



Town of Boston Water District Consolidation

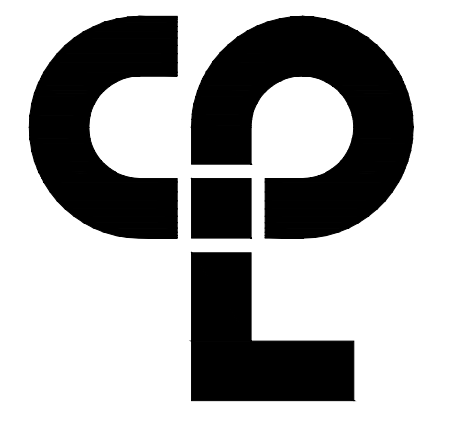
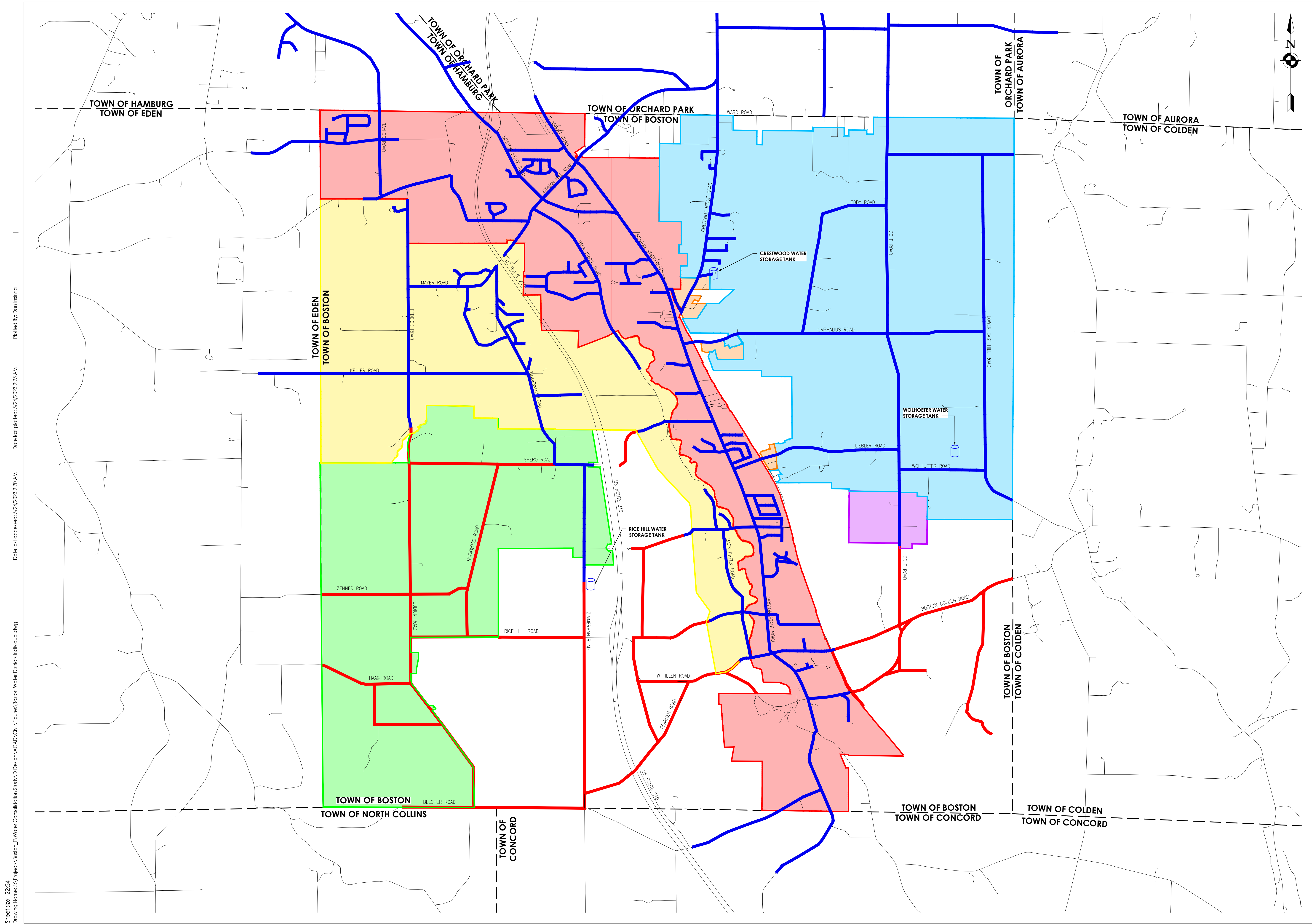
May 30, 2023



