



~~ENVIRONMENTAL~~
Conservation

~~ENVIRONMENTAL MANAGEMENT~~
Environmental Stewardship Division

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CANADA

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FAXED
CLIENT FILE NO.: 4621.00

August 15, 2001

Erik Eising, Manager
Central Manitoba Resource Management Ltd.
PO Box 1265
Portage la Prairie MB R1N 3J9

Dear Mr. Eising:

Enclosed is Environment Act **Licence No. 2516** dated August 15, 2001 issued in accordance with the Manitoba Environment Act to **Central Manitoba Resource Management Limited** in connection with the construction and operation of the Development being two irrigation systems in the Rural Municipality of Whitehead (Sundance Project) and the Rural Municipality of Daly (Deerboine Project), in accordance with the Proposal filed under The Environment Act dated May 3, 2001.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with.

For further information on the administration and application of the Licence, please feel free to contact Ron Slater at (204) 726-6566.

Pursuant to Section 27 of The Environment Act, this licencing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Conservation within 30 days of the date of the Licence.

Yours truly,

Larry Strachan, P. Eng.
Director
Environment Act

Enc.

- c: B. Enns, Regional Director, Western Region, Conservation
- R. Slater, Environment Officer, Western Region, Conservation
- Centennial Public Library/Manitoba Eco-Network/Western Manitoba Regional Library
- R.M. of Daly/R.M. of Whitehead
- B. Shewfelt, PFRA-Morden (FAXED)
- S. Bezak, Stantec Consulting Ltd. (FAXED)
- D. Menon, Manitoba Water Services Board
- Distribution List (attached)

NOTE: Confirmation of Receipt of this Licence (*by the Licencee only*) is required by the Director of Approvals. Please acknowledge receipt by signing in the space provided below and faxing back to the Department by August 22, 2001.

On behalf of Central Manitoba Resource Management Ltd. Date



Environment Act Licence

Loi sur l'environnement Licence

Manitoba
Conservation
Conservation
Manitoba



Licence No./Licence n° 2516
Issue Date/Date de délivrance August 15, 2001

**IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125)
THIS LICENCE IS ISSUED PURSUANT TO SECTION 11(1) TO:**

**CENTRAL MANITOBA RESOURCE MANAGEMENT LIMITED;
"the Licencee"**

for the construction and operation of the Development being two irrigation systems in the Rural Municipality of Whitehead (Sundance Project) and the Rural Municipality of Daly (Deerboine Project), in accordance with the Proposal filed under The Environment Act dated May 3, 2001, and subject to the following specifications, limits, terms and conditions:

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. The Licencee shall ensure that all used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the Development are collected and disposed of in accordance with applicable Manitoba Conservation and legislation requirements.
2. The Licencee shall revegetate areas disturbed by the construction of the Development with a mixture of native or introduced grasses or legumes. These areas shall be revegetated as quickly as possible following construction to prevent soil erosion and the establishment of noxious weeds. Native species shall be used to revegetate areas where native species existed prior to construction.
3. The Licencee shall:
 - a) prepare "As Constructed" drawings for the Development and shall label the drawings "As Constructed"; and
 - b) provide to the Director, within three months of the completion of construction of the Development, two sets of "As Constructed" drawings.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Project Scope

4. The Licencee shall, unless otherwise approved by the Director in writing, construct the water diversion and management works and irrigate the lands as described on the following plans attached to this Licence:

- Sundance Project: "Irrigation System Works – Pump Intake Site, Pipeline Route, Ground Elevations and Irrigation", Figure 1; and
- Deerboine Project: "Irrigation System Works – Pump Intake Site, Pipeline Route and Irrigation Fields", Figure 2.

Proposed amendments to these plans must be submitted to the Director for approval with the nature and purpose of the amendments noted on the plans.

Construction

5. The Licencee shall provide notification to the Environment Officer responsible for the administration of this Licence not less than two weeks prior to beginning construction of the Development of the intended starting date of construction and the name of the contractor responsible for the construction.
6. The Licencee shall ensure that fuel storage areas established for the construction of the Development:
 - a) are located a minimum distance of 100 metres from any waterbody; and
 - b) comply with the requirements of *Manitoba Regulation 97/88R* respecting *Storage and Handling of Gasoline and Associated Products*.
7. The Licencee shall, during construction of the Development, immediately report fuel spills in excess of 100 litres to an Environment Officer.
8. The Licencee shall not undertake instream construction activities in connection with the Development between April 1 and June 15 of any year.
9. The Licencee shall not undertake instream construction activities in connection with the Development during periods of high streamflow.
10. The Licencee shall ensure that buried pipelines which are installed on cultivated land or land in its natural state are installed in accordance with the methodology illustrated in Figures 3 to 5, attached to this Licence. These procedures do not apply when a plough or a continuous trencher is used to install a pipeline.

