



Stormwater Utility Fee for New MS4 Requirements

July 13, 2022

Presentation to Select Board

Overview & Goals

PRESENTERS

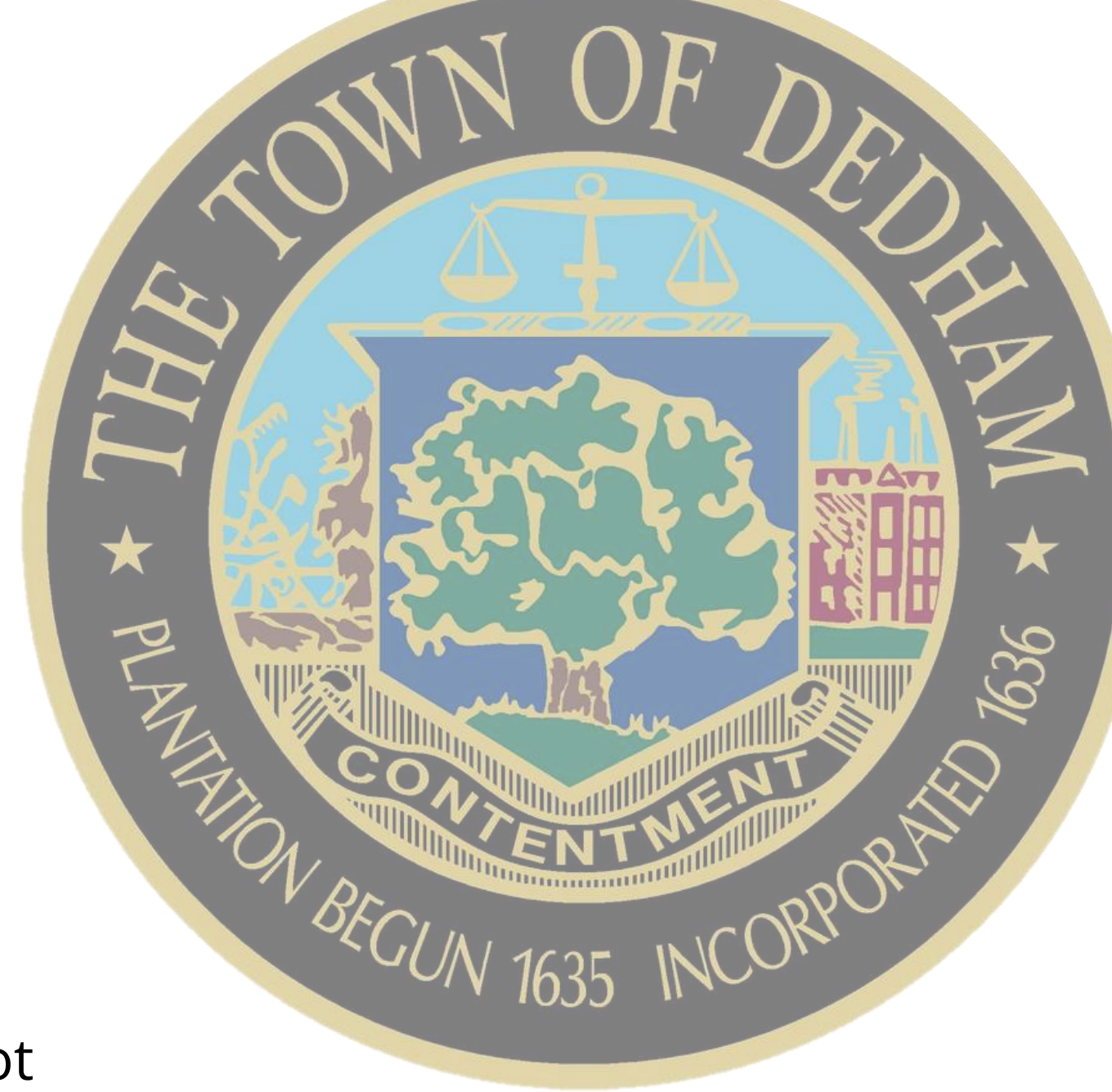
Leon Goodwin, Town Manager
Jason Mammone, Town Engineer
John Arnett, Director of Finance
Amanda Smith, Director of Communications
Mike Butler, Former Select Board Member

WHY ARE WE HERE?

- New federal requirements in place to address phosphorus impairment of surface waters
- Dedham is an MS4 community and current funding structure will not meet requirements

OUR GOALS

- Join numerous other communities in Massachusetts to set up dedicated fund through Stormwater Utility Fee
- Develop a strategic plan to institute a new fee that includes dedicated public outreach and education
- Seeking Select Board support for this plan of setting up a dedicated fund to address MS4 requirements and future operations and maintenance of Town system



Federal Requirement to Address Phosphorus Load

THE TOWN OF DEDHAM IS REQUIRED TO COMPLY WITH MS4 PERMIT AND ADDRESS PHOSPHORUS IMPAIRMENT

WHAT IS MS4?

- Municipal Separate Storm Sewer Systems (MS4) is a network of pipes designed collect or carry stormwater to local water bodies
- Dedham's MS4 system includes drain manholes, catch basins, underground pipes and various best management practices (BMP's). All MS4 discharges to public surface water bodies are regulated by the EPA (NPDES)

