JASON L. MAMMONE, P.E.
DIRECTOR OF ENGINEERING

NATHAN S. BUTTERMORE, P.E.
INFRASTRUCTURE ENGINEER

RONALD I. LAWRENCE
PROJECT ENGINEER

EMAN SAYEGH
GIS MANAGER

TOWN OF DEDHAM

Commonwealth of Massachusetts

55 RIVER STREET
DEDHAM, MA 02026-2935

(781) 751-9350
FAX (781) 751-9359

www.dedham-ma.gov

DEPARTMENT OF INFRASTRUCTURE ENGINEERING

MEMORANDUM

TO: James Kern, Town Manager

FROM: Jason L. Mammone, P.E., Director of Engineering

DATE: January 18, 2018

SUBJECT: Update of Engineering Department Projects and Activities

---

The following is a brief update on some of the projects that the Engineering Department is currently working on and/or involved with:

- **2017 I/I Inspection Project** – *completed* – This project involved the cleaning & TV inspection of approximately 82,160 linear feet (15.6 miles) of sewer mains. The project was completed in October. The total cost of this project was $87,147.38.

- **2017 I/I Rehabilitation Project**– *completed* – The project was designed to remove an estimated 160,000 gallons of infiltration per day primarily through trenchless technologies. The project involved the installation of approximately 4,681 linear feet of cured-in-place pipe (CIPP), the installation of approximately 15 linear feet of short liners, the installation of 28 full-wrap lateral liners and approximately 508 vertical feet of sewer manholes cementitiously lined and exterior grouted, as well as testing and sealing of associated joints and services and manhole and sewer line root treatment. The total cost of this project was $406,681.22.

- **Inflow and Infiltration Project** – *ongoing* – The Engineering Department has been working to reduce inflow and infiltration using an in-house approach to inspect, assess, design, and oversee improvements to the sanitary sewer system. Over the last eleven years the Town has inspected 1,653,922 linear feet (313 miles) of sewer main, performed 5,288 manhole inspections, installed 169,160 linear feet (32 miles) of cured-in-place liners, installed 3,263 feet of short liners, installed 149 full-wrap lateral liners, installed 34 top hat lateral liners, cementitiously lined 6,510 vertical feet of manholes, chemically root treated 2626,847 linear feet (50 miles) of sewer main, and performed 47,569 linear feet (9 miles) of testing and sealing of joints. To date the project has cost approximately $15.4 million and we estimate that we have conservatively removed 5.7 million gallons per day (MGD) of inflow & infiltration from the system. In addition, the Town's MWRA sewer assessments have remained stable and our sewer rates have remained unchanged since 2008 as a result of our decreasing flow share. Assuming a no change in

flow share scenario, we estimate that Dedham has cumulatively saved $9.8 million over the past eleven years as a result of these efforts (See Chart 1).

