

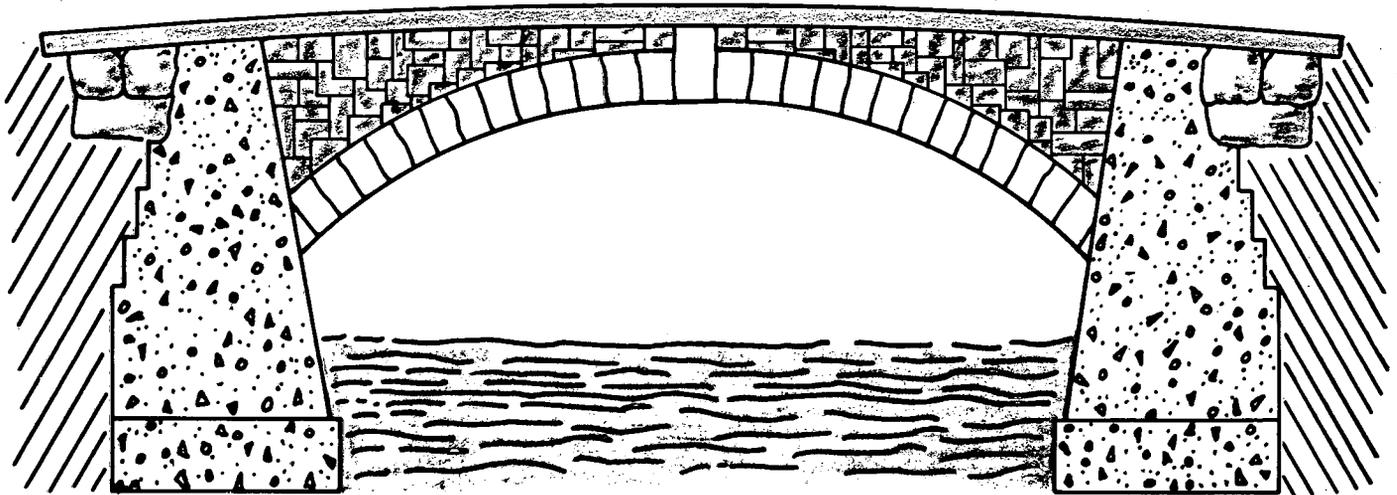
PUBLIC WORKS DEPARTMENT

1970 — 1971

ANNUAL REPORT



BRIDGE TO SERVICE



IN CITY COUNCIL

JUN 22 1972

READ:

WHEREUPON IT IS ORDERED THAT
THE SAME BE RECEIVED.

Providence, Rhode Island

Vincent Vespa
CLERK

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June 30, 1971

DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE DIRECTOR

The Honorable Joseph A. Doorley, Jr.
Mayor of the City of Providence
City Hall
Providence, Rhode Island

Dear Sir:

The following Annual Report, made in accordance with the provisions of Section 46 of Chapter 832 of the Public Laws of the State of Rhode Island, January Session, 1940, covers the work performed during the year ending June 30, 1971, by the various divisions of the Department of Public Works. Appended to this report and to be considered as part thereof, are the reports of the following divisions of this Department.

General Administration
Construction and Maintenance
Sanitation
Engineering Office
Public Service Engineer
Harbor
Environment Control

This Department has rendered assistance to various City Departments, Public Works Department of the State of Rhode Island and the surrounding cities and towns as well as to outside agencies including the Chamber of Commerce, Brown University, the N.E. District Corps of Engineers and the U.S. Bureau of Public Roads. Our relationship has been very cordial with all of these agencies.

I am very appreciative of the splendid cooperation extended me by the City Council Committee on Public Works and City Property and wish to thank the members of these committees for their indulgence.

I also wish to thank the various other City Departments for the cooperation extended to this Department.

The successful operation of the Department is due to the united efforts of the staff, section heads and other key personnel in performing their duties and I wish to thank these people for a job well done.

It is recommended that the Bond Issues for the bridge repairs, Municipal Dock construction and dock building repairs be actively pursued as these Bond

Issues are necessary to adequately maintain structures with protect life and property. Comments on each of the Bond Issues are as follows:

Bridge Repairs:

Concern for the Safety of Bridges has received national attention with the collapse of a bridge on the Federal Highway System. Guidelines and Codes were forthcoming on the maintenance of all bridge types and compliance requires funds.

Municipal Dock Construction:

The deterioration of the Municipal Dock Facility is increasing and may result in loss of revenue expansion of Dock facility necessities, wharf extension and requires funds.

Building Repairs:

Several buildings at the Municipal Wharf require intensive roof repairs which will protect stored supplies.

It is further recommended that budget increases in trust and special accounts be considered in the following divisions:

Sewer:

Increased flooding in various sections of the City necessitates corrective action and renewed interest in the Refuse Act of 1899, will cause anti-pollution plans requiring additional funds.

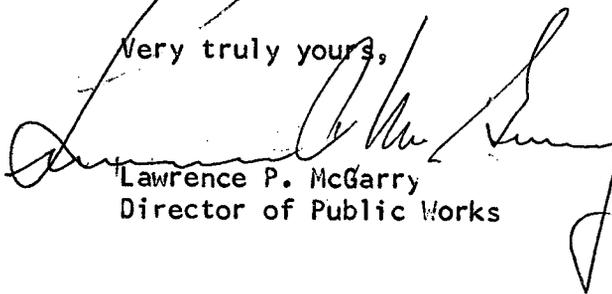
Highway:

The increased deterioration of the road surface and base of the City's street system will require additional funds.

Sanitation:

The conversion of solid waste disposal from incineration to shredding and landfill operations will necessitate modifications to the heating plant and will require additional funds.

Very truly yours,



Lawrence P. McGarry
Director of Public Works

LPMcG:mgk

GENERAL ADMINISTRATION

Lawrence P. McGarry
Director of Public Works
700 Allens Avenue
Providence, R.I.

Dear Sir:

The Annual Report of the General Administration Office of the Dept. of Public Works ended June 30, 1971 is respectfully submitted.

STATEMENT OF REVENUE - ESTIMATED AND ACTUAL

	<u>Budget Estimated</u>	<u>Net Actual Revenue</u>	<u>Budget Excess</u>	<u>Comparison Deficiency</u>
Business and Non-Business Licenses:				
Sidewalk Contractors	450.00	54.00	90.00	
Highway Privileges	<u>522.00</u>	<u>295.00</u>	<u> </u>	227.00
Total Business & Non-Business	972.00	835.00	90.00	227.00
Special Assesments:				
Sewers	12,000.00	1,548.34		10,451.66
Departmental Revenue:				
P.W. Administration	135.00	50.00		85.00
Engineering Office		200.00	200.00	
Sewage Disposal	360,000.00	484,363.10	124,363.10	
Garbage Coll. & Disp.	15,000.00	7,680.05		7,319.95
Refuse Coll. & Disp.	70.00	13.00		57.00
Highway	50,000.00	45,455.43		4,544.57
Sewer Const. & Maint.	700.00	160.20		539.80
Street Lighting	100.00	104.50	4.50	
Municipal Dock	600,000.00	634,213.99	34,213.99	
Draw Bridge		<u>180.00</u>	<u>180.00</u>	
Total Departmental Revenue	1,026,005.00	1152,420.27	158,961.59	12,546.32
Total Statement	1,038,977.00	1174,803.61	159,051.59	13,818.98

STATEMENT OF EXPENDITURES

FOR THE FISCAL YEAR ENDED JUNE 30, 1971

	<u>Personal Services</u>	<u>Services Other Than Personal</u>	<u>Materials & Supplies</u>	<u>Equipment Outlay</u>	<u>Total</u>
General Administration	151,651.10	19,153.12	5,888.59	954.00	177,646.81
Engineering Office	250,152.92	9,007.76	1,498.40	355.50	261,014.58
<u>Sanitation Division:</u>					
Sanitation Administration	28,026.12	717.90	38.07		28,782.09
Street Cleaning	253,311.88	78,233.90	551.99		332,097.77
Sewage Pumping	95,143.80	10,902.95	6,499.13		112,545.88
Garbage Col. & Disp.	904,546.56	150,832.04	48,264.77		1,103,643.37
Sewage Disposal	357,014.80	204,513.77	235,034.77	459.53	797,022.87
Refuse Coll. & Disp.	115,314.32	31,311.00	1,018.11		147,643.93
<u>Const. & Maint. Division</u>					
Highway	932,907.28	226,322.98	130,057.18		1,289,287.44
Bridge Maint.	50,205.66	5,363.18	8,413.86	270.00	64,252.70
Snow Removal	208,963.44	117,164.12	81,414.39		407,541.95
Sewer Const. & Maint.	307,958.22	54,576.32	14,047.50		376,582.12
Municipal Dock	65,580.51	19,657.56	3,241.79		88,479.86
Street Lighting	6,838.20	638,566.55			645,404.75
Environment Control	62,061.48	5,553.14	2,153.68		69,768.30
	<u>3,789,676.79</u>	<u>1,571,876.29</u>	<u>538,122.31</u>	<u>2,039.03</u>	<u>5,901,714.42</u>

The following services were rendered by the General Administration Office for the year ending June 30, 1971

APPLICATIONS RECEIVED

For altering curb openings for driveways	58
Construction of curb openings for driveways	162
Curbing resets	<u>30</u>
Total Applications	250

LICENSES ISSUED

Newspaper Stands	5
Push Carts	7
Sidewalk Stands	5
Drain Layers Licenses	9
Drain Layers Licenses (Limited to sprinkler system)	<u>5</u>
Total Licenses Issued	31

PERMITS ISSUED

Public Utilities	217
Blasting	1
For Moving Cumbersome Equipment	0
Street Openings (Water Supply Board)	111
Original Permits for Sewer Connections	101
Extensions of House Drains	178
Sidewalk Openings for Water Service	162
Street Openings (other)	<u>27</u>
Total Permits Issued	797

Respectfully submitted,

Benjamin Cianciarulo
Benjamin Cianciarulo
Adm. Asst. P.W.

ENGINEERING OFFICE

ADMINISTRATIVE

Expenditures for the fiscal year were:

Item 0	Personal Services	\$250,152.92
Item 1	Services other than Personal	9,007.76
Item 2	Materials and Supplies	1,498.40
Item 5	Equipment	<u>355.50</u>
	TOTAL	\$261,014.58
	REVENUE	200.00

SCOPE AND RESPONSIBILITIES: The Engineering Office consists of the following divisions with stipulated areas of responsibility.

Street Line & City Property Sections

Records
Surveys
Property Records
 Parks
 North Burial Ground
 Miscellaneous

Sewer Section

Design
Specifications
Supervision of
 Construction
 Maintenance

Highway Section

Design
Specifications
Supervision of
 Construction
 Maintenance

Composite Section

Specifications
 Equipment
 Purchases

Hurricane Barrier

STREET LINE AND CITY PROPERTY SECTIONS

Notices of Intention to Build:

(Street lines marked on grounds as requested)

28 Actinia St.
663 Admiral St.
34 Almy St.
19 Ashmont St.
62 Ashmont St.
24 Berlin St.
133 Briggs St.
265 Broadway
261 Broadway
113 Byfield St.
115 Byfield St.
117 Byfield St.
57 Camden Ave.
153 Carpenter St.
98 Cass St.
1438 Chalkstone Ave.
572 Charles St.
25 Cold Spring St.
208 Collyer St.
69 Crandall St.
67 Crandall St.
10 Crispi St.
30 Cross St.
90 Dorchester Ave.
56 Dresser St.
12 Dunbar St.
18 Dunbar St.
104 Eddy St.
2 Elmgrove Ave.
4 Elmgrove Ave.
6 Elmgrove Ave.
8 Elmgrove Ave.
41 Erie St.
58 Evergreen St.
60 Evergreen St.
127 Farm St.
60 Foch Ave.
64 Foch Ave.
30 French St.
11 Glasgow St.
50 Gloucester St.
72 Gray St.
39 Horace St.
41 Horace St.
41 Imera St.
32 Jacqueline Dr.
15 Job St.

82 Job Street
200 Lorimer Ave.
10 Malvern St.
14 Malvern St.
76 Manomet St.
80 Manomet St.
84 Manomet St.
25 Marion Ave.
1 Mercy St.
14 Minto St.
142 Nelson St.
144 Nelson St.
71 Northup Ave.
104 Oakland Ave.
50 Ophelia St.
54 Ophelia St.
147 Oxford St.
34 Parsonage St.
227 Pavilion Ave.
125 Petteys Ave.
151 Pocasset Ave.
30 Prescott St.
316 Public St.
320 Public St.
29 Redwood Dr.
275 Reservoir Ave.
277 Reservoir Ave.
301 Reservoir Ave.
103 Rowley St.
80 Sheldon St.
Smart St. corner Milano St.
39 Superior St.
105 Sutton St.
185 Toronto Ave.
64 Trask St.
60 Trask St.
4 Valley St.
6 Vaughan St.
5 Vincent St.
20 Westford Rd.
1590 Westminster St.
87 Wallace St.
30 Winfield Rd.

PLANS DRAWN TO ASSIST COUNCIL IN CONSIDERATION OF PROPOSED CHANGES IN ZONING AS PETITIONED BY VARIOUS INDIVIDUALS:

Approved:

Alumni Avenue
Blackstone Street
Common Street
Douglas Avenue
Dudley Street
Eaton Street

Holden Street
Hope Street
Plainfield Street
Roosevelt Street
Sterling Avenue

Disapproved:

Anthony Avenue
Broad Street
Calhoun Avenue
Chalkstone Avenue
Charles Street
Homestead Avenue

Pepper Street
Potters Avenue
Transit Street
Westminister Street
Wild Street
Winter Street

CITY PROPERTY PLANS AND SURVEYS MADE:

LP - Location Plan
PA - Proposed Abandonment
PC - Proposed Condemnation
PE - Proposed Easement
PL - Proposed Lease

PP - Proposed Purchase
PPS - Proposed Park Site
PS - Proposed Sale
ZC - Zoning Change

Atwells Avenue
Benefit Street
Berth #5 (Fields Point)
Bond Street
Bond Street (Highway Purposes)
Bond Street
Canal Street
Carpenter Street
Carpenter Street
Common Street
Diamond Street
Dudley Street
Fields Point
Fields Point
Fields Point (Proposed Dike)
Fields Point (Berths #1 & 2) (Soundings)
Fields Point (Berths #3 & 4) (Soundings)
Fields Point (Berths #5 & 6) (Soundings)
Fields Point

P.P.S.
P.S.
L.P.
P.S.

