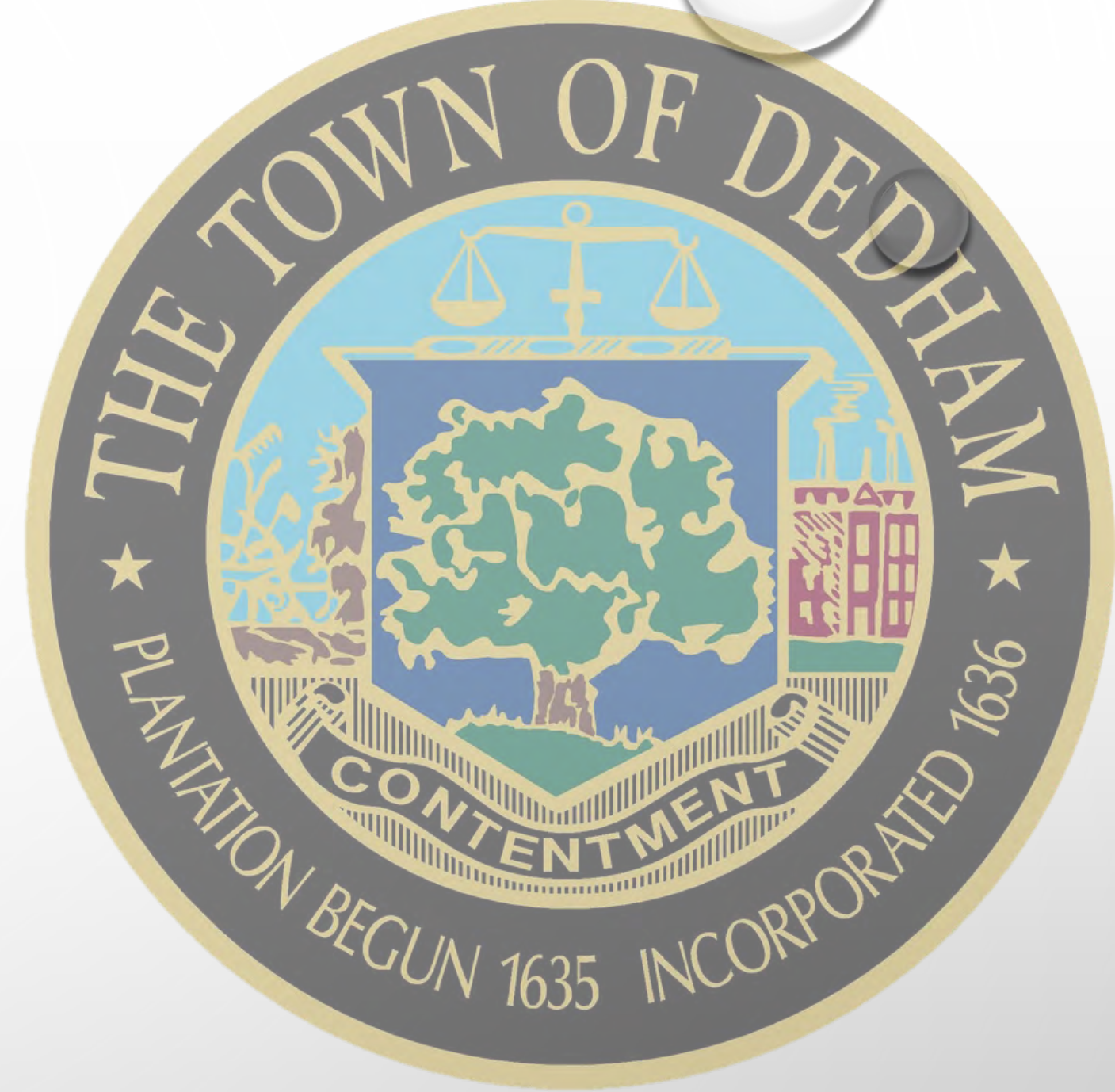


Town-Wide Hybrid Meeting: Stormwater Utility Fee

January 26, 2023



MEETING FORMAT

- Presentation - 7:00 PM to 7:30 PM
- Questions & Comments – 7:30 PM to 8:15 PM
- Meeting Ends – 8:15 PM

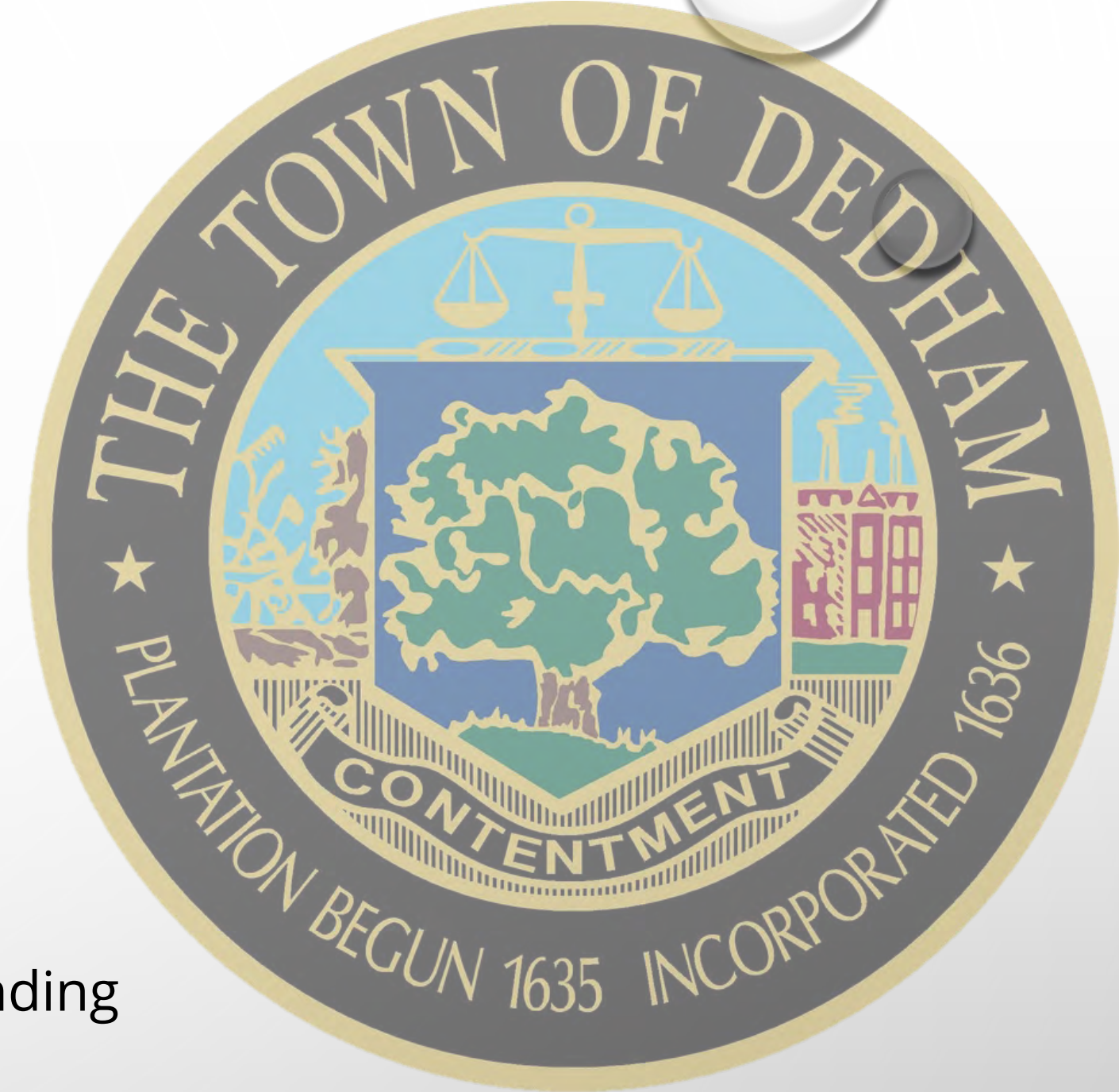
Overview & Goals

PRESENTERS

Leon Goodwin, Town Manager
Jason Mammone, Director of Engineering
John Arnett, Director of Finance
Kevin Coughlin, Select Board Member

WHY ARE WE HERE?

