TOWN OF BARNSTABLE MASSACHUSETTS

FY 2017 CADITAL BUDGET

FY 2017 FY 2021 CADITAL IMPROVEMENTS PLAN

(P)
government finance officers association Distinguished
Budget Presentation
A ward PRESENTED TO
Town of Barnstable
Massachusetts
For the Fiscal Year Beginning
July 1, 2015
Affry R. Ener
Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) has presented a Distinguished Budget Award to the Town of Barnstable for the fiscal year beginning July 1, 2015. The award is the highest form of recognition in governmental budgeting. In order to receive this award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device. This is the **fifteenth consecutive year** that the Town of Barnstable has been presented with this prestigious award.

The criterion on which the award for fiscal year 2016 was based is that which has been used as a guide in preparing the budget for fiscal year 2017. Therefore, it is my belief that the Capital and Operating budgets presented for fiscal year 2017 conform to program requirements, and I will submit them to GFOA to determine their eligibility for another award. My Staff, Mark Milne, Finance Director, and Robert O'Brien, Budget Director, are to be congratulated for their parts in this and the previous fourteen awards.

Thomas K. Lynch Town Manager

Front Cover Photo: Early Learning Center at Hyannis West Elementary School under construction **Back Cover Photo:** Sandy Neck - Installing sand to repair erosion on beach



The Town of Barnstable Office of Town Manager

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Thomas K. Lynch, Town Manager Tom.lynch@town.barnstable.ma.us Mark S. Ells, Assistant Town Manager mark.ells@town.barnstable.ma.us

TO:	The Honorable Members of the Town Council
FROM:	Thomas K. Lynch, Town Manager
RE:	FY 2017 Capital Budget and FY 2017 – FY 2021 Capital Improvements Plan
DATE:	March 24, 2016

The governing regulations for the Town of Barnstable's Capital Improvements Program are encompassed in Section 6-5 of the Town Charter and state the following:

- a) Preparation. The Town Manager shall, in conjunction with any committee established for such purpose, annually submit a capital improvements program to the Town Council at least thirty days prior to the date for submission of the operating budget; unless some other time is provided by ordinance.
- b) Contents. The capital improvements plan shall include: (1) a clear summary of its contents; (2) an itemization of all capital improvements, including those of the school department, proposed to be undertaken during the next five fiscal years with supporting data; (3) cost estimates, methods of financing, and recommended time schedules; and (4) the estimated annual cost of the operating and maintaining the facilities included.
- c) Public Hearing. The Town Council shall publish in a newspaper of general circulation in the Town a summary of the capital improvements plan and a notice stating: (1) the times and places where entire copies of the capital improvements plan are available for inspection by the public; and (2) the date, time, and place not less than fourteen days after such publication, when a public hearing on said plan will be held by the Town Council.
- d) Adoption. At any time after the public hearing but before the first day of the last month of the current fiscal year, the Town Council shall by resolution adopt the capital improvements plan with or without amendment, provided that each amendment must be voted separately and then any increase in the capital improvements plan, as submitted, must clearly identify the method of financing proposed to accomplish this increase.

In accordance with the Town Charter, I hereby submit the Town's FY 2017 Capital Budget and FY 2017 – FY 2021 Capital Improvements Plan for your review and action. In forwarding this document, I would be remiss in not mentioning the work that went into its development by my department heads, their staff and, in particular, the members of the Comprehensive Finance Advisory Committee who spent many hours reviewing and commenting on the numerous projects submitted.

ELECTED OFFICIALS

BARNSTABLE TOWN COUNCIL

Jessica Rapp Grassetti, President, Precinct 7 Eric R. Steinhilber, Vice President, Precinct 2 John G. Flores, Precinct 1 Paul Hebert, Precinct 3 Frederick Chirigotis, Precinct 4 James H. Crocker, Jr., Precinct 5 William Crocker, Jr., Precinct 6 Debra S. Dagwan, Precinct 8 James M. Tinsley, Precinct 9 Sara Cushing, Precinct 10 Philip N. Wallace, Precinct 11 John T. Norman, Precinct 12 Jennifer L. Cullum, Precinct 13

BARNSTABLE SCHOOL COMMITTEE

Margeaux Weber, Chair Chris Joyce, Vice Chair Stephanie Ellis Mike Judge R. Patrick Murphy

TOWN CLERK

Ann M. Quirk, CMC

TOWN COLLECTOR

Maureen Niemi

TOWN ADMINISTRATION

Thomas K. Lynch, Town Manager Mark S. Ells, Assistant Town Manager William F. Butler, Esq., Interim Superintendent of Schools Cynthia A. Lovell, Town **Council Administrator** Lynne M. Poyant, Director of **Community Services Department** Jo Anne Miller Buntich, Director of **Growth Management Department** Paul B. MacDonald, Chief of Police Daniel W. Santos, Director of Public Works Department Richard V. Scali, Director of **Regulatory Services Department** Roland W. Breault, Manager – **Barnstable Municipal Airport**

OTHER TOWN OFFICIALS

Ruth J. Weil, Esq., Town Attorney Mark A. Milne, C.P.A., Director of Finance Robert L. O'Brien, Budget Director Debra Blanchette, Treasurer Jeffery Rudziak, Director of Assessing William E. Cole, Director of Human Resources Daniel J. Wood, Director of Information Technology Edward F. Merigan, Veterans Agent

AIRPORT COMMISSION

Ronald D. Persuitte, Chairman John T. Griffin, Jr., Vice Chairman Robert L. O'Brien, Clerk Stephen P. Cobb Michael A. Dunning Timothy R. Luzietti

Mary F. Smith

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PART I – CAPITAL IMPROVEMENTS PLAN SUBMISSIONS

Cost and Fiscal Year Summary

The capital projects identified by the Town departments in this year's CIP process represents a total of \$47,387,493 for FY 2017, and a combined total of \$195,773,265 over a five-year period. Of the \$195 million, approximately \$70 million represents enterprise funds and \$125 million are general fund requests.

	Enterprise Funds	General Fund	Total
FY 2017	\$19,458,617	\$27,928,876	\$47,387,493
FY 2018	\$13,042,996	\$38,670,008	\$51,713,004
FY 2019	\$17,255,000	\$15,323,797	\$32,578,797
FY 2020	\$10,782,400	\$18,853,040	\$29,635,440
FY 2021	\$9,626,180	\$24,832,351	\$34,458,531
Totals	\$70,165,193	\$125,608,072	\$195,773,265

Enterprise Fund projects are distributed by fund as follows:

Fund	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Totals
Airport	\$6,623,000	\$3,375,000	\$6,650,000	\$4,050,000	\$1,450,000	\$22,148,000
Golf	\$4,232,112	\$305,000	\$355,000	\$1,250,000	\$1,900,000	\$8,042,112
Solid Waste	\$2,740,000	\$0	\$3,000,000	\$0	\$0	\$5,740,000
Water Pollution	\$2,261,505	\$5,604,000	\$4,000,000	\$4,000,000	\$2,470,000	\$18,335,505
Water Supply	\$1,702,000	\$3,484,500	\$3,250,000	\$1,286,000	\$3,288,000	\$13,010,500
Sandy Neck	\$1,400,000	\$0	\$0	\$0	\$0	\$1,400,000
Marina	\$500,000	\$0	\$0	\$0	\$0	\$500,000
НҮСС	\$0	\$274,496	\$0	\$196,400	\$518,180	\$989,076
Totals	\$19,458,617	\$13,042,996	\$17,255,000	\$10,782,400	\$9,626,180	\$70,165,193

General Fund projects are distributed as follows:

Department	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Totals
Growth Mgt.	\$396,000	\$0	\$0	\$0	\$0	\$396,000
Admin. Services	\$418,000	\$650,000	\$0	\$0	\$0	\$1,068,000
Comm. Services	\$7,369,907	\$7,877,220	\$861,299	\$7,266,280	\$1,667,620	\$25,042,326
Public Works	\$10,108,969	\$24,692,688	\$11,337,398	\$6,961,660	\$18,889,731	\$71,990,446
Reg. Services	\$55,000	\$125,000	\$125,000	\$125,000	\$125,000	\$555,000
Schools	\$9,581,000	\$5,325,100	\$3,000,100	\$4,500,100	\$4,150,000	\$26,556,300
Totals	\$27,928,876	\$38,670,008	\$15,323,797	\$18,853,040	\$24,832,351	\$125,608,072

Detail Project Listing

The description and justification for each project listed on the following tables are included in Part IV and Part VII of this document. Part IV contains projects recommended for funding in the FY 2017 program while Part VII includes those projects that will be addressed in the subsequent years. In addition to the projects listed on these tables there are several others that have been identified for which the scope and cost estimates are a work in progress including the following:

Shooting Range

A preliminary study has been conducted which identifies a range of costs for soil remediation depending upon the future use of this area. This was followed up with the Town installing one up-gradient groundwater monitoring well and two down-gradient wells, which would intercept flow leaving the site in order to assess the mobility of the lead contamination. The next step will be to conduct a more comprehensive site assessment. The site assessment would include: sampling oversight, conceptual design and evaluation of alternatives for ceasing shooting; the assessment of groundwater quality, soil sample collection and surveying; and conceptual design, evaluation and costing of alternatives for continuing shooting. This step will be conducted once there is a more clear picture as to the land swap matter associated with the parcel.

Three Bays Watershed 208 Plan Implementation Project

Three Bays Preservation, Inc. has submitted a proposal to the United States Environmental Protection Agency (EPA) in response to the 2016 Southeast New England Program for Coastal Watershed Restoration Grants. The EPA received 50 eligible initial proposals and is inviting 24 to submit a full proposal. Three Bays is one of the 24 invitees. The Town has an existing \$250,000 appropriation for the dredging of Mill Pond which has not been pursued due to permitting complications. These funds are being held in abeyance to be used as a local match for Three Bays grant application subject to the Town Council's approval. It is not yet know if more local funds will be required in order to secure any potential grant award.

<u>Armory</u>

This facility may require some capital investment by the Town in order to make it usable or to attract a viable tenant. The best use of the facility has yet to be determined.

Water Quality

The Cape Cod Commission was directed by the Commonwealth of Massachusetts to prepare an update to the 1978 Section 208 Area-Wide Water Quality Management Plan for Cape Cod. Ultimately, implementing this plan will have significant financial impacts to communities across Cape Cod. Detailed plans and cost estimates have not yet been developed but this will ultimately be the single largest capital program the Town has ever seen. The Town Council has formed the Water Resource Advisory Committee to address this program and the Department of Public Works is updating its Comprehensive Water Resources Management Plan.

Recreational Fields and High School Athletic Field Upgrades

A comprehensive analysis will be conducted on the Town's recreational fields. It is anticipated that future appropriations will be coming forward for the improvement to these properties. In addition, a preliminary investigation is underway for the re-development of the fields at Barnstable High School.

Project Submissions for Enterprise Funds

DEPART	MENT			TOTALS				
PRIORITY	NAME	DESCRIPTION	2017	2018	2019	2020	2021	2017-2021
1	BMA	Design & Reconstruct RWY 15-33, TWY C, Portion TWY B, Airfield Lighting Vault Generator	6,373,000	-	-	-	-	6,373,000
2	BMA	Replace Snow Removal Equip, Aircraft Rescue / Fire Equip, Firefighting Truck, Skid Steer Plow	100,000	-	-	100,000	900,000	1,100,000
3	BMA	Vegetation Management Plan (VMP) and Airspace Study	-	450,000	-	-	-	450,000
4	BMA	Design & Construct New Fiber Optic Airfield Lighting Control System	-	75,000	-	-	-	75,000
5	BMA	Runway and Taxiway Markings and Airport-Owned Roadways	150,000	150,000	150,000	150,000	150,000	750,00
6	BMA	FAA Master Plan Update, GIS Utilities, Runway Extension	-	800,000	-	800,000	400,000	2,000,00
7	BMA	Clear Vegetation and Obstruction	-	700,000	-	-	-	700,00
8	BMA	Design & Construct Snow Removal Equip/Vehicle Storage Building	-	400,000	-	-	-	400,00
9	BMA	Replace Mo-Gas & Diesel Fuel Con-vault, Gas Boy + Alarm	-	150,000	-	-	-	150,00
10	BMA	Design & Construct New T Hangar	-	650,000	-	-	-	650,00
11	BMA	Design & Reconstruct RWY 6-24	-	-	6,500,000	-	-	6,500,00
12	BMA	Design & Reconstruct TWY Bravo (B)	-	-	-	3,000,000	-	3,000,00
		TOTAL AIRPORT	6,623,000	3,375,000	6,650,000	4,050,000	1,450,000	22,148,00
1	HYCC	Design & Construct Core HVAC	-	274,496	-	-	-	274,49
2	HYCC	Cogeneration - HYCC	-	-	-	196,400	518,180	714,58
	•	TOTAL COMMUNITY SERVICES HYCC	-	274,496	-	196,400	518,180	989,07
1	SDY	Sandy Neck Beach Park Stabilization	1,400,000	-	-	-	-	1,400,00
		TOTAL COMMUNITY SERVICES SANDY NECK	1,400,000	-	-	-	-	1,400,00
1	MAR	Gateway Marina Dredging	500,000					500,00
		TOTAL COMMUNITY SERVICES MARINA	500,000	-	-	-	-	500,00
1	GOLF	Hyannis Golf Course Renovation	3,667,112	-	-	-	-	3,667,11
2	GOLF	Olde Barnstable Fairgrounds Golf Facility Improvements	258,000	250,000	175,000	750,000	1,500,000	2,933,00
3	GOLF	Hyannis Golf Course Rear Deck, External Stair, Awning & Interior	307,000	55,000	180,000	500,000	400,000	1,442,00
		TOTAL COMMUNITY SERVICES GOLF	4,232,112	305,000	355,000	1,250,000	1,900,000	8,042,11

Project Submissions for the Enterprise Funds - Continued

DEPART	MENT			TOTALS				
PRIORITY	NAME	DESCRIPTION	2017	2018	2019	2020	2021	2017-2021
1	SW	Replacement of 2007 Mack Tractor Unit	150,000	-	-	-	-	150,000
2	SW	Purchase of Three New Compaction Containers	30,000	-	-	-	-	30,000
3	SW	Purchase of New Open Top Roll-Off Container	10,000	-	-	-	-	10,000
4	SW	Replacement of 2012 Chevrolet Colorado 1/4 Ton Pick-Up (T401)	50,000	-	-	-	-	50,000
5	SW	Solid Waste Facility Master Plan - Construction	2,500,000		3,000,000			5,500,000
		TOTAL PUBLIC WORKS SOLID WASTE	2,740,000	-	3,000,000	-	-	5,740,000
1	WS	Pipe Replacement & Upgrade Program	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	5,250,000
2	WS	Water Supply Wells, Pump Stations & Treatment Plant Repair	200,000	200,000	200,000	200,000	200,000	1,000,000
3	WS	New Well Exploration Program	- 200,000	555,500	2,000,000	36,000	2,038,000	4,629,500
4	WS	Upgrades Design & Construction Mary Dunn 1 Water Storage Tank	52,000	580,000	-	-	-	632,000
5	WS	Water Main Upgrade Barnstable Rd Main to Lewis Street		1,099,000	-	_	-	1,099,000
6	WS	Interconnections with other water systems	400,000	Unknown	-	-	-	400,000
-		TOTAL PUBLIC WORKS WATER SUPPLY	1,702,000	3,484,500	3,250,000	1,286,000	3,288,000	13,010,500
1	WPC	Clarifiers Rehab	1,289,505	-	-	-	-	1,289,505
2	WPC	Backup Generator Replacement	904,000	-	-	-	470,000	1,374,000
3	WPC	Design & Construction Barnstable Road Sewer Evaluation	68,000	814,000	-	-	-	882,000
4	WPC	Reline Sewers & Laterals on South Street HY	-	690,000	-	-	-	690,000
5	WPC	Septage Building Construction	-	3,500,000	-	-	-	3,500,000
6	WPC	Total Organic Compounds (TOC) and Total Nitrogen (TN) Effluent Design & Construction	-	600,000	4,000,000	4,000,000	2,000,000	10,600,000
		TOTAL PUBLIC WORKS WASTE WATER	2,261,505	5,604,000	4,000,000	4,000,000	2,470,000	18,335,50
		TOTAL ENTERPRISE FUNDS	19,458,617	13,042,996	17,255,000	10,782,400	9,626,180	70,165,19

Project Submissions for the General Fund

DEPART	MENT]			TOTALS			
PRIORITY	NAME	DESCRIPTION	2017	2018	2019	2020	2021	2017-2021
1	GM	Marstons Mills Parking Lot	290,000					290,00
2	GM	Walkway-to-the Sea HyArts Shanties	106,000	-	-	-	-	106,00
	1	TOTAL GROWTH MANAGEMENT DEPARTMENT	396,000	-	-	-	-	396,00
1	ASD	Personal Computer (PC) and Windows XP Upgrades	218,979	-	-	-	-	218,97
2	ASD	Microsoft Office 2002/2003 and Exchange 2003 Upgrades	199,021	-	-	-	-	199,02
3	ASD	Unified Communications - VOIP (Voice Over Internet Protocol)	-	650,000	-	-	-	650,00
		TOTAL ADMINISTRATIVE SERVICES DEPARTMENT	418,000	650,000	-	-	-	1,068,000
1	CSD	Barnstable Senior Center Stand-by Generator	225,006		-	-	-	225,006
2	CSD	Craigville Bathhouse Septic System Upgrade	363,700					363,70
3	CSD	Craigville Beach House Site Work Phase IV	246,800		-	-	-	246,80
4	CSD	Kalmus Beach Parking Lot - Repaving	255,017	-	-	-	-	255,01
5	CSD	Design and Construction Osterville Recreation Building	900,444	1,108,823	-	7,134,461	-	9,143,72
6	CSD	Blish Point Boat Access Channel Dredge (3)	1,079,788	-	-	-	-	1,079,78
7	CSD	Kennedy Memorial Renovation Construction	-	974,195	-	-	-	974,19
8	CSD	Lombard Field Improvements - Parking, Bleachers, Ball Field & Press Box	1,686,000	-	-	-	-	1,686,00
9	CSD	West Bay Entrance Channel - Survey, Design & Dredge	-	101,200	-	-	-	101,20
10	CSD	Blish Pt - Design, Permit & Construct Long Term Solution	1,796,500	-			-	1,796,50
11	CSD	West Barnstable Community Building Window Replacement	173,000	-	-	-	-	173,00
12	CSD	MEA Interior Project Phase III	-	192,106	-	-	-	192,10
13	CSD	Centerville Recreation Interior Improvements	289,432	150,000	75,000	25,000	-	539,43
14	CSD	Bathhouse Septic Upgrades	187,220	-	-	-	-	187,22
15	CSD	Design and Construction Centerville Recreation Building Site	-	170,926	786,299	-	-	957,22
16	CSD	Design and Construction Lopes Field	-	-	-	-	1,000,000	1,000,00
17	CSD	Construction West Bay Stone Breakwaters Repair	-	4,589,450	-	-	-	4,589,45
18	CSD	Construction Mill Pond & Long Pond Fish Ways	-	363,687	-	-	-	363,68
19	CSD	MEA Building Site Work Improvements	-	226,833	-	-	-	226,83
20	CSD	Study & Preliminary Design Hyannisport Breakwater	167,000	TBD	TBD	-	-	167,00
21	CSD	MEA Storage Building	-	-	-	106,819	667,620	774,43
		TOTAL COMMUNITY SERVICES DEPARTMENT	7,369,907	7,877,220	861,299	7,266,280	1,667,620	25,042,32

Project Submissions for the General Fund - Continued

DEPART	MENT	η Γ		FIVE YEAR COSTS					
PRIORITY	NAME	DESCRIPTION	2017	2018	2019 2020 2021			2017-2021	
1	DPW	Public Roads Maintenance	3,250,000	3,250,000	3,825,000	3,901,500	3,979,530	18,206,030	
2	DPW	Bumps River Bridge Construction	275,000	4,702,500	-	-	-	4,977,500	
3	DPW	Guardrail Replacement (6,000 linear ft.) & Sidewalk Overlay	299,250	308,228	317,475	326,999	336,809	1,588,761	
4	DPW	Design and Reconstruction Barnstable Road	213,000	2,558,000	-	-	-	2,771,000	
5	DPW	Private Road Repair - Flint Street in Marstons Mills, Willow Street in West Barnstable	853,000	-	-	-	-	853,000	
6	DPW	Design and Construction South Street Improvements	286,165	3,390,899	-	-	-	3,677,064	
7	DPW	Design and Construction Traffic Signal Upgrades Study	150,000	100,000	100,000	-	-	350,000	
8	DPW	Study Design and Construction Hyannis Main St West End Rotary	225,630	2,262,289	-	-	-	2,487,919	
9	DPW	Design and Construction Kennedy Legacy Trail Sidewalk Improvements	217,075	-	-	-	-	217,075	
10	DPW	Snow's Creek Crossing at Ocean Street, Hyannis	1,360,000	-	-	-	-	1,360,000	
11	DPW	Main Street Hyannis Sidewalk Improvement	213,675	-	-	-	-	213,675	
12	DPW	Town Hall Site Parking Lot	119,362	794,881	-	-	-	914,243	
13	DPW	Parking Lots Maintenance	500,000	500,000	500,000	500,000	500,000	2,500,000	
14	DPW	Town Hall Toilet Renovations	592,528	-	-	-	-	592,528	
15	DPW	Mosswood Cemetery, Putnam Avenue Cotuit	23,909	103,950	-	-	-	127,859	
16	DPW	Sidewalk Installations Bump River Road Centerville, Main St Cotuit, South St Hyannis	766,500	-	-	-	-	766,500	
17	DPW	Design and Construction Putnam Avenue Sidewalk	95,000	818,525	-	-	-	913,525	
18	DPW	School Administration Building Mechanical Upgrades	231,375	1,504,707	-	-	-	1,736,082	
19	DPW	Armory Building Envelope, Electrical, and Mechanical Improvements	350,000	-	TBD	-	-	350,000	
20	DPW	DPW Offices Phase III Construction	-	-	1,889,898	-	-	1,889,898	
21	DPW	Design and Construction ADA Compliance Pedestrian Crossing & Sidewalks Report	-	153,686	153,686	153,686	-	461,058	
22	DPW	Huckins Neck Road Reconstruction	-	3,566,500	-	-	-	3,566,500	
23	DPW	MS4 Municipal Separate Storm Sewer System Program	87,500	-	128,500	-	-	216,000	
24	DPW	Traffic Calming	-	67,500	67,500	-	-	135,000	
25	POL	BPD Window Replacement	-	122,685	733,027	-	-	855,712	
26	DPW	Town Hall Interior Renovations	-	488,338	222,299	-	-	710,637	
27	DPW	Coastal Resiliency Master Plan Development	-	-	200,000	TBD	TBD	200,000	
28	DPW	DPW Salt Storage Facility	-	-	1,875,000	-	-	1,875,000	
29	DPW	Bearse's Way from Pitcher's Way to Route 28	-	-	30,000	-	835,000	865,000	
30	DPW	Complete Streets Implementation Program	-	-	207,333	207,333	207,333	621,999	

Project Submissions for the General Fund - Continued

DEPART	MENT			TOTALS				
PRIORITY	NAME	DESCRIPTION	2017	2018	2019	2020	2021	2017-2021
31	DPW	Design Shared Use Path Sandwich to Yarmouth	-	-	723,333	723,333	723,333	2,169,999
32	DPW	U.S. Custom House Interior Work	-	-	364,347	-	-	364,347
33	DPW	Design and Construction Highway Truck Storage Facilities	-	-	-	430,990	6,300,913	6,731,903
34	DPW	Design and Construction Bay Shore Road Boat-Ramp	-	-	-	29,325	216,550	245,875
35	DPW	Craigville Beach Road Pump Station and Force Main	-	-	-	550,000	3,450,000	4,000,000
36	DPW	Burgess Barn Interior	-	-	-	25,000	267,206	292,206
37	DPW	Old Jail Repairs	-	-	-	36,519	236,645	273,164
38	DPW	Design and Construction U.S. Custom House Carriage House	-	-	-	46,975	179,069	226,044
39	DPW	U.S. Custom House Site Improvements	-	-	-	30,000	182,343	212,343
40	DPW	DPW 382 Falmouth Road Facility Parking Lot Repairs	-	-	-	-	200,000	200,000
41	DPW	Craigville Beach Road Sidewalk & Drainage as associated with sewer work for PS at bath house	-	-	-	-	1,275,000	1,275,000
	•	TOTAL PUBLIC WORKS DEPARTMENT	10,108,969	24,692,688	11,337,398	6,961,660	18,889,731	71,990,446
1	RSD	Hydrilla Control Mystic Lake & Middle & Long Ponds	-	100,000	100,000	100,000	100,000	400,000
2	RSD	Toxic Algae Bloom Cyanobacteria School House Pond	55,000	-	-	-	-	55,000
3	RSD	Fanwort Control Wequaquet Lake (including Bearses Pond & Gooseberry Cove)		25,000	25,000	25,000	25,000	100,000
	•	TOTAL REGULATORY SERVICES DEPARTMENT	55,000	125,000	125,000	125,000	125,000	555,000
1	SCH	Barnstable High School Stadium Bleachers	1,000,000	-	-	-	-	1,000,000
2	SCH	Barnstable High School Library AC Upgrades & Replacement	2,800,000	-	-	-	-	2,800,000
3	SCH	BCHMCPS Façade Improvement and Roof Replacement	4,286,000	-	-	-	-	4,286,000
4	SCH	Barnstable United Elementary Parking Lot Light Pole Replacement	100,000	-	-	-	-	100,000
5	SCH	Barnstable United Elementary Restroom Fixture and Hardware Upgrades	375,000	-	-	-	-	375,000
6	SCH	BHS Pump Flange Replacement	70,000	-	-	-	-	70,000
7	SCH	Barnstable High School Exterior Window Replacement	50,000	500,000	-	-	-	550,000
8	SCH	Unit Ventilator Upgrades	250,000	250,100	250,100	250,100	-	1,000,300
9	SCH	Facilities Maintenance Shop Roof Replacement	80,000	-	-	-	-	80,000
10	SCH	Replace HVAC Roof Top Units, (RTU's) at Barnstable High School and Barnstable Middle School	100,000	1,000,000	1,000,000	1,500,000	1,500,000	5,100,000
11	SCH	Walk-In Cooler Replacements	120,000	-	-	-	-	120,000
12	SCH	Kitchen Equipment Replacement and Upgrades	50,000	-	50,000	-	50,000	150,000

Project Submissions for the General Fund – Continued

DEPART	MENT			F	IVE YEAR COST	٢S		TOTALS
PRIORITY	NAME	DESCRIPTION	2017	2018	2019	2020	2021	2017-2021
13	SCH	Flooring Replacement and Upgrades	100,000	100,000	100,000	100,000	100,000	500,000
14	SCH	Barnstable United Elementary Courtyard Improvements	200,000	-	-	-	-	200,000
15	SCH	Campus Wide Mechanical Upgrades (Burners, Boilers, HVAC & Pumps)	-	250,000	250,000	250,000	-	750,000
16	SCH	Electric Utility Transformer Upgrade	-	250,000	-	-	-	250,000
17	SCH	Hyannis West Elementary Exterior/Interior Door Replacement	-	200,000	-	-	-	200,000
18	SCH	BPS Campus Wide Paving	-	225,000	250,000	300,000	400,000	1,175,000
19	SCH	BPS Campus Wide Painting	-	100,000	100,000	100,000	100,000	400,000
20	SCH	Centerville Elementary School Window Replacement	-	1,000,000	-	-	-	1,000,000
21	SCH	Barnstable High School Field House Improvements	-	250,000	-	-	-	250,000
22	SCH	Barnstable Public Schools Asbestos Abatement	-	200,000	-	-	-	200,000
23	SCH	Barnstable High School Fields and Grounds Improvements	-	1,000,000	1,000,000	2,000,000	1,000,000	5,000,000
24	SCH	Barnstable High School Synthentic Turf Replacement	-	-	-	-	1,000,000	1,000,000
		TOTAL SCHOOL DEPARTMENT	9,581,000	5,325,100	3,000,100	4,500,100	4,150,000	26,556,300
		TOTAL GENERAL FUND	27,928,876	38,670,008	15,323,797	18,853,040	24,832,351	125,608,072

PART II – STATUS OF EXISTING CAPITAL APPROPRIATIONS

Updated Fiscal Year 2016 Capital Program

After the completion of the public hearings on the fiscal year 2016 Capital Improvement Program several supplemental appropriations were brought forward for various reasons. The original and revised fiscal year 2016 capital programs are summarized as follows:

	General Fund	Enterprise Funds	Total
Original Capital Program	<u>\$ 15,108,700</u>	<u>\$ 10,863,500</u>	<u>\$ 25,972,200</u>
Supplemental Appropriations:			
Carbon Filtration System		\$ 744,000	\$ 744,000
Shooting Range Testing	\$ 35,000		\$ 35,000
Hyannis GC Restrooms	\$ 82,000		\$ 82,000
Craigville Bathhouse	\$ 450,000		\$ 450,000
Barnstable Harbor Dredging	\$ 490,000		\$ 490,000
Private Way Improvements	\$ 323,386		\$ 323,386
GPS Vehicle Location System	<u>\$ 145,000</u>		<u>\$ 145,000</u>
Subtotal	<u>\$ 1,525,386</u>	<u>\$ 744,000</u>	<u>\$ 2,269,386</u>
Revised FY16 Capital Program	<u>\$ 16,634,086</u>	<u>\$ 11,607,500</u>	<u>\$ 28,241,586</u>

2017 CIP - Status of Existing General Fund Capital Appropriations

Balances in Completed Projects Used to Fund the FY 2017 Capital Program

Part of the annual Capital Improvements Program process is to review the status of all projects, which were appropriated in previous fiscal years. If a project has been completed and funds remain in the appropriation, the remaining funds will be used as a funding source for the current year's capital program. A total of \$759,174 has been identified in prior appropriations and will be applied as follows:

	Available	
Original Appropriation Order	Amount	Project Allocation
2010-071 Prince Cove Boat Ramp	\$6,346	Blish Point Dredging
2013-117 Dredge East Bay	\$25,735	Blish Point Dredging
2010-112 Osterville Boat Ramp	\$37,306	Blish Point Dredging
2014-117 Blish Point Sand Mgt	\$22,401	Blish Point Dredging
2014-113 McKeon Park Wtr/Sew	\$2,392	HyArts Shanties
2013-116 S&G Facility Upgrade	\$15	HyArts Shanties
2013-116 46 & 50 Pearl St Improvements	\$23	HyArts Shanties
2014-100 Aerial Flyover	\$55,000	Software & Hardware Upgrades
2012-097 Ocean St Parking Lot	\$16,101	Beach Facility Improvements
2013-109 Drainage Study	\$50,000	Beach Facility Improvements
2013-110 Senior Center Parking lot design	\$21,250	Beach Facility Improvements
2013-117 School St Bulkhead	\$53,366	Beach Facility Improvements
2013-116 Osterville CC improvements	\$133,579	Ost Bay Site Improvements
2014-068 Comprehensive Building Assessment	\$9,865	Ost Bay Site Improvements
2012-038 Trout Brook & Furlong Way	\$50,871	Private Way Improvements
2013-066 Private Road Repairs	\$20,065	Private Way Improvements
2015-102 Private Way Improvements	\$115,354	Private Way Improvements
2015-119 School Boiler replacements	\$50,000	BCHMCPS Roof & Facade
2011-084 Manhole Reconstruction	\$89,505	Rehab Clarifiers
Total	\$759,174	

The lists on the following pages comprise the active capital projects after the remaining funds from completed projects have been identified. Some of these projects are near completion and some have yet to be implemented.

Active Fiscal Year 2013 and Prior Years Capital Appropriations

GENERAL FUND:

						Balance		
Council						Available		
Order	Dept	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2010-110	DPW	ROOF REPAIRS 200 MAIN &	300,000	295,913	2,030	2,057	Construction	Expires when encumbrance is paid or liquidated
2010-111	DPW	WEST BAY BRIDGE REPAIRS	650,000	423,511	145,175	81,314	Construction	Expires when encumbrance is paid or liquidated
2010-113	DPW	COMPREHENSIVE WASTE WATE	600,000	58,676	28,518	512,806	Construction	Expires when encumbrance is paid or liquidated
2011-065	DPW	FY 12 PAVEMENT MGMT/DRAI	3,250,000	3,210,825	39,166	9	Construction	Expires when encumbrance is paid or liquidated
2013-105	SCH	MODULAR CLASSROOMS-REMO	125,000	109,295	7,020	8,685	Construction	Expires when encumbrance is paid or liquidated
2013-108	DPW	FY 14 PAVEMENT MGMT/DRA	3,250,000	3,218,799	31,201	0	Construction	Expires when encumbrance is paid or liquidated
2013-111	RSD	HYDRILLA CONTROL FY 2014	45,000	16,616	0	28,384	Implementation Underway	Will encumber balance in Spring of 2016
2013-112	RSD	FANWORT REMOVAL FY 2014	35,000	28,250	0	6,750	Implementation Underway	Will encumber balance in Spring of 2016
2013-114	DPW	WATER QUALITY EVALUATION	300,000	173,525	115,475	11,000	Implementation Underway	Expires when encumbrance is paid or liquidated
2010-067	RSD	LAKE WEQUAQUET SAMPLING/	180,000	142,647	4,682	32,671	Implementation Underway	Expires when encumbrance is paid or liquidated
2010-068	DPW	FY 2012 SIDEWALKS	350,000	345,761	4,239	0	Construction	Expires when encumbrance is paid or liquidated
2010-069	DPW	DREDGE-BLISH POINT BOAT	120,000	119,908	92	0	Construction	Expires when encumbrance is paid or liquidated
2012-097	DPW	TOWN HALL INTERIOR IMPVM	153,000	138,379	14,621	0	Construction	Expires when encumbrance is paid or liquidated
2012-097	DPW	SIDEWALKS PROGRAM 2013	70,000	59,983	7,831	2,186	Construction	Expires when encumbrance is paid or liquidated
2012-097	DPW	SNOWS CREEK CULVERT DESI	75,000	43,115	26,999	4,886	Design	Expires when encumbrance is paid or liquidated
2012-097	DPW	BUMPS RIVER BRIDGE	29,000	15,253	13,747	0	Design	Expires when encumbrance is paid or liquidated
2012-097	DPW	WEST BAY BREAKWATERS DES	75,000	46,233	28,650	117	Design	Expires when encumbrance is paid or liquidated
2012-097	DPW	S & G BUILDING - SEWER	75,000	70,070	4,930	0	Punchlist	Expires when encumbrance is paid or liquidated
			9,682,000	8,516,760	474,376	690,864		

ENTERPRISE FUNDS:

						Balance		
Council						Available		
Order	Dept	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2010-095	Airport	RUNWAY 15 RVZ CLEARING	75,000	64,675	2,270	8,055	Construction	Expires when encumbrance is paid or liquidated
2011-079	Airport	GROUNDWATER BIOREMEDIATI	207,000	87,242	119,738	20	Construction	Expires when encumbrance is paid or liquidated
2012-091	Airport	RUNWAY 15 RVZ CLEARING-P	400,000	36,174	206,082	157,744	Construction	Expires when encumbrance is paid or liquidated
2012-094	Airport	TERMINAL ENHANCEMENTS 20	200,000	32,742	3,775	163,483	Construction	Expires when encumbrance is paid or liquidated
2011-081	Marina	PRINCE COVE BULKHEAD DES	20,000	18,567	1,056	377	Design	Expires when encumbrance is paid or liquidated
2012-095	Marina	GATEWAY MARINA DREDGING	80,000	15,720	36,890	27,389	Construction	Expires when encumbrance is paid or liquidated
2007-091	Sewer	TURBINE GENERATOR HYA	570,000	147,663	38,050	384,287	Construction	Expires when encumbrance is paid or liquidated
2010-097	Water	WATER PIPE R&R PROGRAM 2	1,050,000	1,020,585	29,415	0	Construction	Expires when encumbrance is paid or liquidated
2010-099	Water	DESIGN WATER MAIN UPGRAD	110,000	4,959	0	105,041	Design	Pending final location of new wells
2012-084	Water	NEW WATER MAIN-SCUDDER A	1,070,000	933,987	4,594	131,419	Punchlist	Expires when encumbrance is paid or liquidated
			10,982,000	6,922,282	698,077	3,361,641		

2017 CIP - Status of Existing General Fund Capital Appropriations

Active Fiscal Year 2014 Capital Appropriations

GENERAL FUND:

					Balance		
Council					Available		
Order	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2013-106	BLEACHER UPDGRADES	55,000	41,786	3,950	9,264	Construction	Expires when encumbrance is paid or liquidated
2013-106	DESIGN-ROOF/FACADE INTE	100,000	96 <i>,</i> 815	3,185	0	Design	Expires when encumbrance is paid or liquidated
2013-107	SCHOOL KITCHEN EQUIPMEN	110,000	109,786	61	153	Punchlist	Expires when encumbrance is paid or liquidated
2013-115	BUMPS RIVER BRIDGE REPAI	120,000	0	0	120,000	To Be Scheduled	Expires June 30, 2016
2013-115	SIDEWALK OVERLAYS/GUARD	250,000	242,048	7,953	0	Construction	Expires when encumbrance is paid or liquidated
2013-116	MEA FACILITY UPGRADES	131,000	119,355	2,494	9,151	Construction	Expires when encumbrance is paid or liquidated
2013-116	TOWN HALL INTERIOR IMPRO	150,000	104,134	22,378	23,488	Construction	Expires when encumbrance is paid or liquidated
2013-116	HIGHWAY FACILITY IMPROVE	66,000	48,671	0	17,329	Design	Expires June 30, 2016
2013-116	WB COMMUNTY BLDG IMPRVMN	72,000	63,832	1,907	6,261	Construction	Expires when encumbrance is paid or liquidated
2013-116	US CUSTOMS HOUSE UPGRADE	263,000	240,203	21,240	1,557	Construction	Expires when encumbrance is paid or liquidated
2013-116	BEACH FACILITY DESIGN	115,000	50,282	31,339	33,379	Design	Expires when encumbrance is paid or liquidated
2013-116	LOMBARD PARKING & FIELD	101,000	96,813	2,000	2,187	Design	Expires when encumbrance is paid or liquidated
2013-116	TENNIS COURTS RECONSTRUC	500,000	329,415	15,725	154,860	Construction	Expires when encumbrance is paid or liquidated
		2,033,000	1,543,139	112,231	377,629		

ENTERPRISE FUNDS:

						Balance		
Council						Available		
Order	Dept	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2013-098	Airport	TERMINAL & AARF IMPVMTS	200,000	36,001	0	163,999	Construction	Expires June 30, 2016
2013-099	Airport	ACCESS CONTROL & SECURIT	90,000	9,176	0	80,824	Construction	Expires June 30, 2016
2013-102	Airport	CONSTRUCT FUEL FARM-2014	1,540,000	1,067,779	244,043	228,178	Construction	Expires when encumbrance is paid or liquidated
2014-023	Sandy Neck	BEACH & PARKING STABILIZ	175,000	148,087	10,667	16,246	Construction	Expires when encumbrance is paid or liquidated
2013-091	Sewer	BACK-UP PUMP-BEARSE'S WA	80,000	13,803	0	66,197	Construction	Expires June 30, 2016
2013-092	Sewer	PRETREATMENT BLDG & CLAR	50,000	44,036	5,661	304	Construction	Expires when encumbrance is paid or liquidated
2013-093	Sewer	HYDRAULIC LOAD TESTING A	50,000	9,320	22,680	18,000	Construction	Expires when encumbrance is paid or liquidated
2013-085	Water	PIPE REPLACEMENT & UPGRA	1,050,000	820,589	228,983	428	Construction	Expires when encumbrance is paid or liquidated
2013-086	Water	PUMP STATION/TREATMENT P	200,000	197,576	2,425	0	Construction	Expires when encumbrance is paid or liquidated
2013-087	Water	WELL EXPLORATION PROGRAM	489,500	0	0	489,500	To Be Scheduled	Expires June 30, 2016
2013-088	Water	AIR STRIPPER UPGRADE 201	300,000	226,664	8,257	65,079	Construction	Expires when encumbrance is paid or liquidated
			4,224,500	2,573,032	522,715	1,128,753		

2017 CIP - Status of Existing General Fund Capital Appropriations

Active Fiscal Year 2015 Capital Appropriations

GENERAL FUND:

					Balance		
Council					Available		
Order	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2014-092	EARLY LEARNING CENTER 2	2,567,477	2,534,775	31,834	868	Punchlist	Expires June 30, 2017
2014-093	INTERMEDIATE SCHL IMPRV	200,000	153,979	36,194	9,827	Construction	Expires June 30, 2017
2014-094	BHS FIRE, INSTRUSION &	200,000	191,004	8,996	0	Implementation Underway	Expires June 30, 2017
2014-096	BU A/C AND CHILLER PIPE	200,000	177,529	11,551	10,921	Implementation Underway	Expires June 30, 2017
2014-097	BPS LOCK UPGRADES 2015	100,000	72,053	4,154	23,793	Implementation Underway	Expires June 30, 2017
2014-100	AERIAL FLYOVER-MAPPING	140,000	61,952	2,545	75,503	Implementation Underway	\$55,000 of available balance used for FY17 program
2014-101	BICYCLE ACCOMODATIONS PR	170,000	0	0	170,000	Design	Expires June 30, 2017
2014-102	POLICE FACILITY IMPVMNT	288,000	76,783	32,080	179,137	Construction	Expires June 30, 2017
2014-103	HYDRILLA LONG POND MYSTI	75,000	53,550	21,450	0	Implementation Underway	Expires June 30, 2017
2014-104	FANWORT LAKE WEQUAQUET 2	100,000	50,390	19,750	29,860	Implementation Underway	Expires June 30, 2017
2014-106	PARKING LOT EXPANSION-SR	290,000	131,480	0	158,520	Construction	Expires June 30, 2017
2014-108	MARSTONS MILLS FISH RUN	393,500	20,097	0	373,403	Design	Expires June 30, 2017
2014-109	MILL POND & LONG POND FI	42,000	0	36,596	5,404	Construction	Expires June 30, 2017
2014-111	VETERANS' PARK PLAN	50,000	5,128	0	44,872	Implementation Underway	Expires June 30, 2017
2014-114	PUBLIC ROAD MAINTENANCE	3,250,000	2,687,921	562,079	0	Construction	Expires June 30, 2017
2014-115	GUARDRAILS/SIDEWALKS PGR	285,000	271,790	2,524	10,686	Construction	Expires June 30, 2017
2014-116	DREDGING PERMIT/PLANNING	350,310	76,531	132,791	140,988	Implementation Underway	Expires June 30, 2017
2014-118	CENTERVILLE RECREATION B	185,000	21,577	2,255	161,168	Construction	Expires June 30, 2017
2014-119	TOWN FACILITIES SECURITY	100,000	8,000	0	92,000	Study Underway	Expires June 30, 2017
2014-120	PAINE BLACK HOUSE 2015	240,000	143,069	5,769	91,162	Construction	Expires June 30, 2017
2015-023	BHS CAFATERIA WALLS	555,000	524,412	30,588	0	Punchlist	Expires June 30, 2017
2015-030	EPERMITTING ACQUISITION	211,544	189,828	400	21,316	Implementation Underway	Expires June 30, 2017
2015-045	HY WEST & BWB SCHOOL IM	172,000	158,315	0	13,685	Design	Expires June 30, 2017
2015-063	TECH EVAL STEWARTS CREEK	40,000	35,544	3,031	1,425	Study Underway	Expires June 30, 2017
2015-081	LOOMIS LANE REPAIRS	98,060	94,510	0	3,550	Construction	Expires June 30, 2017
		10,302,891	7,740,216	944,586	1,618,089		

ENTERPRISE FUNDS:

		-						
						Balance		
Council						Available		
Order	Dept	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2014-082	Airport	PAINTING RUNWAYS (ETC) 2	50,000	36,079	2,788	11,133	Construction	Expires June 30, 2017
2014-085	Airport	RECONSTRUCT RUNWAY 15-33	400,000	101,445	0	298,555	Construction	Expires June 30, 2017
2014-086	Airport	RECONSTRUCT RUNWAY 6-24	400,000	0	0	400,000	To Be Scheduled	Expires June 30, 2017
2014-087	Airport	PLACE EAST RAMP T-HANGAR	100,000	0	0	100,000	To Be Scheduled	Expires June 30, 2017
2014-089	Airport	CONSTRUCT ACCESS ROAD 20	820,125	110,882	98,977	610,266	Construction	Expires June 30, 2017
2014-090	Airport	TERMINAL & BLDG IMPROVEM	200,000	0	0	200,000	To Be Scheduled	Expires June 30, 2017
2014-076	Sewer	SEPTAGE BLDG EVALUATION-	450,000	23,422	285,930	140,648	Construction	Expires June 30, 2017
2014-077	Sewer	GENERATOR STORAGE BLDG	132,000	15,145	7,155	109,700	Construction	Expires June 30, 2017
2014-078	Sewer	PLANT UPGRADE STUDY 2015	200,000	0	0	200,000	To Be Scheduled	Expires June 30, 2017
2015-014	Sewer	STUDY OF WW ENERGY RECOV	50,000	27,400	1,294	21,306	Implementation Underway	Expires June 30, 2017
2014-081	Solid Waste	SOLID WASTE MASTER PLAN	75,000	30,992	15,475	28,533	Study Underway	Expires June 30, 2017
2014-071	Water	PIPE UPGRADE & REPLACEME	1,050,000	690,961	351,949	7,090	Construction	Expires June 30, 2017
2014-072	Water	PUMP STATION & TREATMENT	200,000	199,545	456	0	Construction	Expires June 30, 2017
2014-073	Water	NEW WELL EXPLORATION 201	583,000	0	0	583,000	To Be Scheduled	Expires June 30, 2017
2014-074	Water	MARY DUNN TANK 2 PAINTIN	68,400	13,725	9,275	45,400	Construction	Expires June 30, 2017
2014-075	Water	WATER MAIN UPGRADES 2015	95,900	0	0	95,900	To Be Scheduled	Expires June 30, 2017
			4,874,425	1,249,595	773,298	2,851,532		

Active Fiscal Year 2016 Capital Appropriations

GENERAL FUND:

					Balance		
Council					Available		
Order	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2015-096	PUBLIC ROAD MAINTENANCE	3,250,000	715,496	1,107,061	1,427,443	To Be Scheduled	Expires June 30, 2018
2015-097	REPLACE SCHOOL ZONE TRAF	92,700	0	0	92,700	To Be Scheduled	Expires June 30, 2018
2015-098	GUARDRAIL & SIDEWALK IMP	400,000	54,784	420	344,796	Design	Expires June 30, 2018
2015-099	BAY STREET BOAT RAMP IMP	289,000	0	0	289,000	To Be Scheduled	Expires June 30, 2018
2015-100	POLICE FACILITY IMPROVEM	355,000	30,000	0	325,000	To Be Scheduled	Expires June 30, 2018
2015-101	TOWN HALL IMPROVEMENTS	939,000	41,625	6,775	890,600	Construction	Expires June 30, 2018
2015-103	JFK MEMORIAL RESTORATION	87,000	5,122	0	81,878	To Be Scheduled	Expires June 30, 2018
2015-111	JOSHUA'S POND SITE IMPRO	317,000	118	0	316,882	To Be Scheduled	Expires June 30, 2018
2015-112	ALUM TREATMENT - HAMBLIN	300,000	254,700	20,920	24,380	Construction	Expires June 30, 2018
2015-113	HYDRILLA CONTROL PROGRAM	100,000	15,668	66,750	17,582	Implementation Underway	Expires June 30, 2018
2015-114	DEMOLISH PORTABLS MARSTO	50,000	9,982	670	39,348	Implementation Underway	Expires June 30, 2018
2015-115	CONSTRUCT MODULAR CLASS	4,044,314	441,702	3,551,786	50,826	Construction	Expires June 30, 2018
2015-116	FACADE/ROOF IMPROVEMENT	3,353,000	2,656	2,943,000	407,344	Construction	Expires June 30, 2018
2015-117	FACADE & ROOF IMPRVMNTS	260,000	28,180	3,000	228,820	Design	Expires June 30, 2018
2015-118	INTERNET & DIGITAL RESO	213,000	68,727	51,931	92,342	Construction	Expires June 30, 2018
2015-119	BOILER REPLACEMENT - HS	350,000	283,014	12,211	54,775	Construction	\$50,000 of available balance used for FY17 program
2015-120	REPLACE A/C-WEST VILLAG	250,000	244,047	4,670	1,283	Construction	Expires June 30, 2018
2015-121	INSTALL COGENERATION PL	50,000	0	0	50,000	Design	Expires June 30, 2018
2015-147	POLE BARN ADDITION - S.G	36,415	34,415	2,000	0	Construction	Expires June 30, 2018
2016-026	FY16 SHOOTING RNG MONITO	35,000	27,610	1,000	6,390	Implementation Underway	Expires June 30, 2018
2016-031	FY16 CRAIGVILLE BATHHOUS	450,000	77,768	25,145	347,087	Construction	Expires June 30, 2018
2016-035	FY16 BARNSTABLE HARBOR D	490,000	218,771	196,950	74,279	Construction	Expires June 30, 2018
2016-037	FY16 PRIVATE RD REPAIRS	323,386	0	0	323,386	To Be Scheduled	Expires June 30, 2018
2016-039	FY16 GPS AUTO VEH LOCAT	145,000	0	116,892	28,108	Implementation Underway	Expires June 30, 2018
		16,179,815	2,554,385	8,111,181	5,514,249		

ENTERPRISE FUNDS:

						Balance		
Council						Available		
Order	Dept	Project Title	Appropriation	Expended	Encumbered	2/29/2016	Project Status	Appropriation Status
2015-122	Airport	RECONSTRUCT CHARLIE & DE	4,585,000	3,915,550	668,752	698	Construction	Expires June 30, 2018
2015-123	Airport	REPLACE SNOW REMOVAL EQU	1,075,000	0	0	1,075,000	To Be Scheduled	Expires June 30, 2018
2015-124	Airport	REPLACE GENERATOR/REMOVE	90,000	0	0	90,000	To Be Scheduled	Expires June 30, 2018
2015-125	Airport	DRAINAGE IMPROVMENTS-HAN	125,000	0	88,804	36,196	Construction	Expires June 30, 2018
2015-127	Airport	REPLACE AIRFIELD EQUIPME	162,000	0	0	162,000	To Be Scheduled	Expires June 30, 2018
2015-105	Golf	FACILITY IMPROVEMENTS -	174,000	10,000	39,500	124,500	Construction	Expires June 30, 2018
2015-106	Golf	FACILITY IMPROVEMENTS -	140,000	10,810	39,500	89,690	Construction	Expires June 30, 2018
2015-108	Marina	DREDGING - GATEWAY MARIN	280,000	20,000	0	260,000	To Be Scheduled	Expires June 30, 2018
2015-109	Marina	RECONSTRUCT PRINCE COVE	570,000	76	0	569,924	To Be Scheduled	Expires June 30, 2018
2015-110	Marina	HYANNIS HARBOR BULKHEAD-	158,000	0	0	158,000	To Be Scheduled	Expires June 30, 2018
2016-034	Sandy Neck	FY16 COASTAL COMM RESILI	148,500	48,440	100,060	0	Construction	Expires June 30, 2018
2015-089	Sewer	RELINE SEWERS/LATERALS -	84,500	0	0	84,500	To Be Scheduled	Expires June 30, 2018
2015-090	Sewer	EVALUATE-SEWER COLLECTIO	200,000	0	0	200,000	To Be Scheduled	Expires June 30, 2018
2015-091	Sewer	REHAB TREATMENT PLANT CL	1,000,000	0	0	1,000,000	To Be Scheduled	Expires June 30, 2018
2015-092	Solid Waste	REPLACE TRUCK SCALE	50,000	0	0	50,000	To Be Scheduled	Expires June 30, 2018
2015-094	Solid Waste	ROLL-OFF TRAILER	50,000	0	0	50,000	To Be Scheduled	Expires June 30, 2018
2015-095	Solid Waste	PURCHASE COMPACTOR UNITS	100,000	0	0	100,000	To Be Scheduled	Expires June 30, 2018
2015-085	Water	PIPE REPLACEMENT & UPGRA	1,050,000	75,401	122,999	851,601	Construction	Expires June 30, 2018
2015-086	Water	PUMP STATION/TREATMT PLA	200,000	137,345	28,876	33,778	Construction	Expires June 30, 2018
2015-087	Water	PAINT/UPGRADE TANK MARY	615,000	0	0	615,000	To Be Scheduled	Expires June 30, 2018
2015-146	Water	INSTALL CARBON FILTER TR	744,000	631,487	65,296	47,216	Construction	Expires June 30, 2018
			11,881,000	5,126,716	1,153,787	5,600,496		

PART III – CAPITAL SUBMISSION REVIEW PROCESS

The Town Administration has implemented a review process for capital submissions that uses 10 evaluation criteria with which each submission is scored. A task force made up of senior level managers across all departments is assigned the responsibility to review all submissions and score them accordingly. The scores of the task force members are then averaged and project submissions are ranked from highest to lowest score. This does not determine which projects will receive funding in the immediate fiscal year but is used as an objective measurement to assess the projects priority against all other submissions. The evaluation criteria used is included in Appendix C. The scores for each project submitted are on the following tables.