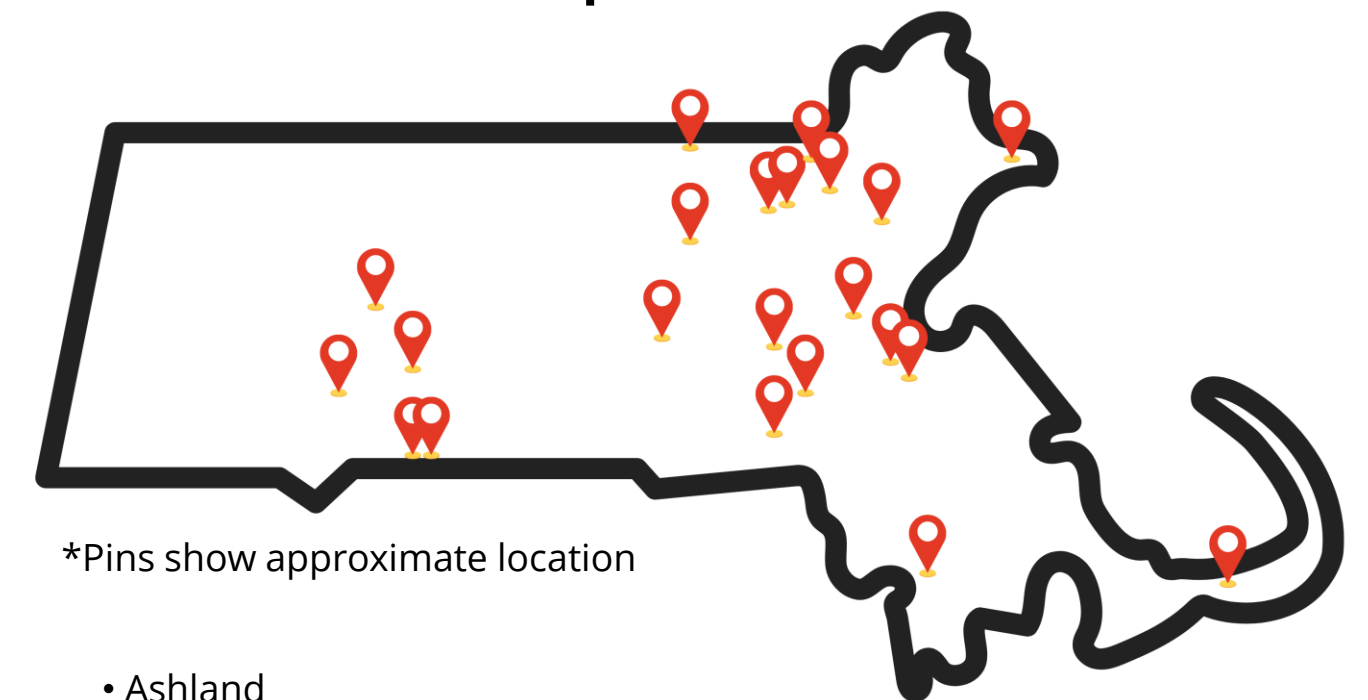
WHY IS THIS HAPPENING?

- EPA reports continuous increase of phosphorus contamination in surface water across the United States
- Untreated stormwater major contributor
- All communities with an MS4 permit must implement a plan to address phosphorus contamination through maintenance, prevention, education, and structural improvements

WHY JULY 1, 2023?

- Requirement in Year 6 of Town's phosphorus control plan
 - Currently in Year 5 (as of July 1, 2022)

Other MA Communities with Stormwater Enterprise Funds for MS4 Permit Requirements



*Pins show approximate location

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

List from Mass.gov
as of 2021

Our Stormwater and this Stealth Pollutant

CHARLES RIVER IS MAJOR NATURAL RESOURCE IN DEDHAM AND PLAYS A CRITICAL ROLE IN THE ENVIRONMENT

WHAT IS STORMWATER?

- Stormwater is untreated runoff from rain events or snow melt that flow over impervious surfaces (parking lots, driveways, roofs) and enters surface water resources
 - Can carry pollutants, like phosphorus, chemicals, trash, oils, etc. into surface water bodies, and can also enter through underground pipes (MS4) and groundwater

WHY DOES EVERYONE HAVE TO PAY?

- All properties share responsibility for phosphorus contamination. Examples of contributing factors include paved surfaces (SHEET FLOW), use of phosphorus-containing fertilizers and other products, lack of onsite treatment (BMPs)
- Dedicated fund to be used to maintain entire MS4 system that serves all of Dedham

WHY IS EXCESS PHOSPHORUS A BAD THING?

- Increased levels of phosphorus cause growth of algae blooms and large aquatic plants that reduce dissolved oxygen levels needed to sustain aquatic life and maintain water quality. Algal blooms pose a risk to human and animal health

