January 2008									
			TOWN OF	NEEDHAM					
		Building,	Infrastructure a		lity Requ	uest			
				P-BIF		1	-		
Project Title			Kendrick Stree	et		Fiscal Year		20	10
Requestor	Public V					Project Cated	jory	03	
Location	Various					T			
Primary	Genera	l Fund				CPA	No		
Funding			Now Cons	truction/Addition		Eligible?			
	Acq	uisition		n square footag		Renovation -	Repair		Χ
Purpose		Health/S	afety	X	Federa	I or State Man	date		
		New Techi	nology		Perfo	rmance Measu	ıre		
		Projec	t Description Pu	urpose and Jus	tification	า			
number of bridgessential to imp South Street/W Project costs w Recent reports bridge and the State has agreedirection of the deprecation are	with neighboring communities. The Massachusetts Bridge Inspection Program has identified a number of bridges to have some level of deficiency and has recommended repairs. This program is essential to improve the structural and/or surface integrity of all bridges throughout Needham. The South Street/Willow Street Bridge and the Kendrick Street Bridge are both in need of repair. Capital Project costs will include surveying, engineering evaluation, design, and repair or reconstruction. Recent reports from Mass Highway indicated that the conditions of the South Street/Willow Street bridge and the Kendrick Street bridge are worsening and are in immediate need of repair. The State has agreed to pay for the repairs of the Willow Street bridge, which will be designed under the direction of the Town of Dover. Bridges are one of the infrastructure assets whose value and deprecation are now tracked under the GASB 34 program FY10 - Kendrick Street Bridge Evaluation and Design - 120,000								
Estimated Useful Life	75 Year	rs		Estimated	d Capital	Cost		120,	,000
Project Manager	Departr	ment of Pul	blic Works						
		t Timeline			Timin	g Consideratio	ns		
Total Project Du			18 months						
Engineering and			18 months						
Preconstruction		ual	TBD						
Construction Ph									
Next Phase (if a	applicable	9)	2010						
				 					
			thod to Determ	nine Estimated	Cost				
0 1/		In-house	e Estimate						
Consultant									
Industry									
References									
In-house		_							
UOM (Specify)	X								
Other	X		Evponditu	ro Cobodulo					
Project			Experialtu	re Schedule					
Element	FY 2	2009	FY 2010	FY 2011		FY 2012	FY :	2013	3
A, D, & E		0	120,000						
Site Costs		0 120,000							
Construction									
F, F, & E									
Technology						+			
Contingency									

120,000

0

TOTAL

	·						
	TOWN OF NEEDHAM						
	Building, Infrastructure and Other Facility Re	quest					
	CIP-BIF						
Project Title	Bridge Repairs Kendrick Street	Fisc	al Year		2010		
Requestor	Public Works	Proje	ect Cate	gory	03		
	Operational and Maintenance Consideration	ns					
Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? YES NO X							
Will additional s	staff be required?	YES		NO	Χ		
	As Permanent Employees	YES		NO			
	Hired Independent Contractors	YES		NO			
Can existing sta	aff operate and/or maintain the facility?	YES	Χ	NO			
Will additional s	services/supplies be required to operate the facility?	YES		NO	Х		
Will additional	equipment or other capital investment be required?	YES		NO	Х		
Will Town rever done?	nues be negatively impacted if the project is not	YES		NO	Х		
Will the investn	nent generate additional revenue for the Town?	YES		NO	Х		
		•	•	•			

	TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF										
Project Title			ons, Roads ai General Fund		5	Fiscal Year		2009 - 2013			
Requestor	Highway Supe	rintend	lent		Project Categ	Project Category C					
Location	Various	Various									
Primary Funding	General Fund	General Fund									
	Acquisition		New Construc (increase in so			Renovation - Re	epair	Х			
Purpose	Purpose Health/Safety			Х	Fed	deral or State Mai					
	New	Techno	logy		Р	Performance Meas	ure				
		Project	Description Pu	rnose and lus	tificat	tion		•			

Project Description Purpose and Justification

Roadway Reconstruction

The roadway system throughout the community has developed over the last century. A great number of miles of roadway, mainly residential roads were developed after World War II. A combination of the aging of the earliest roads, the tremendous expansion of the road system and a failure to provide adequate, ongoing maintenance and repair over the past 25 years has resulted in a significant decline in the overall condition of Needham's roads. A significant number of roads are in need of reconstruction.

This program will provide the necessary funding for the inspection, engineering and design for the rehabilitation or reconstruction of the roadway network including drainage, traffic control and other incidental roadway improvements. Roadway improvements may include full construction or other standard rehabilitation methods. Many of the main roads may require structural and geometric improvements. Improvements in the business district could include new traffic signals, sidewalk improvements, pedestrian lighting, granite curb and other features.

Beginning in FY1999, following several years of attempting to secure funding for the reconstruction of local roads, an ongoing program for funding was initiated. Due to a poor economy and tight budget, the funding for this program was discontinued after only 3 years.

Estimated Useful Life 60 to 80 Years Estimated Capital Cost \$14,250,000

Street Resurfacing

This program is essential to improve the structural and surface integrity of the Town's network of accepted streets. The primary strategy in this program is asphalt paving and incidental work directly associated with paving. Incidental work could include corner reconstruction, handicap ramps, leveling, structural overlays, utility adjustments, minor drainage improvements, some drain extension work, street sign replacement, asphalt curbing with grass shoulders and pavement markings.

Many streets have insufficient pavement thickness, are poorly shaped, lack curbing and require some drainage improvements. Applying this repair strategy in a timely manner will help defer costly and disruptive street reconstruction significantly on all but the most highly traveled roadways. Paving roadways in a timely manner will extend the useful life of the roadway system in the most cost effective manner.

This program would provide funding to pave about 2 centerline miles of roadway. Other paving strategies may be funded under this program.

Estimated Useful Life 10 to 15 Years Estimated Capital Cost \$3,990,000

Traffic Signal & Intersection Improvements

TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF

Project Bridges, Intersections, Roads and Sidewalks
Title Capital Program – General Fund

Project Bridges, Intersections, Roads and Sidewalks
Capital Program – General Fund

2009 - 2013

The costs are estimated by Engineering and require conceptual scope of work for project level costs that have not yet been determined.

This program will fund Traffic Signal Improvements for existing traffic signals and provide funding for new Traffic Signal where none currently exist.

FY09 - No Submission

FY10 – Design - Dedham Ave. @ Harris Ave, this intersection has been identified as requiring traffic signals. This request is for intersection design and traffic signal engineering and design. The engineering and design estimate is \$150,000.

FY11 – Construction - Dedham Ave. @ Harris Ave., intersection improvement and new traffic signal installation. \$525,000.

Design - High St @ Greendale Ave, This intersection has been identified as requiring traffic signals. This request is for intersection design and traffic signal engineering and design. The engineering and design estimate is \$50,000.

FY12 – Construction - High St @ Greendale Ave, intersection Improvement and new traffic signal installation. \$367,000.

Design - Great Plain Ave @ Greendale Ave, this intersection has been identified as requiring intersection improvements and replacement of traffic signals. The engineering and design estimate is \$70,000.

FY13 – Construction - Great Plain Av @ Greendale Av, this existing traffic signal may require intersection improvements and updating some of the existing traffic signal components. \$450,000.

Estimated Useful Life 25 Years Estimated Capital Cost \$1,650,000

Sidewalk Repair & Resurfacing School Walking Routes

FY09 - Nehoiden St from opposite May St. to Central Ave. (West Side), High St. Linden St from Great Plain Ave. to Sylvan Rd.

FY10 - Harris Ave. from Great Plain Ave. to Dedham Ave., Bradford St from Dedham Ave. to Great Plain Ave. (East side), Glenwood Rd. from Bradford St. to the Pollard School Parking Lot.

FY11 - Grant St. from Dedham Ave. to Junction St. (East side), School St. from Chestnut St. to Dedham Ave. (North Side), Dedham Ave. opposite Grant St. to Bradford St. (North Side), Warren St. from School St. to Great Plain Ave.

FY12 – Thornton Rd. from Broad Meadow Rd. to Birds Hill Ave. (East Side), Mt Vernon Ave. from Great Plain Ave. to Birds Hill Ave., Hillcrest Rd. from Birds Hill Rd. to Bond St.

FY-13 - Linden St. from Sylvan Rd. to High Rock St., Oak St. from Chestnut St. to Marked Tree Rd. Warren St. from Dedham Ave. to Kingsbury St.

This program includes funding to construct 10 to 15 handicap ramps.

There are over 160 miles of sidewalk of which 52 miles are designated as school walking routes. The school walking routes are reviewed periodically. Over half of the sidewalks require significant work. Most of the existing sidewalks do not comply with ADA or AAB laws and

TOWN OF NEEDHAM		
Building, Infrastructure and Other Facility Requ	ıest	
CIP-BIF		
Project Bridges, Intersections, Roads and Sidewalks	Fiscal Year	2009 -
Title Capital Program – General Fund	riscai Year	2013

regulations or Town of Needham specifications.

Current conservative estimates identify approximately \$19 million of sidewalk work required, Town wide.

Highway staff performs detailed functions such as loam and seed operations to minimize contractor costs.

Depending on the workload in the Engineering Division, private surveyors may be required to provide layout services.

Estimated Useful Life 20 to 30 Years Estimated Capital Cost \$1,830,000

Sidewalk Repair and Resurfacing non-school walking routes

This program would provide funding for sidewalk repair and resurfacing not covered under the "school walking route" program.

- FY09 Mellen St., Maple St., Mark Lee Rd., Alfreton Rd. and Norfolk Rd.
- FY10 Coolidge Rd, Prince St, Plymouth Rd, Wilshire Pk, Peacedale Rd and Intervale Rd
- FY11 Hillcrest Rd. (Great Plain Ave. to Birds Hill Ave.) Birds Hill Rd, Mount Vernon Rd.,
- FY12 Woodledge Rd., Glendoon Rd., Washburn Ave., Nehoiden St., Gould St. (Noanett Rd to Highland Ave.)
- FY13 Garden St. Rolling Ln. Forest St.,

There are over 160 miles of sidewalk. Over half of the sidewalks require significant work. Most of the existing sidewalks do not comply with ADA or AAB laws and regulations or Town of Needham specifications.