- To introduce the Town's new Stormwater Utility Fee to start July 1, 2023.
- To educate and provide resource materials for a better understanding for the implementation of a Stormwater Utility Fee.
- To emphasize that the Town is under an unfunded mandate by the Environmental Protection Agency (EPA) through our MS4 permit. Non-compliance with our permit could result in the Town being fined up to \$50,000 per day.
- To create an understanding that this is an investment to improve the water quality of our natural resources which will promote improved quality of life for all.



Poll is now closed


Let's Start with Some Icebreakers



Please use your mobile device to scan the QR code or visit slido.com and enter #5782285 to respond to the following questions. (All responses are anonymous)

Note: The following questions are used during the live hybrid meeting ONLY for interactive purposes and are not intended to gather data.

Poll is now closed



Dedham operates and maintains approximately how many stormwater structures (drain manholes & catch basins)?

Poll is now closed



Dedham has approximately how many miles of streams and rivers?

Poll is now closed



True or False: Stormwater flows through the same system of pipes as our sewer?

Our Stormwater System

WHAT IS STORMWATER?

- Stormwater is untreated runoff from rain events or snow melt that flows over impervious surfaces (parking lots, driveways, roofs) and pervious surfaces such as lawns and landscaped areas and enters the Town's stormwater system or directly discharges to our natural resources (i.e. wetlands, streams, ponds, rivers)
 - Can carry pollutants, like phosphorus, chemicals, trash, oils, etc.

WHAT MAKES UP OUR TOWN STORMWATER SYSTEM?

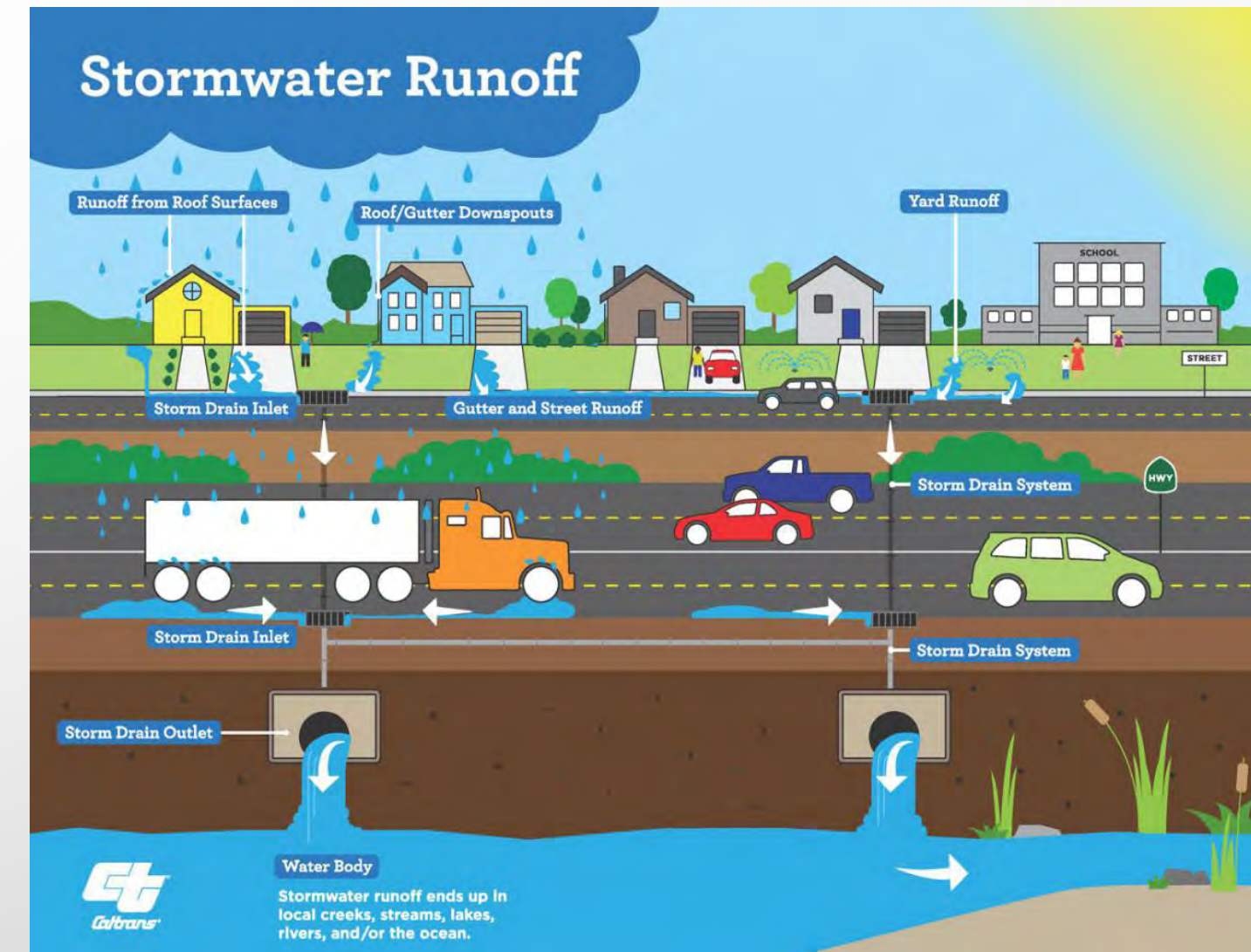
- The Town owns & operates the following infrastructure:
 - Approx. 1,150 Drain Manholes & 2,000 Catch Basins
 - Approx. 260,000 LF (49 Miles) of Pipe
 - Approx. 80 BMPs (Infiltration systems, bio-retention basins, etc.)
 - Approx. 155 Outfalls (More than half discharge directly to our waterways)

WHAT MAKES UP OUR NATURAL RESOURCES?

- Approx. 8,325,000 SF (191 Acres) of Wetlands
- Approx. 250 Ponds
- Approx. 160,000 LF (30 Miles) of Streams & Rivers

WHAT IS THE CURRENT CONDITION OR OUR MAJOR WATERWAYS?

- The Town has 3 Major waterways (Charles River, Mother Brook & Neponset River)
- As determined by MassDEP, all 3 waterways are impaired with combinations of E. Coli, Fecal Coliform, Dissolved Oxygen, PCB & Mercury in fish tissue, Total Phosphorous, Excess Algal Growth, Foams, Scum, Oil Slicks, Milfoil and Nutrient Eutrophication/Biological Indicators.



Regulatory Requirements:

Municipal Sewer Storm System (MS4) Permit Compliance

WHAT IS AN MS4 Permit?

- Issued by EPA authorizing municipalities to discharge pollutants from stormwater systems into natural resource areas.
- Permittees are subject to the Clean Waters Act (CWA) which regulates the numerical limits (amounts) of pollutants allowed to be discharged into these natural resource areas.



History of Dedham's MS4 Permit:

2003: 1st MS4 Permit
issued with less than
50 requirements



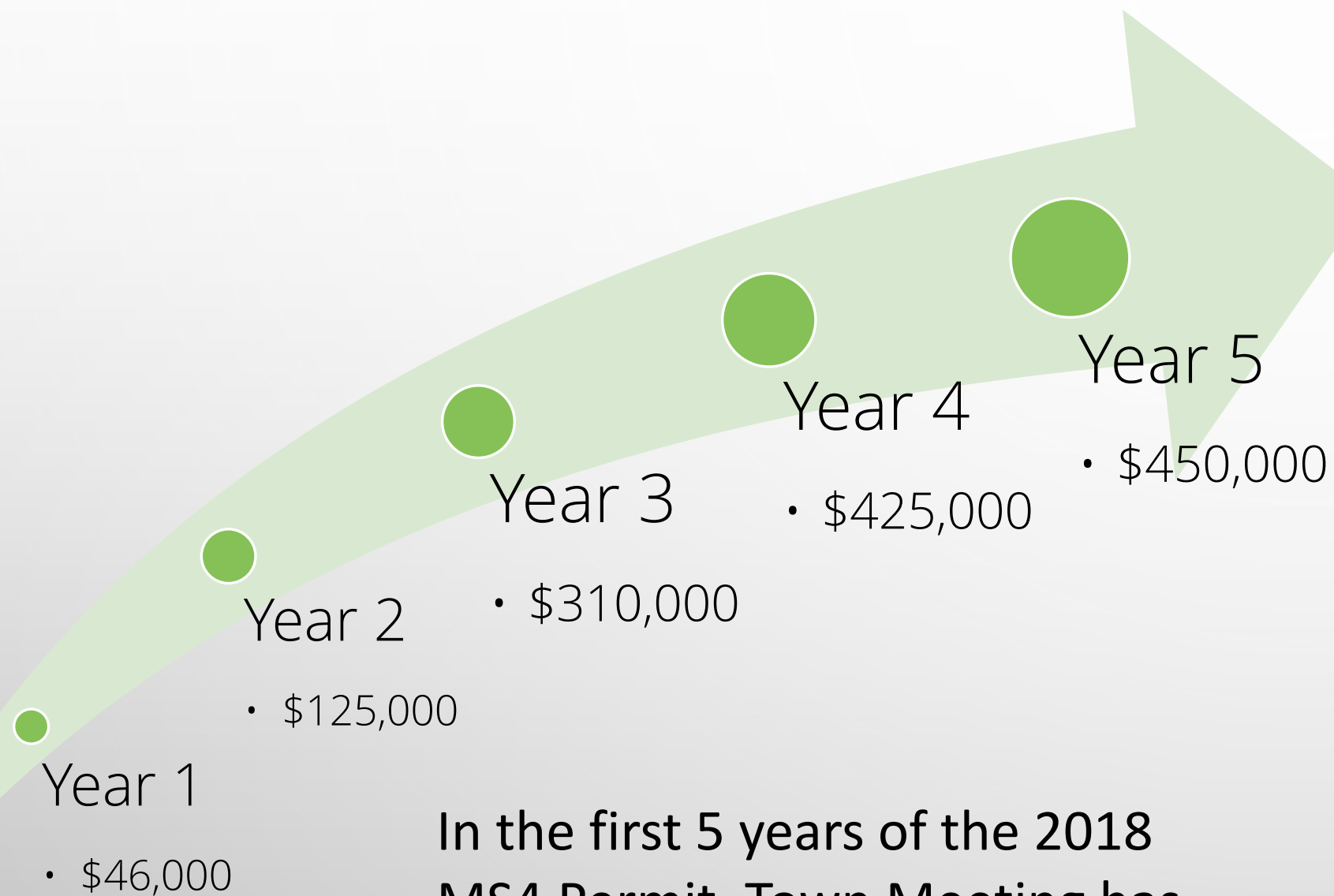
2018: 2nd MS4 Permit
(current permit) with
more than 200
requirements



Next 1-2 years:
3rd MS4 permit to be
released

The Town, under the MS4 Permit, has a great **OPPORTUNITY** to **IMPROVE** the water quality (reduce impairment levels) of our natural resources which in turn will **PROTECT** public health, wildlife and our environment. The money expended to comply with the MS4 permit should be considered an **INVESTMENT** in our natural resources.

What Is Our Financial Need?



In the first 5 years of the 2018 MS4 Permit, Town Meeting has approved funding to meet our obligations of our MS4 permit

Beginning in Year 6 of PCP (as of July 1, 2023)

- Town must begin the implementation of its Phosphorous Control Plan (PCP). All obligations under the just the PCP portion of our permit must be completed by Year 20. All communities within the Charles River Watershed are required to have PCP, but each community has different obligations (amounts of Phosphorous to remove).
- Town will need \$4.1 million to meet all our obligations, including the PCP.
- Dedham is required to remove **891 lbs. of Phosphorous per year over the next 15 years** through structural (infiltration systems) and non-structural (street sweeping & CB cleaning) controls. This will require significant design, construction and O&M costs at an estimated cost of \$3,700,000 per year starting in Year 6.

What Is The Funding Used For?

- The funding is used to meet our obligations under the permit which are broken down into the following categories:



Public Education & Outreach

- Providing educational materials to our schools, Town-wide flyers and mailers, flyers to targeted audiences such as Commercial & Industrial Property owners, Developers and Residents



Illicit Discharge Detection & Elimination (IDDE)

- Updating our GIS stormwater data, Employee training, Dry & Wet weather outfall screening and catchment investigations

Management of Construction Site Runoff

- Site plan review, site inspections, waste control



Management of Post Construction Site Runoff

- Continuous review or regulatory requirements, Updates to the Town Stormwater Rules & Regulations, Collection of As-Built Plans, Collection and review of annual Long-Term O&M plans

Good Housekeeping & Municipal Operations

- Maintain inventories on parks, open spaces, buildings and facilities, Upgrades to DPW facility to meet our Stormwater Pollution Prevention Plan (SWPPP), Catch basin cleanings, Street Sweepings, Inspection & maintenance of all Town-owned stormwater treatment structures



Phosphorous Control Plan

- Design, permitting and construction of BMPs within the Town's right-of-way and Town owned properties.

How Do We Meet Our Financial Need?

- We researched many different avenues and the best way to meet our financial needs and save our property owners as much as possible was to move forward with a Stormwater Utility Fee.
- As of 2021, over 20 other Towns and Cities already have a Stormwater Utility Fee in place to generate the funds needed to meet their MS4 permit obligations.
- Many other Town and Cities are planning to implement Stormwater Utility Fees in the near future or have already begun a process similar to Dedham.
- By establishing a stormwater utility fee, it allows the Town to develop a tiered fee structure for both residential & non-residential property owners that is believed to be fair and equitable to both types of owners based upon impervious surface areas.
- A fee will be issued to all residential and non-residential property owners within the Town of Dedham (including all Town properties) with greater than 500 square feet of total impervious surface area.

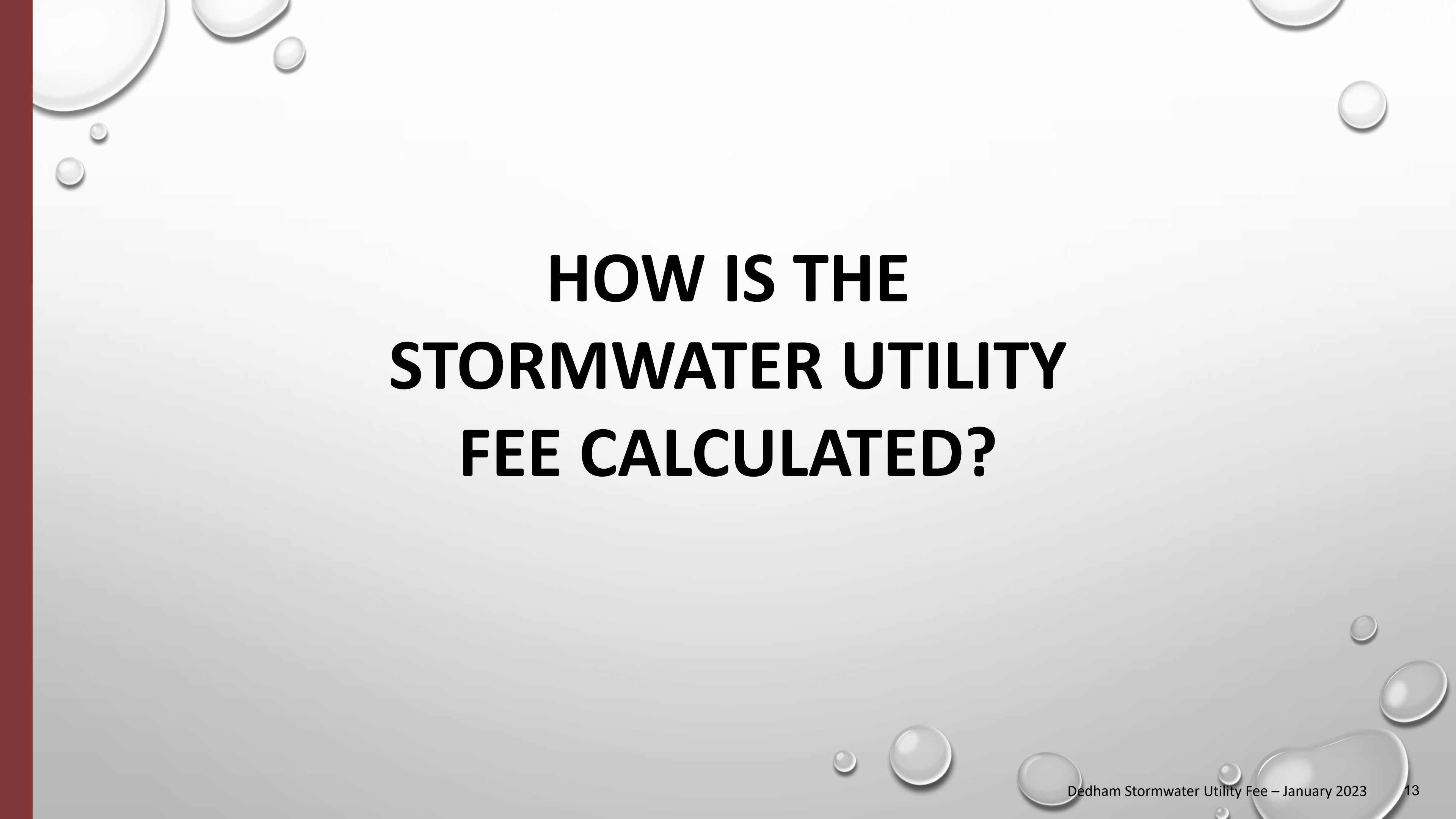
Other MA Communities with Stormwater Utility Fees for MS4 Permit Requirements



