# EAST LYME WATER & SEWER COMMISSION REGULAR MEETING Tuesday, MAY 24th, 2016 MINUTES

The East Lyme Water & Sewer Commission held a Regular Meeting on Tuesday, May 24, 2016 at the East Lyme Town Hall, 108 Pennsylvania Avenue, Niantic, CT. Chairman Nickerson called the Regular Meeting to order at 7:00 PM.

PRESENT:

Mark Nickerson, Chairman, Steve DiGiovanna, David Jacques, Joe

Mingo, Dave Murphy, Carol Russell, Roger Spencer, Dave Zoller

ALSO PRESENT:

Scott Bassett, Auditor, RSM LLP
Paul Malmrose, PE, VP Tighe & Bond
Thomas Mahanna, PE, VP Tighe & Bond
Robert Tedeschi, PE, Weston & Sampson

Sarah Bucci, PE, Weston & Sampson Joe Bragaw, Public Works Director Brad Kargl, Municipal Utility Engineer

Anna Johnson, Finance Director

FILED IN EAST LYME

Au31 20 16 AT 2:15

ABSENT:

Dave Bond

#### 1. Call to Order

Chairman Nickerson called the Regular Meeting of the East Lyme Water & Sewer Commission to order at 7:00 PM and led the assembly in the Pledge.

#### 2. Auditor Report

Scott Bassett, Auditor with RSM LLP explained the Water & Sewer audit noting that the sewer side had a positive cash flow of \$47,841 and the water side had a positive cash flow of \$89,276. (Attached)

Mr. Mingo asked about money that was borrowed from the sewer funds.

Mr. Bassett said that is part of the general fund.

Mr. Mingo said that the Water department had also borrowed money.

Mr. Bassett said that amount is around \$136,000 due to the sewer department. He noted that the audit pages tat they have are specific to the water and sewer department.

Ms. Russell asked if they have assessed their physical health going forward.

Mr. Bassett said that is beyond their scope - they work on assets and history.

# 3. Approval of Minutes

#### Informational Meeting Minutes – April 26, 2016

Mr. Nickerson called for a motion or any discussion or corrections to the Informational Meeting Minutes of April 26, 2016.

# \*\*MOTION (1)

Mr. DiGiovanna moved to approve the Informational Meeting Minutes of April 26, 2016 as presented.

Mr. Zoller seconded the motion.

Vote: 8-0-0. Motion passed.

#### Regular Meeting Minutes ~ April 26, 2016

Mr. Nickerson called for a motion or any discussion or corrections to the Regular Meeting Minutes of April 26, 2016.

#### \*\*MOTION (2)

Mr. Zoller moved to approve the Regular Meeting Minutes of April 26, 2016 as presented.

Mr. DiGiovanna seconded the motion.

Vote: 8 - 0 - 0. Motion passed.

# 4. Delegations

Mr. Nickerson called for delegations.

There were no delegations.

#### 5. Finance Director Report

Ms. Johnson explained the sewer assessment fund and noted in her report that the prison billing was very low for April. May is better but the prison billing will be a challenge going forward.

Mr. Mingo asked about the Gateway apartments.

Mr. Nickerson said that 160 of the apartments are rented and occupied now and as the summer approaches more should be occupied. This should help to offset the prison drop off.

# 6. Approval of Bills – Attachment B – May 24, 2016

Mr. Nickerson called for a motion on the Well 1A & 2A Treatment Study.

# \*\*MOTION (3)

Mr. DiGiovanna moved to approve payment of the following Well 1A & 2A Treatment Study bills: Tighe & Bond, Inv. #041690150 in the amount of \$30,000.00.

Mr. Spencer seconded the motion.

Vote: 8 - 0 - 0. Motion passed.

Mr. Nickerson called for a motion on the Saunders Point Sewer Study bills.

#### \*\*MOTION (4)

Mr. DiGiovanna moved to approve payment of the following Saunders Point Sewer Study bills: Weston & Sampson, Inv. #456190 in the amount of \$1,977.77 and Weston & Sampson, Inv. #457085 in the amount of \$4.436.75.

Mr. Spencer seconded the motion.

Vote: 8 - 0 - 0. Motion passed.

# 7. Water Project Updates

■ Well 1A & 2A Treatment Study – Draft Basis of Design Report Presentation – Tighe & Bond Paul Malmrose, PE, VP Tighe & Bond said that the main problem is iron and manganese and not a health issue but rather one of discoloration. He said that most of these facilities are 15-20 years old. He explained the first few pages of the PowerPoint presentation (see Attached) and then introduced Thomas Mahanna, PE, VP Tighe & Bond to present the Well 1A and 2A options.

Mr. Mahanna said that while they had presented three options that they have recommended Option 1 (Alternative 1A-1) for Well 1A at a probable cost of \$3,120,000.00.

Mr. Mingo asked what happened to the treatment facility for Well 1.

Mr. Mahanna said that it still exists but is not being used.

Mr. Mahanna said that they had also looked at three options for Well 2A and that they again recommended Option 1 (Alternative 2A-1) at a probable cost of \$3,540,000.00. The two projects would have a probable cost of \$6.7M and would be based on 20 years of DWSRF loans (low cost) at 2%. He said that the next step would be submitting for the loan application.

Mr. Mingo asked where they would get the money to pay for all of this.

Mr. Mahanna said that the project timeline is almost two (2) years.

Mr. Kargl noted that in looking over the debt schedule that they could not afford the Tighe & Bond Wells 1A & 2A project ((\$6.7M) during the 2018-2019 time frame and they would have to look at working on it differently. He suggested maybe just getting the pipe in with Well 1A as a solution on an interim basis with a cost of around \$2M instead of the currently proposed \$3.2M. They would have to think on this and on how to proceed.

Ms. Johnson noted that with the DWSRF funds that it would be around 2020 that it would hit if they did the one project.

# 8. Sewer Project Updates

Saunders Point Sewer Study – Draft Plan Presentation – Weston & Sampson

Mr. Kargl said that Weston & Sampson is present to update them on where they are with this study.

Sarah Bucci, PE & Robert Tedeschi, PE with Weston & Sampson explained the PowerPoint presentation (see Attached) noting that this was the first of a series of informational meetings that they would be providing them with as they undertake this study.

Ms. Bucci explained the needs analysis and the ranking matrix.

Mr. Tedeschi said that over the next month or so they will look at the waste flow projections and into how to best develop the sewer route based on the possibilities.

Mr. Kargl said that this is a year long process.

Ms. Russell asked if they are looking at emergency situations.

Ms. Bucci said that Ledge Light Health District keeps track of that and on top of everything. She noted that they have excellent drainage soils at Saunders Point although if there is failure it would go towards the river.

Ms. Russell asked about the ledge in the area and problematic issues.

Ms. Bucci said that one area has ledge and that during the design they would be able to formulate opinions on how to proceed. They are not at that stage yet.

• Request for Qualifications – On-call Wastewater Consulting & Engineering Services

Mr. Kargl said that they have narrowed the list of five down to three that they will be interviewing tomorrow. Those being interviewed are: Tighe & Bond, Weston Sampson and Wright Pierce. He said that he would bring their recommendation on which they would like to the next regular meeting.

#### 9. Budget Authorization Request for Water and Sewer

Mr. Bragaw noted that this year they had done fairly well in the sewer area however the Pattagansett Pump Station controls went out and they had to have people there 24/7 to turn it on manually as the controls could not be bought. They did eventually get it running. He said that upgrading the antiquated controls at the two largest pump stations would cost the \$50,000 that they were going to pay the sewer assessment fund. He would like them to utilize money from the \$50,000 in the operating budget to do these replacements/upgrades.

#### \*\*MOTION (5)

Mr. Murphy resolved to forego payment back to the Sewer Assessment fund up to \$50,000 from FY 15-16 Sewer Department Operations budget line item #06-01-800-800-801 that was originally intended in the approved budget and reallocate those funds to pay for much needed permanent upgraded controls at the Pattagansett and Niantic Pump Stations and the SCADA system.