Enterprise Funds

Fund			Average
Priority	Fund	Project	Score
1	BMA	Design & Reconstruct RWY 15-33, TWY C, Portion TWY B, Airfield Lighting Vault Generator	26.07
11	BMA	Design & Reconstruct RWY 6-24	23.43
5	BMA	Runway and Taxiway Markings and Airport-Owned Roadways	22.79
6	BMA	FAA Master Plan Update, Underground GIS Utilities, Runway 15/33 Extension, Terminal Expansion, Noise Exposure Map	22.79
12	BMA	Design & Reconstruct TWY Bravo (B)	22.36
4	BMA	Design & Construct New Fiber Optic Airfield Lighting Control System	22.07
9	BMA	Replace Mo-Gas & Diesel Fuel Con-vault, Gas Boy + Alarm	21.86
7	BMA	Clear Vegetation and Obstruction Removal Fenceline Buffer Zone & Airspace Offending Areas	21.43
2	BMA	Replace Snow Removal Equip, Aircraft Rescue / Fire Equip, Firefighting Truck, Skid Steer Plow	21.29
3	BMA	Vegetation Management Plan (VMP) and Airspace Study	21.00
8	BMA	Design & Construct Snow Removal Equip/Vehicle Storage Building	20.00
10	BMA	Design & Construct New T Hangar	19.71
			-
1	GOLF	Hyannis Golf Course Renovation	21.71
3	GOLF	Hyannis Golf Course Rear Deck, External Stair, Awning & Interior	21.07
2	GOLF	Olde Barnstable Fairgrounds Golf Facility Improvements	20.00
1	HYCC	Design & Construct Core HVAC	21.43
2	HYCC	Cogenerator - HYCC	21.00
1	SDY	Sandy Neck Beach Park Stabilization	27.62
1	SW	Replacement of 2007 Mack Tractor Unit	19.00
2	SW	Purchase of Three New Compaction Containers	18.71
3	SW	Purchase of New Open Top Roll-Off Container	17.64
4	SW	Replacement of 2012 Chevrolet Colorado 1/4 Ton Pick-Up (T401)	16.79
1	WPC	Clarifiers Rehab	26.71
4	WPC	Reline Sewers & Laterals on South Street HY	26.50
3	WPC	Design & Construction Barnstable Road Sewer Evaluation	26.07
7	WPC	Total Organic Compounds (TOC) and Total Nitrogen (TN) Effluent Construction	25.57
2	WPC	Backup Generator Replacement	25.36
6	WPC	Total Organic Compounds (TOC) and Total Nitrogen (TN) Effluent Design	25.36
5	WPC	Septage Building Construction	24.85
1	WS	Pipe Replacement & Upgrade Program	26.29
2	WS	Water Supply Wells, Pump Stations & Treatment Plant Repair	25.79
5	WS	Water Main Upgrade Barnstable Rd Main to Lewis Street	25.64
4	WS	Upgrades Design & Construction Mary Dunn 1 Water Storage Tank	25.21
3	WS	New Well Exploration Program	23.79
6	WS	Interconnections with other water systems	23.36

General Fund

Dant			A
Dept			Average
Priority	Dept	Project	Score
	Public Works	Public Roads Maintenance	25.71
	Public Works	Bumps River Bridge Construction	24.50
	Schools	Barnstable High School Stadium Bleachers	23.36
	Comm Serv	Craigville Beach House Site Work Phase IV	23.14
	Public Works	Design and Construction South Street Improvements	22.71
	Public Works Public Works	Town Hall Interior Renovations	22.71
	Comm Serv	Design and Reconstruction Barnstable Road Blish Point Boat Access Channel Dredge (3)	22.57
	Reg Services	Hydrilla Control Mystic Lake & Middle & Long Ponds	22.50
	Reg Services		22.50
	Schools	Toxic Algae Bloom Cyanobacteria School House Pond BCHMCPS Facade Improvement and Roof Replacement	22.50
	Reg Services	Fanwort Control Wequaquet Lake (including Bearses Pond & Gooseberry Cove)	22.29
	Schools		22.29
	Schools	Barnstable High School Library AC Upgrades & Replacement	22.21
-	Schools Public Works	Campus Wide Mechanical Upgrades (Burners, Boilers, HVAC & Pumps)	22.14
	Comm Serv	Main Street Hyannis Sidewalk Improvement	
	Schools	Kennedy Memorial Renovation Construction	21.86
		Barnstable High School Exterior Window Replacement	21.86
	Comm Serv	West Bay Entrance Channel - Survey, Design & Dredge	21.79
	Public Works	Coastal Resiliency Master Plan Development	21.71
	Comm Serv	Lombard Field Improvements - Parking, Bleachers, Ball Field & Press Box	21.57
	Public Works	Design and Construction Kennedy Legacy Trail Sidewalk Improvements	21.57
	Schools	Unit Ventilator Upgrades	21.50
	Public Works	Guardrail Replacement (6,000 linea ft) & Sidewalk Overlay	21.36
	Schools	Barnstable Public Schools Asbestos Abatement	21.36
-	Public Works	Design and Construction Traffic Signal Upgrades Study	21.29
	Schools	Replace HVAC Roof Top Units, (RTU's) at Barnstable High School and Barnstable Middle School	21.29
-	Comm Serv	Bathhouse Septic Upgrades	21.21
	Comm Serv	Blish Pt - Design, Permit & Construct Long Term Solution	21.00
	Schools	Hyannis West Elementary Exterior/Interior Door Replacement	21.00
	Public Works	Craigville Beach Road Pump Station and Force Main	20.93
	Schools	Electric Utility Transformer Upgrade	20.86
-	Schools	Centerville Elementary School Window Replacement	20.86
	Admin Serv	Walkway-to-the Sea HyArts Shanties	20.71
	Schools	Walk-In Cooler Replacements	20.64
	Public Works	Study Design and Construction Hyannis Main St West End Rotary	20.57
-	Public Works	DPW Salt Storage Facility	20.43
	Public Works	Craigville Beach Road Sidewalk & Drainage as associated with sewer work for PS at bath house	20.43
-	Public Works	Parking Lots Maintenance	20.36
	Schools	Kitchen Equipment Replacement and Upgrades	20.36
	Public Works	Town Hall Site Parking Lot	20.29
	Comm Serv	Design and Construction Lopes Field	20.21
	Comm Serv	Kalmus Beach Parking Lot - Repaving	20.14
	Public Works	Huckins Neck Road Reconstruction	20.14
	Schools	BPS Campus Wide Paving	20.14
23	Schools	Barnstable High School Fields and Grounds Improvements	20.14

Dept			Average
Priority	Dept	Project	Score
23	Public Works	MS4 Municipal Separate Storm Sewer System Program	20.07
18	Public Works	School Administration Building Mechanical Upgrades	20.00
5	Schools	Barnstable United Elementary Restroom Fixture and Hardware Upgrades	20.00
30	Public Works	Complete Streets Implementation Program	19.93
5	Public Works	Private Road Repair - Flint Street in Marton Mills, Willow Street in West Barnstable	19.86
3	Admin Serv	Unified Communications - VOIP (Voice over Internet Protocol)	19.79
17	Comm Serv	Construction Mill Pond & Long Pond Fish Ways	19.79
9	Schools	Facilities Maintenance Shop Roof Replacement	19.79
21	Schools	Barnstable High School Field House Improvements	19.79
6	Schools	BHS Pump Flange Replacement	19.71
12	Comm Serv	Centerville Recreation Interior Improvements	19.64
1	Admin Serv	Personal Computer (PC) and Windows XP Upgrades	19.57
32	Public Works	U.S. Custom House Interior Work	19.57
13	Schools	Flooring Replacement and Upgrades	19.57
14	Comm Serv	Design and Construction Centerville Recreation Building Site	19.50
	Schools	Barnstable United Elementary Parking Lot Light Pole Replacement	19.50
	Schools	BPS Campus Wide Painting	19.43
		Snow's Creek Crossing at Ocean Street, Hyannis	19.36
-		Town Hall Toilet Renovations	19.29
31		Design Shared Use Path Sandwich to Yarmouth	19.21
-		Sidewalk Installations Bump River Road Centerville, Main St Cotuit, South St Hyannis	19.07
-		Bearse's Way from Pitcher's Way to Route 28	19.07
		Design and Construction Highway Truck Storage Facilities	19.07
	Admin Serv	Microsoft Office 2002/2003 and Exchange 2003 Upgrades	18.93
	Comm Serv	Study & Preliminary Design Hyannisport Breakwater	18.93
		Design and Construction ADA Compliance Pedestrian Crossing & Sidewalks Report	18.93
		DPW 382 Falmouth Road Facility Parking Lot Repairs	18.86
-	Comm Serv	West Barnstable Community Building Window Replacement	18.79
	Schools	Barnstable High School Synthentic Turf Replacement	18.79
		U.S. Custom House Site Improvements	18.71
	Comm Serv	Barnstable Senior Center Stand-by Generator	18.64
	Comm Serv	Design and Construction Osterville Recreation Building	18.64
-		BPD Window Replacement	18.64
-		Design and Construction U.S. Custom House Carriage House	18.50
	Comm Serv	Construction West Bay Stone Breakwaters Repair	18.29
-	Schools	Barnstable United Elementary Courtyard Improvements	18.29
		Design and Construction Putnam Avenue Sidewalk	18.21
		Design and Construction Bay Shore Road Boat-Ramp	18.21
	Comm Serv	MEA Interior Project Phase III	18.14
		Armory Building Envelope, Electrical, and Mechanical Improvements	18.14
-		Old Jail Repairs	18.00
		Burgess Barn Interior	17.93
		DPW Offices Phase III Construction	17.79
-		Mosswood Cemetery, Putnam Avenue Cotuit	17.43
		Traffic Calming	16.00
	Comm Serv	MEA Building Site Work Improvements	15.29
		MEA Storage Building	13.25

Many of the highest scoring projects are recommended for funding in FY 2017. Some of the higher scoring projects that did not receive any funding in FY17 may be a result of the project not being ready for the construction phase, the cost requires further evaluation, funding is not available or the department submitted the project with a request for funding in a subsequent year.

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PART IV – TOWN MANAGER RECOMMENDATIONS

Project Recommendation Rationale

Several factors were taken into consideration when determining which projects to recommend for funding in Fiscal Year 2017. In addition to reviewing the scoring by the Senior Staff I was particularly focused on projects that had received previous funding and are ready for the next stage of their development; projects that would contribute to the economic development of the Town; projects that would preserve important infrastructure components of the Town; projects that improve high usage assets; projects that have outside funding available to offset the costs or can be covered by user fees; and projects that have an important public safety component associated with them. Using these criteria, I am recommending the following list of projects:

Project Title	Received	Contributes To		High	Important Public	User Fees/ Available
	Previous	Economic	Preservation	Usage	Safety/Health	Outside
	Funding	Development	Of Asset	Asset	Component	Funding
Airport Runway			Х	Х		Х
Runway Markings					Х	
Replace Airport Equipment					Х	х
Dredge Gateway Marina	Х		Х			
OBF Golf Facility Improvements			Х	Х		Х
Hyannis GC Facility Improv.			Х	Х		х
Water Pipe Replacement	Х	Х	Х	Х	Х	Х
Water System Wells & Pumps	Х		Х	Х	Х	Х
Water System Interconnections		Х			Х	Х
Mary Dunn Water Tank			Х	Х	Х	Х
WPCF Clarifiers	Х		Х	Х	Х	Х
WPCF Backup Generator					Х	Х
Solid Waste Equipment				Х		Х
Transfer Station Improv.			Х	Х	Х	Х
Traffic Signal Upgrades			Х	Х	Х	
Public Road Improvements			Х	Х	Х	
Guardrails & Sidewalks			Х		Х	
Software & Hardware Upgrades				Х		
MM Land Acq. & Pkg. Lot	Х	Х			Х	
Blish Point Channel Dredge		Х	Х	Х		
Private Road Repairs			Х	Х	Х	
Walkway Shanties		Х				
Osterville Bay Site Improv.	Х		Х			
Beach Facility Improvements	Х	Х	Х	Х		х
Lombard Field Improvements	Х		Х	Х		х
WB Community Bldg Windows			Х			х
School House Pond			Х		Х	
MS4 Stormwater Program					Х	
BCHMCPS Façade & Roof	Х		Х	Х		
BUE Restrooms & Light poles			Х	Х	Х	
Unit Ventilator Upgrades			Х	Х		
Pump Flange Replacements			Х	Х		
Walk-in Cooler Replacement			Х	Х		

This list of projects totals \$29,881,954. The General Fund program totals \$15,598,449 and the Enterprise Funds total \$14,283,505. Funding for the general fund portion of the program consists of \$3,786,070 in Capital Trust Fund (CTF) reserves, \$719,669 in transfers from closed appropriations and revolving accounts, \$666,710 from the Sewer Construction & Private Way Maintenance & Improvements Fund, \$923,000 from the Community Preservation Fund, and \$9,503,000 in new borrowing authorizations.

Funding for the Enterprise Fund programs consists of using \$2,252,000 of enterprise fund reserves, \$89,505 in transfers from closed appropriations, and \$11,942,000 in new borrowing authorizations. \$6,149,350 is anticipated to be reimbursed from federal and state granting agencies for the Airport projects. The grant funds received will reduce the amount of any bonds issued or the reserves used to finance the enterprise fund's capital program. The bonds issued for the enterprise fund projects are expected to be paid back with enterprise fund revenues.

Enterprise Funds Recommendations

	Funding Source					
Project Name and Council Order Number	Enterprise Fund Reserves	Bond Issue	Grants	Total		
AIRPORT:						
Design & Reconstruct RWY 15-33, TWY C, Portion TWY B, Airfield Lighting Vault Generator 2016-090		318,650	6,054,350	6,373,000		
Runway, Roadway & Taxiway Markings 2016-092	150,000			150,000		
Replace Snow Removal Equipment, ARFF Equipment, Skid Steer Plow 2016-091	5,000		95,000	100,000		
Total Airport Enterprise Fund	155,000	318,650	6,149,350	6,623,000		
MARINA:			-			
Gateway Marina Dredging 2016-109		500,000		500,000		
Total Marina Enterprise Fund	-	500,000		500,000		
GOLF COURSES:						
Olde Barnstable Fairgrounds Golf Facility Improvements 2016-107		258,000		258,000		
Hyannis Golf Course Rear Deck, External Stair, Awning & Interior 2016-108		307,000		307,000		
Total Golf Enterprise Fund	-	565,000	-	565,000		
	-	565,000	-	565,000		

The recommended projects for the Enterprise Funds (continued)

	Funding Source					
Project Name and Council Order Number	Enterprise Fund Reserves	Bond Issue	Transfers	Grants	Total	
WATER SUPPLY:						
Pipe Replacement & Upgrade Program 2016-093	150,000	900,000			1,050,000	
Water Supply Wells, Pump Stations & Treatment Plant Repair 2016-094	200,000				200,000	
Interconnections with other water systems 2016-096	400,000				400,000	
Upgrades Design & Construction Mary Dunn 1 Water Storage Tank 2016-095	52,000				52,000	
Total Water Supply Enterprise Fund	802,000	900,000	-	-	1,702,000	
WATER POLLUTION CONTROL:						
Clarifiers Rehab 2016-097		1,200,000	89,505		1,289,505	
Backup Generator Replacement 2016-098		904,000			904,000	
Total Sewer Enterprise Fund	-	2,104,000	89,505	-	2,193,505	
SOLID WASTE:						
Replacement of 2007 Mack Tractor Unit 2016-099	150,000				150,000	
Replacement of 2012 Chevrolet Colorado 1/4 Ton Pick-Up (T401) 2016-100	50,000				50,000	
Solid Waste Facility Master Plan – Construction 2016-101	500,000	2,000,000			2,500,000	
Total Solid Waste Enterprise Fund	700,000	2,000,000	-	-	2,700,000	
Total All Enterprise Funds	1,657,000	6,387,650	89,505	6,149,350	14,283,505	

General Fund Recommendations

	Funding Source						
Project Name and Council Order Number	Cash	Bond Issue	Community Preservation Fund	Transfers	Sewer Construction & Private Way Fund	Total	
INFRASTRUCTURE:							
Traffic Signal Upgrades 2016-105	150,000					150,000	
Public Roads Maintenance 2016-102	3,250,000					3,250,000	
Guardrail Replacement & Sidewalk Improvements 2016-103		730,000				730,000	
Information Technology Software & Hardware Upgrades 2016-086		363,000		55,000		418,000	
Marstons Mills Land Acquisition & Parking lot 2016-087		290,000				290,000	
Blish Point Boat Access Channel Dredge 2016-111		988,000		91,788		1,079,788	
Private Road Repairs 2016-106				186,290	666,710	853,000	
Total	3,400,000	2,371,000	-	333,078	666,710	6,770,788	
MUNICIPAL FACILITIES:	Γ	Γ	1	1	1	1	
Walkway-to-the Sea HyArts Shanties 2016-088	103,570			2,430		106,000	
Osterville Bay School & Recreation Building Site Improvements 2016-112		757,000		143,444		900,444	
Beach Facility Improvements 2016-110		478,000		140,717		618,717	
Lombard Field Improvements 2016-113		936,000	750,000			1,686,000	
West Barnstable Community Building Window Replacement 2016-114			173,000			173,000	
Total	103,570	2,171,000	923,000	286,591	-	3,484,161	

The recommended projects for the General Fund (continued)

			Funding	g Source		
Project Name & Council Order Number	Cash	Bond Issue	Community Preservation Fund	Transfers	Sewer Construction & Private Way Fund	Total
WATER QUALITY:						
School House Pond Algae Remediation 2016-089	55,000					55,000
MS4 Municipal Separate Storm Sewer System Program 2016-104	87,500					87,500
Total	142,500	-	-	-	-	142,500
SCHOOL FACILITIES:						
BCHMCPS Roof & Façade Improvements 2016-081		4,236,000		50,000		4,286,000
Barnstable United Elementary Restroom Upgrades & Light Pole Replacement 2016-082		475,000				475,000
Unit Ventilator Upgrades 2016-083		250,000				250,000
Pump Flange Replacements 2016-084	70,000					70,000
Walk-In Cooler Replacements 2016-085	70,000			50,000		120,000
Total	140,000	4,961,000	-	100,000	-	5,201,000
Grand Totals	3,786,070	9,503,000	923,000	719,669	666,710	15,598,449

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School Department General Fund

DROJECT, SCUL 17 2 SCUOOL	DEDADTNAENIT DDIODITV, 2 of 24	2016 001
PROJECT: SCH -17-3 SCHOOL	DEPARTMENT PRIORITY: 3 of 24	2016-081

Project Working Title: BCHMCPS Façade Improvement and Roof Replacement

Project Location: 165 Bearses Way, Hyannis, MA

Project Description: Provide exterior repair including repointing of masonry, trim replacement, gutters, doors, downspouts and foundations repairs and replacement.

Project Justification: Continued deterioration of building exterior is the cause of increasing water/air infiltration. Additionally, failure of mortar joints and poured surfaces is allowing water penetration resulting in wall heaving and movement.

Impact Of Denial/Postponement: Denial or postponement of this project will result in additional deterioration which will cause continued interior water damage and structural damage to masonry walls. Additional, failure to replace and repair trim work is causing a health hazard by offering shelter to birds and rodents.

Project Cost Estimates:		FY 2017
	Design& Permitting	\$342,000
	Construction or Acquisition	\$3,420,625
	Construction Contingency	\$171,000
	Project Management	\$171,000
	Project Contingency	\$171,000
	All Other Costs	\$10,375
	Total Project Cost	\$4,286,000

Basis for Cost Estimates (explain how arrived at): CBI Consultants & Town of Barnstable Architectural Dept.

Project Time Estimates (months): Design & Permitting 6 Construction 12

Project Estimated Completion Date: January 2018

Project Cost/Description Current and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$4,286,000	Engineering and Construction for BCHMCPS Roof Replacement and Façade
		Repairs/Improvements

Source of Funding: Capital Trust Fund Bond Issue \$4,236,000 & Transfers from Closed Appropriation \$50,000 Council Order 2015-119









PROJECT: SCH -17-4 SCHOOL

DEPARTMENT PRIORITY: 4 of 24

Project Working Title: Barnstable United Elementary Parking Lot Light Pole Replacement

Project Location: 730 Osterville-West Barnstable Road, Marstons Mills, MA

Project Description: Replace Parking Lot Light Poles, (16 Units)

Project Justification: Existing Fiberglass Parking Lot Poles are failing at connection point between base sleeve and pole.

Impact Of Denial/Postponement: Denial or postponement of this project could result in failure of pole causing damage and/or bodily injury.

	FY 2017
Design & Permitting	\$0
Construction or Acquisition	\$90,000
Construction Contingency	\$10,000
Project Management	\$0
Project Contingency	\$0
All Other Costs	\$0
Total Project Cost	\$100,000
	Construction or Acquisition Construction Contingency Project Management Project Contingency All Other Costs

Basis for Cost Estimates (explain how arrived at): Contractor and Supplier Quotations

Project Time Estimates (months): Design & Permitting 2 Construction 4

Project Estimated Completion Date: December 2016

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$100,000	Supply and Replacement of 16 Parking Lot Poles at Barnstable United
		Elementary



2017 CIP - School Department General Fund

PROJECT: SCH -17-5 SCHOOL

DEPARTMENT PRIORITY: 5 of 24

Project Working Title: Barnstable United Elementary Restroom Fixture and Hardware Upgrades

Project Location: 730 Osterville-West Barnstable Road, Marstons Mills, MA

Project Description: Replace sinks, lavatories, fixtures and associated piping and plumbing in 12 Boys & Girls Rooms at BUE. Project would include equipment for water treatment if necessary.

Project Justification: Existing plumbing and fixtures are +20 years old ('94) are obsolete with many replacement parts becoming difficult and impossible to location. Additionally, high ph in water supply is causing deterioration of pipes and fixtures.

Impact Of Denial/Postponement: Denial or postponement of this project will result in continued problems with leaks and nonoperational fixtures causing user inconvenience and potential health/safety issues.

Project Cost Estimates:

	FY 2017
Design & Permitting	\$50 <i>,</i> 000
Construction or Acquisition	\$205 <i>,</i> 000
Construction Contingency	\$30,000
Project Management	\$0
Project Contingency	\$20,000
All Other Costs	\$70,000
Total Project Cost	\$375,000

Basis for Cost Estimates (explain how arrived at): Budgetary estimates provided by CBI Consultants & GGD Engineering.

Project Time Estimates (months): Design & Permitting 6 Construction 18

Project Estimated Completion Date: May 2018

Project Cost/Description Current and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$375,000	Replacement and upgrade of bathroom fixtures at Barnstable United
		Elementary

Source of Funding: Capital Trust Fund Bond Issue Combined Projects \$475,000



2017 CIP - School Department General Fund

PROJECT: SCH -17-8 SCHOOL

DEPARTMENT PRIORITY: 8 of 24

Project Working Title: Unit Ventilator Upgrades

Project Location: District Wide (BWB, HYW, Centerville, BCHMPCS, Cotuit & Osterville Elementary Schools)

Project Description: Replace original/outdated unit ventilators at five elementary schools, (106 units).

Project Justification: Current units are 50+ years old, failing and not operating to current ASHRAE/DLS standards.

Impact Of Denial/Postponement: Denial or postponement will continue to impact air quality, occupant health and heating/ventilating efficiency.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$2,500	\$7,500
	Construction or Acquisition	\$222,600	\$667,800
	Construction Contingency	\$22,500	\$67,500
	Project Management	\$0	\$0
	Project Contingency	\$0	\$0
	All Other Costs	\$2,400	\$7 <i>,</i> 500
	Total Project Cost	\$250,000	\$750,300
	Construction or Acquisition Construction Contingency Project Management Project Contingency All Other Costs	\$222,600 \$22,500 \$0 \$0 \$2,400	\$667,800 \$67,500 \$0 \$0 \$7,500

Basis for Cost Estimates (explain how arrived at): Vendor/supplier budgetary cost estimates

Project Time Estimates (months):	Design & Permitting	2	Construction	36
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Project Estimated Completion Date: August 2019

Project Cost/Description Current and Follow-On Years:

FY	Cost	Project Description/Components
2017	\$250,000	Unit Ventilator Replacement
2018	\$250,100	Unit Ventilator Replacement
2019	\$250,100	Unit Ventilator Replacement
2020	\$250,100	Unit Ventilator Replacement

Source of Funding: Capital Trust Fund Bond Issue \$250,000



2017 CIP - School Department General Fund

PROJECT: SCH -17-6 SCHOOL

DEPARTMENT PRIORITY: 6 of 24

Project Working Title: BHS Pump Flange Replacement

Project Location: Barnstable High School, 744 West Main St., Hyannis, MA.

Project Description: Replace/upgrade existing rubber pump coupler assemblies with stainless steel replacement units.

Project Justification: Existing units have well exceeded 5 to 10 year life expectancy and are beginning to fail.

Impact Of Denial/Postponement: Denial or postponement of this project affects reliable heating and cooling of the buildings. Rupture of the coupler results in loss of

Project Cost Estimates:		FY 2017
	Design & Permitting	\$0
	Construction or Acquisition	\$63,000
	Construction Contingency	\$0
	Project Management	\$0
	Project Contingency	\$7,000
	All Other Costs	\$0
	Total Project Cost	\$70,000

Basis for Cost Estimates (explain how arrived at): Vendor Quotes

Project Time Estimates (months):	Design & Permitting	1	Construction	3
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Project Estimated Completion Date: September 2016

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$70,000	Supply and Replacement of aged circulating pump flanges at Barnstable High
		School.

Source of Funding: Capital Trust Fund Reserves \$70,000





2017 CIP - School Department General Fund

PROJECT: SCH -17-11 SCHOOL DEPARTMENT PRIORITY: 11 of 24

Project Working Title: Walk-In Cooler Replacements

Project Location: Barnstable High School/Hyannis West Elementary School, 744 & 549 West Main Street, Hyannis, MA

Project Description: Replace Walk-In Coolers at BHS and HYW

Project Justification: Existing Equipment at the end of life, reliability and efficiency issues

Impact Of Denial/Postponement: Denial or postponement will result in the continued expense for repairs to operate obsolete equipment and the replacement of spoiled food.

Project Cost Estimates:		FY 201	7	
Des	sign & Permitting	\$0		
Сог	nstruction or Acquisition	\$110,0	00	
Сог	nstruction Contingency	\$10,00	0	
Pro	oject Management	\$0		
Pro	oject Contingency	\$0		
All	Other Costs	\$0		
Tot	tal Project Cost	\$120,0	00	
Basis for Cost Estimates (explain how arrived at): Vendor Budgetary Costs				
Project Time Estimates (months):	Design & Permitting	1	Construction	4
Project Estimated Completion Date	Project Estimated Completion Date: September 2016			

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$120,000	Replace Walk-In Coolers at BHS and HYW

Source of Funding: Capital Trust Fund Reserves \$70,000 & School Lunch Revolving Fund \$50,000













2017 CIP - School Department General Fund

Administrative Services General Fund

PROJECT: ASD -17-1 ADMINISTRATIVE SERVICES

DEPARTMENT PRIORITY: 1 of 3

2016-086

Project Working Title: Personal Computer (PC) and Windows XP Upgrades

Project Location: Multiple Town office locations

Project Description: Replace older PCs running Windows XP

Project Justification (why needed): Information Technology (I.T.) replaces approximately 60 PC's a year using Operating Capital. There are 441 PC's in use (not counting laptops, tablets etc.). At a replacement rate of 60 a year, it would take over 7 years to replace all of the PC's. Of the 441 PC's, 261 are older and are still running the Windows XP Operating System (OS). Microsoft no longer supports Windows XP. Microsoft no longer issues patches to fix newly found security exploits in Windows XP. This means we have 261 older machines that are vulnerable to any new Windows XP security flaws found. This places the Town's I.T. systems, network, and data at greater risk for hacking, information theft, viruses and malware. The 261 PC's are older, some are seven years old, and do not have the performance of newer PC's. New PC's are sold with the latest operating system included. Capital funding for the replacement of these vulnerable 261 PC's benefits the Town twofold. It replaces aging, slower performing PC's with PC's that offer better performance and longevity as well as removing the vulnerable Windows XP operating systems from the Town's network. New PC's come with the latest operating system licensed and installed. Please keep in mind, these are the tools used every day by just about everyone to perform their jobs. It should also be noted that we are currently running Munis version 10.5 (Town's Financial Software). When version 11 is released it will not support the Windows XP Operating System. The Town will have to remain on Version 10.5 until all Windows XP Operating Systems are replaced.

Impact Of Denial/Postponement: Continued use of obsolete PC's with their limitations.

Project Cost Estimates: FY 2017 Acquisition \$218,979

Basis for cost estimates (explain how arrived at): 261 PC's at \$839.00 per PC. Quote from vendor on State Contract.

Project Estimated Completion Date: July 1, 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$218,979	Purchase PC's and replace the Windows XP machines with the newer
		Microsoft Operating System and Office Suite (If capital for that project
		approved).

Operating Budget Impact now or in future: None. PC's purchased come with manufacturers three year warranty.

2017 CIP - Administrative Services Department General Fund

PROJECT: ASD -17-2 ADMINISTRATIVE SERVICES

2016-086

Project Working Title: Microsoft Office 2002/2003 and Exchange 2003 Upgrade

Project Location: All Town locations

Project Description: Upgrade the Microsoft Office 2002/2003 suite to Microsoft Office 2013 (or greater) and upgrade the email server, Microsoft Exchange from 2003 to 2013 (or greater)

Project Justification (why needed): The Microsoft Office Professional 2002/2003 Suite of software the Town has on a majority of PC's and devices has served us well but is now 13 years old and no longer supported by Microsoft. The new software allows tasks to be done easier and quicker with a more professional outcome. Microsoft also 13 years old and no longer supports our existing Microsoft Exchange 2003 server software. Because of its age, more and more either of the third party, software we use will not work with it or offers limited functionality. Munis is a prime example of not supporting this older Microsoft software. Please note, it is not possible to implement this I.T. CIP #2 project without having also implemented I.T. CIP #1. I.T. CIP #3 (FY18) is not possible to implement without the implementation of I.T. CIP #1 and I.T. CIP #2.

Impact Of Denial/Postponement: The Microsoft Office 2002/2003 suite is 13 years old. If denied the Town will continue to use the software and have to deal with the limitations of other third party software's inability to integrate with our standardized Microsoft Office suite due to its age. In fiscal year 2014, I.T. had purchased 125 licenses out of its Operating Capital to upgrade "power users". This does present problems when exchanging documents between the new and the old software as well as dealing with outside organizations that exchange documents with the Town. New hires to the Town will have to learn the older software as many of them are familiar with the new software outside of the Town. With Microsoft no longer supporting the 2002/2003 Office suite and Exchange 2003 we are left with the same vulnerabilities as we have with running the Windows XP operating system. It should be noted that Microsoft has positioned its software in that both Microsoft Office and Exchange must be upgraded together. The Town's current version of the Microsoft email client, Outlook 2002/2003, is not compatible with the newest version of Microsoft Exchange. Denial will impact the ability to implement I.T. CIP #3 FY18 due to most unified communication solutions only work with newer Microsoft Exchange platforms and not an older one (like ours).

Project Cost Estimates: FY 2017 Acquisition \$199,021

Basis for cost estimates (explain how arrived at): Quote from State Contract Vendor for an additional 375 licenses bringing the Town to 500 Licenses for the Microsoft Office Suite and a quote from the same vendor to upgrade Microsoft Exchange.

Project Estimated Completion Date: 7/1/2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	Cost	Project Description/Components
2017	\$143,417	375 Licenses for Microsoft Office 2013
	\$55,604	Microsoft Exchange 2013 and Active Directory upgrades

Source of Funding: Capital Trust Fund Bond Issue Combined Projects \$363,000 & Transfer Closed Appropriations \$55,000 Council Order 2014-100

Operating Budget Impact now or in future: None. Town owns the licenses.

2017 CIP - Administrative Services Department General Fund

Growth Management General Fund

PROJECT: GMT -17-1 GROWTH MANAGEMENT

DEPARTMENT PRIORITY: 1 of 2

2016-087

Project Working Title: Marstons Mills Village Center Parking and Park

Project Location: 164 Cotuit Road, Marstons Mills, Map 078, Parcel 074

Project Description: Acquisition of the above referenced parcel and initial conceptual design for a small park along Cotuit Road with parking in the rear accessible to patrons of the business core area and the Library and Liberty Hall on Main Street. After extensive discussions with area businesses GMD views this small parking and park infrastructure project as economic support for village businesses.

Project Justification: This parcel is offered to the Town at a very opportune time. At the request of the Village the Town through GMD and then with DPW worked with the village for several years to arrive at a working concept for streetscape and place making improvements for Cotuit Road from the Mill Pond to Lovell's Lane, portions of Main Street to the school property and a small portion of River Road. This centuries old intersection no longer safely serves the village, its residents, businesses, and visitors. Once concepts were developed DPW and GMD worked to refine the plans to move to the final design and construction phase of the project. One of the difficulties encountered was a reluctance of some property owners to grant small easements to allow the development of on street parking – adding to the overall number of spaces available to the area. The final design will include only half the number of on-street spaces originally anticipated. This property on the east side of Cotuit Road will fill that need very well. Vehicle access can be gained from Cotuit Road while pedestrian access can be designed to serve both Cotuit Road and Main Street patrons.

Describe Work Previously Accomplished this Proposed Project; Corridor design is complete – construction drawings are now in process. Streetscape and road improvements will occur in the Fall of 2016 or Spring of 2017

Impact Of Denial/Postponement: Lost opportunity to provide space for much needed parking for village businesses and community activities

Project Cost Estimates:		FY 2017	Future FY
	Acquisition	\$260,000	
	Design & Permitting	\$30,000	\$?
	Construction	\$0	\$?
	Total Project Cost	\$290,000	<u>Above costs unknown until</u> conceptual design is completed

Basis for cost estimates: Appraisal, design estimate from qualified firm

Project Estimated Completion Date: Fall 2017

Source of Funding: Capital Trust Fund Bond Issue \$290,000

Operating Budget Impact now or in future: To be developed following design. DPW structures and Grounds will be responsible for maintenance of Park and Parking Lot.

2017 CIP – Growth Management Department General Fund

Existing Conditions 164 Cotuit Road



Proposed Conditions



PROJECT: GMT -17-2 GROWTH MANAGEMENT

Project Working Title: Walkway-to-the Sea HyArts Shanties

Project Location: Village Green at corner of Ocean and South Street, Hyannis along upper walkway – plan and photo attached.

Project Description: Installation of five 10 X 12 customized pre-fabricated wooden sheds for HyArts Cultural District programming. The Walkway shanties will be a year round installation along the Walkway-to-the-Sea. Installation includes site preparation; reinforced concrete slab installation; shanty placement; wiring for security lighting, interior use and a ground level outlet to power performance equipment; and final site restoration.

Project Justification: The HyArts shanty program at Bismore Park is a resounding success both economically and culturally. It is important the town continue to integrate arts into the social, physical and economic fabric of our community. Currently we are not able to accommodate all accepted artists within the existing shanty program. Expansion of the program along the Walkway-to-the Sea will provide: an additional attraction to draw visitors from Main Street to the Harbor; more affordable incubator space for local artists; an additional revenue stream for HyArts programming; and, through installation and site design, increased visibility and use within this public space. Artist demand to participate in the current shanty program at Bismore Park far exceeds available space. Offering additional space meets increased demand and eliminates risk of potential participants seeking programs and selling opportunities in other towns on Cape Cod.

Project Status: Additional Phase Prior Approved Project - Phase 1 – Seven Shanties installed and programmed at Bismore - Prior Funding \$ through Bismore account loan in 2005 - now paid in full

Impact of Denial/Postponement: Deferred funding will delay the programming of this public space and the economic benefit of this creative economy stimulus project, a fundamental GMD Economic Development program. The project benefits from enlivening this portion of the Village Green would also be lost for another summer season. In addition, the delay will adversely affect existing programming in addition to deferring potential benefit from expansion. The shanties are a place making driven strategy providing a key attraction to the area for visitors and a critical component to successfully build and foster our creative economy in downtown Hyannis.

Project Cost Estimates:FY 2017Design \$2,500.00Construction \$106,000

Basis for cost estimates: Consultation with construction and design professionals

Project Estimated Completion Date: September 2016

Project Cost/Description FY 2015 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$106,000	Construction/placement of five 10 X 12 sheds along walkway-to-the-sea
		Sheds, electrical, site work, landscape improvements

Source of Funding: Capital Trust Fund Reserves \$103,570 & Transfer Closed Appropriations \$2,392 Council Order 2014-113, \$38 Council Order 2013-116

2017 CIP – Growth Management Department General Fund

Operating Budget Impact now or in future:

Revenue:First Year (FY 2015)\$7,000Subsequent Years (Average Annual)\$10,000

Expenses: No additional staff costs to program.

Annual building permits for sheds	Ş175
Annual plantings	\$2,000
Anticipated maintenance years 1-5	\$2,500/year
Emergency repair fund	\$2,500/year
Note: Money for emergency repair fur	nd will be funded through reve

Note: Money for emergency repair fund will be funded through revenue received from program participants.

All additional revenue will be used for marketing and entertainment for the program.

Supplemental Information:

Item Description	<u>Quantity</u>	<u>Unit</u>	<u>Cost</u>
10 X 12 shed	5	6990	\$34,950
cement pads	5	1100	\$5 <i>,</i> 500
electrical service			\$2,800
electrical wiring interior/exterior	5	995	\$4,975
preliminary site work			\$2 <i>,</i> 500
site work-hardscape			\$10,400
irrigation system modification			\$7,000
construction, observation & field engineering			\$5 <i>,</i> 000
site work-landscape modifications/materials			\$17,000
site furnishings			<u>\$6500</u>
Sub-Total			\$96,625
10% contingency			<u>\$9,663</u>
Total			\$106,288





Location of Five New HyArts Shanties (Intersection South & Ocean)

Regulatory Services General Fund

PROJECT: RS -17-1 REGULATORY SERVICES DEPARTMENT PRIORITY: 1 of 2

2016-089

Project Working Title: Toxic algae bloom Cyanobacteria, Schoolhouse Pond

Project Location: Schoolhouse Pond, Hyannisport

Project Description (in detail): The goal is to place one solar power unit for water circulation in Schoolhouse Pond to disrupt the habitat for cyanobacteria. Schoolhouse Pond is listed as a chronic public health concern. The Barnstable Health Division and Massachusetts Department of Public Health have closed it to swimming the last two summers due to the toxic algae blooms and visibility of less than four feet. Toxic algae can cause skin and eye irritation and gastrointestinal illness. Children and pets are particularly at risk. The pond is listed as a high priority on the Action Plan for Barnstable Ponds 12/31/2009. Other project objectives include improvement to water quality, pH and oxygen fluctuations and fish habitat. Solar power units are currently being used with success in other Cape towns.

Project Justification (why needed): Public Health concern. Children and pets are at risk for gastrointestinal illness, skin and eye irritation. These are listed as high priority under Action Plan for the Barnstable Ponds dated 12/31/2009. Improve recreational interests and habitat for fish. Health Department contacted Conservation for assistance on this project. Permitting is complete with the Conservation Commission and DEP. Project supported by Friends of Schoolhouse Pond and the Conservation Commission. At some point, the equipment could possibly be moved to another pond, cove in a larger pond.

Impact Of Denial/Postponement: Toxic algae blooms will continue in the pond placing the public at risk. Children and pets are at risk. The health of the pond will continue to decline reducing fish populations and birds.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$0
	Construction	\$50,000
	Construction Contingency	\$5,000
	Construction Services	\$0
	Project Management	\$0
	Project Contingency	\$0
	Total Project Cost	\$55,000

Basis for cost estimates (explain how arrived at): Recent quote from SolarBee®

Project Time Estimates: Design & Permitting (months) 0 Construction (months) 1

Project Estimated Completion Date: Summer 2016, monitoring and maintenance 2016 - 2020

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$55,000	Installation of circulator, monitoring and maintenance

Source of Funding: Capital Trust Fund Reserves \$55,000

2017 CIP - Regulatory Services Department General Fund



2017 CIP - Regulatory Services Department General Fund

Airport Enterprise Fund

PROJECT: AIR-17-1 AIRPORT	DEPARTMENT PRIORITY: 1 of 12	2016-090
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Project Working Title: Rehabilitate Runway 15-33, Replace Runway 15-33 VASI with PAPI, Re-Align a Portion of Taxiway B and Re-Align a Portion of Taxiway C, and Replace Emergency Back-Up Generator in Airfield Lighting Vault.

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Rehabilitate Runway 15-33 (Approximately 5,253 FT. x 150 FT.), Replace Runway 15-33 VASI with PAPI, Re-Align a Portion of Taxiway B (Approximately 700 FT. x 50 FT.), Re-Align a Portion of Taxiway C (Approximately 1250 FT. x 50 FT.), and Replace Emergency Back-Up Generator in Airfield Lighting Vault.

Project Justification:

(A) Runway 15-33 is one of Barnstable Municipals Airport's (HYA) main runways. The main portion of the runway was last rehabilitated in 1985 and was extended in 1989. The pavement condition is listed as fair, soon to be poor. Part of this project will reconstruct Taxiways A and A1 (up to the runway hold lines) to meet current FAA advisory circular design requirements. The holding side of these taxiway stubs was updated during the Taxiway A reconstruction project in 2013.

(B) A portion of Taxiway B east of Runway 15-33 will be realigned. The existing HYA Operations and ARFF building penetrates the Taxiway Object Free Area (TOFA) for Group-III aircraft. Approximately 700ft of Taxiway B from runway 15-33 to the east ramp will be realigned placing the building outside of the TOFA.

(C) Taxiway C is over thirty (30) years old and has exceeded its pavement life expectancy. A portion of Taxiway C was reconstructed in 2015. Taxiway C between Taxiway D and Taxiway A will be reconstructed and realigned to meet current FAA Advisory Circular (A/C) requirements.

(D) The existing Runway 15-33 Visual Approach Slope Indicator (VASI) will be removed and a new FAA owned and operated Precision Approach Path Indicator (PAPI) will be installed in its place to improve operations and flight safety.

(E) The existing emergency back-up generator in airfield lighting vault is over thirty (30) years old and is due for replacement and will be incorporated within this project.

Describe Work Accomplished this Proposed Project: Design has been delayed due to delay in FAA planned funding for reconstruction in FY2016 and FY2017 and using discretionary funding. Use of the statewide crack sealing project is effectively extending the life of the failing pavement in the interim. Initial funding for the Runway reconstruction project is being used for design and bid documents for grant acceptance; and is being used to front-load a mandatory FAA reimbursable agreement for the VASI to PAPI project. Airport funding for the emergency back-up for airfield lighting was previously approved and is being incorporated into this single FAA construction project. The main portion of the Taxiway Charlie reconstruction project was completed in the fall of 2015, with the final phase to be completed in the spring of 2016, as a separate project at a cost of \$4,785,000.

Impact of Denial/Postponement: To deny or postpone funding of this capital project will have flight safety consequences with regard to airport operations; and will increasingly affect the ability of pilots to operate on the runway, perform aircraft engine run-ups, and with potential loss of runway access during strong crosswinds and lessened flight safety. Eventually the runway and taxiways would be unusable and the Airport would be in violation of their Grant Assurances and not in compliance with Airport certification requirements with resultant loss of operational capability.

Project Cost Estimates:

	FY2017
Design & Permitting	\$389,104
Construction or Acquisition:	\$ 6,164,213
Construction Contingency	\$0
Project Management	\$309,683
Project Contingency	\$0
Total Project Cost	\$6,863,000
Less prior appropriations of	(\$490 <i>,</i> 000)
FY2017 cost of	\$6,373,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: Spring CY2018 or earlier depending upon construction phasing, flight operations and the weather.

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	Cost	Project Description/Components
2017	\$6,373,000	Design, Permitting and Reconstruction

Source of Funding: Reimbursable funding from FAA (90%), MassDOT Aeronautics (5%) and local share (5%)

Operating Budget Impact now or in future: None. Routine maintenance would stay the same.

PROJECT: AIR-17-2 AIRPORT

DEPARTMENT PRIORITY: 2 of 12

Project Working Title: Replace Snow Removal Equipment (SRE) and Aircraft Rescue and Fire Fighting (ARFF) Equipment (Rapid Response Vehicle; ASV Skid Steer Plow; and Primary First Response Rescue and Firefighting Truck)

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Snow Removal Equipment (SRE) and Aircraft Rescue and Fire Fighting (ARFF) equipment must be maintained regularly and when certain FAA approved equipment is eligible for replacement with FAA grant assistance, SRE and ARFF vehicles and equipment must be evaluated and replaced as necessary. This project is to replace a 1999 Ford F-450 Heavy Duty Flatbed Truck with fire combat unit; the 2004 ASV Diesel Skid Steer Plow; and the 2006 E-One Titan Primary Aircraft Rescue and Firefighting vehicle with tools and equipment.

Project Justification: With approximately 1.5 million square feet of pavement, that includes two active runways, several aircraft taxiways and aircraft parking ramps that must be maintained, including snow removal; and to maintain our FAA FAR Part 139 airport certification, certain equipment must be available and in good condition to perform as required.

Impact Of Denial/Postponement: The airport may not be able to meet mandated FAA FAR Part 139 certification requirements and would be decertified. The airport would not be able to maintain operations, nor remove snow in order to keep the runways open and safe for operation. The airport would be unable to provide a safe operation for the continuation of commerce as part of the national airspace plan; the airport would be unable to respond to airfield emergencies, with the potential for decreased flight safety, increased property damage, and would unnecessarily endanger lives and property.

Project Cost Estimates:		FY 2017	Future FY
	Construction or Acquisition	\$100,000	\$1,000,000

Basis for Cost Estimates: Recent similar purchases, State Bid List, FAA acquisitions, manufacturer quotes, etc.

Project Estimated Completion Dates: 2017, 2020, and 2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$100,000	Replace 1999 Ford F-450 Heavy Duty Truck \$70,000 and fire combat unit
		\$30,000
2020	\$100,000	Replace 2004 ASV Diesel Skid Steer Plow
2021	\$900,000	Replace 2006 Primary First Response Fire Truck, Tools and Equip

Source of Funding: FAA AIP reimbursable Grant funds at 90%; MassDOT at 5%; BMA at 5%. Fire combat unit may be 100% Airport Enterprise Funds at \$30,000 if deemed not eligible for FAA and MassDOT reimbursement.

Operating Budget Impact: None. Replacement Vehicles. Routine maintenance remains about the same

Supplemental Information: The fire combat unit is essentially a skid mounted firefighting unit that mounts on the truck's flatbed. The ASV Skid Steer with plow is a specialized vehicle for plowing the Engineered Material Arresting System (EMAS) for which we completed a \$1,000,000 upgrade in 2013. It can also be used for other plowing requirements as necessary. The primary first response fire truck is a circa 2006 E-One Titan Aircraft Fire Fighting Truck that the FAA will now only replace every 15 years, along with all associated tools and specialized equipment. This is the airport's primary fire truck used to maintain our FAA Index B rescue and firefighting capability based upon sizes of aircraft using the airport.

Recent Photos attached: Photos of 1995 Ford L-8000 Diesel Heavy Duty Dump Truck with plow and sander; a sample ASV Diesel Skid Steer Plow; and the existing 2006 Titan fire truck.



1995 Ford L-8000 Diesel Heavy Duty Dump Truck



2004 ASV Skid Steer w/Plow



2006 First Response Aircraft Fire Truck

PROJECT: AIR-17-5 AIRPORT

DEPARTMENT PRIORITY: 5 of 12

2016-092

Project Working Title: Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Airport Runway and Taxiway Markings require annual operational and maintenance painting in order to meet FAA 14 CFR Part 139 Inspection requirements to maintain the Airport FAA Certification. In addition, all Airport-owned roadways require annual maintenance painting for roadway and pedestrian safety. This project combines both recurring painting requirements into one annual recurring contract.

Project Justification: The Barnstable Municipal Airport (BMA) runways and taxiways are subject to a lot of heavy aircraft use during the year, including snow plowing. The paint is a special FAA approved paint with imbedded reflective material to provide high visibility during reduced weather visibility and nighttime flight operations. The paint degrades significantly during the year and must be repainted to meet FAA specifications on an annual basis. The paint is inspected annually by the FAA as part of the annual FAA 14 CFR Part 139 airport certification process and must meet minimum standards. During the June 2015 inspection, our runway markings were deemed a discrepancy due to substantial paint chipping and worn away markings and had to be repainted as soon as possible. This was accomplished in the fall of CY2015 using a MassDOT Aeronautics "state-wide" painting contract. Unfortunately, these "state-wide" contracts using MassDOT funds cannot be counted upon on an annual basis to meet our mandated FAA markings requirements. For capital planning purposes, the entire airport must be completely repainted on an annual basis until a different painting system, such as thermoplastic markings, can be fully implemented in conjunction with our ongoing pavement reconstruction projects.

FY2016 funding was incorporated within the Operating Capital Budget at an estimated cost of \$50,000 to accomplish needed painting on an "as needed" rotating basis to accomplish the complete repainting over a period of two or more years. The painting is usually done prior to the late spring annual FAA inspection. Unfortunately, project cost and methodology is no longer valid and we must plan for a complete repainting on an annual basis at an estimated cost of \$150,000; and if we are fortunate enough to be able to participate in further "state-wide" painting contracts through MassDOT, we will only use our funds to supplement the MassDOT funded painting contract as needed.

The airport tried to accomplish this task "in-house" but despite our best efforts, we simply cannot provide the painting expertise to meet FAA standards. Contracting with an experienced airport painting company does meet the standard and saves the airport considerable labor costs and provides a more "professional" finished product. In addition, all airport roadway markings also require annual painting as required for vehicular and pedestrian safety for similar reasons.

Impact Of Denial/Postponement: The runway and taxiway painting is a Federal Aviation Administration (FAA) safety requirement. Roadway painting is a vehicular and pedestrian safety requirement. Failure to provide the runway and taxiway painting could result in loss of airport FAA certification and our ability to provide airport services to commercial aircraft. It would also eliminate our eligibility to receive FAA Airport Improvement Project (AIP) grant funding. The BMA will continue to provide painting "in-house" that does not meet FAA standards, with the increased risk of a reduction in flight safety; and the airport would continue to paint our roadways in a less than professional manner and with a negative impact on our ability to get all airport maintenance tasks completed with a small work force.

Project Cost Estimates: FY2017 Painting Contract: \$150,000

Basis for Cost Estimates (explain how arrived at): Recent previous similar contracts.

Project Estimated Completion Date: Spring 2016 and annually thereafter

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$150,000	Painting
2018	\$150,000	Painting
2019	\$150,000	Painting
2020	\$150,000	Painting
2021	\$150,000	Painting

Source of Funding: Airport Enterprise Fund Reserves \$150,000

Operating Budget Impact: None

Supplemental Information: Design for this project is completed as part of the contracted services with Jacobs Engineering who provides Airport Engineering services including design services for small airport related projects.





Roadway, Taxiway and Runway Markings

Water Supply Enterprise Fund

PROJECT: PW -17-1 WATER SUPPLY

DEPARTMENT PRIORITY: 1 of 6

2016-093

Project Working Title: Pipe Replacement and Upgrade Program

Project Location: The drinking water distribution system for Hyannis

Project Description: This is a continuation of a 30 year, phased, pipe replacement and upgrade program for the Hyannis Water System; as recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan.

Project Justification: It is important to implement a structured program to replace and upgrade the water pipes in the distribution system, some of which are over 100 years old. This program is in addition to the routine maintenance and repair program to be performed by the contracted water system operator. The proposed capital budget for this pipe replacement and upgrade program is \$1,050,000 per year, and includes a capitally funded water works project manager to oversee and implement this program. This continuing project will ensure the long-term ability of the Hyannis Water System to provide sufficient drinking water and fire readiness protection for all its customers.

Describe Work Previously Accomplished this Proposed Project: As this is an ongoing infrastructure repair project, the previous work was to replace and upgrade other sections of the water distribution system.

Impact Of Denial/Postponement: Water distribution capacity will continue to be less reliable over time, which would limit water supply availability during emergencies, for existing customers, and preclude the ability to accommodate new economic growth.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$150,000
	Construction & Acquisition	\$900,000
	Total Project Costs	\$1,050,000

Basis for cost estimates: previous years' experience

Project Estimated Completion Date: June 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	1,050,000	Design & Construction
2018	1,050,000	Design & Construction
2019	1,050,000	Design & Construction
2020	1,050,000	Design & Construction
2021	1,050,000	Design & construction

Source of Funding: Water Supply Enterprise Fund Reserves \$150,000 & Bond Issue \$900,000

2017 CIP – Water Supply Enterprise Fund

Operating Budget Impact now or in future: The upgrades will be to the existing distribution piping which are already maintained by the DPW. Replacing these pipes will likely result in less maintenance cost, and should not result in the need for additional personnel (The project manager that is funded by this project, is an existing capitally funded position).





Replacing Older Pipe

2017 CIP - Water Supply Enterprise Fund

PROJECT: PW -17-2 WATER SUPPLY

DEPARTMENT PRIORITY: 2 of 6

Project Working Title: Water Supply Wells Pump Stations Treatment Plant Repair & Upgrade Program

Project Location: Existing wells, pumping stations, and treatment facilities.

Project Description: This CIP is a continuation of the repairs and upgrades program started in FY2007. With the exception of the Straightway well #2, all of the wells were constructed in the early to mid-1970. The prior year's monies were used to install emergency generators, lighting, and fencing and implement pavement improvements. Starting in FY2014 the Hyannis Water Board approved the recommendation to implement a structured rehabilitation program dealing with major facility components needing upgrades or replacements. These facility components and cost allocations are: \$45,000 for buildings, \$40,000 for process control equipment, \$40,000 for safety and security components, and \$45,000 for electrical equipment. Project management and oversight will be provided by a junior engineer, partially funded out of this program in the amount of \$30,000.

Project Justification: It is appropriate to implement a structured program to repair and upgrade the wells, pump stations and treatment facilities as many of these components are approximately 40 years old. This program is in addition to, and may supplement, the routine maintenance program to be performed by the contracted water system operator.

Project Status: Prior Funding \$200,000

Describe Work Previously Accomplished this Proposed Project: As this is an ongoing infrastructure repair project, the previous work was to repair and upgrade process control equipment, electrical upgrades, VFD speed controls, security fencing, and building enclosure for the interconnection piping and controls.

Impact Of Denial/Postponement: Water supply and pumping capacity will become less reliable over time, thus limiting water supply availability for all customers and during emergencies.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$20,000	\$80,000
	Construction & Acquisition	\$141,500	\$566,000
	Project Management	\$30,000	\$120,000
	Project Contingency	\$8,500	\$34,000
	Total Project Costs	\$200 <i>,</i> 000	\$800,000

Basis for cost estimates: Previous years' experience

Project Estimated Completion Date: June 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	200,000	Design & Construction
2018	200,000	Design & Construction
2019	200,000	Design & Construction
2020	200,000	Design & Construction
2021	200,000	Design & construction

Source of Funding: Water Supply Enterprise Fund Reserves \$200,000

Operating Budget Impact now or in future: The upgrades will be to the existing well buildings, treatment and other facilities, which are currently maintained by the DPW. Some operating budget savings may be realized by replacing existing equipment with more energy efficient equipment, and a reduction in maintenance cost.



Upgrade of Pump Stations

PROJECT: PW -17-3 WATER SUPPLY

DEPARTMENT PRIORITY: 3 of 6

Project Working Title: Mary Dunn 1 water storage tank Upgrades Design & Construction

Project Location: 1230 Mary Dunn Road, Barnstable, MA

Project Description: To design and obtain permits for a new roof on the Mary Dunn 1 water storage tank. Included are the foundation repair, climbing ladder and overflow rehabilitation. Repairs and upgrades are needed for the security fencing, gates and access road. These requested monies are for design, permitting and engineering services. Construction monies will be requested for FY2018 in the estimated amount of \$580,000.

Project Justification: This project was recommended by Weston & Sampson Engineering, Inc in April 2007 Master Plan. Weston & Sampson Engineers, Inc. based on inspections by Merithew / Utility Services Corporation did a detailed tank evaluation in July 2015. According their recommendation the water tank needs a new roof, foundation repair, climbing ladder and overflow rehabilitation. Repairs and upgrades are needed for the security fencing, gates and access road.

Impact Of Denial/Postponement: The sanitary safety and security of the Mary Dunn 1 water tank could be compromised due to the deteriorating wood roof planking, trusses and rolled roofing.

Project Cost I	Estimates:
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	FY 2017	Future FY
Design & Permitting	\$16,800	\$0
Construction & Acquisition	\$0	\$493,000
Project Management	\$30,000	\$0
Project Contingency	\$5 <i>,</i> 200	\$87,000
Total Project Costs	\$52 <i>,</i> 000	\$580,000

Basis for cost estimates: Cost estimates by various engineering firms.

Project Estimated Completion Date: June 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$52,000	Design & Permitting
2018	\$580,000	Construction

Source of Funding: Water Supply Enterprise Fund Reserves \$52,000

Operating Budget Impact now or in future: n/a







Improvements to Mary Dunn #1 Storage Tank

2017 CIP – Water Supply Enterprise Fund

PROJECT: PW -17-4 WATER SUPPLY

DEPARTMENT PRIORITY: 4 of 6

2016-096

Project Working Title: Interconnections with other water systems

Project Location: Hyannis Water System

Project Description: The design, permitting, pilot study and testing, and agreement development of upgraded, permanent interconnections with surrounding public water supply systems.

Project Justification: This project is needed to ensure water supply availability for the Hyannis Water System's customers in case of major mechanical or electrical failures at water pumping or treatment facilities or well contamination issues.

Impact Of Denial/Postponement: The water supply system for Hyannis will not have the redundancy it needs to ensure sufficient water volume, especially during the high demand summer months.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$75 <i>,</i> 000
	Construction & Acquisition	\$50 <i>,</i> 000
	Project Contingency	\$25 <i>,</i> 000
	All Other Costs	\$250,000
	Total Project Costs	\$400,000

Basis for cost estimates: Cost estimates based on previous water works project experience.

Project Estimated Completion Date: June 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$400,000	Design, Permitting, Testing, Agreements
2018	Unknown	Construction based on designs, to be developed

Source of Funding: Water Supply Enterprise Fund Reserves \$400,000

Operating Budget Impact now or in future None





Potential Locations

2017 CIP - Water Supply Enterprise Fund

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2017 CIP – Water Supply Enterprise Fund

Water Pollution Control Enterprise Fund

PROJECT: PW -17-1 WATER POLLUTION CONTROL DEPARTMENT PRIORITY: 1 of 6

2016-097

Project Working Title: Clarifier Rehabilitation

Project Location: 617 Bearse's Way, Hyannis

Project Description: This project calls for the removal and upgrade of the existing mechanical equipment within Primary Clarifiers 1 and 2 and Secondary Clarifiers 1 and 2. This includes the replacement of walkways, scum collection equipment, sludge scraper arms, influent wells, clarifier drives and electrical wiring. This project also includes the minor rehabilitation of Secondary Clarifier 3, including the sandblasting of all steel sludge collection equipment, an application of a corrosion resistant primer and paint, and the installation of a new clarifier drive assembly. The tank walls, weir walls, and effluent channels of all five clarifiers will be sandblasted and epoxy coated. In 2015, \$1,000,000 was approved as a placeholder for this project prior to the completion of the clarifier evaluation and design. The evaluation revealed the need for more work than was originally anticipated.

Project Justification: Primary Clarifiers 1 and 2 and Secondary Clarifiers 1 and 2 were constructed in 1980 and have exceeded the typical design life of 20 years. Secondary Clarifier 3 was constructed in 1997 and is approaching the end of its design life. A 2015 evaluation of the clarifiers described much of the equipment as being in "poor" condition. The sludge removal equipment within the 1980 style clarifiers is inefficient and in need of an upgrade. This project will extend the useful life of the clarifiers by at least another 20 years.

Additional Phase Prior Approved Project: Prior Funding: \$1,050,000

Describe Work Previously Accomplished this Proposed Project: Previous work includes \$50,000 for evaluation and design. The design is currently at 90% complete. \$1,000,000 was approved in 2015 as a placeholder for construction.

Impact Of Denial/Postponement: The clarifiers will degrade to the point of failure. This would result in the loss of a critical component of the wastewater treatment process.

Project Cost Estimates: FY 2017 Construction & Acquisition \$1,289,505

Basis for cost estimates: Engineer's estimate.

Project Estimated Completion Date: January 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$1,289,505	Construction

Source of Funding: Water Pollution Control Enterprise Fund Bond Issue \$1,200,000 & Transfer from Closed Appropriations \$89,505 Council Order 2011-084

2017 CIP - Water Pollution Control Enterprise Fund

Operating Budget Impact now or in future: None. Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.









Clarifiers

PROJECT: PW -17-2 WATER POLUTION CONTROL DEPARTMENT PRIORITY: 2 of 6

2016-098

Project Working Title: Backup Generator Replacement

Project Location: 617 Bearse's Way, Hyannis

Project Description: This project includes the replacement of the existing backup generator at the WPCF with a new 750kw diesel-powered generator. Also included in this project is the replacement of existing switchgear "MSA", distribution breaker "MCC-6", and the generator control system.

Project Justification: The generator, its control system, switchgear MSA, and distribution breaker MCC-6 are 35 years old and have reached the end of their typical operational lifespan. Due to the age of the equipment, the existing generator has become increasingly unreliable and spare parts have become difficult to obtain. The manufacturer has advised the WPCD to replace the existing generator. In 2014, an outside consultant completed a backup power evaluation, which also recommended replacing the existing generator. This evaluation examined various replacement options, and concluded that a two-generator approach would best fit the needs of the Town. This plan includes the immediate replacement of the existing generator with a 750kw diesel generator at switchgear MSA, and adding a separate 450kw diesel generator at switchgear MSB at a future date, when loads increase.

Additional Phase Prior Approved Project: Prior Funding \$570,000

Describe Work Previously Accomplished this Proposed Project: Previous work includes \$19,000 for a backup generator evaluation and \$92,000 for the design of a new generator, control system, switchgear, and distribution breaker.

Impact Of Denial/Postponement: If the current generator fails, the WPCD is able to utilize small portable generators to run select equipment. This would not be a viable long-term solution and would not be viewed favorably by the Massachusetts Department of Environmental Protection. The portable generators are not capable of powering the entire plant, which would lead to drastically reduced effluent quality. This would also leave pump stations short on backup power options, increasing the likelihood of a sanitary sewer overflow during power outages.

Project Cost Estimates: FY 2017 Construction & Acquisition \$904,000

Basis for cost estimates: Engineer's cost estimate

Project Time Estimates: Design & Permitting (1) Construction (12)

Project Estimated Completion Date: 7/31/17

Project Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$904,000	Construction
2021	\$470,000	Phase 2: Design and construction of 450kw generator at MSB

Source of Funding: Water Pollution Control Enterprise Fund Bond Issue \$904,000

2017 CIP - Water Pollution Control Enterprise Fund

Operating Budget Impact now or in future: None. Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.