Agenda

1. Status of Existing Water Districts
2. Current and Anticipated Water Debt
3. Potential Future Projects
4. Consolidation Options
5. Q & A





CPL | Architecture Engineering Planning
 30 Century Hill Dr., Suite 104
 Latham, NY 12110
 CPLteam.com

PROJECT INFORMATION

Project Number: R21.16431.00
 Client Name: TOWN OF BOSTON

Project Name: WATER DISTRICT CONSOLIDATION

Project Address:

PROJECT ISSUE & REVISION SCHEDULE

No.	Date	Description

PROFESSIONAL STAMPS

NEW YORK STATE EDUCATION STATEMENT
 IF IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S REGULATIONS FOR ANY PERSON, UNDER ANY OF THE DIRECTIONS OF A LICENSED ARCHITECT, ENGINEER OF LAND SURVEYOR, TO ACCEPT AN EMPLACEMENT OF AN EMPLACEMENT BEARING THE SEAL OF AN ARCHITECT, ENGINEER OF LAND SURVEYOR, OR A LICENSED PROFESSIONAL ENGINEER AND THE DATE OF SUCH VIOLATION, AND A SPECIFIC DESCRIPTION OF THE VIOLATION.

SHEET INFORMATION

Issued: 04/24/2023 Scale: 1" = 2000'
 Project Status:

