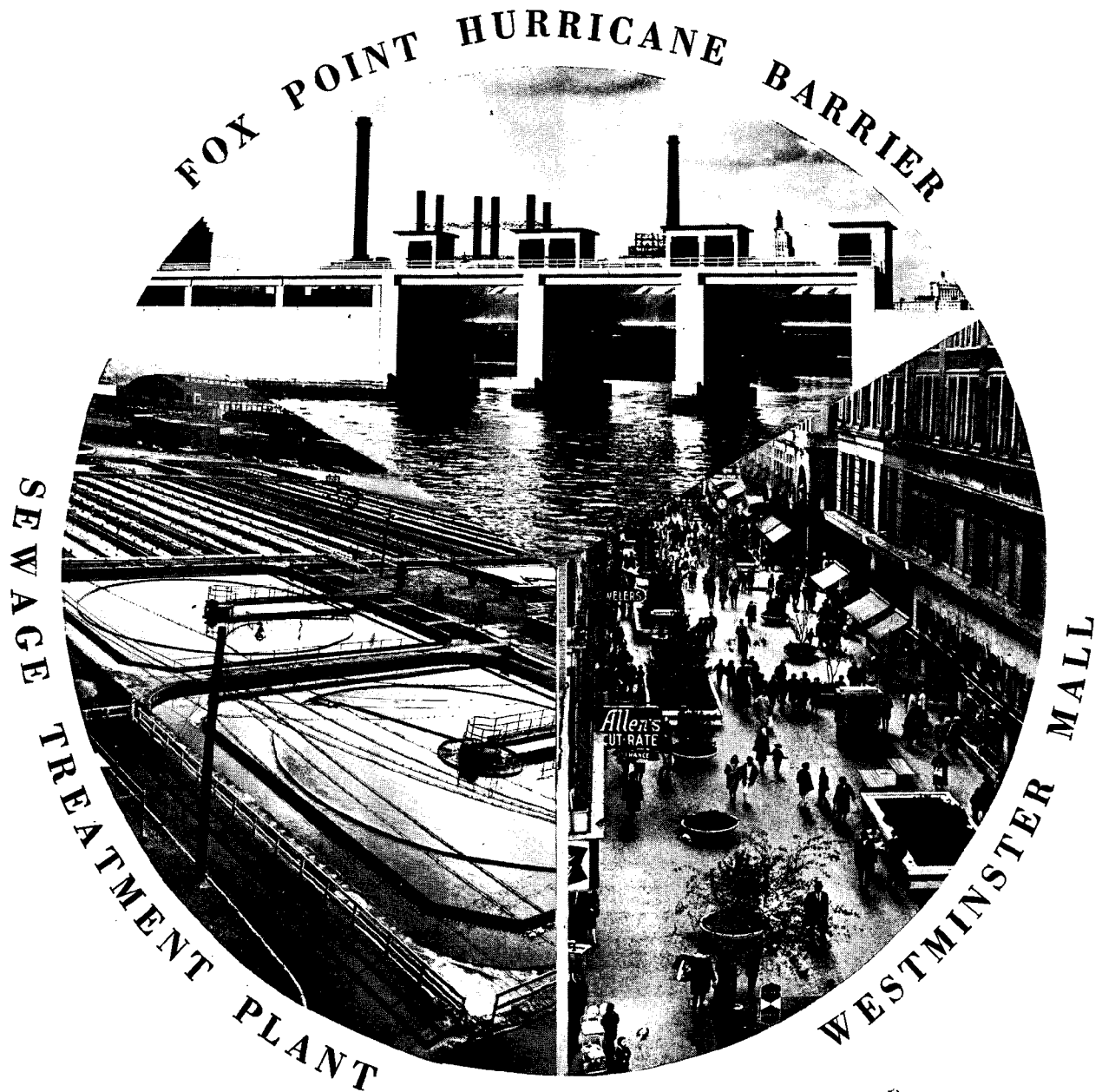


# PUBLIC WORKS DEPARTMENT

1966 - 1967

## ANNUAL REPORT



Providence, Rhode Island

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December 31, 1967

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 September 30, 1967, by the various divisions of the Department of Public Works. Appended to this report and to be considered as a 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

Contract work on the following projects was completed during the year:

The contract for building sewers in Sundry Streets by the Fanning and Doorley Construction Company for an estimated cost of \$38,866.75 is in progress.

The contract for resurfacing streets by the M.A. Gammino Construction Company for an estimated cost of \$152,988.00 is in progress.

The contracts for the construction of a new sludge incinerator by the Nichols Engineering Company and the Ayres Hagan and Booth Construction Company is completed except for some minor items. The cost of this work will be \$824,114.11 when completed, one half of which will be paid for from Federal Funds.

This Department working in conjunction with the Urban Renewal people is resurfacing streets and erecting new street signs in Code Enforcement Areas No. 1 and No. 16. We have also prepared the plans and specifications for similar work in Code Enforcement Area No. 2.

Plans and specifications have also been prepared by this department for the construction of storm sewers in the Mount Hope and West Broadway Redevelopment areas.

We are also furnishing supervision for the relocation of sewers in the Weybosset Hill Redevelopment area and in the area of Interstate route #195.

The electric crane at the Incinerator Unit No. 1 has been rehabilitated under a contract with the J & H Electric Co. at a cost of \$18,236.00.

The southeast corner wall of the Incinerator Garage has been stabilized by the Prepakt Concrete Co. at a cost of \$3610.00.

Rehabilitation of the Providence River Bridges by the Builders Iron Works was completed at a cost of \$975,516.67.

A contract for completely retubing and repairing No. 4 boiler at the incinerator was completed by the Clayburn Construction Co. at a cost of \$68,016.00. This company is also working on a contract to clean and replace boiler tubes in boiler No. 1 and No. 2.

The Sludge Incinerator No. 1 was completely rehabilitated by the Eastern Refractories Co. at a cost of \$45,804.00. Renewal of refractory lining of Unit #1 by Leach Refractory Co. at cost of \$19,066.00.

This Department prepared specifications for and purchased the following equipment and materials during the year:

Automobiles	Sand
Dump Trucks	Rock Salt
Garbage Trucks	Lime Slurry
Asphalt Spreader	Liquid Chlorine
Air Compressor, Truck Mounted	Ferric Chloride

The Highway Section resurfaced 120,747 sq. yds of streets during the year.

This Department has rendered assistance to various City Departments, Public Works Departments 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 Committees 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.

Contract work on the following projects is still in progress:

1. Retubing and rehabilitation of steam turbines at the Garbage Incinerator by Westinghouse Electric Co.
2. Construction of Sludge Incinerator by Nichols Engineering & Research Corp.
3. Surfacing and resurfacing of roads by M.A. Gammino Const. Co.

Plans and specifications are under preparation by the Engineering Office for the following projects:

4. Plans are being prepared for separating storm water run-off from the sanitary sewer in the various Code Enforcement and re-development areas.
5. The plans for a new storm sewer in Fountain Street and for the separation of the freeway drainage from the Fountain Street-Sabin Street storm sewers have been prepared and coordinated with the Providence Redevelopment Agency and the State Public Works Department for construction by them.

Personnel from the Engineers Office have been trained and are now operating the facilities of the Hurricane Dam.

#### Recommendations

Consideration should be given to the installation of a warning system for the detection of radio active isotopes at a location in the sewer system which would allow ample time to protect personnel at the Sewage Disposal Plant from radio activity.

Plans and specifications have been prepared for new ventilation fans in the Incinerator Hopper Rooms, the installation of new overhead doors of the Garbage Incinerator, the inspection and repair of the two (2) Westinghouse steam turbines of the Garbage Incinerator and the retubing of the boilers at the Garbage Incinerator. These projects should be let on bids and pushed to completion as soon as possible.

The flashing around the brick smoke stack in Unit No. 2 should be replaced.

The City Dump at Ponagansett Street will be filled in another year and will also be necessary for the City to obtain another dump site.

Shelter of some kind against radio active fallout should be provided at the Sewage Disposal Works with supplies of water, food, and bedding for a maximum of 32 employees.

Paint all bridges not painted during the past three years.

Crib walk at Point Street needs extensive repairs.

Expansion joints of Gen. Edwards Memorial Viaduct require re-pairing.

Leland Street Footbridge should be rebuilt. The floating dock at the Harbor Master's Wharf at Point and South Water Streets is completely gone and a new one should be built.

Merino Park Footbridge should be completely rebuilt. The piles are in very bad condition.

Many of the Bituminous Macadam Streets require either a surface treatment (seal coat) or a new top.

Some of the main City Streets are showing signs of wear particularly at the joints and will require either extensive patching or new surfaces. We have sealed many of these joints to delay the deterioration but there is much more to be done especially with the increased use of salt for ice control.

Attention should be given in future building construction to the separation of rain water run-off from Sanitary Sewage.

A maintenance gang of one foreman and six men should be set up for the construction and maintenance division to maintain the buildings of the Public Works Department; such as, the Storage and Transit Sheds at Fields Point, Fields Point Dock Office, Harbor Master's Building, House and Building at the Red Bridge, Brick Building at Sewer Syphon on India Street, Incinerator Buildings, Incinerator Garage, Sewer Maintenance Building, Highway Building, and Railroad Tracks at Fields Point, the Washington Park Pumping Station, the Reservoir Avenue Pumping Station and the Ernest Street Pumping Station.

There are many items that should be maintained or repaired at the present time. Some of this work has or is presently being accomplished by the Bridge Maintenance Gang and the Carpenters and Masons for Sewer Shops and Stores and the Construction and Maintenance Shops and Stores; but it could be better accomplished by assigning a definite responsibility for this work.

Several sections of the City are presently being flooded by normal rainstorms and immediate corrective action is required to correct these conditions. The more serious of these conditions are in the following locations:

[illegible]

Fountain Street between Dean Street and Dorrance Street.

Pembroke College Area.

Rutherglen and Sinclair Avenue Areas.

Clay, Crary and Hospital Street Areas.

Dexter Street Area.

The surcharged sewer conditions in the following streets should be corrected:

Woonasquatucket River Trunk Sewer.

Douglas Avenue - Branch Avenue at City Line.

Elmwood Sanitary Sewer at Allens Avenue and Ernest Street.

Rutherglen Avenue and Alexander Street.

Many of the tide gates along the Providence and Seekonk Rivers are in need of being repaired or replaced. (4 were replaced in 1966)

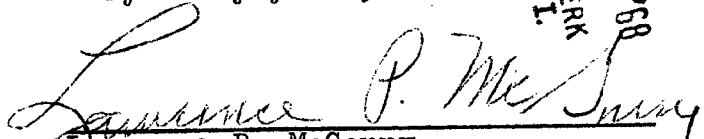
New Sewerage agreements with the towns of North Providence and Johnston should be made. The rates should be revised upward to reflect the actual cost of providing this service.

Provisions should be made to transfer the Mechanical Engineers position from the Sanitation Division to the Engineering Office.

Provision should be made to establish the position of Electrical Engineer in the Engineering Office

Provisions should be made to add the positions of carpenter and electrician to the personnel of the Shops and Stores Section. This would result in having two (2) carpenters in this section.

Very truly yours,

  
Lawrence P. McGarry  
Director of Public Works

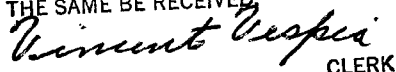
IN CITY COUNCIL

MAR 7 - 1968

READ:

WHEREUPON IT IS ORDERED THAT  
THE SAME BE RECEIVED

A5

  
CLERK

FILED  
MAR 8 10 26 AM '68  
CITY CLERK  
PROVIDENCE, R.I.



GENERAL ADMINISTRATION

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

Dear Sir:

The Annual Report of the General Administration Office of the Public Works Department for the fiscal year ended September 30, 1967, is respectfully submitted.

STATEMENT OF REVENUE - Estimated and Actual

	<u>Budget Estimate</u>	<u>Net Actual Revenue</u>	<u>Budget Excess</u>	<u>Comparison Deficiency</u>
Business and Non-Business Licenses:				
Sidewalk Contractors	500.00	480.00	-	20.00
Highway Privileges	700.00	615.00	-	85.00
Total Business & Non-Business	<u>1,200.00</u>	<u>1,095.00</u>		<u>105.00</u>
Special Assessments:				
Sewers	20,000.00	16,175.78	-	3,824.22
	<u>20,000.00</u>	<u>16,175.78</u>		<u>3,824.22</u>
Departmental Revenue:				
P.W. Administration	-	60.00	60.00	-
Engineering Office	-	5.00	5.00	-
Sewage Disposal	155,000.00	55,276.78	-	99,723.22*
Garbage Coll. & Disp.	24,000.00	25,207.02	1,207.02	-
Refuse Coll. & Disp.	-	217.30	217.30	-
Highway	34,000.00	50,148.53	16,148.53	-
Bridge Maintenance	-	47.63	47.63	-
Sewer Const. & Maint.	300.00	24.38	-	275.62
Street Lighting	-	104.50	104.50	-
Municipal Dock	310,000.00	317,440.71	7,440.71	-
Draw Bridges	-	105.96	105.96	-
Total Department Revenue	<u>\$523,300.00</u>	<u>\$448,637.81</u>	<u>\$25,336.65</u>	<u>\$99,998.84</u>
Total Statement	\$544,500.00	\$465,908.59	\$25,336.65	\$103,928.06

\*Town of North Providence contract for sewage disposal is being renegotiated

# STATEMENT OF EXPENDITURES

FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 1967

	Personal Services	Services Other Than Personal	Material & Supplies	Special Items	Capital Outlay	Total
GENERAL ADMINISTRATION	131,586.41	12,691.54	3,673.56	-	989.55	148,941.06
ENGINEERING OFFICE	210,897.86	4,632.97	1,452.28	-	577.40	217,560.51
SANITATION DIVISION						
Sanitation Administration	15,369.84	2,874.35	66.56	-	-	18,310.75
Street Cleaning	268,243.53	79,087.91	1,423.49	-	-	348,754.93
Sewage Pumping Station	74,240.54	5,475.21	4,790.53	-	-	84,506.28
Sewage Disposal	290,897.03	210,524.82	166,191.42	-	-	667,613.27
Garbage Collection & Disposal	715,023.60	114,359.09	31,474.68	5,070.38	-	865,927.75
Refuse Collection & Disposal	98,042.03	31,445.80	718.81	-	-	130,206.64
Environment Control	49,666.21	5,861.26	2,951.76	-	-	58,479.23
CONSTRUCTION & MAINTENANCE DIVISION						
Construction & Maintenance Admin.	10,129.60	857.00	122.90	-	-	11,109.50
Highway	741,787.12	183,415.98	99,827.43	-	323.80	1,025,354.33
Bridge Maintenance	45,217.56	5,903.83	5,838.61	-	361.67	57,321.67
Snow Removal	163,127.82	108,150.76	73,461.79	-	-	344,740.37
Sewer Construction & Maintenance	271,120.03	59,220.52	11,572.69	-	-	341,913.24
Public Buildings	78,785.92	7,820.98	843.19	-	245.43	87,695.52
Municipal Dock	36,496.55	13,471.23	2,536.05	-	-	52,503.83
Street Lighting	5,884.32	514,933.04	-	-	-	520,817.36
Draw Bridge Operation	58,697.87	671.06	490.13	-	-	59,859.06
	\$3,265,213.84	\$1,361,397.35	\$407,435.88	\$5,070.38	\$2,497.85	\$5,041,615.30

THE FOLLOWING SERVICES WERE ALSO RENDERED BY THE GENERAL ADMINISTRATION  
OFFICE FOR THE YEAR ENDING SEPTEMBER 30, 1967.

APPLICATIONS RECEIVED

For altering curb openings for driveways	44
Construction of curb openings for driveways	182
Curbing Resets	58
	<hr/>
Total Applications	284

LICENSES ISSUED

Newspaper Stands	8
Push Carts	9
Sidewalk Stands	19
Drain Layers Licenses	7
Drain Layers Licenses (Limited to sprinkler system)	6
	<hr/>
Total Licenses Issued	49

PERMITS ISSUED

Public Utilities	231
Blasting	5
For Moving Cumbersome Equipment	1
Street Openings (Water Supply Board)	165
Original Permits for sewer connections	215
Extension of House Drains	241
Sidewalk openings for water service	207
Street Openings (Other)	85
	<hr/>
Total Permits Issued	1150

Respectfully submitted

WILLIAM J. CAIN  
Admin. Ass't. (P.W.)

Engineering Office

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

Dear Sir:

Following is the Annual Report covering various activities of the Engineering Office for the Fiscal Year ending September 30, 1967:

Expenditures:

ITEM 0	Personal Services	\$210,897.86
ITEM 1	Services other than Personal	4,632.97
ITEM 2	Materials and Supplies	1,452.28
ITEM 5	Equipment	<u>577.40</u>
	Total	\$217,560.51

The Engineer's Office consists of three (3) standard and a miscellaneous section. The three standard sections perform the following work:

1. City Property and Street Line Section performs surveys, produces plans and keeps the records of the City streets, miscellaneous City property, the North Burial Ground and City parks.
2. Highway Section designs, writes specifications for and supervises the construction and maintenance of highways.
3. Sewer Section designs, writes specifications for and supervises the construction and maintenance of sewers, drains and sewer appurtenances.

The miscellaneous section designs, writes specifications for the construction, maintenance and purchase of miscellaneous facilities and equipment used by the City.

