SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:FISHERIES AND OCEANS CANADA –
SMALL CRAFT HARBOURS BRANCH
PROPOSAL NAME:PROPOSAL NAME:LITTLE GRINDSTONE POINT
BREAKWATERCLASS OF DEVELOPMENT:2TYPE OF DEVELOPMENT:WATER DEVELOPMENT
CLIENT FILE NO.:5470.00

OVERVIEW:

On June 8, 2010, Manitoba Conservation received a Proposal dated June 4, 2010, from Fisheries and Oceans Canada – Small Craft Harbours Branch to develop a 95 metre long rubble mound breakwater at the federally owned harbour facility in Little Grindstone Point, Manitoba. The federally owned harbour is located within the limits of Hecla/Grindstone Provincial Park and the planned expansion will extend beyond the existing property limits held by the Department of Fisheries and Oceans. The requested property is located in SW 22-26-6 EPM.

Public comments were received in response to the advertisement of this proposal in the Interlake Spectator on Friday, June 25, 2010. The proposal was placed in the Public Registries at the Millennium Public Library, the Manitoba Eco-Network, Conservation Library (Main) and Selkirk and St. Andrews Regional Library. The proposal was distributed to TAC on June 23, 2010, with the closing date for TAC and Public comments on July 26, 2010.

COMMENTS FROM THE PUBLIC:

Is there going to be an environmental study going to be done on the effect of the fish spawning area just west of the harbour? What is the effect the breakwater is going to have on the entrance to the harbour from silting in? As this is a fishing harbour for commercial fisherman there is plenty of safe dock space for their boats. This harbour has been a safe place for over 35+ years with no problems for the fishers who use the harbour. The breakwater will also not allow the water to move and the algae which becomes bad in the summer and fall will become stagnant, and become one green harbour. Remember its a fishers harbour, not a harbour for recreational boaters.

<u>Disposition</u>: Comments were provided to the proponent. Comments regarding impacts to the entrance of the harbour were forwarded to the proponent with a request for further information (see 'Request for Additional Information' section of this summary). With respect to comments related to impacts on spawning, an environmental assessment is

required under the *Canadian Environmental Assessment Act* and Fisheries and Oceans Canada (DFO) has determined that an authorization will be required under the *Fisheries Act*. Manitoba Conservation will continue to work cooperatively with federal agencies on this project.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

 Based on responses to the federal survey, the *Canadian Environmental Assessment Act* will apply to this project. Fisheries and Oceans Canada (DFO) has determined that an authorization will be required under subsection 35(2) of the *Fisheries Act*. As Approval under *Navigable Waters Protection Act* (NWPA) may also be required for the project. However, Transport Canada has not yet made that determination. I will forward TC's determination once I received it.

<u>Disposition</u>: Comments were provided to the proponent. Manitoba Conservation will continue to work cooperatively with federal agencies on this project.

Manitoba Conservation, Parks and Natural Areas Branch

Parks and Natural Areas Branch has reviewed the proposal filed pursuant to the Environment Act for the Little Grindstone Point breakwater project. Parks and Natural Aras Branch supports the development of a breakwater at Little Grindstone Point Harbour as the added protection for both recreation boaters and commercial fishermen is needed. However, the Branch finds this proposal to be lacking in sufficient information.

The harbour at Little Grindstone Point is within Hecla/Grindstone Provincial Park. It is classified as a Natural Park and the Grindstone portion of the park, where the proposed project is located, has an active cottage community.

In Section 1 "Executive Summary" it states "An environmental assessment and license issued by the Province of Manitoba is a prerequisite of entering into a longterm lease with the Province of Manitoba." Parks and Natural Areas Branch would like to clarify that an environmental assessment and license is required because this project is considered to be a harbour development and is therefore a Class II Development under The Environment Act. Because this is a development within a provincial park a long-term lease is required.