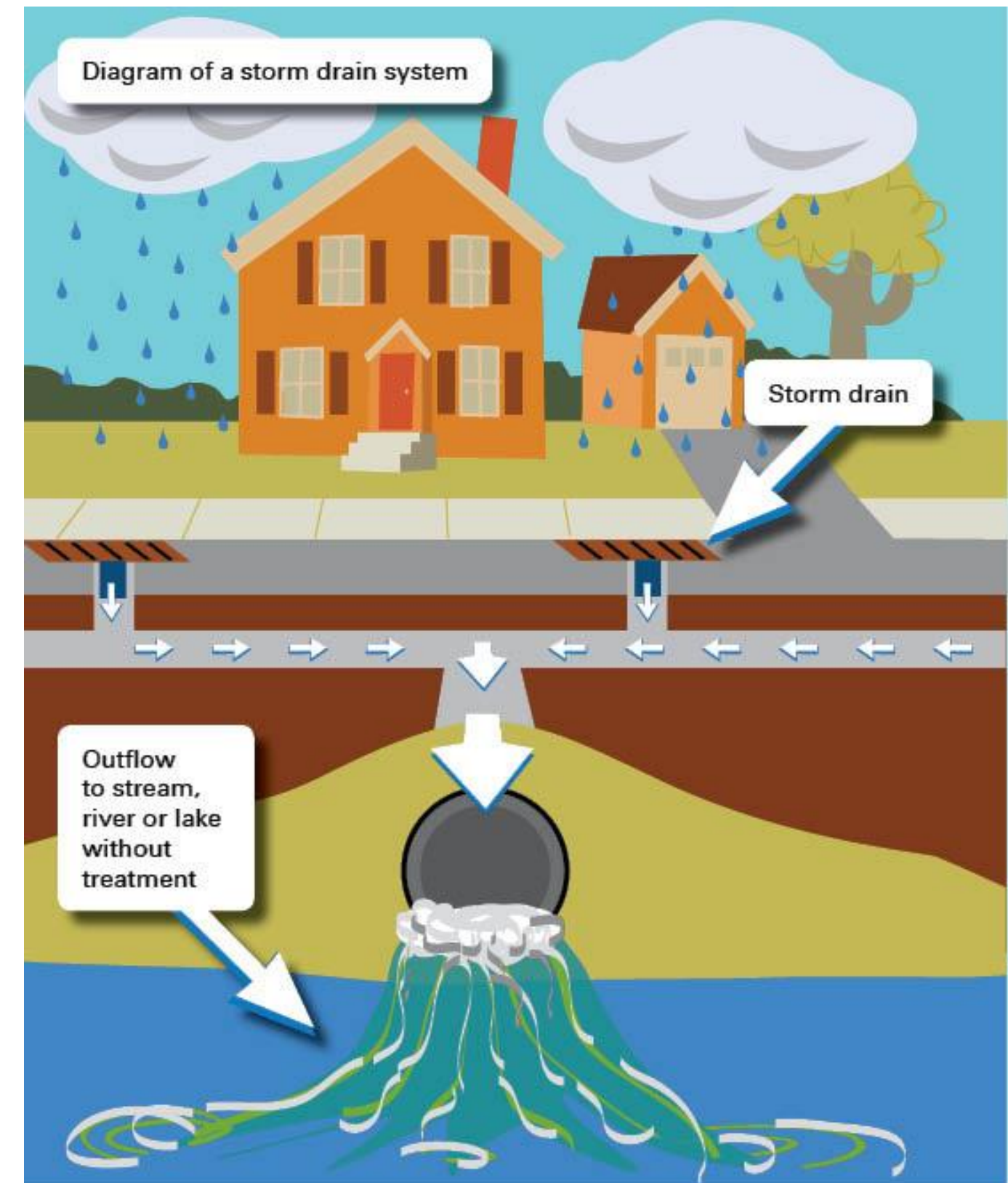


Diagram from Neponset River Watershed Association (a Dedham partner organization)

Town to Set Up Utility Fee to Pay New Required Costs



OUR EXISTING FUNDING AND OPERATIONS **WILL NOT MITIGATE OR MEET NEW PERMIT REQUIREMENTS FROM EPA AND MASSDEP**

WHAT IS A UTILITY FEE?

A fee issued to all property owners in the Town of Dedham to generate the funds necessary to meet our obligations under our MS4 permit issued by the EPA and MassDEP

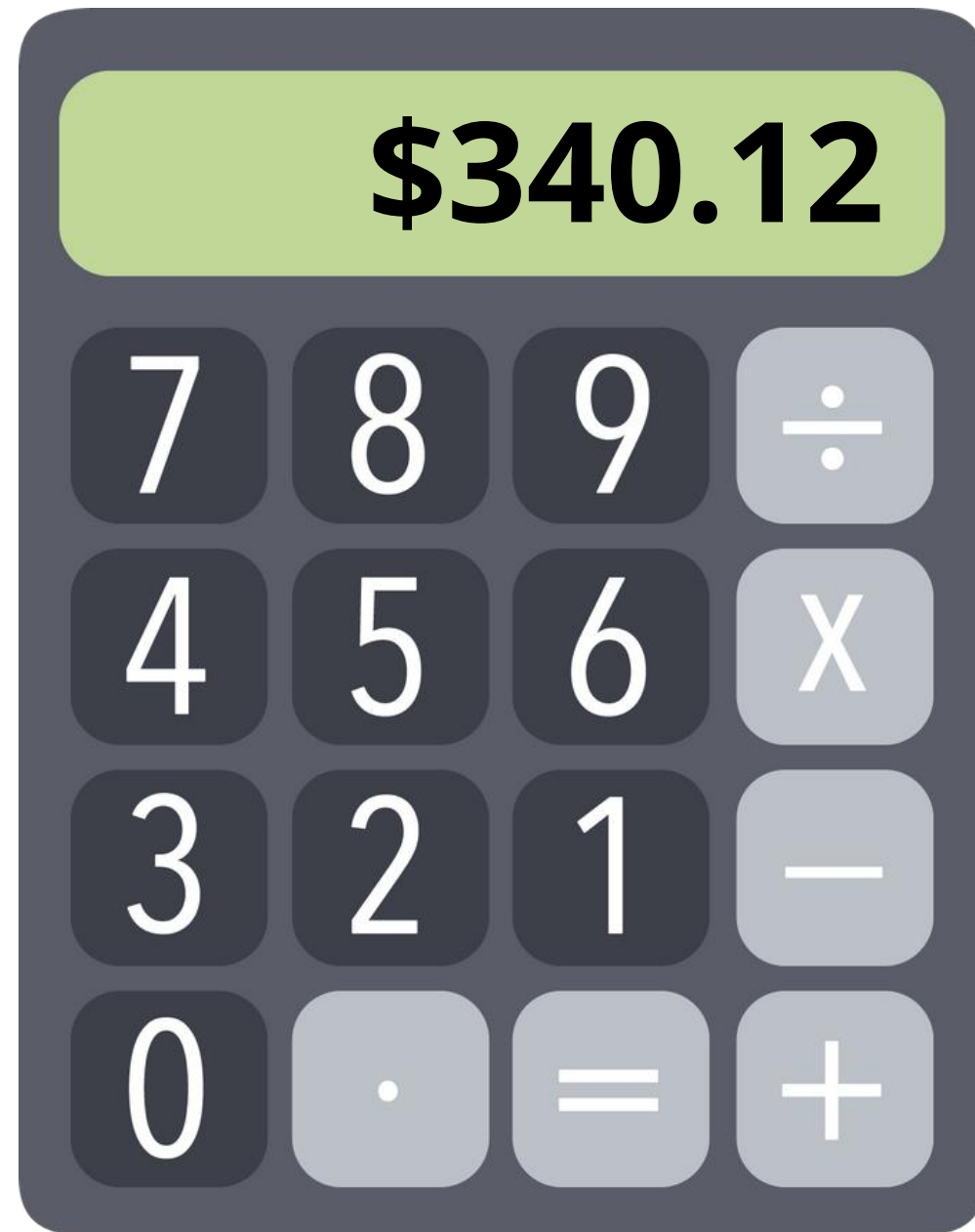
WHAT WILL THE FEE PAY FOR?