A description of the projects accomplished by these sections during the year ending September 30, 1967, is as follows:

City Line and City Property Section

NOTICES OF INTENTION TO BUILD

There were 200 notices of intention to build filed in this office during the fiscal year. Thirty-six of these were not required for various reasons. In response to the remaining 164 notices, the Street Lines were marked on the ground as requested for the specified locations as follows:

20 Devon St.	15 Galileo Avenue
91 Middleton St.	41 Funston Avenue
58 Italy St.	536 Cranston St.
9-11 Bellevue Ave.	835 Hope St.
170 Babcock St.	47 Danby St.
62 Taylor St.	788 Hope St.
220 Lorimer St.	406 Sharon St.
19 Venice St.	30 Vaughan St.
67 Waite St.	139 Ophelia St.
20 Wainwright St.	91 Netop Drive
170 Longfellow St.	108 John St.
102 Nelson St.	16 Vaughan St.
30-32 Dorothy Ave.	61 Cass St.
Park Lane	23 Paolino St.
103 Terminal Road	325 Washington St.
111 Fountain St.	52 Coggeshall St.
140 Greeley St.	118 Argol St.
32 Wyndham Ave.	27 Leslie Drive
572 Charles St.	66 Columbus St.
66 Benefit St.	373 Eaton St.
71 Shipyard St.	21 Pinehurst Ave.
5 Anchor St.	11 Riverdale St.
309 Lockwood St.	51 Windmill St.
102 Enfield Ave.	95 Dante St.
39 Redwood Drive	80 Clematis St.
468 Smith St.	100 Prospect St.
135 Ives St.	28 Sophia St.
112 Edgewood Blvd.	21 Obediah Brown Rd.
328 Williams St.	35 Rowley St.
43 Phebe St.	70 Cactus St.
169-171 Meeting St.	135 Ophelia St.
118 Berlin St.	215 Sunbury St.
138 West Park St.	12 Sackett St.
176 Atlantic Ave.	27 Marion Ave.
76 Victoria St.	20 Netop Drive
205 Woodward Rd.	43 Isabella Ave.
190 Oxford St.	37 Armstrong Ave.
60 Gloucester St.	22 Roslyn Ave.
144 Whitehall St.	215 Clarence St.

40-44 Fish St.  
Shipyard St.  
118 Huxley Ave.  
300-302 Langdon St.  
40 Lakeview Dr.  
84 Summer St.  
28 Malbone St.  
10-14 Wilna St.  
31 Eliza St.  
19 North Ave.  
50 Park Lane  
Benevolent St.  
87 Hyacinth St.  
100 Dudley St.  
342 Woodward Rd.  
51 Clarkson St.  
101 Petteys Ave.  
531 Smith St.  
248 Webster Ave.  
557 Cranston St.  
12-16 Devon St.  
15 DiMario Dr.  
62 Gloucester St.  
Worcester St.  
1 & 3 Thurston St.  
485 Mount Pleasant Ave.  
68 Netop Dr.  
100 Hartshorn Rd.  
25 Dorothy Ave.  
77 Tiffany St.  
1 Riverdale St.  
143 Chester Ave.  
40 Horace St.

375 Richmond St.  
34 Brockton St.  
43-47 Kimball St.  
44 Italy St.  
2 Sherman St.  
18 Lecia Dr.  
24 Lecia Dr.  
16 Minto St.  
12 Vaughan St.  
2 Malvern St.  
17 Towner St.  
790 Broad St.  
5 & 16 Sunrise Dr.  
175 Prairie Ave.  
298 Wickenden St.  
850 Elmwood Ave.  
104 Ohio Ave.  
338 Jastram St.  
148 Glenbridge Ave.  
134 Wood St.  
1 Batcheller Ave.  
141-153 Corliss St.  
285 Carpenter St.  
147 Reservoir Ave.  
30 Galileo Ave.  
69 Cumberland St.  
53-55 Somerset St.  
15 Walton St.  
57 Rowley St.  
1 Addie St.  
21-27 Imera Ave.  
65 Lucile St.  
42 Hauxhurst St.

Field surveys of streets accepted as public highways by the City Council were made and the lay-out maps were drawn for office use and for the official records of the City Clerk.

Information pertaining to street lines, including records of street lay-outs, widenings, abandonments, alignment changes and name changes was furnished to Engineering firms and Title companies throughout the year.

Street Lines were marked out on the ground for the construction of new sewers when requested by the Sewer Section of the Engineering office.

Street Line information was furnished to Engineers for the State of Rhode Island, Department of Public Roads in conjunction with their work on various freeways.

THE FOLLOWING STREETS WERE ABANDONED  
DURING THE YEAR

---

RECEIVED STREETS ABANDONED

<u>NAME</u>	<u>BETWEEN POINTS</u>	<u>LENGTH IN FEET</u>
Atwells Avenue	From the easterly line of Bourn St. 455+ ft. easterly to the South- westerly line of Aborn St.	438.74
South St.	Hospital St. to Imperial Place	<u>240.60</u>  679.34 Ft. or .12866 Miles

UNRECEIVED STREETS ABANDONED

<u>NAME</u>	<u>BETWEEN POINTS</u>	<u>LENGTH IN FEET</u>
Barbars St.	From Middleton St. to Celia St.	200.00
Blanding St.	From Brook St. to its easterly Term.	45.98
Duncan Avenue	Camp St. to Knowles St.	421.69
Magenta St.	From a point 80 Feet north of Nellie St. northerly to its northly termination.	130.00
Manton Court	Portion of Manton Ct. (Parallel with Manton Ave.) Northerly to its northerly termination.	145.00
Pond St.	From Fenner St. easterly 140.18 feet to "Alley D".	140.18

West Hoyle St.	From Cranston St. north- erly, westerly, and north- erly and southerly.	462.56
Unnamed St.	From April Court, north- easterly to its north- easterly termination	<u>45.00</u>
		1590.41 Feet or .30121 miles

The approximate length of streets platted but not received is 40.9674 miles.

The net addition during the year added to the previous total makes the length of Received Streets at the end of the Fiscal Year 1967 (measured along property lines) 370.0023 miles.

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

THE FOLLOWING STREET, RECENTLY PLATTED, HAS BEEN  
ADDED TO THE LIST OF UNRECEIVED STREETS:

Sunrise Drive	Isabella Ave. to its north- erly termination	452.705 Feet or 0.0857 miles
---------------	---	------------------------------------

CITY PROPERTY PLANS AND SURVEYS WERE  
MADE COVERING THE FOLLOWING PROJECTS:

Fields Point	Option to Lease
Colfax St.	Zoning Change
Westminster St.	Zoning Change
North Burial Ground	Portion of Section 33
Crary, Eddy and	
Hospital Sts.	Location Plan
Fields Point	Proposed Lease
Hyacinth St.	Proposed Sale
Thayer St-Fones Alley	Location Plan
Triggs Memorial Park	Proposed Sale
Old Hope High School	Proposed Lease



Clarkson St.	Layout
Magnolia St.	Proposed Abandonment(Portion of)
Fields Point	Proposed Sale (Portion of)
Waterman St.	Proposed Rental
Parente and Luke Sts.	Proposed Sale
Benefit St.	Zoning Change
Smith and Duke Sts.	Zoning Change
Heath and Plainfield Sts.	Zoning Change
Westminster St.	Zoning Change
Celia St.	Zoning Change
So. Angell St.	Zoning Change
Joseph St.	Layout
Coleridge Court	Proposed Abandonment
Ponagansett &Melissa Sts.	Proposed Agreement
Allens Ave. and Crary St.	Proposed Sale
Amherst and Bowdoin Sts.	Proposed Sale
Neutaconkanut Park-Killingly St.	Proposed Lease
Manton Ave. Dump Site	Proposed Sale
Eliza St.	Proposed controllad Dump Site
Elmwood Ave.	Zoning Change
Wickenden and Ives Sts.	Zoning Change
Fields Point	Port Facilities
Fields Point	Municipal Dock
Fields Point	Proposed Lease
Pocasset Ave. and Plainfield St.	Proposed Lease
Roger Williams Park	Animal Exhibit
Manton Ave. Bath House	Proposed Sale
Manton Ave. Fire Station	Proposed Sale
Ocean St.	Proposed Conveyance
Portion of Dennis J. Roberts	
Expressway	Proposed Sale
Port Drive	Proposed Relocation
Wheaton St.	Proposed Sale
Ives St.	Proposed Lease
Roger Williams Park-Potter Dr.	Proposed Sale
North Burial Ground	Sections 12-14
Blanding St.	Proposed Abandonment
Hugo and Shiloh Sts.	Proposed Sale
Service Road #7	Proposed Sale
Pontiac St.	Proposed Abandonment
Douglas Ave.	Zoning Change

THE FOLLOWING PLANS OF STREET LINES WERE DRAWN FOR GENERAL OFFICE USE:

Unnamed St. (Off April Ct.)	Proposed Abandonment
Unnamed St. (Off April Ct.)	Suggested Division Line
John E. Fogarty Square	Proposed Naming of

Monticello St.  
Havana St.  
Winfield Road  
Bissell St.  
Actinia St.  
Cavallatti St.

Winfield Ct.

Virginia Lane

Manomet St.  
South St.  
Sherburne St.  
Pond St.  
Clarkson St.

Right of Way  
Lubec St. to Joseph St.  
Blackstone Blvd. to Eighth St.  
Stamford Ave. to Elmwood Ave.  
Rushmore Ave. to Sisson St.  
Farmington Ave. to its Southerly termination.  
Winfield Rd. to its southerly termination.  
Douglas Ave. to the easterly line of Glasgow St.  
Standish Ave. to Victoria St.  
Proposed Abandonment  
Proposed Abandonment  
Proposed Abandonment(Portion of)  
Near Louisquisset Pike

NEW PLANS WERE DRAWN DURING THE YEAR TO ASSIST THE CITY COUNCIL IN CONSIDERATION OF PROPOSED CHANGES IN THE ZONING MAPS AS PETITIONED BY VARIOUS PERSONS. THE FOLLOWING AMENDMENTS WERE APPROVED: (Locations by Street)

Benefit St.  
Barbara St.  
Bowen St.  
Cady St.  
Celia St.  
Colfax St.  
Church St.  
Douglas Ave.  
Elmwood Ave.  
Halsey St.  
Heath St.  
Howland St.  
Ives St.  
Jenckes St.  
No. Court St.

Plainfield St.  
Pratt St.  
Route 6 Expressway  
Sawyer St.  
Service Rd. No. 3  
So. Angell St.  
So. Court St.  
Smith St.  
Star St.  
Thurston St.  
Westminster St. (1125)  
Westminster St. (1844)  
Wheaton St.  
Wickenden St.

DESCRIPTIONS OF THE ABOVE APPROVED CHANGES WERE DRAFTED AND FURNISHED TO THE ZONING OFFICE AND THE CITY COUNCIL FOR INCORPORATION IN THE ORDINANCES.

THE FOLLOWING PLANS WERE DRAWN FOR AMENDMENTS TO THE ZONING ORDINANCE THAT FAILED OF PASSAGE: (Locations by Street)

Adelaide Ave.  
Camp St.  
Douglas Ave.  
Elmwood Ave.  
Italy St.  
Ives St.

Aurelia Drive  
Adelaide Ave.  
Legion Memorial Dr.  
Sunset Ave.  
Manton Ave.  
So. Angell St.

Huntington Ave.  
Homestead Ave.  
Lecia Drive  
Roda Drive  
Calhoun Ave.

Willow St.  
Italy St.  
Elmwood Ave.  
Westminster St.

#### NORTH BURIAL GROUND

During the year 127 deeds to lots conveyed by the City and 136 certificates of Perpetual Care have been drawn. Descriptions of lots were furnished the superintendent. Field surveys were made and lots staked out on the ground when requested. Elevations were taken and surveys were made for the development of four new sections at the request of the superintendent.

#### GENERAL

DURING THE YEAR THE FOLLOWING WORK OF A SPECIAL NATURE WAS COMPLETED:

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

Title research work was made on various parcels of land in the City's interest.

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

Surveys were made for leases of City owned land at Field's Point.

Various street locations were given to assist the Narragansett Electric Company and the Telephone Company in setting new poles.

Surveys were made and plans drawn for proposed street widening.

Several plans were drawn to assist the City Clerk's Office in accordance with City Council Ordinances.

Measurements were taken and plans made for Public Buildings Department for sidewalk construction estimates.

Measurements were taken and plans drawn to assist the Police Department in the prosecution of murder and accident cases.

The annual chart showing the incidence of certain contagious diseases was prepared for the use of the Health Department.

Resolutions were drafted for the City Council, covering all actions relating to the acceptance and abandonment of streets, defining grades and grading and curbing streets.

Plats presented for record have been compared for the recorder of Deeds Office and Plats for recording have been furnished the Recorder's Office under the provisions of Chapter 987 (1913); Chapter 1549 (1917) and Chapter 2118 (1921).

Descriptions of land taken by condemnation for highways and park purposes and for incorporation in deeds of land purchased or sold, leases and rights-of-way to and 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 rendered as requested.

Engineering assistance was given to the Public Buildings Division, Police Department, City Plan Commission, Traffic Division, Board of Canvassers, City Clerk's Office, City Controller's Office, Tax Assessor's Office, Redevelopment Agency, Water Department and Building Inspection Division, from time to time.

Street lines were established, buildings located and plans drawn for various roads in the Field's Point area.

A survey was made showing location of walls and paths and new graves were staked out on Vine Avenue in the North Burial Ground.

A survey was made and plans drawn showing the locations of walls and fences at the playground at Camp Street, Knowles Street and Duncan Avenue at the request of Public Buildings Department.

Surveys were made and plans drawn for new leases of City owned land at Fields Point.

A survey was made and a new section of graves and paths were laid out in the Birch Avenue Section of the North Burial Ground.

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

During the year extensive work was done for the Board of Canvassers and Registration in preparing tabulation charts for primary and regular elections.

A survey was made, lines were re-established, buildings were located and new plans drawn of the following streets:

Eaton St.  
Lyndhurst St.  
Quincy St.  
Wyndham Ave.  
Elmhurst Ave.  
Hilltop Ave.

River Ave.  
Roslyn Ave.  
Tyndall Ave.  
Radcliff Ave.  
Malbone St.  
Oakland Ave.

A survey was made showing locations of walls and paths and new grades were stakes out on Sycamore Avenue in the North Burial Ground.

A survey was made at Roger Williams Park.

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

During the year members of this Department assisted in the operation and maintenance of the Fox Point Hurricane Dam.

Measurements were taken and plans drawn to assist the Police Department in the prosecution of murder cases at the following locations:

Vine Street  
Portland Street

Westminster Street  
River Drive

Attendance at court was required in the prosecution of the above cases.

The line of Shipyard Street was defined to assist the Police Department in maintaining order during a strike at the Brewster Lumber Company.

Surveys were made, plans drawn, and new sections of graves laid out at North Burial Ground at the following locations:

Vine Avenue  
Palm Avenue  
Birch Avenue

Althea Avenue  
Walnut Avenue  
Shelter Avenue

A survey was made and plans were drawn of the excess property of the Dennis J. Roberts Expressway at Pilsudski St.

Lines and grades were defined at the playground at New York Avenue at the request of the Planning and Urban Development Division.

A location survey was made at Field's Point of City owned land on Field's Point Drive, leased to Narragansett Improvement Company.

A topographical survey was made and plans drawn of the playground area at Camp Street, Knowles Street, Duncan Avenue and Cypress Street.

A survey was made for the sale of City owned land on Terminal Road in the Field's Point Section.

The Providence-Cranston City Line at Bartlett Avenue was re-established, buildings located, and plans drawn at the request of the City Tax Assessor.

A topographical survey was made and locations taken at the playground at Cumerford Street, Wallace Street, Atwood Avenue and Sterling Avenue, at the request of the City Plan Commission.

A survey was made, lines and grades marked and daily inspection provided for the construction of the North American Animal Exhibit at Roger Williams Park.

The City Line between Providence and Johnston was re-established at the request of the City Tax Assessor. This survey required that street lines be re-established on the following streets:

Hartford Avenue  
Mott Street  
Boundary Avenue  
Myra Street  
Horace Street

Verdic Street  
Paolino Street  
Westwood Manor Drive  
Killingly Street

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 Assessor's Office.

This report, of the City Controller, divides City held property into the following categories:

Parks and Playgrounds  
Miscellaneous Public Buildings  
Miscellaneous Real Estate  
Public Schools  
Fire Stations  
Charles H. Smith Estate

Police Stations  
Real Estate acquired at Tax Sale  
Water Works  
Dexter Donation

This report breaks down each parcel of City owned land into Assessor's Plats, Lots, Land Values, Building Improvement Values and Total Unit Valuations.

Also reflected in this report is a compilation of all productive real estate showing a description of property leased, rent per annum, term of lease and termination date.

## HIGHWAY SECTION

Work performed in general is as follows:

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 and 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 81 individuals or corporations, were furnished 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 three (3) covering four (4) 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 0.316 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 plans include 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 manned the communications center and inspected conditions in their assigned zones.

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

Grades were marked, supervision and inspection was furnished, by this section in conjunction with the reconstruction of the Crawford Street Bridge Complex.

Assistance was provided to the Redevelopment Agency during the fiscal year on various projects.

Plans were drawn and cost analyses compiled by this section for several phases in area two of the General Neighborhood Renewal Program, and the West Broadway Redevelopment Project.

