MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMIT

ISSUED TO:
City of Traverse City
Attn: R. Ben Bifoss
400 Boardman Avenue
Traverse City, MI 49684

Permit No. 12-28-0011-P
Issued August 8, 2012
Extended
Revised
Expires August 8, 2014

This permit is being issued by the Michigan Department of Environmental Quality (MDEQ) under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and specifically:

☒ Part 301, Inland Lakes and Streams
☐ Part 325, Great Lakes Submerged Lands
☒ Part 303, Wetlands Protection
☒ Part 31, Floodplain/Water Resources Protection
☐ Part 315, Dam Safety
☐ Part 323, Shorelands Protection and Management
☐ Part 353, Sand Dunes Protection and Management

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Permitted Activity:

1) First phase draw down of the Brown Bridge Pond (headpond) to the elevation of approximately 784 feet North American Vertical Datum of 1988 (NAVD88) through the powerhouse turbines at a maximum rate of 0.5 feet per day.

2) Install three temporary 12-Inch culverts and temporary fill placement for the upgrade of temporary access road and for the construction of temporary access to the south and north abutments and north reservoir rim.

3) Install temporary work mats to provide crossing of low lying areas within wetlands and within the 100-year floodplain.

***Permitted Activity continued on Page 2***

Water Course Affected: Boardman R. Brown Bridge Pond
Property Location: Grand Traverse County, East Bay Township, Section 14 15
Subdivision, Lot 26N, 10W Property Tax No. 28-03-114-002-00

Authority granted by this permit is subject to the following limitations:
A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31, Water Resources Protection, of the NREPA.
C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
D. All work shall be completed in accordance with the plans and specifications submitted with the application and/or plans and specifications attached to this permit.
E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Act of 1974 and comply with each of the requirements of that Act.
G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.

I. Permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached preaddressed postcard to the office addressed thereon.

***Permitted Activity Continued***

4) Dredge approximately 3,100 cubic yards of material from the dam embankment and construct a temporary dewatering structure/cofferdam and riprap channel north of the Powerhouse per the revised plans dated July 30, 2012;

5) Second Phase draw down (permanently drawdown) of the Brown Bridge Pond to the elevation of 765 feet (NAVD88) through the temporary dewatering structure at interval rate of not more than 1 foot per day;

6) Partial Dam removal including the powerhouse demolition, removal of the abandoned fish ladder and portions of the embankment as specified by plans;

7) Construction of 3 temporary sediment traps for sediment transport control;

8) Restoration of 13,000 linear feet of the Boardman River, including dredging of approximately 250,000 cubic yards of spoils in the delta area of the former impoundment and the stabilization of 400 linear feet of stream bank with large wood debris;

9) All dredged material shall be disposed on site and above the 100-year floodplain or disposed of off-site.

10) Fill 2.2 acres and dredge 0.1 acres of emergent wetland identified in the plans as Wetland D.

All regulated areas impacted by temporary work measures shall be restored to pre-construction conditions. All work authorized by this permit shall be completed in accordance with the attached specifications and the Brown Bridge Dam Removal and Restoration Final Design drawings dated May 10, 2012 and submitted by AMEC and received by the MDEQ on May 11, 2012 and revision undated revision received by the MDEQ on July 30, 2012.

J. This permit shall not be assigned or transferred without the written approval of the MDEQ.

K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.

L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31, and wetland).

M. In issuing this permit, the MDEQ has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.

N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents and representatives for any and all claims or causes of action arising from acts or omissions of the permittee or employees, agents, or representatives of the permittee undertaken in connection with this permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.

O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.

P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from the MDEQ. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.

Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the MDEQ. The MDEQ will review the request and if approved, will provide written notification to the new owner.

R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.
S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.

T. Authority granted by this permit does not waive permit requirements under Part 01, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent.

U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.

V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.

W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.

X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the MDNR, Fisheries Division.

Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

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**Permit Conditions:**

1) Prior to initiation of construction, a preconstruction meeting shall be held with the contractor, permittee or her/his representative(s), and representatives of the DEQ. To arrange the required meeting, please contact Mr. Jim Pawloski at 989-705-3443 or by e-mail at pawloski@michigan.gov and Ms. Robyn Schmidt at 231-876-4444 or by email at SCHMIDTR1@michigan.gov.

2) Prior to initiating construction, authorized by this permit, the permittee is required to provide a copy of the permit to the contractor(s) for review.

3) All work shall be completed in accordance with revised plans prepared by AMEC Environmental & Infrastructure, Inc. and Inter-fluve, Inc. Applied River and Wetland Restoration, dated May 10, 2012 and received on May 11, 2012 and undated revision received on July 30, 2012. Said plans are kept on file at the DEQ's Water Resources Division, Gaylord and Cadillac District offices.

4) The use of explosives for removal of the structure over the waterbody, including any abutments or piers, is strictly prohibited.

5) Dam removal activity must be done under the supervision of a licensed professional engineer or an alternate professional with experience in geomorphology and stream stabilization.

