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July 31, 2020

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
EXPANDED ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Resiliency Improvements at Watershops Pond Dam
PROJECT MUNICIPALITY : Springfield
PROJECT WATERSHED : Connecticut River
EEA NUMBER : 16234
PROJECT PROPONENT : City of Springfield
DATE NOTICED IN MONITOR : June 24, 2020

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA Regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a Single Environmental Impact Report (Single EIR). The City of Springfield (City) submitted an Expanded Environmental Notification Form (EENF) with a request that I waive the requirement for the preparation of a mandatory EIR in accordance with 301 CMR 11.11, or if I declined this waiver, allow a Single EIR to be prepared in lieu of the usual two-stage Draft and Final EIR process pursuant to Section 11.06(8) of the MEPA regulations. The City should submit a Single EIR in accordance with the Scope included in this Certificate. The Scope is limited to describing a wetlands monitoring plan, identifying potential wetlands mitigation measures, responding to comments received on the EENF and providing draft Section 61 Findings for each State Agency that will issue Permits.

Project Description

As described in the Expanded Environmental Notification Form (EENF), the project includes improvements to the City of Springfield's (City) Watershops Pond Dam to address structural deficiencies and maintain the operability of its mechanical and electrical systems. The project will enhance the resilience of the dam to minimize the potential for failure under existing and future conditions and to maintain its impoundment for recreational use; it will not increase the dam's impoundment capacity or change its hydraulic functions, such as flood attenuation. The project includes the following components:

- Replacement of the two low-level outlet sluice gates and the movable crest gate and associated mechanisms;
- Permanent closure of two penstock openings at the right abutment of the dam;

- Reconstruction of an approximately 180-foot (ft) long section of the upstream left training wall within the impoundment approximately 10 ft north of its current location and placement of backfill to provide an accessway for maintenance vehicles;
- Repair or replacement of the operator platform and walkway, railings and signage,
- Repairs to the masonry of the downstream and upstream training walls;
- Replacement of electrical service to the site;
- Removal of trees and other vegetation on the dam structure; and
- Installation of tie-down anchors in the downstream dam face to improve stability.

According to the EENF, the improvements to the dam have been designed in accordance with the Department of Conservation and Recreation's (DCR) Office of Dam Safety (ODS) regulations (302 CMR 10.00), including the requirement that the dam withstand one-half of the Probable Maximum Flood (PMF), which is calculated based on a Probable Maximum Precipitation (PMP) volume of 36.4 inches in a 72-hour period. The tie-down anchors will be installed at the downstream base of the dam to minimize the potential for dam failure due to sliding or overturning of the structure.

The 3.5-ft high crest gate spans the width of the dam spillway and in its raised position creates additional flood storage in the impoundment. Flood protection provided by the dam is enhanced by raising the crest gate and opening the low-level sluice gates to release flood waters in a controlled manner. The sluice gates are at least 60 years old and will be replaced to ensure that they can be reliably opened and closed. A small building housing mechanical equipment that operates the crest gate is located at the southern end of the dam and is accessible only by a narrow path along the downstream left embankment. The path will be widened to 10 ft to allow vehicular access to the building to facilitate installation of new crest gate equipment and its operation and maintenance. The penstocks were historically used to divert water from the impoundment to generate power for the historic buildings north of the dam known as the Watershops, but the turbine generators were removed over 50 years ago. The penstocks are no longer used and will be permanently closed as part of the project.

To facilitate access to parts of the dam to be repaired, the impoundment will be drawn down by opening the low-level outlet sluice gates. Because the low-level outlets are located approximately 11.5 ft above the bottom of the dam, rather than at the bottom as is typically the case, a small impoundment with a maximum depth of approximately 15 ft will remain during the drawdown. The impoundment will be drawn down for approximately 16 months; as described in more detail below, the drawdown will be maintained longer than necessary to complete construction in order to minimize water level changes during the hibernation periods of resident turtles and amphibians and to take advantage of springtime precipitation to facilitate refilling of the impoundment.

Project Site

The dam is located on the Mill River in southwestern Springfield. According to the EENF, it was constructed in 1857 to provide hydropower to the Springfield Armory, including the Watershops. The dam impounds an area of approximately 193 acres, known as Watershops Pond or Lake Massasoit, that extends to the northeast. After the Springfield Armory closed in 1968, the dam was sold by the federal government to the City subject to the requirement that it be used to maintain the surrounding impoundment area and associated parkland for recreational purposes. Watershops Pond has a maximum depth of approximately 20 ft and is used for recreational fishing, canoeing and kayaking. Much of the shoreline is privately owned, but public access is available at three City-owned parks.

Watershops Pond Dam is classified as High Hazard Potential dam, which indicates that there is a high likelihood that if the dam were to fail, there would be loss of life and serious damage to downstream structures. The dam has an overall Dam Safety Rating of “Good” and it is expected to perform safely under all flood loading conditions. The dam discharges flow to the west, where it passes through an approximately 200-ft long tunnel under a building and Allen Street before daylighting on the west side of the street. From the dam, the Mill River flows southwest through a densely-developed section of the City. South of Mill Street, the river flows over the Bay State Thread Dam; MEPA review of the planned removal of the Bay State Thread Dam (EEA# 15828) was completed in 2018 but the dam has not yet been removed. Downstream of the dam, the river is conveyed under the eastern part of the City in a pressure conduit, then flows through a channel before joining the Connecticut River. The pressure conduit was constructed by the U.S. Army Corps of Engineers (ACOE) as a component of its Connecticut River Flood Control System.