The fee will be used to meet our obligations under our EPA and MassDEP issued MS4 permit, including but not limited to:

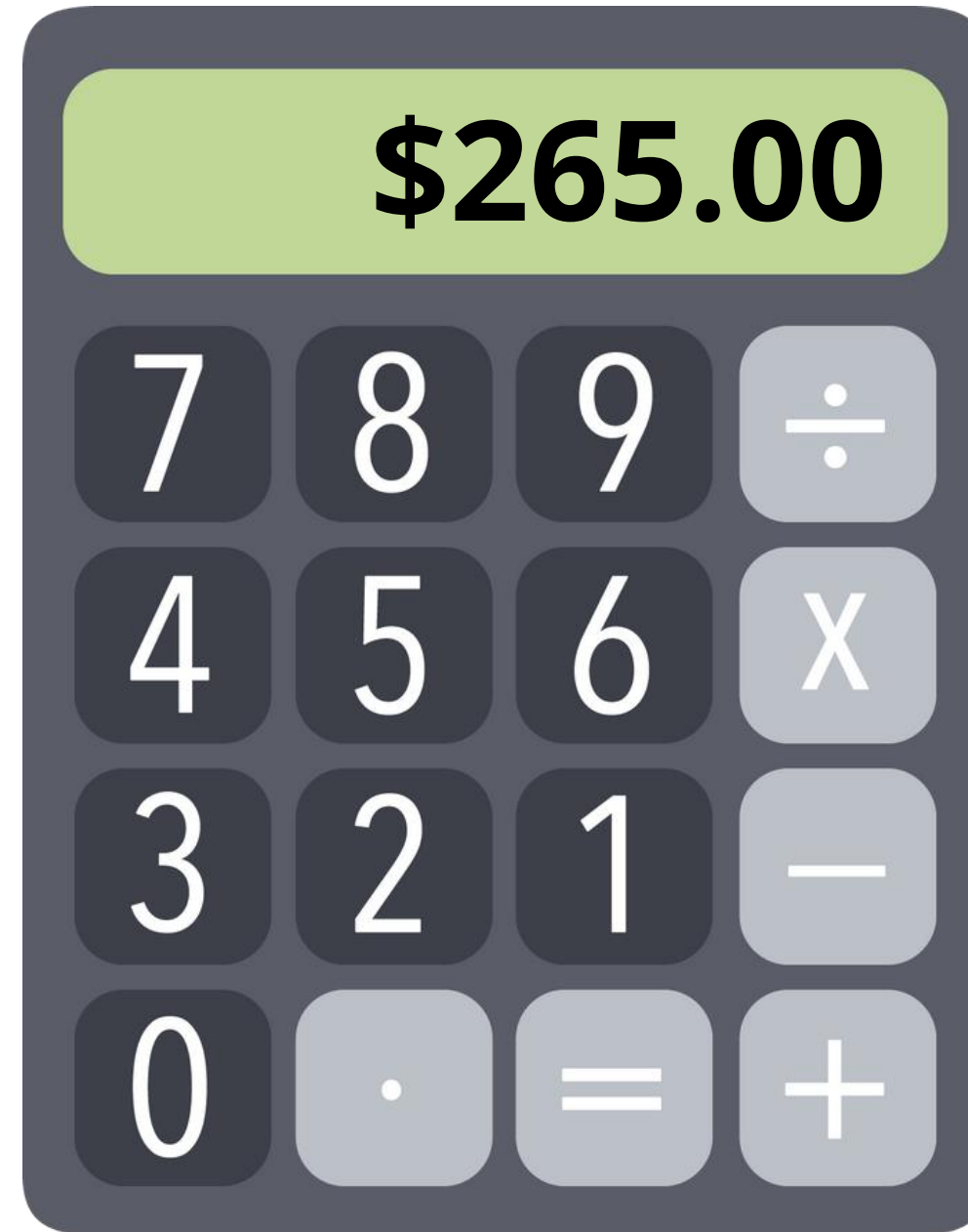
- Public Education & Outreach
- Illicit Discharge Detection & Elimination (IDDE)
- Management of Construction Site Runoff
- Management of Post Construction Site Runoff
- Good Housekeeping & Municipal Operations
- Phosphorous Control Plan

Utility Fee Instead of Tax Is Less Expensive Option

Option 1: Additional Annual Tax*



Option 2: Additional Annual Utility Fee*



vs

\$66.25 per quarter for residential parcels

SAVINGS OF \$75.12
(PER YEAR) AS UTILITY FEE**

*Calculations estimated for average residential taxpayer in Dedham

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

NOTE: These values are **estimates**. Weston & Sampson will use data to finalize fee structure for Town to present to Select Board in September/October 2022

Types of Parcels

RESIDENTIAL PROPERTIES	NON-RESIDENTIAL	VACANT PARCELS
<p style="text-align: center;">47% OF TOTAL LAND AREA (7,264 residential parcels)</p> <p>INCLUDING:</p> <ul style="list-style-type: none"> • SINGLE FAMILY RESIDENTIAL • TWO FAMILY DWELLINGS • THREE FAMILY DWELLINGS 	<p style="text-align: center;">47% OF TOTAL LAND AREA (491 non-residential parcels)</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 	<p style="text-align: center;">6% OF TOTAL LAND AREA (116 vacant parcels)</p> <p>INCLUDING:</p> <ul style="list-style-type: none"> • TRULY VACANT PARCELS • NO STRUCTURES AND SOME ARE PARKING LOTS ASSOCIATED WITH ADJACENT NON-RESIDENTIAL PARCELS <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">PROPOSE TO ASSESS A FEE OF \$100 PER YEAR (OR \$25 PER QUARTER) TO ALL TRULY VACANT PARCELS</p> </div>

Utility Fee Structure and Breakdown

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

HOW IS THE FEE CALCULATED?

Rate structure using Equivalent Residential Unit (ERU): **1 ERU = 3,281 SF (Average Impervious Area for all Residential Parcels)**

Each residential property will be assessed a flat fee of 1 ERU, equal to \$265 per year or \$66.25 per quarter. The ERU will be used to determine how many ERUs would fit within the non-residential parcel, and the parcel would be assessed a fee based upon the number of ERUs.

PARCEL TYPE	EQUATION	TOTAL FEE (PER QUARTER)	TOTAL FEE (PER YEAR)
Residential	$\frac{\text{Total Impervious Area* of All Residential Parcels (SF)}}{\text{Total \# Residential Parcels}} = 1 \text{ ERU}$	\$66.25	\$265.00
Non-Residential	$\frac{\text{Total Impervious Area (SF) of parcel}}{3,281 \text{ SF}} = \# \text{ ERUs (rounded up)}$	\$66.25 x # ERUs	\$265.00 x # ERUs

*Impervious Area includes roofs, driveways, walkways, patios, etc.