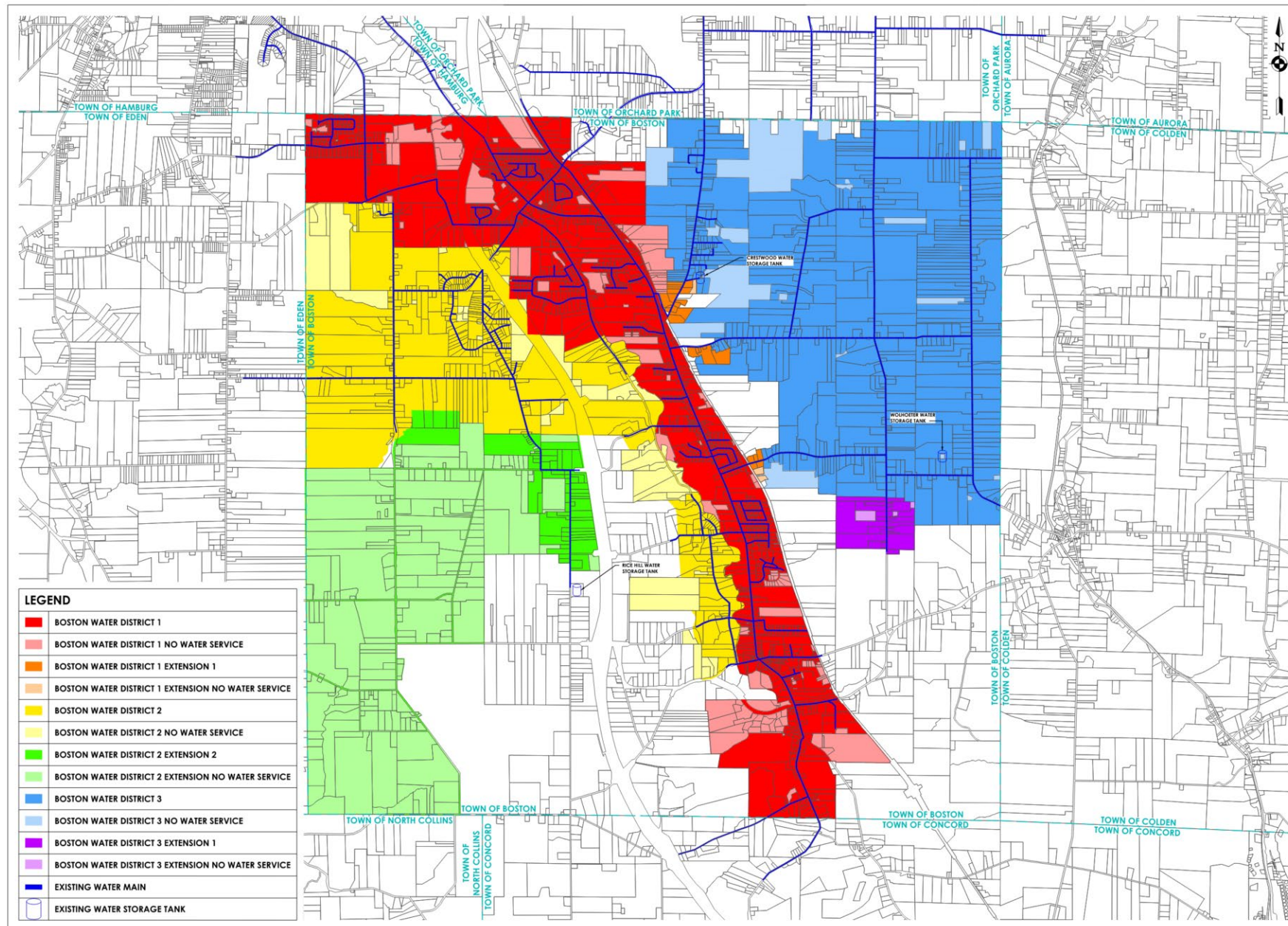
Drawn By: KMS Checked By: DGI

Drawing Title: TOWN OF BOSTON WATER DISTRICTS AND WATER MAINS

Drawing Number: Revision Number:

S-01

Sheet Size: 22x34
 Drawing Name: S:\Projects\Boston_Town_Consolidation\Study\CAD\Design\CAD\Civil\Figures\Boston_Water_Districts_Individual.dwg
 Date last accessed: 5/24/2023 9:20 AM
 Date last plotted: 5/24/2023 9:25 AM
 Plotted By: Don Marino



Existing Water Districts & System

Town Water Users

2,815

Existing Water
Users

471

Parcels in Districts
w/o Water Services

3,739

Parcels in the Town

Current Billing – (a) Unit Based
(b) Ad Valorem



Existing and Anticipated Debt

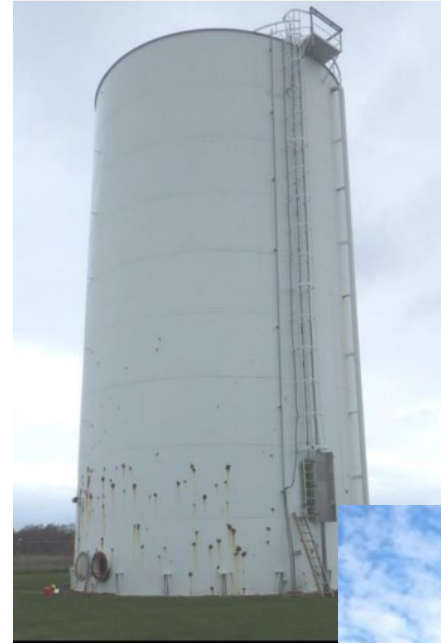
Remaining Town Debt

Water District #3	\$3,641,150.00
Tank Improvements	<u>\$1,013,790.00</u>
	\$4,654,940.00

Anticipated Town Debt

Water District #1 (Phase 1)	\$5,188,005.00
Water District #1 (Phase 2&3)	<u>\$10,465,460.50</u>
	\$15,653,465.50