Mr. DiGiovanna seconded the motion.

Vote: 8 - 0 - 0. Motion passed.

Mr. Bragaw also explained that there is a need for more dollars in the water department due to the fact that this year has 53 weeks in it and the payroll has to be covered. While they can absorb it on the sewer side he said that they cannot absorb it on the water side and is therefore asking them to forego payment to the sewer assessment fund to get them through operating costs.

# \*\*MOTION (6)

Mr. Murphy resolved to forego payment back to the Sewer Assessment fund in the amount of \$30,814.37 from FY 15-16 Water Department Operations budget line item #07-01-300-500-510 that was originally intended in the approved budget and reallocate funds to offset other line items that need additional funds.

Mr. DiGiovanna seconded the motion.

Vote: 8 - 0 - 0. Motion passed.

# 10. Correspondence Log

There was no discussion.

# 11. Chairman's Report

Mr. Nickerson said that he continues to work with Old Lyme on how to proceed with that project. He again thanked Mr. Bragaw and Mr. Kargl for all their hard work on the various projects before them.

# 12. Staff Updates

#### a. Water Department Monthly Report

Mr. Murphy asked if they have hit the allotment for New London.

Mr. Kargl said that they had and that they had exceeded it by some 300,000 gallons so now they will have to see how the summer goes.

# b. Sewer Department Monthly Report

There were no comments.

### 13. ADJOURNMENT

Mr. Nickerson called for a motion to adjourn.

# \*\*MOTION (7)

Mr. DiGiovanna moved to adjourn the May 24, 2016 Regular Meeting of the East Lyme Water & Sewer Commission at 9:04 PM.

Mr. Zoller seconded the motion.

Vote: 8 - 0 - 0. Motion passed.

Respectfully submitted,

Karen Zmitruk, Recording Secretary

Financial Report June 30, 2015

THE POWER OF BEING UNDERSTOOD AUDIT | TAX | CONSULTING

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Matera Sewer Audit 5/24/16



Town of East Lyme, Connecticut

# Statement of Net Position June 30, 2015

Assets Cash and cash eEquivalents Investments Receivables: Property taxes, net of allowance for collection losses Assessments/use charges Intergovernmental Internal balances Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets  Deferred Outflows of Resources	Governmental Business-Type Type Activities Activities		Total	
Investments Receivables: Property taxes, net of allowance for collection losses Assessments/use charges Intergovernmental Internal balances Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets		,,		
Receivables: Property taxes, net of allowance for collection losses Assessments/use charges Intergovernmental Internal balances Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets	\$	7,058,252	\$ 582,587	\$ 7,640,839
Property taxes, net of allowance for collection losses Assessments/use charges Intergovernmental Internal balances Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets		3,215,161	47	3,215,161
Assessments/use charges Intergovernmental Internal balances Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets				
Intergovernmental Internal balances Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets		2,038,647	*	2,038,647
Internal balances Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets		4,471,514	409,361	4,880,875
Other assets Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation Total assets		850,615		850,615
Restricted cash Capital assets, not being depreciated Capital assets, net of accumulated depreciation  Total assets		941,851	(941,851)	
Capital assets, not being depreciated Capital assets, net of accumulated depreciation  Total assets		177,380	84,822	262,202
Capital assets, net of accumulated depreciation  Total assets		5,253,455		5,253,455
Capital assets, net of accumulated depreciation  Total assets		22,241,505	623,015	22,864,520
Total assets		92,934,542	46,129,591	139,064,133
Deferred Outflows of Resources		139,182,922	46,887,525	186,070,447
Deferred pension amounts		777,247	*	777,247
Deferred charges on refundings		1,214,463	*	1,214,463
Total deferred outflows of resources		1,991,710		1,991,710
Liabilities				
Accounts payable and accruals		4,829,612	102,183	4,931,795
Accrued interest payable		548,595	#.	548,595
Bond anticipation notes payable		740,000	Ē	740,000
Meter deposits		5.27	3,795	3,795
Unearned revenue		57,065	#	57,065
Long-term liabilities:				
Due within one year		5,548,540	=	5,548,540
Due in more than one year		63,776,363	-	63,776,363
Total liabilities		75,500,175	105,978	75,606,153
Deferred Inflows of Resources				
Deferred pension amounts		220,528	3.50	220,528
Total deferred inflows of resources		220,528	<u>₩</u>	220,528
Net Position				
Net investment in capital assets Restricted:		60,368,374	46,752,606	107,120,980
Culture and recreation		14,673	(a - 1.77)	14,673
Unrestricted (deficit)		5,070,882	28,941	5,099,823
Total net position\$	;	65,453,929	\$ 46,781,547	\$ 112,235,476

See Notes to Financial Statements.

# Balance Sheet - Governmental Funds June 30, 2015

·				Majo	or Fu	nds			Other	
	1	General	,	Sewer Assessments Fund		Bonded Capital Projects	1	Capital Nonrecurring Fund	Nonmajor Governmental Funds	Total Governmental
Assets		Corioral		T dild		1 TOJECIS		runa	Funus	Funds
Cash and cash equivalents Investments Receivables (net of allowances	\$	3,924,005 3,215,161	\$	747,169 =	\$	3,524,303	\$	1,729,152	\$ 1,102,025 -	\$ 11,026,654 3,215,161
for collection losses):										
Property taxes		2,038,647		=		1.50 m		=	:#1	2,038,647
Assessments/use charges		52,577		3,606,522		30		=	690,014	4,349,113
Intergovernmental		54,829		=		319,370		370,402	106,014	850,615
Advances to other funds  Due from other funds		500.055		616,294				÷	1#8	616,294
Other		606,855		911,221		133,385		348,969	30,744	2,031,174
Total assets	2	136,601 10,028,675	\$	8,579 5,889,785	\$	3,977,058	er.	2 440 500	32,200	177,380
Liabilities	_	10,020,073	φ	3,009,703	<u> </u>	3,977,058	\$	2,448,523	\$ 1,960,997	\$ 24,305,038
Accounts payable and accruals Due to other funds	\$	1,956,071 79,383	\$	33,346	\$	293,490 400,839	\$	435,510 416,678	\$ 692,435 210,904	\$ 3,377,506 1,141,150
Unearned revenue		170		S.		**		596	57,065	57,065
Bond anticipation notes payable Advances from other funds	-	-		- E		740,000 616,294				740,000 616,294
Total liabilities	-	2,035,454	_	33,346		2,050,623		852,188	960,404	5,932,015
Deferred Inflows of Resources										
Unavailable revenue		1,972,851		3,597,239		319,370		370,402	496,067	6,755,929
Total deferred inflows										
of resources	<del>)</del>	1,972,851		3,597,239	_	319,370		370,402	496,067	6,755,929
Fund Balances (Deficits) Nonspendable				616 204					00.000	
Restricted		-		616,294 -		1,607,065		1,225,933	32,200 14,673	648,494
Committed		#		1,642,906		1,007,000		1,225,555	573,292	2,847,671 2,216,198
Assigned		836,994		-		(*)		9	646	836,994
Unassigned (deficits)  Total fund		5,183,376	-		-				(115,639)	5,067,737
balances		6,020,370		2,259,200		1,607,065		1 225 022	E04 E36	44.047.004
Total liabilities, deferred	-	0,020,070		2,203,200		1,007,000		1,225,933	504,526	11,617,094
inflows of resources										
and fund balances	\$	10,028,675	\$	5,889,785	\$	3,977,058	\$	2,448,523	¢ 1,060,007	
							Ψ	2,440,323	\$ 1,960,997	
Amounts report	ted for	governmenta	l acti	vities in the st	tatem	nent of				
		erent because								
governm	seis, ii sental :	et of accumula funds are repo	ated	depreciation p	ourcr	lased in				
stateme	nt of n	et position inc	ludes	s those capita	l ass	ets among				
the asse	ts of th	ne Town as a	whol	e.		ous annong				115,176,047
Deferred in	flows	of resources -	una	vailable reven	ue					6,755,929
		of resources		ferred amount	ts on	refunding				1,214,463
		pension credit - pension expe								(220,528)
Long-lerm	liabiliti	es, including b	ond	s pavable, are	not	due and nava	ble			777,247
in the cu	rrent p	eriod and ther	efore	e are not repo	rted i	in the funds.				(69,324,903)
Internal ser	vice fu	ınds are used	by n	nanagement to	o cha	arge the costs	of			(00,024,000)
nsk man	ageme	ent to individua	al fun	ids. The asse	ts ar	nd liabilities				
in the sta	temen	service funds a it of net position	ire ir nn	iciuded in gov	ernn	ientai activitie	s			
Accrued int	erest p	payable not re	cord	ed in the fund:	S.					7,175 (548,595)
		of governme							24	
Pag Notes to Figure int Statements		3-70111110							=	\$ 65,453,929

