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DEPARTMENT OF INFRASTRUCTURE ENGINEERING

MEMORANDUM

TO: William G. Keegan, Jr., Town Administrator
Board of Selectmen

FROM: Jason L. Mammone, P.E., Director of Engineering
Joseph M. Flanagan, Director of Public Works

DATE: February 14, 2014

SUBJECT: Recommended Pavement Improvements for FY2015-FY2017

As part of the annual pavement management program, please find an analysis of the costs associated with the FY2014 Pavement Management road improvements which were undertaken over the past construction season along with the recommended FY2015-FY2017 pavement improvements for review and consideration..

The FY2014 Recommended Pavement Improvements were presented to the Board and approved on February 14, 2013 as part of the continuing three year FY2014-FY2016 Recommended Pavement Management Improvements. A summary of the work as originally proposed and approved can be found in Table 1.

Table 1 – FY2014 Approved Road Improvements

Repair Type	Length in Feet	Cost
Reclamation	14,550	\$1,598,636.11
Mill and Overlay	390	\$25,256.75
Overlay	0	\$0
Preventative Maintenance	11,997	\$334,586.64
Routine Maintenance	0	\$0
Totals	26,937	\$1,958,479.50

Construction of the planned improvements began in May of 2013 and ended in November of 2013. The preventative maintenance work was completed by All States Asphalt, Inc. and the reclamation work was completed by T.L. Edwards, Inc. under the FY2014 Paving Contract. There were a few of adjustments to the planned FY2014 work. Richards Street and Border Street were not reclaimed as anticipated due to scheduling issues and cold temperatures in November. These roads will be completed in the spring

of 2014. Nova Chip could not be installed on Ames Street, Court Street, High Street, Mt. Vernon Street or Pine Street due to ongoing gas or water utility work during the construction season. These roads were swapped with Sprague Street and Walnut Street that were scheduled for Nova Chip in FY2015 and FY2016.

A summary of the completed work can be found below in Table 2.

Table 2 – FY2014 Completed Improvements

Repair Type	Length in Feet	Cost
Reclamation	14,240	\$1,440,688.77
Mill and Overlay	0	\$0
Overlay	0	\$0
Preventative Maintenance	11,166	\$407,275.04
Routine Maintenance	0	\$0
<i>Totals</i>	25,406	\$1,847,963.81

Based on the combined efforts of the Department of Public Works and the Engineering Department we were able to complete the FY2013 road improvements within the available budget. Using the pavement management estimate, the cost to complete the roads that were not completed would be \$114,331.30, which would bring the total costs of the FY2014 roads to \$1,962,295.11 which is just \$3,815.61(0.2%) more than the original \$1,958,479.50 estimate. A summary of the estimated versus actual unit costs for FY2014 is shown below in Table 3.

Table 3 – FY2014 Units Costs (Estimated vs. Actual)

Repair Type	Estimated Unit Cost (per SY)	Actual Unit Cost (per SY)
Reclamation (Major Collector)	\$40.00	-
Reclamation (Minor Collector & Residential)	\$35.00	\$32.13
Mill and Overlay	\$20.00	-
Overlay	\$15.00	-
Preventative Maintenance	\$12.00	\$10.64
Routine Maintenance	\$0.75	-

We have also compiled and analyzed the costs associated with the FY2014 Pavement Management sidewalk improvements which were undertaken over the past construction season. While many segments of sidewalk repairs were undertaken this year, only wholesale sidewalk replacements are attributed to the sidewalk program.

A summary of the completed work to date can be found below in Table 4.

Table 4 – FY2012 Completed Sidewalk Improvements

Repair Type	Length in Feet	Cost
Bituminous Sidewalk	20,426	\$426,389.12
Concrete Sidewalk	2,181	\$63,430.75
<i>Totals</i>	22,607	\$489,819.87

The Town is now entering into our eighth year of Pavement Management and as a continuation of last year's FY2014-FY2016 Pavement Management Plan we have prepared new recommendations for FY2017. We have also included in FY2015, the roads from FY2014 which have not yet been completed.

As of December 31, 2013 our overall roadway network pavement condition index (PCI) was 82 which is up significantly from our initial PCI of 70 from seven years ago. If the proposed improvements are approved and implemented we can anticipate improving the roadway PCI to 84 by the end of FY2017. In comparison, other Town and Cities in the Commonwealth strive to achieve an overall PCI ranging from 78 to 82. Our current backlog of repairs is \$12,820,791.22.

The funding scenario for the first year of the proposed FY2015 through FY2017 is based on the assumption of a continued local funding level of \$1.5 million per year and utilizing approximately \$600,000 from State Chapter 90 funds. The funding scenario for the second and third year is based on an assumed local funding level of \$750,000 per year and utilizing approximately \$600,000 per year from State Chapter 90 funds. The reduction of local funding in the second and third year is based upon our current PCI rating. Now that the Town has achieved a PCI rating slightly higher than average as compared to other communities in the Commonwealth, we recommended last year to BOS that we reduce the amount appropriated to the roads in an effort to maintain a consistent PCI rating around the mid 80's starting in FY2016. As always, if the Town receives more than the assumed State Chapter 90 funding, we will utilize that money during the current construction season to rehabilitate roads indentified in the following year's program.

The recommended improvements proposed in this document are associated with asphalt pavement only. Sidewalks, curbing, drainage, and other geometric changes are not included in this proposal, however if during the design process these improvements are found to be necessary or desirable we will work to incorporate those items within the available budget(s).