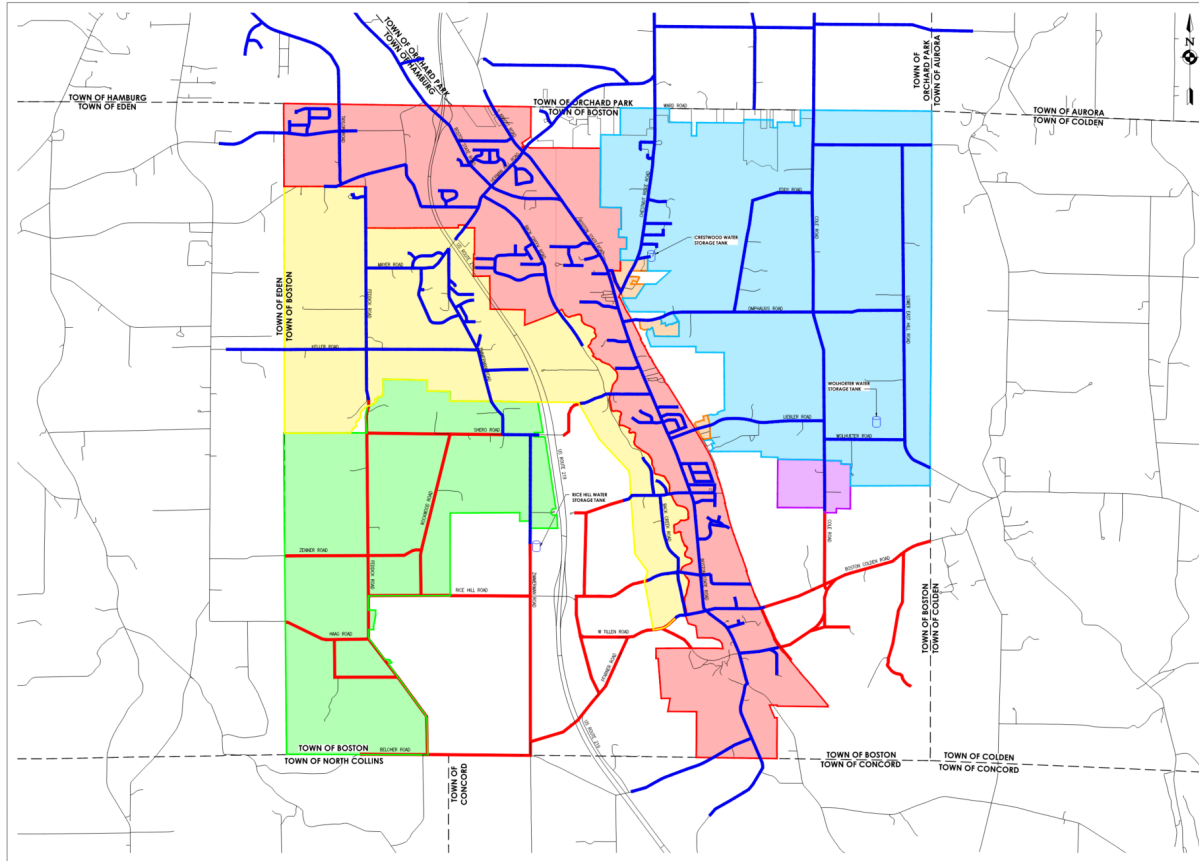
Total Debt= \$20,308,405.50



Potential Future Projects

- Water District 2 Extension 1
 - Approximately 130 New Water Users
 - \$11,310,000
- South Central Water
 - Approximately 145 New Water Users
 - \$12,560,000
- Southeast Water
 - Approximately 77 New Water Users
 - \$6,600,000

Full Townwide Water Project = \$30,470,000



Consolidation Considerations



Rate Definition

Unit Based vs Ad Valorem



Consolidation Area

Existing Districts vs. Entire Town



Proposed Debt

Existing Debt vs. Potential Projects

- Grant Funding Available for each Scenario (60% Grant via WIIA, maximum \$5,000,000 annually)
- Unit Assumptions for Parcels within District without Water Services



Unit Based Options

For discussion on May 30, 2023 - Subject to Change

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
	Consolidate Existing Districts Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt 60% WIIA Grant	Consolidate Entire Town Full Build Out Town Water	Consolidate Entire Town Full Build Out Town Water 60% WIIA Grant
Existing Debt	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00
Anticipated Debt	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50
Future Debt	\$ -	\$ -	\$ -	\$ 30,470,000.00	\$ 30,470,000.00
Future Grants (WIIA 60%)	\$ -	\$ -	\$ 5,000,000.00	\$ -	\$ 15,000,000.00
Total Debt	\$ 20,308,405.50	\$ 20,308,405.50	\$ 15,308,405.50	\$ 50,778,405.50	\$ 35,778,405.50
Approx. Annual Debt	\$ 1,098,781.43	\$ 1,098,781.43	\$ 843,685.13	\$ 2,653,338.26	\$ 1,888,049.37
No. of Parcels w/ Water Service	2815	2815	2815	3167	3167
No. of Parcels w/o Water Service	471	924	924	572	572
Annual Cost for Parcel w/ Water Service	\$ 383.91	\$ 377.93	\$ 290.19	\$ 822.94	\$ 585.59
Annual Cost for Parcel w/o Water Service	\$ 38.39	\$ 37.79	\$ 29.02	\$ 82.29	\$ 58.56



