# ANNUAL REPORT OF THE 

## STREET LAYING-OUT DEPARTMENT,

$$
\text { FOR THE YEAR } 1900 .
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[Document 39 - 1901.]

Hon. Thomas N. Hart,

## Mayor of the City of Boston:

Sir, - The Board of Street Commissioners present the following as the report of the Street Laying-out Department, including a statement relating to public lands in their care, for the year ending January 31, 1901.

Streets having a total mileage of 1.593 were made public ways during the year. Under authority of an act of the Legislature of 1891, and its amendments, providing for assessment upon abutting property of the benefit arising from the laying-out and construction of streets, there has been assessed, upon twenty-five streets and ten public alleys, a total of $\$ 349,981.30$. Under special acts providing for the assessment of benefits to real estate on account of the widening, extension and construction of Huntington avenue, the widening and construction of Clinton street, and the location and construction of the South Union Station, Summer and Cove streets, a total of $\$ 1,387,512.79$ has been assessed. For benefits for sewerage works assessments to the amount of $\$ 282,032.87$ have been made. The total of benefits
assessed for streets, sewerage works, and the South * Union Station, during the year is the sum of $\$ 2,019,-$ 526.96.

The Board has issued thirty-seven orders of notice of intention to lay out, widen, relocate, extend and discontinue streets, or parts of streets, and public alleys, calling for public hearings. It has received and considered fifty-nine petitions for street improvements. For the laying of sewers and surface drains there have been one hundred and twenty-eight petitions presented to the Board during the year. In the settlement of damages for takings of land, etc., for various changes in the City's streets two hundred and sixty-six cases have been acted upon by the Commissioners. Claims for damages for sewers and surface drains ordered have been settled to the number of forty-six. Two petitions for release of sewer assessments have been received, and the releases made by the Board, under authority of the act empowering them to release parts of estates from assessments for sewers and sidewalks upon payment of the proportional parts due upon the parcels released.

Under the provisions of acts of the Legislature giving the Street Commissioners authority to take land for and order the construction of sewerage works, orders have been passed for the improvement and relocation of various natural streams or water courses, and surface drainage has been supplied for territories needing it as follows: Faneuil Valley brook has been relocated, at Brighton, south from Washington street opposite Fairbanks street; surface drainage has been provided for Kempton street and Kenwood road, at Roxbury, for Cornell street, West Roxbury, Zamora street, West Roxbury, and for land at the junction of Harvard avenue and Commonwealth avenue, at Brighton.

Takings have been made for and sewers ordered built in the following private ways: In Boston-in a passageway leading from St. Botolph street; at East Boston-an outlet for sewer in Putnam street; at South Boston - in Hamlin street and Bell court; at Roxbury - in Kempton street and Kenwood road; at Dorchester-in Gustine street, Cottage park, Rowena street, and Brunswick street; at West Roxbury-in Bellevue avenue, Pleasant street, Cornell street, Selwyn street, Belgrade avenue, and Lorraine street, and at Brighton - in Madison avenue.

SEwers have been ordered built in the following public streets :

Adlams street, Dorchester, from Tenean creek to Neponset avenue.

Adams street, Dorchester, in taking in private land between and Milton Branch Railroad.

Adams street, Dorchester, from Richmond street two hundred and five feet northerly.

Arlington avenue, Charlestown, between Alford street and Beacham street.

Boylston street, between Carver street and Tremont street.

Blake street, South Boston, between Dorchester avenue and Boston street.

Burt street, Dorchester, from strip of land between Bailey and Burt streets, taken for sewerage purposes, to a culvert one hundred feet southwesterly.

Beacham street, Charlestown, between Arlington street and West street.
$B$ street, South Boston, between Fourth street and Silver street.

Brookside avenue, connection for Stony brook, between conduit in said avenue and Green street.

Chelsea street, East Boston, from Curtis street seven hundred and fifty feet westerly.

Corey street, West Roxbury, from Park street to Railroad street.

Congress street, between Estes place and Gilbert place.

Cambridge street, Charlestown, between Sever street and Carter street.

Commercial street, tide-gates at corner of Clark street.

Dorchester avenue, South Boston, from junction of B street and West Seventh street to South Bay.

Dale street, West Roxbury, at Burley street.
Eastern avenue.
Fairbanks street, Brighton, from Faneuil street to Washington street.

Gardner street, West Roxbury, between Baker street and the Metropolitan sewer.

Gay Head street, West Roxbury, from Minden street to Round Hill street.

Gainsborough street, from passageway to St. Botolph street.

Humboldt avenue, Roxbury, between Waumbeck street and Hollander street.

Haverhill street, between Traverse street and Causeway street.

Kneeland street, from South street to Utica street.
Lagrange street, West Roxbury, from Pleasant street to Centre street.

Maxwell street, Dorchester, between Capen street and Nelson street.

Millet street, Dorchester, from Talbot avenue to Wheatland avenue.

Massachusetts avenue, between Lansdowne street and the Dorchester brook sewer.

Newland street, between West Dedham street and West Canton street.

Neponset avenue, Dorchester, between Adams street and Minot street.

Norfolk street, Dorchester, from Fremont street two hundred and fifty feet southerly.

Oak street, between Hudson street and Albany street.
Park street, West Roxbury, from Corey street to Centre street.

Poplar street, between Farrell avenue and Chambers street.

Round Hill street, West Roxbury, from Gay Head street to Walden street.

Ritchie street, Roxbury, from Columbus avenue two hundred and seventy feet east, and in land of the City of Boston one hundred feet northerly from Ritchie street.

Selden street, Dorchester, between Capen street and Milton avenue.

St. Botolph street, ninety feet north from Gainsborough street.

Stanhope street, from existing sewer to Trinity place.
South street, West Roxbury, from Jamaica street to St. Joseph street.

St. Joseph street, West Roxbury, from South street to Woodman street.

Silver street, South Boston, from B street to D street.

Stillman street, from Endicott street to North Margin street.

Utica street, from Kneeland street to Beach street.
Washington street, Brighton, between Dighton place and Winship street.
$W^{\top}$ ashington street, Dorchester, between River street and Churchill place.

Beacham street, Charlestown, between West street and Main street.

Beverly street, between Charlestown street and Causeway street.

Gardner street, West Roxbury, from Baker street to Spring street.

Lansdowne street, from Ipswich street two hundred feet westerly.

Maxwell street, Dorchester, from Capen street five hundred and sixty feet easterly.

Parker Hill avenue, Roxbury, from Calumet street five hundred and fifty feet westerly.

Washington street, West Roxbury, from Forest Hills street two hundred and fifty•feet southerly.

The following is a list of the new streets, with their lengths, laid out as public streets during the year:

Boston Proper.
Street.
Feet.,
Trinity place, from Stuart street to Stanhope street, 259.68

Congress square, from the part of said square connecting Congress street with Devonshire street, and thence east to Congress street 186.50

Hale, from Green street . . . . . 294.00
Bay State road, from Granby street to Chilmark street
Ashby, from Commonwealth avenue to Bay State road
297.57

Chilmark, from Commonwealth avenue to Bay State road 255.44

2,708.54
East Boston.
Boardman, from Saratoga street to the Boston and Maine Railroad

2,540.00

## Roxbury.

Hutchings, from Humboldt avenue to Elm Hill avenue

1,104.76
Dorchester.
Denny, extension of southwardly .
278.81

West Roxblry.
Street. Ffet.
Robinmood avenue, from Centre street to Hazel street

1,783.12

Recapitclation.

District.
Boston proper
East Boston
Roxbury
Dorchester
West Roxbury

Feet.
$2,708.54$
2,540.00
$1,104.76$
278.81
$1,783.12$
$8,415.23=1.593$ miles.

## Discontincance of Streets. Boston Proper.

Street. FEET.
Lehigh, between South street and Broadway bridge
647.00

The following are the widenings, relocations, discontinuances, etc., made upon public streets during the year:

| Street. | District. | Action. | Feet taken. | Feet discontin ued. |
| :---: | :---: | :---: | :---: | :---: |
| Portland | Boston proper.... | widening | 11 |  |
| Portland | Boston proper.... | discontinuance. |  | 11 |
| Portland | Boston proper.... | widening | 2 C |  |
| Genesee | Boston proper.... | widening. | 40 |  |
| Berkeley | Boston proper.... | relocation |  |  |
| Washington | Dorchester. | widening | 174 |  |
| Walk Hill.. | West Roxbury ... | relocation | 9,481 |  |
| Beacon | Brighton | relocation | 46,346 |  |
| Totals.. |  |  | 56,078 | 11 |

By an order of November 6, 1900, and acting under the provisions of chapter 462 of the acts of the Legislature of 1893, and acts in amendment or addition thereto, the Board of Street Commissioners established a building line upon Beacon street, parallel to, and distant nine and $\frac{75}{100}$ feet northerly from, the northerly
exterior side of said street, between. Bowdoin street and Somerset street.

## Changes in Street Names.

An order passed by the Board February 9, 1900, changing the name of Peter Parley street, leading from Washington street to Walnut avenue, at West Roxbury, to Peter Parley road, was confirmed by the Board of Aldermen February 19, 1900, and took effect under the provisions of law governing the matter, March 1, 1900.

An order passed by the Board February 9, 1900, changing the name of Dove street, at South Boston, leading from Dorchester street to E street, to Draper street, was confirmed by the Board of Aldermen February 19, 1900, and took effect under provisions of law governing the matter, March 1, 1900.

An order passed by the Board February 16, 1900, changing the name of Bothnia street, leading from Boylston street to Belvidere street, to St. Cecilia street, was confirmed by the Board of Aldermen February 26, 1900, and took effect under provisions of law governing the matter, March 1, 1900.

An order passed by the Board February 16, 1900, changing the name of Shamrock street, leading from Dorchester avemue to Freeport street, at Dorchester, to Kimball street, was confirmed by the Board of Aldermen February 26, 1900, and took effect under the provisions of law governing the matter, March 1, 1900.

An order passed by the Board February 17, 1900, naming the public way leading from Brandon street to South street, at West Roxbury, which is an extension southeastwardly to said Brandon street, and northwestwardly to said South street, of the pullic street known as Robert street, Robert street, was confirmed by the Board of Aldermen February 26, 1900, and took effect under the provisions of law governing the matter, March 1, 1900.

## Authority Given to Open New Streets.

Acting under the provisions of chapter 323 of the acts of the Legislature of 1891, and acts in amendment thereof, the Board of Street Commissioners have,
during the past year, given permission to land-owners to open the following private ways:

South Boston.
Ballister street, from Congress street.

## Roxbury.

Posen street, from Arklow street to Ulmer street extended.

Ulmer street, from Arklow street to Centre street.
Chickamauga park, from Highland street.
Darling street, from Parker Hill avenue to Hillside street.

Wait street, from Parker Hill avenue to Hillside street.

Iroquis street, from Wait street to Darling street.

## Dorchester.

Greeley street, from Geneva avenue to Freeman street.

Chalmers street, from Geneva avenue to Freeman street.

> West Roxbury.

South Fairview street, from Dudley avenue.
Adelaide terrace, from Adelaide street.
Cleaves street, from Columbus avenue.

## Brighton.

Glenburn road, from Faneuil street to Hobart street. Bothwell road, from Faneuil street to Glenburn road.

Newcastle road, from Faneuil street to Brooks street.
Donnybrook road, from Faneuil street to Glenburn road.

> Assessments for Laying-out and Construction of Streets.