In summary, the DPW and Engineering Departments are pleased to report that we have successfully completed the FY2014 Pavement Management Plan approved last year. Through the diligent efforts of both departments we believe we were able to deliver these improvements in an efficient and cost effective manner. All oversight of the design, bidding, contract administration, field engineering, and inspection was performed using

in-house resources. Through these efforts we have been able to raise the Town's PCI to 82 from the initial rating of 70 seven years ago.

The proposed work throughout Town over the course of FY2015-FY2017 is summarized in the attached table and maps. Please review the attached information and provide us with any questions or comments.

Attachment

Cc: Nancy A. Baker, Assistant Town Administrator
Mariellen P. Murphy, Director of Finance
Deborah A Finnigan, P.E., Infrastructure Engineer
Ronald I. Lawrence, Project Engineer

Town of Dedham - Pavement Management Road Program

Name	From	To	PCI	Length (ft)	Area (sy)	Cost	
7/1/2014							
Repair Type: Mill/Overlay							
PINE STREET	79' W OF KIELY ROAD	NEEDHAM STREET	70	2,367	7,364	\$147,271.30	
				Repair Type Sum	2,367	7,364	\$147,271.30
Repair Type: Preventative Maintenance							
COLBURN STREET	64' W OF BUSSEY ST	CURVE ST	80	69	343	\$4,532.17	
COMMON STREET	1155' E OF WEST ST	56' E OF WEST ST	83	1,100	3,543	\$28,737.60	
COMMON STREET	DEXTER ST	CHANNING ST	73	986	3,177	\$27,947.62	
CURVE STREET	COLBURN ST	MAVERICK ST	80	1,170	3,120	\$41,229.14	
WHITING AVENUE	EAST ST	MT VERNON ST	79	1,221	3,663	\$48,400.46	
				Repair Type Sum	4,546	13,847	\$150,846.99
Repair Type: Reclamation Minor Collector and Local							
BONHAM ROAD	380' S OF TRENTON RD	GREENSBORO RD	40	1,108	3,077	\$118,414.47	
BORDER STREET	ASHCROFT ST	DALE ST	41	755	2,516	\$95,243.14	
CAROL DRIVE	GREENLODGE ST	CAROL DR (LOOP)	40	2,400	6,399	\$246,237.45	
CHURCH STREET	HIGH ST	FRANKLIN SQ	41	456	1,063	\$38,687.13	
CONGRESS PLACE	BUSSEY ST	670' N OF BUSSEY ST	40	669	1,339	\$51,510.68	
DRESSER AVENUE	TAYLOR AV	BEECH ST	40	626	1,739	\$66,914.20	
GRANDFIELD STREET	RIVERSIDE DRIVE	VINE ROCK STREET	41	854	2,278	\$87,560.54	
KIMBALL ROAD	DRESSER AV	ALDEN ST	40	903	2,507	\$96,469.76	
OAK STREET	100' E OF WASHINGTON ST	CURVE ST	49	1,636	4,544	\$153,334.51	
OAKDALE AVENUE	RIVER ST	QUINCY AV	41	973	2,594	\$99,814.62	
PAUL STREET	TOWER ST	TURNER ST	40	673	1,795	\$69,060.59	
SCHOOL STREET	WASHINGTON ST	COURT ST	39	1,066	2,841	\$113,707.83	
THOMAS STREET	123' W OF COLONIAL DR	BUSSEY STREET	40	554	1,478	\$56,885.29	

Town of Dedham - Pavement Management Road Program

<i>Name</i>	<i>From</i>	<i>To</i>	<i>PCI</i>	<i>Length (ft)</i>	<i>Area (sy)</i>	<i>Cost</i>
TRENTON ROAD	SHERMAN RD	BONHAM RD	39	1,763	5,094	\$203,868.38
TYLER ROAD	HOOPER RD	SHERMAN RD	35	238	635	\$24,422.61
VINE ROCK STREET	275' E OF NEEDHAM STREE	RIVERSIDE DRIVE (W)	39	938	2,240	\$89,654.97
VINE ROCK STREET	RIVERSIDE DRIVE (W)	RIVERSIDE DRIVE (E)	40	1,175	3,132	\$120,532.80
WESLEY STREET	CAROL DR W	CAROL DR E	40	587	1,565	\$62,622.01
WINTHROP STREET	QUINCY AV	RIVER ST	41	873	1,940	\$74,636.06
Repair Type Sum				18,244	48,775	\$1,869,577.04