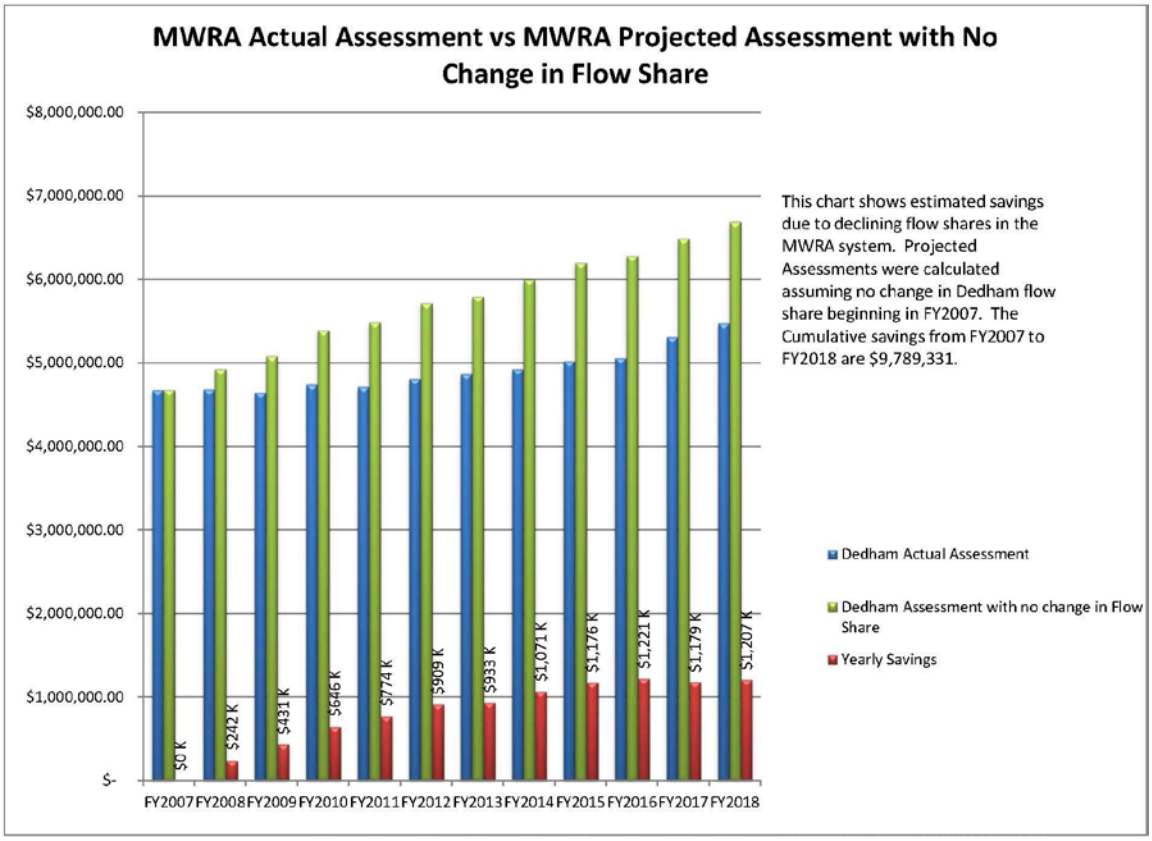

Chart 1

- **2014 Private Building Inspections** – *on hold* – The Engineering Department, in conjunction with Weston & Sampson performed a Town-wide voluntary house-to-house inspection program to identify prohibited connections to the Town's sewer system. Prohibited connections to the sewer system consist of sump pumps, floor drains, driveway drains, roof leaders and other prohibited sources of inflow that may be connected to the sewer system. These prohibited connections are sending clean water to the MWRA's Deer Island treatment facility at the expense of the taxpayers. The program was to take place over 2 years. The intent of the project was to inspect buildings in precincts 4, 5 and 6 in 2014 and the remaining precincts in 2015. Once the inspections had been completed the data was to be compiled and a plan developed to remove and reroute these prohibited connections to the proper sources. Unfortunately, due to the low percentage of owners participating in the voluntary inspections and the cost associated to perform the inspections, we have decided not to pursue inspecting the remaining precincts in 2015. It has been determined that making the inspections voluntary along with the promise of amnesty to fines and penalties that may have resulted from discovering prohibited connections was not enough to get owners to participate. In the future if the Town wishes to continue its reduction of inflow to the sewer system it is suggested that the inspections be mandatory.

Upon completion of visiting precincts 4, 5 and 6, we had approached 3,540 buildings, been allowed voluntary inspections on 1,460 (41%) buildings, not permitted to perform voluntary inspections on 209 (6%) buildings and had no answers and call-backs on 1,871 (53%) buildings. There have been 42 prohibited connections positively identified with an estimated 302,400 gallons per day of peak design inflow.

- **Sewer Fats, Oils, and Grease (FOG) Issues** – *ongoing* – As part of our overall inspection program the Engineering Department also has an aggressive FOG program to help eliminate back-ups and maintenance issues related to excessive grease in the sanitary sewer system. The Engineering Department has implemented a biological dosing program at key locations to help digest grease at known trouble spots.

