

August 17, 2016

Peter Wepler
Chief, Environmental Analysis Branch
U.S. Army Corps of Engineers
New York District
Jacob K. Javits Federal Building
26 Federal Plaza
New York, NY 10278-0090

Re: F-2016-0092 (DA)
U.S. Army Corps of Engineers New York District
Flood Risk Management
Channel modifications, retaining walls, bridge removal
and replacement, a culvert under the railroad parking lot,
trapezoidal cuts along the rivers, and nonstructural
measures potentially applied to a maximum of eight
residences and one non-residential building.
Mamaroneck and Sheldrake Rivers, Village of
Mamaroneck, Westchester County
Concurrence with Consistency Determination

Dear Mr. Wepler,

On June 6, 2016, the U.S. Army Corps of Engineers – New York District (Corps) submitted the above referenced direct federal agency activity and consistency determination to the Department of State (DOS). On July 28th, 2016 DOS requested a fifteen (15) day extension of time to the DOS review and decision making period pursuant to 15 CFR § 930.41(b). With the 15 day extension DOS's decision was due on or before August 20th, 2016. On August 9, 2016 the Corps submitted additional information to supplement their consistency determination. DOS has completed its review of the consistency determination and data and information for the proposed activity and pursuant to 15 CFR § 930.41(a) concurs with the consistency determination for the activity under the enforceable coastal policies of the New York State Coastal Management Plan (CMP) as refined in the Village of Mamaroneck Local Waterfront Revitalization Program (LWRP). DOS has included several recommendations to further mitigate the proposed activity (Section III).

I. **Subject of the Review**

Description of Proposed Activity:

The proposed activity is a flood risk management project along 1.82 miles of the Mamaroneck and Sheldrake Rivers in the Village of Mamaroneck, Westchester County, New



York (the Village). Severe flood risk exists for the approximately 750 homes and businesses located within the flood plain for the Mamaroneck and Sheldrake Rivers Basin. Major flood events resulted in extensive damages and loss of life.

A General Reevaluation Report (GRR) was prepared updating the 1977 Feasibility Report and the 1989 General Design Memorandum. The proposed is authorized by Section 401(a) of the Water Resources Development Act of 1986 and involves realigning the river to the confluence to Mamaroneck Harbor with a 25 foot wide by 8 foot high, 250 foot long culvert to be placed under the railroad station parking lot. Other elements include trapezoidal channel improvements consisting of natural bed channel with side slopes of one vertical on two and a half horizontal (1:2.5), and concrete retaining walls only in areas where space is limited. Additionally, existing retaining walls and utilities will be replaced as necessary along the length of the channel and five bridges will be removed with three replaced. Lastly, eight residential properties and one commercial property are included in the proposal for structure elevation, ringwall levees, and/or floodproofing.

Specifically, the proposed channel work on the Mamaroneck River will be approximately 2,400 ft on the segment of the Mamaroneck River south of I-95 and upstream of the confluence with the Sheldrake River and the segment stretching from south of the confluence to just downstream of the Tompkins Avenue Bridge also approximately 2,400 ft. For both segments the river channel will be deepened and widened to 1:2.5 side slopes and the channel bottom will be widened to 45 ft with 0.25% slope. Retaining walls and utilities will be removed and replaced as needed including the Ward Avenue Bridge.

Next, along the Sheldrake River the proposed channel work will be approximately 3,470 ft from Fenimore Road to the confluence in Columbus Park. The river channel will be deepened and widened to 33 ft and 3.4 ft cut with 0.25% slope. Also proposed is rectangular channel modification upstream of the Mamaroneck Avenue Bridge. Retaining walls and utilities will be removed and replaced as needed including the removal and replacement of the Waverly Place Bridge. Three footbridges will be removed including the Center Avenue footbridge and two footbridges in Columbus Park. The footbridges within Columbus Park will be replaced.

Additionally, the proposed culvert will be a box culvert under the commuter parking lot located on the left bank of the Mamaroneck River just downstream of the Jefferson Avenue Bridge and will discharge almost directly into the Rail Road Bridge opening. The culvert is proposed to be 390 ft long with a slope of 0.36 ft per 100 ft, 25 ft wide, 8 ft high, and will be about 3 ft above the proposed bottom of the river and about 3.5 ft under the finish grade of the parking lot. The purpose of the proposed culvert is to divert a portion of the Mamaroneck River flow during a one year event or greater.