Watershops Pond is identified in the Massachusetts Department of Environmental Protection’s (MassDEP) 2016 Integrated List of Waters as requiring the establishment of a Total Maximum Daily Load (TMDL) due to its impairment by nutrients and eutrophication. According to the EENF, surveys of fish species within the pond by the Massachusetts Division of Fish and Wildlife (MassWildlife) found that it contains common warm water fish species, such as Bluegill (*Lepomis macrochirus*), Pumpkinseed (*Lepomis gibbosus*), Largemouth Bass (*Micropterus salmoides*), White Perch (*Morone americana*) and Common Carp (*Cyprinus carpio*). As shown on the Federal Emergency Management Agency’s (FEMA) National Flood Insurance Rate Map (FIRM) numbers 25013C0402E, 25013C0406E and 25013C0407E (effective July 16, 2013), the dam and impoundment are generally located within the 100-year floodplain (Zone AE) with no defined Base Flood Elevation (BFE); the north branch of the Mill River upstream of the impoundment has a BFE of approximately 161 ft NAVD 88 and is within a defined floodway.

According to the Massachusetts Historical Commission (MHC), the dam is listed in the National Register of Historic Places as a contributing element of the Watershops Armory. The EENF included a letter to the City from MHC dated July 19, 2019 with a determination that the project will have no adverse effect on the dam or the Watershops Armory.

Environmental Impacts and Mitigation

Potential environmental impacts of the project include alteration of approximately nine miles (47,500 linear feet (lf)) of Bank, 9.8 acres (429,000 sf) of Bordering Vegetated Wetlands (BVW), 170 acres (7,373,850 sf) of Land Under Water (LUW), 0.2 acres (8,940 sf) of Bordering Land Subject to Flooding (BLSF) and 0.05 acres (2,210 sf) of Riverfront Area. These impacts are largely due to the drawdown of the impoundment and are anticipated to be temporary. Potential permanent impacts to wetland resource areas associated with reconstruction of the downstream left training wall and removal of vegetation near the gate control house include impacts to 285 lf of Bank, 1,560 sf of LUW and 250 sf of Riverfront Area.

The project will increase the resiliency of the dam by repairing and reinforcing structural deficiencies and replacing components critical to its operation. As noted below, the City will be required to provide additional information on monitoring temporary impacts to BVW and potential measures to mitigate permanent impacts to BVW and LUW.

Jurisdiction and Permitting

The project is subject to the preparation of a Mandatory EIR pursuant to the MEPA regulations because it requires State Agency Actions and will alter one or more acres of BVW (301 CMR 11.03(3)(a)(1)(a)) and ten or more acres of any other wetlands (301 CMR 11.03(3)(a)(1)(b)). The project will require a Section 401 Water Quality Certificate (WQC) from the Massachusetts Department of Environmental Protection (MassDEP) and a Chapter 253 Permit from ODS. It is subject to the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (GHG Policy).

The project requires an Order of Conditions (OOC) from the Springfield Conservation Commission (or a Superseding Order of Conditions from MassDEP in the event the Order is appealed). It requires the filing of a Project Commencement Notification (PCN) to the ACOE pursuant to the General Permits for Massachusetts and a National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit from the Environmental Protection Agency (EPA).

The Proponent is not seeking Financial Assistance for the proposed project. Therefore, MEPA jurisdiction is limited to those aspects of the project within the subject matter of any required or potentially required State Permits that have the potential to cause Damage to the Environment, as defined in the MEPA regulations.

Request for EIR Waiver

In accordance with Section 11.05(7) of the MEPA regulations, the City submitted an EENF with a request that I waive the requirement for the preparation of a mandatory EIR, or if the Waiver is not granted (301 CMR 11.11), allow a Single EIR to be prepared in lieu of the usual two-stage Draft and Final EIR process pursuant to Section 11.06(8) of the MEPA regulations. The EENF was subject to an extended public comment period pursuant to Section 11.06(1) of the MEPA regulations and included a discussion of the project's consistency with the waiver criteria outlined at 310 CMR 11.11. The waiver request was discussed at the remote consultation session for the project held on July 9, 2020.

The MEPA regulations at 301 CMR 11.11(1) state that I may waive any provision or requirement in 301 CMR 11.00 not specifically required by MEPA and may impose appropriate and relevant conditions or restrictions, provided that I find that strict compliance with the provision or requirement would:

- (a) result in an undue hardship for the Proponent, unless based on delay in compliance by the Proponent; **and**
- (b) not serve to avoid or minimize Damage to the Environment.

As stated in 301 CMR 11.11(3), in the case of a waiver of a mandatory EIR review threshold, the Secretary shall at a minimum base the finding required in accordance with 301 CMR 11.11(1)(b) on a determination that:

- (a) the Project is likely to cause no Damage to the Environment; and
- (b) ample and unconstrained infrastructure facilities and services exist to support the Project (in the case of a Project undertaken by an Agency or involving Financial Assistance) or those aspects of the Project within subject matter jurisdiction (in the case of a Project undertaken

by a Person and requiring one or more Permits or involving a Land Transfer but not involving Financial Assistance).

The Proponent may provide evidence satisfactory to the Secretary that the Agency Action on the Project will contain terms such as a condition or restriction that will cause benefits to environmental resources or quality or infrastructure facilities or services in excess of those that would result in the absence of the waiver.

Single EIR Request

In accordance with Section 11.05(7) of the MEPA regulations, the City requested that in the case a waiver was not granted, I allow the Proponent to fulfill its EIR obligations under MEPA with a Single EIR, in-lieu of a Draft and Final EIR. According to 301 CMR 11.06(8), I may allow a Single EIR provided that the EENF:

- Describes and analyzes all aspects of the project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
- Provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed; and
- Demonstrates that the planning and design of the project use all feasible measures to avoid potential environmental impacts.

