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DEPARTMENT OF INFRASTRUCTURE ENGINEERING

MEMORANDUM

TO: Nancy A. Baker, Acting Town Manager
Board of Selectmen

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

DATE: July 15, 2019

SUBJECT: Recommended Pavement Improvements for FY2020-FY2022

As part of the annual pavement management program, please find an analysis of the costs associated with the FY2019 Pavement Management road improvements which are currently being undertaken this contract year along with the recommended FY2020-FY2022 pavement improvements for review and consideration.

The FY2019 Recommended Pavement Improvements were presented to the Board and approved on March 27, 2018 as part of the continuing three year FY2019-FY2021 Recommended Pavement Management Improvements. A summary of the work as originally proposed and approved can be found in Table 1.

Table 1 – FY2019 Approved Road Improvements

Repair Type	Length in Feet	Cost
Reclamation	16,146	\$1,750,012.05
Mill and Overlay	6,862	\$370,316.38
Overlay	0	\$0
Preventative Maintenance	7,719	\$291,528.27
Routine Maintenance	29,400	\$63,061.61
Totals	60,127	\$2,474,918.31

Construction of the planned improvements began in July of 2018. Those roadways that were not completed by the end of 2017 were incorporated into the FY2018 improvements. The routine maintenance work was completed by Crack-Sealing, Inc., the preventative maintenance work was completed by All States Asphalt and the reclamation work was completed by Lorusso Corporation under the FY2019 Paving Contracts.

To date, we completed approximately 50 percent of the FY2019. There is approximately \$1,252,000 worth of roadwork remaining for FY2019. These roads are to be rehabilitated by reclamation. We will continue to work on the remaining FY19 roads before we start the FY20 roads. The cause of the Town not being able to complete all of the FY19 roads is due to a bid protest that the Town was involved in with the paving contractor from March through July 2018.

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

Table 2 – FY2019 Completed Improvements To Date

Repair Type	Length in Feet	Cost
Reclamation	8,107	\$878,204.76
Mill and Overlay	7,886	\$333,901.92
Overlay	0	\$0
Preventative Maintenance	0	\$0
Routine Maintenance	0	\$0
Totals	15,993	\$1,212,106.68

A summary of the estimated versus actual unit costs for FY2019 to date is shown below in Table 3.

Table 3 – FY2019 Units Costs To Date (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	\$30.35
Mill and Overlay	\$20.00	\$18.04
Overlay	\$15.00	-
Preventative Maintenance	\$12.00	-
Routine Maintenance	\$0.75	-

Based upon our favorable contract prices and oversight of the contract with in-house personnel, the Town was also able to complete the wholesale sidewalk replacement for a majority of the roads that have been reclaimed to date in FY2019. In total, the Town replaced approximately 6,420 linear feet of asphalt sidewalk.

The Town is now entering into our thirteenth year of Pavement Management and as a continuation of last year's FY2019-FY2021 Pavement Management Plan we have prepared new recommendations for FY2022.

As of December 31, 2018 our overall roadway network pavement condition index (PCI) was 88 which is up significantly from our initial PCI of 70 from twelve years ago. If the proposed improvements are approved and implemented we can anticipate maintaining the roadway PCI at 88 by the end of FY2022.

The funding scenario for the recommended FY2020 – FY2022 pavement improvements is based on the assumption of a local funding level of \$900,000 and utilizing approximately \$650,000 from State Chapter 90 funds for year 1 and a local funding level of \$700,000 and utilizing approximately \$650,000 from State Chapter 90 funds for years 2 & 3. 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 identified in the following year's program. As of 12/31/18, the Town's current backlog of repairs is \$5,858,116.97.

The recommended improvements proposed in this document are associated with asphalt roadway 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 are on target to successfully complete the FY2019 Pavement Management Plan approved last year within the available budget. Through the diligent efforts of both departments we believe we are 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 88 from the initial rating of 70 twelve years ago.

The proposed work throughout Town over the course of FY2020-FY2022 is summarized in the attached table and maps. Please review the attached information and provide us with any questions or comments.

Cc: Nathan S. Buttermore, 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
7/1/2019						
Repair Type: Mill/Overlay						
COUNTRY CLUB ROAD	1786' N OF GROVE STREET	330' N OF SCHOOL MASTER	65	2,283	5,582	\$111,632.89
COUNTRY CLUB ROAD	GROVE STREET	1786' N OF GROVE STREET	71	1,786	4,764	\$95,274.67
LOWER EAST STREET	TOWNLINE	255' W OF WASHINGTON ST	69	1,329	3,691	\$73,827.78
RIVER STREET	180' W OF MILTON ST	CEDAR ST	69	1,838	5,310	\$106,200.73
STOUGHTON ROAD	SPRAGUE ST	GREENLODGE ST	69	1,251	3,615	\$72,303.11
Repair Type Sum				8,488	22,962	\$459,239.18
Repair Type: Reclamation Minor Collector and Local						
ARROWHEAD LANE	CENTRAL AV	DEAD END	51	405	1,125	\$39,375.00
BEECH STREET	CEDAR ST	DRESSER AV	52	667	1,854	\$64,876.39
BEECH STREET	DRESSER AV	DEAD END	39	521	1,446	\$50,613.89
BRIARWOOD LANE	GREENLODGE ST	DEAD END	40	452	1,205	\$42,186.67
CENTRAL AVENUE	DEAD END	ARROWHEAD LA	38	523	2,323	\$81,293.33
ENDICOTT STREET	EAST ST	722' S of EAST ST	41	722	2,005	\$70,175.00
FRESNO ROAD	GREENBORO RD	DEAD END	44	320	854	\$29,876.00
GREENSBORO ROAD	100' E OF GLEN RD	68' W OF GLEN RD	54	169	431	\$15,098.22
GREENSBORO ROAD	68' W OF GLEN RD	603' N OF GAINSVILLE RD	45	183	467	\$16,359.39
GREENSBORO ROAD	FRESNO RD	100' E OF GLEN RD	45	355	908	\$31,788.56
LAMOINE STREET	96' E OF EAST ST	DEAD END	43	226	628	\$21,962.50
LAMOINE STREET	EAST ST	96' E OF EAST ST	62	97	269	\$9,411.11
MADISON STREET	EAST ST	DEAD END	44	692	1,923	\$67,287.50
MARGARET ROAD	GREENLODGE ST	DEAD END	46	279	807	\$28,240.33
PINE GROVE AVENUE	UPLAND RD	DEAD END	27	439	926	\$32,407.67
PRESTON STREET	75' E OF EAST ST	DEAD END	36	582	1,616	\$56,544.44
PURITAN LANE	EAST ST	CUL DE SAC	32	686	2,053	\$66,694.44

