



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
477 MICHIGAN AVENUE
DETROIT MI 48226-2550

April 26, 2023

PUBLIC NOTICE

The U.S. Army Corps of Engineers (USACE), Detroit District, has prepared a Preliminary Statement of Findings/Finding of No Significant Impact and Environmental Assessment (EA) for rehabilitation of the shore protection revetment at the USACE Duluth Project Office at Canal Park in Duluth, MN (Enclosure). This notice initiates a 30-day agency/public review of the proposed action.

An evaluation of the effects of placing fill materials in the waters of the United States, pursuant to Section 404(b)(1) of the Clean Water Act, and preliminary Statement of Findings is included with the EA. Any person who has an interest that may be affected by the in-water fill placement associated with the revetment rehabilitation may request a public hearing. To be considered, the request must be submitted within the 30-day comment period of this notice. The request must clearly state the interest that may be affected and the manner in which such interest may be affected by the proposed breakwater repairs.

Any person who has a historical or cultural interest that may be affected by the proposed action may submit comments, within the 30-day comment period of this notice and must clearly state what historical or cultural interest may be affected by this activity.

Copies of this Public Notice are being sent to the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, the State of Minnesota and other Federal agencies, tribes, local agencies, interested groups, and individuals.

The EA may be viewed online at the following web address: <https://www.lre.usace.army.mil> Scroll down to the lower left to *Other Public Notices* and select, *Rehabilitation of Shore Protection Duluth Project Office, City of Duluth, St. Louis County, Minnesota*. Electronic copies of this Public Notice, EA, and 404(b)(1) evaluation are being sent to federal, state, and local agencies, Tribes, interested groups, and individuals. The USACE is soliciting comments from the public to consider and evaluate the impacts of the proposed activity. Comments must clearly set forth what interest may be affected by the proposed activity and how the action significantly affects the quality of the human environment. All comments concerning the proposed action should be made within thirty (30) days from the date of this notice. If no comments are received by the end of the thirty (30) day review period, it will be assumed that you have no comment. Please provide all comments by email to: Duluth-publicnoticecomments@usace.army.mil and refer to file DSC2023-001. All comments received will be taken under consideration. Upon completion of public review and, if applicable, a public hearing, and an evaluation of the substantive comments received, the USACE Detroit District Engineer will make a final decision regarding the necessity of preparing an Environmental Impact Statement for the proposed action.

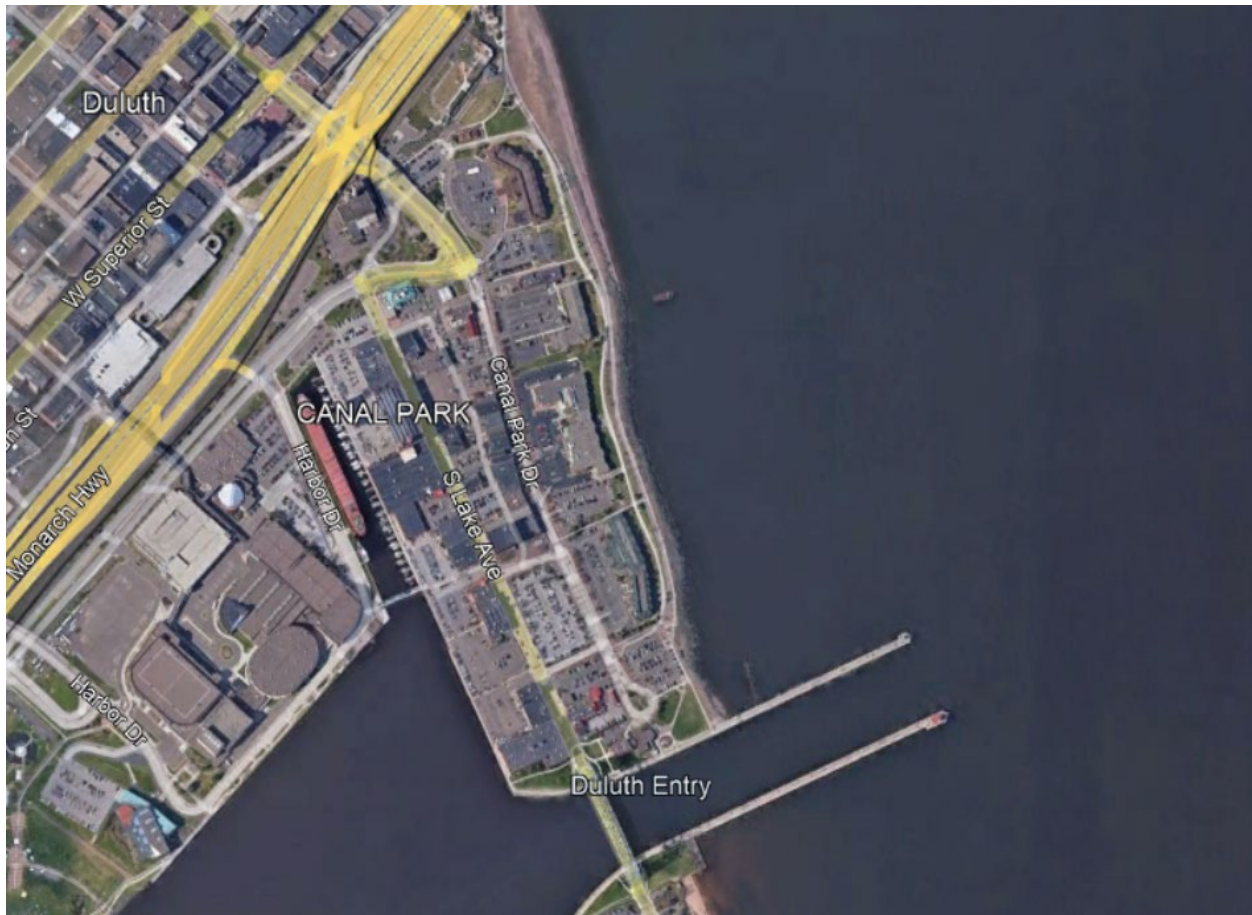
Charles A. Uhlarik

Charles A. Uhlarik
Chief, Environmental Analysis Section

Enclosure

**ENVIRONMENTAL ASSESSMENT AND PRELIMINARY STATEMENT OF
FINDINGS/FINDING OF NO SIGNIFICANT IMPACT**

**Rehabilitation of Shore Protection
Duluth Project Office
City of Duluth, St. Louis County, Minnesota**



April 2023

U.S. Army Engineer District, Detroit
Corps of Engineers, CELRE-PLE
477 Michigan Ave.
Detroit, Michigan 48226-2550



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
477 MICHIGAN AVENUE
DETROIT MI 48226-2550

Preliminary Statement of Findings/Finding of No Significant Impact

**Rehabilitation of Shore Protection Duluth Project Office
City of Duluth, St. Louis County, Minnesota**

The U.S. Army Corps of Engineers (USACE), Detroit District, has completed an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. A Public Notice (dated April 26, 2023), Preliminary Statement of Findings/Finding of No Significant Impact, an Environmental Assessment (EA), and a Clean Water Act Section 404(b)(1) Evaluation address the environmental consequences of rehabilitating a 200-foot-long rock revetment at the USACE Duluth Project Office, Duluth, St. Louis County, Minnesota. The proposed project is being completed pursuant to the USACE operations and maintenance authority.