P.P.S.
P.L.
P.S.
P.S.
Z.C.
P.S.
Z.C.
P.E.
P.L.

P.L.

Fountain, Worcester and Eddy Streets	P.S.
Holden Street	Z.C.
India Point Park (Cross Section)	---
Municipal Wharf (Berthing Location)	---
North Burial Ground (Section 20)	L.P.
North Burial Ground (Section 21)	L.P.
Pallas Street	P.S.
Plain Street	P.S.
Plainfield Street	Z.C.
Pine Street (Demolition)	---
Roger Williams Park Plat	P.S.
Sunshine Island (Fields Point)	L.P.

OFFICE PLANS:

Aborn Street	from Sabin St. to Freeway Line
Boone Street	from State St. to Davis St.
Bridgham Street	from Elmwood Ave. to Westminister St.
Bugbee Court	from Pleasant St. to Southerly Termination
Cahir Street	from Westminister St. to Broad St.
Camp Street	from Carrington Ave. to Olney St.
Charles Street	Portion on Northerly Side
	from Corliss St. to West River St.
City Line	from Union Ave. to Hillwood Avenue
Corliss Street	from Charles St. to Branch Ave.
Cranston Street	from Bridgham St. to Winter St.
Deerfield Terrace	at Alger Avenue
Dupont Drive	from Niantic Ave. to Niantic Ave.
Fountain Street	from Franklin St. to Greene St.
Greene Street	from Fountain to Broadway
Howell Street	from Howell St. to Carrington Ave.
Huntington Avenue By-Pass	from Cranston St. to Chambers St.
Huntington Ave. By-Pass	from Chambers St. to Huntington Ave.
Industrial Drive	from North Main St. to Corliss Street
Lester Street	from Dexter St. to Harrison St.
Little Street	from Randall St. to Southerly Termination
Mason Street	from Aborn St. Northerly
Mason Street	from West Exchange St. to Southerly Termination
McIntyre Court	from Jefferson St. to Westerly Termination
New York Avenue	at Shipyard St.
Niantic Avenue	from Dupont Drive to Southerly Termination
Olney Street	from Carelton Davis Blvd. (Portion Northerly Side)
Park Lane	from Dupont Drive to Southerly Termination
River Avenue	from Chalkstone Ave. to Smith St.
Swan Street	from Chace Ave. to Hillside Ave.
West River Street	from Charles St. to Branch Ave.
Winter Street	from Broad St. to Cranston St.
Greene Street	from Broad St. to Westminister St.

CITY PROPERTY LEASES: (Plans and Surveys)

J. J. Hudson Co. (Service Road)
Metals Processing Co. (New York Ave.)
J.J. Orr Co. (Harborside Blvd.)
Parking Lot (Fountain, Eddy and Worcester Sts.)
Petrolane, Inc. (Fields Point Drive and Sea View Drive)

STREETS RECEIVED:

Kinfield Street	From Barbara St. to Freeway Line	542.42 ft.
-----------------	----------------------------------	------------

RECEIVED STREETS ABANDONED:

Aborn Street	From Sabin St. northwesterly to its termination	524.00 ft.
--------------	---	------------

UNRECEIVED STREETS ABANDONED:

Bugbee Court	From Pleasant St. to southwesterly termination	156.86 ft.
McIntyre Court	From Jefferson St. to westerly termination	151.40 ft.
Paine Street	From Empire St. to Walnut St.	100.00 ft.
Ponagansett Ave.	From Melissa St. to Barbara St.	<u>564.58 ft.</u> 972.84 ft.

The approximate length of streets platted but not received is 41.0916897 miles.

The net addition during the year added to the previous total makes the length of Received Streets at June 30, 1970, (measured along the property lines) 370.448353 miles.

In addition to the total of Received Streets, there are 3.21 miles of roadway in the Governor Dennis J. Roberts Expressway.

NORTH BURIAL GROUND:

Lots Conveyed By City	103
Perpetual Care Certificates	99
Field Surveys	On Request
New Surveys - Including Elevations	5

GENERAL (Specialized Work):

Surveys:

For leases of City owned land at Fields Point.

Field surveys of streets accepted by the City Council. Layout maps made of same for office and records of the City Clerk.

For the location of the Harbor Line in the Fields Point Section, Plans were drawn in addition.

Soundings were taken and plans drawn of the Providence River at the Municipal Wharf.

Surveys made; plans were drawn; and area staked out in the Fields Point Section.

For determining topography of City owned land at Fields Point.

Title Research:

Made on various parcels of land in the City's interest.

Street Lines:

Street lines were re-established, buildings located and plans made for various streets.

Were marked on ground for the construction of new sewers as requested by the Sewer Section.

Were established for various roads in the Fields Point area. Buildings were located and plans drawn.

Plans:

Drawn for proposed street widening.

Resolutions:

Drafted for City Council covering all actions relating to the acceptance and abandonment of streets, defining grades, curbing streets, sale of land, leases and purchases of land.

Plats:

Plats presented for record have been compared for the Recorder of Deeds Office and Plats for recovering were furnished to the Recorders Office under the provisions of Chapter 987 (1913); Chapter 1549 (1917) and Chapter 2118 (1921).

Assistance to Departments, Firms, Utilities, etc.:

Building Inspection Division:
Various Street Locations

Board of Canvassers:
Charts drawn for election result tabulations

City Clerk:
Plans drawn in accordance with City Council Ordinances;
Descriptions and resolutions for all street matters, sales,
purchases and leases of City Properties.

City Controller:
The annual tabulation of all real estate owned by the City of Providence and real estate in which the City of Providence has an interest was made and classified for the City Controller for inclusion in his report and known as Part II...Statistical Information and shown as Tables 1 and 2, of real estate and personal property data in compliance with the provisions of Section 85, Chapter 2, Revised Ordinances of 1946. These tables of real estate were prepared by this office from records of this department and tax valuations furnished by the Tax Assessors Office.

Law Department:

Description of land taken by condemnation for highways and park purposes and for incorporation of deeds of land purchased or sold, leases and rights-of-way from the City, the methods by which various properties were acquired, the purpose of original purchase and present status were furnished to the Law Department and other assistance was rendered as requested.

Narragansett Electric & Telephone Company's
Various Street Locations

Police Department:

Measurements were taken and plans drawn for the Police Department in the prosecution of murders and accidents.

Surveys were made to assist the Police Department in prosecuting license violations.

Public Property:
Surveys made and baseball fields staked at Ascham St. Playground, Davis Park, Hope High Field, Hopkins Park, Joslin Park, Roger Wms. Park and Salmon Street Playground.

Redevelopment Agency:

Plans drawn for abandonment of several streets within the Mt. Hope, East Side Renewal and Weybosset Hill Projects.

Tax Assessors:

Various locations of properties on the City Line.

Traffic Engineers:

Various location plans.

Water Department:

Various Street Locations.

Information pertaining to street lines, including records of street layouts, widenings, abandonments, alignment changes and name changes, was furnished to engineering firms and title companies.

Street lines furnished to the State of Rhode Island Department of Public Roads in conjunction with their work on various freeways.

Inspection was provided by members of this section for ice and snow control operations of the Public Works Department.

Operation and inspection of the Hurricane Barrier was augmented by members of this section.

ENGINEERING OFFICE

SEWER SECTION

NEW CONSTRUCTION:

<u>DONELSON ST.</u> - from Cornwall St. to a point approx. 130' East of Salina St.	-	297.20'
<u>PARK AVE.</u> - from a point about 116' North of and about 145' South of the northerly portion of Parkside Drive.	-	281.97'
<u>PARKSIDE DRIVE.</u> - from Park Ave. easterly, southerly and westerly to Park Ave.	-	682.62'
<u>PARKVIEW BLVD.</u> (Cranston) - from Park Ave. southerly to existing sewer.	-	361.85'
<u>PRATT ST.</u> - from Olney St. to near Halsey St.	-	326.23'
<u>ROGER WILLIAMS PARK</u> - from Parkside Dr. southerly to Park Ave.	-	668.71'
<u>SHILOH ST.</u> - from Harlow Ct. to near Hyacinth St.	-	269.28'
<u>TRENT ST.</u> - from Hereford St. to Loveday St.	-	215.10'

SEWERS ORDERED BUILT BUT NOT CONSTRUCTED:

<u>STREET</u>	<u>LOCATION</u>	<u>RESOLUTION & YEAR</u>
BUCKLIN ST.	from near Potters Ave. to Greenwich St.	229 - 1940
NIANTIC AVE.	from near Cranston St. to Ackerman St.	440 - 1940
WHITE ST.	from Powell St. to Collyer St.	293 - 1951

SEWERS PETITIONED FOR AND REFERRED TO THE PUBLIC WORKS COMMITTEE:

Bowdoin Street	from Atwells Ave. to near Barstow St.	05-06-71
Bullock Avenue	from City Line to Dunbar St.	07-01-54
Clarkson Street	from near Admiral St. to its easterly termination and northerly in right of way to Suffolk St.	05-02-63
Como Street	from northerly term. to Ledge St.	08-06-59
Corsica Street	from near Genoa Ave. to Fruit Hill Ave.	08-10-61
Cowper Court	from term. to Messer Street	06-06-57
Derry Street	from near Geoffreys Court to Oregon St.	12-01-55
East George Street	from near Wayland Ave. to Butler Ave. and in Butler Ave. from East George St. to Pitman St.	02-16-61
Edgeworth Avenue	from westerly term. to present sewer in Edgeworth Ave.	12-16-65
Eylestead Street	from northerly term. to Pavilion Avenue	10-03-63
Genoa Avenue	from near Taranto St. to Fruit Hill Avenue	08-10-61
Groton Street	from Durfee St. to Powhatan St.	09-02-54
Haswell Street	from approx. 300' east of Eddy St. to Eddy St.	04-20-61
Horace Street	from Killingly Street to City Line	04-16-70
Howe Street	from Niantic Ave. to Lakeview Drive	02-16-61
Hyacinth Street	from Vicksburg St. to beyond 200' of Shiloh Street	05-18-67
Hymer Street	from near Seamans St. to Crandall St.	11-03-55

Jordan Street	from Wsetmore St. to Reservoir Ave.	02-16-61
Libia Street	from City Line to Farmington Ave.	08-02-56
Lynde Street	from easterly term. to Longwood Ave.	03-18-65
Maria Street	from Killingly St. to City Line	02-07-57
Myra Street	from near Boundry Ave. to Killingly Street	04-16-53
Neutaconkanut Road	from Sunset Avenue to and including Lot #1	12-17-64
Okie Street	from westerly term. to Bath Street	10-02-52
Queen Street	from northerly term. to Cleveland Street	09-01-55
Stukely Street	from northerly term. to Hartford Avenue	05-03-56
Unnamed Gangway	from Peter Street to Ledge Street	03-03-60
Unnamed Gangway	from east to Havana Street westerly to City Line	03-01-62
Unnamed Gangway (opposite Lynch St.)	from between Manton Avenue and Atwells Avenue	07-01-65
Wayland Avenue	from East George Street to southerly termination	03-03-60
Wilna Street	from Argol to its westerly term.	08-06-70
Woodward Road	from present sewer northerly for 175'	08-16-67
Yorkshire Street	from Hawkins St. to Anchor St.	08-16-65
Yorktown Place	from northerly term. to Ledge Street	09-04-58

SEWER SYSTEM STATISTICS

IMPROVED SEWER SYSTEM:

1890 to 1971 = 28.1014 Miles

STORM SEWER SYSTEM:

1872 to 1971 = 87.9390 Miles

COMBINED SEWER SYSTEM:

1871 to 1971 = 352.1403 Miles

SEWER STRUCTURES:

1871 to 1971)	Manholes	-	20,429
)	Basins	-	12,072
)	Inlets	-	4,781

PRIVATE DRAINS:

Complete records of all sewage drainage installations in private houses and other buildings were made. All new work was covered by field inspection.

GENERAL:

Licenses Issued:

Drain Layers	9
Sprinkler	5

Miscellaneous:

Titles investigated by title companies	1762
Sketches of drainage facilities given to interested parties	2776

SEWAGE METERED: (Under Contract)

North Providence 3,428,732,600 Gals. Billed \$399,104.48

Johnston	482,254,500 Gals.	Billed	\$ 49,672.20
Cranston (Narragansett Brewing Company)	114,500,000 Gals.	Billed	\$ 11,679.00

HIGHWAY SECTION

ESTIMATES: Estimates for payment to contractors for work performed under the supervision of this section are prepared on a monthly basis and a final estimate, showing the complete cost of all work performed, is prepared for each contract. In addition, bids for highway work are checked and tabulation sheets drawn for the Board of Contract & Supply.

Estimates of the cost of making improvements, consisting of curb openings, furnishing and setting curbing, relaying pavements in curb openings, changing curb as desired by 91 individuals or corporations, were furnished by the Director of Public Works.

BUILDING NOTICES: Grades either proposed, defined or established have been marked on the ground for parties intending to build on two (2) streets covering two (2) applications.

CURBING: Lines and grades have been marked out for resetting curbing and paving gutters in portions of streets as requested.

PROFILES: Profiles of sundry streets, approximately 0.076 miles have been made for the purpose of defining grades. The contours of the center and side lines are shown at fifty foot stations, also the levels of the sills and ground lines of the houses adjoining the streets. The profile plan views with property lines and houses shown.

STREET GRADING: Abutting owners: Grades in sundry streets have been marked out at intervals of about fifty feet for street grading or for the benefit of individuals owning abutting property.

ASSESSMENTS: The Highway Section computes assessments for curbing and grading.

SPECIAL: During the year, this section supplied personnel for operations other than normal duties. During snow storms, men from this section inspected conditions in their assigned zones.

The Fox Point Hurricane Barrier Pumping Station is staffed, in part, by men from this section.

Plans and cost estimates for the Smith Hill and Elmwood-West End Code Enforcement Project were made for the Department of Planning and Urban Development.

Plans and Specifications from several consultants were reviewed by this section.

Work performed for various utility companies under contract was inspected by this section to insure conformity to approved specifications and regulations of the City.

CONSTRUCTION: Plans and Specifications, Engineering Field Work and Inspections were furnished for the Construction or the reconstruction of the following streets by the Construction and Maintenance Division-Highway Section.

