NOTICE OF AUTHORIZATION

Permit Number: WRP014208 v. 1 **Date Issued: 11/30/2018**
Site Name: 24/49-Enbridge Energy-Line 5- Straits of Mackinac **Expiration Date: 11/30/2023**

The Michigan Department of Environmental Quality, Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; specifically:

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

Authorized Activity:

Install 48 anchor support structures into the lake bed for the Enbridge Line 5 pipelines within the Straits of Mackinac between Point LaBarbe in the Upper Peninsula and McGulpin Point in the Lower Peninsula. Anchor structures shall be installed at locations, as shown on the attached plans.

Water Course Affected: **Lake Michigan/Lake Huron - Straits of Mackinac**
Property Location: **Mackinac and Emmet Counties**
Emmet County, Wawatam Township, Town/Range 39N/04W Sections 10-11
Mackinac County, Moran Township, Town/Range 40N/4W Section 25

Permittee:
Shane Yokom, Enbridge Pipelines (Lakehead), LLC
26 East Superior St.
Suite 309
Duluth, MN 55802

Scott Rasmusson

Digitally signed by: Scott Rasmusson
DN: CN = Scott Rasmusson email = rasmussons@michigan.gov C = US O = DEQ OU = WRD
Date: 2018.11.30 15:18:38 -05'00'

Scott Rasmusson
Gaylord Field Office
Water Resources Division
989-313-9708

This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.
Please refer to the above permit number with any questions or concerns.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMIT

Issued To:

Enbridge Pipelines (Lakehead), LLC
26 East Superior St.
Suite 309
Duluth, MN 55802

Permit No: WRP014208 v.1
Submission No.: HNC-AR90-WAHM0
Site Name: 24/49-Enbridge Energy-Line 5- Straits of Mackinac
Issued: **November 30, 2018**
Expires: **November 30, 2023**

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

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

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

Authorized Activity:

Install 48 anchor support structures into the lake bed for the Enbridge Line 5 pipelines within the Straits of Mackinac between Point LaBarbe in the Upper Peninsula and McGulpin Point in the Lower Peninsula. Anchor structures shall be installed at locations as shown on the attached plans.

Water Course Affected: Lake Michigan/Lake Huron - Straits of Mackinac
Property Location: Mackinac and Emmet Counties
Emmet County, Wawatam Township, Town/Range 39N/04W Sections 10-11
Mackinac County, Moran Township, Town/Range 40N/4W Section 25

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 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 approved 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 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.
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.
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 of the NREPA, and wetlands).
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 representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the 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 that includes all of 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 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).

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 water body 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 Michigan Department of Natural Resources, Fisheries Division.
Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

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

1. Notification shall be made to the MDEQ, WRD, Gaylord Field Office prior to starting the project. Please notify Scott Rasmusson at rasmussons@michigan.gov; 989-313-9708; or call the MDEQ Gaylord Field Office Front Desk at 989-731-4920.
2. Notification shall be made to the United States Coast Guard, Sector Sault Sainte Marie by phone at 906-635-3220 prior to starting the project. Also notify: United States Coast Guard, 9th Coast Guard District, Attention: O.B.R, 1240 East Ninth Street, Cleveland, Ohio 44199-2060.
3. 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 authorization necessary to conduct the activity.
4. 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.
5. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
6. The permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
7. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning on the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
8. Authority granted by this permit does not waive any jurisdiction of the United States Army Corps of Engineers or the need for any required federal permits.
9. The issuance of this permit does not convey any right, title, or ownership in the state-owned, public trust bottomlands of the Great Lakes occupied by utility crossings and associated structures. Permittee shall comply with the easement requirements for the subject bottomlands pursuant to Part 21, Subpart 9, of the NREPA.
10. Dredging or Filling are not authorized by this permit.
11. Additional attachments to permitted structures are not authorized by this permit.
12. This permit is limited to authorizing the construction as specified above and as shown on the attached plans and carries with it no assurances or implications that associated lake areas can be developed and serviced by the structures authorized by this permit.

13. Every precaution shall be taken to prevent debris from entering the waterbody. Any debris reaching the waterbody during the placement of support structures shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
14. All construction operations relating to or part of this project shall be confined to the existing acquired easements.
15. Prior to initiating permitted construction, the permittee, all contractors and subcontractors doing work authorized by this permit are required to review and be familiar with permit conditions and with Release Notification Requirements in Michigan, specifically pursuant to Part 31 of the NREPA.
16. In accordance with the requirements of the United States Coast Guard, appropriate measures shall be taken to allow for watercraft passage through the project area at any time during the authorized construction.
17. Permittee shall notify the MDEQ, WRD, Gaylord Field Office within one week after the completion of the activity authorized by this permit by notifying Scott Rasmusson at rasmussons@michigan.gov; 989-313-9708; or Gaylord Field Office Front Desk at 989-731-4920.
18. A spill response plan shall be in place to address any environmental emergency such as a spill, a leak or release of hazardous materials to land, water, or air. In the event there is a release of any material during the operation, the project shall be immediately stopped and the spill response plan shall be implemented. The spill response plan shall at a minimum contain all appropriate measures to be taken to control a release including but not limited to identification of environmental clean-up contractors, spill notifications and mitigation procedures. The permittee is responsible for all liability associated with the occurrence of any unintended release, and is also ultimately responsible for the isolation, containment, restoration, cleanup, and disposal of any contaminants.
19. In the event there is an environmental emergency such as a spill, a leak or release of hazardous materials to land, water, or air the permittee, agent or contractor shall immediately notify the MDEQ Pollution Emergency Alerting System (PEAS) by calling: **1-800-292-4706** and/or the National Spill Response Center at **800-424-8802 or 202-267-2675.**
20. The MDEQ's assessment of new information or data regarding bottomlands or natural resource impacts may be cause for the modification, suspension, or revocation of this permit, in whole or in part as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
21. The permittee shall verify the placement of each support either by diver or remote operated vehicle and to verify/document pipeline coating conditions after anchor placement. All damaged coating shall be addressed within 15 days from the date of discovery. Photographs or video shall be taken prior to and after the placement of each support and shall be retained for a minimum of 10 years from the date of the permit.
22. Permittee is required to submit to this office within 90 days of project completion "as-built" plans, signed and sealed by a qualified design professional licensed by the State of Michigan, certifying that the project, including locations of all anchoring structures installed on bottomlands, have been completed in accordance with this permit.

Upon signing by the permittee named herein, this permit must be returned to the MDEQ, WRD, Gaylord Field Office, 2100 West M-32, Gaylord, Michigan 49735-9282 for final execution. This permit shall become effective on the date of the MDEQ representative's signature.

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

Shane E Yokom for Enbridge Pipelines (LAKEHEAD), LLC 28 November 2018

Permittee Date

SHANE E YOKOM Supervisor Regional Support, LP US Environment

Printed Name and Title of Permittee

Scott Rasmusson

Digitally signed by: Scott Rasmusson
DN: CN = Scott Rasmusson email = rasmussons@michigan.gov C = US O = DEQ OU = WRD
Date: 2018.11.30 15:19:25 -05'00'

Issued By:

Scott Rasmusson
Gaylord Field Office
Water Resources Division
989-313-9708

Cc: Emmet County Clerk
Mackinac County Clerk
Emmet County Conservation District
Mackinac County Conservation District
Emmet County Health Department
Mackinac County Health Department
Moran Township Clerk
Wawatam Township Clerk
Mackinaw City Clerk
City of St. Ignace Clerk
LTJG Sean Murphy, U.S. Coast Guard, Waterways Management Division
Catherine Garypie, U.S. Environmental Protection Agency
Katie Otanez, USACE, Detroit LRE-2010-00463-56
Dean Anderson, MSHDA
James Dexter, MDNR
Dave Borgeson, MDNR
Scott Goeman, MDNR
Heather Hettinger, MDNR
Katie Kruse, MDEQ
Tom Graf, MDEQ
James Milne, MDEQ
Ryan McCone, MDEQ
Phil Roycraft, MDEQ

Enbridge Pipelines (Lakehead) L.L.C.

MDEQ/USACE JOINT PERMIT APPLICATION
2018 Line 5 Anchor Installation Project

Supplemental Information

March 15, 2018



Supplemental Information
Enbridge Pipelines (Lakehead) L.L.C.
2018 Line 5 Anchor Installation Project
Mackinac and Emmet Counties, Michigan

PROJECT SUMMARY

3 – Proposed Activities and Construction Methods

Enbridge Pipelines (Lakehead) L.L.C. (Enbridge) is planning to conduct maintenance on the existing dual 20-inch-diameter pipelines beneath the Straits of Mackinac. Enbridge is proposing to install pipeline anchors at 48 locations to comply with federal consent decree (Case 1:16-cv-00914, ECF No. 3 filed 7/20/16) condition 68. These pipeline anchors are in addition to the 22 anchors applied for in 2017 (submission number 2RD-DFDK-Y35G).

Enbridge, considering the history of previous pipeline anchor installation work, is seeking authorization to complete this project from the Michigan DEQ under Act 451, Section 325 and from USACE under Nationwide Permit 12.

Project activities will involve the installation of pipeline anchors which consist of a helical anchoring system with saddle mounts around the pipeline at each of the proposed locations. The 48 anchors will be augured directly into the lake bed. Each anchor uses two 10-inch-diameter by 10-foot long screws. The total lake bottom impact from the anchors will be approximately 20 cubic yards with a total footprint of about 53 ft^2. The proposed locations for installation of the anchors are provided in Attachment A. Attachment B contains typical drawings depicting the auguring apparatus, as well as equipment that will be used for installation. Attachment C contains the anchor installation procedure.

A marine infrastructure and utility contractor, Ballard Marine Construction, will work from barges to complete the anchor installation. No new on-land staging, temporary workspaces, or new access routes will be required for the Project. The Project is scheduled to begin in July 2018.

Ballard Marine Construction will maintain a safety plan and an environmental protection plan for this work activity (Attachment D). In the unlikely event of pipeline damage during this project, Enbridge will implement a repair plan. If a release were to occur from the pipeline during this project, Enbridge would respond following the company Integrated Contingency Plan and Straits Tactical Response Plan.

4 – Project Purpose, Use and Alternatives

The installation of 48 pipeline anchors is being proposed to comply with federal consent decree (Case 1:16-cv-00914, ECF No. 3 filed 7/20/16) condition 68.

This Project is pipeline maintenance and is not associated with a new utility installation. The proposed activities are for the sole purpose of maintaining the previously authorized

pipelines, and are consistent with those activities authorized under Nationwide Permit 12. The method of anchor installation is anticipated to incur no environmental impacts.