The EA analysis, incorporated herein by reference, evaluated various project alternatives: Alternative 1, “No Action” plan; Alternative 2, Repair Existing Revetment as Originally Constructed, Alternative 3, Reconstruct Existing Revetment with Larger and/or More Stone, Alternative 4, Repair and Extend Offshore Breakwater Farther Northwest, Alternative 5, Use Steel Sheet Pile Wall to Shore Up Revetment. The preliminary selected alternative and tentatively recommended plan is Alternative 3, which is the least impacting alternative that meets all design criteria and project objectives as discussed in the EA. All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the preliminary selected alternative and recommended plan. Best management practices (BMPs) as detailed in the EA will be implemented, if appropriate, to minimize impacts. No compensatory mitigation is required as part of the recommended plan. For all the alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of implementing the recommended plan are listed in Table 1.

Table 1: Summary of Potential Effects of the Tentative Recommended Plan

	Minimal and Insignificant effects	Insignificant effects as a result of mitigation	Resource unaffected by action
Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquatic Habitat, Fisheries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clean Water Act Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate Change	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coastal Zone Management Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Minimal and Insignificant effects	Insignificant effects as a result of mitigation	Resource unaffected by action
Contaminant Consideration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exotic/Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federally Listed Species (T&E)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groundwater/Drinking Water	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Health and Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Topography and Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic, Noise, and Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Setting/Environmental Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wildlife/Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Public review of the preliminary Statement of Findings/Finding of No Significant Impact, an Environmental Assessment (EA), and a Clean Water Act Section 404(b)(1) Evaluation was initiated on April 26, 2023. All comments submitted during the public review period will be considered and responded to by email, as appropriate.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the USACE determined the proposed project will have no effect on federally listed species or their designated critical habitat.

Pursuant to Section 106 of the National Historic Preservation Act, as amended, the USACE has determined that the revetment rehabilitation will have “no adverse effect” on historic properties. Coordination for this determination was completed on January 19, 2023, with the SHPO concurring with the USACE determination and federally recognized tribe providing no objections or comments.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the recommended plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found attached to this EA.

A water quality certification pursuant to section 401 of the Clean Water Act will be obtained from the state of Minnesota prior to construction. All conditions of the water quality certification will be implemented in order to minimize adverse impacts to water quality.

Pursuant to the Coastal Zone Management Act of 1972, the USACE submitted a federal consistency determination to the state CZMA administrator December 1, 2022, for concurrence. The project will not impact lands designated under the Coastal Barrier Resources Act (CBRA PL97-348) located in Minnesota.

The proposed project complies with the Federal Executive Order on Flood Plain Management (E.O. 11988) because the project would not cause a harmful interference on adjacent property, will not increase the risk of flooding or related flood damage, nor encourage floodplain development.

All applicable environmental laws were followed in the evaluation of alternatives and coordination with appropriate agencies undertaken. Implementing the tentative recommended plan would not result in significant cumulative or long-term adverse environmental effects. The project would cause no or insignificant minor adverse impacts to natural resources, would not adversely impact navigation, water quality, cultural/historic/tribal resources, federally listed endangered or threatened species and their habitat, nor be injurious to the public interest. Adverse effects would be minor, limited primarily to short-term limited scope noise, turbidity increase, recreation disruption in Canal Park, and air emissions from equipment operation.

Based on this EA and 404(b)(1) Evaluation, coordination with Federal and state agencies and Tribes, and review by my staff, it is my preliminary determination that implementing the tentative recommended plan would not significantly affect the quality of the human environment. Therefore, preparation of an Environmental Impact Statement (EIS) is not required. Following the 30-day agency/public review period and consideration of the comments received, a final decision will be made regarding the necessity of preparing an EIS for the proposed action.

Date Signed

Brett M. Boyle
Lieutenant Colonel, U.S. Army
District Commander

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1.0 INTRODUCTION

1.1 The Duluth Ship Canal is located at the western most end of Lake Superior on the mouth of the St. Louis River in the Duluth, St. Louis County, Minnesota. The U.S. Army Corps of Engineers, Detroit District (USACE), maintains the Duluth Project Office (DuPO) at the Historic Fort Wayne site on the South side of the city. The DuPO is the center of operations and construction for the eastern half of the lower peninsula of Michigan and Lake Superior shoreline in Minnesota, maintaining equipment and personnel to support the district's floating plant and survey missions.

1.2 Proposed Action, Project Need, and Purpose

1.3 The purpose of the project is to restore shore protection along the USACE property. This is needed to protect the property from flooding and would also provide a measure of added protection to the north breakwater and revetment of the Ship Canal. The proposed action is authorized as part of the Duluth-Superior Harbor authority (Rivers & Harbors Act of 3 Jun 1896).

The existing revetment is dilapidated, limiting its effectiveness in providing shore protection. Heavy storms result in debris (sand and smaller riprap) washing over the revetment and onto the existing sidewalks and park grounds. This has resulted in considerable damage under record high water levels of recent years (Figure 2). This debris eventually plugs up the storm drains in the park, resulting in flooding of portions of the park grounds.

2.0 PROJECT AUTHORITY

2.1 The proposed action is authorized as part of the Duluth-Superior Harbor authority (Rivers & Harbors Act of 3 Jun 1896).

3.0 PROJECT HISTORY

3.1 The Duluth Project Office includes the Duluth Entry, including the Duluth Ship Canal and facilities, Duluth Area Office, Lake Superior Maritime Visitor Center, and adjacent Canal Park grounds. The main project area is noted in the Historic American Engineering Record (HAER) done for the Duluth Ship Canal in 1987 as part of Canal Park. The National Register of Historic Properties (NRHP) form done for the Duluth Ship Canal historic district and its contributing resources was completed in 1995.

Significant landscape changes have occurred within the Duluth Superior Harbor by the USACE. Both the HAER and NRHP document the work area of the Ship Canal as a fill area that was created in the early 1900's by the USACE.

4.0 ALTERNATIVES

4.1 Potential alternatives for the Duluth Ship Canal shore protection were reviewed, including a no action alternative.

4.2 Repair Existing Revetment as Originally Constructed: This alternative would involve moving existing stone back into place and adding additional similarly sized stone to repair the revetment.