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

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>
Aldrich Street	Eddy St. to Broad St.	4,703
Algonquin Street	21 ft. W. of W. curb Reservoir Ave. to a pt. 67 ft. westerly.	223
Allston Street	River Ave. to Wolcott St.	1,790
Alton Street	Regent Ave. to Andem St.	1,040
Burns Street	Douglas Ave. to Admiral St.	4,985
California Avenue	Narragansett Blvd. to Michigan Ave.	2,700
Calla Street	Broad St. to Roger Williams Park	5,599
Cambridge Street	Academy Ave. to Sears Ave.	2,204
Canton Street	Chalkstone Ave. to Regent Ave.	3,265
Carolina Avenue	Allens Ave. to easterly termination.	2,121
Chapman Street	Broad St. to Eddy St.	1,848
Coggeshall Street	Douglas Ave. to Mowry St.	2,927
Downing Street	Adelaide Ave. to a pt. 69 ft. W. of W. curb of Reservoir Ave.	1,950
Durham Street	Admiral St. to a pt. 197 ft. northerly.	526
Edgemere Avenue	Manton Ave. to Richland St.	2,610
Ellis Street	Ernest St. to a pt. 67 ft. S. of S. curb of Terminal Rd.	1,439
Elma Street	Broad St. to Prairie Ave.	1,162
Fairbanks Street	River Ave. to Wyndham Ave.	1,273
Fern Street	Chalkstone Ave. to Berkley St.	1,019
Frederick Street	Chalkstone Ave. to Smith St.	1,448
Funston Avenue	Gentian Ave. to Clove St.	4,012
Georgia Avenue	Allens Ave. to easterly termination.	2,152
Gladstone Street	Broad St. to Baxter St.	1,224
Hancock Street	Verndale Ave. to Calla St.	969
Harriet Street	Sayles St. to Mystic St.	2,005
Higgins Avenue	Garfield Ave. to Oakland Ave.	1,973
Huron Street	Andem St. to Maplehurst Ave.	3,417
Julian Street	Manton Ave. to Atwells Ave.	5,830
Lubec Street	Douglas Ave. to City Line	4,056
Melissa Street	Hartford Ave. to Barbara St.	1,885
Michigan Avenue	New York Ave. to Alabama Ave.	6,196
Modena Avenue	Isabella Ave. to Lotus Place	714
New York Avenue	Allens Ave. to easterly termination.	4,036
Parkview Avenue	Broad St. to Rugby St.	997
Rangeley Avenue	Rockland Ave. to Sears Ave.	981



Rockland Avenue	Cambridge Ave. to Rangeley Ave.	913
Royal Avenue	Admiral St. to Gentian Ave.	2,004
Rugby Street	N. Line of Cass St. to a pt. 62 ft. N. of N. curb of Broom St.	3,333
Sayles Street	Ocean St. to Prairie Ave.	2,061
Spicer Street	Broad St. to Verndale Ave.	2,221
Tennessee Avenue	New York Ave. to Chapman St.	2,019
Texas Avenue	Admiral St. to Gentian Ave.	4,165
Toronto Avenue	Allens Ave. to easterly termination.	1,742
Verndale Avenue	Broad St. to Roger Williams Park	6,837
Virginia Avenue	Carolina Ave. to City Line	5,393
Winona Street	Admiral St. to Gentian Ave.	2,673
Wisdom Avenue	Academy Ave. to Huron St.	<u>2,107</u>
Total		120,747

SPECIAL HIGHWAY RESURFACING BY CITY OF PROVIDENCE  
UNDER CONTRACT

By M. A. Gammino Construction Co.

<u>STREET</u>	<u>TYPE - BITUMINOUS CONCRETE</u>	<u>SQUARE YARDS</u>
Academy Avenue	Atwells Ave. to Chalkstone Ave.	9,781
Allens Avenue	From a pt. 92 ft. south of Baker St. to pt. north of I-95 Ramp.	18,979
Chalkstone Avenue	Smith St. to a pt. 264 ft. west of Rosebank Ave.	9,691
Chalkstone Avenue	Harold St. to River Ave.	968
Chalkstone Avenue	Home Ave. to a pt. 85 ft. east of Academy Ave.	1,254
Clifford Street	Dyer St. to Dorrance St.	713
Dorrance Street	Clifford St. to Weybosset St.	4,892
Dudley Street	Eddy St. to Plain St.	3,810
Dyer Street	From a pt. 51 ft. south of Friendship St. to Social Security Building	2,792
Olneyville Square	Broadway to Plainfield St. (Including portions of) (Hartford Ave., Manton Ave.) (and Valley St.)	7,532
Smith Street	Oakland Ave. to Academy Ave.	20,572
Smith Street	Duke St. to Chalkstone Ave. (Including area in square)	2,086
Smith Street	Jefferson St. to Service Road	1,486
Smith Street	At Orms St.	<u>1,647</u>
Total under contract to M. A. Gammino Const. Co.		86,203

By J. H. Lynch & Sons, Inc.

Canal Street	Market Sq. to Memorial Sq.	1,600
Crawford Street	Range west curb South Water St. to east curb Dyer St.	950
Dyer Street	South side Pine St. to Westminster St.	5,059
Dyer Street	South side Pine St. to a pt. 350 ft. southerly.	1,274
Friendship Street	Dyer St. to a pt. 29 ft. west of Dyer St.	94
Market Square	Range west curb Dyer St. on west to east curb South Water St. and curb in front of City Building on east and range north curb across Canal St. on north.	2,772
Memorial Square	Range of bridge curb on north and south Post Office curb on the west east curb Canal St. on the east Memorial Square.	2,002
So. Water Street	College St. to south curb Crawford St.	4,477
Washington Row	Kennedy Plaza to Westminster St.	<u>794</u>
Total under contract to J. H. Lynch & Sons, Inc.		19,022

RECAPITULATION

By M. A. Gammino Construction Co.	86,203
By J. H. Lynch & Sons, Inc.	<u>19,022</u>
Total for Streets Resurfaced Under Contract	105,225

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

By Narragansett Improvement Company

<u>STREET</u>	<u>TYPE - BITUMINOUS CONCRETE</u>	<u>SQUARE YARDS</u>
Clarkson Street	Portion previously paved to its easterly termination.	403
Monticello Street	Opfer St. to Robin Brook Sewer	726
Winfield Court	Winfield Rd. to its southerly termination	885
Winfield Road	Eighth St. to Blackstone Blvd.	<u>2,286</u>
Total under contract to Narragansett Improvement Co.		4,300

Construction was in progress in the following streets on September 30, 1967:

Appleton Street	Delaine Street to Julian Street
Audubon Avenue	Smith Street to City Line
Bowdoin Street	Appleton Street to Amherst Street
Clyde Street	Hereford Street to Loveday Street
Dante Street	Admiral Street to southerly termination.
Doan Avenue	Elmgrove Avenue to Wayland Avenue
Eva Street	Admiral Street to Veazie Street
Everett Avenue	Arlington Avenue to Taber Avenue
Hereford Street	Admiral Street to Sunbury Street
Inkerman Street	Candace Street to Pekin Street
Italy Street	Admiral Street to Ventura Street
Jacqueline Drive	Legion Memorial Drive to a point 255 ft. westerly.
Laurel Avenue	Wayland Avenue to Elmgrove Avenue
Lecia Drive	Sunset Avenue to Jacqueline Drive
Peckham Avenue	Smith Street to City Line
Pekin Street	Chalkstone Avenue to Vale Street
Ventura Street	Huxley Avenue to Dante Street

Following is a list of unimproved streets ordered built by City Council Resolution, construction of which has not commenced:

<u>STREET</u>	<u>CURB ORDERED</u>	<u>LENGTH IN FEET</u>
Actinia Street, Rushmore Ave. to Sisson St.	Oct. 26, 1965	398
Aurelia Drive, Lecia Dr. to Neutaconkanut Rd.	May 11, 1965	396
Canonchet Street, Samoset Ave. to Standish Ave.	May 11, 1965	176
Crary Street, Allens Ave. to east line of unnamed street.	Dec. 5, 1940	276
Cutler Street, Newark St. to Atwells Ave.	Aug. 7, 1952	206
Dorothy Avenue, westerly line of Robin Brook Sewer to Charles St.	Oct. 26, 1965	283
Gage Street, Victoria St. to Samoset St.	May 11, 1965	361
Galileo Avenue, From the pt. previously received, 500 ft. north of Chalkstone Ave., northerly and easterly to Standish Ave.	May 11, 1965	1,213
Guelph Street, Victoria St. to its easterly termination	May 11, 1965	219
Havana Street, Lubec St. to Joseph St.	Oct. 26, 1965	174
Jacqueline Drive, From a pt. 255 ft. west of Legion Memorial Dr. to Neutaconkanut Rd.	May 11, 1965	191
Joseph Street, Unnamed St. east of Havana St. westerly to its westerly termination	Oct. 26, 1965	409
Joy Street, River Ave. to its westerly termination	Dec. 6, 1954	400
Manomet Street, Samoset Ave. to Victoria St.	May 11, 1965	391
Neutaconkanut Road, Sunset Ave. to its southerly termination.	May 11, 1965	792

Platted Street, Crary St. to Globe St.	Dec. 5, 1940	117
Redwood Drive, City Line at Longwood Ave. to City Line at Royal Ave.	May 6, 1960	301
Roda Drive, Lecia Dr. to Neutaconkanut Rd.	May 11, 1965	313
Samoset Avenue, From the southerly line of Gage St., northerly to Galileo Ave.	May 11, 1965	543
Stillwater Avenue, Brightwood Ave., north- erly to the City Line	Feb. 19, 1965	818
Trainor Street, Acorn St. to DePasquale Ave.	June 20, 1935	249
Victoria Street, From a pt. 62.44 ft. north of Guelph St. to Galileo Ave.	May 11, 1965	55
Virginia Lane, From a pt. 421 ft. east of Douglas Ave. to the easterly line of Glasgow St.	May 11, 1965	<u>490</u>
	Total	8,771

#### PETITIONS TO HAVE GRADE DEFINED

Jan. 20, 1955	Adie Street, from Atwells Ave. to Cedar St.
Feb. 17, 1955	Ophelia Street, from a pt. 120 ft. S. of Thornton St. to Wolfe St.
June 2, 1955	Aumond Street, from Edgewood Blvd. to City Line.
Sept. 1, 1955	Queen Street, from Laurel Hill Ave. to its northerly termination.
Nov. 3, 1955	Hymer Street, from Crandall St. to Seamans St.
Dec. 1, 1955	Derry Street, from Oregon St. to Geoffreys Ct.
May 3, 1956	Stukely Street, from Hartford Ave. to #41 Stukely St.
Aug. 2, 1956	Libia Street, from Farmington Ave. to its termination.
Sept. 6, 1956	Minnesota Street, from Woodward Rd. to its termination.
Feb. 7, 1957	Maria Street, from Killingly St. to City Line.
May 16, 1957	Corsica Street, from Fruit Hill Ave. to Genoa St.
May 16, 1957	Genoa Street, from Fruit Hill Ave. to Taranto St.
July 11, 1957	Hillard Street, from Manton Ave. to Pelham St.
July 11, 1957	Cowper Court, from Messer St. to its termination.
Oct. 3, 1957	Duke Street, from Orms St. to Smith St.
May 1, 1958	York Street, from No. Main St. to Steel St.
July 3, 1958	Proctor Place, from Doyle Ave. to termination.
Aug. 7, 1958	Sedan Street, from Argol St. to termination.
Sept. 4, 1958	Yorktown Place, from Linton St. to its termination
Nov. 6, 1958	Myra Street, from Killingly St. to Boundary Ave.
Feb. 19, 1959	Deerfield Terrace, from Alger Ave. to its termination.
Mar. 5, 1959	Sibley Street, from Crescent St. to its westerly termination.
April 2, 1959	Nye Street, from Ida St. to Merino St.
July 2, 1959	Batterson Street, from Walsh St. to Bullock Ave.

July 2, 1959	Bullock Avenue, from Batterson St. to City Line.
July 2, 1959	Hennessey Street, from St. Thomas St. to Bullock Ave.
July 2, 1959	Rowley Street, from Batterson St. to Hennessey St.
July 2, 1959	Triggs Street, from Walsh St. to Bullock Ave.
July 2, 1959	Walsh Street, from Batterson St. to Hennessey St.
March 3, 1960	Wayland Avenue, from Pitman St. to its southerly termination.
March 3, 1960	Unnamed Gangway, from Peter St. to Ledge St.
Sept. 1, 1960	Owen Street, from Manton Ave. to King St.
Feb. 16, 1961	East George St., from Gano St. to Butler Ave.
April 20, 1961	Haswell Street, from Eddy St. to its easterly termination.
May 18, 1961	Shaw Street, from Langdon St. to Lakeside St.
Aug. 10, 1961	Lakeside Street, from Shaw St. to Everson St.
Feb. 15, 1962	Shaw Street, easterly line of Lakeside St., westerly to its westerly termination.
March 1, 1962	Unnamed Gangway, east of Havana St. westerly to the City Line.
June 7, 1962	Dakota Street, Woodward Rd. to termination.
Feb. 20, 1964	Thurston Street, Stamford Ave. to the westerly line of Potter Drive.
March 19, 1964	Molter Street, from Service Road #10 to Lakeview Dr.
March 18, 1965	Lynde Street, from Longwood Ave. to its easterly termination.
Aug. 16, 1967	Burrows Street, Roger Williams Ave. to City Line.

#### PETITIONS FOR CURBING AND GRADING

<u>DATE</u>	<u>STREET AND LOCATION</u>
Feb. 17, 1955	Ophelia Street, from a pt. 120 ft. south of Thornton St. to Wolfe St.
May 5, 1955	Park Row, from Edgewood Blvd. southerly to Cranston City Line.
June 2, 1955	Aumond Street, from Edgewood Blvd. to City Line.
Sept. 1, 1955	Queen Street, Laurel Hill Ave. to its northerly termination.
Nov. 3, 1955	Hymer Street, from Crandall St. to Seamans St.
Dec. 1, 1955	Derry Street, from Oregon St. to Geoffreys Ct.
May 3, 1956	Stukely Street, from Hartford Ave. to #41 Stukely St.
Aug. 2, 1956	Libia Street, from Farmington Ave. to its termination.
Nov. 15, 1956	Burton Street, from Bingham St. to its termination.
Feb. 7, 1957	Maria Street, from Killingly St. to City Line
May 2, 1957	Hagan Street, from Charles St. to Langdon St.
July 11, 1957	Hillard Street, from Manton Ave. to Pelham St.
July 11, 1957	Cowper Court, from Messer St. to its termination.
Aug. 15, 1957	Grotto Avenue, from Upton Ave. to portion already received.
Oct. 3, 1957	Duke Street, from Orms St. to Smith St.
Feb. 20, 1958	Carver Court, from 53 Pleasant St. to its termination.
May 1, 1958	York Street, from North Main St. to Steele St.

July 3, 1958	Proctor Place, from Doyle Ave. to its termination.
Sept. 4, 1958	Yorktown Place, from Linton St. to its termination.
Sept. 18, 1958	Tappan Street, from angle to Admiral St.
Nov. 6, 1958	Myra Street, from Killingly St. to Boundary Ave.
March 5, 1959	Sibley Street, from Crescent St. to its westerly termination.
July 2, 1959	Batterson Street, from Walsh St. to Bullock Ave.
July 2, 1959	Bullock Avenue, from Batterson St. to City Line.
July 2, 1959	Hennessey Street, from St. Thomas St. to Bullock Ave.
July 2, 1959	Rowley Street, from Batterson St. to Hennessey St.
July 2, 1959	Triggs Street, from Walsh St. to Bullock Ave.
July 2, 1959	Walsh Street, from Batterson St. to Hennessey St.
March 3, 1960	Wayland Avenue, from Pitman St. to its southerly termination.
March 3, 1960	Unnamed Gangway, from Peter St. to Ledge St.
Feb. 16, 1961	East George Street, Cano St. to Butler Ave.
April 20, 1961	Haswell Street, Eddy St. to its easterly termination.
May 18, 1961	Shaw Street, Langdon St. to Lakeside St.
Aug. 10, 1961	Lakeside Street, from Shaw St. to Everson St.
Aug. 10, 1961	Genoa Street, Fruit Hill Ave. to Taranto St.
Aug. 10, 1961	Corsica Street, from Fruit Hill Ave. to Genoa St.
Feb. 15, 1962	Shaw Street, easterly line of Lakeside St. westerly to its westerly termination.
March 1, 1962	Unnamed Gangway, east of Havana St. westerly to the City Line.
Feb. 20, 1964	Thurston Street, Stamford Ave. to the westerly line of Potter Dr.
March 19, 1964	Molter Street, from Service Rd. #10 to Lakeview Dr.
March 18, 1965	Lynde Street, from Longwood Ave. to its easterly termination.
June 2, 1966	Concord Street, from Cemetery St. to Overpass.
Aug. 16, 1967	Burrows Street, Roger Williams Ave. to City Line.

#### SUMMARY TO OCTOBER 1, 1967

The following table shows type of pavement, lengths and areas:

<u>TYPES OF PAVEMENT</u>	<u>LENGTHS</u> <u>MILES</u>	<u>AREA</u> <u>SQUARE YARDS</u>
Reinforced Concrete	0.170	3,101.0
Bituminous Concrete (curbed)	210.820	3,572,803.3
Bituminous Concrete (not curbed)	7.296	126,089.0
Sheet Asphalt (curbed)	55.485	1,361,584.3
Sheet Asphalt (not curbed)	0.300	4,195.0
Bituminous Macadam (curbed)	86.678	1,342,561.0
Bituminous Macadam (not curbed)	1.608	26,513.0
Asphalt Blocks	0.119	958.0

Granite Blocks	2.556	39,428.8
Waterbound Macadam (curbed)	1.601	29,545.0
Waterbound Macadam (not curbed)	0.580	6,237.0
	<u>367.213</u>	<u>6,513,015.4</u>
Received (not improved)	<u>2.514</u>	
Total	369.727	

The following work has been completed during the year-  
namely:

Streets Paved with New Material 61,327 Linear Feet

Bituminous Concrete Pavement Laid 230,272 Square Yards.

Granite Blocks	2.556	39,428.8
Waterbound Macadam (curbed)	1.601	29,545.0
Waterbound Macadam (not curbed)	0.580	6,237.0
	<u>367.213</u>	<u>6,513,015.4</u>
Received (not improved)	<u>2.514</u>	
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namely:

Streets Paved with New Material 61,327 Linear Feet

Bituminous Concrete Pavement Laid 230,272 Square Yards.