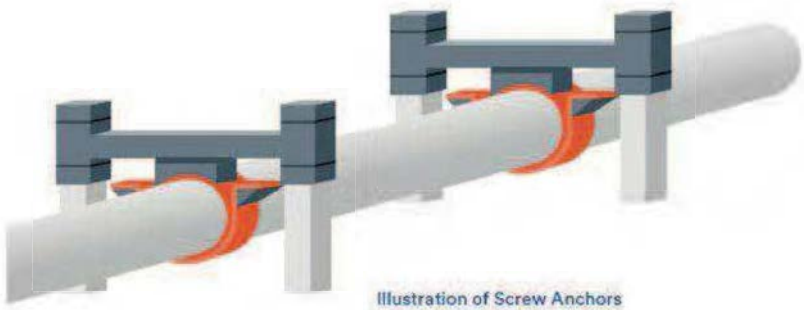


Illustration of Screw Anchors installed on a water bottom



Illustration of Screw Anchor Technology
(viewed in direction of pipeline)

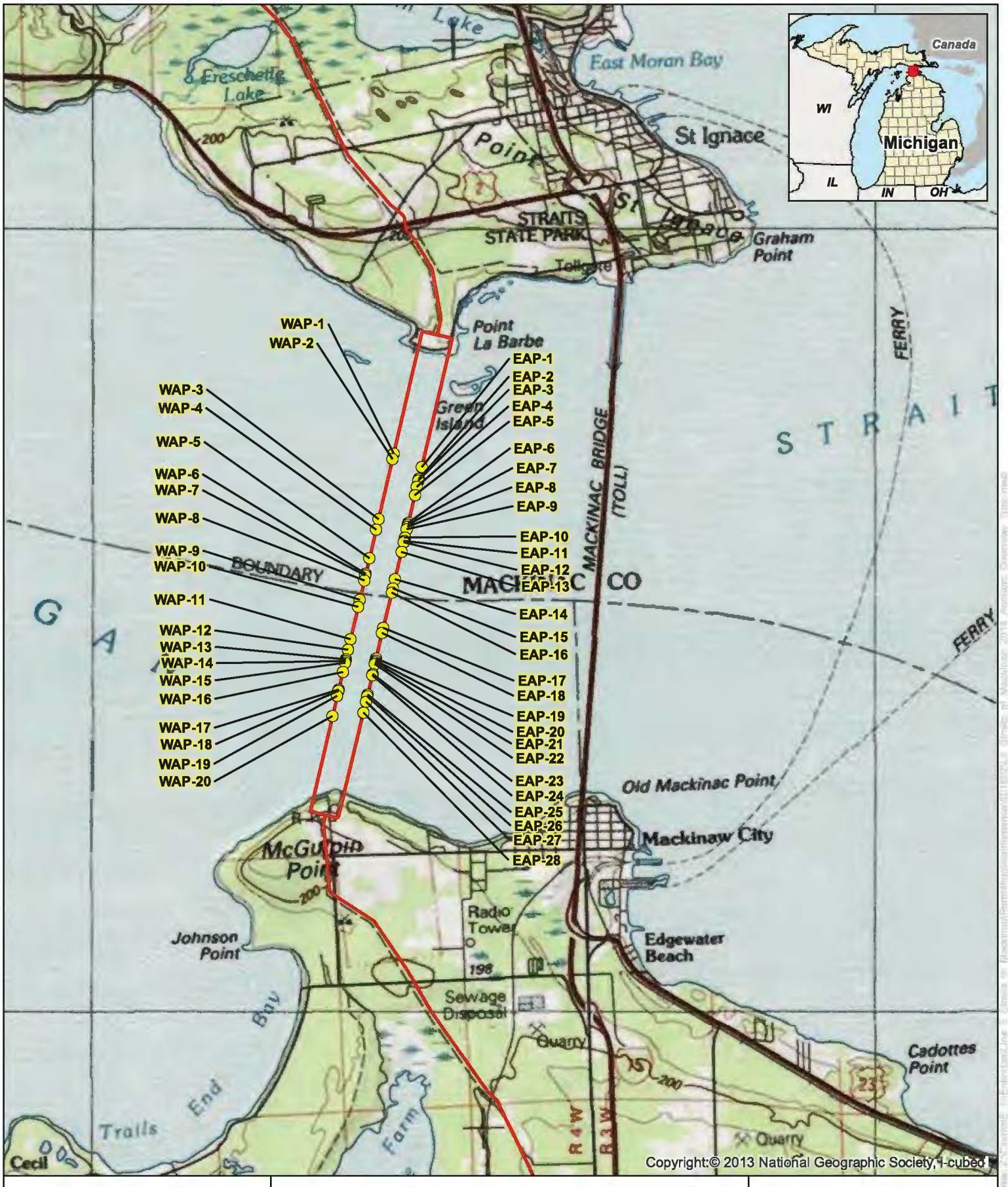
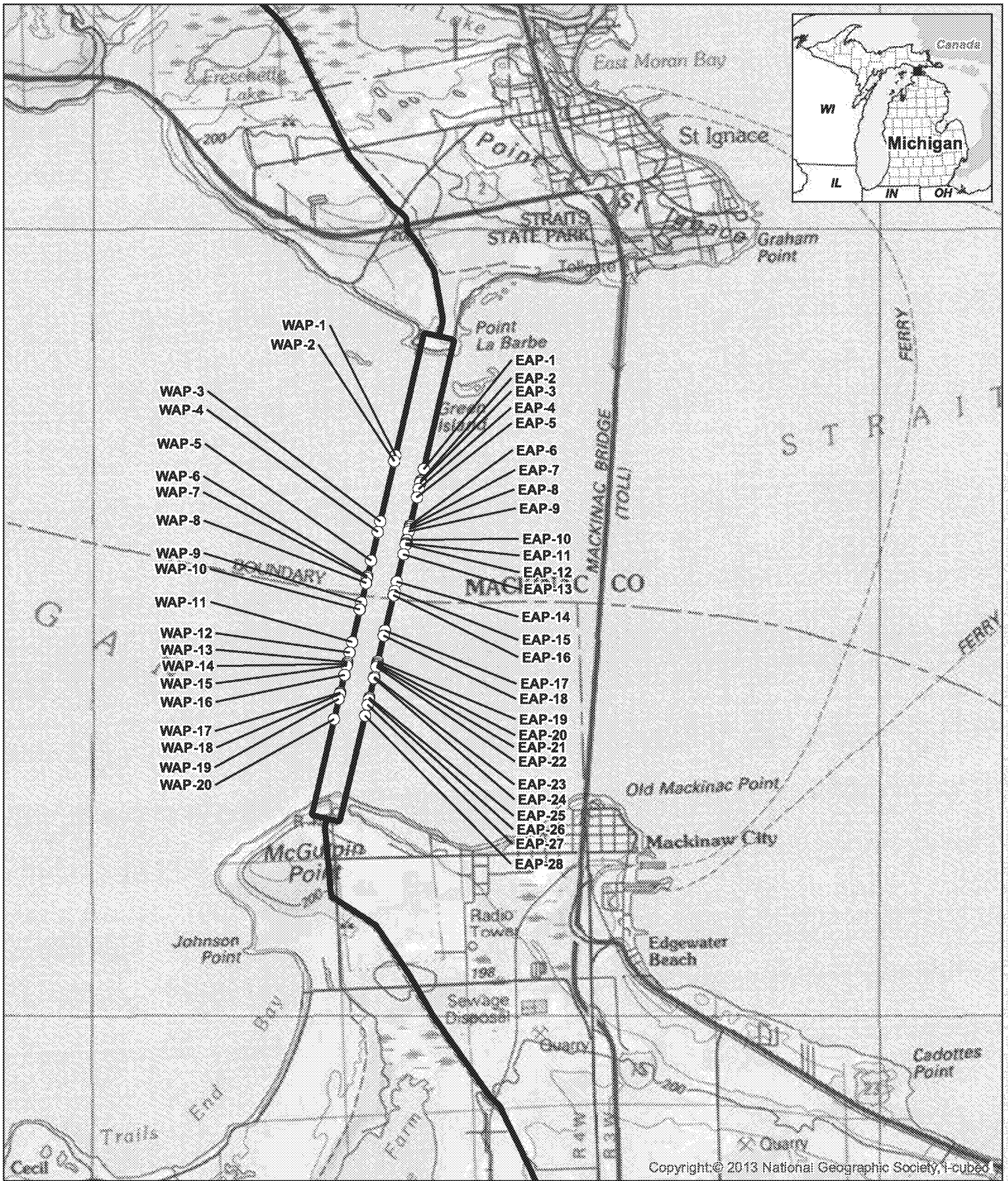


Figure 1a

Line 5 Straits of Mackinac

Enbridge Pipelines (Lakehead) L.L.C.

2018 Proposed Anchor Locations



0 0.5 1 Miles

1 inch = 1 miles

N W E S

ENBRIDGE

For Environmental Review Purposes Only

Figure 1b

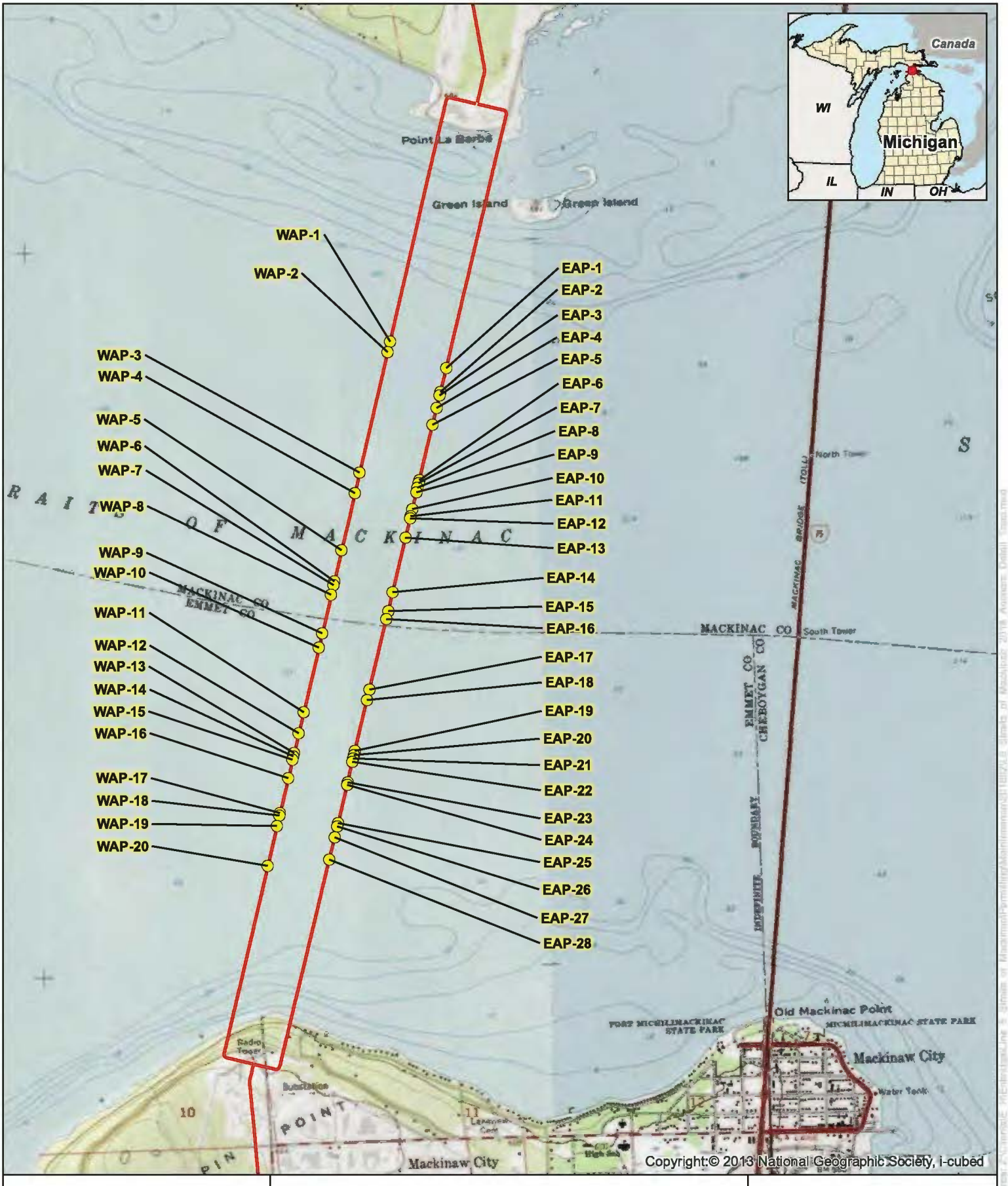
Line 5 Straits of Mackinac

Enbridge Pipelines (Lakehead) L.L.C.