4.3 Reconstruct Existing Revetment with Larger and/or More Stone: Alternative 3 would include salvaging existing stone, excavation for establishing a specific slope, and discharge of appropriately sized rocks for rehabilitating the revetment. Upland work would include a T-wall made of steel sheet pile and landscaping within Canal Park.

4.4 Repair and Extend Offshore Breakwater Farther Northwest: This option would include discharging rocks into the water to extend and repair the existing breakwater that is just northeast of the revetment.

4.5 Use Steel Sheet Pile Wall to Shore Up Revetment: This option would involve placement of steel sheet pile wall waterward of the existing revetment, discharge of backfill, and a return wall to connect with the city owned bulkhead.

5.0 ALTERNATIVE SELECTION AND RECOMMENDED PLAN

5.1 The Duluth Project Office has tentatively selected Alternative 3 as the best approach for stabilizing the shoreline and prevent debris from overtopping the revetment.

5.2 Alternatives 2 was not selected as shoreline protection would not be sufficiently protect the shoreline or prevent debris from entering the park during storm events.

5.3 Alternative 3, the preferred alternative, was selected because it allows for construction of a top elevation and crest width suitable to preventing water from overtopping the crest and associated debris deposition into the park area. This alternative best meets the need for protection of the USACE property and long-term durability, and therefore is the recommended plan that is evaluated in this Environmental Assessment.

5.4 Alternative 4 was not selected because upgrading the offshore breakwater would have minimal impact on providing protection from high lake levels and wave overtopping. Additionally, extension of the offshore breakwater northward likely is outside the existing project authority. Therefore, this option is not considered further.

5.5 Alternative 5 was not selected because it is less desirable in that it would not match the City's existing shoreline protection (revetment with reinforced concrete T-wall and walkway). Additionally, the SSP would increase costs, would increase wave energy by reflecting it away from the shore instead of absorbing it, would be less aesthetically

appealing, and would be more complicated to tie into the adjacent City revetment. Therefore, this option is not considered further.

5.6 The proposed activities may require temporary access, staging areas, and/or construction of one or more temporary structures in the uplands. The type and location of temporary structures and/or staging sites cannot be determined at this time, since they would be incidental to the work being performed. Examples include turnarounds, work and storage areas, access roads, and office facilities. Temporary structures or staging sites would be at approved locations within project boundaries or rights-of-way, and would be located outside of any wetlands, areas containing federally protected species and their critical habitat, and properties listed on or eligible for listing on the National Register of Historic Places. Some variation from the project as described may occur with respect to the sequence of activities, method of operation, or design details as a result of unanticipated design improvements, site conditions, or cost-saving measures. Such variations would not result in significant changes to either the overall project design or environmental effect, without further evaluation under the National Environmental Policy Act (NEPA).

6.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

6.1 The environmental evaluation identifies and analyzes the type and magnitude of anticipated impacts associated with implementing the proposed project/recommended plan. The anticipated impacts are outlined in Table 1.

6.2 Physical Setting – The City of Duluth is the second largest city in Minnesota and the largest city on Lake Superior. The large metropolitan area hugs the Lake Superior shoreline and covers approximately 88 acres of land. The St. Louis River runs along the northeastern border of Duluth and separates the city from its neighboring city, Superior, in Wisconsin. Along the river is many industrial buildings and docks near the mouth and further upstream is more residential housing before turning into forests and wetlands further upstream.

6.3 Weather – In Duluth, the summers are comfortable; the winters are freezing, snowy, and windy; and it is partly cloudy year-round. Over the course of the year, the temperature typically varies from 7°F to 78°F and is rarely below -15°F or above 88°F. Weather does not appreciably change with project implementation. The project will not affect weather.

6.4 Land Use – Duluth, Minnesota, is a mix of heavy residential, industrial, and commercial use along the St. Louis River and Lake Superior Shorelines. The southwestern edge of the city is more forested and less densely populated. Along the river is many industrial buildings and docks near the mouth which opens to a large, protected bay. Minnesota Point and Superior Point is a thin sliver of land which spans the width of the bay with openings at Duluth Ship Canal and Duluth-Superior Ship Canal. Further upstream is more residential housing before turning into forests and wetlands further upstream.

6.5 Topography and Soils – Duluth is a developed city within significant infrastructure along the lake and river edges. The proposed action area along the shoreline is composed of sandy sediment and rock revetment. Soils in the park area are comprised of fill material built up to create the land mass in the Duluth Canal Park. Some soil will be excavated from the area, but overall, the impacts to soils are expected to be minimal.

6.6 Air Quality – The proposed project will have minor short-term impacts from diesel exhaust during construction but no long-term impacts that would affect air quality. Construction impacts to air quality are considered short term.

6.7 Aquatic Habitat and Fish – The construction activity is a disturbance that fish avoid by temporarily seeking other habitat, of which there is an abundance along the nearby breakwater and the North and South Piers. As the work is only occurring along a small section of shoreline, impacts to fish and aquatic habitat are negligible and temporary during construction. Benthos that may be present would be destroyed in the immediate work area, but post construction habitat along the repaired shoreline sections would be similar to the existing habitat and would be recolonized by benthic organisms over time.

Negligible impacts would be expected to the Fitger's Reef Refuge as the project would be localized to a small corner at the opposite end of the refuge and sufficiently distanced from the spawning that occurs at the reef and in Chester Creek. Further, best management practices would be implemented to reduce increases in turbidity.

Work exclusion dates from October 1 to May 30 would be observed or waiver of that work exclusion would be obtained from the Minnesota Department of Natural Resources fishery division to avoid potential impacts to the Fitger's Reef Refuge during the fall spawning season in Lake Superior.

6.8 Clean Water and Water Quality – The water quality of the Lake Superior is largely clean with low turbidity and oligotrophic. The shoreline rehabilitation will have minimal short-term impact on turbidity levels which will have a minor impact on the water quality locally. The project includes work within waters of the U.S. and a Section 404(b)(1) evaluation is attached to this EA (Appendix A). A Clean Water Act Section 401 water quality certification from the Minnesota Pollution Control Agency (MPCA) is being pursued.

6.9 Climate Change – Global climate change is expected to lead to six major types of (physical) changes in the Great Lakes basin: (1) increased annual averages in air and surface water temperatures (with greater extremes in hottest temperatures), (2) increased duration of the stratified (thermocline) period, (3) changes in the direction and strength of wind and water currents, (4) flashier precipitation (increases in the intensity of storms and drier periods in between) and river flows, (5) greater variation in annual ice cover/greater water surface evaporation/larger lake effect snow events, and (6) greater variations in lake levels. The shoreline rehabilitation will not impact the above possible changes and therefor will not affect climate change. The impacts from

conducting the proposed work on any measurable climate change criteria are considered insignificant.