Type - Bituminous Concrete

<u>STREET</u>		<u>SQUARE YARDS</u>
Alexander Street	Rounds Ave. to Sinclair Ave.	1,550
Ansel Avenue	Reservoir Ave. to Louis Ave.	2,100
Badger Road	Sharon St. to Hillview St.	1,900
Barbara Street	King Philip St. to Middleton St.	1,789
Benefit Street	No. Main St. to Thomas St.	7,333
Bolton Avenue	Kimball St. to Home Ave.	2,487
Bradford Street	Atwells Ave. to Cedar St.	1,205
Brookfield Street	Riverdale St. to Glenbridge Ave.	1,074
Chad Brown Street	Admiral St. to appt. 150 ft. E. of W. curb March St.	2,429
Church Street	No. Main St. to Benefit St.	437
Delmar Street	Reservoir Ave. to Louis Ave.	1,960
Denison Street	Commodore St. to Chatham St.	826
Dresser Street	Ponagansett Ave. to Melissa St.	1,333
Drill Street	Sharon St. to Hillview St.	995
Durham Street	From a pt. 197 ft. N. of N. curb of Durham St. to Sunbury St.	1,683
Early Street	Prairie Ave. Niagara St.	4,612
Eddy Street	Weybosset St. to Middle St.	260
Eighth Street	Highland Ave. to Summit Ave.	1,303
Erie Street	Sharon St. to Rome Ave.	2,516
Fairfield Street	Manton Avenue to Richland St.	2,972
Firglade Avenue	Forest St. to Hart St.	1,638
Forest Street	Morris Avenue to Hope St.	1,030
Fourth Street	Hope St. to Lorimer Ave.	2,357
Freeman Parkway	Elmgrove Ave. to Cole Ave.	2,598
Galileo Avenue	Chalkstone Ave. to a pt. 508 ft. northerly	1,402
Grand Broadway	Vandewater St. to Stansbury St.	942
Greeley Street	Russo St. to Oppen St.	1,384
Harris Avenue	Harris Ave. @ Kinsley Ave.	1,767
Harris Avenue	Harris Ave. @ Atwells Ave.	1,039
Harris Avenue	Atwells Ave. to Freeway Ramp	3,515
Highland Avenue	Sixth St. to Eighth St.	1,456
Ivy Street	Rochambeau Ave. to Cypress St.	5,856
Laura Street	Broad St. to Melrose St.	4,953
Lawn Street	Bolton Avenue to Farm St.	982
Leo Avenue	Langdon St. to Charles St.	2,391
Longmont Street	Admiral St. to Cornwall St.	2,171
Louis Avenue	Roger Williams Ave. to Wildwood Ave.	2,060
LaSalle Drive	Sharon St. to Sharon St.	1,905

Mayflower Street	Morris Ave. to Hope St.	896
Memorial Square	Steeple St. to Promenade St.	2,387
Mercy Street	Sanford St. to Ethan St.	3,204
Merino Street	Plainfield St. to Eastwood Ave.	2,511
Mitchell Street	Broad St. to Melrose St.	4,857
Niagara Street	Detroit Ave. to Stanwood St.	11,664
Overhill Road	Hope St. to Lorimer Ave.	1,881
Paolino Street	Killingly St. to City Line	1,043
Parkway Avenue	Chalkstone Ave. to View St.	1,551
Penn Street	Almy St. to Vinton St.	3,414
Phillips Street	Morris Ave. to Hope St.	923
Promenade Street	Park St. to a pt. 336 ft. W. of Park St.	1,180
Raphael Street	Langdon St. to Charles St.	2,188
Raymond Street	Chalkstone Ave. to Ayrault St.	3,134
Richland Street	Edgemere Ave. to Glenbridge Ave.	680
Riverdale Street	Manton Ave. to S'ly Termination	1,696
Rome Avenue	Sharon St. to Enfield Ave.	3,507
Sandringham Avenue	Annie Street to Sharon Street	5,706
Sanford Street	Plainfield St. to Mercy St.	576
Seventh Street	No. Main St. to Highland Ave.	1,373
Shepard Avenue	Leo. Ave. to City Line	1,593
Simmons Street	Pocasset Ave. to Ethan St.	1,648
Sixth Street	Summit Ave. to Lorimer Ave.	4,578
Sophia Street	Murray St. to Sibyl St.	2,173
Stansbury Street	Douglas Avenue to Grand Broadway	2,430
Stonelaw Avenue	River Avenue to Sharon St.	2,469
Walton Street	Academy Ave. to Enfield Ave.	1,395
Whiting Street	Morris Ave. to Hope St.	792
Wildwood Avenue	Reservoir Ave. to Louis Ave.	1,941
	TOTAL	<u>155,066</u>

Plans and Specifications, Engineering Field Work and Inspections were furnished for the grading, curbing, construction and resurfacing of the following streets:

By Narragansett Improvement Company
Type Bituminous Concrete

<u>Street</u>		<u>Square Yards</u>
Havana Street	Lubec St. to Joseph St.	463
Jacqueline Drive	From a pt. 255 ft. W. of Legion Memorial Dr. to Newtaconkanut Dr.	464
Joseph Street	Havana Street to a pt. 131 ft. westerly	500

Middleton Street	Barbara St. to Service Rd.	<u>773</u>
	Total under contract to Narragansett Improvement Co.	2,200
	By: J. H. Lynch & Sons Inc.	
Bond Street	Atwells Ave. to Spruce St.	997
	Total under contract to J. H. Lynch & Sons, Inc.	<u>997</u>
	By: Campanella Corporation	
Broadway	Dean St. to Valley St.	29,273
	Total under contract to Campanella Corporation	<u>29,273</u>
	By: Cardi Corporation	
Elmwood Avenue	Lexington Ave. to Whitney St.	37,337
Prairie Avenue	Broad St. to Point St.	<u>25,863</u>
	Total under contract to Cardi Corporation	63,200

RECAPITULATION

By Narragansett Improvement Company	2,200
By J. H. Lynch & Sons, Inc.	997
By Campanella Corporation	29,273
By Cardi Corporation	<u>63,200</u>
Total for Street Curbed and Built and Resurfaced under Contract	95,670

CONSTRUCTION IN PROCESS AT END OF FISCAL YEAR:

Anthony Avenue	Calhoun Ave. to Cranston St.
Augusta Street	Durham St. to Seamans St.
Brayton Avenue	W. Exchange St. to a pt. 89 ft. N. of Atwells Ave.
Camp Street	Doyle Avenue to Olney St.
Clematis Street	Molloy Street to Home Avenue
Creighton Street	Brown St. to Prospect St.
Evelyn Street	Union Ave. to Prudence Ave.
Fair Street	Seamans Street to Phebe St.
Federal Street	DePasquale Ave. to a pt. 76 Ft. W. of W. curb of Dean Street
Kenyon Street	America St. to a pt. 101 ft. W. of Dean St.
Marcello Street	Atwells Ave. to Knight St.
Morris Avenue	Rochambeau Ave. to Cypress St.
North Avenue	Hope St. to Blackstone Blvd.
Phebe Street	Admiral St. to General St.
Pitman Street	Butler Ave. to a pt 78 ft. W. of E. River St.
Sibyl Street	Mercy St. to Murray St.
Stanton Street	Murray St. to Prudence Ave.
Union Avenue	Silver Lake Ave. to Plain- field St.

(STREETS ORDERED BUILT (CONSTRUCTION NOT YET STARTED) :

<u>STREET</u>	<u>LIMITS</u>	<u>ORDERED</u>	<u>LENGTH IN FT.</u>
Aurelia Dr.	Lecia Dr. to Neutaconkanut Rd.	5/11/65	396
Canonchet St.	Samoset Ave. to Standish Ave.	5/11/65	176
Crary St.	Allens Ave. to east line of unnamed street	12/5/40	276
Cutler St.	Newark St. to Atwells Ave.	8/7/52	206
Gage St.	Victoria St. to Samoset Ave.	5/11/65	361
Guelph St.	Victoria St. to its easterly termination	5/11/65	219
Jacqueline Dr.	From a pt. 427 ft. west of Legion Memorial Drive to Neutaconkanut Rd.	5/11/65	18
Joseph St.	From a pt. 131 ft. west of Havana St. to its westerly termination	10/26/65	278

Joy St.	River Avenue to its westerly termination	12/6/54	400
Kinfield St.	Barbara St. to Freeway Line	5/10/71	522
Manomet Street	Samoset Ave. to Victoria St.	5/11/65	391
Neutaconkanut Rd.	Sunset Avenue to its southerly termination	5/11/65	792
Platted Street	Crary St. to Globe St.	12/5/40	117
Redwood Drive	City Line at Longwood Ave. to City Line at Royal Ave.	5/6/60	301
Roda Drive	Lecia Dr. to Neutaconkanut Rd.	5/11/65	313
Samoset Ave.	From the southerly line of Gage St., northerly to Galileo Ave.	5/11/65	543
Stillwater Ave.	Brightwood Ave., northerly to City Line	2/19/65	818
Trainer St.	Acorn St. to DePasquale Ave.	6/20/35	249
Virginia Lane	From a pt. 421 ft. east of Douglas Ave. to the easterly line of Glasgow St.	5/11/65	490
	TOTAL		<u>6,866</u>

PETITIONS TO HAVE GRADE DEFINED

<u>STREET</u>	<u>LOCATION</u>	<u>DATE</u>
Adie Street	Atwells Ave. to Cedar Street	Jan. 20, 1955
Almond Street	Edgewood Blvd. to City Line	June 2, 1955
Batterson St.	Walsh St. to Bullock Avenue	July 2, 1959
Bullock Ave.	Batterson St. to City Line	July 2, 1959
Corsica St.	Fruit Hill Ave. to Genoa Street	May 16, 1957
Cowper Court	Messer St. to its termination	July 11, 1957
Dakota Street	Woodward Rd. to termination	June 7, 1962
Deerfield Terrace	Alger Ave. to its termination	Feb. 19, 1959
Derry Street	Oregon St. to Geoffreys Ct.	Dec. 1, 1955
Duke Street	Orms St. to Smith St.	Oct. 3, 1957
East George St.	Gano St. to Butler Ave.	Feb. 16, 1961
Genoa Street	Fruit Hill Ave. to Taranto Street	May 16, 1957
Haswell Street	Eddy St. to its easterly termination	April 20, 1961
Hennessey St.	St. Thomas Street to Bullock Ave.	July 2, 1959
Hillard St.	Manton Avenue to Pelham St.	July 11, 1957
Hymer Street	Crandall Street to Seamans Street	Nov. 3, 1955
Lakeside St.	Shaw Street to Everson Street	Aug. 10, 1961
Libia Street	Farmington Ave. to its termination	Aug. 2, 1956

Lynde Street	Longwood Ave. to its easterly termination	March 18, 1965
Maria Street	Killingly Street to City Line	Feb. 7, 1957
Minnesota St.	Woodward Road to its termination	Sept. 6, 1956
Myra Street	Killingly St. to Boundry Avenue	Nov. 6, 1958
Molter Street	Service Rd. #10 to Lakeview Dr.	March 18, 1964
Nye Street	Ida St. to Merino St.	April 2, 1959
Ophelia St.	From a point 120 ft. S. of Thornton St. to Wolf St.	Feb. 17, 1955
Owen Street	Manton Avenue to King Street	Sept. 1, 1960
Queen Street	Cleveland St. to its northerly termination	Sept. 1, 1955
Rowley Street	Batterson St. to Hennessey St.	July 2, 1959
Sedan Street	Argol Street to termination	Aug. 7, 1958
Shaw Street	Langdon Street to Lakeside Street	May 18, 1961
Shaw Street	Easterly Line of Lakeside Street westerly to its westerly termination	Feb. 15, 1962
Sibley Street	Crescent St. to westerly termination	March 5, 1959
Stuckely St.	Hartford Ave. to #41 Stukely St.	May 3, 1956
Sunrise Drive	Isabella Ave. to northerly termination	March 18, 1971
Triggs Street	Walsh St. to Bullock Ave.	July 2, 1959
Thurston St.	Stamford Ave. to the westerly line of Potter Drive	Feb. 20, 1954
Un-Named		
Gangway	Peter St. to Ledge St.	March 3, 1958
Walsh Street	Batterson St. to Hennessey St.	July 2, 1959
Wayland Avenue	Pitman St. to its southerly termination	March 3, 1960
York Street	No. Main St. to Steel St.	May 1, 1958
Yorktown Place	Linton St. to its termination	Sept. 4, 1958

PETITIONS FOR CURBING AND GRADING

<u>STREET</u>	<u>LOCATION</u>	<u>DATE</u>
Almond Street	Edgewood Blvd. to City Line	June 2, 1955
Batterson St.	Walsh St. to Bullock Avenue	July 2, 1959
Boundry Ave.	Killingly St. to City Line	Nov. 6, 1969
Burton St.	Bingham Street to its Term.	Nov. 15, 1956
Carver Court	53 Pleasant St. to its Term.	Oct. 3, 1958
Concord St.	Cemetery Street to Overpass	June 2, 1966
Corscia St.	Fruit Hill Ave. to Genoa St.	Aug. 10, 1961
Cowper Street	Messer St. to its Term.	July 11, 1957
Derry Street	Oregon St. to Geoffreys Ct.	Dec. 1, 1955

East George St.	Gano St. to Butler Avenue	Feb. 16, 1961
Genoa Streer	Fruit Hill Ave. to Taranto St.	Aug. 10, 1961
Grotto Avenue	Upton Ave. to Portion already received	Aug. 15, 1957
Hagan Street	Charles St. to Langdon St.	May 2, 1957
Haswell St.	Eddy St. to its easterly Term.	April 20, 1961
Hennessey St.	St. Thomas St. to Bullock Ave.	July 2, 1959
Hillard St.	Manton Ave. to Pelham St.	July 11, 1957
Hymer Street	Crandall St. to Seamans St.	Nov. 3, 1955
Lakeside St.	Shaw Street to Everson Street	Aug. 3, 1961
Libia Street	Farmington Ave. to its Term.	Aug. 2, 1956
Lynde Street	Longwood Ave. to its easterly Term.	March 18, 1965
Maria Street	Killingly St. to City Line	Feb 7, 1957
Molter Street	Service Rd. #10 to Lakeview Dr.	March 19, 1964
Myra Street	Killingly St. to Boundary Ave.	Nov. 6, 1958
Ophelia St.	From a point 120 ft. south of Thornton St. to Wolfe St.	Feb. 17, 1955
Queen Street	Cleveland St. to its northerly Term.	Sept. 1, 1955
Rowley Street	Batterson St. to Hennessey St.	July 2, 1959
Shaw Street	Langdon Street to Lakeside Street	May 18, 1961
Shaw Street	Easterly line of Lakeside Street W. to W. Termination	Feb. 16, 1962
Sibley Street	Crescent St. to its westerly Term.	March 15, 1959
Stuckely St.	Hartford Ave. to #41 Stukely St.	May 3, 1956
Sunrise Dr.	Isabella Ave. to its northerly Term.	March 18, 1971
Tappan Street	Angle to Admiral Street	Sept. 18, 1958
Thurston St.	Stamford Ave. to westerly line Potter Drive	Feb. 20, 1964
Triggs Street	Walsh St. to Bullock Ave.	July 2, 1959
Un-Named		
Gangway	Peter St. to Ledge St.	March 3, 1960
Walsh Street	Batterson St. to Hennessey St.	July 2, 1959
Wayland Ave.	Pitman St. to southerly Term.	March 3, 1960
York Street	No. Main St. to Steele Street	May 1, 1958
Yorktown Place	Linton St. to its Term.	Sept. 4, 1958