Review of the EENF

The EENF provided a description of existing and proposed conditions, preliminary project plans, and identified measures to avoid, minimize and mitigate project impacts. It included an alternatives analysis, reviewed construction period mitigation measures, provided documentation of the City's outreach to the public and State Agencies and summarized sediment quality data in the impoundment.

Alternatives Analysis

The EENF included an evaluation of alternatives to address structural deficiencies of the dam, including Dam Removal, Dam Maintenance and Dam Rehabilitation (the Preferred Alternative). The Dam Removal alternative would include cutting a notch in the dam that would allow flows from a 500-year flood event to pass; while much of the dam structure would remain in place, it would no longer function as a dam. Up to 8,000 cy of sediment would be dredged from the impoundment to establish a new channel, and newly exposed areas of the bottom of the pond would be replanted or allowed to naturally revegetate. According to the EENF, this alternative would restore natural stream habitat and hydrology and eliminate the risk of dam failure. Removal of the dam would be more costly than other alternatives, but it would eliminate long-term maintenance costs. This alternative was rejected because it would result in the loss of flood protection provided by the dam and of the pond's recreational value. Maintenance of the surrounding impoundment area and parkland for recreational purposes is a condition of the original land transfer from the federal government, and, therefore, must be preserved.

The Dam Maintenance alternative would continue the City's current practice of performing routine maintenance of the dam, but would not address structural deficiencies that could lead to its failure; the alternative was rejected for this reason. The improvements proposed in the Preferred Alternative, including rehabilitation the crest gate, repair of structural deficiencies and reinforcement of

the dam structure by installing tie-down anchors, will minimize the risk of dam failure, ensure the continued operation of the crest gate and low-level sluice gates for flood protection and maintain Watershops Pond as an important recreational resource for City residents.

The work proposed in the Preferred Alternative requires access to parts of the dam that are submerged. The City considered three alternatives for redirecting water around these areas so that work can be conducted under dry conditions, including Full-height Cofferdam, Partial-height Cofferdam and No Cofferdam alternatives. The Full-height Cofferdam method would include the installation of a cofferdam upstream of the dam that would maintain the current water level and depth of the impoundment while passing flow from the pond over or around the cofferdam and through the low-level outlets on the existing dam. This alternative would result in a 178-acre impounded area that would maintain recreational use and aquatic habitat during the construction period and minimize potential impacts to BVW. This alternative was rejected because of its higher cost, longer construction period and minimal capacity for providing flood storage. The Partial-height Cofferdam alternative is similar to the Full-height Cofferdam alternative, but would result in a partial drawdown that would maintain an impounded area of 47 acres with a maximum depth of approximately 10 ft. The partial drawdown would have an ancillary benefit of providing the City an opportunity to inspect and repair drainage infrastructure that is submerged under current conditions and to remove debris from the pond. The partial drawdown would significantly reduce the area of aquatic habitat, potentially causing mortality of fish and other organisms, and would expose BVW to drier conditions. It would cost significantly less than the Full-height Cofferdam, but it would similarly extend the construction period and result in a loss of flood storage.

The Preferred Alternative includes a full drawdown of the impoundment by opening the low-level outlets on the dam to lower the water level of the pond in a controlled manner. Because the low-level outlets are not at the bottom of the dam, a small impoundment area of approximately 21 acres with a maximum depth of approximately four ft will be present throughout the construction period. The Preferred Alternative provides an opportunity for the City to repair drainage infrastructure and remove debris from the impoundment during the drawdown, and in the event of a significant storm event, the low-level outlets could be closed to provide storage of flood waters. Potential impacts to BVW would be similar to those of the Partial-height Cofferdam Alternative, but the Preferred Alternative is more likely to cause fish kills during the construction period due to the smaller impoundment area.

Wetlands, Water Quality and Aquatic Habitat

The 18-month drawdown of the impoundment will expose 170 acres of LUW and eliminate the hydrological connection between the pond's surface water and BVW along the shoreline. According to the EENF, the City has drawn down the pond at least four times since 1941 with no permanent impacts to BVW. The most recent drawdown occurred during the winter of 1996-1997 to enable removal of aquatic weeds and debris. Monitoring conducted after the 1996-1997 drawdown found no evidence of long-term impacts to BVW and suggested that the BVW adjacent to the pond is more dependent on groundwater levels than on pond level. Based on those results, the City does not anticipate permanent impacts on BVW. However, the previous drawdown identified in the EENF was for a shorter duration and did not occur during a spring and summer, which is the growing season for BVW, unlike the proposed drawdown. The EENF did not describe any potential monitoring of BVW during or after the drawdown or identify potential mitigation measures if permanent impacts are detected, but included a commitment by the City to develop such plans during the WQC and Wetlands Protection Regulations permitting processes. As detailed below, the Single EIR should review potential measures to minimize

the duration of the drawdown during the growing season and provide conceptual monitoring and mitigation plans. In addition, the EENF did not describe how the project will meet the performance standards for LUW in connection with the placement of fill over an area of 1,560 sf for an access roadway. The Single EIR should describe how the project will mitigate for the reduction in the carrying capacity of the channel leading to the dam, as required by the Wetlands Regulations at 310 CMR 10.56(4)(a)(1).