Operation – Matters Respecting Water Management and Water Quality Protection

11. The Licencee shall ensure that pump intakes associated with the Development are screened in accordance with the Department of Fisheries and Oceans publication "Freshwater Intake End-of-Pipe Fish Screen Guideline" (March, 1995). Final screen designs shall be approved by the Department of Fisheries and Oceans prior to the operation of the Development. Alterations in screen design required by any future changes in the pumping period shall also be approved by the Department of Fisheries and Oceans prior to any changes in the operation of the Development.
12. The Licencee shall ensure that a minimum instream flow is maintained below all diversion points of the Development at all times while water is being diverted into the Development. The minimum instream flow at each diversion point shall be as determined by Manitoba Conservation and specified in a Water Rights Licence issued for the Development.

13. The Licencee shall immediately cease diverting water from the Assiniboine River or reduce the diversion rate if the minimum instream flow provided for in Clause 12 of this Licence is not equalled or exceeded.
14. The Licencee shall, on a daily basis while irrigation is occurring from the Development, record volumes of water pumped, and durations of pumping for each intake location. A report on this information shall be provided, by March 1 of the following year, to the Environment Officer responsible for the administration of this Licence, the Environmental Approvals Branch, and the Water Branch of Manitoba Conservation. The report shall be provided in the format shown in Table 1, attached to this Licence.
15. The Licencee shall ensure that backflow prevention devices are installed and are operational at all times if fertilizer or crop protection products are applied through the irrigation systems of the Development.

Operation – Matters Respecting Land Management and Soil Quality Protection

16. The Licencee shall ensure that irrigation does not occur, with water diverted by the Development, on a land parcel other than a land parcel identified in the Environment Act Proposal, dated May 3, 2001. The area irrigated in any year by the Sundance project shall not exceed approximately 210 hectares, and the area irrigated in any year by the Deerboine project shall not exceed approximately 270 hectares. Deviations from these limits by more than 10% shall not occur without the previous written authorization of the Director. In particular, the use of water diverted by the Development to irrigate land in the project areas more frequently than one year in three with lesser amounts of water shall not occur.
17. The Licencee shall implement agronomic practices described in the following documents:
 - a) Sections 3.3 and 3.4 of the Environment Act Proposal's Sundance and Deerboine reports concerning nutrient management and pesticide management, respectively;
 - b) Appendix D of the Environment Act Proposal's Deerboine report concerning manure management; and
 - c) The document "Draft Best Management Practices Manual 1999" by the Central Manitoba Irrigators Association and Central Manitoba Resource Management Ltd., concerning general agronomic practices.

Monitoring

18. The Licencee shall provide a listing of annual groundwater, surface water and soil monitoring activities to be carried out for the Development. The plan shall include a monitoring schedule, and shall be provided to the Director for approval by October 1, 2001. The plan may be provided in the same format and as an addition to the April, 2001 document "Draft Report on of CMRM Monitoring Plans Upper Rat Creek, Fingas Leslie, Lower Rat Creek and Fairholm Irrigation Projects."

19. The Licencee shall ensure that the monitoring activities required in Clause 18 of this Licence include continued monitoring of domestic wells in the project area and monitoring of total phosphorus, phytoplankton and periphyton in the Assiniboine River. Algae and macrophyte monitoring upstream and downstream of the Development in the Assiniboine River shall also be included in the monitoring program.
20. The Licencee shall, prior to the commencement of operation of the Development, meet with the Environment Officer responsible for the administration of this Licence and the contact person for the Environmental Approvals Branch of Manitoba Conservation to review the monitoring and reporting requirements of this Licence.
21. The Licencee shall, on an annual basis, undertake the monitoring plan approved by Clause 18 of this Licence. A report summarizing the monitoring results for the previous year shall be submitted to the Director by March 1 of each year.