SUMMARY

<u>TYPES OF PAVEMENT</u>	<u>LENGTHS (MILES)</u>	<u>AREA (SQ. YDS.)</u>
Reinforced Concrete	0.170	3,101.0
Bituminous Concrete (Curbed)	246.274	4,216,528.3
Bituminous Concrete (Not Curbed)	8.309	141,792.0
Sheet Asphalt (Curbed)	46.401	1,128,396.3
Sheet Asphalt (Not Curbed)	0.300	4,195.0
Bituminous Macadam (Curbed)	61.204	946,539.0
Bituminous Macadam (Not Curbed)	0.848	17,593.0
Asphalt Blocks	0.119	958.0
Granite Blocks	2.469	38,232.8
Waterbound Macadam (Curved)	1.534	28,948.0
Waterbound Macadam (Not Curved)	0.327	4,454.0
	<u>367.955</u>	<u>6,530,737.4</u>
Received (Not Improved)	2.008	
TOTAL	<u>369.963</u>	

Streets paved with new materials 93,746 linear Ft.
Bituminous Concrete Pavement Laid 316,379 Square Yards

SANITATION ADMINISTRATION

The office of each section handles all the necessary clerical work pertaining to their section.

Condensed records from all Sections are maintained and filed in this office for reference.

The expenditures for this Section for the fiscal year were as follows:

ITEM 0	Personal Services	\$28,026.12
ITEM 1	Services other than Personal	717.90
ITEM 2	Materials and Supplies	38.07
	Total	<hr/> \$28,782.09

STREET CLEANING SECTION

The expenditures for this section were as follows:

ITEM 0	Personal Services	\$253,311.88
ITEM 1	Services other than Personal	78,233.90
ITEM 2	Materials and Supplies	<u>551.99</u>
	Total	\$332,097.77

This section is responsible for the cleaning of all streets and highways within the City and the maintenance and care of all the trash cans situated both downtown and in the outlying sections of the City.

The streets in the downtown section of the City, bounded by Dyer Street, South Main St., Washington Row, Union Station, West Exchange Street, Aborn St., Empire Street, Chestnut Street and Clifford Street are cleaned daily.

The following streets and squares are also cleaned daily:

Broadway from LaSalle Square to Olneyville Square
Westminister Street from Empire Street to Hoyle Square
Weybosset Street from Empire Street to Cathedral Square
Broad Street from Empire Street to Trinity Square
Atwells Avenue from Aborn Street to Ridge Street
Pocassett Avenue from Olneyville Square to City Line
Randall Street from Charles Street to North Main Street
Smith Street from State House to Oakland Avenue
Douglas Avenue from Admiral Street to Mowry Street
Plainfield St. from Hartford Ave. to Webster Ave.
Gay St. from Willard Ave. to Blackstone St.
North Main St. from College Hill to Mill St.
Charles St. from Railroad Bridge to City Line
South Main St. from College Hill to Point St.
Wickenden St. from East St. to Power St.
Ives St. from Wickenden St. to Power St.
Governor St. from Wickenden St. to Power St.
Wayland Ave. from Waterman St. to Angell St.
South Angell St. from Wayland Avenue to Butler Ave.
Hope St. from Butler Ave. to Wayland Ave.
Hartford Ave. from Laurel Hill Ave. to Olneyville Sq.
Thayer St. from Brook St. to Waterman St.
Waterman St. from Thayer St. to Brook St.
Cranston St. from Dexter St. to City Line
Potters Ave. from Cranston St. to Dexter St.

Eagle Park
Randall Sq.
Wayland Sq.

Olneyville Sq.
Trinity Sq.
Washington Sq.

A crew of men with hand broom and hand push barrels are assigned to the downtown area and the outlying section of the City to keep these sections free from debris, 197 trash cans are located throughout these sections. They are emptied twice daily.

All the main arteries in the City were cleaned twice a week. All the streets in the outlying sections were inspected and cleaned by the day and night cleaning crews supplemented by the mechanical sweepers. Additional highway cleaning crews were assigned in cleaning the outlying sections during the spring and fall.

Nine mechanical sweepers were in operation, both day and night.

Our dual gutter broom sweeper is in service and is capable of cleaning gutters from either side of the sweeper, and is advantageous on one way streets.

Three front end loaders were used to pick up the sweepers dumps and load them in trucks for disposal. Three large trucks were used in the fall to pick up leaves. These trucks are equipped with Elgin Leaf Collectors and have a capacity of 10 tons. An operator and two laborers are needed for this operation.

Two reversible trailer mounted vacuum loading leaf litter collections are used to help in the removal of leaves from the streets.

An emergency crew was on duty twenty-four hours a day to handle complaints from the general public and to correct conditions outlined in a police report.

A summary of operations for this section follows:

Hand Broom Sweeping	42 miles
Machine Broom Sweeping	20,496 miles
Beat Patrol	4,362 miles
Hand Broom Sweeping	247 tons
Street Container Disposal	2,631 tons
Machine Broom Disposal	14,111 tons

SEWAGE PUMPING STATION

This section is charged with the operation and maintenance of three Sewage Pumping Stations in the City. The main station is located on Ernest Street and handles approximately all of the Sewage flow. One of the smaller stations is situated on Reservoir Avenue near the City Line and the other in Harborside Park, Field's Point.

Two hundred millions of gallons a day is the capacity of the main pumping station on Ernest Street. Electric power to operate this station is partially supplied from the Garbage Incinerator Plant, balance of power required is provided by the local power company. The two smaller stations operated automatically and the power to operate them is supplied by the local power company. All stations are in operation twenty-four hours per day.

Expenditures for this section for the fiscal year were as follows:

ITEM 0	Personal Services	\$95,143.80
ITEM 1	Services other than Personal	10,902.95
ITEM 2	Materials and Supplies	6,499.13
	Total	<hr/> \$112,545.88

SEWAGE PUMPING STATION

Total monthly flow, in million gallons, for each station, is as follows:

	<u>ERNEST STREET</u>	<u>WASHINGTON PARK*</u>	<u>RESERVOIR AVENUE*</u>	<u>TOTAL</u>
<u>1970</u>	<u>STATION NO. 1</u>	<u>STATION NO. 2</u>	<u>STATION NO. 3</u>	
July	1,488.44	35.0	35.0	1558.44
August	1,686.89	35.0	35.0	1756.89
September	1,477.84	35.0	35.0	1547.84
October	1,510.68	35.0	35.0	1580.68
November	1,594.41	35.0	35.0	1664.41
December	1,580.39	35.0	35.0	1650.39
<u>1971</u>				
January	1,794.42	35.0	35.0	1864.42
February	1,657.39	35.0	35.0	1727.39
March	1,780.15	35.0	35.0	1850.15
April	1,684.41	35.0	35.0	1754.41
May	1,963.84	35.0	35.0	2033.84
June	1,713.65	35.0	35.0	1783.65
	<hr/>	<hr/>	<hr/>	<hr/>
	19,932.51	420.0	420.0	20,772.51

*Estimated flow

SEWAGE PUMPING STATION

The following is a monthly tabulation of the electrical power from the Garbage Incinerator used at the Ernest Street Station.

<u>1970</u>	<u>K.W.H.</u>
July	none
August	none
September	none
October	none
November	none
December	none
<u>1971</u>	
January	none
February	none
March	none
April	none
May	none
June	none
	<hr/>
Total	none

SEWAGE DISPOSAL WORKS

This section is responsible for the treatment and disposal of all the sewage from the City of Providence, Town of North Providence, Town of Johnston, and waste from the Narragansett Brewing Co., Cranston, Rhode Island. The Disposal Plant is located in the southerly section of the city near the Municipal Dock at Field's Point.

The following tables show the statistics for the Disposal Plant for the fiscal year 1970-1971.

Estimated population served by the plant.

Providence	187,061
Johnston	
North Providence	

<u>Sewage Flow</u>	<u>Million Gallons</u>
Providence	
Johnston	
North Providence	
Cranston (Narragansett Brewing Company)	
Total Flow	19,391.71 M.G.

SUMMARY OF OPERATIONS

Total flow of Sewage	19,391.71	M.G.
Average Daily Flow	53.20	M.G.
Max. Daily Flow (8 Feb. 1971)	106.41	M.G.
Min. Daily Flow (18 Oct. 1970)	33.81	M.G.
Total air used for Aeration	16,864.54	MCF
Liquid Chlorine	1,013.5	Tons
Ferric Chloride	164.2	Tons
Lime as Chemline Slurry	2,668.8	Tons
Grit Removals	751.0	Tons
Sludge cake incinerated	43,492.0	Tons
Ash removed from Incinerator	5,497.9	Tons
Oil for operation of Incinerator No. 2 Oil	339,127	Gals.

Electric power used from the Garbage Incinerator

<u>1970</u>	<u>K.W.H.</u>
July	none
August	none
September	none
October	none
November	none
December	none
<u>1971</u>	
January	none
February	none
March	none
April	none
May	none
June	none
	<hr/>
Total	none

The expenditures for the fiscal year were as follows:

ITEM 0	Personal Services	357,014.80
ITEM 1	Services other than personal	204,513.77
ITEM 2	Materials and Supplies	235,034.77
ITEM 5	Special Items	459.53
		<hr/>
	Total	797,022.87

During the period from July 1, 1970 to June 30, 1971 mechanical breakdowns resulting from normal wear and tear were repaired by the plant Personnel.

All weir support brackets in the #2 primary tank were replaced and weirs were leveled to insure better tank operation. Weirs and support brackets were primed and painted.

Weirs in the #1 primary tank were leveled and all metal work was primed and painted.

A new 8000 Lb. capacity chlorinizer unit was assembled and installed in place of the #1 Chlorinizer, which is now scheduled to be rebuilt.

A new vacuum pump was installed in the filter building and is presently in use. An obsolete vacuum pump was removed and scrapped.

An extensive rebuilding job was completed on the Komline Filter and it was put into operation.

A new cloth media was purchased for the #1 Eimco filter and installed.

The #1 Incinerator was put back into service after being shut down for a period of about 6 years.

A new motor and impellor were purchased for the #3 primary pump in order to double its pumping capacity.

The #2 and #4 Sewage Sludge holding tanks were rebuilt and are ready for service when needed.

GARBAGE COLLECTION AND DISPOSAL

The Garbage Collection and Disposal Section is charged with the collection and disposal of Domestic Combustible Refuse and the disposal of Commercial refuse. The Domestic refuse is collected by City trucks and transported to the Incinerator for disposal. All Commercial refuse is transported to the Incinerator in private vehicles. Electric power is generated at the Garbage Incinerator by means of waste heat boilers and Turbo-Generators. The power generated is used at the Sewage Disposal Works, Sewage Pumping Station, Highway Department Building, Municipal Garage, Garbage Incinerator and the Sanitation Maintenance Garage.

A fleet of twenty trucks, with special load packing bodies, is used in making the collection of domestic garbage and combustible household rubbish. Two collections per week are made from every residence in the City.

Two Garbage Incinerators, each with a capacity of 160 tons per day, are situated at 100 Terminal Road in Providence, only one unit is in operation at a time, the other is on stand-by. Each unit has two steam boilers and the steam generated is used to generate electric power to drive auxiliary machinery at the plant and to heat the Incinerator Plant, the Sanitation Garage, and several buildings at the Sewage Disposal Works. The two Turbo-Generators, each with a rating of 1250 K.W. are operated one at a time keeping second unit on stand-by. Both the Incinerator and Power Plant are in operation twenty-four hours per day.

The expenditures of this section for the fiscal year were as follows:

ITEM 0	Personal Services	904,546.56
ITEM 1	Services other than Personal	150,832.04
ITEM 2	Materials and Supplies	48,264.77
ITEM 3	Special Items	
	Total	1,103,643.37

GARBAGE COLLECTION AND DISPOSAL

The following is the K.W. H. furnished the Sewage Disposal Works, the Municipal Garage, the Sewage Pumping Station, the Highway Garage and Station Power.

1970	Sewage Disposal	Sewage Pumping	Municipal Garage	Highway Garage	Station Power	Total
July	none	none	none	none	none	none
August	none	none	none	none	none	none
September	none	none	none	none	none	none
October	none	none	none	none	none	none
November	none	none	none	none	none	none
December	none	none	none	none	none	none
<u>1971</u>						
January	none	none	none	none	none	none
February	none	none	none	none	none	none
March	none	none	none	none	none	none
April	none	none	none	none	none	none
May	none	none	none	none	none	none
June	none	none	none	none	none	none
Totals	none	none	none	none	none	none

GARBAGE COLLECTION AND DISPOSAL

TOTAL POWER GENERATED

K.W.H.

Average Daily Distributed Load	none
Average Daily Distributed Load to Sewage Disposal Works	none
Average Daily Distributed Load to Sewage Pumping Station	none
Average Daily Distributed Load to Municipal Garage	none
Average Daily Distributed Load to Highway Garage	none
Average Daily Distributed Load to Garbage Incinerator	none

The monthly ash totals from the Incinerator during the year were as follows:

1970

TONS

July	1,080.00
August	1,040.90
September	1,029.95
October	1,080.00
November	1,037.70
December	1,074.00

1971

January	1,039.00
February	959.50
March	1,079.70
April	1,039.75
May	1,039.40
June	1,039.75

Total

12,539.65

GARBAGE COLLECTION AND DISPOSAL

The following is the total amount of Garbage and Refuse disposed of by this department from July 1, 1970 to June 30, 1971.