6.10 Coastal Zone Management – Pursuant to the Coastal Zone Management Act of 1972, the USACE determined that implementing the proposed project would be undertaken consistent to the maximum extent practicable with the State of Minnesota's Coastal Zone Management Plan. The USACE provided its federal consistency determination, pursuant to the Coastal Zone Management Act to the MPCA Federal Consistency Coordinator on December 1, 2022. Concurrence is presumed as a response was not received by the USACE within 60 days, and no extension was requested, as applicable pursuant to 15 CFR 940.41. The State Federal consistency coordinator was notified of the presumed concurrence on February 28, 2023. The shoreline rehabilitation project is not within a designated Coastal Barrier as designated under the Coastal Barrier Resources Act (CBRA) of 1982.

6.11 Contaminants – Construction of the riprap revetment would have no significant impact on contaminant levels in the water, bottom substrate, or area shoreline. Sediment excavated/dredge from the shoreline is generally of a sandy nature and not likely to be contaminated. There are no known sites of contamination in the vicinity of the shoreline repairs and contaminated sediments are not anticipated at the work area, which is supported by a 2019 geotechnical exploration report from the adjacent shoreline prior the city rebuilding their revetment which showed no chemicals of concern in the area (American Engineering Testing, Inc.). The stone material required for the proposed project can be defined as naturally occurring inert material and is required to be free of soil and other foreign materials. Therefore, the use of purchased stone and stone recovered on-site would not be expected to cause any contamination problems. No changes in any background levels of toxic metals, organic, or pathogenic organisms would be anticipated in the vicinity of the Duluth Ship Canal.

6.12 Cultural Resources – Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, USACE determined that the recommended plan has no adverse effect on historic properties. The State Historic Preservation Office concurred with this determination on January 19, 2023. Seventeen federally recognized Tribes were asked for comments regarding the plan on September 9, 2022, and no comments were received. Under Section 106, a public notice was published on March 7, 2023, with no comments received.

6.13 Exotic and Invasive Species – The proposed repairs would not promote invasive species relative to existing conditions, and project specifications include clauses for equipment cleaning pre- and post-construction to ensure no transmission of exotic species during equipment mobilization/demobilization.

6.14 Farmlands – The Farmland Protection Policy Act (FPPA) is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. The work site contains no farmlands and therefore the project would have no effect on farmlands.

6.15 Federally Listed Threatened and Endangered Species – Pursuant to Section 7 of the Endangered Species Act of 1973 (ESA), as amended, the USACE has determined that the proposed work will have no effect on the six (6) federally listed threatened, endangered, and proposed species or their designated critical habitat potentially present in the project area (USFWS species list, March 1, 2023): Canada lynx (threatened), gray wolf (threatened), piping plover (endangered), red knot (threatened), northern long-eared bat (endangered as of March 31, 2023), and tricolored bat (proposed endangered). The Federal determination of no effect for all six species is based on lack of habitat for any of these species in the project site vicinity. A Consistency Letter, dated March 1, 2023, was generated using a Determination Key (D-key) in the USFWS Information for Planning and Consulting (IPaC) web tool. The Consistency Letter supports the USACE no effect determination for five of the six species. Currently, IPaC has a separate D-key for northern long-eared bat (NLEB). Evaluation of the NLEB D-key resulted in a determination of no effect for NLEB documented in a March 22, 2023, Consistency Letter, which supports the USACE no effect determination for that species.

6.16 Floodplain and Hydrology – The proposed action complies with the Federal Executive Order on Flood Plain Management (E.O. 11988) because the proposed project would not impact flood stages, would not encourage floodplain development, nor have an effect on the floodplain. Construction has minimal impacts to hydrology in the area.

6.17 Groundwater and Drinking Water Supply – Duluth residents receive their water from Lake Superior from a plant located just north of the city. No drinking water intakes are in the immediate work area. The shoreline rehabilitation project will have no effect on the groundwater or on drinking water intakes or supply.

6.18 Health and Safety – Construction will be conducted consistent with state health and safety requirements. The project will not impact the health and safety of the surrounding neighboring areas.

6.19 Noise and Traffic – Temporary and minor noise would occur from the presence and operation of heavy machinery on land including trucks hauling materials to and from the work site. Construction activities will comply with local noise requirements. Any traffic disruptions, if required, would be temporary and short-term during the construction period. Impacts from construction are considered minimal and insignificant.

6.20 Recreation – The work would cause a minor disturbance to pedestrians and park users during construction. Post- construction would have a benefit as debris brought by overtopping wave action would be reduced allowing for consistent use of the park sidewalks.

6.21 Social Setting/Environmental Justice – The project is located near a frequently used park, but not within an area that would be considered socially disadvantaged.

Impacts from the proposed work are expected to be minimal and small in scope and would not be expected to have any environmental justice impacts.

6.22 Wetlands – The proposed project is not located in or will impact wetlands.

6.23 Wildlife Habitat and Wildlife – The proposed work areas are located on the shoreline of Lake Superior. The proposed construction noise and activity will temporarily displace urban birds and small mammals, but the impacts are considered short-term, minimal, and insignificant.

6.24 Cumulative Impacts – The proposed work will have an insignificant measurable impact on the environment. Implementation of this project is not anticipated to cause any significant short term, long term or cumulative impacts to Lake Superior, Duluth, Minnesota, or the surrounding vicinity.

6.25 The summary of potential effects is found in Table 1.

Table 1: Summary of Potential Effects of the Recommended Plan

	Minimal and Insignificant effects	Insignificant effects as a result of mitigation	Resource unaffected by action
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquatic Habitat, Fisheries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clean Water Act Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate Change	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coastal Zone Management Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Contaminant Consideration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exotic/Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Federally Listed Species (T&E)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groundwater/Drinking Water	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Health and Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Topography and Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic, Noise, and Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Social Setting/Environmental Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wildlife/Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7.0 STATE AND FEDERAL AGENCY COORDINATION

7.1 An early coordination letter was sent out on August 31, 2022, to State and Federal Agencies with jurisdiction in the project area. The MPCA responded by email dated October 6, 2022, stating they had no comments or concern with the project. The USFWS responded by email dated October 6, 2022, stating that they had no comments or concerns with the project. The USEPA did not respond to the early coordination.

8.0 MAJOR FINDINGS AND CONCLUSIONS

8.1 The proposed project has been reviewed pursuant to the following Acts and Executive Orders: Fish and Wildlife Act of 1956; Fish and Wildlife Coordination Act of 1958; National Historic Preservation Act of 1966; National Environmental Policy Act of 1969; the Council on Environmental Quality, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508); the Corps of Engineers, Policy and Procedure for Implementing NEPA (33 CFR Part 230); Clean Air Act of 1970; Executive Order 11593, Protection and Enhancement of the Cultural Environment, May 1971; Coastal Zone Management Act of 1972; Endangered Species Act of 1973; Clean Water Act of 1977; Coastal Barrier Resources Act (CBRA) of 1982; Executive Order 11988; Flood Plain Management , May 1977; Executive Order 11990, Wetland Protection, May 1977; Executive Order 12898, Environmental Justice, February 1994; Executive Order 13653, Preparing the United States for the Impacts of Climate Change, November 2013.

