

## **APPENDIX C – DFO REQUEST FOR REVIEW**



# Request for Review

Please note that Guidance on Submitting a Request for Review is available at the end of this form. This guidance explains the requirements for a Request for Review by DFO under the fish and fish habitat protection provisions of the *Fisheries Act*. All information requested must be provided. If you attach documents to your application with additional information, you must still provide appropriate summaries in the spaces provided on the application document or your application will be considered incomplete.

## A) Contact information

Name of Business/Company:

City of Winnipeg

Name of Proponent:

Duane Baker, CET

Mailing address:

Water and Waste Department  
110-1199 Pacific Avenue

City/Town:

Winnipeg

Province/Territory:

Manitoba

Postal Code:

R3E 3S8

Tel. No. :

204-986-4289

Fax No.:

Email:

duanebaker@winnipeg.ca

Select additional contact:

Contractor/Agency/Consultant (if applicable):

Shaun Moffatt  
c/o KGS Group

Mailing address:

3rd Floor - 865 Waverley Street

City/Town:

Winnipeg

Province/Territory:

Manitoba

Postal Code:

R3T 5P4

Tel. No. :

204-318-2054

Fax No.:

204-896-0754

Email:

smoffatt@ksgroup.com

Is the Proponent the main/primary contact?  Yes  No



If no, please enter information for the primary contact or any additional contact.

Please contact Shaun Moffatt at KGS Group as per Additional Contact information.

## B) Description of Project

If your project has a title, please provide it.

Lodge Avenue Outfall Renewal and Rehabilitation

Is the project in response to an emergency circumstance\*?  Yes  No

Does your project involve work in water?  Yes  No

If yes, is the work below the High Water Mark\*?  Yes  No

What are you planning to do? Briefly describe all project components you are proposing in or near water.

The City of Winnipeg has identified that the Lodge Avenue Outfall located along Sturgeon Creek requires emergent repair. The Lodge Avenue Outfall (City of Winnipeg Asset # S-MA20003886) is an 1800 mm/1850 mm Diameter Conc. / CSP Storm Water outfall pipe that discharges to Sturgeon Creek.

While the work is below the High Water Mark no in water works is expected as the outfall invert is above the UWRL (Unregulated Winter River Level).

The purpose of the proposed works is to protect the public and upstream neighborhoods from surface and basement flooding. The outfall is an important and necessary asset of the City of Winnipeg Sewer Management System. The following near water works will be required to complete the outfall repairs:

- Removal of approximately 27 m of 1800 mm diameter CMP pipe and 6 m of 1850 mm concrete pipe.
- Replacement/Installation of new pipe, approximately 33 m of 1800 mm diameter CMP pipe with polymer coating.
- Localized riverbank regrading to match existing bank contours.
- Installation of 0.6 m thick riprap set flush (subcut) to existing bank contours at the pipe outlet.
- Installation of Erosion Control Blankets and Silt Fencing.
- Site Restoration and Revegetation (tree planting, seeding).

How are you planning to do it? Briefly describe the construction materials, methods and equipment that you plan to use.

### Construction Schedule

The Lodge Avenue Outfall works are scheduled between January 1 and March 15, 2020 during low flow and water levels. Every reasonable effort will be made to minimize the duration of construction activity and disturbance to the bed and shore at the project location. Site restoration and revegetation will be completed the following spring before June 30, 2020.

### Site Access

Site access and works near the river edge will be conducted during low flow (winter) and during frozen ground and ice conditions. Access by fording is to be restricted to one crossing location, and traffic is to be limited. Minor regrading of the riverbank area may be required for equipment access; it will be performed by excavation only. Under no circumstances will any fill be allowed on the riverbank for equipment access. In general, all excavation shall proceed from the top of bank area down to the bottom so as not to jeopardize riverbank stability. All material excavated shall be disposed of off-site immediately upon excavation. The stockpiling of excavated material at the site will not be allowed. Upon completion of the works, the bank shall be restored to the pre-construction condition and geometry.

### Sediment and Erosion Control

Silt fences and erosion control blankets will be used to prevent the release of sediment laden runoff into the river during excavation or other construction activities. These protection measures will be maintained until re-vegetation has been re-established. Any sediment, sand, or debris introduced to the ice surface shall be removed upon project completion and prior to spring thaw. Effective long term erosion and sediment control measures (e.g. erosion control blankets, sediment barriers, straw mulch, silt fences) will be used to prevent



any construction activities from contributing sediment to the water bodies. This includes stabilizing and seeding disturbed areas after construction and ensuring they are reclaimed to vegetation within one growing season. In addition to the above, all work will be performed in accordance with an Environmental Protection Plan approved by the Contract Administrator.

