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Floodplain Management Plan

New York Governor's Office of Storm Recovery

**Community Development Block Grant – Disaster Recovery
North Ferry Pump Replacement Project**

Schenectady County, New York
Effective Date: November 17, 2018

Executive Order 11988 – Floodplain Management

New York State Homes and Community Renewal

**U.S. Department of Housing and Urban Development
Community Development Block Grant – Disaster Recovery (CDBG-DR)
North Ferry Street Pump Relocation**

**Schenectady, New York
Effective Date, November 17, 2018**

This Floodplain Management Plan Compliance Document meets the requirements of 24 CFR Part 55.20 and Executive Order 11988—Floodplain Management— for the North Ferry Street Pump Relocation Project. The City of Schenectady is the recipient for the project funding. The Proposed Project will be conducted in compliance with Executive Order 11988.

The Proposed Project entails the construction of a new wastewater pump station just to the south of the existing pump station at 123 North Ferry Street in the 100-year floodplain. As such, this Floodplain Management Plan documents the eight-step decision making process for the Proposed Project and pertains to activities within the Special Flood Hazard Area (SFHA) as defined by the Federal Emergency Management Agency (FEMA), or its successors, pursuant to the National Flood Insurance Program (NFIP), or a successor program, whether advisory, preliminary, or final.

Description of Proposed Project Activities in the SFHA

The Project entails the construction of a new wastewater pump station just to the south of the existing pump station at 123 North Ferry Street in Schenectady, New York (**Figure 1**). The Project would disturb less than 0.5 acres of land. Construction of the Project could require dewatering during excavation. The construction of the wet well would require excavation to approximately 31 feet below the existing surface.

The ground floor elevation of the existing North Ferry Street Pump Station [225 feet above sea level (ASL)] is below the 100-year flood elevation and is prone to flooding from the Mohawk River. During the 2011 flooding caused by Hurricane Irene, the pump station, including its electrical systems, control systems, and emergency generator suffered water damage. The facility did not operate for approximately 24 hours.

The Proposed Project would improve septic and wastewater infrastructure to reduce flood damage and risk of pollution by increasing the reliability and the resiliency of the City of Schenectady’s wastewater facilities. Should the pump station fail during a flood, the City would not be able to pump wastewater and raw sewage would be released to the neighborhood and Mohawk River, in violation of the State Pollution Discharge Elimination System (SPDES) discharge permit. The proposed project would help to avoid such a situation.

The proposed project is consistent with the objectives outlined in the City of Schenectady Comprehensive Plan 2020. Objectives in the plan include providing well-maintained 21st century municipal infrastructure with safe waste management, developing a plan to address

flooding issues citywide, and protecting and promoting historic resources. In addition to providing storm resiliency, the proposed project will bring the pumping station into to compliance with New York State Department of Environmental Conservation (NYSDEC) sanitary sewer overflow (SSO) discharge requirements. The City of Schenectady has entered an Order on Consent to eliminate an existing SSO which discharges into the Mohawk River, approximately 3,375 linear feet downstream of the pump station at the east end of the historic stockade district. As part of a City-Wide Wastewater Master Plan, the City has determined that the existing function and performance of the North Ferry Street Pump Station must be re-defined and upgraded in order to beset meet the City's needs and obligations under the Order on Consent.

Executive Order 11988 & 24 CFR Part 55

HUD regulation 24 CFR Part 55 implements Executive Order 11988 for Floodplain Management. The Order requires Federal agencies (or a state agency implementing a Federal funding program) to reduce the loss of life and property caused by floods, minimize impacts of floods on human safety, health, and welfare, and preserve the natural and beneficial functions of floodplains. Under this Order, Federal agencies must evaluate the potential effects of the proposed action. In addition, Federal agencies are required to demonstrate that all practicable alternatives have resulted in the reduction or elimination of the long-and short-term adverse impacts associated with occupancy and modifications of the floodplain.

Projects located within a SFHA are subject to Executive Order 11988. Information on where SFHAs are located is available on Flood Insurance Rate Maps (FIRMs) published by FEMA. FEMA uses engineering studies to determine the delineation of these areas or zones subject to flooding. The relevant data source for the SFHA is the latest issued FEMA data or guidance, which includes advisory data, such as Advisory Base Flood Elevations (ABFEs) or preliminary and final FIRMs.

The Project entails the construction of a new wastewater pump station just to the south of the existing pump station at 123 North Ferry Street in Schenectady, New York (**Figure 1**). The Project would disturb less than 0.5 acres of land. Construction of the Project could require dewatering during excavation. The construction of the wet well would require excavation to approximately 31 feet below the existing surface.

24 CFR Part 55.20 Eight-Step Process

Step 1: Determine if the proposed action is in a 100-year floodplain.

All of the project site is within the 100-year SFHA Zone A, as shown on the FEMA FIRM Community Panel Number 36093C0154D, dated January 8, 2014. The Project site covers approximately 0.5 acres within the 100-year floodplain. (See the attached **Figure 2**.)

Step 2: Notify the public of the intent to locate the proposed action in a floodplain.

An Early Public Notice of Proposed Activity Within the 100-year Floodplain was published by the Governor's Office of Storm Recovery on October 16, 2018 (see attached **Early Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain**). The notice requested comments from the public concerning floodplain and natural resource impacts of the proposed action. The notice also indicated that the proposed action would be evaluated for potential direct and indirect impacts associated with floodplain development and, where practicable, would be designed or modified to minimize potential adverse impacts to lives, property, and natural values

within the floodplain. The notice was published in the October 16, 2018, *The Daily Gazette* and posted at http://www.stormrecovery.ny.gov/environmental_docs. The required 15-day period was conducted to allow for public comments, and comments were accepted either electronically or via written correspondence. No comments on floodplains were received.