8.2 This Environmental Assessment (EA) evaluation concludes that the proposed project is in compliance with the acts and executive orders listed above. The USACE's preliminary environmental analysis indicates that implementing the recommended plan would not result in significant cumulative or long-term adverse environmental effects. The project would cause no or insignificant minor adverse impacts to natural resources, would not adversely impact navigation, water quality, cultural/historic resources, federally listed endangered or threatened species and their habitat, nor be injurious to the public interest. Adverse effects would be minor, limited primarily to short-term noise impacts, disruption of recreational users access to Canal Park, and air emissions from construction equipment operation, and minor short-term turbidity increase around the project area.

9.0 PUBLIC REVIEW

9.1 Electronic copies of this EA are being made available to federal, state, and local agencies, Tribes, stakeholders, interested groups, and individuals. The USACE is soliciting comments from the public to consider and evaluate the impacts of the proposed activity for a 30-day review and comment period. Any person who has a concern/interest or has historical/cultural interests that may be affected by the proposed project may submit written comments within the comment period of this notice. Comments must clearly set forth what interest may be affected by the proposed activity and how the action significantly affects the quality of the human environment. If no comments are received by the end of the thirty (30) day review period, it will be assumed that no comments are forthcoming. Comments need to be submitted by email to: Duluth-publicnoticecomments@usace.army.mil and refer to file DSC2023-001. All comments received will be taken under consideration, as applicable.

9.2 Following the comment period and a review of the comments received, the USACE Detroit District Engineer will make a final decision regarding the necessity of preparing an Environmental Impact Statement (EIS) for the proposed project. Based on the preliminary conclusions of the EA and 404(b)(1) Evaluation, early coordination with other Federal and State agencies and Tribes, it appears that implementing the tentative recommended plan would not significantly affect the quality of the human environment. Therefore, preparation of an EIS is tentatively not required. As such, a preliminary Statement of Findings/Finding of No Significant Impact is included in the EA.

10.0 REFERENCES:

Environmental Protection Agency. *Air Data: Air Quality Data Collected at Outdoor Monitors Across the US*. <https://www.epa.gov/outdoor-air-quality-data>. Accessed February 16, 2023.

Fish and Wildlife Service. *IPaC: Information for Planning and Consultation*. <https://ipac.ecosphere.fws.gov/>. Accessed January 6, 2023.

Appendix A

Clean Water Act Section 404(b)(1) Evaluation

CLEAN WATER ACT, SECTION 404(b)(1) EVALUATION
Of the Effects of Placing Fill Material into the Waters of the United States
Rehabilitation of Shore Protection Duluth Project Office
City of Duluth, St. Louis County, Minnesota

I. PROJECT DESCRIPTION

A. Location and Description. Duluth, Minnesota is located near the mouth of the St. Louis River where it meets the western end of Lake Superior. The Duluth Ship Canal is part of the Duluth-Superior Harbor, which is between Duluth, Minnesota, to the north, and Superior, Wisconsin, to the south. The Ship Canal is adjacent to the USACE DUPO, Lake Superior Maritime Visitor Center, and Canal Park grounds (Figure 1). The Detroit District, USACE, maintains the DUPO which has responsibilities to USACE projects along Lake Superior, in Minnesota and parts of Michigan's Upper Peninsula. The Lake Superior Maritime Visitor Center, which is operated by the DUPO, receives 500,000 visitors a year and the park where work will be conducted receives an approximately 2 million visitors per year.

B. Authority and Purpose. The proposed work will be conducted under USACE maintenance authority for the Duluth-Superior Federal Navigation Project which is authorized by the Rivers and Harbors Act of 3 June 1896. The proposed work includes excavation and discharge of rock for reconstruction of a riprap revetment that protects the DUPO/visitor center grounds and ultimately the entire facility, including the Ship Canal north breakwater and revetment.

C. Proposed Work. The U.S. Army Corps of Engineers (USACE), Detroit District, proposed action involves reconstruction of the riprap shoreline protection along the Duluth Ship Canal property immediately north of the ship canal and extending along the shore for approximately 200 feet. Part of the reconstruction work is below the Ordinary High Water Mark (OHWM) of Lake Superior (elevation of 603.1 feet IGLD 1985). Associated upland work includes installation of a T-wall along the length of the revetment that connects to the City of Duluth's T-wall, replacement of the existing sidewalk and reconstructing two existing storm drains. The selected alternative would also tie into the adjacent Lake Walk Trail and revetment, recently reconstructed by the City of Duluth. The proposed reconstruction of the riprap shoreline protection is necessary to prevent further degradation of the existing revetment, minimize overtopping during storm events, and prevent debris from blocking the storm water drains. The proposed action is authorized as part of the Duluth-Superior Harbor authority (Rivers & Harbors Act of 3 Jun 1896).

D. Proposed Fill Material

(1) Characteristics of Material. Existing stone riprap will be moved into Lake Superior to allow preparation of the shoreline for the revetment reconstruction work and then put back in place as part of the new revetment. Unsuitable material would be hauled off site for proper disposal. Shoreline protection will include the addition

of appropriately sized stone riprap, large toe stone, smaller sized underlayment stone, and bedding stone. Upland work will include steel sheet piling (SSP) driven into the ground to form a wall at the back side of the revetment crest and, behind the wall, backfill and concrete for the sidewalk.

(2) Quantity and Source of Material. The proposed work will include placement of rock riprap along the shoreline to restore the former revetment to withstand the forces of Lake Superior. The updated revetment will generally follow the footprint of the original shore protection and will include stone to accommodate the improved crest height. The replacement revetment will include approximately 1,800 cubic yards of large stone, 370 cubic yards of bedding stone, and 370 cubic yards of toestone below the Ordinary High Water Mark elevation of 603.1ft IGLD 1985. Material will be obtained from an upland clean source with some reuse of stone from the existing revetment.

E. Fill Site

(1) Location and Size. Repairs to the revetment will occur along the 200 feet of existing shoreline and extend no farther into the lake than the riprap discharged along the City of Duluth property located to the northwest. Some existing stone is present, but much of it has washed out from storm events resulting in a shoreline that has a large percentage of sand.

(2) Habitat Type. Shoreline protection work is located within the littoral zone of Lake Superior in a semi-protected location that is only open to the lake to the northeast because of an offshore rubble mound approximately 150 feet offshore, and the north pier of the Ship Canal to the south. The benthic habitat adjacent to the shoreline is comprised of sand, rock, with some silt, and placed armor stone for scour protection. Sand is generally not conducive to a wide variety of benthic organisms. Displaced stone, which may be recovered and re-used, and additional placed stone may provide some habitat for benthic organisms. Fish habitat exists within the Fitger's Reef Refuge which extends from Chester Creek down to the northwest pier for Duluth Ship Canal. Fish species expected to be found in the vicinity of the Duluth Ship Canal include lake and brown trout, walleye, yellow perch, rainbow/steelhead, chinook and coho salmon, and a variety of minnows.

