



US Army Corps
of Engineers

Detroit District

Public Notice

Applicant: City of Traverse City

In Reply Refer To: Corps File No. LRE-2018-00546-56-S18

Date: November 27, 2019

Expires: December 17, 2019

**PROPOSED BOARDWALK, KAYAK LAUNCH, DAM REMOVAL, DREDGING,
DISCHARGES OF FILL AND RIPRAP FOR THE RECONSTRUCTION OF A NEW
SPILLWAY-DAM, AND A NATURAL BYPASS CHANNEL WITH A FISHPASS
FACILITY IN THE BOARDMAN RIVER, AT TRAVERSE CITY, MICHIGAN**

Applicant: City of Traverse City
c/o Timothy Lodge, City Engineer
400 Boardman Avenue
Traverse City, Michigan 49684

Project Location: The site is located in the Boardman River, between Union Street and Cass Street at the Union Street Dam Park, in Traverse City, Grand Traverse County, Michigan, 49684 (Section 03, Township 27 N, Range 11 W).

Federal Authority: The applicant has applied for a Department of the Army permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

State Authority: Section 401 of the Clean Water Act requires that all discharges of dredged or fill material must be certified by the State as complying with applicable effluent limitations and water quality standards. Coastal Zone Management Certification (or waiver thereof) is required from the State of Michigan if this proposed activity would occur within the designated coastal zone.

Project Description: As shown on the attached plans, the applicant proposes to mechanically dredge/excavate approximately 6,935 cubic yards of materials, discharge a total of 15,362 cubic yards of fill, and 1,096 cubic yards of riprap, and conduct work and grading activities in areas landward and waterward of the Ordinary High Water Mark (OHWM) of 582.0 (IGLD 85) of the Boardman River to facilitate the removal and replacement of the existing Union Street Dam by constructing a new multifaceted dam structure with a Selective Bi-directional Fish Passage facility (FishPass). The project would also include the construction of public and recreational amenities along the waterfront such as Americans with Disabilities Act (ADA) compliant boardwalks, fishing platforms, kayak portage and launch sites, a pedestrian bridge, parking areas, an amphitheater, and a two story research facility with public restrooms.

Work proposed within the Boardman River would be conducted in three phases. A total of approximately 825 feet of temporary steel sheet piling for cofferdams and cut-off walls would be installed to facilitate the in-stream construction activities during two phases of construction. This would include a common center sheet pile wall 530 feet long utilized to direct river flow to either the south or north side of the river channel so construction could occur in dry or non-flowing conditions. The sheet piling would be removed and reinstalled as necessary to facilitate dewatering operations and to provide for bypass pumping or routing of any existing stormwater outlets that are within the sheet pile and cofferdam areas.

The following table summarizes the total dredging/excavation of earthen areas and fill impacts associated with the project (Sheets 10-12):

Impact Area	Impact	Max Length (ft.)	Average Width (ft)	Approx. Impact Area (sq. ft.)	Average Depth (ft.)	Calculated Volume from Dimensions (CYD)
A	Cut	184	9	1,656	2	123
B	Cut	93	20	1,860	2	138
C	Fill	374	106	39,644	1.65	2,423
D	Cut	342	95	32,490	5.1	6,137
E	Cut	43	11	473	4	70
F	Fill	287	83	23,821	4.5	3,970
G	Fill	295	205	60,475	4	8,959
H	Fill	45	6	270	1	10
I	Cut	110	13	1,430	1	53
J	Cut	57	19	1,083	3	120
K	Cut	49	27	1,323	6	294
			Total Cut = 40,315 (sq. ft.)		Total Cut = 6,935 (CYD)	
			Total Fill = 124,210 (sq. ft.)		Total Fill =15,362 (CYD)	

A summary of the temporary construction measures, proposed project details and specifications are described below:

Phase 1 (South Side) – Construct a temporary sheet pile cofferdam to isolate the southern portion of the river channel from active river flow. Complete dewatering operations as necessary within the sheet pile area. During this phase, all river flow would be diverted through the existing Union Street Dam culverts located in the northern part of the earthen dam embankment (Sheet 13).

- Remove an existing boardwalk on the south shore located east of the existing dam (Sheet 8).
- Construct a new 12-inch watermain at the downstream end of the project area via horizontal directional boring under the Boardman River, a minimum depth of 10 feet below river grade (Sheets 32-33).
- Construct southerly wall of headworks at the upstream end of the channel. Construct approximately an 80 ft. long by 1.5 ft. wide Labyrinth weir, a 20 ft. long by 1.5 ft. wide low flow bypass weir and associated concrete aprons (Sheets 14, 16-19).
- Construct a temporary bypass channel approximately 450 ft. long by 82 ft. wide on the south side of the river. Place 3,069 cubic yards of temporary armor consisting of 12"-24" rock placed 3 feet thick, along the bottom of the temporary bypass channel and along the south river bank for the duration of Phase 2 (Sheet 13-14).
- Demolish existing dam features within limits of Phase 1 sheet pile including the auxiliary spillway, fish ladder, an existing water main, and two (2) existing culverts (Sheet 8).
- Begin downstream construction of the Articulated Concrete Block (ACB) entry pad at the downstream end of the project area (Sheet 20).