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>
QUARRY ROAD	CRANBERRY LA	VINCENT RD	48	593	1,648	\$57,672.22
SMITH CIRCLE	GREENLODGE ST	CUL DE SAC	43	295	1,636	\$36,661.33
STEPHEN LANE	GREENLODGE ST	CUL DE SAC	46	424	1,773	\$41,251.39
THOMPSON STREET	EAST ST	DEAD END	39	815	2,174	\$76,094.67
WEST JERSEY STREET	CENTRAL AV	DEAD END	38	632	1,755	\$61,415.28
Repair Type Sum				<i>10,076</i>	<i>29,825</i>	<i>\$997,285.33</i>
Repair Type: Routine Maintenance						
CLEVELAND STREET	BIRCH ST	LEONARD ST	95	1,245	3,874	\$2,905.70
COLBURN STREET	CURVE ST	MAVERICK ST	86	1,292	3,445	\$2,584.11
COLBURN STREET	DEAD END	HYDE PARK ST LEG	84	675	2,250	\$1,953.25
COLONIAL DRIVE	537' N OF BUSSEY ST	THOMAS ST	86	581	1,097	\$822.45
COLONIAL DRIVE	BUSSEY ST	537' N OF BUSSEY ST	90	537	1,552	\$1,164.37
CONGRESS PLACE	BUSSEY ST	670' N OF BUSSEY ST	95	669	1,339	\$1,003.95
EMMETT AVENUE	COLBURN ST	ODYSSEY LA	86	844	2,345	\$1,758.96
EMMETT AVENUE	ODYSSEY LA	SAWMILL LA	86	668	1,484	\$1,113.26
GREENHOOD STREET	COLBURN ST	GARFIELD RD	86	748	1,828	\$1,371.33
GREENHOOD STREET	COLONIAL DR	COLBURN ST	95	894	2,284	\$1,712.93
HARDING TERRACE	COLBURN ST	DADHAM BLVD	86	1,123	2,994	\$2,245.60
HARDING TERRACE	DEDHAM BLVD	DEAD END	95	1,167	2,723	\$2,042.40
LEONARD STREET	DEDHAM BLVD	BIRCH SR	95	1,646	5,119	\$3,839.50
LEONARD STREET EXTENSIO	BIRCH ST	195' S of BIRCH ST	95	195	476	\$357.13
STAFFORD STREET	HARDING TERR	EMMITT AV	86	375	999	\$749.60
WHITEHALL STREET	WARE ST	GREENHOOD ST	95	1,994	5,317	\$3,988.00
Repair Type Sum				<i>14,653</i>	<i>39,129</i>	<i>\$29,612.54</i>
Year Grand Total				33,217	91,916	\$1,486,137.05

7/1/2020

Town of Dedham - Pavement Management Road Program

Name	From	To	PCI	Length (ft)	Area (sy)	Cost
Repair Type: Preventative Maintenance						
COMMON STREET	36' W OF HAVEN ST	1155' W OF WEST ST	84	2,161	7,202	\$86,428.00
GREENLodge STREET	MARGARET RD	STOUGHTON RD	81	830	2,860	\$34,314.93
GREENLodge STREET	SPRAGUE ST	MARGARET RD	81	529	2,056	\$24,672.67
MILTON STREET	140' S OF RIVER ST	TOWNLINE	84	1,067	3,911	\$46,934.80
MILTON STREET	150' S OF MYRTLE ST	200' N OF RIVER ST	84	1,650	6,598	\$79,180.80
MILTON STREET	200' N OF RIVER ST	140' S OF RIVER ST	68	389	2,552	\$30,624.93
MILTON STREET	WALNUT ST	150' S OF MYRTLE ST	84	588	4,114	\$49,366.80
RIVER STREET	TOWNLINE	180' W OF MILTON ST	84	1,219	4,604	\$55,252.27
WEST STREET	COMMON STREET	965' N OF COMMON STREET	77	964	3,214	\$38,568.00
WESTFIELD STREET	2530' E OF CUL-DE-SAC	CUL-DE-SAC	59	2,530	4,705	\$53,973.33
Repair Type Sum				11,926	41,817	\$499,316.53
Repair Type: Reclamation Minor Collector and Local						
ADAMS STREET	SHIRETOWN RD	50' E OF NETTA RD	42	474	1,263	\$44,221.33
BENJAMIN STREEET	ASHCROFT ST	DALE ST	48	630	1,819	\$63,659.56
EDISON AVENUE	FULTON ST	MORSE AV	41	700	2,022	\$70,767.67
LILLY LANE	ADAMS ST	DEAD END	39	566	1,510	\$52,864.00
MADISON STREET	CEDAR ST	MT VERNON ST	58	1,631	4,894	\$171,297.00
MORSE AVENUE	EDISON AV	FENCE	41	186	497	\$17,397.33
NETTA ROAD	ADAMS ST	DEAD END	39	473	1,261	\$44,146.67
REED STREET	PRATT AV	BORDER ST	74	1,145	3,052	\$106,829.33
SHIRETOWN ROAD	CIRCUIT RD	DEAD END	46	1,210	3,226	\$112,905.33
WILLIAMS AVENUE	ASHCROFT ST	DALE ST	75	676	1,876	\$65,673.61
Repair Type Sum				7,690	21,422	\$749,761.83
Repair Type: Routine Maintenance						