Assessments have been levied upon the estates abutting upon the following streets, under the provisions of
chapter 323 of the Acts of the Legislature of 1891, and acts in amendment or addition thereto:

| Stheet. | Date of Order. | Cost. | Amount Assessed. | Date of Assessment. |
| :---: | :---: | :---: | :---: | :---: |
| Rosseter street | Aug. 6, 1897 | \$7,999 19 | \$2,541 60 | Feb. 13, 1900 |
| Telford street. | March 1, 1898 | 1,79272 | 1,792 72 | F'eb. 14, 1900 |
| Chamberlain street. | July 10, 1896 | 4,134 22 | 3,364 85 | Feb. 14, 1900 |
| Fairmount street. | April 14, 1897 | 28,765 05 | 21,573 78 | Feb. 14, 1900 |
| Leroy street | Aug. 19, 1897 | 6,99822 | 5,594 36 | Feh. 19, 1900 |
| Waterlow street | Aug. 31, 1897 | 3,619 70 | 2,488 01 | March 2, 1900 |
| Merlin street. | April 29, 1898 | 2,390 39 | 2,390 39 | March 16, 1900 |
| Bernard street | Aug. 31, 1897 | 10,298 43 | 6,363 17 | March 21, 1900 |
| A thelwold street | May 6, 1896 | 4,800 00 | 4,800 00 | March 31, 1900 |
| Athelwold street | Aug. 7, 1896 | 11,981 06 | 11,981 06 | March 31, 1900 |
| Trinity place | Dec. 5, 1898 | 4,056 16 | 4,056 16 | May 9, 1900 |
| Commonwealth avenu | Jan. 5, 1895 | 88,838 06 | 88,838 06 | June ${ }^{\text {- 7, }} 1900$ |
| Commonwealth avenu | June 29, 1895 | 133,736 71 | 95,987 66 | June 7, 1900 |
| Lonsdale street | Nov. 19, 1897 | 13,834 22 | 12,047 11 | June 13, 1900 |
| Andrews street | June 9, 1899 | 1,468 66 | 97906 | July 24, 1900 |
| Carlos street | Nov. 11, 1897 | 2,308 65 | 1,846 96 | July 2t, 1900 |
| Mellen street | May 27, 1898 | 5,606 70 | 4,765 68 | July 31, 1900 |
| Woodlawn street | Nov. 30, 1897 | 6,716 99 | 6,716 99 | Nov. 13, 1900 |
| Idaho street | Oct. 28, 1897 | 5,849 54 | 5,849 54 | Nov. 13, 1900 |
| Hewins street | March 2, 1898 | 4,342 37 | 4,342 37 | Nov. 13, 1900 |
| Maryland stree | Dec. 16, 1897 | 3,335 03 | 3,335 03 | Nov. 13, 1900 |
| Leedsville stree | Nov. 17,1897 | 4,454 03 | 3,785 93 | Nov. 15, 1900 |
| Atherstone street | Aug. 23, 1888 | 2,052 67 | 2,052 67 | Jan. 23, 1901 |
| Hublard street | April 22, 1898 | 3,413 44 | 2,730 75 | Jan. 23, 1901 |
| Bragdon street | July 29, 1898 | 3,578 17 | 3,578 17 | Jan. 23, 1901 |
| Chester street | Oct. 3, 1898 | 25,976 88 | 20,781 50 | Jan. 28, 1901 |
| Harold strcet | Dec. 18, 1897 | 6,663 01 | 5,792 57 | Jan. 28, 1901 |
|  |  | \$399,010 27 | \$330,376 15 |  |

## Assessments for Laying-out and Construction of Public Alleys

Assessments have been levied upon the estates abutting upon the following public alleys, under the provisions of chapter 323 of the Acts of the Legislature of

1891, and chapter 298 of the Acts of the Legislature of 1898, and acts in amendment of or addition to said acts :

| Alley. | Date of Order. | Cost. | Amount Assessed. | Date of Assessment. |
| :---: | :---: | :---: | :---: | :---: |
| Public Alley $2001 . . . .$. | Dec. 21, 1898 | \$583 13 | \$29154 | July 31, 1900 |
| I'ublic Alley 101........ | Oct. 31, 1898 | 2,399 88 | 2,399 88 | Oct. 8,1900 |
| Public Alley 403....... | Oct. 12, 1898 | 2,659 76 | 2,659 76 | Nor. 8,1900 |
| Public Alley 404....... | Oct. 12, 1898 | 3,846 51 | 3,846 51 | Nov. 8, 1900 |
| Public Alley 418........ | Oct. 12, 1898 | 25312 | 25312 | Nor. 8, 1900 |
| Public Alley 419........ | Oct. 12, 1898 | 1,812 40 | 1,812 40 | Nov. 8, 1900 |
| Public Alley 420. | Oct. 12, 1898 | 11929 | 11929 | Nov. 8,1900 |
| Public Alley 431.. | Nov. 10, 1898 | 1,259 46 | 1,259 46 | Sov. 8, 1900 |
| Public Alley 437. | Nov. 10, 1898 | 2,536 48 | 2,536 48 | Noт. 8, 1900 |
| Public Alley 701. | Feb. 17, 1899 | 4,520 97 | 4,426 71 | Nov. 15, 1900 |
|  |  | \$19,991 00 | \$19,605 15 |  |

Spectal Assessments.
Under authority of special acts of the Legislature assessments have been levied by the Street Commissioners during the year for benefits to real estate arising from extending, widening, laying-out and constructing Huntington avenue, from Copley square through or over Tremont street to the boundary line of the town of Brookline, from widening and constructing Clinton street, from Fulton street to Commercial street, and from the location and construction of the Union Station, Summer street and Cove street, as under:

| Huntington arenue | \$338,878 52 |
| :---: | :---: |
| Clinton street . | 90,418 29 |
| Union Station, Summer street and Cove street | 958,215 98 |
|  | \$1,387,512 79 |

Assessments upon property benefited by sewerage works that have been ordered by the Board of Street Commissioners have been levied during the year to the amount of $\$ 282,032.87$.

Payments made for land damages and other claims,
on account of laying-out, widening, relocating and extending streets, including claims previous to January 31, 1900:

| Street Laying-Out Department <br> Commercial street | Appropriation. $\$ 99000$ |
| :---: | :---: |
| Washington and Bartlett streets, Roxbury | 72805 |
| Vermont street, West Roxbury | 40000 |
|  | \$2,118 05 |

Payments Made from other Appropriations.

| Beacham street |
| :--- |
| Adams street, Park to Parkman : $\left.\quad . \quad: \quad \begin{array}{r}\$ 7,400 \\ \text { Weld street } \\ 2,600 \\ \hline\end{array} \quad \begin{array}{r}00 \\ 206\end{array}\right)$ |

Laying-out and Construction of Highways:
Columbia road . . . $\$ 315,45354$
B street . . . . . 34,022 38

Belvidere street . . . 18,52545
South street . . . . 15,035 95
Swett street . . . . 9,23800
Spring street . . . . 7,658 90
Leeds street . . . . 4,00000

Wensley street . . . 3,283 64
West Selden street . . . 3,153 00
North Harvard street . . 2,95200
Angell street . . . . 2,801 25
Barrington street . . . 1,52400
Hubbard street . . . 1,27500
Millet street . . . . 1,176 77
Burt street . . . . 1,040 74
Dixfield street . . . 90000
Francis street . . . . 64100
Amory street . . . . 53000
Genesee street . . . 25000
Callender street . . . 21477
Spencer street . . . 16808
Mellen street . . . . 12000
Gaylord street . . . 5700
$\$ 424,02147$
Laying-out and Construction of
Highways, chapter 443 of 1899,
-Roxbury and West Roxbury :
Walk Hill street . \$18,481 00
Carlow street . 9,250 00
Carried fomeard . \$27,731 00
$\$ 424,021 \quad 47$

| , | 827,731 |
| :---: | :---: |
| Brookline avenue | 9,000 00 |
| Corinth street | 2,900 00 |
| Echo street | 1,700 00 |
| Perkins street | 985 |
| Custer street | 525 |
| Cardington street | 2500 |

$\$ 424,02147$

43,091 74
Laying-out and Construction of Highways, chapter 443 of 1899 , -Dorchester :

Lamiat avenue . \$53,911 06
Hancock street - 19,670 00
Bird street . . 15,00000
Barry street . . 7,30000
Shepton street . 7,236 33
Leonard street . 5,85000
Gibson street . 3,000 00
Alexander street . 2,50000
Boston street . 2,091 00
Edwin street . 1,192 80
117,75119
Laying-out and Construction of Highways, chapter 443 of 1899 , - East Boston :

Bennington street 292,566755

Laying-out and Construction of Highways, chapter 443 of 1899 , -Brighton :

Cambridge street . \$10,725 00
Tremont street . 3,193 86
13,91886
$\$ 891,35081$

Charlestown street (chapter 346 of 1897) . . 191,775 53
Blue Hill and other avenues:


The following are settlements made by the Board of Street Commissioners during the financial year, of damages occasioned by takings for surface drainage and sewers :

Tenean creek:
Ashmont to Lonsdale street:
Marietta P. Brooks . . . $\$ 38805$
Gibson to Centre street:
Margaret M. Lynn . . . . 22500
$\$ 61305$
Stony brook:
Canterbury branch, Franklin field to Brook street:
Patrick Meehan . . $\$ 3,00000$
Moses Williams . . 2,89000
F. H. Robinson . . 6000
E. W. Noyes, gdn., et al. . . . 32413
$\$ 6,27413$
Neponset avenue branch :
Letitia B. Evans . . $\$ 28300$
Ann E. Merrill et al. . 22500
Ellen F. Dolan . . 7500
Patrick Dolan . . 3500
Archibald M. Robertson, 9000
Margaretta Heid . . 7500
78300
Oakland Garden fork of Canterbury
brancl :
Mary C. Bicknell . . . 8982
Goldsmith brook :
Willian Killion . . . . $\$ 40290$
Henry McDonald . . . . 45000
Maria J. Hassey . . . . 12000
Ellen Cady et als. . . . . 12000
James Leonard . . . . 12500
Hannah Craffey et als. . . . 12500
Susie French . . . . . 12500
Bridget Galvin . . . . 40000
John Murray . . . . . 17500
Joseph Ladner . . . . 16000
Chester H. Baker . . . . 15000
Bedford E. Fulmore . . . 10000
Ralph J. Renton . . . . 10000
J. and M. A. Galvin . . . 15000

Patrick W. Condry
16000
Carried forward
$\$ 2,86290 \quad \$ 7,76000$
Brought fombard ..... 82,862 90
\$7,760 00
Patrick O'Loughlin et als. ..... 27500
Shepard brook :
T. E. Kenney, excr. ..... $\$ 52620$
J. M. Fitzgerald, admr. . ..... $565 \quad 20$
Freeport street brook:
James V. Devine ..... $\$ 30000$
Frank Anthony ..... 45000
Mattapan brook:
W. H. Wilkinson ..... $\$ 35000$
Charles H. Carew ..... 22500
Franklin Park brook:Joseph E. Nute$2,400 \quad 00$
Salt Creek brook :
Boston \& Albany Railroad Company ..... 51276
Faneuil Valley brook:Lasell E. Partridge80000
Commonwealth and Harvard avenues, surface drainage:
Ellen E. Packard ..... $\$ 1,58210$
Edward A. Packard ..... 1,211 60
Adams street to Milton Branch Railroad, surface drain :
Susan J. Pierce ..... 65000
Prentiss place outlet:
James Dunn ..... $\$ 400 \quad 00$
Lawrence W: Grittin ..... 27500
West Selden street outlets : J. B. L. Bartlett ..... $\$ 20000$
Samuel Snow ..... 76900
Mascot street outlet:
E. W. Noyes, guardian, et al. ..... 15300
Parley Vale outlet:
Pauline W. Lewis ..... $\$ 21250$
Clarence B. Knott ..... 21250
Anson street sewer:
William and Aunie Swanton, excrs.42500
Lamont street sewer :
Margaret J. Donovan ..... $750 \quad 00$
Faxon street sewer :Charles S. Clerke$220 \quad 00$Carried forward .$\$ 23,86276$
Brought forward ..... \$23,862 76
Middleton avenue sewer:
Martin O'Brien ..... 20000
Ferndale street sewer:
Heirs of Caroline Jackson . . . . 1,111 79
Faneuil street to Harriet street, sewer :Alvan M. Smith and others52770
Madison avenue, sewer:
John Behan, admr. . ..... 10000
Webster street, sewer:Mary R. Plympton .12500
Fairview street, sewer :Roman Catholic Arclubishop of Boston$1,000 \quad 00$
\$26,927 ..... 25
Expenditures.
Salaries and other Expenses.
Salaries ..... $\$ 25,46409$
Advertising ..... 78094
Printing ..... 30670
Stationery ..... 45954
Carriage-hire ..... 26650
Telephone and messenger service ..... 29013
Books and maps ..... 4800
Furniture, fittings, electrical work and material, and repairs, for oflices ..... $38 \quad 54$
lncidentals ..... 28247
Estimates ..... 11,600 00
Public Lands.

Care tide-gates, King's mill pond land, two years

$$
\$ 200 \quad 00
$$

Care of Thomas-street school estate, 2000
Snow shovelling, Thornton-street school estate

1000
Taxes, Town of
Hull
.
Taxes, City of Everett

$$
1670
$$

$$
63 \quad 41
$$

Repairs Ingraham school building, Sheafe street ..... $26 \quad 50$
Repairs, Thomas-street school building ..... 2250

The yearly rentals of lands and buildings in charge of the Board of Street Commissioners amount to $\$ 812$.

The expenditures of the Surveying Division of the Street Laying-Out Department have been as follows:

Salaries . . . . . . . . \$55,236 19
Instruments and repairs . . . . . 13817
Surveyors' supplies . . . . . . 1,94963
Stationery and printing stock . . . . 32969
Printing . . . . . . . . 10090
Books and maps . . . . . . . 30672
Travelling expenses . . . . . . 13800
Car tickets . . . . . . . . 1, 11574
Telephone . . . . . . . . 17291
Office fittings . . . . . . . 71414
Incidentals . . . . . . . 16852
Advertising . . . . . . . 37973
$\$ 60,75031$
Public Lands.
The following is a list of the real estate belonging to the City in charge of the Board of Street Commissioners:

City Proper.
Description.
Square Feet.
Albany street, land opposite East Brookline street . . . . . . . . 1,074
Rented for $\$ 100$ a year.
Harrison avenue, land between Brookline and Newton streets
4,740
South Boston.
Gold street, land on south-west side, between A street and the New England Railroad
Charlestown.
Rutherford avenue, land on north-east side . . 29,445
Small part of rented at \$12 a year.
Remainder occupied by City Departments.
Elm street, land and building on south-east side, corner of Lincoln place 3,397
Roxbury.
Ritchie street, land opposite the Marcella-street Home, 22,716
Thornton street, Thornton-street Primary School estate

## Dorchester.

DEsCRIPTION.
Square Feet.
Gibson street, land on north side
42,000 square feet rented to Sewer. Division of
Street Department at $\$ 400$ a year.
32,600 square feet rented to Boston Water
Board at $\$ 300$ a year.