    - **Legacy Place** – *ongoing* – The Engineering Department, in conjunction with the DPW and Health Department, has been monitoring the grease traps at Legacy Place. These grease traps have been improperly maintained to date and have been causing multiple problems at our Rustcraft Road Pump Station. We have been conducting random sampling of the grease traps throughout the year to determine if the establishments have been properly cleaning their grease traps according to their mandated cleaning schedule. When it is determined that an establishment is not cleaning their grease traps properly, the information is provided to the Health Department for their intervention. Our department will continue to monitor the grease traps to determine if the establishments are complying with the Board of Health's cleaning schedule.

- **Sewer Billing Project** – *ongoing* – The Engineering Department has been working with the Collectors Office to identify properties which were likely on sewer but not receiving bills using billing data and GIS information. To date 156 properties have been added to the sewer billing system. Of the 156 properties, 24 are properties located in Westwood and 3 are properties located in Boston. We are currently utilizing our sewer TV inspection data and GIS to plot locations were active sewer connections are made to the Town's system to identify additional properties that are likely connected but not receiving bills.

- **Pump Station Operation** – *ongoing* – The Engineering Department, in conjunction with the DPW, oversees the operation of the three sanitary sewer pumping stations, including the weekly maintenance, routine and emergency repairs, and upgrades of various components. The Engineering Department and DPW monitors alarms at all stations 24 hours a day and responds as needed.

- **Sewer Connection, Extension, and Repair Inspections** – *ongoing* - The Engineering Department reviews, issues, and inspects permits for the installation and satisfactory testing of sewer lines and manholes on a daily basis. We spend a great deal of time responding to questions from residents and builders and we provide them with locations of existing facilities from record plans or television inspections. Over the past year, the Department reviewed, issued and/or inspected 47 permits. In addition to sewer permits, our department administered Drainlayer Licenses to 23 bonded and insured sewer contractors.

- **Colburn Street Dam** – *ongoing* – In the beginning of 2017, our department along with the Town's consultant (Dewberry Engineers, Inc) completed all the required permitting necessary to finish the design of the dam's rehabilitation project. The project was sent out to bid in April with a bid opening on May 18th. The project was awarded to T. Ford Company, Inc. with a project start date of June 26th.

  The rehabilitation project consisted of the following:
  - Installing a temporary cofferdam to pump Mother Brook around the work area
  - Excavating built up sediment and debris along the upstream face of the dam
  - Installation of a concrete curtain wall extending from the existing bottom of the dam structure to the underlying bedrock.
  - Removing the existing stop log system and installing a new aluminum stop log system.
  - Installing a 4 to 5" inch layer of shotcrete along the upstream face of the dam
  - Filling in the voids along the downstream face of the dam
  - Pressure grouting the voids behind the dam face and below the existing dam structure
  - Installation of erosion/scour control materials immediately downstream of the dam

  The rehabilitation of the dam was substantially completed in November. We are currently working on closing out all project associated permits and hope to have the project completed in the beginning of 2018.

  Project updates and photos were updated weekly on the Town's Website and also allowed anyone interested in the project to sign up to receive notifications when new updates or photos were uploaded to the Town's website.

- **MWRA's Southern Extra High Pipeline Project** – *ongoing* – The MWRA's project will be conducted in two phases (North and South Phase). Construction of the North Phase of the project started in December of 2017 and includes the installation of a 36-inch water line from the Town line on Dedham Boulevard to East Street. During construction, our department will be providing daily inspectional services to ensure that our sewer and drainage infrastructure remains intact. We will also be involved in attending construction meetings to stay up to date on construction activities and to address any issues to our infrastructure. The North Phase is anticipated to be completed in 2019. The South Phase is expected to be awarded this summer with construction starting shortly thereafter. The South Phase will go from East Street, down Rustcraft Road to the train station then under the track towards Route 128 where it will enter Westwood.

- **Greenlodge School Parking Lot Expansion –** *ongoing* – In the beginning of 2017, the Engineering Department was approached by the principal of Greenlodge School asking if we would be able to design some additional parking within an underutilized asphalt area located behind the school. The principal has been struggling with the amount of existing on-site parking available to staff and visitors during the school day and during events.