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>
ALLINDALE WAY	VILLAGE AV	WAMPATUCK RD	90	407	994	\$745.62
AMES STREET	333' S OF PLEASANT ST	654' N OF HIGH ST	92	426	1,421	\$1,065.75
AMES STREET	654' N OF HIGH ST	HIGH ST	92	655	2,328	\$1,746.01
BEAR HILL	CHUTE RD	DEAD END	91	284	441	\$330.98
CHESTNUT STREET	HIGH ST	MARTIN BATES ST	95	924	2,157	\$1,617.70
CHICKERING ROAD	WASHINGTON STREET	CUL-DE-SAC	94	1,954	4,483	\$3,255.83
CHURCH STREET	FRANKLIN SQ	COURT ST	81	522	1,217	\$912.80
CHURCH STREET	HIGH ST	FRANKLIN SQUARE	93	516	1,204	\$903.35
COUNTRY CLUB ROAD	330' N OF SCHOOL MASTER	337' E OF THE TOWN LINE	90	1,201	2,668	\$2,001.17
COUNTRY CLUB ROAD	337' E OF THE TOWN LINE	TOWN LINE	77	337	750	\$562.33
COUNTY STREET	CHESTNUT ST	BULLARD ST	95	642	1,499	\$1,124.20
COURT STREET	BATES CT	CHURCH ST	92	388	1,594	\$1,195.72
COURT STREET	CHURCH ST	MARSH ST	92	913	3,145	\$2,358.84
COURT STREET	HIGH ST	BATES CT	92	331	1,657	\$1,242.75
COURT STREET	MARSH ST	WETHERBEE ST	92	748	2,659	\$1,994.13
EASTERN AVENUE	HIGH ST	50' N OF BRYANT ST	75	342	2,470	\$1,852.50
FAIR OAK ROAD	CHICKERING ROAD	DEAD END	94	449	947	\$710.44
FRANKLIN SQUARE	SCHOOL ST	CHURCH ST	84	283	1,256	\$942.00
GARDEN WAY	PACELLA DR	CUL DE SAC	95	310	1,230	\$619.60
GLENRIDGE ROAD	COMMON STREET	HAVEN STREET	93	1,139	2,784	\$2,087.98
HIGH STREET	250' N OF EASTERN AV	EASTERN AV	91	248	1,239	\$928.88
HIGH STREET	EASTERN AV	MAPLE PL	91	505	3,255	\$2,441.32
HIGH STREET	MAPLE PL	AMES ST	91	644	2,434	\$1,825.52
HIGHLAND STREET	RICHARDS ST	WASHINGTON ST	90	4,677	11,433	\$8,574.50
LEE TERRACE	ORCHARD ST	DEAD END	94	458	967	\$725.33
LOWDER STREET	570' N OF HIGHLAND ST	SAWYER DR	75	1,073	2,146	\$1,609.50
LOWDER STREET	HIGHLAND ST	570' N OF HIGHLAND ST	93	569	1,265	\$948.83

