

a.

Memorandum Of Agreement For Long Term Maintenance of Buffalo Creek Channel

BETWEEN:

**THE GOVERNMENT OF MANITOBA,
As represented by the Minister of Conservation**

(“Manitoba”)

-and-

**THE STATE OF NORTH DAKOTA,
As represented by the Chairman of the North Dakota State Water Commission, The
Governor of North Dakota**

(“North Dakota”)

WHEREAS Manitoba and the Pembina and Cavalier Counties Water Resource Districts and the State Water Commission have been meeting to discuss issues regarding drainage on the Buffalo Creek Channel in Manitoba;

AND WHEREAS Manitoba has revised the design flows for the South Buffalo Creek drainage system based on an agricultural runoff model;

AND WHEREAS residents and officials of both jurisdictions are working toward the resolution of a long standing drainage issue to the mutual economic benefit of both parties, including good water management principles;

AND WHEREAS there is a commitment by both parties to work cooperatively with the Pembina River Advisory Board to develop the Pembina River Dike modifications to provide equitable management of the Pembina River flood waters;

AND WHEREAS the intent of this Agreement is to reach an understanding regarding payment to Manitoba by North Dakota for the required construction to upgrade approximately 16 miles of channels and several crossings in Manitoba;

AND WHEREAS it is proposed that the culverts at Crossing number 2, South of Section 6-1-3 W, and Crossing number 3, South of Section 3-1-3 W (at the US/Canada Border) shall be installed as part of the drainage system development;

THEREFORE Manitoba and North Dakota agree as follows:

SECTION 1.0 – RESPONSIBILITIES OF MANITOBA

1.01 Manitoba shall:

- a. Upgrade the approximately 16 miles of the Buffalo Creek Channel, including crossings, in Manitoba to the proposed drainage standard of $Q = 35A$ ($K = 0.678$);
- b. Develop detailed drainage design discharges, to be attached as Schedule "A" to this Agreement;
- c. Develop a detailed construction schedule with the intent of constructing within a 3-year period, to be attached as Schedule "B" to this Agreement. The milestones of the schedule shall be: installation of pipes by the end of the first year, completion of a drain one mile on either side of the US/Canada Border by the end of the second year, the entire project complete by the end of the third year;
- d. Develop and provide to North Dakota a set of drawings and specifications that the Buffalo Creek Channel system shall be constructed to;
- e. Subject to funds being appropriated by the Legislature of Manitoba, pay for the total estimated cost of \$3.0 million (Canadian funds) of the work outlined in this Agreement over a 3-4 year period commencing in the spring of year 2002;
- f. Install 4 - 1500 mm X 15 dia (60-inch diameter X 50 feet) culverts at Crossing number 2, according to the construction schedule attached as Schedule "B";
- g. Install 3 - 1500 mm X 15 dia (60-inch diameter X 50 feet) culverts at Crossing number 3, according to the construction schedule attached as Schedule "B"; and
- h. Review the application for a license under The Water Rights Act (Manitoba) to be submitted by the R.M. of Rhineland for the construction of a drain in S.W. 6-1-3 W.

SECTION 2.0 - RESPONSIBILITIES OF MANITOBA AND NORTH DAKOTA REGARDING MAINTENANCE

- 2.01 Maintenance of the channels and crossings in North Dakota shall be the responsibility of North Dakota and maintenance of the channels and crossings in Manitoba shall be the responsibility of Manitoba. North Dakota, however, will be responsible for all maintenance related to the culverts installed at crossings #2 and 3, described in Section

1.01(f) and 1.01 (g). North Dakota can also request maintenance to be performed in Manitoba at North Dakota's expense or at a mutually agreed upon allocation of cost.