Statement of Revenues, Expenditures and Changes in Fund Balances (Deficits) - Governmental Funds For the Year Ended June 30, 2015

140		Major	Funds		Other	
	General	Sewer Assessments	Bonded Capital	Capital Nonrecurring	Nonmajor Governmental	Total Governmental
Revenues	General	Fund	Projects	Fund	Funds	Funds
Property tax assessments						
and lien fees	\$ 49,782,485	\$	\$	¢.	er.	
Intergovernmental	14,231,113	Ψ :=		\$	\$	\$ 49,782,485
Other revenues	17,201,110	30	582,740	05.040	1,188,867	16,002,720
Charges for services	7,050,389	1 104 000	213,154	35,210	-	248,364
Investment income	36,613	1,104,989	-	68,202	3,142,805	11,366,385
Total revenues	71,100,600	854	10,400	2,481	3	50,351
	71,100,000	1,105,843	806,294	105,893	4,331,675	77,450,305
Expenditures Current:						
General government	6,239,710					
Public safety	3,807,681	<del></del>	(=)	-	5	6,239,710
Public works	3,894,401	88,825	440.000	***		3,807,681
Health and welfare	262,123	00,023	112,303	1,037,778	1,995,381	7,128,688
Culture and recreation	2,332,997	(e)	-	•	Ti.	262,123
Education	49,709,355	5 <del>5</del>	-	2	5,000	2,337,997
Capital outlay	1,940,082			390	1,777,711	51,487,066
Debt Service:	1,340,062	5.20	6,169,794	1,257,502	199	9,367,378
Principal retirements	3,617,920					
Interest and other charges	1,351,155	:57	#	(iii)	445,963	4,063,883
Total expenditures	73,155,424	00.005		103,371		1,454,526
- our experiences	73,133,424	88,825	6,282,097	2,398,651	4,224,055	86,149,052
Excess (deficiency) of					12.	
revenues over						
(under) expenditures	(2,054,824)	1,017,018	(5,475,803)	(2,292,758)	107,620	(8,698,747)
Other Financing Sources (Uses)						
Transfers in	050 404					
Transfers (out)	852,464	(0.50, 10.1)	200	189,000		1,041,464
Issuance of capital lease	(189,000)	(852,464)	3	545	(46,946)	(1,088,410)
Issuance of refunding bonds	873,014	-	17	•	¥	873,014
Cash to escrow	5,580,000	(A)	<u>#1</u>	-	π.	5,580,000
Bond premium	(5,716,709)	=	**	546	₩.	(5,716,709)
Issuance of drinking water notes	264,652	30	∞ _	( <del>*</del> )	=	264,652
Issuance of bond anticipation notes	( <del>)</del>	-	1,203,458		:E	1,203,458
Total other financing	(#)	*	315,000	2,640,000	( <del>(*)</del>	2,955,000
	2 22 2 12 2	2200				
sources (uses)	1,664,421	(852,464)	1,518,458	2,829,000	(46,946)	5,112,469
Change in fund						
balances (deficits)	(390,403)	164,554	(3,957,345)	536,242	60,674	(3,586,278)
und balances, beginning	6,410,773	2,094,646	5,564,410	689,691	443,852	15,203,372
und balances, ending	_\$ 6,020,370 \$	2,259,200 \$	1,607,065	\$_1,225,933	\$ 504,526	\$ 11,617,094

# Statement of Net Position - Proprietary Funds June 30, 2015

Assets		Business-Type Activities Enterprise Funds		(	Governmental Activities
			Sewer Department		Internal Service Fund
Current Assets					
Cash and cash equivalents					
Receivables:		\$	582,587	\$	1,285,053
User charges					*."
Other			409,361		響
Due from other funds			74,572		122,401
Inventory			40,494		60,929
Total current assets			10,250	0	180
Total current assets		-	1,117,264		1,468,383
Noncurrent Assets					
Capital assets, net of accumulated					
depreciation			40.750.000		
Total noncurrent assets		-	46,752,606	_	
Total Honourone assets			46,752,606		
Total assets			47,869,870		1,468,383
Liabilities					
Current Liabilities					
Accounts payable			52,752		256.004
Meter deposits			3,795		356,004
Claims payable			5,795		1.006.402
Due to other funds			982,345		1,096,102
Compensated absences			49,431		9,102
Total liabilities		-	1,088,323		1 464 200
		_	1,000,323		1,461,208
Net Position					
Net Investment in Capital Assets			46,752,606		
Jnrestricted .			28,941		7 475
		-	20,541	-	7,175
Total net position		\$	46,781,547	\$	7,175

See Notes to Financial Statements.

# Statement of Revenues, Expenses and Changes in Fund Net Position - Proprietary Funds For the Year Ended June 30, 2015

			usiness-Type Activities erprise Funds	(	Governmental Activities
ja varanta ka			Sewer Department		Internal Service Fund
Operating Revenues					
Charges for services and other		\$	1,909,028	\$	7,472,255
Total operating revenues			1,909,028		7,472,255
Operating Expenses					
General and administrative			78,708		684,296
Labor and maintenance			1,755,756		<u>#</u>
Claims			28		9,303,970
Depreciation			884,368		Ħ
Total operating expenses		,	2,718,832	_	9,988,266
Operating (loss)			(809,804)	_	(2,516,011)
Nonoperating Revenues Investment income					76
Total nonoperating revenues		X			75 75
Net (loss) before transfers			(809,804)		(2,515,936)
Transfers and Other Financing Sources					
Transfers in			46,946		<b>2</b> 7
			46,946		
Change in net position			(762,858)		(2,515,936)
Net position, beginning			47,544,405		2,523,111
Net position, ending	Prop. L	\$	46,781,547	\$	7,175
See Notes to Financial Statements.	agripment				

# Statement of Cash Flows - Proprietary Funds For the Year Ended June 30, 2015

3	ia.	Business-Type Activities Enterprise Funds	Governmental Activities
Cash Flows From Operating Activities		Sewer Department	Internal Service Fund
Receipts from customers and users Payments to suppliers Payment to employees Receipts from premiums		\$ 1,819,163 (1,259,301) (512,021)	\$
Cash paid for claims and administration  Net cash provided by (used in)			7,349,854 (9,056,745)
Operating activities  Cash Flows From Capital and Related Financing Activities	What	sud the	(1,706,891) (2) Second of Cont.
Acquisition and construction of capital assets  Net cash used in capital and related  financing activities		(67,520)	- Geher
Cash Flows From Noncapital Financing Activities Transfers in		46,946	
Net cash provided by noncapital financing activities		46,946	
Cash Flows Provided by Investing Activities Investment income			75
Net cash provided by investing activities			75
Net increase (decrease) in cash and cash equivalents		27,267	(1,706,816)
Cash and Cash Equivalents Beginning		555,320	2,991,869
Ending		\$ 582,587	\$ 1,285.053

(Continued)

Town of East Lyme, Connecticut

# Statement of Cash Flows - Proprietary Funds (Continued) For the Year Ended June 30, 2015

	Bu	siness-Type				
		Activities	(	Governmental		
	Enterprise Funds			Activities Internal		
		Sewer		Service		
	C	Department		Fund		
Reconciliation of Operating Loss to Net						
Cash Provided by (Used in) Operating Activities						
Operating loss	\$	(809,804)	\$	(2,516,011)		
Adjustments to reconcile operating loss						
to net cash provided by (used in) operating activities:						
Depreciation		884,368		160		
(Increase) decrease in:						
Inventory		(100)		72		
Receivables		(89,865)		(122,401)		
Due from other funds		15,524				
Increase (decrease) in:						
Accounts and other payables		43,162		928,164		
Due to other funds		4,556		3,357		
Net cash provided by (used in) operating activities	\$	47,841	\$	(1,706,891)		

See Notes to Financial Statements.