*Pins show approximate location

- Ashland
- Ayer
- Bellingham
- Braintree
- Chelmsford
- Chicopee
- East Longmeadow
- Fall River
- Gloucester
- Longmeadow
- Millis
- Milton
- Newton
- Northampton
- Pepperell
- Reading
- Shrewsbury
- Tewksbury
- Westfield
- Westford
- Yarmouth

List from Mass.gov as of 2021



HOW IS THE STORMWATER UTILITY FEE CALCULATED?

Types of Parcels

RESIDENTIAL PROPERTIES	NON-RESIDENTIAL
<p style="text-align: center;">7,341 Parcels (92% of Total Parcels*,¹)</p> <p style="text-align: center;">19,977,306 SF of Impervious Area (46% of Total Impervious Area)</p> <p>INCLUDING:</p> <ul style="list-style-type: none"> • SINGLE FAMILY RESIDENTIAL • TWO FAMILY DWELLINGS • THREE FAMILY DWELLINGS 	<p style="text-align: center;">661 Parcels (8% of Total Parcels*,²)</p> <p style="text-align: center;">23,076,534 SF of Impervious Area (54% of Total Impervious Area)</p> <p>INCLUDING:</p> <ul style="list-style-type: none"> • DWELLINGS WITH 4 OR MORE UNITS • COMMERCIAL • INDUSTRIAL • WAREHOUSE • MIXED-USE • NON-PROFITS (I.E. CHURCHES, SCHOOLS) • TOWN-OWNED PROPERTIES • STATE-OWNED PROPERTIES

* Parcels with less than 500 SF of total impervious area will not be billed and therefore not considered as part of our analysis.

1. 9 Residential Parcels have less than 500 SF of total impervious area.

2. 601 Non-Residential Parcels have less than 500 SF of total impervious area. Of those parcels, 540 (90%) had 0 SF of total impervious areas

Utility Fee Structure and Breakdown

AS OF JULY 1, 2023 (FY24) THE TOWN IS ESTIMATED TO NEED **UP TO \$4.1 MILLION PER YEAR** TO MEET ALL OUR OBLIGATIONS UNDER THE MS4 PERMIT.

HOW WAS THE FEE CALCULATED?

If all residential and non-residential parcels for were considered equal within their respective parcel type, a flat-fee structure would resemble as shown in the table below.

Parcel Type	Impervious Area (SF)	Fee Multiplier	Adjusted Impervious Area (SF)	Cost per SF of Impervious Area	Percentage of Fee Required Based on Multiplier	Share of \$4.1 Million	Average Stormwater Fee Per Parcel
Residential	19,977,306	1.0	19,977,306	\$0.0784	38%	\$1,566,564	\$214
Non-Residential	23,076,534	1.4	32,307,148	\$0.1098	62%	\$2,533,436	\$3,833

NOTE: The 1.4 Fee Multiplier is Consistent with Existing Sewer Billing Rates for Residential & Non-Residential

No Two Parcels Are the Same

AS OF JULY 1, 2023 (FY24) THE TOWN IS ESTIMATED TO NEED **UP TO \$4.1 MILLION PER YEAR** (ESTIMATED) TO MEET ALL OUR OBLIGATIONS UNDER THE MS4 PERMIT.

Diving deeper into each respective parcel type it was apparent that residential and non-residential parcels were not equal based upon the amount of impervious area per parcel.

- For residential parcels, the impervious areas ranged from 588 SF to 69,068 SF.
- For non-residential parcels, the impervious areas ranged from 503 SF to 1,078,854 SF

Due to the significant ranges in impervious areas, the **most equitable approach is to generate a tiered fee structure.**

Before a tiered fee structure could be generated for the two parcel types, it was important to determine the Equivalent Residential Unit (ERU) rate that would be carried throughout the fee structuring.

The ERU rate was determined by taking the average impervious area for all single-family dwellings as this group makes up 82% of all the total parcels analyzed.

Average IA for Single Family Dwellings = ERU (SF)	Total Adjusted Impervious Area (SF)	Residential ERU Rate = \$4.1 Million/(Adj. IA/ERU)	Non-Residential ERU Rate = (Res ERU Rate x 1.4)
2,627	52,284,454	\$207	\$290

Residential Parcel Tiered Fee Structure

AS OF JULY 1, 2023 (FY24) THE TOWN IS ESTIMATED TO NEED UP TO \$4.1 MILLION PER YEAR (ESTIMATED) TO MEET ALL OUR OBLIGATIONS UNDER THE MS4 PERMIT.

RESIDENTIAL PARCEL – TIERED FEE STRUCTURE

Tier #	Impervious Area (SF)	Number of Parcels	Percent of Parcels in Tier	Average Impervious Area	Average Impervious Area/ERU	Flat Rate Fee Per Year (Per Quarter)	Fees Collected
1	500 < IA ≤ 5,000	6,910	94%	2,386	0.909	\$189 (\$47.25)	\$1,305,990
2	5,000 < IA ≤ 10,000	360	5%	6,481	2.467	\$511 (\$127.75)	\$183,960
3	IA > 10,000	71	1%	16,387	6.238	\$1,292 (\$323.00)	\$91,732
Total Revenue Collected =							\$1,581,682

NOTES:

- ERU = 2,627 SF
- Residential ERU Rate = \$207

Non-Residential Parcel Tiered Fee Structure

AS OF JULY 1, 2023 (FY24) THE TOWN IS ESTIMATED TO NEED UP TO \$4.1 MILLION PER YEAR (ESTIMATED) TO MEET ALL OUR OBLIGATIONS UNDER THE MS4 PERMIT.