2018 Proposed Anchor Locations

○ 2018 Proposed Anchor Locations

Line 5



0 0.25 0.5 Miles

1 inch = 0.5 miles

N W E S

ENBRIDGE

For Environmental Review Purposes Only

Figure 2a

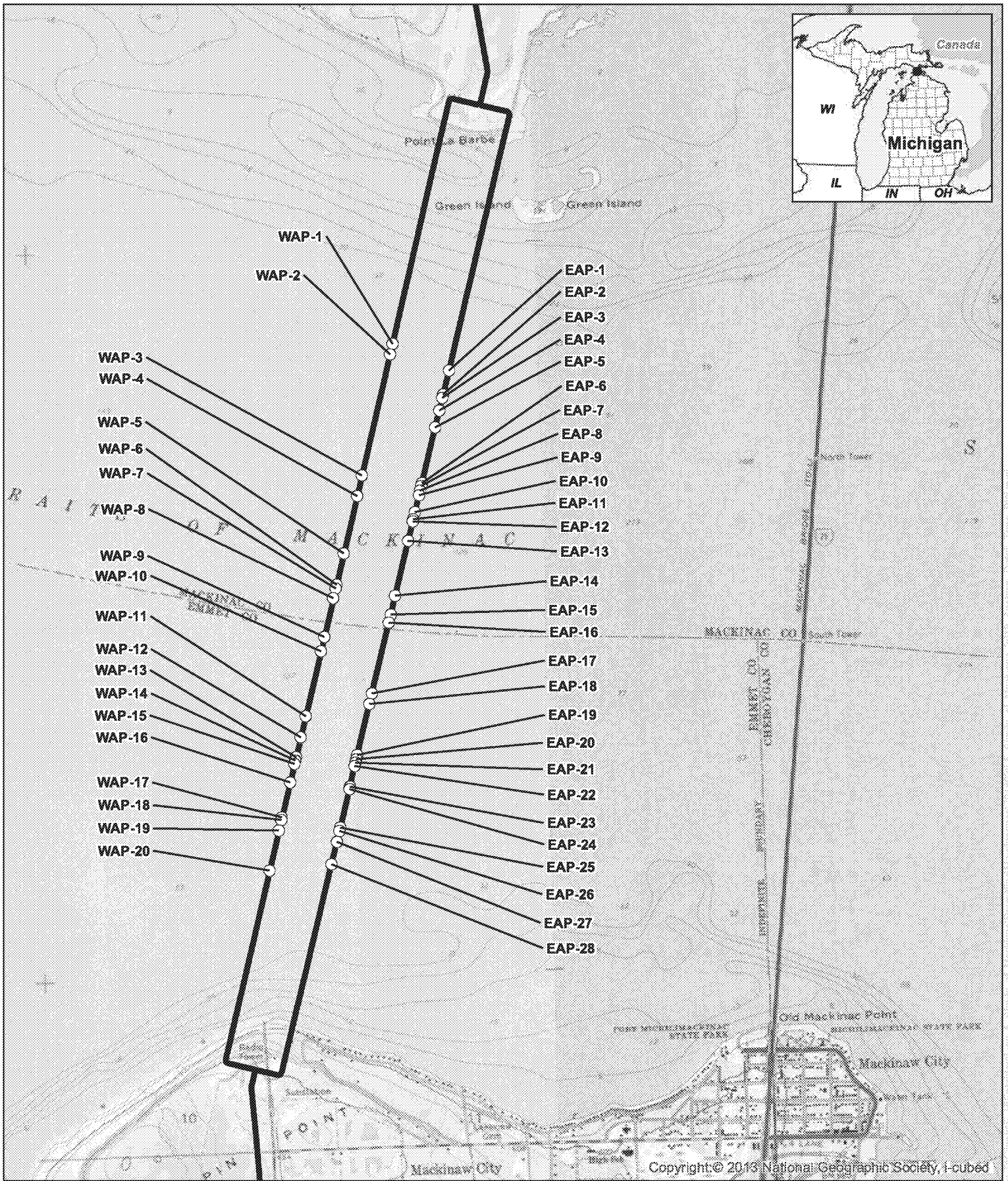
Line 5 Straits of Mackinac

Enbridge Pipelines (Lakehead) L.L.C.

2018 Proposed Anchor Locations

2018 Proposed Anchor Locations

Line 5



0 0.25 0.5 Miles

1 inch = 0.5 miles

N W E S

ENBRIDGE

For Environmental Review Purposes Only

Figure 2b

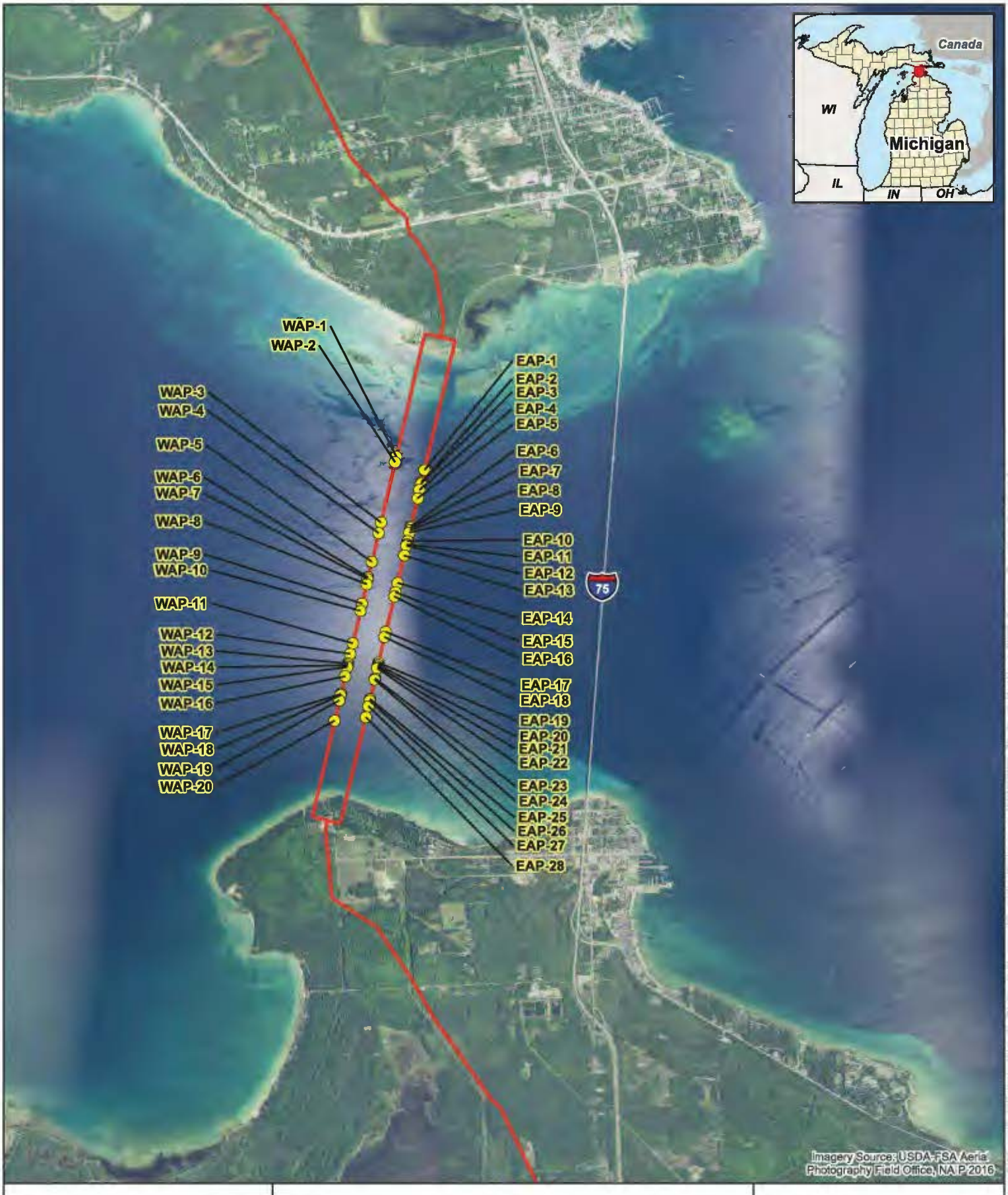
Line 5 Straits of Mackinac

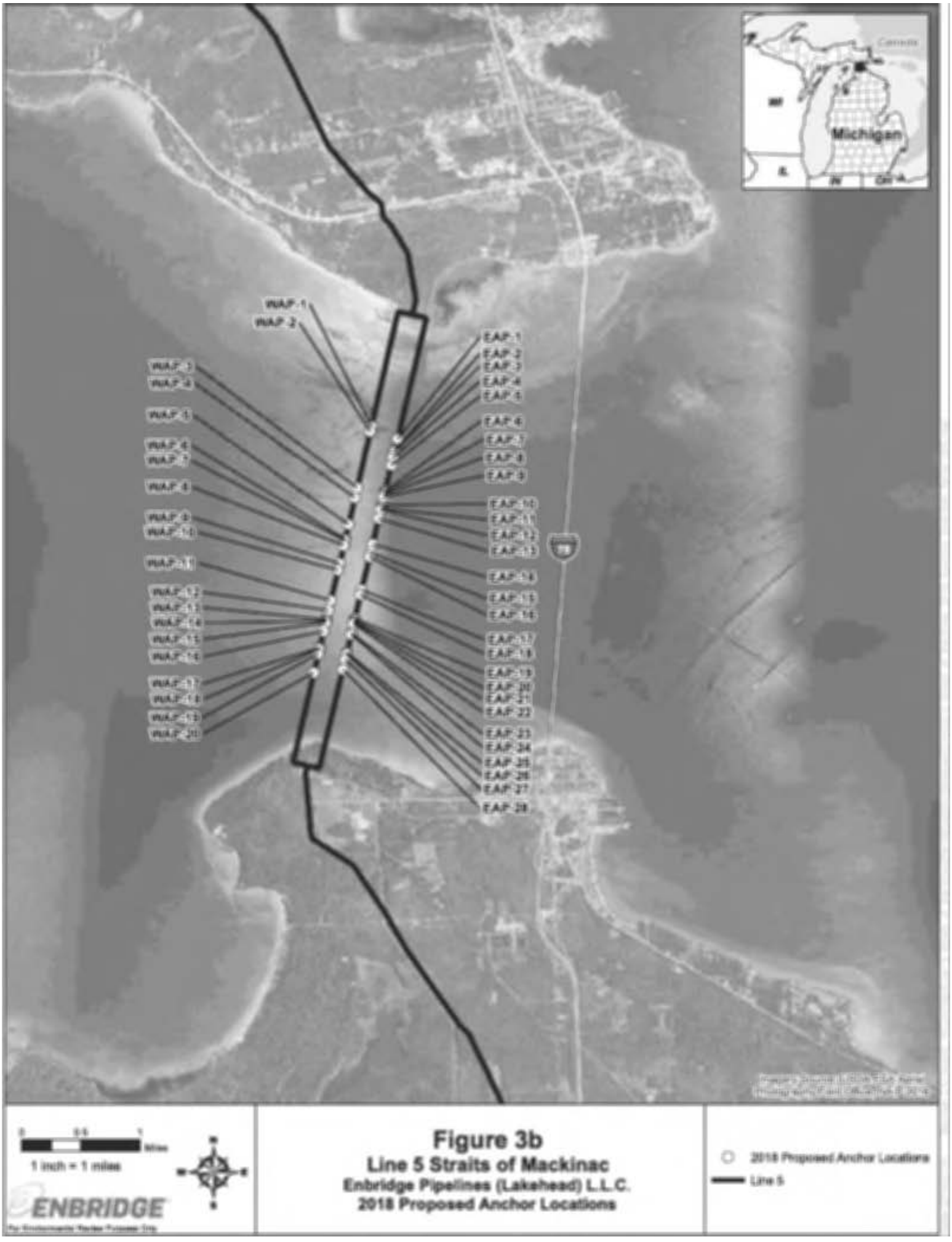
Enbridge Pipelines (Lakehead) L.L.C.