Existing Generator

2017 CIP - Water Pollution Control Enterprise Fund

Solid Waste Enterprise Fund

PROJECT: PW -17-1	SOLID WASTE	DEPARTMENT PRIORITY: 1 of 5	2016-099

Project Location: Barnstable Transfer Station & Recycling Center, 45 Flint Street, Marstons Mills, MA

Project Description: Purchase a new tractor unit for services at the Barnstable Transfer Station & Recycling Center and as back-up support for other operations of DPW.

Project Justification: This vehicle is used daily for various operations at the transfer station since 2007 and has reached its useful purpose. It also serves as a reserve vehicle when needed by other divisions in DPW

Impact of Denial/Postponement: As the vehicle ages, repairs will increase in cost and possibly in frequency. This vehicle operates on a daily basis on various tasks at the facility. Down time for this vehicle could result in the loss of production or delays in the operations. This vehicle also serves as support for other DPW operations, i.e. salt delivery winter 2015

Project Cost Estimates: FY2017 Acquisition \$150,000.00

Basis for cost estimates: Previous purchases of vehicles and discussions with vendors

Project Estimated Completion Date: April 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$150,000	Purchase of New Tractor Unit

Source of Funding: Solid Waste Reserve Fund Reserves \$150,000

Operating Budget Impact now or in future: None. Routine maintenance will continue.





Solid Waste Tractor

PROJECT: PW -17-4 SOLID WASTE

DEPARTMENT PRIORITY: 4 of 5

Project Working Title: Replacement of 2012 Chevrolet Colorado ¼ Ton Pick-Up (T401)

Project Location: Barnstable Transfer Station & Recycling Center

Project Description: Purchase a new ¾ ton pick-up for services at the Barnstable Transfer Station & Recycling Center and for assistance in other DPW functions and emergencies

Project Justification: This vehicle serves as support for the solid waste division operations and assists in other emergency functions of DPW. The current vehicle does not meet the needs for the daily operations and its only functional ability is for transportation. A larger capacity pick-up truck would be able to provide services at the facility for transporting parts and equipment, snow plowing and towing. T401 will be repurposed for other uses at the DPW.

Impact of Denial/Postponement: Replacement to a full-sized ¾ ton pick-up allows the ability of the truck to participate in the daily operations of the facility. It would also bring another plow truck into the snow & ice operations of the department. Not replacing the current vehicle will result in a vehicle that is not moving most of the workday because of its inability to provide assistance due to its lack of size.

Project Cost Estimates: FY 2017 Acquisition New Pick-up Truck \$50,000

Basis for cost estimates: Previous purchases of vehicles of similar style

Project Estimated Completion Date: March 2017

Project Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$50,000	Purchase of New ¾ Ton Pick-Up

Source of Funding: Solid Waste Reserve Fund Reserves \$50,000



PROJECT: PW -17-5 SOLID WASTE

DEPARTMENT PRIORITY: 5 of 5

2016-101

Project Working Title: Solid Waste Facility Master Plan - Construction

Project Location: 45 Flint Street, Marstons Mills

Project Description: Safety, Traffic Flow and Increased Efficiency Improvements at the Solid Waste Facility. Previously, Town Council approved (FY15-19 CIP) a comprehensive study to improve safety for employees and customers, traffic flow, and increase the efficiency of operations at the Solid Waste Facility. The work has progressed to the preliminary design stage. It is anticipated that after a public process, the design will be finalized and construction could begin as early as the fall/winter of 2016/2017. The preliminary design recommends the construction work be executed in three broad phases.

<u>Phase I</u> will establish a temporary location to relocate the solid waste and compost areas as well as the scale and C&D drop off area. (Leaf and Yard Waste Area in Figure 2)

<u>Phase II</u> includes the construction of new solid waste and recycling drop off area; construction of a new entrance to the facility; and construction of a new swap shop area.

Phase III Includes construction of a new C&D area, relocation of the Mechanics Garage and the salt shed,

Additional Phase Prior Approved Project; Prior Funding \$75,000

Describe Work Previously Accomplished this Proposed Project: Facility evaluation and preliminary design.

Impact of Denial/Postponement: Denial of this request will result in continued safety concerns, inconvenience and inefficiencies.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$50,000	\$0
	Construction & Acquisition	\$2,000,000	\$2,500,000
	Construction Contingency	\$150,000	\$125,000
	Project Management	\$200,000	\$250,000
	Project Contingency	\$100,000	\$125,000
	Total Project Costs	\$2,500,000	\$3,000,000

Basis for Cost Estimates: Consultant Estimate

Project Estimated Completion Date: Phase I and II work - December 2017

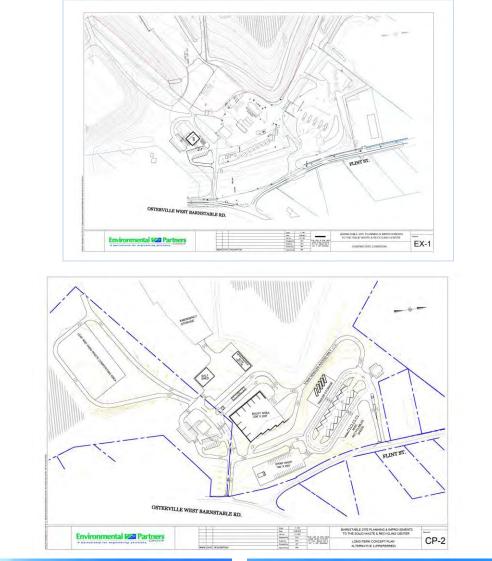
Project Cost/Description FY 2016 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$2,500,000	Phase I and II Construction
2019	\$3,000,000	Phase III Construction

Source of Funding: Solid Waste Enterprise Fund Reserves \$500,000 & Bond Issue \$2,000,000

2017 CIP - Solid Waste Enterprise Fund

Operating Budget Impact now or in future: It is expected that the changes will improve "customer experience" and the efficiency of the facility. However, the scope of services offered by the Solid Waste Facility will continue to be the same.





2017 CIP - Solid Waste Enterprise Fund

Public Works General Fund

PROJECT: PW -17-1 PUBLIC WORKS

DEPARTMENT PRIORITY: 1 of 41

2016-102

Project Working Title: Public Roads Maintenance

Project Location: Road rehabilitation work, milling and/or repaving of Bay Lane and Riverview Lane in Centerville, High Street in Cotuit, Pine Grove Ave and Megan Road in Hyannis, Osterville - West Barnstable Road and Treetop Circle in Marstons Mills and Bumps River Road in Osterville. Major drainage improvements are planned Treetop Circle in Marstons Mills. Smaller drainage projects, crack sealing and preventive maintenance are also planned for various roads town-wide (approx. 28 miles) to extend their service life. Associated costs are included in this project.

Project Description: This is a continuing essential program aimed at combating the progressive deterioration of the Town's roadway assets and provision of new storm water handling capacity. Depending on physical conditions and analysis using the Town's Pavement Management Program, the repairs may include one of several different approaches including full depth reconstruction, asphalt overlay, milling and paving, applying a chipseal surface layer or crack sealing. In addition to surface repairs, improvement projects typically include installation or upgrading of drainage systems, curbing, and sidewalks wherever practicable. Other project elements include: Design Services for various construction quality control measures; Roadwork inspection and material testing; Construction and repair of multiple drainage sites town-wide in problem areas identified during the course of the year.

Project Justification: The condition of the Town's road system is deteriorating each year. Adequate maintenance and reconstruction, where necessary, is essential to preserve this major capital asset. Analysis performed through the Pavement Management Program shows a current backlog of approximately \$19.2 million of needed public road repairs. This represents a reduction of the \$21 million backlog presented in the FY2016 CIP. In addition, the Town has a backlog of approximately 230 locations where drainage improvements are required to protect public safety and prevent potential property damage.

Impact Of Denial/Postponement: The impact of denial or postponement will be accelerated deterioration of our public roadway network resulting in public safety hazards and liability, potential damage to private property, and increased repair costs. One example is the crack seal projects that are proposed; allowing these roads to deteriorate would require more expensive maintenance operations such as milling and placing an asphalt overlay that would cost significantly more than the proposed preventative maintenance.

Project Cost Estimates:

	FY 2017
Design & Permitting	\$250,000
Construction & Acquisition	\$2,252,071
Construction Contingency	\$225,207
Project Management	\$216,000
Project Contingency	\$162,722
All Other Costs	144,000
Total Project Costs	\$3,250,000

Basis for cost estimates: Cost estimates and locations were developed through the Barnstable pavement management system, which includes cost/benefit comparisons for guidance in the selection of projects. Costs calculated based on the level of labor, equipment and materials required to complete the construction. Quantities for individual items calculated based on actual field counts, measurements and observations. Historical cost data and the most current unit rates applied for each item and/or activity to determine estimated costs. Input provided by Highway Department personnel to assist in identification of problematic roadway conditions and recent repair history.

Project Estimated Completion Date: June 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$3,250,000	Planning, analysis, design, construction & construction management
2018	\$3,250,000	Planning, analysis, design, construction & construction management
2019	\$3,825,000	Planning, analysis, design, construction & construction management
2020	\$3,901,500	Planning, analysis, design, construction & construction management
2021	\$3,979,530	Planning, analysis, design, construction & construction management

Source of Funding: Capital Trust Fund Reserves \$3,250,000

Operating Budget Impact now or in future: The purpose of this project is primarily to maintain the existing roadway network and reduce the impacts of deferred maintenance on operating and capital budgets.

Supplemental Information: The Road Repairs program continues to utilize funding for the combination of road and drainage repairs. This request for funding is one consolidated request as described, with the exception of roads being considered for reconstruction or rehabilitation with the use of Chapter 90 funds and Highway Division maintenance funds. Limited design, inspection and construction of drainage site improvements will continue to be completed by in-house personnel. Drainage costs include contingency funds for emergency situations and police details.



Example of Roadway Needing Rehabilitation

2017 CIP - Public Works Department General Fund

PROJECT: PW -17-3 PUBLIC WORKS

DEPARTMENT PRIORITY: 3 of 41

Project Working Title: Sidewalk and Guardrail Improvements

Project Location: Sidewalks – Hyannis: Main Street, South Street, Pearl Street and Ocean Street (Kennedy Legacy Trail); Guardrail –Town-wide

Project Description: Sidewalk improvements will include appropriate repair of failed sections, provision of ADA (Americans with Disabilities Act) compliant ramps and crosswalks, repair of tree grates and provision of "signature" markings for designated trails such as the Kennedy Legacy Trail. Guardrail replacement improvements will include removal of broken concrete posts and broken cable guardrail sections. It is estimated that approximately 6,000 feet of new guardrail will be constructed.

Project Justification: Providing for public safety is a paramount function of the Department of Public Works. The heavily used sidewalks in Hyannis serving thousands of tourists and residents each year are priority assets that need to be maintained and improved. These improvements should encourage more use and further the success of business and cultural interests in the community. Replacement of non-standard and damaged guardrails will increase the safety of our roadways as well as protecting adjacent property from damage.

Describe Work Previously Accomplished this Proposed Project (including whether or not design completed): Prior work on guardrail replacement has resulted in approximately 23,000 feet of guardrail replacement within the last five years.

Impact Of Denial/Postponement: failure to implement the sidewalk improvement and guardrail replacement project will result in increased risks on our roadways and sidewalks to both vehicle users and pedestrians. In addition inefficient repair "call outs" will continue with increased public frustration. Opportunities to enhance the experience of visitors to Hyannis, including access to shops, the waterfront and memorial attractions will be lost.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$20,460
	Construction & Acquisition	\$625,925
	Construction Contingency	\$39,540
	Project Mgt & Contingency	\$44,075
	Total Project Costs	\$730,000

Basis for cost estimates: DPW Engineering Division analysis. Barnstable County Combined Bid Pricing will be used wherever possible for construction contracts.

Project Estimated Completion Date: December 2018

Operating Budget Impact now or in future: Ongoing maintenance of the assets affected will be required; however a reduced effort will be needed because of new construction.

Source of Funding: Capital Trust Fund Bond Issue \$730,000







2017 CIP - Public Works Department General Fund

PROJECT: PW -17-23 PUBLIC WORKS

Project Working Title: MS4 Municipal Separate Storm Sewer System Program

Project Location: Various

Project Description: An MS4 is a conveyance system owned by a state, city, town, village, or other public entity that discharges to waters of the U.S. Any designed or use to collect or convey storm water (including storm drains, pipes, ditches, etc.); that is not a combined sewer; and that is not part of a Publicly Owned Treatment Works (sewage treatment plant).

To prevent harmful pollutants from being washed or dumped into water bodies from an MS4, the EPA requires that the Town obtain a NPDES permit (Phase II) and develop a storm water management program. For the Town of Barnstable, that program will include the following:

In July 2016 – EPA Permit is predicted to be Final and will expire in 5 years (July 2021).

- By July 2017 Need to submit updated storm water management plan, develop the Illicit Discharge Detection and Elimination (IDDE) Program's written plan; Inventory/audit Town facilities; conduct additional mapping of existing outfall as needed and then develop Operations and Maintenance (O&M) manuals for each facility. Public outreach and participation and annual training will also begin at this time.
- By July 2018 Develop a Storm Water Pollution Prevention Plans (SWPPPs) for appropriate Town facilities; develop Spill Prevention, Control, and Countermeasure (SPCC) plans for above ground fuel storage tanks; develop park maintenance plans and complete any mapping needs. Public outreach and participation will also continue.
- By July 2019 Complete dry weather screening of the Town's storm water outfalls
- By July 2020 Complete the nutrient source ID report

Project Justification: The EPA mandates this program and the Town must comply.

Impact of Denial/Postponement: The Town could face fines from the EPA

Project Cost Estimates: FY 2017/2019 Design & Permitting \$216,000

Basis for cost estimates: DPW engineering

Project Estimated Completion Date: 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$87,500	Permitting
2019	\$128,500	Permitting

Source of Funding: Capital Trust Fund Reserves \$87,500

Operating Budget Impact now or in future: TBD

PROJECT: PW -17-7 PUBLIC WORKS

Project Working Title: Traffic Signal Upgrades Study Design Construction

Project Location: Town-wide

Project Description: Preventative maintenance, emergency response and professional services to initiate the mitigation of intersection deficiencies, equipment failures and poor intersection operations with the twenty-eight (28) existing Town-owned traffic signal systems and four (4) mandated "opticom" systems on state controlled signals. These improvements would increase the level of service for the signaled intersections and adhere to mandatory Federal Manual on Uniform Traffic Control Devices (MUTCD) requirements for pedestrians.

Project Justification: In March 2012, a traffic engineering inventory, analysis, and operations plan was developed for 24 existing Town-owned traffic signal systems, including documentation of the type and condition of control mechanisms, performance of timing functions and compatibility of intersection hardware. The study compared signal timing functionality with identification of current and future traffic flow and/ or pedestrian crossing needs.

Travel times can be significantly increased by delays at signalized intersections, fuel is wasted and air quality is compromised by idling traffic in downtown locations. A Town-wide traffic signal inventory and analysis study has identified maintenance, timing adjustment, changed user needs, and set up a systematic review program for equipment adjustment, upgrade, and replacement. This will ultimately reduce maintenance costs and provide a higher level of service at our intersections.

Describe Work Previously Accomplished this Proposed Project: A traffic signal inventory was completed in March 2012.

Impact Of Denial/Postponement: Lack of action on this issue will create more costly repairs in the future. It will also promote inefficient use of funds and result in continued frustrations as expressed by local and visiting automobile and pedestrian traffic. Failure to review and maintain our traffic signals could also cause accidents and open the Town to legal responsibility in such unfortunate cases. Seventeen of the eighteen existing traffic signals systems with pedestrian crossings do not meet the Federal MUTCD requirements for pedestrian clearance.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$30,000	\$40,000
	Construction & Acquisition	\$100,000	\$130,000
	Construction Contingency	\$5,000	\$10,000
	Project Management	\$15,000	\$20,000
	Total Project Costs	\$150,000	\$200,000

Basis for cost estimates: DPW Engineering Dept.

Project Estimated Completion Date: FY2020

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$150,000	Design & Construction
2018	\$100,000	Design & Construction
2019	\$100,000	Design & Construction

Source of Funding: Capital Trust Fund Reserves \$150,000

Operating Budget Impact now or in future:





Traffic Signals Various Locations

PROJECT: PW -17-4 PUBLIC WORKS

Project Working Title: Private Road Repair

Project Location: Flint Street in Marstons Mills and Willow Street in West Barnstable.

Project Description: Legislation passed in 2014 (Chapter 339 of the Acts of 2014 - signed by the Governor on 10/3/2014) allows that:

"the Town of Barnstable may from time to time, for the purpose of ensuring the safety of the general public, enter and make expenditures for undertaking maintenance and improvements within the layout, or any portion thereof, of one or more private ways within the Town". To do this the Town must make "a declaration of common usage of such private way by the general public by vote of the Town Council". Common usage is defined as "a road or any portion thereof that has been commonly used by the general public for a period of at least 20 consecutive years of travel directly from 1 public road or area to another public road or area." In FY2015, four roads were improved under this legislation.

This year it is proposed to address two more roads: Flint Street and Willow Street.

Project Justification: The roads in question are in common usage, in need of repair, and are heavily traveled. A significant number of large trucks that support the Town's Solid Waste Facility in particular utilize Flint Street. This effort will completely reconstruct Flint Street, to help accommodate the large truck traffic; and stabilize Willow Street for the next few years.

Impact of Denial/Postponement: The roads will continue to deteriorate, possibly leading to unsafe and ultimately unpassable conditions.

	FY 2017
Design & Permitting	\$68,200
Construction & Acquisition	\$682,500
Construction Contingency	\$34,100
Project Management	\$68 <i>,</i> 200
Total Project Costs	\$853,000
	Construction & Acquisition Construction Contingency Project Management

Basis for cost estimates: DPW staff utilizing the pavement management system.

Project Estimated Completion Date: Spring 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$853,000	Design and Construction

Source of Funding: Sewer Construction & Private Way Maintenance & Improvement Fund Reserves \$666,710 & Transfer from Closed Appropriations \$115,354 Council Order 2015-102, \$50,871 Council Order 2012-038, \$20,065 Council Order 2013-066

Operating Budget Impact now or in future: Repairs should result in a decrease of emergency repairs to private roads required for these two roads.









Flint Street MM and Willow Street WB Conditions

2017 CIP - Public Works Department General Fund

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2017 CIP - Public Works Department General Fund

Golf Course Enterprise Fund

PROJECT: CS -17-2 GOLF

DEPARTMENT PRIORITY: 2 of 3

2016-107

Project Working Title: Olde Barnstable Fairgrounds Golf Club Facility Improvements

Project Location: 1460 Route 149, Marstons Mills, MA

Project Description: This Phase includes the replacement of windows and doors that are beyond repair with more energy efficient units. Trim and Exterior painting to elevations where windows and doors are replaced. The HVAC system is in need of upgrades to include new insulation and plumbing. Repairs will be needed to the ceilings where damage has occurred from the HVAC. Pro Shop sidewall is failing around window and needs rebuilding as part of the window replacement program.

Project Justification: The existing clubhouse and cart barn were constructed in 1991 and are in desperate need of improvements. The clubhouse is the hub of the golf course operation and provides services to 1,100 members and the public. The facility houses a restaurant, pro shop, function room and a large wrap around deck. The cart barn is used to store 80 gasoline powered golf carts. Due to the lack of funding, many of these improvements for both buildings have been deferred and have become urgently needed.

Describe Work previously accomplished this Proposed Project: The Roof is currently out to bid and design work has begun on the exterior trim and rear deck, which will be completed in 2016.

Impact of Denial/Postponement: The clubhouse will fall further into disrepair; window and door leakage will compromise the interior finish. The seals within the windows have failed and the windows are frosted. Deferment of maintenance will: escalate future maintenance cost and will result in the inability to maintain and protect the town's asset, loss of members and fee-paying guests, and loss of market share to area competition.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$24,460
	Construction & Acquisition	\$185,526
	Design Contingency	\$18,530
	Project Management	\$10,192
	Construction Contingency	\$19,292
	Total Project Costs	\$258,000

Basis for cost estimates: Architect assisted in-house estimate

Project Estimated Completion Date: January 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$ 258,000	Window and door replacement, HVAC improvements, ceiling repairs & painting. Pro Shop exterior wall to be rebuilt.
2018	\$ 250,000	Cart barn roof replacement, cart barn overhead door replacement, clubhouse carpeting, and furniture & fixtures replacement.
2019	\$ 175,000	Replacement of two 1,000-gallon underground fuel tanks and dispensary systems. Cold storage building construction.
2020	\$ 750,000	Complete sand bunker renovation & restoration
2021	\$ 1,500,000	Replacement of Irrigation system.

Source of Funding: Golf Enterprise Fund Bond Issue \$258,000

Operating Budget Impact now or in future: There should be no impact on the operating budget as far as expenses are concerned. It will be some time before we could see any increases in revenues associated with the facility renovation. This project is to stabilize an existing Town building and would require marginal increase in utility costs.

Expenses: No increase in expenses is expected. Possible long-term savings in utilities after energy saving windows, doors and insulation are installed.



Olde Barnstable Fairgrounds Golf Course Club-House

Project Working Title: Hyannis Golf Course Rear Deck, External Stair, Awning & Interior Staircase Project

Project Location: 1800 lyannough Road, Route 132, Hyannis MA 02601

Project Description: This Phase includes the rebuilding of the large rear deck, balustrade and stairs to meet current code requirements, which are beyond their useful life, and needing a multitude of immediate repairs. The large deck awning is in need of replacement. The awning needs extending to cover the access from the bar area which it serves. The interior stairwell, the subject of a lawsuit, from the main level down to the Pro Shop is not to code and requires enlarging and rebuilding. Other needed improvements will be incorporated as well.

Project Justification: The existing clubhouse was built in the mid 1970's and is in desperate need of improvements. The building is the hub of the entire town golf operation and provides facilities to over 1,100 members and the public. The large function/banquet facility serves the non-golfing public daily year round. The building houses a restaurant, pro shop, and large exterior deck. The maintenance building houses the turf maintenance equipment and provides staff with crew's quarters and restroom facilities. Due to a lack of funding, many of these improvements have been deferred and have become urgently needed.

Describe Work previously accomplished this Proposed Project: The ADA Bathrooms (#14110) are complete. The Roof is currently out to bid and design work has begun on the entrance and ADA exterior ramp, which will be completed in 2016. These improvements are being funded from a prior appropriation of \$140,000.

Impact of Denial/Postponement: The clubhouse will fall further into disrepair; window and door leakage will compromise the interior finish. Deferment of maintenance will escalate future maintenance costs, function/banquet business will fall out of favor with non-golfing public. The inability to maintain and protect the town's asset will result in loss of members and fee-paying guests, as well as loss of market share to area competition.

Project Cost Estimates:		FY2017
	Design & Permitting	\$30,215
	Construction & Acquisition	\$228,715
	Design Contingency	\$22,890
	Project Management	\$12,590
	Construction Contingency	\$12,590
	Total Project Costs	\$307,000

Basis for cost estimates: Architect assisted estimates.

Project Estimated Completion Date: January 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$ 307,000	Large Rear Deck, Stairs, Balustrade rebuild to code, Large Awning replacement and Interior Stair rebuild
2018	\$ 55,000	Maintenance Building Roof, trim, gutters and exterior painting
2019	\$ 180,000	Interior Paint, Carpeting, furniture and fixtures replacements.
2020	\$ 500,000	Parking lot expansion, resurfacing and landscape improvements
2021	\$ 400,000	New cart Barn, Lower restaurant reopened, new lower deck.

Source of Funding: Golf Enterprise Fund Bond Issue \$307,000

Operating Budget Impact now or in future: Over time as the facility is renovated potential customers will find it much more appealing and conducive for their banquet functions and large golf outings. The lessee will be able to reach revenue thresholds triggering additional monies to the golf division. The golf course will attract more large golf tournaments and outings, which will also increase revenues. This project is to stabilize an existing Town building, which would require marginal increase in utility costs.

Expenses: No increases in expenses are planned as a result of renovations. Once the roof, windows, and doors are upgraded along with Insulation there could be a decrease in utility expenses.

Marina Enterprise Fund

PROJECT: CSD -17- COMMUNITY SERVICES

DEPARTMENT PRIORITY: 1 of 1

2016-109

Project Working Title: Gateway Marina Dredge – Additional Dredging

Project Location: Hyannis Harbor, Hyannis

Project Description: This project involves the maintenance dredging of the Gateway Marina within Hyannis Harbor to a depth of 6 feet below MLW, with over dredge (approximately 2,500 cubic yards of sediment now based upon recent hydrographic survey).

Project Justification: This dredging is important in order to maintain free access by shallow draft boats to the floats behind the Maritime Museum. Gateway Marina has experienced shoaling for several years and is now at the point where some of our slip holders and transient boaters are experiencing difficulties accessing slips at mid to low tides. The Marina is at the end of Hyannis Inner Harbor where the flushing is poor and sediment tends to collect. Harbor staff has had to rearrange some slip assignments because of this as well. As shoaling continues, more of the marina will become inaccessible and the marina will have to operate at less than full capacity. FY16 CIP request was based upon calculations that underestimated the dredge volume. The selected consultant firm has now performed an actual onsite hydrographic survey, which included a larger area of problem depths. Recent sampling indicates the sediment would not qualify for beneficial reuse or ocean disposal resulting in significantly higher licensed landfill disposal. We now seek to increase the funding in order to address the additional corrected sediment volumes and increased disposal costs.

Impact Of Denial/Postponement: The Outer Harbor channel will fill in with sand and reduce the channel to a dangerous condition, which could threaten commercial and recreational boat traffic.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$0
	Construction & Acquisition	\$475,000
	Construction Contingency	\$0
	Project Management	\$0
	Project Contingency	\$25,000
	All Other Costs	\$0
	Total Project Costs	\$500,000

Basis for cost estimates: Environmental consultant and DPW cost estimates

Project Time Estimates: Design & Permitting (6 months) Construction (3 months)

Project Estimated Completion Date: February 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$500,000	Additional dredging and CA

Source of Funding: Capital Trust Fund Bond Issue \$500,000

2017 CIP – Marina Enterprise Fund

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2017 CIP – Marina Enterprise Fund

Community Services General Fund

PROJECT: CSD -17-4 COMMUNITY SERVICES DEPARTMENT PRIORITY: 4 of 21

2016-110

Project Working Title: Kalmus Beach Parking Lot - Repaving

Project Location: Kalmus Beach Parking Lot off of Ocean Street

Project Description: Cleaning and repaving of entire existing asphalt parking and access area. Re-striping all parking stalls and traffic markings. Improving storm drainage systems.

Project Justification: Existing paving is deteriorating, failure to repair now with a thin pavement overlay will result in the need for a more extensive and expensive fix in the future. Poor surface drainage is contributing to pavement deterioration and inconveniencing users of the facility.

Impact of Denial/Postponement: The parking lot will deteriorate further, resulting in the need for complete reconstruction. The facility will not serve our many visitors adequately.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$27,260
	Construction	\$207,106
	Construction Contingency	\$20,651
	Total Project Cost	\$255,017

Basis for cost estimates: From current unit pricing from Town construction contracts and comparison with competitive professional consultant contracts entered into with the Town for design and permitting.

Project Estimated Completion Date: April 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$255,017	Design, Permitting & Construction

Operating Budget Impact now or in future: Parking lot needs continued sweeping – within approximately 5 years it will require crack sealing – budget Amount \$10,000

Project Working Title: Craigville Bathhouse Septic System Upgrade

Project Location: 997 Craigville Beach Road, Centerville, MA

Project Description: This project would fund replacement of the existing Craigville Bathhouse septic system.

Project Justification: The existing septic system at the Craigville Bathhouse failed its Board of Health required inspection. As a result, the system needs to be replaced within the next two years, or alternative means to address the bathhouse's wastewater needs to be implemented.

Impact of Denial/Postponement: This facility is heavily used by the public. The septic system has failed its inspection and will continue to decline without much needed repair.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$15,000
	Construction & Acquisition	\$300,000
	Design Contingency	\$15,000
	Project Management	\$10,000
	Construction Contingency	\$20,000
	All Other Cost	\$3,700
	Total Project Costs	\$363,700

Basis for cost estimates: In House Architect

Project Time Estimates: Design & Permitting (3 months) Construction (2 months)

Project Estimated Completion Date: July, 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$363,700	Design, Permitting & Construction

Source of Funding: Capital Trust Fund Bond Issue Combined Projects \$478,000 & Transfer from Closed Appropriations \$50,000 Council Order 2013-109, \$21,250 2013-110, \$16,101 2012-097, \$53,366 2013-117

Project Working Title: Blish Point Boat Access Channel Dredge (3)

Project Location:, Barnstable Harbor Mid-Channel, Barnstable, MA

Project Description: This project involves the design, permitting and dredging of the mid channel and boat access channel at the State boat ramp. This portion of the channel needs the dredging with either off shore disposal or upland disposal using geo-bags for dewatering. Review and approval by the regulatory agencies is required and will be accomplished through the permitting process. The Outer Channel was dredged in January 2016 through an existing permit with Council funding in October of 2015.

Project Justification: The entrance channel to the Barnstable Harbor and Marina must be dredged every five years in order to keep it open to commercial and recreational boating. This is the middle portion which must be dredged as soon as possible to prevent the closure of the Marina to larger boats.

Impact Of Denial/Postponement: The channel will continue to shoal and eventually force the closure of the Barnstable Marina since boating will be dangerous for passage into the Marina at low tides.

FY 2017

Project Cost	: Estimates:
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	11 201/
Design & Permitting	\$40,700
Construction & Acquisition	\$847,707
Construction Contingency	\$127,381
Project Management	\$30,000
Project Contingency	\$34,000
Total Project Costs	\$1,079,088

Basis for cost estimates: Environmental Engineering Consultant and in-house estimate

Project Estimated Completion Date: February, 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$ 1,079,788	Design, permitting and dredging

Source of Funding: Capital Trust Fund Bond Issue \$988,000 & Transfer Closed Appropriations \$6,346 2010-071 Council Order, \$25,735 2013-117 Council Order, \$37,306 2010-112 Council Order, \$22,401 2014-117 Council Order

Operating Budget Impact now or in future: None

Project Working Title: Osterville Recreation Building Design & Construction

Project Location: 93 First Avenue, Osterville

Project Description: This is a three-phase project. Phase I includes the hazardous materials abatement specification preparation, demolition specifications; bid documents and contract administration; and project management fees and contingencies for the demolition of the former Osterville Bay School and Community Center buildings. Future phases will address new building and recreation field construction.

Project Justification: The existing recreation building and the former Bay Elementary School have reached the end of their useful life and are beyond repair. It is time for the site and buildings to be demolished to allow continued and restored use of the site. Parking is inadequate as the building and grounds are heavily used. The existing ball field has deep holes and ruts and is at the end of its useful life. Currently there is no handicapped access to the playground.

Describe Work Previously Accomplished this Proposed Project: Prior Funding \$185,000. A feasibility study has been completed for the Bay School building.

Impact Of Denial/Postponement: The public will continue to use a worn out, leaking, in inadequate facility.

Project Cost Estimates:	FY 2017	FY 2018	Future FY
Design, Permitting, Demolition	\$690,134	\$0	\$0
Construction & Acquisition	\$0	\$0	\$5,900,000
Design Contingency	\$68,969	\$0	\$590,000
Project Management	\$68,800	\$773 <i>,</i> 500	\$272 <i>,</i> 500
Construction Contingency	\$37,933	\$292 <i>,</i> 676	\$97,559
All Other Costs	\$34,608	\$42,647	\$274,402
Total Project Costs	\$900,444	\$1,108,823	\$7,134,461

Basis for cost estimates: In-house and professional estimates

Project Estimated Completion Date: Spring 2022

Project Cost/Description FY 2017 and Follow-On Years:

FY	Cost	Project Description/Components
2017	\$900,444	Design, Permitting, Demolition
2018	\$1,108,823	Design, Demolition & Site Work
2019	\$0	
2020	\$ 7,134,461	Construction

Source of Funding: Capital Trust Fund Bond Issue \$757,000 & \$9,865 2014-068 Council Order, \$133,579 2013-116 Council Order

Operating Budget Impact now or in future: To be developed following design.

2017 CIP – Community Services General Fund

PROJECT: CSD -17-8 COMMUNITY SERVICES

Project Working Title: Lombard Field Parking and Field Improvements

Project Location: West Barnstable Community Building (WBCB) and Site

Project Description: This project includes the architectural and engineering services for the contract documents, bid and contract administration and the full construction funding of the improved facility. This is the site of a much used community center, playground, baseball field and parking area. It is utilized fully by many residents and is one of our most highly used community parks. The existing playground will be relocated on the site away from the ball field, reducing the issue with falling balls onto it, parking will be organized and paved with drainage, walks with dark sky lighting, a new ball field with lighting and fencing and press box, and landscaping, curbs and ADA access throughout.

Project Justification: This is a highly used field and parking area within the Village of West Barnstable. The playground, community building and ball field is used throughout the year day and evening. Plowing this gravel parking area is problematic and drainage even more so. With evening use, lighting the area without walks and proper lighting is a major issue as is the condition of the ball field with its poor drainage and uneven soft surface.

Describe Work Previously Accomplished this Proposed Project: Design development phase documents are in hand with a cost estimate and local approvals being obtained; surveys and geotechnical work has been performed.

Impact Of Denial/Postponement: This facility is in poor condition and without improvements will fall into disrepair and become a hazard to the user of the fields and parking area with poor drainage, lighting snow and ice conditions which are not properly managed given the condition of the site. The ball field is rutted and poorly drained such that it is a hazard to the players.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$50,000
	Construction & Acquisition	\$1,316,100
	Construction Contingency	\$141,700
	Project Management	\$50,000
	Project Contingency	\$120,000
	All Other Costs	\$8,200
	Total Project Costs	\$1,686,000

Basis for cost estimates: Environmental Engineering Consultant and in-house estimate

Project Estimated Completion Date: Spring, 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$1,686,000	Additional Design, Project Mgt. & Construction

Source of Funding: Capital Trust Fund Bond Issue \$936,000 & Community Preservation Fund \$750,000

PROJECT: CSD -17-11 COMMUNITY SERVICES

Project Working Title: West Barnstable Community Building Window Replacement

Project Location: 2401 Meetinghouse Way (Route 149) West Barnstable,

Project Description: Window replacement project: This project will fund the on-going historic adaptive reuse improvements to the West Barnstable Community Building. For the past several years, improvements have been made to the interior and exterior of the building. These funds will continue repair tasks and such related scope costs that are of greatest concern for the upcoming years. Replace 33 existing worn out aluminum windows with historically correct wood high efficiency windows with insulating glass. Trim to be replaced and painted.

Project Justification: The Centerville Community Center building is a facility that is heavily used by Recreation Division programs, and the public on a daily basis, with its adjoining playground and ball field. It is one of the busiest Town facilities used by our residents and programs. Continuing to renovate and maintain this town asset adds to the preservation of a historic town resource. Funding the improvements would alleviate high energy costs and make a more comfortable facility.

Describe Work Previously Accomplished this Proposed Project: Previous years funding has been provided for lighting and wood floor replacement, new doors, waterproofing and new roofing. ADA toilets have been completed as well. Hazmat completed, engineering design has started.

Impact Of Denial/Postponement: The interior of this building is in good shape and the windows will continue to decline without much needed maintenance and repair. In order to protect the interiors the windows are in need of replacement. This building has great historical significance, and the windows should match the renovation standards.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$13,000
	Construction & Acquisition	\$131,300
	Design Contingency	\$13,000
	Project Management	\$7,850
	Construction Contingency	\$7,850
	Total Project Costs	\$173,000

Basis for cost estimates: In House Architect

Project Estimated Completion Date: April 2017

Project Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$ 173,000	Replace windows and trim with historically accurate high efficiency
		windows

Source of Funding: Community Preservation Fund \$173,000

PART V – CAPITAL TRUST FUND CASH FLOW ANALYSIS

The Capital Trust Fund (CTF) is used as a mechanism to finance the Town's general fund capital improvement program within the limitations of Proposition 2½. Annually, the Town transfers a sum of money from the general fund into the CTF. The resources within the CTF are then used to make the annual loan payments on the bonds issued to finance the Town's capital program. It CTF operates essentially as a debt service fund. Some of the Town's capital appropriations are financed using the reserves within the CTF as opposed to bond issues. Annually, the Town reviews the projected cash flows in and out of the CTF for the prospective 20 year period in order to measure the level of additional capital appropriations the fund can absorb.

For the most part, this fund is not the funding source for enterprise fund capital improvements. Most enterprise funds pay 100% of their capital cost which is recovered through their respective user fees. Enterprise fund capital improvements may be funded from the CTF, which is a policy decision. The two current exceptions are the bond issues for the construction of the Hyannis Youth & Community Center (HYCC) and the bond issue for the Barnstable Harbor Marina bulkhead replacement.

The FY17 general fund Capital Improvements Program includes a combination of "pay-as-you-go" or cash financing and new bond issues. The cash financing portion of the program is funded from the capital trust fund reserves and balances remaining in appropriations from completed projects. This "pay-as-you-go" financing approach saves the Town thousands of dollars in the form of bond issuance and interest cost. It also provides the opportunity to have some capital program on an annual basis, and provides flexibility within the budget. With just a debt service program, the CTF can become saturated with loan payments and prohibit the approval of any new projects until the debt service from other projects expire. This would also reduce the Town's flexibility in its resource allocation as future cash flows are committed to fixed annual loan payments.

In the event of absolute necessity, the cash portion of the program could be converted to a debt program to allow for a larger capital program up front. For example, the Town could allocate \$1 million in cash per year for capital improvements or allocate \$1 million per year towards new debt service. \$1 million in new debt service could pay for a bond issue of approximately \$8 million with an amortization period of 10 years.

Furthermore, the annual contribution from the general fund to the CTF could be decreased by the cash program portion (\$3.25M), if the need for funding general fund operations is determined to be greater than the need for the capital expenditure. There are countless scenarios that can be created to allocate the annual cash flow of the CTF between a cash and borrowing program.

The annual contribution to the CTF has grown to \$8.3 million in FY17. This amount is projected to increase by 2.5 percent per year in order to allocate more funds to the capital program. Even as more funds are allocated to the capital program, the Town's capital needs require a higher contribution level. Opportunities to increase this contribution are examined every year. In FY16, an additional \$4 million was transferred from the general fund reserves so as to provide for a greater level of capital funding over the next five years and another \$1 million is anticipated by the end of FY19.

Table A on page 85 illustrates the CTF cash flow for the next 10 years incorporating all existing loan payments and the FY17 proposed capital improvements program. Table B illustrates the potential capacity within the CTF over the next ten years, and Table C provides the detailed amortization of all existing loans to be paid out of the CTF.

Major Assumptions Used In Table A:

- Investment earnings will average 1.1% per year;
- The transfer from the general fund will increase 2.5% per year;
- Loan amortization on the FY17 bond issue will include:
 - \$363,000 over 5 years,
 - o \$1,455,000over 10 years,
 - o \$3,159,000 over 15 years,
 - \$4,526,000 over 20 years;
- The coupon rates on the bonds are estimated to range from 2.5% to 4.0% with the longer the amortization period the higher the interest rate;
- The FY17 bonds will be issued at a time so that the first loan payments will not be made until FY18;
- There are no estimated savings from bond refinancing included in the projection;
- The Federal government will not make any changes and the tax advantages of municipal bonds will remain intact;
- No other major changes will take place in the municipal bond market; and
- The cash funded portion of the capital program will total \$3.7 million per year.

Major Assumptions Used In Table B:

In addition to all of the assumptions in Table A, bond issues ranging from \$4.3 to \$5.8 million per year are included for the FY18 through FY26 capital program with the following amortization amounts:

- \$3,150,000 over 5 years
- \$8,250,000 over 10 years
- \$12,500,000 over 15 years
- \$26,500,000 over 20 years

TABLE A – Estimated Capital Trust Fund Cash Flow FY 2017 – FY 2026

		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
1	Beginning Trust Fund Balance	\$ 12,779,934	\$ 11,520,905	\$ 9,898,070	\$ 9,784,071	\$ 9,249,614	\$ 9,411,607	\$ 11,306,077	\$ 12,748,327	\$ 14,997,012	\$ 19,159,263
	Resources:										
2	Investment Earnings	140,579	126,730	108,879	107,625	101,746	103,528	124,367	140,232	164,967	210,752
3	Private Road Betterments Collected	75,000	90,267	85,267	80,267	75,267	70,267	65,267	60,267	55,267	50,267
4	Transfer From General Fund	8,316,723	8,511,985	8,712,112	8,917,226	9,127,450	9,342,913	9,563,745	9,790,081	10,022,058	10,259,816
5	Additional Contribution From General Fund	-	-	1,000,000	-	-	1,000,000	-	-	1,000,000	-
6	Total Current Year Resources	8,532,302	8,728,982	9,906,257	9,105,117	9,304,462	10,516,707	9,753,379	9,990,579	11,242,292	10,520,835
7	Total Available Resources	21,312,236	20,249,886	19,804,328	18,889,188	18,554,076	19,928,314	21,059,456	22,738,906	26,239,304	29,680,098
	Commitments:										
8	Existing Debt Service Payments	(6,092,761)	(5,759,241)	(5,444,057)	(5,079,749)	(4,599,019)	(4,095,162)	(3,857,459)	(3,304,240)	(2,658,403)	(2,534,433)
9	Estimated Debt Service on FY17 CIP (\$9.503m)	-	(892,575)	(876,200)	(859,825)	(843,450)	(827,075)	(753,670)	(737,654)	(721,638)	(716,824)
10	Public Roads Program	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)
11	Other Cash Program	(448,570)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)
12	Total Current Year Commitments	(9,791,331)	(10,351,816)	(10,020,257)	(9,639,574)	(9,142,469)	(8,622,237)	(8,311,129)	(7,741,894)	(7,080,041)	(6,951,257)
13	Increase (Decrease) in Trust Fund	(1,259,029)	(1,622,834)	(114,000)	(534,457)	161,993	1,894,470	1,442,250	2,248,685	4,162,251	3,569,578
14	Ending Trust Fund Balance	\$ 11,520,905	\$ 9,898,070	\$ 9,784,071	\$ 9,249,614	\$ 9,411,607	\$ 11,306,077	\$ 12,748,327	\$ 14,997,012	\$ 19,159,263	\$ 22,728,841
15	% of trust fund resources committed in CY (max = 80%)	47%	53%	52%	53%	52%	45%	42%	36%	28%	25%

This table illustrates the Capital Trust Fund's (CTF) cash flow incorporating all existing loan payments on previously authorized projects as well as the recommended projects for FY17. Cash funded projects in FY17 total \$3,698,570 and bond funded projects total \$9.5 million. The bonds will be issued in FY17 and the first estimated loan payment of \$892,575 is anticipated to be made in FY18 as illustrated above on line 9. Line 8 in the table above includes all existing loan payments. Lines 10 and 11 include estimates on future cash appropriations for capital to be financed from the trust fund's reserves. One-time additional resources to be added to the fund in FY19, FY22 and FY25 are included on line 5. The percentage of the trust fund's current year resources that are committed in any year are less than the Administrative Code limit of 80% (line 15) indicating that the fund has the capacity to absorb more debt financed projects in future years.

TABLE B – Capital Trust Fund Estimated Capacity For The Next 10 Years

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
1 Beginning Trust Fund Balance	\$ 12,779,934	\$ 11,520,905	\$ 9,898,070	\$ 9,217,821	\$ 7,561,364	\$ 6,056,107	\$ 5,748,577	\$ 4,541,660	\$ 3,832,429	\$ 4,589,097
Resources:										
2 Investment Earnings	140,579	126,730	108,879	107,625	101,746	103,528	124,367	140,232	164,967	210,752
3 Private Road Betterments Collected	75,000	90,267	85,267	80,267	75,267	70,267	65,267	60,267	55,267	50,267
4 Transfer From General Fund	8,316,723	8,511,985	8,712,112	8,917,226	9,127,450	9,342,913	9,563,745	9,790,081	10,022,058	10,259,816
5 Additional Contribution From General Fund	-	-	1,000,000	-	-	1,000,000	-	-	1,000,000	-
6 Total Current Year Resources	8,532,302	8,728,982	9,906,257	9,105,117	9,304,462	10,516,707	9,753,379	9,990,579	11,242,292	10,520,835
7 Total Available Resources	21,312,236	20,249,886	19,804,328	18,322,938	16,865,826	16,572,814	15,501,956	14,532,240	15,074,721	15,109,931
Commitments:										
8 Existing Debt Service Payments	(6,092,761)	(5,759,241)	(5,444,057)	(5,079,749)	(4,599,019)	(4,095,162)	(3,857,459)	(3,304,240)	(2,658,403)	(2,534,433
9a Estimated Debt Service on FY17 CIP (\$9.5m)	-	(892,575)	(876,200)	(859,825)	(843,450)	(827,075)	(753,670)	(737,654)	(721,638)	(716,824
9b Estimated Debt Service on FY18 CIP (\$5.8m)		-	(566,250)	(555,750)	(545,250)	(534,750)	(524,250)	(453,125)	(443,500)	(433,875
9c Estimated Debt Service on FY19 CIP (\$5.8m)			-	(566,250)	(555,750)	(545,250)	(534,750)	(524,250)	(453,125)	(443,500
9d Estimated Debt Service on FY20 CIP (\$5.8m)				-	(566,250)	(555,750)	(545,250)	(534,750)	(524,250)	(453,125
9e Estimated Debt Service on FY21 CIP (\$5.8m)					-	(566,250)	(555,750)	(545,250)	(534,750)	(524,250
9f Estimated Debt Service on FY22 CIP (\$5.1m)						-	(489,167)	(480,125)	(471,083)	(462,042
9g Estimated Debt Service on FY23 CIP (\$4.3m)							-	(420,417)	(412,625)	(404,833
9h Estimated Debt Service on FY24 CIP (\$5.8m)								-	(566,250)	(555,750
9i Estimated Debt Service on FY25 CIP (\$5.8m)									-	(566,250
9j Estimated Debt Service on FY26 CIP (\$5.8m)										-
10 Public Roads Program	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000
11 Other Cash Program	(448,570)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000
12 Total Current Year Commitments	(9,791,331)	(10,351,816)	(10,586,507)	(10,761,574)	(10,809,719)	(10,824,237)	(10,960,295)	(10,699,811)	(10,485,624)	(10,794,882
13 Increase (Decrease) in Trust Fund	(1,259,029)	(1,622,834)	(680,250)	(1,656,457)	(1,505,257)	(307,530)	(1,206,917)	(709,232)	756,668	(274,047
14 Ending Trust Fund Balance	\$ 11,520,905	\$ 9,898,070	\$ 9,217,821	\$ 7,561,364	\$ 6,056,107	\$ 5,748,577	\$ 4,541,660	\$ 3,832,429	\$ 4,589,097	\$ 4,315,050
15 % of trust fund resources committed in CY (max = 80%)	47%	52%	55%	61%	68%	69%	76%	80%	76%	79%

Including the proposed FY17 capital program, it is estimated the Capital Trust Fund can absorb approximately \$97 million in capital expenditures over the next 10 years and stay within the maximum allowable commitment of 80% as shown on line 15. Cash financed capital is estimated at \$37 million as illustrated on lines 10 and 11. Bond financed capital is estimated a \$60 million through FY25. The estimated annual loan payments on the bonds are illustrated on lines 9a through 9j.

TABLE C – Capital Trust Fund Debt Amortization Schedule

DEBT SERVICE PROGRAM	Issued Matu	ity Princ	pal P&I Payment	8 P&I Payments	P&I Payments							
Purpose	Date Dat	e Amo	int FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
CTF Advance Refund 6/15/2003 Drainage 1 (i)	04/18/12 09/15	22 193	200 24,32	3 23,528	22,828	22,228	21,628	18,968	15,504	-	-	-
CTF Advance Refund 6/15/2002 Land Acquisitions BUTAPS	06/14/11 06/15	20 1,102	000 154,650	145,600	140,400	135,200	-	-	-	-	-	-
CTF Advance Refund 6/15/2003 Building Improvements	04/18/12 09/15	22 96	600 12,164	11,764	11,414	11,114	10,814	10,464	6,732	-	-	-
CTF Advance Refund 6/15/2003 Drainage 2 (i)	04/18/12 09/15	22 96	700 12,16	3 11,768	11,418	11,118	10,818	10,468	6,834	-	-	-
CTF Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.	04/18/12 09/15	20 39	100 5,72	5,523	5,348	5,198	4,162	-	-	-	-	-
CTF Advance Refund 6/15/2003 Police Facility Addition	04/18/12 09/15	22 626	900 79,15	76,557	71,229	67,500	65,700	63,600	61,200	-	-	-
CTF Advance Refund 6/15/2003 School Remodel I	04/18/12 09/15	22 242	700 31,33	30,299	29,389	28,609	22,806	21,192	20,196	-	-	-
CTF Advance Refund 6/15/2003 School Remodel II	04/18/12 09/15	22 193	400 24,28	23,480	22,780	22,180	21,580	17,940	15,300	-	-	-
CTF Baxter Neck Road's Neck Road - Private Way	06/14/11 06/15	26 350	000 33,47	32,725	31,725	30,725	29,725	23,725	22,925	22,125	21,450	20,750
CTF Beach Facilities Improvements (I) \$270,000 Refunded	02/15/07 02/15	17 195	000 15,600) -	-	-	-	-	-	-	-	-
CTF Beach Facilities Improvements (I) \$270,000 Refunded	02/15/15 02/15	22 71	300 2,98	17,985	16,310	15,680	15,120	14,560	-	-	-	-
CTF Beach Facility Design	11/22/13 11/15	18 115	000 26,17	20,600	20,200	-	-	-	-	-	-	-
CTF BHMCS Roof (I) \$910,000 Refunded	02/15/07 02/15		,	,	-	-	-	-	-	-	-	-
CTF BHMCS Roof (I) \$910,000 Refunded	02/17/15 02/15		900 16.68	60,581	57,705	55,770	54,050	52,330	50,610	48.890	46.170	44,490
CTF BHS Cogeneration	02/15/07 02/15		000 52,000		-	-	-	-	-	-	-	-
CTF Bismore Park Visitor Center	06/26/08 06/15				37,316	36,076	34,836	33,596	32,318	-	-	-
CTF Bismore Park Visitor Center - CAP	06/26/08 06/15		,	,	12,038	11,638	11,238	10,838	10,425	-	-	-
CTF Blish Point Sand Management	02/17/15 02/15		,	,	43,400	41,600				-	-	-
CTF Boat Ramp Renovations	06/14/11 06/15		,		28,000	27,000	26,000	-	-	-	-	-
CTF Boat Ramps - CAP	06/26/08 06/15		,	- ,	73,429	70,989	68,549	66,109	63,593	-	-	-
CTF Bridge Repair	06/14/11 06/15		,	,	28,000	27,000	26,000	-	-	-	-	-
CTF Building - Senior Center - Refunded	02/15/07 02/15		,		26,250	-		-	-	-	-	-
CTF Building - Town Hall Repairs - 01-087 Refunded	06/14/11 06/15		,	,	11,560	11,160	10,760	9,360	-	-	-	-
CTF Building - Town Hall Space - 00-110 Refunded	06/14/11 06/15		,	,	21,280	20,520	19,760	-	-	-	-	-
CTF Bumps River Bridge Repair	11/22/13 11/15		,	,	11,500	11,250	10,950	10,650	10,375	10.125	-	
CTF Centerville Recreation Building	02/17/15 02/15		, ,		15,313	14,863	14,463	14,063	13,663	13,263	12.863	12,463
CTF Coastal Water Quality Improvements	06/26/08 06/15		,	,	-	-	-	-	-	-	-	-
CTF Dredge Permitting/Planning	02/17/15 02/15		,	,	70,525	67.600			-	-	-	-
CTF Dredging	06/16/10 06/15				36,125	34,625	33,725	32,825	31,850	25,875	-	-
CTF Dredging East Bay & Blish Point	06/14/11 06/15		,	,	72,800	70,200	67,600	-	-	-	-	-
CTF Early Learning Center Modular Facility	02/17/15 02/15		,	,	157,625	153,125	149,125	145,125	141,125	137.125	133,125	129,125
CTF East Bay Dredging	11/22/13 11/15				69.000	67,500	65,700	63,900	62,250	60,750	155,125	125,125
CTF Guardrail Replacements	11/22/13 11/15		000 10,55		10,100	-		-	-	-	-	-
CTF Guyer Barn Upgrades	11/22/13 11/15				17,125	16,750	16,300	15,850	15,438	10,125		
CTF Highway Operations Facility Construction	11/22/13 11/15		000 11,050	-	5,750	5,625	5,475	5,325	5,188	5.063		
CTF HS Library AC Units	11/22/13 11/15		,		51,750	50,625	49,275	47,925	46,688	45,563	-	-
CTF Hyannis Harbor Bulkhead Construction	11/22/13 11/15		,		16,850	16,475	16,025	10,650	10,375	10,125	-	-
CTF Intermediate School roof & Façade Design	11/22/13 11/15			-	20,200	-		-	-	-	-	-
CTF Lake & Pond Improvements	06/26/08 06/15				20,200			-	-		-	
CTF Lake Treatment	06/16/10 06/15		,		- 24,075	23,075	- 17,475	17,025	- 16,538	16,050	- 15,525	
CTF Land Acquisition - CAP	06/26/08 06/15				28,890	23,073	26,970	26,010	25,020	-	-	
CTF Land Acquisition - CAP CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	02/15/07 02/15				28,890	27,930	20,970	20,010	23,020	-	-	
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	02/13/07 02/13		· · · · · ·		49,310	47,600	- 46,080	44,560	43,040	- 35,520	- 34,240	32,960
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded CTF Lombard Parking & Ballfield Design	11/22/13 11/15			,	49,310	47,600	46,080	44,560	43,040	- 35,520	- 34,240	32,960
CTF Marstons Mills Fish Run Reconstruction	02/17/15 02/15				33,750	27,625	- 26,825	26,025	- 25,225	- 24,425	- 23,625	- 22,825
	11/22/13 11/15				16,700	16,325	26,825	10,650	10,375	24,425	23,625	22,625
CTF MEA Facility Upgrades			,				,				_	-
CTF Mill Pond Dredge & Lake Wequaquet Planning	06/14/11 06/15			-	-	-	-	-	-	-	-	-
CTF Millway Boat Ramp & Dock Upgrades	11/22/13 11/15				16,700	16,325	10,950	10,650	10,375	10,125	-	-
CTF MME Roof Replacement (I) \$750,000 Refunded	02/15/07 02/15		,		-	-	-	-	-	-	-	-
CTF MME Roof Replacement (I) \$750,000 Refunded	02/17/15 02/15				49,510	47,800	46,280	44,760	43,240	40,720	34,240	32,960
CTF Municipal Building Improvements	06/26/08 06/15				7,106	6,906	6,706	6,506	6,300	6,088	5,875	5,663
CTF Municipal Facility Improvement	06/14/11 06/15	21 300	35,70	34,800	33,600	32,400	31,200	-	-	-	-	-

			a	2012				2012		2012			2012
DEBT SERVICE PROGRAM	Issued Date	Maturity Date	Principal	P&I Payments FY 2017	P&I Payments FY 2018	P&I Payments FY 2019	P&I Payments FY 2020	P&I Payments FY 2021	P&I Payments FY 2022	P&I Payments FY 2023	P&I Payments FY 2024	P&I Payments FY 2025	P&I Payments FY 2026
Purpose			Amount	-				-	-		-		
CTF Municipal Facility Improvements		06/15/29 06/15/16	402,500	7,369	7,119	6,994	6,744	6,594	6,444	6,281	6,119	5,944	5,769
CTF Municipal Facility Upgrades/Repairs - MEA Building	06/14/11			- 33,999		33,999							
CTF MWPAT CW-04-31 Pool 11		07/15/20	389,216	,	33,999	,	33,999	33,999	-	-	-	-	-
CTF Nitrogen Management CW-04-31-A	03/15/11		211,460	23,330	23,330	23,330	23,330	23,330		-	-	-	-
CTF Nitrogen Management CW-04-31-B Series 16 CTF Old Town Hall Phase II (I)		07/15/20 02/15/17	157,531 295,000	27,804 26,000	27,842	27,882	27,922	27,963	-	-	-	-	-
	11/22/13		295,000	26,000	23.400	- 23.000	- 22.500	- 21.900	21.300	- 20.750	- 20.250	-	-
CTF Osterville Community Building Upgrades		1 - 1 -		- /	-,	-,	,	,	/	.,	.,	-	-
CTF Pearl St Building Upgrades CTF Pleasant St. Dock - 1	11/22/13	11/15/23 06/15/23	114,000 350,000	11,950 29,641	11,700 28,779	11,500 27,686	11,250 26,766	10,950 25,846	10,650 24,926	10,375 23,978	10,125		-
	06/26/08			29,641	28,779	27,686	26,766	25,846	24,926	23,978	-	-	-
CTF Pleasant St. Dock - 2			350,000	29,641	28,779	27,686	26,766	25,846	24,926	23,978	-	-	-
CTF Police Dept. Emergency Generator	06/14/11	06/15/16	271,000		-								- 18.919
CTF Police Facilities	- / -	02/15/35	288,000 508,000	24,169 37,844	23,869 36,594	23,194 35,969	22,519 34,719	21,919 33,969	21,319 33,219	20,719 32,406	20,119 31,594	19,519 30,719	29,844
CTF Police Facility CTF Police Station Construction (I) \$400,000 Adv Refunded 6-15-05		02/15/30	181,650	25.313	23,783	23.130	22.320	21,600	20,880	,	31,594 19,440	18.720	- 29,844
				- /		-,	,	,	,	20,160	- / -	18,720	
CTF Police Station Upgrades	11/22/13		168,000 600.000	23,000	17,550	17,250 52,250	16,875 50,650	16,425 49,050	15,975 47,450	15,563	15,188 44,250	- 42,900	- 41,500
CTF Prince Cove/Hayward Rd. Boat Ramp	06/14/11			55,050	53,850	,	,	,	,	45,850	44,250	42,900	
CTF Private Road Repairs		06/15/23	1,607,900	137,896	133,884	128,801	124,521	120,241	115,961	111,548			-
CTF Private Road Repairs (I)		11/15/23	633,000	77,125	75,500	74,200	72,575	65,700	63,900	62,250	60,750	-	-
CTF Public Wharves-Dredging-Refunded	02/15/07	- 1 -1 -	155,800	-	-	-	-	-	-	-	-	-	-
CTF Refunded Recreational Facility		06/15/16	144,000	-	-	-	-	-	-	-	-	-	-
CTF S&G Facility Roof Repairs		11/15/23	103,000	11,950	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-
CTF School Building Improvements		06/15/30	936,000	73,369	65,869	64,744	62,494	61,144	59,794	58,331	56,869	55,294	53,719
CTF School Computer Network Infrastructure		11/15/23	189,000	23,500	23,000	22,600	22,100	21,500	15,975	15,563	15,188	-	-
CTF School Equipment (I)		06/15/16	193,000	-	-	-	-	-	-	-	-	-	-
CTF School Facilities Repair (I) \$339,000 Refunded	02/15/07		339,000	31,200	-	-	-	-	-	-	-	-	-
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	02/15/07		450,000	46,800	-	-	-	-	-	-	-	-	-
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	02/17/15		199,700	8,390	51,390	49,455	42,520	41,000	38,480	-	-	-	-
CTF School Facilities Upgrades/Repairs I	06/14/11		65,000	-	-	-	-	-	-	-	-	-	-
CTF School Facilities Upgrades/Repairs II	06/14/11		179,000	13,763	13,463	13,063	12,663	12,263	11,863	11,463	11,063	10,725	10,375
CTF School Facilities Upgrades/Repairs III		06/15/26	190,000	19,313	18,863	18,263	12,663	12,263	11,863	11,463	11,063	10,725	10,375
CTF School Facilities Upgrades/Repairs IV	06/14/11		332,000	40,850	34,800	33,600	32,400	31,200	-	-	-	-	-
CTF School Facilities Upgrades/Repairs V (I)	06/14/11		884,000	70,069	68,719	66,919	65,119	63,319	61,519	59,719	57,919	56,400	54,825
CTF School Facility Improvements 1 (I)		06/15/28	916,600	45,188	44,063	42,638	41,438	40,238	39,038	37,800	36,525	35,250	33,975
CTF School Fire & Communications System	11/22/13		200,000	23,900	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-
CTF School Grounds Maintenance Equipment	11/22/13		150,000	31,650	30,900	30,300	-	-	-	-	-	-	-
CTF School Gym Bleacher Upgrades	11/22/13		55,000	10,550	10,300	10,100	-	-	-	-	-	-	-
CTF School Health & Safety Improvements \$478,000 Refunded	02/15/07		273,000	26,000	- 31.780	- 30.700	- 29.620	- 28.660	27.700	-	- 19.980	- 19.260	
CTF School Health & Safety Improvements \$478,000 Refunded				7,780	- /	,	- /	-,		21,740	- /	- /	18,540
CTF School Hot Water Pump Replacement	11/22/13 06/14/11		85,000 487,000	15,825 46,638	15,450 45,588	15,150 39,188	- 37,988	- 36,788	- 35,588	- 34,388	- 33,188	- 32,175	-
CTF School Improvement (I)				,	,	,	,	,	,	,			31,125
CTF School Kitchen equipment	11/22/13		110,000	21,100	20,600	20,200	-	-	-	-	-	-	-
CTF School Parking Lot (I)	06/14/11		250,000	29,750	29,000	28,000	27,000	26,000	-	-	-	-	-
CTF School Remolding - Asbestos 00-110 Refunded	06/14/11		50,000	6,150	6,000	5,800	5,600	5,400	5,200	-	-	-	-
CTF School Roof Repairs	11/22/13		600,000	71,700	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-
CTF School Upgrades 1 (I) \$360,000 Refunded	02/15/07	- 1 -1	250,000	26,000	-	-	-	-	-	-	-	-	-
CTF School Upgrades 1 (I) \$360,000 Refunded	02/17/15		104,700	4,427	28,127	27,360	21,280	20,520	19,760	-	-	-	-
CTF School Upgrades 2 (I) \$150,000 Refunded	02/15/07		100,000	10,400	-	-	-	-	-	-	-	-	-
CTF School Upgrades 2 (I) \$150,000 Refunded	02/17/15		47,400	1,866	6,766	6,645	6,420	6,220	6,020	5,820	5,620	4,920	4,240
CTF Senior Center - Garden Level \$457,000 Refunded	02/15/07	02/15/17	252,000	26,000	-	-	-	-	-	-	-	-	-
CTF Senior Center - Garden Level \$457,000 Refunded	02/17/15	- 1 -1	195,000	7,635	31,635	25,555	24,700	23,940	23,180	22,420	21,660	20,900	20,140
CTF Senior Center - Parking Lot Expansion	02/17/15		290,000	29,525	29,125	28,225	27,325	26,525	25,725	24,925	24,125	23,325	22,525
CTF Sewer Expansion Analysis	11/22/13	11/15/18	70,000	15,725	15,350	10,100	-	-	-	-	-	-	-