REVIEW AND REVOCATION

- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If construction of the development has not commenced within three years of the date of this Licence, the Licence is revoked.
- C. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.



Larry Strachan, P. Eng.
Director
Environment Act

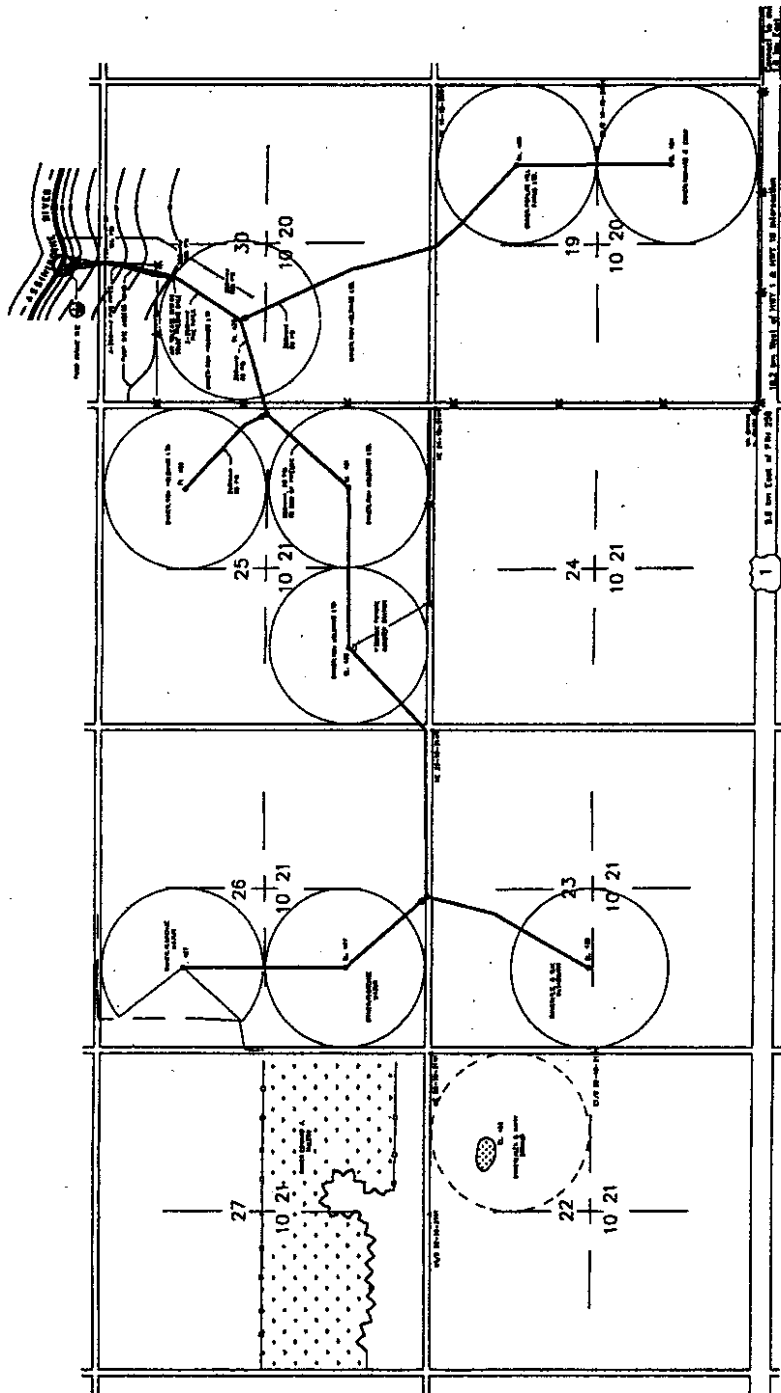
Client File: 4621.00



Legend

- PIPELINE
- FENCE
- TREES
- Q ROAD
- PROPOSED PIVOT
- SLOUGH
- PROPOSED IRRIGATION
- PROPOSED 3-PHASE 575 VOLT HYDRO
- RISERS