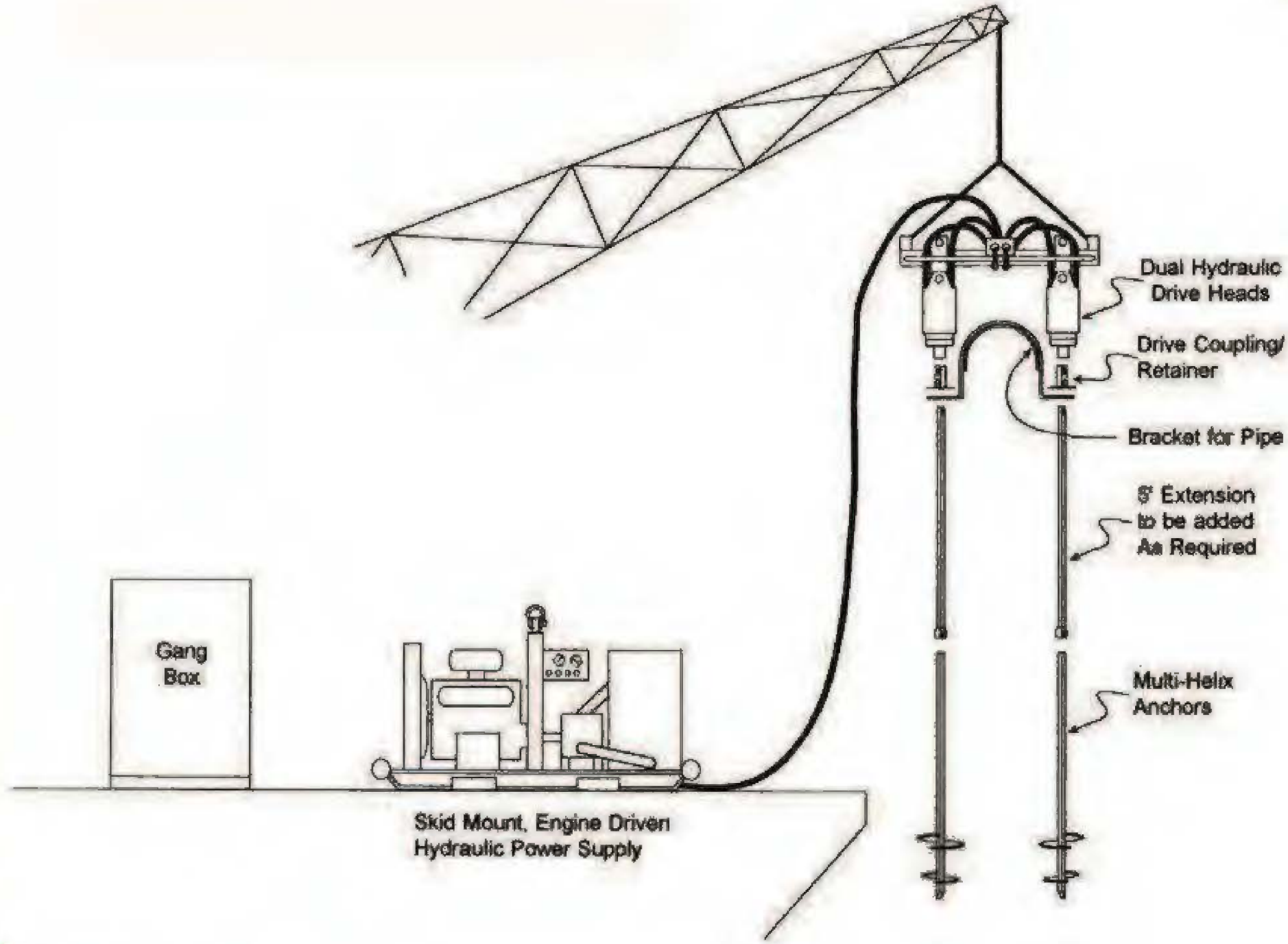
2018 Proposed Anchor Locations

○ 2018 Proposed Anchor Locations

Line 5

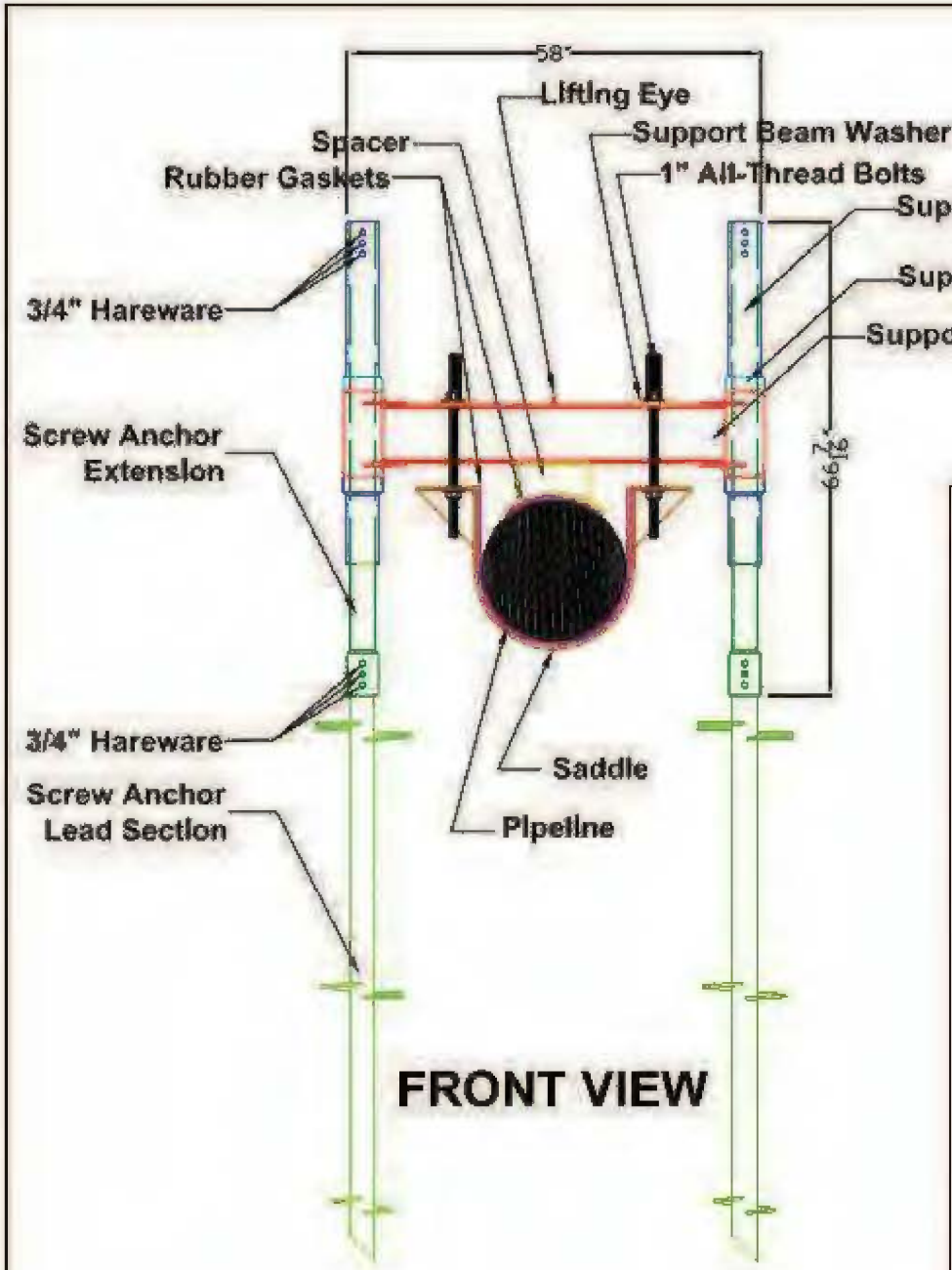

Canada
WI
Michigan
IL
IN
OH
WAP-1
WAP-2
WAP-3
WAP-4
WAP-5
WAP-6
WAP-7
WAP-8
WAP-9
WAP-10
WAP-11
WAP-12
WAP-13
WAP-14
WAP-15
WAP-16
WAP-17
WAP-18
WAP-19
WAP-20
EAP-1
EAP-2
EAP-3
EAP-4
EAP-5
EAP-6
EAP-7
EAP-8
EAP-9
EAP-10
EAP-11
EAP-12
EAP-13
EAP-14
EAP-15
EAP-16
EAP-17
EAP-18
EAP-19
EAP-20
EAP-21
EAP-22
EAP-23
EAP-24
EAP-25
EAP-26
EAP-27
EAP-28
75
Imagery Source: USDA-FSA Aerial Photography Field Office, NAIP 2016
0
0.5
1
Miles
1 inch = 1 miles
N
W
E
S
ENBRIDGE
For Environmental Review Purposes Only
Figure 3a
Line 5 Straits of Mackinac
Enbridge Pipelines (Lakehead) L.L.C.
2018 Proposed Anchor Locations
2018 Proposed Anchor Locations
Line 5

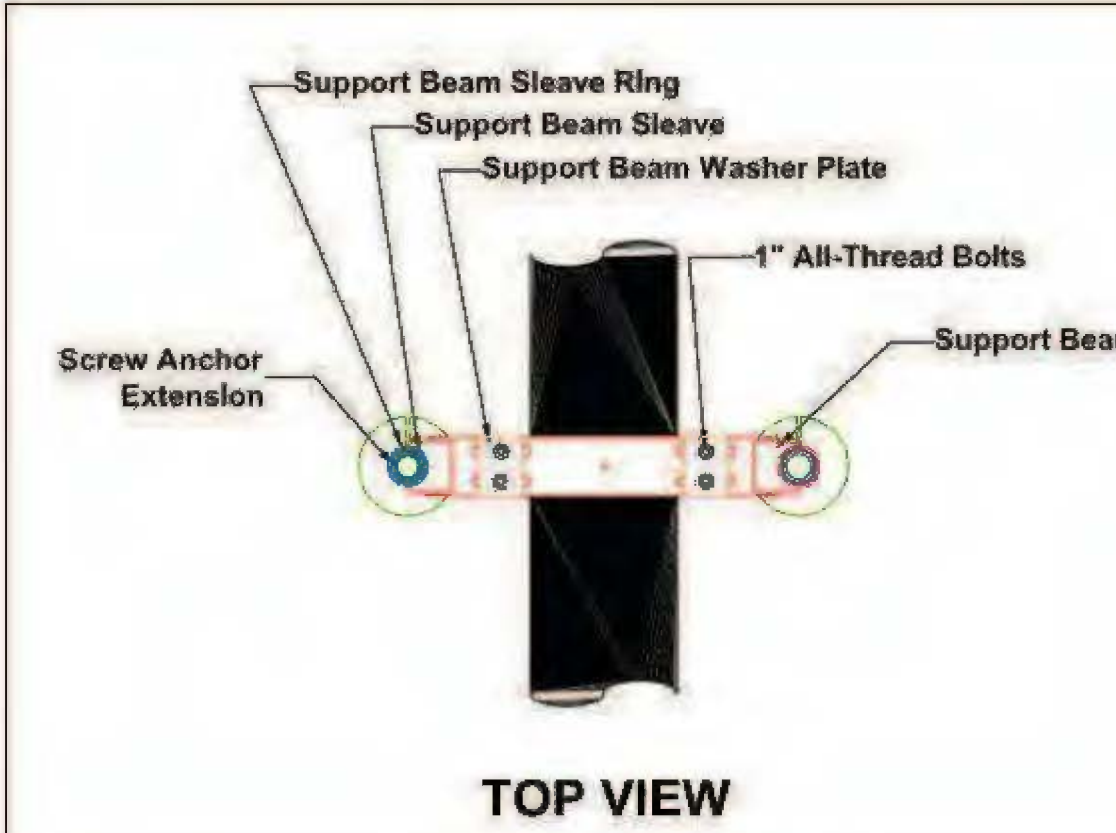

Michigan
WAP-1
WAP-2
WAP-3
WAP-4
WAP-5
WAP-6
WAP-7
WAP-8
WAP-9
WAP-10
WAP-11
WAP-12
WAP-13
WAP-14
WAP-15
WAP-16
WAP-17
WAP-18
WAP-19
WAP-20
EAP-1
EAP-2
EAP-3
EAP-4
EAP-5
EAP-6
EAP-7
EAP-8
EAP-9
EAP-10
EAP-11
EAP-12
EAP-13
EAP-14
EAP-15
EAP-16
EAP-17
EAP-18
EAP-19
EAP-20
EAP-21
EAP-22
EAP-23
EAP-24
EAP-25
EAP-26
EAP-27
EAP-28
1 inch = 1 miles
ENBRIDGE
Figure 3b
Line 5 Straits of Mackinac
Enbridge Pipelines (Lakehead) L.L.C.
2018 Proposed Anchor Locations
2018 Proposed Anchor Locations
Line 5