Repair Type: Routine Maintenance

CHURCH STREET	FRANKLIN SQ	COURT ST	92	582	1,359	\$1,120.37
CURVE STREET	MAVERICK ST	100' E OF WASHINGTON ST	89	1,690	3,755	\$2,715.52
EMMETT AVENUE	COLBURN ST	ODYSSEY LA	92	844	2,345	\$1,933.90
GREENLODGE STREET	FOX MEADOW	FILLMORE RD	90	1,507	5,022	\$4,140.83
GREENLODGE STREET	MARGARET RD	STOUGHTON RD	90	830	2,860	\$2,357.98
HIGH STREET	716' W OF WESTFIELD ST	STATE SECTION	91	1,814	5,642	\$4,297.90
HIGH STREET	BULLARD ST	COMMON ST	91	1,637	4,547	\$3,463.50
HIGH STREET	CROWLEY AV	150' E OF HARVARD ST	91	430	1,625	\$1,238.02
HIGH STREET	MILTON ST	80' W OF MILTON ST	91	80	622	\$473.98
MT. VERNON STREET	CHARLES ST	123' N OF WHITING AV	90	487	1,623	\$1,338.58
PINE STREET	BRIDGE STREET	79' W OF KIELY ROAD	91	1,726	5,369	\$4,426.85
RIVER STREET	TOWNLINE	180' W OF MILTON ST	91	1,219	4,604	\$3,507.45
SPRAGUE STREET	167' S OF COVENTRY RD	TOWN LINE	91	941	3,451	\$2,629.15
SPRAGUE STREET	212' W OF CEDAR ST	UPLAND RD	90	605	2,756	\$2,099.52
SPRAGUE STREET	50' W OF HOOPER RD	167' S OF COVENTRY RD	91	468	3,067	\$2,336.60
THOMAS STREET	190' W OF WHITEHALL ST	123' W OF COLONIAL DR	92	551	1,469	\$1,211.60
WALNUT STREET	HAZELNUT PL	150' N OF WHITING AV	90	188	543	\$413.72
WENTWORTH STREET	EAST ST	CENTRAL AV	92	1,588	4,236	\$3,492.75

Town of Dedham - Pavement Management Road Program

Name	From	To	PCI	Length (ft)	Area (sy)	Cost
			Repair Type Sum	17,187	54,896	\$43,198.22
			Year Grand Total	42,343	124,881	\$2,210,893.55

7/1/2015

Repair Type: Mill/Overlay

CEDAR STREET	129' E OF SPRAGUE ST	EAST ST ROTARY	86	289	1,027	\$20,536.89
COBBLER LANE	OAKDALE AV	123' N OF RIVER ST	80	272	847	\$16,943.11
EAST STREET	100' N OF GREENWOOD AV	ROTARY	64	223	1,115	\$22,290.00
EAST STREET	ROTARY	ROTARY	78	311	690	\$13,800.00
NEEDHAM STREET	200' E OF HILLSIDE RD	ROTARY	80	1,259	3,917	\$78,337.78
NEEDHAM STREET	90' E OF CHARLESBANK RD	200' E OF HILLSIDE RD	89	715	2,462	\$49,234.89
NEEDHAM STREET	RIVERSIDE DR	90' E OF CHARLESBANK RD	68	291	970	\$19,393.33
NEEDHAM STREET	ROTARY	ROTARY	78	242	323	\$6,461.33
NEEDHAM STREET	ROTARY	100' S OF LYNCH AV	79	435	1,352	\$27,048.00
SPRAGUE STREET	CEDAR ST	200' W OF CEDAR ST	84	212	965	\$19,297.33
WASHINGTON STREET	378' N OF COURT ST	COURT ST	72	390	1,214	\$25,256.75
			Repair Type Sum	4,638	14,881	\$298,599.41

Repair Type: Preventative Maintenance

AMES STREET	333' S OF PLEASANT ST	654' N OF HIGH ST	84	426	1,421	\$11,524.31
AMES STREET	654' N OF HIGH ST	HIGH ST	91	655	2,328	\$18,880.23
COURT STREET	BATES CT	CHURCH ST	82	388	1,594	\$12,929.68
COURT STREET	CHURCH ST	MARSH ST	83	913	3,145	\$25,506.94
COURT STREET	HIGH ST	BATES CT	83	331	1,657	\$13,438.27
COURT STREET	MARSH ST	WETHERBEE ST	84	748	2,659	\$21,563.23
HIGH STREET	AMES ST	BULLARD ST	83	395	1,493	\$12,626.99
			Repair Type Sum	3,856	14,297	\$116,469.65

Town of Dedham - Pavement Management Road Program

Name	From	To	PCI	Length (ft)	Area (sy)	Cost
Repair Type: <i>Reclamation Minor Collector and Local</i>						
ALPINE STREET	WINTHROP ST	CEDAR ST	44	500	1,110	\$44,401.56
CHESTNUT STREET	HIGH ST	MARTIN BATES ST	45	924	2,157	\$83,116.93
COUNTY STREET	CHESTNUT ST	BULLARD ST	40	642	1,499	\$60,082.78
GREENLodge STREET	100' S OF FLINTLOCKE LA	TRUMAN RD	44	424	941	\$36,274.06
KIELY ROAD	62' S OF HILLCREST AVENUE	PINE STREET	40	675	1,874	\$72,239.04
LINDALE AVENUE	NEEDHAM STREET	MARLBORO STREET	39	709	1,891	\$72,895.06
ORCHARD STREET	ELM ST	WILSON AV	41	806	2,148	\$82,781.57
PEARL STREET	HIGH ST	NORFOLK ST	41	279	807	\$31,095.76
PINE HILL ROAD	VALLEY ROAD	RIVERSIDE DRIVE	43	714	1,903	\$73,349.65
ROSEMARY ROAD	1000' W OF NEEDHAM STR	CUNNINGHAM ROAD	45	1,128	3,257	\$125,516.30
SAMOSSET ROAD	RIVERSIDE DRIVE	PINE HILL ROAD	39	350	934	\$37,443.51
WAMPATUCK ROAD	LOWDER ST	500' N OF LOWDER ST	41	500	1,111	\$42,821.00
WORTHINGTON STREET	WASHINGTON ST	SCHOOL ST	45	560	1,182	\$45,564.79
Repair Type Sum				8,211	20,817	\$807,582.01
Repair Type: <i>Routine Maintenance</i>						
BRIDGE STREET	261' N OF FULLER STREET	PINE STREET	92	1,181	3,411	\$2,702.64
BRIDGE STREET	41' N OF FULLER ST	450' N OF COMMON STREET	89	1,253	3,619	\$2,867.19
BRIDGE STREET	COMMON STREET	BRIDGE STREET	89	462	1,541	\$1,221.07
BUSSEY STREET	TOWNLINE	COLBURN ST	89	2,023	6,068	\$4,807.02
CEDAR STREET	QUINCY AV	129' E OF SPRAGUE ST	86	3,544	11,812	\$9,357.94
CEDAR STREET	RIVER ST	QUINCY AV	87	1,000	3,333	\$2,640.46
COLBURN STREET	BUSSEY ST	64' W OF BUSSEY ST	87	64	322	\$254.69
EAST STREET	EAST ST ROTARY	TOWN LINE	89	4,250	19,359	\$15,336.42
EAST STREET	WHITING AV	100' N OF GREENWOOD AV	87	4,575	15,249	\$12,080.80
EASTERN AVENUE	150' N OF MAH WAY	MAH WAY	87	140	404	\$320.17