The project includes dredging of 820 cubic yards (cy) of sediment from an approximately 5,500 sf area in the impoundment. Approximately 140 cy of sediment will be repositioned to allow access to areas of the dam and the right upstream training wall that will need to be repaired. Approximately 680 cy of sediment will be removed in connection with the construction of the new left upstream training wall. Some of this dredged sediment may be used as fill material behind the new training wall and any remaining sediment will be disposed off-site. The EENF provided an analysis of the chemical composition of sediments in the impoundment that identified low concentrations of volatile organic compounds (VOC), extractable petroleum hydrocarbons (EPH), polychlorinated biphenyls (PCB) and metals, with the exception of lead. Additional testing for lead in the dredged sediment may be required prior to reuse or disposal of the material.

Drawdown of the pond will commence in early October 2020 and will reach its maximum extent a month later. According to the EENF, once the drawdown begins aquatic organisms are anticipated to move to downstream or upstream portions of the Mill River or reside in the remaining pool of water. Significant mortality of aquatic animals is anticipated; however, the City believes that the pond will be repopulated by animals that survived in the pool or upstream areas. Oxygen levels in the pool will be monitored and will be aerated if necessary. When the water level of the pond is restored upon completion of the project, the City and MassWildlife will restock the pond with fish. According to the EENF, construction activities may be complete by Fall 2021 and refilling of the pond could begin at that time. As noted above, MassWildlife has recommended that refilling not commence until April 2022 to avoid disturbing turtles and frogs that may begin hibernation during the later fall/winter months. In the Single EIR, the City should further evaluate the potential for refilling the pond in 2021 (well before the onset of winter) if construction activities are completed sooner than expected. This timing would accommodate both the goals of avoiding the hibernation period and minimizing the drawdown period overall to reduce impacts to BVW and other wetlands.

Greenhouse Gas Emissions (GHG)

This project is subject to review under the May 2010 MEPA Greenhouse Gas Emission (GHG) Policy and Protocol (Policy) because it exceeds thresholds for a mandatory EIR. The GHG Policy includes a de minimis exemption for projects that are expected to produce minimal GHG emissions. According to the EENF, operation of the crest gate will use electric equipment and GHG emissions during the construction period. However, this activity will be short-term, and the small amount of GHG emissions emitted will be minimized by requiring contractors to adopt an anti-idling policy during the construction period. As such, this project falls under the GHG Policy's de minimis exemption, and the City is not required to include a GHG analysis in the Single EIR.

Construction Period

The City will conduct in-water work using mitigation measures to minimize impacts to water quality, including small cofferdams around work areas and sedimentation and erosion controls. Should dewatering of work areas be necessary, frac tanks or other measures will be used to remove sediment before the water is discharged downstream. Nuisance odors will be caused by decaying matter on the exposed pond bottom during the drawdown. Odor will be minimized by removing or burying dead fish and application of odor-reducing foam. The potential for releases of oil and/or other hazardous materials should be minimized by using biodegradable hydraulic fluid in construction equipment where possible and through the development and implementation of a spills contingency plan. The City should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.00) if oil and/or hazardous materials are found during construction. The project must comply with the Solid Waste and Air Pollution Control regulations. I refer the City to MassDEP's comments that identify relevant regulatory requirements and provide additional recommendations. The Single EIR should include a detailed list of construction-period mitigation measures in the draft Section 61 Findings.

If submerged cultural resources are encountered during the course of the work, the City should take steps to limit adverse effects and notify the Board of Underwater Archaeology (BUAR) and MHC in accordance with BUAR's Policy Guidance for the Discovery of Unanticipated Archaeological Resources.

Conclusion

Based on review of the EENF and consultation with State Agencies, I am declining to grant a Waiver of the requirement to prepare an EIR. However, I am granting the request to file a Single EIR. The Scope of the Single EIR consists primarily on the preparation of wetlands monitoring and mitigation plans that will demonstrate how the City will mitigate any permanent impacts to wetland resource areas. The City should submit a Single EIR that provides updated project information and analyses as specified in the Scope below.

SCOPE

General

The Single EIR should follow Section 11.07 of the MEPA regulations for outline and content, and include the information required in this Scope. It should identify, describe, and assess the environmental impacts of any changes in the project that have occurred since the filing of the EENF. If necessary, the Single EIR should include updated site plans for existing and post-development conditions at a legible scale. The Single EIR should include a list of required State Permits, Financial Assistance, or other State, local and federal approvals and provide an update on the status of each of these pending actions.

Comments from DCR are supportive of the project, but identify additional information that will be necessary during the Chapter 253 permitting process, including confirmation that the improvements have been designed to withstand the one-half PMF. I encourage the City to include additional information in the Single EIR that will facilitate DCR's review of the permit application.

Wetlands, Water Quality and Aquatic Habitat

The Single EIR should include a conceptual Monitoring and Mitigation Plan for wetland resource areas, including BVW and LUW. The plan should identify the duration of the monitoring program, methods for assessing wetlands impacts and recovery, measures for identifying and managing invasive species, and potential mitigation measures. The Single EIR may provide a conceptual-level plan that will be refined through review of the project by MassDEP and the Springfield Conservation Commission. I encourage the City to consult with MassWildlife to determine a date in the fall at which refilling of the pond could commence without impacting hibernating animals. The Single EIR should review the potential for refilling the pond prior to April 2022 if construction is completed earlier than expected.

Mitigation and Draft Section 61 Findings

The Single EIR should include a section that summarizes proposed mitigation measures and provides draft Section 61 Findings for each Agency Action. It should contain clear commitments to implement these mitigation measures (including monitoring), estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

Response to Comments

The Single EIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the Single EIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended, and shall not be construed, to enlarge the Scope of the Single EIR beyond what has been expressly identified in this certificate.