Baker's court, old lock-up estate
1,580
King's mill pond, so called, being that part of the hed of Tenean creek, or Smelt brook, between Mill, Exchange, Park and Adams streets and Neponset arenue, about 470,386
Southern avenue, land on south side, between Bernard street and Elmhurst street

4,335
West Roxbury.
Moreland street, land . . . . . 30,421
Thomas street, Thomas-street Prmary school estate, 10,954
Brighton.
Western avenue, marsh, north-east of Western avenue and north-west of North Harvard street

10,890
Parkman street, land on south-west side of
5,000
Islands, etc.
Great Brewster Island, Boston Harbor, about 16 acres.
Apple Island, Boston Harbor, about $9 \frac{1}{2}$ acres.
Summer and Pleasant streets, in town of Everett, old gravel pits

20,700

## Conveyances.

February 15, 1900, there was conveyed to G. Fred Plerce and Ralph A. Quimby about 3,400 square feet of land on Codman street, Dorchester, adjoining and northeast of the Shawmut Branch Railroad, together with rights of the City of Boston in a passageway from Codman street adjoining said land on the north-east, for $\$ 200$ and the grantees' rights in about 2,040 square feet of land in the part of said passageway south-west of said railroad and adjoining other land of the City.

Acts of the Legislature provide that the Board of Street Commissioners, at the request of the School Committee, shall take, by purchase or otherwise, such lands for school purposes, as the School Committee,
with the approval of the Mayor, shall designate, etc., and that the damages sustained by any person under such taking shall be determined by agreement between said Board and persons, etc. Under these acts the Board have taken during the year the following lands:

| Location. | School. | From whom Taken or I'urchased. | Date of Taking or Purchase. |
| :---: | :---: | :---: | :---: |
| Norfolk street, Dorchester.. Glenway street, Dorchester. | New school...... <br> Glenway School. | Catherine Elms. City of Boston .. | March 12, 1900. October $30,1900$. |

During the financial year the following payments have been made for lands taken by the Board of Street Commissioners for school purposes:

Paul Revere School:
T. J. McCormick . . . . . . $\$ 4,57500$

New school, Pearl, Bartlett and School streets, Charlestown:
S. J. and C. W. Conant and H. I. Hadley . 4,400 00
$\$ 8,97500$

## Surveying Division.

The work of the Surveying Division during the past year has been carried on in a manner similar to that of past years, and is given in detail as follows:

$$
\text { Plan } 5 .
$$

The eight sections filed in this territory is the result of the work begun last year, a synopsis of the projections being given in a previous report.

For boundaries of the work in these especial sections it may be briefly stated that Codman square (junction of Talbot avenue, Washington street and Centre street) lies at its northernmost border, and with Washington street bisecting it, the territory extends as far south as Fairmount avenue, extending from this main trunk thoroughfare directly west 1,000 feet and eastwardly the same distance up the western slope of Ashmont Hill. There is scarcely any attempt made in these sections as filed to introduce new streets, the territory
being already well settled and developed. Exceptions are a proposed extension of Ashmont street westerly from the westerly line of Washington street, and an extension of Wentworth street to Fuller street.

A $\pm 0$-foot street leaving Euclid street midway between Washington street and Withington street runs in a north-westerly direction, and enters Southerm avenue near its junction with Talbot avenue.

A 40 -foot street (No. 1609) is introduced to leave Norfolk street, nearly opposite Learnard street, to run along the north-easterly line of the Second Parish Cemetery and at the north-easterly corner to turn and enter the street just described above (No. 1608) near its junction with Southern avenue.

Dunbar avenue is also shown extended and a 40 -foot street (College avenue) lies midway between and practically parallel with these two.

An extension of Moultrie avenue to Washington street is shown just north of the Second Church. These constitute almost entirely the suggestions for development, the work consisting largely in defining and fixing the old street lines and in perfecting the grades for them.

A large proportion of the territory covered by this plan has now been filed, and the balance will be at an early date, efforts to that end being now rapidly pushed upon the whole of it, except that part lying adjacent to the railroad and involving the grade crossing question, where it will be necessary to suspend operations until that question is settled.

Three hearings were given during the year under authority of Chapter 210 of the Acts of the Legislature of 1898, on the following dates: May 4,1900 , July 6 , 1900, and December 28, 1900.

The hearing given on May $t$ was held on territory shown on X 23, and was in relation to a reduction in the proposed width of School street from 50 feet to 40 feet, by the elimination of the proposed line of widening from the southerly side of the street, the straight portion of the old line from Washington street being produced to Athelwold street, and a line of widening provided for the northerly side of the street as far as Athelwold street, which should be 40 feet from and parallel with this latter line.

The plan showing this change has not been filed.
The hearing given on July 6 was held on territory
shown on $\mathrm{X} 73, \mathrm{X} 74$ and X 87, and was in relation to a relocation of and a reduction in the width of Wildwood street from $\check{50}$ feet to 40 feet; the discontinuance of Sutton street and the substitution therefor of Verrill street; the elimination of the portion of Street No. 938 from Wildwood street to Verrill street and the introduction of Street No. $198 \pm$ from Morton street to Woolson street, between Wildwood street and Verrill street, under the name of Sutton street.

The changes as enumerated above were shown on new plans, and refiled November 27, 1900.

The hearing given on December 28 was held? on territory shown on X 19 and X 22 and was in relation to the elimination of Street No. 264 from Dakota street to Lindsey street.

The plans showing this change have not yet been filed.
The following is a statement of the work done during the year:

Plan from actual survey of two sections; X 42 and X 59 ; size, 9 feet by 5 feet; scale, $\frac{1}{5} \frac{1}{5 \pi}$ : (Completed.) Plan from actual survey of two sections; $\mathbf{X} 43$ and X 58 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections; X 62 and X 79 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections; X 63 and X 78; size, 9 feet by 5 feet; scale, $\frac{1}{2} \frac{1}{50}$. (Completed.)

Plan from actual survey of two sections, $\bar{X} 7 \pm$ and X 87; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of one section, X 73 ; size, 5 feet by 5 feet; scale, $\frac{1}{2} \frac{1}{50}$. (Completed.)

Plan from actual survey of two sections, X 41 and X 60; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.) Plan from actual survey of two sections, X 66 and X 75 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.) Plan from actual survey of two sections, X 65 and X 76 ; size, 9 feet by 5 feet; scale, $2 \frac{1}{50}$. (In progress.) Plan from actual survey of two sections, X 64 and X 77 ; size, 9 feet by 5 feet; scale, $\frac{1}{2} \frac{1}{50}$. (In progress.) Four sectional plans of Sections X 58 , X 62, X 63 and $X 73$; size of each 4 feet by 4 feet; scale, $2 \frac{1}{50}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 4, 1901, with the City Engineer.

Four sectional plans of Sections X 42, X 43, X 59 and X 79 ; size of each, 4 feet by 4 feet; scale, $2^{\frac{1}{5}} \mathrm{p}^{\circ}$
(Complete with grades.) These plans were approved by the Mayor and filed January 31, 1901, with the City Engineer.

In this territory of about 183.65 acres covered by the above plans there are comprised:
Public streets:
Number of streets $\quad 24,400 \mathrm{ft}$.
$\begin{aligned} & \text { Length }\end{aligned} \quad \begin{array}{r}26 \\ \text { Area miles }\end{array}$
$\begin{array}{ll}262 & \text { acres }\end{array}$
New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:
Number of streets $\quad 19,660 \mathrm{ft}$.
Length
Area

Totals:
$\begin{aligned} & \text { Number of streets } \\ & \text { Length . } \\ & \pm 2,160 \mathrm{ft} .\end{aligned}=\begin{array}{r}51 \\ 7.98\end{array}$
Area . . . 1,901,350 sq. ft. $=43.65$ acres
Percentage of above area absorbed by all streets, old and new, $23.76 \%$.

Plans and profiles completed showing grades.
Whitfield street, from Norfolk street to Talbot avenue.
Southern avenue, from Washington street to Talbot avenue.
Norfolk terrace, from Washington street to Norfolk street.
Grace street, from Roslin street to Walton street.
Waldorf street, from Mellen street to Ashmont street.
Hillside terrace, from Bailey street to Fuller street.
Gordon street, from Torrey street to Dunbar avenue.
$W^{W}$ ashington street, from Norfolk street to Brent street.
Street No. 1601, from Fairmount street to Armandine street.
Street No. 1608, from Euclid street to Norfolk street. Street No. 1609, from Whitfield street to Norfolk street.

Grades revised or fixed on whole or portions of the following streets:
Rosedale street, from Washington street to Whitfield street.

Northem avenue, from Washington street to Talbot avenue.
Norfolk street, from Chipman street to Washington street.
Learnard street, from Dunbar avenue to Norfolk street.
Chipman street, from Dunbar avenue to Norfolk street.
Wilmington street, from Torrey street to Norfolk street.
Armandine street, from Milton avenue to Washington street.
Rockwell street, from Milton avenue to Washington street.
Stockton street, from Milton avenue to Washington street.
Mora street, from Milton avenue to Washington street.
Fuller street, from Milton avenue to Washington street.
Wentworth street, from Armandine street to Dumbar avenue.
Ashmont street, from Wentworth street to Washington street.
Dunbar avenue, from Wentworth street to Washington street.
Grade plan of Sections X 42, X 43, X 58, X 59, X $62, \mathrm{X} 63, \mathrm{X} 78$ and X 79; scale, $\frac{1}{1000^{\circ}}$. (Completed.)

In connection with the sectional and other plans enumerated above the following work has been done :
$\begin{array}{lll}\text { Number of titles looked up } & & 756 \\ \text { Number of conveyances copied } \\ \text { Number of plans copied from Suffolk and Norfolk } & 254 \\ \quad \text { Registries and elsewhere . . . . . } & 55\end{array}$

## Plan 7.

This plan comprises the territory lying adjacent to South Bay, which has been undergoing something of a transformation through the railroad changes and improvements which have taken place the past two years. These operations have to a large extent interfered with the laying out of new work for this district, and also with that in progress.

One section, however, was finished and filed during the year. The principal feature of the improvements shown, in fact, the only one (as the territory is comparatively well settled), was the proposed widening of Preble street to seventy feet. Starting at Dorchester avenue the widening is all on the southerly side for the full extent; it gradually diminishes, however, until it is entirely worked out upon that side at Wendell street, and from there on the old line is practically the same as the new one. The northerly line of the new street is, of course, parallel with this line, and seventy feet from it; and as a matter of fact brings most of the widening upon the northerly line of the street.

This improvement, when carried out, will unquestionably prove advantageous to all adjacent property, making a fine, broad thoroughfare, connecting with Columbia road, and forming a way from Roxbury to South Boston without the objectionable features attendant on the present method of communication.

The following is a statement of the work done during the year :

Plan from actual survey of two sections, U 8 and U 13 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

One sectional plan of Section U 8 ; size, 4 feet by 4 feet; scale, $\frac{1}{20}$. (Complete with grades.) This plan was approved by the Mayor, and filed January 4, 1901, with the City Engineer.

In this territory of about 22.96 acres covered by the above plans there are comprised:

## Public streets:

Number of streets $\cdot \quad 4,820 \mathrm{ft} . \mathrm{ft}=0.91$ miles
Length : $\quad . \quad 176,570 \mathrm{sq} . \mathrm{ft}=4.05$ acres
Area

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

| Number of streets |  | 8 |
| :---: | :---: | :---: |
| Length | 2,930 ft. | 0.55 mile |
| Area | $112,350 \mathrm{sq} . \mathrm{ft}$. | 2.58 acre |

Totals:
Number of streets . . . . . 16
Length $\quad . \quad . \quad 6,850 \mathrm{ft} . \quad=1.30 \mathrm{miles}$
Area $\quad . \quad 288,920 \mathrm{sq} . \mathrm{ft} . \quad 6.63$ acres

Percentage of above area absorbed by all streets, old and new, $28.87 \%$.

Plans and profiles completed showing grades of the following streets:
Gifford place, from Vinton street to Ward street.
Ward court, from Vinton street to Ward street.
Grades revised or fixed on the whole or portions of the following streets:
Carpenter street, from Preble street to Hyde street.
Centre place, from Preble street to Hyde street.
Dorchester street, from Dorchester avenue to Vinton street.
Hyde street, from Dorchester avenue to Old Colony avenue.
Jenkins street, from Dorchester street to Old Colony avenue.
Leeds street, from Dorchester avenue to Woodward street.
Liberty street, from Preble street to Hyde street.
Old Colony avenue, from Boston place to Street No. $1 \% 2$.
Preble street, from Dorchester avenue to old Colony avenue.
Rogers street, from Dorchester street to Hyde street.
Vinton street, from Dorchester street to Preble street.
$W^{\top}$ ard street, from Dorchester street to Preble street.
Washington avenue, from Hyde street to Street No. 1772.

Wendell place, from Hyde street to Preble street.
Wendell street, from Hyde street to Preble street.
Wesley street, from Hyde street to Preble street.
Woodward street, from Dorchester avenue to Leeds street.