# Notes to Financial Statements

Note 4. Capital Assets

Capital asset activity for the year ended June 30, 2015 was as follows:

8		Balance July 1, 2014	Increases	Decreases	Balance June 30, 2015
Governmental activities					
Capital assets, not being depreciated:					
Land	\$	13,308,047	\$ 280,000	\$ Ë	\$ 13,588,047
Construction in progress	-	6,443,138	4,327,483	(2,117,163)	8,653,458
Total capital assets, not being					
depreciated		19,751,185	 4,607,483	(2,117,163)	22,241,505
Capital assets, being depreciated:					
Buildings and improvements		124,038,939	1,293,114	18	125,332,053
Machinery and equipment		7,082,132	546,583	(179,550)	7,449,165
Vehicles		7,964,648	409,237	19 <del>4</del> 3	8,373,885
Infrastructure		20,576,168	1,748,990	875	22,325,158
Water distribution systems		27,112,388	2,306,278		29,418,666
Total capital assets, being					
depreciated	s	186,774,275	 6,304,202	(179,550)	192,898,927
Total capital assets		206,525,460	10,911,685	(2,296,713)	215,140,432
Less accumulated depreciation for:					
Buildings and improvements		58,617,480	2,140,905		60,758,385
Machinery and equipment		4,398,576	267,041	(161,598)	4,504,019
Vehicles		3,794,001	471,751	941	4,265,752
Infrastructure		16,595,805	1,300,059	99	17,895,864
Water distribution systems		11,944,338	596,027	-	12,540,365
Total accumulated depreciation		95,350,200	4,775,783	(161,598)	99,964,385
Total capital assets, being				6.7	
depreciated, net		91,424,075	1,528,419	(17,952)	92,934,542
Governmental activities capital					
assets, net	\$ 1	11,175,260	\$ 6,135,902	\$ (2,135,115)	\$ 115,176,047

# Notes to Financial Statements

Recreation

Education

Sewer

Business-type activities

Total depreciation expense - governmental activities

Total depreciation expense - business-type activities

# Note 4. Capital Assets (Continued)

		Balance July 1, 2014		Increases	Do	creases		Balance June 30, 201
Business-type activities	-	July 1, 2011		IIICIEases	Del	creases		Julie 30, 201
Capital assets, not being depreciated:	1							
Land	\$	608,210	\$		\$		e	600.04
Construction in progress	*	14,805	Ψ	-	Φ	0.400	\$	608,21
Total capital assets, not being	-	14,000				-		14,80
depreciated		623,015		14				623,01
Capital assets, being depreciated:								
Buildings and improvements		5,090,394		(2)				5,090,39
Machinery and equipment		616,216		44,520		2		660,73
Sewer distribution systems		58,948,453		23,000				58,971,45
Total capital assets, being	_							00,011,10
depreciated		64,655,063		67,520		*		64,722,58
Total capital assets		65,278,078		67,520		=		65,345,598
Less accumulated depreciation for:								
Buildings and improvements		1,833,731		91,627		_		1,925,358
Machinery and equipment		544,610		8,855		-		553,46
Sewer distribution systems		15,330,283		783,886		· ·		16,114,169
Total accumulated depreciation		17,708,624		884,368				18,592,992
Total capital assets, being								
depreciated, net	_	46,946,439		(816,848)				46,129,591
Total business-type activities								
capital assets, net	\$	47,569,454	\$	(816,848)	\$	(3)	\$	46,752,606
preciation expense was charged to fu	unctions	s/programs o	of the	e Town as	follows	:		
vernmental activities								
General government							•	
Public safety							\$	1,587,616
Public works								290,881
Recreation								865,427

72,129

1,959,730

4,775,783

884,368

884,368

# Notes to Financial Statements

# Note 5. Interfund Receivables, Payables and Transfers

A summary of interfund balances as of June 30, 2015 is presented below:

a v	20	Due From Other Funds	Due To Other Funds
General Fund Sewer Assessments Fund Bonded Capital Projects Fund Capital Nonrecurring Fund Non-Major Governmental Funds and other Enterprise Funds Grand total	el P	\$ 606,855 911,221 133,385 348,969 91,673 40,494 2,132,597	\$ 79,383 33,346 400,839 416,678 220,006 982,345 2,132,597

The outstanding balances between funds result mainly from the time lag between the dates that (1) interfund goods and services are provided or reimbursable expenditures occur, (2) transactions are recorded in the accounting system, and (3) payments between funds are made.

\$616,294 due to the Sewer Assessments Fund from the Bonded Capital Project Fund is a long-term advance as it will not be paid in the short-term.

Interfund transfers during the year ended June 30, 2015 were as follows:

	ansfers From Other Funds	Transfers To Other Funds	
General Fund Sewer Assessments Fund Capital Nonrecurring Fund Water Department Enterprise Funds Grand total	\$ 852,464 - 189,000 - 46,946 1,088,410	\$ 189,000 852,464 - 46,946 - 1,088,410	

Transfers are used to account for financing by the General Fund of programs accounted for in other funds in accordance with budgetary amortizations, and from the Sewer Assessment Fund to the General Fund to pay sewer notes and bonds. Nonmajor fund transfers to Enterprise Funds are for construction of capital assets.

# **Notes to Financial Statements**

# Note 6. Unearned Revenue/Deferred Inflows of Resources

Governmental funds report deferred inflows of resources in connection with receivables for revenues that are not considered to be available to liquidate liabilities of the current period. Governmental funds and governmental activities report unearned revenue in connection with resources that have been received, but not yet earned. At the end of the current fiscal year, the various components of unearned revenue and deferred inflows of resources reported in the governmental funds and governmental activities were as follows:

General Fund:  Delinquent property taxes receivable and interest \$1,928,995 \$- Intergovernmental 5,309 - Other 38,547 -  Sewer Assessments Fund: Sewer assessments not yet due 3,597,239 -  Bonded Capital Projects: Intergovernmental 319,370 -  Capital Nonrecurring Fund: Intergovernmental 5,70,402 -  Other Nonmajor Governmental Funds: Water usage unbilled 496,067 - Grant drawdowns prior to meeting all eligibility requirements 57,065		Deferred Inflows	 Unearned Revenues	
Intergovernmental 5,309 - Other 38,547 -  Sewer Assessments Fund: Sewer assessments not yet due 3,597,239 -  Bonded Capital Projects: Intergovernmental 319,370 -  Capital Nonrecurring Fund: Intergovernmental 370,402 -  Other Nonmajor Governmental Funds: Water usage unbilled 496,067 - Grant drawdowns prior to meeting all	General Fund:			
Other 38,547 -  Sewer Assessments Fund: Sewer assessments not yet due 3,597,239 -  Bonded Capital Projects: Intergovernmental 319,370 -  Capital Nonrecurring Fund: Intergovernmental 370,402 -  Other Nonmajor Governmental Funds: Water usage unbilled Grant drawdowns prior to meeting all	Delinquent property taxes receivable and interest	\$ 1,928,995	\$ 2	
Sewer Assessments Fund: Sewer assessments not yet due 3,597,239  Bonded Capital Projects: Intergovernmental 319,370  Capital Nonrecurring Fund: Intergovernmental 15 unds: Water usage unbilled 496,067  Grant drawdowns prior to meeting all	Intergovernmental	5,309	-	
Sewer assessments not yet due 3,597,239  Bonded Capital Projects: Intergovernmental 319,370  Capital Nonrecurring Fund: Intergovernmental Sunds: Untergovernmental Funds: Water usage unbilled 496,067  Grant drawdowns prior to meeting all	Other	38,547	*	
Bonded Capital Projects: Intergovernmental 319,370  Capital Nonrecurring Fund: Intergovernmental Intergovernmental Sunds: Water usage unbilled Grant drawdowns prior to meeting all	Sewer Assessments Fund:			
Intergovernmental 319,370  Capital Nonrecurring Fund: Intergovernmental Sunds: Water usage unbilled 496,067 Grant drawdowns prior to meeting all	Sewer assessments not yet due	3,597,239	8≌	
Capital Nonrecurring Fund: Intergovernmental  Other Nonmajor Governmental Funds: Water usage unbilled Grant drawdowns prior to meeting all	Bonded Capital Projects:			
Intergovernmental 370,402  Other Nonmajor Governmental Funds: Water usage unbilled 496,067  Grant drawdowns prior to meeting all	Intergovernmental	319,370	::5:	
Other Nonmajor Governmental Funds: Water usage unbilled 496,067 Grant drawdowns prior to meeting all	Capital Nonrecurring Fund:		9	
Water usage unbilled 496,067 - Grant drawdowns prior to meeting all	Intergovernmental	370,402	~	
Grant drawdowns prior to meeting all	Other Nonmajor Governmental Funds:			
		496,067		
	Grant drawdowns prior to meeting all	, -		
	eligibility requirements	i e	57,065	
Total deferred inflows/unearned revenue \$ 6,755,929 \$ 57,065	Total deferred inflows/unearned revenue	\$ 6,755,929	\$	

# **Notes to Financial Statements**

Note 7. Long-Term Liabilities (Continued)

General obligation bonds - governmental activities: As of June 30, 2015, the outstanding general obligation bonds of the Town were as follows:

	Original	Date of	Date of	Interest	Balance				D. ( ) (	Balance
Purpose	Amount	Issue	Maturity	Rate	July 1, 2014		Additions	Deductions	Refunded	June 30, 2015
General Purpose								•	\$ =	\$ 6,970,000
CIP Var, Darrow, Roads	\$ 6,970,000	7/26/12	7/25/32	2.0-4.0%			\$	\$	•	. ,
Open Space & Radio Upgrade	1,295,000	2/2/12	7/15/29	2.0-3.0%	1,295,000		(€):	20.000	5	1,295,000
TIF, Tech, & CIP	135,000	4/18/11	7/15/16	2.0-5.0%	64,000		(#X)	32,000		32,000
Land Acq, Road, Fire Pump	3,860,000	2/9/11	2/9/31	2.0-5.0%	3,685,000		2/	175,000	3,335,000	175,000
Open Space	918,000	2/10/10	7/15/26	2.0-5.0%	787,000		(*)	74,000		713,000
Radio System Upgrade	1,105,000	7/16/09	7/15/30	3.5-5.0%	50,000	0	120	50,000	2	
Ref Var, Athletic Complex	6,930,000	7/24/14	7/15/30	2.0-4.0%	(E		6,930,000			6,930,000
Total general purpose					12,851,000	)	6,930,000	331,000	3,335,000	16,115,000
Schools										750 000
CIP Culinary, Music Wall, Var	750,000	7/26/12	7/15/32	.65% - 3.1%	750,000		-	·	*	750,000
HS Roof & School Reno	1,693,000	2/2/12	7/15/28	2.0-3.0%	1,693,000				₩	1,693,000
ELMS, Roof, School CIP	6,876,000	4/18/11	7/15/21	2.0-5.0%	5,167,000	0	(*)	762,000		4,405,000
ELMS, HS Roof & Ren Ref	7,785,000	2/10/10	7/15/24	2.0-5.0%	6,544,000	0	-	767,000	=	5,777,000
ELHS & Pool Refunding	3,969,000	7/16/09	7/15/19	3.0-4.0%	2,280,000	0		464,000	1,816,000	P VI man tana di Pristra Anni
CO Roof, Tennis Court, Network	1,774,000	7/24/14	7/15/30	2.0-4.0%	E		1,774,000	26)		1,774,000
Total schools					16,434,000	0	1,774,000	1,993,000	1,816,000	14,399,000
Sewer )										
Pine Grove Sewer	580,000	2/2/12	7/15/28	2.0-3.0%	580,000	0	120	391	*	580,000
Sewer Const Ref 92 7 95	4,955,000	4/18/11	7/15/18	2.0-5.0%	3,170,000	0	1.5	765,000	=	2,405,000
Pine Grove Sewer Refund	2,182,000	2/10/10	7/15/26	2.0-5.0%	1,889,000	0	( <del>-</del> )	174,000	8	1,715,000
Sewer Const (Colton Rd)-Ref	531,000	7/16/09	7/15/19	3.0%	305,000	0	•	63,000	242,000	
Clean Water Phase III	8,588,195	12/30/94	12/21/14	2.0%	440	0				440
Logger Hill, Ref	916,000	7/24/14	7/15/30	2.0-4.0%			916,000	(#)	* **	916,000
Total sewers					5,944,440	0	916,000	1,002,000	242,000	5,616,440
Water Bonds	200 540	0/20/42	10/21/27	2.0%	335,043	2	-	15,121	2	319,922
DWSRE-2012-7010	360,516		12/31/32		1,000,000			10,121	-	1,000,000
Various Water Projects	1,000,000	7/26/12	7/15/32	2.0-4.0%				1000		3,762,000
2012 Ref Bonds 2009	3,762,000	2/12/12	7/15/29	2.0-3.0%	3,762,000 346,515			17,269	- 2	329,246
DWSRF/ARRA 2010-8003	401,454	12/29/11	6/30/31	2.06%	114,000		2 200	56,000		58,000
Water Bonds - ref 98	239,000	4/18/11	7/15/16	2.0-5.0%			-	200,000		30,000
Various Water Projects	4,180,000	7/16/09	7/15/30	3.5-5.0%	200,000			23,000	92,000	127
Water Ref 03 Bonds	200,000	7/16/09	7/15/19	3.0-4.0%	115,000		00.000	23,000	52,000	90,000
Refunding	90,000	7/24/14	7/15/30	2.0-4.0%	r 200 00		90,000	326,325	<u>-</u>	6,200,167
DWSRF 2013-7022	6,526,492	6/30/15	6/30/34	2.0%	5,323,034		1,203,458	637,715	92,000	11,759,335
Total water					11,195,592	4	1,293,458	031,110	32,000	11,100,000
Total bonds/notes - govern	mental activitie	es			\$ 46,425,031	1 :	\$ 10,913,458	\$ 3,963,715	\$ 5,485,000	\$ 47,889,774

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# Notes to Financial Statements

# Note 7. Long-Term Liabilities (Continued)

The following is a summary as of June 30, 2015, of the future principal and interest requirements for the Town's bond indebtedness - governmental activities excluding the bond anticipation notes and drinking water notes:

Fiscal Year	i i			ā
Ending		Principal	Interest	Total
2016	\$	4,000,000	\$ 1,218,448	\$ 5,218,448
2017		4,020,000	1,082,998	5,102,998
2018		4,175,000	953,773	5,128,773
2019		3,425,000	839,998	4,264,998
2020		2,925,000	749,552	3,674,552
2021-2025		11,470,000	2,515,433	13,985,433
2026-2030		7,965,000	1,041,835	9,006,835
2031-2035	-	3,060,440	185,571	3,246,011
Total	_\$	41,040,440	\$ 8,587,608	\$ 49,628,048

Bond anticipation notes and subsequent event: The Town has \$3,695,000 of tax-exempt general obligation bond anticipation notes (BANS) outstanding as of June 30, 2015. The notes bear interest at 1.0%. The Notes matured on July 21, 2016.