6) Mr. Jim Pawloski and Ms. Robyn Schmidt of the DEQ shall be notified 72 hours prior to the start of the following construction activities:
   a) The start of the project.
   b) The start of the dam breach.
   c) The start of any dredging upstream of the dam
   d) The placement of any bank stabilization measures.

7) The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state or federal approval, or authorizations necessary to conduct the activity.

8) Noncompliance with these terms and conditions, and/or the initiation of other regulated activities not specifically authorized by this permit shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the DEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
9) If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity and/or mitigation plan from the DEQ. Such revision requests shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the DEQ prior to being implemented.

10) This permit may be transferred to another person upon written approval of the DEQ. The permittee must submit a written request to the DEQ to transfer the permit to the new owner. The new owner must also submit a written request to accept transfer of the permit. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the DEQ. The DEQ will review the request and if approved, will provide written notification to the new owner.

11) A permit may be extended for cause. To request an extension of a permit, a written request must be submitted to the MDEQ before the expiration date of the permit. The request must indicate the reasons for the extension. The MDEQ will review the request and, if approved, provide written notification to the permittee.

12) Authority granted by this permit does not waive compliance requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA. Any discharge of sediment into waters of the state is a violation of this permit, Part 91, and Part 31, Water Resources Protection, of the NREPA. A violation of these parts subjects the permittee to potential fines and penalties.

13) If the project, or any portion of the project, is stopped and lies incomplete for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap or other acceptable temporary protection.

14) The pre-construction design flood or 100-year floodplain elevation at this location on the Boardman River varies from 801.4 feet North American Vertical Datum of 1988 (NAVD88) at the upstream of the project work area to 771.9 feet NAVD88 at the downstream limits of the proposed project work area. The post-construction design flood or 100-year floodplain at this location varies from 798.2 feet NAVD88 at the upstream limits of the project proposed work area to 771.7 feet NAVD88 at the downstream limits of the project proposed area. The 100-year floodplain elevation determination was based on the Hydraulic Analysis provided with the permit application and using approved flow discharges by the DEQ.

15) No work shall be done in the stream during periods of above-normal flows except as necessary to prevent erosion.

16) No fill, excess soil, or other material shall be placed in any wetland or surface water area not specifically authorized by this permit, its plans, and specifications.

17) Prior to the start of construction, all non-work wetland areas shall be bounded by properly trenched filter fabric fence and/or orange construction fencing to prevent sediment from entering the wetland and to prohibit construction personnel from entering or performing work in these areas. Fence shall be maintained daily throughout the construction process. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site. The erosion barrier shall then be removed in its entirety and the area restored to its original configuration and cover.

18) Temporary soil erosion and sedimentation control measures shall be installed before commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels, ditches, or any disturbed area shall be installed within five (5) calendar days after final grading or the final earth change has been completed.
19) All raw areas with high erosion potential resulting from the permitted construction activity shall be promptly and effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner so as to prevent erosion and any potential siltation to surface waters or wetlands and in compliance with Part 91, Soil Erosion and Sediment Control, of the NREPA.

20) All raw areas with high erosion potential, within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets in accordance with the following dates: September 20th for the Upper Peninsula, October 1st for the Lower Peninsula north of US-10, and October 10th for the Lower Peninsula south of US-10 and in compliance with Part 91, Soil Erosion and Sediment Control of the NREPA.

21) All slurry resulting from any dewatering operation shall be discharged through a filter bag or pumped to a sump located away from wetlands and surface waters and allowed to filter through natural upland vegetation, gravel filters, or other engineered devices for a sufficient distance and/or period of time necessary to remove sediment or suspended particles. The discharge of slurry water resulting from the hydro-demolition of concrete is not allowed to enter a lake, stream, or wetland.

22) During removal or repair of the existing structure, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal and/or reconstruction of the structure shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.

23) The permittee shall provide passage of flow during and after construction. During periods of low stream flow the permittee shall provide a minimum flow release approximately equivalent to the stream flow into the impoundment. The following minimum monthly flows shall be maintained throughout all phases of construction (values shown in cfs):

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24) Unless specifically stated under the "Permitted Activity" of this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.

25) It is advised that proper caution signs and/or buoys be placed at or near the dam to prevent endangerment of recreational users.

26) All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed in such a manner so as to prevent and ensure against erosion of any material into any waterbody or wetland.

27) All fill/backfill shall consist of clean inert material which will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fill shall be CONTAINED in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas with high erosion potential associated with the permitted activity shall be STABILIZED with sod and/or seed and mulch, riprap, or technology specified by this permit or project plans as necessary to prevent erosion and in compliance with Part 91, Soil Erosion and Sediment Control of the NREPA.
28) Graded riprap consisting of clean stone or cut rock shall be placed in sufficient quantity to provide adequate erosion protection. If broken concrete is used it shall be no larger than 24 inches in any dimension and free of protruding metal, contaminants, and other foreign material. Any broken concrete shall be covered with clean stone or cut rock. It shall be placed in layers with staggered joints and voids filled with smaller riprap. Broken asphalt is not authorized at this site.