  We met with the principal and the Town's Facility Director to discuss the project and how we could best implement their ideas and hopes into a feasible plan that would create additional on-site parking. During the summer when school was closed, we performed our on survey of the site needed to generate an existing conditions plan to be utilized in

the design. The challenge for this project was to create access to the underutilized asphalt area from the existing parking lot, providing as many additional parking spaces within that area and still allowing Fire Trucks total 360 degree access to the building. Our final conceptual design provides an additional 23 on-site parking spaces Increasing the total number of on-site parking spaces to 57 (40% increase). The conceptual design was completed in November and presented to the Facilities Director along with a cost estimate that could be utilized for their capital requests for FY2019. All work associated with this project has been accomplished in-house at no cost to the School Department. Should the project get funded, we will then continue to work in 2018 on developing final plans and filing for site plan review with the Planning Board and a Stormwater Management permit with the Conservation Commission.

- **Greenwood Avenue Study** – *ongoing* – In September, the Town was approached by a concerned resident that resides in the Greenwood Avenue/Depot Avenue neighborhood. Over the past year, the resident has experienced several occasions when he has incurred property damage resulting from semi-tractor trailers trying to make the sharp turn from Greenwood Avenue onto Depot Avenue. These trucks come off the highway entering Dedham to get to their destination not realizing that there is a height restriction to go under the East Street Bridge until they are at the bridge. The easiest and most appealing route for them is to back up slightly and turn onto Greenwood Avenue then onto Depot Avenue then onto Cedar Street so they can re-enter the Endicott Rotary and head back to the highway or to a different route to get to their destination. The resident requested that the BOS look into changing Greenwood Avenue into a one-way street, therefore closing off the option to truck drivers to use Greenwood Avenue as a cut-through turnaround. The BOS requested that our department study the existing conditions and develop recommendations that would mitigate the issue. We designed 3 options for the neighborhood. One option included increased warning signage along East Street heading towards the Endicott Rotary warning truck drivers about the upcoming low clearance restriction and rotary. The other two options dealt with changing Greenwood Avenue into a one-way street heading from Depot Avenue to East Street. The options were presented to the neighborhood at a neighborhood meeting to which resulted in various opinions on which option was the best. Since creating a one-way street is a form of traffic calming, the Town's Traffic Calming Policy was followed and a ballot was sent out to all abutters to Greenwood Ave and Depot Avenue, presenting the options and allowing them to select which option the believed to be best for the neighborhood. The ballots have been returned and our office is currently reviewing them. In late January, a technical memorandum of the study will be presented to the BOS along with the available options and results of the ballots. We will move forward with the final designs in 2018 for whichever option is voted on by the BOS.

- **Liana Estates Subdivision** – *ongoing* – In recent history, most newly proposed subdivisions that are reviewed by the Planning Board seek waivers and propose to be developed as private ways. The developer for the Liana Estates subdivision located off of East Street proposed to construct a roadway that meets Town Standards in hopes that it would be accepted by the Town as a Public Way. The major obstacle in doing so was the cost associated with hiring a third party engineer to perform the required inspections of all earthwork operations within the right-of-way to be certain that the work was performed to Town Standards. Realizing the importance of having this roadway constructed to Town Standards and accepted as a Public Way, the Engineering Department along with the Public Works Department offered to perform all of the required inspections, with in-house staff, of earthwork activities within the right-of-way

with the exception of the asphalt testing of the roadway. This cost savings to the developer allowed them to move forward as proposed. The right-of-way construction is approximately 75% complete and the developer hopes to finish construction in 2018 and have an article submitted to Town Meeting in 2019 to have it accepted as a Public Way.

- **Transportation Improvement Projects (TIP) –** In the winter of 2013/2014 the Engineering Department presented to the BOS four potential projects that could be considered a viable project for funding through the MPO TIP. The BOS selected moving forward with the sidewalk/corridor improvements for Bussey Street and Rustcraft Road/Elm Street. The Engineering Department hired BETA Group as the design consultants for the project.