DEBT SERVICE PROGRAM	Issued	Maturity	Principal	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments	P&I Payments
Purpose	Date	Date	Amount	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
CTF Sidewalk Improvements	06/14/11	06/15/21	350,000	41,650	40,600	39,200	37,800	36,400	-	-	-	-	-
CTF Sidewalk Overlays	11/22/13	11/15/23	190,000	23,650	23,150	22,750	22,250	21,650	21,050	15,563	15,188	-	-
CTF Sidewalk/Guardrail Improvements 1	02/17/15	02/15/20	200,000	46,000	45,200	43,400	41,600	-	-	-	-	-	-
CTF Sidewalk/Guardrail Improvements 2	02/17/15	02/15/20	85,000	22,350	16,950	16,275	15,600	-	-	-	-	-	-
CTF Tennis Courts	11/22/13	11/15/23	500,000	59,750	58,500	57,500	56,250	54,750	53,250	51,875	50,625	-	-
CTF Town Building Repairs & Renovations \$685,000 Refunded	02/15/07	02/15/17	350,000	36,400	-	-	-	-	-	-	-	-	-
CTF Town Building Repairs & Renovations \$685,000 Refunded	02/17/15	02/15/27	317,600	12,470	46,470	44,940	43,410	41,050	39,730	38,410	37,090	30,770	29,650
CTF Town Hall Interior Upgrades	11/22/13	11/15/23	150,000	17,925	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-
CTF Traffic Calming	06/14/11	06/15/16	50,000	-	-	-	-	-	-	-	-	-	-
CTF US Customs House upgrades	11/22/13	11/15/23	263,000	29,875	29,250	28,750	28,125	27,375	26,625	25,938	25,313	-	-
CTF Wastewater Management Planning	06/14/11	06/15/16	600,000	-	-	-	-	-	-	-	-	-	-
CTF Water Quality Evaluation	11/22/13	11/15/23	230,000	29,325	28,700	28,200	27,575	21,900	21,300	20,750	20,250	-	-
CTF West Barnstable Community Building Upgrades	11/22/13	11/15/23	72,000	11,150	10,900	5,750	5,625	5,475	5,325	5,188	5,063	-	-
CTF Guardrail Improvements (#2015-098)	02/25/16	06/30/36	170,000	26,611	26,000	25,200	24,400	18,600	18,000	17,400	16,800	16,200	15,600
CTF Sidewalk Improvements (#2015-098)	02/25/16	06/30/36	230,000	33,944	33,200	32,200	31,200	30,200	29,200	23,200	22,400	21,600	20,800
CTF Paving: Bay Stree Boat Ramp (#2015-099)	02/25/16	06/30/36	142,000	22,522	20,000	19,400	18,800	18,200	17,600	17,000	16,400	10,800	10,400
CTF Police Station Remodeling (#2015-100)	02/25/16	06/30/36	355,000	31,904	31,444	30,644	29,844	29,044	28,244	27,444	26,644	25,844	25,044
CTF Town Hall Remodeling (#2015-101)	02/25/16	06/30/36	939,000	85,103	79,831	77,831	75,831	73,831	71,831	69,831	62,831	61,031	59,231
CTF Road Repairs (#2015-102)	02/25/16	06/30/31	518,000	55,732	51,719	50,319	48,919	47,519	46,119	44,719	43,319	41,919	40,519
CTF Joshuas Pond Recretional Facility (#2015-111)	02/25/16	06/30/31	282,000	31,794	29,194	28,394	27,594	26,794	25,994	25,194	24,394	23,594	22,794
CTF Hamblin Pond Alum Treatment (#2015-112)	02/25/16	06/30/31	300,000	30,233	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325
CTF Elementary School Modular Classroom (#2015-115)	02/25/16	06/30/36	3,720,000	312,409	308,306	300,706	293,106	280,506	273,106	265,706	258,306	250,906	243,506
CTF BIS Façade & Roof Improvements (#2015-116)	02/25/16	06/30/36	3,353,000	283,543	276,781	269,981	263,181	256,381	249,581	242,781	235,981	229,181	222,381
CTF BCHMCPS Façade & Roof Improvements (#2015-117)	02/25/16	06/30/26	260,000	40,111	39,200	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000
CTF High School & Middle School Boiler Upgrades (#2015-119)	02/25/16	06/30/26	350,000	48,611	47,600	46,200	44,800	43,400	42,000	40,600	39,200	37,800	36,400
CTF W Village Elementary A/C Replacement (#2015-120)	02/25/16	06/30/26	250,000	34,722	34,000	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000
CTF Craigville Beach Bathhouse (#2016-031)	02/25/16	06/30/36	450,000	40,094	39,525	38,525	37,525	36,525	35,525	34,525	33,525	32,525	31,525
CTF Road Repairs - Governors Way (#2016-037)	02/25/16	06/30/31	304,000	34,388	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325
CTF Channel Dredging- Barnstable Harbour (#2016-035)	02/25/16	06/30/26	490,000	69,056	67,600	65,600	63,600	61,600	59,600	57,600	55,600	48,600	46,800
TOTAL GENERAL FUND DEBT SERVICE				4,751,255	4,469,909	4,198,361	3,876,123	3,430,753	2,963,256	2,762,295	2,254,201	1,646,908	1,560,405
	06/14/11	00/05/00	725.000	60.024	50.004	57.004	55 634	54.004	50.404	50.024	44.224	12.050	44.025
CTF Marina Bulkhead Repair I		02/15/30		60,031	58,831	57,231	55,631	54,031	52,431	50,831	44,231	43,050	41,825
CTF HYCC 1 (I) \$1,000,000 Refunded		02/15/17	500,000 474,900	52,000 18.546	- 66,446	- 64,390	- 62,230	- 60,310	- 58,390	- 56,470	- 53,550	- 51.670	- 49,790
CTF HYCC 1 (I) \$1,000,000 Refunded				- /	66,446	,	,	60,310		,		51,670	49,790
CTF HYCC 2 (I) \$8,000,000 Refunded	02/15/07	02/15/17	4,000,000	416,000	-	-	-		-	-	-	-	-
CTF HYCC 2 (I) \$8,000,000 Refunded	02/17/15	02/15/27 02/15/17	3,794,400 800.000	148,190 83.200	535,190	515,775	495,450	480,170	463,890	447,650	430,450	413,330	396,290
CTF HYCC 3 (I) \$1,600,000 Refunded					-	-	-	-		-	-		-
CTF HYCC 3 (I) \$1,600,000 Refunded CTF HYCC 4	02/17/15	02/15/27 06/15/28	759,000 6,765,000	29,645 508,895	107,645 496,220	103,135 480,165	98,670 466,645	95,630 453,125	92,590 439,605	89,550 425,663	86,510 410,298	82,470 395,975	79,470
	06/26/08	06/15/28	6,765,000	,	,	,	,	,	,	,	, · · · · ·	,	,
TOTAL ENTERPRISE FUND DEBT SERVICE				1,316,507	1,264,332	1,220,696	1,178,626	1,143,266	1,106,906	1,070,164	1,025,039	986,495	949,028
Temporary interest on bond anticipation notes				25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
GRAND TOTAL ALL DEBT SERVICE				6,092,761	5,759,241	5,444,057	5,079,749	4,599,019	4,095,162	3,857,459	3,304,240	2,658,403	2,534,433

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PART VI – SEWER CONSTRUCTION AND PRIVATE WAY MAINTENANCE AND IMPROVEMENTS FUND

Chapter 355 of the Acts of 2014 enacted by the General Court allows the Town of Barnstable to establish a special fund that may be used for the construction of sewers and the maintenance and improvements of private ways.

Dedicated revenue sources for this fund include 100% of the local meals excise tax and one-third of the local rooms excise tax. In addition, any betterment assessed to property abutters on sewer construction and private way improvements will also be credited to this fund if the fund is used to finance the improvements. The Stewart's Creek sewer construction and West Main Street Pump Station projects are the only projects to date that have been accounted for within this special fund. The Town borrowed money from the Massachusetts Clean Water Trust to finance the construction of these projects. The Town received low interest loans and principal subsidies on the loans. The loans will be paid back from the resources credited to this special fund. Betterments on the Stewarts Creek project were assessed to property abutters in the amount of 50% of the project costs. The betterments collected are credited to this fund.

The Fiscal Year 2017 Capital Program includes one project to be financed from this fund – the Private Road Repairs. A total of \$666,710 in project funding is recommended to be financed from this fund. Following is a 5 year projection for the fund's activity.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Beginning Fund Balance	\$10,044,539	\$11,335,915	\$13,315,051	\$15,320,057	\$17,351,244
Resources:					
Meals Tax	1,370,000	1,376,850	1,383,734	1,390,653	1,397,606
Room Tax	900,000	904,500	909,023	913,568	918,136
Betterments	90,000	85,000	80,000	75,000	70,000
Investment income	100,445	113,359	133,151	153,201	173,512
Commitments:					
Debt service	(502,359)	(500,573)	(500,902)	(501,235)	(501,578)
Private Road Improvements	(666,710)	-	-	-	_
Excess Resources	1,291,376	1,979,136	2,005,006	2,031,187	2,057,676
Ending Fund Balance	\$11,335,915	\$13,315,051	\$15,320,057	\$17,351,244	\$19,408,920

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PART VII – DEBT POSITION ANALYSIS

A. Type And Purpose Of Debt

The Town sells bonds to finance major capital improvements that require large cash outlays. General Obligation Bonds (GOB) have been sold to fund capital improvements managed by various municipal operations such as schools, public works, recreation, conservation, and the Town's enterprise fund operations. General Obligation Debt, (GOD), is supported by the full faith and credit of the Town and is repaid from property taxes collected from both current and future property owners throughout the term of the debt, except for the bonds issued to fund most capital improvements for enterprise fund operations. Although property taxes are pledged as collateral for enterprise fund GOB's, most of the bonds are repaid with revenue generated by the enterprise funds and not property taxes. This arrangement provides for more favorable borrowing rates for enterprise fund debt and is required by Massachusetts General Laws. Alternatively, enterprise funds would have to issue what are referred to as "Revenue Bonds", which would typically carry much higher interest rates, as the collateral is enterprise fund revenue as opposed to property taxes.

Properly structured municipal debt is tax exempt. This feature is attractive to many investors who, in turn, require less interest than they would from non-tax-exempt investments. Typical rates for municipal bonds over the past several years have been in the 1.5% to 4% range. Rates remain low in FY16 as the economy is making municipal bonds more attractive for highly rated communities. When netted out against inflation, municipal borrowing costs, especially for strong credit worthy Towns such as Barnstable is enviable.

The Town operates several enterprise funds including the airport, two golf courses, a wastewater treatment facility, a solid waste transfer station, water supply operations, four marinas, Sandy Neck Beach Park and the Hyannis Youth & Community Center. These funds are expected to repay their debt from the revenues that they generate unless it is determined that a General Fund contribution is necessary to provide for some fee mitigation. In addition, the Town has borrowed on behalf of the Community Preservation Fund (CPF) that was created by general legislation to enable towns in the Commonwealth to acquire open space and to finance recreation, community housing and historic preservation projects. The CPF, a special revenue fund, is funded with three percent surtax on each real estate tax bill. The Commonwealth provides a partial matching program for the surtax billed from a state trust account, which is funded by real estate transfer taxes. The matching program is expected to decline as more communities adopt the CPF, real estate transactions declining, as well as a decline in the State's trust fund balance.

B. Current Debt Position

As of June 30, 2015, the Town of Barnstable had \$101.8 million of outstanding long-term debt. New debt issued in FY15 was \$23.6 million and existing debt retired was \$33.3 million, representing a \$9.7 million net decrease in the outstanding long-term debt level from June 30, 2014. These debt figures include all debt incurred on behalf of the governmental funds and enterprise funds.

Projected Debt Payments by Project and Fund

The following four tables set forth the projected General Obligation Debt (G.O.D.) payments by issue for both the Town's governmental funds and the enterprise funds. It is significant to note that the State reimburses for school construction projects at the rate of 64% including interest costs incurred, as well as several Massachusetts Clean Water Trust (MCWT) loans for sewer construction, water system improvements and landfill capping loans.

Bonds Payable Schedule – Governmental Funds (Excludes Enterprise Fund Debt)

Projects	Maturitie Through	Original Loan Amount	Coupon Rate (%)	 Outstanding at June 30, 2014	 Issued	Redeemed	Outstanding at June 30, 2015
MCWT Title V Bond of 1997	2021	\$ 200,000	0.00	\$ 72,603	\$ - \$	(10,400) \$	62,203
MCWT Title V Bond of 2002	2023	200,000	0.00	90,212	-	(9,972)	80,240
Municipal Purpose Bonds of 2005	2015	6,280,000	3.25 - 5.00	3,445,000	-	(3,445,000)	-
MCWT Title V Bonds of 2006	2026	400,000	0.00	240,000	-	(20,000)	220,000
MCWT Title V Bond of 2007	2027	200,000	0.00	130,000	-	(10,000)	120,000
Municipal Purpose Bonds of 2007	2027	44,066,188	3.38 - 4.75	24,210,000	-	(6,730,000)	17,480,000
MCWT Bond of 2008 (CW-04-31)	2021	389,216	2.00	222,094	-	(29,856)	192,238
Municipal Purpose Bonds of 2008	2028	5,928,700	3.75 - 4.50	3,212,000	-	(373,000)	2,839,000
MCWT Bond of 2009.	2021	887,454	2.00	629,745	-	(340,301)	289,444
Municipal Purpose Bonds of 2010	2030	3,873,270	2.00 - 5.00	2,750,000	-	(200,000)	2,550,000
Municipal Purpose Bonds of 2011	2031	15,751,000	2.00 - 4.00	11,290,349	-	(1,746,552)	9,543,797
Municipal Purpose Refunding of 2012	2023	10,037,900	2.00 - 4.00	8,079,500	-	(1,200,000)	6,879,500
Municipal Purpose Bonds of 2014	2024	6,248,000	2.00 - 3.00	6,248,000	-	(793,000)	5,455,000
Municipal Purpose Refunding of 2015	2027	5,265,500	2.00 - 4.50		5,265,500	-	5,265,500
Municipal Purpose Bonds of 2015	2035	3,930,000	2.00 - 4.50	-	 3,930,000	-	3,930,000
Total Bonds Payable		 		60,619,503	9,195,500	(14,908,081)	54,906,922
Add: unamortized premium		 		187,337	 728,615	(44,303)	871,649
Total Bonds Payable, net		 		\$ 60,806,840	\$ 9,924,115 \$	(14,952,384) \$	55,778,571

Debt service requirements for principal and interest for **Governmental Bonds Payable** in future fiscal years are as follows:

Year	Principal	Interest	Total
2016\$	8,980,249 \$	2,164,830 \$	11,145,079
2017	8,627,730	1,849,462	10,477,192
2018	8,535,737	1,446,313	9,982,050
2019	8,529,982	1,079,172	9,609,154
2020	4,926,660	712,148	5,638,808
2021	3,764,171	531,702	4,295,873
2022	3,296,756	394,626	3,691,382
2023	2,677,256	270,033	2,947,289
2024	1,567,483	186,840	1,754,323
2025	1,029,483	139,291	1,168,774
2026	737,483	99,341	836,824
2027	500,483	74,010	574,493
2028	394,483	56,972	451,455
2029	359,483	43,840	403,323
2030	344,483	31,730	376,213
2031	165,000	19,506	184,506
2032	125,000	14,100	139,100
2033	115,000	10,350	125,350
2034	115,000	6,900	121,900
2035	115,000	3,450	118,450
-			
Total\$	54,906,922 \$	9,134,616 \$	64,041,538

The Commonwealth of Massachusetts has approved school construction assistance to the Town. The assistance program, which is administered by the Massachusetts School Building Authority, provides resources for construction costs and debt service interest of general obligation bonds outstanding. The Town is currently receiving annual payments for 64% of eligible costs in relation to the construction of the new Middle School and the renovation and addition to the High School. During 2015, approximately \$3,509,000 of such assistance was received. Approximately \$12,935,000 will be received in future years. Of this amount, \$891,000 represents reimbursement of future long-term interest costs and \$12,044,000 represents reimbursement of approved construction cost and interest costs previously paid.

Bonds Payable Schedule – Enterprise Funds

Projects	Maturities Through	Original Loan Amount	Coupon Rate (%)	Outstanding at June 30, 2014	Issued	Redeemed	Outstanding at June 30, 2015
Golf Course Add: unamortized premium	2025 \$	6,601,500	5.00	\$ 2,900,000 \$	2,151,500 \$ 314,768	(2,350,000) \$	2,701,500 314,768
Total Golf Course Bonds Payable, net				2,900,000	2,466,268	(2,350,000)	3,016,268
Wastewater	2032	27,735,259	0.00 - 4.75	17,924,235		(1,830,596)	16,093,639
Water Add: unamortized premium	2033	21,453,325	2.00 - 5.00	12,135,005	6,244,800 810,683	(7,046,917)	11,332,888 810,683
Total Water Bonds Payable, net				12,135,005	7,055,483	(7,046,917)	12,143,571
Solid Waste Transfer Station	2027	8,145,600	0.00 - 4.50	2,749,800	284,900	(758,700)	2,276,000
Sandy Neck	2031	1,265,000	4.00	1,115,000		(50,000)	1,065,000
Marinas	2030	1,814,000	3.00 - 5.00	1,673,651		(143,448)	1,530,203
Hyannis Youth and Community Center Add: unamortized premium	2028	22,393,300	3.375 - 5.00	11,617,000	5,028,300 720,384	(6,168,000)	10,477,300 720,384
Total Hyannis Youth and Community Cent	ter Bonds Pay	/able, net		11,617,000	5,748,684	(6,168,000)	11,197,684
Airport	2031	730,000	2.00 - 4.12	650,000		(30,000)	620,000
Total Bonds Payable, net				50,764,691	15,555,335	(18,377,661)	47,942,365
Less: unamortized premium					(1,845,835)		(1,845,835)
Total Bonds Payable				50,764,691 \$	13,709,500 \$	(18,377,661) \$	46,096,530

Debt service requirements for principal and interest for **Enterprise Bonds Payable** in future fiscal years are as follows:

Year	Principal	Interest	Total
2016\$	3,915,077 \$	2,029,778 \$	5,944,855
2017	3,976,087	1,884,916	5,861,003
2018	3,670,454	1,232,770	4,903,224
2019	3,740,815	1,013,400	4,754,215
2020	3,357,395	885,300	4,242,695
2021	3,207,292	777,368	3,984,660
2022	3,231,731	674,392	3,906,123
2023	3,293,111	569,231	3,862,342
2024	3,210,016	464,925	3,674,941
2025	3,110,815	369,481	3,480,296
2026	2,886,085	273,213	3,159,298
2027	2,926,837	197,729	3,124,566
2028	1,767,078	121,344	1,888,422
2029	988,595	80,514	1,069,109
2030	967,958	57,316	1,025,274
2031	923,355	33,810	957,165
2032	437,378	15,951	453,329
2033	446,451	6,931	453,382
2034	20,000	1,200	21,200
2035	20,000	600	20,600
_			
Total\$	46,096,530 \$	10,690,167 \$	56,786,697

The Town is scheduled to be subsidized by the MCWT on a periodic basis for principal in the amount of \$1,177,346 and interest costs for \$489,892 for a portion of the enterprise fund. The principal subsidies are guaranteed.

The Town issued \$18,235,000 in General Obligation Refunding Bonds on February 17, 2015 for an advance debt refunding of \$19,385,000 in outstanding General Obligation Bonds originally issued in 2005 and 2007. The \$19,385,000 of General Obligation Bonds was refunded by placing the proceeds of the refunding bonds plus a net bond premium for a total of \$20,689,045 in an irrevocable trust to refund the outstanding debt when they are callable on February 15, 2025. As a result, the refunded bonds are considered defeased. The reacquisition price exceeded the net carrying amount of the old debt by \$2,454,045. This refunding was undertaken to reduce total debt service payments by \$1,706,141 and resulted in an economic gain of \$1,524,819.

The Town is subject to various debt limits by statute and may issue additional general obligation debt under the normal debt limit. At June 30, 2015, the Town had the following authorized and unissued debt:

Purpose	Amount
Sewer projects	\$ 10,088,246
Water projects	4,056,480
Dredging projects	280,000
Road projects	660,000
Airport projects	20,618,125
Improvements for Bismore Park	582,000
Facilities improvements	1,608,000
School improvements	11,286,000
Fuel farm	810,000
Bulkhead	728,000
Sidewalks	400,000
Fish run reconstruction	500
Total	\$ 51,117,351

C. General Obligation Debt – Credit Ratings

Several factors determine the amount of debt the Town can afford to maintain. These include the strength of the local economy, the wealth of the community, the amount of debt sold by overlapping jurisdictions (Barnstable County Government, Cape Cod Regional Transit Authority and Cape Cod Regional Technical High School), future capital needs, the local economy as well as the Town's financial position, administrative capabilities, and level of planning. These factors, as well as many others, influence the Town's bond rating - an evaluation of the Town's ability to repay debt as determined by the rating agencies. System improvements such as programmatic budgeting, an administrative code, policy planning based on a ten-year forecast, and financial fund management have helped the Town's position.

In February 2016, the Town Treasurer conducted a \$16.648 million bond sale which required a rating to be assigned to it prior to the sale. In their most recent bond rating analysis dated February 12, 2016 Standard & Poor's (S&P) affirmed the 'AAA' rating on the Town's outstanding debt with a stable outlook. S&P cited the following reasons for their rating and stable outlook:

- Strong economy, with projected per capita effective buying income at 116% of the national level and market value per capita of \$292,246;
- Very strong management, with "strong" financial policies and practices under our Financial Management Assessment methodology;
- Strong budgetary performance, with an operating surplus in the general fund but an operating deficit at the total governmental fund level in fiscal 2015;
- Very strong budgetary flexibility, with an available fund balance in fiscal 2015 of 29% of operating expenditures;
- Very strong liquidity, with total government available cash at 44.7% of total governmental fund expenditures and 6.6x governmental debt service, and access to external liquidity we consider strong;
- Strong debt and contingent liability position, with debt service carrying charges at 6.8% of
 expenditures and net direct debt that is 43.5% of total governmental fund revenue, as well as low
 overall net debt at less than 3% of market value and rapid amortization, with 82.1% of debt scheduled
 to be retired in 10 years, but a large pension and other postemployment benefit (OPEB) obligation and
 the lack of a plan to sufficiently address the obligation; and
- Strong institutional framework score

The descriptor used by S&P for this rating is "Prime Investment Grade". Less than 30 other communities in Massachusetts have an AAA rating from S&P. Strong bond ratings generally reduce interest expense to service the debt as well as bond insurance costs. Additionally, strong bond ratings enhance the prestige of the community within the financial markets and are a vote of confidence by the rating agency that the municipality is pursuing a sound financial course. This AAA rating reflects sound credit quality with associated very low risk and should result in future low borrowing costs for the Town. In August 2007, Moody's Rating Services upgraded its bond rating for the Town from Aa3 to Aa1, a two-step increase.

It is important to understand that no single ratio or factor determines a General Obligation Bond rating or fully encompasses the fiscal health of a municipality. The factors must be taken as a group. Other debt ratios, as well as economic and administrative factors account for the differences in ratings. A growing community can afford more debt than a non-growth area and a community with more income wealth can afford more debt than a poor community.

Generally, bond ratings do not change suddenly but respond more to long-range trends. The stable outlook reflects S&P's view of the town's very strong budgetary flexibility and liquidity, further supported by a strong economy. As such, they do not expect to change the rating in the next two years. However, dramatic changes are key indicators of fiscal health and can result in a more immediate rating change. In projecting bond ratios, it is important to review the sensitivity of the ratios to changes in the economy.

Extract from Standard & Poor's Credit Profile of Barnstable Printed November 8, 2013

"The stable outlook reflects our view of the town's very strong budgetary flexibility and liquidity, further supported by a very strong and diverse local economy. Although Barnstable maintains a strong debt and liability profile, and despite pension and OPEB costs that are expected to continue rising through the medium term, we do not anticipate weakened performance or liquidity measures, due to the town's very strong management practices. Steady economic development in recent years should aid tax base stability and provide additional future tax revenue. While unlikely, significant deterioration in general fund reserve or performance could lead to rating actions. For these reasons, we do not expect to change the rating within the two-year outlook horizon."

D. General Obligation Debt - Limitations

There are legal limitations that govern the issuance of municipal debt. Under Massachusetts statutes, the debt limit of the Town of Barnstable is 5 percent of the valuation of taxable property as last equalized by the State Department of Revenue. The Town can authorize debt up to this amount without State approval. The current debt limitation for the Town of Barnstable is close to \$674 million which is significantly higher than the Town's outstanding general obligation debt that is subject to this limitation. It should be pointed out that much of the existing Town debt does not factor into this limitation. There are categories of general obligation debt that are exempt from, and do not count against the debt limit such as certain school bonds, water bonds, solid waste disposal facility bonds, and water pollution abatement revenue bonds.

Town's Equalized Valuation (EQV)	<u>\$13,476,184,100</u>
Debt Limit – 5% of EQV	\$673,809,205
Less:	
Outstanding Debt Applicable to Limit	\$65,723,674
Authorized and Unissued Debt	<u>\$51,117,361</u>
Legal Debt Margin	<u>\$556,968,180</u>

E. General Obligation Debt - Affordability

Debt analysis, future debt projections and general obligation bond ratios help determine the amount of general obligation debt the Town can afford to issue and support. The table on the following page illustrates the various debt ratios compared to national medians reported by Standard and Poor's. As shown, Barnstable's ratios show moderate amounts of debt. There are a number of factors not directly under the control of the Town that impact key General Obligation (G.O.) bond ratios. Several of the G.O. bond ratios are very sensitive to these uncontrollable factors, and the assumptions used to project their growth can play an important role in future debt policy. Some of these factors are:

Overlapping Debt. Overlapping debt is the G.O. debt that is issued by other government entities whose jurisdictions include the citizens of Barnstable. The Town also has to be aware of the debt management practices of overlapping jurisdictions. The primary entities that have an impact on the Town are Barnstable County, Cape Cod Regional Vocational Technical School District and the regional transportation authority. Overlapping debt combined with the Town's own direct debt is a true measure of the G.O. debt burden placed on the citizens. To determine an issuer's overall G.O. debt burden, overlapping debt is added to the issuer's own outstanding G.O. debt. If other overlapping jurisdictions pursue aggressive capital improvements programs, some of the Town's debt ratios will increase. Therefore, it is important to be aware of not only our G.O. debt issuance plans, but also those of other surrounding jurisdictions.

			Share of
	Debt	Applicable	Overlapping
<u>Jurisdiction</u>	Outstanding	Percentage	<u>Debt</u>
Barnstable County	\$ 25,907,367	17.40%	\$ 4 ,507,882
Barnstable Fire District	2,069,783	100.00%	2,069,783
Centerville-Osterville-Marstons Mills Fire Dist.	3,815,693	100.00%	3,815,693
Cotuit Fire District	2,161,000	100.00%	<u>2,161,000</u>
Subtotal overlapping debt			12,554,358
Town direct debt			<u>55,778,571</u>
Total direct and overlapping debt			<u>\$ 68,332,929</u>

Property Assessments. Several key debt ratios use property valuations in the calculation of debt burden. If the Town's property values were to rise, debt ratios will continue to improve.

Town of Barnstable Debt Ratios

Current Status	Criteria
0.717%	Direct Debt - General fund debt as a % of the town's FY15 equalized property valuation as calculated by the state. Formula – Overall general fund debt ÷ Equalized valuation
	Standard & Poor's rates this as low (favorable)
6.23%	Municipal Debt Burden – Current Year Definition - Town's general fund debt service ÷ Total general fund expenditures
	Standard & Poor's rates this as moderate
\$1,241	Net Direct Debt Per Capita Definition – Governmental fund net debt ÷ Town population
	Standard & Poor's rates this as low (favorable)

\$ 298,343

Per Capita Market Value Definition – Equalized valuation ÷ Population

Standard & Poor's rates this as very high (favorable)

F. Administrative Polices In Relation To Debt

This section provides policies governing the management of debt for the Town that are included in the Town's Administrative Code.

Debt Refinancing

An advance refunding of outstanding debt shall only be considered when present value savings of at least 3% of the principal amount of the refunded bonds are produced, unless: (1) a debt restructuring is necessary or (2) bond covenant revisions are necessary in order to facilitate the ability to provide services or to issue additional debt. The Town, in collaboration with its Financial Advisor, continually monitors municipal bond market conditions to identify refinancing opportunities. An analysis shall be conducted when necessary to determine whether debt financing, cash purchase, or leasing is the most cost effective method of financing for the Town.

General Obligation Debt

1. All debt shall be financed within the limitations of Proposition 2½ with the exception of debt related to enterprise funds, gifts, and betterments. The requirements for such financing shall be an expenditure of at least \$250,000 and a useful life in excess of five years.

2. The term of long-term debt generally shall not exceed the expected useful life of the capital asset being financed and, in no case, shall it exceed twenty years.

3. The ratio of Net Debt (Total outstanding Town of Barnstable General Obligation debt less reimbursements) to Total Assessed Valuation shall not exceed 1.5%. This excludes debt of overlapping jurisdictions.

The debt-to- assessed value ratio for the Town of Barnstable is 0.76%.

4. The ratio of Debt Service to Total Expenditures (operating expenditures and debt service combined) shall not exceed 15%.

The Town's debt coverage ratio is 10.18%.

5. The Town shall target a Standard and Poor's (S&P) debt to income ratio of 8%. The S&P ratio is calculated by dividing Overall Net Debt per Capita by Income per Capita.

The Town's debt-to-income per capita ratio is 5.9%.

6. Current revenue should be committed annually to provide sufficient "Pay-as-you-go" financing so that at the end of five years, annual contributions from current revenues amount to 10% of new debt to be issued.

The Town currently exceeds this requirement by a significant margin. The Town intends to spend over \$19 million in the next five years as "pay-as-you-go" financing and anticipates financing about \$31 million in capital with new debt issues resulting in a 38/62 ratio.

2017 CIP - Debt Position Analysis

7. Excess appropriated bond issues shall be placed into a "bond repayment fund account" at the end of a project completion. The only purpose of the "bond repayment fund account" shall be 1) to make bulk principal pay-downs against general bond debt, or 2) to be used to pay down the principal on any bond issue at the time of refinancing as provided for in Section 1.04C herein.

The Town currently has no balance in this fund.

Capital Trust Fund

A Capital Trust Fund has been established for the purpose of financing debt service for recommended Capital Improvement Program projects, as contained within the Town's five-year capital improvement plan.

- 1. The Capital Trust Fund will be funded through a general operation set aside of at least \$1.9 million annually. The estimated commitment for FY 2017 is approximately \$8.3 million. This is expected to be repeated for the next 5 years.
- 2. The Capital Trust Fund shall not be utilized for any purpose other than that stated herein.
- 3. The criteria for reviewing capital project eligibility for Capital Trust Fund borrowing include the following:
 - a. The capital project shall have a financing term of 20 years or less,
 - b. The capital project shall have a minimum project cost of \$250,000,
 - c. The capital project is approved by the Town Council for funding through an appropriation and loan order submitted by the Town Manager.
- 4. The Capital Trust Fund will have a debt service restriction on the fund, such that debt service estimates from authorized loan orders shall not exceed, at any one time, more than 80% of the amount in the fund as of the close of the fiscal year prior to the next debt service authorization, unless recommended by the Town Manager.
- 5. The Capital Trust Fund shall otherwise function in accordance with related financial policies of the Town.

G. Debt Summarized

A responsible debt management program is an integral part of municipal finance. A Town's debt must be structured to reflect the underlying, long-term economic prospects of the community. There are statutory requirements and market forces at work to regulate a community's ability to borrow. Continuing disclosure, as required on an annual basis to the bond markets, provides a powerful incentive for a municipality to keep its financial house in order. This analysis has emphasized the importance of credit ratings because, in effect, these are municipal finance report cards. A good credit rating should be guarded jealously, since it is not easily obtained, but can be lost quickly without vigilance and sound financial management.

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PART VIII – DETAILED DESCRIPTIONS OF DEFERRED PROJECTS

Enterprise Fund Projects

Airport Enterprise Fund

PROJECT: AIR-17-3 AIRPORT

DEPARTMENT PRIORITY: 3 of 12

Project Working Title: Vegetation Management Plan (VMP) and Airspace Study

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: All airports need to manage their surrounding trees and smaller vegetation near the runways. As trees and other vegetation grow taller they create safety hazards for pilots and can limit the visibility between aircraft and the control tower. The FAA Safety Regulations (specifically FAR Part 77 and FAA FAR Part 139) require that certain areas of trees and shrubs surrounding airports must be cut.

Project Justification: FAA regulations and standards require that airspace Protection Zones (PZs) must be achieved and maintained in order to assure an appropriate level of safety at each airport, and to maintain eligibility for Federal grant funds. PZs are crucial elements of aviation and public safety because when maintained they ensure unobstructed flight paths and views for pilots, air traffic controllers, and ground crew, enabling safe takeoffs, landings, and ground movements. The failure to keep these protection zones clear of penetrating vegetation results in a direct increase of risk to pilots and passengers due to the increase potential for a plane crash during takeoff or landing. In addition, compliance with FAA regulations, orders, and advisories is necessary for eligibility for federal funding for airport maintenance and improvement projects. The Barnstable Municipal Airport (HYA) has completed various projects to remove trees and shrubs from airport property; however, a comprehensive Airport Vegetation Management Plan (VMP) has not been accomplished at HYA to identify vegetation penetrations and future vegetation removal. The purpose of a VMP is to identify the airport's PZ's and any existing object penetrations within those PZs through an Airspace Study. Once the Airspace Study identifies penetrations, a clearing plan, clearing of penetrations and subsequent Yearly Operational Plans (YOPs) can be developed to identify future clearing and maintenance of the VMP treated areas (typically three - five yearly operational plans following initial vegetation removal). The vegetation management process at airports has become well defined in the Commonwealth (15 of the 36 public-use airports in the Commonwealth have completed VMPs), and follows a regular, predictable path with regard to methods of vegetation removal and management, identification of target vegetation, and identification of sensitive resources and alternative methods of removal with respect to those sensitive resources. Through the VMP process, a short-term cutting plan, long-term maintenance plan, and monitoring plan will be identified.

Impact of Denial/Postponement: Denial will continue to affect the airport's ability to meet FAA regulations and standards requiring the clearing of Protection Zones (PZs); it will affect the airport's ability to assure an appropriate level of safety is maintained for unobstructed flight paths and views for pilots, air traffic controllers, and ground crew, enabling safe takeoffs, landings, and ground movements; and postponement will jeopardize eligibility for federal and state funding for airport maintenance and improvement projects.

Project Cost Estimates: FY2017 Management Plan \$450,000

2017 CIP - Deferred Airport Enterprise Fund Projects

Basis for Cost Estimates: Prior VMP and Airspace Study projects completed at other airports in Massachusetts, engineering consultant estimates, industry cost estimates, and FAA and MassDOT consultations.

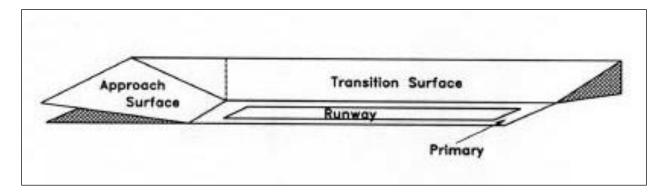
Project Estimated Completion Date: FY 2018

Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$450,000	Complete the Airspace Study and Plans

Source of Funding: FAA AIP reimbursable Grant funds at 90%; MassDOT at 5%; BMA 5%

Operating Budget Impact now or in future: None



Typical Runway Protection Typical Runway Protection Zone Graphic

PROJECT: AIR-17-4 AIRPORT

Project Working Title: Design and Construct New Fiber Optic Airfield Lighting Control System (ALCS)

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design and construct a new fiber optic Airfield Lighting Control System (ALCS) for improved communications between the Air Traffic Control Tower (ATCT) and the airfield lighting vault via a hardwire communications pathway.

Project Justification: The existing Airfield Lighting Control System (ALCS) communicates from the Air Traffic Control Tower (ATCT) to the airfield lighting vault via a wireless communications pathway. A life safety system of this nature typically has two pathways for control, a hardwired line (or fiber) and a wireless link. The hardwire communications path is typically the primary pathway and the wireless link is typically a backup in the event of a failed cable or communications equipment failure. The already existing fiber optic cable from the ATCT to the Aircraft Rescue and Fire Fighting (ARFF) building will be extended with a new fiber optic cable approximately 1000 feet in total length to connect to the airfield lighting vault. This project provisions this additional cable and equipment. Additionally, this new cable will also improve video and access control systems within the lighting vault and at Gate Papa (P). The fiber cable would also be utilized in improving perimeter security and other airport related systems along the East side of the airport.

Impact of Denial/Postponement: Denial will continue an unsafe communications system that could have flight and life safety concerns in the event of an unforeseen failure of the wireless system with no alternative or back-up system in place. Failure to construct this new system will also negatively impact other necessary security upgrades as the airport continues to modernize and grow new business on the East side of the airport.

Project Cost Estimates:		FY 2018
	Design & Permitting	\$15,000
	Construction or Acquisition:	\$60,000
	Total Project Cost	\$75,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, DPW estimates, industry cost estimates, and FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2018	\$75,000	Design and Construction

Source of Funding: FAA AIP reimbursable Grant funds at 90%; MassDOT at 5%; BMA at 5%;

Operating Budget Impact now or in future: None-Extension of existing fiber optic system. Minimal maintenance once installed.

PROJECT: AIR-17-6 AIRPORT

Project Working Title: FAA Airport Layout Plan/FAA Master Plan Update including Underground GIS Utilities Survey; Possible 926 Foot Runway 15/33 Extension; Possible Terminal Expansion with Jetways; and FAA/FAR Part 150 Noise Exposure Map Update

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: The Airport's required FAA Airport Layout Plan (ALP) and Master Plan (per FAA Advisory Circular AC150/5070-6) is a comprehensive long-term plan for the airport development that should be revisited and updated periodically, particularly upon completion of the Town and Cape Cod Commission mandated Master Plan and Development Agreement process. Development items that improve an airport for the primary purpose of accommodating aircraft operations would also be included in the update and are considered to be "capacity projects," which would include the possible extension of Runway 15/33 by approximately 926 feet to provide a better margin of safety for regional and longer range private and commercial jet aircraft; and to determine the potential need for Terminal expansion to accommodate use of jetways for larger air carrier aircraft using this airport.

In addition, this planning process will be done in concert with the Airport's utilities infrastructure systems plan that will incorporate all utilities that were originally built in the 1940's and have been upgraded multiple times over the subsequent decades. There is a need to collate all historic construction and engineering data into a comprehensive data base, with controlled GIS surveys of above and below-ground systems. This project will include the survey and data collection of all runway, taxiway, apron and airfield utilities, including landside utilities for all buildings, parking facilities, and access roads onto a comprehensive GIS database, compatible with FAA and Town needs.

And finally, this project this project would update the original 1987 FAA FAR Part 150 noise compatibility study and noise exposure maps approved by the FAA in 1989; and it would update the Barnstable Municipal Airport (BMA) Noise Studies conducted in 1998/99.

Project Justification: The present Master Plan does not appear to be complete and should be completely updated to bring the Airport into full FAA compliance. The Airport Layout Plan and other required portions of the Plan are kept up-to-date; however, a comprehensive airport layout plan does not appear to have been brought up to date for many years. The availability of space at the departure end of Runway 33 to extend the existing runway by up to 926 feet, and still maintain minimum runway safety margins is feasible and should be comprehensively reviewed. The primary purpose for such an extension would be to provide additional runway length to safely accommodate larger, heavier and longer flight range private, regional and commercial turbine (jet) aircraft. The extra landing and take-off distance afforded to aircraft by the runway extension, provides an increased margin of safety for such flight operations.

The new airport terminal building commenced operations in 2011. Due to budgetary constraints, the original design was considerably reduced and certain aspects were eliminated that would have better accommodated larger air carrier aircraft already beginning to use the airport. The future needs of these aircraft would be studied and planned within the context of the updated FAA Master Plan and would include the potential for a larger terminal and associated jetways, larger security and baggage handling facilities, larger passenger waiting rooms and so forth, if found to be necessary.

The airfield underground communications and utility systems are not adequately researched or surveyed, which leads to accidental utility damage despite efforts to adequately identify and locate them prior to any

construction. This project will reduce hazards and risks during reconstruction of airport projects, and reduce engineering and potential repair costs in the future.

The goal of the Barnstable Municipal Airport (BMA) noise mitigation program is to minimize the environmental impact of noise from airport operations, increasing the degree of compatibility between the airport and its neighbors through implementation of noise and land use mitigation measures that are practical for use consistent with the wellbeing of the inhabitants of this region. The noise exposure maps will provide current "average day-night noise exposure" contours (Ldn) which can also be used for approved FAA noise mitigation measures if applicable, and as a guide for present and future land use planning. This combined project will help the BMA meet these goals and will provide an updated factual basis for discussions regarding noise exposures; it will focus on practical options to address issues of primary concern; and it will include public involvement. These recommended "voluntary" noise studies are the most likely to receive FAA approval for cost sharing.

Impact of Denial/Postponement: To deny or postpone funding of this capital project will not allow the Airport to be in full compliance with FAA directives that may have long term financial consequences with regard to receipt of FAA and MassDOT grants. Failure to extend the runway will increase the risk of flight accidents with existing aircraft using the Airport, and will have a negative impact on the ability to attract new private, charter and scheduled airline service. The lack of a utilities plan will have safety consequences with regard to airport operations and future construction activities. In addition noise complaints will continue, and the BMA will be seen as unresponsive to the inhabitants of the region. In addition, the BMA will have missed an opportunity to fine tune voluntary flight paths, and other noise reduction and flight safety measures.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$0	\$2,000,000

Basis for Cost Estimates: Planning and engineering consultant estimates, and FAA and MassDOT consultations.

Project Estimated Completion Date: 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$800,000	Start Project (Phase 1 planning)
2019	\$0	
2020	\$800,000	Master Plan projects (AMP); (EA for Master Plan projects)
2021	\$400,000	Phase 2 Permitting (EA Phase 2 permitting)

Source of Funding: Reimbursable funding from FAA (90%), MassDOT Aeronautics (5%) and local share (5%)

Operating Budget Impact now or in future: To be determined.

Supplemental Information:

(1) The recent completion of a property line and partial leasehold survey will form an integral part of the FAA Master Plan. The partially updated Airport Layout Plans have incorporated ongoing property acquisitions, and the results of the Cape Cod Commission Development of Regional Impact; and the recently completed EIR and the new Master Plan and Development Agreement will form a part of the new FAA Master Plan.

- (2) The current length of runways at the airport hampers future air service development efforts. While the fact that each aircraft performs differently, a simple rule of thumb is that the heavier the aircraft, the more runway is needed. There is no such thing as "too much runway" when it comes to flight safety.
- (3) During recent airport improvement projects, undetected and unknown utility lines, FAA telecommunications, and airport aids to navigation lines were discovered after the commencement of construction that caused costly delays and emergency repairs in the interests of safety. This is a continuing problem with almost every construction project at the airport. This project will identify these utilities and telecommunication lines in advance as a preventative measure.

PROJECT: AIR-17-7 AIRPORT

Project Working Title: Clear Vegetation and Obstruction Removal along the Airport Perimeter Fence Line Buffer Zone and in FAA Airspace (Part 77) Offending Areas

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design, permit and clear vegetation that has regrown along most of the Airport perimeter fence line buffer zone creating potential Transportation Security Administration (TSA) security violations; and in places where the vegetation has regrown in certain areas of the airfield where it is creating an airspace flight obstruction – sometimes called an Federal Aviation Administration (FAA) FAR Part 77 airspace obstruction or an offending area.

Project Justification: The existing perimeter fence line was installed in phases over many years to first meet FAA airfield and flight safety requirements and then subsequent to the September 11, 2001 terrorist incident, the TSA has required all FAA FAR Part 139 airports to have a security fence along the entire perimeter that is 8 feet tall with 3 strands of barbed wire along the top, with a 10-foot clear buffer zone on each side of the fence line if possible. Over the past 12 years, the vegetation has continued to grow back along the entire fence line creating a safety and security concern. The airport continues to manually attempt to keep the growth off and away from the fence, without the use of herbicides, with existing personnel, and with the use of AmeriCorps volunteers, JTEC volunteers, and temporary employees. We cannot keep up with the vegetation without this project. The Airport encompasses 683 acres of land, more or less. The results of a new land survey also identified the perimeter length and associated fence line.

Impact of Denial/Postponement: Denial will continue to affect airport personnel's ability to keep the fence line clear of vegetation; it will increase the maintenance workload on a limited staff; it will increase the probability of incurring a security violation from the TSA; and it will increase the probability of an adverse effect on flight minimum altitudes and negatively affect flight safety and commerce.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$0	\$70,000
	Construction	\$0	\$630,000
	Total Project Cost	\$0	\$700,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, industry cost estimates, and FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$700,000	Design, Permitting and Clearing

Source of Funding: FAA AIP reimbursable Grant funds at 90%; MassDOT at 5%; BMA at 5%;

2017 CIP - Deferred Airport Enterprise Fund Projects

Operating Budget Impact now or in future: To be determined, however, routine maintenance will continue unabated to maintain the clear zones.



Clear Vegetation Adversely Affecting Airport Security and Safety

2017 CIP - Deferred Airport Enterprise Fund Projects

PROJECT: AIR-17-8 AIRPORT

Project Working Title: Design and Construct New Snow Removal Equipment (SRE) Vehicle Storage Building

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: This project will design and construct a vehicle storage building of approximately 10,000 square feet, which will provide additional parking spaces to accommodate the needs of the Barnstable Municipal Airport (BMA). The new storage building would be constructed of metal with a concrete slab foundation and with a 24 foot wide by 22 foot high door for vehicle and plow ingress and egress. The new building would be located on the east side of the airport.

Project Justification: The existing Aircraft rescue and firefighting (ARFF) building provides insufficient vehicle garage bays and storage capability to meet the storage and parking requirements for airport SRE and other operational vehicles. Currently, we must store many of our vehicles, plows and sanders, and specialty equipment outside in the elements, which contributes to an already corrosive operating environment and shortens their useful life. We currently have limited covered space in the ARFF building, and in a portion of the Hangar II bay – the majority of which is leased to Cape Air, who have expressed a desire to lease the entire hangar. The new building would be of metal construction, built on a slab, with no heat and no water. It would have electrical power, vehicle exhaust vents if necessary, and lights only - to be built at minimal cost for "cold" storage. This new facility would help preserve our very costly vehicles for a longer period of time and reduce our long term maintenance and replacement costs.

Impact of Denial/Postponement: Impact of denial will shorten the useful life of the very costly airport vehicles needed to maintain operations and certification requirements; it will increase the airport's annual maintenance costs, and it will increase the airport's vehicle replacement costs. Only certain SRE vehicles are eligible for FAA and MassDOT grant funding assistance. All other vehicle replacement costs will adversely affect the Airport Enterprise Fund Reserves.

Project Cost Estimates:		FY2017	FY 2018
	Design & Permitting	\$0	\$60,000
	Construction or Acquisition:	\$0	\$340,000
	Total Project Cost	\$0	\$400,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, DPW estimates, industry cost estimates, and FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2017 and/or 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2018	\$400,000	Design and Construct

Source of Funding: Enterprise Funds (20%) and reimbursable funding by MassDOT AD (80%) if available. If MassDOT funds are not available, project may be funded by airport reserves <u>or</u> deferred indefinitely.

Operating Budget Impact now or in future: Specific savings by extending vehicle service lives is yet to be determined.

PROJECT: AIR-17-9 AIRPORT

Project Working Title: Design and Replace Mo-Gas and Diesel Fuel Con-Vault, Gas Boy & Alarm

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design and replace the circa 1997 era Mo-Gas (low lead gasoline) and Diesel fuel Con-Vault (concrete encased fuel tanks), Gas Boy (computerized dispensing system) and the associated alarms that have reached the end of their useful lives. The existing concrete structure and equipment is deteriorating and should be replaced.

Project Justification: The Con-Vault encases two (2) 4,000 gallon above ground fuel tanks (Mo-Gas and Diesel) that is used by all Airport vehicles and by all Airport tenant vehicles on a reimbursable basis. This service is provided to tenants as a convenience since their vehicles are not licensed to operate outside the airport environment. Tenants are charged for the cost of the fuel plus a small additional fee to cover airport overhead costs. The Gas Boy is a computerized "gas station-type pump" that monitors usage by each vehicle authorized to use the pump, with all data transmitted to the Airport finance department for recording and billing purposes. The alarm is monitored by the operations staff.

Impact of Denial/Postponement: Impact of denial will allow the Con-Vault to deteriorate to the point where it would have to be decommissioned before encountering any external fuel leakage or spills and the subsequent HAZMAT clean-up costs. Shutting the system down would be a major inconvenience and will have a significant impact on lost time as employees would have to depart the airport to obtain fuel, and would cost a significant amount of money to bring vehicles up to code to operate on the highways. If low lead and diesel fuel has to be trucked in to a temporary fueling facility, it would significantly increase the risk of a fuel spill.

Project Cost Estimates:		FY2017	FY 2018
	Design & Permitting	\$0	\$10,000
	Construction or Acquisition	\$0	\$140,000
	Total Project Cost	\$0	\$150,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2017 and/or 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$150,000	Design and Replace

Source of Funding: Airport Enterprise Funds (20%) and reimbursable funding by MassDOT AD (80%) if available. If MassDOT funds are not available, project may be funded by airport reserves <u>or</u> deferred indefinitely)

Operating Budget Impact now or in future: None -Replacement of existing system.



Existing 1997 era Mo-Gas an Diesel Con Vault

PROJECT: AIR-17-10 AIRPORT

Project Working Title: Design and Construct New T-Hangar

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design and construct a new 6-bay nested T-hangar to provide additional hangar space to accommodate the needs of general aviation at the Barnstable Municipal Airport (BMA). The T-hangar would be constructed of metal with a concrete foundation and with bi-fold doors for aircraft access to the east ramp.

Project Justification: The recently completed Airport access road and the construction of the new fuel farm mandated the demolition of one of the two airport-owned existing T-hangars, located adjacent to Gate Foxtrot (F). Since this T-hangar serviced Airport users that had to be displaced, the Airport desires to construct a new T-hangar on the East ramp to accommodate this loss of space. In addition, the BMA holds a waiting list for T-hangar space that fluctuates between 25 and 27 aircraft owners waiting for space, and projections for the future of General Aviation at the BMA forecasts an additional demand for hangar space. Revenues generated by the rental of the bays will help offset costs of construction and maintenance.

Impact Of Denial/Postponement: Impact of denial will further decrease potential BMA revenues, and will prevent the BMA from meeting the demands of airport users for hangar space.

Project Cost Estimates:		FY2017	FY 2018
	Design & Permitting	\$0	\$50,000
	Construction or Acquisition:	\$0	\$600,000
	Total Project Cost	\$0	\$650,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, DPW estimates, and FAA and MassDOT consultations, etc.

Project Estimated Completion Date: FY 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$650,000	Design and Construct

Source of Funding: Airport Enterprise Funds (20%) and reimbursable funding by MassDOT AD (80%) if available. If MassDOT funds are not available, project may be funded by airport reserves or deferred indefinitely.

Operating Budget Impact now or in future: Routine maintenance costs to be determined after several years use.

Revenue: First Year (FY 2017) \$0 Subsequent Years (Ave Annual) \$24,000 rental fees.

Expenses: To be determined based on usage

2017 CIP - Deferred Airport Enterprise Fund Projects



Existing T-Hangar

PROJECT: AIR-17-11 AIRPORT

Project Working Title: Runway 6-24 Major Reconstruction

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Runway 6-24 (circa 1991) has exceeded its pavement's 20-year design life and will, therefore, be programmed by the FAA and State for a full reconstruction. This project will include the design and reconstruction of the full length (5,425 feet) of the runway, in place, including in-pavement lighting and edge lights, and will extend the design life of the pavement for another two decades, and will also include other miscellaneous related airfield improvements.

Project Justification: Runway pavements are given a 20-year useful life by the FAA, after which time a major reconstruction is justified. Runway 6-24 will have exceeded its useful life by 2017, at which time it is scheduled for a rebuild. This will avoid hazards to flight safety from failing pavement, and potential aircraft damage. Crack sealing and crack repairs have extended its useful life until now but further deterioration poses serious safety risks that must be addressed. In June of 2013, the MassDOT Aeronautics Division completed a statewide pavement management report that shows the majority of Runway 6-24 as having a pavement condition index (PCI) of 54 to 73 depending upon location, with 0 being the worst condition, to 100 being the best condition. A PCI of 55 to 70 requires major rehabilitation.

Design has been delayed at least three years or more due to delay in FAA planned funding for reconstruction in FY 2019. Use of the Statewide crack sealing project is effectively extending the life of the failing pavement in the interim.

Prior Funding (FY14 for runway reconstruction design): \$400,000 Not used

Impact of Denial/Postponement: To deny or postpone funding of this capital project will have flight safety consequences with regard to airport operations; and will increasingly affect the ability of pilots to operate on the runway, due to the potential for aircraft damage and lessened flight safety. Eventually the runway would be unusable and the Airport would be in violation of their Grant Assurances and not in compliance with Airport Certification requirements with resultant loss of operational capability.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$0	\$650,000
	Construction	\$0	\$5,850,000
	Total Project Cost	\$0	\$6,500,000
	Less prior appropriation of		(\$400,000)
	Adjusted Cost	\$0	\$6,100,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2019

Project Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	

2017 CIP - Deferred Airport Enterprise Fund Projects

2019 \$\$6,500,000

Design, Permitting & Construction

Source of Funding: Reimbursable funding from FAA (90%), MassDOT Aeronautics (5%) and local share (5%)

Operating Budget Impact now or in future: Routine maintenance would stay the same.