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>
MARION STREET	WASHINGTON ST	WILLOW ST	90	377	1,090	\$817.70
MARSH STREET	WASHINGTON ST	COURT ST	82	508	1,130	\$847.17
MARTIN BATES STREET	HIGHLAND ST	CHESTNUT ST	73	1,192	2,385	\$1,788.45
NORFOLK STREET	50' E OF PEARL ST	COURT ST	94	288	641	\$480.62
NORFOLK STREET	CHURCH ST	50' E OF PEARL ST	94	135	571	\$428.13
ORCHARD STREET	ELM ST	WILSON AV	96	806	2,148	\$1,611.00
PACELLA DRIVE	HIGHLAND ST	FAY RD	96	2,042	5,218	\$3,913.45
PEARL STREET	HIGH ST	NORFOLK ST	94	279	807	\$605.15
POND FARM ROAD	CHICKERING ROAD	DEAD END	94	543	1,388	\$1,041.31
PROSPECT STREET	WILLOW ST	WASHINGTON ST	93	340	832	\$624.07
RICHARDS STREET	COURT ST	HIGHLAND ST	76	1,088	2,901	\$2,175.40
RODMAN PLACE	VILLAGE AV	CUL DE SAC	61	250	582	\$395.20
SANDY VALLEY ROAD	179' S OF DEAD END	CUL DE SAC	73	524	815	\$611.57
SANDY VALLEY ROAD	300' S OF DAVE WAY	179' S OF DEAD END	74	1,189	1,981	\$1,485.88
SANDY VALLEY ROAD	HIGHLAND ST	300' S OF DAVE WAY	59	1,502	3,171	\$2,378.33
SCHOOL STREET	WASHINGTON ST	COURT ST	93	1,066	2,841	\$2,131.00
SPRUCE STREET	WASHINGTON ST	WILLOW ST	76	506	1,068	\$800.69
STONEY LEA ROAD	SANDY VALLEY RD	709' E OF STONEY LEA RD	76	3,557	7,508	\$5,631.13
VILLAGE AVENUE	CHESTNUT ST	HIGH ST	90	1,894	4,629	\$3,471.60
VILLAGE AVENUE	COURT ST	CHESTNUT ST	90	1,050	2,915	\$2,186.46
WAMPATUCK ROAD	LOWDER ST	LOWDER ST	94	1,203	2,673	\$2,005.00
WASHINGTON STREET	HIGH ST	SCHOOL ST	89	303	2,557	\$1,917.73
WASHINGTON STREET	SCHOOL ST	BRYANT ST	84	356	1,821	\$1,365.82
WEST STREET	BURGESS LANE	NEEDHAM TOWN LINE	76	1,481	4,277	\$3,207.97
WILLOW STREET	SPRUCE ST	PROSPECT ST	84	878	2,537	\$1,902.98
WILSON AVENUE	WASHINGTON ST	DEAD END	79	894	2,384	\$1,788.00
WORTHINGTON STREET	WASHINGTON ST	SCHOOL ST	94	560	1,182	\$886.83

Town of Dedham - Pavement Management Road Program

Name	From	To	PCI	Length (ft)	Area (sy)	Cost	
				Repair Type Sum	45,754	121,697	\$90,822.22
				Year Grand Total	65,371	184,936	\$1,339,900.58

1/1/2022

Repair Type: Mill/Overlay

EAST STREET	CLARK ST	WHITING AV	76	1,254	4,180	\$83,600.00	
EAST STREET	WHITING AV	100' N OF GREENWOOD AV	78	4,575	15,249	\$304,986.67	
HIGH STREET	122' S OF HARRIS ST	250' N OF EASTERN AV	59	257	1,286	\$25,720.00	
MT. VERNON STREET	JEFFERSON ST	GRANT AV	69	694	2,620	\$52,397.78	
NELSON DRIVE	SPRAGUE ST	CARLISLE RD	73	478	1,327	\$26,538.89	
PINE STREET	BRIDGE STREET	79' W OF KIELY ROAD	77	1,726	5,369	\$107,370.67	
				Repair Type Sum	8,983	30,031	\$600,614.01

Repair Type: Reclamation Minor Collector and Local

BERLIN STREET	DEAD END	GREENHOOD ST	43	454	1,312	\$45,924.67	
BIRCH STREET	DEDHAM BLVD	ROWAN ST	38	845	2,629	\$92,011.11	
BIRCH STREET	ROWAN ST	DEAD END	38	370	1,152	\$40,320.92	
EVERGREEN WAY	MAVERICK ST	CUL DE SAC	48	260	707	\$21,200.67	
GAFFNEY ROAD	CURVE ST	DEAD END	46	996	2,876	\$100,676.33	
GARFIELD ROAD	DEAD END	HARDING TERR	51	982	2,838	\$99,331.56	
RIDGE AVENUE	OAK ST	DEAD END	41	613	1,702	\$59,558.33	
SCHILLER ROAD	OAK ST	DEAD END (S)	40	761	2,113	\$73,937.50	
SCHILLER ROAD	TOWNLINE	OAK ST	86	124	344	\$12,055.56	
WARE STREET	DEAD END (E)	DEAD END (W)	41	1,379	3,678	\$128,734.67	
				Repair Type Sum	6,784	19,352	\$673,751.32