## SEWER AND STRUCTURAL SECTION

The duties of this section consist of the preparation of studies, plans, specifications and estimates of proposed Sanitary and Storm sewers, preparation of studies, plans, specifications and estimates of proposed miscellaneous structures and the field engineering and inspection work of all above projects in progress and the computation of final payments to contractors.

All records on the above are filed for future reference and all field record books are filed in fire-proof cabinets. Plans are made on cloth-mounted drawing paper of all sewer construction and all house drainage connections are platted on these plans.

A contract for sewers in various streets by the Fanning and Doorley Co. dated January 16, 1967, was completed Aug. 25, 1967.

The streets involved are as follows with the completion dates noted:

<u>COMPLETION DATE</u>	<u>DESCRIPTION</u>
July 20, 1967	Pontiac Street, from 207' N. of Reservoir Ave. to Reservoir Ave.
July 25, 1967	Imera Ave., from Actinia St. to Almira Ave.
July 25, 1967	Joseph Street & Bagalia Rd, from Lubec St. to Douglas Ave.
August 25, 1967	Sewer Maint. Yard, from Ernest St. to Pumping Station

A contract for relaying a sanitary sewer in Ocean St, from Oxford Street to Potters Avenue by the V.F. Capaldi Construction Company dated August 1, 1966 was completed November 8, 1966. Final cost equalled \$28,549.94.

Following are lists of streets for which sewer plans were made for submission to the Public Works Committee of the City Council:

### LIST NO. 1

Sewers ordered built by the City Council which are not constructed as of September 30, 1967, exclusive of those contracted for:

<u>City Council Resolution and Year</u>	<u>Location</u>
229-1940	Bucklin St., from near Potters Ave. to Greenwich Street.



440-1940

Niantic Avenue, from near Cranston Street to Ackerman Street.

293-1951

White Street, from Powell Street to Collyer Street.

157-1965

Stillwater Avenue, from near City Line to Brightwood Avenue.

LIST NO. 2

Sewers petitioned for and referred to the Public Works Committee for further action, from October 1, 1951 to September 30, 1967:

October 2, 1952

Okie Street, from its westerly Term. to Bath St.

April 16, 1953

Myra St., from near Boundary Ave. to Killingly St.

July 1, 1954

Bullock Ave., from City Line to Dunbar St.

September 2, 1954

Groton St., from Durfee St. to Powhattan St.

September 1, 1955

Queen St., from northerly Term. to Cleveland St.

November 3, 1955

Hymer St., from near Seamans St. to Crandall St.

December 1, 1955

Derry St., from near Geoffreys Ct. to Oregon St.

May 3, 1956

Stukely St., from its northerly Term. to Hartford Ave.

August 2, 1956

Libia St., from the City Line to Farmington Ave.

February 7, 1957

Maria St., from Killingly St. to City Line.

June 6, 1957

Cowper Ct., from its Term. to Messer Street.

September 4, 1958

Yorktown Pl., from its Term. to Linton St.

August 6, 1959

Como St., from its northerly Term. to Ledge St.

March 3, 1960	Wayland Ave., from East George St. to Southerly Termination.
March 3, 1960	Unnamed Gangway, from Peter St. to Ledge Street.
February 16, 1961	East George St., from new Wayland Ave. to Butler Ave. and in Butler Ave. from East George St. to Pitman St.
February 16, 1961	Howe Street, from Niantic Ave. to Lakeview Dr.
February 16, 1961	Jordan St., from Westmore St. to Reservoir Ave.
April 20, 1961	Haswell St., from approximately 300' east of Eddy St. to Eddy St.
August 10, 1961	Genoa Ave., from near Taranto St. to Fruit Hill Ave.
August 10, 1961	Corsica St., from near Genoa Ave. to Fruit Hill Ave.
March 1, 1962	Unnamed Gangway east of Havana St. westerly to City Line.
May 2, 1963	Clarkson St., from near Admiral St. to its easterly Term. and Northerly in Right of Way to Suffolk St.
October 3, 1963	Hylstead St., from northerly Term. to Pavilion Ave.
December 17, 1964	Neutaconkanut Rd., from Sunset Ave. to and including Lot No. 1.
March 18, 1965	Lynde St., from easterly Term. to Longwood Ave.
July 1, 1965	Unnamed Gangway (opposite Lynch St.) between Manton Ave. and Atwells Ave.
August 16, 1965	Yorkshire St., from Hawkins St. to Anchor St.
September 16, 1965	Edgeworth Ave., from westerly Term. to present sewer in Edgeworth Ave.
May 18, 1967	Hyacinth St., from Vicksburg St. to beyond 200' of Shiloh St.

August 6, 1967

Burrows Street, from Roger Williams Ave.  
to City Line.

August 16, 1967

Woodward Road, from present sewer, northerly  
for a distance of 175'.

SEWER SYSTEM STATISTICS: In order to make complete the Providence Sewer Statistics up to the end of the Fiscal Year of September 30, 1967, the following extracts from previous reports are herein included and the mileage figures changed to the new totals:

The City is divided into four main drainage areas bounding on the Providence, Woonasquatucket, Moshassuck and Seekonk Rivers.

Combined sewers, discharging both crude sewage and storm water into rivers, were constructed in these areas between the years 1871 and 1890 to a total length of 62.7 miles.

A) In 1890 a new method of handling sewage flow was devised and was called the improved sewer system. From 1890 to 1904, 28.1511 miles of this system were constructed with sizes varying from 6 in. to 110 in. in diameter. This system included the intercepting sewers, designed for the collection of sewage flow from older sewers which heretofore discharged into rivers, which helped toward the elimination of sewage pollution of river and harbor waters. Due to later revisions in construction, the length of the improved sewer system equaled as of September 30, 1967, 28.1014 miles.

B) In 1872 the first storm sewer construction was started and as of September 30, 1967, to a total of 87.7917 miles of sewers for storm water only, have been constructed and discharged into the nearest available pond or stream.

C) The total length of the so-called regular combined sewers as of September 30, 1967, equals 351.1484 miles.

The total lengths (A+B+C) of all types and sizes of sewers maintained by the Sewer Division of the Public Works Dept. as of September 30, 1967, equal 467.0415 miles. (Increase this year .2478 mile).

Included in this mileage are approximately 20373 manholes, also there are approximately 4723 inlets and 12,029 basins for collecting surface water and trapping debris before entrance into sewers.

The normal or dry weather flow of sewage is collected and conveyed to the Sewage Treatment Plant at Field's Point. Tide gates are installed at river outfalls to prevent tidewater or river water from entering sewers.

The sewage from the Washington Park and Field's Point Districts drains into a small pumping station equipped with two automatic electrically driven pumps, located on City Land at Field's Point just south of New York Avenue and from there is pumped through a cast-iron force main directly to the Sewage Treatment Plant.

A part of the sewage from the West Elmwood District drains into a small pumping station, equipped with two automatic electrically driven pumps, located on City Land at Reservoir Avenue and Pontiac Avenue and from there is pumped through a cast-iron force main into the Rutherglen Avenue gravity flow sewer.

A comparatively high level sewer collects sewage from the Elmwood and South Providence Districts and flows through gravity sewers, directly to the Sewage Pumping Station.

Generally, with the exceptions as outlined in previous paragraphs, low level sewers collect the sewage from the remainder of the City Districts, with most of the East Side Sewage flowing through an inverted syphon sewer under the Providence River at India Street, and then the sewage flows by gravity to the large pumping station at Ernest Street. At the pumping station the sewage is lifted approximately 27 feet to the high level sewer in Ernest Street and flows by gravity to the Sewage Treatment Plant.

#### Sewage for year from Cranston, Johnston and North Providence

By special acts of the Rhode Island Legislature, parts of Cranston sewage, and all the North Providence and Johnston sewage are allowed to enter the City of Providence sewer system for treatment and disposal. Sewage costs are billed quarterly and the following shows the amounts billed in our fiscal year 1966-1967.

#### RECEIVED FROM CRANSTON: (Narragansett Brewing Company):

On contract dated June 1, 1965, Terms \$102.00 per million gallons, 121,670,000 gallons metered and billed for \$12,410.34.

#### RECEIVED FROM JOHNSTON:

Contract dated March 9, 1956, Terms \$57.00 per million gallons was revised August 15, 1966, to \$103.00 per million gallons, 388,449,400 gallons metered, 28,616,000 gallons estimated, and billed for \$42,957.74.

#### RECEIVED FROM NORTH PROVIDENCE:

Flow measured and computed to equal 2,642,049,300 gallons. Contract dated September 8, 1959, Terms \$100,000.00 annually, was revised September 26, 1966, to \$103.00 per million gallons, and again June 9, 1967 to \$116.40 per million gallons. Average daily flow equals 7,238.500 gallons. Total billing was \$282,957.45.

#### PRIVATE DRAINS:

A complete record is made of all sewage drainage installations in private houses and other buildings. These records and record plans are made and filed by the Sewer Section of the Public Works Engineering Office and contain valuable information of interest to property

owners, Title Searchers, Etc. All new work is covered by field inspection and must comply with the City Ordinance as to workmanship and materials and the work must be done by licensed plumbers or drainlayers who must prove their qualifications before being issued permits by the Director of Public Works.

In the January session of the State Legislature-Chapter 1661-1945, there was enacted by the General Assembly an Act to simplify the present system of Licensing Master and Journeymen Plumbers for the protection of public health. Sec. 8 (reads as follows) "Nothing in this Act shall prohibit any City or Town from granting a license to any person as a drainlayer to engage in the business of laying of drains and cesspools" (with the provision, that it is not required by the holder of a State License).

For the calendar year of 1967, the Director of Public Works issued Licenses to seven (7) drain layers and six special for sprinkler system licenses. No list of Licensed Plumbers was received from State authorities. There were approximately 2000 titles investigated for encumbrances of drainage facilities by title company investigators, and 3000 sketches of present drainage installations given to interested parties. (Owners, Plumbers and Drainlayers).

#### MISCELLANEOUS WORK:

During the year specifications were written, stencils cut and checked and the bids were tabulated for the following:

<u>BIDS SUBMITTED</u>	<u>DESCRIPTION</u>	<u>ORDERED BY</u>
10/17/66	Rock Salt	Highway Section
10/24/66	Liquid Ferric Chloride	Sewer Treatment Sec.
10/24/66	Liquid Chlorine	Sewer Treatment Sec.
10/24/66	Lime Slurry	Sewer Treatment Sec.
10/24/66	One (1) 13 cu. yd. Vacuum St. and catch basin cleaner mtd. on one (1) heavy duty 39,000 lb. Tandem Chassis	Sewer Const. Sec.
10/31/66	One (1) Fork Lift Truck	Highway Sec.
10/31/66	One (1) Cable Type Sewer Cleaning Machine	Sewer Section
11/14/66	One (1) Tilt Cab Utility Truck	Bridge Sec.
11/14/66	Screened Sand	D.P.W.
11/21/66	Ten (10) Reversible Trip Type Snow Plows	Highway Sec.
11/21/66	Four (4) Heavy Duty Dump Truck Chassis Only, four (4) used Dump Bodies	Highway Sec.

12/5/66	One (1) New 10,000 Lb. Dump Truck	Sanitation Sec.
12/12/66	One (1) Motor Grader	Highway Sec.
1/9/67	One (1) 10,000 Lb. Dump Truck	Sanitation Sec.
1/9/67	Diesel Fuel Grade No. 2	Highway Sec.
1/9/67	Two (2) Vertical Sewage Pumps & Motors	Sanitation Sec.
1/9/67	480 Street Sign Posts	D.P.W.
1/9/67	One (1) New Incinerator Bucket for Garbage	Incinerator Sec.
1/23/67	Cold Patch	Highway Sec.
1/23/67	One (1) New 35,000 Lb. Dump Truck	Sanitation Sec.
1/23/67	One (1) New 25,000 Lb. Truck with Aerial lift.	Forestry Sec.
2/6/67	Three (3) Low Priced 2 Door Sedans	D.P.W.
2/6/67	One (1) 3/4 Ton Pickup Truck	Municipal Dock
2/13/67	One (1) Bituminous Paver	Highway Section
2/13/67	Street Signs	D.P.W.
2/20/67	One (1) 14,000 lb. Truck Chassis	Sewer Maint. Sec.
2/27/67	180 Sets of Yellow rain-wear	D.P.W.
3/20/67	One (1) 21,000 lb. Truck with hydraulic Aerial lift.	Forestry Sec.
4/3/67	1248 Mtd. Street Name Faces	D.P.W.
4/10/67	One (1) Floor Maintenance Machine	Highway Sec.
4/24/67	Asphaltic Concrete for 1967 Construction	Highway Sec.
4/24/67	One (1) New 4 Door Sedan	D.P.W.
7/10/67	One (1) Air Compressor (125 C.F.M.)	Sewer Maint. Sec.
7/10/67	Two (2) 16 yd. enclosed garbage & refuse Trucks	Sanitation Sec.
* 7/24/67	One (1) Air Compressor Mtd. on 10,000 Lb. Truck Chassis	Highway Sec.
9/25/67	One (1) 49,000 lb. Heavy Duty Dump Truck	Highway Sec.

A contract was awarded December 28, 1965, to J & H Electric Co. for reconditioning operating crane at Garbage Incinerator. To date, work in the amount of \$12,273.00 has been done.

A contract was awarded to Clayburn Contracting Corp. on January 12, 1966, for retubing and renewals to boilers No. 1 and No. 2 at Garbage Incinerator. This work is now in progress.

A contract was awarded to Westinghouse Electric Co. on February 14, 1966, for repairs to condensers and turbines at Garbage Incinerator. This work is now in progress.

A contract was awarded July 8, 1966, to Prepakt Concrete for stabilization of soil at Incinerator Garage. Work has been completed at a cost of \$3,610.00.

A contract was entered into with Leach Refractories Co., Inc., East Providence, R.I. for the renewal of refractory lining and arch of Garbage Incinerator Unit No. 2 on August 17, 1966, for the bid price of \$41,440.00. This work is now completed at a final cost of \$47,296.17.

A contract was awarded to the Eastern Refractories Co. on January 9, 1967, for the repair of Sludge Incinerator Unit No. 1 which was completed at a cost of \$45,804.00.

A contract was awarded to the Clayburn Construction Co. of Long Island City, N.Y. on January 9, 1967, for repairing and retubing the No. 4 boiler at the Garbage Incinerator which was completed at a cost of \$68,016.00.

A new buring stoker for the Garbage Incinerator Unit No. 1 was purchased from the Illinois Stoker Co. for the price of \$29,500.18.

Many conferences were held in connection with the Providence Freeways, with the Public Works Department of the State of Rhode Island in regard to the disposal of storm waters from the various highways and all sewer sizes and connections to the City sewers were approved. Some of this work is now in construction.

The various projects are named as follows with the Engineers engaged in the preparation of the plans and specifications:

Classical-Central	Castellucci, Galli & Planka Assoc. Providence, Rhode Island
Interstate Route 95	Charles A. Maguire & Assoc. Providence, Rhode Island
Route 6 Expressway	Edwards and Kelsey, Providence, R.I.
Weybosset Hill	C.W. Riva Co., Providence, R.I.
East Side Randall Sq.	Charles A. Maguire & Assoc. Providence, Rhode Island
Seekonk River Crossing	Charles A. Maguire & Assoc. Providence, Rhode Island
Washington Bridge	Frank L. Ehasz Assoc. Providence, R.I.

Lippitt Hill

C.W. Riva Co., Providence, R.I.

Interstate Route 195

Castellucci, Galli, & Planka Assoc.  
Providence, Rhode Island

All plans made in connection with the sewer basins and inlets required for drainage of new or rebuilt streets were made in this office.

This division has made studies, prepared preliminary plans, conferred with other City Departments, and consulted with the State Department of Public Works, the Federal Public Roads Administration and the contract engineers and architects, preparing plans and specifications for all Public Works Projects in the City.

Plans submitted by architects, private engineers, the various utilities and contractors were checked over, revised and approved for sidewalk slabs, vaults, bridge crossings and duct installations under or over streets and sidewalks.

Cost accounts, budgets, inventories, sick leaves, vacations, employee data entrances, and terminations were reported to the Finance Department. Payrolls and requisitions were made up and delivery slips forwarded.

SEWER ASSESSMENTS: Sewer Assessments as provided by authority of Chapter 870 of the Public Laws of the State of Rhode Island of 1901 are certified for payment by the Director of Public Works to the City Collector. Special working plans are made and areas and amounts are computed by this office and filed for permanent record.

Respectfully Submitted,

Robert B. Strong  
Deputy Director of Public Works



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

Dear Mr. McGarry:

Attached hereto is the annual report for the Sanitation Division of the Public Works Department for the fiscal year 1966-1967.

This Division is divided into the following Sections:

Sanitation Administration

Street Cleaning

Sewage Pumping Station

Sewage Disposal Works

Refuse Collection and Disposal

Garbage Collection and Disposal

Respectfully yours,

Gommaire Domaige, P.E.  
Chief of Sanitation

## SANITATION ADMINISTRATION

The office personnel handles all the necessary clerical work pertaining to the Refuse Collection and Disposal Section. The Sewage Pumping Station Section and a portion of the work associated with the Sewage Disposal Works Section and Garbage Collection and Disposal 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	\$15,369.84
ITEM 1	Services other than Personal	2,874.35
ITEM 2	Materials and Supplies	<u>66.56</u>
	Total	\$18,310.75

### STREET CLEANING SECTION

The expenditures for this Section were as follows:

ITEM 0	Personal Services	268,243.53
ITEM 1	Services other than Personal	79,087.91
ITEM 2	Materials and Supplies	<u>1,423.49</u>
	Total	348,754.93

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 Street, 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  
Westminster Street from Empire Street to Hoyle Square  
Weybosset Street from Empire Street to Cathedral Squares  
Broad Street from Empire Street to Trinity Square  
Atwells Avenue from Aborn Street to Ridge Street  
Pocasset Avenue from Olneyville Square to City Line  
Randall Street from Charles Street to North Main St.  
Smith Street from State House to Oakland Avenue  
Douglas Avenue from Admiral St. to Mowry St.  
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 Ave. 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                      Olneyville Sq.  
Randall Sq.                     Trinity Sq.  
Wayland Sq.                    Washington Sq.