TOWN OF BOSTON
WATER DISTRICT CONSOLIDATION
UNIT BASED ESTIMATE

For discussion on May 30, 2023 - Subject to Change

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
	Consolidate Existing Districts Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt 60% WIIA Grant	Consolidate Entire Town Full Build Out Town Water	Consolidate Entire Town Full Build Out Town Water 60% WIIA Grant
Existing Debt	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00
Anticipated Debt	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50
Future Debt	\$ -	\$ -	\$ -	\$ 30,470,000.00	\$ 30,470,000.00
Future Grants (WIIA 60%)	\$ -	\$ -	\$ 5,000,000.00	\$ -	\$ 15,000,000.00
Total Debt	\$ 20,308,405.50	\$ 20,308,405.50	\$ 15,308,405.50	\$ 50,778,405.50	\$ 35,778,405.50
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Annual Cost for Parcel w/o Water Service	\$ 38.39	\$ 37.79	\$ 29.02	\$ 82.29	\$ 58.56

Notes

- *Existing Debt includes WD 3 and Tank projects
- *Anticipated Debt includes WD 1 replacement project
- *Future Debt includes Full Build out of Water system
- *WIIA Grant = 60% of Total Costs for Phase 2&3 in WD1, and Full Build out Water Project, with an annual max of \$5,000,000
- *Parcels without Service are calculated as 0.1 unit
- *Loan interest rate estimated at 3%, 30 years

Ad Valorem Options

For discussion on May 30, 2023 - Subject to Change

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
	Consolidate Existing Districts Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt 60% WIIA Grant	Consolidate Entire Town Full Build Out Town Water	Consolidate Entire Town Full Build Out Town Water 60% WIIA Grant
Existing Debt	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00
Anticipated Debt	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50
Future Debt	\$ -	\$ -	\$ -	\$ 30,470,000.00	\$ 30,470,000.00
Future Grants (WIIA 60%)	\$ -	\$ -	\$ 5,000,000.00	\$ -	\$ 15,000,000.00
Total Debt	\$ 20,308,405.50	\$ 20,308,405.50	\$ 15,308,405.50	\$ 50,778,405.50	\$ 35,778,405.50
Approx. Annual Debt	\$ 1,098,781.43	\$ 1,098,781.43	\$ 843,685.13	\$ 2,653,338.26	\$ 1,888,049.37
Total District Assessed Value	\$ 445,875,123.00	\$ 596,550,661.00	\$ 596,550,661.00	\$ 596,550,661.00	\$ 596,550,661.00
No. of Parcels w/ Water Service	2815	2815	2815	3167	3167
No. of Parcels w/o Water Service	471	924	924	572	572
Annual Cost for Parcel w/ Water Service per \$100,000	\$ 224.03	\$ 167.44	\$ 128.57	\$ 404.35	\$ 287.72
Annual Cost for Parcel w/o Water Service per \$100,000	\$ 22.40	\$ 16.74	\$ 12.86	\$ 40.43	\$ 28.77
Annual Cost for Parcel w/ Water Service per \$200,000	\$ 448.06	\$ 334.89	\$ 257.14	\$ 808.69	\$ 575.44
Annual Cost for Parcel w/o Water Service per \$200,000	\$ 44.81	\$ 33.49	\$ 25.71	\$ 80.87	\$ 57.54
Annual Cost for Parcel w/ Water Service per \$300,000	\$ 672.09	\$ 502.33	\$ 385.71	\$ 1,213.04	\$ 863.17
Annual Cost for Parcel w/o Water Service per \$300,000	\$ 67.21	\$ 50.23	\$ 38.57	\$ 121.30	\$ 86.32