Section 3.1 "Project Description" is lacking in the detailed information needed by Parks and Natural Areas Branch to adequately determine the overall scope and footprint of the development, as well as the impacts to the park environment and users. Parks and Natural Areas Branch requests that the following information be provided:

- How is the breakwater going to be built?
- How is equipment going to access the construction area?
- Will a new access road need to be built to access the construction area? If so will it be decommissioned after construction is complete or remain? Who will be responsible for maintaining this access road?
- What section of shoreline vegetation will be lost due to this project?
- Section 6 on mitigation mentions the need for stockpiles. Will any on-site rock stockpiles need to be established to do this project? If so where will they be?
- After construction is complete will vehicles be able to and be permitted to drive out onto the breakwater?
- Will floating docks be constructed along the inside of the breakwater as shown in the original proposal to Parks and Natural Areas Branch as provided by the Little Grindstone Harbour Authority in February of 2009? Will the existing floating docks be replaced with permanent docks as also outlined in their previous proposal?

Section 3.2.1 states that Canada holds title (H58316) to several adjacent lots within but not part of the Park described as: Parcels A, B, C, D and E, Plan 16784, W.L.T.O., excepting thereout allmines and minerals as more fully set forth in a transfer registered in the W.L.T.O. as No. 83-79117 in Fractional S.W. ¼ 22-26-6, E.P.M. and part of the Bed of Lake Winnipeg.

Parks Branch requests further information regarding the titled property (e.g. the property area and boundaries). Is title held to water storage lots and/or land area above O.H.W.M? Is the title to the entire area outlined in blue in the figure if Appendix A? How long has this title been held? According to Parks Branch's records, SW ¼ 22-26-6EPM is shown to be provincial Crown land designated as Provincial Park.

Department of Oceans, Small Craft Harbours Branch has not yet applied to Parks and Natural Areas Branch for a long-term lease for the expanded area. Parks Branch requests that a clause be placed in the Environment Act License, if approved, stipulating that prior to the commencement of any development works associated with this project, a lease must first be obtained from Parks.

Section 3.2.4 states that the "requested uplands" (i.e. the shore) are within a protected Backcountry land use category. This is incorrect. All lands within the area they are requesting a long-term lease for are within the Recreation Development land use category.

Sections 5 and 6 fail to look at any impacts other than to aquatic ones. The human factor needs to be taken into consideration due to the cottage community.

- There could be an increased risk to people in the spring due to the heavy load of rocks on the ice likely causing the ice to break up or fail sooner than it normally would. What will be done to mitigate this risk?
- It is briefly mentioned that there will be a "minor amount of disturbance to terrestrial vegetation". What will this disturbance be and how will it be mitigated?
- Several rare species occur in Hecla/Grindstone Provincial Park and in Lake Winnipeg. Has the proponent contacted the Manitoba Conservation Data Centre to request rare species occurrences for terrestrial or aquatic species? If not this should be done so if there happen to be any occurrences proper mitigation can occur.
- As mentioned there are several cottages on Grindstone. There are going to be impacts to the cottagers and other park users by way of noise, trucks hauling fill down the roads etc. while this breakwater is being constructed. How is this going to be mitigated?

Appendix E "Engineering Plans and Specifications" includes several points which Parks and Natural Areas Branch would like clarification or has comments on.

01 35 43 – ENVIRONMENTAL PROCEDURES

- 1.3.1 Provide temporary drainage and pumping required to keep excavations and site free from water. The proponent should detail where they propose to do excavations within the park in association with the breakwater development (excluding quarries where they are obtaining material).
- 1.4.1 Construction equipment will enter and leave the lake at such a location and in such a manner that disturbance to the lakeshore. Where is this location going to be? It should not be left up to the construction contractor to decide.
- 1.4.4 Do not use waterway beds for borrow material. Borrow material should only be obtained from designated pits or quarries where permits have been obtained for. No borrow material is to be obtained onsite where the breakwater is to be constructed.
- 1.4.12 Reclaim and restore disturbed areas to previous or better condition. Only vegetation species native to the area are permitted to be used in any reclamation or restoration activities.
- 1.6.1 Do not bury rubbish and waste materials on site unless approved by Engineer. Rubbish and waste materials are not permitted to be buried on site for any reason. Rubbish and waste materials are to be disposed of in a designated waste disposal ground. If they are not types of waste that can be

disposed of at the Grindstone waste transfer station then it will be removed from the park and disposed of in an appropriate manner at a disposal facility.