Current conservative estimates identify approximately \$16 million of sidewalk work required, Town wide.

Estimated Useful Life 20 to 30 Years Estimated Capital Cost 1,100,000

Estimated Useful Life	Varies		Estimated Capital Cost	22,820,000			
Project Manager	Highway Supe	erintendent					
F	Project Timeline	9	Timing Considerat	ions			
Total Project Duration Depends on (months) Project							
Engineering a Phase	Engineering and Design Phase		Depending on the workload in the Engineering Division				
Preconstruction and Actual Construction Phase		Depends on Project	private surveyors may be required to provide lag services.				
Next Phase (i	f applicable)	Ideally Annually					

		Building	, Infrastructure a	NEEDHAM nd Other Facility F	Request				
Project	_		tions, Roads ar	- <mark>BIF</mark> nd Sidewalks	Fisc	al Year		2009 -	
Title	Capital		- General Fund					2013	
		IV	lethod to Determ	ine Estimated Cos					
Consultant									
Industry									
References									
In-house	X								
UOM	1								
(Specify)									
Other									
			Expenditur	e Schedule					
Project Element	F	Y 2009	FY 2010	FY 2011	FY 20	FY 2012 FY 2013			
TOTAL		1,555,000	4,740,000	5,130,000	5,64	5,000	5,	750,000	
Other Costs	*								
				enance Considerat	ions				
				t are no currently					
provided for vectors below)	within the	e affected d	epartment budge	ets? (If so explain	YES		NO	X	
Will additiona	I staff be	required?			YES		NO	Х	
		•	As Peri	manent Employees	S YES		NO		
			Hired Indepe	endent Contractors	YES		NO		
Can existing s	staff ope	rate and/or	maintain the fac	ility?	YES	Χ	NO		
				erate the facility?	YES		NO	Х	
			r capital investm		YES		NO	Х	
Will Town rev done?	enues be	e negatively	impacted if the	project is not	YES		NO	Х	
	tment ge	enerate add	itional revenue fo	or the Town?	YES		NO	Х	
	J			onsiderations	•	•	•	•	

Street Resurfacing

Other cost would include an estimated \$25,000 for DPW/Highway staff to provide labor and/or purchase materials for patching, edging, layout and control, tree removal, utility rehabilitation, construction oversight, driveway paving adjustments, masonry work and loam and seeding.

Sidewalk Repair & Resurfacing School Walking Routes

Other cost would include an estimated \$50,000 for DPW/Highway staff to provide labor and/or purchase materials for patching, edging, paving portions of sidewalks, layout and control, tree removal, utility rehabilitation, construction oversight, driveway paving adjustments, masonry work and loam and seeding.

TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF **Project** 2009 -**Brook and Culvert Repairs** Fiscal Year 2013 Title 03 Requestor Town Engineer Project Category Location Various Primary CPA General Fund No Funding Eligible? New Construction/Addition Acquisition Renovation - Repair Χ (increase in square Purpose footage) Health/Safety Federal or State Mandate Χ New Technology Performance Measure Project Description Purpose and Justification

The severe storms of October 1996, June 1998 and 2006 have resulted in numerous complaints and subsequent investigations of the Town's brooks, streams and culverts. The conditions observed were significant. The DPW has developed a repair and maintenance program which is a combination of contracted work and use of town forces. It is the intention of the DPW to expend Capital Funds to address the issue of flooded and poor draining brooks, streams, waterways and culverts throughout the Town that have been severely neglected for many years. Lack of routine maintenance has caused the failure of retaining walls, loss of soils behind the walls, and brooks have become silted allowing the overgrowth of vegetation that has impacts on the level of the water flows. This neglect has resulted in the loss of useable abutting property and flooded basements. The current conditions are beyond the means of DPW equipment and personnel. It will require a detailed investigation, a plan of recommended improvements, a design drawing and specifications, environmental permitting and bidding of construction to be overseen by the Town's Engineering Division. This will return the waterways to a condition that the DPW will be able to maintain. FY06 funding for this program included cleaning of Hurd Brook and culverts, from Central Avenue to the Wellesley line and a portion of Alder Brook. In FY07, no funding was appropriated. FY08 funding will complete Alder Brook.

Future Projects include, but are not limited to, the following locations:

Winding River Rd.
Locust Lane
Fuller Brook
Oxbow Road
Webster & Howland Streets
Brookside Road & Forest Street
Chestnut Street & Carriage Lane
Emerson Place
Pennsylvania Avenue

Estimated Useful Life	25 Years		Estimated Capital Cost	500,000			
Project							
Manager							
Project Timeline			Timing Considerations				
Total Project Duration							
(months)							
Engineering a	and Design						
Phase							
Preconstructi	on and Actual						
Construction	Phase						

			TOWN OF	NEEDHAM					
		Buildina		and Other Facility I	Reauest				
				-BIF					
Project Title	Brook	and Culve			Fisc	al Year	r	2009 - 2013	
Requestor	Town E	ngineer			Proje	ect Cate	egory	03	
Next Phase (in	f applica	ble)							
		. N	lethod to Determ	ine Estimated Cos	t				
Consultant									
Industry									
References									
In-house									
UOM									
(Specify)									
Other									
Expenditure Schedule									
Project	F'	Y 2009	FY 2010	FY 2011	FY 20	FY 2012 FY 2013			
Element									
A, D, & E									
Site Costs									
Construction	1	00,000	100,000	100,000	10	0,000		100,000	
F, F, & E									
Technology									
Contingency &	&								
Other				100 000					
TOTAL	1	00,000	100,000	100,000		0,000		100,000	
				tenance Considera		1	ı	1	
				t are not currently	YES		NO		
•			lepartment budge	ets?		Х			
Will additiona	I staff be	e required?			YES		NO	Х	
				manent Employee:			NO	Х	
				endent Contractor			NO	Х	
			maintain the fac		YES		NO	Х	
				erate the facility?	YES	X	NO		
				ent be required?	YES		NO	X	
Will Town rev done?	enues be	e negatively	impacted if the	project is not	YES		NO	Х	
Will the investment generate additional revenue for the Town? YES NO X								Х	
	J			onsiderations	•				
As the miles of	of Brook	completed		l Program increase	e, they inc	rease t	he annı	ıal	
			Drains Operating		J				

	TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF										
Project Title	Municipal Pa	rking L	ot Improven	nents		Fiscal Year	2009 - 2013				
Requestor	Public Works				Project Category	03					
Location	Various										
Primary Funding	General Fund	General Fund					No				
Durnoco	Acquisition		Ne Constructio (increase foota	n/Addition in square		Renovation - Repair	Х				
Purpose	Hea	Health/Safety			Federal or State Mandate						
	New	logy		F	Performance Measure						
		Project	Description Pu	rpose and Jus	stificat	ion					

This is the third part of a program to reconstruct or repave the Municipal Parking Lots in the Downtown Business District. The Chapel and Eaton Square Lots were completed in the 1997 construction season. The Chestnut Street and Lincoln Street Lots were completed in the 2000 construction season. The Dedham Avenue Lot resurfacing is completed. The remaining municipal lot in need of repair is the Mark Lee Road Lot in Needham Heights. Engineering design for this lot is proposed to be completed in-house and repairs to this lot are proposed in FY09.

Chapel Street and Eaton Square Parking Lots - FY97, Completed

Chestnut Street and Lincoln Street Parking Lots - FY00, Completed

Dedham Avenue Parking Lot - FY04, Completed (utility pole to be relocated)

FY09: Mark Lee Road Parking Lot - 100,000

FY10: Upper Hersey Parking Lot - 175,000

FY11 - No Work Proposed

FY12 - No Work Proposed

FY13 - Chapel Street and Eaton Square Parking Lots

Estimated Useful Life	20 years		Estimated Capital Cost	TBD
Project Manager	Town Enginee	er		
I	Project Timelin	е	Timing Considerat	ions
Total Project Duration (months)		18 months		
Engineering a Phase	and Design	8 months		
Preconstruction and Actual Construction Phase		10 months		
Next Phase (if applicable) 2010				

				TOWN OF	NEEDHAM					
			Ruilding		nd Other Facility F	Penilest				
			Danang		-BIF	request				
Project Title	М	lunicip	oal Parking	g Lot Improvem		Fise Yea		2009 2013		
			M	lethod to Determ	ine Estimated Cos	t				
			In-house	Estimate						
Consultant										
Industry			Design to	be performed in-	house					
References										
In-house	X	(
UOM										
(Specify)										
Other				F						
<u> </u>				Expenditur	e Schedule			<u> </u>		
Project Element		FY	2009	FY 2010	FY 2011	FY 20	012	FY 2013		
A, D, & E			0							
Site Costs										
Construction			100,000 175,000 0 0 TE							
F, F, & E			173,000							
Technology										
Contingency	&									
Other	_									
TOTAL			100,000	175,000	0		0		TBD	
				· · · · · · · · · · · · · · · · · · ·	enance Considera	tions		I.		
Are there any	/ or	peratio	nal costs to	be incurred that	t are no currently					
				epartment budge		YES		NO	Х	
Will additiona						YES	X	NO		
				As Peri	manent Employees		1	NO	Х	
					endent Contractors	_	Х	NO	-	
Can existing s	sta	ff oper	ate and/or	maintain the fac		YES	X	NO		
					erate the facility?	YES		NO	Х	
				r capital investme		YES		NO	Х	
				impacted if the		YES		NO	Х	
	Will the investment generate additional revenue for the Town? YES NO X									
		<u> </u>			onsiderations		•			
We already h	ire	outsid	e contracto	ors to help mainta	ain the Town's pub	olic parkir	ng lots.			

	TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF									
Project Needham Center/ Chestnut Street Streetscape & Fiscal Year 2010 Pedestrian Facility Improvements										
Requestor	Public Works		Project Category C		03					
Location	Needham Center/Chestnut Street									
Primary Funding	General Fund				CPA Eligible?					
<u> </u>	Acquisition	New Construc (increase in so			Renovation - Rep	oair	Х			
Purpose	Heal	Health/Safety			eral or State Mand					
	New Technology Performance Measure									
	Р	roject Description Pu	rpose and Jus	stificat	ion					

In 1995 the Needham Design Guidelines Partnership consisting of members of the Planning Board, the Design Review Board and the Needham Business Association secured funding from public and private sources to produce a report entitled "Town of Needham Design Guidelines for the Business Districts". Utilizing a consultant, this group held several meetings including workshops where both public and private participants could provide input to develop this quideline. This quideline is offered to private developers to encourage them to incorporate these treatment recommendations as their properties undergo improvements. Several of these recommendations have been incorporated into the recent reconstruction of the Great Plain Ave near Pickering St. and the Highland Ave/Chapel St./May St. intersection, the reconstruction of Chapel St., the Chestnut St. Parking Lots and proposed Chestnut Street reconstruction project from Marsh road to the MBTA bridge. This has allowed property owners to enhance their rear entrances or improve their entrance areas such as on Chapel St, as prescribed in the guidelines. There is a separate section devoted to public improvements. These improvements include recommendations for improved streetscape character involving the use of pedestrian-scale light fixtures, landscaping, including additional trees and plantings, and other public amenities such as benches, trash receptacles and bicycle racks. More significantly, it recommends more public accessibility. These are accomplished with wider sidewalks, additional crosswalks and safer crossing at intersections. This work is proposed to be undertaken in 3 stages. First the development of conceptual plans in order to determine the desired outcome followed by engineering / design, then the construction. Funding for the construction could be sought from the State under a special program, however, funds for these are not in large amounts and competition is heavy.

The Downtown Study Committee has not yet finalized a recommendation for the theme of visual improvements for the Downtown area.

The proposed funding for 2010 is intended to fund the first phase of design and construction under this Capital Item.

Estimated Useful Life	20 Years		Estimated Capital Cost	TBD			
Project Manager	Town Engine	er					
	Project Timelin	е	Timing Considerations				
Total Project (months)	Il Project Duration nths) 18 months						
Engineering a Phase	and Design	18 months					
Preconstruction and Actual Construction Phase 2012		2012					
Next Phase (if applicable)	2011					

				y 2000							
		5		NEEDHAM							
		Buildin		nd Other Facility R	equest						
Droiset	Noodk s	m Conto		-BIF				l			
				et Streetscape &	Fisc	al Yea	r	2010			
ritie	Pedestr		ity Improvemen	ine Estimated Cost							
			In-House Estima								
Consultant		l	in-nouse Estima	ie							
Industry Refer	ences										
In-house	CIICES										
UOM (Specify)											
Other		Х									
Expenditure Schedule											
Project											
FY 2009 FY 2010 FY 2011 FY 2012 FY 2013											
A, D, & E 75,000											
Site Costs			·								
Construction			50,000								
F, F, & E											
Technology											
Contingency &	!										
Other											
TOTAL			125,000								
		Ope	rational and Maint	enance Considerat	ions						
			to be incurred tha		YES		NO				
provided for w	ithin the	affected	department budge	ets?	ILS	Х	INO				
Will additional	staff be i	equired?)		YES		NO	Х			
			As Per	manent Employees	YES		NO	Χ			
			Hired Indep	endent Contractors	YES		NO	Χ			
Can existing st	taff opera	ite and/o	r maintain the fac	ility?	YES	Х	NO				
			be required to ope		YES	Х	NO				
			er capital investm		YES	X	NO				
	enues be	negativel	y impacted if the	project is not	YES		NO	X			
done?								, ,			
Will the invest	ment ger	erate ad	ditional revenue fo		YES		NO	Х			
			Budgetary C	onsiderations							

The plantings and landscaping will likely require some maintenance depending upon what is selected in the final plan. Additional trash receptacles will require greater collection response. Greater snow removal effort on widened sidewalks may also result.

	Bu	ilding, Ir		ture a	NEEDHAM and Other Fac -BIF	ility Re	equest		
Project Title	Retaking Mo	numen	itation o	of Stre	eet Layouts		Fiscal	Year	2009
Requestor	Public Works						Project Catego		03
Location	Various							•	1
Primary Funding	General Fund						CPA Eligible	e?	
Purpose	Acquisition				n/Addition in square		Renova Rep	air	Х
		alth/Safe					ederal or S Mandate	е	
	New	Technol					ormance N	/leasure	
		Project	Descripti	ion Pu	rpose and Ju	stificat	ion		
of various st included in th	would fund the reets throughouse project. Meadow Road	out the	Town.						
Estimated Useful Life	100 Years		I	Estima	ated Capital C	Cost			TBD
Project Manager Title	Town Enginee	er							
	Project Timeline	9			Ti	ming C	Considerati	ions	
Total Project (months)	Duration	12							
Engineering a Phase	and Design								
Preconstruction Construction	on and Actual Phase								
Next Phase (i	f applicable)	2010							
	la la			<u>eterm</u>	ine Estimated	d Cost			
Concultant	In-n	ouse Est	timate						
Consultant Industry References									
In-house									
UOM									
(Specify)									
Other	X								
5			Expe	nditur	e Schedule				
Project Element	FY 2009		FY 201	0	FY 2011		FY 2012	2	FY 2013
A, D, & E	60,	000							
Site Costs									
Construction F, F, & E									
Technology									

		Building	, Infrastructure a	NEEDHAM and Other Facility I P-BIF	Reque	st					
Project Title	R	etaking Monum	entation of Str	eet Layouts	I	Fisca	I Year	200)9		
Contingency of Other	&										
TOTAL 60,000											
	Operational and Maintenance Considerations										
Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? NO X											
Will additiona	l s	taff be required?			YI	ES		NO	Х		
			As Per	manent Employee:	s YI	ES		NO			
			Hired Indep	endent Contractor	s YI	ES		NO			
Can existing s	sta	ff operate and/or	maintain the fac	cility?	YI	ES	Χ	NO			
Will additiona	l s	ervices/supplies b	e required to op	erate the facility?	YI	ES		NO	Х		
		quipment or othe			YI	ES		NO	Х		
Will Town revenues be negatively impacted if the project is not done? YES NO X											
Will the inves	tm	ent generate add	itional revenue f	or the Town?	YI	ES	•	NO	Χ		
			Budgetary C	onsiderations							

		Bu	ilding,			NEEDHAM nd Other Faci	lity Re	equest			
					CIP-	BIF		·			
Project				narge In	nprover	nents – Wa	ter	Fiscal	Year		09-
Title	Quality Public V		()					Droice	t Catao	or.	13
Requestor Location	Various							Projec	t Categ	OI y	03
Primary								CPA		l	
Funding	Genera	I Fund						Eligible	e?	No	
Purpose	Acquis			(incre		v n/Addition uare footage)		Renovat			Х
			alth/Sa					deral or Sta			X
				nology				erformanc	e Meas	ure	
			Projec	ct Descrip	otion Pur	pose and Jus	stificat	ion			
for all illicit discharges to the Charles River. Illicit Discharges identified in this investigation were pursued and improvements undertaken to eliminate them in 1996 and 1997. This investigation led to the Town entering into a Memorandum of Understanding (MOU) with the EPA to commence a Town-wide investigation and to the development of a Stormwater Master Plan. This Master Plan was completed in 2002. Incorporated into this Stormwater Master Plan are improvements to the Storm Drainage System to upgrade the quality of the water discharged to the Charles River in Needham. Further investigation and sampling continues year to year. When the EPA Stormwater Discharge Permit took effect, there were a number of projects identified to better manage stormwater quality. The first projects that have been identified include: FY09 - Rosemary Glen (Perry Gorge) Engineering, Design, Permitting / Construction 40,000 FY10 - DPW Facility SWMP, Engineering / Design / Permitting 25,000 FY11 - DPW Facility SWMP, Construction 50,000 FY12 - Water Shed Management Plan 35,000										ion led ence a er Plan to the liver in mwater nanage	
Estimated	80 Year	rs			Estima	ted Capital C	ost			1	50,000
Useful Life Project	Town E	nainea	۰r								
Manager						 -	. ,		,		
Total Project	Project T		9			111	ning (Considerati	ions		
(months)	Duration		12 m	nonths							
Engineering a	and Desig	gn	12 m	nonths	1						
Preconstructi		ctual	12 m	nonths	-						
Construction Next Phase (i		hlo)	2010		1						
NEXT FIIASE (тарриса	nie)	2010	,							
			Me	ethod to	Determi	ne Estimated	Cost				
Consultant											
Industry Refe	erences										
In-house	,	Х									
UOM (Specify	()										
Other											

			TOWN OF	•								
		Ruilding		nd Other Facility I	Pagu	ost						
		bullarig	CIP-		Kequ	CSI						
Project	S	torm Drain Disc			1				09-			
Title		uality (EPA)	J			Fisc	al Yea	r	13			
Requestor	Pι	ublic Works				Proje	egory	03				
			Expenditur	e Schedule								
Project Element		FY 2009	FY 2010	FY 2011	F	Y 20	12	FY 2	013			
A, D, & E	5,000											
Site Costs												
Construction			50,000									
F, F, & E												
Technology												
Contingency & Other												
TOTAL		40,000	25,000	50,000			5,000					
		Opera	ational and Maint	enance Considera	tions							
		perational costs to nin the affected d		t are no currently ets?	,	YES		NO	Х			
Will additiona	l st	taff be required?			,	YES		NO	Х			
		•	As Perr	manent Employee	s '	YES		NO	Х			
			Hired Indepe	endent Contractor	s '	YES		NO	Х			
Can existing s	sta	ff operate and/or	maintain the faci	lity?	\	YES	Χ	NO				
Will additiona	l se	ervices/supplies b	erate the facility?	'	YES		NO	Х				
		quipment or other	\	YES		NO	Χ					
Will Town revidone?												
Will the invest	tm	ent generate add	itional revenue fo	or the Town?	,	YES		NO	Χ			

	TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF											
Project Title	Storm Water	Maste	er Plan Draina	ige Improve	ment	:s	Fiscal Year		09-13			
Requestor	Requestor Public Works Project Category 03											
Location Various												
Primary Funding	General Fund						CPA Eligible ?	No				
Purpose	Acquisition New Construction/Addition Rend Construction/Addition Construction/Addition Rend Construction/Addition Rend Construction/Addition Rend Construction/Addition Rend Construction/Addition Construction/Addition Rend Construction/Addition Construction/Addition/Addition Construction/Addition/A								х			
	Health/Safety Federal or State Mandate											
	New Technology Performance Measure											
	Project Description Purpose and Justification											

The March 2002 Storm Water Master Plan, identified a number of areas throughout the Town where improvements are required to resolve flooding problems and illicit discharges. Locations for improvements have been prioritized within the Plan. Drainage improvements to Bradford Street and Carey Road were determined to be most critical. The funding request also includes installation of additional storm drains between Lantern Lane and Gayland Road and to replace, increase capacity and extend storm drains on Manning St, Hoover Rd and Concord Rd & Burnside Rd. Since the issuance of this report numerous multi-unit developments have been built or planned in the Town of Needham. These developments incorporate new roads with drainage structures and roof or sump connections which are then connected to the existing town owned system. These new connections have increased the load on the current system and causes flooding in some areas.