**Decanting Existing Water from Pipe (not expected, but if required)**

All existing river water from inside the pipe shall be pumped back into the creek. The Contractor shall ensure that the pumped water does not have elevated levels of sediment and is directed to an appropriately sized energy dissipating outlet device to prevent bed or bank erosion at the point of discharge into the natural water body. The decanting activities shall be monitored continuously to address the turbidity of the water. Contractor will continuously monitor the pump pressure. Contractor shall cease pumping operation prior to taking in sediment. All sediment material shall then be pumped into a storage tank and is to be disposed of off site. The water withdrawal rates shall not exceed 10% of the instantaneous stream flow at the time. Vacuum unit and pumping systems size, screens, and capacity will be sized according to the Department of Fisheries and Oceans' Freshwater Intake End-of-Pipe Fish Screening Guidelines to prevent debris blockage and fish mortality.

**Outfall Pipe Replacement**

The downstream 33 m of the outfall outlet is to be replaced as part of the proposed works. The pipe material will include 33 m of 1800 mm diameter corrugated metal pipe. The pipe will be replaced within a shored excavation. The pipe will be bedded in clean granular material extending 600 mm above the top of the pipe (in areas above the high water mark). The remaining backfill will consist of selected clean clay fill material. Lastly, a 600 mm thick riprap blanket will be placed around the pipe outlet to protect the pipe and shoreline against erosion. The riprap is to consist of 300 mm diameter limestone rock, and is to be set flush (subcut) to the existing bank contours above the UWRL.

**Riverbank Regrading**

Native riverbank grass seed installation, silt fencing, and erosion control blanket shall be used at the mid and lower bank as erosion mitigation. Backfilled excavations and areas disturbed by construction activities shall be regraded to match the existing river bank contours. The materials will consist of clean clay fill, compacted in 150 mm lifts. All deleterious materials shall be removed off-site during the regrading operations. Placement of sod and seed at the top of bank within the limits of bank access, and any damaged areas, shall be completed by June 30, 2020.

**Construction Equipment Required:**

A Loader, Excavator, and Skid Steer will be required for site access, pipe replacement, regrading, and restorations. Other smaller equipment that may be required includes appropriately sized pumps, small hand tools, and generators.

**Plans, Maps, and Affected Area:**

See attached documents (Attachment 1).

Include a site plan (figure/drawing) showing all project components in and near water.

Are details attached?  Yes  No

Identify which work categories apply to your project.

- |   |   |
|---|---|
| <input type="checkbox"/> Aquaculture Operations     | <input type="checkbox"/> Log Handling / Dumps             |
| <input type="checkbox"/> Aquatic Vegetation Removal | <input type="checkbox"/> Log Removal                      |
| <input type="checkbox"/> Beaches                    | <input type="checkbox"/> Moorings                         |
| <input type="checkbox"/> Berms                      | <input type="checkbox"/> Open Water Disposal              |
| <input type="checkbox"/> Blasting / Explosives      | <input type="checkbox"/> Piers                            |
| <input type="checkbox"/> Boat Houses                | <input type="checkbox"/> Riparian Vegetation Removal      |
| <input type="checkbox"/> Boat Launches / Ramps      | <input type="checkbox"/> Seismic Work                     |
| <input type="checkbox"/> Breakwaters                | <input checked="" type="checkbox"/> Shoreline Protection  |
| <input type="checkbox"/> Bridges                    | <input type="checkbox"/> Stormwater Management Facilities |
| <input type="checkbox"/> Cable Crossings            | <input type="checkbox"/> Surface Water Taking             |
| <input type="checkbox"/> Causeways                  | <input type="checkbox"/> Tailings Impoundment Areas       |
| <input type="checkbox"/> Culverts                   | <input type="checkbox"/> Temporary Structures             |
| <input type="checkbox"/> Dams                       | <input type="checkbox"/> Turbines                         |



- Dewatering / Pumping
- Docks
- Dredging / Excavation
- Dykes
- Fishways / Ladders
- Flow Modification (hydro)
- Groundwater Extraction
- Groynes
- Habitat Restoration
- Ice Bridges

- Water Control Structures
- Water Intakes / Fish Screens
- Water Outfalls
- Watercourse Realignment
- Weirs
- Wharves
- Wind Power Structures

Other Please Specify

Was your project submitted for review to another federal or provincial department or agency?  Yes  No

If yes, indicate to whom and associated file number(s).

### C) Location of the Project

Coordinates of the proposed project Latitude  N Longitude  W

OR UTM zone  ;  Easting  
 Northing

Include a map clearly indicating the location of the project as well as surrounding features.

Name of Nearest Community (City, Town, Village):

Winnipeg

Municipality, District, Township, County, Province:

Manitoba

Name of watershed (if applicable):

N/A

Name of watercourse(s) or waterbody(ies) near the proposed project:

Sturgeon Creek

Provide detailed directions to access the project site:

The project site is located in Winnipeg, Manitoba. The site can be accessed off of Portage Avenue and is located within Grants Old Mill park at Lodge Avenue and Booth Drive.