  In April 2016, our State Representative, Paul McMurtry, Town Manager, Selectmen Mike Butler, Town Planner, Director of Public Works and I attended an MPO meeting in which prospective project proponents were provided an opportunity to speak on behalf of our project for consideration for funding by the MPO. In June 2016, the MPO voted to approve funding for the Rustcraft Road/Elm Street project and programmed the start of the project for FFY2021.

  To date, we have received the 75% design comments for the Rustcraft Road/Elm Street project back from MassDOT. Once comments have been reviewed and addressed we will make a formal submission to the Conservation Commission to obtain all required permits. We anticipate having a submission into the Conservation Department around February of 2018. The Bussey Street 25% design submitted with MassDOT is still under review awaiting comments from MassDOT's bridge/structural group. MassDOT will schedule a 25% Design Public Hearing for the Bussey Street project once the review is complete. We are anticipating having that hearing in the first half of 2018.

- **Pavement Management** – *ongoing* – The Engineering Department, in conjunction with the Department of Public Works, has continued the pavement management program which began in 2007. Through eleven years of the program, the Town completed approximately $23 million worth of repairs and maintenance to approximately 72 miles of roads and 22 miles of sidewalks. During this time the pavement condition index has risen from 70 to 86. A new 3-year road program is currently being generated and is to be considered for approval by the BOS in March or April of 2018.

- **Traffic Calming** – *ongoing* – In 2012, The Board of Selectmen approved the traffic calming policy created by the Engineering Department. The Engineering Department will continue to work with the Board of Selectmen and the Town Manager to refine and revise the policy, as needed, in order to give clear guidance to residents wishing to implement traffic calming strategies in their neighborhoods through the submission of Traffic Calming Request Forms to the Transportation Advisory Committee (TAC). The Engineering Department sits as an ex-officio member of the TAC responsible for general oversight of the committee and performing preliminary investigations consisting of traffic counts, intersection turning movement counts, and speed surveys using in-house equipment and labor.

  To date, the TAC has received and decided on nine (9) traffic calming requests. None of the requests were determined to require traditional traffic calming measures based upon the initial traffic evaluations performed by our department (i.e. speed tables, speed humps, road narrowing). However, for those requests that do not warrant traditional

traffic calming measures, the TAC does provide low cost traffic calming alternatives that the concerned neighborhood could implement on their own (i.e. staggered parking, step 2 kid alert).

- **Private Ways** – *ongoing* – The Town By-laws for acceptance of private ways as public ways were updated at the 2014 Annual Town Meeting. The Engineering Department worked with the private ways subcommittee that developed the updated policy/standard by which the residents of a private way would have to adhere to in order to become a public way and also includes the construction standards/specifications by which a private way must be reconstructed.

  In 2015, the Town received Public Way Layout Petition Forms from 7 private ways. Of those 7, only 1 (Birch Street) had submitted a completed petition package which was approved by the BOS in March 2016. Following that, Birch Street submitted a completed Approval of Conceptual Overlay Map package which was approved by the BOS in September. Upon completion of the layout and design plans, the BOS voted to layout Birch Street as a public way in May 2017. The layout of Birch Street was then presented at the 2017 Annual Town Meeting and approved by Town Meeting members. The BOS voted on the Order of Taking in July 2017 resulting in Birch Street becoming the first private way to become a public way under the 2014 By-Law.

  In 2016, the Town received a Public Way Petition Form from 1 private way (Quarry Road). The petition package was approved by the BOS in September. Following that, Quarry Road submitted an Approval of Conceptual Overlay Map package which was approved by the BOS in January. Currently, the layout and design plans have been completed by our consultant (BETA Group) and will be in front of the BOS for a vote in January of 2018.

  In 2017, the Town received a Public Way Layout Petition Forms from 4 private ways. Of those 4, only 1 (Churchill Place) had submitted a completed petition package which is to be voted on by the BOS in January of 2018.