<u>1970</u>	<u>Garbage (Tons)</u>	<u>Rubbish (Tons)</u>
July	3,267.30	1,276.95
August	3,143.87	1,441.80
September	3,361.33	1,207.10
October	3,318.83	1,178.76
November	3,558.10	1,094.91
December	3,322.44	1,228.02
<u>1971</u>		
January	2,989.51	1,186.72
February	2,637.51	539.56
March	3,218.60	925.52
April	3,418.07	884.86
May	3,417.87	400.85
June	3,554.07	520.83
Totals	39,207.50	11,885.88

Daily average for collection based on 309 working days 126.88 (Tons)

Daily average for disposal based on 365 working days 139.99 (Tons)

GARBAGE DISPOSAL

During the period from July 1, 1970 to June 30, 1971 mechanical breakdowns resulting from normal wear and tear were repaired by the plant personnel. Replacements needed included in parts: new boiler tubes, new drive parts, new crane parts, new bearings, sections of new steam and water lines, etc. Refractory lining in the combustion chambers and fire boxes of both plants were patched when and where necessary. New charging door assemblies, seats, and tracks were installed in Plant #2 garbage incinerator.

New refractory arch and back walls were installed in the Plant #2 garbage incinerator furnace chamber. Furnace grates of Plant #2 incinerator were repaired and replaced in part with new castings where needed.

Purchased and installed a new boiler water feed pump. Turbine #18118 of the turbo-generator set was completely overhauled.

REFUSE COLLECTION AND DISPOSAL

The total cubic yards collected for the fiscal year follows:

<u>1970</u>	<u>Total</u>
July	7,022.00
August	6,271.00
September	6,836.00
October	6,214.00
November	6,404.00
December	6,694.00
<u>1971</u>	
January	5,880.00
February	5,738.00
March	6,122.00
April	6,022.00
May	4,456.00
June	6,634.00
	<hr/>
Total	74,293.00

REFUSE COLLECTION AND DISPOSAL

The Refuse Collection and Disposal Section is responsible for the Collection and Disposal of all non-combustible refuse from the residential section of the City once each month. The City is divided into twenty routes. Six trucks, six drivers and twelve laborers are used in this collection.

All materials collected are disposed of in a sanitary land fill dump situated at 668 Hartford Avenue, Providence, Rhode Island opened for operation in May 1968. This section has a laborer assigned to the dump to maintain a clean disposal area. The dump is open five days a week during the year. The Highway Section has a bulldozer and operator assigned to the site to maintain the land fill operation.

The trucks used are 16 cu. yards load packers and are rented from Shop and Stores Revolving Fund.

This section also collects non-combustible refuse from Fire and Police Stations, City Buildings and Public Libraries.

Expenditures for this section for the fiscal year were as follows:

Item 0	Personal Services	\$115,314.82
Item 1	Services other than personal	31,311.00
Item 2	Materials and Supplies	1,018.11
Total		<hr/> 147,643.93

SANITATION DIVISION REVENUE

Sewage Pumping Station	-----
Sewage Disposal Works	484,363.10
Garbage Collection and Disposal	7,680.05
Refuse Collection and Disposal	13.00
Total	<hr/> \$492,056.15

RECOMMENDATIONS

1. The Narragansett Brewery waste should be treated at the source prior to discharge into municipal sewage system, preferably the one of the City of Cranston. The geotrichum candidum infestation of the Providence sewage is due to the Narragansett Brewery waste as proven by trials in 1968.
2. It is again recommended that in this era of radioactivity, serious consideration should be given to the installation of a warning system for the detection of radioactive isotopes in the Sewage system of the City. This warning device should be installed at some point in the Sewage system where the employees at the pumping station and the sewage disposal plant would receive advance warning of the presence of these dangerous isotopes in the flow of sewage. Radioactive isotopes are being used more and more in medicine and industry and it is very possible that some of them could inadvertently find their way into the sewage system.
3. Erect a wire fence with two gates at the entrance and exit of the Garbage Incinerator. These gates would be closed during the hours when no dumping is allowed at the incinerator.
4. The diversion gate #5A and 5B installation at the Sewage Disposal Plant must be replaced.
5. The position of electrician should be added to the personnel of the Sanitation Division to perform electrical maintenance in the Sewage Disposal, the Refuse Incinerator and the Sewage Pumping Station installations. This work is usually done by outside contractors.
6. Further the study required toward the acquisition of a new Refuse Incinerator. This to be in the form of a preliminary survey to include: Recommended design, size, space, air pollution control, and operating estimates for equipment, installation and operation and a pictorial representation of the project for assimilation of the proposal. This study should include a thorough investigation of the benefits to be gained by the addition of a solid waste disintegrator to an incinerator installation. Benefits may include savings resulting from reduced storage requirements, small hopper capacities, wide choice of furnace design, and an incinerator fuel approaching homogeneousness, etc..
7. Provision must be made to incinerate sewage grit and grease, this entails a study to determine the most economical method of disposal by use of a feed mechanism to the present Sludge Incinerator or the acquisition of a new Grit and Grease Incinerator.

8. The sludge incinerator and garbage incinerator metal stacks must be painted.
9. Purchase a mobile paint spraying outfit for painting outdoor equipment located in the Sewage Disposal Plant; for more efficient use of material, time and personnel.
10. The filter building and the blower building are in acute need of repairs. This condition is a constant source of danger to personnel, especially due to falling bricks.
11. The fees for disposal of commercial combustible waste should be reviewed and increased to the same level set by some of our neighbor's such as Pawtucket.
12. The co-operation of the law enforcement agency should be obtained for the enforcement of the Ordinance for the collection, conveyance and disposal of waste materials in the City of Providence.
13. The program to replace ceramic disffusers in the aeration tanks of the Sewage Disposal Plant with Raypro diffuser socks must be continued.
14. The spray water intake manifold in the Sewage Plant must be altered to increase spray water capacity.
15. A new sludge pump and a new vacuum pump must be provided for the Sewage Plant to replace obsolete equipment.
16. Garbage Incinerator Plant boilers #1, #2, and #3 must be retubed.
17. The program to overhaul Chlorinizers of the Sewage Plant must be continued to conclusion to maintain prescribed dosage at peak flow during storms and normal chlorination of the north passage.
18. A diesel generator must be provided to generate sufficient electrical power to operate one 60 MGD sewage pump and one Sewage plant blower in the event of main power failure.

19. Boilers for general heating of Sewage Disposal Plant, filter, Blower, and Incinerator buildings must be repaired or replaced as needed should the garbage incineration facility be shut down.
20. Arrangement must be made to enable use of low sulphur fuel where required.
21. The garbage Incinerator building roof must be repaired if this facility is scheduled to remain active.
22. Sewage Sludge incinerator #2 must be overhauled.
23. Eimco filter #1 and #2 stainless steel belts must be replaced.
24. New screens are to be provided and installed in the Sewage Pumping Station.
25. Four small diesel pumps and other provisions are to be made to protect equipment from damage in the primary and secondary pumping station, the chlorination building and the field laboratory building of the Sewage Plant in the event of a hurricane.

HIGHWAY SECTION

The main duty of this section is the maintenance of approximately 340 miles of paved streets, including the repairing, patching seal coating, surfacing, resurfacing or reconstruction of Highways and the setting, re-setting or replacing of granite curbing. This section also constructs new highways when ordered and performs miscellaneous jobs for other sections of the Department of Public Works as well as for other City Departments.

EXPENDITURES:

ITEM 0	Personal Service	\$932,907.28
ITEM 1	Services other than Personal	226,322.98
ITEM 2	Materials and Supplies	<u>130,057.18</u>
	TOTAL	\$1,289,287.44
	Revenue	45,455.43

Received Streets Repaired and Surfaced 1970-1971

Streets

LOCATION

Harris Avenue	Harris Ave. @ Kinsley
Sanford St.	Plainfield St. to Mercy St.
Shepard Ave.	Charles St. to Leo Ave.
Stansbury St.	Douglas Ave. to Grand Broadway
DePinedo St.	Job St. to West Term.
Sherwood St.	Douglas Ave. to Vandewater St.
Greeley St.	Russo to Oppper St.
Memorial Sq.	Junction of Canal & Steeple Sts. to Promenade
Leo Avenue	Langdon St. to Charles St.
Raphael Ave.	Langdon St. to Charles St.
Paolino St.	Killingly St. to Johnston City Line
Simmons St.	Pocasset Ave. to Ethan St.
Harris Ave.	Intersection of Harris And Atwells Ave.
Laura St.	Broad St. to Melrose St.
Parkway Ave.	Chalkstone Ave. to View St.
Harris Ave.	Atwells Ave. to Freeway Ramp
Comet St.	Gesler St. to Swiss St.
Ivy St.	Rochambeau Ave. to Dead End
Firglade St.	Forest St. to Hart St.
Eighth St.	Highland Ave. to Summit Ave.
Fourth St.	Hope St. to Lorimer Ave.
Mayflower St.	Morris Ave. to Hope St.
Sixth St.	Summit Ave. to Lorimer Ave.
Seventh St.	No. Main St. to Highland Ave.
Highland Ave.	Sixth St. to Eight St.
Bolton Ave.	Kimball St. to Home Ave.
Promenade St.	Park St. to 267' Westerly on Park St.
Longmont St.	Admiral St. to Cornwall St.
Raymond St.	Chalkstone Ave. to Ayrault St.
Lawn St.	Bolton Ave. to Farm St.
Louis Ave.	Roger Wms. Ave. to Wildwood Ave.
Caxton St.	Veazie St. to Wild St.
Mitchell St.	Broad St. to Melrose St.
Grand Broadway St.	Vandewater St. to Stansbury St.
Durham St.	27 Durham St. to Sunbury St.
Denison St.	Commodore St. to Chatham St.
Chad Brown St.	Admiral St. to March St.
Russo St.	Raphael Ave. to Leo Ave.
Eddy St.	Weybosset St. to Middle St.
Benefit St.	Thomas St. to No. Main St.
Owen St.	Manton Ave. to Westerly Term.
Pope St.	St. Thesesa's Churth to Tot Lot
Fields Point Dr.	Right of way to Metal Co.

Ada Avenue
 Ansel St.
 Wildwood St.
 Delmar St.
 Penn St.
 Overhill Road
 Bradford St.
 Bradford St.
 Whiting St.
 Forest St.
 Phillips St.
 Alexander St.
 Church St.
 Freeman Pkwy.

Ortoleva Dr. to East Term.
 Reservoir Ave. to Louis Ave.
 Reservoir Ave. to Louis Ave.
 Reservoir Ave. to Louis Ave.
 Almy St. to Vinton St. (3 Sections)
 Hope St. to Lauriston Ave.
 Broadway to Atwells Ave.
 Jones St. to Cedar St.
 Morris Ave. to Hope St.
 Morris Ave. to Hope St.
 Morris Ave. to Hope St.
 Rounds Ave. to Sinclair Ave. (2 Sections)
 No. Main St. to Benefit St.
 Elmgrove Ave. to Cole Ave.

Received Streets started 1969-1970 Completed 1970-1971

<u>Street</u>	<u>Location</u>
Riverdale St.	Manton Ave. to So. Term.
Brookfield St.	Manton Ave. to Glenbridge Ave.
Fairfield St.	Manton Ave. to Richland St.
Richland St.	Edgemere Ave. to Glenbridge Ave.
Gallileo Ave.	Chalkstone Ave. to "BEY"
Barbara St.	King Phillip to Middleton St.
Mercy St.	Sanford St. to Ethan St.
Sophia St.	Murray St. to Sibyl St.
Merino St.	Plainfield St. to Eastwood Ave.
Dresser St.	Ponagansett St. to Melissa St.
LaSalle Drive	Shanon St. to Sharon St.
Walton St.	Academy Ave. to Enfield Ave.
Erie St.	Sharon St. to Rome Ave.
Rome Ave.	Sharon St. to Enfield Ave.
Drill St.	Sharon St. to Hillview St.
Badger Road	Sharon St. to Hillview St.
Sandringham Ave.	Annie St. to Sharon St.
Stonelaw Ave.	River Ave. to Sharon St.
Niagara St.	Detroit Ave. to Stanwood Ave. (12 Sections)
Early St.	Prairie Ave. to Niagara St. (2 Sections)

Received Streets Repaired and Surfaced Incomplete as of June 30, 1971

<u>Street</u>	<u>Location</u>
North Ave.	Hope St. to Blackstone Blvd.
Camp St.	Doyle Ave. to Olney St.
Creighton St.	Brown St. to Propect St.
Brayton Ave.	Dean St. to Cedar St.
Stanton St.	Murray St. to Prudence Ave.
Federal St.	DePasquale Ave. to Dean St.
Evelyn St.	Union Ave. to Prudence St.
Pitman St.	Governor St. to East River St.
Union Ave.	Silver Lake Ave. to Plainfield St.
Sibyl St.	Mercy St. to Murray St.
Kenyon St.	America St. to DePasquale Ave.
Kenyon St.	DePasquale Ave. to Dean St.
Clematis St.	Molloy St. to Glover St.
Jacqueline Drive	Neutaconkanut Rd. to 180' Easterly
Phebe St.	Admiral St. to General St.
Fair St.	Hazael St. to Phebe St.
Augusta St.	Wainwright St. to Crandall St.
Anthlly St.	Calhoun Ave. to Cranston St.

Unreceived Streets Resurfaced Completed 1970-1971

<u>Street</u>	<u>Location</u>
Anchor St.	Glasglow St. to Ea. Term.
Humbert Ave.	Stanhope St. to Victor Emanueal
Right of Way Road	Shipyard St. to Section #1
Cheshire St.	Sussex St. to West Term.
Stockwell St.	Riverdale St. to Ea. Term.
Stockwell St.	Riverdale St. to West. Term.
Henry St.	Riverdale St. to Ea. Term.
Thornton St.	Ophelia St. to Eliza St.
Eliza St.	Thornton St. to So. Term.
Polly St.	

Permanent Maintenance

Shipyard Street
Pocasset Ave, Sophia & Murray Street's Intersections

SNOW REMOVAL

Expenditures

ITEM 0	Personal Services	\$208,963.44
ITEM 1	Services other than Personal	117,164.12
ITEM 2	Materials and Supplies	<u>81,414.39</u>
	Total	\$407,541.95

Snow removal is primarily a function of the Highway Section. All the ice control (sanding, salting, ect.) is accomplished by this section. The plowing is performed in the following manner.