### D) Description of the Aquatic Environment

Identify the predominant type of aquatic habitat where the project will take place.

Estuary (Estuarine)  Lake (Lacustrine)  On the



Provide a detailed description of biological and physical characteristics of the proposed project site. This description should include information on aquatic species at risk\* (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>), their residence\* and critical habitat\* if found in the area. An overview of the distribution of aquatic species at risk and the presence of their critical habitat within Canadian waters can be found here <http://dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html>

The substrate of Sturgeon Creek is predominately erodible fine sediments. West of the city, upstream of the site, Sturgeon Creek has been channelized for agricultural drainage and consists of simple habitat. Within the city, near the site, there has been some channelization as well as shoreline stabilization and the construction of fishways at dams. Areas of riffles have been constructed and interspersed with pools to provide more complex habitat. There is a constructed dam, with fishway, immediately upstream of the outfall location. There is generally little to no riparian habitat along Sturgeon Creek other than a thin band of not mown grasses with some shrubs and a the occasional tree. The outfall is approximately 1,100 m upstream of the confluence with the Assiniboine River. Fish species that have been observed in Sturgeon Creek in the vicinity of the Lodge Outfall include goldeye, channel catfish, white sucker, rock bass, fathead minnow, shorthead redhorse and common carp. Additional fish species observed in Sturgeon Creek further upstream include northern pike and brook stickleback. With the proximity to the Assiniboine River aquatic species at risk identified in Sturgeon Creek, approximately 500 m downstream of the project area include silver chub and bigmouth buffalo. Both of these species are identified as Special Concern under SARA, however, no critical habitat is present near the project area. Photographs of the shoreline upstream and downstream of the outfall are provided in Attachment 2.

Include representative photos of affected area (including upstream and downstream area) and clearly identify the location of the project.

### E) Potential Effects of the Proposed Project

Have you reviewed the Pathways of Effects (PoE) diagrams (<http://www.dfo-mpo.gc.ca/pnw-ppe/pathways-sequences/index-eng.html>) that describe the type of cause-effect relationships that apply to your project?

Yes  No

If yes, select the PoEs that apply to your project.

- |   |  |
|---|--|
| <input type="checkbox"/> Addition or removal of aquatic vegetation              | <input checked="" type="checkbox"/> Placement of material or structures in water |
| <input type="checkbox"/> Change in timing, duration and frequency of flow       | <input type="checkbox"/> Riparian Planting                                       |
| <input type="checkbox"/> Cleaning or maintenance of bridges or other structures | <input type="checkbox"/> Streamside livestock grazing                            |
| <input type="checkbox"/> Dredging   | <input type="checkbox"/> Structure removal                                       |
| <input checked="" type="checkbox"/> Excavation                                  | <input type="checkbox"/> Use of explosives                                       |
| <input type="checkbox"/> Fish passage issues                                    | <input type="checkbox"/> Use of industrial equipment                             |
| <input type="checkbox"/> Grading  | <input type="checkbox"/> Vegetation Clearing                                     |
| <input type="checkbox"/> Marine seismic surveys                                 | <input type="checkbox"/> Wastewater management                                   |
| <input type="checkbox"/> Organic debris management                              | <input type="checkbox"/> Water extraction  |
| <input type="checkbox"/> Placement of marine finfish aquaculture site           |  |

Will there be changes (i.e., alteration) in the fish habitat\*?  Yes  No  Unknown

If yes, provide a description.

The existing vegetation and substrate immediately surrounding the outfall will be removed and replaced with riprap shoreline protection.

Is there likely to be a harmful alteration, disruption or destruction of habitat used by fish?  Yes  No  Unknown

Is there likely to be destruction or loss of habitat used by fish?  Yes  No  Unknown

What is the footprint (area in square meters) of your project that will take place below the high water mark\*?

Approximately 17.5 sq.m.

Is your project likely to change water flows or water levels?  Yes  No  Unknown



If your project includes withdrawing water, provide source, volume, rate and duration.

N/A

If your project includes a water control structure, provide the % of flow reduction.

N/A

If your project includes discharge of water, provide source, volume and rate.

The outfall is the release point of storm water collected by the City of Winnipeg Land Drainage System, the volume and rate is variable depending on rain storm events and spring melt, typically with no flows in winter.

Will your project cause death of fish?  Yes  No  Unknown

If yes, how many fish will be killed (for multi-year project, provide average)? What species and lifestages?

What is the time frame of your project?

The construction will start on 01/02/2020 and end by 03/13/2020

If applicable, the operation will start on MM/DD/YYYY and end by MM/DD/YYYY

If applicable, provide schedule for the maintenance

No predetermined maintenance schedule, repair work is conducted on an as required basis.