Further, the proposed retaining walls will be approximately 1,200 lf of riprap along the Mamaroneck and Sheldrake Rivers. About 500 ft of riprap will be located roughly 200 ft both upstream and downstream of the N. Barry Ave. Extension Bridge along the Mamaroneck River and 700 ft of riprap at the 90 degree turn in the Sheldrake River located downstream of the Fenimore Rd. Bridge. Also, 300 lf of concrete is proposed for placement along the bottom of the

Mamaroneck River downstream from the Station Plaza Bridge to just downstream of Halstead Ave.

Finally, the proposed nonstructural measures consist of eight residential properties in the Harbor Heights neighborhood south of the Mamaroneck River as candidates for structure elevation or raising. Additionally, structural measures are considered for one non-residential property in the industrial area along Fenimore Road and south of the Sheldrake River as a candidate for construction of a ringwall.

Purpose:

The stated purpose of the proposal is to improve flood and storm protection for the Village of Mamaroneck and to reduce the flood risks and associated urban damages caused by repetitive flooding of the Mamaroneck and Sheldrake Rivers within the Mamaroneck and Sheldrake Rivers Basin in the Village of Mamaroneck.¹

Public Comments Received:

DOS issued a public notice in the State Register dated June 29, 2016.² Numerous comments were received from interested parties and have been considered as part of the body of information relevant to the review.

II. Analysis

Federal regulation defines “any coastal use or resource” to include land and water uses such as public access and floodplain management, natural resources, biological and physical resources, and uses and resources appropriately described in a management program.³ The proposed activity will occur in New York’s coastal area within the Village’s LWRP boundaries. The Corps’ reasonably foreseeable effects analysis and consistency determination are in the context of the enforceable policies of the Village of Mamaroneck LWRP.⁴

Flooding and Erosion Hazards

The LWRP discusses floodplain management and the issue of riverine flooding in Section II of the LWRP document. Flooding issues persist due to the Village’s location at the bottom of three drainage basins, including the Sheldrake and Mamaroneck River Basins, and the Village is subject to extreme floods especially at the confluence of the Sheldrake and Mamaroneck Rivers.⁵ High flood flows result in damages, loss of life, harbor siltation, and

¹ U.S. Army Corps of Engineers New York District, Draft Environmental Impact Statement for the Mamaroneck and Sheldrake Rivers Flood Risk Management, Village of Mamaroneck, Westchester County, New York, General Re-Evaluation Report (hereinafter “DEIS”), January 2016, at p. i.

² New York State Register, June 29th, 2016. General Notices. Department of State, F-2016-0092(DA).

³ 15 C.F.R. § 930.11(b).

⁴ Pursuant to 15 CFR Part 930.39(a).

⁵ Village of Mamaroneck, Local Waterfront Revitalization Program. Adopted by the Village of Mamaroneck Trustees, November 13, 1984; Approved by NYS Secretary of State, May 21, 1985; OCRM concurrence, August 12, 1985 at p. 9 (hereinafter “LWRP”).

degradation of coastal water quality.⁶ Poor drainage along with shallow soils, steep slopes and high water, combined with increased land development reduced the absorption effect of soils in the Sheldrake and Mamaroneck Rivers Basin.⁷ Section II of the Village's LWRP also addresses possible solutions to the riverine flooding including the 1986 Army Corps proposed project and non-structural solutions.⁸ Policies 12, 14, and 17 are analyzed in relation to flooding and erosion hazards.

Policy 12 – Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features.

Policy 12 relates to floodplain management and recognizes the value of natural protective features. The LWRP discusses floodplain management as a coastal use important to the Village and identifies natural protective features. The purpose of the Corps' proposal is to reduce flood risk and improve flood and storm protection. To accomplish the above goal the Corps is proposing channel modifications, trapezoidal cuts, retaining walls, and bridge removal and replacement along the Sheldrake and Mamaroneck Rivers. The retaining walls will only be constructed in areas where space is limited for natural bed channel modifications.

The above described proposal will impact natural protective features. The explanatory language for the above policy describes natural protective features to include wetlands, trees, beaches, and offshore islands. According to the Corps' Draft Environmental Impact Statement (DEIS), short term minor and long term moderate adverse impacts to vegetation will result from the plan including the removal of mature trees.⁹ Additionally, short term minor and long term moderate impacts to wetland vegetation will result from the proposed.¹⁰

The Corps' proposal includes mitigation efforts to avoid and minimize impacts and restore any impacted features. As part of the plan, the Corps proposes to restore riparian areas to pre-construction conditions, including replanting trees, and to coordinate with the Village of Mamaroneck Department of Public Works, Tree Committee, and local landowners.¹¹ Further, the wetlands located in Columbus Park will not be impacted and the Corps will obtain an Article 15 permit from the NYS Department of Environmental Conservation.¹²

The proposed is consistent with the above policy.