TOWN OF BOSTON
WATER DISTRICT CONSOLIDATION
AD VALOREM ESTIMATE

For discussion on May 30, 2023 - Subject to Change

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
	Consolidate Existing Districts Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt	Consolidate Entire Town Existing & Anticipated Debt 60% WIIA Grant	Consolidate Entire Town Full Build Out Town Water	Consolidate Entire Town Full Build Out Town Water 60% WIIA Grant
Existing Debt	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00	\$ 4,654,940.00
Anticipated Debt	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50	\$ 15,653,465.50
Future Debt	\$ -	\$ -	\$ -	\$ 30,470,000.00	\$ 30,470,000.00
Future Grants (WIIA 60%)	\$ -	\$ -	\$ 5,000,000.00	\$ -	\$ 15,000,000.00
Total Debt	\$ 20,308,405.50	\$ 20,308,405.50	\$ 15,308,405.50	\$ 50,778,405.50	\$ 35,778,405.50
Approx. Annual Debt	\$ 1,098,781.43	\$ 1,098,781.43	\$ 843,685.13	\$ 2,653,338.26	\$ 1,888,049.37
Total District Assessed Value	\$ 445,875,123.00	\$ 596,550,661.00	\$ 596,550,661.00	\$ 596,550,661.00	\$ 596,550,661.00
No. of Parcels w/ Water Service	2815	2815	2815	3167	3167
No. of Parcels w/o Water Service	471	924	924	572	572
Annual Cost for Parcel w/ Water Service per \$100,000	\$ 224.03	\$ 167.44	\$ 128.57	\$ 404.35	\$ 287.72
Annual Cost for Parcel w/o Water Service per \$100,000	\$ 22.40	\$ 16.74	\$ 12.86	\$ 40.43	\$ 28.77
Annual Cost for Parcel w/ Water Service per \$200,000	\$ 448.06	\$ 334.89	\$ 257.14	\$ 808.69	\$ 575.44
Annual Cost for Parcel w/o Water Service per \$200,000	\$ 44.81	\$ 33.49	\$ 25.71	\$ 80.87	\$ 57.54
Annual Cost for Parcel w/ Water Service per \$300,000	\$ 672.09	\$ 502.33	\$ 385.71	\$ 1,213.04	\$ 863.17
Annual Cost for Parcel w/o Water Service per \$300,000	\$ 67.21	\$ 50.23	\$ 38.57	\$ 121.30	\$ 86.32

Notes

- *Existing Debt includes WD 3 and Tank projects
- *Anticipated Debt includes WD 1 replacement project
- *Future Debt includes Full Build out of Water system
- *WIIA Grant = 60% of Total Costs for Phase 2&3 in WD1, and Full Build out Water Project, with an annual max of \$5,000,000
- *Parcels without Service are calculated as using 10% of taxable assessed value
- *Loan interest rate estimated at 3%, 30 years
- *Median Parcel Value of Town is \$155,300, Average Parcel Value of Town is \$249,338

TOWN OF BOSTON
OPINION OF PROBABLE COST - TOWN OF BOSTON

NO 2 EXT 1 WATER - 130 USERS

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Furnish and Install 8" Diameter PVC Water Main	LF	56,500	\$ 100.00	\$ 5,650,000.00
2	Furnish and Install 8" In-Line Gate Valves Complete	EA	60	\$ 3,500.00	\$ 210,000.00
3	Furnish and Install Water Service	EA	130	\$ 2,225.00	\$ 289,250.00
4	Furnish and Install Hydrant Assemblies	EA	120	\$ 10,000.00	\$ 1,200,000.00
5	Rock Excavation	CY	1,000	\$ 75.00	\$ 75,000.00
6	Maintenance & Protection of Traffic Including Signs	LS	1	\$ 148,500.00	\$ 148,500.00
7	Mobilization	LS	1	\$ 222,800.00	\$ 222,800.00

SUBTOTAL = \$ 7,795,550.00
 CONTINGENCY (20%) = \$ 1,559,110.00
 LEGAL, ENGINEERING, & ADMINISTRATION (25%) = \$ 1,948,887.50
TOTAL (ROUNDED) = \$ 11,310,000.00