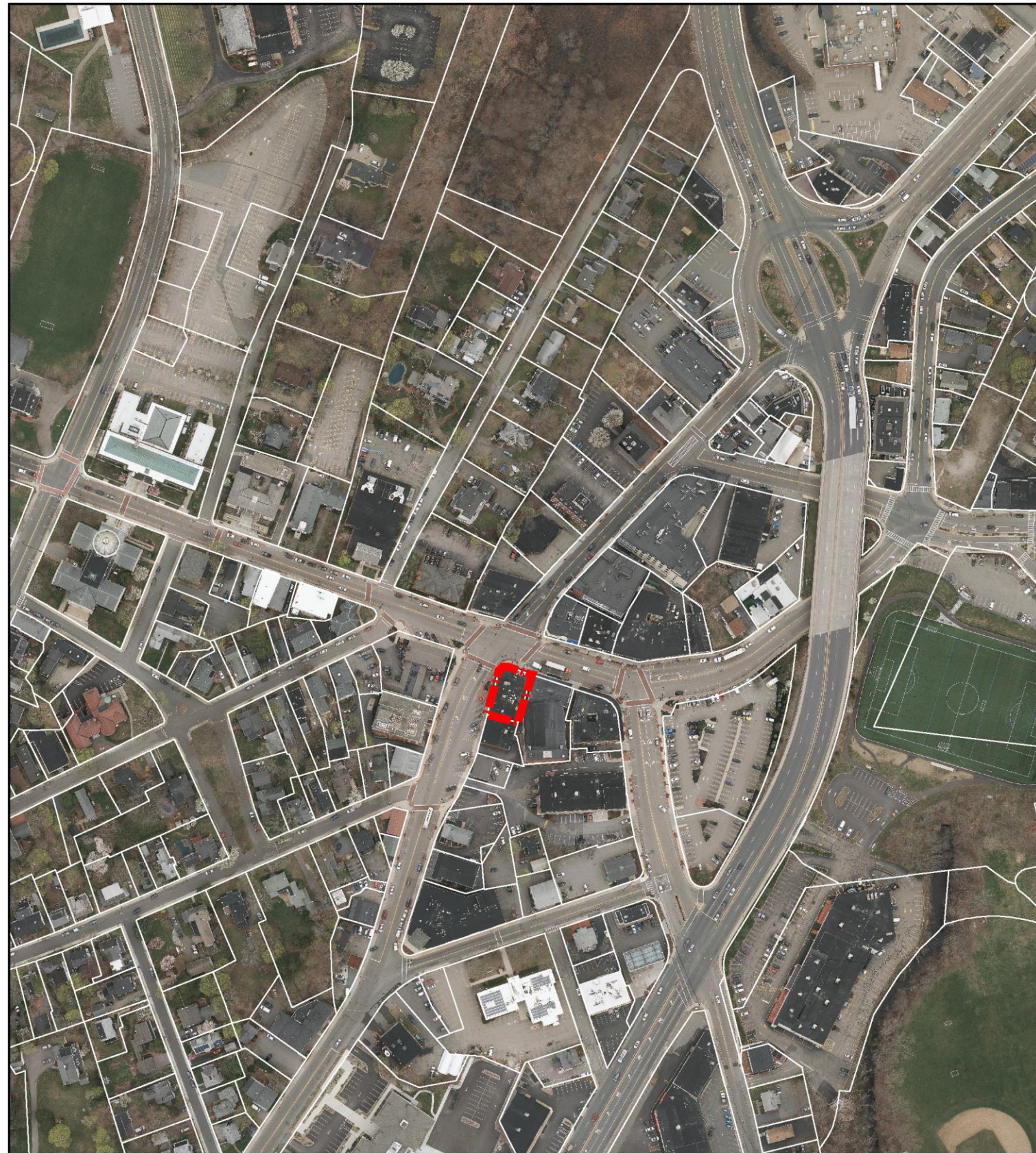
NOTE: FEES MUST BE FAIR AND EQUITABLE TO RESIDENTIAL, NON-RESIDENTIAL, AND VACANT PARCELS.

Examples of Parcels and Potential Fees



Shown on the next 5 slides are examples of non-residential and residential parcels and the potential stormwater utility fee using the equation shown on the previous slide

Note: These maps have been generated using Town of Dedham GIS data and aerial imagery



PARCEL 108-67
376 WASHINGTON ST
MAKARIOS SERIES LLC

0 125 250 Feet



TOWN OF DEDHAM, MASSACHUSETTS



PARCEL 157-7

TOTAL AREA =	5,964 sf. ft.
TOTAL IMPERVIOUS AREA =	5,964 sf. ft.
% OF TOTAL PARCEL IA =	100%
ERU =	2 ERU's
ESTIMATED UTILITY FEE =	\$530