NON-RESIDENTIAL PARCEL – TIERED FEE STRUCTURE

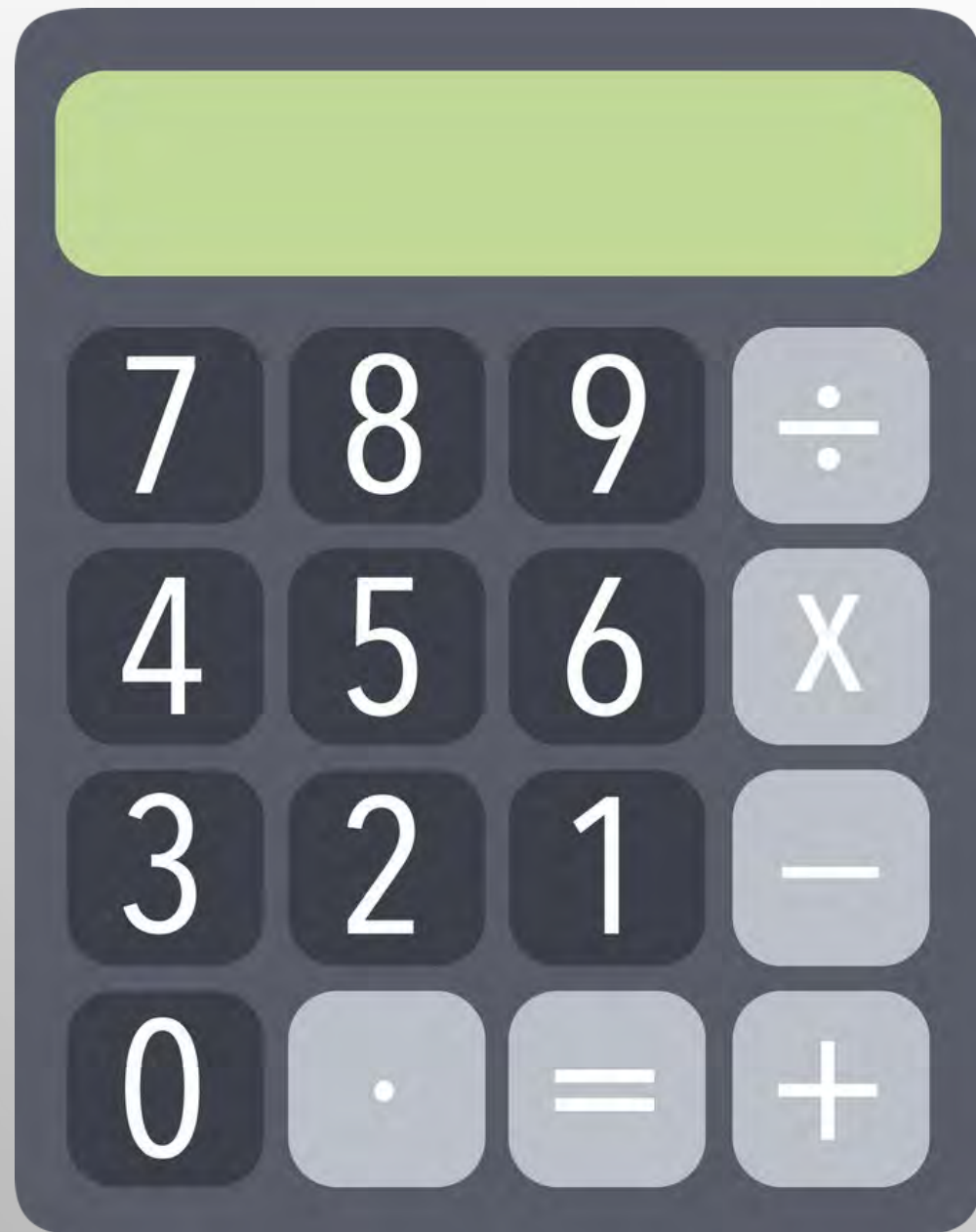
Tier #	Impervious Area (SF)	Number of Parcels	Percent of Parcels in Tier	Average Impervious Area SF	Average Impervious Area/ERU	Flat Rate Fee Per Year (Per Quarter)	Fees Collected
1	500 < IA ≤ 5,000	239	36%	2,745	1.045	\$304 (\$76.00)	\$72,656
2	5,000 < IA ≤ 10,000	123	19%	7,130	2.714	\$788 (\$197.00)	\$96,924
3	10,000 < IA ≤ 15,000	59	9%	12,237	4.658	\$1,351 (\$337.75)	\$79,709
4	15,000 < IA ≤ 25,000	60	9%	18,962	7.218	\$2,094 (\$523.50)	\$125,640
5	25,000 < IA ≤ 50,000	69	10%	35,922	13.674	\$3,966 (\$991.50)	\$273,654
6	50,000 < IA ≤ 75,000	41	6%	62,291	23.712	\$6,877 (\$1,719.25)	\$281,957
7	75,000 < IA ≤ 100,000	27	4%	85,393	32.506	\$9,427 (\$2,356.75)	\$254,529
8	100,000 < IA ≤ 250,000	25	4%	146,982	55.951	\$16,226 (\$4,056.50)	\$405,650
9	250,000 < IA ≤ 500,000	12	2%	333,486	126.946	\$36,815 (\$9,203.75)	\$441,780
10	500,000 < IA ≤ 750,000	3	0%	565,736	215.354	\$62,453 (\$15,613.25)	\$187,359
11	750,000 < IA ≤ 1,000,000	2	0%	946,719	360.380	\$104,511 (\$26,127.75)	\$209,022
12	IA < 1,000,000	1	0%	1,078,854	410.679	\$119,097 (\$29,774.25)	\$119,097
Total Revenue Collected =							\$2,547,977

NOTES:

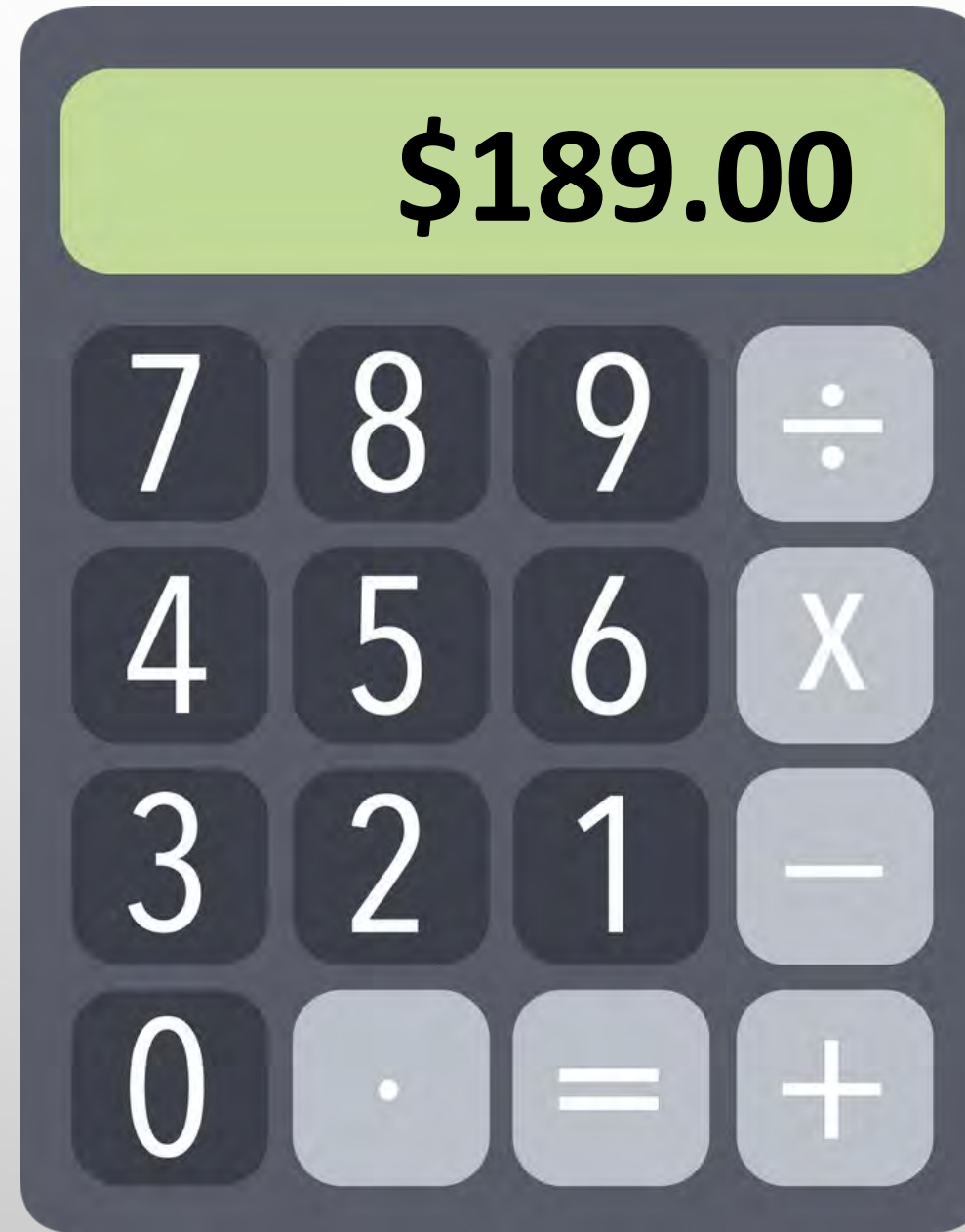
- ERU = 2,627 SF
- Non-Residential ERU Rate = (Residential ERU Rate) x 1.4 = \$290

Utility Fee Instead of Tax Is Less Expensive Option (Residential)