Repair Type: Routine Maintenance

ARLINGTON ROAD	BRIDGE STREET	DEAD END	90	804	1,877	\$1,407.70
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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>
BAYARD STREET	RIVERSIDE DRIVE	VINE ROCK STREET	94	795	2,121	\$1,590.40
BEACON STREET	BRIDGE STREET	COMMONWEALTH AVENUE	96	815	2,173	\$1,629.80
BERKELEY ROAD	BRIDGE STREET	ARLINGTON ROAD	88	904	2,410	\$1,807.80
COMMONWEALTH AVENUE	MARLBORO STREET	BRIDGE STREET	96	1,654	4,595	\$3,446.04
FAIRFIELD STREET	BRIDGE STREET	COMMONWEALTH AVENUE	96	911	2,631	\$1,973.40
FISHER ROAD	AMES STREET	MAYNARD ROAD (E)	97	816	2,175	\$1,631.00
GRANDFIELD STREET	RIVERSIDE DRIVE	VINE ROCK STREET	94	854	2,278	\$1,708.40
HILLSIDE ROAD	NEEDHAM STREET	VINE ROCK STREET	79	1,271	3,389	\$2,541.80
KIELY ROAD	42' N OF HILLCREST AVE	PINE STREET	94	780	2,168	\$1,625.63
KIELY ROAD	BRIDGE STREET	42' N OF HILLCREST AVENUE	86	707	2,041	\$1,530.97
LINDALE AVENUE	NEEDHAM STREET	MARLBORO STREET	96	709	1,891	\$1,418.60
MARLBORO STREET	LINDALE AVENUE	MASSACHUSETTS AVENUE (96	234	677	\$507.65
MARLBORO STREET	MASSACHUSETTS AVENUE (LINDALE AVENUE	96	682	1,893	\$1,420.00
MASSACHUSETTS AVENUE	RIVERVIEW STREET	DEAD END	96	1,728	4,607	\$3,455.00
MAYNARD ROAD	FISHER ROAD	BINGHAM AVENUE	97	1,066	2,843	\$2,132.40
NEEDHAM STREET	100' S OF LYNCH AV	CLAY BANK RD	88	1,268	3,803	\$2,852.10
NEEDHAM STREET	1435' E OF TOWNLINE	TOWNLINE	95	1,435	4,784	\$3,587.75
NEEDHAM STREET	1508' E OF TOWNLINE	1435' E OF TOWNLINE	95	73	187	\$139.92
NEEDHAM STREET	200' E OF HILLSIDE RD	ROTARY	82	1,259	3,917	\$2,937.67
NEEDHAM STREET	90' E OF CHARLESBANK RD	200' E OF HILLSIDE RD	93	715	2,462	\$1,846.31
NEEDHAM STREET	CLAY BANK RD	1508' E OF TOWNLINE	79	1,114	3,341	\$2,505.83
NEEDHAM STREET	RIVERSIDE DR	90' E OF CHARLESBANK RD	93	291	970	\$727.25
NEEDHAM STREET	ROTARY	100' S OF LYNCH AV	95	435	1,352	\$1,014.30
NEEDHAM STREET	ROTARY	ROTARY	95	242	323	\$242.30
OAK TREE ROAD	NEEDHAM STREET	VALLEY ROAD	88	550	1,465	\$1,099.00
PINE HILL ROAD	NEEDHAM STREET	VALLEY ROAD	92	568	1,514	\$1,135.80
PINE HILL ROAD	VALLEY ROAD	RIVERSIDE DRIVE	88	714	1,903	\$1,427.60

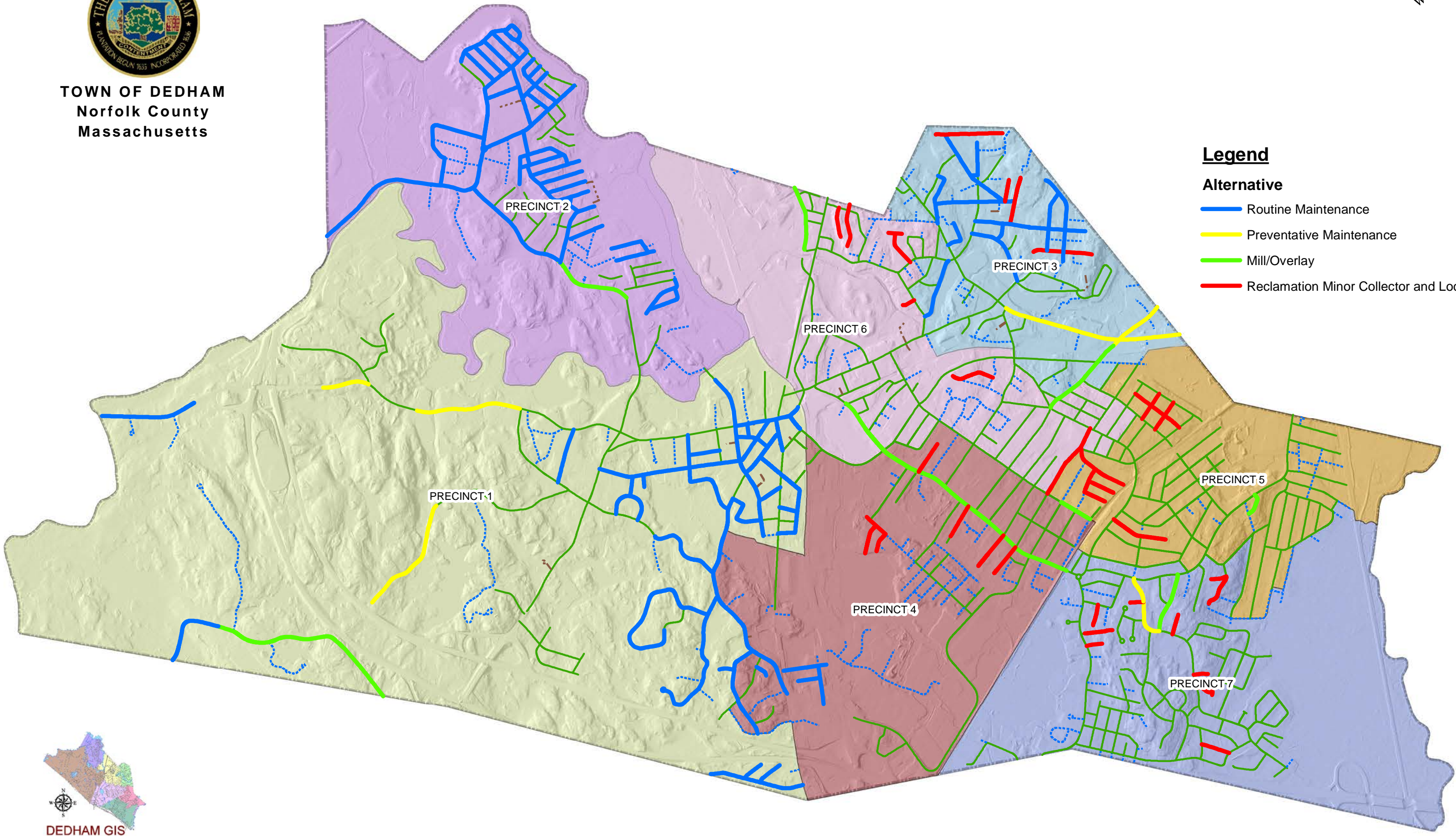
Town of Dedham - Pavement Management Road Program