- **Needham Street Bridge** – *ongoing* – The Engineering Department in conjunction with DPW had been working with MassDOT as they established their 100% design plans. The Engineering Department was responsible for acquiring all the right-of-way easements for the project. MassDOT awarded the Notice To Proceed to Northern Construction on 10/19/15. Construction of the new bridge began in 2016 and was completed in the summer of 2017, approximately 6 month ahead of schedule. The Engineering and Public Works Departments worked closely with MassDOT and the contractor during all phases of construction.

- **Dedham Mother Brook BMP Implementation Project** – *completed* – Back in 2012, the Engineering Department in conjunction with the Neponset River Watershed Association (NepRWA) completed a study through a MassDEP grant that identified 3 project sites in Dedham that would be suitable for structural BMP retrofits.

  Once again, in conjunction with NepRWA, the Town was able to secure a grant in 2015 through MassDEP to design and construct BMPs at the 3 project sites identified in our previous report. The design includes the construction of a bio-retention basin within the common area between Colburn Street and Hyde Park Street, a bio-retention basin along the edge of the right-of-way at the intersection of Emmett Avenue and Sawmill Lane and

the third is a drainage swale located at Avery Street. The stormwater at all 3 of these sites are located within the Mother Brook tributary of the Neponset River. Both are listed as Category 5 waterbodies for pathogens (e. coli). The BMPs selected for this project will treat the stormwater collected to reduce the amounts of pathogens, phosphorous, nitrogen and sediments prior to discharge into the Mother Brook, thus improving overall water quality. The Engineering Department designed the landscape plans associated with the BMPs and is the project manager for the project. The Department of Public Works has been responsible for the construction of the BMPs with our oversight. The final BMP was completed in the summer of 2017. It is also important to note that 1 of the 3 BMPs was on Park & Recreation Land and the Parks & Recreation Commissioners were more than supportive in granting us the rights to construct the BMP on their property.

- **Storm Drainage Improvements/Inspections** – *ongoing* – The Engineering Department routinely responds to complaints and flooding issues throughout Town. As part of our evaluations of drain lines we have cleaned and inspected approximately 26.5 miles of pipe. In addition, we design improvements as needed. Over the past year the Town has installed 17 new deep sump catch basins.

- **Neponset Valley Stormwater Collaborative** – *ongoing* - The Engineering Department sits as one of the representatives from Dedham as part of the regional stormwater collaborative with 14 other Neponset Valley Communities. This collaborative was formed through the Community Innovation Challenge Grant awarded to the MAPC and Neponset River Watershed Association. The collaborative is working together to prepare the communities for the challenges that are anticipated to arise from the new MS4 permit to be issued to the Commonwealth from the EPA.

- **Stormwater Illicit Discharge Detection** – *ongoing* – As part of the Town's NPDES Stormwater Phase II Permit, the Engineering Department conducts outfall inspections to screen for illicit discharges to the storm drainage systems. To date, 457 inspections have been completed.

- **Subdivision and Site Plan Review** – *ongoing* - The Engineering Department reviews numerous site plans and subdivisions for consistency with Town regulations and acceptable design standards. We provide written comments to the respective boards on the adequacy of those plans and calculations.

- **Town of Dedham Construction & Design Standards** – *ongoing* – The Engineering Department is responsible for updating the Town's Design and Construction Standards. Every few years we review all the standards and update and/or revise those standards to meet local and state requirements. Our last update/revision of the standards took place in 2015.

- **Geographic Information System (GIS) Administration** – *ongoing* - The Engineering Department, led by its GIS Manager, manages the administration of the GIS for the Town. The role of the GIS Division within the Engineering Department is to respond directly to the various needs of the Town's various departments, as they relate to GIS. The responsibilities of the GIS Division include database administration, software application development, generating reports, creating maps and updating the Town's geospatial data. Below is a listing of some of the projects that the GIS division has been involved with:

- **Addressing** – *ongoing* – The GIS Division is responsible for maintaining an up to date Master Street List and Master Address File (MAF), and for carrying out the duties contained within its regulations. Since this data is crucial not only for the First Responder but for all departments, resident and public; the GIS division continues to add new, modify, update and solve conflict issues
- **Aerial Imagery** – *Completed* **–** Prepared RFQs for bidding and procurement to acquire 3" pixel resolution suitable for producing 1"= 40' scale planimetric data Aerial Photographs/Images for the Town of Dedham. New Aerial Imagery is to be utilized for updating the Town's planimetric data. New Aerial Imagery is recommended every 2 to 5 years. Aerial imagery is vital in providing vast amount of data at low cost. The selected consultant is scheduled to acquire the aerial photography in the spring of 2017.
- **Planimetric Update (phase II)** – *ongoing* – Prepare RFQs for bidding and procurement Phase II of The Town of Dedham, MA Spring 2016 Aerial Photography and Mapping Services Project which will consist of:
    - New DTM to support creation of accurate Orthorectification
    - Town-wide 4-band (color and CIR) orthophotograph with 3-inch pixels or better
    - Set of 1-foot contour and spot elevation
    - New 40 scale Planimetric mapping features from stereo
- **Data Integrity –** *ongoing* –The criticality of having and providing accurate data is imperative, and data integrity is key in facilitating that. Therefore, The GIS Division continues to not only conduct deep and thorough evaluation, modification and maintenance of the existing and newly created data, but also continue to embrace and adopt the standard recommended structures by the GIS community.
- **Data Update –** *ongoing* –The GIS Division continues to update the underlying data such as parcels, road centerline, street regulation, right of way…etc. to better represent/replicate the real world
- **Partnership with ESRI** – *Ongoing* –The Town's GIS Division has recently partnered and collaborated with a GIS consultant (ESRI) to work together to draft a plan to not only leverage ESRI's latest technologies and available services, but also taking into consideration migrating the current Town wide GIS system to be in alignment with the current industry wide path going forward. The contract will end in October/November of 2018
- **Department Outreach –** *ongoing* – The GIS Division continues to conduct informational sessions with individuals and small groups of departments to focus the discussion and better understand the needs.
- **Department Training –** *ongoing* – The GIS Division continues to train individuals and/or small groups of departments on utilizing the GIS that meet their needs.
- **Departments' Special Projects –** *ongoing* – The GIS Division continues to work closely with many departments to create, and produce data, and maps that can facilitate and support their needs and decision making by migrating, modifying, evaluating and analyzing the available information.
- **Web GIS for Town staff –** *ongoing* **–** The GIS division has been implementing cloud and web based GIS technology called ArcGIS Online. This technology provides GIS capabilities to departments and staff that do not otherwise have GIS. These tools allow sharing and collaboration of information between

departments. The GIS Division continues to develop new content on ArcGIS Online to enhance the Town's GIS.