Policy 14 – Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development or at other locations.

⁶ Id.

⁷ Id at pp. 10-11.

⁸ Id at p. 11.

⁹ DEIS at p.86.

¹⁰ Id at p. 87.

¹¹ Id at p. 106.

¹² Id at p. 86.

The LWRP explanation for the above policy describes actions which increase flooding and erosion including the failure to observe proper drainage or land restoration practices such as Best Management Practices (BMPs) for soil erosion and stormwater management. The proposed activity includes BMPs and is designed to not increase erosion and flooding.

The proposed is a flood risk management project and is designed to reduce flood risk and damages. The Corps' proposed plan will adhere to BMPs to protect water quality and wetlands and will develop a site specific Stormwater Pollution Protection Plan (SWPPP) for the State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity. Also, all disturbed areas will be restored and stabilized.

Additionally, in response to public comments the Corps added an aquifer study during design development to the proposal.¹³ The above discussed incorporated BMPs, site plans, and study will avoid an increase in flooding and erosion.

The proposed is consistent with the above policy.

Policy 17 – Whenever possible, use nonstructural measures to minimize damage to natural resources and property from flooding and erosion. Such measures shall include: (i) the setback of buildings and structures; (ii) the planting of vegetation and the installation of sand fencing and draining; (iii) the reshaping of bluffs; and (iv) the floodproofing of buildings or their elevation above the base flood level.

The above policy applies nonstructural measures as a means to avoid damage from flooding and erosion whenever possible. Nonstructural measures include planting vegetation and avoiding the risk by siting buildings out of the hazard area. The proposed plan consists of nonstructural measures such as vegetated sloped banks to decrease flood risk. Hard structures such as retaining walls are only proposed in areas where development constricts the use of sloped banks.

Additionally, in the Harbor Heights neighborhood eight residential properties were selected for structure elevation or raising. During the design phase additional properties may be identified for elevation or floodproofing.

Further, the LWRP policy explanation includes a discussion of the County of Westchester and Village policy of “zero increase” in peak rates of stormwater discharge and the Village’s Flood Damage Prevention Ordinance. As discussed in Policy 14 above, the proposed plan will develop and implement an SWPPP during construction phase and will restore and stabilize disturbed areas.

The proposed is consistent with the above policy.

Open Space and Recreation

Open space and recreational opportunities are highlighted in the LWRP. The LWRP identifies recreation as the third largest expense in the Village budget and its greatest source of

¹³ Letter from Nancy Brighton, Chief of Watershed Section, Army Corps of Engineers, New York District to Jeffrey Zappieri Supervisor, Consistency Review Unit, Office of Planning and Development, New York State Department of State, August 9, 2016 (hereinafter Brighton Letter).

revenue outside of property taxes.¹⁴ A 44 acre public park, Harbor Island, provides open space for recreation along with 12 other public parks in the Village including Columbus Park.¹⁵ The Village LWRP provides an inventory of conservation and open space areas located in the Village. Policies 19 and 20 are analyzed in relation to open space and recreation.

Policy 19 – Protect, maintain and increase the levels and types of access to public water-related recreation resources and facilities so that these resources and facilities may be fully utilized by all the public in accordance with reasonably anticipated public recreation needs and the protection of historic and natural resources. In providing such access, priority shall be given to public beaches, boating facilities, fishing areas and waterfront parks.

Policy 20 – Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or to the water's edge that are publicly owned shall be provided, and it should be provided in a manner compatible with adjoining uses. Such lands shall be retained in public ownership.

The explanatory language for the above policies discuss public access and recreation on publicly owned lands such as Village owned parks and State underwater lands. The policies also list passive enjoyment such as walking paths and maintaining existing access. The proposed plan includes channel work on both the Mamaroneck and Sheldrake Rivers including within Columbus Park and the Ward Avenue Bridge. Many of the public comments received discussed access to Columbus Park and to the Village via the Ward Avenue Bridge as points of concern.