ENBRIDGE

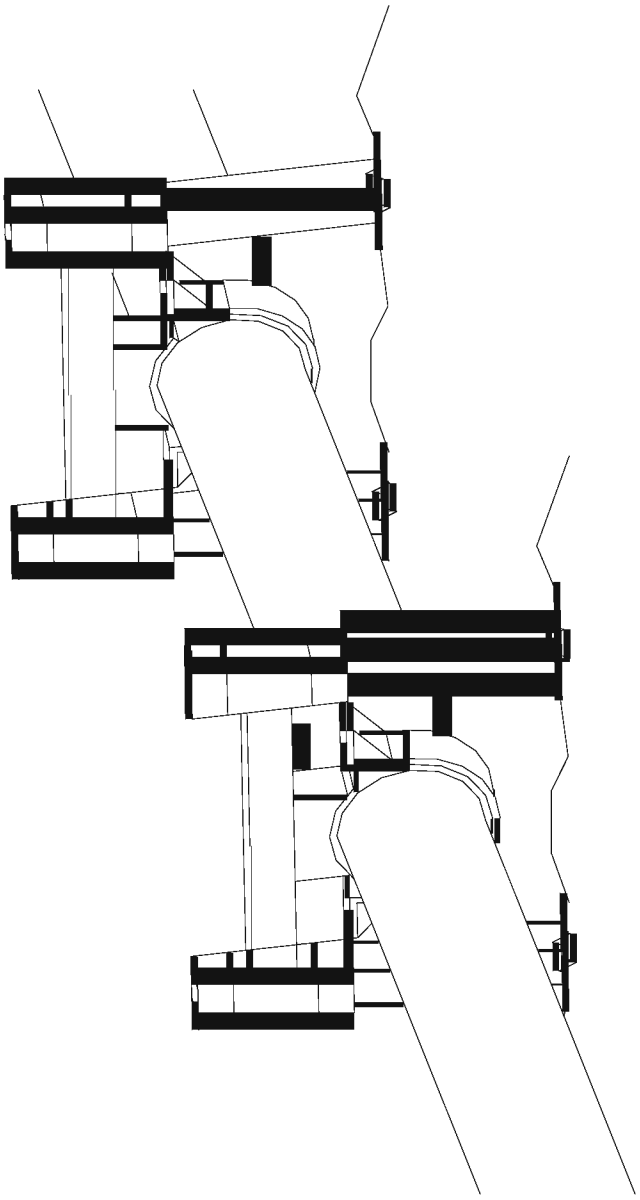
ENBDNR0004663

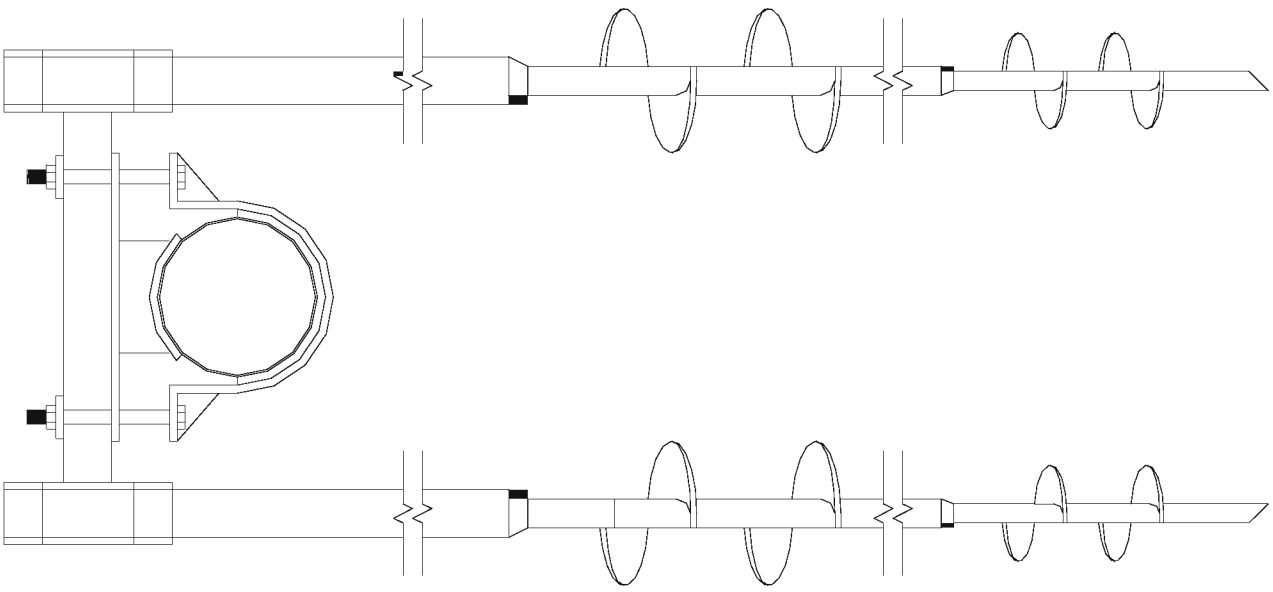




ENBRIDGE

ENBDNR0004664





ENBRIDGE

SCREW ANCHOR INSTALLATION PROCEDURE

Ballard Marine Construction

Introduction

By letter dated September 13, 2017 the Michigan Department of Environmental Quality ("MDEQ") requested Enbridge Pipelines (Lakehead), LLC ("Enbridge") to provide additional information in further support of its permit application for the twenty-two (22) Line 5 Enbridge Straits Anchors. MDEQ requested details on prior anchor installations and differences in current procedures that "will protect and maintain the integrity of the pipeline, including the pipeline coating during anchor installation."

Enbridge has contracted Ballard Marine Construction ("BMC") to install the anchors on the Straits of Mackinac lakebed. BMC is a marine infrastructure and utility contractor with over forty years of experience. BMC's record of safety and success on over 10,000 individual projects have allowed it to grow to global reputation as an industry leader for clients in the pipeline, nuclear, hydroelectric, salvage, submarine cable and public infrastructure industries. BMC's procedures for performing its work for this Project in a safe and effective manner protecting environment, public trust, and riparian interest are set forth herein. BMC reserves the right to modify the procedures detailed herein to react to unfavorable or differing site conditions, variations on equipment available, or due to alternative methods that prove at least as safe and more efficient.

1. Promoting and maintaining a safe working environment is paramount.

BMC places the protection and preservation of life above all responsibilities – both on behalf of those performing the work and the public who may be using or enjoying the waterway. As such, BMC has carefully crafted policies and procedures designed to protect the lives affected by BMC's work.

BMC will only work in conditions suitable for safe and effective marine construction. BMC will employ an offshore manager that will make final determinations as to whether the conditions are suitable for construction. No work will begin without an adequate forecast of suitable weather for the time required to complete the work activities scheduled. BMC's work will not proceed in unfavorable conditions such as wave heights greater than 5 feet, sustained winds in excess of 25 M.P.H. (less for winds with a westerly component), surface visibility less than 1 mile, or lightening strikes within 10 miles. An occurrence of any hazardous event will cause BMC to immediately secure its work-space, cease operations, and return to shore.

BMC's work will be operated from vessels suitable for the construction activities. All vessels will be USCG Certification of Documentation, ABS Classed for Service in the Great Lakes, USCG Uninspected towing Vessel Safety Inspection with inspection and maintenance records maintained for not less than the prior year. All personnel charged with operating and maintaining the vessels will have a minimum of 1 year of fleeting and deck work experience on the Great Lakes. All vessel operators will have and maintain the appropriate USCG licenses with a radar operations endorsement and an FCC license for marine radio communications.

ENBDNR0004666

BMC's work will proceed off of vessels at underwater depths of 60 to 240 feet requiring the utmost care in protecting the personnel performing or observing the work. BMC will supply a deep air and mixed gas diving spread, including two decompression chambers, diver hot water units, a class-2 dive bell, bell LARS with 2 man-rated winches, and other critical features for the effective and safe performance of work. Before each dive, BMC's qualified personnel will define the breathing gas needed for each diver performing the scheduled work.

From the time BMC leaves shore to the time it returns, it will continue to engage safety protocols ensuring the life safety of its crew and the public. BMC will continue to monitor weather forecast and review the fleeting operations with its crew. Once the vessels are in place to perform work, BMC will continue to adhere to proper safety protocols.

BMC will deploy the requisite number of divers to perform its work as determined by the actual conditions encountered for each screw anchor support assembly. BMC will perform pre-dive checks on the dive bell and its equipment, including the backup recovery winch. Before deploying the dive bell, the primary and secondary decompression chambers will be prepared, along with the control gas distribution and hot water distribution systems.

Once the dive bell is deployed a safe but effective distance from an anchor assembly (at least 10-feet above assembly elevation), BMC will continually monitor the dive bell location to ensure each diver can safely access its tools, equipment, and personal protective equipment. While divers are engaged, BMC will continue to monitor weather from the vessels and ensure the dive bell movements are not more than 15-feet in any direction from its target spot of deployment.

After each dive, BMC will recover each diver through its primary (and, if necessary, secondary) decompression chambers constantly monitoring for decompression illness. A detailed neurological and physical exam will be conducted. The vessels will be returned and secured to shore. Maintaining a safe work environment is paramount to BMC's success.

2. Protection of environmental and riparian interests

The protection of the environment and riparian interest is of the utmost importance to BMC, and therefore, BMC will employ carefully considered procedures and protocols to further that interest. Before leaving shore, BMC will review the planned operations with the entire fleeting crew. BMC's weather monitors help ensure the ambient conditions do not impair the work or cause an environmental impact.

The fleeting vessels will be carefully moved to the location of the assembly being constructed and secured using an adequate number of moor anchors. BMC will deploy a small inspection class remotely operated vehicle (ROV) to video inspect the lake bottom conditions in real time, measure and confirm span heights, and monitor the diver and installation tool movements. The ROV will use a three-dimensional positioning system to confirm the location of each assembly. BMC's team will observe the entire work site with the ROV, and maintain video recording during all installation procedures.

ENBDNR0004667

To ensure BMC's equipment functions properly and does not adversely impact the pipeline, the installation tools and assemblies will be function tested before deployment. The installation tools will be slowly and deliberately moved into place. The tools, when not in use, will be maintained at least 50-feet from the pipeline (and opposite from the position of the diving bell). After installation of an assembly is complete, a detailed video inspection of the assembly as-installed and the surrounding coating (20-feet on either side) will be conducted. A hard-line measurement of the constructed assembly and previous assemblies (or pipeline features) will be documented. Survey logs will be maintained.

3. Protection of commercial and recreational interests

BMC will maintain a safe environment on the surface so as not to impact the recreational and commercial use of the waterway. At all times while on the water, the fleeting crew Tug Captain will conduct visual and radar watches monitoring commercial, ferry, and recreated traffic near the vessels deployed by BMC. The Tug Captain will broadcast a general Notice to Mariners every hour on the Marine Emergency Channel 16, and will maintain direct radio communications with any commercial traffic within 1-hour transit of the assembly work-site.

The vessels, including the barge assembly, will fly the appropriate symbols to indicate the limited maneuverability and dive operations.

By maintaining constant awareness of other watercraft and communicating BMC's operations by reasonable means, BMC will take the precautions available to it to keep 3rd party a safe distance from the worksite.

4. Installation of lakebed anchors

With the foregoing protocols in place and maintained through the duration of BMC's work, BMC will proceed with the installation of lakebed anchors in a safe and thoughtful manner designed to protect its workers, the environment, the integrity of the existing pipeline, and avoid interference from the public.

The screw anchor assembly will be installed with a custom tool designed by BMC and personnel (both fleeting and divers) experienced in the planned construction activities. BMC will supply enough material to complete 22 screw anchor assemblies. An appropriate amount of materials will be staged on BMC's barge for the day's activities. The barge will maintain sufficient open space for a safe working environment, and sufficient lighting for all operational areas. The barge will be fully USCG compliant for operations on the Great Lakes. Mounted to the deck of the barge (and secured for marine activity) will be a crane with capacity to operate BMC's custom tool. Tug boat(s) will accompany the barge for towing and live-boat operations. The tug boat(s) will be fully USCG compliant for operations on the Great Lakes.