Town of Dedham - Pavement Management Road Program

<i>Name</i>	<i>From</i>	<i>To</i>	<i>PCI</i>	<i>Length (ft)</i>	<i>Area (sy)</i>	<i>Cost</i>	
EASTERN AVENUE	155' S OF MAH WAY	560' S OF MAH WAY	87	406	1,263	\$1,000.41	
ELM STREET	27' S OF ROBINWOOD RD	RUSTCRAFT RD	87	906	3,827	\$3,031.50	
ELM STREET	STATE PORTION	27' S OF ROBINWOOD RD	86	1,264	5,620	\$4,451.91	
GREENLodge STREET	COLWELL DR	364' S OF COLWELL DR	87	364	1,780	\$1,409.79	
GREENLodge STREET	SPRAGUE ST	MARGARET RD	87	529	2,937	\$2,326.92	
HIGH STREET	MAVERICK STREET	200' E OF LINDEN PLACE	89	956	3,399	\$2,692.55	
MT. VERNON STREET	123' N OF WHITING AV	SANDERSON AV	86	2,390	7,966	\$6,311.07	
MT. VERNON STREET	RECREATION RD	CHARLES ST	86	373	1,242	\$983.67	
OAKDALE AVENUE	FAIRVIEW ST	COBBLER LANE	87	109	315	\$249.68	
OAKDALE AVENUE	WALNUT ST	FAIRVIEW ST	87	688	1,910	\$1,512.91	
REED STREET	PRATT AV	BORDER ST	86	1,145	3,052	\$2,418.06	
ROSEMARY ROAD	CUNNINGHAM ROAD	NEEDHAM STREET (W)	86	304	879	\$695.97	
RUSTCRAFT ROAD	628' W OF IVERSON WAY	CENTRAL AV	87	586	2,018	\$1,598.50	
RUSTCRAFT ROAD	890' W OF CENTRAL AV	ELM ST	87	2,918	10,051	\$7,962.50	
RUSTCRAFT ROAD	CENTRAL AV	890' W OF CENTRAL AV	87	890	3,066	\$2,428.58	
RUSTCRAFT ROAD	EAST ST	628' W OF IVERSON WAY	92	1,238	4,265	\$3,378.74	
SANDERSON AVENUE	MT VERNON ST	EAST ST	87	1,127	3,005	\$2,380.80	
SANDERSON AVENUE	RIVER ST	MT VERNON ST	87	1,534	5,112	\$4,050.08	
WEST STREET	BURGESS LANE	NEEDHAM TOWN LINE	89	1,481	4,277	\$3,388.54	
WEST STREET	COMMON STREET	965' N OF COMMON STREET	89	964	3,214	\$2,546.19	
				Repair Type Sum	38,661	134,315	\$106,406.77
				Year Grand Total	55,366	184,310	\$1,329,057.84

7/1/2016

Repair Type: Mill/Overlay

CHICKERING ROAD	950' N OF WASHINGTON ST	450' S OF CUL-DE-SAC	94	450	1,142	\$19,995.56	
				Repair Type Sum	450	1,142	\$19,995.56