Zones 1-2-3-8-10	By the Incinerator Trucks
Zones 4-5-6-9-13	By the Highway Dept. Trucks
Zones 11-12	By the Sewer Trucks

Thirteen main routes of the City are plowed in tandem by hired trucks working under the supervision of the zone supervisors. All hills and main highways are sprayed with salt.

For the fiscal year 1970-1971 the City had 18 snow storms, the first on December 6, 1970 and the last on March 19, 1971 with a total of 39.9 inches. During this period the following work was completed.

(Bus. areas, churches and Fun. Homes)	6,200 Cu.Yds
Sanding Streets	19,761 Miles
Plowing Streets	17,333 Miles
Removal of Snow	15,996 Cu.Yds

The following materials were used during the year:

Sand	8,523.00 Tons
Salt	4,629.50 Tons

The following equipment was hired from private contractors;

Trucks (Plow)	31	2103.5 Hrs.
Payloader (Removal)	2	147.5 Hrs.
Grader	6	144.5 Hrs.

FOX POINT HURRICANE BARRIER

ORGANIZATION CHART

CHIEF ENGINEER

PUMPING STATION

Operators 5

Bldg. Maint.

Crew 4

Equip. Maint.

Foreman 1
Crew 8

Sewer Gates

Foreman 2
Crew 10

Grounds Maint.

Foreman 1
Crew 4

Electrical Maint.

General
Electric 2

Street Gates

Foreman 1
Crew 8

The Hurricane Flood Protection for the City of Providence was authorized by the Flood Control Act, dated July 3, 1956, Public Law 85-500, 85th Congress and is located across the Providence River 900 feet upstream from its confluence with the Seekonk River at Fox Point. It extends from the expressway at Allens Avenue on the West across the Providence River to Traverse St. on the East.

The structure was constructed under three contracts, completed January 31, 1966 and accepted by the City on March 19, 1966.

The protection for Providence consists of a river gate section, pumping station, barrier wall sections and earth and rock fill dikes.

The Hurricane protection system includes about 700 feet of concrete structures across the Providence River, which includes a 50 ft. concrete cellular structure in the West abutment, a 24ft. pumping station, a 180 ft. center barrier, a 148 ft. river gate section, and a 108 ft. concrete wall section on the east abutment between the barrier wall section and the land dike. The pumping station includes five vertically mounted axial flow 119-inch pumps with a total capacity of 7,000 c.f.s. at a 20 ft. head. In the westerly end bay of the pumping station, two 10ft. by 15 ft. gates for the control of flows into the cooling water canal are located. The river gates section includes three 40ft. by 40 ft. tainter gates with sill at elevation - 15.0 mean sea level.

The west dike section is approximately 1,400 ft. long and includes 1,250 feet of an earth and rock fill section with armor stone protection, a concrete wall section and the Allens Avenue and Narragansett Electric Company Vehicular Gates.

The east abutment, approximately 780 feet long, includes the South Main Street Vehicular Gate and 730 feet of an earth and rock fill section with stone protection.

The hurricane protection project provides complete protection to about 280 acres in the downtown business and industrial sections. This project provides a high degree of protection from a hurricane of design intensity, with a still water flood level of 20.5 feet mean sea level.

During the year the Pumping Station has been operated monthly to maintain working order. In addition to monthly tests, the station has been on alert and manned by City Personnel during coastal storms.

The operation and maintenance of the Barrier requires the co-operation of various sections of the Public Works Department, namely the Engineering Personnel, the Highway Section, Sewer Section and the Bridge Section.

The Engineering Personnel supply the required work force for operation of the Pumping Station with the Chief Engineer designated by Federal Authorities as superintendant of the Barrier Operations.

The highway burb crews supply the required work for maintenance of the street gate.

The Bridge Section is assigned the station heavy equipment maintenance and was made available as required.

It is noted that all personnel are permanently assigned to other duties.

In addition to Public Works Maintenance a contract with General Electric Company provided the required electrical equipment maintenance. Testing of the Cathodic Protection System was let to contract.

It is recommended that three additional personnel be assigned the Bridge Section to perform the increasing maintenance demand of the Barrier facility....

Joseph J. Campo, P.E.
Dep. Dir. of P.W.

JJC:mgk

BRIDGE MAINTENANCE SECTION

The Bridge Maintenance Section personnel consists of eleven (11 men). The tasks performed by these men are the most varied of all sections in the Public Works Department.

Mainly concerned with structural maintenance and reconstruction of forty (40) bridges varying in size and complexity, two (2) viaducts and eight (8) culverts including timber, concrete and steel repairs and maintenance. The bridge section maintains twenty (20) additional bridges for sidewalk snow removal.

In addition to their main task, the section performs difficult structural repairs for all sections of Public Works.

Also, the Bridge Section erects heavy duty barricades and maintains rail switches and tracks at West River Park and Port facilities.

The expenditures of the section for the fiscal year 1970-1971 were as follows:

Item 0	Personal Services	\$ 50,205.66
Item 1	Services other than Personal	5,363.18
Item 2	Materials and Supplies	8,413.86
Item 5	Equipment	<u>270.00</u>
	Total	\$ 64,252.70
	Revenue	180.00

Of the aforementioned forty (40) structures, twenty-two (22) required work this year and are as follows:

1. Point St. Bridge Replaced broken door, repaired wood floor, replaced twenty broken windows. Engine room house. Repaired two sections of roadway sub (wood) flooring. Repaired two sections of steel expansions joints.

- Repaired wood sidewalk stringers and replaced worn sidewalk planks, cleaned, primed, painted iron fences along bridge sidewalks.
2. Red Bridge Repaired standards for navigation lights, maintenance of lights. Cleaned and painted wood barricaded on shore spans.
 3. Park St. Bridge Repaired pileings, fence railings. Repaired sections of roadway sub deck and top deck. Replaced worn sidewalk planking. Replaced sidewalk fence posts and painted sidewalk fences.
 4. Smith St. Bridge Repaired wood roadway beams, replaced rotted out wood sub deck in several sections. Repaired wooden beams and replaced worn planking on bridge sidewalks. Removed debris from around bridge pileings in river.
 5. Crawford St. Bridge Complex Repaired fences along sidewalks. Repaired expansion dams at two bridge sections.
 6. Leland St. Footbridge Rebuilt two sections of sidewalk. Repaired wood pileings. Repaired wooden fences on bridge.
 7. DeLaine St. Bridge Removed roadway asphalt. Replaced three (3) rotted out wood floor beams and subdeck 3" planking, north side of bridge roadway. Cleaned and painted all steel work.

- | | | |
|-----|--------------------------------------|--|
| 8. | "Merino Bridge"
Glenbridge Avenue | Repaired and painted sidewalk approach fences. Replaced worn planking on bridge sidewalks. |
| 9. | Veazie St. Bridge | Cleaned and prime painted all steel work |
| 10. | Atwells Ave. Bridge | Cleaned and painted all steel work. |
| 11. | Acorn Street Bridge | Cleaned and painted steel super structure and sidewalk fences. Replaced worn sidewalk planking, repaired wood support beams for sidewalks. |
| 12. | Gaspee St. Bridge | Clean and painted steel sidewalk fences. Repaired two (2) sections of roadway expansion joints. |
| 13. | "Tar Bridge" Manton Ave. | Repaired two (2) loose tread plates on expansion joints of roadway. |
| 14. | "Wanskuck Bridge"
Branch Avenue | Cleaned, primed and painted steel sidewalk fences. Replaced three (3) worn concrete sidewalk slabs. |
| 15. | Charles St. Bridge | Repaired two (2) damaged sections of steel sidewalk fence. Cleaned, primed painted bridge steel work. |
| 16. | Francis St. Bridge | Repaired four (4) damaged sections of steel sidewalk fence. |
| 17. | Pettis St. Bridge | Repaired wood sidewalk approach fence. Replaced three (3) wood sidewalk beams. |

- | | | |
|-----|---|---|
| | | Replaced worn sidewalk planking. |
| 18. | West River St. Bridge | Cleaned, prime painted all steel work. |
| 19. | Roger Williams Avenue
Railroad Bridge | Repaired wood sidewalk stringers. Replaced worn sidewalk planking. |
| 20. | Reservoir Avenue
Railroad Bridge | Repaired wood sidewalk approach fence. Repaired two (2) roadway expansion joints. |
| 21. | Hawkins St. Bridge | Cleaned, prime painted all steel work. |
| 22. | West River Industrial Park
Railroad Bridge | Repaired wood sidewalks, and fences. |

BARRICADE FENCES

Erected heavy duty wooden barricade fence at Faunce Drive.

Repaired and painted barricade fences and guard rails at following locations:

Carolina Ave., Oak St., Veazie St., Greeley St., Pleasant Valley Parkway, Riverdale St., Branch Ave., Harris Ave. Viaduct, Prospect St., Hillard St., New York Ave.

SNOW REMOVAL

Removed snow and sanded sidewalks on city owned bridges, plus all sidewalks on bridges over route 95 and areas under route 295 in city. Also sidewalks on Westminster St. and Broadway over Roberts Expressway.

SERVICES RENDERED OTHER DEPARTMENTS

Westminster St. Pedestrian Mall	Erected three (3) flood-lights, also masonry and carpenter work.
West River Industrial Park Railroad	General maintenance of track switches and railroad bridge.
D. P. W. Incinerator Field's Point	Installed heavy wood bumpers at garbage pits.
Public Works Administration Building	Repaired overhead doors, steam lines, broken windows, doors and locks. Also painted doors and window frames.
Hurricane Barrier	Lubrication, rigging, cleaning and painting.
D. P. W. Engineers	Sounded river at Municipal Dock Field's Point

Lawrence P. McGarry
Director Of Public Works
700 Allens Avenue
Providence, R.I.

June 30th, 1971

Dear Sir:

I respectfully submit the following report on the operations of the Sidewalk and Curbing Section, of the Department of Public Works, for the fiscal year July 1st, 1970 to June 30th, 1971.

This section is responsible for the condition of all sidewalks in the City. It serves notices on property owners for the repair, construction or reconstruction of sidewalks, issues licenses and permits to sidewalk contractors for repairs, construction or reconstruction of sidewalks; inspects all sidewalk work; makes temporary minor repairs to sidewalks; and is responsible for the posting and maintenance of defective street signs and memorial square signs.

THE OPERATION OF THIS SECTION WERE AS FOLLOWS;

Sidewalk Contractor's Licenses Issued	50
Notices Served to Build or Repair	128
Built or Repaired	55
Permits Issued to Build or Repair	176
Construction of New Curb Openings for Driveways Inspected	160
New Memorial Square Approved by Council	1
Memorial Square Signs Repaired and Relettered	58
Sidewalks Inspected Damage due to Tree Roots	167
Sidewalks Inspected after Installation of New Water Service	90
Sidewalk Openings by Narr. Elec. and Tel. Co. Inspected	141
Sidewalk Openings by Gas Co. Inspected	66
Streets Abandoned by Council and Signs Erected	5
Sidewalk Washout and Depressions Inspected and Repaired	193
Sidewalk Claims Investigated	35
Investigated Accident Claims and Private Property Claims	80
Street Signs Repainted and Relettered	622
Street Names Changed by Council and New Signs Erected	1
Total Lin. Ft. of Brick Sidewalk Built	506
Total Lin. Ft. of Bituminous Sidewalks Built	12,908
Total Lin. Ft. of Concrete Sidewalks Built	10,468

Respectfully submitted,

Charles J. Fidrych,
Sidewalk Inspector

SEWER CONSTRUCTION & MAINTENANCE

The Sewer Construction and Maintenance section of the Public Works Department is responsible for the inspection, cleaning, repairing, construction and reconstruction of the sewers and sewer appurtenances, such as manholes, catch basins, inlets, etc. of the sewer system.

EXPENDITURES

Item 0	Personal Services	\$307,958.22
Item 1	Services other than Personal	54,576.32
Item 2	Materials & Supplies	<u>14,047.58</u>
	Total	\$376,582.12
	Revenue	160.20

MAINTENANCE WORK PERFORMED

Catch basins replaced	1
Catch basins repaired and rebuilt	40
Catch basins frames and covers reset	11
Catch basins covers replaced	4
Catch basin covers repaired or rebuilt	2
Catch basin covers reset	2
Dome over basins	5
New catch basins built	1
Manhole covers replaced	2
Manhole frame and covers reset	27
Manhole frame replaced	7
Manhole frames rebuilt	1
Manhole frames and covers raised to grade	30
Manhole covers repaired	7
Inlet stone reset	1
Inlet stone replaced	31
Inlet stone removed	2
Gutter grates replaced frame and cover	2
Gutter grates repaired and reset	4
Gutter grates raised or lowered to grade	1
Broken pipes replaced	7
Pipes repaired	1
Pipes reset	3
Storm line repaired	3
Broken line repaired	7
Repair connections	5
Excavation for broken pipes	7

Basins, gutter grates, and sumps cleaned; Deposits removed, lines flushed and complaints received.

8947	Catch basins cleaned	21,094.67	cu.yds.
43	Sumps cleaned	104	cu.yds.
332	Gutter Grates cleaned	763	cu.yds.
37	Potholes cleaned	30	cu.yds.
	Open drains cleaned	1,812	cu.yds.
8294	Complaints received	All cleared	
	Sewer lines flushed	22,746	ft.

Following is a resume of private drain connections, inspections made in conjunction with private construction and alterations:

Original	101	Extensions	178
----------	-----	------------	-----

CONSTRUCTION WORK PERFORMED 1970 - 1971

Davis Park	Build brick wall between storm & sanitary line
Trinity Parkway	Build box grate with concave cover
Shiloh Street	Build new sanitary line
Fifth and Hope St.	Remove inlet and build regular basin
155 Early St.	Dome over basin with concave gutter grate frame
Union Ave.	Build inlet and chutes
Potters adn Elmwood Ave.	Remodel two regular basins
40 Hooper St.	Change regular basin into concave gutter grate basin
Westminister at Valley St.	Change 2 flat g.g. inlets into concave with no stone
771 Blackstone Blvd.	Build 6" deep flat g.g. basin with 3" trap
50 Tyndall Ave.	Build new box grate chute
Sewage Disposal Plant	Excavate for water line
Elmwood and Princeton Ave.	Build new box chute
Church St.	Repair broken sewer line
Opposite 19 Peck Street	Rebuild box chute, replace inlet stone
Cold Spring at Pitman	Build new box grate
Livingston and Printery St.	Build manhole over slot
Mary E. Fogarty School	Build manhole in driveway
Pine and Dyer Sts.	Repair collapsed gutter grates, brick Work
Gallatin and Melrose St.	Repair broken pipe in storm line
137 Eastwood St.	Repair collapsed chute, brick work done
335 Williams St.	Excavate to repair obstruction in Sanitary line
29 Eastwood Ave.	Build new box chute to offset basin

S/W on Arch and Elmwood Ave.
Samoset and Gage St.