- **Web GIS for Town Officials** – *Completed* – Per the selectmen request, developed a Tax Analysis Application that compare visually and by chart the effect of tax rate change on taxes value for different structures' types between 4 consecutive years
- **Public Web/Mobile GIS –** *ongoing* – The GIS Division continues to maintain, enhance, update and publish mapping content through the Town of Dedham Maps Online application. Information is available as downloadable PDF files, web maps, and applications.
- **Infrastructure Engineering Operations** – *ongoing* – The Engineering Department uses iPad tablets to conduct storm water outfall inspections in the field. Development is underway to expand this process for maintenance of other infrastructures throughout the town.
- **Sewer Billing Project** – *ongoing* – The GIS Division has been working with the Engineering Department and Collectors Office to identify properties which were likely on sewer but not receiving bills
- **Stormwater Outfall Catchment area** – *Ongoing* – As part of the MS4 report that the Engineering Department is responsible for, the GIS Division performed several data manipulation and analysis to create the outfall network and assign the related structures
- **Work Order/Asset Management for Public Works –** *ongoing* **–** Maintaining, updating the integrated work order and asset management solution. The software solution, Cartegraph, allows Public Works staff to track service requests and work orders to their completion. The asset management allow Public Works Department to track maintenance history on specific items (e.g. signs, stormwater infrastructure), also it provides Public Works Department with the capability of tracking federally mandated maintenance on public infrastructure.
- **Citizen Access Service Requests –** *ongoing* - The GIS Division continues to maintain the implemented YourGov application by Cartegraph for the Public Works department. The YourGov solution has both a web and mobile application. Both applications integrate directly into the Public Works existing work order management system, allowing staff to access all service requests in a single location.
- **Cemetery** – *ongoing*– Continue to maintain and enhance the data and web application for the Brookdale Cemetery. The Brookdale Cemetery web application was redesigned for better support on various tablet and mobile devices. This allows the Cemetery Division to access burial record information from the field. The same application was repackaged for the Village Cemetery.
- **Police** – *ongoing* – Automated mapping of incident information from the police database. The process provides the police with a secured web map of incident data updated every six hours. The data is also made available to other GIS users for mapping of accident or other relevant police incident information.
- **Information Technology** – *ongoing* – Supporting and solving IT related issues during the transition period in an effort to minimize the impact on the GIS database and the availability of GIS applications and data to all of its customers.
- **State/Regional Collaboration –** *ongoing* –
    - **MassGIS** – *ongoing* - Working with MassGIS staff to provide updated standardized structure data for the Town of Dedham to the state. Standardized parcel and structure information are critical data layers for creating statewide address information to support E911 services.

- **Other notable completed projects**:

    - Dedham Square Improvement Project (2016)
    - Town-Wide Flow Monitoring Project (2016)
    - Sewer System Hydraulic Flow Model Project (2016)
    - Vincent Road – Illicit Connection Detection & Elimination (2016)
    - Massachusetts Avenue Stormwater Utility Design (2016)
    - Lancaster Road/Kennsington Road Sewer Design (2016)
    - 2015 Inflow Investigations (2015)
    - Violet Avenue at Pine Street Intersection Realignment (2015)
    - 2014 Inflow Investigations (2015)
    - Striar Property (2015)
    - Violet Avenue Drainage Study (2014)
    - Gonzalez Field – Accessible Parking Design (2014)
    - 2013 Inflow Investigations (2014)
    - Washington Street Discontinuance (2013)
    - Municipal Building Inspections (2012)
    - Town Wide Inflow & Investigation & Rehabilitation Program (2012)
    - Lowder Street at Highland Street Intersection Realignment (2012)
    - Town-Wide Flow Monitoring Project (2011)
    - Highland Street Sidewalk Design (2011)
    - High/Lowder/Westfield Street Traffic Calming (2011)
    - Stormwater BMP Retrofit Grant (2012)
    - Lowder Street Culvert Replacement (2011)
    - Cedar Street Culvert Replacement (2011)
    - Colburn Street Reconstruction (2011)
    - Pacella Drive Illicit Discharge Removal (2010)
    - Traffic Regulations Update (2010)
    - East Street Reconstruction – Phase II (2009)
    - East Street Reconstruction – Lowe's Money (2009)
    - Condon Park Parking Lot Design (2009)
    - Bussey Street Culvert Abandonment (2009)
    - Maverick Street Wall Replacement (2009)
    - Zoar Avenue Sewer Replacement (2009)
    - Rustcraft Road Sewer Replacement (2009)
    - Gaffney Road Sewer Improvements (2009)
    - Brookdale Cemetery Expansion (2008)
    - Flanagan Place/Orphan Line Drainage (2008)
    - Bridge Inspections (2008)
    - Intersection Redesign, Greenlodge Street at Sprague Street (2008)
    - East Street and Washington Street Sewer Replacement (2007)
    - Street Opening Regulations Update (2006)
    - Sewer Regulations Update (2006)
    - Salt Shed (2006)

Cc: Board of Selectmen
Nancy A. Baker, Assistant Town Manager
Joseph M. Flanagan, Director of Public Works
Nathan S. Buttermore, P.E., Infrastructure Engineer
Ronald I. Lawrence, Project Engineer
Eman Sayegh, GIS Manager