(3) Timing and Duration of Discharge. Repair work is expected to require one construction season. Per the State of Minnesota Department of Natural Resources, no in-water work would occur from 01 October through 30 May.

F. Description of Placement Methods.

(1) The proposed shoreline protection reconstruction will be conducted by heavy equipment from land. Some operation below the OHWM will be necessary to prepare the site for the construction, but it is anticipated that no barges would be used for either materials delivery or equipment operation. Removal of the existing rock and excavation/dredging of sandy material will occur to establish a project slope. Suitable rock will be retained on the adjacent lakebed and reused in the project.

(2) Rock revetment and other fill material will be trucked to the site for placement. A SSP T-wall will be driven into the upland end of the revetment and the rock fill will be discharged waterward of the T-wall to create the revetment. A portion of the discharged rock fill will be waterward of the OHWM of Lake Superior. All stone will be discharged in a controlled manner.

II. FACTUAL DETERMINATIONS.

A. Physical Substrate Determinations. The substrate at the proposed project site consists of mostly sand and gravel with some cobble and silt. This information is based off 1983 soil borings and supported by a 2019 geotechnical exploration report from the adjacent shoreline prior the city rebuilding their revetment (American Engineering Testing, Inc.). Existing large rock material used as shore protection is also present at the surface.

B. Water Circulation, Fluctuation, and Salinity Determinations. During the project operation, minor and localized short-term changes in water clarity, dissolved gases, and nutrient levels may occur as a result of disturbance to the bottom sediments. No significant changes in salinity, water chemistry, color, odor, or taste would be expected to occur. No measurable changes in current patterns, flow, water velocities, stratification, or hydrologic regime would be expected as the reconstructed revetment would be in the same location as the existing revetment. No specific actions would be required to minimize impacts as they are minor, localized, and short term.

C. Suspended Particulate / Turbidity Determinations. Minor increases in turbidity would be anticipated during the project from the re-suspension of bottom materials during the excavation/dredging and placement of stone fill. Because of the sandy nature of the bottom material, turbidity would settle quickly, with some minor residual cloudiness due to a fraction of finer grained material that may be present. The increased turbidity can produce negative aesthetics, decrease light penetration, and reduce dissolved oxygen in the immediate work area; however, project-induced turbidity would be similar to, but localized, in comparison to turbidity induced over the greater area by storms.

D. Contaminant Determinations. Construction of the riprap revetment would have no significant impact on contaminant levels in the water, bottom substrate, or area shoreline. Sediment excavated/dredge from the shoreline is generally of a sandy nature and not likely to be contaminated. There are no known sites of contamination in the vicinity of the shoreline repairs and contaminated sediments are not anticipated at the work area, which is supported by a 2019 geotechnical exploration report from the adjacent shoreline prior the city rebuilding their revetment which showed no chemicals of concern in the area (American Engineering Testing, Inc.). The stone material required for the proposed project can be defined as naturally occurring inert material and is required to be free of soil and other foreign materials. Therefore, the

use of purchased stone and stone recovered on-site would not be expected to cause any contamination problems. No changes in any background levels of toxic metals, organic, or pathogenic organisms would be anticipated in the vicinity of the Duluth Ship Canal.

E. Aquatic Ecosystem and Organism Determinations. The construction activity is a disturbance that fish avoid by temporarily seeking other habitat, of which there is an abundance along the nearby breakwater and the North and South Piers. As the work is only occurring along a small section of shoreline, impacts to fish and aquatic habitat are negligible and temporary during construction. Benthos that may be present would be destroyed in the immediate work area, but post construction habitat along the repaired shoreline sections would be similar to the existing habitat and would be recolonized by benthic organisms over time.

Negligible impacts would be expected to the Fitger's Reef Refuge as the project would be localized to a small corner at the opposite end of the refuge and sufficiently distanced from the spawning that occurs at the reef and in Chester Creek. Further, best management practices would be implemented to reduce increases in turbidity.

No impacts would be expected to occur on other special aquatic sites such as sanctuaries, wetlands, mud flats, vegetated shallows, coral reefs, or riffle and pool complexes, as they do not exist in the project area. Impacts to the biota from the temporary changes in the suspended solid levels would be localized and, since the area does not provide significant habitat or special species, these impacts would be negligible. Impacts to wildlife, in general, would be negligible. No special actions are required to minimize impacts to the aquatic ecosystem during this project. The project would not significantly add or detract from overall habitat value in the project vicinity.

F. Federally Listed Species. No impacts are expected to Federally listed Threatened and Endangered Species nor their designated critical habitat (see Section III.C. below).

G. Proposed Disposal Site Determination. Because of the sandy nature of the lake bottom in the project site, and the partially protected location of the site, the mixing zone is expected to be the immediate vicinity of the construction. No significant impacts on municipal or private water supplies, recreational or commercial fisheries, water-related recreation, aesthetics, parks, national and historic monuments, national seashores, wilderness areas research sites, or similar preserves, would be expected.

H. Determination of Cumulative Effects on the Aquatic Ecosystem. The proposed repairs are a small area of the entire ship canal and pier complex. No cumulative adverse effects on the aquatic ecosystem would be anticipated. The proposed repairs, past repairs, and potential future repairs in other breakwater and revetment sections have negligible cumulative effects as they are spaced out by

decades in time. The main impacts of any of the repairs is temporary turbidity and temporary disruption of habitat in the specific work areas, which because they are temporally limited, are not cumulative in nature. The main cumulative effect is that the restored and improved revetment will reduce erosion of and debris deposition into the parkland and prevent that material from entering the storm sewer system.

III. FINDINGS OF COMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE.

A. Adaptation of the Section 404(b)(1) Guidelines to this Evaluation. No significant adaptations of the guidelines were made relative to this evaluation.

B. Evaluation of Alternatives. Alternatives to the proposed action of repairing the existing revetment through discharge of additional riprap include: (1) Repair existing revetment as originally constructed, (2) Repair and extend offshore breakwater farther northwest, and (3) Use steel sheet pile wall to shore up revetment. The selected alternative of repairing the existing revetment and discharging additional riprap represents an economically, structurally, and environmentally sound method of repair while allowing for the continued protection of the USACE facility and Ship Canal.

C. Compliance with State Water Quality Standards. The project is under review by the State of Minnesota for compliance with State water quality standards. Construction would not commence until the State certifies, or waives, compliance with State water quality standards.