<u>Disposition</u>: Several comments were forwarded to the proponent for further information (see 'Request for Additional Information' section of this summary). Comment regarding lease requirements can be accommodated with licence conditions.

Manitoba Water Stewardship

- Manitoba Water Stewardship recommends an *Environment* Act Licence to include the following requirements:
 - The Licencee shall provide both baseline and post-monitoring information to assess the project.
 - The Licencee shall amend—including upon assessing monitoring information—the design of the shoal to incorporate a greater range of depths
- Manitoba Water Stewardship submits the following concerns:
 - Lake Winnipeg supports a diverse fish community and an economically important commercial and recreational fishery. While the proponent has provided a range of depths, information is not provided on:
 - the bottom substrate;
 - the near shore littoral area (other than to indicate that there didn't appear to be any aquatic vegetation); and,
 - fish presence/use of the area in question or presence of mussels.
 - Information is not provided on how the breakwater may alter, through a change in wind/wave action the area to the east.
 - The proponent proposes a walleye spawning shoal as compensation. The shoal is to be built along the windward side of the breakwater and will be constructed of 75mm-150 mm diameter clean rock 0.3 m thick. The proponent refers to a document by Erickson and Cann regarding the poor and erratic nature of natural walleye reproduction in Manitoba lakes due to limited spawning shoals. This analogy was for closed lake systems in agro-Manitoba. Manitoba Water Stewardship is not of the opinion that walleye spawning habitat is limiting in Lake Winnipeg. However, there is the recognition of the need to compensate within a close proximity to the works. The shoal may also provide habitat for other species.
 - Regarding the proposed design of the shoal, while the proponent has identified the ideal substrate diameter, the shoal is proposed to be 0.3 m

thick. Given the 218 and 215 m contour lines drawn in the detailed plan provided in Appendix E there are two concerns:

- In high water years (elevation 218.8 m) the potential water depths over the shoal will range from 0.5 m to 3.5 m with the a large portion of the shoal having greater than 1.2 m and,
- In low water years (elevation 216.7 m) the shoal will range from exposed to 2.4 m.
- The preferred depths noted in Erickson and Cann (egg deposition in 0.3 to 1.2 m of water) and monitoring reports from the Brevoort Lake Reef in Lake Erie (75% of egg deposition and 95% of fry production occurred at depths less than 0.76m/2.5') would suggest that overall the water depths of the proposed shoal will be too deep. The Minnesota Department of Natural Resources provided some recommendations/criteria for design and placement of artificial shoals which included the following:
 - Prospective shoal area should have previous use as a walleye spawning shoal or be in the path of a known spawning run, although random placement may benefit non-target species;
 - Shoal should be placed on very firm substrate to minimize sinking; they suggested placing a 4-6" layer of 1-2" rock screenings covered by larger spawning materials or use a synthetic cloth liner (stretched on the bottom prior to freezeup);
 - Determine if the lake bed and shoreline is erodible and may present a siltation or detritus problem;
 - Shoal should have a gradual slope (max of 10%); and,
 - Establish a benchmark on high ground so changes can be measured.
- Manitoba Water Stewardship submits the following comments:
 - The Manitoba Department of Water Stewardship is mandated to ensure the sustainable development of Manitoba's water resources. Manitoba Water Stewardship is committed to the goals of: protecting aquatic ecosystem health; ensuring drinking water is safe and clean for human health; managing water-related risks for human security; and stewarding the societal and economic values of our waterways, lakes and wetlands; for the best water for all life and lasting prosperity. Manitoba Water Stewardship achieves these goals, in part, through administering legislation, including *The Water Protection Act, The Water Rights Act*, and *The Water Power Act*.
 - The Water Rights Act requires a person to obtain a valid licence to control water or construct, establish or maintain any "water control works."
 "Water control works" are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of

water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If a proposal advocates any of the aforementioned activities, a person is required to submit an application for a Water Rights Licence to Construct Water Control Works. A person may contact the following Water Resource Officer to obtain an application and/or obtain information.