Phase 2 (North Side) – Realign temporary sheet pile cofferdam and cut off walls to isolate the northern river channel for construction activity. Complete dewatering operations as necessary within the sheet pile area. During this phase, the river would flow over the newly constructed low flow and labyrinth weirs and through the temporary armored bypass channel (Sheet 14).

- Demolish existing dam features within limits of Phase 2 sheet pile including the dam embankment, remaining portions of existing water main, ten (10) existing culverts and associated inlet structures (Sheet 8).
- Construct a 410 ft. long by 30 ft. wide bi-directional fish sorting channel and headwork structures (Sheets 20-21).

- Install gates at headworks and downward tilting gates at the downstream end of the fish sorting channel (Sheet 21).

Phase 3

- Remove all temporary sheet piling and excess armor rock from the bottom of the temporary bypass channel (Sheet 15).
- Utilize bulk bag cofferdams and temporary diversions (i.e., temporary sheet pile, concrete jersey barriers, etc.) to complete construction of north and south banks of the naturalized bypass channel and the downstream control weir. (At this time, the fish sorting channel is opened to flow to pass as much river flow through the fish sorting channel so the bypass channel improvements can be constructed under minimal flow).
- Complete construction of the downstream ACB entry pad measuring 50 ft. long by 90 ft. wide (upstream) and 50 ft. wide (downstream) with a trapezoidal footprint to facilitate uniform entry to both the fish sorting channels and the naturalized bypass channel. Install anchorages extending from the ACB entry pad to be used for research equipment to (Sheets 20 & 22).
- Place a 40 ft. long woody-habitat structure (i.e., log jam) along the north bank of the bypass channel (Sheets 20 & 26).
- Discharge a total of 400 cubic yards of mixed diameter rock and habitat boulders in two (2) areas within the naturalized bypass channel measuring 80 ft. long by 40 ft. wide for stream habitat (i.e., riffles)(Sheet 20).
- Place riprap with live stake plantings along the north and south banks of the natural bypass channel, and riprap around the labyrinth weir for erosion protection. The following table summarizes the location and dimensions of proposed riprap/vegetated riprap areas (Sheets 23-25):

Rip Rap Area	Length	Width	Depth	CYD
1	318	12	1	283
2	365	17.5	2	473
3	59	7	2	31
4	87	16	6	309
Total				CYD = 1,096

A summary of proposed recreational amenities and park improvements to be constructed within the Boardman River are described below:

- Construct a kayak landing/launch area along the south bank just north of the proposed pedestrian bridge, comprised of precast concrete slabs and backfilled with compacted washed gravel. The placement of 22 cubic yards of rock/riprap would impact a 60 ft. long by 5 ft. wide by 2 ft. deep area below the OHWM (Sheets 20 & 27).
- At the downstream end of the FishPass, proceeding west under the Union Street Bridge, construct a 159 ft. long open-pile boardwalk extending 8 feet waterward from the bridge wall/abutment (Sheets 22 & 30).
- In connection with the boardwalk, construct an approximate 60 ft. long open-pile platform deck extending waterward from the concrete walk abutment, and measuring 19 feet wide at the west end, tapering to a width of 8.7 feet at the east end. The platform shall include an open-pile 9.5 foot wide fishing pier extending a maximum of 10.8 feet waterward as measured from the corner abutment at the east end of the structure (Sheets 28-29 & 31).
- Seasonally install and remove an ADA accessible kayak launch extending waterward from the platform deck. The kayak launch would consist of a 15 ft. by 4.3 ft. launch ramp centered between two (2) 13 ft. long by 7 ft. wide finger docks (one on each side) extending from a 19 ft. by 7 ft. dock. A 25 ft. long by 5 ft. wide aluminum gangway would be installed between the floating dock/kayak launch and the fishing pier (Sheets 28-29).
- Install and/or extend a total of two (2) stormwater outfalls to the Boardman River consisting of one (1) 12-inch diameter pipe (invert elevation 581.5 feet) and one (1) 15-inch diameter pipe (invert elevation 580.0 feet) at the downstream end of the project. Discharge 4 cubic yards of associated riprap protection at each outlet (Sheets 34-35).

