The Red River Floodway Expansion Project

- A publication by the Manitoba Floodway Authority

More Protection. More Opportunities. September 2007



en years after the 1997 Flood of the Century, the governments of Canada and Manitoba are well on their way to providing one-in-700 year level of flood protection for the residents of Winnipeg.

By building on the vision and foresight of former Manitoba Premier Duff Roblin, who spearheaded the construction of the original Red River Floodway, the expansion project has already improved flood protection from the one-in-90 to the one-in-300 year level – equivalent to the largest flood in Manitoba's history.

As the floodway expansion proceeds, employment and economic opportunities will continue to be available for workers and companies wishing to participate in this historic project. At the same time, recreation and economic development opportunities will be pursued along the expanded floodway.

We look forward to working with the Government of Canada in improving flood protection and realizing all of the opportunities that the floodway expansion project presents for our province.

2 (content

Honourable Ron Lemieux, Minister Manitoba Infrastructure and Transportation and MLA for La Verendrye



ach and every spring, the waters of the Red River rise, occasionally posing serious challenges to Winnipeg's existing flood protection system. As the 1997 Flood of the Century demonstrated, Winnipeg came within inches of a potential major social, economic and environmental disaster.

The Red River Floodway Expansion Project is critically important to the long-term security of the city of Winnipeg. By improving flood protection to one-in-700

year level of protection, floodway expansion will protect hundreds of thousands of people, homes and businesses. It will also prevent more than \$12 billion in damages to the provincial economy during a major flood.

As a critically important national infrastructure project, Canada's New Government was pleased to deliver on Prime Minister Harper's pledge to provide funding for the expansion project. We congratulate the people of Manitoba for moving forward on this historic project that will improve flood protection for present and future generations.

OTORUS.

Honourable Vic Toews, President Treasury Board and MP for Provencher

In this issue...

Full Funding Secured

Canada and Manitoba Commit \$665 Million to Floodway

One-in-300 Year Protection Provided

Expansion Reaches Major Milestone

Construction Update

2007 Busiest Year for Construction

2007 Aboriginal Set-Aside Initiative Underway

Building on Last Year's Success

Plan to Protect Endangered Peregrine Falcons

Construction to Accommodate Hatching Season and Enhance Habitat

Engineering Consultants Recognized

Floodway Contractors Win Awards

Heavy Equipment Operators Wanted

Register or Renew with the Job Referral Service

2007 Access to Earth Initiative

Depot Open Until September 30

Floodway Earth to Enhance Springhill Ski and Snowboard Runs

Expansion Broadens Recreation and Tourism Opportunities

Public Safety During Construction

Avoid Floodway Construction Zones

MFA Partners in SAFE Roads Initiative

Reduce Speed to Protect Construction Workers

Full Funding Secured for Floodway Expansion Project



n February 23, 2007, the governments of Canada and Manitoba officially announced that each government would be contributing \$170.5 million as the final phase of funding for the Red River Floodway Expansion Project. This funding complements previous joint contributions of \$324 million, bringing the total funding for the project to \$665 million. The governments of Canada and Manitoba are cost-sharing the \$665 million expansion equally.

Ron Lemieux, Manitoba Minister of Infrastructure and Transportation (far left), Vic Toews, President of Treasury Board (left), Premier Gary Doer (centre) and Lawrence Cannon, Minister of Transport, Infrastructure and Communities (right), announce full funding for the floodway project at the Forks National Historical site.

Expansion Project Reaches One-In-300 Year Flood Protection

n April 5, 2007, 10 years after the 1997 Flood of the Century, Manitoba Premier, Gary Doer, and Member of Parliament for Winnipeg South, Rod Bruinooge, on behalf of the Honourable Lawrence Cannon, Minister of Transport, Infrastructure and Communities, officially announced that the floodway expansion had reached a major milestone.

"Since construction on the expansion project began, crews have been working to increase the capacity of the channel," said Doer. "Today, we are marking a major milestone for the floodway project by announcing that the floodway can now withstand a one-in-300 year level flood – equivalent to the largest flood in Manitoba's history – the flood of 1826. Over the upcoming weeks, the Manitoba Floodway Authority will be tendering additional work that will bring us closer to our final objective of providing a one-in-700 year level of flood protection."