PROJECT: AIR-17-12 AIRPORT

Project Working Title: Design and Reconstruct a Portion of Taxiway Bravo (B)

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: As part of the Federal Aviation Administration's (FAA) goals to improve and correct airport layout deficiencies, enhance aircraft safety, and insure compliance with regulatory guidance, this project serves to correct major operational aircraft ground and runway safety area (RSA) deficiencies associated with a portion of taxiway Bravo (circa 1961 and 1985).

Project Justification: This reconstruction project for a 3,000 foot by 50 foot portion of Taxiway B (between the ARFF/SRE Building and Runway 6-24, not including the Glide Slope Critical Area) is the final step in a multi-year process to modify the East Ramp and its associated taxiways to bring it into compliance with FAA airport design criteria; and to meet the requirements of the Airport Layout Plan, the Draft Airport Master Plan, Development of Regional Impact, EIR and Development Agreement for the future development of the East Ramp. In June of 2013, the MassDOT Aeronautics Division completed a statewide pavement management report that shows Taxiway Bravo as having a pavement condition index (PCI) of 47 to 65 depending upon location, with 0 being the worst condition, to 100 being the best condition. A PCI of 55 to 70 requires complete major rehabilitation. The project is also subject to the Airport Master Plan Update, Review and Permitting requested under CIP Project Air-17-06.

Impact of Denial/Postponement: Denial or postponement of funding for this project will negatively affect aircraft and airport operations for the future development of the East Ramp, and the airport will not be in compliance with FAA airport design criteria.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$0	\$300,000
	Construction	\$0	\$2,700,000
	Total Project Cost	\$0	\$3,000,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2020

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2020	\$3,000,000	Permitting, Design and Construction

Source of Funding: FAA share: 90%, MassDOT AD share: 5% and Airport share: 5%.

Operating Budget Impact now or in future: None - Routine maintenance would stay the same.

Hyannis Youth And Community Center Enterprise Fund

PROJECT: CS -17-1 HYCC

DEPARTMENT PRIORITY: 1 of 2

Project Working Title: HYCC Core HVAC Design and Construction

Project Location: 141 Bassett Lane, Hyannis

Project Description: The proposed project includes the study of the existing HVAC system for the core areas of the building, engineering design, construction, contract administration, and project management services for improvements to the existing HVAC system and related renovations

Project Justification: The central core of the building is fed off of one system without reheat units and temperature controls for a diverse number of spaces of varying occupancies. This causes problems that result in some areas being hot while others are cold. This is complicated by having cold ice rinks on two sides of the space. The electrical system is maxed out, so a gas fired system would be less expensive to employ.

Impact Of Denial/Postponement: Multiple room type and occupancies require better heating and cooling controls and a system modification to alleviate complaints from staff and visitors.

Project Cost Estimates:		FY 2018
	Design & Permitting	\$26,704
	Construction & Acquisition	\$194,526
	Construction Contingency	\$31,012
	Project Management	\$11,127
	Construction Contingency	\$11,127
	Total Project Costs	\$274,496

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2018	\$ 274,496	HVAC Design and Construction

Source of Funding: HYCC Enterprise Fund

Operating Budget Impact now or in future: Savings amount unknown at this time.

PROJECT: CS -17-2 HYCC

Project Working Title: HYCC Cogenerator design and construction

Project Location: 141 Bassett Lane, Hyannis

Project Description: The proposed project involves the design and installation of a complete cogenerator which using gas as a fuel creates electrical current for use in the building while giving off heat which going thru converter is used for the refrigeration plant. In this manner, the heat is "free" for use in the building plant to make ice for the two rinks. Included in this cost are the engineering design, contract administration, and contingency and project management services for these energy efficient improvements to the existing HVAC system.

Project Justification: Energy grants are available for this kind of project, which results in lower up front cost while gaining reductions in electrical usage costs.

Impact Of Denial/Postponement: The TOB will continue to pay for the high price of operating cost.

Project Cost Estimates:		Future FY
	Design & Permitting	\$66,473
	Construction & Acquisition	\$503 <i>,</i> 580
	Design Contingency	\$50,358
	Project Management	\$38,776
	Construction Contingency	\$55,394
	Total Project Costs	\$714,580

Basis for cost estimates: Engineer's estimate

Project Estimated Completion Date: January, 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2020	\$ 196,400	Design
2021	\$ 518,180	Construction

Source of Funding: HYCC Enterprise Fund

Operating Budget Impact now or in future: Savings in fuel costs due to greater efficiency of system. Savings amount unknown at this time.

Golf Enterprise Fund

PROJECT: CS -17-1 GOLF

DEPARTMENT PRIORITY: 1 of 3

Project Working Title: Hyannis Golf Course Renovation

Project Location: 1800 Iyannough Road, Route 132, Hyannis, MA

Project Description: Renovation and modernization of the Hyannis Golf Course. The plan calls for the replacement of entire irrigation system. A complete comprehensive bunker renovation is necessary. Installation of forward tee boxes on each hole will ease the difficulty of the golf course and encourage beginners, juniors, women and seniors to come play. Refurbishment of existing cart paths and installation of new paths where none exist presently. Select tree removal and widening of golf holes will ease the degree of difficulty and speed up play.

Project Justification: The main goal is to protect the asset and keep the business viable. Major golf course features are well beyond their natural life cycle. Infrastructure is deteriorating after 40+ years of use without attention. Heavy local competition gives customers attractive alternative options. Hyannis GC is too difficult for many golfers. Bunkers are in extremely poor condition. Irrigation system is archaic, obsolete and inefficient. Failure of a major component of the pump station leaves us with NO water as we only have one (1) pump.

Impact Of Denial/Postponement: Each year we delay this project conditions continue to deteriorate and the cost associated with the renovation increases. We will see a continual decay of course features and infrastructure. Our reputation will suffer and revenues will decline. Revenue shortfalls will affect our ability to cover expenses and debt service obligations leading to budget cuts that will further inhibit our ability adequately maintain the property. Irrigation system failure could result in widespread loss of turf throughout the golf course.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$216,494
	Construction	\$3,350,698
	Total Project Cost	\$3,667,112

Basis for cost estimates: Cost estimates based on the Renovation Business Plan produced by Richard Mandell Golf Architecture using the "recommended renovation option"

Project Time Estimates: Design & Permitting (months) 8 Construction (months) 4

Project Estimated Completion Date: Fall 2017 or spring 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$3,667,112	Design, Permitting & Construction

Source of Funding: Golf Enterprise Fund Bond Issue

Operating Budget Impact now or in future: Will be developed following construction. It is quite possible the cost of routing maintenance will be reduced at least for the short term.

2017 CIP – Deferred Golf Enterprise Fund Projects

Revenue: Based on a 2014 report form the National Golf Foundation covering financial results from 19 public golf courses show that positive financial results were achieved after renovations. Major renovations averaging \$5M showed an ROI of 9% after the second year. Following these statistics there is the potential to see an increase in revenue of \$125,000 the first year.



Hyannis Golf Course

Sandy Neck Enterprise Fund

PROJECT: CS -17-1 SANDY NECK

DEPARTMENT PRIORITY: 1 of 1

Project Working Title: Sandy Neck Coastline Stabilization

Project Location: 425 Sandy Neck Road, West Barnstable, MA

Project Description: The existing dune continues to be unprotected against storm damage. Design and environmental permitting services are currently underway with CZM funding for alternative long range solution for the management of the dune edge to control erosion. The agreed upon solution will provide the basis for the changes needed to the site of this important asset of the Town.

Project Justification: The erosion along the dune edge has continued. The town installed 5,500 cubic yards of emergency replacement sand to replace material eroded during storms in the fall of 2013. This material is sacrificial and 60% has disappeared after recient storms. A more permanent solution is now being studied. This CIP will provide for design and construction funding of the recommended site alternative change to the site. The study will conclude with submission of the solution to the regulatory agrencies, and ;subect to their approval, allow the Town to move forward with this constuction activity in lieu of adding more sacrifical sand to the beach.

Describe Work Previously Accomplished this Proposed Project: CZM funding for the alternative study has allowed for the study to be conducted as a search for a solution continues.

Impact Of Denial/Postponement: Without a long term solution, the beach will continue to erode and continue to reduce the parking area and cause concern about the surviving septic system and the use of the beach itself for the public.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$120,000
	Construction & Acquisition	\$1,000,000
	Construction Contingency	\$140,000
	Project Management	\$60,000
	Project Contingency	\$80,000
	Total Project Costs	\$1,400,000

Basis for cost estimates: Environmental engineering cost estimate

Project Estimated Completion Date: Summer, 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$1,400,000	Design, Permitting, Project Management, Construction
2021		

Source of Funding: General Fund, Sandy Neck Enterprise Fund, CZM Grant

2017 CIP - Deferred Sandy Neck Enterprise Fund

Operating Budget Impact now or in future: None

Supplemental Information: Sacrificial sand has been placed on the beach over the past two years at a cost totaling \$259,250. The purpose of this CIP request is to fund an alternative solution to this on-going expense to the Town. The chart below documents the money expended thus far.

	Date	Amount	Cost
Placement #1	Dec. 2013	5,500 c/y	\$119,250
Placement #2	Dec. 2014	4,300 c/y	\$90 ,000
Placement #3	Feb. 2015	2,600 c/y	\$50,000

Water Supply Enterprise Fund

PROJECT: PW -17-5 WATER SUPPLY

DEPARTMENT PRIORITY: 5 of 6

Project Working Title: Water Main Upgrade Barnstable Road from Main to Lewis Street Hyannis

Project Location: Barnstable Road in Hyannis.

Project Description: Construct the needed water main upgrade on Barnstable Road from Main Street to Lewis Street.

Project Justification: This project was recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan due to deficient fire flows. This project will ensure the long-term ability of the Hyannis Water System to increase drinking water quality and provide sufficient fire readiness protection in the area to support economic growth.

Prior Funding: Project #14-075 \$95,900

Describe Work Previously Accomplished this Proposed Project:: The previously appropriated monies were for the design of the project. A design RFQ is currently under development.

Impact Of Denial/Postponement: The water quality and fire flow capacity in this area will continue to deteriorate, impacting and limiting water supply availability for existing and future customers, and during emergencies.

Project Cost Estimates:		FY 2018
	Construction & Acquisition	\$934,150
	Project Contingency	\$164,850
	Total Project Costs	\$1,099,000

Basis for cost estimates: Cost estimates based on previous water works project experience.

Project Estimated Completion Date: June 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$1,099,000	Construction

Source of Funding: Water Supply Division, Enterprise Account, Water Capital Reserve, User Fees, Borrow

Operating Budget Impact now or in future: None

2017 CIP – Deferred Water Supply Enterprise Fund Projects



Water Supply Pipes Needing Replacement

PROJECT: PW -17-3 WATER SUPPLY

Project Working Title: New Well Exploration Program

Project Location: Town of Barnstable

Project Description: To continue the on-going new well exploration program with the permitting, designing and construction of two or more new wells for the Hyannis Water System. This capital request is for the third of four phases of the new well exploration program. The first phase consisted of exploratory test wells, environmental notifications, evaluations and recommendations. The second phase dealt with DEP new source approvals, 8" test well construction, and 5 day pumping tests. This third phase will consist of the design and permitting of the new well buildings and appurtenances with all environmental impact reporting requirements. The fourth phase will be the construction phase. A junior engineer, partially funded out of this program, will provide project management and oversight.

Project Justification: Recent water quality study results indicated that three of the DPW's twelve wells have water quality issues (iron and manganese) that cannot be addressed with our current treatment systems. In addition, the Mary Dunn 4 well is under the influence of surface water and cannot be used. As a result, four of the twelve wells need to be replaced, or have additional treatment added to them.

Prior Funding: \$583,000

Describe Work Previously Accomplished this Proposed Project: A request for proposals is being finalized to accomplish the first two phases of this program.

Impact Of Denial/Postponement: The ability to provide the ratepayers of the Hyannis Water System with the highest possible water quality will continue to deteriorate and the redundancy of water pumping capacity will diminish.

Project Cost Estimates:		Future FY
	Design & Permitting	\$475,000
	Construction & Acquisition	\$3,532,000
	Project Management	\$121,500
	Project Contingency	\$501,000
	Total Project Costs	\$4,629,500

Basis for cost estimates: previous years' experience

Project Estimated Completion Date: FY2022

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$555,500	Design & Permitting
2019	\$2,000,000	Construction well A
2020	\$36,000	Project Management
2021	\$2,038,000	Construction well B & Project Management

2017 CIP – Deferred Water Supply Enterprise Fund Projects

Source of Funding: Water Supply Division, Enterprise Account, Water Capital Reserve, User Fees, Borrow

Operating Budget Impact now or in future: It is expected that some moderate financial impact on the operating contract will occur after FY2018 due to slight increases in utility and maintenance costs. The dollar amount will be determined in FY 2017.



Exploring New Sources of Water Supply

Water Pollution Control Enterprise Fund

PROJECT: PW -17-3 WATER POLLUTION CONTROL

DEPARTMENT PRIORITY: 3 of 6

Project Working Title: Barnstable Road Sewer Evaluation, Design and Construction

Project Location: Barnstable Road, Hyannis

Project Description: Evaluation of Barnstable Road sewer system's condition, capacity, and expected future use. Design of any recommended improvements, which may include new gravity sewer pipe, new sewer manholes, relining sewer pipe and sewer manholes. Construction monies will be requested for FY 2019.

Project Justification: The Water Department's 2007 Master Plan calls for the replacement of 3,200 feet of water main, valves, hydrants, and service connections on Barnstable Road. In conjunction with this project, the WPCD seeks to hire a consultant to identify any structural or design improvements that could be made to the sewer system on Barnstable Road and to complete design work for any necessary repairs. Certain stretches of sewer on Barnstable Road are 80 years old and plans to repair these lines are imminent. This project aims to coordinate these repairs with other utilities in order to save on overall project costs and minimize any inconvenience to the public that would be caused by frequent road openings.

Describe Work Previously Accomplished this Proposed Project: Design for the Water portion of the project has been funded, but is waiting for the other components for the DPW to hire an engineer.

Impact Of Denial/Postponement: If denied, the water main replacement would continue as planned, and any sewer repairs would be carried out later, independent of this project. An opportunity to coordinate repairs with other utilities would be lost, meaning more road openings going forward and more disruption to local traffic and businesses in this area.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$68,000	
	Construction & Acquisition	\$0	\$678,000
	Project Management	\$0	\$68,000
	Project Contingency	\$0	\$68,000
	Total Project Costs	\$68,000	\$814,000

Basis for cost estimates: DPW In-house Estimate

Project Estimated Completion Date: June 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$68,000	Evaluation & Design
2018	\$814,000	Construction

Source of Funding: Water Pollution Control Sewer Reserve Fund

Operating Budget Impact now or in future: None. Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.

2017 CIP – Deferred Water Pollution Enterprise Fund Projects





Project area and pipe ages

Project Working Title: Reline Sewers & Laterals on South Street, Hyannis

Project Location: South St, Hyannis

Project Description: The purpose of this project is to reline the sewers and laterals on South Street. This procedure consists of inserting a soft plastic liner into the sewer, and then heating it to form a hard interior liner. This will extend the useful life of the pipe by at least 50 years.

Project Justification: This is the second phase of this project, following up on the design phase. The sewers on South Street were installed in 1935 in 3-foot sections of clay pipe. Increasingly, the pipe has been suffering from cracks and root intrusion. As root intrusion progresses, the likelihood of large breaks and sewer collapse increases. By proactively relining the South Street sewer, the Town will avoid a costly pipe collapse that could cut off sewer service to a large number of properties.

Impact Of Denial/Postponement: Denial of this project would put the South Street sewer system in serious jeopardy. This stretch of road, along with other sewers feeding into this road, would risk losing sewer service in the event of a major pipe failure. The South Street sewer system serves a large portion of town including Main Street and Sea Street.

Project Cost Estimates: FY 2017 Design, Construction & Acquisition \$690,000

Basis for cost estimates: In-house estimate based off of prior projects. An updated cost estimate can be expected after the design phase of this project.

Project Estimated Completion Date: 7/31/18

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$690,000	Relining of sewer and laterals on South Street

Source of Funding: Water Pollution Control Sewer Reserve Fund

Operating Budget Impact now or in future: None> Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.







Large root ball Top Photo Roots in pipe joint Center Photo Project area Lower Chart

PROJECT: PW -17-5 WATER POLLUTION CONTROL

Project Working Title: Septage Building Construction

Project Location: 617 Bearse's Way, Hyannis

Project Description: Construction of recommended improvements to the WPCF septage building and solids handling process. This request serves as a placeholder until the evaluation and design are complete.

Project Justification: The WPCF's solids handling process and sludge processing building (septage building) are currently being evaluated as a result of a 2014 CIP request. The septage building was built in 1990 and is at the end of its design life. The building processes 12,000,000 gallons of septic waste, 11,000,000 gallons of sludge, and 1,000,000 gallons of grease per year. The septage building is a critical component of the wastewater treatment process. Along with improvements to the mechanical equipment, piping, electrical components and structure, this project will also act upon recommended improvements to the WPCF's sludge thickening and disposal practices. These improvements will increase the efficiency of the sludge thickening process and could result in savings on sludge disposal costs.

Describe Work Previously Accomplished this Proposed Project: Prior Funding \$450,000 - evaluation and design are currently underway.

Impact Of Denial/Postponement: If denied, the septage building will continue to operate beyond its expected design life, using inefficient technologies and expensive sludge disposal methods. Working conditions will continue to deteriorate resulting in an unsafe work environment.

Project Cost Estimates: FY 2018 \$3,500,000

Basis for cost estimates: In house estimate to be used as a placeholder. A more accurate cost for this project will be developed when the evaluation and design phase is complete.

Project Estimated Completion Date: 1/30/19

Project Cost/Description FY 2017 and Follow-On Years:

FYCostProject Description/Components2017\$02018\$3,500,000Construction

Source of Funding: Water Pollution Control Sewer Reserve Funds and or bond.

Operating Budget Impact now or in future: Unknown until completion of evaluation. There is potential for savings on sludge disposal costs.

2017 CIP – Deferred Water Pollution Enterprise Fund Projects



Existing Septage Processing Building

PROJECT: PW -17-6 WATER POLLUTION CONTROL

Project Working Title: Total Organic Compounds (TOC) and Total Nitrogen (TN) Effluent Limits Design

Project Location: 617 Bearse's Way, Hyannis, MA

Project Description: A follow-up to the TOC and Total N Evaluation, this project will design improvements to the WPCF in order to meet new Commonwealth of Massachusetts effluent discharge requirements.

Project Justification: The State has reduced TOC effluent limits to 3 mg/l for waters discharged into a Drinking Water Zone II. The WPCF discharges into a Drinking Water Zone II. This limit is in place, but is not currently being enforced. The Town must be prepared to comply with this State regulation or face the potential of costly fines. TOC acts as an indicator of pharmaceuticals, personal care products, and other emerging contaminants of concern. The purpose of this project is to increase effluent quality in order to further protect public health.

Describe Work Previously Accomplished this Proposed Project: Prior Funding \$200,000 evaluation. The evaluation phase of this project has been approved but has not yet begun.

Impact Of Denial/Postponement: Denial of this project would lead to a violation of State regulations and could result in costly fines. Improvements to the quality of water discharged into the Drinking Water Zone II will be put on hold putting public health at risk.

Project Cost Estimates: **FY 2018** \$600,000

Basis for cost estimates: In house estimate, to be updated upon the completion of the evaluation.

Project Estimated Completion Date: 6/30/2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$600,000	Design
2019	\$4,000,000	Construction (est)
2020	\$4,000,000	Construction (est)
2021	\$2,000,000	Construction (est)

Source of Funding: Water Pollution Control Sewer Reserve Fund

Operating Budget Impact now or in future: Upgrades to the facility to address additional removal of TOC will result in additional energy costs, additional maintenance costs, and could result in the need for additional personnel. Until the evaluation is complete and a design has been chosen, it is difficult to predict the impact this project would have on the Operational Budget.

Solid Waste Enterprise Fund

PROJECT: PW -17-2 SOLID WASTE

DEPARTMENT PRIORITY: 2 of 5

Project Working Title: Purchase of Three New Compaction Containers

Project Location: Barnstable Transfer Station & Recycling Center, 45 Flint Street, Marstons Mills, MA

Project Description: Purchase of 3 new compaction containers for the disposal of Municipal Solid Waste (MSW) at the Barnstable transfer station & recycling center

Project Justification: Compaction Containers allow a greater amount of MSW to be placed into each container for more efficient operation of the transfer station & recycling center. some of the current compaction containers are beginning to have structural issues which do not allow maximum compaction

Impact of Denial/Postponement: Denial will result in costly repairs and loss of production. The loss of compaction containers will result in delays to users of the transfer station and possible losses in revenue.

Project Cost Estimates: FY 2017 Acquisition \$30,000

Basis for cost estimates: Previous year's quotes

Project Estimated Completion Date: January 2017

Project Cost/Description FY 2017 and Follow-On Yeas:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$30,000	Purchase of 3 New Compaction Containers

Source of Funding: Solid Waste Reserve Fund





PROJECT: PW -17-3 SOLID WASTE

Project Working Title: Purchase of New Open Top Roll-Off Container

Project Location: Barnstable Transfer Station & Recycling Center, 45 Flint Street, Marstons Mills, MA

Project Description: Purchase of a new open top roll-off container for the disposal of metal at the Barnstable Transfer Station & Recycling Center

Project Justification: The open top roll-off container is needed to haul metal out of the facility for recycling. We have one container for mixed metal and one for aluminum to accomplish these tasks. This limits our ability to adjust a schedule. Another container would allow greater flexibility in the schedule of the hauling.

Impact Of Denial/Postponement: Denial of this purchase may result in inefficient operation at the transfer station & recycling center. Having only two containers leaves open the possibility of delays in metal hauling if any type of issue or failure arises with either of the containers

Project Cost Estimates: FY 2017 Acquisition Container \$10,000

Basis for cost estimates: County Bid (2015)

Project Estimated Completion Date: January 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$10,000	Open Top Container

Source of Funding: Solid Waste Reserve Fund

Operating Budget Impact now or in future: None. Routine maintenance remains same



Rusted Open Top Roll-off Containers

General Fund Projects

Administrative Services Department

PROJECT: ASD -17-3 ADMINISTRATIVE SERVICES

DEPARTMENT PRIORITY: 3 of 3

Project Working Title: Unified Communications – VOIP (Voice over Internet Protocol

Project Location: All Town and School locations attached to Barnstable Fiber Optic Network

Project Description: Replace existing phone system(s) with Voice over Internet Protocol (VOIP) utilizing the Barnstable Fiber Optic Network (BFON)

Project Justification: The PBX phone system located in Town Hall (508-862-XXXX exchange) will be 16 years old as of July 2016. The 508-862-XXXX exchange has experienced failures more and more as it ages. Most recently the voice mail went down and had to be reinitialized. All voicemails both new and saved were lost and everyone had to setup their voicemail box again. The Town was told by the phone vendor that parts were hard to find for a system of this age. With the systems age and sketchy parts availability it is overdue to be replaced with a newer system. When BFON was completed and all Town and School buildings were connected by high speed fiber, I.T. had planned that the next obvious step would be a unified communication system for all Town and School locations. With a proven solid data network backbone in place and aging telephony system(s) it makes sense to combine all locations into one unified communications platform. This will eliminate the islands of smaller CENTREX phone systems that exist today, (508-790-XXXX, Airport, Golf(s), Solid Waste, Police Department etc.) along with the locations that utilize POTS lines (Plain Old Telephone Systems), all with a potential for cost savings. Having said all that I.T. believes this is the way the Town and Schools should proceed. Town and School I.T. have inventoried all phone locations and have accurate counts of phones and network equipment needed. What I.T. does not have is a complete listing of ALL existing lines and their costs compiled. We therefore at this time are unable to calculate cost savings if in fact there are any. I.T. will be putting in a decision package for FY17 for a consultant to come in and thoroughly examine what is currently in place and taking into account any other solutions that could work to benefit the Town and Schools. I.T. has the expertise on the network and computer side but freely admits we need assistance in the old school telephone systems as they typically in the past have not been under I.T.'s control. I.T. does not have the staff nor the time, or the familiarity with older style phone systems to take on a thorough documentation of the existing phone system (Town and Schools) along with a thorough analysis of billing down to the minute detail. By doing this we will ensure the Town and Schools are headed in the most advantageous direction. It will also assist us in knowing what can be decommissioned after the unified communications solution is implemented. Please note, I.T. does see the actual acquisition and implementation of a unified communication system being put forth for FY18. Another note, and it is mentioned in the MS Office & Exchange server upgrade in CIP Project #2 of FY17, is that the majority of unified communication systems offered today either do not work at all or have limited functionality with older Microsoft Exchange servers and it will be necessary to implement I.T. CIP priority #2 (FY17) prior to a unified communication system that integrates with email (FY18).

Impact Of Denial/Postponement: If denied or postponed the Town and Schools will have to continue using the existing antiquated phone system and suffer through breakdowns as they occur. We will run the chance of a breakdown where a replacement part cannot be found thus leaving the phone system inoperable.

 Project Cost Estimates:
 FY 2017
 \$0
 Future FY
 \$650,000

Basis for cost estimates: Costs will be firmed up in FY17 and included in a FY18 CIP.

Project Estimated Completion Date: Unknown at this time.

Source of Funding: General Fund



2017 CIP - Deferred Administrative Services General Fund Projects

Community Services Department

PROJECT: CSD -17-1 COMMUNITY SERVICES

DEPARTMENT PRIORITY: 1 of 21

Project Working Title: Barnstable Senior Center Stand-by Generator

Project Location: 825 Falmouth Road, Hyannis

Project Description: Installation of a new stand-by generator at the Senior Center to handle the electrical demands during a power outage.

Project Justification: Being able to operate the Senior Center during in power outage conditions with back-up power is very important as many seniors seek shelter during inclement weather. An emergency generator at the Senior Center would also allow for the safe evacuation of the Adult Supportive Day clients. When there is a power outage, the staff must escort the clients, most of who have cognitive and/or mobility impairments, through a long, winding and steep pathway to reach the main level of the building. Having an emergency generator onsite would allow power to be restored so the elevator and lights would be functional, thereby ensuring the safety of all users of the facility. The Hyannis Fire Department has recommended the installation of the generator during BSC annual safety inspections.

Impact Of Denial/Postponement: The facility will continue to operate without power during storm events and services cannot be delivered in time of need.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$19 <i>,</i> 887
	Construction & Acquisition	\$170,500
	Design Contingency	\$14,731
	Project Management	\$9,944
	Construction Contingency	\$9,944
	Total Project Costs	\$225 <i>,</i> 006

Basis for cost estimates: In-House estimate

Project Estimated Completion Date: FY 2018

Project Cost/Description FY 2017 and Follow-On Years:

FY	Cost	Project Description/Components
2017	\$ 225,006	Design & Construction

Source of Funding: Community Development Block Grant (CDBG)

Operating Budget Impact now or in future: \$2,000 annually for operation & maintenance

PROJECT: CSD -17-3 COMMUNITY SERVICES

Project Working Title: Craigville Bathhouse Site Work Phase IV

Project Location: 997 Craigville Beach Road, Centerville, MA

Project Description: This project would fund the phase IV improvements at the Craigville Bathhouse consisting of pavement, striping, gates and guardrails. Funding for this project continues the multi-year improvement project. Improving the interior & exterior of the building and making the facility operational. These funds would provide for design and renovation/construction as identified hereinafter:

Project Justification: This building has been patched, repaired and painted but heavier renovations are now necessary. The site is in need of improvement with regard to striping, layout, walks, rails, and gates. It is not solely cosmetic; many of the needs are safety related. The intention is to bring the building up to standard for safe use by all the citizenry.

Describe Work Previously Accomplished this Proposed Project: Prior Funding \$115,000. Phase 1 consisting of the installation of a new roof on the existing bathhouse and is currently in the bid phase (phase I). Building renovation work (phase II) is currently in design. Septic system / sewer system (phase III) study is in a separate CIP.

Impact Of Denial/Postponement: This facility is heavily used by the public. The site is in poor shape and will continue to decline without much needed repair. The building will lose popularity with its users without improvements to this aging facility.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$15,000
	Construction & Acquisition	\$200,000
	Project Management	\$10,000
	Construction Contingency	\$20,000
	All Other Costs	\$1,800
	Total Project Costs	\$246,800

Basis for cost estimates: In House Architect

Project Estimated Completion Date: April 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$ 246,800	Design & Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: To be developed following design.

2017 CIP - Deferred Community Services General Fund Projects

Project Working Title: Kennedy Memorial Renovation Construction

Project Location: 480 Ocean Street, Hyannis MA

Project Description: Historic restoration and preservation of the John F. Kennedy Memorial Park. Work consists of the restoration of the concrete patio, granite benches, fountain, and landscape enhancements as needed.

Project Justification: Town of Barnstable owns and operates the John F. Kennedy Memorial Park located at 480 Ocean Street, Hyannis. The park was constructed in 1965 and dedicated on July 8, 1966, to memorialize our 35th President and his association with Cape Cod. The park has been a major tourist destination since its inception, and continues to be heavily visited.

Describe Work Previously Accomplished this Proposed Project: Prior Funding \$87,00. Design is scheduled to be completed in 2016.

Impact Of Denial/Postponement: The Town will recognize the 50th anniversary of the park's dedication in 2017. This project has been identified as a priority by the JFK trust fund committee, Town Manager, and Town Council. The pool fountain and associated mechanical equipment are in a state of failure. Delay will push restoration beyond the 2017 celebration ceremony.

Project Cost Estimates:		FY 2017
	Additional Design & Permitting	\$95,822
	Construction & Acquisition	\$665,434
	Design Contingency	\$133,087
	Project Management	\$39,926
	Project Contingency	\$39,926
	Total Project Costs	\$974,195

Basis for cost estimates: Consulting Architect Estimate

Project Estimated Completion Date: FY 2017

Project Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$ 974,195	Design & Construction

Source of Funding: General Fund Additional Funding may be available through the CPC

Operating Budget Impact now or in future: Once restored it will require normal maintenance already provided for

PROJECT: CSD -17-9 COMMUNITY SERVICES

DEPARTMENT PRIORITY: 9 of 21

Project Working Title: West Bay Channel Dredging Design and Permitting

Project Location: West Bay, Cotuit

Project Description: This project involves the design and permitting for the continued maintenance dredging of the West Bay entrance channel.

Project Justification: This channel provides important navigational access for a significant number of recreational and commercial boats. The failure to maintain these channels can result in very dangerous conditions, which can threaten the safety of our residents and risk serious damage to boats.

Impact Of Denial/Postponement: The channels will continue to shoal and eventually completely close off access for recreational and commercial boating into the Three Bay Area.

Project Cost Estimates:		FY 2018
	Design & Permitting	\$80,000
	Project Management	\$12,000
	Project Contingency	\$9,200
	Total Project Costs	\$101,200

Basis for cost estimates: Environmental engineering and in-house estimate

Project Estimated Completion Date: FY 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2018	\$ 101,200	Design and Permitting

Source of Funding: General Fund

Operating Budget Impact now or in future: Once dredged it should good for a number years.

PROJECT: CSD -17-12 COMMUNITY SERVICES

DEPARTMENT PRIORITY: 12 of 21

Project Working Title: MEA Interior Project Phase III

Project Location: 1189 Phinney's Lane, Centerville

Project Description: The project consists of interior improvements of the existing Marine Environmental Affairs building.

Project Justification: Phases I & II Renovations of the Marine and Environmental Affairs building was recently completed, which converted temporary work areas into needed permanent open office areas. Phase III of the planned renovation work will include reconfiguration of the main entrance area to comply with accessibility requirements, restrooms will be made ADA compliant. Interior office areas will be refinished with new paint, flooring, and lighting. Much needed storage areas will be completed in the garage area.

Describe Work Previously Accomplished this Proposed Project: The existing office and garage building HVAC system was replaced. The roof was replaced as well. A building sewer connection was installed. Phases I & II office renovation and expansion have been completed. Emergency generator installed.

Impact Of Denial/Postponement: The Restrooms are non-compliant in ADA terms and Existing offices are below acceptable standards and need upgrading. This gives a poor impression of the Town to the visiting public using these facilities.

FY 2018 \$9,526

\$144,332 \$14,433 \$7,938

\$15,877 \$192,106

Design & Permitting
Construction & Acquisition
Design Contingency
Project Management

Basis for cost estimates: In-house estimate

.

Project Estimated Completion Date: FY 2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2018	\$192,106	Design & Construction

Construction Contingency

Total Project Costs

Source of Funding: General Fund

Operating Budget Impact now or in future: New facility will protect equipment and add to its longevity by putting it under cover. Increased utilities cost \$1,000 per year.

PROJECT: CSD -17-13 COMMUNITY SERVICES

Project Working Title: Centerville Recreation Interior Improvements

Project Location: 524 Main Street, Centerville

Project Description: This project seeks additional funds for interior and exterior work: It will fund the on-going historic adaptive reuse improvements to the Centerville Community Building and its related systems. For the past several years, site improvements have been made to the interior and exterior of the building and adjoining program areas. These funds will continue repair tasks and such related scope, which are of greatest concern. Replace steam heat including systems with modulating gas boilers; replace all steam pipe work and radiators / baseboard heaters. Corridor white paneling to be removed, original drywall or plaster to be restored, with new doors to old first floor classroom. Classroom to have ceilings removed and have lighting conduit concealed, new energy efficient lights. New kitchen cabinet and counter layout. Restore chalkboard and painting throughout. Sensitive improvements to the interior.

Project Justification: The Centerville Community Building is a facility that is heavily used by Recreation Division programs, and the public on a daily basis, with its adjoining playground and ball field. It is one of the busiest Town facilities used by our residents and programs. Continuing to renovate and maintain this town asset adds to the preservation of a historic town resource. Funding the improvements would alleviate high energy costs and make a more comfortable facility. Given the heavy use of this facility, the interior needs a significant amount of upkeep and maintenance which has been deferred for years. Our intention is to bring the building up to standard for safe use by all the citizenry.

Describe Work Previously Accomplished this Proposed Project: Prior Funding \$185,120. This funding is being used for design development for electrical renovations and improvements. Hazmat inspection is completed, and engineering design is underway.

Impact Of Denial/Postponement: The interior of this building is in poor condition and will continue to decline without much needed maintenance and repair. The building will lose popularity with its users. This building has great historical significance, containing two, albeit in poor condition old school rooms, which are a valuable historical resource.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$12,584
	Construction & Acquisition	\$228,800
	Design Contingency	\$22,880
	Project Management	\$12,584
	Construction Contingency	\$12,584
	Total Project Costs	\$289,432

Basis for cost estimates: In House Architect

Estimated Completion Date: April 2017

Project Cost/Description FY 2017 and Follow-On Years:

FY Cost Project Description/Components

2017 \$ 289,432 Replace steam heat with new gas modulating boiler, pipework and radiators,

2017 CIP - Deferred Community Services General Fund Projects

		replace paneling and restore corridor and doors, restore old chalkboard and historic paint.
2018	\$ 150,000	Replace worn out aluminum windows with new energy efficient historic wood
		windows. Additional insulation to Building. Install new window treatments and
		blinds.
2019	\$ 75 <i>,</i> 000	Interior wainscoting and trim to be replaced with historically correct trim,
		additional painting
2020	\$25,000	Attic floor and insulation to be repaired, review roof ventilation

Source of Funding: General Fund

Operating Budget Impact now or in future: None. Normal maintenance will continue.

PROJECT: CSD -17-14 COMMUNITY SERVICES

DEPARTMENT PRIORITY: 14 of 21

FY 2017

Project Working Title: Bathhouse Septic Upgrades

Project Location: Loop, Dowses, Lovell's, Wequaquet Beaches

Project Description: This project will fund the design and construction of four title V septic systems

Justification: The existing systems are in violation of Board of Health Septic regulations

Impact of Denial/Postponement: Use of the facilities will continue to violate current septic regulations. Antiquated systems ri9sk compromising beach water quality

Project Cost Estimates:

Design & Permitting	\$27,500
Construction & Acquisition	\$132,000
Construction Contingency	\$13,200
Project Management	\$7,260
Project Contingency	\$7,260
Total Project Costs	\$187,220

Basis for cost estimates: In-house estimate

Project Estimated Completion Date: Spring 2018

Project Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$187,220	Design & Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: With new construction technology, we will realize continued savings in energy and maintenance costs.

PROJECT: CSD -17-15 COMMUNITY SERVICES

Project Working Title: Centerville Recreation Building Site Design & Construction

Project Location: 524 Main Street, Centerville

Project Description: Design of parking expansion, drainage, lighting and new playground and equipment, and play field improvements.

Project Justification: The existing playground is unsafe by current standards. Parking is inadequate as the building and grounds are heavily used. The existing ball field has deep holes and ruts and is at the end of its useful life. Currently there no handicapped access to the playground.

Describe Work Previously Accomplished this Proposed Project: The Exterior of the building has been renovated with new roof, siding and doors. The interior electrical renovations are in design thru a previous CIP.

Impact Of Denial/Postponement: The parking will continue be less than adequate and the playground will be questionable in terms of use.

Project Cost Estimates:		Future FY
	Design & Permitting	\$114,867
	Construction & Acquisition	\$665,896
	Design Contingency	\$99,884
	Project Management	\$38,289
	Construction Contingency	\$38,289
	Total Project Costs	\$957,225

Basis for cost estimates: DPW engineering

Project Estimated Completion Date: Fall 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$170,926	Design
2019	\$786,299	Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: None. Routine maintenance will continue.

2017 CIP - Deferred Community Services General Fund Projects

PROJECT: CSD -17-16 COMMUNITY SERVICES

Project Working Title: Lopes Field Design and Construction

Project Location: Old Colony Road, Hyannis

Project Description: This is a request to rebuild the Lopes ball field in Hyannis. This year's monies would be used to hire a qualified consultant to evaluate the existing field, assist with permitting, and provide design documents for construction. Additional monies in subsequent years would be required for construction of the project. It is expected that at a minimum the project will include new fencing, a new backstops, replacing the bleachers, replacing the "dug-out" areas, either replacing or removing the playground equipment, reconstructing the parking area, replacing the infield, and possibly re-grading and reseeding the outfield.

Project Justification: The existing Lopes Field is in very poor shape, and a significant safety concern; yet, is used by Sturgis Charter Public High School, Pope John Paul II High School, and a number of other groups as a practice and game facility. The facility has deteriorated to the point that the Town needs to invest in the property, or bar its use.

Impact Of Denial/Postponement: Due to the safety issues, and condition of the facility, the impact of denial or postponement will result in the loss of use of the facility

Project Cost Estimates:		Future FY
	Design & Permitting	\$150,000
	Construction & Acquisition	\$750,000
	Construction Contingency	\$37,500
	Project Management	\$62,500
	Total Project Costs	\$1,000,000

Basis for cost estimates: DPW Estimate

Project Estimated Completion Date: FY2018\19

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$1,000,000	Design and Construction

Source of Funding: General Fund

Operating Budget Impact now or in future:



Existing Conditions

PROJECT: CSD -17-17 COMMUNITY SERVICES

Project Working Title: West Bay Breakwater – Construction

Project Location: West Bay, Osterville

Project Description: Because of a detailed survey and analysis by Ocean & Coastal Consultants, as publicized in a report dated March 2014, the recommended repair will reset the existing armor stones currently displaced (replacing stone as needed). A second layer of armor stone sized up to the 100-year design interval will be integrated with the current armor layer, increasing the thickness of the armor layer. Stability of the armor stone will be increased by softening the existing 1.5H:1V slope to a 2H:1V slope. A 15-foot wide toe comprised of armor stone will be installed around the breakwaters (East to West).

Project Justification (why needed): Numerous storms, heavy seas and constant turbulence have damaged the stone breakwaters that protect either side of the channel entering the West Bay from Nantucket Sound over the years. The integrity of the structure is now compromised; the breakwaters have lost stones from either sides and have settled. The breakwaters provide for safe navigation in the area and prevent shoaling of the entrance channel.

Describe Work Previously Accomplished this Proposed Project: From FY2016: Existing conditions survey, analysis and preliminary design (report) completed. Final design in progress.

Impact Of Denial/Postponement: If not remedied, the shoaling in the inlet will worsen and the channel become non navigable. Water quality in the bay will be compromised.

Project Cost Estimates:

	Future FY
Construction	\$3,800,000
Construction Contingency	\$380,000
All Other Costs	\$409,450
Total	\$4,589,450

Basis for cost estimates: From FY2016: Consultant Construction Estimate with Industry Standard contingencies (10% construction, 5% Construction Inspection, 5% Construction Management)

Project Estimated Completion Date: To be developed following completion of design.

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$4,589,450	Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: A fully repaired breakwater would require no annual maintenance for an extended period.

PROJECT: CSD -17-18 COMMUNITY SERVICES

DEPARTMENT PRIORITY: 18 of 21

Project Working Title: Mill Pond & Long Pond Fish Ways Construction

Project Location: Mill Pond Adjacent to Route 149 Marstons Mills & Long Pond off Holly Lane Centerville

Project Description: Rehabilitation work at the Mill Pond site including repair of the concrete flume, dam and associated access walks and fencing. Construction at the Long Pond site of a permanent control structure and fish way, together with stream bank stabilization. Final design and permitting is expected to be completed by April 30, 2016.

Project Justification: Fish ways and associated works provide a basis for the continuation of the historic and natural process of fish passage to spawn in our ponds. There are extensive cultural and economic benefits associated with this project. The Mill Pond site will be coordinated with the upcoming Marstons Mills Village Center Improvement project

Describe Work Previously Accomplished this Proposed Project: Design is at the 25% stage.

Impact of Denial/Postponement: Delay of appropriating construction funding for these projects will result in continuation of the inability of fish to access headwaters and therefore upset the balance of nature in the ponds. This in turn will negatively affect the cultural and economic benefits to be gained.

Project Cost Estimates:		Future FY
	Design & Permitting	\$0
	Construction & Acquisition	\$275 <i>,</i> 000
	Construction Contingency	\$41,250
	Project Management	\$31,625
	Project Contingency	\$15,812
	Total Project Costs	\$363,687

Basis for cost estimates: DPW Engineering Dept. Analysis.

Project Estimated Completion Date: April 2017

Method of Project Accomplishment: Public Bid, Contract construction oversight

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	Cost	Project Description/Components
2017	\$0	
2018	\$363,687	Construction and construction management

Source of Funding: General Fund

Operating Budget Impact now or in future: None. Only routine maintenance following repairs.



Mill Pond & Long Pond Fishways

PROJECT: CSD -17-19 COMMUNITY SERVICES

Project Working Title: Marine & Environmental Affairs Building Site Work Improvements

Project Location: 1189 Phinney's Lane, Centerville

Project Description: The existing Marine and Environmental Affairs building was constructed over 20 years ago. The site is in need of improvements and upgrades to extend its useful life. There are currently 20 employees working out of this facility not including seasonal staff.

Project Justification: The Marine and Environmental Affairs facility has seen no major site work since its construction in 1979. An ongoing program of renovations is necessary in order to protect the Town's building assets and assure reliability in the future for this unit's operation. Whilst the building is being upgraded, nothing has been done for its overused site. Improvements are needed.

Describe Work Previously Accomplished this Proposed Project: The overlay roof replacement has been completed. The HVAC system was replaced in FY 2008. HVAC system was replaced in order to resolve air quality issues within the building. The exterior has been painted. Commercial overhead doors have been replaced. Interior renovations Phase I - III completed. The roof has been replaced. A sewer line and connection thereto is completed and the existing septic system removed.

Impact Of Denial/Postponement: Life safety concerns and the possible loss of use of the facility if upgrades not incorporated and the facility continues to deteriorate.

Project Cost Estimates:		Future FY
	Design & Permitting	\$11,733
	Construction & Acquisition	\$177,769
	Design Contingency	\$17,777
	Project Management	\$9,777
	Project Contingency	\$9,777
	Total Project Costs	\$226 <i>,</i> 833

Basis for cost estimates: DPW engineering

Project Estimated Completion Date: FY2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$226,833	Design & Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: Routine maintenance will continue

2017 CIP - Deferred Community Services General Fund Projects

PROJECT: CSD -17-20 COMMUNITY SERVICES

DEPARTMENT PRIORITY: 20 of 21

Project Working Title: Hyannisport Breakwater Study Preliminary Design and future construction

Project Location: Hyannis Outer Harbor

Project Description: Analysis and preliminary design of the Hyannisport Harbor Breakwater, final design and construction costs will be established after preliminary work.

Project Justification: Support stones have been displaced along the breakwater resulting in gaps in the structure therefore reducing its effectiveness of protecting the harbor. The poor condition of the breakwater is a safety hazard for navigation, and the public who walk upon it.

Impact of Denial/Postponement: Postponing study and analysis of the breakwater will allow more deterioration of the breakwater structure. Future storms will reduce the function of the breakwater allowing potential shoreline damage. The safety of the public walking on the breakwater will not be addressed

Project Cost Estimates:		Future FY
	Design & Permitting	\$157,500
	Project Contingency	\$7,875
	All Other Costs	\$1,625
	Total Project Costs	\$167,000

Basis for cost estimates (explain how arrived at): DPW Engineering - Comparison with West Bay breakwater design costs from RFP.

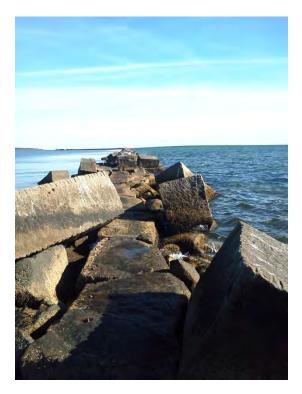
Project Estimated Completion Date: December 2018 (Preliminary Design)

Project Cost/Description FY 2017 and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$167,000	Study and Preliminary Design
2019	To Be Determine	Final design and Permitting
2020	To Be Determine	Construction and Construction Management

Source of Funding: General Fund

Operating Budget Impact now or in future: Once repaired it will not require further expenditures for a number of years.





Hyannisport Breakwater

2017 CIP - Deferred Community Services General Fund Projects

PROJECT: CSD -17-21 COMMUNITY SERVICES

Project Working Title: Marine & Environmental Affairs Storage Building

Project Location: 1189 Phinney's Lane, Centerville

Project Description: This project consists of a 2,500 square foot storage addition to the existing Marine Environmental Affairs building and associated site work upgrades.

Project Justification: The Marine and Environmental Affairs building currently is insufficient in size to accommodate equipment. Because of various reorganizations and repositioning of staffing over the years, MEA has had to create office space in the garage area which further limits the ability to have a sufficient working area and reduced space for the storage of vehicles and boats. This project will provide the needed space that will allow for the garaging of the division's vehicles and boats, protecting them from the elements; and allow for covered and protected maintenance on them. The office building should then be used for the growing office functions, therein, separating vehicle and boat storage areas from the office functions.

Describe Work Previously Accomplished this Proposed Project: Additional office space has been completed within the existing garage area.

Impact Of Denial/Postponement: The Town's boats and other equipment being stored outside will continue to deteriorate at an undesirable rate and, as such, their useful life shortened.

Future FY

Project Cost Estimates:

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Design & Permitting	\$40,057
Construction & Acquisition	\$606,927
Design Contingency	\$60,693
Project Management	\$33,381
Construction Contingency	\$33,381
Total Project Costs	\$774,439

Basis for cost estimates: DPW engineering cost estimate

Project Estimated Completion Date: Summer 2022

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$ 106,819	Design
2021	\$ 667,620	Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: New facility will protect equipment and add to its longevity by putting it under cover. Increased utilities costs \$1,000 per year.

2017 CIP - Deferred Community Services General Fund Projects

Public Works Department

PROJECT: PW -17-2 PUBLIC WORKS

DEPARTMENT PRIORITY: 2 of 41

Project Working Title: Bumps River Bridge Construction

Project Location: South Main Street, Centerville - spanning Bumps River

Project Description: Replacement of the Bridge.

Project Justification: It has been recommended by the Structural Engineering Consultants that the bridge be replaced to maintain its carrying capacity thereby avoiding weight limit restrictions affecting emergency vehicle use and commercial activities.

Describe Work Previously Accomplished this Proposed Project: Analysis and testing of the bridge has been completed and report identifying the need for replacement has been presented to the Town.

Impact of Denial/Postponement: The bridge will further deteriorate over time and weight restrictions will have to be noticed thereby restricting emergency vehicle access and use by school busses and heavy commercial vehicles

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$275,000	\$0
	Construction & Acquisition	\$0	\$3,432,000
	Construction Contingency	\$0	\$858,000
	Project Management	\$0	\$275,000
	Project Contingency	\$0	\$137,500
	Total Project Costs	\$275,000	\$4,702,500

Basis for cost estimates: Consulting Engineer with DPW review

Project Estimated Completion Date: November 30,2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$275,000	Design
2018	\$4,702,500	Construction & Construction Management

Source of Funding: General Fund

Operating Budget Impact now or in future: A new bridge will result in less scheduled maintenance and fewer call outs for patching and safety issues.

PROJECT: PW -17-4 PUBLIC WORKS

Project Working Title: Barnstable Road Reconstruction Design and Construction

Project Location: Barnstable Road, Hyannis

Project Description: The project will consist of a complete reconstruction of Barnstable Road in Hyannis and its associated utilities. The Water Division has previously requested, and been granted, design monies for their pipe replacement. The Water Pollution Control Department is making a similar request for their pipe in this year's CIPs. This request is to cover the design of the storm water utilities, and design of the actual road reconstruction

Project Justification: The April 2007 Water Division Master Plan recommended that the 3,200 feet water main in Barnstable Road be replaced. The Water Pollution Control Division has sewer in the Barnstable Road that dates back to the 1930s. Barnstable Road is expected to deteriorate over the next 5-10 years. As a result, the DPW would like to take this opportunity to address all utilities and the road at once, rather than with multiple projects over a number of years. It is felt this would limit inconvenience to the citizen to one project while addressing multiple problems at once.

Describe Work Previously Accomplished this Proposed Project: Design for the Water portion of the project has been funded, but funding for the General Fund and WPC Enterprise portions of work is proposed this year. Once money has been appropriated, the DPW will seek engineering services.

Impact Of Denial/Postponement: Work will be accomplished in a piece-meal way. The water work will proceed, leaving a large trench patch in the road. Sewer work will be accomplished within the next 5 years leaving yet another trench patch. Storm drainage will not be addressed and the road will deteriorate.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$213,000	\$0
	Construction & Acquisition	\$0	\$2,132,000
	Project Management	\$0	\$213,000
	Project Contingency	\$0	\$213,000
	Total Project Costs	\$213,000	\$2,558,000

Basis for cost estimates: DPW In-house Estimate

Project Estimated Completion Date: June 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	Cost	Project Description/Components
2017	213,000	Design and Permitting
2018	2,558,000	Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: None. Road will not require attention for at least 5-10 years







Barnstable Road Current Conditions

PROJECT: PW -17-5 PUBLIC WORKS

Project Working Title: South Street Improvements Design and Construction

Project Location: South Street Hyannis (Main Street to Lewis Bay Road)

Project Description: Design and construction of a "complete street, involving traffic flow analysis, addressing bicycle and pedestrian movement needs and installing new infrastructure including sidewalks, roadway surface and storm water upgrades.

Project Justification: South Street is one of the main transportation arteries in Hyannis. The roadway carries traffic from the west enabling access to the Cape Cod Hospital, Hyannis waterfront, arts centers, museums and the center of Town government. Several years ago, the water mains were upgraded in the roadway but only a thin overlay was provided to cover the resulting trenches. The major signalized intersection at Old Colony, South and Ocean Street needs upgrading. The adjacent curbing and sidewalks were not improved and are showing signs of disrepair. Lighting should be provided for pedestrian and vehicle safety. Drainage systems in the roadway are inadequate, resulting in major flooding in the road at times of heavy rainfall. Allocation of space in the road layout for bicycles and pedestrians will result in addressing the needs for these modes of travel and increase the accessibility to the many attractions along the roadway for local users and visitors alike.

Impact of Denial/Postponement: failure to fund South Street improvements will result in continued deterioration of the roadway surface features and underground utilities. An opportunity to upgrade the corridor to provide excellent access to the many businesses, cultural attractions and Municipal offices will be lost. Safety issues with curb ramps and sidewalks will be exacerbated and excessive maintenance funds required to provide a minimum level of service.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$286,165	\$0
	Construction & Acquisition	\$0	\$2,601,500
	Construction Contingency	\$0	\$260,150
	Project Management	\$0	\$286,166
	Project Contingency	\$0	\$143,083
	All Other Costs	\$0	\$100,000 (police)
	Total Project Costs	\$286,165	\$3,390,899

Basis for cost estimates: DPW Engineering

Project Estimated Completion Date: November 30, 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$286,165	Design and Permitting
2018	\$3,390,899	Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: With new construction, extra maintenance from Highway division will be reduced.



South Street

PROJECT: PW -17-8 PUBLIC WORKS

Project Working Title: Hyannis Main Street West End Rotary Study Design and Construction

Project Location: At the west end of Main Street, intersection with Scudder Lane, North Street and West Main Street.

Project Description: A comprehensive review of vehicle, pedestrian and bicycle needs for this important "gateway" to Hyannis. Of particular concern is the lack of pedestrian access around the rotary and proper property access in the vicinity. All potential improvements will be considered including the possibility of a reconfiguration to include a modern roundabout. Storm water improvements and review of existing utilities will also be addressed.

Project Justification: The existing physical pavement and drainage conditions at this location are due for improvement. Connecting pedestrian facilities from Main Street to West Main Street and North Street is non-existent. Important receptors including schools, open space and business uses will benefit from pedestrian access.

Impact Of Denial/Postponement: Lack of progress on this project will result in perpetuating unsafe conditions for pedestrians and cyclists. Vehicle movement will also be hampered especially during the summer season. Water quality in adjacent pond receiving waters will continue to deteriorate.

	FY 2017	FY 2018
Design & Permitting	\$225,630	\$0
Construction & Acquisition	\$0	\$1,635,000
Construction Contingency	\$0	\$245,250
Project Management	\$0	\$188,026
Project Contingency	\$0	\$94,013
All Other Costs	\$0	\$100,000 (Police)
Total Project Costs	\$225,630	\$2,262,289.00
	Construction & Acquisition Construction Contingency Project Management Project Contingency All Other Costs	Design & Permitting\$225,630Construction & Acquisition\$0Construction Contingency\$0Project Management\$0Project Contingency\$0All Other Costs\$0

Basis for cost estimates: DPW Engineering Analysis

Project Estimated Completion Date: September 30, 2018

Project Cost/Description FY 2016 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$225,630	Study, Design& Permitting
2018	\$2,262,289	Construction & Construction Management

Source of Funding: General Fund

Operating Budget Impact now or in future: Required regular maintenance by DPW Highway Division will continue. Cost savings will result in less heavy maintenance for pot hole repair and drainage structure repair for the expected life of the project (20 years).







West End Hyannis Rotary

PROJECT: PW -17-10 PUBLIC WORKS

Project Working Title: Snow's Creek Culvert Construction

Project Location: Snow's Creek crossing at Ocean Street, Hyannis

Project Description: Replacement of an existing small culvert with a larger box culvert, provision of additional sidewalk on the south side of Ocean Street in the culvert vicinity and construction of safety railings.

Project Justification: This project has been designed to enhance the tidal flowage into Snows Creek estuary to improve the deteriorating water quality. Restoring an enhanced connection from the creek to the ocean provides the best opportunity to improve the water quality and hence the aquatic value and surrounding plant and wildlife community.

Project Status: Prior Funding \$75,000

Describe Work Previously Accomplished this Proposed Project: Design and Permitting of the project has been approved with design at the 80% stage.

Impact Of Denial/Postponement: Failure to construct this project will mean further deterioration of the creek estuary with associated loss of aquatic and land based species. Potential expansion of algae growth and invasive species will harm the value of this resource area and affect the neighboring property values.

Project Cost Estimates:

Construction & Acquisition	\$900,000
Construction Contingency	\$180,000
Project Management	\$90,000
Project Contingency	\$90,000
All Other Costs	\$100,000 (Police/Detours)
Total Project Costs	\$1,360,000.

FY 2017

Basis for cost estimates: Consulting Engineers analysis w/ DPW review

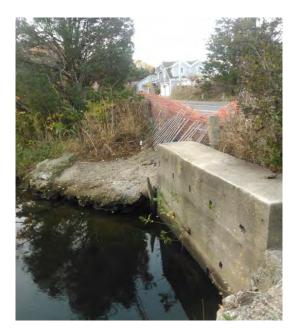
Project Estimated Completion Date: May 31, 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$1,360,000	Project Construction and Project Management

Source of Funding: General Fund

Operating Budget Impact now or in future: This project will have added features such as debris gratings that will require additional DPW routine maintenance.









Snows Creek Culvert

PROJECT: PW -17-12 PUBLIC WORKS

Project Working Title: Town Hall Site Parking Lot

Project Location: 367 Main Street, Hyannis

Project Description: The project will fund the design and construction of paving, curb, landscape, lighting and drainage work that will resolve a disorganized site with traffic conflicts and multiple curb cuts.

Project Justification: Town Hall Square is the center of our town and school offices, art and historical museum activities, and Main Street commerce. The proposed project would correct deficiencies in the current automobile traffic pattern and provide safe pedestrian access to associated connection points. Current vehicular and pedestrian traffic is dangerous and inconvenient within the area. The proposed alterations are designed to correct these issues. Additional barrier free parking spaces will be created as part of this project.

Impact of Denial/Postponement: We will continue to have problems with pedestrian and vehicular traffic in this location and present an aged and worn down image.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$89,362	\$0
	Construction & Acquisition	\$0	\$624,910
	Design Contingency	\$0	\$62,491
	Project Management	\$10,000	\$24,370
	Construction Contingency	\$20,000	\$83,110
	Total Project Costs	\$119,362	\$794,881

Basis for cost estimates: In-house estimate

Project Estimated Completion Date: 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$ 119,362	Design
2018	\$ 794,881	Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: None

PROJECT: PW -17-13 PUBLIC WORKS

Project Working Title: Parking Lots Maintenance

Project Location: Various Town Parking Lots

Project Description: A recurring, annual budget, for refurbishing the Town's municipal parking lots.