Circulation

The Proponent should circulate the Single EIR to those parties who commented on the EENF, to any State and municipal agencies from which the Proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations. The Proponent may circulate copies of the Single EIR to commenters in a digital format (e.g., CD-ROM, USB drive) or post to an online website. However, the Proponent should make available a reasonable number of hard copies to accommodate those without convenient access to a computer to be distributed upon request on a first-come, first-served basis. The Proponent should send correspondence accompanying the digital copy or identifying the web address of the online version of the Single EIR indicating that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments. The Single EIR submitted to the MEPA office should include a digital copy of the complete document. A copy of the Single EIR should be made available for review in the Springfield Public Library.¹

¹ Requirements for hard copy distribution or mailings will be suspended during the Commonwealth's COVID-19 response. Please consult the MEPA website for further details on interim procedures during this emergency period: <https://www.mass.gov/orgs/massachusetts-environmental-policy-act-office>.

July 31, 2020

Date

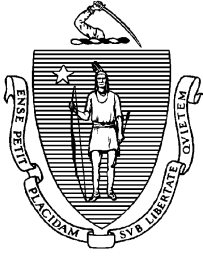
K. Theoharides

Kathleen A. Theoharides

Comments received:

07/22/2020 Massachusetts Department of Environmental Protection (MassDEP)/Western
Regional Office (WERO)
07/22/2020 Springfield Water and Sewer Commission
07/24/2020 Board of Underwater Archaeological Resources (BUAR)
07/24/2020 Department of Conservation and Recreation (DCR)
07/24/2020 Springfield College
07/24/2020 City of Springfield Department of Public Works

KAT/AJS/ajs



The COMMONWEALTH OF MASSACHUSETTS
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July 24, 2020

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
Attention: Alex Strycky, MEPA Unit
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Resiliency Improvements at Watershops Pond Dam (EOEA #16234), 1 Allen Street, Springfield, MA

Dear Secretary Theoharides,

The staff of the Massachusetts Board of Underwater Archaeological Resources has reviewed the above-referenced proposed project as detailed in the *Environmental Monitor* of 24 June 2020 and offers the following comments.

The Board has conducted a preliminary review of its files, the Massachusetts Historical Commission's Massachusetts Cultural Resources Inventory System (MACRIS), historic maps and charts, and secondary literature sources to identify known and potential submerged cultural resources in the proposed project area. No record of any underwater archaeological resources was found. Based on the results of this review and the nature of the proposed project, the Board expects that this project is unlikely to impact submerged cultural resources.

Should heretofore unknown archaeological resources be encountered during the course of work, the Board expects that the project's sponsor will take steps to limit adverse effects (take care to not further disturb the archaeological resource and note its precise location) and notify the Board and the Massachusetts Historical Commission, as well as other appropriate agencies, immediately in accordance with the Board's *Policy Guidance for the Discovery of Unanticipated Archaeological Resources*.

The Board appreciates the opportunity to provide these comments as part of the MEPA review process. Should you have any questions regarding this letter, please do not hesitate to contact me at (617) 626-1014, or by email at david.s.robinson@mass.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "David S. Robinson".

David S. Robinson
Director

/dsr

Cc: Brona Simon, MHC



July 24, 2020

Secretary Kathleen A. Theoharides
Executive Office of Energy and Environmental Affairs
MEPA Office Attn: Alex Strycky
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

RE: 16234 Resiliency Improvements at Watershops Pond Dam EENF, Springfield

Dear Secretary Theoharides:

The Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS) has reviewed the Expanded Environmental Notification Form (EENF) submitted by GZA GeoEnvironmental, Inc. on behalf of the City of Springfield for resiliency improvements proposed at Watershops Pond Dam in Springfield.

As described in the EENF, the project's scope of work includes: replacement of the dam's existing Bascule-type crest gate and associated control systems; replacement of the upstream left training wall to improve future dam access for maintenance; masonry repairs to the dam's other training walls; tree removal and vegetation control; replacement of the two existing sluice gates; permanent closure of the dam's penstock openings; repair or replacement of the existing operator platform and walkway; and other improvements. Work is proposed to be performed while Watershops Pond is maintained in a fully drawn-down condition.

Watershops Pond Dam is classified High Hazard Potential. High Hazard Potential Dams are dams located where failure will likely cause loss of life and serious damage to homes, industrial or commercial facilities, important public utilities, highways or railroads. Implementation of the project design will address a number of dam deficiencies which have been documented during past inspections of the dam. Successful project completion will result in significant improvement to overall dam condition, operability and public safety. ODS acknowledges the applicant's proposal to perform the work while Watershops Pond is fully drawn down. This will minimize risk to both public safety and the safety of construction personnel during execution of the work and will provide for improved site conditions to ensure higher quality construction.

Rehabilitation of Watershops Pond Dam will require the submission of a Chapter 253 Dam Safety Permit application to ODS for review. ODS staff will communicate with the proponent's design engineer as part of the permit process to ensure all required documentation is provided. Upon receipt and review of all required technical information demonstrating compliance with ODS regulations, a Chapter 253 Dam Safety Permit will be prepared and issued by ODS.