"The Manitoba Red River Floodway Expansion Project is critical to the long-term protection of Winnipeg and the surrounding municipalities," said Bruinooge. "The devastating flood only ten years ago serves to underscore the importance of having the right infrastructure in place, and Canada's New Government is delivering on our commitment to get the project done."

Construction on the Red River Floodway Expansion Project officially kicked off on September 23, 2005. Since that time, the floodway's capacity has increased from one-in-90 year to one-in-300 year flood level.



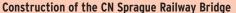
Manitoba Premier Gary Doer (centre), Member of Parliament for Winnipeg South, Rod Bruinooge (left) and Manitoba Minister of Infrastructure and Transportation, Ron Lemieux (right) announce that the floodway has delivered one-in-300 year flood protection.

Construction Update

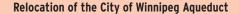
he 2007 construction season is proving to be the busiest yet for the floodway project. To date, over 1,000 people and over 50 companies have worked on the project. Work that is already completed, underway, or set to begin includes:

Completed Work

Replacement and Upgrade of the Trans-Canada Highway East **Bridge -** MD Steele Construction replaced the existing bridge with two new structures. The work included major safety improvements including the addition of an acceleration (eastbound) and deceleration (westbound) lane. The bridge was a priority project and opened to traffic in November 2006.



- PCL Constructors Canada Ltd. completed construction of the new Canadian National Railway (CNR) Sprague railway bridge over the Red River Floodway. Train traffic was diverted to a temporary detour structure during construction. The project was completed in June 2007.



- Mulder Construction relocated the City of Winnipeg Branch I and II aqueducts. Work was co-ordinated with the City's planned improvements to its water treatment plant next to the aqueduct. The project was completed in March 2007.

Work In Progress

Floodway Channel Excavation - The excavation of approximately 31 kilometres (19 miles), or 64 per cent of the floodway channel, between the inlet control structure and just south of the PTH 59 north bridge, is underway or complete. In June 2007, four additional excavation contracts, stretching from the PTH 59 north bridge to the outlet control structure, near Lockport and north of Winnipeg, were unveiled. During the project,

approximately 22 million cubic metres of earth will be excavated from the floodway channel. Excavation work is scheduled to wrap up in 2009 with bridge and related work completed in 2010.

Replacement and Upgrade of the PTH 59 South Bridge -

PCL Constructors Canada Ltd. is replacing the two existing bridges. The bridges will be higher and longer to ensure that they are above the one-in-700 year flood level. In addition, Prairie Grove Road is being relocated higher along

the bank, ensuring that the road remains above the flood water level for longer periods. The southbound structure of PTH 59 south bridge was completed and re-opened in the fall of 2006. Work on the northbound structure should be completed in the fall of 2007.

Inlet Control Structure - TPG Pritchard Machine, a division of Pritchard Engineering Co. Ltd., is making mechanical, hydraulic and electrical upgrades of the inlet control structure. The structure regulates the flow between the floodway and the Red River.

Outlet Control Structure - PCL Constructors Canada Ltd. will widen the existing outlet structure by approximately twice its size to accommodate increased flow. Side walls will also be constructed in the channel to prevent erosion. New chute and baffle blocks on the downstream end of the outlet will further reduce the speed of water re-entering the Red River. These

improvements will help ensure the speed of water passing through the outlet remains largely unchanged from the pre-expansion condition. Work on the outlet is scheduled to occur over two years.

CN Redditt Railway Bridge - PCL Constructors Canada Ltd. began replacement of the CN Redditt railway bridge in January 2007. The project is scheduled to be completed by summer of 2008.

West Dike - The west dike, located southwest of Winnipeg, is being extended and raised, providing better protection against wind and waves during major floods. The work will include dike construction, ditch grading, culvert installation, traffic control, temporary detours, traffic signs, silt fencing and other temporary erosion control measures, granular road

surfacing, rock riprap and revegetation. The first 10 kilometres (six miles) of a section of the west dike has been completed. Work has begun on the remainder of the section from the inlet to PR 330.