D. Compliance with Applicable Toxic Effluent Standard or Prohibition Under Section 307 of the Clean Water Act (CWA). Since the fill materials are uncontaminated, placement would not be in violation of the Toxic Effluent Standards of Section 307 of the CWA.

E. Compliance with the Endangered Species Act (ESA) of 1973. Pursuant to Section 7 of the Endangered Species Act of 1973 (ESA), as amended, the USACE has determined that the proposed work will have no effect on the six (6) federally listed threatened, endangered, and proposed species or their designated critical habitat potentially present in the project area (USFWS species list, March 1, 2023): Canada lynx (threatened), gray wolf (threatened), piping plover (endangered), red knot (threatened), northern long-eared bat (endangered as of March 31, 2023), and tricolored bat (proposed endangered). The Federal determination of no effect for all six species is based on lack of habitat for any of these species in the project site vicinity. A Consistency Letter, dated March 1, 2023, was generated using a Determination Key (D-key) in the USFWS Information for Planning and Consulting (IPaC) web tool. The Consistency Letter supports the USACE no effect determination for five of the six species. Currently, IPaC has a separate D-key for northern long-eared bat (NLEB). Evaluation of the NLEB D-key resulted in a determination of no effect for NLEB documented in a March 22, 2023, Consistency Letter, which supports the USACE no effect determination for that species.

F. Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection Restoration and Sanctuary Act of 1972. The proposed project would be in compliance with the subject act as no designated sanctuaries exist within the project vicinity.

G. Evaluation of Extent Waters of the United States would be Degraded. The proposed fill placement would not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreational and commercial fishing, plankton, fish, shellfish, wildlife, and special aquatic sites. Life stages of aquatic or other wildlife species would not be adversely affected outside of the immediate work area where a limited number of benthic organisms that may be present would be destroyed by the work. This represents a minor area of the Lake Superior Shoreline. No significant adverse effects to the aquatic ecosystem in the areas of diversity, productivity, stability, recreation, aesthetic, and economic values would occur.

H. Appropriate and Practicable Steps taken to Minimize Potential Adverse Impacts of the Discharge on Aquatic Ecosystem. Appropriate steps taken to minimize the adverse effects on the aquatic ecosystem at the proposed site include the use of suitable fill materials and coordination with the State of Minnesota for compliance with State water quality standards and for consistency with State coastal policies. Construction methods will include measures to limit generation of turbidity, such as placing stone mechanically instead of dropping stone, which would result in greater sediment disturbances. Work exclusion dates from October 1 to May 30 would be observed or waiver of that work exclusion would be obtained from the Minnesota Department of Natural Resources fishery division to avoid potential impacts to the Fitger's Reef Refuge during the fall spawning season in Lake Superior.

I. Compliance with Section 404(b)(1) Guidelines. On the basis of the "Guidelines for Specification of Disposal Sites for Dredged or Fill Material" (40 CFR part 230), it has been determined that the proposed fill activity is in compliance with Section 404 of the 1977 Clean Water Act.