Town of Dedham - Pavement Management Road Program

Name	From	To	PCI	Length (ft)	Area (sy)	Cost
Repair Type: Preventative Maintenance						
GREENLODGE STREET	364' S OF COLWELL DR	FOX MEADOW	84	1,024	3,412	\$44,987.19
GREENLODGE STREET	STOUGHTON RD	COLWELL DR	84	616	2,326	\$30,668.00
NEEDHAM STREET	1435' E OF TOWNLINE	TOWNLINE	80	1,435	4,784	\$63,072.61
Repair Type Sum				3,074	10,522	\$138,727.80
Repair Type: Reclamation Minor Collector and Local						
BORDER STREET	DALE ST	CEDAR ST	41	800	2,400	\$92,306.49
CHICKERING ROAD	450' S OF CUL-DE-SAC	CUL-DE-SAC	30	554	1,372	\$43,057.78
CHICKERING ROAD	WASHINGTON STREET	950' N OF WASHINGTON ST	29	950	2,253	\$73,888.89
COLWELL DRIVE	GREENLODGE ST	100' N OF SCOTT CIR	43	1,852	5,143	\$197,793.21
COMMONWEALTH AVENUE	100' S OF RIVERVIEW STREE	BRIDGE STREET	52	1,329	3,692	\$129,218.06
COMMONWEALTH AVENUE	145' S OF MARLBORO STRE	100' S OF RIVERVIEW ST	54	180	520	\$20,035.92
COMMONWEALTH AVENUE	MARLBORO STREET	145' S OF MARLBORO STREE	62	145	387	\$13,533.33
DURHAM ROAD	SPRAGUE ST	DEAD END	33	1,264	3,370	\$117,964.00
FISHER ROAD	AMES STREET	MAYNARD ROAD (E)	41	816	2,175	\$83,629.48
MAYNARD ROAD	FISHER ROAD	BINGHAM AVENUE	41	1,066	2,843	\$109,338.75
PAUL STREET	TURNER ST	ETNA RD	38	795	2,209	\$77,311.11
TAYLOR AVENUE	495' S OF DRESSER AV	ALDEN ST	42	413	1,102	\$42,383.89
TAYLOR AVENUE	CEDAR ST	DRESSER AV	41	974	2,598	\$99,924.66
TAYLOR AVENUE	DRESSER AV	495' S OF DRESSER AV	41	496	1,322	\$50,844.26
Repair Type Sum				11,634	31,387	\$1,151,229.83
Repair Type: Routine Maintenance						
BINGHAM AVENUE	56' E OF CREST AVENUE	MAYNARD ROAD	91	760	2,026	\$1,669.43
BUSSEY STREET	170' N OF HIGH ST	HIGH ST	91	172	1,224	\$1,008.39
CENTRAL AVENUE	TAFT LA	258' N OF RUSTCRAFT RD	91	360	1,679	\$1,383.27

Town of Dedham - Pavement Management Road Program

<i>Name</i>	<i>From</i>	<i>To</i>	<i>PCI</i>	<i>Length (ft)</i>	<i>Area (sy)</i>	<i>Cost</i>	
CENTRAL AVENUE	WENTWORTH ST	TAFT LA	91	985	4,376	\$3,606.46	
COBBLER LANE	123' N OF RIVER ST	RIVER ST	90	123	383	\$315.81	
COMMON STREET	240' N OF WEST STREET	900' N OF WEST STREET	91	980	2,524	\$2,079.82	
COMMON STREET	HIGH ST	BRIDGE ST	91	409	1,452	\$1,196.77	
DEPOT AVENUE	GREENWOOD AV	CEDAR ST	86	170	454	\$374.19	
EASTERN AVENUE	MAH WAY	155' S OF MAH WAY	90	156	450	\$370.38	
GAINSVILLE ROAD	38' N OF GLEN RD	GREENSBORO RD	86	377	920	\$758.33	
HIGH STREET	122' S OF HARRIS ST	250' N OF EASTERN AV	91	257	1,286	\$1,059.63	
HIGH STREET	150' E OF HARVARD ST	HARRIS ST	91	371	1,403	\$1,155.77	
HILLCREST AVENUE	BRIDGE STREET	14' W OF KIELY RD	91	670	1,787	\$1,472.32	
JERSEY STREET	1165' W OF EAST ST	CENTRAL AV	86	187	477	\$392.71	
KIELY ROAD	BRIDGE STREET	42' N OF HILLCREST AVENUE	91	707	2,041	\$1,682.14	
LOWDER STREET	SAWYER DR	HIGH ST	92	1,605	3,210	\$2,644.90	
MILTON STREET	WALNUT ST	150' S OF MYRTLE ST	91	588	4,114	\$3,390.10	
MONROE STREET	DEAD END	EAST ST	92	1,965	5,678	\$4,678.87	
NEEDHAM STREET	100' S OF LYNCH AV	CLAY BANK RD	92	1,268	3,803	\$3,133.74	
NEEDHAM STREET	CLAY BANK RD	1508' E OF TOWNLINE	92	1,114	3,341	\$2,753.27	
ODYSSEY LANE	EMMITT AV	CUL DE SAC	91	380	1,494	\$1,231.14	
PINE HILL ROAD	NEEDHAM STREET	VALLEY ROAD	91	568	1,514	\$1,247.95	
QUINCY AVENUE	WHTIING AV EXT	DALE ST	86	850	2,456	\$2,024.02	
SAVIN STREET	TURNER ST	CRANE ST	91	775	2,153	\$1,774.02	
WILDWOOD DRIVE	FAIRBANKS RD	CENTRAL ST	91	588	1,568	\$1,292.34	
ZOAR AVENUE	BRIDGE STREET	MORELAND AVENUE	91	714	2,062	\$1,699.05	
				<i>Repair Type Sum</i>	<i>17,095</i>	<i>53,874</i>	<i>\$44,394.82</i>
				<i>Year Grand Total</i>	<i>32,253</i>	<i>96,925</i>	<i>\$1,354,348.01</i>
				<i>Grand Total of All Years</i>	<i>129,963</i>	<i>406,116</i>	<i>\$4,894,299.40</i>