Present levels of public access to publicly owned lands will not be diminished and future recreational development will not be constrained. The channel work consists of vegetated slopes except in areas where development constraints exist. In Columbus Park the channel work will consist of vegetated slopes with no hardening. Further, the retaining walls will be level with existing ground or no higher than one foot. Any future recreational development will not be impeded in areas where development constrained the plan to retaining walls. Lastly, the Ward Avenue Bridge and the footbridges in Columbus Park will be replaced in order to maintain existing levels of passive enjoyment.¹⁶

The proposed plan is consistent with the above policies.

Sites of Historic or Architectural Importance

The Village was settled in 1661 and has numerous sites of historic or architectural importance. These sites were inventoried in the LWRP. Additionally, during the 1930s large scale Works Progress Administration (WPA) funded projects were constructed in the Village including the retaining walls along the Mamaroneck River and the Ward Avenue Bridge.¹⁷ These

¹⁴ LWRP at p. 21.

¹⁵ Id.

¹⁶ Brighton Letter.

¹⁷ DEIS at p. 66.

resources were determined to be potentially eligible for the National Register of Historic Places.¹⁸ Policy 23 is analyzed in relation to sites of historic and architectural importance.

Policy 23 – Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archeology or culture of the State, its communities, or the Nation.

The above policy discusses the value of preservation of historic sites. The DEIS found that the proposed will have adverse effects on eligible historic properties such as the Ward Avenue Bridge and the stone retaining walls thematic district. The Corps' consistency determination indicates that the Corps will evaluate wall segments of this district to determine if any can be reused and incorporated into the current plan. Additionally, the Corps is coordinating with the New York State Historic Preservation Office (NYSHPO) and the Village regarding the proposed activity and committed to replace the Ward Avenue Bridge.

The proposed plan is consistent with the above policies.

Natural Resources

Natural resources are also inventoried in the LWRP with an identified goal to protect to the maximum extent possible.¹⁹ These resources include birds, wetlands, fish, shellfish, and buffer areas. The LWRP embraces a watershed wide approach to ensure protection of water resources.²⁰ Westchester County also endorses a watershed wide approach to protecting the Long Island Sound Watershed. The Village is included in the Watershed Advisory Committee (WAC) 4 study area which details watershed management plans and includes recommendations. Policies 18, 30, 33, 37, and 44 are analyzed in relation to natural resources.

Policy 18 – To safeguard the vital economic, social and environmental interests of the State and the Village of Mamaroneck, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the State and Village have established to protect valuable coastal resource areas.

The Mamaroneck River drains into the Long Island Sound at Mamaroneck Harbor. Section II of the LWRP identifies natural resources as interests of the Village including Mamaroneck Harbor and open space areas such as Delancey Cove and the Mamaroneck Reservoir. The locations of the identified resources are not within the footprint of the proposed plan. However, the Long Island Sound at Mamaroneck Harbor may be impacted by any change in water quality of the Mamaroneck and Sheldrake Rivers.

The proposed plan will not significantly impair coastal waters and resources identified in the LWRP. The Corps' planning regulations require their analysis of the watershed as a system. This approach is in line with the LWRP preferred watershed wide approach. The DEIS found long term beneficial impacts of the proposed activity including decreased erosion and sedimentation

¹⁸ Id at p. 94.

¹⁹ LWRP at p. 21

²⁰ Id at pp. 9-16.

of surface water.²¹ Also, as discussed in Policy 14 above and Policies 30, 33, and 37 below, the Corps' will use BMPs to protect water quality and will restore and stabilize all disturbed areas.

The proposed is consistent with the above policy.

Policy 30 – Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to State and National water quality standards.

Policy 33 – Best Management Practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Policy 37 – Best Management Practices will be utilized to minimize the nonpoint discharge of excess nutrients, organics and eroded soils into coastal waters.

The Village LWRP espouses a watershed approach for stormwater management as a means to minimize flooding and erosion hazards and ensure protection of water resources.²² Policies 30, 33, and 37 additionally describe BMPs and State and Federal water quality standards proposed activities should adhere to in the Village.