PARCEL 108-67
376 WASHINGTON ST
MAKARIOS SERIES LLC

0 125 250 Feet



TOWN OF DEDHAM, MASSACHUSETTS

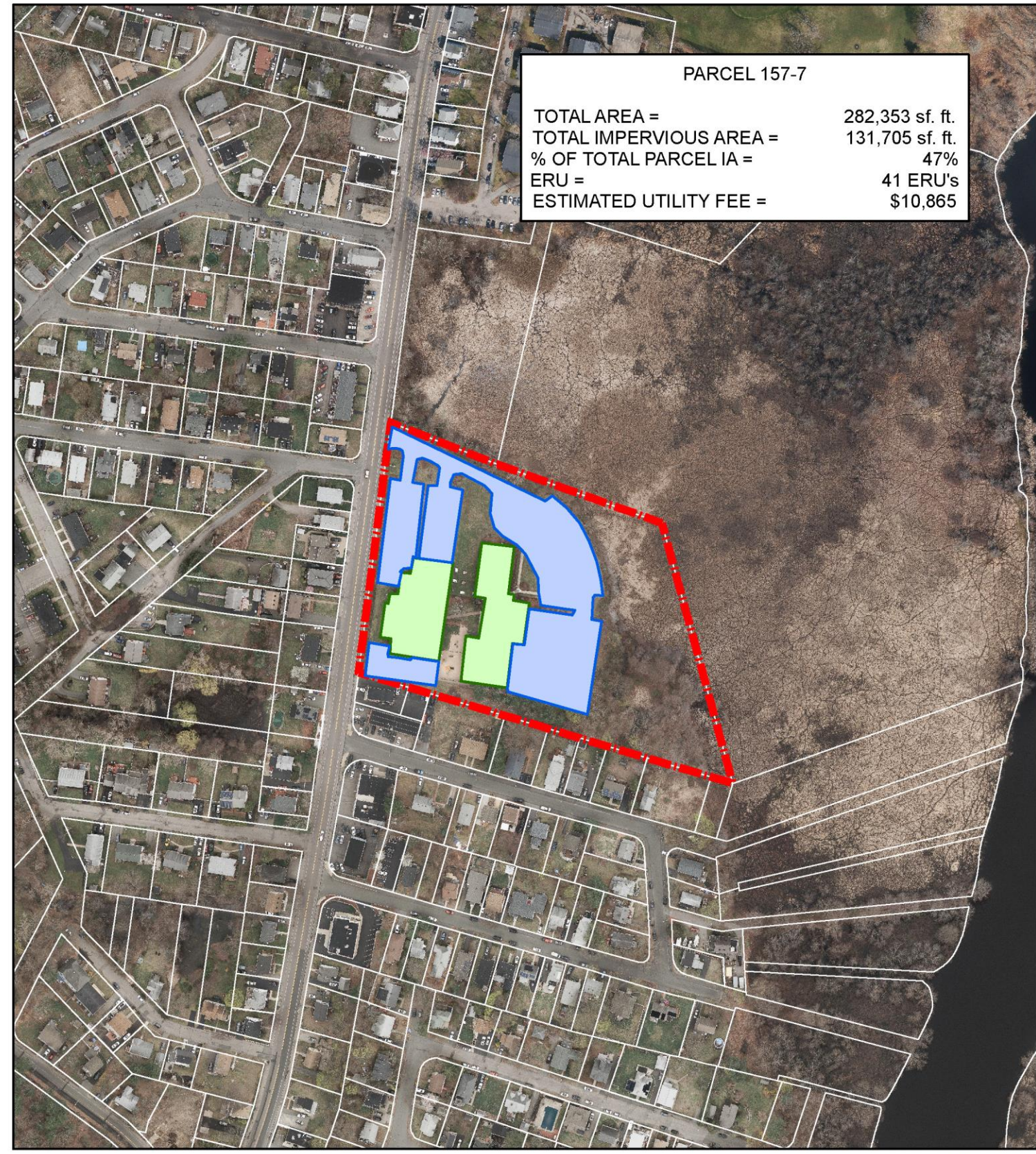


**PARCEL 39-45
270 BRIDGE ST
MARBRIDGE LLC**

0 125 250 Feet



TOWN OF DEDHAM, MASSACHUSETTS

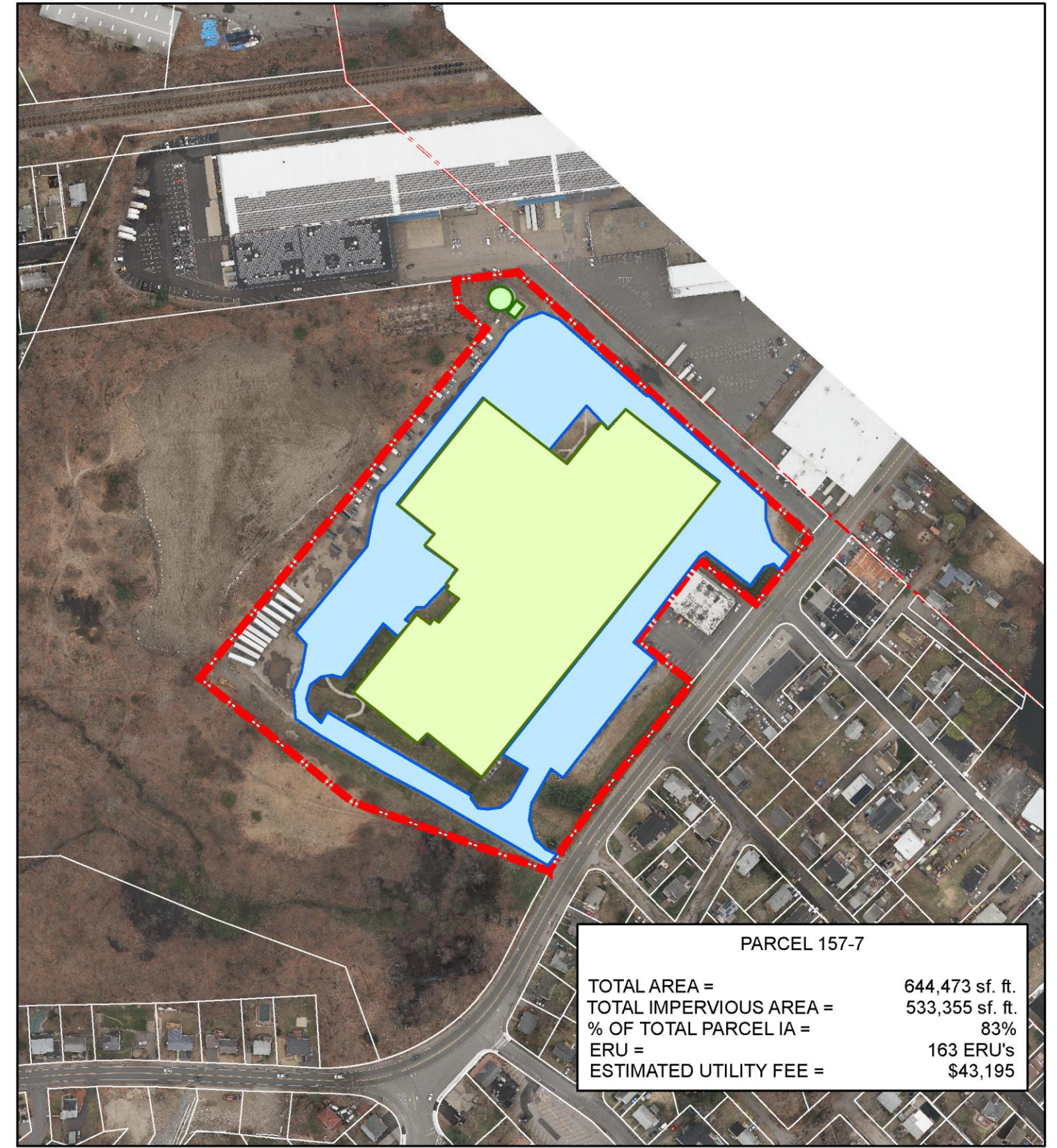


**PARCEL 39-45
270 BRIDGE ST
MARBRIDGE LLC**

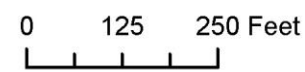
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TOWN OF DEDHAM, MASSACHUSETTS