The Massachusetts Dam Safety Regulations, 302 CMR 10.14, require dams to have spillway capacity to pass the flow resulting from Spillway Design Flood (SDF) unless the applicant demonstrates the design flow can be stored, passed through, or passed over the dam without failure occurring. For existing dams of this size and hazard potential rating, the design storm for the SDF is the 1/2 PMF (Probable Maximum Flood) storm event, unless it is demonstrated through a quantitative and relative impact analysis that selection of an alternate SDF is suitable. While the EENF mentions the project includes "provisions for adequately conveying the Inflow Design Flood to the extent practicable," ODS looks forward to receiving technical

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Lt. Governor

Kathleen A. Theoharides, Secretary
Executive Office of Energy & Environmental Affairs

Jim Montgomery, Commissioner
Department of Conservation & Recreation

submittals during the permit process pertaining to how the project will meet the spillway SDF requirements required by the Dam Safety Regulations. Prior to issuance of a Ch. 253 Dam Safety Permit the applicant will need to clearly demonstrate compliance with the regulation's SDF criteria.

DCR appreciates the opportunity to comment on this project. Please contact David Ouellette at (617) 626-1347 with any questions or to request additional information or coordination with ODS.

Sincerely,

A handwritten signature in cursive script that reads "Jim Montgomery".

Jim Montgomery
Commissioner

cc: William Salomaa, Dam Safety Director
Nat Tipton, MEPA Review Coordinator



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker
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Kathleen A. Theoharides
Secretary

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July 22, 2020

Kathleen A. Theoharides, Secretary
Executive Office of Energy & Environmental Affairs
Massachusetts Environmental Policy Act Office
Alex Strysky, EEA No. 16234
100 Cambridge Street, 9th Floor
Boston, MA 02114-2524

Re: Watershops Pond Dam Resiliency
Improvements
Springfield EENF

Dear Secretary Theoharides,

The Massachusetts Department of Environmental Protection (MassDEP), Western Regional Office (WERO) appreciates the opportunity to comment on the Expanded Environmental Notification Form (EENF) submitted for the proposed Resiliency Improvements at Watershops Pond Dam in Springfield, Massachusetts. The dam is listed as an “high hazard potential” concrete and masonry gravity dam. The Project is being funded by a grant from the U.S. Department of Housing and Urban Development’s National Disaster Resilience Competition. The City of Springfield was awarded \$17 million in funding and all work associated with the Project must be completed within the performance period which closes in September 2022. The applicable MassDEP regulatory and permitting considerations regarding wetlands, water quality certification, air pollution, solid waste, hazardous waste and waste site cleanup are discussed.

I. Project Description

The dam which impounds the Mill River forming Watershops Pond (also known as Lake Massasoit) was constructed in 1857 and substantially modified in 1958. Upgrades will include replacement of the existing moveable crest gate, general masonry repairs to the upstream and downstream training walls, replacement of the upstream left training wall and

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

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widening of the access route, vegetation and tree removal, repair or replacement of the operator platform and walkway and existing railings, and the installation of new security fencing and hazard warning signage. Two penstock openings will be permanently closed and two existing sluice gates will be replaced. As needed, angled tie-down anchors in the downstream dam face will be added to meet regulatory requirements for dam safety.

The project will not change traffic or infrastructure demands and will improve safety and functionality of the City-owned infrastructure and improve public safety. There will be a temporary drawdown of the pond. The drawdown will provide the Springfield Water and Sewer Commission the opportunity to inspect, maintain and repair infrastructure and the Springfield Department of Public Works will be able to make repairs to stormwater outfalls not normally accessible, and allow removal of trash and discarded items in the pond. There is also tornado debris that can be removed during the drawdown.

The Proponent is requesting the Waiver of a Mandatory Environmental Impact Report as it would present an undue hardship for the Proponent. Greenhouse Gas Emission Policy and Protocol will be followed. Emissions will be limited to the operation of construction equipment on-site and the EENF states that it would qualify for a de minimis exemption.

Environmental impacts associated with this project include:

- 307 total site acreage – existing
- 820 cubic yards (approximate) of dredge material
- 0.04 acres (1,940 SF) acres of new impervious area
- Up to 429,000 SF of new bordering vegetated wetlands alteration
- Up to 7,373,850 SF of new other wetland alteration
- 47,500 LF Bank - temporary
- 8,940 SF bordering Land Subject to Flooding
- 250 SF Riverfront Area
- 305 SF gross square footage structures (existing)

II. Required Mass DEP Permits and/or Applicable Regulations

Wetlands

310 CMR 10.00

Waterways

310 CMR 9.00

Water Quality Certificate

314 CMR 9.00

Air Pollution

310 CMR 7.00

Solid Waste

310 CMR 16.00

Hazardous Waste

310 CMR 30.00

Bureau of Waste Site Cleanup

310 CMR 40.000

III. Permit Discussion

Bureau of Water Resources

Wetlands & Waterways

The Site appears to contain Bank (Inland), Bordering Vegetated Wetland, Bordering Land Subject to Flooding, Land Under Water Bodies and Waterways (LUWW), and Riverfront Area.

The scope of work requires that a Notice of Intent be submitted for the project. Prior to commencement of project construction a final Order of Conditions must be issued.

Resource Area Delineation

All resource areas must be clearly shown and resource area alterations quantified on the site plans submitted for subsequent permitting.

The project proposes 1,560 square feet of permanent loss to LUWW for the purpose of constructing a permanent access road within the waterway. It was highlighted by MassDEP during the February 3, 2020 pre-permitting meeting, that this element of the project does not comply with the performance standards for LUWW, specifically 310 CMR 10.56(4)(a)1):

“...Work within Land under Water Bodies and Waterways shall not impair the water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks.”

The Proponent states in the EENF it will seek to mitigate these impacts in consultation with the Springfield Conservation Commission.