Grade plan of Section U 8; scale, $\frac{1}{1000}$. Completed, In connection with the sectional and other plans enumerated above, the following work has been done: Number of titles looked up
Number of conveyances copied

Number of plans copied from Suffolk and Norfolk Registries and elsewhere

## Plan 8.

There was some interruption in the work on this territory during the year, the result being the filing of but four sections, showing territory in the vicinity of Oak square and Bigelow hill. Other work was accomplished but not in time to show results in filed plans. The territory filed is bounded approximately by Washington street, Nonantum street, the boundary line between the cities of Boston and Newton, Washington street, Matchett street, Webster street, Dunboy street and Faneuil street.

The work as finished on these filed plans does not differ materially from that exhibited on them at the hearing given some time ago.

The suggestions which were then shown, and now adopted, were the introduction of 40 -foot streets to divide the larger blocks, and provisions made for widening the thoroughfares. One street, 40 feet wide, extends from the Newton boundary line midway between Washington street and Tremont street, parallel with these streets until near Oak square, where it turns and enters Washington street at a point about 200 feet west of Tremont street.

The 60 -foot street designed as a continuation from Newton of Hunnewell avenue, a part of which had been previously filed, is now carried to completion on three sections, in a southerly direction across Matchett street and Street No. 1719 to Shedd street, which is widened on either side to Champney street to meet the required width ; the latter street being also widened to the same width in like manner, from Shedd street to Oak square.

Another 40 -foot street was filed, from the easterly side of Bigelow street about 150 feet south of Stratton street, following the contour of the hill, making as easy a gradient as possible, to connect with Webster street just west of Jackson square.

Street No. 1719 , which runs from Washington street in the same direction as Matchett street, and is about 250 feet south-easterly, is continued to Webster street.

From the northerly end of Matchett street, a 40 -foot street is designed to run along the rear of the deep lots
fronting on the northerly side of Webster street, as far as Jackson square, where it enters Dunboy street.

This street will enable the owners to properly utilize these very deep lots, as well as those fronting on the southerly side of Hardwick street, an opportunity which they did not previously possess.

Washington street, east of Oak square, is shown, widened to 70 feet.

Faneuil street it is proposed to make 60 feet wide.
Nonantum street is made a uniform width of 50 feet, while Crescent avenue is provided with a widening to make it 50 feet.

Two hearings were given during the year under Authority of chapter 210 of the Acts of the Legislature of 1898, on the following dates, March 30, 1900, and June 8, 1900.

The hearing given on March 30 was held on territory shown on Sections 060,061 and 062 , and was in relation to the introduction of Evans road, Road No. 4 and Road No. 5, from Corey road to the Brookline town line.

The plans showing those changes have not yet been filed.

The hearing given on June 8 was held on territory shown on Sections N 29 and N 32, and was in relation to the introduction of Idlewild street from Commonwealth avenue to Holmes avenue, between Gorham street and Harvard avenue; also the rounding of the south-westerly corners of Harvard avenue and Commonwealth avenue.

The change shown on Section N 32 in relation to Idlewild street was made in accordance with the petition and a new plan filed November 27, 1900.

The following is a statement of the work done during the year :

Plan from actual survey of two sections, O 29 and and O 30 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections, O 11 and 0 12; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections, O 23 and O 24 ; size, 9 feet by 5 feet; scale, ${ }^{2} \frac{1}{50}$. (In progress.)

Plan from actual survey of two sections, O 27 and O 28 ; size, 9 feet by 5 feet; scale, $\frac{1}{2 \frac{1}{5} \sigma}$. (In progress.)

- Plan from actual survey of two sections, 033 and 0 34 ; size, 9 feet by 5 feet; scale, $\frac{1}{2} \frac{1}{50}$. (In progress.)

Plan from actual'survey of three sections, 08 , 09 and $0 \cdot 10$; size, 13 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, O 13 and O 14 ; size, 9 feet by 5 feet; scale, $\frac{1}{50}$. (In progress.)

Plan from actual survey of two sections, O 15 and 0 16 ; size, 9 feet by 5 feet ; scale, $\frac{1}{5} \frac{1}{5}$. (In progress.)

Plan from actual survey of two sections, $O 6$ and 0 7 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Four sectional plans of Sections O 12, O 28, O 29 and 030 ; size of each, 4 feet by 4 feet; scale, $2^{\frac{1}{50}}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 4, 1901, with the City Engineer.

In this territory of about 90.98 acres covered by the above sectional plans there are comprised :

Public streets :
Number of streets
Length
$7,970 \mathrm{ft} .=1.51$ miles
Area $467,500 \mathrm{sq} . \mathrm{ft} .=10.73$ acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets 23
Length . . $12,820 \mathrm{ft}$. $=2.43$ miles
Area 486,420 sq. ft. $=11.17$ acres

Totals :
Number of streets . . . . . 27
Length . . . $19,070 \mathrm{ft}$. $=3.61$ miles
Area
$953,920 \mathrm{sq} . \mathrm{ft} .=21.90 \mathrm{acres}$
Percentage of area of above territory absorbed by all streets, old and new, $24.07 \%$.

Plans and profiles completed showing grades of the following streets:
Oak square avenue, from Washington street to Faneuil street.
Montfern avenue, from Washington street to Faneuil street.
Street No. 1723, from Bigelow street to Webster street.

Champmey street, from Washington street to Stratton street.
Street No. 1720, from Washington street to Matchett street.
Atkins street, from Washington street to Webster street.
Street No. 1\%10, from Washington street to Newton boundary line.
Stratton street, from Bigelow street to Atkins street.
Webster street, from Bigelow street to Matchett street. Street No. 1726, from Bigelow street to Street No. 1714 .

Grades revised or fixed on the following streets:
Commonwealth avenue, from Harvard avenue to Griggs street.
Idlewild street, from Commonwealth avenue to Holmes avenue.
Grade plan of Sections $\mathrm{O} 12 \mathrm{O} 28, \mathrm{O} 29$ and O 30 ; scale, $\frac{1}{10 \frac{1}{00}}$. (Completed).

Contour plan showing contours at every foot of parts of Sections $O 12, O 13, O 28$ and O 29 , showing territory bounded by Bigelow street, Webster street, Dunboy street and Faneuil street; size, 3 feet by 4 feet; scale, to feet to an inch. (Completed.)

Two contour plans showing contours at every foot of Sections O 26 and 027 and parts of Sections O $3 \pm$ and O 35, showing territory bounded by Fairbanks street, Faneuil street, Parsons street and Washington street; size, Part 1, 5 feet by 7 feet; Part 2, 3 feet by 5 feet; scale, 40 feet to an inch. (Completed.)

In connection with the sectional and other plans enumerated above, the following work has been done: Number of titles looked up $\begin{array}{lll}\text { Number of conveyances copied . . . . } & 212 \\ \text { Number of }\end{array}$ Number of plans copied from Suffolk and Norfolk

Registries and elsewhere . . . . 17

## Plan 10.

One second hearing was given during the year in conjunction with Plan 11 on Sections Z 91, Z 92, Aa 81, Аа 82, Аа 83, Аа 84, Аа 85, Аа 98, Аа 99, Аа $100, \mathrm{Bb} 1, \mathrm{Bb} 20, \mathrm{Bb} 21, \mathrm{Bb} 40, \mathrm{Cc} 9, \mathrm{Cc} 10, \mathrm{Cc} 11$, Ce 12, Cc 29, Сc 30, Cc 31, Cc 32, Ce 49, Cc 50 and Cc 52, showing territory bounded approximately by the Charles river, High street, Gardner street, Spring street
and the West Roxbury Branch of the New York, New Haven and Hartford Railroad.

Most of the work done on this plan during the year was in intimate connection with that of the adjacent Plan 11, and was chiefly along the line dividing the two.

Two sections, Z 65 and Z 75, being about equally divided by this line, were among those filed. The West Roxbury Station of the West Roxbury Branch of the New York, New Haven and Hartford Railroad is situated in Z 75, at its most westerly extremity.

Here the principal effort in the way of development was upon the tract west from the block of land bounded by Centre street, Bellevue street, Landseer street and LaGrange street. A 40 -foot street leaves Centre street 200 feet from Bellevue street and continuing practically parallel with it, connects with Street No. 482 , which runs from LaGrarge street to Bellevue street about 200 feet from Landseer street.

From this street are projected two 40 -foot streets which are to rum in a south-westerly direction, and parallel with street No. 482 to LaGrange street.

From the last of these two streets (No. 692) two small 40 -font streets will extend from Centre street, and will complete the development of this tract, with streets located 200 feet apart, making all lots practically 100 feet deep.

The final plan providing for the widening to 80 feet of LaGrange street east of the railroad is filed, as is an additional plan for the widening of Centre street to 80 feet. The widenings on the latter are shown as being all of them practically on the easterly side. Provision is made to continue the widening of March avenue at 40 feet to Park street. The principal point of interest shown on Z 65 is the Highland Station on the West Roxbury Branch of the New York, New Haven and Hartford Railroad, which practically divides the section equally by a diagonal line. The treatment for development of the portion lying in Plan 11 will be spoken of in detail under that plan; all that pertaining to this plan being simply an adjustment of the lines and grades of the streets already upon the ground, which were considered satisfactory and ample for a proper growth of the district.

Another locality bounded approximately by Spring street, Charles river and the West Roxbury Branch

Railroad was given consideration for development, and as a result four sections of it were filed.

Although not very compactly built upon, a large number of streets had been projected in this district, and had some standing, as many sales of the lots had been made and recorded upon them.

It was, iherefore, considered desirable to, as far as possible, let this system remain undisturbed, which has been done, the work here being confined to a readjustment of one of the most objectionable features, while several new streets were introduced to better divide the larger blocks.

From Prospect street, a 40 -foot street has been projected to divide the block between Gould street and Billings street; this street terminated at a cross street beginning at Gould street and ruming south-westerly parallel with Belle avenue and 200 feet from it. From Prospect street, between Charles street and Washington avenue the very deep block has been sub-divided by the introduction of another 40 -foot street.

Charles street, projected as it exists on record, shows a very considerable bend in its line; the plan as filed largely eliminates this by extending the portion lying east of Prospect street directly to that street.

From this portion of Charles street have been projected 40 -foot streets at intervals of 200 feet from Prospect street, running towards tho river bank, while one of these extends north-easterly to Washington avenue, dividing the very long block transversely.

A widening is made for Spring street to 80 feet, as far as the Dedham boundary line, and is chiefly upon the north-westerly side of the street.

Baker street is shown widened to 80 feet, the widening being equally upon either side.

A new street is located between Moreland street and Cypress street, and another between Baker street and Johmson avenue, and provision is made for the connection of Johnson avenue with Oak avenue, by the extension of the latter. At a distance of about 200 feet from Johnson avenue, a 40 -foot street leaves Oak avenue, continuing easterly to beyond Ashland street. There was some work done upon Sections Z 51, Z 52 and Z 53, showing territory in the vicinity of Roslindale, under this plan, but it was unimportant, most of it falling within the lines of Plan 11, under which head it will be mentioned more in detail.

Two hearings were given during the year, under authority of chapter 210 of the Acts of the Legislature of 1898 , on the following dates:- February 9, 1900, and March 30, 1900.

The hearing held on February 9 was on territory shown on Sections Z 57, Z 63, Z 64, Z 78, Z 79, Z 81, Z 82 and Z 100, and was in relation to the change of the line of widening of Beech street, from the northeasterly side to the south-westerly side of the street.

The plans showing these changes have not yet been filed.

The hearing held on March 30 was on territory shown on Sections Ce 6, Cc 7 and Cc 15, and was in relation to a relocation of Street No. 608, opening from Centre street, nearly opposite Summer street, and continuing south-easterly at a width of 80 feet. The changes were made in accordance with petition, and the plan was filed on September 4,1900 .

A hearing was held on December 8, 1899, under authority of chapter 210 of the Acts of the Legislature of 1898 , on territory shown on plans numbered Z 87, Z 93 and Z 94, lying north-west of Centre street, between Mt. Vernon street and Baker street, and was in relation to the extension of Temple street across the tracks of the West Roxbury Branch, New York, New Haven and Hartford Railroad, and the change of grade incidental to same of Temple street and the connecting streets.

The changes were made on Z 87 and Z 94 in accordance with the petition, and the plans were filed February 20, 1900.

Z 93 was not refiled as the original filing was subsequent to that of Z 87 and Z $9 t$, and shows a grade which fits the conditions provided in those plans, showing changes refiled.

The following is a statement of the work done during the year:

Plan from actual survey of two sections, Cc 8 and Cc 13; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections, Cc 11 and Cc 12 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, Cc 29 and Cc 30 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Parts of three sectional plans of Sections Y 52, Z 65, and Z 75 ; size of each, $\pm$ feet by $\pm$ feet ; scale, $\frac{1}{250}$.
(Complete with grades). These plans were approved by the Mayor, and filed January 4 , 1901, with the City Engineer.

Five sectional plans of sections or parts of Sections Y 53, Cc 8, Cc 12, Ce 13 and Cc 29 ; size of each, 4 feet by 4 feet; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 31, 1901, with the City Engineer.