FY09 - Bradford Street System (Area 1) - Eng. 35,000 Lantern Lane & Gayland Road (Area 6a & 6b) - Eng. 40,000

FY10 - Taylor Street/Central Ave (Undesignated) - Eng. 25,000, Carey Road (Area 2) - Eng. 30,000 Bradford Street System (Area 1)- Construction 225,000 Lantern Lane & Gayland Road (Area 6a & 6b) - Construction 200,000

FY11 – No Work Proposed

FY12 - No Work Proposed

FY13 - Foxhill Rd., Canterbury Lane, South St., and X-Country (Area 10) - Eng. 40,000 Carey Road (Area 2) - Construction 150,000 Taylor Street/Central Ave (Undesignated) - Construction 160,000

Future Areas to be considered, but not yet prioritized:

Foxhill Rd., Canterbury Lane, South St., and X-Country (Area 10) – Construction TBD Concord Street, Greendale Ave., Woodbine Cir. System (Area 4) – Eng. 100,000 Oak St. (Area 8), Mackintosh Ave. (Areas 3 & 7), Oxbow Rd. (Area 9), West St (Area

11)
Fairfield Street, Elmwood Road (Area 5)

Estimated Useful Life	80 Years	Estimated Capital Cost	850,000
--------------------------	----------	------------------------	---------

Total Project Timeline						Januar	•					
Storm Water Master Plan Drainage Improvements Fiscal Year O9-13			_									
Project Title Town Engineer			Bu	ilding,	Infrastru		· ·	Request				
Project Manager Town Engineer Town Enginee	5					CIP	-BIF					
Mainager Town Engineer Project Timeline Timing Considerations	Title	Storm	Wate	r Mas	ter Plan	Draina	ige Improvemer	nts			09-13	
Total Project Duration (months) Engineering and Design Phase Preconstruction and Actual Construction Phase Next Phase (if applicable) Total Note of Phase Next Phase (if applicable) Next Phase (if applicable) Total Note of Phase Next Phase (if applicable) Next Phase (if applicable) Next Phase (if applicable) Total Note of Project Element FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 FY 2012 FY 2013 A, D, & E 75,000 Site Costs Construction 425,000 F, F, & E Technology Contingency & Other Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? As Permanent Employees FYES NO AND X Will additional services/supplies be required to operate the facility? Will additional equipment or other capital investment be required? VES NO X Will Town revenues be negatively impacted if the project is not over the proper in the project is not over th		Town E	ngine	er								
Engineering and Design Phase Preconstruction and Actual Construction Phase Next Phase (if applicable) Next Phase (if applicable) Tonhouse Estimate and Consultant In-house Estimate and Consultant	F	roject Ti	melin	е			Timing	Consider	ations			
Engineering and Design Phase Preconstruction and Actual Construction Phase Next Phase (if applicable) Next Phase (if applicable) 2010		Duration		12 m	nonths							
Preconstruction and Actual Construction Phase Next Phase (if applicable) 2010 Method to Determine Estimated Cost	Engineering a	nd Desig	ın	12 m	nonths							
Method to Determine Estimated Cost	Preconstruction		ctual	2010)							
Consultant X Industry References In-house X UOM (Specify) Other Froject Element Fry 2009 Fry 2010 Fry 2011 Fry 2012 Fry 2013 A, D, & E Fry 2009 Fry 2010 Fry 2011 Fry 2012 Fry 2013 A, D, & E Fry 2009 Fry 2010 Fry 2011 Fry 2012 Fry 2013 Fry 2013 Fry 2013 Fry 2013 Fry 2013 Fry 2010 Fry 2011 Fry 2012 Fry 2013 F			ole)	2010)							
Consultant X Industry References In-house X UOM (Specify) Other Froject Element Fry 2009 Fry 2010 Fry 2011 Fry 2012 Fry 2013 A, D, & E Fry 2009 Fry 2010 Fry 2011 Fry 2012 Fry 2013 A, D, & E Fry 2009 Fry 2010 Fry 2011 Fry 2012 Fry 2013 Fry 2013 Fry 2013 Fry 2013 Fry 2013 Fry 2010 Fry 2011 Fry 2012 Fry 2013 F				N 4	0 th 0 -1 t.	Dat	in a Cating -tI C					
Consultant X Industry References In-house X UOM (Specify) Other Project Element FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 A, D, & E FY 2009 Site Costs Construction F, F, & E Technology Contingency & Other Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? As Permanent Employees FYS NO Hired Independent Contractors F, E NO Can existing staff operate and/or maintain the facility? Will additional equipment or other capital investment be required? Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X WIII additional equipment or other capital investment be required? YES NO X WIII additional equipment or other capital investment be required? YES NO X WIII additional equipment or other capital investment be required? YES NO X WIII additional equipment or other capital investment be required? YES NO X			-ا ما					šl				
Industry References In-house X UOM (Specify) Other	Concultant	T v	in-n	iouse i	estimate	and Cor	isuitant					
References In-house X UOM (Specify) Other Project FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 FY 2013 FY 2015 FY 2015 FY 2016 FY 2016 FY 2016 FY 2017 FY 2017 FY 2018 F		^	1									
In-house X UOM (Specify) Other Expenditure Schedule Project Element FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 A, D, & E 75,000 Site Costs Construction F, F, & E Technology Contingency & Other TOTAL 75,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? As Permanent Employees FYES NO Will additional services/supplies be required to other capital investment be required? Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X Will additional equipment or other capital investment be required? YES NO X WIII Town revenues be negatively impacted if the project is not YES NO X												
UOM (Specify) Other Expenditure Schedule Project Element FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 A, D, & E 75,000 Site Costs Construction FF, F, & E Technology Contingency & Other TOTAL Tot		X										
Construction Contingency & Other Conti												
Expenditure Schedule Project Element FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 A, D, & E 75,000 55,000 40,000 Site Costs 50 50 50 50 50 50 50 50 50 50 50 50 50												
Project Element FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 A, D, & E 75,000 55,000 40,000 Site Costs Construction 425,000 310,000 F, F, & E Technology Contingency & Other TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO AS Permanent Employees YES NO WILL Independent Contractors YES NO X X WILL Independent Contractors YES NO X WILL Independent Contractors YES NO X X WILL Independent Contractors YES NO X X WILL INDEPENDENT TOTAL TOTA												
Project Element FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 A, D, & E 75,000 55,000 40,000 Site Costs 5 7000 700 700 700 700 700 700 700 700		1			Exr	enditur	e Schedule					
A, D, & E 75,000 55,000 40,000 Site Costs Construction 425,000 310,000 F, F, & E Technology Contingency & Other TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO X Hired Independent Contractors YES NO X Will additional services/supplies be required to operate the facility? YES X NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?	Project		, 200	,	•			EV 20	110			
Site Costs Construction 425,000 310,00 F, F, & E Technology Contingency & Other TOTAL 75,000 480,000 350,000 Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO X Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?	Element	FY	/ 2009	7	FY ZC)10	FY 2011	FY ZU	112	FY	2013	
Construction 425,000 310,000 F, F, & E Technology Contingency & Other TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?	A, D, & E		75	,000	5	55,000					40,000	
Technology Contingency & Other TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?	Site Costs											
Technology Contingency & Other TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO X Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO X Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?					42	25,000					310,000	
Contingency & Other TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO X Hired Independent Contractors YES NO SCAN existing staff operate and/or maintain the facility? YES X NO X Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?												
Other TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO X Hired Independent Contractors YES NO S Can existing staff operate and/or maintain the facility? YES X NO S Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?												
TOTAL 75,000 480,000 350,000 Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? YES NO X As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?		&										
Operational and Maintenance Considerations Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? As Permanent Employees YES NO X As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?			75	,000	48	30,000					350,000	
Are there any operational costs to be incurred that are no currently provided for within the affected department budgets? Will additional staff be required? As Permanent Employees YES NO X As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?							enance Considera	tions		•	,,,,,	
will additional staff be required? As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?	Are there any	operatio	nal co									
Will additional staff be required? As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?								YES		NO	X	
As Permanent Employees YES NO Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?					. 1,	9		VFC	+	NO	У	
Hired Independent Contractors YES NO Can existing staff operate and/or maintain the facility? YES X NO Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?	vviii additioHa	i stall De	тсчи	ii cu:		As Pari	manent Employee		+		^	
Can existing staff operate and/or maintain the facility? Will additional services/supplies be required to operate the facility? Will additional equipment or other capital investment be required? Will Town revenues be negatively impacted if the project is not done? YES NO X					Hire				1			
Will additional services/supplies be required to operate the facility? YES NO X Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done?	Can existing s	staff oner	ate a	nd/or					X			
Will additional equipment or other capital investment be required? YES NO X Will Town revenues be negatively impacted if the project is not done? YES NO X									<u> </u>		Х	
Will Town revenues be negatively impacted if the project is not done? YES NO X												
	Will Town rev											
		tment ge	nerat	e addi	tional rev	enue fo	or the Town?	YES		NO	Х	

	Bui	lding, I	nfrastructure a	NEEDHAM and Other Fac -BIF	ility Re	equest			
Project Traffic and Street Lighting Energy Challenge Program Fiscal Year 2009									
Requestor	Public Works					Project Categ	ory	03	
Location	Town Wide								
Primary Funding	General Fund					CPA Eligible?	No		
Durnoso	Acquisition		Ne Constructio			Renovation - Re	pair	Х	
Purpose	Hea	lth/Saf	ety		Fede	eral or State Mand	date		
	New	Techno	logy		Pe	rformance Measu	re		
		Project	Description Pu	rpose and Jus	stificat	tion			

The Community Energy Challenge is an opportunity for municipalities across New England to identify simple and cost-effective measures that increase energy efficiency and renewable energy use while reducing air pollution and saving money.