401 Water Quality Certificate

The information provided with the EENF made it unclear whether an Individual Clean Water Act Section 401 Water Quality Certification (WQC) was required for the project. Subsequent clarification by the Applicant to MEPA indicated that the applicant proposed approximately 820 cubic yards of dredge (excavation below the high water mark). The applicant proposes that some materials will be used on-site, while other

materials are likely unsuitable for reuse because it is non-structural in nature and will require reuse/recycling/disposal off-site, as may be appropriate.

Based upon the clarification of the volume of dredge material, a WW08 401 WQC Dredge permit is required for this project.

Chapter 91 Waterways

As proposed, the project does not appear to require a Waterways License of Permit.

Bureau of Air and Waste

Air Quality

Construction and Demolition Activities

The construction and demolition activity must conform to current Air Pollution Control Regulations. The proponent should implement measures to alleviate dust, noise, and odor nuisance conditions that may occur during the construction and demolition activities. Such measures must comply with the MassDEP's Bureau of Air and Waste (BAW) Regulations 310 CMR 7.01, 7.09, and 7.10.

Construction Equipment

MassDEP recommends that the project proponent participate in the MassDEP Diesel Retrofit Program. All non-road engines shall be operated using only ultra-low sulfur diesel (ULSD) with a sulfur content of 15 ppm pursuant to 40 CFR 80.510.

Odor

Pursuant to information presented by the Proponent on Page 29, following drawdown, low water levels may cause odors. This activity must be managed to in a manner as to control nuisance odors. In addition, disturbance of pond sediments may cause odors during the removal of rubbish as well as during the dredging operation. Any accumulated sediment or other "noxious" materials must be managed in a manner so as to control nuisance odors.

Solid Waste

The proponent shall properly manage and dispose of all solid waste generated by this proposed project pursuant to 310 CMR 16.00 and 310 CMR 19.000, including the regulations at 310 CMR 19.017 (waste ban). In addition, the proponent shall manage regulated asbestos and asbestos-containing waste material as special wastes in accordance with 310 CMR 19.061.

Asphalt, brick and concrete (ABC) generated through crushing and reuse on-site must be handled in accordance with regulation and policy. Otherwise, the proponent would need

to obtain a site assignment and facility permit for the crushing activity and a Beneficial Use Determination (BUD) for the reuse of the crushed material. The BUD regulations at 310 CMR 19.060 establish levels of assessment for four categories of beneficial use. More information regarding the handling of ABC, and a copy of the 30-day notification form may be found at the following website:

<http://www.mass.gov/eea/agencies/massdep/recycle/reduce/using-or-processing-asphalt-pavement-brick-and-concrete-.html>.

Any discarded objects encountered during the demolition of the former dam and dredging of the pond sediments shall be removed from the site for disposal as Solid Waste or recycling as appropriate.

Hazardous Waste

Any hazardous wastes generated by the demolition and earthwork activities or universal wastes must be properly managed in accordance with 310 CMR 30.0000.

If any hazardous waste, including waste oil, is generated at the site, the proponent must ensure that such generation is properly registered with the Department and managed in accordance with 310 CMR 30.00.

Bureau of Waste Site Cleanup

The proponent has identified release tracking number (RTN) 1-0000606 within the project area with a Response Action Outcome (RAO) and/or Permanent Solution with or without conditions (PS/PSC). There are also several sites within a 0.5-mile radius from the project location. Given the history of the industrial use of the surrounding area, the proponent should retain a Licensed Site Professional (LSP) to monitor for potential soil and/or groundwater contamination during excavation and dam improvement activities. The Massachusetts Contingency Plan (MCP) details procedures to follow for the parties conducting work. MassDEP staff are available for guidance.

In addition, a spills contingency plan addressing prevention and management of potential releases of oil and/or hazardous materials from pre- and post-construction activities should be presented to workers at the site and enforced. The plan should include but not be limited to, refueling of machinery, storage of fuels, and potential releases.

IV. Section 61 Findings

The proponent has presented proposed Section 61 Findings in the EENF for this project. MassDEP has reviewed these findings and finds them to be satisfactory.

V. **Other Comments/Guidance**

MassDEP has adequate regulatory authority through the 401 WQC permitting process to determine the potential environmental impacts from the project and to ensure that all feasible measures are taken to avoid, minimize and mitigate any negative impacts as necessary. With respect to Greenhouse Gas (GHG) Emissions, MassDEP concurs that the long term GHG impacts from the construction stage of this project are De Minimis.

The MassDEP permitting process will ensure environmental impacts are avoided where possible and minimized where necessary. MassDEP staff is available for discussions as the project progresses. If you have any questions regarding this comment letter, please do not hesitate to contact Kathleen Fournier at (413) 755-2267.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Michael Gorski
Regional Director

cc: MEPA File



July 24, 2020

Kathleen A. Theoharides, Secretary
The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge St., Suite 900, Boston, MA 02114

RE: EEA 16234: Expanded Environmental Notification Form (EENF)
Resiliency Improvements at Watershops Pond Dam Project
City of Springfield
Springfield, MA

Dear Secretary Theoharides:

I am writing on behalf of Springfield College to voice support for the above-referenced Project. Founded in 1885 as The School for Christian Workers, the Springfield College main campus is located on the banks of Watershops Pond. Lake Massasoit, as we prefer to call it, is a signature component of Springfield College and is a riveting landmark of American history and an on-going source of local pride. The Pond is not only a signature element that reflects the beauty of our local area, but is it a key element of our campus experience, with curricular and co-curricular programming that has the Pond as a central element.