Opposite 869 Branch Ave.
Padelford and Jenkins St.
Fields Point
55 Bancroft St.
Smith & Holden St.
Swift St.

Build 2 gutter grate box chutes
Replace 12" with 12 x 6 branch, build
new basin
Repair chute
Reset basin frame and cover to grade
Replace manhole frame and cover
Repair chute
Replace basin frame
Excavate & repair storm line

**PERSONNEL
ADMINISTRATION**

STREET LIGHTING

John T. Crowley

Acting Public Service Engineer

PUBLIC SERVICE DIVISION

Mr. Lawrence P. McGarry
Director of Public Works
700 Allens Avenue
Providence, Rhode Island

Dear Sir:

I respectfully submit the following report for the Public Service Division for the fiscal year 1970-1971.

NUMBER AND KIND OF STREET LIGHTING UNITS IN SERVICE IN PROVIDENCE SINCE 1956

INCANDESCENTS

MERCURY

MERCURY BRIDGE STRUCTURES

YEAR	24 hr. Burning	5.5A 1000Lu	2500Lu	10000Lu.	15000c O.H.	15000c U.G.	3500Lu	7000Lu	21000Lu
1956	44	8228	447	435	3476				
1957	44	8248	489	391	3501				
1958	44	8192	484	349	3570				
1959	44	8236	512	348	3593			7	
1960	44	8244	519	345	3623			42	
1961	44	8212	547	331	3607			38	
1962	44	8122	536	309	3567			118	12
1963	44	8139	541	187	2754	825		173	231
1964	44	8136	534	122	1081	2311		245	321
1965	44	8100	530	66	2076	1203		297	426
1966	44	8069	526	38	2054	1187		404	501
1967	44	8040	537	33	2036	1174		512	526
1968	44	8042	546	33	2034	1152		544	544
1969	44	7674	525	32	1984	1112	351	646	667
1970	44	5840	281	28	1477	1077	2095	1302	1386
1971	44	3676	138	26	1228	1032	4416	1950	1710

*15000c Lu. Means a 21000 Lu. Mercury Vapor Lamp Installed-In An Existing 15000 Lu. Mercury designed Luminaire.

STREET LIGHTING DATA

July 1, 1970 - June 30, 1971 Changes

Total number equivalent single incadescent lights	6149	3840	2307
Total number mercury lights 15c 21,000, & 7,000 Lu. & 3500 Lu.	7381	10380	2999

From May 1 to October 14, inclusive, the half night lights burn one extra hour until 1 A.M.

The United Transit Company is charged for $\frac{1}{2}$ the cost of the 15,000c lumen U.G. mercury which is located at the Thayer Street entrance to the tunnel.

There are 8 lights on Montgomery Avenue for which Cranston pays \$7.00 per light per annum.

These charges shown for the United Transit Company and the City of Cranston are billed by the City Controllers Office.

The rates which are affected by fuel costs are:

General Service Rate D, Power Rate F., Power Rate G.

NARRAGANSETT ELECTRIC COMPANY FUEL COSTS

The amount determined under the preceding provisions shall be increased or decreased by .000005 per kilowatt hour for each \$.01 increase or decrease in cost of fuel, as defined in the Company's terms and conditions, above or below \$10.75 per net ton. The cost of fuel for any month shall effect the price of electricity billed in the second month following such month.

The cost of fuel by month was as follows:

1970	July	8.566
	August	8.750
	September	8.917
	October	8.850
	November	8.327
	December	8.034
1971	January	7.892
	February	8.000
	March	8.134
	April	8.112
	May	7.856
	June	9.143

* Standard Net Ton

The number of lamps and globes reported as broken on street lights during the years 1970-1971, is as follows:

1970-1971	<u>LIGHTS BROKEN</u>
	3652

	Annual Decrease Per 10¢ Decrease in cost of Fuel Below \$10.75	No. of 10¢ below \$10.75 Base Fuel Price	Decrease to Base Price	Annual Base Price	Net Price
<u>INCANDESCENT 100 cp.</u>					
U.G. All Night	.021	25	.53	29.12	28.59
U.G. Single, ½ Night	.009	25	.23	25.11	24.88
Aerial Single, A.N.	.021	25	.53	16.09	15.56
Aerial Single, ½ Night	.009	25	.23	10.40	10.17
<u>MISCELLANEOUS</u>					
2500 Lu. U.G. A. N.	.043	25	1.08	52.19	57.11
2500 Lu. Aerial, A.N.	.043	25	1.08	32.19	31.11
10000 Lu. Aerial, A.N.	.132	25	3.30	72.51	69.21
10000 Lu. U.G. A. N.	.132	25	3.30	92.51	89.21
10000 Lu. U.G. ½ Night	.072	25	1.80	72.39	70.59
2500 Lu. U.G. ½ Night	.0245	25	.61	43.74	43.13
21,000 Lu. O.H.	---	--	---	94.00	94.00
21,000 Lu. U.G.	---	--	---	114.00	114.00
7,000 Lu. O.H. Mercury	---	--	---	55.00	55.00
7,000 Lu. U.G. Mercury	---	--	---	75.00	75.00
21,000 Lu. U.G. 2 Lt.	---	--	---	208.00	208.00
15,000-c Lu. O.H.				77.00	77.00
15,000-c Lu. U.G.				97.00	97.00
15,000-c Lu. U.G. 2 Lt.				174.00	174.00
15,000-c Lu. Underpasses 24 Hr.				123.00	123.00
7,000 Lu. U.G. 2 Lt.				130.00	130.00
3,500 Lu. O.H.				45.00	45.00
3,500 Lu. U.G.				65.00	65.00

NOTES:

15,000c Mercury Vapor means a 21,000 Lumen Mercury Vapor Lamp installed in an existing 15,000 Lumen Mercury Vapor Luminaire.

MALL PARKING DECK LIGHTS

1 FRANCIS STREET

The Mall Parking Deck lights are charged to the general street lighting Account. However, they will not show on the schedule because they are on a separately metered circuit and do not come under the contract price per light unit. They are metered on a "G" Rate and so much per K.W.

<u>No. of Lights</u>	<u>Type of Lights</u>	<u>Hours of Burning</u>
12 U.G.	21,000 Lumen M.V.	24
14 U.G. A.N.	21,000 Lumen M.V.	Predetermined Ft. Candle Level
18 U.G. A.N.	2,500 Lumen Inc.	Predetermined Ft. Candle Level

The 10 U.G. A.N. 21,000 Lumen M.V. lights on the top deck are separately metered and charged to the Meyers Brothers Parking System.

MONTHLY CHARGES

<u>MONTH</u>	<u>BILL</u>
July, 1970	\$ -----
August, 1970	80.39
September, 1970	152.68
October, 1970	74.00
November, 1970	78.24
December, 1970	
January, 1971	
February, 1971	147.08
March, 1971	73.07
April, 1971	71.27
May, 1971	
June, 1971	148.13

Sign Inspection

Signs inspected for overhead wire clearance 181

These signs are inspected for wire clearance as noted in the National Safety Code Standard.

Private Floodlight Inspections APPROVED 150

WESTMINISTER PEDESTRIAN MALL

<u>MONTH</u>	<u>BILL</u>
<u>1970</u>	
July	193.78
August	234.50
September	241.26
October	275.69
November	352.95
December	621.78
<u>1971</u>	
January	621.78
February	293.52
March	189.91
April	121.88
May	127.13
June	121.61

STREET LIGHTING SECTION

STREET LIGHTING COSTS

The total expenditures for the fiscal year ending June 30, 1971, for street, bridge, subway and park lighting bills, contracted in the months stated, less all credits for outage, have been as follows:

1970-1971 Appropriation -- \$635,000.00

INCANDESCENTS AND MERCURYS

<u>1970</u>	<u>TOTAL BILL</u>	<u>LESS OUTAGE</u>	<u>NET COST</u>
July	54,561.50	29.87	54,531.63
August	56,887.14	48.54	56,838.60
September	58,684.86	67.29	58,617.57
*October	58,495.03	35.45	58,459.63
November	58,402.22	61.64	58,340.58
December	58,930.01	120.63	58,809.38
<u>1971</u>			
January	59,111.35	124.41	58,986.94
February	59,934.77	96.60	59,838.17
March	59,847.65	76.56	59,771.09
**April	60,735.21	128.57	60,606.64
May	61,705.82	29.13	61,676.64
June	<u>61,902.91</u>	<u>37.58</u>	<u>61,865.33</u>
	709,198.52	856.32	708,342.20

* 2 U.G. Singles - Credit 669 nights \$327.12

** Fuel Adjustment \$ 70.32

RECAPITULATION

Grand Total	\$708,342.20
Total monthly average cost 1969-1970	47,744.77
Total monthly average cost 1970-1971	59,028.51
Increase from previous years of the Monthly Average	11,283.74
Total savings in outages	856.32

New Street Light Petitions Received Granted Hold

113 15 98

Utility Pole Petitions Received and Field Checked 289

Very truly yours,

John T. Crowley
Utility Inspector
Acting Public Service Engineer

PUBLIC SERVICE SUMMARY

The 208 utility pole petitions received and field checked by this department represented new and regular maintenance work.

An added duty of this division is the field inspection and approval of all gas permits and the checking of soil resistivity.

The sign inspections by this division were prompted by some near fatalities in the past, which is now controlled by allowing signs to be only as near high tension wires as the National Safety Code Standard allows and recommends.

This division also field checks, inspects and approves all petitions submitted for the installation of all underground conduit, vaults, manholes and duct lines installed in Providence by the Narragansett Electric Co., Providence Gas Company, New England Telephone & Telegraph Company, Western Union Telegraph Company, Department of Public Safety and the Traffic Engineering Department.

Christmas decorations have been inspected and approved at Olneyville Square, Mount Pleasant Area, Wayland Square, Federal Hill and the Downtown area, sponsored by the various businessmen's associations.

This division also checked and approved all monthly department electric and gas bills rendered to all City of Providence Departments.

Consequently, it would seem advisable at this time to recommend to the department and assistant to be added to the street lighting division, to help maintain and keep up to date card files, cutage records, field check light locations, and constantly check for foliage obstructing the new higher mounted street light fixtures. In this way our department can work in closer proximity and more efficiently with all utility companies, and our own forestry department.

I suggest some expense item for new equipment, the maintaining of same; and travel expense, if the opportunity arises, to attend another street lighting institute.

These outdoor lighting institutes are frequently given by the General Electric Company and other street lighting equipment company and will keep us abreast of the new developments in street lighting.

This department also sends inspectors out os the State on occasions during the year to wire and cable manufacturers, to witness and approve the testing of Traffic Signal Cable and Fire Alarm Cable to make certain it meets the required specifications. This cable is destined to be installed on the City of Providence.

STREET LIGHTING SUMMARY

We can again say the high standard of street lighting enjoyed by the citizens on the traveled arteries of the City of Providence, and neighborhood streets has contributed in a big way to the welfare of the pedestrian as well as the motorist in protecting the lives and property of its citizens.

We also feel that our improved lighting still contributes an important part in enabling the Traffic Engineering Division and the Police Department to gain national recognition for traffic safety on our streets.

Our Master Plan for the relighting of the entire City of Providence is now approximately one-half complete and if conditions are favorable the project should be completed around the early part of 1973.

At the time of its completion the City shall be relighted entirely with three different sources of mercury vapor lighting and all the existing incandescents shall be removed. Some of these remaining incandescents lights have been in service since 1914.

Our main problem is still trees and as the project progresses, information is forwarded to the City Forester for his cooperation in clearing the light brackets.

This Department also inspects every new installation request for private lighting by the Narraganset Electric Company for adverse affect on traffic and homes. These private light sources are either 400 Watt or 1000 Watt mercury vapor floodlights, or private lighting on the sidewalk side of the utility pole which is called area lighting.

DEPARTMENT OF COMMUNICATIONS

INVENTORY	SIGNAL CONST.	FIRE ALARM DIV.	POLICE SIGNALS
	<u>TOTAL</u>	<u>AERIAL</u>	<u>UNDERGROUND</u>
Fire Alarm Boxes	1052	647	410
City Owned	688	424	265
Private Owned	368	223	145
Police Call Boxes	167	102	65
Total number of all box and cable pedestals			366
Total number of Fire Boxes pedestals			274
Total number of Police Box pedestals			67
Total number of cable pedestals only			36
Total number miles of underground cables			37.15
Total number miles of Parkway Cables			1.47
Total number miles of Aerial Cable			4.82
Equivalent Single Conductor:			1258.4
Underground			129.3
Aerial			6.42
Parkway			
Footage of underground ducts & Lateral owned by City			3445.6
Number of poles city owned			36
Increase of City owned fire boxes			0
Increased of private owned fire boxes			14

PROVIDENCE GAS COMPANY

Total Gas Services in Providence			36,283½
Miles of Main:			
L.P.	393 Miles	36 Feet	
H.P.	20 Miles	289 Feet	
Natural Gas	<u>1 Mile</u>	<u>1,800</u>	
Total	414 Miles	2,125 Feet	
Gas Holders			4
Number of Meters (Active)			50,487
Decrease in Gas Services 6/30/70 - 6/30/71			249½
Increase in Mains			1,068 Feet
Decrease in Number of Meters 6/30/70 - 6/30/71			40

WESTERN UNION TELEGRAPH COMPANY

City Plan, Providence, Rhode Island

Manholes Owned 1

*Number of feet of Telegraph Cable

*This cable is enclosed in conduit which is leased from the New England Telephone Company.