The barge will be positioned over the assembly location and maintained by no less than 2-point mooring secured by placing maximum bollard pull by the tugs. The barge's position will

ENBDNR0004668

be constantly monitored so that the dive equipment and tools remain in a position under water that will not impact the existing pipeline.

Once the barge is secured in place, nearly all functions will be checked prior to operation with ongoing monitoring thereafter, including dive bell location and operation, tool placement and operation, video and monitoring equipment, and the condition and quantity of assembly materials. The ROV operators will collect a detailed video inspection of the pre-assembly location and will document the pipe condition at the pre-assembly location and 20 linear feet on either side. The divers will be briefed on the particular installation conditions and objectives of their dive activities before entering the water.

The dive bell will be slowly lowered into the water and not allowed to move more than 5 to 8 feet in any direction so that the diver can access the assembly location without the dive bell interfering or inadvertently impacting the pipeline.

Likewise, BMC's custom installation tool will be slowly lowered into position guided by the continuous observations of BMC to ensure the screw anchor assembly is centered on the pipeline keeping anchors at the required distances. Each screw anchor will be placed using an alignment guide to ensure proper location. Each anchor will be drilled into the lakebed at the appropriate position and at the depth required to achieve the torque necessary for the anchor's performance as specified by the anchor manufacturer. BMC's custom tool measures the torque value being applied to ensure achieving the anchor manufacturer specifications.

Once an anchor is placed, the installation tools will be disconnected from the screw anchor assembly and slowly raised vertically off the pipeline. When not in use, the BMC's installation tool will placed no closer than 15 feet from the pipeline to avoid inadvertent contact.

After the anchors are placed, divers will complete the remaining assembly with hand tools. The top saddle will first be placed on top of the pipeline with the bottom saddle subsequently secured to it. All connections will be hand-torqued prior to tool-torqueing to specified settings allowing the saddles to remain level throughout completion of the assembly. Lastly, an identification placard will be placed on the completed assembly.

A detailed video inspection of the assembly, as installed, will document the pipe condition at the assembly location and 20 linear feet on either side.

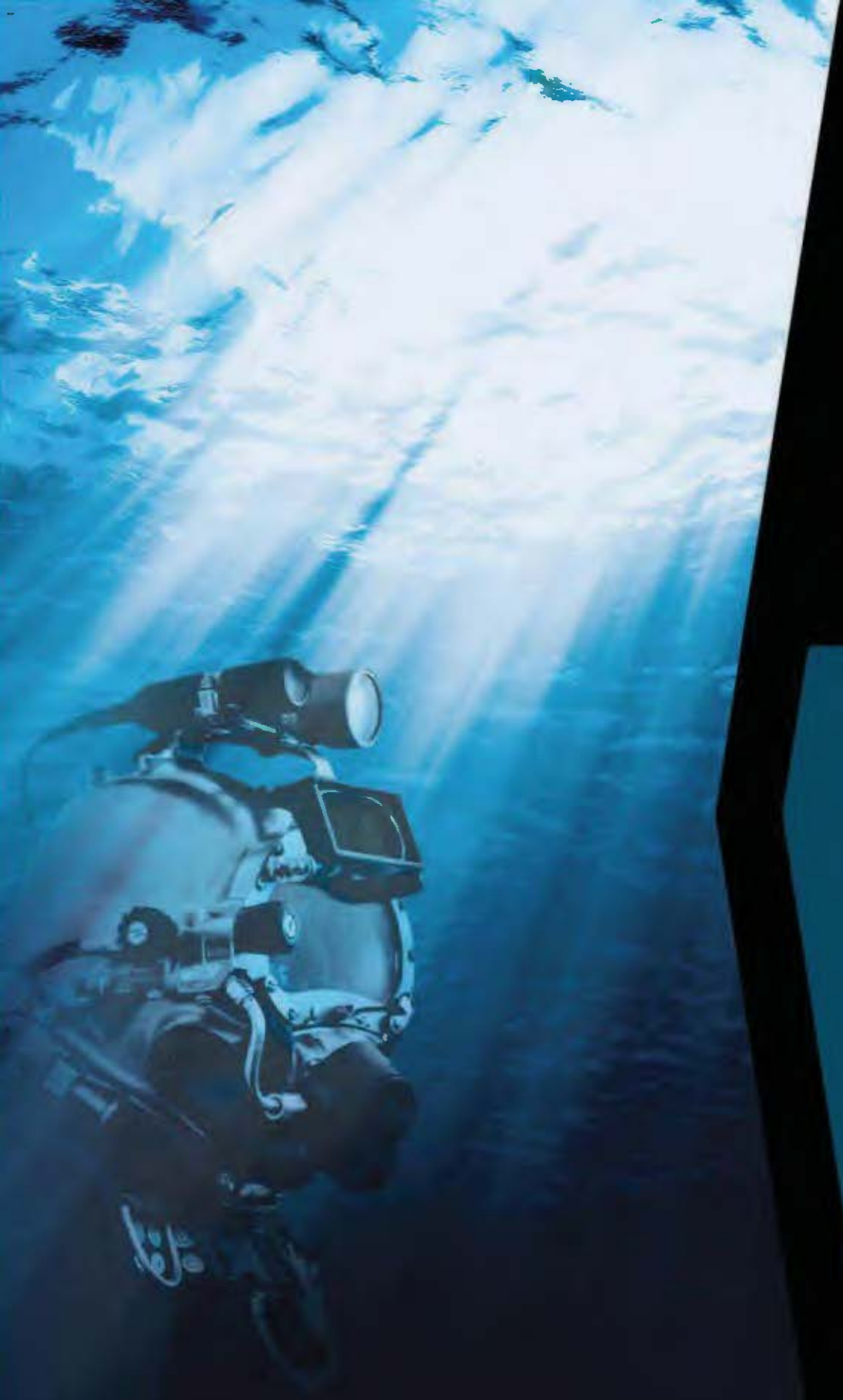
After BMC's work is completed, the tools and dive team will be recovered to the surface by slowly ascending. The safe distance that the dive bell and tool will be maintained prior to its ascent will ensure no inadvertent contact with the pipeline.

Conclusion

BMC is committed to a safe and efficient installation of screw anchor assemblies on behalf of Enbridge. BMC's installation procedure is thoughtfully designed to protect the lives of its employees, the environment, and Michigan's use and enjoyment of the Great Lakes.

*****

ENBDNR0004669



ENVIRONMENTAL PROTECTION PLAN

Straits of Mackinac Inspection

Date: March 9, 2018

Prepared For:
Enbridge Energy

Prepared By:
Ballard Marine Construction, LLC
Chris Bauer, Senior PM
BALLARD Project Number 0717036a

www.BallardMC.com

BALLARD MARINE CONSTRUCTION

Table of Contents

Introduction 3
Project Location 3
Project Review 4
Purpose 4
Spill Prevention 5
Spill Response 6
Spill Control 7
Oil Disposal Company 8
Emergency Response Resources 8
Appendix A - Safety Data Sheets 9
Appendix B - Kokosing Construction Company Emergency Response Actions 10

ENBDNR0004671

Introduction

Ballard Marine Construction (BALLARD) is a specialized commercial diving, marine construction and casualty response company headquartered in the Pacific Northwest. We have a history of taking on technically demanding projects for government and private clients. Operationally, we're focused on reducing waste and ensuring preventative measures are always in place. This commitment to environmental stewardship is proven in our daily activities and projects.

We recognize that our activities and projects have an impact on the environment in terms of the use of raw materials, emissions to air and water, and waste generation, and seek to minimize this as far as is reasonably practicable. Furthermore, our goal is to embed environmental sustainability into BALLARD's activities, thereby driving continuous improvements in the company's environmental performance.

BALLARD is committed to:

- Continual improvement in its environmental performance
- Preventing pollution, contamination or degradation of the environmental systems in our operating environments
- Compliance with all Federal, State and Local Environmental legislation and regulations governing our company's operations, activities and projects

It is the policy of BALLARD to:

- Make efficient use of natural resources by conserving energy and water, minimizing waste, and recycling whether it be in the field or at the office
- Ensure the safe keeping, transportation and subsequent recovery or disposal of all waste
- Use recycled construction materials whenever these can be commercially justified
- Keep transport use to a minimum and regularly service vehicles to maintain their efficiency

Project Location

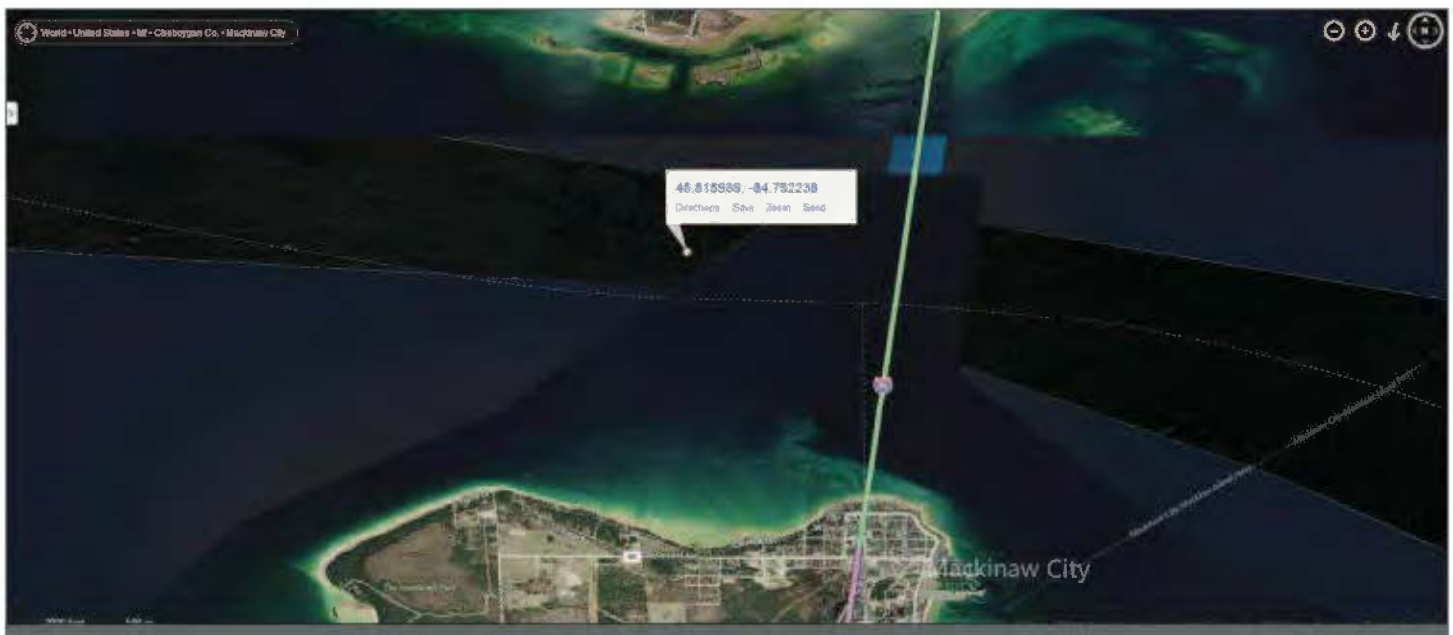


Figure 1: Project Location

Project Review

BALLARD will be conducting surface-supplied and saturation diving operations to install anchors and saddles and perform visual inspection of specified areas of the pipeline as well as coating. This work will be performed at the Strait of Mackinac, approximately 1.5-miles West of Mackinac Bridge as shown in Figure 1.

Purpose

BALLARD prepared the following Environmental Protection Plan (EPP) as a Prime Diving Contractor for Enbridge, for the Straits of Mackinaw inspection project in Mackinaw, MI.

This EPP is intended to provide guidance to minimize environmental pollution and damage that may occur while conducting tasks associated with the anticipated scope of work, during dive station setup, demobilization and/or diving operations. This EPP describes the approach, methods, and operational procedures to be employed to protect the natural environment.