The DPW Engineering Division and Highway Division have been exploring new technologies relative to traffic signal lamps. This request proposes to retrofit all of the existing red yellow and green lamps which use 116 watt incandescent bulbs (average life 1 year) with a 6 watt/12 watt Light Emitting Diode (LED) unit (guaranteed 5 year life with up to 10 years life for those currently in service around the country). These LED displays provide efficient, durable and reliable service. They also offer the added benefit of improved brightness for safety and easy maintenance by only having to be replaced every 5-10 years vs. once per year. The Massachusetts Highway Department began retrofitting their signals several years ago and the Town of Framingham and City of Newton have also undertaken retrofits.

The Town is also investigating a streetlight conversion program, which replaces Mercury Vapor lights with more energy efficient and mercury free High-Pressure Sodium (HPS) lights. The program will include a study for the investigation to reduce the overall number of streetlights within the Town, saving energy and replacement costs as part of the Town's Sustainable Needham Initiative. The cost savings realized from the conversion of mercury vapor to high pressure sodium is approximately 40 percent.

Many of the local minor streets including cul-de-sac's and dead-end roads can be considered for street light reductions. Several other locations where new pedestrian scale lights have been installed are candidates for having the standard street lights still in existence removed.

FY09

Traffic Light Conversion Site Work -75,000 Streetlight Conversion/Reduction Study - 25,000

FY10-13

Implementation of Streetlight Conversion/Reduction Program -TBD

Estimated Useful Life	10 Years		Estimated Capital Cost	100,000			
Project Manager	Town Engine	er					
Project Timeline			Timing Considerations				
Total Project (months)	Total Project Duration 18 months						
Engineering a	and Design						
Phase							

			T-0		y ZUUO				
		Duilding			NEEDHAM	oguest			
		bullaing	, mirastri		and Other Facility R P-BIF	equest			
Project	Traffic an	d Stree	t Lightin		gy Challenge				
Title	Program	_ 0 00	9	g =or	g,go	Fisc	al Year		2009
Requestor	Public Wor					Proje	ect Cate	gory	03
Preconstruction		al 10 n	nonths			-			
Construction F			110111115]					
Next Phase (if	applicable))		L					
		M	lethod to	Determ	ine Estimated Cost				
0 "									
Consultant									
Industry References									
In-house									
UOM									
(Specify)									
Other									
	, ,		Ext	penditu	re Schedule				
Project	EV. 20	200	•			EV 20	10	E\/	2012
Element	FY 20	JU9	FY 20	010	FY 2011	FY 20	12	F Y	2013
A, D, & E		25,000							
Site Costs									
Construction		75,000							
F, F, & E									
Technology									
Contingency 8	k								
Other	1,	20.000							
TOTAL	1	00,000	ational as	d Main	topopo Copoldarat	one			
Δ					tenance Considerat	10115			
					t are no currently	YES		NO	Х
provided for w			epai imer	n buage	#15 <i>1</i>	V/50		N:0	
Will additional	starr be re	quired?		Λο Da	manant Franksis	YES		NO	X
			History		manent Employees endent Contractors		-	NO	
Can existing s	taff operate	and/or				YES YES	Х	NO NO	
		erate the facility?	YES		NO	X			
Will additional		NO	X						
Will Town reve						YES			
done?	onaco po ne	gatively	pactet		p. 0,000 15 1100	YES		NO	X
Will the invest	tment gener	rate add	itional rev	venue f	or the Town?	YES		NO	Х
	<u> </u>					•	•		

	Bu	ilding, I		cture a	NEEDHAM and Other Fac -BIF	ility Re	quest				
Project Title	Streetscape	Impro	vement	s			Fiscal	Year		2010	
Requestor	Public Works						Projec	t Catego	ory	03	
Location	Various										
Primary Funding	General Fund						CPA Eligible	e?	No		
	Acquisition	Acquisition New Construction / Addition							Renovation		
Purpose	Addresses H	Addresses Health r Safety Issue Federal r State Mandate									
	New	Techno	logy			Pei	rformance	Measu	re		
		Project	Descript	tion Pu	rpose and Ju	stificati	on				
beautification been improve require main the DPW mo while limiting sites and pre-	There are areas within the Town's right-f-way throughout Town that provide the opportunity for beautification. Areas such as traffic islands, small parks r locations at intersecting streets that have been improved for safer vehicle management and pedestrian safety. They also create areas that require maintenance. The simplest solution is t plant grass in these areas, however, this adds to the DPW mowing workload. These can be beautified t improve the appearance f the community while limiting the ongoing maintenance requirements. These funds would be used t develop these sites and prepare them for treatment. The actual beautification is being pursued through a local community organization.										
Estimated Useful Life	20 Years			Estima	ated Capital C	ost				\$25,000	
Project Manager	Town Engine	er									
	Project Timelin	е			Ti	ming C	onsiderati	ions			
Total Project (months)	Duration	12 mo	onths								
Engineering a Phase	and Design										
Preconstructi Construction	on and Actual Phase										
Next Phase (Next Phase (if applicable)										
		Me	tnod t D	etermi	ne Estimated	Cost					
Consultant Industry References In-hues											
UM (Specify) other											

		Building	, Infrastructure a	NEEDHAM nd Other Facility F -BIF	Requ	ıest						
Project Title	S	Streetscape Improvements Fiscal Year 2010										
Requestor Public Works Project Category 03												
Expenditure Schedule												
Project Element		FY 2009	FY 2010	FY 2011		FY 20	12	FY	2013			
A, D, &	Ε											
Site Cost	ts		25,000									
Constructio	n											
F, F, & E												
Technolog	Technology											
Contingency othe												
TOTAL			25,000									
		Oper	ational and Maint	enance Considerat	ions	5	ı	T	1			
			be incurred that lepartment budge			YES		N	Х			
Will additiona	ıl s	taff be required?				YES		N	Х			
			As Peri	manent Employee:	S	YES		N				
			Hired Indepe	endent Contractors	S	YES		N				
Can existing :	sta	ff operate and/r i	maintain the facili	ty?		YES	Х	N				
Will additiona	ıl s	ervices/supplies b	oe required t oper	ate the facility?		YES		N	Х			
Will additiona	ıl e	quipment r other	capital investmen	nt be required?		YES		N	X			
Will Town revenues be negatively impacted if the project is not den? YES N X												
Will the investment generate additional revenue for the Town? YES N X												

TOWN OF NEEDHAM Future Project Summary CIP-F											
Project Title Sewer Service Connection Fiscal 1 Installation/Replacement Year 2010 - 2011											
Department	Department Public Works - Sewer Division										
Primary User	Town	Х		Sc	chool			Non- Municipal			
Location								Estimated Capital Cost	100,000		
Eunding	GF	RTS	SW	/R	WTR		OTH	CPA			
Funding	Y Eligible?										
Project Purpose and Highlights											

With the initiation of the Road Construction Programs, a component of the overall project that had been overlooked for funding was the installation or replacement of the sewer service building connections. There are still homes that have chosen not to connect to the Sewer System. Should their septic system fail, they could be ordered to connect due to health reasons regardless of any moratoriums on excavations in new construction that my be in-place. The cost for these service installations are typically not included in road construction estimates. In the case of Chapter 90 Projects, these are not considered as a reimbursement eligible expense. However, they are reimbursable through a betterment type process typically over a ten (10) year period. These expenses will be included in future local road reconstruction estimates. Homeowners where sewer mains exist will be encouraged to connect prior to the project start. However, for those homeowners who do not connect, a partial connection within the right-of-way will be installed. There is a corresponding request for water service connections.

Project Manager | Water & Sewer Superintendent

TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF											
Project Title	Sewer System Rehabilitation - Infiltration Removal Program Sewer System Rehabilitation - Inflow Removal Program Fiscal Year 2011										
Requestor	Water & Sewer	Superintendent			Project Categ	jory	03				
Location	Location Various										
Primary Funding	Sewer Enterpris MWRA(Loan/gra	se Fund / WPAT – SF ant)	RF (2%Loan)	/	CPA Eligible?	No					
Purpose Acquisition Purpose New Construction/Addition (increase in square footage) Renovation - Repair X							Х				
	Health/Safety Federal or State Mandate X										
	New Technology Performance Measure										
	Pr	oject Description Pu	rpose and Jus	stificat	tion						

The Town of Needham, along with numerous other communities, is under Administrative Orders from the DEP to identify and remove Infiltration and Inflow (I/I) in existing sewer systems. Infiltration is defined as groundwater or storm water runoff that enters the system thru deteriorated pipe or manhole structures that by definition need to be repaired. As a result of this order, I/I studies have been undertaken to determine the locations and volumes of I/I entering the sanitary sewer system. The I/I analysis (1985 & 1989) and the Sewer System Evaluation Survey (SSES) (1991) have identified, by flow measurement, the areas of the collection system which are contributing high volumes of I/I to the system. On the basis of volumes of flow and knowledge of local sewer overflows or basement flooding, an order of priority has been established to determine the scheduling of the engineering, design and remediation work. The highest priorities relate to locations of known surcharging with sewage overflow or release or basement flooding. The remediation proceeds in stages starting with the preliminary engineering, followed by the rehabilitation design and concluding with the rehabilitation construction.

Much of this work could include extending or expanding the storm drain system to accept groundwater from household sump pumps. Needham's most significant problem is believed to be from these private sources. The program will initiate with an education and information campaign to inform and prepare the homeowners as to the nature of the problem. The cost impacts to the community, the legal implications, the likely solutions and the responsibilities of the homeowner and the potential enforcement actions by the Town, the MWRA, the DEP and the EPA will need to be communicated. The preliminary engineering will likely take the form of smoke testing and flooded dye testing to determine any direct or indirect interconnections between the sewer and the storm drain system. It will also include a door-to-door investigation of households to determine where violations are occurring. Typical violations include, but are not limited to, sump pumps or open clean-outs where non-sanitary flow is discharging directly to the sewer system as well as foundation drains, yard drains, roof leaders and other cross connections.