PAVEMENT MANAGEMENT
FY2015 - FY2017 ROAD PROGRAM



TOWN OF DEDHAM
Norfolk County
Massachusetts

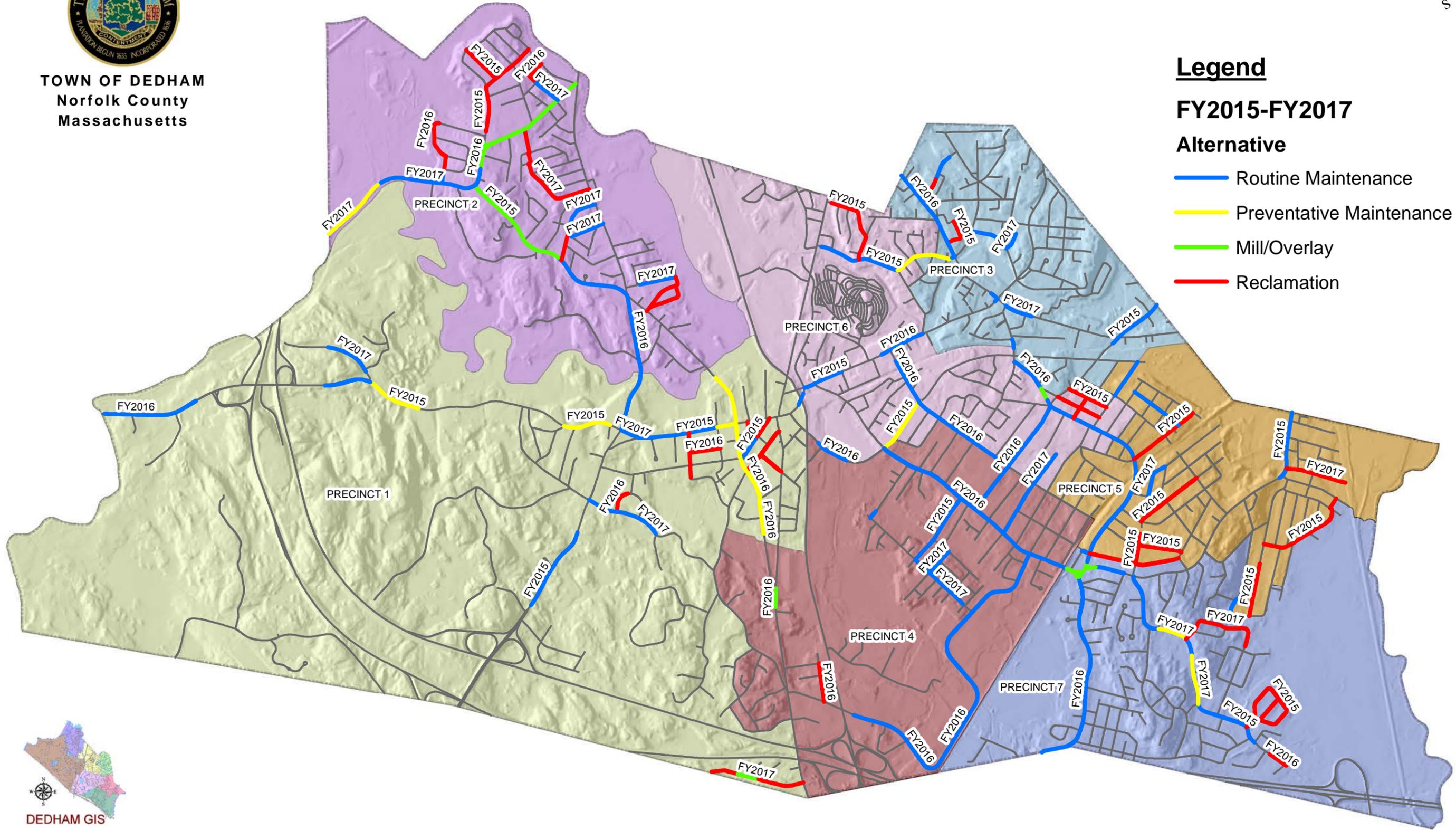


Legend

FY2015-FY2017

Alternative

- Routine Maintenance
- Preventative Maintenance
- Mill/Overlay
- Reclamation



DEDHAM GIS

This document is intended for
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1 inch = 2,000 feet

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PAVEMENT MANAGEMENT
FY2015 - FY2017 ROAD PROGRAM



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Norfolk County
Massachusetts