Bond anticipation note transactions for the year ended June 30, 2015 were as follows:

Outstanding, July 1, 2014	\$	5,120,000
New borrowings	Ψ	3,695,000
Repayments		(5,120,000)
Outstanding, June 30, 2015	\$	3,695,000
Reported as:		
Long-term debt	\$	2,955,000
Short-term debt	_\$_	740,000

On July 9, 2015, the Town issued \$6,190,000 of general obligation bonds. Bond anticipation notes of \$2,955,000 at June 30, 2015, with an original maturity of July 21, 2015, were paid off and permanently financed with this issue. The bonds have principal and interest payments ranging from \$325,000 to \$365,000, with interest ranging from 2.0%-4.0% and mature on July 15, 2035. In addition, the Town reissued \$740,000 of General Obligation Bond Anticipation Notes with an interest rate of 1.25% and due to mature on July 21, 2016.

#### **Notes to Financial Statements**

# Note 7. Long-Term Liabilities (Continued)

**Drinking water fund notes:** The Town has drinking water notes in the amount of \$6,849,334. The notes bear interest at 2.0%, are payable in equal monthly installments and mature on December 31, 2034. The following is a summary as of June 30, 2015, of the future principal and interest requirements for the Town's drinking water notes - governmental activities:

Fiscal							
Year							
Ending		Principal Interest			Total		
						105 505	
2016	\$	306,758	\$	118,807	\$	425,565	
2017		312,960		113,283		426,243	
2018		319,288		107,646		426,934	
2019		325,744		101,897		427,641	
2020		332,331		96,031		428,362	
2021-2025		1,765,206		387,937		2,153,143	
2026-2030		1,951,029		222,477		2,173,506	
2031-2035		1,536,018		48,046		1,584,064	
Total	\$	6,849,334	\$	1,196,124	\$	8,045,458	

Bonds authorized but unissued: Total authorized but unissued debt at June 30, 2015 consists of the following:

ocwei	\$ 13,117,112
Sewer	4,366,046
Schools	256,066
General purpose	\$ 8,495,000

Legal debt limit: The Town's indebtedness (including authorized but unissued bonds and overlapping debt), net of principal reimbursements expected from the State, does not exceed the legal debt limitation as required by the Connecticut General Statutes as reflected in the following schedule:

Category		De	ebt Limit	 ndebtedness	Balance
General purpose		\$ 11	2,207,232	\$ 27,340,000	\$ 84,867,232
Schools	2	22	4,414,465	15,620,066	208,794,399
Sewers		18	7,012,054	9,982,486	177,029,568
Urban renewal		16	2,077,113	9	162,077,113
Pension deficit		14	9,609,643		149,609,643

The total overall statutory debt limit for the Town is equal to seven times annual receipts from taxation, or approximately \$349,089,167.

Capital lease: At June 30, 2015, the Town and the Board of Education are committed under leases for vehicles and miscellaneous instruments. These lease agreements qualify as capital leases for accounting purposes (title transfers at the beginning of the lease term) and, therefore, have been recorded at the present value of the future minimum lease payments as of the date of their inception. The equipment is carried at approximately \$4,100,000, with approximately \$2,000,000, in accumulated depreciation.

Town of East Lyme, Connecticut

Combining Balance Sheet Nonmajor Governmental Funds June 30, 2015

									Pe	rmanent		
	-			Special	Rev	enue				Fund		
	-					Special		Historic	N	1cCook		Total
		Water		School		Education	Pi	reservation	M	emorial		Nonmajor
7	D	epartment	L	unch Fund		Frant Fund		Fund		Fund	Funds	
Assets										- 2		
Cash	\$	952,791	\$	41,499	\$	106,824	\$	*	\$	911	\$	1,102,025
Intergovernmental Receivables		2,123		41,069		62,822						106,014
Assessments/user Charges		690,014		8				8				690,014
Inventory		32,200		~		2		2				32,200
Due from Other Funds	-	16,071	-		_	-		14,673	_	141	_	30,744
Total assets	\$	1,693,199	\$	82,568	\$	169,646	\$	14,673	<u>\$</u>	911	_\$_	1,960,997
Liabilities												
Accounts payable	\$	455,586	\$	198,207	\$	38,642	\$	-	\$	548	\$	692,435
Due to other funds		136,054		-		73,939		*		911		210,904
Unearned revenue		120				57,065		*		-		57,065
Total liabilities	-	591,640		198,207		169,646		П.		911	_	960,404
Deferred Inflows of Resources												
Unavailable revenues		496,067		(#)		: e		*		: <b>→</b> ):		496,067
Total deferred inflows												
of resources		496,067		250		1/82				- 2		496,067
Fund Balances (Deficits)												
Nonspendable		32,200		5965		390				150		32,200
Restricted		970		1.00				14,673		7		14,673
Committed		573,292		(50)		130		0.70		-		573,292
Unassigned				(115,639)				721		···		(115,639)
Total fund balances												
(deficits)	-	605,492		(115,639)		(*)		14,673	_	-		504,526
Total liabilities, deferred inflows of resources										è		
and fund balances	\$ 1	,693,199	\$	82,568	\$	169,646	\$	14,673	\$	911	\$	1,960,997

Combining Statement of Revenues, Expenditures and Changes in Fund Balances (Deficits) Nonmajor Governmental Funds
For the Year Ending June 30, 2015

		Specia	Revenue		Permanent Fund	
77	Water Department	School Lunch Fund	Special Education Grant Fund	Historic Preservation Fund	McCook Memorial Funds	Total Nonmajor Funds
Revenues					V:	-
Intergovernmental	\$ 270	\$ 297,371	\$ 886,496	\$ 5,000	\$ =	\$ 1,188,867
Charges for services	2,530,617	604,555	-	7,633	*	3,142,805
Interest income	3		₩ <del></del>	5		3
Total revenues	2,530,620	901,926	886,496	12,633		4,331,675
Expenditures						
Current:						
Culture and recreation	2	2		5,000		£ 000
Public works	1,995,381			0,000	_	5,000 1,995,381
Education	*	891,215	886,496		100	
Debt service	445,963	-	000,400	120	15	1,777,711
Total						445,963
expenditures	2,441,344	891,215	886,496	5,000	397	4,224,055
Excess (deficiency) of revenues over (under) expenditures	89,276	10,711	<del>-</del>	7,633		107,620
Other Financing Sources (Uses) Transfers (out)	zes					
Total other	(46,946)		/#:	4		(46,946)
financing sources (uses)	(46,946)					- 101 - 100
3001063 (0363)	(40,940)		•			(46,946)
Change in fund balances (deficits)	42,330	10,711	941	7,633	¥	60,674
Fund Balances (Deficits)  Beginning	563,162	(126,350)		7,040		440.050
=		(120,000)		7,040		443,852
Fund Balances (Deficits) Ending	\$ 605,492	\$ (115,639)	\$ -	\$ 14,673	\$ -	\$_ 504,526

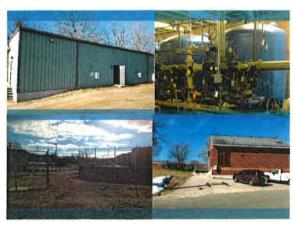
# Capital Assets Used in the Operation of Governmental Funds Schedule by Category June 30, 2015