Previously Funded Areas

FY08- Engineering, Design & Construction

1,740,300

Infiltration Construction - Area 2, 24 & 21(L)
Inflow Engineering & Design - Area 19-1

FY08 – Area 22 (Prelim. Design - Infiltration) 66,500

INFILTRATION

The work to date has focused on infiltration removal. This program will continue as an infiltration

			January 2008									
	TOWN OF NEEDHAM Ruilding Infrastructure and Other Facility Pequest											
	Building, Infrastructure and Other Facility Request CIP-BIF											
.			tion - Infiltration									
Project Title	Removal Pro		tion - Inflow Removal	Fiscal Year	2011							
Title	Program	iii Kenabiiita	tion - milow Kemovai									
removal eff					•							
FY09 – FY10) (No Wo	rk Proposed)		0								
	ninary Engineer		80,	,000								
Design - Area 22 75,000												
Construction - N/A 0												
FY12 - Preliminary Engineering – TBD Design – Area 16 TBD TBD												
Construction - Area 22 TBD												
INFLOW	ofinad as claar	non sontic w	vater, which is introduced to	the system. This	water is							
generally p		sidential sump	pumps that drain basemen									
The engineering and design for the next year's infiltration rehabilitation construction covers Area 2 -Great Plain Ave/Greendale Ave/Peacedale Rd/Sterling Rd; Area 24-Great Plain Ave/Fairfield St/Douglas Rd, and Grosvenor Rd/Dawson Dr/Richard Rd; Area-Lower 21 - Greendale Ave/Valley Rd/Barbara Rd/Kenney Rd/Rybury Hillway; and the remainder of the Bird's Hill interceptor along Route 128												
Are FY13- Area Are FY14 - Area	1 (No Wo 19-1 - Constructus 19-1 - Constructus 1, 3, & 4 - Constructus 1, 3, & 4 - Constructus 1, 2, 24 & 21(L) 1, 2, 24 & 21(L) 1, 2, 24 & 21(L)	Engineering & I onstruction L) - Engineerin) - Construction	g & Design									
Estimated Useful Life	25 Years		Estimated Capital Cost									
Project Manager	Town Enginee	er										
Project Timel			Timing Considerations									
Total Project (months)		24 Months										
Engineering a Phase	-	12 Months										
	Preconstruction and Actual Construction Phase 12 Months											
Next Phase (i	f applicable)											
Method to Determine Estimated Cost												
otriod to De	COMMINIO LOUITIO											
Consultant												
Industry												
References	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_										
In-house UOM	X	\dashv										
(Specify)												
		1										

			y 2008								
TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request											
Building, Infrastructure and Other Facility Request CIP-BIF											
Project Removal Program Sewer System Rehabilitation - Infiltration Removal Program Fiscal Year 2011 Program											
Expenditure Schedule											
Project FY 2009 FY 2010 FY 2011											
A, D, & E	0	0	155,000								
Site Costs											
Construction	Construction 0 0 0										
F, F, & E											
Technology											
Contingency & Other	i.										
TOTAL	0	0	155,000								
			enance Considera	tions		1					
	operational costs to vithin the affected of			YES		NO	Х				
Will additional	staff be required?			YES		NO	Х				
As Permanent	Employees			YES		NO	Х				
Hired Indepen	dent Contractors			YES		NO	Х				
Can existing s	Can existing staff operate and/or maintain the facility? YES X NO										
Will additional services/supplies be required to operate the facility? YES NO X											
Will additional equipment or other capital investment be required? YES NO X											
Will Town revenues be negatively impacted if the project is not done? YES X NO											
Will the invest	ment generate add	ditional revenue fo	or the Town?	YES		NO	Х				

Beginning in FY 1996, the MWRA assessment included a component that reflects the volume of wastewater discharged. The total I/I has been measured to be as much as 60% of Needham's total wastewater flow. Normal daily wastewater volume is approximately 3.0 m.g.d. with peak I/I; the volume can exceed a rate of 15.0 m.g.d. These spikes are attributable to the inflow component and can total as much as 300 m.g.d. annually in a typical rainfall year. The remaining 75% is flow that occurs throughout the year as infiltration and can approach 1 billion gallons per year. This is approximately 25% of the total I/I in the system.

		р.,	موالما:			NEEDHAM	silias e D				
		Bu	iiaing	j, infrastr		nd Other Fac -BIF	шту к	request			
Project Title		it Plain A		nue Sewa		nping Statio	n-	Fisc	al Year	2009 - 2010	
Requestor									ect Categ	ory	03
Location	Grea	t Plain Av	venue	e							ı
Primary Funding	Sewe	er Enterp	rise F	Fund				CPA Eligi	ble?	No	
Durnoso	Acqı	uisition	New Construction/Addition						ovation -	Repair	Х
Purpose				Safety			F		State Ma		
		New		nology					ance Mea	sure	
			Proje	ect Descri	ption Pu	irpose and Ju	stifica	tion			
MGL c.30 s Prior to the project to b A meeting General's O proposed to By Novemb bid format dollars of \$	39M a sched e bid u was a ffice re be re 200 to con 1,670,	nd subsection of the subsectio	equerening GL c.1 with in a cer MC wwn's the ie \$7	ntly, in Au of bids of 149. Town C decision to GL c.149. consultar new stat 70,000 re	ugust 20 n Augus ounsel o return nt comp ute and	ion. In July 206, bids we it 15th, a bid following red the bid pack leted its revis issued a ne is to bridge the a contingency	re rec prote ceipt c ages sions t w con ne fun	eived to est was report a lette unopened to the planstruction	renovate eceived caser from to and the estimate	the staticalling for the Attornations are in FY 20	on. the ney vas
Estimated Useful Life	20 Ye	ears			Estima	ated Capital (Cost			770	,000
Project	Town	n Enginee	er								
Manager		3			Timin	a Considerati	onc				
Project Timel Total Project		on			111111111	g Consideration	0115				
(months)	Darati	011	18 r	months							
Engineering a Phase	and De	sign	18 r	months							
Preconstructi Construction		d Actual	200)8							
Next Phase (i		cable)	N/A								
	. чррп	042.07	,,	•	1						
			Λ	Method to	Determ	ine Estimate	d Cost				
		1		In-House	e Estima	ite					
Consultant Industry		Х									
References											
In-house											
UOM (Specify	/)]								
Other		1									

			OF NEEDHAM								
Building, Infrastructure and Other Facility Request											
CIP-BIF											
Project	Project Great Plain Avenue Sewage Pumping Station- 2009 -										
Title Supplement Fiscal Year 2007											
		Expend	iture Schedule								
Project Element	Project										
A, D, & E											
Site Costs											
Construction	685,450										
F, F, & E											
Technology											
Contingency & 69,550											
Other	15,000										
TOTAL	770,000										
			aintenance Consid		S						
	operational costs in the operation of th			ntly	YES		NO	Х			
	staff be required?				YES		NO	Χ			
As Permanent	Employees				YES		NO	Χ			
Hired Indepen	dent Contractors				YES		NO	Х			
Can existing s	taff operate and/o	r maintain the	facility?		YES	Х	NO				
Will additional	services/supplies	be required to	operate the facili	ty?	YES		NO	Х			
Will additional equipment or other capital investment be required? YES NO X											
Will Town revenues be negatively impacted if the project is not done? YES NO X											
Will the invest	ment generate ad	ditional revenu	e for the Town?		YES		NO	Χ			

TOWN OF NEEDHAM Future Project Summary CIP-F											
Project Title Wastewater Pump Station Improvements Fiscal Year 10-13											
Department	epartment Public Works - Sewer Division										
Primary User	Towi	n)	×		School		Non- Municipal				
Location			Vari	ious	3		Estimated Capital Cost	See Below			
Funding	GF RTS SWR WTR OTH CPA										
runding	Funding X Eligible?										
	Project Purpose and Highlights										

As part of the Wastewater System Master Plan, several of the wastewater pumping stations was evaluated to determine their current physical condition, capacity vs. current & future flow projections and compliance with current codes or standards of operation. The Master Plan recommends that at least 7 of the 10 stations require work. These include major improvements and replacement of the Reservoir St. "B" Station (this is the 2nd oldest station in the system). Its standby generator has failed and pumps need constant maintenance.

The design of the elimination of the Richardson Drive Station is completed. Other canister pump stations at Lake Drive, Milo Circle, Warren Street and Reservoir "A" are at or beyond their design lives. Constant maintenance and emergency shutoffs occur more frequently and require greater amounts of personnel time and emergency funds to keep running. The remaining canister station at Richardson Drive is scheduled to be eliminated when gravity sewer construction is complete but will need maintenance until then.

The great amount of activity in the Needham Business Center will have a tremendous impact on the Kendrick St. & Reservoir St. "B" Stations. The Kendrick St. Station had been renovated to accommodate some of the initial redevelopment currently underway in the area tributary to this station. This renovation was undertaken and funded by the proponents for the redevelopment of 140 Kendrick St. New enhancements must now be contemplated in anticipation of the addition of 350 residential units at 300 Second Avenue (Charles River Landing) proposed for completion in the next few years.

This could provide sufficient capacity for the next few years under the current zoning. Future redevelopment or rezoning could require additional renovation or replacement.

The Great Plain Ave. Station design is completed for renovations including both building and pump system upgrades. The structure is 50 years old and is in need of repairs. The pumping and control systems do not meet current code requirements. Due to these factors and the now known status of the Olin College impacts, the Great Plain Ave. Station has been funded for renovation. The Reservoir "B" Station is next to be considered for improvements.