Policy 30 incorporates State and Federal water quality standards regarding discharge of pollutants into coastal waters such as the Long Island Sound. The DEIS discusses the location of a stated listed Superfund site within the study area, the ITT Sealectro site. This facility is located on the Mamaroneck River just above the confluence with the Sheldrake River.²³ Surrounding soil and groundwater are contaminated with volatile organics and remediation actions took place in the 1990s.²⁴ Additionally, a remedial design for controlling soil vapor intrusion was implemented in 2009.²⁵ Public comments received expressed concern over contaminated soil and groundwater entering the Mamaroneck River. The Corps' proposed plan addresses these concerns and will adhere to both State and Federal water quality standards. The proposed plan includes testing for volatile organics prior to construction and coordination with NYSDEC. Further, standard industry BMPs to protect water quality and wetlands will be implemented during construction and coordination with local, county, and NYSDEC representatives will occur.

Finally, the Corps' proposed plan address BMPs for stormwater runoff as directed in Policy 33. The explanation for Policy 33 includes both structural and nonstructural measures to prevent degradation of water quality. This guidance also discusses flood control projects to increase the carrying capacity of the rivers. Also, the explanation for Policy 37 addresses stormwater runoff and BMPs as a measure to mitigate potential stormwater problems. To control stormwater runoff the Corps will prepare and implement an SWPPP in accordance with the SPDES general permit for stormwater discharges, will create an ESCP, verify that BMPs were implemented, and restore

²¹ DEIS at p. 83

²² LWRP at pp. 9-16.

²³ DEIS at p. 30.

²⁴ Id at p. 80.

²⁵ Id.

and stabilize all disturbed areas. During construction, temporary measures include stabilized construction entrances, storm water inlet protection, silt fencing, and erosion control blankets. Additionally, the Corps' proposed plan will increase the carrying capacity of the rivers especially at the confluence in Columbus Park which in turn will limit sediment and pollutants entering the Long Island Sound during flooding.²⁶ Lastly, the Corps will obtain an Article 15 permit, stream disturbance, excavation and fill in navigable waters, and freshwater wetlands permit from the NYSDEC along with all other federal, state, and local permits as needed.

The proposed is consistent with the above policies.

Policy 44 – Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

The LWRP recognizes both tidal and freshwater wetlands as vital areas providing protection from flooding.²⁷ The Corps performed a wetland delineation survey in 2011 and identified a single wetland across from Harbor Heights section of Village and also determined that additional wetlands are likely throughout the project area.²⁸ A freshwater wetland on the National Wetlands Inventory Map exists within Columbus Park, a freshwater pond located at the confluence of the Mamaroneck and Sheldrake rivers.²⁹ The proposed plan avoids impacts on both the Columbus Park wetland and the single wetland in the Harbor Heights area. As part of the plan, the Corps proposes to restore riparian areas to pre-construction conditions, including replanting trees, and to coordinate with the Village of Mamaroneck Department of Public Works, Tree Committee, and local landowners.³⁰

The proposed is consistent with the above policy.

III. Recommendations

DOS makes the below recommendations to enhance mitigation of the proposed activity. DOS's concurrence with the Corps' consistency determination is not a conditional concurrence on the Corps adhering to these recommendations.

1. Minimize native plant removal to maximize flood control benefit of restored riparian areas;
2. Coordinate with Westchester County and the Village of Mamaroneck during development of stormwater plans, tree removal plans, and restoration of riparian areas;
3. Incorporate SHPO recommendations provided in the Draft Memorandum of Agreement in Appendix C of the DEIS;

²⁶ Id at p. 97.

²⁷ LWRP at p. 11

²⁸ DEIS at p. 47 and p. 51.

²⁹ U.S. Army Corps of Engineers New York District, Mamaroneck & Sheldrake Rivers New York Flood Risk Management, General Reevaluation Report for the Village of Mamaroneck, Draft Main Report, January 2016, at p. 3-20.

³⁰ DEIS at p. 106.

4. Develop a post construction monitoring and management plan to ensure success of the project and management of water quality.

IV. **Conclusion**

Pursuant to 15 CFR §§ 930.4(a)(1), DOS concurs with the Corps' consistency determination for the proposed flood risk management activities. DOS appreciates the opportunity to engage in the consultation process and requests that the Corps comply with the recommendations for this proposed activity in Section III.

Please contact Jeffrey Zappieri at (518) 473-6000 with questions and arrangements for further consultation as needed.

Sincerely,



Gregory Capobianco
Office of Planning and Development
New York State Department of State

cc: Cindy Goldstein, Chairperson, Village of Mamaroneck Harbor and Coastal Zone
Management Commission
Richard Slingerland, Village Manager, Village of
Mamaroneck
Alan Fuchs, NYS Department of Environmental Conservation