In this territory of about 115.13 acres covered by the above sectional plans there are comprised:

Public streets :
Number of streets . . $5,870 \mathrm{ft} . \quad 1 \pm$
Length . $\quad . \quad 1.11$ miles
Area . . . $241,570 \mathrm{sq} . \mathrm{ft} .=5.55$ acres
New streets established, private streets adopted and public streets proposed to be widened under Chapter 323 of the Acts of 1891:

Number of streets
26
Length . . . . $18,110 \mathrm{ft}$. $=3.43$ miles
Area . . $695,020 \mathrm{sq} . \mathrm{ft} .=15.96$ acres
Totals :


Percentage of area of above territory absorbed by all streets, old and new, $18.6 \pm \%$.

Plans and profiles completed showing grades of the following streets:

Hart street, from Baker street to Prospect street. Spring street, from Baker street to Charles river. Oak avenue, from Johnson street to Excelsior street. Billings streei, from Elmwood street to George street. E'lmwood street, from Baker street to Street No. 756. Street No. 1296, from Billings street to Street No. 758. Street No. 1318, from Gould street to Street No. 1320. Billings street, from Belle avenue to Hamilton street. Washington avenue, from Belle avenue to Spring street. Street No. 1321, from Prospect street to Belle avenue.

Charles street, from Prospect street to Belle avenue.
Prospect street, from Charles street to West Roxbury Branch New York, New Haven \& Hartford Railroad.
Street No. 1392, from Johnson street to Johnson avenue. Street No. 142.3, from Prospect street to Street No. 1318.

Gould street, from Belle avenue to Hamilton street.
Walnut street, from Belle avenue to Spring street.
Moreland street, from Belle avenue to Spring street.
Hamilton street, from Gould street to Charles street.
Street No. 1973, from Washington avenue to Street No. 1975.

Street No. 1977, from Charles street to Street No. 1975.
Grade plan of Sections Cc 8, Ce 12, Ce 13, Ce 29, Y 52 , Y $53, \mathrm{Z} 65$ and Z 75. Scale, $\frac{1}{100.0}$. (Completed.)

In connection with the sectional and other plans enumerated above, the following work has been clone:

Number of titles looked up, $3+3$.
Number of conveyances copied, 162.
Number of plans copied from Suffolk and Norfolk Registries and elsewhere, 28.

## Plan 11.

One second hearing was given during the year on this plan, in conjunction with Plan 10, on Sections Z 91 and Z 92, Aa 81, Aa 82, Aa 83, Aa 84, Аa 85, Aa 98, Aa 99, Aa 100, Bb 1, Bb 20, Bb 21, Bb 40, Ce 9 , Cc 10, Cc 11, Cc 12, Cc 29, Cc 30, Cc 31, Ce 32, Cc 49 , Cc 50 and Cc 52 , showing territory bounded approximately by the Charles river, High street, Gardner street, Spring street and the West Roxbury Branch of the New York, New Haven and Hartford Railroad.

The sections represented on this plan in the filing of work done during the year is the completion of a development, a large part of which was filed last year, for a territory lying on the slope of the hill east of Centre street, between Walter street and South street, more particularly east of the Arnold arboretum, Walter street and South street; also lying adjacent to and along the tracks of the West Roxbury Branch of the New York, New Haven and Hartford Railroad, northerly and southerly from Roslindale.

At this particular point there was a large amount of work done in the way of adjusting and working out in detail the new street lines and grades ordered by the commission appointed to eliminate the crossings at grade along this branch. The principal street of this work was what is now called Robert street, and is shown in detail on one of the plans filed. It begins at Centre street, opposite Fletcher street, at a width of 60 feet, and continues easterly from this point, practically parallel with South street, between Walter street and Conway street, under the tracks of the railroad, through what was formerly a portion of Brandon street, to South street.

In connection with the above work of the commission was made the extension of South Fairview street to South street, opposite Conway street.

The section filed showing the street will also show it extended at the same width ( 40 feet) still farther westerly parallel with the railroad, at a distance substantially 100 feet from it, across Guernsey street, at which point the distance from the railroad increases slightly as it continues to Central street, at Central Station, where it ends.

Nearly opposite this end of South Fairview street extended existed a small 40 -foot street (No. 1698, as shown), which had been introduced through private interests; it continues south-westerly from Central street. Although it may not be the best arrangement that could be had, for many reasons it has been considered best to retain it.

Alongside the West Roxbury parkway, from Centre street to Church street, has been located a 40 -foot street, and running parallel with it 200 feet away, is another street of the same width. Provision has been made to eliminate the objectional sharp corner at the junction of South street and Centre street by gracefully rounding it.

Two 40 -foot streets have been projected from Centre street to South street, south of and substantially parallel with Congreve street, at a distance of about 200 feet apart; one of these streets crosses South street and continuing connects with the extension of South Fairview street.

From the westerly of these two streets is projected a 40 -foot street to connect with South street, at a distance of about 200 feet from Guernsey street. The
filing also shows an extension of Selwyn street at its present width as far as South street.

From South street, at its junction with Conway street, a 40 -foot street is suggested along the location of the West Roxbury Branch Railroad, as far as the Arnold Arboretum. Conway street is extended north-easterly to meet an extension of Mendum street.

A widening is provided, in the plan filed, for Centre street to 80 feet; of Church street to 60 feet, the widening being upon the westerly side, and one for Walter street to 60 feet.

The two sections, Z 65 and Z 75 , lie partly in Plan 10 and partly in Plan 11, bisected by the West Roxbury Branch of the New York, New Haven and Hartford Railroad.

In the portion in Plan 11, the filing shows the introduction of a 40 -foot street from Centre street to Railroad street, substantially in line with Maple street extended; and another street of the same width, as an extension of Hastings street, from Centre street to Railroad street. An extension is shown of Bellevue street at its present width across Centre street, continuing to Montview street, dividing longitudinally the block of undeveloped land lying between Park street and Mt. Vernon street.

Two 40 -foot streets are shown as connecting Centre street with an extension of Pleasant street. Jordan street is extended to Mt. Vernon street. A slight widening in places is provided for Mt. Vernon street on its westerly side, simply to make its width uniform, and its lines symmetrical for its entire length. Centre street, as before mentioned, is here, as elsewhere, made 80 feet in width.

A slight widening is shown for Corey street, on its north-easterly side, from Centre street, north-westerly, making it 50 feet wide. A widening is shown for Henshaw terrace, to make it a 40 -foot street.

One hearing was held during the year on this plan in conjunction with Plan 10, under authority of Chapter 210 of the Acts of the Legislature of 1898, on February 9,1900 , and was on territory shown on Sections Z 57, Z $63, \mathrm{Z}$ 64, Z 78, Z 79, Z 81, Z 82 and Z 100, and was in relation to the change of the line of widening of Beech street, from the north-easterly side to the southwesterly side of the street.

The plans showing these changes have not yet been filed.

The following is a statement of the work done during the year :

Plan from actual survey of one section, Y 51; size, 5 feet by 5 feet; scale, $\frac{1}{50}$. (Completed.)

Plan from actual survey of one section, Z 60; size, 5 feet by 5 feet ; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of one section, Z 59; size, 5 feet by a feet ; scale, ${ }_{2} \frac{1}{50}$. (Completed.)

Plan from actual survey of one section, Z 58; size, $\check{a}$ feet by 5 feet ; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of one section, Z 65; size, 5 feet by 5 feet ; scale, $\frac{1}{2} 50 . \quad$ (Completed.)

Plan from actual survey of one section, Z 75; size, 5 feet by 5 feet; scale, $\frac{1}{2^{50}}$. (Completed.)

Ten sectional plans of parts of Sections Y 34, Y 48, Y 49, Y 51, Y 52, Z 58, Z $59, \mathrm{Z} 60, \mathrm{Z} 65$ and Z 55 ; size, of each 4 feet by 4 feet; scale, $\frac{1}{25 \pi}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 4, 1901 with the City Engineer.

Two sectional plans of parts of Sections Y 47 and Y 53 ; size of each, 4 feet by 4 feet ; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 31, 1901 with the City Engineer.

In this territory of about 218.10 acres covered by the above plans there are comprised:

Public streets:
Number of streets
21
Length . . . $19,050 \mathrm{ft}$. $=3.61$ miles
Area
$954,050 \mathrm{sq} . \mathrm{ft} .=21.90$ acres
New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:


Totals :
Number of streets $\begin{aligned} 39,570 \mathrm{ft} . & =\begin{array}{r}57 \\ 1,49 \text { miles } \\ 1,773,950 \mathrm{sq} . \mathrm{ft}\end{array}\end{aligned}$
Area $\quad . \quad 1,773,950 \mathrm{sq} . \mathrm{ft} .=44.01$ miles
Percentage of above area absorbed by all streets, old and new $24.96 \%$.

Plans and profiles completed showing grades of the following streets:

Guernsey street, from Centre street to South street.
Street No 1598, from Centre street to Corey street.
Street No. 16\%4, from Centre street to Railroad street. Rhoda street, from Central street west.
Street No. 1694, from Central street to Street No. 1807.
Street No. 1 1r85, from Centre street to Street No. 1692.
Street No. 1r88, from South street to Street No. 1789.
Bradford terrace, from South street, to Centre street.
Bradford avenue, from South street to 25,000 feet south of State House.
Street No. 1806, from Centre street to West Roxbury Branch Railroad.
Street No. 1807, from South street to Street No. 1694.
South Walter street, from South street to South Fairview street.
Brookfield street, from South street to South Fairview street.
Robert street, from South street to Brandon street.
South Comway street, from South street to South Fairview street.
Street No. 1811, from Conway street to Street No. 1014.

Proctor street, from Walter street, to Fairview street. Street No. 1816, from South street to Arnold arboretum.
Street No. 1817, from Tappan street to Fairview street. Street No. 1867, from Centre street to Church street.
Street No. 1868, from Centre street to Church street. Grade plan of Sections Y 34, Y 45, Y 48, Y 49, Y 51 , Y 52, Y 53, Z 58, Z 59, Z 60, Z 65, Z 75; scale, $\frac{1}{1000}$. (Completed.)

Plan showing contours at every 5 feet of Sections Z $18, \mathrm{Z} 19, \mathrm{Z} 20, \mathrm{Z} 21, \mathrm{Z} 22, \mathrm{Z} 23, \mathrm{Z} 38$, Y 10 , Y 11 , Y 12, Y 13 , showing territory bounded by Allandale street, Centre street, West Roxbury Parkway, Weld street, Church street and Town of Brookline; size, 15 feet by 5 feet; scale, 40 feet to an inch. (Completed.)

In connection with the sectional and other plans enumerated above the following work has been done:
Number of titles looked up ..... 178
Number of conveyances copied ..... 76
Number of plans copied from Suffolk and Nor- folk Registries and elsewhere ..... 15

## Plan 12.

All the work done during the year on this section was on territory lying upon its extreme south-westerly border, and was done in conjunction with that in Plan 11; and as that plan embraced the greater part of it the description in detail of the studies made in the field and of the actual work filed will be found under the heading of that plan.

The following is a statement of the work done during the year:

Plan from actual survey of two sections, Y $3 \pm$ and Y 47; size, 9 feet by 5 feet; scale, $\frac{1}{2} \frac{1}{5} \sigma$. (Completed.)

Plan from actual survey of two sections, Y 48 and Y 53; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections, $Y 49$ and Y 52; size, 9 feet by 5 feet; scale, $\frac{1}{2 \frac{1}{50}}$. (Completed.)

One sectional plan of Section Y $3 \pm$; size, 4 feet by 4 feet; scale, $\frac{1}{250}$. (Complete with grades.) This plan was approved by the Mayor, and filed January t, 1901, with the City Engineer.

Two sectional plans of parts of Sections Y 47 and Y 53; size of each, 4 feet by 4 feet; scale, $\frac{1}{2^{\frac{1}{50}} \text {. (Com- }}$ plete with grades.) These plans were approved by the Mayor, and filed January 31, 1901, with the City Engineer.

In this territory of about 33.85 acres covered by the above plan there are comprised:
Public streets :
Number of streets
Length
Area

$$
\begin{aligned}
3,330 \mathrm{ft} . & =0.63 \mathrm{miles} \\
1 \pm 0,700 \mathrm{sq} . \mathrm{ft} . & =3.23 \mathrm{acres}
\end{aligned}
$$

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:
Number of streets
4
Length $\quad 2,360 \mathrm{ft}=$.0.45 miles
Area $\quad 9,400 \mathrm{sq} . \mathrm{ft}=2.17$ acres

Totals:
Number of streets
6
Length
$4, \overparen{1} 10 \mathrm{ft} . \quad=0.89$ miles
Area $235,100 \mathrm{sq} . \mathrm{ft} . \quad=5.40$ acres
Percentage of area of above territory absorbed by all streets old and new, $16 \%$.

Plan and profiles completed showing grades of the following streets:
Lindall street, from Washington street to Lindall street.
South street, from Washington street to Bussey bridge. Street No. 1821, from South street to South street.
Street No. 1822 from street No. 1823 to 25,000 feet south of State House.
Street No. 1823, from Washington street to Street No. 1822.

Grade plan of Sections Y 34, Y 47, Y 53 ; scale, $\frac{1}{1000}$. (Completed.)

In connection with the sectional and other plans enumerated above the following work has been done:
Number of titles looked up

## Plad 13.

Quite an amount of work was done in the territory shown under this head, several parties being continued in the field throughout the year, at different points.

Section S 22 represents territory which is bounded approximately by Centre street, Day street, Minden street, and Walden street.