A crew of men with hand brooms and hand push barrels are assigned to the downtown area and the outlying sections 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.

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

Three front end loaders were used to pick up the sweeper 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 collectors 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	84 miles
Machine Broom Sweeping	18,574 miles
Beat Patrol	7,069 miles
Hand broom disposal	546 Tons
Street container disposal	3,563 Tons
Machine broom disposal	12,338 Tons

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>
	STATION NO. 1	STATION NO. 2	STATION NO. 3	
<u>1966</u>				
October	1,094.0	35.0	35.0	1,164.0
November	1,194.0	35.0	35.0	1,264.0
December	1,072.0	35.0	35.0	1,142.0
<u>1967</u>				
January	1,172.0	35.0	35.0	1,242.0
February	953.0	35.0	35.0	1,023.0
March	1,486.0	35.0	35.0	1,556.0
April	1,665.0	35.0	35.0	1,735.0
May	1,830.0	35.0	35.0	1,900.0
June	1,613.0	31.0	31.0	1,675.0
July	1,478.0	28.0	28.0	1,534.0
August	1,820.0	34.0	33.0	1,887.0
September	1,396.0	35.0	35.0	1,466.0
TOTALS	16,773.0	408.0	407.0	17,588.0

\* Estimated Flow

SEWAGE PUMPING STATION

Following is a monthly tabulation of the electrical power from the garbage incinerator used at the Ernest Street Station.

<u>1966</u>	<u>K.W.H.</u>
October	142,780.0
November	131,500.0
December	129,480.0
 <u>1967</u>	
January	128,510.0
February	47,660.0
March	54,947.0
April	82,910.0
May	21,650.0
June	27,400.0
July	39,900.0
August	24,000.0
September	<u>11,230.0</u>
TOTAL.....841,967.0	

## 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, Fields 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 supplied from the Garbage Incinerator Plant. Provision has been made for stand-by power from the local power company. The two smaller stations operate 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	\$74,240.54
ITEM 1	SERVICES OTHER THAN PERSONAL	5,475.21
ITEM 2	MATERIALS and SUPPLIES	<u>4,790.53</u>
	Totals	\$84,506.28

## 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 wastes from the Narragansett Brewing Co., Cranston, R.I. The Disposal Plant is located in the southerly section of the City near the Municipal Dock at Fields Point.

The following tables show the statistics for the Disposal Plant for the fiscal year 1966 -1967.

Estimated Population served by the plant.

Providence	187,061
Johnston	2,200
No. Providence	12,000
	<u>201,261</u>

### SEWAGE FLOW

### MILLION GALLONS

Providence	14,036.7153
Johnston	417.0654
No. Providence	2,642.0493
Cranston (Narragansett Brewing Co.)	121.6700
TOTAL FLOW	17,217.50

### SUMMARY OF OPERATIONS

Total flow of sewage	17,217.50 M.G.
Average Daily Flow	47.30 M.G.
Max. Daily Flow (May 26, 1967)	129.30 M.G.
Min. Daily Flow (Dec. 26, 1966)	20.63 M.G.
Total Air Used for Aeration	19,958.46 Mil. Cu. Ft.
Liquid Chlorine	864.81 Tons
Ferric Chloride	144.948 Tons
Lime as Chemline Slurry	1,812.38 Tons
Grit Removals	691.80 Tons
Sludge Cake Incinerated	34,686.00 Tons
Ash Removed from Incinerator	6,059.25 Tons
Fuel Oil Used for the Operation of the Sludge Incinerator No. 2 Fuel Oil	262,660.00 Gals.



## RECOMMENDATIONS

1. The Sewage Disposal Departmental laboratory personnel have made and continue to make extensive research studies toward the effective control of the Sphaerotilus and Geotrichum organism growths that have developed and caused operational difficulties throughout the plant over the past few years. Metcalf and Eddy Engineers have stated "very positively that the brewery wastes were responsible for the Sphaerotilus and Geotrichum infections in the secondary treatment of the Fields Point Sewage Treatment Plant". Based on this assertion it is recommended that the Narragansett Brewery waste be diverted from the Providence Sewage Disposal Plant System and channeled into the recently expanded Cranston system or directly into the bay for trial duration of at least one year. A year is necessary to include the four seasons in the trial period because temperature and other seasonal peculiarities affect the growth of these organisms.
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 Sewerage System of the City. This warning device should be installed at some point in the Sewerage 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 Sewerage 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. A study for use of Chemical Polymers to replace either / both Ferric Chloride or / and Lime in the conditioning of sewage sludge to improve vacuum filtration and realize a worth while saving in the cost of chemicals and fuel oil will be conducted in 1968.
5. Replace the present ash trucks used for removal of ashes from both the Refuse and Sludge Incinerators with trucks having more adaptable and larger bodies to reduce the number of trips necessary for disposal of ashes to the City dump. Should the distance to a newly located dump be increased, the above or an additional truck and driver would become necessary.

6. 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.
7. 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 personnel requirements; general over-all layout of equipment; cost 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, smaller hopper capacities. Wide choice of furnace design, an incinerator fuel approaching homogeneousness, etc.
8. Provision must be made to incinerate sewage grit, 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 Incinerator.
9. A study must be initiated to locate another dump site.
10. 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.
11. 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.
12. The incinerator fees should be reviewed and increased to the same level set by some of our neighbors such as Pawtucket.
13. The cooperation 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.

Respectfully submitted,

Gommaire Domaige, P.E.  
Chief of Sanitation

# Electric Power used from the Garbage Incinerator

<u>1966</u>	<u>K.W.H.</u>
October	1,200
November	1,300
December	1,400
<u>1967</u>	
January	1,200
February	870
March	2,000
April	18,300
May	215,500
June	248,200
July	170,600
August	156,900
September	<u>293,900</u>
TOTAL	1,111,370

The expenditures for the year were as follows:

ITEM 0	Personal Services	\$290,897.03
ITEM 1	Services other than Personal	210,482.70
ITEM 2	Materials and Supplies	<u>160,870.90</u>
	TOTAL	\$662,250.63

Professor Henry Campbell, and his Assistant Doctor Poon, of Rhode Island University are still engaged in the research project to investigate the causes contributing to the bulking of the activated sludge at the Sewage Disposal Works. The ways and means of eliminating or controlling the infestation of the Geotrichum organism still remains to be solved. We are presently awaiting a report from Professor Campbell detailing the results of his research to date.

Due to a change in the location of the sampling point and various detrimental factors, the general efficiency of treatment declined for the fiscal year 1966 -1967. Removals of B.O.D. and suspended solids during the period January to September 1967 were below excepted standards. Every effort is being made by plant personnel to have the causes for this condition corrected. Satisfactory control of bacteria, however, has been maintained throughout the year.

During the year mechanical breakdown resulting from normal wear and tear were repaired by plant personnel. The assistance rendered by the Sewer Maintenance Section in removing the accumulation of grit and debris in the by-pass channels of the plant influent to the detritors, in May and September, is gratefully acknowledged.

#### 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 Incinerating 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 2nd 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	\$715,023.60
ITEM 1	Services other than Personal	114,359.09
ITEM 2	Materials and Supplies	30,947.79
ITEM 3	Special Items	5,070.38
	TOTAL	<u>\$865,400.86</u>

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.

<u>1966</u>	<u>Sewage Disposal</u>	<u>Sewage Pumping</u>	<u>Municipal Garage</u>	<u>Highway Garage</u>	<u>Station Power</u>	<u>Total</u>
Oct.	1,200	142,780	7,800	17,120	97,100	266,000
Nov.	1,300	131,500	15,600	20,300	89,300	258,000
Dec.	1,400	129,480	17,200	18,120	93,800	260,000
<u>1967</u>						
Jan.	1,200	128,510	18,200	14,890	106,200	269,000
Feb.	870	47,660	7,800	12,640	27,030	96,000
Mar.	2,000	54,947	16,513	26,540	95,000	195,000
Apr.	18,300	82,910	19,500	7,300	86,900	215,000
May	215,000	21,650	9,600	21,750	102,500	371,000
June	248,200	27,400	9,600	21,750	117,400	393,000
July	170,600	39,900	8,100	18,860	82,500	293,000
Aug.	156,900	24,000	5,200	14,860	123,200	305,000
Sept.	293,900	11,230	6,300	19,970	96,600	428,000
Total	1,111,370	841,967	141,413	214,100	1,117,530	3,349,000

## GARBAGE COLLECTION AND DISPOSAL

Two induced fans were changed over from steam drive to electric motors. The installation was done by Incinerator employees including new concrete bases. A number of leaking boiler tubes were cut out of boiler No. 3 and replaced with new plugs. Worn gears and bearings were replaced on the electric crane in Plant No. 2 during routine maintenance by Incinerator employees. A number of steam and water pipes which had rusted out were replaced in both plants Nos. 1 and 2. New gears and chains were installed on the ash chute in Plant No. 1 this work was done by our maintenance employees. New boiler blow-down lines were installed to the blow-down tanks in boilers Nos. 1 and 2. Burned out charging doors were replaced with new ones in Plant No. 2. Three water pumps were overhauled including the installation of new bearings. A new gear box was installed in the overhead electric crane in Plant No. 2 and two new exhaust fans were installed in the same plant. The overhead electric crane in Plant No. 1 was completely overhauled by the J & H Electric Co. Five new 12 x 12 oak bumpers were installed in front of the garbage pits by employees of the Bridge Department. A number of new tubes were installed in boilers Nos. 1 and 2 in plant No. 1. The ash conveyor in Plant No. 1 was repaired a number of times by our own employees. New bearings were installed in the forced and induced fans in Plant No. 2. A complete overhaul job on Turbine No. 2 and new condenser tubes installed by the Westinghouse Electric Co. New circuit breakers were installed in the electric turbine board. This work was done to make it possible to run our turbines in parallel with the Narragansett Electric Co. This work was done by the Renzi Electric Co. The circuit breakers in outside transformer station were taken apart and oiled and cleaned by the Jay Electric Co. Boiler No. 4 in Plant No. 2 was completely retubed. This work was done by Clayburn Contracting Co.

GARBAGE COLLECTION AND DISPOSAL

TOTAL POWER GENERATED

	<u>K.W.H.</u>
Average Daily Distributed Load	9,175
Average Daily Distributed Load to Sewage Disposal Works	3,044
Average Daily Distributed Load to Sewage Pumping Station	2,308
Average Daily Distributed Load to Municipal Garage	387
Average Daily Distributed Load to Highway Garage	586
Average Daily Distributed Load to Garage Incinerator	3,061

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

1966

October  
November  
December

<u>Tons</u>
1,091.00
1,105.00
1,114.00

1967

January  
February  
March  
April  
May  
June  
July  
August  
September

1,105.00
947.28
1,050.85
993.96
1,069.60
1,025.83
1,031.20
1,054.47
1,037.20
<u>12,625.39</u>

Total

GARBAGE COLLECTION AND DISPOSAL

The following is the total amount of Garbage and Refuse disposed of by this department from October 1966 to September 1967:

	<u>Garbage (Tons)</u>	<u>Rubbish (Tons)</u>
<u>1966</u>		
October	2,919.32	2,191.60
November	3,006.62	2,072.00
December	3,411.18	2,225.45
<u>1967</u>		
January	2,064.48	2,269.90
February	2,447.74	2,042.79
March	2,736.00	2,250.14
April	2,862.70	1,355.83
May	3,230.19	1,866.01
June	3,167.41	1,884.50
July	3,076.84	1,569.01
August	3,198.75	1,309.80
September	3,016.90	1,441.65
Total	36,038.13	22,478.68
Daily average for collection based on 313 working days		115.13
Daily average for disposal based on 365 working days		160.32



REFUSE COLLECTION and DISPOSAL

Total cubic yards collected for the year follows:

<u>1966</u>	<u>TOTAL</u>
October	4,064
November	4,096
December	4,000
<u>1967</u>	
January	4,080
February	4,112
March	3,536
April	4,512
May	4,000
June	4,780
July	4,669
August	4,595
September	<u>5,026</u>
Total.....	51,470

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 sections 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 were disposed of in a sanitary fill land dump situated on Manton Avenue near the junction of Chalkstone Avenue in the City. This dump was closed June 30, 1967 and a new dump was opened on July 3, 1967. The new dump site is located on Pongansett Avenue off Hartford Avenue. This section has a bulldozer with an operator working at this location to maintain a clean disposal area. One laborer is also assigned to the dump. The dump site is open five days a week during the year.

The trucks used are 16 cu. yd. load packers and are rented from the 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	\$98,042.03
ITEM 1	Services other than Personal	31,445.80
ITEM 2	Materials and Supplies	<u>718.81</u>
	Total	\$130,206.64

SANITATION DIVISION REVENUE

Sewage Pumping Station	\$-----
Sewage Disposal Section	55,276.78
Garbage Collection and Disposal	25,207.02
Refuse Collection and Disposal	<u>217.30</u>
Total	\$80,701.10

## CONSTRUCTION AND MAINTENANCE

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

Dear Sir:

The annual report of the Construction and Maintenance Division of the Public Works Department for the fiscal year ended September 30, 1967 is respectfully submitted:

This Division consists of the following Sections: Construction and Maintenance Administration, Highway, Bridge Maintenance, Snow Removal, Sewer Construction and Maintenance and Public Buildings.

### CONSTRUCTION AND MAINTENANCE ADMINISTRATION

The expenditures of the Administration Section were as follows:

ITEM 0	Personal Services	10,129.60
ITEM 1	Services other than Personal	857.00
ITEM 2	Materials and Supplies	<u>122.90</u>
	Total	11,109.50

### 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, resetting 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 Services	741,787.12
ITEM 1	Services other than Personal	182,204.49
ITEM 2	Materials and Supplies	80,912.47
ITEM 5	Capital Outlay	<u>323.80</u>
	Total	1,005,227.88
	Revenue	50,765.53

DRIVEWAYS AND CURBINGS

Driveways constructed	182
Driveways Widened	28
2' Circular corners set	356
SB corners set	8
Curbs set and reset (feet)	1,950
Driveways relocated	4
Replacing stone	1

Received Streets Repaired and Surfaced 1966-1967

STREET

LOCATION

Algonquin St.  
Winona St.  
Burns St.  
Funston Ave.  
Modena Ave.  
Royal Ave.  
Durham St.  
Terminal Rd.  
Elma St.  
Wanskuck Ave.  
Lubec St.  
Texas Ave.  
Wisdom Ave.  
Huron St.  
Ellis St.  
Higgins Ave.  
Frederick St.  
Fairbanks St.  
Cambridge St.  
Rangley Ave.  
Canton St.  
Alton St.  
Allstone St.  
Fern St.  
Rockland Ave.  
Edgemere Ave.  
Downing St.  
Melissa St.  
Julian St.

Reservoir Ave. Intersections  
Admiral St. to Gentian Ave.  
Douglas Ave. to Admiral St.  
Gentian Ave. to Clove St.  
Lotus Place to Isabella Ave.  
Admiral St. to No. Prov. Line  
Admiral St. approx 197' No.  
  
Broad St. to Prairie Ave.  
Gentian Ave. W. to No. Prov. Line  
Douglas Ave. to City Line  
Admiral St. to Gentian Ave.  
Academy Ave. to Huron St.  
Andem St. Maplehurst Ave.  
Ernest St. to Terminal Rd.  
Garfield to Oakland Ave.  
Chalkstone Ave. to Smith St.  
River Ave. to Wyndham Ave.  
Academy Ave. to Sears Ave.  
Rockland to Sears Ave.  
Chalkstone Ave. to Regent Ave.  
Andem St. to Regent Ave.  
Wolcott St. to River Ave.  
Chalkstone Ave. to Berkley St.  
Cambridge St. to Rangley Ave.  
Manton Ave. to Richland St.  
Reservoir Ave. to Adelaide Ave.  
Hartford Ave. to Barbara St.  
Manton Ave. to Atwells Ave.

Received Streets Started 1965-1966 Completed 1966-1967

STREET

Harriet St.  
Gladstone St.  
Coggeshall St.  
Sayles St.

LOCATION

Sayles St. to Mystic St.  
Broad St. to Baxter St.  
Douglas Ave. to Mowry St.  
Ocean St. to Prairie Ave.

Received Streets Repaired and Surfaced Incomplete as of 9/30/67

STREET

Everett Ave.  
Appleton St.  
Laurel Ave.  
Doan Ave.  
Bowdoin St.  
Peckham Ave.  
Audubon Ave.  
Pekin St.  
Inkerman St.  
Dante St.  
Ventura St.  
Eva St.  
Hereford St.  
Clyde St.  
Italy St.  
Jacqueline Dr.  
  
Lecia Dr.

LOCATION

Arlington to Taber Ave.  
Delaine to Julian St.  
Wayland to Elmgrove Ave.  
Elmgrove to Wayland Ave.  
Appleton to Amherst St.  
Smith St. to City Line  
Smith St. to City Line  
Chalkstone Ave. to Vale St.  
Candace St. to Pekin St.  
Admiral St. to So. Term.  
Huxley Ave. to Dante St.  
Admiral St. to Veazie St.  
Admiral St. to Sunbury St.  
Hereford St. to Loveday St.  
Admiral St. to Ventura St.  
From Legion Memorial Dr. to a  
point 255' Westerly  
Sunset Ave. to Jacqueline Dr.