Construction of the PTH 59 south bridge is scheduled to be completed by end of the year.



A major expansion of the outlet control structure in Lockport began this summer.



West dike construction.



The CN

Sprague



Channel excavation during the winter of 2007.

2007 Aboriginal Set-Aside Initiative Underway

uilding on the success of the 2006 Aboriginal Set-Aside Initiative, Aboriginal construction contractors continue to work on increasing the flood protection provided by the west dike.

"Last year's Aboriginal Set-Aside Initiative on the west dike proved to be a tremendous success," said Ron Lemieux, Minister of Infrastructure and Transportation. "As a result, this year's initiative will provide more opportunities for the Aboriginal workers and construction companies. By working with the Aboriginal construction industry to increase the pool of workers and contractors, we are building capacity and developing the resources that will benefit the construction industry and the province as other major construction projects get underway."

This spring, the Manitoba Floodway Authority (MFA) advertised 10 tenders for work on a section of the west dike from the inlet control structure to PR 330 as part of the Aboriginal Set-Aside Initiative. After reviewing the 89 bids submitted, the MFA awarded the contracts among the following Aboriginal contractors:

- L. Chabot Enterprises Ltd. from Winnipeg
- Camster Construction Ltd. from St. Laurent
- 5456291 Manitoba Ltd. from Winnipeg
- Skownan/Dyck Joint Venture Construction Company from Skownan First Nation
- Cree West Contractors Ltd. from Winnipeg
- H. Baudry Construction from Ste. Agathe

To date, all of the work on the Aboriginal Set-Aside has been completed on time and on budget.

Floodway Authority Unveils Plan to Protect Endangered Peregrine Falcons

his spring, Premier Gary Doer announced a plan to reduce the impact of west dike construction on Parkland Mews Falconry & Bird of Prey Education Centre. The plan includes timing construction to accommodate this year's falcon hatching season and creating up to four new ponds. This will help support and promote the protection of endangered peregrine falcons that nest in captivity just outside of Winnipeg.

"Parkland Mews has established a very unique initiative to protect endangered peregrine falcons," said Doer. "By working to understand the habits, breeding and nesting



routine of these remarkable birds, Parkland Mews is contributing to the long-term protection and well-being of this species. We are very pleased that the MFA has been able to accommodate Parkland Mews in its plans for construction of the west dike."

"Peregrine falcons nest in areas where they are not readily disturbed," said Robert Wheeldon, falconer and founding director of Parkland Mews. "The Manitoba Floodway Authority is sensitive to this and has taken strong measures to accommodate the recovery program while constructing the west dike. As a result of this partnership, Parkland Mews will be in stronger position to assist in conservation endeavours for saving the peregrine in Manitoba. We congratulate the MFA for their leadership and commitment to conservation and environmental protection."

Premier Gary Doer holding Fiona, the peregrine falcon, and accompanied by Marilyn Brick, MLA for St. Norbert, at the announcement unveiling plans to protect the endangered species during floodway construction.

Engineering Consultants Recognized for Work on Floodway Project



The Trans-Canada Highway #1 east bridge was opened to traffic in the fall of 2006.

In the spring of 2007, two consultant firms received awards from the Consulting Engineers of Manitoba for their significant contributions to the floodway expansion project. ND LEA Inc. won the Award of Excellence in Infrastructure for temporary railway detours on the project. As the new railway bridge is completed, the detour bridge is dismantled and then the piers and steel decks are moved downstream and re-erected at a new bridge replacement project. This design has significantly reduced costs and the environmental impact of construction since piers are reused a number of times, rather than being demolished and reconstructed after every use.

UMA Engineering Ltd. won the Award of Excellence in Innovation for the Red River Floodway twin bridges on the Trans-Canada Highway # 1 east. The work involved the replacement of the existing four-lane bridge with two new threelane bridges over the Red River Floodway. The new bridges are approximately three metres (10 feet) higher than the previous bridge. In addition, the bridges incorporate a structural health monitoring system to monitor the condition and structural integrity of the bridge.