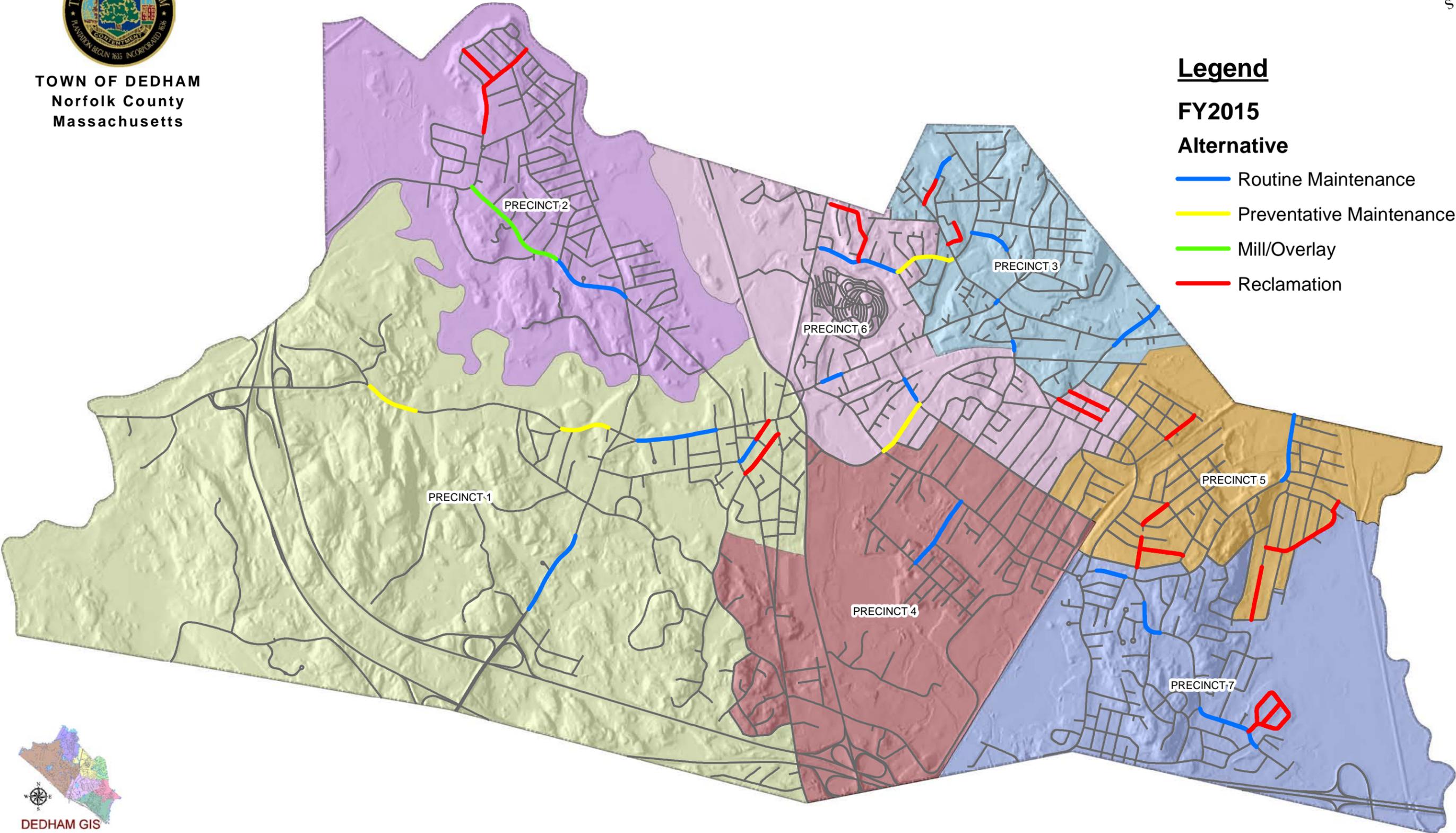


Legend

FY2015

Alternative

-  Routine Maintenance
-  Preventative Maintenance
-  Mill/Overlay
-  Reclamation



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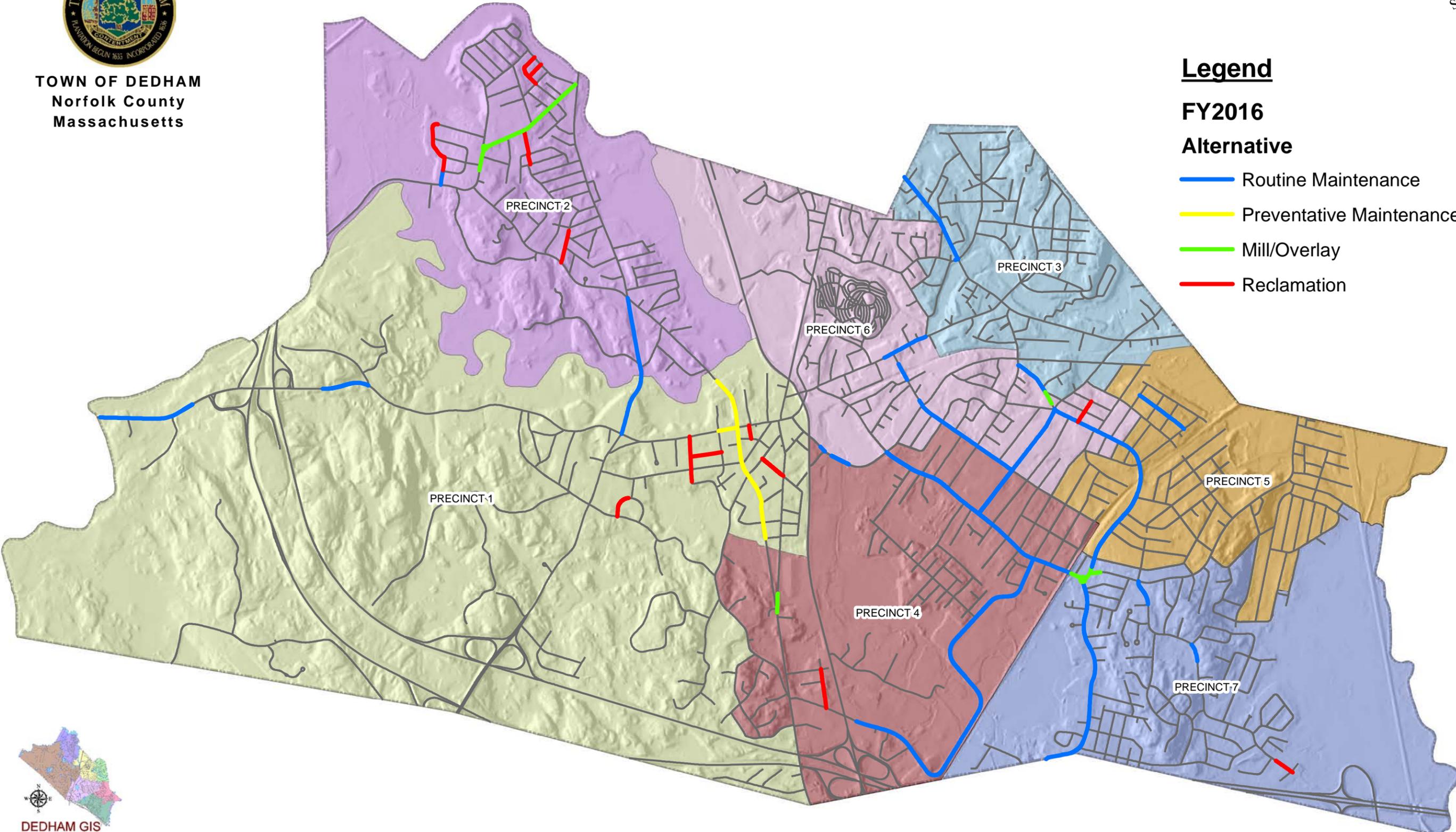