<i>Name</i>	<i>From</i>	<i>To</i>	<i>PCI</i>	<i>Length (ft)</i>	<i>Area (sy)</i>	<i>Cost</i>
PINE STREET	79' W OF KIELY ROAD	NEEDHAM STREET	90	2,367	7,364	\$5,522.67
RIVERDALE ROAD	HILLSIDE ROAD	VINE ROCK STREET	94	715	1,907	\$1,430.00
RIVERSIDE DRIVE	37' N OF VINE ROCK STREET	1842' W OF VINE ROCK STRE	88	1,805	4,814	\$3,610.80
RIVERSIDE DRIVE EAST	RIVERSIDE DR (S)	RIVERSIDE DR (N)	86	585	1,561	\$1,170.95
RIVERVIEW STREET	BRIDGE STREET	COMMONWEALTH AVENUE	88	1,040	2,774	\$2,080.40
ROSEMARY ROAD	880' W OF VINE ROCK STRE	CUNNINGHAM RD (S)	88	1,245	3,596	\$2,696.63
ROSEMARY ROAD	CUNNINGHAM RD (S)	NEEDHAM STREET (W)	85	304	879	\$658.88
ROSEMARY ROAD	NEEDHAM STREET (E)	880' W OF VINE ROCK STREE	78	883	2,453	\$1,839.38
SAMOSET ROAD	RIVERSIDE DRIVE	PINE HILL ROAD	96	350	934	\$700.60
SHORT STREET	VIOLET AVENUE	KIELY ROAD	88	241	590	\$442.19
TRIMOUNT STREET	RIVERSIDE DRIVE	VINE ROCK STREET	94	792	2,112	\$1,584.20
VALLEY ROAD	HILLSIDE ROAD	RIVERSIDE DRIVE	96	722	1,925	\$1,444.00
VINE ROCK STREET	275' E OF NEEDHAM STREE	RIVERSIDE DRIVE (W)	96	938	2,240	\$1,680.23
VINE ROCK STREET	NEEDHAM STREET	275' E OF NEEDHAM STREET	96	267	623	\$467.25
VINE ROCK STREET	RIVERSIDE DRIVE (W)	RIVERSIDE DRIVE (E)	94	1,175	3,132	\$2,349.20
VIOLET AVENUE	COMMONWEALTH AVENUE	50' W OF SHORT STREET	86	220	587	\$440.00
WOODLAWN STREET	RIVERSIDE DRIVE	VINE ROCK STREET	88	817	2,089	\$1,566.68
ZOAR AVENUE	BRIDGE STREET	BROOKSIDE AV	94	163	470	\$352.30
ZOAR AVENUE	BROOKSIDE AV	MORELAND AVENUE	88	551	1,592	\$1,194.05
<i>Repair Type Sum</i>				<i>38,573</i>	<i>107,430</i>	<i>\$80,572.83</i>
Year Grand Total				<i>54,339</i>	<i>156,813</i>	<i>\$1,354,938.16</i>
Grand Total of All Years				<i>152,926</i>	<i>433,665</i>	<i>\$4,180,975.79</i>

PAVEMENT MANAGEMENT
FY2020 - FY2022 ROAD PROGRAM



TOWN OF DEDHAM
Norfolk County
Massachusetts



Legend

- Alternative**
- Routine Maintenance
 - Preventative Maintenance
 - Mill/Overlay
 - Reclamation Minor Collector and Local