Unreceived Streets Resurfaced Completed 1966-1967

STREET

Libia St.  
Burton St.  
Redwood Dr.  
Stillwater Ave.  
Cornwall St.  
Roger Williams Ct.  
Gwinnett Ct.  
Edna St.  
Legion Memorial Dr.  
Owens St.  
Panay St.  
Horace St.

LOCATION

Farmington Ave. to City Line  
Carder St. southerly 260 Ft.  
Royal Ave. to Longwood Ave.  
Brightwood Ave. to 360' No.  
Sherwood St. to Easterly Term.  
Elmwood Ave. to Dead End  
Reservoir Ave. to Dead End  
Plainfield St. to Hartford Ave.  
Sunset Ave. to Neutaconakanut Pk.  
Manton Ave. to King  
Curtis St. to Manton Ave.  
Killingly to City Line

## Code Enforcement Program

### Streets Resurfaced

#### STREET

#### LOCATION

Carolina Ave.	Allens Ave. to Easterly Term.
Georgia Ave.	Allens Ave. to Easterly Term.
Michigan Ave.	New York Ave. to Alabama Ave.
Aldrich St.	Eddy St. to Broad St.
Toronto Ave.	Allens Ave. to Easterly Term.
Tennessee Ave.	New York Ave. to Chapman St.
New York Ave.	Allens Ave. to Easterly Term.
California Ave.	Narragansett Blvd. to Michigan Av.
Chapman St.	Broad St. to Eddy St.
Parkview St.	Broad to Rugby St.
Rugby St.	Cass St. to Broad St.
Spicer St.	Broad to Verndale Ave.
Verndale Ave.	Broad to Roger Williams Park
Hancock St.	Verndale to Calla St.
Virginia Ave.	Carolina to City Line
Calla St.	Broad to Roger Williams Park

### MISCELLANEOUS WORK

During the past year the Highway Section performed services for the Engineering Division, Bridge Maintenance, Draw Bridge, Municipal Dock, Public Buildings, Sewer Maintenance, Sewage Disposal Garbage Incinerator, City Sergeant, Park Department, Forestry Department, Recreation Department, Health, Welfare, Police and Fire Department, Hurricane Barrier, Rhode Island Hospital, Municipal Garage and Traffic Engineering.

Special Services performed by the Highway Section were as follows:

Erected and removed bandstand for Columbus Day, Armistice Day, and Labor Day Celebrations, also for dedications and memorials.

Assisted in the decorations for the City of Providence for Christmas and Fourth of July Celebrations.

### PERMANENT MAINTENANCE

Elmwood Ave.	Dyer St.
Eddy Street	Dorrance St.
Broad St.	Smith St.
Broadway	South St.
Hope St.	North Main St. Parking Lot
Roger Williams Park	

LAWNS AND GRASS PLATS MAINTAINED

Oakland Avenue	Eight St. & Lorimer Ave.
Kinsley Avenue	Slater Ave. & Goldsmith St.
North Main St.	Sewer Disposal Grounds
Franklin Square	Eddy St. & Ship St.
Elmgrove Avenue	Market Square
Chad Brown St.	Cemetery St.
Atwells Avenue	Pitman St.
Highway Bldg. Grounds	Public Works Administration
	Building Grounds

SIDEWALK AND CURBING SECTION

Sidewalk Contractor's licenses issued	48
Notices served to build or repair	198
Built or repaired	101
Permits issued to build or repair	364
Sewer openings inspected	207
Construction of new curb openings for driveways inspected	214
Memorial Square signs repainted & relettered	60
Sidewalks inspected damage due to tree roots	171
Sidewalk opening by Narra. Elec. & Telephone Co. inspected	97
Sidewalks inspected after installation of new water service	231
Streets abandoned by Council and signs erected	12
Sidewalk opening by gas Co. inspected	56
Washout depressions inspected and repaired	149
Sidewalk claims investigated	33
Street signs repainted and relettered	805
Street names changed by Council and new signs erected	1
New St. names approved by Council and new signs erected	4
Total lin. ft. of brick sidewalks built	130
Total lin. ft. of Bituminous sidewalks built	20,779
Total lin. ft. of Concrete sidewalks built	10,024

Respectfully submitted,

Charles J. Fidrych,  
Sidewalk Inspector  
Sidewalk & Curbing Section

# 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 Street 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 214 ft. pumping station, a 180 ft. center river 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 10 ft. by 15 ft. gates for the control of flows into the cooling water canal are located. The river gate section includes three 40 ft. 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. The 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 pumps have been subjected to heat bearing tests to insure working order for typical use of said pumps during hurricane action.

The Operation and Maintenance of the Barrier requires the cooperation of various sections of the Public Works Department, namely the Engineering Personnel, the Highway Section, Sewer Section and the Bridge Section.

The station has been on alert and manned by City Personnel during coastal storms and Hurricane Dora.

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 curb crews supply the required work for maintenance of the street gates.

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 Co. 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  
Chief Civil Engineer

## BRIDGE MAINTENANCE SECTION

The eleven (11) men that comprise the Bridge Maintenance section perform the most varied tasks of all Public Works personnel.

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 tasks, the section performs difficult structural repairs for all sections of the Public Works Department.

The Bridge Section also erects heavy duty barricades and maintains rail switches and tracts at West River Park and Port facilities.

The expenditures of the section for the fiscal year 1966-1967 were as follows:

Item 0	Personal Services	45,217.56
Item 1	Services other than Personal	5,903.83
Item 2	Material and Supplies	5,838.61
Item 5	Capital Outlay	<u>361.67</u>
	TOTAL	57,321.67
	REVENUE	47.63

Specific work required of the Bridge Maintenance Department for the fiscal year 1966-1967 is as follows:

1. Park St. Bridge      Repair top and sub decks; repair sidewalk; replace wooden sidewalk plank damaged by truck; replace worn 4"x4"x20' wood top rails
2. Red Bridge      Repair sidewalks; replace worn sidewalk planking; repair damaged gears shaft and telltale.
3. Point St. Bridge      Replace worn planking on sidewalks; repair expansion dams on roadway.
4. Manton Ave. Bridge      Repair expansion joints.
5. Merino St. Bridge      Repair deck and wood fences; paint iron and wood fences.
6. Leland St. Ft. Bridge      Clean and paint bridge
7. Pettis St. Bridge      Repair sidewalk and fence.

8. Smith St. Bridge      Repair sub-deck of roadway
9. Merino Ft. Bridge      Repair wooden fence
10. Adelaide Ave. Bridge      Repair sidewalk
11. West River R.R. Bridge      Made necessary repairs
12. Roger Williams Bridge      Repair sidewalk

Repaired and erected barricade fences at Virginia Lane, Clara St., Social St., Newberry St., Sibley St., Woodside Road, West Park St., India St., and East River Street.

Repaired and painted barricade fences at Special St., Newberry St., and Sibley St. Cleaned and painted ten sections of Point Street viaduct.

#### BRIDGES CLEANED AND PAINTED

Francis Street Bridge

Park Street Bridge

Gaspee Street Bridge

Leland Street Bridge

#### SNOW REMOVAL

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

#### Services Rendered other Departments

Repaired railroad crossing for Municipal Dock on Ernest Street.  
 Erect steel guard posts around new electric power poles on Shipyard Street.  
 Erect wood shelves in storage room of D.P.W. Administration Building.  
 Clean and paint walls and ceiling in Bridge Dept. Maintenance Shop.  
 Erect steel guard rail along river on South Water Street at Hurricane Barrier.  
 Clean and paint overhead doors, woodwork and metal flashing on garage attached to D.P.W.  
 Rigging and moving heavy equipment for the Hurricane Barrier.

## SNOW REMOVAL

### Expenditures

ITEM 0	Personal Services	163,127.82
ITEM 1	Services other than Personal	108,150.76
ITEM 2	Material and Supplies	<u>73,461.79</u>
	Total	344,740.37

Snow removal is primarily a function of the Highway Section. All the ice control (sanding, salting, etc.) 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 Department 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 zone supervisors. All hills and main highways are sprayed with salt.

For the fiscal year 1966-1967 the City had 23 snow storms, the first on December 20, 1966 and the last on April 7, 1967 with a total of 57.10 inches. During this period the following work was completed.

Sanding Streets	21,415 miles
Plowing Streets	27,453 miles
Removal of snow (Business areas, churches and Funeral Homes)	8,924 cu. yds.

The following materials were used during the year:

Sand	6,281.30 Tons
Salt	6,468.95 Tons

The following equipment was hired from private contractors:

Trucks (Plow)	35	2,488.50 hours
Trucks (Removal)	16	151.50 hours
Payloader (Removal)	1	13.00 hours

## SEWER CONSTRUCTION AND MAINTENANCE

The Sewer Construction and Maintenance Section of the Public Works Department is responsible for the inspection, maintenance, 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	271,120.03
ITEM 1	Services other than Personal	59,220.52
ITEM 2	Materials and Supplies	<u>11,572.69</u>
	Total	341,913.24
	Revenue	24.38

### MAINTENANCE WORK PERFORMED

Catch basins replaced	2
Catch basins repaired and rebuilt	8
Catch basin frames and covers reset	9
Catch basin covers replaced	2
Catch basin covers repaired or rebuilt	12
Catch basin covers reset	7
Domed over basins	2
New catch basins built	6
Manhole covers replaced	7
Manhole frame and covers reset	31
Manhole frames replaced	6
Manhole covers and grates raised to grade	21
Manhole covers replaced	4
Inlet stones reset	4
Inlet stones replaced	31
Inlet stones removed	3
Gutter grates replaced frame and cover	4
Gutter grates repaired and reset	6
Gutter grates raised or lowered to grade	2
Weirs raised	1
Weirs built	2
Weirs removed	1
Broken pipes replaced	17
Pipes repaired	4
Pipes reset	2
Pipes installed	5
Storm line repaired	2

Broken line repaired	10
Trunk line cleaned	1
Reset pipe frame	1
Repair connections	9
Excavations for broken pipes	7
Install new grates	2
Replace traps	1
Repair head wall	1
Remove apron stone	1
Build water meter pit	1

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

Catch basins cleaned	15,627.88 cu. yds.
87 Sumps cleaned	195 $\frac{1}{2}$ cu. yds.
965 Gutter grates cleaned	654 cu. yds.
35 Pot holes cleaned	30 cu. yds.
Open drains cleaned	1,832 Ft.
8,732 complaints received	all cleared
Sewer lines flushed	20,984 Ft.

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

ORIGINAL 215

EXTENSIONS 241

#### CONSTRUCTION WORK PERFORMED 1966-1967

River Ave. and Pleasant Valley Pkwy.	Repair corner of headwall with stone blocks and concrete cap using reinforced rods 18" x 36"
Ellis and Terminal Road	Replace 3 broken pipes
Ellis and Ernest St.	Put in 6" cast iron breather
Old Sewer Dept. yard	Repair basin line and water line
Sunbury and Veazie St.	Repair open joint in basin
850 Elmwood Avenue	Install 6" wide connection in sewer
353 Cahill St.	Repair broken pipes

38 Oriental St.	Replace 4 broken pipes
112 Pinehurst Avenue	Repaired sanitary line
71 Ocean St.	Built water meter pit
East George St.	Extended storm sewer line with 24 inch corrugated asphalt line 16 gauge pipe
138 Texas Avenue	Removed apron stone supported grate frame and cover with rail and brick work
48 Park Side Drive	Replace 8" pipe
42 Raphael St.	Replaced broken pipe
32 Wyndham St.	Put in new connection at gutter line
Merino Park	Replace three broken eight inch pipes
Melrose St.	Built two new basins
Kinsley Ave.	Reset twenty-five ft. of twelve inch pipe line
River Ave. and Prescott St.	Built new basin
158 Ford St.	Replace broken pipe in line
Dakota St.	Built Basin
Bolton Ave. and Lawn St.	Replaced broken pipe in line
777 Chalkstone Ave.	Replace broken pipe in line
Cahill St.	Repair broken pipe in Main Line

Ocean St. on Expressway	Built new weir
374 Veazie St.	Built new manhole
55 Home Ave.	Replace broken sewer line
155 Francis St.	Replace broken sewer line
East Transit and Gano St.	Truck line cleaned
220 Messer St.	Put in new house connection
58 Italy St.	Built new house connection
200 Hawkins St.	Built one gutter grate inlet
153-155 Congdon St.	Repaired connection in street
Ohio Avenue	Built two new manholes
Congdon St.	Excavated and removed obstruction in sanitary line
South Water and Pike St.	Install new grate
81 America St.	Replace 8" trap with a 12" storm trap
Ohio Avenue (at dead end)	Built gutter grate basin
Byfield and Rugby St.	Replace broken connections
61 Detroit Avenue	Repaired storm connections
Roger Williams Park	Install 40' of 36" corrugated metal pipe to connect both lakes
West Exchange St.	Connected storm sewer to West Exchange Street trunk line using 15" pipe and 15" storm trap.



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

Dear Sir:

We herewith submit the annual report for the Division of Public Buildings, Public Works Department:

The following are the expenditures for the fiscal year ending September 30, 1967:

ITEM 0	Personal Services	78,785.92
ITEM 1	Services other than Personal	7,820.98
ITEM 2	Materials and Supplies	843.19
ITEM 5	Capital Outlay	<u>245.43</u>
	Total	87,695.52

During the year we supervised the construction of:

Nelson St. School - Addition and Alterations  
Lippitt Hill Elementary School  
Administration Building for Public Welfare Department  
James L. Hanley Classical Central Education Center

This included inspection at the site and supervision of supplementary details.

This Division prepared plans and specifications and supervised the work to be done at the following schools:

Bridgham Jr. High School	Cornice Repairs
Broad St. School	New sinks and cabinets
Mt. Pleasant High School	Plumbing Repairs
Regent Ave. School	Library Shelving
Veazie St. School	Sidewalks and yard paving
Webster Ave. School	Plumbing repairs

Under the School Modernization and Construction Program we supervised work for:

Regent Ave. School	Miscellaneous Alterations
	Structural
Webster Ave. School	Electrical Modernization
Webster Ave. School	Miscellaneous Alterations
	Structural

prepared plans and specifications for:

Academy Avenue School  
(Contract awarded 9/11/67)

Modernization and Miscellaneous alterations

prepared specifications for:

Classroom furniture at the Nelson St. School  
Folding Chairs )  
Office Furniture ) For various Schools  
Typewriter Tables)

This Division also prepared specifications for the Lippitt Hill Elementary School furnishings and equipment which included:

Classroom Furniture  
Auditorium Chairs and Trucks  
Office and Teacher Furniture  
Audio Visual Equipment  
Kitchenware  
Television Sets and Stands  
Miscellaneous Maintenance Equipment  
Dental Equipment  
Social Studies Equipment  
Science Equipment

Work done by this Division for other departments:

for Bureau of Police and Fire:

Headquarters Building - Repairs to Sewer Lines  
Headquarters Building - Boiler Repairs  
Headquarters Building - Furnish and Install storm windows

Headquarters Building - New surfacing on stair treads  
Headquarters Building - Electrical Repairs  
Headquarters Building - Repairs to Expansion Tank  
Chad Brown Training School - Roofing and Sheet Metal work

Dog Kennel - Roger Wms. Pk.- Repairs to Fan and Motor  
Improvements to Police Range - Scituate  
Atwells Ave. Fire Sta.-Roof Repairs  
Branch Ave. Fire Sta.- Plumbing Repairs  
Broad St. Fire Sta.- Repairs to Conductor Pipes  
Brook St. Fire Sta.- Roof Repairs  
Mt. Pleasant Ave.- Sidewalks and Yard Paving and removal of concrete Pad  
North Main St. Fire Sta.- Roof Repairs  
Reservoir Ave. Fire Sta.- Roof Repairs  
Rochambeau Ave. Fire Sta.- Repairs to Copper Gutters

for Bath Houses and Comfort Stations:

Miscellaneous plumbing, electrical and structural repairs where necessary at Franklin Park Bath House, Kennedy Plaza and Weybosset Street Comfort Stations.

for City Sergeant:

Supervision of miscellaneous heating, plumbing, electrical, plastering, structural, roofing and chimney repairs at the City Hall and Fountain Street Annex.

Installation of Aluminum Windows - City Clerk's Office

for Board of Canvassers:

Posting notices; delivery and pick up of tables and other equipment used in primaries and special elections; supervision of electricians hooking up voting machines and any emergency repairs when called for.

for Park Department:

Supervision of construction of:

Fire Damage repairs at animal barn and garage  
Roofing and miscellaneous repairs at Bird House  
Public rest room facilities

Christmas Display - supervision of electrical work

Miscellaneous minor plumbing and structural and electrical repairs

for Recreation Department:

Electrical and heating repairs at various centers as requested  
Fire Damage repairs at Joslin St. Recreation Center

coordinating with other departments the requisitioning, processing of purchase order receiving copies to Controller's office for payment for:

Fence Installations and Backboards  
Demolition of Structures  
Purchase of creative playground equipment  
Site Improvements  
Landscaping  
Tennis Courts and Basketball Courts at Nathan Bishop Recreation Field  
Construction of Shipyard Playfield

Other work done by this division or under our supervision and inspection:

Veterans Administration Building - Hope St. - Roof Repairs

Traffic Engineering - Roof repairs at New York Avenue

Public Welfare Department - Plumbing and roof repairs at various district offices

Nathanael Greene Jr. High School - New Doors and Fire damage repairs

Preparation of estimates of costs as requested by various City departments.

Work under construction and being done under the supervision of this Division during the fiscal year ending September 30, 1967 or brought to completion during this time amounts to approximately \$13,984,364.00.