Legend

FY2016

Alternative

-  Routine Maintenance
-  Preventative Maintenance
-  Mill/Overlay
-  Reclamation



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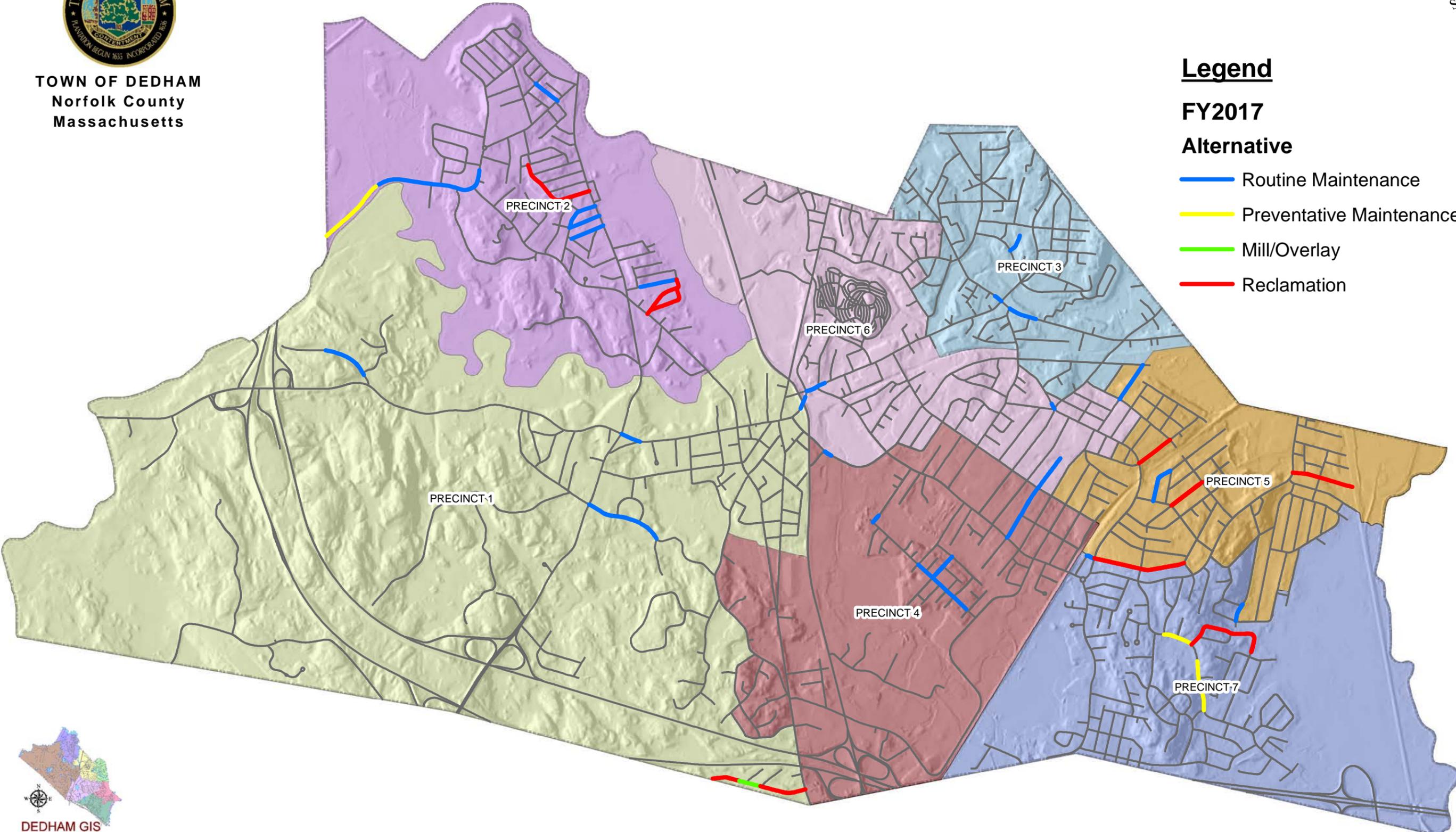


Legend

FY2017

Alternative

-  Routine Maintenance
-  Preventative Maintenance
-  Mill/Overlay
-  Reclamation



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