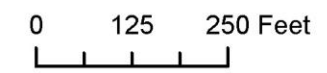
**PARCEL 157-7
480 SPRAGUE ST
AMAZON WAREHOUSE**



TOWN OF DEDHAM, MASSACHUSETTS



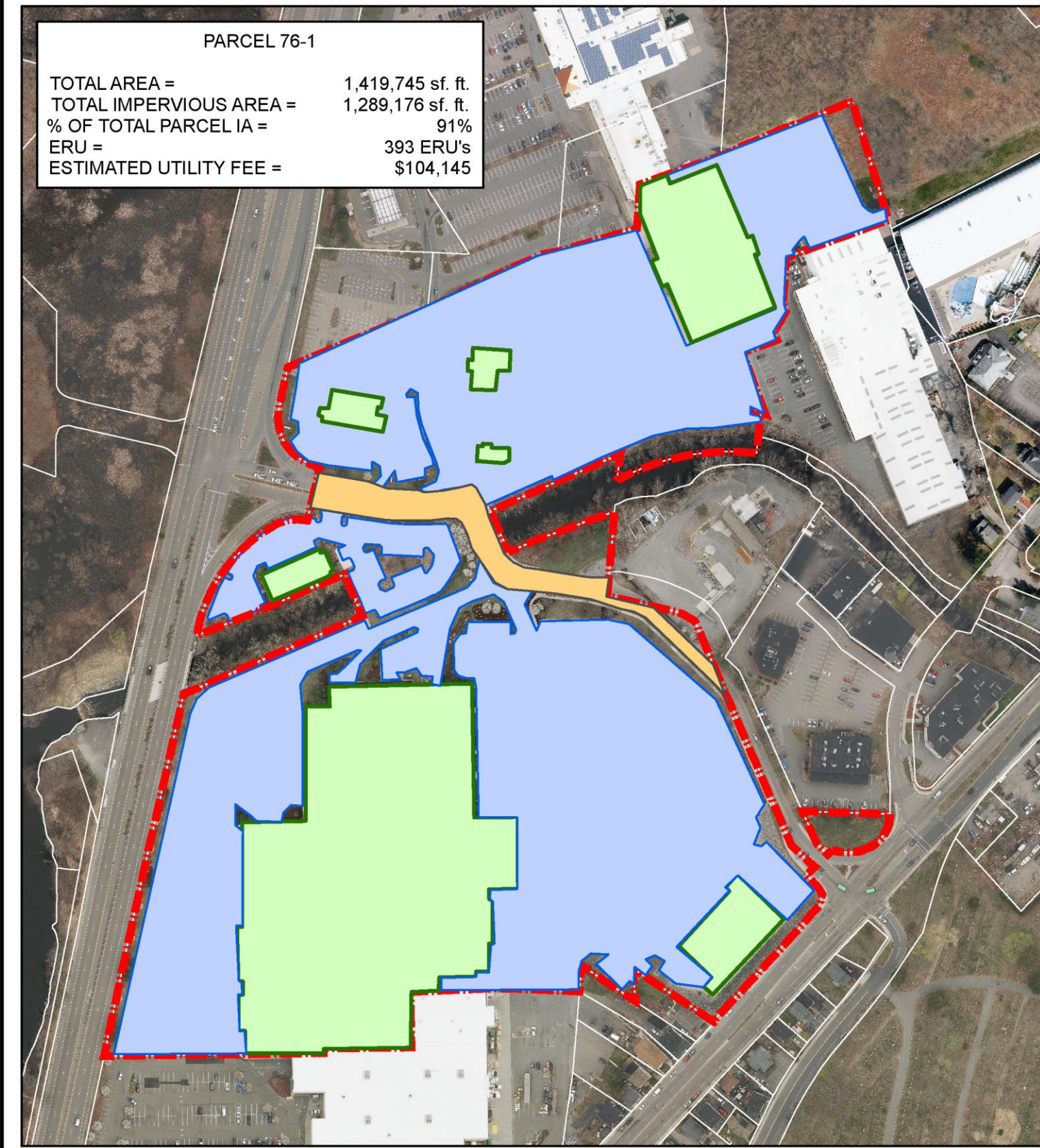
**PARCEL 157-7
480 SPRAGUE ST
AMAZON WAREHOUSE**



TOWN OF DEDHAM, MASSACHUSETTS



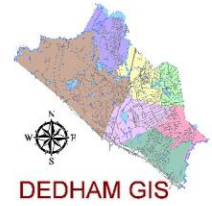
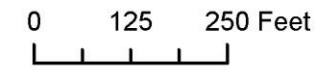
PARCEL 76-1	
TOTAL AREA =	1,419,745 sf. ft.
TOTAL IMPERVIOUS AREA =	1,289,176 sf. ft.
% OF TOTAL PARCEL IA =	91%
ERU =	393 ERU's
ESTIMATED UTILITY FEE =	\$104,145



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TOTAL AREA =	1,419,745 sf. ft.
TOTAL IMPERVIOUS AREA =	1,289,176 sf. ft.
% OF TOTAL PARCEL IA =	91%
ERU =	393 ERU's
ESTIMATED UTILITY FEE =	\$104,145



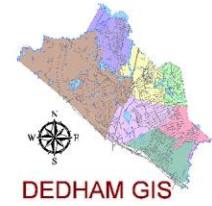
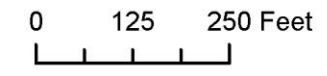
PARCEL 76-1
300 PROVIDENCE HWY
DEDHAM MALL