- A contact person is Mr. Geoff Reimer C.E.T., Senior Water Resource Officer, Water Control Works and Drainage Licensing, Manitoba Water Stewardship, Box 4558, Stonewall, Manitoba ROC 2Z0, telephone: (204) 467-4450, email: geoff.reimer@gov.mb.ca.
- The proponent needs to be informed that if the proposal in question advocates any construction activities, erosion and sediment control measures should be implemented until all of the sites have stabilized.

<u>Disposition:</u> Comments were provided to the proponent. Some comments were forwarded to the proponent for further information (see 'Request for Additional Information' section of this summary). With respect to comments related to impacts on spawning and fish habitat, an environmental assessment is required under the *Canadian Environmental Assessment Act* and Fisheries and Oceans Canada (DFO) has determined that an authorization will be required under the *Fisheries Act*. Manitoba Conservation will continue to work cooperatively with federal agencies on this project.

ADDITIONAL INFORMATION REQUEST:

EAL Branch contacted the proponent with questions from TAC members and the public concerning the project on August 5, 2010. A submittal in response to comments was received on August 12, 2010 and included the following information:

- Land Title Documents
- Revised Breakwater Design
- Substrate Shoreline Photos
- Conservation Data Centre's Search Results

Included in the submittal was a response to the following TAC and public questions:

1. Section 3.1, "Project Description" is lacking in the detailed information needed by Parks and Natural Areas Branch to adequately determine the overall scope and footprint of the development, as well as the impacts to the park environment and users. Parks and Natural Areas Branch requests that the following information be provided: a. How is the breakwater going to be built?

The breakwater will be built using land based excavation equipment on ice. Rock will be hauled to site from local quarries using rock trucks, stockpiled on site and then placed on the breakwater from the ice.

b. How is equipment going to access the construction area?

The equipment will access the construction area on the ice, likely using the existing launch ramp at the harbour as the access point. Snow will be built up on the launch ramp to protect the concrete underneath from the heavy loads of the excavation equipment.

c. Will a new access road need to be built to access the construction area? If so will it be decommissioned after construction is complete or remain? Who will be responsible for maintaining this access road?

No, no new access road will need to be built to access the construction area. As stated above, the equipment will access the construction area using an ice road which will not require any gravel surfacing.

d. What section of shoreline vegetation will be lost due to this project?

No shoreline vegetation will be lost due to this project. The breakwater design has been revised to allow for a 10 metre gap between the breakwater and the shoreline to allow for the flow of water between the two. See attached construction drawing G-1 dated August, 2010 - "20100810 Little Grindstone Breakwater.pdf".

e. Section 6 on mitigation mentions the need for stockpiles. Will any on-site rock stockpiles need to be established to do this project? If so where will they be?

Yes, there will be a need for on-site rock stockpiles for this project. They will likely be located on the gravel surfaced parking area near the harbour, if acceptable to the Parks and Natural Areas Branch.

f. After construction is complete will vehicles be able to and be permitted to drive out onto the breakwater?

No, vehicles will not be able to access the breakwater after construction is complete.

g. Will floating docks be constructed along the inside of the breakwater as shown in the original proposal to Parks and Natural Areas Branch as provided by the Little Grindstone Harbour Authority in February of 2009? Will the existing floating docks be replaced with permanent docks as also outlined in their previous proposal?

Floating docks may be installed inside the breakwater in the future but that has not been determined to date. A separate application will be filed if a fixed wharf or floating docks are to be installed at a later date.