Option 1: Additional Annual Tax*



Option 2: Additional Annual Utility Fee*



VS

SAVINGS OF **\$158.50****
(PER YEAR) AS UTILITY FEE

\$ 47.25 per quarter for Tier
1 residential parcels

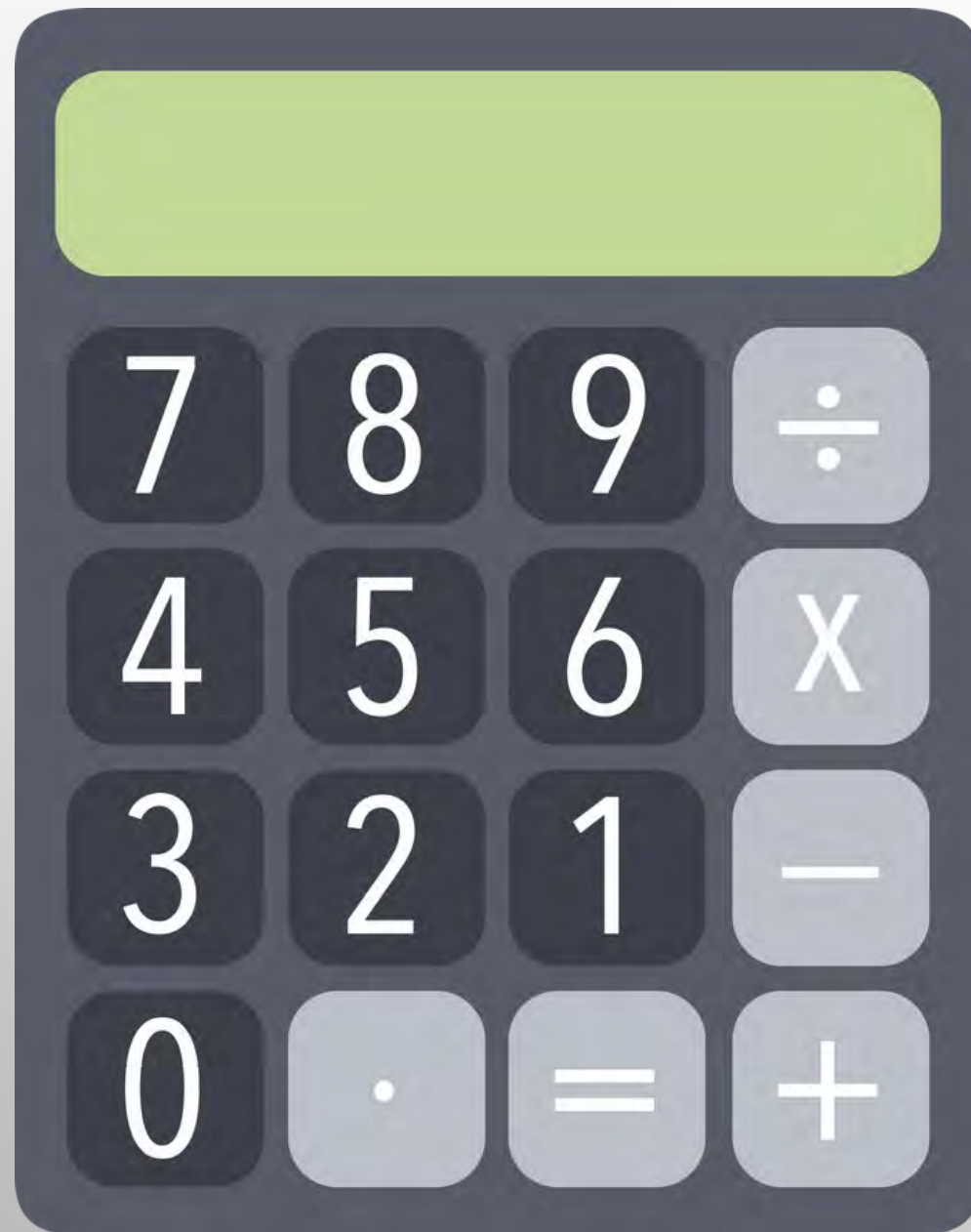
Note: This is an example of a Tier 1 Residential Parcel. Values subject to change as valuations and tax rates are finalized

*Calculations estimated for average residential taxpayer in Dedham.

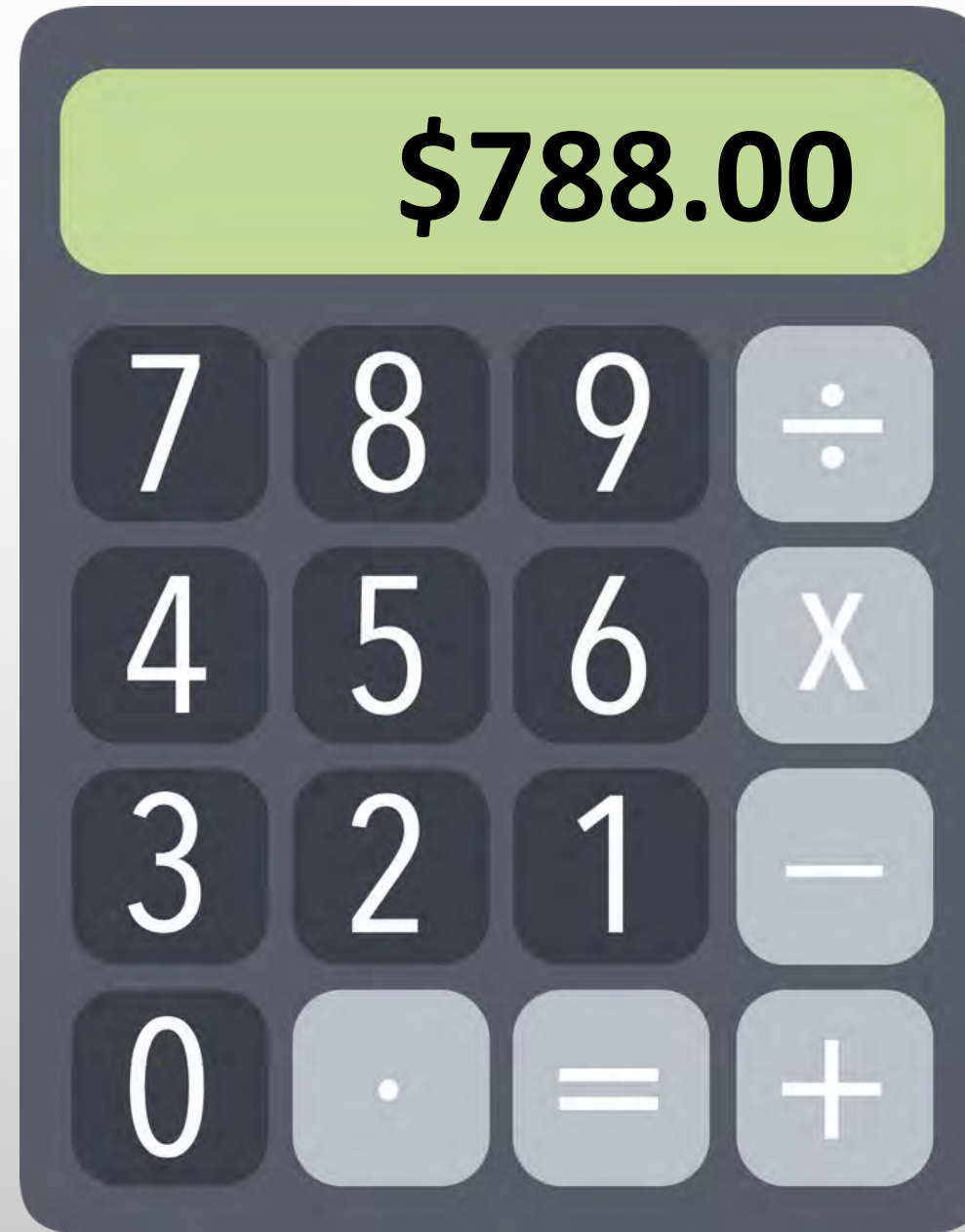
**Savings when billed as utility fee instead of part of tax levy (operating budget)

Utility Fee Instead of Tax Is Less Expensive Option (Non-Residential)

Option 1: Additional Annual Tax*



Option 2: Additional Annual Utility Fee*



VS

SAVINGS OF \$2,016.76**
(PER YEAR) AS UTILITY FEE

**\$197.00 per quarter for Tier 2
non-residential parcels**

Note: This is an example of a Tier 2 Commercial Parcel. Values subject to change as valuations and tax rates are finalized.