\$	13,588,047
•	8,653,458
	125,332,053
	7,449,165
	8,373,885
	22,325,158
:	29,418,666
\$	215,140,432
	\$



# **Well 1A and 2A Treatment Study**

Public Meeting May 24, 2016

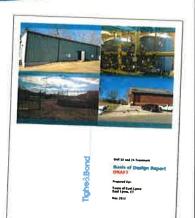




Tighe&Bond

# **Basis of Design Report**

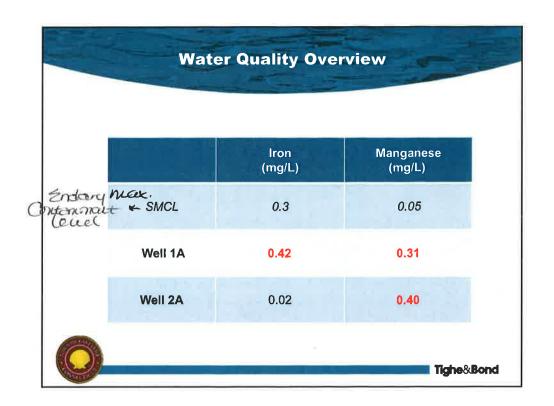
- Tighe & Bond prepared a Draft Basis of Design Report for the Water and Sewer Commission (May 2016)
- Evaluated three (1A-1, 1A-2, & 1A-3) alternatives for treatment at Well 1A
- Evaluated three (2A-1, 2A-2, & 2A-3) alternatives for treatment at Well 2A
- Inspected existing facilities and included costs for rehabilitation
- Further developed two selected alternatives (1A-1 & 2A-1) as basis of design for facilities upgrade

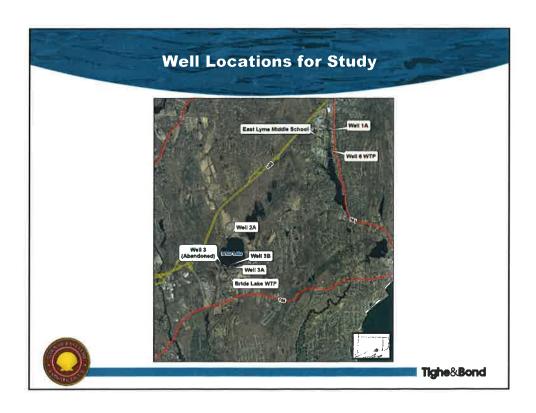




**■ Tighe&Bond** 

Attachment - submitted Wes WelliA-2A 5/24/16.





# Treatment Alternatives Evaluated for Well 1A

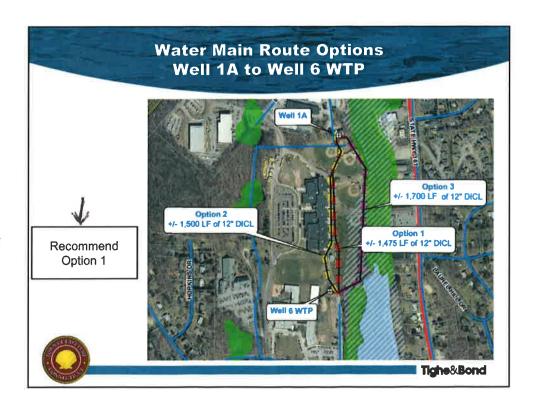
- Alternative 1A-1: Connect Well 1A to Well 6 WTP, and increase Well 6 WTP capacity for combined flow of 1,110 gpm
- Alternative 1A-2: Connect Well 1A to Well 6 WTP, and increase Well 6 WTP capacity for Well 1A flow only (805 gpm)
- Alternative 1A-3: Construct new WTP at Well 1A with a capacity of 805 gpm



Well 1A



I Tighe&Bond



Poc A

# **Well 1A Recommendation**

#### Alternative 1A-1:

Connect Well 1A to Well 6 WTP, and increase Well 6 WTP capacity for combined flow of 1,110 gpm.

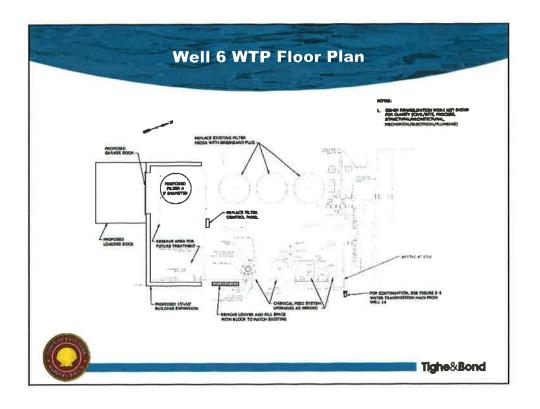
- Construct Transmission Water Main from Well 1A to Well 6 WTP along access roads and between the baseball fields
- Install additional greensand filter vessel at Well 6 WTP
- Install Greensand Plus media in all filters and modify existing chemical feed systems

Opinion of Probable Cost to complete: \$3,120,000



Tighe&Bond

#### **Well 1A Benefit/Cost Ratios Benefit to Cost Ratios Well 1A Treatment Alternatives** Annual Benefit/ Benefit Project Loan Cost Ratio Alt. Description Rating Cost Payment Connect Well 1A to Well 6 WTP; increase WTP to provide capacity 84% \$3.12MM \$188,760 4.46 for combined flow of 1,105 gpm Connect Well 1A to Well 6 WTP 6.29 1A-2 76% \$2.00MM \$121,000 and provide capacity of 805 gpm Construct new WTP at Well 1A \$6.59MM \$398,695 1.68 1A-3 with capacity of 805 gpm **■ Tighe&Bond**



# Well

# Treatment Alternatives Evaluated for Well 2A

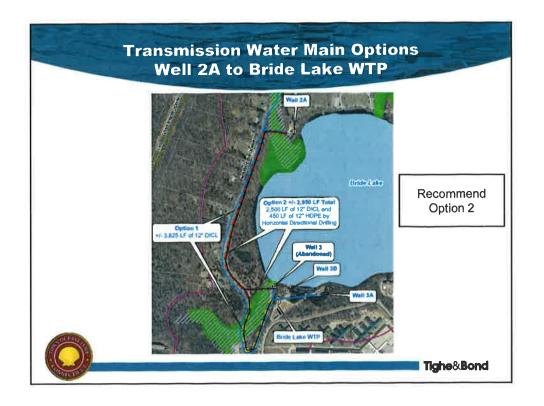
- Alternative 2A-1: Connect Well 2A to Bride Lake WTP, and increase Bride Lake WTP capacity for a combined flow of 1,705 gpm from Wells 2A, 3A and 3B.
- Alternative 2A-2: Connect Well 2A to Bride Lake WTP, and increase Bride Lake WTP for combined flow from Well 2A, 3A and 3B. Construct new chemical pretreatment building.
- Alternative 2A-3: Construct a new WTP at Well 2A with a capacity of 500 gpm.



Well 2A



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# **Well 2A Recommendations**

# Alternative 2A-1:

Connect Well 2A to Bride Lake WTP, and increase Bride Lake WTP capacity for a combined flow of 1,705 gpm from Wells 2A, 3A and 3B.

- Construct transmission water main from Well 2A along North Bride Brook Road to the Bride Lake WTP access road
- Install Greensand Plus media in remaining filters at Bride Lake WTP
- Upgrade process controls, communication equipment, and chemical feed systems at the Bride Lake WTP.