Heavy Equipment Operators Wanted

o help fill future jobs, the provincial government's Job Referral Service (JRS), which is designed to match qualified workers with floodway contractors who are looking for additional workers, is registering heavy equipment operators. In particular, workers with scraper, dozer, grader and backhoe experience are required.

If you have already registered with the JRS, please note that your registration has to be renewed every six months to ensure your application remains active. To register, or to update your application, please call 945-0575 in Winnipeg or toll free 1-866-332-5077.

For more information, please contact an employment service advisor at your local Employment Manitoba Centre or visit the online Floodway Job Referral Service at manitoba.ca/ jobreferral.

Only those who have appropriate experience and skills be will considered.



Access to Earth Initiative Provides More Free Earth to the Public

Now in its second year, the MFA's Access to Earth Initiative makes excavated earth from the floodway project available to the public for free.

In the summer and fall of 2007, the MFA opened two earth depot sites. The first location was open from August 7 to September 2 next to the St. Mary's Road bridge. The second location is open from September 4 to September 30 at the former Duff Roblin Park location. Approximately 13,000 cubic metres of earth were hauled during the first Access to Earth Initiative in the fall of 2006. The public is reminded that the earth available is heavy clay fill, not top soil.

The MFA plans to reintroduce the initiative in upcoming years as floodway work progresses. If you are interested in the Access to Earth Initiative, please visit the MFA website at www.floodwayauthority.mb.ca or contact the MFA offices at 945-4900 or toll free 1-866-356-6355 to register.

Floodway Earth to Help Enhance **Springhill Ski and Snowboard Runs**

n March, Premier Gary Doer announced a plan to reduce the impact of floodway construction on the operation of Springhill Winter Sports Park – a ski hill operated and leased on Crown land within the floodway right-of-way.

"While floodway expansion is critical to the long-term protection of Winnipeg, Springhill Winter Sports Park is one of Manitoba's many great recreational destinations during the winter season," said Doer. "The plan presents an opportunity to use earth from the expansion project to improve Springhill's ski and snowboard runs and contribute to long-lasting recreational and tourism opportunities in the region."

"During our extensive public consultation and environmental licensing process, MFA made a firm commitment to reduce adverse impacts directly related to floodway construction," said Ernie Gilroy, CEO of the Manitoba Floodway Authority. "These measures will support Springhill's future development efforts, further promote economic development opportunities and ultimately enhance the benefits the expanded floodway will have to the community."

"The MFA has been great to work with over the past year," said Dan Woodbeck, owner of Springhill Winter Sports Park. "As construction proceeds, we appreciate that the MFA has recognized the impact the project has on our operation. We are also very excited that the floodway earth will allow us to increase the height of our ski hill and construct a half-pipe for the benefit of our user groups."

Public Advised to Avoid Floodway Construction Zones

Again this fall, the MFA is reminding the public that work on the floodway expansion project will create an active construction site along the length of the floodway channel. This means workers and heavy equipment will be on site at all times and new construction hazards will arise and change throughout the year. As a result, the public - whether on foot, bicycle, snowmobile or all-terrain vehicle - are advised to avoid floodway construction zones, especially in recreational use areas such as near Springhill and near the outlet control structure in Lockport.

Thank you for your co-operation in keeping the construction site safe for the public and for floodway workers.

Second SAFE Roads Campaign Aims to Increase Safety at **Construction Zones**

uring the summer, the MFA was pleased to participate, for the second year, in SAFE Roads, a public awareness campaign about traffic safety in road construction zones. It urges motorists across Manitoba to use caution when driving through construction zones. The campaign aims to raise awareness among drivers, to increase safety in road construction zones and help ensure workers are safe.

The SAFE Roads Team is a joint safety effort between six partners:

- The Manitoba Heavy Construction Association
- Province of Manitoba Manitoba Infrastructure and Transportation
- The City of Winnipeg
- The Workers Compensation Board
- Manitoba Hydro
- The Manitoba Floodway Authority

Manitoba Floodway Authority

200-155 Carlton Street Winnipeg MB R3C 3H8 Tel.: 204-945-4900 Fax: 204-948-2462

Toll-free: 1-866-356-6355 Email: floodway@gov.mb.ca www.floodwayauthority.mb.ca