SECTION 3.0 – RESPONSIBILITIES OF NORTH DAKOTA

- 3.01 North Dakota shall pay to Manitoba a pro rata share of the enhanced drainage capacity benefit attributable to North Dakota, which is \$357,000.00 (US funds) (“Funds”).
- 3.02 Payment of the Funds from North Dakota will be pro-rated according to the percentage of work completed, based on certification of the project engineer identified by Manitoba.
- 3.03 North Dakota shall construct a dike located in Section 26, Township 164 North, Range 56 West in the vicinity of crossing #2, to an elevation one-half foot lower than the existing road in Manitoba, to tie into the upgraded Buffalo Creek Channel in Manitoba, according to the construction schedule attached as Schedule “B”.

SECTION 4.0 – GENERAL PROVISIONS

- 4.01 No other costs shall be levied against North Dakota for construction of the upgraded Buffalo Creek Channel and crossings.
- 4.02 Neither party shall be liable to the other party for any damages caused by delay to the construction of the respective drainage works, as outlined in this Agreement, where the delay is caused by any reason, including, but not limited to, an act of God, regulatory approval processes or sufficient funds not being appropriated for the work.
- 4.03 The work outlined in this Agreement shall be subject to all applicable legislation, including those relating to the environmental review process and all other regulatory requirements.
- 4.04 Manitoba will not be responsible for any costs for the construction and maintenance of the dike described in section 3.03.
- 4.05 No amendment or change to, or modification of, this Agreement shall be valid unless it is in writing and signed by both parties.
- 4.06 This document and the attached Schedules contain the entire agreement between the parties. There are no undertakings, representations or promises, express or implied, other than those contained in this Agreement.

This agreement has been executed by the Minister of Conservation, or his dully authorized representative, on behalf of the Government of Manitoba; and by the Chairman of the North Dakota State Water Commission, the Governor of North Dakota, or his dully authorized representative, on behalf of the State of North Dakota, on the dates noted below.

GOVERNMENT OF MANITOBA

Original signed by _____
Minister of Conservation

Date September 11, 2002

WITNESS:

STATE OF NORTH DAKOTA

Original signed by _____
Governor of North Dakota and Chairman of the
North Dakota State Water Commission

Date August 30, 2002

WITNESS:

Schedule A

Buffalo Creek Channel

Design Discharges

Location	DA (mi ²)	Discharge	
		cfs	m ³ /s
Crossing 2			
S6-1-3W	21	276	7.8
Channel			
NE 5-1-3W	25	310	8.8
S 12-1-3W	28	335	9.5
Crossing 3			
S 4-1-3W	13	199	5.6
Channel			
E 2-1-3W	18.6	254	7.2
Channel			
E 1-1-3W	49	490	13.9
NE 8-1-2W U/S	52.35	512	14.5

Note: Runoff Model 35.0A ^{0.678} employed to calculate discharges.

SCHEDULE B
South Buffalo 2003 - 2004

Description	Cost Estimate	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Year 2003													
South Buffalo 6.7, 8-1-2W, & 1-1-3W													
Land Management													
- Land Fees, Legal Surveys Fees, LMS Fees	\$ 31,422.16												
Construction Cost Estimate No quantities	\$ 62,305.00												
South Buffalo 1, 2, 3-1-3W													
Land Management													
- Land Fees, Legal Surveys Fees, LMS Fees	\$ 55,897.57												
Construction Cost Estimate	\$ 377,377.50												
South Buffalo E9, 10, 11, 12-1-3W													
Land Management													
- Land Fees, Legal Surveys Fees, LMS Fees	\$ 116,244.04												
Sub Total	\$ 643,246.27												
Year 2004													
South Buffalo E9, 10, 11, 12-1-3W													
Construction Cost Estimate	\$ 311,444.05												
South Buffalo N4, N5, S, 6-1-3W													
Land Management													
- Land Fees, Legal Surveys Fees, LMS Fees	\$ 121,738.18												
Construction Cost Estimate	\$ 892,209.21												
Sub Total	\$ 1,325,391.44												
Total	\$ 1,968,637.71												

Prepared By Ron G. Kaatz
 Cost Estimate and Time Schedule based on no DFO involvement
 Final plans and quantities have not been completed, these are rough estimates only