- Section 3.2.1 states that Canada holds title (H58316) to several adjacent lots within but not part of the Park described as: Parcels A, B, C, D and E, Plan 16784, W.L.T.O., excepting thereout all mines and minerals as more fully set forth in a transfer registered in the W.L.T.O. as No. 83-79117 in Fractional S.W. ¹/₄ 22-26-6, E.P.M. and part of the Bed of Lake Winnipeg.
 - a. Parks Branch requests further information regarding the titled property (e.g. the property area and boundaries). Is title held to water storage lots and/or land area above O.H.W.M? Is the title to the entire area outlined in blue in the figure if Appendix A? How long has this title been held? According to Parks Branch's records, SW ¹/₄ 22-26-6EPM is shown to be provincial Crown land designated as Provincial Park.

Please see the attached document "20100812 Little Grindstone Point Harbour Land Title Documents.pdf" which includes:

- A property report on SCH property at the Little Grindstone Harbour site
- Sanned copy of the title (front)
- Sanned copy of the title (back)
- Sanned copy of Plan 16784 (Plan of Survey for parcels referred to in Canada's title to Little Grindstone site).
- 3. Sections 5 and 6:
 - a. It is briefly mentioned that there will be a "minor amount of disturbance to terrestrial vegetation". What will this disturbance be and how will it be mitigated?

As a result of the revised design, shown on the attached "20100810 Little Grindstone Breakwater.pdf", there will be no disturbance to terrestrial vegetation.

b. Several rare species occur in Hecla/Grindstone Provincial Park and in Lake Winnipeg. Has the proponent contacted the Manitoba Conservation Data Centre to request rare species occurrences for terrestrial or aquatic species? If not this should be done so if there happen to be any occurrences proper mitigation can occur.

Small Craft Harbours (SCH) has contacted the Manitoba Conservation Data Centre (please see the attached "20100812 Email - Manitoba Conservation Data Centre.pdf") and is awaiting a response.

c. As mentioned there are several cottages on Grindstone. There are going to be impacts to the cottagers and other park users by way of noise, trucks hauling fill down the roads etc. while this breakwater is being constructed. How is this going to be mitigated?

This will be mitigated by completing the construction of the breakwater in the winter months, when the number of cottagers and other park users are at a minimum.

- 4. Appendix E "Engineering Plans and Specifications" includes several points which Parks and Natural Areas Branch would like clarification or has comments on "ENVIRONMENTAL PROCEDURES."
 - a. 1.3.1 Provide temporary drainage and pumping required to keep excavations and site free from water. The proponent should detail where they propose to do excavations within the park in association with the breakwater development (excluding quarries where they are obtaining material).

Excluding quarries, no excavation is proposed to be undertaken within the park in association with the breakwater development. This is a standard specification from the National Master Specifications and can be removed.

b. 1.4.1 Construction equipment will enter and leave the lake at such a location and in such a manner that disturbance to the lakeshore. Where is this location going to be? It should not be left up to the construction contractor to decide.

This is an item that would be addressed in a pre-construction meeting and would not left up to the contractor to decide. As stated above, access to the ice and construction area will be via the launch ramp on the south east corner of the harbour.

c. 1.4.4 Do not use waterway beds for borrow material. Borrow material should only be obtained from designated pits or quarries where permits have been obtained for. No borrow material is to be obtained onsite where the breakwater is to be constructed.

Noted. The source of material has to be approved by the engineer as stated in Section 35 31 24 - 1.1.1.

d. 1.4.12 Reclaim and restore disturbed areas to previous or better condition. Only vegetation species native to the area are permitted to be used in any reclamation or restoration activities.

Noted. This will be added to that note in the specification.

e. 1.6.1 Do not bury rubbish and waste materials on site unless approved by Engineer. Rubbish and waste materials are not permitted to be buried on site for any reason. Rubbish and waste materials are to be disposed of in a designated waste disposal ground. If they are not types of waste that can be disposed of at the Grindstone waste transfer station then it will be removed from the park and disposed of in an appropriate manner at a disposal facility.

This is standard text from the National Master Specification and there was no intent to bury waste material on site. It will be changed to indicate no waste materials are to be disposed of on site and shall be disposed of in a designated waste disposal ground.