*Calculations estimated for average commercial taxpayer in Dedham.

**Savings when billed as utility fee instead of part of tax levy (operating budget)

Examples of Impervious Areas and Stormwater Utility Fees for Various Parcel Types

Note: The following maps have been generated using the Town's newest web application. This web application is also now available to the public. If you are interested to see what impervious surfaces were used to determine the tier your property falls into, please visit the following link:

<https://experience.arcgis.com/experience/fee0e6418aa345eea02093e2de356bfa>

Tier 1 Residential Parcel

Impervious Area = 1,656 SF

Stormwater Utility Fee = \$189/Year (\$47.25/Quarter)



Parcel Identification Number	Impervious Area (sqft)
24-197	1,659

- Buildings
- Driveways

Scale in Feet

5 0 5

FIGURE 7
TOWN OF DEDHAM, MA
STORMWATER ENTERPRISE FUND DEVELOPMENT

SAMPLE IA DELINEATIONS
RESIDENTIAL PARCEL

JANUARY 2023 SCALE: NOTED

Weston & Sampson

Esri Community Maps Contributors, City of Boston, Town of Dedham, MassGIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Tier 1 Residential Parcel
Impervious Area = 2,710 SF
Stormwater Utility Fee = \$189/Year (\$47.25/Quarter)



Parcel Identification Number	Impervious Area (sqft)
142-171	2,710

- Buildings
- Driveways

FIGURE 5
TOWN OF DEDHAM, MA
STORMWATER ENTERPRISE FUND DEVELOPMENT

SAMPLE IA DELINEATIONS
RESIDENTIAL PARCEL (2710 SQFT)

JANUARY 2023 SCALE: NOTED

Weston & Sampson

Eri Community Maps Contributors, City of Boston, Town of Dedham, MassGIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA



Tier 3 Residential Parcel

Impervious Area = 40,643 SF
 Stormwater Utility Fee = \$1,292/Yr (\$323.00/Qrt)

Parcel Identification Number	Impervious Area (sqft)
121-9	40,643

	Buildings
	Driveways
	Parking Lots

FIGURE 1
 TOWN OF DEDHAM, MA
 STORMWATER ENTERPRISE FUND DEVELOPMENT

SAMPLE IA DELINEATIONS
 RESIDENTIAL PARCEL

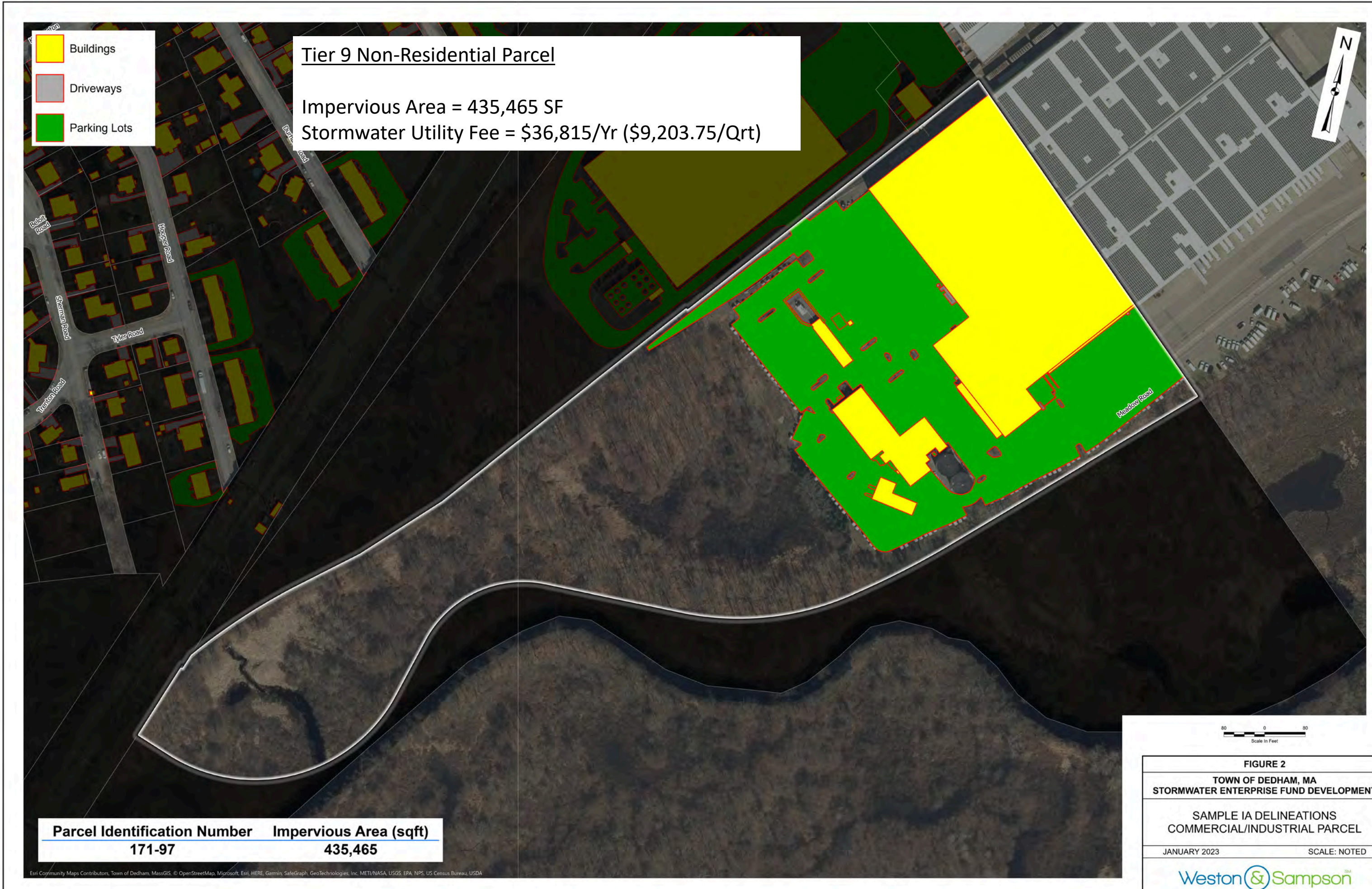
JANUARY 2023 SCALE: NOTED

Weston & Sampson

Esr Community Maps Contributors, City of Boston, Town of Dedham, MassGIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS-EPA, NPS, US Census Bureau, USDA

- Buildings
- Driveways
- Parking Lots

Tier 9 Non-Residential Parcel
 Impervious Area = 435,465 SF
 Stormwater Utility Fee = \$36,815/Yr (\$9,203.75/Qrt)