Project Justification: The Town has 54 parking lots that the DPW maintains. These range from the large, highly-used, ones such as the Town Hall Parking Lot and Craigville Beach Parking Lot (over 20,000SY); to smaller ones such as the Bay Street Landing Parking Lot (almost 600SY). The DPW addresses small maintenance type items, but does not have the budgets for larger issues such as resurfacing, significant drainage reconstruction, rebuilding, etc. This request is intended to start an annual program, much like the public roads program, that allows the department to address these larger work items in a systematic way.

Impact Of Denial/Postponement: Denial of the project will result in unresolved safety concerns (i.e. tripping hazards, unsafe traffic flows due to illegible pavement markings, etc. for visitors and residents utilizing these deteriorating parking lots. Currently, the parking lots are only addressed to this level of maintenance on a project by project basis, and generally only once the parking lot has significantly deteriorated.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$50 <i>,</i> 000	\$50,000
	Construction & Acquisition	\$450,000	\$450,000
	Total Project Costs	\$500,000	\$500,000

Basis for cost estimates: DPW Estimate. A traditional Mill and Overlay of a parking lot is budgeted at approximately \$20/SY, without significant drainage or lighting work. This budget will allow essentially one big parking lot in a year, or multiple smaller ones.

Project Estimated Completion Date: Subject to weather, Spring or Fall of each year

Project Cost/Description FY 2016 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$500,000	Annual Parking Lot Program
2018	\$500,000	Annual Parking Lot Program
2019	\$500,000	Annual Parking Lot Program
2020	\$500,000	Annual Parking Lot Program
2021	\$500,000	Annual Parking Lot Program

Source of Funding: General Fund

Operating Budget Impact now or in future: Work will be completed by contractors, and project funded employees; and scheduled during traditionally slower times for the Engineering inspectors.

PROJECT: PW -17-14 PUBLIC WORKS

Project Working Title: Town Hall Toilet Renovations

Project Location: 367 Main Street, Hyannis, MA

Project Description: This project continues the work needed to upgrade the existing toilet facilities within the building. Exterior restoration work has been completed using CPA funds, and the interior stairs are being renovated utilizing CIP and CAP funds. This CIP funding request relates directly to public health, safety and code issues that need immediate attention. Recommendations from the building study by the historic architect are also contained within the scope of work. Preliminary space programming changes are under design and will be coordinated with the current space occupants.

Project Justification: The Town Hall is the public image of the Town. The building requires continual upgrades and improvements. The public areas in Town Hall, which include the toilet rooms, are in poor condition and give a negative impression of the Town of Barnstable. In addition there are limited toilet facilities, much of which does not meet ADA standards. Conditions exist where toilets are limited by gender on specific floor levels. The work of this CIP will correct this problem and bring the Town Hall into complience.

Describe Work Previously Accomplished this Proposed Project: Completed work underway includes the installation of circulator pumps for the chilled water system. CPA funds were used to renovate the courtyard vestibule and for major exterior restoration of masonry, for window and slate roof replacement. The existing old coal fired boilers have been removed from the basement leaving space for the installation of three new modulating boilers and the eventual change over to a new forced hot water system in FY16. The new boilers have been purchased and are to be installed during the summer of 2016. The Town Clerk's Offices has been fully renovated. Stairwell renovation work is currently underway (east stair complete, West Stair about to commence) thru FY13, 14 & 15 CIP funding. This work includes architectural, mechanical, electrical, sprinkler, fire safety, space enclosure with new rated doors and hold open devices, related finishes and improvements that will bring the public stair into code compliance and repair the water damage. CPC funds have been obtained for the raising of the staircase to include wooden stairs and landing and to complete the first floor corridor.

Impact of Denial/Postponement: The toilet facilities within the building will continue to degrade and require increased maintenance.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$58,281
	Construction & Acquisition	\$441,526
	Design Contingency	\$44,153
	Project Management	\$24,284
	Project Contingency	\$24,284
	Total Project Costs	\$592,528

Basis for cost estimates: In-house and Architect's estimate and studies

Project Estimated Completion Date: Fall 2017

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$592,528	Design & Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: The facility is an existing Town facility that is currently maintained by the DPW. Improvements/upgrades are expected to result in improvement in energy usage with new lighting, insulation and HVAC, and are not expected to adversely impact the Operating Budget.



Town Hall Toilet Conditions

PROJECT: PW -17-15 PUBLIC WORKS

Project Working Title: Mosswood Cemetery Building Improvements

Project Location: Mosswood Cemetery, Putnam Avenue, Cotuit

Project Description: Renovation to the present Mosswood office for the purpose of providing ADA accessibility and restroom facilities.

Project Justification: Mosswood, our largest cemetery, has one inadequate restroom that is used by employees, visitors, and mourners while they conduct business at the office and attend burial services. The renovation would upgrade the existing toilet so that it will be handicapped accessible and provide public handicap access to the building

Impact Of Denial/Postponement: We will continue to have problems with not having an accessible public restroom at this place of business, as well as the inconvenience to our customers and residents with the present setup. Continued use of inadequate facilities for our employees.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$8,316	\$0
	Construction & Acquisition	\$0	\$99,000
	Design Contingency	\$0	\$4,950
	Project Management	\$5,198	\$0
	Construction Contingency	\$10,395	\$0
	Total Project Costs	\$23,909	\$103,950

Basis for cost estimates: DPW in-house cost estimate

Project Estimated Completion Date: FY 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$23,909	Design
2018	\$103,950	Construction

Source of Funding: General Fund and possibly the Kirkman Trust Fund

Operating Budget Impact now or in future: None. Routine maintenance will continue

PROJECT: PW -17-16 PUBLIC WORKS

DEPARTMENT PRIORITY: 16 of 41

Project Working Title: Sidewalk installations Bumps River Rd Centerville, Main St Cotuit, South St Hyannis

Project Location: Bumps River Road, Centerville (Fuller Road to Babbling Brook Road), Main Street, Cotuit (Ocean View Avenue to Freedom Hall) and South Street, Hyannis (Ocean Street to Pleasant Street)

Project Description: Installation of new sidewalks at various locations in Town.

Project Justification: Citizens have brought to our attention the need for improvements to our network of sidewalks on Town arterial and connector roads. The staff has reviewed these needs, and has prioritized the requests based on safety considerations, pedestrian activity, and the speed and volume of traffic additional criterion that is also considered is location with respect to activity centers such as schools, libraries, recreational facilities, and commercial areas.

Impact Of Denial/Postponement: Denial of the project will result in unresolved safety concerns (i.e. tripping hazards, etc) for pedestrians utilizing these deteriorating sidewalks

Project Cost Estimates:		FY 2017
	Design & Permitting	\$60 <i>,</i> 000
	Construction & Acquisition	\$600,000
	Construction Contingency	\$30 <i>,</i> 000
	Project Management	\$10,000
	Project Contingency	\$36 <i>,</i> 500
	All Other Costs	\$30,000
	Total Project Costs	\$766,500

Basis for cost estimates: DPW engineering

Project Estimated Completion Date: November 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$766,500	Bumps River Rd, Centerville (Fuller Rd. to Bubbling Brook Rd) Main
		Street Cotuit (Ocean View Ave to Freedom Hall) and South Street,
		Hyannis , Hyannis (Ocean St. to Pleasant St.) Design & Construction.

Source of Funding: General Fund

Operating Budget Impact now or in future: To be developed

PROJECT: PW -17-17 PUBLIC WORKS

Project Working Title: Putnam Avenue Sidewalk Design & Construction

Project Location: Adjacent to Putnam Avenue, Cotuit from Route 28 to Main Street

Project Justification: A pedestrian connection from Cotuit Village to the Commercial Center on Route 28, Mosswood Cemetery and to the open spaces afforded at the Barnstable Land Trust lands will be a great benefit to walkers and joggers in the area.

Describe Work Previously Accomplished this Proposed Project: On the ground survey has been initiated by the Town Surveyor.

Impact of Denial/Postponement: failure to implement this project design and construction will not achieve the potential for pedestrian access to the various attractions along Putnam Avenue and perpetuate unsafe conditions for pedestrians traveling along the road.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$95,000	\$0
	Construction & Acquisition	\$0	\$690,000
	Construction Contingency	\$0	\$103,500
	Project Management	\$0	\$79,350
	Project Contingency	\$0	\$39,675
	All Other Costs	\$0	\$1,000 (advertising)
	Total Project Costs	\$95,000	\$913,525

Basis for cost estimates: DPW Engineering Dept.

Project Time Estimates: Design & Permitting (12 months) Construction (12months)

Project Estimated Completion Date: May 30, 2018

Project Cost/Description FY 2016 and Follow-On Years:

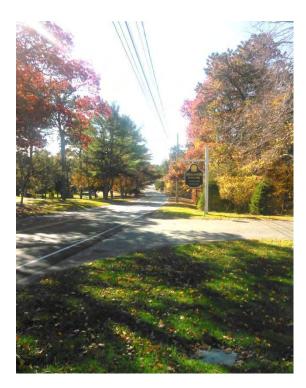
<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$95,000	Project Design & Permitting
2018	\$818,525	Project Construction & Project Management

Source of Funding: General Fund

Operating Budget Impact now or in future: Normal maintenance requirements will be expanded to this section of sidewalk.









Putnam Avenue

PROJECT: PW-17-18 PUBLIC WORKS

Project Working Title: School Administration Building Mechanical Upgrades

Project Location: 230 South Street, Hyannis

Project Description: Replacement and upgrade of mechanical systems within the building including:

- Mechanical / Headend upgrades at Lower Level
- Emergency generator, cooling plant, sprinkler and hot water system equipment replacement
- Renovation and expansion of the existing basement mechanical room and egress paths to accommodate a replacement emergency generator (reuse of the BPD old generator) and replacement of the 30 ton cooling plant including the head-end upgrade of the sprinkler service
- Removal of the old concrete mounting pad
- Replacement of the existing electric hot water heater with a new gas fired hot water heater and thermostatic mixing valve.
- Relocation of the gas service from the electric room into the mechanical room (another code violation).
- Installation of new fire rated walls and ceilings throughout the basement level, including rated door improvements along the access ways. This is a public safety issue needing attention.
- Limited first floor interior reorganization of space (HR), new finishes, ADA access rest room improvements and new lighting.
- Mechanical/electrical service distribution, replacement, and energy conservation improvements throughout including new electrical service, HVAC controls, ventilation, communications, plumbing and related HVAC improvements, and new elevator.

Project Justification: The historic building study reported significant deficiencies in this building. The exterior restoration work is completed utilizing part CIP and CPA funds. The additional work was not accomplished during the exterior restoration project. Outdated mechanical work remains to be completed for efficiency of operation. With this work the building will be fully renovated with some limited work remaining for the second floor school department office upgrades.

Describe Work Previously Accomplished this Proposed Project: Additional funding from CPC for the exterior restoration work was added into the project and is complete. The existing heating plant has been replaced with 3 high efficiency modulating boilers. In FY09, CPA Funds were secured for the engineering assessment. PW-10-110 provided funding of \$144,000 for the low roof repairs and replacement work. This work is complete.

Impact Of Denial/Postponement: The building condition study indicates the need for significant head-end mechanical and accessibility improvements. If left as is, further deterioration will occur with increased scope of mechanical repairs and potential system failures.

Project Cost Estimates:		FY 2017	FY 2018
	Design & Permitting	\$181,375	\$0
	Construction & Acquisition	\$0	\$1,213,208
	Design Contingency	\$0	\$181,981
	Project Management	\$ 30,000	\$39,759
	Project Contingency	\$ 20,000	\$49,759
	Total Project Costs	\$ 231,375	\$1,504,707

Basis for cost estimates: DPW Cost Estimate

Project Time Estimates: Design & Permitting (8 months) Construction (15 months)

Project Estimated Completion Date: Spring 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$ 231,375	Design of MEP Headend Upgrades.
2018	\$1,504,707	Construction

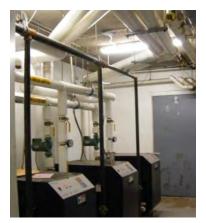
Source of Funding: General Fund and possible CPA Funding

Operating Budget Impact now or in future: Improved energy efficiency for lighting and HVAC

Supplemental Information: The historic architect's study of the SAB is complete and the costs above are reflective of their recommendations. The study is available for review.









School Administration Building Mechanical Systems

PROJECT: PW-17-19 PUBLIC WORKS

Project Working Title: Armory Building Envelope, Electrical, and Mechanical Improvements

Project Location: South Street, Hyannis

Project Description: This project will fund the preliminary and final design of the Armory Improvements. It is expected those improvements will at a minimum include the following as described in a 2012 Assessment of the Armory by Design Lab Architects:

Replacement of Windows and Doors, and their associated frames Replacing the steel lintels Repairing cracks in the CMU bearing walls, brick facing, and Glazed Structural Facing Tile Replacing the domestic hot water system (heater, distribution pipes, etc.) Replacing the plumbing fixtures in the building and associated piping as appropriate Replacing the interior gas piping Replacing the storm system piping as appropriate Installation of a sprinkler system Replacing the heating/ventilation system and associated piping, ductwork, fin-tube radiators, units, and control system Replacing the exhaust systems in bathrooms Replace the existing 200A electrical service with a 800-1200A service, along with associated panels Replace the electrical distribution equipment and feeders Replace the electrical receptacles and associated branch wiring Replacing the lighting Hazardous material identification and abatement as necessary.

Project Justification: This project will fund the design of the work that will ultimately stabilize the deterioration of the facility. It is expected it will bring the building to a point that its next tenant (whether the Town or a private entity) can focus on operational issues, building layout, and interior finishes (painting, carpeting, etc.). Without it, the building will continue to deteriorate; and it is likely potential tenants will find the cost of the required work to be more than they can afford.

Impact Of Denial/Postponement: The building will continue to deteriorate, and will likely be considered unoccupyable by many potential tenants. At some point the Town will have to address these issues for the building, or risk it falling into ruin.

Project Cost Estimates:	Design & Permitting	FY 2017 \$350,000	Future FY
	Construction & Acquisition	\$0	TBD
	Construction Contingency	\$0	TBD
	Project Management	\$0	TBD
	Project Contingency	\$0	TBD
	All Other Costs	\$0	TBD
	Total Project Costs	\$350,000	TBD

Basis for cost estimates: DPW estimate

Project Time Estimates: Design & Permitting (18 months) Construction (TBD)

Project Estimated Completion Date: Design to be completed in December 2017

Project Cost/Description FY 2016 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$350,000	Preliminary and Final Design
2018	TBD	

Source of Funding: General Fund

Operating Budget Impact now or in future: TBD









Armory Building Exterior & Interior

PROJECT: PW-17-20 PUBLIC WORKS

Project Working Title: DPW Offices Phase III Construction

Project Location: 382 Falmouth Road, Hyannis

Project Description: Construction of the Administrative and Highway Division managerial offices, employee lockers, showers, toilet rooms within the current garage area of the existing Administration/Highway building. The design and construction of the new truck garage (Phase IV) and the design and construction of a new salt shed (Phase V) are listed in separate CIP requests.

Project Justification: The third phase of this five-phase project will provide much needed office space and consolidation of the administrative staff. Construction will also allow for the removal of the remaining old "temporary" staff trailer facility (which is at the end of its useful life), thus increasing much needed parking. At the completion of this project, the Town Architect Staff will join the rest of the administrative staff in this building.

Describe Work Previously Accomplished this Proposed Project: The Phase I ERC and Phase II DPW Administration and Technical Support offices have been completed. The re-roofing work over the Phase I, II, and III areas has been completed at this time.

Impact Of Denial/Postponement: The DPW feasibility study has shown that greater efficiency will be realized through consolidation of the Administrative and Highway offices at this site. Once Phase III is completed, the remaining staff trailer will then be demolished. Decreased operational and utility costs will be realized by elimination of the last trailer with the renovation.

Project Cost Estimates:		FY 2019
	Design & Permitting	\$66,312
	Construction & Acquisition	\$1,657,806
	Construction Contingency	\$ 82,890
	Project Management	\$82,890
	Total Project Costs	\$1,889,898

Basis for cost estimates: DPW In-house estimate

Project Estimated Completion Date: 2019

Project Cos	t/Description FY 201	7 and Follow-On Years:
<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$ 1,889,898	Design & Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: Phase III should have a negligible impact on the Operating Budget. Utility costs for the new spaces will be offset by elimination of the utilities on the existing, inefficient, temporary trailers that currently house employees.

PROJECT: PW-17-21 PUBLIC WORKS

DEPARTMENT PRIORITY: 21 of 41

Project Working Title: ADA Compliance Pedestrian Crossing & Sidewalks Report, Design, Construction

Project Location: Town wide emphasis on Village centers

Project Justification: The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity for persons with disabilities in public accommodation and transportation. Regulations promulgated in 2010 require that accessible walkways and street crossings be provided on all public ways.

Describe Work Previously Accomplished this Proposed Project (including whether or not design completed): In house preliminary analysis of the condition of handicapped crossings and sidewalks in Town has been completed.

Impact Of Denial/Postponement: Our street crossings and sidewalks will not meet the requirements of the law; safety will be compromised for not only persons with disabilities but all pedestrian users.

Project Cost Estimates:		Future FY
	Design & Permitting	\$43,470
	Construction & Acquisition	\$315,000
	Construction Contingency	\$47,250
	Project Management	\$36,226
	Project Contingency	\$18,113
	All Other Costs	\$1,000 (advertising)
	Total Project Costs	\$461,059

Basis for cost estimates: DPW Engineering Dept. analysis

Project Estimated Completion Date: May 30, 2020

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$153,686	Design, Permitting and Construction
2019	\$153,686	Design, Permitting and Construction
2020	\$153,686	Design, Permitting and Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: Routine maintenance of the newly constructed crossings and sidewalks will continue as programmed. Fewer "call outs" would be expected for repairs at these areas.





PROJECT: PW -17-22 PUBLIC WORKS

Project Working Title: Huckins Neck Road Reconstruction

Project Location: Centerville, connecting Phinney's Lane with Route 132

Project Description: Roadway reconstruction including new base, paving and storm water upgrades

Project Justification: The "Roadway Asset Management" system has identified this section of roadway as in need of repair. The road surface has been inspected and received a 'very poor' rating. The road also has poor drainage that needs to be corrected This rating, together with the need for heavy maintenance and concerns regarding water quality in adjacent ponds has prompted the design and proposed construction.

Describe Work Previously Accomplished this Proposed Project: A design RFP was published and a Consultant selected to perform a comprehensive design of the roadway. The design is at the 75% level and Conservation Commission approval for work within their jurisdiction has been given.

Impact Of Denial/Postponement: The roadway surface will continue to deteriorate and cause more frequent "call outs" for repair. Water quality issues created by roadway runoff into adjacent ponds will not be addressed and safety of the traveling public could be jeopardized.

Project Cost Estimates:		FY 2018
	Design & Permitting	\$0
	Construction & Acquisition	\$2,850,000
	Construction Contingency	\$427,500
	Project Management	\$142,000
	Project Contingency	\$142,000
	All Other Costs	\$5,000 (advertising/legal)
	Total Project Costs	\$3,566,500

Basis for cost estimates: Consultant cost estimate with DPW Engineering Dept. Review

Project Estimated Completion Date: December 31, 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$3,566,500	Construction and construction management

Source of Funding: General Fund

Operating Budget Impact now or in future: Normal maintenance will need to be continued by the DPW Highway Division. A reduction in "call outs "for emergency repairs will be experienced.

PROJECT: PW-17-24 PUBLIC WORKS

Project Working Title: Traffic Calming

Project Location: Town Wide

Project Justification: One of the demonstrated public concerns on our roadways is speeding. Our Police Department does an excellent job of patrolling our neighborhoods to warn and apprehend speeders but do not have the resources to cover all situations. The Department of Public Works Engineering Division has supplemented Police efforts by installing permanent and temporary features to address speeding vehicles. One of the most successful methods is to erect solar powered speed indicator signs at critical locations. The signs alert drivers exceeding the speed limit and collect data on vehicle count and speed. Another feature with potential to decrease speed and protect pedestrians at crossings is a "raised "crossing. This is in effect a speed table with increased visibility created by colored surface, together with signage. Analysis of specific situations could mean introduction of additional features designed to slow traffic.

Describe Work Previously Accomplished this Proposed Project: Installation of raised crossing and solar powered speed signage at multiple locations

Impact of Denial/Postponement: The need for traffic calming measures is very high as perceived by the public and as a method to increase safety on our roads in general. Lack of attention to this demand will increase frustration in the populace and continue to tax our overburdened Police Department.

Future FY

Project Cost Estimates:

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Design & Permitting	\$10,000
Construction & Acquisition	\$100,000
Construction Contingency	\$15,000
Project Management	\$5,000
Project Contingency	\$5,000
Total Project Costs	\$135,000

Basis for cost estimates: DPW Engineering Dept. analysis

Project Estimated Completion Date: November 2020

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$67,500	Design and Construction
2019	\$67,500	Design and Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: Installation of features such as solar speed signs will require maintenance by the DPW Highway Division in case of damage, data gathering will be an added component to DPW administration staff.



Crossing with increased visibility

PROJECT: PW-17-25 PUBLIC WORKS

Project Working Title: BPD Window Replacement

Project Location: 1200 Phinney's Lane, Hyannis, MA 02601

Project Description: The Police Department facility was constructed over 30 years ago. The original windows in the original building are coming to the end of their useful life and need replacement.

Project Justification: The Police Department Facility is one of the most heavily used buildings we have in Town. The facility is utilized 24/7 and as such building elements are worn out and need to be replaced. This building will need to service Barnstable for a very long time into the future. Major window replacements within the original building are within the scope of this work for design (phase 1) and construction (phase 2).

Describe Work previously accomplished this Proposed Project: The Dispatch HVAC and lighting have been upgraded. Sound & lighting upgrades have been made to the cellblock. Building is now tied into the sewer system. Rear door replacements are out to bid. Major interior improvements are going out for an Architect for design and construction of interior improvements, HVAC mechanical and lighting, carpeting, painting, electrical upgrades.

Impact of Denial/Postponement: Continued deferred renovation of this building will continue to result in deterioration of work previously funded by the Community Preservation Committee.

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Project Cost Estimates:

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Design & Permitting	\$68,457
Construction & Acquisition	\$622,336
Design Contingency	\$62,234
Project Management	\$34,228
Construction Contingency	\$68,457
All Other Costs	\$0
Total Project Costs	\$855,712

Basis for cost estimates: Architect assisted in-house estimate

Project Estimated Completion Date: Fall 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$ 122,685	Design
2019	\$ 733,027	Construction

Source of Funding: General Fund and possible CPC funding, if approved for construction

Operating Budget Impact now or in future: None. This project is to stabilize an existing Town building and would require marginal increase in utility costs.



Police Facility Windows

PROJECT: PW -17-27 PUBLIC WORKS

Project Working Title: Town Hall Interior Renovations

Project Location: 367 Main Street, Hyannis, MA

Project Description: This project continues the work needed to maintain the existing building. The exterior restoration work has been completed using CPA funds. Many of the interior improvements planned relate to public health, safety and code issues that need immediate attention. Recommendations from the building study by the historic architect are also contained within the scope of work. Preliminary space programming changes are under design and will be coordinated with the space occupants.

Due to the magnitude of the scope of work for renovations and possible reconfigurations, it is proposed that this work executed under a multi-phased program. This will allow the Town Hall to function while in the renovation process.

Phase 1 work is proposed for FY18 and includes architectural and engineering design, cost estimating, contract documents and renovation work for the lower basement and first floors of the building. The areas affected include Tax Collection, Assessors, Lunchroom, Mail and Copy Center and Corridor. Included will be the relocation of the existing TV Studio, energy efficient room lighting, power distribution, installation of new interior floor, wall and ceiling finishes throughout, renovation of the sprinkler system to suit revised floor plan and upgraded lighting and alarm systems

Project Justification: The Town Hall is the public image of the Town. The building needs continual upgrades and improvements. The public areas in Town Hall are in poor condition and give a negative impression of the Town of Barnstable, with chipped paint, peeling wallpaper and significant water damaged exterior walls. The funding for the additional Bathrooms and upgrade to ADA standards are being sought in a separate CIP. The lighting and electrical systems are inefficent and costly. The fire alarm system does not meet present day code standards. Air quality concerns exist with mold within walls and ceilings due to a poor HVAC system and many years of moisture leaking through the walls from the exterior. The existing steam based system is being replaced under a separate FY16 CIP. Much of the exterior plaster and drywall surfaces are in need of full replacement. Any plan changes will require basic changes to all building systems. Spreading out this project over several years will only increase the total cost of the project and subject the occupants and residents to years of construction and inconvenience.

Describe Work Previously Accomplished this Proposed Project: Work underway includes the installation of circulator pumps for the chilled water system. CPA funds were used to renovate the courtyard vestibule and for major exterior restoration of masonry, and for window and slate roof replacement. The existing old coal fired boilers have been removed from the basement leaving space for the installation of three new modulating boilers and the eventual change over to a new forced hot water system. The new boilers have been purchased and are scheduled to be installed during the spring of 2016, which was funded by CIP in 2016. The Town Clerk's Offices have been fully renovated at this time. Stairwell renovation work is currently underway (East Stair complete, West Stair about to commence) thru FY13 funding. This work includes architectural, mechanical, electrical, sprinkler, fire safety, space enclosure with new rated doors, related finishes and improvements that will bring the public stair into code compliance and repair the water damage. CPC funds have been obtained for the improvement of the staircase to include wooden stairs and landing and to complete the first floor public corridor in FY16.

Impact Of Denial/Postponement: Mechanical systems will continue to degrade and require increased maintenance and operating costs. The Fire alarm system will continue to degrade and may result in a system that does not function properly thus compromising life safety. The offices are greatly in need of renovation, will continue to be cramped and ineffective workspaces. The public areas of the building will still be in deplorable condition, leaving a poor impression of Town Government. With the waterproofing of the exterior walls being completed, interior walls need major repairs to correct the damage and mold that has occurred by water penetration over many years.

Project Cost Estimates:

	Future FY
Design & Permitting	\$69,899
Construction & Acquisition	\$485 <i>,</i> 408
Design Contingency	\$97,082
Project Management	\$29,124
Project Contingency	\$29,124
Total Project Costs	\$710,637

Basis for cost estimates: In-house and Architect's estimate and studies

Project Estimated Completion Date: Fall 2018

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$488,338	Phase 1 Basement and First Floor Renovations, Public Corridors, security improvements, interior repairs & renovation.
2019	\$222,299	Phase II Design & Renovation, Second Floor

Source of Funding: General Fund Cape Light Compact and Comcast funds may be available to supplement funding.

Operating Budget Impact now or in future: The facility is an existing Town facility that is currently maintained by the DPW. Improvements/upgrades are expected to result in improvement in energy usage with new lighting, insulation and HVAC, and are not expected to adversely impact the Operating Budget.





PROJECT: PW -17-28 PUBLIC WORKS

Project Working Title: Coastal Resiliency Master Plan Development

Project Location: Various

Project Description: The creation of a Master Plan to address public infrastructure needs/requirements as they relate to climate change and sea level rise, and their various effects. (Severe storms, flooding, etc.).

Project Justification: While various agencies throughout all levels of government have attempted to mitigate the impacts of coastal hazards, particularly as a result of climate change and predicted sea level changes, it is difficult for local communities to convert the separate requirements of state and federal agencies into a plan. This is especially true for DPWs that are responsible for the public infrastructure. How might the existing infrastructure be affected by current and future coastal hazards? What modifications are required to address these hazards? Does infrastructure need to be relocated? Does redundant infrastructure need to be constructed (for example, if the primary evacuation route/road for an area is likely to be washed away during an event, then a backup route needs to be identified)? This project is intended to look specifically at the public infrastructure, its vulnerabilities, and requirements concerning coastal hazards. It will also make recommendations to mitigate those risks and concerns.

Impact of Denial/Postponement: Currently DPW is ill prepared to address the changing coastal hazards. The Department lacks the modeling capability and expertise to adequately predict what public infrastructure needs to be addressed and how. Denial of this proposal will leave the department in that situation and prolong addressing what may be critical vulnerabilities.

Project Cost Estimates: FY 2019 Design & Permitting \$200,000

Basis for cost estimates: DPW estimate

Project Estimated Completion Date: December 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$200,000	Master Plan Development

Source of Funding: General

Operating Budget Impact now or in future: None

PROJECT: PW -17-28 PUBLIC WORKS

Project Working Title: DPW Salt Storage Facility

Project Location: 382 Falmouth Road, Hyannis

Project Description: This is a six-phase project to correct serious deficiencies in working conditions within the Department of Public Works. Two phases have been completed. The ongoing feasibility study and design portion of the project approved in FY2006 examined the collocation of the DPW Administration and Technical Support Division with the Highway Division Phase I, the construction of an Emergency Response Center (ERC) is completed and occupied. Phase II, DPW administration and engineering offices, is completed and occupied. Re-roof of the remaining old garage is complete and design work is underway for the Phase III Highway Division offices and facilities. This would be the last of the six-phase project. Phase VI: Involves the demolition of the existing salt shed and the design and construction of a new 13,000 SF salt shed with 6,500-ton storage capacity.

Project Justification: This project is included as the last phase of the DPW improvements. The Town has two existing salt sheds, which are located at the DPW and the transfer station. Together, the capacity of both salt sheds yields approximately 4,000 tons of salt. The existing salt storage does not provide enough capacity to perform best management practices during a major snowstorm event. Also, inconsistent salt deliveries provide unreliable response during snow emergencies. The proposed salt shed at the DPW would provide adequate storage for one winter season, which would increase the effectiveness to respond to snow emergencies.

Impact of Denial/Postponement: Failure to construct this project will impact the effectiveness during snow emergency responses. Also, further deterioration of the existing salt shed would result in failure long-term.

Project Cost Estimates:

FY 2019

Construction & Acquisition	\$1,630,000
Construction Contingency	\$82,000
Project Management	\$163,000
Total Project Costs	\$1,875,000

Basis for cost estimates: DPW Engineering Estimates

Project Estimated Completion Date: FY 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$1,875,000	Phase VI - Design & Construction of a Salt Shed

Source of Funding: General Fund

Operating Budget Impact now or in future: TBD





Existing Salt Storage Building

PROJECT: PW -17-29 PUBLIC WORKS

Project Working Title: Bearse's Way Bike Path Construction

Project Location: Bearse's Way from Pitcher's Way to Route 28

Project Description: Project includes the construction of a multi-use path with an asphalt surface twelve (12) feet wide located between the road edge and adjacent property boundaries. The majority of the route will maintain a wide green space between the road and the path. The path will join the soon to be constructed path approach to Route 28 that forms part of the funded MADOT Bearse's Way/ Route 28 intersection improvement project. This path will allow cyclists to avoid riding on the busy, high-speed section of Bearse's Way roadway.

Project Justification: This path will complete a bike access route to Hyannis joining the existing path running along Route 132 from Shootflying Hill Road to the multi-use path along Bearse's Way south of Route 28, The impending (spring 2016) construction of the Route 28 /Bearse's Way intersection project will allow safe crossing of Route 28

Describe Work Previously Accomplished this Proposed Project: Survey and Design has been completed to the 75% level on this project. Funding for this effort made possible by funds from the Cape Cod Commission.

Impact of Denial/Postponement: Failure to complete this project will result in an unsafe section of roadway for bicycle riders expecting to travel toward Hyannis on the existing bike route links.

Project Cost Estimates:		Future FY
	Design & Permitting	\$30,000
	Construction & Acquisition	\$600,000
	Construction Contingency	\$120,000
	Project Management	\$60,000
	Project Contingency	\$30,000
	All Other Costs	\$25,000 (Police)
	Total Project Costs	\$865,000

Basis for cost estimates: DPW Engineering analysis

Project Estimated Completion Date: April 30,2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components	
2019	\$30,000.00	Completion of project design	
2021	\$835,000.00	Project construction & project management	

Source of Funding: General Fund

Operating Budget Impact now or in future: Specific costs to be developed. Additional DPW Highway Division maintenance will be required for pavement upkeep and snow removal.

PROJECT: PW -17-30 PUBLIC WORKS

Project Working Title: Complete Streets Implementation Program

Project Location: Town Wide

Project Description: Certain roadways in Town are suitable for design and eventual construction under the "Complete Streets umbrella". This can best be described as a state of the art toolbox that allows appropriate designs benefitting all road users. In order to implement a "Complete Streets" policy special considerations in design and in particular public outreach are necessary. Detailed analysis of pedestrian, bicycle and vehicle movements and interactions are required.

Project Justification: For reasons of safety, health and cost savings a "Complete Streets Policy " has been adopted by MADOT. Cities and towns in the Commonwealth have adopted Bylaws to promote a complete streets policy. It is recommended that Barnstable adopt a complete streets policy. In the future funds for complete streets construction projects will be forthcoming from the State.

Moving forward with a complete streets policy will complement the work being done separately on Town and State multi-use paths creating connectivity. Provision of complete streets features such as shared use facilities and proper sidewalks, which will increase the usage of the streetscape, encouraging access to our beaches, open spaces and businesses.

Impact Of Denial/Postponement: An opportunity to improve the function and livability of our Town will be lost. Important projects will not qualify for available State funds.

Project Cost Estimates:

Design & Permitting Construction & Acquisition Construction Contingency Project Management Project Contingency All Other Costs Total Project Costs FY 2019 \$560,000 TBD \$30,000 \$30,000 \$2,000 (advertising) \$622,000

Basis for cost estimates: DPW engineering

Project Estimated Completion Date: July 1, 2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	207,333	
2020	207,333	
2021	207,333	

Source of Funding: General Fund

Operating Budget Impact now or in future: The maintenance budget may need to be adjusted to accommodate new roadway features but "call outs" for repairs will diminish because of new construction.



PROJECT: PW -17-31 PUBLIC WORKS

Project Working Title: Shared Use Path Sandwich to Yarmouth -Design

Project Location: Adjacent to the Service Road in Barnstable from the Sandwich Town Line to a connection to the existing shared use pathway at Route 132 and a terminal facility near the Hyannis Golf Course.

Project Description: Full ground survey to include engineering design and permitting for a proposed shared use path. The path will meet all local, state and federal standards as applicable. Preparation of materials and conducting public outreach sessions. The project is proposed to be divided into three phases in Barnstable; the first from the Sandwich Town Line to Route 149, the second from Route 149 to Route 132 and the third including a bridge and associated work to cross Route 132.

Project Justification: This project is a significant link in the "vision" to create an off road path from the Cape Cod Canal to Provincetown. At this time, construction is underway on a section of the path terminating at Station Avenue in Yarmouth and plans have been developed to the 25% design stage for the path extension from the Yarmouth Town Line to Mary Dunn Road in Barnstable. To the west, construction is underway on a section of the path in Sandwich and a Project Information Form has been submitted to MADOT for the section of path in Sandwich from Route 130 to the Barnstable Town Line.

Describe Work Previously Accomplished this Proposed Project: In August 2015, a Project Needs Form (PNF) for a project including the section in Sandwich from Route 130 to the Barnstable Town Line was submitted to MADOT. MADOT recommended phasing of the project to split the sandwich section from the Barnstable sections, while being supportive of the total project.

Impact of Denial/Postponement: The regionally important expansion of the major shared use path connection on Cape Cod will be delayed, thereby affecting the overall economic growth of the region. Off road paths for bicycle and other non –vehicle users are a major attraction to visitors and residents alike and this link is essential to the "vision" of connectivity.

Project Cost Estimates:		Future FY
	Design & Permitting	\$1,800,000
	Construction & Acquisition	\$0
	Project Contingency	\$360,000
	All Other Costs	\$10,000
	Total Project Cost	\$2,170,000

Basis for cost estimates: DPW Engineering Dept. analysis

Project Estimated Completion Date: December 30, 2021

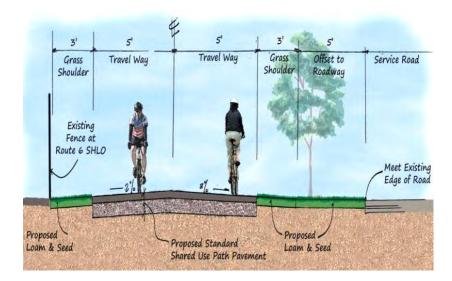
FY	Cost	Project Description/Components
2019	\$723,333	Design and Permitting
2020	\$723,333	Design and Permitting
2021	\$723,333	Design and Permitting

Source of Funding: General Fund

Operating Budget Impact now or in future: None. It has been the standard practice for the Mass Division of Conservation and Recreation to be responsible for the maintenance of completed shared use paths, however there may be some incidental maintenance activity increase in areas connected to the facility.









PROJECT: PW -17-32 PUBLIC WORKS

Project Working Title: U.S. Custom House Interior Work

Project Location: 2252 Main Street, Route 6A, Barnstable

Project Description: This project would fund needed interior repairs for finishes, HVAC systems, and lighting.

Project Justification: Erected in 1856 the building has been patched, repaired and painted but heavier renovations are now necessary. Handicap access, handicap accessible toilets, and interior finishes need to be addressed.

Describe Work previously accomplished this Proposed Project: A Historic building study was completed for this building with CPC funds. In 2012, the CPC also approved funds to perform much needed window restoration, masonry repairs, metal trim restoration, exterior paint removal and installation of a new opaque breathable masnory coating. This project's cost estimate is based on continuing the needed work outlined in the historic building study and reflects only a portion of work needed per the study.

Impact Of Denial/Postponement: Continued deferred repair of the interior of this facility will contribute to its deterioration, and could ultimately result in a increase in repair costs, or require the replacement of existing building items in the future while limiting the public's use of the building.

Project Cost Estimates:		FY 2019
	Design & Permitting	\$29,148
	Construction & Acquisition	\$264,979
	Design Contingency	\$26,498
	Project Management	\$14,574
	Construction Contingency	\$29,148
	Total Project Costs	\$364,347

Basis for cost estimates: Architect assisted in-house estimate

Project Time Estimates: Design & Permitting (months) 6 Construction (months) 10

Project Estimated Completion Date: June 2019

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$ 364,347	Phase III interior design and restoration

Source of Funding: General Fund Possible CPC funds & state grant funds for construction.

Operating Budget Impact now or in future: This work will result in some reduction in maintenance requirements, but should not have a significant impact on the Operating Budgets.





Custom House Interior

PROJECT: PW -17-33 PUBLIC WORKS

Project Working Title: Highway Truck Storage Facilities Design & Construction

Project Location: 382 Falmouth Road, Hyannis, MA

Project Description: This project is for the design of a new enclosed and insulated truck garage and shops, with drive-through capability, which will be used to park, store and perform daily maintenance on trucks and equipment. The new building will incorporate the design of taller doors, which allow for access by larger equipment, and would have a lean-to for plow storage. Sanding trucks must be kept protected, in a temperate environment, allowing for quick response to snow and ice emergencies. This design work includes site master planning for the entire campus. Follow on projects include the construction of the new enclosed and insulated truck garage as well as site improvements developed in this phase.

Project Justification: This Project will involve design work required to create a new enclosed and insulated truck garage and shops. This is a badly needed space to provide for the protection, storage and daily maintenance of valuable trucks and equipment. Currently most trucks are left outside and deteriorate at a much faster rate and cannot be accessed quickly during storm events and emergencies.

Describe Work Previously Accomplished this Proposed Project: The Phase I ERC and Phase II DPW Administration and technical support offices have been completed. The re-roofing work over the Phase I, II, and III areas have been completed at this time. The Phase III Highway Division Managerial Offices consolidation has been submitted under a separate CIP this year.

Impact Of Denial/Postponement: The trucks continue to be stored outside and will negatively impact snow and ice operations, thus construction of the truck garage will resolve this issue.

Project Cost Estimates:		Future FY
	Design & Permitting	\$337,800
	Construction	\$5,630,003
	Construction Contingency	\$281,500
	Project Management	\$281,500
	Project Contingency	\$177,100
	All Other Costs	\$24,000
	Total Project Costs	\$6,731,903

Basis for cost estimates: DPW Engineering Estimates

Project Estimated Completion Date: FY 2021

Project Cost/Description FY 2017 and Follow-On Years:				
<u>FY</u>	<u>Cost</u>	Project Description/Components		
2020	\$430,990	Phase 1V - Design of new Highway Truck Garage		
2021	\$6,300,913	Phase V - Construction of new Highway Truck Garage		

Source of Funding: General Fund

Operating Budget Impact now or in future: Protection and increased longevity of vehicles will offset the cost of increased utilities.



Vehicles & equipment stored outside at Highway Facility

PROJECT: PW -17-34 PUBLIC WORKS

Project Working Title: Bay Shore Road Boat Ramp-Design and Construction

Project Location: Bay Shore Road, Hyannis

Project Description: The existing boat ramp will be replaced and the adjacent parking area will be reconstructed with permeable paving. Engineering design plans and Environmental Permitting completed prior to bidding and construction.

Project Justification: The Bay Shore Road boat ramp and associated parking area serve important mooring fields within Hyannis harbor and is heavily used by the boating population in the neighborhood. The existing asphalt ramp is deteriorated and needs replacement. Storm water facilities that were improved several years ago will undergo a further upgrade to protect water quality.

Describe Work Previously Accomplished this Proposed Project: Prior work on Storm water facilities was completed utilizing CZM Grant Funds.

Impact of Denial/Postponement: If repairs are not made the ramp will continue to deteriorate and will eventually become unsafe and unusable. A ramp that is poor condition poses a safety hazard and could prove to be a liability should an accident occur due to the condition of the ramp.

Project Cost Estimates:		Future FY
	Design & Permitting	\$29,325
	Construction & Acquisition	\$170,000
	Construction Contingency	\$25,500
	Project Management	\$9,775
	Project Contingency	\$9,775
	All Other Costs	\$1,500 (Advertising)
	Total Project Costs	\$245,875

Basis for cost estimates: DPW Engineering estimates based upon prior similar project costs

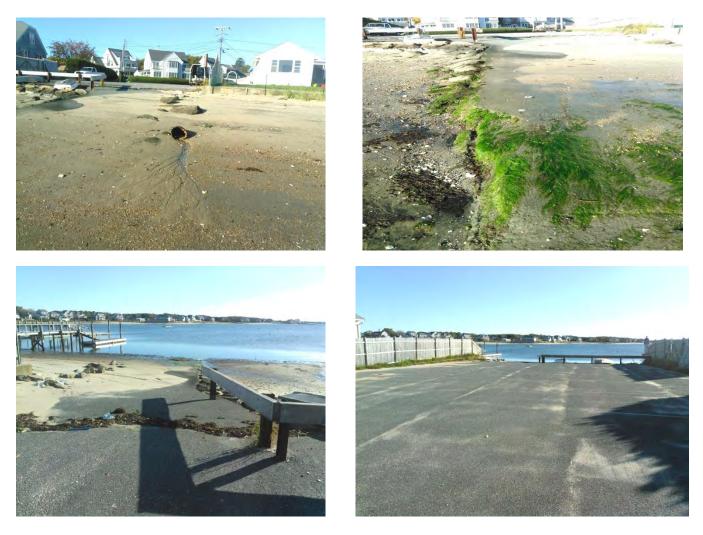
Project Estimated Completion Date: November 30, 2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2020	\$29,325	Design & Permitting
2021	\$216,550	Construction & Construction Management

Source of Funding: General Fund

Operating Budget Impact now or in future Normal operating costs for the facility will continue.



Bay Shore Road Boat Ramp

PROJECT: PW -17-35 PUBLIC WORKS

Project Working Title: Craigville Beach Road Pump Station and Force Main

Project Location: Craigville Beach Bathhouse (997 Craigville Beach Road), Craigville Beach Road, Centerville Avenue, and Old Craigville Road

Project Description: Provision of a new wastewater pumping station beside the existing bathhouse, standby generator, construction of a sanitary sewer force main and collector line in anticipation of sewer expansion in the area. Rehabilitation of the roadway after construction to include trench patching.

Project Justification: Craigville Beach is one of the most heavily utilized beaches in Town. In 2014, the FEMA maps rezoned the area of the Craigville Beach bathhouse as part of the flood (velocity) zone. The Town's Board of Health has no record of the existing septic tank at the bathhouse. Its condition and capacity is unknown and may fail in the near future. Existing septic system has not been upgraded in recent decades and could possibly be affecting the water quality of the harbor. Therefore, an upgrade would be an improvement to water quality protection for the receiving waters of Craigville Harbor. A beach house assessment was completed in December 2014, which recommended additional toilets to the facility. With an unknown capacity, these improvements cannot be implemented.

The project location directly lies within the Districts of Critical Planning Concern, DEP Wetlands, Nitrogen Removal area, and Area of Concern (AOC) as identified in the Comprehensive Wastewater Management Plan (June 2010) and Wastewater Facilities Plan (1994). As identified as an AOC in 1994, this area (CE1) was found to would not be sustainable for septic systems within the next 20 years or by 2014. These residential and commercial properties within the velocity and 100 year (AE zone) flood zones will likely have future septic system issues. While this project does not address the entire sewer extension to this area, it will provide the infrastructure needed to transport the wastewater to the existing system for proper treatment. This project area will address approximately 140 properties with their future need as the pump station and piping would be sized accordingly.

Describe Work Previously Accomplished this Proposed Project: Funding in FY2014 (\$115,000) allowed for the initiation of design and permitting services for the Craigville Bathhouse, which included the Craigville Beach Bathhouse Feasibility Study.. Additional funds are needed for design, permitting and the construction.

Impact of Denial/Postponement: Denial of the project will result in safety concerns and disturbance for visitors and residents of the Craigville Beach. Also, the Town would not be able to provide an adequate alternative for nearby future failing septic systems, which will directly impact the receiving waters of Craigville Harbor.

Project Cost Estimates:		Future FY
	Design & Permitting	\$550 <i>,</i> 000
	Construction & Acquisition	\$2,750,000
	Construction Contingency	\$700,000
	Project Management	\$0
	Total Project Costs	\$4,000,000

Basis for cost estimates: DPW Engineering Estimates

Project Estimated Completion Date: FY2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	Cost	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$550,000	Design
2021	\$3,450,000	Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: TBD

PROJECT: PW -17-36 PUBLIC WORKS

Project Working Title: Burgess Barn Interior

Project Location: 559 Route 149 Marstons Mills, MA

Project Description: This project would fund interior renovations of the building interior and access improvements to the Burgess Barn. The work would include floor construction, mechanical, electrical, thermal insulation, interior restoration, and installation of new ADA toilet facilities.

Project Justification: Erected in the late 1700's, the building is in a state of significant disrepair and in danger of being lost. Recently CPA funding was approved to preserve the exterior of the building. This project would allow the building to become usable by added ADA access, toilet and storage facilities. Without additional funding, the building will sit unused as an empty building shell.

Describe Work previously accomplished this Proposed Project: The Marstons Mills Village Association has conducted Minor maintenance to the building. The proposed work will allow the building to become usable at the village fields.

Impact of Denial/Postponement: Continued deferred renovation of this building will continue its non-use resulting in deterioration of work previously funded by the Community Preservation Committee.

Project Cost Estimates:		Future FY
	Design & Permitting	\$19,811
	Construction & Acquisition	\$225,120
	Construction Contingency	\$12,382
	Project Management	\$12,382
	Design Contingency	\$22,512
	Total Project Costs	\$292,207

Basis for cost estimates: Architect assisted in-house estimate

Project Estimated Completion Date: Summer 2022

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$25,000	Design
2021	\$267,206	Construction / Stabilization

Source of Funding: General Fund Possible CPC funding, if approved for construction

Operating Budget Impact now or in future: This project is to stabilize an existing Town building and would require marginal increase in utility costs.









Burgess Barn Interior

PROJECT: PW -17-37 PUBLIC WORKS

DEPARTMENT PRIORITY: 37 of 41

Project Working Title: Old Jail Repairs

Project Location: 3365 Main Street, Route 6A, Barnstable

Project Description: This project would fund needed structural, exterior and site improvements to the building. These funds would provide for design, renovation/construction.

Project Justification: Originally constructed in 1690, the building has been moved, patched, repaired and painted but additional renovations are now necessary. Extensive deterioration of original floor supports has been observed in the basement.

Describe Work previously accomplished this Proposed Project: A Historic building study was completed for this building under CPC funding. The following cost estimate is based on that study.

Impact Of Denial/Postponement: Continued deferred maintenance of this facility will contribute to its continued deterioration.

Project Cost Estimates:		Future FY
	Design & Permitting	\$31,519
	Construction & Acquisition	\$191,023
	Design Contingency	\$19,102
	Project Management	\$10,506
	Construction Contingency	\$21,013
	Total Project Costs	\$ 2 73,163

Basis for cost estimates: Architect assisted in-house estimate

Project Estimated Completion Date: October 2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$ 36,519	Design
2021	\$ 236,645	Construction / Restoration / Preservation

Source of Funding: General Fund Possible Community Preservation Funds and State Historic Grant

Operating Budget Impact now or in future: These renovations are not expected to have a measurable impact on the Operating Budget.













Exterior and Interior of Old Jail Building

PROJECT: PW -17-38 PUBLIC WORKS

Project Working Title: U.S. Custom House Carriage House Design and Construction

Project Location: 3353 Main Street, Route 6A, Barnstable

Project Description: This project would fund needed exterior masonry, door and window repairs of the carriage house building. These funds would provide for design and renovation/construction.

Project Justification: Erected in 1856, the building has been patched, repaired and painted, but heavier renovations are now necessary. Masonry and exterior deterioration continues to allow moisture penetration into the structure, causing furthering deterioration.

Describe Work previously accomplished this Proposed Project: A historic building study was completed for this building with CPC funding. This project's recommendations and cost estimate are based on the results of that study.

Impact Of Denial/Postponement: Continuing to defer maintenance on this facility will contribute to its deterioration, and will result in increased future repair costs and extensive structural damage.

Project Cost Estimates:		Future FY
	Design & Permitting	\$19,790
	Construction & Acquisition	\$143,408
	Design Contingency	\$21,511
	Project Management	\$8,246
	Construction Contingency	\$23,089
	All Other Costs	\$10,000
	Total Project Costs	\$226,044

Basis for cost estimates: Architect assisted DPW in-house estimate

Project Estimated Completion Date: Fall 2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$ 46,975	Custom House Carriage House Design
2021	\$ 179,069	Custom House Carriage House Restoration

Source of Funding: General Fund and possible CPC funds or state historic grants

Operating Budget Impact now or in future: This facility is an existing facility that is currently maintained by the DPW. These improvements are not expected to impact the Operating Budget.









Carriage House Exterior

PROJECT: PW -17-39 PUBLIC WORKS

Project Working Title: U.S. Custom House Site Improvements

Project Location: 3353 Main Street, Route 6A, Barnstable

Project Description: This project would fund needed site improvements. These funds would provide for design and preservation/renovation/construction. Restoration of perimeter Iron Fence, new site walls and parking areas, planting and lighting.

Project Justification: Erected in 1856, the building is in the process of a phased restoration. Work to the historic landcape is now necessary. Landcape items such as the historic cast iron fence is deteriorating or missing. Parking areas have deteriorated and become undefined. Stone parking areas need new surfacing.

Describe Work previously accomplished this Proposed Project: A historic building study was completed for this building with CPC funding. This project's recommendations and cost estimate are based on the results of that study.

Impact Of Denial/Postponement: Continuing to defer maintenance on this facility will contribute to its deterioration, and will result in increased future repair costs and damage.

Project Cost Estimates:		Future FY
	Design & Permitting	\$25,481
	Construction & Acquisition	\$147,717
	Design Contingency	\$22,158
	Project Management	\$8,494
	Construction Contingency	\$8,494
	All Other Costs	\$0
	Total Project Costs	\$212,343

Basis for cost estimates: Architect assisted DPW in-house estimate

Project Estimated Completion Date: 2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$ 30,000	Site Restoration Design
2021	\$ 182,343	Site Restoration Construction

Source of Funding: General Fund and CPC funds or state historic grants

Operating Budget Impact now or in future: This facility is an existing facility that is currently maintained by the DPW. These improvements are not expected to impact the Operating Budget.



Conditions immediately surrounding the Custom House

PROJECT: PW -17-40 PUBLIC WORKS

Project Working Title: DPW 382 Falmouth Road Facility Parking Lot Repairs

Project Location: 382 Falmouth Road, Hyannis, MA

Project Description: The existing parking lot has been reconfigured to serve the new DPW Administration and Highway Emergency Response Center as well as incorporating the gas service island and parking for staff and visitors to the facility. The pavement has been cut up and patched over a number of years and is in need of a top surface coat of bituminous pavement and new striping of parking spaces and roadway markings to direct traffic around the service island as both the public, staff and trucking share space in the lot.

Project Justification: With the reorganization of parking and the mixing of the public, staff and trucking the lot is in need of striping to define the parking and roadway from a safety point of view.

Impact of Denial/Postponement: The entry approach should be designed to channel traffic into the site and be channeled outward to the street in a defined and safe manner. The lack of curb definition at the entry creates a confusing area for traffic to move thru. Lack of a defined traffic pattern in the lot creates an unsafe zone in which people and vehicles move thru.

Project Cost Estimates:		FY 2021
	Construction & Acquisition	\$174,000
	Construction Contingency	\$9,000
	Project Management	\$17,000
	Total Project Costs	\$200,000

Basis for cost estimates: DPW Engineering Estimates

Project Estimated Completion Date: FY2021

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$0	
2021	\$200,000	Design & Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: TBD

PROJECT: PW -17-41 PUBLIC WORKS

Project Working Title: Craigville Beach Road sidewalk & drain as associated with sewer work for PS at bath house

Project Location: Craigville Beach Road from Long Beach Road to Lake Elizabeth Drive

Project Description: Provision of a new sidewalk on the northerly side of the road, construction of a sanitary sewer collector line in anticipation of sewer expansion in the area. Rehabilitation of the roadway after construction to include drainage structures and milling and paving surface.

Project Justification: Craigville Beach is one of the most heavily utilized beaches in Town. There are multiple pedestrian crossings in the summer months from the beach parking lot to snack bars and residences on the north side of the road. In addition, pedestrians walk year round along the roadway. There are existing sidewalks to the east and west of the project limits. In addition to the sidewalk, it is felt that it would be wise and economically beneficial to add a collector sewer line along the roadway in anticipation of sewers being extended to the area. This project would be completed injunction with the Craigville Beach Road Pump Station.

Impact Of Denial/Postponement: Denial of the project will result in safety concerns being unresolved for pedestrians and an opportunity will be lost to gain fiscal advantage for construction of a sewer line.

Project Cost Estimates:		FY 2021
	Design & Permitting	\$150,000
	Construction & Acquisition	\$1,125,000
	Total Project Costs	\$1,275,000

Basis for cost estimates: DPW Engineering Estimates

Project Estimated Completion Date: FY2021

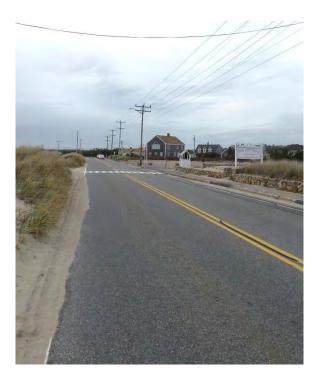
Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$0	
2019	\$0	
2020	\$0	
2021	\$1,275,000	Design & Construction

Source of Funding: General Fund

Operating Budget Impact now or in future: None for a number of years





Craigville Beach Road

Regulatory Services Department

PROJECT: RS -17-1 REGULATORY SERVICES

DEPARTMENT PRIORITY: 1 of 3

Project Working Title: Hydrilla Control

Project Location: Mystic Lake and Middle Pond, Marstons Mills and Long Pond, Centerville

Project Description: 2015 marked the 5th year of hydrilla control in Mystic Lake. In Long Pond after 12 years effort, we enjoyed two years of what appeared to be a hydrilla free pond, but it was short lived. In 2015 hydrilla returned to Long Pond, most likely from tubers that can lie dormant for quite some time. Hydrilla is capable of causing devastating impacts to freshwater ponds, due to its rapid growth rate. It can spread from pond to pond and has more recently cropped up in Middle Pond within the last 4 years. The Town along with the Association for the Preservation of Long Pond, the Indian Ponds Association and MA DCR are collaborating in this effort to preserve the 3 affected ponds and to reduce the chance of hydrilla spreading to other ponds in Barnstable. With the spread of hydrilla in Mystic and the return in Long Pond there is an urgency to continue with the eradication process. Fall 2015 we relied on mechanical means of removal in Mystic Lake, Middle and Long Pond. For FY17, we anticipate using Sonar™ aquatic herbicide, supplementing the effort with bottom screening, hand-pulling and diver-assisted suction harvesting (DASH).

Project Justification: Our efforts have resulted in drastic decline of hydrilla in Long Pond with the use of Sonar[™] in the past. Fall 2015, 4 patches were covered with benthic blankets. It is important to return to using Sonar[™] if we do not want the hydrilla to get out of control. Hydrilla is spreading quickly in Mystic. It appears a combination of mechanical and aquatic herbicide is necessary to combat this relentless aquatic invasive weed.

Describe Work Previously Accomplished this Proposed Project: Pre & post treatment surveys. Mechanical hydrilla control. Non-chemical control s are being used in both Long Pond Centerville and Mystic Lake. The use of the chemical Sonar[™] is on hold until its use in a water body with associated cranberry bogs can be determined. We are currently in discussion with UMass Cranberry station and the bog owners/mangers. Until such time the details can be worked out it is important that non-chemical control continue such as DASH - Diver Hand-Pulling or Diver Assisted Suction Harvesting and the use of benthic barriers continue. Final reports forthcoming.

Impact Of Denial/Postponement: Take-over of subject ponds and other Town lakes & ponds by hydrilla, and a much greater cost of control. Recreational affects fishing, boating and swimming.

Project Cost Estimates:

FY 2017 FY2018-2021 Construction \$0 Construction \$ 100,000Annually

Basis for cost estimates: Prior experience with hydrilla control projects. Contact with Keith Gazaille of Aquatic Control Technology on projected amount.