Very truly yours,

R. Einar Soderback  
Superintendent of Public Bldg.

A N N U A L R E P O R T

F O R T H E

Public Service Division

Public Works Department  
City of Providence  
Fiscal Year 1966-1967

PUBLIC SERVICE DIVISION

Administration Section

Street Lighting Section

Peter J. Hicks, Jr.  
Public Service Engineer  
City of Providence, Rhode Island

PERSONNEL  
ADMINISTRATION

Peter J. Hicks, Jr.

Public Service Engineer

Street Lighting

John T. Crowley

Utility Inspector

NUMBER AND KIND OF STREET LIGHTING UNITS IN SERVICE IN PROVIDENCE SINCE 1945

MERCURY	24Hr. Burning	5.5A 100cp	Bridge Structures	<u>INCANDESCENTS</u>			<u>SODIUM</u>		<u>MERCURY</u>	
				250cp.	1000cp.	600cp.	1000cp.	15000c O.H.	15000c U.G.	21000 Lu.
1945		8756	8		540	29	25			
1946		8513	8		554	29	26	19		
1947		8709	8		568	29	26	179		
1948		8687	8		568	29	26	256		
1949		8624	115		586	29	25	1049		
1950		8701	116		550	29	25	1556		
1951		8721	162		560	29	25	1855		
1952		8668	226		565	29	25	2360		
1953		8671	251		504	29	25	2802		
1954	44	8308	314		506	29	25	3293		
1955	44	8277	414		449	20	25	3428		
1956	44	8228	447		435	29	25	3476		
1957	44	8248	489		391	29	25	3501		
1958	44	8192	484		349	29	25	3570		
1959	44	8236	512		348	29	22	3593	7	
1960	44	8244	519		345	29	22	3623	42	
1961	44	8212	547		331	29	21	3607	88	
1962	44	8122	536		309	29	21	3567	118	12
1963	44	8139	541		187	29	21	2754	173	231
1964	44	8136	534		122	29	21	1081	245	321
1965	44	8100	530		66	29	21	2076	297	426
1966	44	8069	526		38	29	21	2054	404	501
1967	44	8040	537		33	0	0	1174	512	526
*15000c Lu. Means A 21000 Lu. Mercury Vapor Lamp installed-In An Existing 15000 Lu. Mercury Designed Luminaire										

# SCHEDULES OF STREET LIGHTING DATA

	1000 cp.		O.H. A.N.		15000c & 21000ln		Sodium Light	
	U.G. H.N.	A.N.	U.G. H.N.	A.N.	Merc. U.G.	U.G. A.N.	U.G. A.N.	A.N.
October 1, 1966	3	27	4		1629	21		
September 30, 1967	3	27	3		1633	0		
Changes	0	0	1		4	21		
	Merc. 7000 Lu.		Merc. 2 Lt.		Merc. Vap. O.H.		250cp.	
	A.N.	U.G.	A.N.	U.G.	Merc. Vap. O.H.	U.G. H.N.	O.H. U.G.	H.N.
October 1, 1966	404	5	2108					
September 30, 1967	512	7	2104					
Changes	108	2	4					
	100cp. U.G.		100cp. O.H.		Merc. Vap.		250cp.	
	A.N.	U.G. H.N.	A.N.	H.N.	Merc. Vap. O.H.	U.G. H.N.	O.H. U.G.	H.N.
October 1, 1966	133	222	7705-E	9	44		502	13
September 30, 1967	129	221	7681	9	44		513	13
Changes	4	1	24	0	0		11	0

September 30, 1966 - September 30, 1967 Changes

Total number equivalent single incadescent lights  
 Total number mercury lights 21,000 & 7,000 Lu.  
 Total number equivalent single sodium lights 10000 Lu.

8662 52  
 4190 102  
 21 0

From May 1 to October 14, inclusive, the H.N. 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.  
 B-includes 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 preceeding 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 affect the price of electricity billed in the second month following such month.

The cost of fuel by month was as follows:

1966 August.....	\$ 9.582
1966 September.....	9.552
October,.....	9.604
November.....	9.558
December .....	9.686
1967 January.....	9.502
February.....	9.255
March.....	9.413
April.....	9.387
May.....	9.301
June.....	9.243
July.....	9.237

\*Standard net ton

The number of lamps and globes reported as broken on street lights during the years 1965-1966-1967, is as follows:

<u>INCANDESCENT</u>	<u>LIGHTS BROKEN</u>	<u>MERCURY GLOBES</u>
1965-1966	6228	99
1966-1967	6404	113

# STREET LIGHTING UNIT COSTS

Under the provisions of terms and conditions for street light — this being the so called "Fuel Clause," the cost of the street lights for the year beginning October 1, 1966 depended upon the cost of fuel for the year ending July 31, 1967. This cost averaged 9.44 per standard net ton. This is \$1.31 below the base price of \$10.75. All base prices shown in the rate schedule will therefore be decreased by an amount obtained by multiplying the decrease per ten cent variation by 13. A tabulation showing the unit prices for the year beginning October 1, 1967, is as follows:

	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	13	.27	29.12	28.85
U.G. Single, $\frac{1}{2}$ Night	.009	13	.12	25.11	24.99
Aerial Single, A.N.	.021	13	.27	16.09	15.82
Aerial Single, $\frac{1}{2}$ Night	.009	13	.12	10.40	10.28
<u>MISCELLANEOUS</u>					
250 C.P. U.G. A.N.	.043	13	.56	52.19	51.63
250 C.P. Aerial, A.N.	.043	13	.56	32.19	31.63
1000 C.P. Aerial, A.N.	.132	13	1.72	72.51	70.79
1000 C.P. U.G. A.N.	.132	13	1.72	92.51	90.79
1000 C.P. U.G. $\frac{1}{2}$ Night	.072	13	.94	72.39	71.45
250 C.P. U.G. $\frac{1}{2}$ Night	.024	13	.32	43.74	43.42
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

## 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>K.W. USED</u>	<u>BILL</u>
October, 1966	4560 K.W.	\$ 87.27
November, 1966	5400 K.W.	95.60
December, 1966	4280 K.W.	84.50
January, 1967	5650 K.W.	98.20
February, 1967	5060 K.W.	92.53
March, 1967	5180 K.W.	93.27
April, 1967	4640 K.W.	87.30
May, 1967	4040 K.W.	69.51
June, 1967	3880 K.W.	66.89
July, 1967	4200 K.W.	94.30
August, 1967	5200 K.W.	63.66*
September, 1967	6360 K.W.	121.55

\* \$39.38 Credit

Sign Inspection

Signs inspected for overhead wire clearance 149

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

Private Floodlight Inspections

<u>APPROVED</u>	<u>REJECTED</u>	<u>REMOVED</u>	<u>AREA LIGHTS</u>
91	3	2	2

WESTMINISTER PEDESTRIAN MALL

<u>MONTH</u>	<u>K.W. USED</u>	<u>BILL</u>
October 1966	3954	\$ 154.86
November 1966	5938	217.57
December 1966	7536	268.33
January 1967	7829	278.74
February 1967	4295	163.02
March 1967	2683	108.41
April 1967	1967	81.43
May 1967	1969	81.79
June 1967	1767	74.71
July 1967	2527	105.48
August 1967	2191	92.04
September 1967	2536	105.84

# STREET LIGHTING SECTION

## STREET LIGHTING COSTS

The total expenditures for the fiscal year ending September 30, 1967, for street, bridge, subway, and park lighting bills, contracted in the months stated, less all credits for outage, have been as follows:

1966-1967 Appropriation — \$532,111.30

### INCANDESCENTS AND MERCURYS

<u>1966</u>	<u>TOTAL BILL</u>	<u>LESS OUTAGE</u>	<u>NET COST</u>
October	42,880.48	80.64	42,799.84
November	42,988.07	101.92	42,886.15
December	42,862.27	96.69	42,765.58
<u>1967</u>			
January	42,927.75	74.97	42,852.78
February	42,912.23	105.24	42,806.99
March	42,909.92	66.60	42,843.32
April	42,958.57	76.35	42,882.22
May	42,969.46*	281.94	42,687.52
June	42,970.99	29.31	42,941.68
July	42,973.50	45.42	42,928.08
August	42,895.30	47.34	42,847.96
September	<u>43,068.09</u>	<u>49.17</u>	<u>43,018.92</u>
	\$515,316.63	\$1055.59	\$514,261.04

\*Storm Outage of Series Circuits

### Recapitulation

Grand Total	\$514,261.04
Total monthly average cost 1965-1966	\$ 42,605.13
Total monthly average cost 1966-1967	\$ 42,855.08

Increase from previous year of the Monthly average	\$ 249.95
---	-----------

Total savings in outages	\$ 1,055.59
--------------------------	-------------

### New Street Light Petitions Received    Granted    Hold

163	60	103
-----	----	-----

### Utility Pole Petitions Received and Field Checked    199

#### SUMMARY

There are now 3210, 15,000c Lumen Mercury Vapor Lights in service.  
There are now five hundred and twelve (512) 7000 Lumen Mercurys.  
There are now 526, 21,000 Lumen Mercury Vapor Lights in service.

The number of 2,500 Lumen Incandescent lights have been increased by eleven (11), bringing the total number of this type of light now in use to 537.

There are thirty three (33) 10,000 Lumen Lights in service in the City that will be replaced with 21,000 Lumen Mercury Vapor Lights in the near future.

There are eight thousand and forty (8040) 1000 Lumen Lights in service (familiar neighborhood type). There have been 60 lights of this type installed during the past fiscal year, on street light petitions.

#### EXPENDITURES

Item O. Personal Services	5,884.32
Item I. Services other than personal	514,989.04

Very truly yours,

Peter J. Hicks, Jr.  
Public Service Engineer

John T. Crowley,  
Street Lighting Section

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

The Central-Classical Redevelopment area is still in progress and we have worked in conjunction with the utility companies in removing and replacing lights as the project develops.

Improved Lighting on the Following Streets

<u>STREET</u>	<u>TYPE OF LIGHT</u>
Market Square Complex	21000 Lumen Mercury Vapors
Hay, Peck & Orange Streets	7000 Lumen Mercury Vapors
Camden, & Danforth Streets	7000 Lumen Mercury Vapors
Point Street Viaduct	7000 Lumen Mercury Vapors
Thayer Street	7000 Lumen Mercury Vapors
Huntington Industrial Park	7000 Lumen Mercury Vapors
Prairie Avenue	21000 Lumen Mercury Vapors
Chad Brown Complex	21000 & 7000 Lumen Mercury Vapors

Mercury Vapor Floodlights were also installed at the Danforth Street, Smith Street, and Flynn School Playgrounds.

Approximately 60 new 1000 Lumen & 7000 Lumen Light Installations were granted on Council Petition Requests.

### 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	1,399
Total number of traffic signal poles	643
Total number of traffic signal controllers (local)	182
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	29.45
Total number of miles of aerial cable	7.11
Total number of miles of equivalent single conductor (underground)	156.08
Total number of miles of equivalent single conductor (aerial cable)	34.92

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 & 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 miles 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.)	18270
	(b)	Total number jointly owned poles with N.E.T.&T Company	14088
2.	(a)	Total number iron poles in city	245
	(b)	Number of underground street light standards (ornamental incandescent and mercury vapor)	2155
	(c)	Number of iron poles with N.E.T.&T. Company	9
3.		Total number miles conduit (trench feet) in city	81.54
4.		Total number miles conduit (duct feet) in city	682.55
5.		Total number miles underground cable in city	896.59
6.	(a)	Total number miles equivalent single underground conductor	1244.41
	(b)	Total number miles aerial cable	363.97
	(c)	Total number miles equivalent conductor aerial cable	957.62
7.		Total number miles aerial open wire	3742.51
8.		Total number service pipes or laterals	66.89
9.		Total number commercial transformers in city	62.24
10.		Total number customers supplied directly by U.G. connection	23846
11.		Total number customers supplied directly by O.H. connection	47702
12.		Total number meters installed in city	71548
13.		Approximate total number of 1 $\phi$ 2 wire 115 V. meters in city	28225
14.		Approximate total number of 1 $\phi$ 3 wire 115/230 V meters in city	38335
15.		Approximate total number of 3 $\phi$ 3 wire 115 V. meters in city	13

THE NARRAGANSETT ELECTRIC COMPANY con't.

16.	Approximate total number of 3 $\phi$ 3 wire 230 V. meters in city	206
17.	Total number of 3 $\phi$ 4 wire 120/208 V. meters in city	1628
18.	Total number of 1 $\phi$ 3 wire 120 V. two element meters in city	1879
19.	Total number of D.C. 2 wire and 3 wire 250 and 250/500 V. meters in city	46
20.	Approximate total number of 3 $\phi$ 3 wire 575V. meters in city	1216

DEPARTMENT OF PUBLIC SAFETY

INVENTORY	SIGNAL CONSTRUCTION		FIRE ALARM DIVISION		POLICE SIGNAL SYSTEM	
	Total	Aerial	U.G.	Quick Action Door	Key Type Door	Keyless
Fire Alarm Boxes	1005	618	387	983	9	13
City Owned	689	422	267	689	0	0
Privately Owned	316	196	120	294	9	13
Police Call Boxes	168	103	65			
Total number of all box and cable pedestals						
Total number of all Fire Box Pedestals					368	
Total number of all Police Box Pedestals					275	
Total number of all Cable Pedestals Only					67	
					36	
Total number of miles of Underground Cables					87.15	
Total number of miles of Parkway Cables					1.47	
Total number of miles of Aerial Cable					4.82	
Total number of miles of Equivalent Single Conductor - Underground					1258.40	
					129.30	
					6.42	
Total Footage of all underground ducts and laterials owned by the City					3445.6	
Number of Poles Owned by the City					36	
Increase of number of Fire Alarm Boxes owned by the City					1	
Increase of number of Fire Alarm Boxes Privately owned					5	
These increases are for the year 1966-1967						

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

Total number of wood poles (including jointly used, but not including those jointly used with no Telephone Company ownership	18,193
Total number of jointly used poles with Narragansett Electric Co.	14,088
Total number of miles main conduit (trench miles)	68.06
Total number of miles U.G. Cable	327.22
Total number of miles aerial cable	327.18
Total wood terminal boxes on poles	174
Approximate number of telephones supplied directly by underground or block distribution	49,506
Approximate number of telephones supplied directly by overhead lines on highways	48,117
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	30.1
Increase in the number of telephones in use	2,642

ESTIMATE

This report covers plant statistics as of September 30, 1967.

WESTERN UNION TELEGRAPH COMPANY

City Plan, Providence, Rhode Island

Number of Poles	None
Number of Poles Jointly Owned	None
Number of feet U.G. conduit (tr.ft.)	276
Number of U.G. conduit	922.6
Number of miles of U.G. cable	.743
Number of miles of wire in U.G.	65.12
Manholes owned	1

PROVIDENCE GAS COMPANY

Total Gas Service in Providence			37,051 $\frac{1}{2}$
Miles of Main:			
L.P.	393 Miles	4,586 Feet	
H.P.	15 Miles	3,017 Feet	
Natural Gas	<u>1 Mile</u>	<u>1,800 Feet</u>	
Total	410 Miles	4,123 Feet or	410.8
Gas Holders			4
Number of Meters (Active)			51,548
Decrease in Gas Services 9/30/66-9/30/67			113 $\frac{1}{2}$
Increase in Miles of Main 9/30/66-9/30/67			1.4
Decrease in Number of Meters 9/30/66-9/30/67			400

### STREET LIGHTING SUMMARY

We can again say the high standard of street lighting enjoyed by the citizens on the travelled arteries of the City of Providence has contributed in no small way to the welfare of the pedestrian as well as the motorist in protecting the lives and property of its citizens. The low amount of assault cases on the City streets after dark confirms this fact.

It has increased property valuation and acted as an incentive to property owners to improve their property.

We also feel that our improved street 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.

We are constantly improving residential lighting, as much as possible where it is feasible, by installing more units to fill in the existing long spacings that were practical years ago when they were installed but where new construction of homes and the full growth of trees have now made those spacing impractical as well as unsafe at night. Possibly, in the future, a controlled tree planting system by our City Forester will correct this street light shading by trees in our neighborhoods by recommending the planting of new trees back of the property line and not on the curb line as is presently and formerly done. Some of our existing neighborhood streets are impossible to adequately light at all because of tree foliage grown from trees on both sides of the street extending over the center line of the highways.

The street light breakage showed another increase over last year. The many Redevelopment areas throughout the City are a factor. However our weekly copy of the percentage breakage is still forwarded to Commissioner Goldstein, Commander Wilding and Colonel Franklin for their constant assistance.

## PUBLIC SERVICE SUMMARY

The small amount of utility pole petitions received and field checked by this department again this year is because neither one of the utility companiers conducted a depreciation survey. The 199 figure represented new and regular maintenance work.

There have not been any gas tests conducted by this division for some years, to check the B.T.U. content of illuminating natural gas, because of the lack of personnel, the inadequate laboratory conditions and the unworkable condition of the two pieces of gas testing equipment.

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, man-holes and duct lines installed in Providence by the Narragansett Electric Company, 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, outage records, gas testing, and field check light locations. In this way our department can work in closer proximity and more efficiently with all utility companies.

I suggest some expense item for new equipment, the maintaining of same; and travel expense, if the opportunity arises, to attend another street institute. These outdoor lighting institutes are frequently given by the General Electric Company and other street lighting equipment companies and will keep us abreast of the new developments in street lighting.