Parcel Identification Number	Impervious Area (sqft)
171-97	435,465

Scale in Feet
 0 80

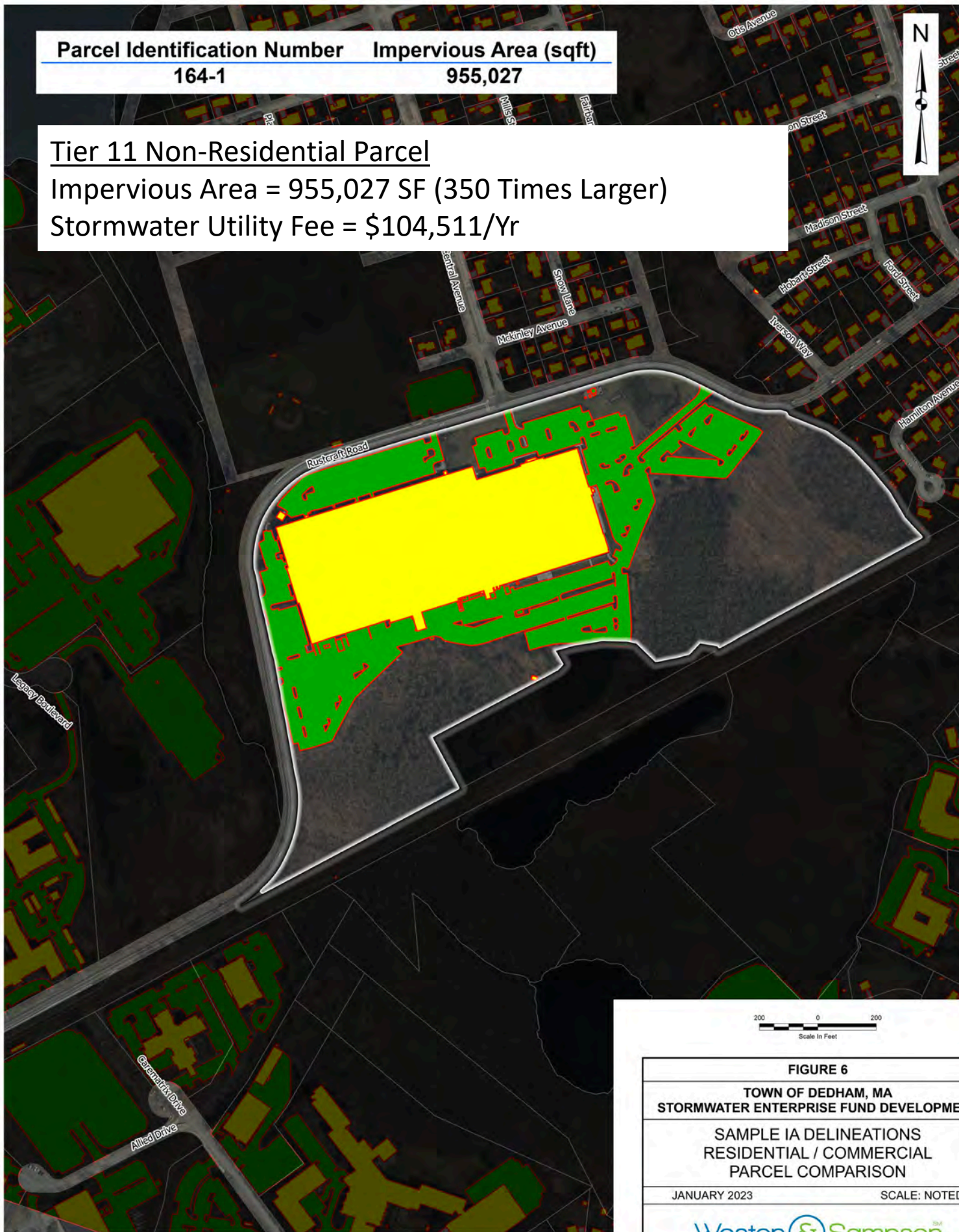
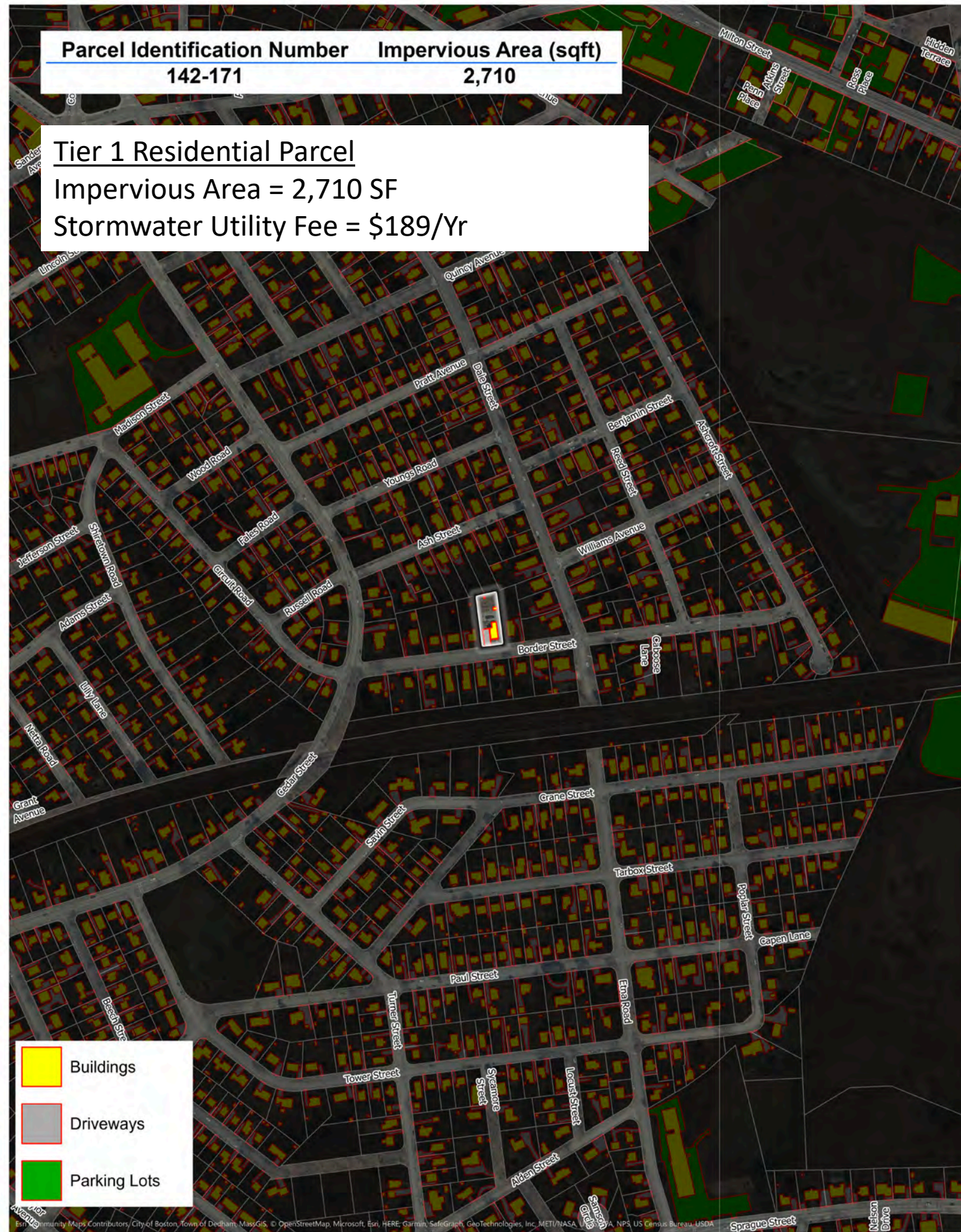
FIGURE 2
TOWN OF DEDHAM, MA
STORMWATER ENTERPRISE FUND DEVELOPMENT

SAMPLE IA DELINEATIONS
 COMMERCIAL/INDUSTRIAL PARCEL

JANUARY 2023 SCALE: NOTED

Weston & Sampson

Esri Community Maps Contributors, Town of Dedham, MassGIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA



200 0 200
Scale in Feet

FIGURE 6
TOWN OF DEDHAM, MA
STORMWATER ENTERPRISE FUND DEVELOPMENT
 SAMPLE IA DELINEATIONS
 RESIDENTIAL / COMMERCIAL
 PARCEL COMPARISON
 JANUARY 2023 SCALE: NOTED

Weston & Sampson

NEXT STEPS

AS OF JULY 1, 2023:

- New Stormwater Utility Fee will become effective July 1, 2023
- Property owners will begin to see a new Stormwater Utility Fee appear on sewer bill each quarter (first bill in summer 2023)

- Continue discussions with Select Board and Finance & Warrant Committee. (Recently made a presentation to Finance & Warrant Committee as part of Warrant Hearings).
- Continue to reach out to all property owners about the stormwater utility fee through various means of social media, Town website, local newspapers, email, local cable station, and mailers.
- Continue to update our dedicated webpage to provide the latest information pertaining to the stormwater utility fee, including a robust FAQ section, presentation recordings and materials, and Town staff contact information to reach out with and questions and/or concerns.
- Continue working with Town Counsel to develop a Stormwater Utility Fee Policy that will address the following:
 - What to do and who to contact in case of a discrepancy with your bill and/or calculated impervious surface
 - The process for annual utility fee rate reviews and providing updates
 - Detailed information on how the utility fees are determined
 - Who oversees the Stormwater Utility Fee

Please visit our Stormwater Utility Fee page on the Town website:

www.dedham-ma.gov/SW_Utility



Questions & Suggestions

CONTACT INFORMATION:

Jason Mammone, Director of Engineering

Email: Jmammone@dedham-ma.gov

FOR MORE INFORMATION ABOUT THE
STORMWATER UTILITY FEE, PLEASE VISIT:

www.dedham-ma.gov/SW_Utility