29) Use or placement of the spoils shall be done in such a manner to prevent nuisance conditions and control the release of fugitive dust or visible emissions as required by Part 55, Air Pollution Control, of the NREPA, or the rules promulgated under this Act.

30) If the project, or any portion of the project, is stopped and lies uncompleted for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the uncompleted work from erosion, including the placement of temporary gravel bag riprap or other acceptable temporary protection.

31) All spoils resulting from the excavation as well as sediments removed from sand traps downstream river station 99+00 and according with plans to be disposed at spoil areas One, Six, Seven and Eight shall be covered with six inches of clean soil with a minimum organic matter content of 2-5% that supports vegetation growth, and seeded with a crop cover of native vegetation. This area shall be monitored for a period of five years to ensure that the site has been adequately protected and is not subject to any erosion.

32) The spoils shall not be mixed with other waste or materials that are not inert as defined in Part 115, Solid Waste Management, of the NREPA.

33) Within three (3) months after final placement of spoils, the permittee shall obtain a boundary survey of the area used as a disposal site, including the cover and side slopes thereof. The permittee shall enter said description on the enclosed Restrictive Covenant, have the Restrictive Covenant signed by the proper corporate officers, have the signatures properly witnessed and notarized, and record the Restrictive Covenant with the appropriate County Register of Deeds. A copy of the recorded document shall be submitted to the DEQ, P.O. Box 30028, Lansing, Michigan 48909, Attention: Mr. Duane Roskoskey, within four (4) months after final placement of spoils.

34) A licensed professional engineer of the permittee's choice shall certify to the DEQ that the excavation and covering of contaminated soils was completed per DEQ permit requirements. The permittee is responsible to insure the project is constructed in accordance with all drawings and specifications contained in this permit. Certification shall be provided no later than three (3) months after the spoils are placed on-site and covered.

35) The provisions of this permit do not preclude the permittee from disposal of the spoils in accordance with Part 115 at a properly licensed Type II solid waste disposal facility or at an out-of-state facility in accordance with the State's solid waste disposal regulations.

36) Within 7 days following the completion of the project, the City of Traverse City shall contact Ms. Amy Rivest of the DEQ, Remediation Division at our Cadillac District Office, phone: 231-876-4463 regarding any requirements concerning the exposure of previously submerged bottomland under Part 201 Environmental Remediation of the Natural Resources and Environmental Protection Act, Act 451 of 1994.

37) Permittee shall control invasive plant species in all exposed previously submerged bottomland areas planted with native plant species, using appropriate techniques and in accordance with all applicable local, state, and federal regulations, for a period of three years from the project completion. Permittee shall submit annual photo documentation of these restored bottomland areas to the DEQ’s Cadillac District Office.
38) Any modification or revision to the approved design plans and/or specifications must be approved in writing by the DEQ, Water Resources Division, Hydrologic Studies and Dam Safety Unit prior to being implemented.

39) The permittee shall furnish a written statement from a professional engineer, certifying that he has supervised the removal of the dam and that it was removed in accordance with the plans and specifications approved by the Water Resources Division of the DEQ.

40) Final approval of the dam removal will not be granted until a site inspection by the DEQ has confirmed that the dam has been removed in accordance with the approved plans and specifications.

41) Prior to the start of construction, survey points shall be established to monitor potential headcutting of the channel. The locations of these survey points shall be submitted to the DEQ prior to construction. These points shall be closely monitored to ensure that head cutting does not extend beyond the area estimated in the plan. If head cutting does exceed the estimated limits then a corrective action plan shall be implemented to prevent additional headcutting.

42) In issuing this permit, the DEQ has relied on the information and data, which the permittee has provided in connection with the permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, or additional information demonstrates that the spoil is causing environmental contamination or that new State or Federal regulations are promulgated which cause this disposal to be inappropriate, the DEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.

43) The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representatives of the permittee, undertaken in connection with this permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.

This permit shall become effective on the date of the DEQ representative's signature. Upon signing by the permittee named herein, this permit must be returned to the DEQ's Water Resources Division, Hydrologic Studies and Dam Safety Unit, for final execution.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

X _______________________________ 8-7-12
Permittee Date

X _______________________________
M. Kayler, Acting City Manager
Printed Name and Title of Permittee
cc: City of Traverse City Clerk
    East Bay Township Clerk
    Grand Traverse County Drain Commissioner
    Grand Traverse CEA
    Ms. Melanie Haveman, U.S. Environmental Protection Agency
    Mr. Charles M. Wooley, U.S. Fisheries & Wildlife Service
    Mr. Rick Westerhof, U.S. Fisheries & Wildlife Service
    Mr. Todd Kallish, DNR, Fisheries Division
    Mr. Brian Bury, DNR, Fisheries Division/Natural Rivers
    Ms. Sandra Sroonian, AMEC
    Mr. Scott Rought, AMEC
    Mr. Andrew Selle, Inter-fluve, Inc.
    Mr. Jim Pawloski, DEQ, Water Resources Division, Gaylord Office
    Ms. Robyn Schmidt, DEQ, Water Resources Division, Cadillac Office