Maintaining and modernizing the Watershops Pond Dam is a worthy undertaking that has the support of Springfield College. The City of Springfield approached us several months earlier to inform us of their plans and to hear our concerns. From those discussions, we have learned that the City is proposing to conduct a drawdown of the Pond in conjunction with the resiliency improvements to the dam. We enthusiastically support this aspect of the Project, in that the drawdown will allow Springfield College the rare opportunity to access, inspect, and maintain portions of our campus that we normally cannot access. We also support the City's request for a waiver of the mandatory Environmental Impact Report (EIR). It appears the preparation of an EIR would not avoid or minimize damage to the environment and could represent a hardship to the City and jeopardize the City's HUD grant that is enabling this important Project.

Sincerely,

A handwritten signature in black ink that reads "Mary Beth A Cooper".

Mary-Beth Cooper

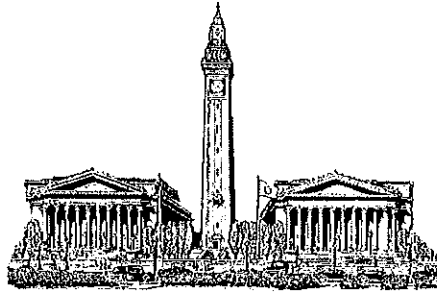
Springfield College President

**DEPARTMENT OF
PUBLIC WORKS**

DIRECTOR'S OFFICE

70 TAPLEY STREET
SPRINGFIELD, MA 01104

413-750-2808 413-787-6029 FAX



CITY OF SPRINGFIELD
MASSACHUSETTS

July 24, 2020

Kathleen A. Theoharides, Secretary
The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge St., Suite 900, Boston, MA 02114

RE: EEA 16234: Expanded Environmental Notification Form (EENF)
Resiliency Improvements at Watershops Pond Dam Project
City of Springfield
Springfield, MA

Dear Secretary Theoharides:


I am writing on behalf of the Springfield Department of Public Works to voice support for the above-referenced Project. The Springfield DPW is responsible for numerous public services within the City, including streets and traffic control, municipal trash service, flood protection, and storm drains. While the Watershops Pond Dam is operated and maintained by the Parks Department, the DPW supports the maintenance and modernization of the dam. The dam is located upstream of some of the City's critical flood protection infrastructure, and operation of the dam has been instrumental in the DPW's abilities to properly operate and maintain our flood control systems. Increasing the dam's resilience and reliability is critical to the safety of the City and its residents.

As one of the Commonwealth's oldest cities, Springfield has an extensive storm drain infrastructure that requires constant maintenance and improvement. Watershops Pond is centrally located within the City, and much of our stormwater infrastructure is along the margins of the pond. The City is proposing to conduct a drawdown of Watershops Pond in conjunction with the dam improvements. We enthusiastically support this aspect of the Project, in that the drawdown will allow the DPW to access, inspect, and maintain portions of our stormwater infrastructure that we cannot normally access. This will result in improved water quality within the pond and downstream areas. The DPW is ready to assist with any cleanups of the pond that may be facilitated by the drawdown. The pond has not been drawn down since 1996-97, and urban ponds typically require maintenance and cleaning to balance the aesthetic qualities of the

pond with the functional and recreational needs of the community and the pond's natural ecosystem.

Additionally, the DPW supports the City's request for a waiver of the mandatory Environmental Impact Report (EIR). We don't think the preparation of an EIR would avoid or minimize damage to the environment. Importantly, any delay in the Project would jeopardize the City's HUD grant that is funding this critical Project.

Sincerely,



Christopher M. Cignoli, P.E.
Director Department of Public Works



Established

1996

SPRINGFIELD WATER AND SEWER COMMISSION

POST OFFICE BOX 995
SPRINGFIELD, MASSACHUSETTS 01101-0995
413-452-1300

Kathleen A. Theoharides, Secretary
The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge St., Suite 900, Boston, MA 02114

July 22, 2020

RE: EEA 16234: Expanded Environmental Notification Form (EENF)
Resiliency Improvements at Watershops Pond Dam Project
City of Springfield
Springfield, MA

Dear Secretary Theoharides:

I am writing to voice support for the above-referenced Project. The Springfield Water and Sewer Commission was established in July 1996 as a regional water and sewer authority serving a large portion of the lower Pioneer Valley. Our mission as the stewards of the centuries old water and sewer systems is to provide a sustainable, uninterrupted, high-quality supply of water to our customers, to collect and treat wastewater, and return clean water to the environment. While fulfilling our mission, we strive to operate, maintain, improve, and manage our water and wastewater infrastructure in an environmentally responsible manner that is cost-effective and affordable to the region we serve. This project will directly benefit our existing infrastructure as we have water and sewer mains that cross Watershops Pond in at least three locations, and we have major sewer interceptors that are immediately adjacent to and in many places below the normal water surface of Watershops Pond.

Maintaining and modernizing Watershops Pond Dam is a worthy undertaking that we support. Our understanding is that the City of Springfield, the Proponent, is proposing to conduct a drawdown of Watershops Pond in conjunction with the resiliency improvements to the dam. We wholeheartedly support this aspect of the Project, in that the drawdown will allow us the rare opportunity to access, inspect, and maintain portions of our critical infrastructure that we normally cannot access. We also support the Proponent's request for a waiver of the mandatory Environmental Impact Report (EIR). It appears the preparation of an EIR would not avoid or minimize damage to the environment and could represent a hardship to the Proponent in that any delay in the Project would jeopardize the City's HUD grant that is enabling this important Project.

Respectfully

Springfield Water and Sewer Commission

By: 

Joshua D. Schimmel, Executive Director