DEDHAM GIS

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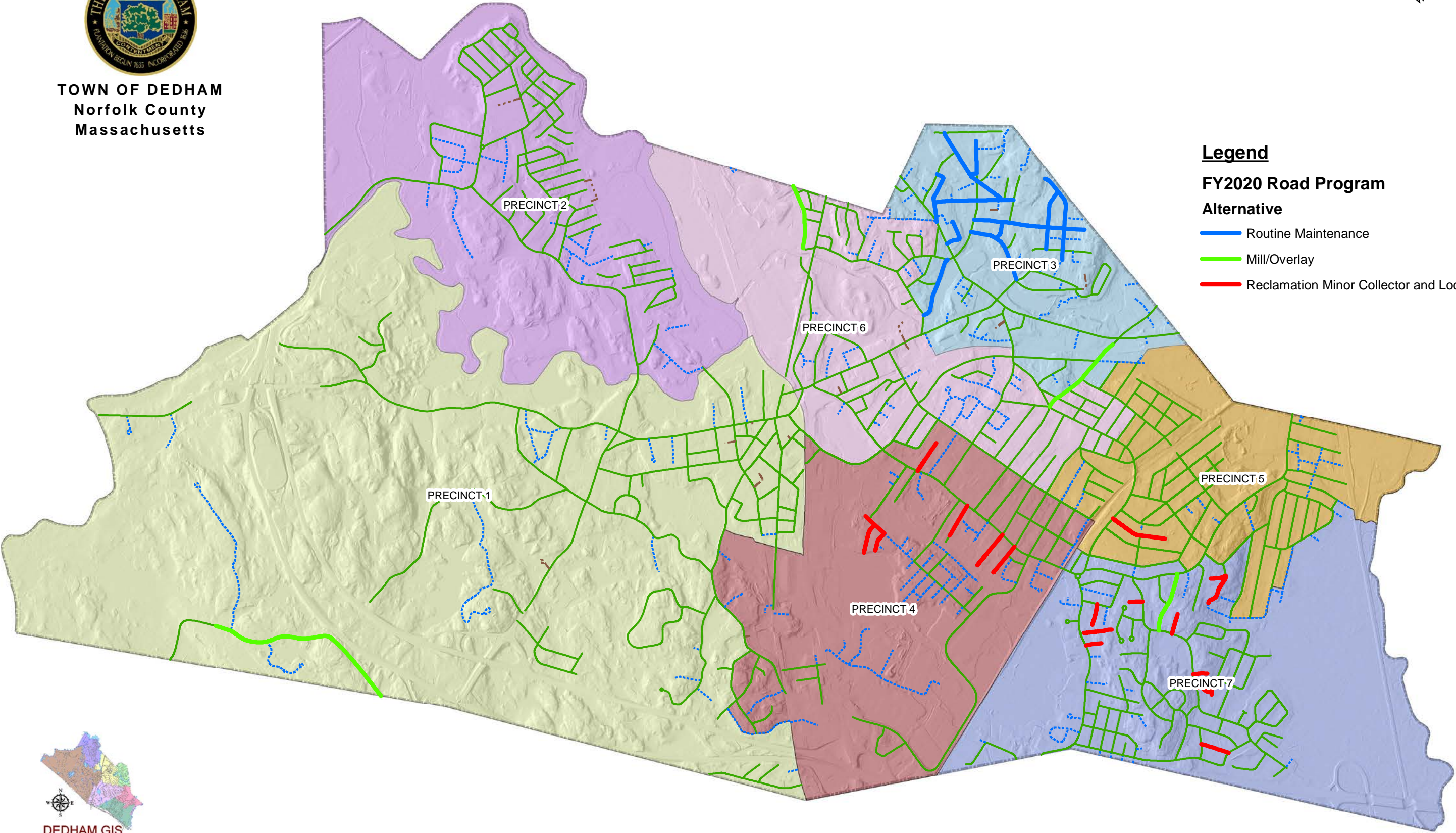
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PAVEMENT MANAGEMENT
FY2020 - FY2022 ROAD PROGRAM



TOWN OF DEDHAM
Norfolk County
Massachusetts



Legend

FY2020 Road Program

Alternative

- Routine Maintenance
- Mill/Overlay
- Reclamation Minor Collector and Local



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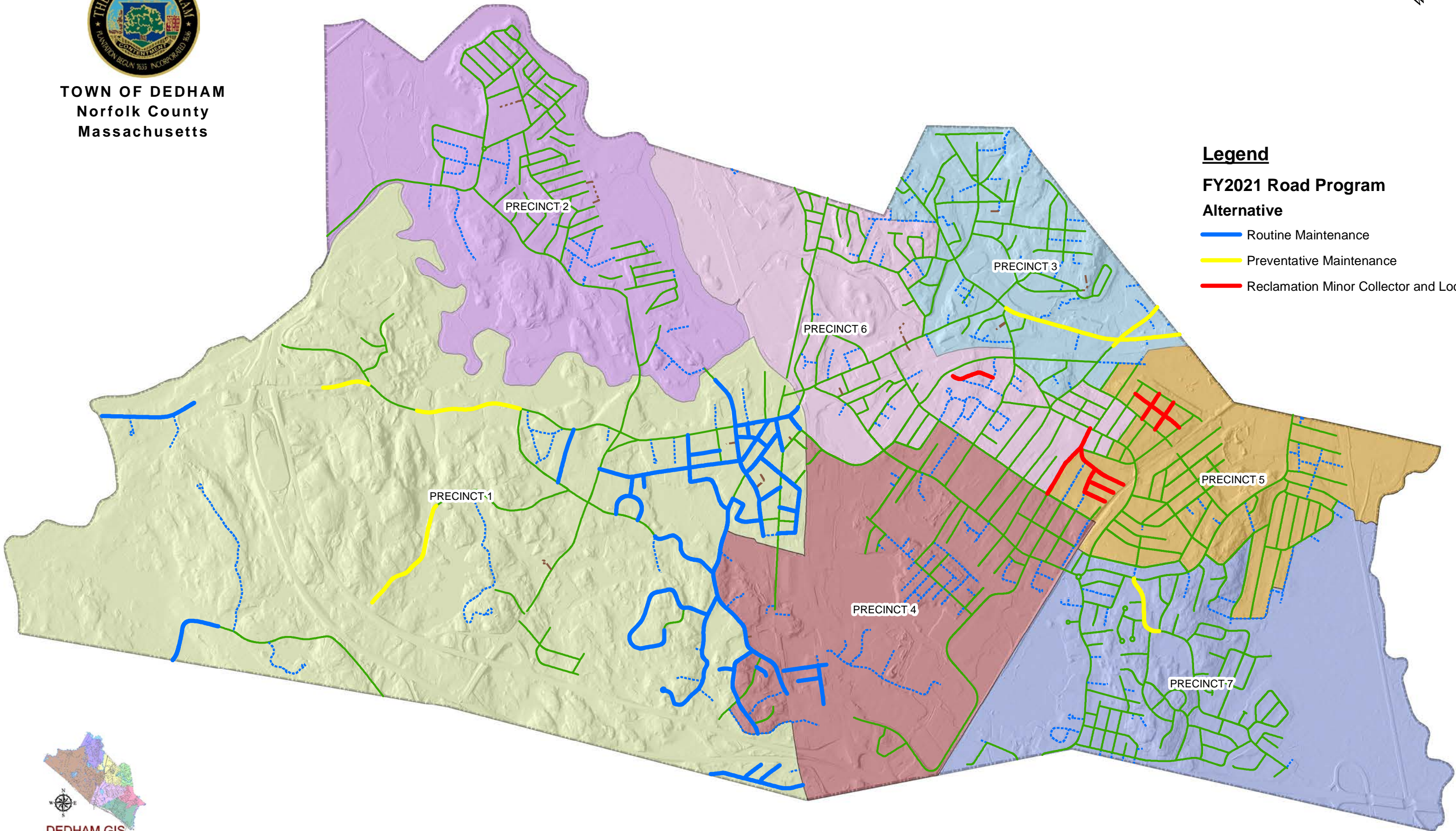
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PAVEMENT MANAGEMENT
FY2020 - FY2022 ROAD PROGRAM