This department also sent inspectors out of the State on two occasions during the past fiscal year to wire and cable manufacturers, to witness and approve the testing of Traffic Signal Cable and Fire Alarm Cable to make certain it met the required specifications. This cable was destined to be installed in the City of Providence,



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

Dear Sir:

The following rigs arrived in the harbor during the period from October 1, 1966 to September 30, 1967:

Steamships	406
Motor Vessels	629
Barges	267
Tugs	588
U.S.C.G.Sq.Rigger	1
	<u>1,891</u>

The following cargo arrived in the harbor and the following cargo was shipped during the period from October 1, 1966 to September 30, 1967:

RECEIVED		SHIPPED	
Gasoline	2,332,926 Tons	Gasoline	260,539 Tons
Fuel Oils	4,015,188 "	Fuel Oils	432,418 "
Kerosene	162,840 "	Kerosene	53,297 "
Diesel	143,432 "	Diesel	27,039 "
Lube	51,316 "	Lube	4,950 "
Asphalt	54,173 "	Asphalt	71,327 "
Coal	296,132 "	Scrap	369,016 "
Cement	153,146 "	Gen.Cargo	77 "
Chemicals	15,273 "	TOTAL	<u>1,218,663</u> Tons
Gen.Cargo	74,870.271		
Lumber	74,551 (44,732,275 B.F.)		
TOTAL	<u>7,373,847.271</u> Tons		

Total: 7,373,847.271 Tons Received  
 1,218,663 Tons Shipped  
8,592,510.271 Tons Received & Shipped

Very truly yours,

John A. Mahoney  
 Clerk-Municipal Dock

The following rigs arrived at the harbor from October 1, 1966 to September 30, 1967

	Steamships	Motor Vessels	Barges	Tugs	U.S.C.G. Square Rigger
October	31	35	16	37	
November	29	46	24	42	
December	38	45	24	59	
January	32	41	30	61	
February	38	41	20	50	
March	43	45	31	69	
April	41	35	33	60	
May	40	55	18	63	
June	27	45	21	44	
July	24	94	14	36	1
August	33	77	21	22	
September	30	70	15	45	
	406	629	267	588	1

TONNAGE RECEIVED OCTOBER 1, 1966 to SEPTEMBER 30, 1967

	Gasoline	Fuel Oils	Kerosene	Diesel	Lube	Asphalt	Coal
October	83,176	162,749	12,947	21,108	3,608	261	52,414
November	175,508	339,391	2,078	8,308	4,231	---	26,225
December	240,260	373,186	21,063	13,248	4,353	6,520	26,230
January	221,152	356,881	14,226	5,851	15,991	---	26,278
February	144,051	537,444	29,942	14,230	840	5,333	---
March	208,888	464,948	28,992	3,654	2,197	3,333	26,220
April	127,345	519,184	16,223	8,940	4,288	7,500	26,263
May	213,005	371,545	13,261	14,225	4,063	---	---
June	227,523	239,093	8,803	14,980	3,780	11,898	---
July	199,967	179,241	1,710	9,388	2,697	1,666	29,615
August	263,432	210,763	5,722	14,760	3,198	8,498	56,007
September	228,619	260,763	13,873	14,740	2,070	9,164	26,880
TOTALS:	2,332,926	4,015,188	162,840	143,432	51,316	54,173	296,132

TONNAGE RECEIVED OCTOBER 1, 1966 to SEPTEMBER 30, 1967

	Cement	Chemicals	General Cargo	Lumber (Bd. Ft.)	Lumber (Tons)
October	16,307	1,000	537	---	---
November	13,537	3,029	560	2,763,544 B.F.	4,605 Tons
December	18,884	824	702	860,456 "	1,434 "
January	2,630	1,971	18,000	---	---
February	---	---	544	2,904,918 "	4,841 "
March	2,625	---	1,279,735	9,524,842 "	15,874 "
April	20,115	1,834	1,956,980	3,215,390 "	5,359 "
May	16,866	1,145	2,400,544	9,710,134 "	16,183 "
June	15,665	2,113	3,377,264	5,542,484 "	9,238 "
July	13,152	1,322	435,500	5,100,667 "	8,501 "
August	13,950	1,128	26,042,348	2,732,357 "	4,554 "
September	<u>19,415</u>	<u>907</u>	<u>19,033,900</u>	<u>3,377,543 "</u>	<u>3,962 "</u>
	153,146	15,273	74,870,271	44,732,275 B.F.	74,551 Tons

SHIPPED                      OCTOBER 1, 1966 to SEPTEMBER 30, 1967

	Gasoline	Fuel Oils	Kerosene	Diesel	Lube	Asphalt	Scrap	Gen. Cargo
Oct.	31,250	13,733	7,588	1,704		2,833	201,638	77
Nov.	27,260	24,690	4,069	1,872		4,500		
Dec.	33,516	40,025	6,695	3,182			19,734	
Jan.	36,038	44,044	6,121	3,932			21,885	
Feb.	15,011	76,164	12,518	2,582		5,833	21,297	
Mar.	6,766	92,614	7,211	240			10,391	
Apr.	1,995	37,779	3,840	1,858	4,950		21,268	
May	23,918	36,598	3,720	1,641		3,500		
June	34,051	22,985	684	3,866		9,495	23,975	
July	3,168	20,540	150	1,493		10,666		
Aug.	18,003	15,881	701	1,828		19,334	21,328	
Sept.	29,563	7,365	---	2,841		15,166	27,500	
TOTAL:	260,539	432,418	53,297	27,039	4,950	71,327	369,016	77

MUNICIPAL WHARF

October 1, 1966 to September 30, 1967

The following rigs and cargo arrived at the Municipal  
Wharf during the period from October 1, 1966 to September 30, 1967:

Rigs

Steamships	82
Motor Vessels	38
Barges	97
Passenger Ships	1
U.S.C.G. Square Rigger	1
TOTAL:	<u>219</u>

CARGO

RECEIVED

Salt	18,000 Tons
Cement	119,918 "
Asphalt	37,364 "
Lumber	74,551 " (44,732,275 B.F.)
Gen.Cargo	8,410 "
Steel	622 "
Pig Iron	4,500 "
Gasoline	379,684 "
Fuel Oils	53,481 "
Kerosene	3,074 "
Lube Oils	21,706 "
Chemical	<u>8,513 "</u>

Total: 729,823 Tons

SHIPPED

Scrap	48,748 Tons
Gasoline	1,817 "
Gen.Cargo	<u>77 "</u>
Total:	50,642 Tons

MUNICIPAL WHARF AND HARBOR SECTION

October 1, 1966 to September 30, 1967

INCOME RECEIVED

Lease of Land	\$ 100,988.90	01
Storage	11,681.48	02
Trackage	4,382.00	
Dockage	38,984.28	
Wharfage	84,837.41	
Lease & Rental of Building Space	64,645.10	08
Telephone	97.25	
Miscellaneous	2,332.00	
Electricity	1,065.39	
Water	985.10	
Refund from Water Supply Board	<u>7,441.80</u>	
Total:	\$ 317,440.71	

### DRAW BRIDGE OPERATION SECTION

This section is responsible for the operation of the two draw bridges (Point Street Bridge and Red Bridge) owned and operated by the City of Providence. The men in this section also performed the housekeeping and preventative maintenance duties (greasing, oiling, shoveling snow, etc.) required on these bridges in operation. The repair and heavy maintenance work required on these bridges is performed by the Bridge Maintenance Section.

#### EXPENDITURES

ITEM 0	Personal Services	\$58,697.87
ITEM 1	Services other than Personal	671.06
ITEM 2	Materials and Supplies	490.13
	TOTAL	<u>\$59,859.06</u>

Revenue	105.96
---------	--------

Point Street Bridge was placed on a limited opening basis on May 10, 1958. The operating personnel and the electric power meter were removed at that time. Requests to have the bridge opened for water traffic must be made 24 hours in advance so that an operating crew can be obtained and a power meter installed.

The following table shows the number and type of craft passing through Red Bridge by months of the fiscal year. It also shows the totals of vessels and openings and average time for openings for the fiscal year immediately preceding.



SUMMARY OF OPERATIONS FOR YEAR ENDING SEPTEMBER 30, 1967

RED BRIDGE

	Steamers	Tow Boats	Sailing Vessels	Sailing Boats	Barges	Miscellaneous	Total number of Vessels 1966-1967	Total openings 66-67	Average time openings to close gates (min.) 1966-1967	Total number of vessels 1965-1966	Total openings 1965-1966	Average time openings to close gates (min.) 1965-1966
OCTOBER	14	7	-	-	4	3	28	25	5.40	43	35	5.45
NOVEMBER	15	10	2	-	5	2	34	30	5.37	34	25	5.40
DECEMBER	12	8	9	-	2	-	31	29	5.47	66	61	5.37
JANUARY	16	4	-	2	-	-	22	20	4.74	35	27	4.05
FEBRUARY	13	24	-	-	15	-	52	35	4.42	53	44	5.05
MARCH	11	28	-	-	17	-	56	47	4.09	41	30	4.74
APRIL	8	28	2	-	12	2	52	40	5.01	18	24	4.42
MAY	12	10	1	-	6	-	29	22	4.67	43	36	5.47
JUNE	10	4	5	-	3	-	22	20	5.40	56	49	4.42
JULY	6	4	9	-	6	-	25	20	4.36	117	81	4.67
AUGUST	10	-	8	4	-	-	22	20	5.21	60	51	4.69
SEPTEMBER	11	15	-	-	3	-	29	27	4.18	59	52	4.09
	138	142	36	6	73	7	402	335		625	515	

The following table shows the total of craft passing through the drawbridges beginning the fiscal year 1907:

From 1907 to 1928, inclusive, years ending December 31.

From 1929 includes 9 months only, and ends September 30.

From 1930 to date, years end September 30.

YEAR	POINT ST. BRIDGE	RED BRIDGE	YEAR	POINT ST. BRIDGE	RED BRIDGE
1907	25,949	2,632	1937-38	1,136	1,913
1908	21,767	4,852	1938-39	1,676	2,187
1909	17,218	6,914	1939-40	1,299	3,431
1910	17,125	2,927	1940-41	1,066	2,420
1911	20,078	3,293	1941-42	1,205	1,722
1912	21,519	3,021	1942-43	1,263	1,087
1913	15,311	3,734	1943-44	1,487	2,262
1914	13,364	2,491	1944-45	1,233	1,319
1915	14,409	2,755	1945-46	1,078	1,828
1916	11,638	3,368	1946-47	936	1,640
1917	9,704	3,273	1947-48	1,010	1,541
1918	6,894	2,680	1948-49	666	2,130
1919	7,123	3,647	1949-50	638	1,609
1920	6,950	4,451	1950-51	371	1,973
1921	6,067	2,001	1951-52	125	1,628
1922	5,307	2,958	1952-53	202	1,752
1923	5,476	5,134	1953-54	51	2,787
1924	4,858	2,035	1954-55	883	1,313
1925	4,939	1,942	1955-56	141	1,536
1926	5,198	2,415	1956-57	16	1,189
1927	4,700	2,934	1957-58	9	1,076
1928	4,679	3,912	1958-59	6	1,021
1929	4,068	3,623	1959-60	0	758
1929-30	3,210	2,738	1960-61	212	586
1930-31	3,243	2,742	1961-62	104	614
1931-32	1,197	1,900	1962-63	2	689
1932-33	1,327	2,787	1963-64	0	749
1933-34	1,990	3,750	1964-65	0	449
1934-35	1,307	2,454	1965-66	0	515
1935-36	1,468	2,150	1966-67	0	335
1936-37	1,368	2,130			
BRIDGE	GREATEST NUMBER OF OPENINGS IN ANY ONE DAY		DAILY AVERAGE NUMBER OF OPENINGS FOR THE YEAR		
	1965-1966		1966-1967		
RED	7		1.20		
POINT	0				

## ENVIRONMENTAL CONTROL

This division was created as an adjunct to the Sanitation Division for the purpose of maintaining some of the services previously within the purview of the Department of Health, before it was taken over by the State of Rhode Island. The following services and supervision have been maintained.

### RODENT CONTROL

The Environment Control section of the Public Works Department performs its duties in the field of rodent control primarily upon receipt of complaints. An inspector pays a visit to the specified site of complaints. If the area warrants attention, a working crew proceeds to cyanide holes.

Besides cyanide gas a Pival bait is used for exterminating. Pival has been found most effective and it is harmless to domestic animals and humans. This bait is placed in containers and the containers placed in various locations of the infested area.

Inhabitants of the neighborhood are requested to cooperate by instructing their children not to remove or destroy these bait containers. Re-calls are made to the vicinities usually over two or three week periods in order to check the existing conditions and to note any improvement of the area under complaint.

Due to the lack of cooperation on the part of dwellers in keeping yards free from garbage and debris, demolition in re-newal and redevelopment areas, etc., the work of this section becomes a continuously important and very necessary function.

### MOSQUITO CONTROL

The Department of Environment Control has the duty of spraying all areas and sewers in the City of Providence, plus the cleaning up of swampy areas by raking, shoveling all known river beds, creeks, polluted lands and parks. The parks lakes and swampy polluted lands are completely sprayed from the beginning of the season to the end of the season. The control of mosquitos are very important to this department and to the City.

### REMOVAL OF POISON WEEDS

The removal of poison weeds such as Jimson Weed, Ragweed, Poke berries, Poison Ivy etc, are destroyed by this department by spraying of chemicals and oils. The plants are cut down after the spraying and put into a dump truck by labor gangs under the supervision of the foreman then taken away to the incinerator and burned. After this the area is then completely re-inspected by the inspector and foreman.

## MARIJUANA CONTROL

The Marijuana Program involves responsible field work by the Environment Control Section of the Public Works Department. Working crews periodically check all areas known to have existing marijuana conditions. They also follow leads reported to them by the local Police Department.

The customary procedure is to up-root the marijuana by pulling it from the ground and chopping it apart from the earth. It is then piled onto a dump truck and taken to the incinerator where it is burned. When this operation is completed, experienced inspectors from this section check the area thoroughly to see that all traces of marijuana have been removed.

### STAFF AND EQUIPMENT

Laborers	9
Foreman	1
Office Clerk	1
Vermin Control Officer (Inspt)	1
Dump Truck	1
Passenger Car	1
Jeep (Truck)	1
1/4 Ton Truck	1

### STATISTICAL REPORT OF OPERATIONS

Rodent Complaints	2012
Bait Stations	1676
Bait cans set up	2186
Loads of debris removed	231
Permits to raze buildings	470
Dirty yard complaints rec'd	1837
Bags of bait distributed	
1 1/4 lb. bags	3116
Warning signs posted	32

### IN REVIEW

Any urban area has in its midst individuals who tend to be careless in their care and disposition of garbage and debris, not realizing the serious consequences brought about by the attraction of vermin and rodents, that are the natural carriers of these diseases.

If these conditions were allowed to persist it would be only a matter of time, before an entire area was contaminated. This department has had to be constantly vigilante to prevent these conditions as much as possible with the limited authority granted.

The department consistently averages better than forty calls per day from the inhabitants of the City who are calling to point out unsanitary conditions. A few of the calls are the usual cranks or or individuals carrying on a personal vendetta against a neighbor but the greater number are justifiable complaints. We are fortunate that in most instances, especially where the landlord is in residence that the basis for the complaint is cleaned up almost immediately once the matter is called to the landlords attention.

An analysis of what might be referred to as the chronic or consistent offenders discloses that the premises are usually owned by non-resident investors.

#### RECOMMENDATIONS

Subject to the Directors discretion, we respectfully suggest that the Legal Division be consulted in regard to the implementation of Ordinances making it possible for this department to enter the premises and clean them up, billing the landlord for the work, the landlord fails to cooperate after proper notice has been given to him.

Respectfully submitted:

Charles H. Oatley,  
Chief Environment Inspt.

#### SHOPS AND STORES

The Public Works Shops and stores services 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 expenses 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. yd.	1 Utility Truck
32 Garwood Packer Trucks	4 Derrick Trucks
3 Dump Truck 10 cu. yds	1 Hoist Truck 5000#
3 Compressors, Truck Mounted	2 Bulldozers TD 18
35 Dump Trucks, 4 cu. yds.	1 Sky Worker
4 Dump Trucks, 6 cu. yds	1 Welder, Electric Portable
1 Bulldozer Td9 3 cu. yds.	5 Road Graders
10 Pickup Trucks 3/4 Ton	2 Mist Sprayers
1 Stake Body Truck 1 Ton	2 Concrete Mixers 3S
1 Express Body Truck 2½ Ton	6 Snow Loaders
1 Express Body Truck ½ Ton	5 Lawn Mowers, Power
21 Passenger Cars	5 Tail Gate Spreaders
10 Air Compressors, Portable	108 Snow Plows
1 Trailer 25 T Flatbed w/tractor	4 Snow Blowers
1 Station Wagon	4 Scout Cars
2 Hoist Trucks 2500#	4 Front End Loaders
1 Roller 8-12 Ton Tandem	1 Roller 10-14 Ton Tandem
1 Roller 10-12 Ton 3 Wheel	2 Paver, asphalt
1 Walters Snow Fighter	3 Tool Heaters
1 Roller 3-5 Ton Tandem	6 Generators, Portable
1 Tar Kettle	6 Tool Wagons
4 Leaf Collectors	18 Spreaders, Mounted
1 Wood Chipper	1 Utility Truck
2 Eductor Trucks	1 Stump Rooter
1 Sewer Cleaning Machine	1 Vac. All Basin Cleaner

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 the section and incorporated in the rental pool.

1 Packer Truck	1 Compressor Truck Mounted
1 Utility Truck	1 Aerial Lift Truck
2-10 Wheel Trucks	1 Sewer Cleaning Machine
1 Paver Asphalt	1 Vac. All Basin Cleaner
4 Automobiles	1 Grader
10 Plows	2 Small Dump Trucks
1 Derrick Truck	6 Dump Trucks
1 Pickup Truck	10 Radios, Mobile
1 Eductor Truck	

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

1 Out Board Motor	Bridge Maint. Section
2 Fork Lifts	Automotive 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 Department

The Public Works Stock room carries much of the materials, parts and supplies required by the sections of the division. An inventory of \$96,028.60 in materials and supplies and parts was on hand on September 30, 1967.