

## MEMORANDUM



TO: Mr. James McGonagle, Commissioner of Public Works  
Ms. Shawna Sullivan, Deputy Commissioner of Public Works  
Mr. Thomas Fitzgerald, Utilities Director

FROM: Stephanie Kaiser, Carol Harris, Zach Henderson

DATE: November 16, 2022

RE: Newton Phase 1 Phosphorus Control Plan (Calendar Year 2023)

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This memorandum is intended to provide an overview of tasks necessary to complete Newton's Phosphorus Control Plan, in compliance with the Phase 1 Phosphorus Control Plan (PCP) requirements and associated June 30, 2023, deadline. The Phase 1 PCP is required by the U.S. Environmental Protection Agency (EPA) under the Municipal Separate Storm Sewer System (MS4) General Permit Appendix F.

The City of Newton has begun phosphorus control planning and has already advanced multiple components of the required Plan elements. The PCP tasks outlined in this memorandum are those necessary to advance or refine items already in progress, complete outstanding items and prepare the final Phase 1 PCP in compliance with the requirements. A general description of these tasks and budgetary estimate are provided in this memorandum for the City of Newton's planning considerations. Below are the tasks which have been identified for completion of the Phase 1 PCP.

**Legal Analysis** – The preliminary Legal Analysis, previously prepared, shall be refined and updated to reflect current information, and more importantly to define potential policy or program changes that may be necessary to advance implementation of the PCP.

**Funding Analysis** – The primary funding mechanism for the City's support of MS4 programs is the Stormwater Enterprise Fund. As the PCP is advanced and Planned Controls and their implementation costs identified, it is anticipated that the City may want to consider and understand current alternate funding sources that may be available. Additionally, funding sources and eligibility requirements are continuously changing and warrant review on an annual basis. Therefore, available funding mechanisms will be revisited as the PCP is advanced.

**Baseline Load Updates** - The EPA assigned a baseline load using 2005 land use and impervious data. Since land use and coverage are continuously changing, development changes from 2005-2022 are required to be accounted for as part of the Phase 1 PCP implementation. Therefore, the baseline load and associated reduction requirements need to be recalculated for inclusion in the final PCP.

**Planned Non-Structural Controls** - As part of the preliminary PCP, previously prepared, the City's non-structural stormwater control practices and frequencies were evaluated to estimate associated phosphorus load reduction resulting from those practices. It is anticipated that the City may desire to enhance their non-structural stormwater control program due to EPA's refinement of allowable leaf litter credits and other comprehensive phosphorus control planning considerations.



**Planning of Structural Controls in City Right-of-Ways** - The City of Newton has approximately 925 acres of municipal rights-of-way with additional private impervious area, such as driveways, tributary to the public roads. Structural stormwater retrofits in municipal right-of-ways could provide a significant opportunity for phosphorus reduction and are included to be evaluated for inclusion in the Plan.

**Operation & Maintenance Program for Structural Control Measures** - The Phase 1 PCP requires identification and implementation of an operation and maintenance program for structural control measures credited with reducing phosphorus. Both O&M program implementation for City owned and managed controls as well as the City's approach to documenting O&M of private controls will be incorporated into the Phase 1 PCP.

**Phase 1 PCP Implementation Schedule** - An implementation schedule of Phase 1 controls is required to be included in the Plan.

**Phase 1 PCP Estimated Implementation Costs** – Estimated costs to implement Phase 1 are required to be included in the Plan.

**Final Phase 1 Phosphorus Control Plan** – The City of Newton's Phase 1 PCP will be prepared based on the preliminary Phase 1 PCP and the additional information gathered through these subsequent tasks for submittal to EPA.

**Meetings, Outreach and Collaboration** – Advancement and finalization of the Phase 1 PCP will require input and collaboration with the City of Newton. Outreach to support public-private collaboration may also be warranted.

**EPA Alternate Schedule Request Initiation** – Based on a planning level city-wide analysis previously performed, it is understood that the City cannot achieve the long-term permit requirements without incorporating Private BMPs into the Plan. Theoretically, the City may achieve the required 2028 load reduction solely through management of City property; however, this approach is not anticipated to be feasible based on financial and schedule constraints. Given the likelihood that the city will pursue an alternate schedule request after submittal of the Phase 1 PCP, it is recommended that discussions surrounding the challenges and need for the alternate schedule be initiated with EPA prior to and soon after the submittal of the Phase 1 Plan. A budgetary placeholder to initiate and support discussions with EPA is recommended at this time.

The budget of \$405,500 associated with these tasks is provided for your planning purposes. This includes a budgetary placeholder associated with the EPA Alternate Schedule request initiation task, as noted above, and recommended for inclusion at this time. Tasks, their scopes, and associated budget may be refined as the Phase 1 Phosphorus Control Plan and discussions with EPA continue to evolve.