Here no attempt whatever was made at new development or the introduction of new streets for the purpose of subdivision, and the work was confined to arranging the old lines and developing the grades of the existing streets, nearly all of which are public.

Section S $4 \pm$ shows a territory located farther along within the limits of West Roxbury, having for its southeasterly boundary, Centre street, and extending westwardly, the land sloping gradually in that direction toward the Jamaicaway.

The ownership of this territory is confined almost entirely to one estate, that of the late Joseph H. Curtis, and is admirably adapted for building purposes. The system of streets shown on the plan filed is one which is satisfactory in every way to nearly all concerned.

It consists of a series of 40 -foot streets, parallel with Lochstead avenue, departing from Centre street at intervals of about 200 feet, one terminating at the Jamaicaway, while the other ends at a lateral street which extends from Perkins street to Lochstead avenue; while still another intersecting street, nearly parallel with it, continues onward to Lakeville place. This
section also shows the termination of the proposed $7(1-$ foot extension of South Huntington avenue over Catalpa street and across Perkins street to Centre street.

This plan also shows a widening of Centre street to 80 feet.

Seven sections were filed, representing a territory bounded substantially by Columbus avenue, Washington street, Townsend street, Walnut avenue, Bower street, Humboldt avenue and Seaver street. This locality, which is one of the best within the City limits, has been largely developed, and is in places quite compactly settled. There was little to be done in the way of development, except in an amplification of the existing system, which the filed plans show.

An extension of Howland street is shown from where it now terminates, at a point about a thousand feet west of Humboldt avenue, to Harold street, parallel with and about 175 feet from Wentworth street.

An extension of Waumbeck street, at a width of 40 feet, to Walnut avenue, while about 165 feet from and parallel with this extension is located another 40 -foot street, which is in line with Westminister avenue.

In order to develop a portion of the deep block of land lying between Cobden street and Westminister avenue a new street 40 feet wide has been introduced at a distance of about 250 feet from Walnut avenue, to connect these streets.

Townsend street is shown widened to 60 feet, and, as shown on the plan, the widening is principally on the southerly side of the street.

Sherwood Park, a 25 -foot street, departing from Columbus avenue just east of Weld street, is provided with a 5 -foot widening for the westerly side, and at this added width is extended to Walnut park.

Walnut avenue, from Crawford street to Columbus avenue, is shown widened to a width of 60 feet, the widenings between these points being entirely on the easterly side.

Under authority of chapter 210 of the Acts of the Legislature of is98, a hearing was held on May 11, 1900 , on territory shown on Section S 37, and was in relation to the relocation of Street No. 902 (proposed extension of Catalpa street) from a diverted line to a direct line from Perkins street to Centre street at a width of 60 feet.

The plan showing these changes has not yet been filed.

Under authority of chapter 210 of the Acts of the Legislature of 1898 a hearing was held on July 13, 1900, in relation to a widening of South Huntington avenue and Catalpa street, and the extension of the latter in a practically direct line from Perkins street to Centre street, with an increase in width of both Huntington avenue and Catalpa street, from 60 feet to 70 feet, from Heath street to Centre street.

The plans showing these changes were filed November 6,1900 .

The following is a statement of the work done during the year:

Plan from actual survey of one section, S $19 ;$ size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of one section, $\mathrm{S} 4 \pm$; size, 5 feet by 5 feet; scale, ${ }_{2} \frac{1}{50}$. (Completed.)

Plan from actual survey of two sections, T 52 and T 69 ; size, 9 feet by 5 feet; scale, $\frac{1}{2} \frac{1}{5}$. (Completed.)

Plan from actual survey of two sections, T 67 and T 68; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections, $T+\bar{i}$ and T 48 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections, T 53 and T 54 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of one section, S 22 ; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of one section S 38 ; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Five sectional plans of Sections T 47 , T 48, T 54 , T 68 and T 69 ; size of each, $t$ feet by $\pm$ feet; scale, $2 \frac{1}{50}$. (Complete with grades). These plans were approved by the Mayor, and filed January 4, 1901, with the City Engineer.

Four sectional plans of Sections S 22, S 44, T 52 and T 53; size of each 4 feet by 4 feet; scale, $\frac{1}{50}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 31, 1901, with the City Engineer.

In this territory of about $206.6 \pm$ acres covered by the above plans there are comprised :
Public streets:
Number of streets
39
Length
Area

$$
\begin{aligned}
36,355 \mathrm{ft} . & =6.88 \text { miles } \\
1,607,200 \mathrm{sq} . \mathrm{ft} . & =36.89 \text { acres }
\end{aligned}
$$

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:
Number of streets
22
Length . . $12,390^{\circ} \mathrm{ft} . \quad=2.34$ miles
Area . . . $379,600 \mathrm{sq} . \mathrm{ft} .=8.71$ acres
Totals:
Number of streets . . . . . 59
Length . . . $43,925 \mathrm{ft} .=8.32$ miles
Area . . $1,986,800$ sq. ft. $=45.60$ acres
Percentage of above area absorbed by all streets, old and new, $22.07 \%$.

Plans and profiles completed showing the grades of the following streets :
Ashworth park, from Walnut park to Columbus ayenue. Crestwood park, from Munroe street to Townsend street.
Dennison street, from Walnut avenue to Harrishof street.
Elbert street, from Humboldt avenue to Hazelwood street.
Haley street, from Dennison street to Harrishof street.
Harrishof street, from Dennison street to Walnut street.
School street, from Walnut avenue to School-street place.
$W^{\top}$ alnut avenue from Seaver street to Harold street.
Street No 1213, from Walnut avenue to Crawford street.
Street No. 1223, from Walnut avenue to Crawford street.
Street No. 1233, from Dennison street to Codman park.
Street No. 1240, from Cobden street to Westminster avenue.
Street No. 1346, from Lochstead avenue to Street No. 1504.

Street No. 1505, from Centre street to Street No. 1503. Street No. 1506, from Lochstead avenue to Street No. 1504.

Street No. 1507, from Centre street to Street No. 1346.
Street No. 1518, from Boylston avenue to Street No. 1519.

Street No 1521, from Centre street to Street No. 1517.
Grades revised or fixed on the whole or parts of the following streets :

Abbotsford street, from Walnut avenue to Harold street. Arklow street, from Gay Head street to Walden street.
Barbara street, from South Huntington avenue to Centre street.
Basswood street, from South Huntington avenue to Crawford street.
Bower street, from Walnut avenue to Humboldt avenue.
Bymner street, from Crawford street to Jamaicaway.
Castleton street, from South Huntington avenue to Zamora street.
Centre street, from Creighton street to Walden street.
Cobden street, from Walnut avenue to Dunford street.
Columbus avenue, from Walnut avenue to Ashworth park.
Crawford street, from Walnut avenue to Humboldt avenue.
Creighton street, from Centre street to Day street.
Day street, from Creighton street to Minden street.
Edge Hill street, from Round Hill street to Gay Head street.
Elmore street, from Walnut avenue to Mayfair street. Evergreen street, from South Huntington avenue to Crawford street.
Floyd street, from South IIuntington avenue to Crawford street.
Gay Head street, from Centre street to Minden street.
Harold street, from Walnut avenue to Seaver street.
Harrishof street, from Walnut avenue to Warren street.
Hollander street, from Humboldt avenue to Crawford street.
Holworthy street, from Humboldt avenue to Walnut avenue.
Homestead street, from Elm Hill avenue to Walnut avenue.
Howland street, from Harold street to Humboldt avenue.
Humboldt avenue, from Hutchings street to Walnut avenue.
Hutchins avenue, from Day street to Street No. 1097.
Hutchings street, from Harold street to Street No. 1342. Laurel street, from Humboldt avenue to Ottawa street.

Lochstead avenue, from Centre street to Street No. 1503.

Minden street, from Schiller street to Walden street.
Mozart street, from Centre street to Bolster street.
Munroe street, from Walnut avemue to Hazelwood street.
Perkins street, from Centre street to Zamora street.
Round Hill Street, from Day street to Walden street.
Ruthven street, from Walnut avenue to Elm Hill avenue.
Schiller street, from Minden street to Mansur street.
Seaver street, from Walnut avenue to Street No. $13 \pm 2$.
South Huntington avenue, from Centre street to Heath street.
Spring Park avenue, from Centre street to Street No. 1517.

Sumnyside street, from Creighton street to Centre street. Townsend street, from Codman park to Hazelwood street.
Wabeno street, from Waumbeck street to Wyoming street.
Walden street, from Minden street to Heath street.
Walnut avenue, from Columbus avenue to School street.
Walnut Park, from Walnut avenue to Washington street.
Waumbeck street, from Crawford street to Wabeno street.
Westerly street, from Centre street to Sunnyside avenue.
Westminster avenue, from Walnut avenue to Washington street.
Wyominy street, from Humboldt avenue to Warren street.
Street No. 1346 , from Lochstead street to Street No. 1507.

Street No. 1095, from South Huntington avenue to Jamaicaway.
Street No. 1502, from South Huntington avenue to Street No. 1346.
Grade plan of Sectious S $22, \mathrm{~S} 4 \pm, \mathrm{T} 47, \mathrm{~T} 48, \mathrm{~T} 52$, T 53, T 54 , T 68 , T 89 ; scale, $\frac{1}{1000}$. (Completed.)

In connection with the sectional and other plans enumerated above the following work has been done:
Number of titles looked up . . . . . 432
Number of conveyances copied . $65 \pm$
Number of plans copied from Suffolk and Norfolk
Registries and elsewhere . 92

## Plan 14.

A part of the result of the year's work on this plan is shown on the five sections which were filed, showing a continuation of the development of the territory in the vicinity of that part of Dorchester known as Meeting House Hill. With Eaton square for its northernmost point, it reaches southerly as far as Arcadia street, and has Adams street for its approximate easterly boundary, and Draper street, with an extension of the latter, for its westerly limit. From Richfield street are shown widenings of Davidson avenue and Rich-* field Park, to a width of 40 feet, with extensions westerly.

A 40 -foot street is projected from Norton street to Olney street, which is sulbstantially parallel with and about 170 feet distant from Richfield street. Upon Mount Ida, the street bearing that name, is shown extended to Homes avenue, and from it, at intervals of about 200 feet, depart four 40 -foot streets, ending at Percival street.

It is intended to widen Percival street to 40 feet, and to extend it beyond Homes avenue, where it will unite with an extension of Homes avenue, the two streets lying practically 187 feet apart, and being brought together by a curve of 93.50 feet radius; from the centre of the curve is projected an outlet for both of these streets, in the shape of a 4 -foot street to Robinson street.

Fox street, it is proposed to widen to 40 feet; Williams park, from East street, just east of Adams street, will be made 35 feet in width.

The two small courts named Arcadia place and Arcadia terrace, rumning sontherly from Arcadia street, will be utilized as streets, both being made 30 feet wide, and the westerly one, Arcadia place, extended to Charles street. A new street is projected, $t 0$-foot wide, leaving Dorchester avemue at its junction with Adams street and running south-westerly between Arcadia street and Charles street to Arcadia place, thus providing an outlet for Arcadia terrace.

The following is a statement of the work done during the year:

Plan from actual survey of two sections, T 81 and T 82 ; size, 9 feet by 5 feet ; scale, $2 \frac{1}{25}$. (Completed.)

Plan from actual survey of two sections, U 90 and U 91 ; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of one section, W 10 ; size, 5 feet by 5 feet ; scale, $\frac{1}{250}$. (Completed.)

Three sectional plans of Sections T 81, U 91 and W 10 ; size of each, 4 feet by 4 feet ; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 4, 1901, with the City Engineer.

Two sectional plans of Sections T 82 and U 90 ; size of each, 4 feet by 4 feet ; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 31, 1901, with the City Engineer.

In this territory of about 114.80 acres covered by the above plans there are comprised :

Public streets :

| Number of streets | $18,190 \mathrm{ft}$. | 30 |
| :--- | ---: | ---: |
| Length | 3.45 miles |  |
| Area |  |  |

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

| Number of streets $\quad 10,250 \mathrm{ft}$. |
| :--- |
| Length $\quad=\quad 1.94$ miles |
| Area $\quad 380,000 \mathrm{sq} . \mathrm{ft}=$ |

Totals :

| Number of streets | $27,410 \mathrm{ft}$. | 56 |
| :--- | ---: | :--- |
| Length | $=5.19$ miles |  |
| Area | $1,072,580 \mathrm{sq} ft.$. | $=\quad 24.61$ acres |

Percentage of above area absorbed by all streets, old and new, $21.43 \%$.

Plans and profiles completed showing grades of the following streets :
Arcadia place, from Arcadia street to Charles street. Arcadia terrace, from Arcadia street to Street No. 1859.

Barry street, from Clarkson street to Barry street.
Branch avenue, from Arcadia street to Ditson street.
Clarkson street, from Hamilton street to Barry street.
Coleman street, from Quincy street to Draper court.
Davidson avenue, from Richfield street to Olney-street place.
Hancock street, from Adams street to Downer court.

Highland street, from East street to High street. Homes avenue, from Adams street to Mt. Ida road. Homes street, from Fox street to Homes avemue.
Richfield park, from Richfield street to Olney street place.
Robinson avenue, from Robinson street to Homes avenue.
Williams park, from East street to Hecla street.
Winter street, from Church street to Hancock street.
Street No. 183\%, from Robinson street to Homes avenue.
Street No. 1838, from Fox street to Adams street.
Street No. 1859, from Dorchester avenue to Arcadia place.
Street No. 1987, from Homes avenue to Street No. 1837.