Project Estimated Completion: Summer each year

Project Cost/Description FY 2017 and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	hydrilla control
2018	\$100,000	hydrilla control
2019	\$100,000	hydrilla control
2020	\$100,000	hydrilla control
2021	\$100,000	hydrilla control

Source of Funding: General Fund

Operating Budget Impact now or in future: All work contracted



Underwater photo taken by one of the divers showing a large patch of hydrilla in Long Pond

PROJECT: RS -17-2 REGULATORY SERVICES

DEPARTMENT PRIORITY: 2 of 3

Project Working Title: Fanwort Control

Project Location: Wequaquet Lake (including Bearses's Pond & Goosberry Cove)

Project Description: Invasive fanwort control at Wequaquet Lake hot spots via suction harvesting and Sonar [™] herbicide.

Project Justification: Fanwort is very invasive, and without control will spread throughout the lake, heavily impacting recreational use.

Prior Funding: 100,000. Pre & post treatment surveys, Diver Assisted Suction harvesting (DASH) of Fanwort 9 days, final report forthcoming. In addition technical support and data collection to on-going water quality management of lake Wequaquet, specifically to follow up findings of the late summer 2014 continuous monitoring and make recommendations for management changes resulting from discussions with Town staff and Wequaquet Lake Protective Association. Continued to record and collect sediment cores in Bearse's Pond. Impact Of Denial/Postponement: Allowing fanwort to spread would greatly impact recreation if not controlled

Project Cost Estimates: FY2018-2021 Treatment \$25,000 Annually

Basis for Cost Estimates: prior fanwort control. Contact with Keith Gazaille of Aquatic Control Technology on projected amount.

Project Estimated Completion Date: Annually

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$25,000	Fanwort control and monitoring
2019	\$25,000	Fanwort control and monitoring
2020	\$25,000	Fanwort control and monitoring
2021	\$25,000	Fanwort control and monitoring

Source of Funding: General Fund

Operating Budget Impact now or in future: All work contracted

School Department

PROJECT: SCH -17-1 SCHOOL

DEPARTMENT PRIORITY: 1 of 24

Project Working Title: Barnstable High School Stadium Bleachers

Project Location: 744 West Main Street, Hyannis, MA

Project Description: Replace existing bleachers and add visitors' side bleachers

Project Justification: Current bleachers are becoming structurally unsound and unsafe. Floor planks are showing signs of fatigue, bolts, fasteners and structural members are rusting and deteriorating. Current configuration is not code compliant and due to design and age, retro-fitting for compliancy is not possible.

Impact Of Denial/Postponement: Poses significant safety hazard and liability for the Town of Barnstable.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$75 <i>,</i> 000
	Construction or Acquisition	\$750,000
	Construction Contingency	\$40,000
	Project Management	\$0
	Project Contingency	\$0
	All Other Costs	\$135,000
	Total Project Cost	\$1,000,000

Basis for Cost Estimates (explain how arrived at): Engineering/manufacturing estimates (CDM Smith & E&D Specialty Stands)

Project Time Estimates (months): Design & Permitting 6 Construction 6

Project Estimated Completion Date: May 2017

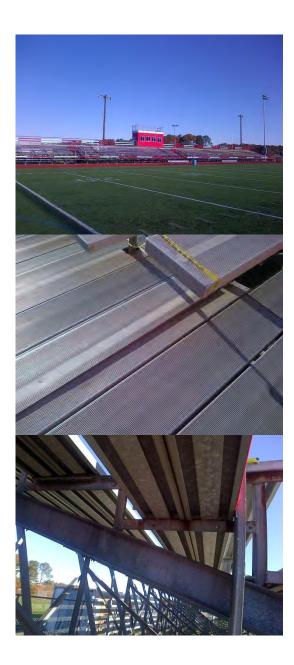
Project Cost/Description Current and Follow-On Years:

FYCostProject Description/Components2017\$1,000,000BHS Bleacher Engineering and Construction

Source of Funding: General Fund

Operating Budget Impact:

2017 CIP - Deferred School Department Projects





PROJECT: SCH -17-2 SCHOOL

Project Working Title: Barnstable High School Library AC Upgrades & Replacement

Project Location: 744 West Main Street, Hyannis, MA

Project Description: The HVAC units that service the BHS Library and adjacent classroom spaces (Nesbitt Units 7, 8 & 9) are at end of life and are undersized. After performing a comprehensive feasibility study with CBI Consulting & GGD Consulting (December 30, 2013), it was discovered that the distribution and return systems associated with unit #9 were not adequately designed for the 2 story space. Additionally it was determined that the existing aluminum curtain wall and glazing were extremely inefficient in providing thermal performance.

Project Justification: Currently during the summer months the library space becomes very hot & humid making it very uncomfortable for its occupants. Additionally, there are concerns with respect to ability to effectively heat the space during the winter months. The completion of this project will provide a more energy efficient and comfortable space.

Impact Of Denial/Postponement: Denial or postponement of this project will result in continued deterioration of heating, cooling and comfort level and increase in utility costs.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$93,000
	Construction or Acquisition	\$2,200,000
	Construction Contingency	\$120,000
	Project Management	\$100,000
	Project Contingency	\$60,000
	All Other Costs	\$227,000
	Total Project Cost	\$2,800,000

Basis for Cost Estimates: Engineering/Architect Evaluation and Estimates

Project Estimated Completion Date: September 2017

Project Cost/Description Current and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$2,800,000	Engineering and construction costs for BHS Library AC Replacement

Source of Funding: General Fund

Operating Budget Impact: None-current level of maintenance to continue





PROJECT: SCH -17-7 SCHOOL

DEPARTMENT PRIORITY: 7 of 24

Project Working Title: Barnstable High School Exterior Window Replacement (Engineering & Cost Analysis)

Project Location: 744 West Main Street, Hyannis, MA

Project Description: Engineering existing conditions and cost study for replacement/repair of BHS windows.

Project Justification: Many window assemblies at BHS are leaking (air/water infiltration) due to failed caulking, insufficient flashing, rotted frames and lintels. These leaks are allowing water into wall cavities throughout the building.

Impact Of Denial/Postponement: Denial or postponement of this project will cause continued water damage to wall cavities' and interior wall /floor surfaces. The water infiltration may also cause health and safety issues.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$50,000	\$
	Construction or Acquisition	\$	\$500,000
	Construction Contingency	\$	\$
	Project Management	\$	\$
	Project Contingency	\$	\$
	All Other Costs	\$	\$
	Total Project Cost	\$50,000	\$500,000

Basis for Cost Estimates (explain how arrived at): Estimates based on previous projects

Project Estimated Completion Date: June 2018

Project Cost/Description Current and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$50,000	Engineering Evaluation
2018	\$500,000	Window Replacement and Rework, (Estimated)

Source of Funding: General Fund

Operating Budget Impact: Current level of maintenance to continue



PROJECT: SCH -17-9 SCHOOL

Project Working Title: Facilities Maintenance Shop Roof Replacement

Project Location: 835 Falmouth Road, Hyannis, MA

Project Description: The existing roof is + 40 years old and leaking

Project Justification: We are experiencing leaks throughout the building and have birds nesting in gaps between the soffit and roof. The building houses all of the district's equipment, supplies and files which need to be protected.

Impact Of Denial/Postponement: Denial or postponement of this request will result in continued deterioration and leaks causing damage to district equipment and supplies.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$
	Construction or Acquisition	\$80,000
	Construction Contingency	\$
	Project Management	\$
	Project Contingency	\$
	All Other Costs	\$
	Total Project Cost	\$80,000

Basis for Cost Estimates (explain how arrived at): Budgetary estimates

Project Estimated Completion Date: September 2016

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$80,000	Facilities Maintenance Shop Roof Replacement

Source of Funding: General Fund

Operating Budget Impact: Current level of maintenance to continue





2017 CIP - Deferred School Department Projects

PROJECT: SCH -17-10 SCHOOL

Project Working Title: Replace HVAC Roof Top Units, (RTU's) at Barnstable High School and Barnstable Intermediate School

Project Location: 744 West Main Street and 895 Falmouth Road, Hyannis, MA

Project Description: Engineering evaluation and specification generation for replacement of RTU's at BHS & BIS

Project Justification: Existing Nesbitt and Trane Roof Top Units are obsolete and parts are becoming difficult to obtain.

Impact Of Denial/Postponement: Unit failure will greatly affect heating and unit ventilation.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$100,000	\$0
	Construction or Acquisition	\$0	\$5,000,000
	Construction Contingency	\$0	\$0
	Project Management	\$0	\$0
	Project Contingency	\$0	\$0
	All Other Costs	\$0	\$0
	Total Project Cost	\$100,000	\$5,000,000

Basis for Cost Estimates: Engineering Estimates

Project Estimated Completion Date: September 2020

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$100,000	Engineering & Specifications
2018	\$1,000,000	BHS/BIS RTU Replacement
2019	\$1,000,000	BHS/BIS RTU Replacement
2020	\$1,500,000	BHS/BIS RTU Replacement
2021	\$1,500,000	BHS/BIS RTU Replacement





PROJECT: SCH -17-12 SCHOOL

Project Working Title: Kitchen Equipment Replacement and Upgrades

Project Location: All BPS School Kitchens

Project Description: Continued campus wide replacement and upgrade of kitchen equipment which is being done as a collaborative effort between Food Services and BPS Facilities.

Project Justification: Existing equipment in most schools is nearing 20 year end of life. Menu requirements are changing and necessitating the need for updated equipment sets

Impact Of Denial/Postponement: Denial or postponement of this request will impact the quality and quantity of meals served at BPS.

Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$0	\$0
	Construction or Acquisition	\$50,000	\$100,000
	Construction Contingency	\$0	\$0
	Project Management	\$0	\$0
	Project Contingency	\$0	\$0
	All Other Costs	\$0	\$0
	Total Project Cost	\$50,000	\$100,000

Basis for Cost Estimates (explain how arrived at): Vendor quotes

Project Estimated Completion Date: September 2016

Project Cost/Description Current and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017	\$50,000	Kitchen Equipment
2018	\$0	
2019	\$50,000	Kitchen Equipment
2020	\$0	
2021	\$50,000	Kitchen Equipment







PROJECT: SCH -17-13 SCHOOL

Project Working Title: Flooring Replacement and Upgrades

Project Location: Barnstable Public Schools Campus Wide

Project Description: Replace worn tile, carpet and vinyl flooring throughout school district.

Project Justification: Existing flooring becoming worn and tattered in all school throughout the district including gym floors.

Impact Of Denial/Postponement: Denial or postponement of this request will result in continued deterioration of existing flooring and cause safety issues.

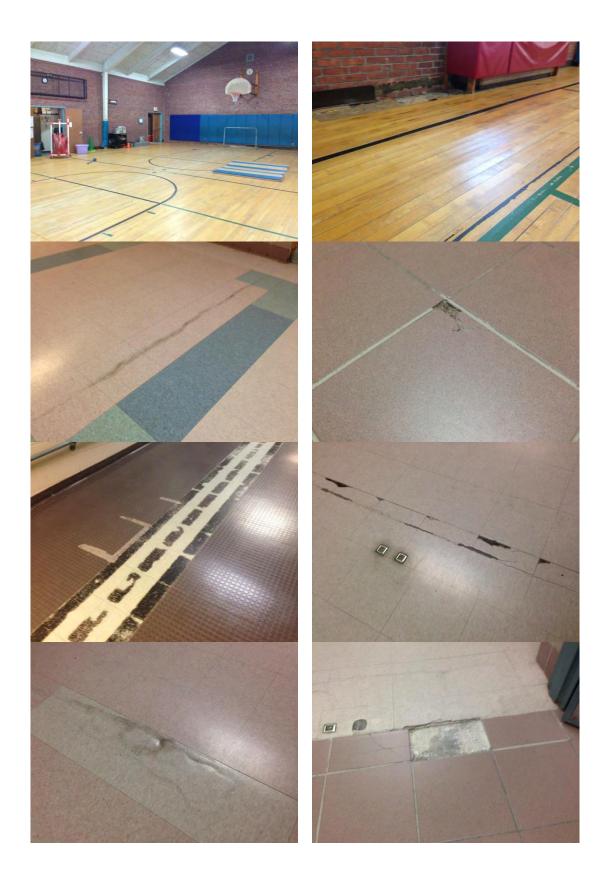
Project Cost Estimates:		FY 2017	Future FY
	Design & Permitting	\$0	\$0
	Construction or Acquisition	\$100,000	\$400,000
	Construction Contingency	\$0	0
	Project Management	0	0
	Project Contingency	00	0
	All Other Costs	0	0
	Total Project Cost	\$100,000	\$400,000

Basis for Cost Estimates (explain how arrived at): Vendor Quotes

Project Estimated Completion Date: September 2016

Project Cost/Description Current and Follow-On Years:

FY	Cost	Project Description/Components
2017	\$100,000	Flooring Replacement
2018	\$100,000	Flooring Replacement
2019	\$100,000	Flooring Replacement
2020	\$100,000	Flooring Replacement
2021	\$100,000	Flooring Replacement



PROJECT: SCH -17-14 SCHOOL

Project Working Title: Barnstable United Elementary Courtyard Improvements

Project Location: 730 Osterville-West Barnstable Road, Marstons Mills, MA

Project Description: BUE courtyard has housed a manmade combination pond and wetlands area, which had significantly contributed to major building moisture infiltration issues. Through student, staff and private contractor efforts, the entire system have been removed (2012 -2014). The area now needs to be refurbished in a more appropriate style using hardscape/low maintenance materials. This project will continue to be supported by doonations ; however, funding will be needed for materials and some professional services.

Project Justification: This funding is needed to complete the project, make the courtyard a more usable, and appropriate space for school and community use.

Impact Of Denial/Postponement: Denial or postponement of this project will render the courtyard space unusable and will create potential safety hazards.

Project Cost Estimates:		FY 2017
	Design & Permitting	\$0
	Construction or Acquisition	\$200,000
	Construction Contingency	\$0
	Project Management	\$0
	Project Contingency	\$0
	All Other Costs	\$0
	Total Project Cost	\$200,000

Basis for Cost Estimates (explain how arrived at): Verbal/Budgetary Estimates

Project Time Estimates (months): Design & Permitting 1 Construction 18

Project Estimated Completion Date: January 2018

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$200,000	BUE Courtyard Upgrades and Improvements

Source of Funding: General Fund

Operating Budget Impact:

2017 CIP - Deferred School Department Projects



PROJECT: SCH -17-15 SCHOOL

Project Working Title: Campus Wide Mechanical Upgrades (Burners, Boilers, HVAC & Pumps)

Project Location: BPS Campus Wide (Includes Osterville Elementary & Cotuit)

Project Description: District wide mechanical systems upgrade to include boilers, burners and pumps at all school owned buildings including Osterville and Cotuit.

Project Justification: Much of our existing equipment over 30 years old and requires replacement/upgrade.

Impact Of Denial/Postponement: Denial and postponement will affect our ability to heat and cool district spaces efficiently and reliability.

	Future FY
Design & Permitting	\$0
Construction or Acquisition	\$750,000
Construction Contingency	\$0
Project Management	\$0
Project Contingency	\$0
All Other Costs	\$0
Total Project Cost	\$750,000
	Construction or Acquisition Construction Contingency Project Management Project Contingency All Other Costs

Basis for Cost Estimates (explain how arrived at): Budgetary Estimates

Project Estimated Completion Date: December 2012

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$250,000	Mechanical Upgrades
2019	\$250,000	Mechanical Upgrades
2020	\$250,000	Mechanical Upgrades



PROJECT: SCH -17-16 SCHOOL

Project Working Title: Electric Utility Transformer Upgrade

Project Location: Barnstable West Barnstable Elementary, Barnstable Community Horace Mann Charter Public School, Osterville Elementary, Cotuit Elementary

Project Description: All four of these locations are still electrically serviced by transformers, which are housed in on-site underground vaults. These transformers should be removed and replaced with above ground transformers and all service panels should be upgraded.

Project Justification: Increased Safety & Reliability

Impact Of Denial/Postponement: Denial or postponement of this request could adversely affect service in the event of a transformer failure.

Project Cost Estimates:		FY 2018
	Design & Permitting	\$0
	Construction or Acquisition	\$250,000
	Construction Contingency	\$0
	Project Management	\$0
	Project Contingency	\$0
	All Other Costs	\$0
	Total Project Cost	\$250,000

Basis for Cost Estimates (explain how arrived at): Historical Costs for similar projects

Project Time Estimates (months):	Design & Permitting	6	Construction	36
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Project Estimated Completion Date: September 2017

Project Cost/Description Current and Follow-On Years:

FY	<u>Cost</u>	Project Description/Components
2017		
2018	\$250,000	Transformer Upgrades

Source of Funding: General Fund





2017 CIP - Deferred School Department Projects

PROJECT: SCH -17-17 SCHOOL

Project Working Title: Hyannis West Elementary Exterior/Interior Door Replacement

Project Location: 549 West Main Street, Hyannis, MA

Project Description: Upgrade and replace aged/dated interior and exterior doors throughout building to improve security and energy savings.

Project Justification: Existing doors are >50 years old and in need of replacement. Current units are warped to the point where air/rodent infiltration has become an issues and building security is at risk.

Impact Of Denial/Postponement: Denial or postponement of this request will lead to further deterioration of door assemblies and increased maintenance costs.

Project Cost Estimates:		Future FY
	Design & Permitting	\$0
	Construction or Acquisition	\$200,000
	Construction Contingency	\$0
	Project Management	\$0
	Project Contingency	\$0
	All Other Costs	\$0
	Total Project Cost	\$200,000

Basis for Cost Estimates (explain how arrived at): Budgetary vendor quotes and past installations.

Project Time Estimates (months): Design & Permitting 1 Construction 4

Project Estimated Completion Date: September 2017

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$200,000	Interior/Exterior Door Replacement









PROJECT: SCH -17-18 SCHOOL

DEPARTMENT PRIORITY: 18 of 24

Project Working Title: BPS Campus Wide Paving

Project Location: Campus Wide

Project Description: Pave and repair campus parking lots and sidewalks as needed.

Project Justification: Safety and maintenance

Impact Of Denial/Postponement: Denial or postponement will result in continued deterioration to school/town properties and assets.

Project Cost Estimates:

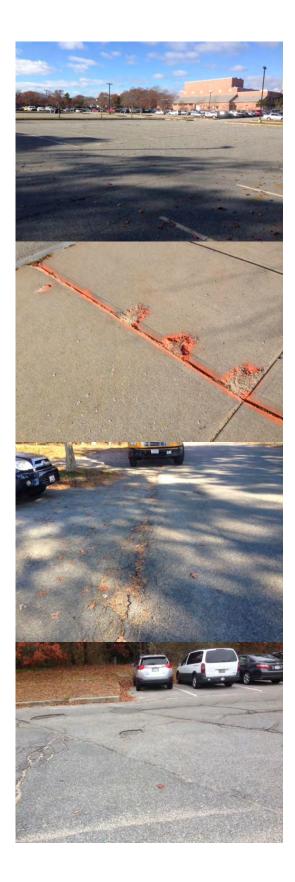
	Future FY
Design & Permitting	\$0
Construction or Acquisition	\$1,175,000
Construction Contingency	\$0
Project Management	\$0
Project Contingency	\$0
All Other Costs	\$0
Total Project Cost	\$1,175,000

Basis for Cost Estimates (explain how arrived at): In house estimate by DPW

Project Estimated Completion Date: September 2020

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$225,000	Paving/sidewalks
2019	\$250,000	Paving/Sidewalks
2020	\$300,000	Paving/Sidewalks
2021	\$400,000	Paving/Sidewalks





PROJECT: SCH -17-19 SCHOOL

Project Working Title: BPS Campus Wide Painting

Project Location: All District Locations

Project Description: Paint District Buildings and Facilities

Project Justification: Preventative Maintenance and Aesthetics

Impact Of Denial/Postponement: Denial or postponement of this project will impact visual appearance and life of exterior surfaces of district buildings.

Proje	ct Cost	Estim	ates:
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	Future FY
Design & Permitting	\$0
Construction or Acquisition	\$400,000
Construction Contingency	\$0
Project Management	\$0
Project Contingency	\$0
All Other Costs	\$0
Total Project Cost	\$400,000

Basis for Cost Estimates (explain how arrived at): Budgetary Estimates

Project Estimated Completion Date: September 2020

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$100,000	Painting
2019	\$100,000	Painting
2020	\$100,000	Painting
2021	\$100,000	Painting

Source of Funding: General Fund

PROJECT: SCH -17-20 SCHOOL

Project Working Title: Centerville Elementary School Window Replacement

Project Location: 658 Bay Lane, Centerville, MA

Project Description: Replace remaining single pane window units with dual/thermos pane units to complete previous window replacement project.

Project Justification: Existing units are leaking and inefficient, failure to replace will result in security, maintenance and energy consumption issues.

Impact Of Denial/Postponement: Denial of project will affect building energy and security.

Project Cost Estimates:		Future FY
	Design & Permitting	\$
	Construction or Acquisition	\$1,000,000
	Construction Contingency	\$
	Project Management	\$
	Project Contingency	\$
	All Other Costs	\$
	Total Project Cost	\$1,000,000

Basis for Cost Estimates (explain how arrived at): Budgetary Estimate based on similar projects

Project Estimated Completion Date: January 2018

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$1,000,000	Window replacement

Source of Funding: General Fund





2017 CIP - Deferred School Department Projects

PROJECT: SCH -17-21 SCHOOL

Future FV

Project Working Title: Barnstable High School Field House Improvements

Project Location: 744 West Main Street, Hyannis

Project Description: Repairs to BHS Field House Interior Space and Floors

Project Justification: Require floor and equipment replacement and painting due to continued use of gym space.

Impact Of Denial/Postponement: Postponement of this work will promote additional deterioration and impact safety.

Project Cost Estimates:

	Tuture I I
Design & Permitting	\$0
Construction or Acquisition	\$250,000
Construction Contingency	\$0
Project Management	\$0
Project Contingency	\$0
All Other Costs	\$0
Total Project Cost	\$250,000

Basis for Cost Estimates (explain how arrived at): Budgetary Estimates

Project Estimated Completion Date: December 2018

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u> P	Project Description/Components	
2017			
2018	\$250,000	Field House Improvements	

Source of Funding: General Fund





PROJECT: SCH -17-22 SCHOOL

Project Working Title: Barnstable Public Schools Asbestos Abatement

Project Location: District Wide

Project Description: Remove known remaining isolated areas of asbestos throughout the district, (Crawlspace, hot water pipes, floor tiles, etc.)

Project Justification: Provide asbestos free learning and work spaces.

Impact Of Denial/Postponement: Possible exposure and health risk to students and staff.

Project	Cost	Estimates:
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	11 2010
Design & Permitting	\$0
Construction or Acquisition	\$200,000
Construction Contingency	\$0
Project Management	\$0
Project Contingency	\$0
All Other Costs	\$0
Total Project Cost	\$200,000

FY 2018

Basis for Cost Estimates (explain how arrived at): Asbestos/AHERA Reports

Project Estimated Completion Date: September 2019

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$200,000	Asbestos Abatement

Source of Funding: General Fund



PROJECT: SCH -17-23 SCHOOL

Project Working Title: Barnstable High School Fields and Grounds Improvements

Project Location: 744 West Main Street, Hyannis, MA

Project Description: Upgrades and modifications to existing Barnstable High School athletic fields and grounds.

Project Justification: Current athletic fields and grounds are outdated and not able to support play at Division I levels, additional JV fields and fields located at Barnstable Intermediate School require rework and maintenance.

Impact Of Denial/Postponement: Denial or postponement will poses safety issues associated with poor playing conditions and overcrowding of existing space due to poor layout and configuration of current space.

Project Cost Estimates:		Future FY
	Design & Permitting	\$500,000
	Construction or Acquisition	\$4,500,000
	Construction Contingency	\$0
	Project Management	\$0
	Project Contingency	\$0
	All Other Costs	\$0
	Total Project Cost	\$5,000,000

Basis for Cost Estimates (explain how arrived at): Budgetary Engineering Estimates

Project Estimated Completion Date: September 2020

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2017	\$0	
2018	\$1,000,000	Engineering/Permitting/Construction
2019	\$1,000,000	Engineering/Permitting/Construction
2020	\$2,000,000	Engineering/Permitting/Construction
2021	\$1,000,000	Engineering/Permitting/Construction

Source of Funding: General Fund





2017 CIP - Deferred School Department Projects

PROJECT: SCH -17-24 SCHOOL

Project Working Title: Barnstable High School Synthetic Turf Replacement

Project Location: 744 West Main Street, Hyannis, MA

Project Description: Replace Field Synthetic Turf

Project Justification: Existing turf is at end of 10 year life expectancy (Installed November 22, 2010)

Impact Of Denial/Postponement: Denial or postponement of this request could result in rapid deterioration of playing surface and potential for unsafe playing conditions.

Project Cost Estimates:		Future FY
	Design & Permitting	\$0
	Construction or Acquisition	\$1,000,000
	Construction Contingency	\$0
	Project Management	\$0
	Project Contingency	\$0
	All Other Costs	\$0
	Total Project Cost	\$1,000,000

Basis for Cost Estimates (explain how arrived at): Costs estimate from engineering and turf contractors.

Project Estimated Completion Date: September 2012

Project Cost/Description Current and Follow-On Years:

<u>FY</u>	<u>Cost</u>	Project Description/Components
2021	\$1,000,000	Synthetic Turf Replacement

Source of Funding: General Fund

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2017 CIP

APPENDIX A - FISCAL YEAR 2017 CAPITAL BUDGET APPROPRIATION ORDERS

APPROPRIATION TRANSFER AND LOAN ORDER 2016-081 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$4,286,000** be appropriated for the purpose of funding the Barnstable Community Horace Mann Charter Public School Roof and Façade Improvement project as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$4,236,000**, and that **\$50,000** be transferred from available funds in council Order 2015-119, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes.

APPROPRIATION AND LOAN ORDER 2016-082

Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$475,000** be appropriated for the purpose of funding the Barnstable United Elementary School Parking lot Light Pole Replacements and Restroom Fixture & Hardware Upgrades as outlined in the FY 2017 -FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$475,000**, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes.

APPROPRIATION AND LOAN ORDER 2016-083

Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$250,000** be appropriated for the purpose of funding the Barnstable Public Schools' Unit Ventilator Upgrade project as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$250,000**, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes.

APPROPRIATION AND TRANSFER ORDER 2016-084 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$70,000** be appropriated for the purpose of funding the Barnstable High School Pump Flange Replacements as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$70,000** be transferred from available funds within the Capital Trust Fund, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes.

APPROPRIATION AND TRANSFER ORDER 2016-085 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$120,000** be appropriated for the purpose of funding the Barnstable Public School's Walk-in Cooler Replacements as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$70,000** be transferred from available funds within the Capital Trust Fund and that **\$50,000** be transferred from available funds within the School Lunch Revolving Special Revenue Fund, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes.

APPROPRIATION TRANSFER AND LOAN ORDER 2016-086 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$418,000** be appropriated for the purpose of funding the Information Technology Hardware & Software Upgrade project as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$363,000**, and that **\$55,000** be transferred from available funds under council order 2014-100, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-087

Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$290,000** be appropriated for the purpose of funding the Property Acquisition, Design and Permitting of a Parking Lot in Marstons Mills as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$290,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-088

Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$106,000** be appropriated for the purpose of funding the Site Improvements on the Walkway To The Sea as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$103,570** be transferred from available funds within the Capital Trust Fund, and that **\$2,392** be transferred from available funds under council order 2014-113, and that **\$38** be transferred from available funds under council order 2013-116, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-089 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$55,000** be appropriated for the purpose of funding the Water Quality Improvements at Schoolhouse Pond as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$55,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-090 Airport Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$6,373,000** be appropriated for the purpose of funding the Airfield Improvements as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$6,373,000**, and that the Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-091 Airport Enterprise Fund Capital Improvement Plan (Majority vote)

ORDERED:

That the sum of **\$100,000** be appropriated for the purpose of funding the Heavy Duty Vehicle Replacement as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$100,000** be transferred from the Airport Enterprise Fund reserves, and that the Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-092 Airport Enterprise Fund Capital Improvement Plan (Majority vote)

ORDERED:

That the sum of **\$150,000** be appropriated for the purpose of funding the Runway & Taxiway Markings project as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$150,000** be transferred from the Airport Enterprise Fund reserves, and that the Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION TRANSFER AND LOAN ORDER 2016-093 Water Supply Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$1,050,000** be appropriated for the purpose of funding the pipe replacement and upgrade program for the Hyannis Water System as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$150,000** be transferred from the Water Supply Enterprise Fund Reserves, and that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$900,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-094 Water Supply Enterprise Fund Capital Improvement Plan (Majority vote)

ORDERED:

That the sum of **\$200,000** be appropriated for the purpose of Pump Station and Treatment Plant Upgrades as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$200,000** be transferred from the Water Supply Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-095

Water Supply Enterprise Fund Capital Improvement Plan (Majority vote)

ORDERED:

That the sum of **\$52,000** be appropriated for the purpose of funding the Design and Permitting of Mary Dunn 1 Water Storage Tank Upgrades as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$52,000** be transferred from the Water Supply Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-096 Water Supply Enterprise Fund Capital Improvement Plan (Majority vote)

ORDERED:

That the sum of **\$400,000** be appropriated for the purpose of funding the Study, Design, Permitting and Testing of Interconnections with Other Water Systems as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$400,000** be transferred from the Water Supply Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-097 Water Pollution Control Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$1,289,505** be appropriated for the purpose of funding the Rehabilitation of the Clarifiers at the Wastewater Treatment Plant as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$1,200,000**, and that **\$89,505** be transferred from available funds under council order 2011-084, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-098 Water Pollution Control Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$904,000** be appropriated for the purpose of funding the Backup Generator Replacement at the Wastewater Treatment Plant as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$904,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-099 Solid Waste Enterprise Fund Capital Improvement Plan (Majority vote)

ORDERED:

That the sum of **\$150,000** be appropriated for the purpose of funding the Replacement of the 2007 Mack Tractor as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$150,000** be transferred from the Solid Waste Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-100

Solid Waste Enterprise Fund Capital Improvement Plan (Majority vote)

ORDERED:

That the sum of **\$50,000** be appropriated for the purpose of funding the Vehicle Replacement as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$50,000** be transferred from the Solid Waste Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION TRANSFER AND LOAN ORDER 2016-101 Solid Waste Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$2,500,000** be appropriated for the purpose of funding the Phase I and II Site Improvements at the Solid Waste Facility as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$500,000** be transferred from the Solid Waste Enterprise Fund Reserves, and that the Town Treasurer, with the approval of the Town Manager, be authorized to borrow **\$2,000,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-102 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$3,250,000** be appropriated for the purpose of funding the Public Roads Improvement Program as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$3,250,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-103

Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$730,000** be appropriated for the purpose of funding the Guardrail and Sidewalk Improvement Program as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$730,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-104

Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$87,500** be appropriated for the purpose of funding the Updated Stormwater Management Plan in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$87,500** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-105 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$150,000** be appropriated for the purpose of funding the Traffic Signal Upgrades as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$150,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND TRANSFER ORDER 2016-106

Sewer Construction & Private Way Maintenance & Improvement Fund (Majority vote)

ORDERED:

That the sum of **\$853,000** be appropriated for the purpose of funding the Private Way Improvements as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that **\$666,710** be transferred from available funds within the Sewer Construction & Private Way Maintenance & Improvement Fund, and that **\$115,354** be transferred from the available balance under council order 2015-102, and that **\$50,871** be transferred from the available balance under council order 2013-065, and that **\$20,065** be transferred from the available balance under council order 2013-066, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-107

Golf Course Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$258,000** be appropriated for the purpose of funding facility improvements at the Olde Barnstable Fairgrounds Golf Course as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$258,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-108

Golf Course Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$307,000** be appropriated for the purpose of funding facility improvements at the Hyannis Golf Course as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$307,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-109 Marina Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$500,000** be appropriated for the purpose of funding the maintenance dredging of Gateway Marina as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$500,000**, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-110 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$618,717** be appropriated for the purpose of funding the Beach Facility Improvements as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$478,000**, and that **\$50,000** be transferred from available funds under council order 2013-109, and that **\$21,250** be transferred from available funds under council order 2013-110, and that **\$16,101** be transferred from available funds under council order 2013-110, and that **\$16,101** be transferred from available funds under council order 2013-117, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION TRANSFER AND LOAN ORDER 2016-111 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$1,079,788** be appropriated for the purpose of funding the Blish Point Boat Access Channel Dredging as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$988,000**, and that **\$6,346** be transferred from available funds under council order 2010-071, and that **\$25,735** be transferred from available funds under council order 2013-117, and that **\$37,306** be transferred from available funds under council order 2010-112 and that **\$22,401** be transferred from available funds under council order 2014-117, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION AND LOAN ORDER 2016-112 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$900,444** be appropriated for the purpose of funding the Site Improvements at the Former Osterville Bay Elementary School as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$757,000**, and that **\$9,865** be transferred from available funds under council order 2014-068, and that **\$133,579** be transferred from available funds under council order 2013-116, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPROPRIATION TRANSFER AND LOAN ORDER 2016-113 Capital Trust Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$1,686,000** be appropriated for the purpose of funding the Lombard Field Improvements as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager and Community Preservation Committee; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$936,000**, and that **\$750,000** be transferred from the amount set aside for open space/outdoor recreation in the Community Preservation Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto, subject to the oversight of the Community Preservation Committee.

APPROPRIATION TRANSFER AND LOAN ORDER 2016-114 Community Preservation Fund (Majority vote)

ORDERED:

That the sum of **\$173,000** be appropriated for the purpose of funding the West Barnstable Community Building Window Replacements as outlined in the FY 2017 - FY 2021 Capital Improvement Plan and recommended by the Town Manager and Community Preservation Committee; and that to meet this appropriation, that **\$173,000** be transferred from the undesignated funds within the Community Preservation Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto, subject to the oversight of the Community Preservation Committee.

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APPENDIX B - AMORTIZATION SCHEDULES AS OF FEBRUARY 25, 2016

2017 CIP - Appendix B - Debt Amortization Schedules

Purpose	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
GENERAL FUND BONDS	Date	Date	Amount	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	02/15/07		403,000	41,600		-						F12025	F12020
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	02/13/07		325,200	13,065	- 52,065	49,310	47,600	46,080	44,560	43,040	35,520	34,240	32,960
CTF Land Acquisition () - Hyannis Gon Course \$748,000 Relanded	06/26/08		365,200	30,930	30,030	28,890	27,930	26,970	26,010	25,020		54,240	52,900
CTF Advance Refund 6/15/2002 Land Acquisitions BUTAPS	06/14/11		,	154,650	145,600	140,400	135.200	20,970	- 20,010	- 25,020			-
	00/14/11	00/15/20	1,102,000	240,245	227,695	218,600	210,730	73,050	- 70,570	68,060	35,520	34,240	32,960
Total Land Acquisition				240,245	227,695	218,600	210,730	73,050	70,570	68,060	35,520	34,240	32,960
CTF School Facilities Repair (I) \$339,000 Refunded	02/15/07	02/15/17	339,000	31,200		-	-	-	-	_		-	
CTF BHS Cogeneration	02/15/07		500.000	52,000	-								
High School Construction - Refunded	02/15/07		,	3,434,050	3,434,250	3,433,500	_	-	-	-	-	-	_
Barnstable Middle School - Refunded 2	02/15/07		1,548,520	176,300	165,300	158,050	150.800	-			-		-
Barnstable Middle School - Refunded 1	02/15/07		7,071,300	799,660	757,660	719,200	681,200	-		-	-		-
CTF School Upgrades 1 (I) \$360,000 Refunded	02/15/07		250,000	26,000	-	-	-	-	-	-	-	-	_
CTF School Upgrades 1 (I) \$360,000 Refunded	02/13/07		104.700	4,427	28.127	27,360	21.280	20.520	19.760				
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	02/17/13		450,000	46,800	20,127	-	21,200	20,520	15,700			-	-
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	02/13/07		199,700	8,390	51,390	49,455	42,520	41,000	38,480	-		-	
CTF School Health & Safety Improvements \$478,000 Refunded	02/15/07		273,000	26,000	-		-		-	-	-	-	-
CTF School Health & Safety Improvements \$478,000 Refunded	02/17/15		193,400	7,780	31,780	30,700	29,620	28,660	27,700	21,740	19,980	19,260	18,540
CTF MME Roof Replacement (I) \$750,000 Refunded	02/15/07		400,000	41,600	-	-				-	-		
CTF MME Roof Replacement (I) \$750,000 Refunded	02/17/15		329,800	13,256	52,056	49,510	47,800	46,280	44,760	43,240	40,720	34,240	32,960
CTF School Upgrades 2 (I) \$150,000 Refunded	02/15/07		100,000	10,400	-	-	-		-	-	-	-	-
CTF School Upgrades 2 (I) \$150,000 Refunded	02/17/15		47,400	1,866	6,766	6,645	6,420	6,220	6,020	5,820	5,620	4,920	4,240
CTF BHMCS Roof (I) \$910,000 Refunded	02/15/07		460,000	46,800	-	-	-		-	-	-	-	.,
CTF BHMCS Roof (I) \$910,000 Refunded	02/17/15		426,900	16,681	60,581	57,705	55,770	54,050	52,330	50,610	48,890	46,170	44,490
CTF School Facility Improvements 1 (I)	06/26/08		916,600	45,188	44,063	42,638	41,438	40,238	39,038	37,800	36,525	35,250	33,975
CTF School Building Improvements	06/16/10		936,000	73,369	65,869	64,744	62,494	61,144	59,794	58,331	56,869	55,294	53,719
CTF School Facilities Upgrades/Repairs V (I)	06/14/11		884,000	70,069	68,719	66,919	65,119	63,319	61,519	59,719	57,919	56,400	54,825
CTF School Parking Lot (I)	06/14/11		250,000	29,750	29,000	28,000	27,000	26,000	-	-	-	-	-
CTF School Facilities Upgrades/Repairs IV	06/14/11		332,000	40,850	34,800	33,600	32,400	31,200	-	-	-	-	-
CTF School Remolding - Asbestos 00-110 Refunded	06/14/11		50,000	6,150	6,000	5,800	5,600	5,400	5,200	-	-	-	-
CTF School Facilities Upgrades/Repairs II	06/14/11		179,000	13,763	13,463	13,063	12,663	12,263	11,863	11,463	11,063	10,725	10,375
CTF School Facilities Upgrades/Repairs III	06/14/11		190,000	19,313	18,863	18,263	12,663	12,263	11,863	11,463	11,063	10,725	10,375
CTF School Improvement (I)	06/14/11		487,000	46,638	45,588	39,188	37,988	36,788	35,588	34,388	33,188	32,175	31,125
HS Addition & Renovation Advance Refund 6/15/2003	04/18/12		58,100	10,843	10,443	8,222	-	-	-	-	-	-	-
CTF Advance Refund 6/15/2003 School Remodel II	04/18/12		193,400	24,280	23,480	22,780	22,180	21,580	17,940	15,300	-	-	-
CTF Advance Refund 6/15/2003 School Remodel I	04/18/12		242,700	31,339	30,299	29,389	28,609	22,806	21,192	20,196	-	-	-
CTF School Roof Repairs	11/22/13		600,000	71,700	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-
CTF HS Library AC Units	11/22/13		450,000	53,775	52,650	51,750	50,625	49,275	47,925	46,688	45,563	-	-
CTF School Fire & Communications System	11/22/13		200,000	23,900	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-
CTF School Computer Network Infrastructure	11/22/13		189,000	23,500	23,000	22,600	22,100	21,500	15,975	15,563	15,188	-	- 1
CTF Intermediate School roof & Façade Design	11/22/13		100,000	21,100	20,600	20,200	-	-	-	-	-	-	-
CTF School Hot Water Pump Replacement	11/22/13		85,000	15,825	15,450	15,150	-	-	-	-	-	-	-
CTF School Gym Bleacher Upgrades	11/22/13		55,000	10,550	10,300	10,100	-	-	-	-	-	-	-
CTF School Grounds Maintenance Equipment	11/22/13	11/15/18	150,000	31,650	30,900	30,300	-	-	-	-	-	-	- 1
CTF School Kitchen equipment	11/22/13		110,000	21,100	20,600	20,200	-	-	-	-	-	-	-
CTF Early Learning Center Modular Facility	02/17/15		2,000,000	164,125	162,125	157,625	153,125	149,125	145,125	141,125	137,125	133,125	129,125
CTF Elementary School Modular Classroom (#2015-115)	02/25/16		3,720,000	312,409	308,306	300,706	293,106	280,506	273,106	265,706	258,306	250,906	243,506
CTF BIS Façade & Roof Improvements (#2015-116)	02/25/16	06/30/36	3,353,000	283,543	276,781	269,981	263,181	256,381	249,581	242,781	235,981	229,181	222,381
CTF BCHMCPS Façade & Roof Improvements (#2015-117)	02/25/16	06/30/26	260,000	40,111	39,200	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000
CTF High School & Middle School Boiler Upgrades (#2015-119)	02/25/16	06/30/26	350,000	48,611	47,600	46,200	44,800	43,400	42,000	40,600	39,200	37,800	36,400
CTF W Village Elementary A/C Replacement (#2015-120)	02/25/16	06/30/26	250,000	34,722	34,000	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000
Total Schools	, .,-•	.,,==	,	6,311,379	6,113,606	6,007,541	2,364,499	1,479,516		1,263,531	1,190,198	,	978,036

Purpose	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
GENERAL FUND BONDS			ů	•	,	•	,				,		
	Date	Date	Amount	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026
CTF Private Road Repairs	06/26/08	06/15/23	1,607,900	137,896	133,884	128,801	124,521	120,241	115,961	111,548	-	-	
CTF Bridge Repair		· · ·	250,000	29,750	29,000	28,000	27,000	26,000	-	-	-	-	-
CTF Sidewalk Improvements		06/15/21	350,000	41,650	40,600	39,200	37,800	36,400	23,725	22,925	-	-	-
CTF Baxter Neck Road's Neck Road - Private Way			350,000	33,475 5.723	32,725	31,725	30,725 5.198	29,725 4.162	,	,	22,125	21,450	20,750
CTF Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.		09/15/20 09/15/22	39,100 193,200	24,328	5,523 23,528	5,348 22,828	22,228	4,162	- 18,968	- 15,504	-	-	
CTF Advance Refund 6/15/2003 Drainage 1 (i) CTF Private Road Repairs (I)		11/15/23	633,000	24,328	75,500	74,200	72,575	65,700	63,900	62,250	60,750	-	-
CTF Sidewalk Overlays		11/15/23	190,000	23,650	23,150	22,750	22,250	21,650	21,050	15,563	15,188	-	
		11/15/23	190,000	17,125	16,750	11,500	11,250	10,950	10,650	10,375	10,125	-	
CTF Bumps River Bridge Repair CTF Guardrail Replacements		11/15/23	60,000	10,550	10,750	10,100	- 11,250	- 10,950	10,050	- 10,375	10,125	-	
CTF Sidewalk/Guardrail Improvements 1		02/15/20	200,000	46,000	45,200	43,400	41,600	-				-	
CTF Sidewalk/Guardrail Improvements 1		02/15/20	200,000 85,000	22,350	45,200	43,400	15,600	-	-	-	-	-	
CTF Guardrail Improvements (#2015-098)		06/30/36	170,000	22,330	26,000	,	24,400	18,600	- 18,000	- 17,400	16,800	- 16,200	- 15,600
CTF Sidewalk Improvements (#2015-098)		06/30/36	230,000	33,944	33,200	25,200 32,200	,	,		23,200	22,400	21,600	
CTF Road Repairs (#2015-102)	02/25/16		518,000	55,732	51,719	50,319	31,200 48,919	30,200 47,519	29,200 46,119	44,719	43,319	41,919	20,800 40,519
			,	34,388	29,725	,	28,125	27,325	26,525			24,125	,
CTF Road Repairs - Governors Way (#2016-037)	02/25/16	06/30/31	304,000	ļ		28,925		,	,	25,725	24,925	,	23,325
Total Public Ways				620,298	593,754	570,771	543,391	460,100	374,098	349,208	215,631	125,294	120,994
CTF Police Station Construction (I) \$400,000 Adv Refunded 6-15-05	02/17/15	02/15/25	181,650	25,313	23,783	23,130	22,320	21,600	20,880	20,160	19,440	18,720	-
CTF Old Town Hall Phase II (I)		02/15/17	295,000	26,000	-	-	-	-	-	-	-	-	-
CTF Building - Senior Center - Refunded		02/15/19	702,378	82,990	79,790	26,250	-	-	-	-	-	-	-
CTF Beach Facilities Improvements (I) \$270,000 Refunded		02/15/17	195,000	15,600	-	-	-	-	-	-	-	-	
CTF Beach Facilities Improvements (I) \$270,000 Refunded		02/15/22	71,300	2,985	17,985	16,310	15,680	15.120	14.560	-	-	-	-
CTF Senior Center - Garden Level \$457,000 Refunded		02/15/17	252,000	26,000	-			-	-	-	-	-	1
CTF Senior Center - Garden Level \$457,000 Refunded		02/15/27	195,000	7,635	31,635	25,555	24,700	23,940	23,180	22,420	21,660	20,900	20,140
CTF Town Building Repairs & Renovations \$685,000 Refunded		02/15/17	350,000	36,400	-	-	,	-	-	-		-	
CTF Town Building Repairs & Renovations \$685,000 Refunded		02/15/27	317,600	12,470	46,470	44,940	43,410	41,050	39,730	38,410	37,090	30,770	29,650
CTF Bismore Park Visitor Center - CAP		06/15/23	150,000	12,888	12,513	12,038	11,638	11,238	10,838	10,425	-	-	-
CTF Bismore Park Visitor Center		06/15/23	465,000	39,951	38,789	37,316	36,076	34.836	33,596	32.318	-	-	-
CTF Municipal Building Improvements	06/26/08	06/15/28	297,000	7,531	7,344	7,106	6,906	6,706	6,506	6,300	6,088	5,875	5,663
CTF Municipal Facility Improvements		06/15/29	402,500	7,369	7,119	6,994	6,744	6,594	6,444	6,281	6,119	5,944	5,769
CTF Police Facility	06/16/10	06/15/30	508,000	37,844	36,594	35,969	34,719	33,969	33,219	32,406	31,594	30,719	29,844
CTF Building - Town Hall Space - 00-110 Refunded		06/15/21	180,000	23,680	23,080	21,280	20,520	19,760	-	-	-	-	-
CTF Municipal Facility Improvement	06/14/11	06/15/21	300,000	35,700	34,800	33,600	32,400	31,200	-	-	-	-	-
CTF Building - Town Hall Repairs - 01-087 Refunded	06/14/11	06/15/22	100,000	12,260	11,960	11,560	11,160	10,760	9,360	-	-	-	-
CTF Advance Refund 6/15/2003 Building Improvements	04/18/12	09/15/22	96,600	12,164	11,764	11,414	11,114	10,814	10,464	6,732	-	-	-
CTF Advance Refund 6/15/2003 Police Facility Addition	04/18/12	09/15/22	626,900	79,157	76,557	71,229	67,500	65,700	63,600	61,200	-	-	-
CTF Tennis Courts	11/22/13	11/15/23	500,000	59,750	58,500	57,500	56,250	54,750	53,250	51,875	50,625	-	-
CTF US Customs House upgrades	11/22/13	11/15/23	263,000	29,875	29,250	28,750	28,125	27,375	26,625	25,938	25,313	-	-
CTF Osterville Community Building Upgrades	11/22/13	11/15/23	200,000	23,900	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-
CTF Police Station Upgrades	11/22/13	11/15/23	168,000	23,000	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-
CTF Town Hall Interior Upgrades	11/22/13	11/15/23	150,000	17,925	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-
CTF Guyer Barn Upgrades		11/15/23	148,000	17,800	17,425	17,125	16,750	16,300	15,850	15,438	10,125	-	- 1
CTF MEA Facility Upgrades	11/22/13	11/15/23	131,000	17,375	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-
CTF Beach Facility Design	11/22/13	11/15/18	115,000	26,175	20,600	20,200	-	-	-	-	-	-	-
CTF Pearl St Building Upgrades	11/22/13	11/15/23	114,000	11,950	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-
CTF S&G Facility Roof Repairs	11/22/13	11/15/23	103,000	11,950	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-
CTF Lombard Parking & Ballfield Design		11/15/18	101,000	21,100	20,600	20,200	-	-	-	-	-	-	-
CTF West Barnstable Community Building Upgrades		11/15/23	72,000	11,150	10,900	5,750	5,625	5,475	5,325	5,188	5,063	-	- 1
CTF Highway Operations Facility Construction	11/22/13	11/15/23	66,000	11,050	5,850	5,750	5,625	5,475	5,325	5,188	5,063	-	-
CTF Centerville Recreation Building	02/17/15	02/15/35	185,000	15,963	15,763	15,313	14,863	14,463	14,063	13,663	13,263	12,863	12,463
CTF Senior Center - Parking Lot Expansion	02/17/15	02/15/30	290,000	29,525	29,125	28,225	27,325	26,525	25,725	24,925	24,125	23,325	22,525

2017 CIP - Appendix B - Debt Amortization Schedules

Purpose	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
GENERAL FUND BONDS	Date	Date	Amount	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026
CTF Police Facilities	02/17/15	02/15/35	288,000	24,169	23,869	23,194	22,519	21,919	21,319	20,719	20,119	19,519	18,919
CTF Police Station Remodeling (#2015-100)	02/25/16	06/30/36	355,000	31,904	31,444	30,644	29,844	29,044	28,244	27,444	26,644	25,844	25,044
CTF Town Hall Remodeling (#2015-101)	02/25/16	06/30/36	939,000	85,103	79,831	77,831	75,831	73,831	71,831	69,831	62,831	61,031	59,231
CTF Joshuas Pond Recretional Facility (#2015-111)	02/25/16	06/30/31	282,000	31,794	29,194	28,394	27,594	26,794	25,994	25,194	24,394	23,594	22,794
CTF Craigville Beach Bathhouse (#2016-031)	02/25/16	06/30/36	450,000	40,094	39,525	38,525	37,525	36,525	35,525	34,525	33,525	32,525	31,525
Total Public Facilities				1,045,487	970,957	879,290	787,837	759,362	686,652	639,577	504,078	311,628	283,565
CTF Pleasant St. Dock - 1	06/26/08		350,000	29,641	28,779	27,686	26,766	25,846	24,926	23,978	-	-	-
CTF Pleasant St. Dock - 2	06/26/08		350,000	29,641	28,779	27,686	26,766	25,846	24,926	23,978	-	-	-
CTF Boat Ramps - CAP	06/26/08		927,000	79,699	77,374	73,429	70,989	68,549	66,109	63,593	-	-	-
CTF Dredging	06/16/10		419,250	38,375	36,875	36,125	34,625	33,725	32,825	31,850	25,875	-	-
CTF Boat Ramp Renovations	06/14/11		250,000	29,750	29,000	28,000	27,000	26,000	-	-	-	-	-
CTF Dredging East Bay & Blish Point	06/14/11		665,000	77,350	75,400	72,800	70,200	67,600	-	-	-	-	-
CTF Prince Cove/Hayward Rd. Boat Ramp	06/14/11		600,000	55,050	53 <i>,</i> 850	52,250	50,650	49,050	47,450	45,850	44,250	42,900	41,50
CTF East Bay Dredging	11/22/13	11/15/23	600,000	71,700	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-
CTF Hyannis Harbor Bulkhead Construction	11/22/13	11/15/23	142,000	17,525	17,150	16,850	16,475	16,025	10,650	10,375	10,125	-	-
CTF Millway Boat Ramp & Dock Upgrades	11/22/13	11/15/23	133,000	17,375	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-
CTF Blish Point Sand Management	02/17/15	02/15/20	215,000	51,325	50,425	43,400	41,600	-	-	-	-	-	-
CTF Dredge Permitting/Planning	02/17/15	02/15/20	341,000	80,075	78,675	70,525	67,600	-	-	-	-	-	-
CTF Marstons Mills Fish Run Reconstruction	02/17/15	02/15/30	326,000	35,375	34,875	33,750	27,625	26,825	26,025	25,225	24,425	23,625	22,825
CTF Paving: Bay Stree Boat Ramp (#2015-099)	02/25/16	06/30/26	142,000	22,522	20,000	19,400	18,800	18,200	17,600	17,000	16,400	10,800	10,400
CTF Channel Dredging- Barnstable Harbour (#2016-035)	02/25/16	06/30/26	490,000	69,056	67,600	65,600	63,600	61,600	59,600	57,600	55,600	48,600	46,800
Total Waterways				704,459	685,981	653,201	626,521	495,916	384,661	372,073	247,550	125,925	121,525
CTF MWPAT CW-04-31 Pool 11	11/09/07	07/15/20	389,216	33,999	33,999	33,999	33,999	33,999	-	-	-	-	-
CTF Coastal Water Quality Improvements	06/26/08	06/15/18	250,000	26,040	25,140	-	-	-	-	-	-	-	-
CTF Lake & Pond Improvements	06/26/08	06/15/18	250,000	26,040	25,140	-	-	-	-	-	-	-	-
CTF Lake Treatment	06/16/10	06/15/25	275,000	25,575	24,575	24,075	23,075	17,475	17,025	16,538	16,050	15,525	-
CTF Nitrogen Management CW-04-31-A	03/15/11	07/15/20	211,460	23,330	23,330	23,330	23,330	23,330	-	-	-	-	-
CTF Advance Refund 6/15/2003 Drainage 2 (i)	04/18/12	09/15/22	96,700	12,168	11,768	11,418	11,118	10,818	10,468	6,834	-	-	-
CTF Nitrogen Management CW-04-31-B Series 16	05/14/15	07/15/20	157,531	27,804	27,842	27,882	27,922	27,963	-	-	-	-	-
CTF Water Quality Evaluation	11/22/13	11/15/23	230,000	29,325	28,700	28,200	27,575	21,900	21,300	20,750	20,250	-	-
CTF Sewer Expansion Analysis	11/22/13	11/15/18	70,000	15,725	15,350	10,100	-	-	-	-	-	-	-
CTF Hamblin Pond Alum Treatment (#2015-112)	02/25/16	06/30/31	300,000	30,233	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325
Total Water Quality				250,239	245,570	187,929	175,145	162,810	75,318	69,847	61,225	39,650	23,325
TOTAL GENERAL FUND BOND OBLIG	ATIONS			9,172,108	8,837,562	8,517,332	4,708,123	3.430.753	2,963,256	2.762.295	2.254.201	1.646.908	1.560.405

Purpose	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	,
GENERAL FUND BONDS	Date	Date	Amount	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	Balance
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	02/15/07	02/15/17	403,000	-	-	-	-	-	-	-				41,600
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	02/17/15	02/15/26	325,200	-	-									398,440
CTF Land Acquisition - CAP	06/26/08	06/15/23	365,200	-	-	-	-	-	-	-				195,780
CTF Advance Refund 6/15/2002 Land Acquisitions BUTAPS	06/14/11	06/15/20	1,102,000	-	-	-	-	-	-	-				575,850
Total Land Acquisition	•			-	-	-	-	-	-	-	-	-	-	1,211,670
CTF School Facilities Repair (I) \$339,000 Refunded	02/15/07	02/15/17	339,000	-	-	-	-	-	-	-	-	-	-	31,200
CTF BHS Cogeneration	02/15/07	02/15/17	500,000	-	-	-	-	-	-	-	-	-	-	52,000
High School Construction - Refunded	02/15/07	02/15/19	27,486,190	-	-	-	-	-	-	-	-	-	-	10,301,800
Barnstable Middle School - Refunded 2	02/15/07	02/15/20	1,548,520	-	-	-	-	-	-	-	-	-	-	650,450
Barnstable Middle School - Refunded 1	02/15/07	02/15/20	7,071,300	-	-	-	-	-	-	-	-	-	-	2,957,720
CTF School Upgrades 1 (I) \$360,000 Refunded	02/15/07	02/15/17	250,000	-	-	-	-	-	-	-	-	-	-	26,000
CTF School Upgrades 1 (I) \$360,000 Refunded	02/17/15	02/15/22	104,700											121,473
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded		02/15/17	450,000	-	-	-	-	-	-	-	-	-	-	46,800
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	02/17/15	02/15/22	199,700											231,235
CTF School Health & Safety Improvements \$478,000 Refunded	02/15/07	02/15/17	273,000	-	-	-	-	-	-	-	-	-	-	26,000
CTF School Health & Safety Improvements \$478,000 Refunded	02/17/15	02/15/26	193,400	-	-	-	-	-	-	-	-	-	- 1	235,760
CTF MME Roof Replacement (I) \$750,000 Refunded	02/15/07	02/15/17	400,000	-	-	-	-	-	-	-	-	-	-	41,600
CTF MME Roof Replacement (I) \$750,000 Refunded	02/17/15	02/15/26	329,800	-	-									404,822
CTF School Upgrades 2 (I) \$150,000 Refunded	02/15/07	02/15/17	100,000	-	-	-	-	-	-	-	-	-	-	10,400
CTF School Upgrades 2 (I) \$150,000 Refunded	02/17/15	02/15/27	47,400	4,120	-	-								58,656
CTF BHMCS Roof (I) \$910,000 Refunded	02/15/07	02/15/17	460,000	-	-	-	-	-	-	-	-	-	-	46,800
CTF BHMCS Roof (I) \$910,000 Refunded	02/17/15	02/15/27	426,900	42,230	-									529,506
CTF School Facility Improvements 1 (I)		06/15/28	916,600	32,663	31,350	-	-	-	-	-	-	-	-	460,163
CTF School Building Improvements		06/15/30	936,000	52,088	50,288	48,600	46,800	-	-	-	-	-	- 1	809,400
CTF School Facilities Upgrades/Repairs V (I)		06/15/31	884,000	53,138	46,450	44,850	43,250	41,650	-	-	-	-	-	853,863
CTF School Parking Lot (I)		06/15/21	250,000	-	-	-	-	-		-	-	-	- 1	139,750
CTF School Facilities Upgrades/Repairs IV		06/15/21	332,000	-	-	-	-	-	-	-	-	-	-	172,850
CTF School Remolding - Asbestos 00-110 Refunded	<u> </u>	06/15/22	50,000	-	-	-	-	-	-	-	-	-	-	34,150
CTF School Facilities Upgrades/Repairs II		06/15/26	179.000	-	-	-	-	-	-	-	-	-	-	120,700
CTF School Facilities Upgrades/Repairs III	<u> </u>	06/15/26	190.000	-	-	-	-	-	-	-	-	-	- 1	136,850
CTF School Improvement (I)	06/14/11	06/15/26	487.000	-	-	-	-	-	-	-	-	-	-	372,650
HS Addition & Renovation Advance Refund 6/15/2003		09/15/18	58.100	-	-	-	-	-	-	-	-	-	-	29,508
CTF Advance Refund 6/15/2003 School Remodel II	04/18/12	09/15/22	193.400	-	-	-	-	-	-	-	-	-	-	147,540
CTF Advance Refund 6/15/2003 School Remodel I	04/18/12	09/15/22	242,700	-	-	-	-	-	-	-	-	-	-	183,830
CTF School Roof Repairs		11/15/23	600.000	-	-	-	-	-	-	-	-	-	-	531,000
CTF HS Library AC Units		11/15/23	450,000	-	-	-	-	-	-	-	-	-	-	398,250
CTF School Fire & Communications System		11/15/23	200,000	-	-	-	-	-	-	-	-	-	-	177,000
CTF School Computer Network Infrastructure		11/15/23	189.000	-	-	-	-	-	-	-	-	-	-	159,425
CTF Intermediate School roof & Façade Design		11/15/18	100,000	-	-	-	-	-	-	-	-	-	-	61,900
CTF School Hot Water Pump Replacement		11/15/18	85,000	-	-	-	-	-	-	-	-	-	-	46,425
CTF School Gym Bleacher Upgrades		11/15/18	55,000	-	-	-	-	-	-	-	-	-	-	30,950
CTF School Grounds Maintenance Equipment		11/15/18	150,000	-	-		-	-			-	-	-	92,850
CTF School Kitchen equipment		11/15/18	110,000	-	-	-	-	-	-	-	-	-	-	61,900
CTF Early Learning Center Modular Facility		02/15/35	2,000,000	126,125	123.125	120,625	118,000	115,000	112,000	109.000	106,000	103.000		2,504,625
CTF Elementary School Modular Classroom (#2015-115)		06/30/36	3,720,000	236,106	232,406	227,781	223,850	218,300	212,750	207.200	201.650	196,100	190,550	4,933,259
CTF BIS Facade & Roof Improvements (#2015-116)		06/30/36	3,353,000	210,581	207,281	203,156	199,650	194,700	189,750	184,800	179,850	174,900	169,950	4,444,393
CTF BCHMCPS Facade & Roof Improvements (#2015-117)		06/30/26	260,000	- 210,501			-	-	-	- 104,000	-		-	315,311
CTF High School & Middle School Boiler Upgrades (#2015-119)	02/25/16		350,000				_	-			-	-	-	426,611
CTF W Village Elementary A/C Replacement (#2015-120)		06/30/26	250,000				-				-	-	-	304,722
Total Schools	02/25/10	30,30,20	230,000	757,050	690,900	645,013	631,550	569,650	514,500	501,000			360,500	33,722,096
Total Schools				757,050	050,500	045,013	031,350	303,030	514,500	301,000	407,500	474,000	300,300	33,722,090