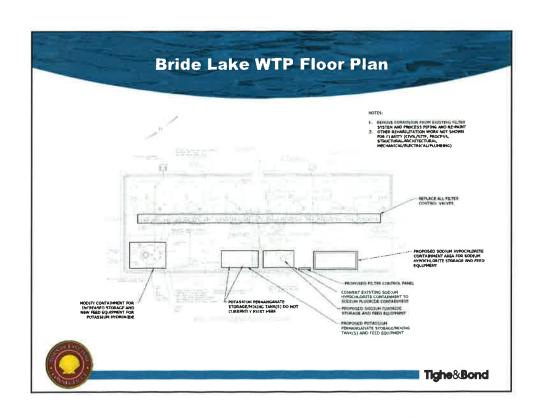
Opinion of Probable Cost to complete: \$3,540,000



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3,540,000 3,120,000 66,660,000 total

	efit to Cost Ratios 2A Treatment Alternatives				
Alt.	Description	Benefit Rating	Project Cost	Annual Loan Payment	Benefit/ Cost Ratio
2A-1	Connect Well 2A to Bride Lake WTP and provide capacity for combined flow of 1,705 gpm	83%	\$3.54MM	\$214,170	3.85
2A-2	Connect Well 2A to Bride Lake WTP, construct chemical feed building and provide capacity for flow of 1,705 gpm	92%	\$5.03MM	\$304,013	3.04
2A-3	Construct new WTP at Well 2A with capacity of 500 gpm	70%	\$6.62MM	\$400,510	1.74



# **Recommendations Summary**

# Well 1A Recommendation:

- Alternative 1A-1: Connect Well 1A to Well 6 WTP, expand Well 6 WTP capacity for combined flow of 1,110 gpm and rehabilitate Well 6 WTP.
- Opinion of Probable Cost to complete alternative: \$3,120,000

# Well 2A Recommendation:

- Alternative 2A-1: Connect Well 2A to Bride Lake WTP, and expand Bride Lake WTP capacity for a combined flow of 1,705 gpm from Wells 2A, 3A and 3B.
- Opinion of Probable Cost to complete alternative: \$3,540,000



**■ Tighe&Bond** 

# **Project Cost Summary**

Description	Well 1A Project	Well 2A Project	Total Costs
Capital Costs	\$3,120,000	\$3,540,00	\$6,660,000
Annual Debt Service	\$188,760	\$214,170	\$402,930
O&M Cost Increase	\$24,000	\$24,000	\$48,000



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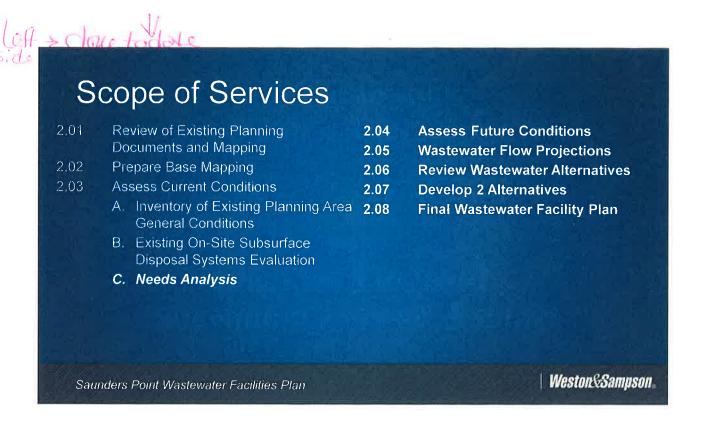


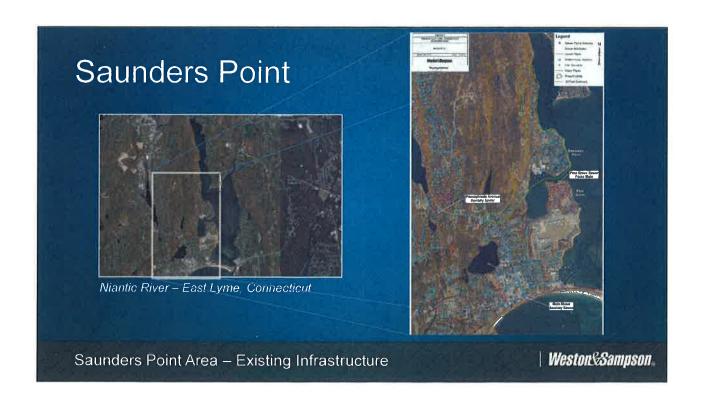


# Saunders Point Wastewater Facilities Plan Town of East Lyme Water & Sewer Commission May 24, 2016 Weston & Sampson



5/24/16 Attachment submitted Wes-Suders A. Sencer Study







# Defining Areas of Needs

- Location
- Parcel Size
- Environmental Conditions
- Historic Precedent

Identifying Areas of Similar Need in Saunders Point

Weston&Sampson

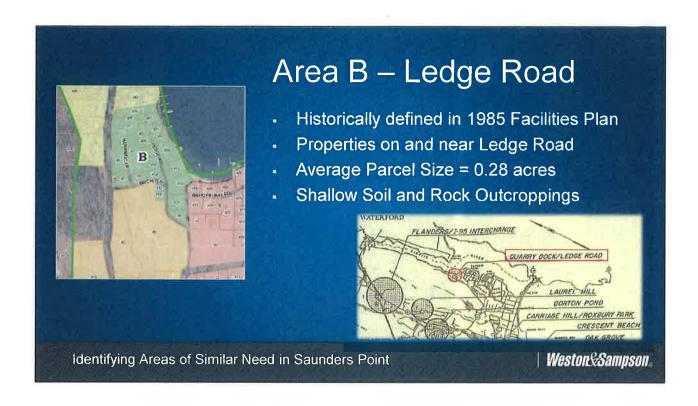


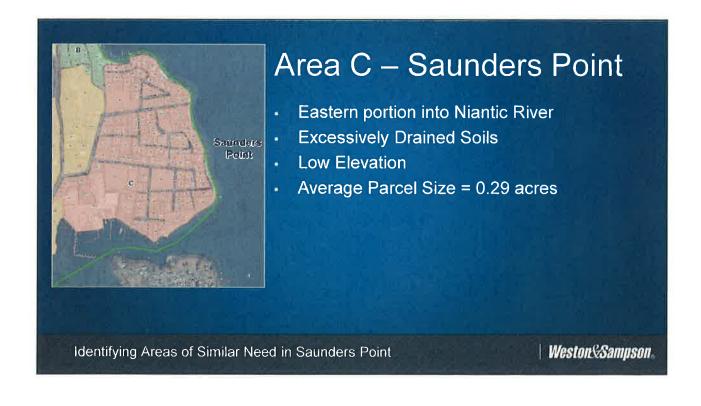
# Area A – Quarry Dock Rd

- Northern Most Area
- Properties up Quarry Dock Road
- Average Parcel Size = 0.75 acres

Identifying Areas of Similar Need in Saunders Point

Weston Sampson





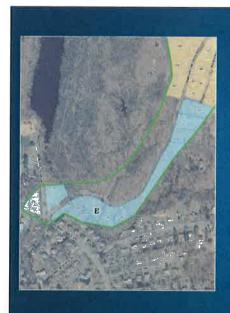


# Area D – Central Oswegatchie Hills Road

- Central Project Area
- Larger Parcel Size Properties
- Average Parcel Size = 0.83 acres

Identifying Areas of Similar Need in Saunders Point

| Weston & Sampson



# Area E – Southern Oswegatchie Hills Road

- Southern Most Area
- Low density housing
- Average Parcel Size = 0.55 acres

Identifying Areas of Similar Need in Saunders Point

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# **Sanitation Needs Analysis**

- Environmental Impact
- Socio-economic Impact

Weston & Sampson

# **Environmental Impact**

- Septic Failures and Repairs
- Parcel Size (Septic Drainage Area)
- National Diversity Database (CTDEEP)
- Flood Zones (FEMA)
- Wetland Proximity
- Soil Drainage Impact to Environment
- Aquifer Protection

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# Socio-Economic Impact

- Building Density
- Historic Sites
- Drinking Water Access / Wells
- Soil Drainage Impact to Community

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