Street No. 1988, from Bowdoin street to Coleman street.

Grades revised or fixed on the whole or portions of the following streets :
Adams street, from Dorchester avenue to Hancock street.
Arcadia street, from Adams street to Draper street.
Barry street, from Richfield street to Quincy street.
Bellevue street, from Hamilton street to Kane street.
Bowdoin street, from Hancock street to Norton street.
Charles street, from Dorchester avenue to Arcadia place.
Church street, from Adams street to High street.
Clarkson street, from Hamilton street to Quincy street.
Coleman street, from Hamilton street to Quincy street.
Corwin street, from Westville street to Arcadia street.
Draper street, from Bowdoin street to Arcadia street.
East street, from Winter street to Highland street.
Ellet street, from Adams street to Dorchester avenue. Fox street, from Adams street to Percival street.
Hamilton street, from Bowdoin street to Mt. Everett street.
Hecla street, from Adams street to Dorchester avenue.
Linden street, from Adams street to Dorchester avenue.
Lyon street, from Adams street to Dorchester avenue.
Montello street, from Arcadia street to Robinson street.
Mt. Ida road, from Bowdoin street to Street No. 1834.
Norton street, from Bowdoin street to Richfield street.
Parish street, from Winter street easterly.
Percival street, from Fox street to Bowdoin street.

Potosi street, from Percival street to Mt. Ida road. Quincy street, from Bowdoin street to Clarkson street.
Richfield street, from Olney street to Puritan avenue.
Robinson street, from Adams street to Draper street.
Westville street, from Corwin street to Ditson street.
Winter street, from Adams street to Church street.
Street No. 96\%, from Robinson avenue to Draper street.
Street No. 1831, from Olney street to Norton street.
Street No. 1834, from Mt. Ida road to Percival street. Street No. 1835, from Mt. Ida road to Street No. 1837. Street No. 1836. from Mt. Ida road to Street No. 1837.

Grade plan of Sections T 81, T 82, U 90, U 91 and W 10; scale, $\frac{1}{1000}$. (Complete.)

In connection with the sectional and other plans emumerated above, the following work has been done:
Number of titles looked up . . . . . 78
Number of conveyances copied . . . 183
Number of plans copied from Suffolk and Norfolk
Registries and elsewhere12

## Additional Hearings.

The following is a list of additional hearings on changes to be made on filed plans, under authority of chapter 210 of the Acts of the Legislature of 1898.

## Plan 3.

A hearing was held on December 7, 1900, on Section W 90 in relation to the elimination of Street No. 343 , leading from Magdala street, and the substitution therefor of Carnac street.

The plans showing this change have not yet been filed.

## Plan 6.

A hearing was held on May 25, 1900, on Sections X 82, X 83, X 84, X 85, X 96, X 97, X 98, X 99 and was in relation to the straightening of Street No. 559, the introduction of a new street between and parallel with it and Street No. 560 ; a relocation of a portion of Street No. 562; an extension of Druid street northerly across Codman street, to Street No. 559, and relocation of portion of the latter; a widening of Codman street, from Morton street to Dorchester avenue, to a width of 80 feet; the introduction of a new street, 200 feet east
of and parallel with Oakridge street; relocation of Streets No. 556 , No. 558 , No. 585 ; abandomment of Street No. 891 and No. 892, and the introduction of substitute streets, at intervals of 150 feet from Street No. 890, and relocation of Street No. 894.

The plans showing these changes have not yet been filed.

## New Standard of Measurement.

For many years there had existed in Boston a standard, used by Civil Engineers, Surveyors and others, for the purpose of testing their tapes.

This standard consisted of brass plugs placed at O, 50 feet and 100 feet in the granite stones forming the sidewalk in front of the northerly side of City Hall, in Court square.

An account in detail of the history of the establishment of this standard can be found on page 33 of the report of the Street Laying-Out Department for 1896.

The accuracy of this standard had from time to time been questioned, but it has now been determined to be of sufficient accuracy for all ordinary work.

Appreciating the value of possessing a correct standard and considering the accurate character of the work now being carried on by the Engineering Division of this Department, under the Board of Survey Act, it seemed imperative that some means should be taken to have the accuracy of the present standard established beyond question, or a new one adopted by the City. The latter conclusion was the one arrived at, and consequently, early in 1898, two steel bars, each one and one-half inches wide, one-quarter of an inch thick, one being 102 feet long, and the other 51 feet long, were ordered of the Washburn Moen Manufacturing Company, of Worcester, Mass.

These bars were delivered to the Department in November, 1898, having been transported from Worcester to Boston, in their straight normal condition over the Boston and Albany Railroad, upon three flat cars, to the station in Boston, and thence in the hands of sixteen of the men of this Department, carried to Court square and placed in the covered wooden box, which had been prepared there to receive them, at the westerly side of the Old Court House, on November 4 , 1898.

These bars were allowed to remain there for a time, at rest, to permit them to resume a condition as near normal as possible. Later, silver plugs were inserted by C. L. Berger \& Sons, instrument makers, of Boston, for graduating purposes, and in May, 1900, the bars were both marked under the direction of the Superintendent of the United States Coast and Geodetic Survey, by Mr. Louis A. Fischer.

The authorities at Washington concede this standard to be the most satisfactory and accurate of any in the United States.

It is intended to place an apparatus in the standard box for the purpose of drawing the tapes through the same and for stretching them.

The following correspondence relating to the work of marking the bars will explain itself:
[Copy.]
Washington, July 13, 1900.
Mr. F. O. Whitney, Chief of Surveying Division, Street Commissioners' Office, Old Court House, Boston, Mass.:
Sir, -I have to transmit herewith the report of Mr. L. A. Fischer, of this office, upon the graduation and comparison of your 100 -foot and 30 -metre Bench Standard.

Yours respectfully, Andrew Braid, Acting Superintendent.
[Enclosure.]
[Copy.]
WAsinfgtox, July 11, 1900.
Dr. H. S. Pritchett, Superintendent, U.S.C. \& G.
Survey, and of Standard Weights and Measures, Washington, D.C.:
Sir,-I have the honor to submit herewith a report on the graduation and verification of the 100 -foot and $30-$ metre Bench Standard belonging to the Street Commissioners' office, Boston, Mass.

In accordance with your instructions, I left Washington on May 15, and arrived in Boston the following morning at 7 o'clock. I at once reported my presence at the Street Commissioners' office in the Old Court House, where I found that all the necessary preparations had been made for taking up the work.

In a short time the 10 -foot standard bar and the other apparatus shipped from this office were unpacked and the work was begun.

The Bench Standard is adjacent to the west side of the Old Court House Building, and is protected from the sun during the forenoon and after 3 or $\pm$ P. M. While the bar and its support are continuous the fact that stone stairs, leading into the building at two points, passed immediately over the standard, interfered somewhat with the progress, of the work.

The Bench Standard had large silver plugs inserted at zero, 10 feet, 50 feet, and 100 feet, and at 1 metre and 30 metres,-in all, six (6) plugs. The surface of the Bench Standard was also polished at intervals of 10 feet and 3 metres, to carry temporary graduation.

The 10 -foot graduating and comparing bar was graduated as follows: 1, 2, 3, 6, 9 and 10 feet, and 1, 2 and 3 metres. The value of these graduations were carefully determined by comparison with the standards of this office before the bar was shipped to Boston; and after its return to Washington additional comparisons were made to check the first.

The graduating of the Bench Standard was done as follows: The vernier of the tracer, which moved along the 10 -foot standard and could be clamped at will, was brought into coincidence with the zero of the 10 -foot bar. Then the whole bar was adjusted so that the line ruled by the tracer would cross the centre of the zero plug of the Bench Standard. Without disturbing the bar the tracer was next moved until the vernier coincided with 1 metre, and later to the 3 metre and 10 feet graduation of the 10 -foot bar, lines being ruled with the tracer at each stop. A sliding microscope, which could also be clamped anywhere on the 10 -foot bar, was then clamped at the zero end of the bar, without disturbing the same, and the cross lines of the microscope were carefully set upon the first lines ruled. The whole 10 -foot bar was next slid along until the cross wires of the microscope bisected the 3 metre line ruled upon the Bench Standard. The 10 -foot bar had thus been moved the distance between its 3 metre graduations, and by setting the vernier of the tracer upon the 3 metre line and ruling a line on the 100 -foot bar we had twice the distance between the 3 metre lines of the standard bar. The 10 -foot bar was then shifted until the cross wires of the microscope, which had not been disturbed,
bisected the line ruled upon the 100 -foot bar at the -10 foot point; the tracer moved until the vernier coincided with the 10 -foot line of the standard; and a new line was then ruled upon the 100 -foot bar at 20 feet from the end. This procedure was continued until the total spaces of 100 feet and 30 metres were laid off; the former into 10 -foot and the latter into 3 -metre intervals. The graduation was interrupted at noon, when half the Bench Standard had been ruled, by the sum shining upon the apparatus, and the graduating was discontinued until about 6 o'clock, when it was again taken up and completed. The whole of the graduation was therefore done in one day.

The next morning the comparison of the 10 -foot and 3 -metre spaces was made with the corresponding divisions of the 10 -foot bar. It was my intention at first to make the graduations of the 10 -foot bar coincide approximately with the divisions on the Bench Standard, and measure the disagreements at both ends by means of a micrometer microscope which could be shifted from end to end of the bar for that purpose. This proved to be a rather slow and laborious operation, and the zero graduation of the 10 -foot bar, when measuring in the reverse direction, were made to agree, as closely as could be determined with the aid of a pocket magnifying glass, while the discrepancies between the lines on the Bench Standard and 10 -foot standard at the opposite end of the 10 -foot bar were measured with the micrometer microscope.

One measure of the 100 -foot and one of the 30 -metre spaces were made in the morning, with the temperature slowly rising, while the other two measures were made in the opposite direction in the afternoon, with the temperature slowly falling. The conditions were favorable for good work, the sky being overcast all day and the temperature quite constant, but nevertheless the accordance of the two measures was rather astonishing, the measures of the 100 -foot space differing by $\frac{10}{10 \% 0}$ of an inch, while the two measures of the 30 -metre space differed by $\frac{100}{10000}$ of an inch, or $\frac{25}{1000} \mathrm{~mm}$. In both cases the disagreement is less than one part in a million.

A 100 -foot steel tape, which had been carefully compared a number of times with the United States Bench Standard in Washington, was next compared with the 100 -foot space, as a rough check on the comparisons
with the 10 -foot bar, and as the length of the space as derived from the tape agreed within $\frac{3}{1000}$ of an inch with the value derived from the 10 -foot bar the two measures with the 10 -foot bar were deemed sufficient.

The next day lines were ruled upon a steel 50 -foot bar made of the same material as the Bench Standard. As the intention is to use this to compare the two 50 -feet intervals of the Bench Standard in case it is moved to some other location, no special care was taken to get the 50 -foot space exact. A zero line was ruled at one end, and the position of the other line was determined within a few one-thousandths of an inch with the aid of the 100 -foot steel tape referred to above. No comparisons of this bar were made with the 10 -foot bar, and as the Street Commissioners' Office will be in a position to accurately determine the length of this bar in terms of their 100 -foot bar as soon as the necessary comparing apparatus has been completed, no value will be given here. The graduation of the 50 -foot bar was completed a few minutes before noon, just as it began to rain.

Upon my return to Washington the values of the graduations of the 10 -foot bar were again determined in terms of our standards. These comparisons took much longer than I anticipated, and account for the delay in transmitting this report.

Using the mean of all comparisons of the 10 -foot bar, the values found for the graduations of the 100 -foot Bench Standard of the Street Commissioners' Office are as follows:

0 to $50.0=50$ feet -0.001 inch, at $62^{\circ} \mathrm{F} . \pm 0.0015$
0 to $100=100$ feet -0.001 inch, at $\cdot 62 \mathrm{~F} . \pm 0.0020$

## Metre Graduation.

0 to $1 \mathrm{~m} .=1 \mathrm{~m} .+0.01 \mathrm{~mm}$. at $0.0^{\circ}$ Cent. $\pm 0.01$ 0 to $30 \mathrm{~m} .=30 \mathrm{~m} .-5.89 \mathrm{~mm}$. at $0.0^{\circ}$ Cent. $\pm 0.20$

The large correction to the metre space is due to the fact that this space was supposed, by those who placed the plugs, to be correct at 62 Fahr., instead of at 0.0 cent. Hence, the 30 -metre plug was placed too near the 0 plug by $0.000011 \times 30,000 \times 16.67=5.501 \mathrm{~mm}$., if we assume the coefficient of expansion of the Bench Standard to be 0.000011 per degree centigrade. The result was that the 30 -metre space, ruled as described
above, fell about 5.5 millimetres beyond the 30 -metre plug, and another line had to be ruled upon the centre of the plug and the distance between the two lines determined by means of a steel millimetre scale, with the aid of the micrometer microscope referred to before.