TRAFFIC ENGINEERING DEPARTMENT

The following is a list of traffic signal equipment in use by the Traffic Engineering Department of the City of Providence:

Total number of traffic signal heads	1420
Total number of traffic signal poles	655
Total number of traffic signal controllers (local)	183
Total number of traffic signal controllers (master)	6
Total number of feet of underground ducts and laterals	73,301
Total number of miles of underground cable	29.49
Total number of miles of aerial cable	7.29
Total number of miles of equivalent single conductor (underground)	156.38
Total number of miles of equivalent single conductor (aerial cable)	36.38

The above list of equipment is owned by the Traffic Engineering Department. At the same time we are using duct space and cable belonging to New England Telephone and Telegraph Company and the City of Providence Fire Department as Follows:

Total number of feet of duct space belonging to the New England Telephone & Telegraph Company assigned to City use	52,530
--	--------

Total number of feet of duct space belonging to the Fire Department of the City of Providence	3,040
---	-------

Total number of equivalent single conductor underground cable belonging to the City of Providence Fire Department and assigned for Traffic Engineering use	47.6
--	------

THE NARRAGANSETT ELECTRIC COMPANY

1.	(a) Total number of wood poles in City (including those jointly owned but not including those jointly used, with no Narragansett ownership).	18,792
	(b) Total number jointly owned poles with N.E.T. & T. Company	14,238
2.	(a) Total number of iron poles in the city.	11
	(b) Number of underground street light standards (ornamental incandescent and mercury vapor).	2,101
	(c) Number of iron poles with N.E.T. & T. Co.	0
3.	Total number miles conduit (trench feet) in city.	88
4.	Total number miles conduit (duct feet) in city.	718.98
5.	Total number miles underground cable in city.	953.82
6.	(a) Total number miles equivalent single underground conductor.	1308.70
	(b) Total number miles aerial cable.	380.10
	(c) Total number miles equivalent single conductor aerial cable.	1003.91
7.	Total number miles aerial open wire.	3619.94
8.	Total number service pipes or laterals.	68.26
9.	Total number commercial transformers in city.	6,363
10.	Total number customers supplied directly by U. G. connection.	23,108
11.	Total number customers supplied directly by O. H. connection.	50,169
12.	Total number meters installed in city.	73,277
13.	Approximate total number of 1Ø 2 wire 115 V. meters in city.	20,490

14.	Approximate total number of 1Ø 3 wire 115/230 V. meters in City.	44,876
15.	Approximate total number of 3Ø 3 wire 115 V. meters in city.	5
16.	Approximate total number of 3Ø 3 wire 230 V. meters in city.	721
17.	Total number of 3Ø 4 wire 120/208 V. meters in city.	2,745
18.	Total number of 1Ø 3 wire 120 V. two element meters in city.	3,377
19.	Total number of D. C. 2 wire and 3 wire 250 and 250/500 V. meters in city.	30
20.	Approximate total number of 3Ø wire 575 V. meters in city.	1,033

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

Total number of wood poles (including jointly used, but not including those jointly used with no ownership.	18,072
Total number of jointly used poles with New England Co.	14,238
Total number of miles conduit (trench miles).	75.41
Total number of miles U. G. cable	385.15
Total number of miles aerial cable	396.42
Total number of wood terminal boxes on poles	130
Approximate number of telephones supplied directly by underground or block distribution.	54,412
Approximate number of telephones supplied directly by overhead lines on highways.	52,524
The following additions have been made to the equipment in use by this company during the past year:	
Additional miles of cable - underground and aerial.	22.2
Increases in the number of telephones in use.	2,991

ESTIMATE

This report covers plant statistics as of June 30, 1971.

Lawrence P. McGarry
Director of Public Works
700 Allens Avenue
Providence, R.I.

Dear Mr. McGarry:

We respectfully submit the following report concerning the activities of the division of the Public Works and Environment Control Division for the year July 1, 1970 to June 30, 1971.

ENVIRONMENT CONTROL

This department was established as an adjunct to the Sanitation Division after the transfer of the major portion of the Health Department to the State of Rhode Island. The primary purpose of the department is to hold the line against the careless disposition of refuse and other discards that attract rodents and vermin which are the forerunners of disease.

RODENTS

This department activities have covered the inspection and baiting of yards and mercantile areas where the presence of rodents or ideal conditions for their multiplication were evident.

DANGEROUS WEEDS

The department has been consistently called upon to detect and destroy marijuana growing in the city. Experienced workmen remove the weed including the roots and truck it away for destruction.

REMOVAL OF POISON WEEDS

Jimson Weed, Ragweed, Poke Berries, Poison Ivy are also destroyed by this department. These weeds although not classed in the same category as marijuana are a definite menace to the physical comfort of the city's population.

CLEARANCE OF RIVERS AND DAMS

The crew of the department has also been called upon to clear the dams and river banks of the local streams in order to facilitate navigation and restore their natural beauty.

HURRICANE BARRIER

In addition to this departments general duties there is included the task of clearing all vegetation from the rocky Hurricane Barrier. The winds carry the seeds droppings them between the large rocks, where they grow, causing and eye sore. The removal of this growth, which can only be accomplished by clambering over the rocks and pulling by hand is a long and tedious task but the results keeps the barrier in an orderly condition.

ASSISTANCE TO SUPERVISOR OF PUBLIC WORKS

This department also assist the Department of Public Buildings in the transportation and moving of equipment during elections and dismantling after the functions are completed. Bath houses and confort stations are also kept of debris.

MAINTENANCE OF CITY OWNED LAND

City owned land is kept clear of debris and rubbish that is carelessly deposited by un-thinking individuals. The land is also cleared of the growth that otherwise destroy the appearance of the area.

RAZED BUILDINGS

This department also oversees the fumigation of buildings that are to be torn down in order to prevent the escape of rodents and vermin to adjacent buildings in the area.

SNOW REMOVAL

This department has regularly included in its activities the regular removal of snow from the areas covering the Manton Avenue sidewalks adjacent to the dumping area. Our administration building and the Hopkins Park Area.

Operational Statistics, Staff and Equipment:

Laborers	9
Foreman	1
Office Clerk	1
Vermin Control Officer	1
Inspector	1
Dump Truck	1
Passenger Car	1
Jeep Truck	1
Panel Truck	1

Operation:

Rodent Complaints	4,206
Stations Baited	2,871
Loads of debris removed	927
Supervision of razed bldg. areas	549
Dirty yard complaints received	3,036
Bags of bait distributed without charge (1½ lbs. to a bag)	4,733
Warning signs posted	226

Although there is a substantial increase in the operational statistics it is our opinion that the tremendous rubbish removal campaigns diligently instituted by the Director of Public Works in the various wards of the City, removing thousands of pounds of rubbish, held the situation in check.

RECOMENDATIONS

In addition to the enactment of the changes in the laws that control the departments operation we would suggest an official inquiry into the feasibility of instituting a public educational campaign in conjunction with the injerent desease that is a natural adjunct to the conditions brought about by the unsanitary conduct by the occupants of the consistantly offencing dwelling areas. Historically we know that some of these areas were once some of the finest in the city as we can only conclude that the conditions were brought about by the accupants. It seems that economic depression need not be accompanied by squalor.

Respectfully submitted,

Charles H. Oatley
Environment Control Dept.

Mr. Lawrence P. McGarry
 Director of Public Works
 700 Allens Avenue
 Providence, Rhode Island

Dear Mr. McGarry:

The following rigs arrived during the period from July 1, 1970 to June 30, 1971.

Steamships	379
Motor Vessels	482
Barges	326
Tugs	719
Dredges	1
Yacht	1

The following cargo was received and the following cargo was shipped during the above period.

<u>Received</u>		<u>Shipped</u>	
Gasoline	2,829,253 Tons	Gasoline	132,611 Tons
Fuel Oils	4,647,227	Fuel Oils	479,272
Kerosene	123,243	Kerosene	50,393
Diesel	198,231	Diesel	43,533
Lubes	33,314	Asphalt	13,331
Asphalt	44,846	Scrap	252,005
Cement	209,067	Total	971,145 Tons
Chemicals	19,563		
General Cargo	81,808		
Salt	37,744		
Lumber	129,937		
Total	8,354,232 Tons		
Tons Received	8,354,232		
Tons Shipped	<u>971,145</u>		
Total	9,325,377		

Very truly yours,

John S. Silva
 Ass't. Port Director

Tonnage Received July 1, 1970 to June 30, 1971

	<u>Gasoline</u>	<u>Fuel Oils</u>	<u>Kerosene</u>	<u>Diesel</u>
July 1970	257,551 Tons	362,499 Tons	25,062 Tons	35,616 Tons
August	492,108	223,038	1,889	8,893
September	238,797	341,083	2,793	16,215
October	217,458	401,519	114,082	32,198
November	205,520	381,725	14,863	9,181
December	177,421	341,045	2,541	5,457
January 1971	204,555	802,492	12,494	11,348
February	202,958	381,837	6,195	3,817
March	264,356	524,658	7,562	13,705
April	173,249	324,932	4,852	12,974
May	179,236	390,461	28,812	24,060
June	216,044	171,938	2,097	24,767

	<u>Lubes</u>	<u>Asphalt</u>	<u>Cement</u>	<u>Chemicals</u>
July 1970	3,150 Tons	1,666 Tons	19,934 Tons	1,813 Tons
August	3,576	4,165	21,928	1,753
September	5,016	7,164	28,463	1,478
October	2,385	4,332	18,077	-----
November	3,492	3,332	22,692	1,769
December	3,976	5,832	23,326	2,777
January 1971	-----	-----	7,750	-----
February	2,027	7,193	-----	1,563
March	3,112	-----	7,890	2,574
April	5,339	2,499	20,757	1,561
May	1,241	1,000	19,117	764
June	-----	7,663	19,133	3,511

	<u>Gen. Cargo.</u>	<u>Lumber</u>	<u>B. F. Lumber</u>
July 1970	16,709 Tons	15,791 Tons	9,474,877 B. F.
August	36,755	4,595	2,757,202
September	5,987	9,756	5,853,784
October	2,121	11,166	6,700,131
November	1,567	7,246	4,347,765
December	1,310	4,460	2,675,943
January 1971	30,003	9,995	5,997,381
February	3,069	5,700	3,420,845
March	13,524	15,548	9,328,931
April	5,691	18,259	10,955,528
May	3,159	24,325	14,595,075
June	2,726	3,096	1,857,783

Tonnage Shipped July 1, 1970 to June 30, 1971

	<u>Gasoline</u>	<u>Fuel Oils</u>	<u>Kerosene</u>	<u>Diesel</u>
July 1970	18,771 Tons	24,869 Tons	4,411 Tons	1,945 Tons
August	5,217	37,713	2,827	3,063
September	14,805	25,383	1,729	8,170
October	12,382	43,033	237	463
November	9,727	46,444	147	840
December	11,913	27,912	14,821	3,528
January 1971	4,680	43,558	9,286	4,804
February	17,720	89,972	6,964	7,492
March	11,812	53,553	2,011	1,647
April	8,361	46,144	1,406	7,304
May	2,900	16,247	4,020	1,474
June	14,323	24,444	2,534	2,803

	<u>Asphalt</u>	<u>Scrap</u>
July 1970	833 Tons	42,198 Tons
August	1,666	15,752
September	-----	14,790
October	-----	6,460
November	2,333	13,740
December	6,833	34,513
January 1971	-----	-----
February	-----	-----
March	-----	18,908
April	1,666	29,991
May	-----	12,054
June	1,666	61,599

SHOPS AND STORES

The Public Works Shops and Stores service completely all sections of the Public Works Department.

All the automotive construction and maintenance equipment is furnished to the section requiring its use on a rental basis. These rental payments are shown as receipts in the Revolving Fund which, together with the money received for stock orders and job orders, comprise the money used for defraying the operating costs and the purchase cost for the rental equipment of these sections.

A detailed resume of the activities is as follows:

This section has no budget allowance. All the expense for labor and materials are paid for with the money received from the equipment rentals, and from stock and job orders, together with the initial capital appropriated.

This section is responsible for procuring, servicing, maintaining and repairing all equipment, materials and supplies required by the sections and divisions of the Public Works Department.

A list of the available rental equipment is as follows:

2 Dump Trucks 2 cu.yds.	1 Utility Truck
30 Garwood Packer Trucks	4 Derrick Trucks
4 Dump Trucks 10 cu.yds.	1 Hoist Truck 5000#
3 Compressors, Truck Mounted	2 Bulldozers TD 18
33 Dump Trucks 4 cu.yds.	1 Sky Worker
4 Dump Trucks 6 cu.yds.	1 Welder, Electric Portable
1 Bulldozer TD 93 cu.yds.	5 Road Graders
10 Pickup Trucks 3/4 Tons	2 Mist Sprayers
1 Stake Body Truck 1 Ton	2 Concrete Mixers 3S
1 Express Body Truck 2 1/2 Tons	2 Snow Loaders
1 Express Body Truck 1 1/2 Ton	3 Lawn Mowers, Power
24 Passenger Cars	108 Snow Plows
8 Air Compressors, Portable	4 Snow Blowers
1 Trailer 25 T Flatbed w/tractor	3 Scout Cars
2 Station Wagons	3 Front End Loader
2 Hoist Trucks 2500#	1 Roller 10-14 tons tandem
1 Roller 8-10 ton tandem	2 Pavers, asphalt
1 Roller 10-12 ton 3 wheel	3 Tool Heaters
1 Walters Snow Fighter	6 Generators, Portable
1 Roller 3-5 tons tandem	6 Tool Wagons
1 Tar Kettle	19 Spreaders, Mounted
4 Leaf Collectors	1 Utility Truck
1 Wood Chipper	1 Vac. All Basin Cleaner
2 Eductor Trucks	1 Sewer Cleaning Machine
9 Mechanical Sweepers	

This equipment is serviced and repaired in the repair shops by personnel of this section.

During the year the following new equipment was purchased by this section and incorporated in the rental pool.

1 Utility Truck	1 Concrete Mixer
3 Automobiles	1 Station Wagon
4 Mechanical Sweepers	1 Wood Chipper

In addition to the rental equipment in the pool, this section also services, repairs and maintains the following equipment for this sections shown:

1 Outboard Motor	Bridge Maint. Sec.
2 Fork Lifts	Automobile Repair shop
1 Air Compressor	Paint Shop
1 Emergency Motor & Generator	Point St. Bridge
2 Buckets, Clamshell	Incinerator
4 Buckets, Orange Peel	Sewer Maint. Section
1 Roller, 5 ton tandem	Recreation Dept.

The Public Works Stock Room carries much of the material, parts and supplies required by the sections of the division. An inventory of \$123,643.42. in material and supplies and parts was on hand on June 30, 1971.

The following is an inventory of the Equipment used by the Department:

Rental Equipment	\$695,809.76
Plant Equipment	55,764.72
Radio System	<u>36,597.02</u>
Total	\$788,171.50