Step 3: Identify and evaluate practicable alternatives to locating the proposed action in a floodplain.

The existing North Ferry Street Pump Station is a critical component of the city's sewer system. It is located over the sewer mains that run along the Mohawk River. The ground floor elevation of the existing facility [225 feet above sea level (ASL)] is below the 100-year flood elevation and is prone to flooding. Flooding of the Mohawk River and its tributaries after Hurricane Irene and Tropical Storm Lee inundated the existing facilities control and electrical systems and the control panels did not operate for almost 24 hours due to power failure.

Alternatives to the proposed action considered:

Other Locations

Due to the alignment of the existing sewer main, the range of locations for the replacement pump station was limited to locations along the sewer main. Two other locations were considered. One location considered was to the east of the existing pump station across North Ferry Street. The other locations were to the west behind the existing pump station. All of these locations are in the 100-year floodplain. The impacts to the floodplain in these other locations would be the same or greater depending on the amount of disturbance to extend the utilities and add new access and parking surfaces.

The proposed project location and design are a result of a feasibility study, a public outreach and participation program and collaboration with the New York State Historic Preservation Office (SHPO). The proposed project has been designed to accommodate the flood elevation and maintain the character of Riverfront Overlook and bike path along the river. In addition to providing storm resiliency, the proposed project will bring the pumping station into compliance with New York State Department of Environmental Conservation (NYSDEC) sanitary sewer overflow (SSO) discharge requirements.

No Action Alternative

Not undertaking the Project would not be consistent with the objectives outlined in the City of Schenectady Comprehensive Plan 2020. Objectives in the plan include providing well-maintained 21st century municipal infrastructure with safe waste management and developing a plan to address flooding issues citywide. In the absence of the Proposed Project (the No Action Alternative), the existing pump station would remain vulnerable to damage during flooding events, potentially leading to more service interruptions. The City would not increase the resiliency of a key component of the infrastructure it needs to function during emergency situations. Without the project, the communities' wastewater system would continue to be vulnerable to flood damage. Additionally, the pumping station would remain out of compliance with NYSDEC SSO discharge requirements and in violation of Consent Order R44-2012-1218-117.

Step 4: Identify and describe the proposed action's direct and indirect effects associated with occupying or modifying the floodplain.

The new North Ferry Street Pump Station site would be in a previously disturbed area and would not disturb the nearby floodway. The floodplain area on the project was previously disturbed by the construction of a residential or commercial building between 1840 and 1915. The private building and parcel was sold to the city utility and was soon demolished after the construction of the 1913 pump house on the parcel to the north. The old private parcel site was made level with construction debris and modern fill. The old private building parcel has remained vacant since the demolition.

The primary disturbance of the floodplain would be the 0.5 acres associated with the construction of the new facility. The existing facility's access and parking surfaces will be used for the new facility (**Figures 3a and 3b**). The direct and indirect impacts associated with the development within the floodplain would be limited to approximately 0.14 acres of new impermeable surface due to the new facility structure. The limited area of disturbance would not adversely affect the natural and beneficial values of the floodplain or lives and property.

When complete, this project will mitigate the incapacitation of the facility and allow it to remain operational during storm events so that this critical wastewater facility can provide continuous service to the residents of the City of Schenectady during emergencies.

Step 5: Identify methods to minimize the potential adverse impacts within a floodplain and to restore and preserve the natural and beneficial values.

The short-term impacts during construction would be mitigated by best management practices for debris, dust, and erosion control during construction activities. Best management practices during construction would ensure that disturbance of the 100-year floodplain by equipment, site runoff, sedimentation, or other construction activities would be minimized. All construction equipment will be stored outside of the 100 year floodplain.

The floodplain area has previously been disturbed by the structures of the residences and existing Pump Facility in the past. There would be a limited increase in the existing impermeable surface. No long-term effects to the natural and beneficial values of the floodplain are anticipated as a result of this limited increase from the Project.

Step 6: Reevaluate the proposed action to determine if it is still practicable given its floodplain effects.

The construction of the new facility would not adversely affect the natural and beneficial floodplain values or lives and property. There would be beneficial impacts due to the improved operation of the wastewater system for the community, particularly with the respect to the beneficial increase in the community's resiliency. As a result, the proposed action is still practicable. The presence of existing infrastructure make it impractical to locate the pump station outside of the 100 year floodplain.

The No Action Alternative would not be practicable because without the Project, the facility is vulnerable to future flood damage which could compromise the facility's ability to provide services during storm events.

Step 7: If the only practicable alternative is locating in a floodplain, publish a final public notice.

It has been determined that there is no practicable alternative to locating the project in the floodplain. This is due to the location of the alignment of the existing sewer main and the

proximity to the utilities and infrastructure at the existing pump station site.

A combined Finding of No Significant Impact/ Notice of Intent to Request Release of Funds and Final Notice and Public Review of a Proposed Action in a 100-Year Floodplain was published by the Governor's Office of Storm Recovery in *The Daily Gazette* on December 17, 2018 in accordance with 24 CFR Part 55. The final notice details the reasons why the project must be located in the floodplain, a list of alternatives considered, and all mitigation measures taken to minimize adverse impacts and preserve natural and beneficial floodplain values.

All comments received during the comment period will be responded to and fully addressed prior to funds being committed to the proposed project, in compliance with Executive Order 11988 or 24 CFR Part 55.

Step 8: The proposed action can be implemented after the above steps have been completed.

Implementation of the proposed action may require additional local and state permits, which could place additional design modifications or mitigation requirements on the Project.