In regard to the probable errors assigned to the spaces they are not the result of computation, but are estimated and, I believe, represent fairly the truth. Those for the foot graduation involve only the errors due to the comparison and to the graduations of the 10 -foot rod, the mean temperature of comparison being, fortunately, very close to 62 F . The probable error assigned to the 30 -metre space involves the two sources of error mentioned and, in addition, the error due to the assumed coefficient of 0.000011 , used to reduce the observations from 62 F . $(16.67 \mathrm{C}$.$) to 0 \mathrm{C}$.

Many of the above details may appear unimportant at this time, but a history of the graduation and verification of this Standard may be of considerable interest in the future, and hence I have attempted, as detailed, an account as the time at my disposal would permit.

Respectfully submitted, Louis A. Fischer.
In charge of Office of Standard Weights and Measures.
Summary of Work during the Year.
Sectional plans completed, approved and filed during the year: 43 sections, $\mathrm{O} 12, \mathrm{O} 28, \mathrm{O} 29, \mathrm{O} 30, \mathrm{~S} 22$, $\mathrm{S} 44, \mathrm{~T} 47, \mathrm{~T} 48, \mathrm{~T} 52, \mathrm{~T} 53, \mathrm{~T} 54, \mathrm{~T} 68, \mathrm{~T} 69, \mathrm{~T} 81$, T $82, \mathrm{U} 8, \mathrm{U} 90, \mathrm{U} 91, \mathrm{~W} 10, \mathrm{X} 42, \mathrm{X} 43, \mathrm{X} 58, \mathrm{X} 59$, X $62, \mathrm{X} 63, \mathrm{X} 78, \mathrm{X} 79, \mathrm{Y} 34, \mathrm{Y} 47, \mathrm{Y} 48, \mathrm{Y} 49$, Y 51 , Y 52, Y $53, \mathrm{Z} 58, \mathrm{Z} 59, \mathrm{Z} 60, \mathrm{Z} 65, \mathrm{Z} 75$, Сс 8 , Сс 12, Ce 13, Cc 29.

Territory covered by above plans 986.14 acres.
Public streets :
Number of streets . . . . . 149
Length . $\quad . \quad 119,985 \mathrm{ft}$.
Area $\quad=22.72$ miles

New streets established, private streets adopted and public streets, proposed to be widened under chapter 323 of the Acts of 1891:
Number of streets
Length
Area

$$
\begin{aligned}
105,180 \mathrm{ft} . & =19.91 \text { miles } \\
3,844,790 \mathrm{sq} . \mathrm{ft} . & =88.26 \text { acres }
\end{aligned}
$$

Totals :
Number of streets $\quad 205,285 \mathrm{ft} . \quad=308$
Length $\quad=38.87$ miles
Area $\quad . \quad 9,1+9,210 \mathrm{sq} . \mathrm{ft}$.
$=213.31 \mathrm{acres}$

Percentage of area of above territory absorbed by all streets, old and new, $22.47 \%$.

Plans from actual survey completed:

| Number |  |
| :--- | :--- |
| Number of sections comprised | . |
| Area of sections comprised | . |
| Scale | . | | 20 |
| ---: |
| 45 |
| S acres |

Plans from actual survey in progress :
Number15
Number of sections comprised ..... 27
Area of sections comprised ..... 621.0
Scale ..... ${ }_{2}{ }_{5}^{1} 0$Plans and profiles showing grades completed :
Number of streets ..... 221
Scale ..... $2 \frac{1}{50}$ and $\frac{1}{50}$
Plans showing contours at every one foot completed:
Number of plans ..... 2
Number of sections comprised ..... 12
Area of section comprised ..... 161.72 acres
Scale ..... 40 feet to an inch
In connection with the sectional and other plansenumerated above, completed and in progress, thefollowing work has been done :
Number of titles looked up ..... 2,244
Number of conveyances copied ..... 1,279
Number of plans copied from Suffolk Registry and elsewhere ..... 220

Summary of all surveying work done under Chapter 323 of the Acts of 1891, and amendments thereto, to February 1, 1901.

Preliminary plans completed :
Number
Numbers, $1,2,3,4,5,6,7,8,9,10,11,12,13$ and 14

Area . . 20,621 acres
Sizes, 11 ft .6 in. by $8 \mathrm{ft} .9 \mathrm{in} . ; 12 \mathrm{ft} .3 \mathrm{in}$. by 5 ft. ; 14 ft . by $10 \mathrm{ft} . ; 16 \mathrm{ft} .6 \mathrm{in}$. by 10 ft . ; 10 ft . by 8 $\mathrm{ft} . ; 9 \mathrm{ft}$. by $5 \mathrm{ft} . ; 11 \mathrm{ft}$. by $10 \mathrm{ft} . ; 20 \mathrm{ft}$. by 10 ft . ; 8 ft .6 in . by $7 \mathrm{ft} . ; 17 \mathrm{ft}$. by $10 \mathrm{ft} . ; 20 \mathrm{ft}$. by $10 \mathrm{ft} . ;$ 18 ft . by 10 ft . ; 15 ft .6 in . by 10 ft . ; and 16 ft . 6 in. by 10 ft . ; scale, 50 ft . to an inch, and $\frac{1}{1000}$.
Public streets :
$\begin{aligned} & \text { Number of streets } \\ & \text { Length }\end{aligned} \quad \dot{1}, 16 \overline{7}, 631 \mathrm{ft}=221.14$ miles
Private streets :
Number of streets . . . . 1,012
Length $501,401 \mathrm{ft} .=94.96$ miles
Estates:
Number of estates . . . . . . 22,094
Working plans completed:
Number
Size $\quad . \quad 16 \mathrm{ft}$ by 7 ft .
Scale . . . . . 50 ft . to an inch
Plans from actual survey completed :
Number . . . . . . . . 232
Number of sections . . . 490
Area of sections comprised : . 9,589.14 acres Scale
Plans from actual survey completed of territory :
Number . . . . . . . 6
Number of sections comprised. . . 90
Area of sections comprised . . 1,681.01 acres Scale
Sectional plans completed, approved and filed :
Number of plans
462
Size of each
Scale 4 ft . by 4 ft .

Territory covered by plans:
Area
9,296.68 acres
Public streets:
Number of streets

$$
435
$$

Length
Area
$60 \pm, 530 \mathrm{ft} . \quad=115.40$ miles
. . $31,64 \pm, 502$ sq. ft. $=726.44$ acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Totals:
Number of streets . . . . . 1,759
Length . $1,748,432 \mathrm{ft} .=331.16$ miles
Area . . $86,068,220 \mathrm{sq} . \mathrm{ft} .=1,979.12$ acres
Percentage of area of above territory absorbed by all streets, old and new, $22.40 \%$.

Sectional plans completed, ready to file:
Number of plans.
1
Size
4 ft . by 4 ft .
Scale
Territory covered by plan:
Area
5.24 acres

Public streets:
Number of streets . . . . . 1
Length . . . $246 \mathrm{ft} . \quad=0.04$ mile
Area . . . . $39,360 \mathrm{sq} . \mathrm{ft} .=0.90$ acre
New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets
3
Length . . 932 ft . $=0.18$ mile
Area
$37,008 \mathrm{sq} . \mathrm{ft} .=0.85$ acre
Totals:
Number of streets $\quad . \quad 1,178 \mathrm{ft} . \quad=0.22$ mile
Length $\quad . \quad 76,368 \mathrm{sq} . \mathrm{ft} .=1.75$ acre
Area $\quad . \quad$
Totals of sectional plans filed and ready to file :
Number of plans.
Size of each . . . . 4 ft . by 4 ft .
Scale
$2^{\frac{1}{50}}$
Territory covered by plans:
Area

Public streets:


New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:
Number of streets
1,413
Length . $1,334,251 \mathrm{ft} . \quad 252.69$ miles
Area $54,603,726$ sq. ft. $=1,253.52$ acres

Totals:
Number of streets
1,762
Length . $1,7 \pm 9,610 \mathrm{ft} . \quad 331.38$ miles
Area . . . $86,14 t, 588 \mathrm{sq} . \mathrm{ft} .=1,980.87$ acres
Percentage of area of above territory, exclusive of parks, rivers, etc., absorbed by all streets, old and new, $22.41 \%$.

Streets located and relocated on sectional plans completed, approved and filed :
Length .
$1,748,432 \mathrm{ft} .=331.16$ miles
Streets located and relocated on sectional plans completed, ready to file:
Length
$1,178 \mathrm{ft} .=0.22$ mile
Index plans completed:
Number of plans.
2
Size

- 4 ft . by $\pm \mathrm{ft}$.

Scale $\frac{1}{1000}$ and $\frac{1}{1500}$
Grade plans of whole territories completed:
Number of plans
Number of sections comprised 25
Area of sections comprised . . 237.75 acres
Scale
Grade plans showing sections:
Number of plans . . . . . 17
Number of sections completed . . 463
Area of sections completed . . 9,263.63 acres
Scale
$\frac{1}{1000}$

Revised grade plan showing sections:

- Number of plans . . . . . . ${ }^{2}$
Number of sections completed
Area of sections completed.
Scale .

Plans showing contours at every 5 feet, completed:
Number of plans . . . . . . 6

Number of sections comprised . . . 64
Area of sections comprised . 1,201.87 acres Scale. . . 40 ft . to an inch and $\frac{1}{1000}$

Plans showing contours at every foot, completed:
Number of plans . $\quad . \quad 8$
Number of sections comprised
Area of sections comprised.
Scale

Plans showing contours at every foot, completed:
Number of plans
Number of sections comprised

Plans showing contours at every foot, completed :
Number of plans
Number of sections comprised
Area of sections comprised . . 3,697.08 acres Scale 40 ft . to an inch

Plans showing contours at every 2 feet, completed:

Conveyances copied and titles looked up:

Plans copied from Suffolk and Norfolk Registries: Number

Stone monuments set in districts covered by Plans 1, 2, $3,4,5,6,7,8,9,10,11,12$, and 13 for use in determination of position and location of street lines:
Number of monuments
Miscellaneous work includes tracings, estimates of areas by calculations, planimeter, etc., sketches and studies of different plats, etc.

## LTST OF PLANS.

SURVEYING DIVISION IN STREET LAYING-OUT DEPARTMENT, JANUARY 31, 1901.

ROOMS 23 TO 27 InCLUSIVE, OLD COLRT-HOUSE.

| Indexed. | Classification. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Plans. } \end{gathered}$ |
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| " " " $24 . \ldots$ | " " 2 Back Bay. | 1 |
| " " " 27. | - 3 Neponset | 1 |
| " Frame " 27,... | 4 Back Bay. | 1 |
| " Wall " 26. | " 5 Central Dorchester | 1 |
| " " " 23. | " 6 Lower Mills and Mattapan.. | 1 |
| " " 27. | " \% South Bay ................. | 1 |
| "Frame " 25.... | " 8 Brighton......... | 1 |
| "Wall " 27. | " 9 Part of Roxbury. | 1 |
| " Frame " $27 .$. | [6 10 Part of West Roxbury | 1 |
| " " " 25. | " 11 " " " | 1 |
| ". " 27 . | " 12 " " " | 1 |
| " " " 27 . | " 13 " " Roxbury and West Roxbury. | 1 |
| " Wall " $25 . \ldots$ | " 14 Grove Hall aud Meeting House Hill.. | - 1 |
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| Vol. J | " " " 6 and 12. | 42 |
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LIST OF PLANS. - Continued.

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| :---: | :---: | :---: |
| Case HH. | Brought forvard. $\qquad$ <br> Plans from Actual Survey. | 4,363 |
|  | Sections. Sections. Sections. <br> Ee 1, Ff 10 Ee 20, Ff 11 Ee 21, Fi30 | 3 |
|  | Ff 8, 13 Ff 9, 12, 29 Ce 1, Dd 10 | 3 |
|  | W 65, 76, $85 \quad \mathrm{~W}$ 72, 89, $92 \quad \mathrm{~W}$ 73, 74, 75 | 3 |
|  | W 86, 87, $88 \quad \mathrm{~W} 90,91 \quad$ W 93, 94, 95, 96 | 3 |
|  | M 46, 47, $48 \quad \mathrm{M} 53,54,55 \quad \mathrm{Z} 61,80$ | 3 |
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|  | Z 78,79 78 Z 81, $1000 \mathrm{Z} \mathrm{82,99}$ | 3 |
|  | $\mathrm{Z} \mathrm{88,98}$ \% $284,97 \quad$ Ee 20, Ff. 11 | 3 |
|  | Y 90, $91 \quad$ Cc 1, Dd $10 \quad$ Cc 2, 3 | 3 |
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|  | M 31 (part), 32 (part), 33 (part), 41 (part), 48, 49, 50, 51 (part), 60 (part) | 1 |
| KK | M 52, 53, 70, 51 (part), 60 (part).................. | 1 |
|  | M 28, 29, 30, 31 (part), 32 (part), 33 (part) <br> N 21, 22, 23, 39, 40, 41 (part), 42 .. | 1 |
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|  |  | 2 |
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LTST OF PLANS. - Continued.


LIST OF PLANS. - Continued.


| Indexed. | Classification. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Plans. } \end{gathered}$ |
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## Respectfully submitted,

$$
\begin{aligned}
& \text { Salem D. Charles, } \\
& \text { Edward W. Presho, } \\
& \text { James A. Gallivan, } \\
& \text { Street Commissioners. }
\end{aligned}
$$