5. Lake Winnipeg supports a diverse fish community and an economically important commercial and recreational fishery. While the proponent has provided a range of depths, information is not provided on the bottom substrate, the near shore littoral area (other than to indicate that there didn't appear to be any aquatic vegetation), and fish presence/use of the area in question or presence of mussels.

Please see the attached "20100812 Substrate Shoreline Photos.pdf" which documents photos of the shoreline and substrate taken with an underwater camera on August 5th, 2010. The near shore littoral area consists of small limestone cobbles, changing to a silt bottom with few sporadic cobbles where the breakwater begins, and finally to a silt bottom with no cobbles for the remainder of the breakwater. To mitigate the impact on the near shore littoral area, the design of the breakwater was revised to leave a 10 meter space between the beginning of the breakwater and the shoreline. A few large armour stones will be placed in this area to dissipate the energy of any large waves that could enter the harbour through this space, and to indicate to boaters that the area is not intended for boat traffic. Small Craft Harbours (SCH) is in the process of engaging an environmental consultant to determine the fish presence/use in the area as was requested by Fisheries and Oceans Canada - Fish Habitat Management (FHM) as part of the review to obtain Fisheries Act Authorization. This consultant will be hired to obtain baseline data and to measure the effectiveness of the rock shoal compensation once it is constructed and over a period of three years as agreed upon by SCH and FHM.

6. What is the effect the breakwater is going to have on the entrance to the harbour from silting in?

Many harbours on Lake Winnipeg require regular, routine maintenance dredging including the harbour at Little Grindstone Point, MB. The entrance channel to the harbour was last dredged in 1991. It is anticipated the installation of the breakwater will have a negligible effect on the littoral drift of material in the area.

On September 17, 2010, the proponent filed the following additional information in response to concerns raised by Manitoba Water Stewardship:

7. The Licencee shall provide both baseline and post-monitoring information to assess the project.

We have been in discussions with Fish Habitat Management (FHM) on this topic as a part of acquiring Fisheries Act Authorization for the project. It has been agreed with FHM that we will provide post-monitoring information to assess the proposed compensation. Baseline data cannot be collected at this point as the spawning season happens between April 1st and June 15th and construction is proposed to start this fall. We have proposed to FHM that instead we will monitor a "control area", a site nearby of similar substrate that will not be modified by a spawning shoal to be able to compare and evaluate the increase in productivity of the spawning shoal. FHM has agreed that this would be acceptable.

8. The Licencee shall amend—including upon assessing monitoring information the design of the shoal to incorporate a greater range of depths.

The design of the rock shoal has been developed in to satisfy the compensation requirements outlined by FHM as part of the Fisheries Act Authorization as well as Transport Canada - Navigable Waters Protection Program (NWPP). Amending the design to incorporate a greater range of depths could impact navigability and safety issues for boaters due to fluctuating water levels. The current location of the shoal was chosen as it is not likely to encounter vessels along the edge of the breakwater and is in turn a safer location for the shoal. Currently the elevation of the rock shoal ranges from elevation 214.5m at the outer end to 217.5m at the shore end, covering a range of depths of 3.0m. Safety issues are being reviewed by NWPP who will issue approval pursuant to the Navigable Waters Protection Act. We will ensure that the rock shoal is a productive enhancement of fish habitat in the area as part of our obligations to FHM and Fisheries Act Authorization.

DISCUSSION AND ANALYSIS:

This information is sufficient to allow TAC concerns to be addressed through licence conditions. There are no overriding technical issues associated with this project that would preclude the issuance of an Environment Act Licence with appropriate conditions.

PUBLIC HEARING:

No requests were received for a public hearing on the project. Technical issues surrounding the project are sufficiently understood. A public hearing is not recommended for the project.

RECOMMENDATION:

All comments received on the Proposal can be addressed as licence conditions or have been forwarded to the proponent for information. It is recommended that an Environment Act Licence be issued for the project subject to the limits, terms and conditions as described on the attached draft licence. Administration of the licence should be assigned to the Central Region, with technical assistance to be provided by Environmental Assessment and Licensing Branch upon request.

PREPARED BY:

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