The environmental resources within the project boundaries and those affected outside the limits of work must be protected during the entire duration of the contract. BALLARD will comply with all applicable environmental, federal, state, and local laws and regulations.

A copy of the EPP shall be at the dive site always and be available to the client representative upon request. Along with the Dive Plan and associated documents, the EPP will be reviewed at pre-shift safety meetings.

A. Date of EPP submission:

March 9, 2018

B. BALLARD Personnel Responsible for Ensuring Compliance to EPP:

Chris Bauer, Senior Project Manager
Mobile: (920) 257-9938

C. Name(s) & qualifications of person(s) manifesting hazardous waste to be removed from the site:

Clean Harbors Environmental Services, Inc. (800) 645-8265

Chicago Field Service Center
26137 S. Ridgeland Avenue
Monee, IL 60449

Wisconsin Field Services
W158 N9305 Nor X Way
Menomonee Falls, WI 53051

D. Name and qualifications of person training BALLARD environmental protection personnel:

Rebekah Feasel, Safety Manager

- Ms. Feasel's background includes working as a 40-hour HAZWOPER Instructor and member of the Safety Committee at Diver's Institute of Technology in Seattle, WA, and as the SSE training instructor for diving safety policies, equipment maintenance and troubleshooting techniques at Epic Divers and Marine in Harvey, LA.

E. **BALLARD environmental protection personnel training program:**

Training programs are conducted internally or outsourced as necessary. BALLARD promotes a workplace in which all employees are properly trained to comply with applicable environmental laws, regulations, and procedures, to meet environmental program goals and to take personal responsibility for protecting the environment. All BALLARD personnel are trained in 40 Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) and complete annual 8-hour refresher courses.

Spill Prevention

BALLARD will design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants by using the following Best Management Practices (BMPs):

1. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. Storage in excess of 25 gallons of flammable liquids or 60 gallons of Class III liquids shall be within cabinets constructed to the requirements of NFPA 30. Not more than 25 gallons of flammable liquids shall be stored in safety cans outside of a flammable liquids storage room or storage cabinet.
2. All on-site portable fuel containers (in quantities less than 25 gallons) will be stored within HD plastic-lined enclosed secondary containment structure consisting of raised borders (e.g. children's wading pool) forming an impervious structure capable of containing at least 110% of the largest volume within the containment structure.
3. Secondary containment facilities shall be impervious to the materials stored therein for a minimum contact time of 72 hours.
4. Keep material storage areas clean, organized and equipped with an ample supply of appropriate spill clean-up material (spill kit).
5. Fuel storage areas will have fire extinguishers available of sufficient size for the entire fuel storage area.
6. The integrity of all fuel and oil containers will be monitored and all containers will be placed on bermed plastic and covered from storm water when not in active use.
    a) Secondary containment facilities will be maintained free of accumulated rainwater and spills.
    b) In the event of spills or leaks, accumulated rainwater and contaminants shall be collected and placed into drums. These liquids shall be handled as hazardous waste unless testing determines them to be non-hazardous.
    c) Sufficient separation should be provided between stored containers to allow for spill cleanup and emergency response access.

To prevent discharges onto the ground or into the water during mixing and transfers of hazardous materials, petroleum products and fuel:

1. Fueling of dive compressors, generators and/or related equipment will be conducted using spill prevention and control measures (i.e. fueling cans with built-in funnels, absorbent nappies on hand and ready for immediate use).
2. Contaminated surfaces will be cleaned immediately using absorbent materials following any spill incident to prevent contamination of storm water run-off (where applicable).

ENBDNR0004674

3. Emergency repairs of equipment (i.e. dive compressors) may only be performed onsite if using temporary containment placed beneath the affected equipment. If it is raining when repairs are to be made, a temporary rain cover will be installed over the equipment to prevent substances from spreading.
4. Hazardous materials stored onsite should be handled only when necessary and only in accordance with the work practices listed above.

Daily visual inspections will be conducted on all combustion engines, surrounding areas, secondary containment structures and associated fuel and oil containers. These inspections and cleanup procedures ensure that all equipment is free of external petroleum-based products. Daily visual inspections and regular preventive maintenance (i.e. oil level checks) will be conducted on all combustion engines on the project barges and vessels prior to the start of and during operations. Observed leaks will be cleaned-up as necessary and reported to the Dive Supervisor or Project Manager for maintenance and/or immediate corrective action.

Routine inspections and maintenance will be performed to prevent drips, leaks or failures of hoses, valves, fittings, containers, pumps, or other systems that contain or transfer hazardous materials. Minor drips and/or leaks will be diagnosed and repaired as necessary and drip pans, where feasible, will be placed to eliminate potential releases. Drip pans are to be cleaned and emptied daily during heavy rains or whenever there is excessive movement of a dive barge/vessel that may cause materials to spill outside of the drip pan.

Spill Response

Should a spill occur, the Supervisor will assess the situation for safety and the potential for the release to pose an immediate threat to human health or the environment. If the supervisor deems the release to be a potential threat, immediate action will be taken to eliminate or minimize the spills impact on the environment.

The following methods and procedures will be used for expeditious contaminant clean-up. At no time will BALLARD personnel attempt to contain and/or mitigate a spill if doing so will put them in danger.

Table 2 – Spill Response Procedures

	BALLARD is Sub-Contractor	Spills >RQ	Significant or Potential Release of Hazardous Materials
Reporting	Supervisor will assess and report spill to Client POC	1. Notify the National Response Center (800) 424-8802	1. Notify 9-1-1 of the emergency
Assessment of Spill	The Project Manager / Supervisor will be notified immediately. BALLARD onsite personnel will don appropriate PPE and take immediate actions to mitigate and minimize spill impacts utilizing spill response kits onsite. Safety will be priority number one, operations to eliminate the source of release and clean-up spills will not be undertaken until the Supervisor has performed a hazard analysis and determined that his or her crew will be able to perform response activities safely.		

ENBDNR0004675

Securing the Area	In the event of a spill, the barge/vessel/trailer will be secured onsite and monitored by onboard crew and/or security watch after hours (as needed). For spills in water, floating sausage absorbent booms will be employed immediately to encircle the spill as required to prevent dispersion. BALLARD crews will only perform response activities to the level for which they are equipped and trained.
Spill Response	The spill source will be identified and absorbents will be deployed as needed to completely encircle and isolate the spill site. The spill source will be diagnosed and repaired to eliminate further impacts. Contaminated deck surfaces will be cleaned immediately using absorbent materials following any spill incident to prevent contamination of water runoff (where applicable)
Containment and Disposal	All contaminated absorbent materials will be double-bagged in drum liners or placed in drums, the exterior and lid of the drum will be labeled (with contents, date, time collected, job location and POC) for disposal contractor questions. The bags and/or drum(s) will be sealed and temporarily stored onsite for post-job transport back to the BALLARD shop where proper disposal can be arranged with a certified disposal company.

Spill Control

Equipment and supplies will be tested and/or maintained as necessary to ensure proper operation during our activities onsite. The procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations.

1. Should a spill occur, BALLARD employees who are involved or witness the spill will immediately notify the Dive Supervisor. The Dive Supervisor will determine the extent of the spill and will notify the onsite representative for Enbridge immediately.
2. At the direction of the Dive Supervisor, BALLARD personnel will take immediate action to control or minimize the release of hazardous materials within their scope of training and the PPE available to them.
3. BALLARD will immediately clean-up any "incidental releases" that do not pose a hazard or in any way impact the environment.
   Note: BALLARD personnel will report all spills directly to the onsite representative for Enbridge. BALLARD will **NOT** directly notify Federal, State or Local Agencies without direction from the onsite representative to do so.

Table 1: Federal, State, and Local Agencies Notified in Event of a Spill

Agency Name	Contact Number	When to Notify Them	Agency Regions
National Response Center	1 (800) 424-8802	Whenever there is a release greater than the reportable quantity (RQ) for that material.	National
US Coast Guard	1 (906) 635-3236	Whenever there is a release greater than the RQ for that material.	Sector Sault Sainte Marie

4. In the event of a significant spill, diving operations will be suspended. The Project Manager and Dive Supervisor, will supervise and utilize all necessary BALLARD personnel to implement and complete the containment and cleanup.
5. All BALLARD personnel have 40 Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training and complete annual 8-hour refresher courses. Based on this training, BALLARD personnel are qualified to respond and perform all necessary spill response and cleanup tasks.
6. The following list of materials and equipment will be immediately available at the job site:

a. Dry Chemical and water fire extinguisher(s)
b. 40 feet of absorbent boom
c. 5 bales of absorbent pads
d. First Aid and Trauma kit(s)
e. Personal protective equipment appropriate to materials on-site
f. Miscellaneous tools
g. Polyethylene bags (drum liners)
h. Visqueen
i. 5 gallon buckets
j. Duct tape
k. 5 gallons of Simple Green
l. Spill Dry (kitty litter)

7. BALLARD provides spill kits for immediate containment and cleanup on site. These spill kits include basic PPE and sorbent materials to assist in initial response operations. Spill kits will be placed near stored hazardous materials on the jobsite in a location that is immediately accessible by responding employees.

Note: Safety Data Sheets (SDS') for hazardous materials present onsite at any given time are included in Appendix A. The plan will be updated as necessary should new hazardous materials be brought onsite or removed from the site.

Oil Disposal Company

BALLARD intends to utilize Clean Harbors Environmental Services to recover and recycle oily waste generated during this project. They will be scheduled to recover and recycle the oily waste product.

Emergency Response Resources

BALLARD has a working relationship with Clean Harbors, a USCG ORSO responder. Clean Harbors will be contacted at 1 (800) 645-8265 to aid BALLARD personnel in the response should an unforeseen spill emergency occur. Additional response resources are available at the BALLARD facility located in Seattle, WA.

ENBDNR0004677

Appendix A - Safety Data Sheets

ENBDNR0004678

Appendix B - Kokosing Construction Company Emergency Response Actions

KOKOSING CONSTRUCTION COMPANY, INC.
DUROCHER MARINE DIVISION

VESSEL OR DRY LAND INCIDENT
EMERGENCY RESPONSE ACTIONS

FOR EMERGENCIES WITH POTENTIAL IMPACT TO LIVES, PROPERTY, OR THE ENVIRONMENT

A. Receipt of call by Durocher employee as notification of a pending, occurring, or past vessel emergency.

B. Initial Durocher contact person to get as many pertinent facts as possible about the emergency. Who, what, where, and when? Make sure to note contact information of Durocher employee on scene.

C. If the Durocher contact person does not have proper authority, then he/she should call a Durocher person who does have authority. This list would include any Durocher foremen, superintendents, engineers, managers, or executives as the normal chain-of-command may contain.

D. Durocher person-in-authority judges the information received and, if it is determined to be a true or probable emergency, takes the next step in response actions.

E. Call to the vessel commander or Durocher employee in charge of incident, if not already contacted by them, to verify the situation. Confirm that everything possible is being done at the site of the emergency to protect life and property.
   1. Make calls to a local 911 Central Dispatch System
   2. Call the USCG
      i. Buffalo 716-843-9315 or 716-843-9527
      ii. Cleveland 216-701-5986
      iii. Detroit (Lake Huron) 313-568-9600 or 313-568-9524
      iv. Duluth 218-720-5286 or 218-522-0707
      v. Milwaukee (Lake Michigan) 414-747-7100 or 414-747-7182
      vi. Sault Ste. Marie 906-635-3233 or 906-632-0967

   3. If those calls have not been made, and they are necessary, make those calls immediately. Also confirm that steps are being taken to prevent or contain a hydrocarbon discharge or hazardous materials (spills).

   4. Location of Spill Kits (Oil boom and oil pads)
      i. Shop
         1. Oil pad is located upstairs in the shop
         2. Oil boom is located upstairs in building #3
      ii. Vessels
         1. Located in bow compartment or engine room
      iii. Barges
         1. Located on deck in green waterproof barrel

F. If an emergency situation involves hydrocarbons (fuels, oils, lubricants) spill or any significant harm to the environment may have occurred or could occur, call the National Response Center (NRC) @ 800-424-8802. Provide them with the information pertinent to the emergency including the vessel description and official USCG vessel number, if possible. The NRC will provide a report number.
Then the NRC will call the nearest USCG Captain of the Port (COTP) with the emergency information you provided.