If applicable, provide schedule for decommissioning

No plans to decommission.

Are there additional effects to fish and fish habitat that will occur outside of the time periods identified above?  Yes  No

(If yes, provide details)

Can you follow appropriate Timing Windows (<http://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/index-eng.html>) for  Yes  No all your project activities below the High Water Mark\*\*?

(If no, provide explanations.)

Have you considered and incorporated all options for redesigning and relocating your project to avoid negative effects to fish and fish habitat?

Yes  No

If yes, describe.

The outfall cannot be redesigned or relocated because of the surrounding infrastructure at the site.

Have you consulted DFO's Fish and Fish Habitat Protection Measures Habitat (<http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html>) to determine which measures apply to your project?  Yes  No

Will you be incorporating applicable measures into your project?  Yes  No



If yes, identify which ones. If No, identify which ones and provide reasons.

PREVENT THE DEATH OF FISH - No fish will be killed and no explosives used. In water work is scheduled in winter to avoid fish spawning and migration season and to occur during period of low flow.

MAINTAIN FISH PASSAGE - The project will not change flows or water levels and will not obstruct or interfere with the movement and migration of fish.

ENSURE PROPER SEDIMENT CONTROL - An erosion and sediment control plan will be developed and implemented; excavated material will be disposed of off-site immediately upon excavation; silt fences and erosion control blankets will be used to prevent the release of sediment laden runoff into the river during excavation or other construction activities; these protection measures will be maintained until re-vegetation has been re-established; work will be scheduled to avoid weather conditions that may result in high flow volumes and/or increased erosion and sedimentation; monitoring the river for signs of increased sedimentation during construction and taking corrective actions as required; and operating machinery on land in stable dry areas.

PREVENT ENTRY OF DELETERIOUS SUBSTANCES IN WATER - Depositing deleterious substances in the river will be avoided; any sediment, sand, or debris introduced to the ice surface shall be removed upon project completion and prior to spring thaw; a spill response plan will be developed and implemented; an emergency spill kit will be kept on site; work will be stopped and deleterious substances contained to prevent dispersal if spilled; spills of any oil, fuel or other deleterious material will be reported; spills will be cleaned-up and appropriately disposed; machinery on-site will be maintained in a clean condition and free of fluid leaks; washing, refueling and servicing of machinery and fuel storage will be a minimum of 100 m away from the river.

Have you considered whether DFO standards and codes of practice apply to your project?  No  Yes

If Yes, include a list.

Have you considered other avoidance and mitigation measures?  No  Yes

If Yes, include a list.

Are there any relevant measures that you are unable to incorporate?  Yes  No

(If yes, identify which ones.)

What harmful effects to fish and fish habitat do you foresee after taking into account the avoidance and mitigation measures described above?

Permanent alteration of approximately 17.5 sq.m of shoreline habitat.

Do these include effects on aquatic species at risk\*?  Yes  No

If yes, please describe, including how many individuals will be harmed, harassed, or otherwise affected by the project, and how?

Silver chub and bigmouth buffalo are identified as being present in Sturgeon Creek approximately 500 m downstream of the outfall, however, as the work will be done in the winter and all work is above the ice level no individuals will be affected and there is no critical habitat identified in the area.

Do these include effects on areas identified as their residence or critical habitat?  Yes  No

If yes, please describe



Are there any aquatic invasive species in the vicinity of your project area?

Yes  No

(If yes, identify which ones.)

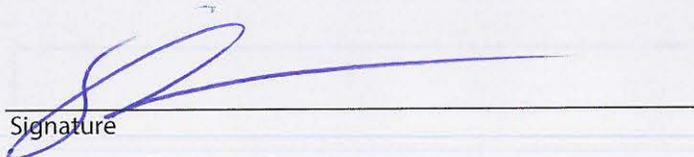
Does your project aim to, or will it be likely to, effect any of these aquatic invasive species?

Yes  No

If yes, how?

### F) Signature

I, Shaun Moffatt (print name) certify that the information given on this form is to the best of my knowledge, correct and completed.

  
Signature

24/10/2019  
Date

Information about the above-noted proposed work or undertaking is collected by DFO under the authority of the *Fisheries Act* for the purpose of administering the Fish and Fish Habitat protection provisions of the *Fisheries Act*. Personal information will be protected under the provisions of the *Privacy Act* and will be stored in the Personal Information Bank DFO-PPU-680. Under the *Privacy Act*, Individuals have a right to, and on request shall be given access to any personal information about them contained in a personal information bank. Instructions for obtaining personal information are contained in the Government of Canada's Info Source publications available at [www.infosource.gc.ca](http://www.infosource.gc.ca) or in Government of Canada offices. Information other than "personal" information may be accessible or protected as required by the provision of the *Access to Information Act*.

*\*All definitions are provided in Section G of the Guidance on Submitting a Request for Review*