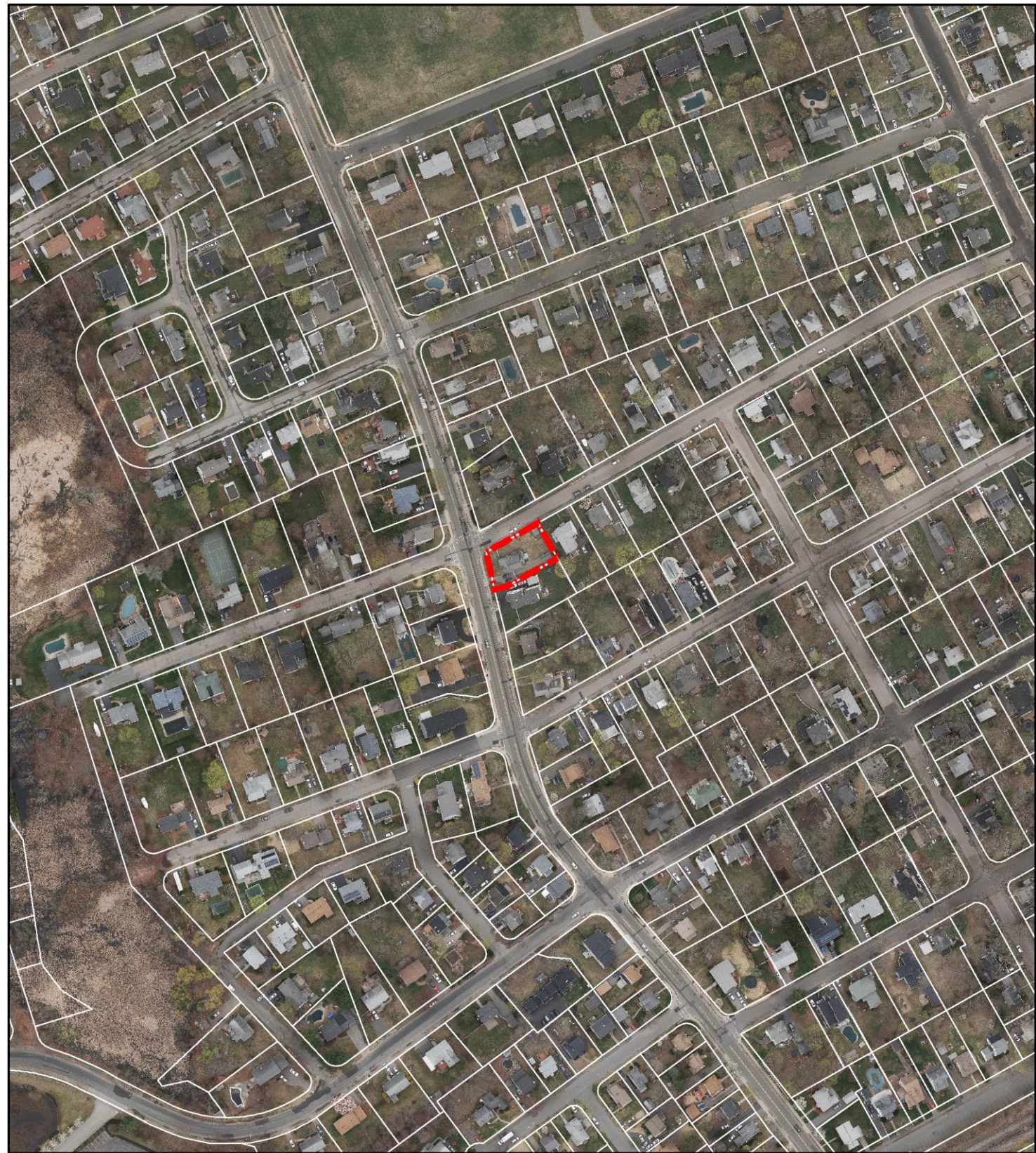
TOWN OF DEDHAM, MASSACHUSETTS



PARCEL 76-1
300 PROVIDENCE HWY
DEDHAM MALL



TOWN OF DEDHAM, MASSACHUSETTS



**PARCEL 140-18
750 EAST ST
RESIDENTIAL PARCEL**

0 125 250 Feet



TOWN OF DEDHAM, MASSACHUSETTS



PARCEL 140-18	
TOTAL AREA =	9,077 sf. ft.
TOTAL IMPERVIOUS AREA =	3,280 sf. ft.
% OF TOTAL PARCEL IA =	36%
ERU =	1 ERU's
ESTIMATED UTILITY FEE =	\$265



**PARCEL 140-18
750 EAST ST
RESIDENTIAL PARCEL**

0 125 250 Feet



TOWN OF DEDHAM, MASSACHUSETTS

PUBLIC EDUCATION & OUTREACH

ON-GOING (TO BEGIN AUGUST/SEPTEMBER 2022)

- Flyers with tax and utility bills
- Public Information Meetings
- Specific page on Town website
- Collaboration with Boards/Committees and Community Groups
- Attendance at Town/Community events
- Social media campaign
- Targeted outreach to businesses and non-profits

SET UP FEE STRUCTURE & BILLING SYSTEM

TO BEGIN AUGUST 2022

- Starting in August, Weston & Sampson will be creating an online GIS web application that will show all the impervious surfaces (including areas) for all parcels.
 - This data will be used to develop an ERU and assist the Town in developing a more detailed fee structure
 - Return to present fee structure to Select Board in Fall 2022

NEXT STEPS

TOWN MEETING VOTE SPRING ANNUAL TOWN MEETING MAY 2023

- Appropriate the necessary funds into Sewer Enterprise Fund for MS4 work
- Vote will occur each Spring Annual Town Meeting
- Presentation(s) to Finance & Warrant Committee early 2023 as part of Warrant Hearings
- Produce additional information materials for inclusion in Warrant Book

WHAT HAPPENS AS OF JULY 1, 2023? NEW FEE EFFECTIVE IN FY24

- New Utility Fee will become effective July 1, 2023
- Property owners will begin to see a new Stormwater Utility Fee appear on sewer utility bill each quarter
- Increase in work/services to comply with MS4 permit (subject to change each year)

Questions & Suggestions