G. Call Kokosing's insurance carrier for spills, EPG rep Lars Perkins at 203-730-8833. EPG will contact Ken Meyer at 516-731-2021, he contracts all spill contractors. You may suggest the following contacts that we have used in the past but ultimately Ken makes the call on who is contracted (depends on price and location).
   1. Spill response and clean-up firms we have used in the past:
   2. Straits of Mackinac or Cheboygan area, call A-1Environmental Services in Kalkaska, Michigan at 1-800-544-2663
   3. Cleveland area, call Inland Waters of Ohio at 1-800-869-3949

H. Record all pertinent information for future reference.

I. Visit the scene or arrange visit to take pictures, (or oil samples if the spill is from equipment that is NOT ours) and assure that follow-up actions are being taken to control the situation and complete the response.

J. Complete a report on the emergency and submit it to your supervisor.

Transportation Security Incident (TSI) or Breach of Security at our dock.

TSI: A security incident resulting in a significant loss of life, environmental damage, transportation system disruption or economic disruption.

Marine Casualty or Serious Marine Incident

K. **Reportable Marine Casualty**

A reportable marine casualty is an incident with a vessel on a U.S. navigable waterway that includes any of the following:

- An unintended grounding, or an unintended strike of (collision with) a bridge;
- An intended grounding, or an intended strike with a bridge, that creates a hazard to navigation, the environment, or the safety of a vessel;
- A loss of main propulsion, primary steering, or any associated component or control system that reduces the maneuverability of the vessel;
- An occurrence materially and adversely affecting the vessel's seaworthiness or fitness for service or route, including but not limited to fire, flooding, or failure of or damage to fixed fire-extinguishing systems, lifesaving equipment, auxiliary power-generating equipment, or bilge-pumping systems;
- A loss of life;
- An injury that requires professional medical treatment (treatment beyond first aid) and, if the person is engaged or employed on board a vessel in commercial service, that renders the individual unfit to perform his or her routine duties;
- An occurrence causing property damage in excess of $25,000, this damage including the cost of labor and material to restore the property to its condition before the occurrence, but not including the cost of salvage, cleaning, gas-freeing, dry docking, or demurrage; or
- An occurrence involving significant harm to the environment as defined in 33 CFR 4.03-65

**If involved in a reportable marine casualty, ensure you fill out and submit a CG-2692 to the Coast Guard.*

Do I need Alcohol and Drug testing?
46 CFR 4.05-12
For each marine casualty required to be reported, and verified to be a Serious Marine Incident, the marine employer shall determine whether there is any evidence of alcohol or drug use by individuals directly involved in the casualty and report the results on a CG-2692B

L. Serious Marine Incident

The term Serious Marine Incident includes the following events involving a vessel in commercial service:

Any marine casualty or accident as defined on the front of this brochure or 46 CFR 4.03-1, which is required to be reported by 46 CFR 4.-05-1 resulting in the following:

1) One or more deaths;

2) An injury to a crewmember, passenger, or other person which requires professional medical treatment beyond first aid, and, in the case of a person employed aboard a vessel in commercial service, which renders the individual unfit to perform routine vessel duties;

3) Damage to property, as defined in 46 CFR 4.05-1(a)(7) of this part, in excess of $100,000;

4) Actual or constructive total loss of any vessel Subject to inspection under 46 USC 3301;

5) Actual or constructive total loss of any self propelled vessel, not subject to inspection under 46 USC 3301, - 100 gross tons or more;

6) A discharge of oil of 10,000 gallons or more into the navigable waters of the United States, as defined by 33 USC 1321, whether or not resulting from a marine casualty;

7) A discharge of a reportable quantity (RQ) of a hazardous substance into navigable waters of the U.S. or a release of a RQ of a hazardous substance into the environment, whether or not resulting from a marine casualty

Who is Required to conduct Alcohol and Drug Testing and When?

Coast Guard regulations currently require marine employers to take all practical steps after a Serious Marine Incident to have each individual engaged or employed on board a vessel in commercial service, who is directly involved in the incident, chemically tested for evidence of drug and alcohol use.

Effective June 20, 2006, final rule requires that most commercial vessels have alcohol testing devices on board, and authorizes the use of saliva as an acceptable specimen for alcohol testing.

Certain operations where the vessels could conceivably get the tests completed within two hours will not need to carry the alcohol testing devices; however, all other vessels should carry them to ensure they will not be subject to civil penalty of $5,000 per violation, with each day of a continuing violation constituting separate violations.

Conforming products for Alcohol Screening Devices can be obtained at:
http://www.dot.gov/ost/dapc/index.html.

46 CFR 4.06–3 Requirements for alcohol and drug testing following a serious marine incident

Drug testing is mandatory within 32 hours following a Serious Marine Incident.

Alcohol testing is mandatory within 2 hours following a Serious Marine Incident.

If alcohol testing cannot be conducted within 2 hours due to safety concerns directly related to the casualty, testing is to be conducted as soon as the safety
concerns have been adequately addressed to permit such testing, but no later than 8 hours after the incident.

The responsibility to ensure that the alcohol and drug testing occurs remains on the marine employer. The marine employer must ensure that the CG-2692B is
completed with the testing information. if any testing was not conducted, the marine employer must state the reason why on the CG-2692B.

ACCIDENT REPORTING PHONE LIST

During Work Hours (7am-6pm):

- Auto Accidents, General Liability or loss or damage of property
  - 740-694-6315 or 800-800-6315
  - John Reed Ext 242
- Worker's Compensation injuries
  - 740-694-6315 or 800-800-6315
  - Cora Huntsman ext. 240 or Beth Wright ext. 278

After Hours Reporting (6pm – 7am):

- For Auto, General Liability or Worker's Comp
  - 800-994-0692

For All Employees After Work Hours:

- If for any reason, you feel that you might need medical attention after hours for a work related injury, call the # below, **PRIOR** to seeking medical treatment
  - 800-617-1822

CRISIS TEAM RESPONSIBILITIES
DUROCHER MARINE

Team Leader: Usually the person in charge of the general area or vessel at the time and place a crisis occurs. Examples are manager, superintendent, foreman, captain. This person is expected to assemble and lead the team responding to the crisis.

Backup Team Leader: Person with the ability to perform as the team leader in that person's absence.

Phone Person: Person who must call 911 with a crisis description and location. This person may also be responsible for calling the National Response Center, if necessary.

Backup Phone Person: Person with the ability to perform as the phone person in that person's absence.

Project Spokesperson: Person with the Kokosing authority to speak to the media on behalf of the company in regards to the crisis.

Backup Spokesperson: Person with the authority to perform as the spokesperson in that person's absence.

Gate Guard/Securer: Person who tends the jobsite security gate to prevent unauthorized access to the site.

Backup Gate Guard/Securer: Person with the ability to perform as the guard in that person's absence.

Escort Person: Person responsible for escorting personnel approved by the team leader but not otherwise allowed onsite.

Backup Escort Person: Person with the ability to perform as the escort person in that person's absence.

Photographer: Person responsible for taking appropriate pictures of people, places, and things involved in the crisis. This is for the purpose of providing record and potential investigative information after the crisis is over.

Backup Photographer: Person with the ability to perform as the photographer in that person's absence.

DUROCHER SALARY EMPLOYEE PHONE LIST Page 1

NAME	CELL #	HOME #	OTHER #	
Aaron Harke	231-420-4646	231-597-9484		
Beth Weber	231-420-4640	989-939-7410	989-732-1632	Parents
Bill Wenger	231-420-4638	231-627-2207	239-403-0250	Condo
Brendan Ryan	231-268-1066			
David Hudson	231-420-4644	231-625-2934		
David Nordquist	269-519-3343			
Devlin Huhta	231-445-2460			
Gary Yaklin	231-420-4636	989-734-4904		

DUROCHER SALARY EMPLOYEE PHONE LIST Page 2

NAME	CELL #	HOME #	OTHER #	
Joanna Landon	231-420-0029	231-627-2344	231-420-4048	Scott
Jonathon Crowe	231-445-0214			
Kathy Loznak	231-420-4330	231-537-2077		
Mark Henrikson	231-420-4639	231-627-5894		
Mike Schmeltzer	231-420-1195	616-847-0081		

DUROCHER SALARY EMPLOYEE PHONE LIST Page 3

NAME	CELL #	HOME #	OTHER #	
Stan Neff	231-420-4637	231-625-9330	231-885-1116	Mary
Tim Paquette	231-420-4635			
ToddMerchant	231-420-4650	231-627-7298		
Travis Lake	231-420-0093		231-286-9588	Heather

ENBDNR0004684

OFFICE SECURITY SYSTEM

Call list for office alarm, call in order from 5:00 PM – 8:00 AM

1. Todd Merchant 231-627-7298
2. Joe Van Antwerp 231-627-7488
3. Bill Wenger 231-627-2207
4. Mark Henrikson 231-627-5894
5. Stan Neff 231-625-9330

The following information is needed if you receive a call from the alarm company:
Account number: 111466
Pass code: 2243
24 Hour Emergency Phone: 800-424-3624

Sunrise Electronics & Security: 800-347-8890

ACCIDENT REPORTING POLICY

1.0 Introduction

It is Kokosing's goal to have zero accidents, incidents or near misses. However, if an accident, incident or near miss occurs, Kokosing requires immediate reporting to the contact at Fredericktown office.

2.0 Procedures

2.1 All auto accidents, general liability and loss or damage of property are to be reported to the Workers' Compensation Department immediately. To report accidents or injuries after hours and on the weekends, call the afterhours reporting number listed below:

Accident/Injury After Hours Reporting:
6:00 PM to 7:00 AM
Call: 800-994-0692

2.1.1 The afterhours service will ask for your name, job name, location, a phone number where you can be contacted and a brief description of why you are calling. The service will then contact a Kokosing representative to call you back.

2.2 Reporting accidents immediately is required for several reasons:

2.2.1 The Workers' Compensation Department will immediately become involved to help insure proper medical attention is given to our employees

2.2.2 Prompt investigation prior to changing the scene of the accident may be required to determine cause and who is the responsible party for the loss.

2.2.3 After an accident or injury, drug testing is required per Kokosing's drug testing policies.

2.3 If no one can be reached or no one is available to get to the accident or incident, refer to Appendix A for the important accident information that should be collected. You should take pictures, do a drawing and record exact location of construction signage (i.e. station numbers) or other relevant information. If you do not have a camera, purchase a disposable camera if possible.

2.4 Have all witnesses write their own statement of what happened, where they were when the accident occurred and any other relevant information. This should be done prior to leaving for the day.

Tug Boat Information

Name	Length	Width	Draft	Gross Tons	Official #	KCC#
Valerie B	67.2'	24'	10'	91	638560	13570
Nancy Anne	54.0'	20.0'	8.0'	73	523039	13500
Champion	63.7'	23.5'	9.5'	125	556293	13501
General	71.0'	19.5'	10.0'	119	907159	13502
Joe Van	49.2'	15.0'	7.0'	32	201991	13503
Ray D	42.3'	12.5'	5.8'	20	284428	13504
Timmy V	38.8'	13.1'	3.5'	24	641537	13505

Barge Information

Name	Vessel Size	Gross Tons	Official #	KCC#
Sam II	90' x 50' x 7.5'	297	279148	13512
M-1	100' x 24.9' x 4.9'	121	550126	13513
MM-141 MM-142	140' x 39' x 9'	420	625672 627503	13514 13515
M-2	47.1' x 16.9' x 3.1'	24	548113	13516
D-2002 D-2003	195' x 40'x 12'	749	1101739 1101738	13517 13518
D-2006 D-2007	195' x 40'x 12'	786	1109541 1109542	13519 13520
Kokosing I	180' x 56' x 12'	1016	1144055	13738
Kokosing 2	150' x 54' x 8'	544	1228272	23291
9611B/9613B9614B/9615B	Dump scows			23770/23709 23802/23771