Appendix B

Figures and Plans

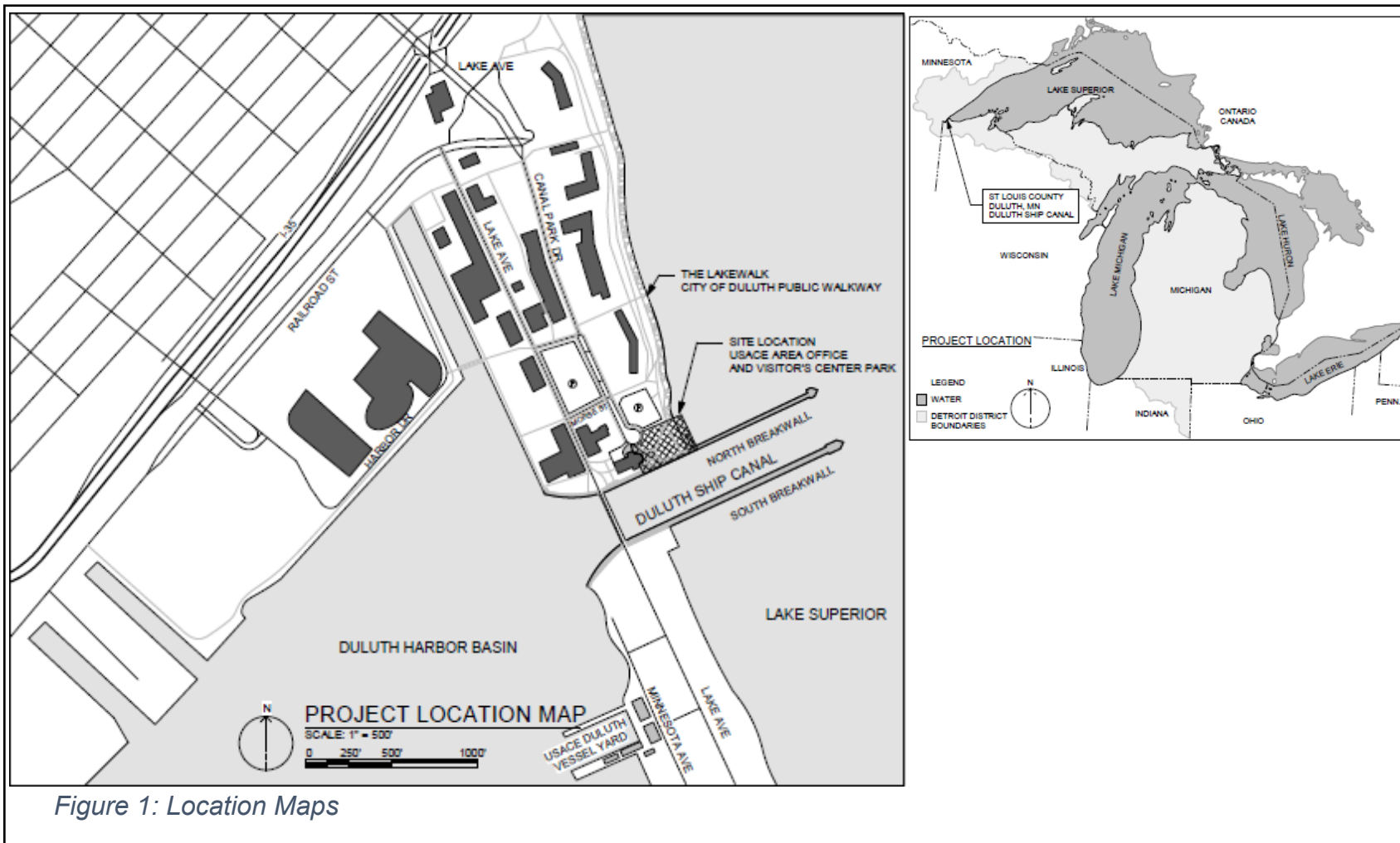


Figure 1: Location Maps

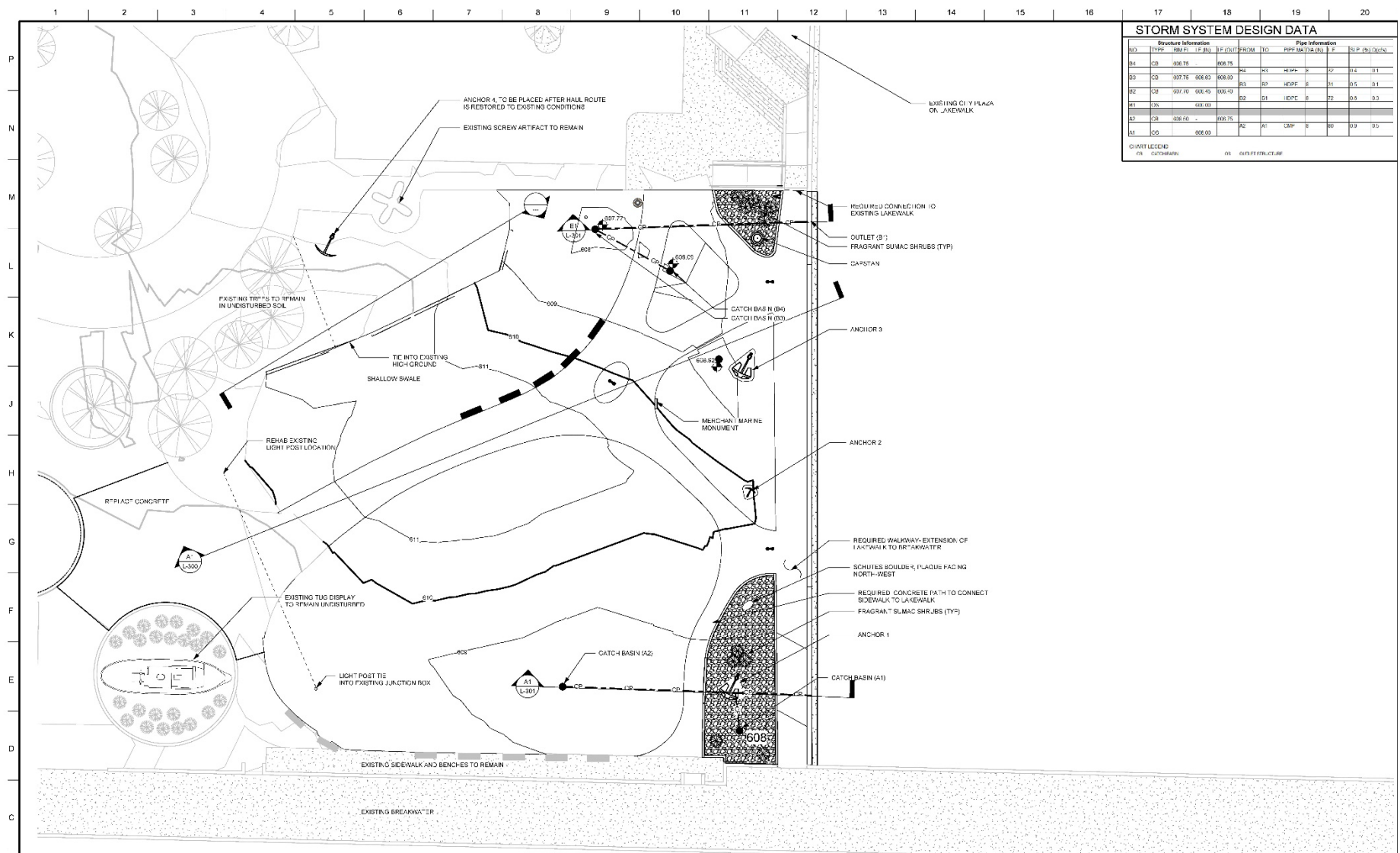


Figure 2: Landscape Planview drawing.



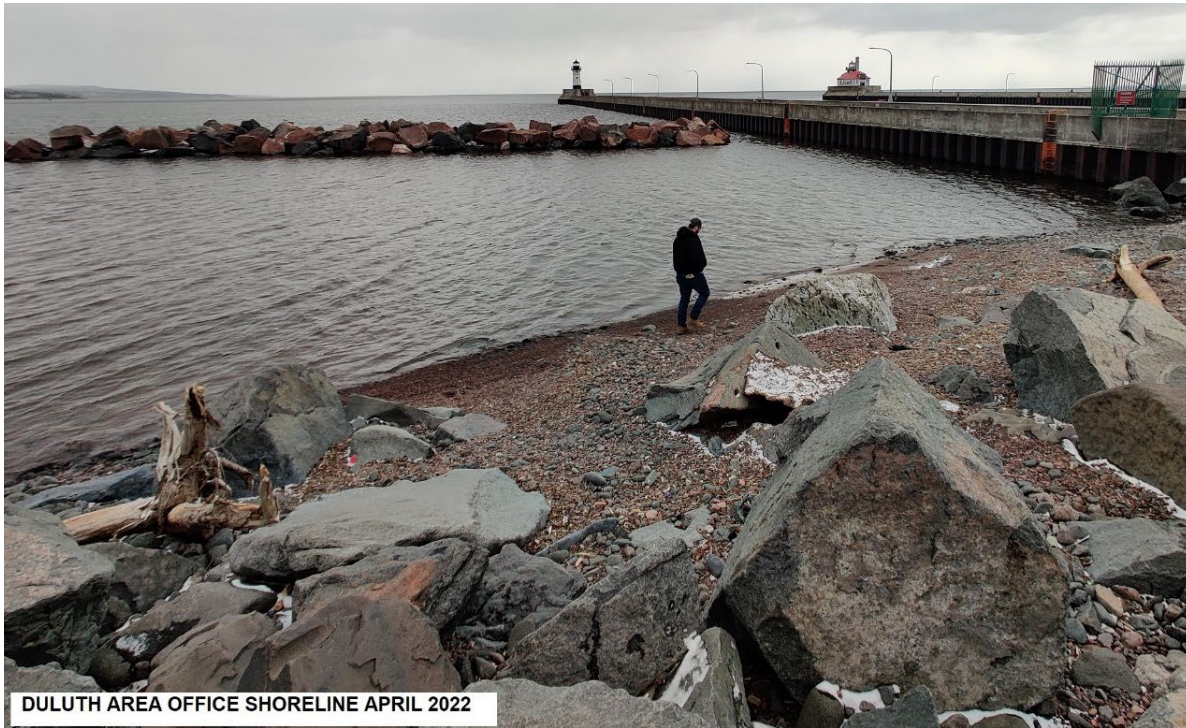


Figure 5: Photos illustrating current conditions at the Duluth Project Office and impacts of storm events on the shoreline and park.