Purpose	Issue	Maturity	Original	Payments										
GENERAL FUND BONDS	Date	Date Date	Amount	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	Balance
CTF Private Road Repairs	_	06/15/23	1,607,900	-	-			-			F12034	F12035	F12030	872,853
CTF Bridge Repair	06/14/11		250,000							-				139,750
CTF Sidewalk Improvements	06/14/11		350,000				-			-				195,650
CTF Baxter Neck Road's Neck Road - Private Way	06/14/11		350,000							-				269,350
CTF Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.	04/18/12		39,100				-			-				25,954
CTF Advance Refund 6/15/2003 Drainage 1 (i)	04/18/12		193,200	-						-				149,012
CTF Private Road Repairs (I)	11/22/13		633,000	-	-	-	-	-		-				552,000
			,	-	-	-		-		-				,
CTF Sidewalk Overlays		11/15/23	190,000	-	-	-	-	-		-				165,250
CTF Bumps River Bridge Repair	11/22/13		120,000											98,725
CTF Guardrail Replacements	11/22/13		60,000	-	-	-	-	-	-	-				30,950
CTF Sidewalk/Guardrail Improvements 1		02/15/20	200,000	-	-	-	-	-	-	-	-	-		176,200
CTF Sidewalk/Guardrail Improvements 2	02/17/15		85,000	-	-		-	-	-	-	-	-		71,175
CTF Guardrail Improvements (#2015-098)	02/25/16		170,000	-	-	-	-	-	-	-	-	-		204,811
CTF Sidewalk Improvements (#2015-098)		06/30/36	230,000	-	-	-	-	-	-	-	-	-		277,944
CTF Road Repairs (#2015-102)	02/25/16	06/30/31	518,000	39,119	38,419	37,544	31,800	30,900	-	-	-	-		648,582
CTF Road Repairs - Governors Way (#2016-037)	02/25/16	06/30/31	304,000	22,525	22,125	21,625	21,200	20,600	-	-	-	-		381,188
Total Public Ways				61,644	60,544	59,169	53,000	51,500	-	-	-	-	-	4,259,394
CTF Police Station Construction (I) \$400,000 Adv Refunded 6-15-05	02/17/15	02/15/25	181,650	-		-	-	-	-	-				195,347
CTF Old Town Hall Phase II (I)	02/17/15		295.000	-	-	-	-	-	-	-				26.000
CTF Building - Senior Center - Refunded		02/15/17	702.378							-				189,030
CTF Beach Facilities Improvements (I) \$270,000 Refunded	02/15/07		195,000				-		-	-				15,600
CTF Beach Facilities Improvements (1) \$270,000 Refunded	02/15/07		71,300			-	-	-	-	-				82,640
CTF Senior Center - Garden Level \$457,000 Refunded		02/15/22	,			-	-			-				,
CTF Senior Center - Garden Level \$457,000 Refunded	02/15/07		252,000 195,000	- 19,570			-	-	-	-				26,000 241,335
CTF Town Building Repairs & Renovations \$685,000 Refunded	02/17/13		350.000	- 19,570	-	-	-			-				36.400
CTF Town Building Repairs & Renovations \$685,000 Refunded		02/15/17	317.600	27,810		-	-	-	-	-				391,800
	06/26/08		150.000	27,010										,
CTF Bismore Park Visitor Center - CAP CTF Bismore Park Visitor Center	06/26/08		465,000				-	-		-				81,575 252,883
			297,000	5,444						-				
CTF Municipal Building Improvements		06/15/28	402,500	5,444	5,225	5,200	-	-	-	-				76,694 81,550
CTF Municipal Facility Improvements	06/16/10		,		5,388		-	-	-	-				
CTF Police Facility	06/16/10		508,000	28,938	27,938	27,000	26,000			-				446,750
CTF Building - Town Hall Space - 00-110 Refunded	06/14/11		180,000	-	-	-	-	-	-	-				108,320
CTF Municipal Facility Improvement	06/14/11		300,000	-	-	-	-	-	-	-				167,700
CTF Building - Town Hall Repairs - 01-087 Refunded	06/14/11		100,000	-	-	-	-	-	-	-				67,060
CTF Advance Refund 6/15/2003 Building Improvements		09/15/22	96,600	-	-	-	-	-	-	-				74,466
CTF Advance Refund 6/15/2003 Police Facility Addition	04/18/12		626,900	-	-	-	-	-	-	-				484,943
CTF Tennis Courts	11/22/13		500,000	-	-	-	-	-	-	-	<u> </u>		┝───┤	442,500
CTF US Customs House upgrades		11/15/23	263,000	-	-	-	-	-	-	-	ļ			221,250
CTF Osterville Community Building Upgrades	11/22/13		200,000	-	-	-	-	-	-	-				177,000
CTF Police Station Upgrades	11/22/13	· ·	168,000	-	-	-	-	-	-	-	ļ			137,825
CTF Town Hall Interior Upgrades		11/15/23	150,000	•	-			•		-	L			132,750
CTF Guyer Barn Upgrades	11/22/13	, , , ,	148,000		-	-	-	-	-	-	<u> </u>			126,813
CTF MEA Facility Upgrades	11/22/13		131,000	-	-	-	-	-	-	-	L			109,500
CTF Beach Facility Design		11/15/18	115,000		-	-	-	-	-	-				66,975
CTF Pearl St Building Upgrades	11/22/13		114,000	-	-	-	-	-	-	-				88,500
CTF S&G Facility Roof Repairs	11/22/13		103,000	-	-	-	-	-	-	-				88,500
CTF Lombard Parking & Ballfield Design		11/15/18	101,000	-	-	-	-	-	-	-	ļ	ļ		61,900
CTF West Barnstable Community Building Upgrades		11/15/23	72,000	-	-	-	-	-	-	-	L			54,475
CTF Highway Operations Facility Construction	11/22/13		66,000	-	-	-	-	-	-	-				49,325
CTF Centerville Recreation Building	02/17/15		185,000	12,163	11,863	11,613	11,350	11,050	10,750	5,450	5,300	5,150		227,363
CTF Senior Center - Parking Lot Expansion	02/17/15	02/15/30	290,000	21,925	21,325	20,825	10,300	-	-	-	-	-		335,725

Purpose	Issue	Maturity	Original	Payments	Payments	Payments								
GENERAL FUND BONDS	Date	Date	Amount	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	Balance
CTF Police Facilities	02/17/15	02/15/35	288,000	18,469	18,019	17,644	17,250	16,800	16,350	10,900	10,600	10,300		352,594
CTF Police Station Remodeling (#2015-100)	02/25/16	06/30/36	355,000	24,244	18,844	18,469	18,150	17,700	17,250	16,800	16,350	15,900	15,450	465,254
CTF Town Hall Remodeling (#2015-101)	02/25/16	06/30/36	939,000	57,431	56,531	55,406	54,450	53,100	51,750	50,400	49,050	47,700	46,350	1,239,353
CTF Joshuas Pond Recretional Facility (#2015-111)	02/25/16	06/30/31	282,000	21,994	16,594	16,219	15,900	15,450	-	•	-	-	-	351,894
CTF Craigville Beach Bathhouse (#2016-031)	02/25/16	06/30/36	450,000	25,525	25,125	24,625	24,200	23,600	23,000	22,400	21,800	21,200	20,600	591,894
Total Public Facilities				269,099	206,850	197,000	177,600	137,700	119,100	105,950	103,100	100,250	82,400	8,367,480
CTF Pleasant St. Dock - 1	06/26/08	06/15/23	350,000	-	-	-	-	-	-	-				187,623
CTF Pleasant St. Dock - 2	06/26/08	06/15/23	350,000	-	-	-	-	-	-	-				187,623
CTF Boat Ramps - CAP	06/26/08	06/15/23	927,000	-	-	-	-	-	-	-				499,740
CTF Dredging	06/16/10	06/15/24	419,250	-	-	-	-	-	-	-				270,275
CTF Boat Ramp Renovations	06/14/11	06/15/21	250,000	-	-	-	-	-	-	-				139,750
CTF Dredging East Bay & Blish Point	06/14/11	06/15/21	665,000	-	-	-	-	-	-	-				363,350
CTF Prince Cove/Hayward Rd. Boat Ramp	06/14/11	06/15/26	600,000	-	-	-	-	-	-	-				482,800
CTF East Bay Dredging	11/22/13	11/15/23	600,000	-	-	-	-	-	-	-				531,000
CTF Hyannis Harbor Bulkhead Construction	11/22/13	11/15/23	142,000	-	-	-	-	-	-	-				115,175
CTF Millway Boat Ramp & Dock Upgrades	11/22/13	11/15/23	133,000	-	-	-	-	-	-	-				109,500
CTF Blish Point Sand Management	02/17/15	02/15/20	215,000	-	-	-	-	-	-	-	-	-		186,750
CTF Dredge Permitting/Planning	02/17/15	02/15/20	341,000	-	-	-	-	-	-	-	-	-		296,875
CTF Marstons Mills Fish Run Reconstruction	02/17/15	02/15/30	326,000	22,225	21,625	21,125	20,600	-	-	-	-	-		366,150
CTF Paving: Bay Stree Boat Ramp (#2015-099)	02/25/16	06/30/26	142,000	-	-	-	-	-	-	-	-	-		171,122
CTF Channel Dredging-Barnstable Harbour (#2016-035)	02/25/16	06/30/26	490,000	-	-	-	-	-	-	-	-	-		595,656
Total Waterways				22,225	21,625	21,125	20,600	-	-	-	-	-	-	4,503,388
CTF MWPAT CW-04-31 Pool 11	11/09/07	07/15/20	389,216	-	-	-	-	-	-	-				169,997
CTF Coastal Water Quality Improvements	06/26/08	06/15/18	250,000	-	-	-	-	-	-	-				51,180
CTF Lake & Pond Improvements	06/26/08	06/15/18	250,000	-	-	-	-	-	-	-				51,180
CTF Lake Treatment	06/16/10	06/15/25	275,000	-	-	-	-	-	-	-				179,913
CTF Nitrogen Management CW-04-31-A	03/15/11	07/15/20	211,460	-	-	-	-	-	-	-				116,652
CTF Advance Refund 6/15/2003 Drainage 2 (i)	04/18/12	09/15/22	96,700	-	-	-	-	-	-	-				74,592
CTF Nitrogen Management CW-04-31-B Series 16	05/14/15	07/15/20	157,531	-	-	-	-	-	-	-				139,414
CTF Water Quality Evaluation	11/22/13	11/15/23	230,000	-	-	-	-	-	-	-				198,000
CTF Sewer Expansion Analysis	11/22/13	11/15/18	70,000	-	-	-	-	-	-	-				41,175
CTF Hamblin Pond Alum Treatment (#2015-112)	02/25/16	06/30/31	300,000	22,525	22,125	21,625	21,200	20,600	-	-	-	-	-	377,033
Total Water Quality	22,525	22,125	21,625	21,200	20,600	-	-	-	-	-	1,399,134			
TOTAL GENERAL FUND BOND OBLIG	TOTAL GENERAL FUND BOND OBLIGATIONS					943,931	903,950	779,450	633,600	606,950	590,600	574,250	442,900	53,463,161

Purpose	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
ENTERPRISE FUND BONDS	Date	Date	Amount	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026
Airport (O)	06/14/11	06/15/31	730,000	52,700	51,800	50,600	54,400	53,000	51,600	55,200	53,600	52,250	50,850
Total Airport Fund Bonds			•	52,700	51,800	50,600	54,400	53,000	51,600	55,200	53,600	52,250	50,850
Hyannis Golf Course Equipment	02/15/07	02/15/17	550,000	67,600	-	-	-	-	-	-	-	-	-
Hyannis Golf Course Acquisition \$3,900,000 Refunded	02/15/07	02/15/17	1,810,000	223,600	-	-	-	-	-	-	-	-	-
Hyannis Golf Course Acquisition \$3,900,000 Refunded	02/17/15	02/15/25	1,951,500	80,200	292,200	290,660	289,760	289,600	289,080	288,200	291,960	290,160	-
Golf Course Maintenance Equipment	02/17/15	02/15/20	200,000	46,000	45,200	43,400	41,600	-	-	-	-	-	-
Olde Barnstable Building Improvements (#2015-105)	02/25/16	06/30/26	174,000	20,767	21,400	20,800	20,200	19,600	24,000	23,200	22,400	21,600	20,800
Hyannis Building Improvements (#2015-106)	02/25/16	06/30/26	140,000	15,444	15,200	19,800	19,200	18,600	18,000	17,400	16,800	16,200	15,600
Total Golf Course				453,611	374,000	374,660	370,760	327,800	331,080	328,800	331,160	327,960	36,400
Sewer 91-39, Series 3	08/01/01	02/01/17	948,689	76,735	-	-	-	-	-	-	-	-	-
Sewer 91-39, Series 3	08/01/01	02/01/17	(subsidy)	(25,504)	-	-	-	-	-	-	-	-	-
Sewer 96-28, Series 3	08/01/01	02/01/17	1,484,449	120,071	-	-	-	-	-	-	-	-	-
Sewer 96-28, Series 3	08/01/01	02/01/17	(subsidy)	(39,907)	-	-	-	-	-	-	-	-	
Sewer 98-27, Series 5	08/25/04	08/01/19	329,295	30,863	29,398	28,194	26,961	-	-	-	-	-	-
Sewer 98-27	08/25/04	08/01/19	(subsidy)	(10,664)	(9,985)	(9,441)	(8,491)	-	-	-	-	-	-
Sewer 98-42, Series 5	08/25/04	08/01/19	216,429	17,913	17,061	16,357	20,550	-	-	-	-	-	-
Sewer 98-42, Series 5	08/25/04	08/01/19	(subsidy)	(7,092)	(6,779)	(1,385)	(550)	-	-	-	-	-	-
Sewer 98-44, Series 5	08/25/04	08/01/19	112,262	9,685	9,936	9,530	9,113	-	-	-	-	-	-
Sewer 98-44, Series 5	08/25/04	08/01/19	(subsidy)	(3,640)	(3,414)	(3,229)	(2,908)	-	-	-	-	-	-
Sewer 98-46, Series 5	08/25/04	08/01/19	1,398,265	124,326	118,418	118,436	118,163	-	-	-	-	-	-
Sewer 98-46, Series 5	08/25/04	08/01/19	(subsidy)	(45,295)	(42,564)	(40,301)	(36,199)	-	-	-	-	-	-
Shallow Well Injection - CW-00-60 - Pool 8	08/25/04	08/01/22	436,370	32,549	31,771	31,305	33,983	33,040	32,250	30,750	-	-	-
Shallow Well Injection - CW-00-60 - Pool 8	08/25/04	08/01/22	(subsidy)	(12,156)	(11,852)	(11,704)	(10,636)	(10,267)	(9,974)	(9 <i>,</i> 028)	-	-	-
Sewer 98-44A	12/14/06		1,582,178	133,084	132,061	126,434	126,831	126,588	121,424	120,681	115,000	-	-
Sewer 98-44A		08/01/23	(subsidy)	(51,695)	(49,202)	(46,919)	(45,096)	(42,911)	(40,775)	(38,360)	(34,430)	-	-
Sewer 98-49A	12/14/06		556,458	48,410	46,257	44,287	42,747	45,863	43,989	41,976	40,000	-	-
Sewer 98-49A		08/01/23	(subsidy)	(18,168)	(17,277)	(16,478)	(15,872)	(15,082)	(14,307)	(13,463)	(12,096)	-	-
Sewer Collection Expansion	02/15/07		640,000	62,400	-	-	-	-	-	-	-	-	-
Waste Water Treament Plant Sewer Turbine Generator	06/26/08		570,000	36,816	35,916	33,776	32,856	31,936	31,016	30,068	34,090	32,900	31,710
MWPAT CW-04-35	12/15/09		4,938,114	326,669	326,668	326,668	326,669	326,668	326,668	326,668	326,668	326,668	326,668
Sewer 05-28 Restructured	03/15/11		629,403	41,636	41,636	41,636	41,636	41,637	41,637	41,636	41,637	41,637	41,637
Sewer (I)	06/14/11		300,000	35,700	34,800	33,600	32,400	31,200	-	-	-	-	-
Sewer CW-04-35A Pool 13		07/15/27	1,469,137	107,329	107,318	107,307	107,295	107,284	107,272	107,259	107,247	107,234	107,221
Rehab Clarifiers (#2015-091)		06/30/36	1,000,000	82,873	81,813	79,813	77,813	75,813	73,813	71,813	69,813	67,813	65,813
Pump Station/Sewer Main Const (#2009-132)	02/25/16	06/30/21	318,000	80,367	75,000	72,400	64,800	62,400	-	-	-	-	-
Total Sewer Enterprise Fund				1,153,307	946,981	940,285	942,063	814,169	713,011	709,999	687,928	576,251	573,048
Solid Waste Landfill Closure - 98-24, Series 4		08/01/18		480,765	464,424	465,350	-	-	-	-	-	-	-
Solid Waste Landfill Closure - 98-24, Series 4		08/01/18		(153,957)	(140,492)	(129,348)	-	-	-	-	-	-	-
Solid Waste Facility (I) \$630,000 Refunded	02/15/07		330,000	31,200	-	-	-	-	-	-	-	-	-
Solid Waste Facility (I) \$630,000 Refunded	02/17/15		284,900	11,126	40,026	38,825	37,520	36,360	35,200	33,040	31,920	30,800	29,680
Advance Refund 6/15/2003 Transfer Station Improvements	04/18/12	09/15/22	241,500	30,410	29,410	28,535	27,785	27,035	22,240	20,910	-	-	-
Total Solid Waste Fund				399,544	393,367	403,362	65,305	63,395	57,440	53,950	31,920	30,800	29,680
Water Co. (Level Debt) (O) \$10,000,000 Refunded		02/15/17	3,990,000	494,000	-	-	-	-	-	-	-	-	-
Water Co. (Level Debt) (O) \$10,000,000 Refunded	02/17/15		5,704,800	219,756	689,556	691,615	690,430	693,870	691,350	692,070	691,870	689,750	692,750
MWPAT DWS-09-02		07/15/30	2,788,911	169,185	169,184	169,185	169,184	169,184	169,185	169,184	169,184	169,185	169,184
DW-09-02 Series 16	05/14/15		533,117	34,973	35,010	35,049	35,089	35,129	35,170	35,213	35,256	35,300	35,346
DWP-11-09 Series 17A	05/14/15		793,438	52,422	52,486	52,552	52,620	52,689	52,759	52,831	52,904	52,980	53,057
DWP-11-10 Series 17A	05/22/13	01/15/33	560.761	34.019	34.062	34,104	34.148	34,193	34,238	34,285	34,332	34,382	34,431

2017 CIP - Appendix B - Debt Amortization Schedules

Purpose	Issue	Maturity	Original	Payments	Payments								
ENTERPRISE FUND BONDS	Date	Date	Amount	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026
Water Main Loop	02/17/15	02/15/35	540,000	47,438	46,838	45,488	44,138	42,938	41,738	40,538	39,338	38,138	36,938
Water Main Replacement (#2010-097)	02/25/16	06/30/21	380,000	94,778	87,000	84,000	81,000	78,000	-	-	-	-	-
Pipe Replacement Upgrade FY17 (#2015-085)	02/25/16	06/30/36	900,000	74,586	73,631	71,831	70,031	68,231	66,431	64,631	62,831	61,031	59,231
Paint/Repair Mary Dunn 2 (#2015-087)	02/25/16	06/30/21	615,000	148,917	144,600	139,600	129,600	124,800	-	-	-	-	-
Total Water Enterprise Fund				1,370,073	1,332,366	1,323,424	1,306,240	1,299,033	1,090,872	1,088,752	1,085,716	1,080,765	1,080,936
CTF Marina Bulkhead Repair I	06/14/11	06/15/30	725,000	60,031	58,831	57,231	55,631	54,031	52,431	50,831	44,231	43,050	41,825
Marina Bulkhead Repair II	06/14/11	06/15/30	525,000	41,050	40,300	39,300	38,300	37,300	41,300	40,100	38,900	37,888	36,838
Advance Refund 6/14/2004 Prince Cove Marina Acquisition	04/18/12		864,000	121,370	112,470	109,145	105,310	98,550	95,400	91,800	-	-	-
Gateway Marina Dredging (#2015-108)	02/25/16	06/30/26	280,000	40,889	40,000	38,800	37,600	36,400	35,200	29,000	28,000	27,000	26,000
Pince Cover Marina Bulkhead (#2015-109)	02/25/16	06/30/36	570,000	48,849	48,188	46,988	45,788	44,588	43,388	42,188	40,988	39,788	38,588
Hyannis Harbour Bulkhead (#2015-110)	02/25/16	06/30/21	158,000	44,144	34,800	33,600	32,400	31,200	-	-	-	-	-
Total Marina Enterprise Fund	•			356,334	334,589	325,064	315,029	302,069	267,719	253,919	152,119	147,725	143,250
Constants at December 1 access 11	06 14 4 14 4	06/45/26	04 000	7.000	6.040	6 740	6 540	6.240	6 110	5.04.0	5 74.0	5 550	40.375
Sandy Neck Beach House II	06/14/11	06/15/26 06/15/31	81,000 966,491	7,069 70,206	6,919 69,006	6,719 72,406	6,519 70,606	6,319 68,806	6,119 72,006	5,919 70,006	5,719 68,006	5,550 71,319	10,375
Sandy Neck Beach House I		· ·	,	,	,	,	,	,		,	,	,	69,394
Sandy Neck Beach House III	06/14/11	06/15/31	217,509	16,556	16,256	15,856	15,456	15,056	14,656	14,256	13,856	13,519	13,169
Total Sandy Neck Enterprise Fund	1			93,831	92,181	94,981	92,581	90,181	92,781	90,181	87,581	90,388	92,938
CTF HYCC 1 (I) \$1,000,000 Refunded	02/15/07	02/15/17	500,000	52,000	-	-	-	-	-	-	-	-	-
CTF HYCC 1 (I) \$1,000,000 Refunded	02/17/15	02/15/27	474,900	18,546	66,446	64,390	62,230	60,310	58,390	56,470	53,550	51,670	49,790
CTF HYCC 2 (I) \$8,000,000 Refunded	02/15/07	02/15/17	4,000,000	416,000	-	-	-	-	-	-	-	-	-
CTF HYCC 2 (I) \$8,000,000 Refunded	02/17/15	02/15/27	3,794,400	148,190	535,190	515,775	495,450	480,170	463,890	447,650	430,450	413,330	396,290
CTF HYCC 3 (I) \$1,600,000 Refunded	02/15/07	02/15/17	800,000	83,200	-	-	-	-	-	-	-	-	-
CTF HYCC 3 (I) \$1,600,000 Refunded	02/17/15	02/15/27	759,000	29,645	107,645	103,135	98,670	95,630	92,590	89,550	86,510	82,470	79,470
CTF HYCC 4	06/26/08	06/15/28	6,765,000	508,895	496,220	480,165	466,645	453,125	439,605	425,663	410,298	395,975	381,653
Total HYCC Enterprise Fund				1,256,476	1,205,501	1,163,465	1,122,995	1,089,235	1,054,475	1,019,333	980,808	943,445	907,203
Land Acquisition - 2004-105 Bonehill \$200k Refunded	02/17/15	02/15/25	90,850	12,143	11,813	11,565	11,160	10,800	10,440	10,080	9,720	9,360	-
Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded		02/15/25	73,600	12,432	10,832	10,845	11,440	11,040	4,640	4,480	4,320	4,160	-
Land Acquisition - Hyannis Golf \$5,500,000 Refunded		02/15/25	2,496,300	338,981	328,741	321,835	308,540	301,580	286,500	277,620	266,700	255,320	-
Land Acquisition - Archibald \$500,000 Refunded	02/15/07	02/15/17	275,000	26,000	-	-	-	-	-	-	-	-	-
Land Acquisition - Archibald \$500,000 Refunded	02/17/15		212,100	8,490	32,490	31,410	30,330	29,370	28,410	26,450	25,530	24,610	23,690
Town Hall Renovations	06/16/10	06/15/30	1,332,520	98,394	95,144	93,519	90,269	88,319	86,369	84,256	82,144	79,869	77,594
Land Acquisition 1 Adv Ref 6/15/2002	06/14/11	06/15/22	7,065,000	893,510	856,160	817,960	684,120	624,480	526,240	-	-	-	-
Advance Refund 6/15/2003 Land Acquisitions	04/18/12		964,600	116,834	113,034	109,709	106,859	104,009	100,684	96,492	-	-	-
Advance Refund 6/15/2004 Landbank Acquisitions3	04/18/12	09/15/22	5,385,600	747,584	713,224	682,234	650,624	623,374	597,544	567,732	-	-	-
Advance Refund 6/15/2004 Landbank Acquisitions 2	04/18/12	09/15/22	227,300	30,750	29,750	28,875	28,125	27,375	26,500	25,500	-	-	-
Total Community Preservation Fu	nd			2,285,118	2,191,188	2,107,952	1,921,467	1,820,347	1,667,327	1,092,610	388,414	373,319	101,284
Title V - Phase I - 97-1131 Series 6-	07/25/02	08/01/20	197,403	12,944	12,359	11,774	11,209	10,468	-	-	-		-
Title V - Phase I - 97-1131 Series 6	07/01/04		190,580	13,236	12,555	12,239	11,205	11,242	10,969	10,459	-		-
Title V - Phase III - Pool 11 T5-97-1131-2	10/31/05	07/15/25	200,000	10,000	10,000	10,000	10,000	10,000	10,000	10,400	10,000	10,000	10,000
Title V - Phase IV - Pool 11 T5-97-1131-3	10/31/05		200,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Title V - Phase V - Pool 12 97-1131-4D	12/14/06	07/15/26	200,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total Title V				56,180	55,096	54,013	52,950	51,710	40,969	40,459	30,000	30,000	30,000
MWPAT CWS-09-07	07/08/10	07/15/30	3,285,646	199,318	199,318	199,318	199,318	199,318	199,318	199,318	199,318	199,318	199,318
Sewer CWS-09-07-A Series 16	05/14/15	07/15/32	4,592,367	301,256	301,583	301,917	302,260	302,608	302,965	303,329	303,701	304,082	304,471
Total Sewer Construction Trust Fu	nd			500,573	500,902	501,235	501,578	501,926	502,283	502,647	503,019	503,400	503,788
TOTAL ENTERPRISE FUND BOND OBLIG	TIONS			7,977,746	7,477,971	7,339,041	6,745,367	6,412,865	5,869,556	5,235,849	4,332,264	4,156,302	3,549,377
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Purpose	Issue	Maturity	Original	Payments										
ENTERPRISE FUND BONDS	Date	Date	Amount	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	
Airport (O)		06/15/31	730,000	54,350	52,663	50,863	54,063	52,063	F12032	F12033	F12034	FT2035	FT2036	790,000
Total Airport Fund Bonds	00/14/11	00/15/31	730,000	54,350	52,663	50,863	54,063	52,063	-	-				790,000
				54,550	52,005	50,805	54,005	52,005	-	-	-		-	790,000
Hyannis Golf Course Equipment	02/15/07	02/15/17	550.000				-	-	-	-				67,600
Hyannis Golf Course Equipment Hyannis Golf Course Acquisition \$3,900,000 Refunded		02/15/17	1.810.000	-			-							223,600
Hyannis Golf Course Acquisition \$3,900,000 Refunded		02/15/25	1,951,500		-					-				2,401,820
Golf Course Maintenance Equipment		02/15/20	200,000	-				-	-			· .		176,200
Olde Barnstable Building Improvements (#2015-105)		06/30/26	174,000	-					-	-	-			214,767
Hyannis Building Improvements (#2015-106)		06/30/26	140,000	-		-	-	-	-	-				172,244
Total Golf Course	02/20/20	00/00/20	110,000	-			-	-	-	-	-			3,256,231
														5,250,251
Sewer 91-39. Series 3	08/01/01	02/01/17	948.689	-			-	-	-	-				76,735
Sewer 91-39, Series 3		02/01/17	(subsidy)	-	-		_	_	-	_				(25,504)
Sewer 96-28, Series 3		02/01/17	1,484,449	-			-	-	-	-				120,071
Sewer 96-28, Series 3		02/01/17	(subsidy)	-	-		-	-	-	-		1		(39,907)
Sewer 98-27, Series 5		08/01/19	329,295	-	-		-	-	-	-		1		115,416
Sewer 98-27		08/01/19	(subsidy)	-	-		-	-	-	-				(38,581)
Sewer 98-42, Series 5		08/01/19	216,429	-	-	-	-	-	-	-				71,881
Sewer 98-42, Series 5		08/01/19	(subsidy)	-	-	-	-	-	-	-				(15,806)
Sewer 98-44, Series 5	· · ·	08/01/19	112,262	-	-	-	-	-	-	-				38,264
Sewer 98-44, Series 5	08/25/04	08/01/19	(subsidy)	-	-	-	-	-	-	-				(13,191)
Sewer 98-46, Series 5		08/01/19	1,398,265	-	-	-	-	-	-	-				479,342
Sewer 98-46, Series 5	08/25/04	08/01/19	(subsidy)	-	-	-	-	-	-	-				(164,359)
Shallow Well Injection - CW-00-60 - Pool 8	08/25/04	08/01/22	436,370	-	-	-	-	-	-	-				225,647
Shallow Well Injection - CW-00-60 - Pool 8	08/25/04	08/01/22	(subsidy)	-	-	-	-	-	-	-				(75,617)
Sewer 98-44A	12/14/06	08/01/23	1,582,178	-	-	-	-	-	-	-				1,002,102
Sewer 98-44A	12/14/06	08/01/23	(subsidy)	-	-	-	-	-	-	-				(349,389)
Sewer 98-49A	12/14/06	08/01/23	556,458	-	-	-	-	-	-	-				353,530
Sewer 98-49A	12/14/06	08/01/23	(subsidy)	-	-	-	-	-	-	-				(122,744)
Sewer Collection Expansion	02/15/07	02/15/17	640,000	-	-	-	-	-	-	-				62,400
Waste Water Treament Plant Sewer Turbine Generator	06/26/08	06/15/28	570,000	30,485	29,260	-	-	-	-	-				390,830
MWPATCW-04-35	12/15/09	07/15/27	4,938,114	326,668	326,668	-	-	-	-	-				3,920,019
Sewer 05-28 Restructured	03/15/11	07/15/28	629,403	41,636	41,637	41,636	-	-	-	-				541,275
Sewer (I)		06/15/21	300,000	-	-	-	-	-	-	-				167,700
Sewer CW-04-35A Pool 13		07/15/27	1,469,137	107,207	107,193	-	-	-	-	-				1,287,165
Rehab Clarifiers (#2015-091)	02/25/16		1,000,000	63,813	62,813	61,563	60,500	59,000	57,500	56,000	54,500	53,000	51,500	1,327,373
Pump Station/Sewer Main Const (#2009-132)	02/25/16	06/30/21	318,000	-	-	-	-	-	-	-	-	-	-	354,967
Total Sewer Enterprise Fund				569,809	567,570	103,199	60,500	59,000	57,500	56,000	54,500	53,000	51,500	9,689,620
Solid Waste Landfill Closure - 98-24, Series 4		08/01/18	5,166,301	-	-	-	-	-	-	-				1,410,539
Solid Waste Landfill Closure - 98-24, Series 4		08/01/18	(subsidy)	-	-	-	-	-	-	-				(423,797)
Solid Waste Facility (I) \$630,000 Refunded		02/15/17	330,000	-	-	-	-	-	-	-				31,200
Solid Waste Facility (I) \$630,000 Refunded		02/15/27	284,900	28,840	-									353,336
Advance Refund 6/15/2003 Transfer Station Improvements	04/18/12	09/15/22	241,500	-	-	-	-	-	-	-		ļ		186,325
Total Solid Waste Fund				28,840	-	-	-	-	-	-	-	-	-	1,557,603
Water Co. (Level Debt) (0) \$10,000,000 Refunded		02/15/17	3,990,000	-	-	-	-	-	-	-				494,000
Water Co. (Level Debt) (O) \$10,000,000 Refunded		02/15/27	5,704,800	692,160	-	-	-	-	-	-	-	-		7,135,177
MWPAT DWS-09-02		07/15/30	2,788,911	169,184	169,184	169,184	169,184	169,184	-	-				2,537,765
DW-09-02 Series 16		07/15/32	533,117	35,391	35,439	35,487	35,536	35,586	35,637	35,689	-	L		600,297
DWP-11-09 Series 17A		01/15/33	793,438	53,135	53,215	53,298	53,381	53,466	53,553	53,643	-	-		900,993
DWP-11-10 Series 17A	05/22/13	01/15/33	560,761	34,482	34,534	34,587	34,641	34,698	34,754	34,812				584,700

Purpose	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	
ENTERPRISE FUND BONDS	Date	Date	Amount	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	Balance
Water Main Loop	02/17/15	02/15/35	540,000	36,038	35,138	34,388	23,600	23,000	22,400	21,800	21,200	20,600		661,68
Water Main Replacement (#2010-097)	02/25/16	06/30/21	380,000	-	-	-	-		-	-	-	-		424,7
Pipe Replacement Upgrade FY17 (#2015-085)	06/30/36	900,000	57,431	56,531	55,406	54,450	53,100	51,750	50,400	49,050	47,700	46,350	1,194,6	
Paint/Repair Mary Dunn 2 (#2015-087)	02/25/16	06/30/21	615,000	-	-	-	-	-	-	-	-	-	-	687,5
Total Water Enterprise Fund				1,077,821	384,041	382,350	370,792	369,033	198,094	196,344	70,250	68,300	46,350	15,221,5
CTF Marina Bulkhead Repair I	06/14/11	06/15/30	725,000	40,513	39,200	37,800	36,400	-	-	-	-			672,0
Marina Bulkhead Repair II	06/14/11	06/15/30	525,000	40,713	39,400	38,000	41,600	-	-	-				550,9
Advance Refund 6/14/2004 Prince Cove Marina Acquisition	04/18/12	09/15/22	864,000	-	-	-	-	-	-	-				734,0
Gateway Marina Dredging (#2015-108)	02/25/16	06/30/26	280,000	-	-	-	-	-	-	-				338,8
Pince Cover Marina Bulkhead (#2015-109)	02/25/16	06/30/36	570,000	37,388	36,788	36,038	35,400	29,500	28,750	28,000	27,250	26,500	25,750	750,6
Hvannis Harbour Bulkhead (#2015-110)	02/25/16		158,000	-	-	-	-	-	-	-	-	· ·	-	176,1
Total Marina Enterprise Fund	- , -, -	/ /	,	118,613	115,388	111,838	113,400	29,500	28,750	28,000	27,250	26,500	25,750	3,222,8
lotar Marina Enterprise Fund				110,015	115,500	111,000	115,400	25,500	20,750	20,000	27,250	20,500	23,750	3,222,0
Sandy Neck Beach House II	06/14/11	06/15/26	81,000	-			_		-	-				67,2
Sandy Neck Beach House I	06/14/11		966,491	72,331	- 70,081	67,681	- 70,281	67,681	-					1,049,8
Sandy Neck Beach House III	06/14/11		217,509	12,794	17,419	16,819	16,219	15,619						227,5
•		00/13/31	217,509	85,125	87,500	84,500	86,500	83,300	-		-			1,344,5
Total Sandy Neck Enterprise Fun	u			65,125	87,500	64,500	80,500	65,500	-	-	-	-	-	1,544,5
	02/45/07	02/45/47	500.000											53.0
CTF HYCC 1 (I) \$1,000,000 Refunded	02/15/07		500,000	-	-	-	-	-	-	-				52,0
CTF HYCC 1 (I) \$1,000,000 Refunded	02/17/15		474,900	47,380	•	-								589,1
CTF HYCC 2 (I) \$8,000,000 Refunded	02/15/07		4,000,000	-	-	-	-	-	-	-				416,0
CTF HYCC 2 (I) \$8,000,000 Refunded	02/17/15		3,794,400	380,070	-	-	-	-	-	-				4,706,4
CTF HYCC 3 (I) \$1,600,000 Refunded	02/15/07		800,000	-	-	-	-	-	-	-				83,2
CTF HYCC 3 (I) \$1,600,000 Refunded	02/17/15		759,000	76,220	-	-								941,5
CTF HYCC 4	06/26/08	06/15/28	6,765,000	366,909	352,165	-	-	-	-	-				5,177,3
Total HYCC Enterprise Fund				870,579	352,165	-	-	-	-	-	-	-	-	11,965,6
			_											
Land Acquisition - 2004-105 Bonehill \$200k Refunded	02/17/15	02/15/25	90,850	-	-	-	-	-	-	-				97,0
Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded	02/17/15	02/15/25	73,600	-	-	-	-	-	-	-				74,1
Land Acquisition - Hyannis Golf \$5,500,000 Refunded	02/17/15	02/15/25	2,496,300	-	-	-	-	-	-	-				2,685,8
Land Acquisition - Archibald \$500,000 Refunded	02/15/07	02/15/17	275,000	-	-	-	-	-	-	-				26,0
Land Acquisition - Archibald \$500,000 Refunded	02/17/15	02/15/26	212,100	-	-	-	-							260,7
Town Hall Renovations	06/16/10	06/15/30	1,332,520	75,238	72,638	70,200	67,600	-	-	-				1,161,5
Land Acquisition 1 Adv Ref6/15/2002	06/14/11	06/15/22	7,065,000	-	-	-	-	-	-	-				4,402,4
Advance Refund 6/15/2003 Land Acquisitions	04/18/12	09/15/22	964,600	-	-	-	-	-	-	-				747,6
Advance Refund 6/15/2004 Landbank Acquisitions3	04/18/12	09/15/22	5,385,600	-	-	-	-	-	-	-				4,582,3
Advance Refund 6/15/2004 Landbank Acquisitions 2	04/18/12	09/15/22	227,300	-	-	-	-	-	-	-				196,8
Total Community Preservation Fu	nd			75,238	72,638	70,200	67,600	-	-	-	-	-	-	14,234,7
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Title V - Phase I - 97-1131 Series 6-	07/25/02	08/01/20	197,403	-	-		-		-	-				58,7
Title V - Phase I - 97-1131 Series 6	07/01/04		190,580	-	-	-	-	-	-	-				82,6
Title V - Phase III - Pool 11 T5-97-1131-2		07/15/25	200,000	-	-	-	-	-	-	-		<u> </u>		100,0
		07/15/25	200,000	-	-	-	-		-	-		<u> </u>		100,0
			200,000		-			-	-	_				110,0
Title V - Phase IV - Pool 11 T5-97-1131-3	· · ·	07/15/26	200.000	10.000										451,3
Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase V - Pool 12 97-1131-4D	· · ·	07/15/26	200,000	10,000		_	-	_	-	-	-	_		431,3
	· · ·	07/15/26	200,000	10,000	-	-	-	-	-	-	-	-	-	
Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase V - Pool 12 97-1131-4D Total Title V	12/14/06			10,000	-		-		-		-	-	-	2 0 80 7
Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase V - Pool 12 97-1131-4D Total Title V MWPAT CWS-09-07	12/14/06 07/08/10	07/15/30	3,285,646	10,000 199,318	- 199,318	199,318	- 199,318 206,111	199,318	-	-	-	-	-	
Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase V - Pool 12 97-1131-4D Total Title V MWPAT CWS-09-07 Sewer CWS-09-07-A Series 16	12/14/06 07/08/10 05/14/15			10,000 199,318 304,868	- 199,318 305,273	199,318 305,688	306,111	199,318 306,544	- 306,986	- 307,438	-	-	-	5,171,0
Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase V - Pool 12 97-1131-4D Total Title V WWPAT CWS-09-07	12/14/06 07/08/10 05/14/15	07/15/30	3,285,646	10,000 199,318	- 199,318	199,318		199,318	-	-	-	-	-	5,171,0
Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase V - Pool 12 97-1131-4D Total Title V MWPAT CWS-09-07 Sewer CWS-09-07-A Series 16 Total Sewer Construction Trust Fu	12/14/06 07/08/10 05/14/15 nd	07/15/30	3,285,646	10,000 199,318 304,868 504,185	- 199,318 305,273 504,591	199,318 305,688 505,006	306,111 505,430	199,318 306,544 505,862	- 306,986 306,986	- 307,438 307,438	-	-	-	2,989,7 5,171,0 8,160,8
itle V - Phase IV - Pool 11 T5-97-1131-3 itle V - Phase V - Pool 12 97-1131-4D Total Title V WWPAT CWS-09-07 iewer CWS-09-07-A Series 16	12/14/06 07/08/10 05/14/15 nd	07/15/30	3,285,646	10,000 199,318 304,868 504,185	- 199,318 305,273 504,591	199,318 305,688 505,006	306,111	199,318 306,544 505,862	- 306,986	- 307,438 307,438	- - 152,000	- - 147,800	- 123,600	5,171,

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2017 CIP

APPENDIX C - CAPITAL PROJECT EVALUATION CRITERIA

2017 CIP - Appendix C – Capital Project Evaluation Criteria

CRITERIA AND STRATEGIC PLAN AREA	HIGHEST IMPACT (Score of 4)	MEDIUM IMPACT (Score of 3)	LOW IMPACT (Score of 2)	NO IMPACT OR NOT APPLICABLE (Score of 0)
PUBLIC HEALTH AND SAFETY degree to which project meets public health and safety needs/issues.	 Project is necessary to <u>alleviate a significant</u>, <u>existing</u>, <u>documented</u> health or safety hazard. This could include: Proposed project meets the minimum requirements/mandates of a local, state or federal law pertaining to health and safety of the community. Project directly pertains to the delivery of public safety through police protection. Project required to achieve adopted LOS for health or safety standards 	 Project is necessary to prevent the onset of a likely health and safety hazard or <u>alleviate an existing, minor</u> hazard. If problem does not currently exist, failure to act would result in hazard being present within one-two years. May include: Enhancement of current health and safety programs or projects; Related to, but not exclusive impact on traffic control on town's public ways; Addresses local, state or federal laws pertaining to health and safety, but goes beyond minimum requirements to additional enhancements. 	 Project is needed to <u>maintain the current</u> <u>level</u> of health and safety services provided to residents. Failure to complete project may result in appearance of hazard within 2-5 years. May include: Repair or regular maintenance of facilities in order to maintain a healthy and/or safe condition. Maintains existing traffic LOS and/or prevents formation of a safety problem. 	Project <u>does not relate to, nor</u> <u>have any impact on</u> public health and safety issues within the town.
EDUCATION applicability of project to educational priorities of the town.	Project is intended <u>directly</u> for the purpose of educating the town's children and is <u>essential</u> in order to meet state and local educational standards. This includes repair/maintenance of, as well as new buildings and structures used for classrooms, school-sponsored recreational activities, administrative support to schools, and other related projects	Project will be used <u>primarily</u> for education of the town's children, but may include other ancillary uses. Project is important, but not required in meeting minimum educational standards.	Project will be used <u>minimally</u> for direct education of the town's children. Primary use of the project will be other than education purposes. This project is not required toward meeting any educational standards, but may enhance existing programs/facilities.	Project is <u>not intended</u> to be used for educational purposes.
ECONOMIC DEVELOPMENT degree to which project meets economic development objectives of Town Council and other town plans.	 Project would have <u>significant impact</u> on the ability to retain and expand business within the town. May include: Significant impact on increasing year-round job opportunities, particularly high-paying jobs; Strong contribution to retaining existing and attracting new businesses to the town; Significant private contributions to project's future development; Substantially increases attraction for additional tourists to the town. 	 Project would make a <u>major contribution</u> to the Town's ability to retain and expand business. May include: Create expanded job opportunities, year-round and seasonal; Measurable retention of existing business and/or possible attraction of new business to the town. May involve private contributions to the project directly or indirectly; Increases attraction of additional tourists to the town. 	 Project would have <u>some contribution</u> to the Town's ability to retain and expand businesses. May include: Minimal impact on expanded job opportunities, or preventing loss of jobs; Some potential for attraction of new business to town. Little to no private contributions to the project directly or indirectly; May have some slight impact on attracting additional tourists to town. 	Project <u>does not have any impact</u> on the Town's ability to retain and expand businesses, create jobs, tourism or the tax base.

INFRASTRUCTURE AND PROTECTION OF CAPITAL ASSETS degree to which project maintains and protects existing capital assets of the town.	 Project is <u>critical to save structural integrity</u> of existing asset or repair significant structural deterioration. Failure to act would result in complete loss of the asset or would require significantly more funds if repairs are delayed. Project would meet the needs of the community for a minimum of 20 years. 	 Project is <u>necessary to repair or replace</u> assets before a partial loss of structural integrity causes the need for significant repairs. Project would last a minimum of <u>10 years.</u> Project would meet the needs of the community for a minimum of 10 years. 	 Project will <u>improve appearance, public</u> <u>accessibility and/or deter future</u> <u>maintenance</u> of this type for a minimum of <u>5 years</u>. Project would meet the needs of the community for a minimum of 5 years. 	Project does not improve or protect existing capital assets.
ENVIRONMENT AND NATURAL RESOURCES - - degree to which project conserves and protects natural and historical resources of the town.	 Project is <u>critical to preservation</u> of a well-documented natural or historic town resource. Other applicable criteria may include: Failure to approve project would result in damage or deterioration of key natural resource/environment in the near future. If not approved, project would have long-lasting negative impacts on the town's water supply or coastal resources. Failure to approve project would result in a loss of critical resources Project significantly impacts an ACEC, WP or GP designated area. Project is critical to protect / stabilize a townowned significant historic resource; 	 Project will have <u>substantial impacts</u> on the ability to preserve or maintain a key natural or historic resource for the town. Other applicable criteria may include: Project may repair natural ecological deterioration and may result in improved access by residents to enjoy resource. Maintains or improves the ecology of freshwater ponds, wetlands, or natural habitats. Project impacts GP designated district or other significant areas of concern. Project will improve / restore a historic resource as a physical record. 	 Project will <u>improve, but is not necessary</u> for the maintenance of a key natural or historic resource for the town. Other applicable criteria may include: May improve access by the public to enjoy the resource. May add and/or expand the greenbelt system within the Town; or otherwise expand the amount of natural habitat. Project is necessary to conserve / retain existing historic materials and/or features. 	Project <u>does not relate to or have any</u> <u>impact on</u> preservation or maintenance of natural or historic resources.
QUALITY OF LIFE degree to which project addresses town-wide quality of life for its residents.	 Project is <u>critical to the continuation</u> or needed expansion of an existing cultural and/or human service. Project is <u>required</u> to respond to a <u>documented</u> health, cultural and/or human service <u>need</u>. Project <u>significantly expands</u> the quality of life for the residents of the town. 	 Project <u>maintains or enhances</u> the ability to deliver cultural and/or human services. Project <u>enhances the existing</u> quality of life within the town. 	 Project <u>supports</u> the delivery of cultural an/or human services. Project <u>supports the existing</u> quality of life within the town. 	 Project is <u>not related</u> to the delivery of cultural and/or human services. Project <u>does not impact</u> the quality of life within the town.
FINANCING availability of non-general fund financing overall financial feasibility.	 Project has a <u>highly positive fiscal impact</u> due to the following: Implementing project would result in significant increased revenues to the town or significantly expands the non-residential tax base; Non-general fund revenues sufficient to support 75-100% of project expense; and have been identified and applied for. 	 Project has a <u>generally positive fiscal impact</u> due to the following: Project would result some increased revenue to the town or increases the nonresidential tax base somewhat; Non-general fund revenues sufficient to support 25-74% of project expense have been identified. 	 Project has a <u>neutral to slightly positive</u> <u>fiscal impact</u> due to the following: Additional revenues would not offset additional costs. Project supported by 1-25% of non- general fund revenues. 	 Project has a <u>negative fiscal impact</u> due to the following: None of the cost of the project will be funded by non-general funds. Project would not bring in additional revenues.

OPERATING BUDGET IMPACT degree to which project is required to reduce or eliminate short-term operating costs; and its impact on future operating budget.	 Project has a <u>highly positive impact on the operating budget</u> due to: Implementing project would substantially decrease current operating fund expenditures due to current excessive maintenance, patching, etc. costing more than 50% of the cost of the project, prorated over 3 years; 100% of future operating costs can be absorbed within existing budgets once project is completed. Not doing project would result in significant increased operating costs to the town in the near future (i.e. major repair versus complete replacement). 	 Project has a <u>generally positive impact on</u> <u>the operating budget</u> due to: Implementing project may moderately decrease current operating fund expenditures due to on-going repairs, maintenance, etc. costing between 25-50% of cost of the project prorated over 3 years; Project would result in minimal increase in future operating costs for the benefits gained; Not doing project would result in a noticeable, but not significant increase in expenditure of operating funds to repair or make asset usable in the short term. 	Project has a <u>neutral to slightly positive</u> <u>impact on the operating</u> budget due to: • Implementing project may decrease or have a neutral affect on current operating fund expenditures due to on-going repair, maintenance, etc. costing up to 25% of the cost of the project prorated over 3 years; • Project would increase future operating costs with only minimal benefits received; • Not doing project would result in the need for minimal additional operating funds for repair / maintenance of current assets.	 Projects has a <u>negative impact on the operating budget</u> due to: Significant increase in current operating fund expenditures required maintaining, repairing, or otherwise operating project. Project requires significant increase in future operating fund expenditures without documented benefits
PLANNING AND RELATIONSHIP TO EXISTING PLANS how the project addresses implementation of previously developed plans of the town to protect and enhance human and physical assets.	Project is <u>specifically included in a plan</u> <u>adopted by a State, Regional or Local</u> <u>Legislative</u> body, such as: • Specifically listed in the annual Town Council Strategic Plan. • Included within the prior 5 year Capital Improvement Program • Listed as a priority in the 5 Year Capital Improvements Plan of the LCP (once adopted). • Project included in a State Bond Bill • Project is specifically listed in a plan adopted by the Town Council.	 Project is part of an Executive Order or Plan of Action adopted by the School Board and/or the Town Manager, such as: Project generally supports the policies and/or resolves adopted by the Town Council Project is included in the current year Transportation Improvement Program (TIP). Project <u>specifically included</u> in a plan adopted by the School Board and/or the Town Manager 	 Project is included as <u>part of a Town</u> <u>Departmental Work Plan</u>, or part of a functional service delivery system such as. Project supports the Departmental Mission and prioritizes needed action Project needed to accomplish a major service effort Project <u>supports a plan</u> adopted by the School Board and/or the Town Manager 	Project is <u>not related</u> to the plans, policies or resolves adopted by the Town Council or other agencies of the town.
USAGE AND SERVICE DEMAND degree to which project is used by population and manner in which it is used.	 Project will be in <u>continuous usage</u> or will be used year round. Project will serve <u>50 to 100%</u> of the population of the town. Project serves <u>three or more functions</u> and/or needs of the town. 	 Project will be used <u>the majority of the year</u>. Project will serve <u>25 to 75%</u> of the population of the town or is designed for a village or other sub-area of the town. Project serves at least two functions and/or needs of the town. 	 Project will be used <u>seasonally</u>. Project will serve <u>less than 25%, but</u> <u>more than 5%</u> of the population of the town or is designed for a limited service area. Project serves a <u>single service</u> and/or need of the town. 	 Project will be <u>only</u> <u>intermittently used</u>. Project will provide <u>limited</u> <u>services</u> to a very limited service area.

FY 2017 BUDGET ACTION CALENDAR

Monday	Sep	21	2015	Town Manager & School Superintendent develop annual policy agreement on the allocation of the projected FY 2017 revenue		
Friday	Oct	2	2015	Town Manager issues instructions to Departments for FY 2017 Operating & Capital Budgets		
Monday	Oct	26	2015	Municipal Departments submit preliminary listing of any proposed FY 2017 position changes with supporting justification to Human Resources and Town Manager		
Tuesday	Nov	10	2015	Town Manager conducts public hearing on <u>Calendar Year</u> permits and fees		
Friday	Nov	13	2015	HR Director submits position changes summary including comments to Town Manager		
Monday	Nov	23	2015	CIP project data sheets (w/project photos) and review of existing capital projects due		
Thursday	Dec	17	2015	Annual Organization of Town Council (TM must submit budget to Council within 170 days per M.G.L. 44 § 32 (Friday June 5, 2016)		
Tuesday	Dec	22	2015	Final day for CIP Task Force to complete & submit CIP Project scores		
Monday	Dec	21	2015	Operating Budget Decision Packages due		
Wednesday	Jan	20	2016	Operating Budget Narratives including photos showcasing department due		
Thursday	Jan	21	2016	Town Council conducts a joint meeting/workshop with the School Committee in accordance with Town Charter		
Tuesday	Feb	23	2016	Town Manager conducts public hearing on <i>Fiscal Year</i> permits and fees		
Thursday	Mar	<u>24</u>	2016	Town Manager submits recommended Capital Budget to Clerk of Town Council per Part VI, Section 6-5(a) of the Charter. (<i>TC must adopt Plan BEFORE June 1, 2016</i>). Town Council conducts first reading of Capital Budget orders.		
Friday	Mar	<u>25</u>	2016	Town Council publishes summary of FY 2017 Capital budget and hearing in local paper		
Thursday	Apr	7	2016	CFAC submits report of their review of recommended FY 2017 Capital Budget to Toy Council		
Thursday	Apr	7	2016	Town Council conducts first public hearing on FY 2017 Capital Budget per Part VI Section 6-5 (c) of the Charter. (<u>hearing be held not less than 14 days AFTER</u> <u>Publication)</u>		
Tuesday	Apr	5	2016	Adopted FY 2017 School Committee budget due to the Town Manager		
Thursday	Apr	21	2016	Town Council conducts second public hearing on FY 2017 Capital Budget per Part VI Section 6-5 (c) of the Charter.		
Thursday	May	5	2016	Fown Manager submits recommended Operating Budget to the Town Council. <i>TC must adopt budget within 45 days, otherwise it becomes part of FY17 appropriatio</i> per Section 6-3 (b) of the Charter		
Friday	May	6	2016	Town Council publishes summary of Operating Budget and hearing info in local newspaper - per Part VI, Section 6-3 (a) of the Charter		
Thursday	May	19	2016	Town Council conducts first reading of FY 2017 Operating Budget orders		
Tuesday	May	31	2016	Last weekday FY 2017 Capital Improvement Plan can be adopted by the Town Council per Part VI, Section 6-5(d) of the Charter		
Thursday	Jun	2	2016	Town Council conducts Public Hearing on recommended FY 2017 Operating Budget (Public Hearing to be held not less than 14 days AFTER such publication)		
Thursday	Jun	2	2016	CFAC submits report of their review of recommended FY 2017 Operating Budget to Town Council		
Thursday	Jun	9	2016	Town Council conducts 2nd Public Hearing on recommended FY 2017 Operating Budget		
Thursday	Jun	16	2016	Town Council conducts 3 rd Public Hearing on FY 2017 Operating (if needed)		
Friday	Jun	17	2016	Last weekday FY 2017 Operating Budget can be adopted by the Town Council per Part VI, Section 6-3 (b) of the Charter. <i>(TC must adopt within 45 days of receiving budget)</i>		
Thursday	Jun	30	2016	Unencumbered balances on Capital Appropriations authorized during & before FY 2014 EXPIRE		

Town Council Action Item

Town Manager Action Item Municipal/School/CFAC Action Item