FY10 Reservoir St. "B" - Engineering & Design	\$ 550,000
FY11 Reservoir St. "B" - Construction	\$ 3,800,000
Cooks Bridge - Engineering & Design	TBD
FY12 Cooks Bridge - Construction	TBD
Reservoir St. "A" - Engineering & Design	TBD
FY13 Reservoir St. "A" - Construction	TBD
Alden Rd - Engineering & Design	TBD

Project Manager Water & Sewer Superintendent

TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF											
Project Title	Water System Replacement	Water System Improvements – 14" Water Main Replacement Fiscal Year 2009 - 2011									
Requestor	Water & Sewer S	Super	intendent			Project Cated	gory	03			
Location											
Primary Funding	Water Enterprise	Water Enterprise Fund / MWPAT (Loan Program) CPA Eligible? No									
Purpose	Acquisition New Construction/Addition Renovation - Repair footage)										
	Health/Safety X Federal or State Mandate										
New Technology Performance Measure											
	Pro	oject	Description Pu	rpose and Jus	stificat	ion					

This project replaces and/or rehabilitates the 14" transmission water main from the CRWTP to School Street that was installed in 1936 -1939. Certain sections of the current main is made of steel, these sections are to be replaced. Other sections of pipe are made of cast iron and lined with a type of bitumastic or coal tar coating that appears to be breaking down causing water quality issues at the tap. Failure of the steel pipe will cause interrupting flow and the ability to provide adequate fire protection. Water quality issues are a concern with the break-down of the bitumastic lining. The total length of the 14" main is approximately 19,000 If (3.6 miles), extending from Charles River Street, to Pine Street, to Central Avenue, to Marked Tree Road, Oak Street, Chestnut Street, to School Street.

An application for Water Pollution Abatement Trust (WPAT) funding was submitted in August 2007.

FY06 -Phase I Design - 50,000 - Previously Funded

FY08-Phase I Construction - 250,000 - Previously Funded

FY09 -Phase II, III & IV Construction, Administrative, Engineering & Inspection Costs - 1,900,000

NOTE; Needham was notified in November 2007 by DEP that this project has been included in their draft Intended Use Plan.

			•	
Estimated Useful Life	80 Years		Estimated Capital Cost	1,900,000
Project Manager	Town Engine	er		
I	Project Timelin	9	Timing Considerati	ions
Total Project (months)	Duration	36 Months		
Engineering a Phase	and Design	12 Months		
Preconstruction Construction	on and Actual Phase	36 Months		
Next Phase (if applicable) 2010				
			·	

				NEEDHAM				
		Building		and Other Facility R	equest			
		Banang		-BIF	equest			
Project		•		14" Water Main	Fisc	al Ye	ar	2009 -
Title	Replace							2011
				ine Estimated Cost				
0 11 1	L v.	Estimated	costs determine	ed under WPAT app	lication.			
Consultant	Х							
Industry								
References	V							
In-house								
UOM								
(Specify)								
Other Expenditure Schedule								
Droiget			Expenditui	e Schedule				
Project Element								2013
A, D, & E	150,000							
A, D, & E 150,000 Site Costs								
Construction	-	1,500,000						
F, F, & E		1,300,000						
Technology								
Contingency 8	2,							
Other	~	250,000						
TOTAL	-	1,900,000						
-			ational and Maint	enance Considerat	ions			
Are there any	oneratio			t are no currently				
			epartment budge		YES		NO	Х
Will additional	staff be	required?			YES		NO	Х
			As Per	manent Employees	YES		NO	Χ
			Hired Indep	endent Contractors	YES		NO	Χ
Can existing s	taff oper	ate and/or	maintain the fac	ility?	YES	Χ	NO	
Will additional	l services	s/supplies b	e required to op	erate the facility?	YES		NO	Х
Will additional	l equipm	ent or othe	r capital investm	ent be required?	YES		NO	Χ
	enues be	negatively	impacted if the	project is not	YES		NO	Х
done?							INU	^
Will the invest	tment ge	nerate add	itional revenue f	or the Town?	YES		NO	Χ

		TO	NAME OF REFERENCE						
	Build		OWN OF NEEDHAM ucture and Other Fa	cility F	Request				
	T		CIP-BIF						
Project Title	Fire Hydran	t Replacemer	nt Program		Fiscal	Year	2010)	
Requestor	Water & Sew	er Superintend	dent		Project	t Categor	y 03		
Location	Various					,			
Primary Funding	Water Enterp	rise Fund			CPA Eligible	e?	No		
Purpose	Acquisition		truction/Addition ncrease in square footage)		Renovatio	on - Repa	ir X		
	Health/Safety		Х		al or State		te X		
	New Technolo			Perfo	rmance Me	easure			
Project Descr	iption Purpose	and Justificati	on						
and more reliable fire hydrants within the community by developing an ongoing revolving cycle of replacing approx. 50 fire hydrants per year (by contractor). There are approximately 150 unreliable fire hydrants remaining out of 300 initial hydrants that are out-dated and ungated poured lead-joints. During the annual fall hydrant inspection (dry testing), older fire hydrants have been determined to be potential freezing hazards due to their lack of ability to either properly drain or efficiently shut down. With prior years funding (200,000) it was intended to have hydrant replacements privately contracted. With reprioritization and coordination the first & second year's project was successfully completed with Town forces. By utilizing Town forces, this provided the ability to install an estimated 60% more hydrants replaced than originally anticipated.									
Estimated Useful Life	60 years		Estimated Capital C	ost		100,000)		
Project Manager	Water & Sew	er Superintend	dent						
Project Timel	ine		Timing Consideration	ons					
Total Project (months)	Duration	12 months							
Engineering a	and Design								
Preconstructi	on and Actual	12 months							
Construction Next Phase (i			+						
Wext Friday (п аррпсавіс)								
		Method to	Determine Estimated	Cost					
Consultant Industry									
References									
In-house	X								
UOM (Specify	/)								
Other									
			penditure Schedule						
Project	FY 2009	FY 2	010 FY 2011		FY 2012		FY 2013		

	TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF										
Project Title	Fire Hydrant Re	placement Progr	am	Fisc	cal Yea	ar	2010				
Requestor	Water & Sewer Su	uperintendent		Proj	ect Cat	tegory	03				
Element											
A, D, & E											
Site Costs											
Construction		100,000	100,000								
F, F, & E											
Technology											
Contingency & Other											
TOTAL		100,000	100,000								
Other Costs*											
	ind Maintenance Co										
	y operational costs within the affected			YES		NO	х				
	Il staff be required?)		YES		NO	Х				
As Permanen				YES		NO	X				
	ndent Contractors			YES		NO	Х				
	staff operate and/o	r maintain the fac	ility?	YES	Х	NO					
	Il services/supplies			YES		NO	Х				
	l equipment or oth			YES		NO	Χ				
Will Town rev	venues be negative	y impacted if the	project is not	YES		NO	Х				
Will the inves	tment generate ad	ditional revenue fo	or the Town?	YES		NO	Х				

	TOWN OF NEEDHAM Future Project Summary CIP-F										
Project Title Irrigation Supply Facility / Design Fiscal Year 10-12											
Department	Public W	ublic Works - Water									
Primary User	Town		X		School		Non- Municipal				
Location		Dedh	nam Ave	. Re	eservoir		Estimated Capital Cost	70,000			
Eunding	GF RTS SWR WTR OTI						СРА				
Funding					Х		Eligible?				
Project Purpose and Highlights											

The Water System Master Plan identified all of the sources of water which supply the Town. In the report it was acknowledged that the use of the original supply serving the Town prior to the development of the Charles River St. Well Field had been discontinued. This supply known as the Needham Reservoir/Dedham Ave. Pump Station had been discontinued as an active supply in the 1950's. It has since been formally decommissioned but it has not been completely deactivated. It consists of 2-8' + diameter shallow wells (30'+) deep, which were originally connected through piping under the reservoir to the pump house. The reservoir was constructed as an earth dam impoundment to serve as a recharge for the wells. Its capacity was 400,000 -500,000 gallons per day. The report recommended that this supply be explored as an alternate for irrigation purposes for the Defazio Complex, the Pollard School Fields and the Needham Golf Club. Using this source for these seasonal demands could lessen the impact upon the Charles River Well Field or the MWRA water system. The work would involve installing pumping equipment and controls at or near the wells, piping to connect to the irrigation systems and disconnection from the potable water supply. The first phase for this project is for design work.

Project Manager Town Engineer

	Bu	TC ilding, Infrastr	ucture a	NEEDHAM and Other Faci P-BIF	ility R	equest		
Project Title	Water Syste	m Rehabilita	tion Pr	ogram		Fisca	l Year	2009
Requestor	Water & Sew	er Superintend	ent			Projec	t Category	03
Location	Various							
Primary Funding	Water Enterp	rise Fund				CPA Eligibl	e? N)
	Acquisition		struction/Addition x Renarce x Repair			Renovati Repair		X
Purpose	Health/Safety	1		Х	Fede	eral or Stat	te Mandate	
	New Technolo	ogy			Perf	ormance M	leasure	
		Project Descrip	ption Pu	irpose and Jus	stifica	tion		•
FY09 Garden St. – Construction - 585,000								
- Chapel St./Great Plain Ave. to Highland – New 8' (980 lf) – Engineering & Design - May St./Highland Ave. to Webster St. – New 8" (1700 lf) - Engineering & Design 97,500 FY10 Chapel St./May St. – Construction - 650,000								
75,800	-	t./Great Plain A			(2000) lf) – Engi	neering &	Design
FY11 Pickerin	g St. Construc	tion - 505,000						
98,300		/Grant St. to P /Garfield St. to						
FY12 Kimball	St./Lincoln St.	– Construction	n - 655,	000				
95,000	- Grant St./	Junction St. to	Dedhai	m Ave. – New	8′ (2	500 lf) – E	ngineering	& Design
FY13 Grant S	t Constructio	on - 685,000						
Design 90,000	- Pleasant St./Howland St. to Dedham Ave New 8" (1160 lf) - Engineering & Design - Norfolk St./Warren St. to Webster St New 8" (1300 lf) - Engineering & Design							
Estimated Useful Life	80 years Estimated Capital Cost 3,536,600							
Project Manager	Town Enginee	er						
Project Timel			Timin	g Consideratio	ns			
Total Project (months)	Duration	12 months						