SOUTH CENTRAL WATER - 145 NEW USERS

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Furnish and Install 8" Diameter PVC Water Main	LF	50,500	\$ 100.00	\$ 5,050,000.00
2	Furnish and Install 8" In-Line Gate Valves Complete	EA	55	\$ 3,500.00	\$ 192,500.00
3	Furnish and Install Water Service	EA	145	\$ 3,000.00	\$ 435,000.00
4	Furnish and Install Hydrant Assemblies	EA	110	\$ 10,000.00	\$ 1,100,000.00
5	New 150,000 gal Water Storage Tank	LS	1	\$ 300,000.00	\$ 300,000.00
6	New Pump Station	LS	1	\$ 300,000.00	\$ 300,000.00
7	Route 219 Crossing	LF	700	\$ 1,200.00	\$ 840,000.00
8	Rock Excavation	CY	1,000	\$ 75.00	\$ 75,000.00
9	Maintenance & Protection of Traffic Including Signs	LS	1	\$ 147,000.00	\$ 147,000.00
10	Mobilization	LS	1	\$ 220,500.00	\$ 220,500.00

SUBTOTAL = \$ 8,660,000.00
 CONTINGENCY (20%) = \$ 1,732,000.00
 LEGAL, ENGINEERING, & ADMINISTRATION (25%) = \$ 2,165,000.00
TOTAL (ROUNDED) = \$ 12,560,000.00

SOUTHEAST WATER - 77 NEW USERS

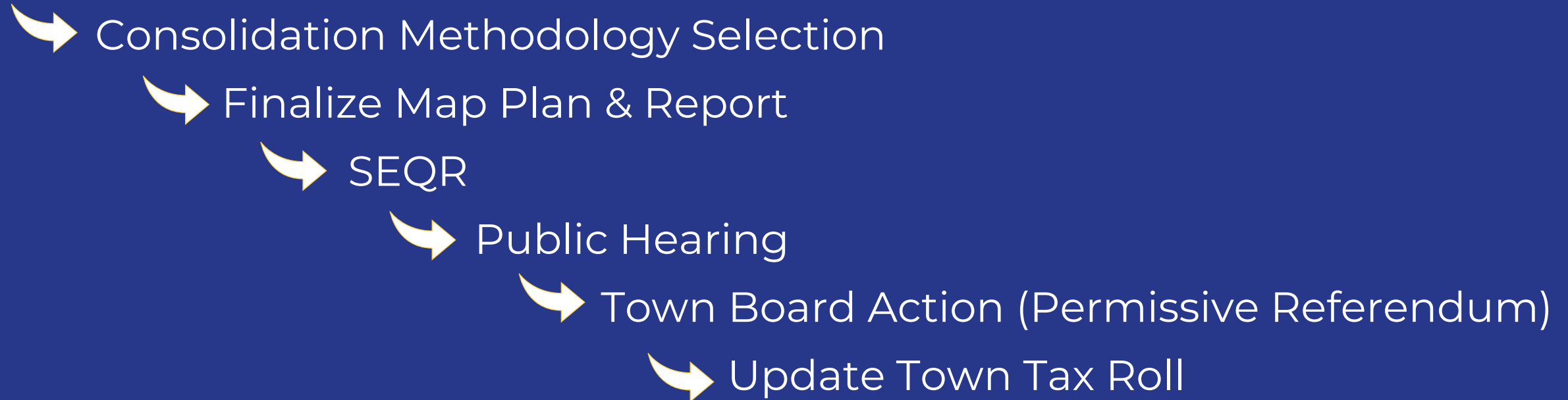
ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Furnish and Install 8" Diameter PVC Water Main	LF	30,500	\$ 100.00	\$ 3,050,000.00
2	Furnish and Install 8" In-Line Gate Valves Complete	EA	35	\$ 3,500.00	\$ 122,500.00
3	Furnish and Install Water Service	EA	77	\$ 3,000.00	\$ 231,000.00
4	Furnish and Install Hydrant Assemblies	EA	70	\$ 10,000.00	\$ 700,000.00
5	Rock Excavation	CY	1,000	\$ 75.00	\$ 75,000.00
6	Maintenance & Protection of Traffic Including Signs	LS	1	\$ 147,000.00	\$ 147,000.00
7	Mobilization	LS	1	\$ 220,500.00	\$ 220,500.00

SUBTOTAL = \$ 4,546,000.00
 CONTINGENCY (20%) = \$ 909,200.00
 LEGAL, ENGINEERING, & ADMINISTRATION (25%) = \$ 1,136,500.00
TOTAL (ROUNDED) = \$ 6,600,000.00

TOTAL TOWN BUILD OUT = \$ 30,470,000.00

Next Steps

Town Board Decision



Questions and Comments Welcome!