Upon completion of the project, the naturalized bypass channel would have a total length of approximately 547 feet, an average width of 67 feet (Sheet 36-38), and an in-stream artificial 410 ft. long by 30 ft. wide bi-directional fish sorting channel. A total volume of 13,543 cubic yards of fill material would be discharged below the OHWM, converting approximately 0.8 acres of waters to uplands (Sheet 9). No drawdown of Boardman Lake or wetland impacts are proposed. The purpose of the project is to replace the aging Union Street Dam and reconstruct a new dam designed with a research facility replicating a natural stream channel and featuring a fish-sorting channel to develop and integrate various fish sorting technology and techniques, to provide up- and down-stream passage of desirable fishes while simultaneously blocking and/or removing undesirable fishes (i.e., sea lamprey).

Avoidance & Minimization: “Alternative locations and configurations were considered. Twelve sites were considered during the decision analysis, ultimately the Union Street Dam was identified for FishPass because of the needs identified by the Boardman River Implementation Team (IT) as a critical site for Sea Lamprey Control. Additionally, three alternative configurations were considered:

- Alternative 1: No Action;
- Alternative 2: Arced Labyrinth Weir or Broad Crested Weir on North Bank and Experimental Channels on South Bank; and
- Alternative 3: Arced Labyrinth or Broad Crested Weir on South Bank and Experimental Channels on North Bank.

Three workshops were held in 2016-2018 with the City of Traverse City, Great Lakes Fish Commission, Engineers and the general public to review these alternatives. Alternative 3 was selected based on property ownership, input from citizens, site access for construction, ability to pass design flood events and consistency with the Traverse City Master Plan. The arced labyrinth weir was selected because it minimizes the project’s footprint while meeting discharge requirements.”
The Corps has not verified the adequacy of the applicant’s avoidance and minimization statement at this time.

Compensatory Mitigation: The applicant has not offered compensatory mitigation for unavoidable impacts to waters of the United States.
The Corps has not determined whether mitigation will be required at this time.

Other Authorizations: A permit is required from the Michigan Department of Environment, Great Lakes and Energy (EGLE) under applicable provisions of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451.) The State file identifier is 28-UNION STREET DAM PARK, RIVERS EDGE DR – TRAVERSE CITY.

Comments: We are publishing this notice in compliance with Title 33 Code of Federal Regulations Parts 320-332. Comments on the project should be submitted in writing and postmarked or delivered by the expiration date of this public notice. Comments of a positive or negative nature may be submitted. All responses must refer to file number LRE-2018-00546-56-S18. We will interpret a lack of response as meaning that there is no objection to the permit application. Comments should be filed with:

Kerrie E. Kuhne
Chief, Permit Evaluation Western Branch
Regulatory Office
Corps of Engineers, Detroit District
477 Michigan Avenue
Detroit, Michigan 48226-2550

Comments may be e-mailed to: Kristi.M.DeFoe@usace.army.mil, but must include a name and mailing address.

Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

Evaluation: The decision whether to issue the Department of the Army permit will be based on evaluation of the probable impacts of the proposed activity on the public interest. That decision will reflect the national concerns for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This activity involves the discharge of dredged or fill material into waters of the United States. Therefore, the U.S. Army Corps of Engineers' evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator of the Federal Environmental Protection Agency, under the authority of Section 404(b)(1) of the Clean Water Act.

Endangered Species: We will review this application for the potential impact on threatened or endangered species pursuant to Section 7 of the Endangered Species Act as amended. The project site is within the range of the Federally threatened Northern long-eared bat (*Myotis septentrionalis*). We are not aware of the presence of

any other listed species or critical habitat at or in the vicinity of the proposed worksite. We invite information and/or comments regarding the potential presence of, or impacts to, any listed species or critical habitat.

Cultural Resources: The District Staff has reviewed existing information on historic properties potentially affected by the proposed project, including the National Register of Historic Places. The South Union Street – Boardman River Bridge is located at the project site and is listed in the National Register of Historic Places. The District Engineer invites responses to this public notice from federal, state and local agencies, historical and archaeological societies, Indian tribes, and other parties likely to have knowledge of or concerns with historic properties in the area.

Additional Information: This public notice and drawings are also available for viewing/printing at:
<http://www.lre.usace.army.mil/Missions/RegulatoryProgramandPermits/PublicNotices.aspx>. Questions concerning this application may be directed to Kristi DeFoe at the Corps of Engineers address listed above, or telephone number (313) 226-7718.

FOR THE DISTRICT ENGINEER:

Charles M. Simon
Chief, Regulatory Office
Engineering and Technical Services

NOTICE TO POSTMASTERS:

We request that the above notice be conspicuously and continuously posted for the time period of this notice.