TOWN OF DEDHAM
Norfolk County
Massachusetts



Legend

FY2021 Road Program

Alternative

- Routine Maintenance
- Preventative Maintenance
- Reclamation Minor Collector and Local



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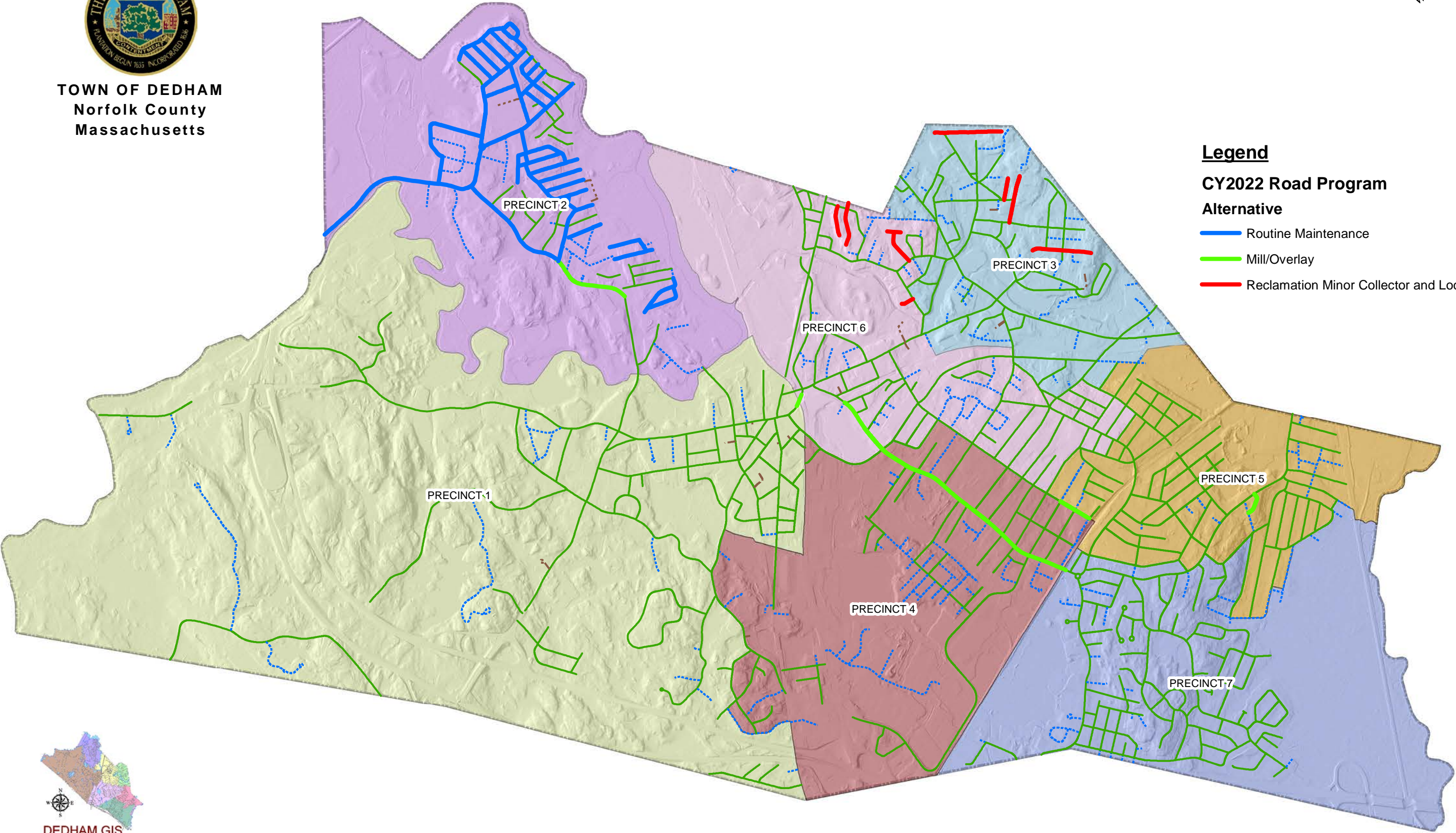
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PAVEMENT MANAGEMENT
FY2020 - FY2022 ROAD PROGRAM



TOWN OF DEDHAM
Norfolk County
Massachusetts



Legend

CY2022 Road Program

Alternative

- Routine Maintenance
- Mill/Overlay
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