					NEEDHAM				
		Buildi			and Other Facility	Request			
			.,,		-BIF	,			
Project Title	Water :	System	Rehabilitat	ion Pr	ogram	Fise	cal Year		2009
Requestor	Water &	Sewer S	Superintende	ent		Proj	ect Categ	ory	03
Engineering a Phase	and Desig	n							
Preconstruction		ctual 1	2 months						
Next Phase (i	f applicat	ole)							
Matte and the Da	4 ! -		-1.01						
Method to De	termine i	<u>-stimate</u> 	d Cost						
Consultant Industry References In-house UOM (Specify) Other	Industry References In-house X UOM (Specify) Other								
Expenditure S	Schedule	l							
Project Element		′ 2009	FY 20)10	FY 2011	FY 2012 FY 2013			
A, D, & E	9	7,500	75,8	00	98,300	95,0	00	90	,000
Site Costs									
Construction	58	35,000	650,0	000	605,000	655,0	000	685	5,000
F, F, & E									
Technology									
Contingency Other	&								
TOTAL	68	32,500	725,8	300	603,300	750,0	000	775	5,000
					tenance Considera				
Are there any provided for v					t are no currently ets?	YES		NO	Х
Will additiona						YES		NO	Х
As Permanen	t Employe	ees				YES		NO	Х
Hired Indepe	ndent Cor	ntractors	5			YES		NO	Х
Can existing	staff oper	ate and/	or maintain	the fac	ility?	YES	Х	NO	
Will additiona	l services	s/supplie	s be require	d to op	erate the facility?	YES		NO	Х
Will additiona	ıl equipm	ent or ot	her capital i	nvestm	ent be required?	YES		NO	Х
Will Town rev	enues be	negativ	ely impacted	d if the	project is not	YES		NO	Х
Will the inves	tment ge	nerate a	ıdditional rev	enue f	or the Town?	YES		NO	Х

		T	OWN OF	NEEDHAM						
	Bu	ilding, Infrastr			lity Re	quest				
Duningt	T		CIP	-BIF					00	
Project Title	Water Servi	ce Connectio	ns			Fiscal	Year		09- 13	
Requestor	Water & Sewe	er Superintend	lent			Projec	t Catego	ory	03	
Location				Various						
Primary Funding		Water Ente	erprise F	und		CF Eligi		Ν	lo	
	Acquisition			n/Addition in square		Renovat		epair	Х	
Purpose	Hea	alth/Safety		Х	Fed	eral or Sta	ate Man	date		
	New	Technology			Pe	erformanc	rmance Measure			
Project Description Purpose and Justification										
The primary purpose of this program is to remove lead from the system. With the initiation of the Road Construction Programs, a component of the project that had been overlooked for funding was the replacement of the water service building connections. This leaves an element of the subsurface infrastructure susceptible to failure before the desired life of the reconstructed roadway has been realized. In the case of Chapter 90 projects, such as Webster St., these are not considered as a reimbursement eligible expenses. Should the DPW be successful in continuing the local road reconstruction program, these expenses could be determined and funded on a project by project basis. Water main projects include service replacements as a project expense.										
Estimated Useful Life	60 years		Estima	ated Capital C	ost		200,00	00/yr.		
Project Manager	Water & Sewe	er Superintend	lent							
Project Timel	ine		Timing	g Consideratio	ns					
Total Project (months)	Duration	12 months								
Engineering a Phase	and Design									
Preconstruction	on and Actual Phase	12 months								
Next Phase (i	f applicable)	2010								
		Method to	Determ	ine Estimated	Cost					
Consultant Industry References In-house UOM (Specify Other	X ()									

		Building		NEEDHAM and Other Facility I	Reque	st					
Project	v	/ater Service Co		-BIF	F	isc	al Yea	r	09-		
Title Requestor	W	/ater & Sewer Sup	perintendent		F	Proje	ect Cate	egory.	13		
. toquests.				re Schedule		. 0) (, or our	- <u> </u>	1 00		
Project Element		FY 2009	FY 2010	FY 2011	FY	′ 20 ⁻	12	FY 20	013		
A, D, & E											
Site Costs											
Construction	Construction 200,000 200,000 200,000 200,000 200,000								00,000		
F, F, & E											
Technology											
Contingency Other	&										
TOTAL		200,000	200,000	200,000		20	0,000	2	00,000		
				enance Considera	tions						
		perational costs to hin the affected d		t are no currently ets?	YE	ES		NO	Х		
Will additiona	ıl s	taff be required?			YE	ES		NO	Χ		
As Permanen	t E	mployees			YE	ES		NO	Χ		
Hired Indepe	nde	ent Contractors			YE	ES		NO	Χ		
Can existing s	sta	ff operate and/or	maintain the fac	ility?	YE	ES	Χ	NO			
Will additiona	al s	ervices/supplies b	e required to ope	erate the facility?	YE	ES		NO	Χ		
Will additiona	Vill additional equipment or other capital investment be required?							NO	Χ		
Will Town revenues be negatively impacted if the project is not done?						NO	X				
Will the inves	tm	ent generate add	itional revenue fo	or the Town?	YE	ES		NO	Χ		

	TOWN OF NEEDHAM Building, Infrastructure and Other Facility Request CIP-BIF										
Project Title	Water Storage	Water Storage Tank - Repair & Paint Fiscal Year 2009									
Requestor	Water & Sewer S	Superintendent		Project Category	03						
Location	Dunster Road W	Ounster Road Water Tank									
Primary Funding	Water Enterprise	Water Enterprise Fund				No					
	Acquisition	New Construct Addition (increase square footage	ease in		Renovation - Repair	X					
Purpose	Health/Safety	х	Federa Manda	al or State ate	X						
	New Technology			Perfor	mance Measure						
	Project Description Purpose and Justification										

The DEP Regulations controlling the operation and maintenance of water supply and distribution systems require routine draining and inspection of water storage tanks. Periodically the report of the inspection indicates that the surface coating is worn or damaged and is in need of cleaning and repainting. The Dunster Road Water Tank was completely cleaned and painted inside and out in 1993 and prior to that in 1978. The previous inspection indicated no problems inside or out. Last year's inspection revealed similar results inside, however, the outside has sustained more than normal wear. It has been especially burdened by vandalism beyond normal graffiti. It is recommended that the outside at least be cleaned and painted. The Birds Hill Water Tank is now 30 years old. It still has the original coating inside and out. The last few inspections have found no serious problems but the report has recognized the age of the coating and its impending deterioration. The DPW is recommending cleaning and painting as soon as practical.

The Birds Hill tank is being cleaned and painted in FY08. This request is for cleaning and painting the Dunster Road Tank. Construction inspection costs have been added for the proposed work at the tank.

A recommendation has been made to install a mixing system in both the Birds Hill & Dunster Road Tanks in the future.

Estimated Useful Life	15 years		Estimated Capital Cost	730,000
Project Manager	Town Engine	er		
Project Timel	ine		Timing Considerations	
Total Project (months)	, ,			
Engineering and Design Phase				
	Preconstruction and Actual Construction Phase			
Next Phase (if applicable)			
Method to De	etermine Estim	ated Cost		
Consultant	X			
Industry				
References				
In-house	Х			

		Bu	ıilding	, Infrastructure a	NEEDHAM and Other Facility P-BIF	Request				
Project Title	Wate	r Stora	ige Ta	ank - Repair &	Paint	Fi	scal Ye	ar	2009	
Requestor	Water	- & Sew	er Sup	perintendent			oject itegory		03	
UOM (Specify Other	')									
Expenditure Schedule										
Project Element		FY 2009 FY 2010 FY 2011 FY 2012 FY 2013								
A, D, & E										
Site Costs										
Construction		715	,000							
	F, F, & E									
Technology										
Contingency Other	&	15	,000							
TOTAL		730	,000							
					tenance Considera					
				be incurred that epartment budg	it are no currently ets?	YES	5	N	10	Χ
Will additiona	l staff l	be requ	ired?	-		YES	;	N	10	Х
As Permanen	t Emplo	oyees				YES	5	N	10	Χ
Hired Indepen	ndent (Contract	tors			YES	;	N	10	Χ
Can existing s	staff op	erate a	nd/or	maintain the fac	cility?	YES	S X	N	10	
					erate the facility?	YES	5	N	10	Χ
					ent be required?	YES	5	N	10	Χ
Will Town rev done?	enues	be nega	atively	impacted if the	project is not	YES	5	N	10	Χ
	tment	generat	e add	itional revenue f	or the Town?	YES	5	N	1O	Х

TOWN OF NEEDHAM Future Project Summary CIP-F									
Project Title Water Supply Development Feasibility Study Fiscal Year 2010									
Department	Public W	orks - Water 8	& Sewer						
Primary User	Town	Х	School		Non Munici				
Location		Va	rious		Estima Capital			TBD	
Eunding	GF	RTS	SWR	WTR	OTH	СР	PΑ		
Funding				Х		Eligik			
Project Purpose and Highlights									

The historical demand in water supply is seasonal in nature. The typical usage during nonsummer periods is 2-3 million gallons per day (mgd). The summer usage can reach as high as 5-7 mgd. Therefore, the Town must supplement its supply from the MWRA. Ideally the reliance on the MWRA source would be for emergency purposes as a back-up supply. Becoming more self reliant would require the development of additional wells. The process for putting new or additional supply on-line is typically 10 years. Depending upon the conditions in the Watershed, these requests could be limited, conditioned or even denied. This likelihood would have to be determined. Alternately, the development of additional wells within the well field could allow the Town to better manage the water within the well field. It preserves the ability for maximizing of the currently permitted withdrawal volume. Routine servicing and maintenance of the wells can occur on a rotating basis while maintaining our permitted withdrawal volumes. This will assist in reducing the reliance on the expensive MWRA water supply. It would also allow the Town to produce additional water during special emergency conditions with only basic water treatment. This process would be initiated through a feasibility study.

Water & Sewer Superintendent Project Manager

TOWN OF NEEDHAM Future Project Summary CIP-F								
Project Title	Water System - Fire Flow Improvements						Fiscal Year	10-13
Department	Public Works - Water & Sewer							
Primary User	Town	Х		School			Non- Municipal	
Location	Various						Estimated Capital Cost	6,850,000
Funding	GF	RTS	SWR	WTR		OTH	СРА	No
				Х			Eligible?	
Project Purpose and Highlights								

The Water System Master Plan has identified a category of improvements for high priority action:

- FY10 St. Mary's Street Pump Station improvements/construction 4,400,000
- FY11 Bird's Hill Tank high service area/engineering & design 250,000
- FY12- Bird's Hill Tank high service area/construction 1,200,000
 - Dunster Road Tank high service area/engineering & design 200,000
- FY13 Dunster Road Tank high service area/construction 800,000

Project Manager | Water & Sewer Superintendent