NOTE: ALL PIPE IS P.I.P.
UNLESS OTHERWISE SHOWN



JANUARY 2003
11382545

Client/Project
PITRA
SUNDANCE IRRIGATION PROJECT

Figure No. 2.2
Title

IRRIGATION SYSTEM WORKS
-PUMP INTAKE SITE, PIPELINE ROUTE,
GROUND ELEVATIONS AND IRRIGATION

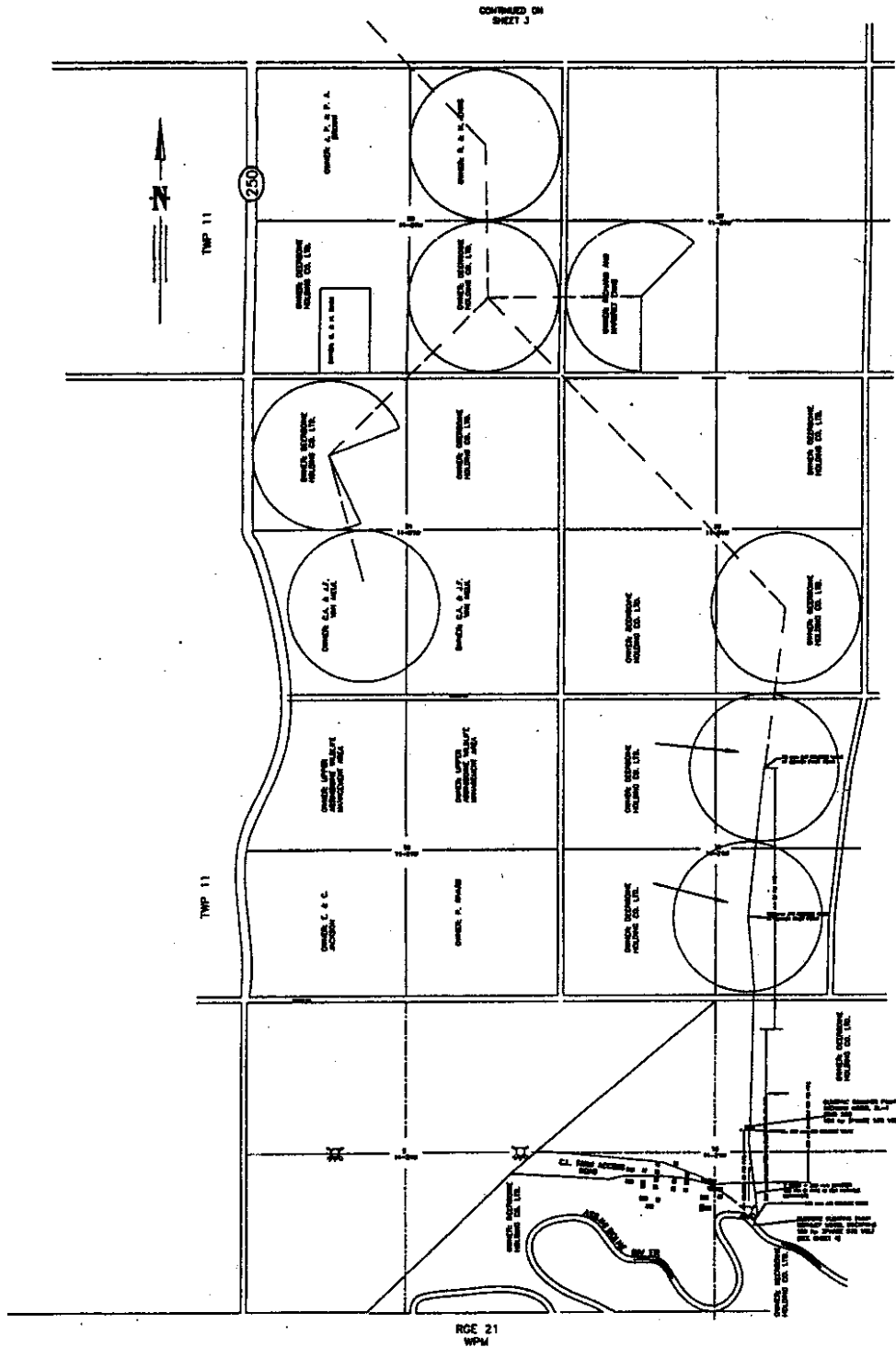


Stantec



Figure 1 to Environment Act Licence No. 2516

SP/01/11/20046 - PITRA/0001/02-2.dwg
18 January 2003, 10:34 AM by: [unclear]



EXISTING PIPELINE AND PIVOTS ———
 PROPOSED PIPELINE - - - - -
 PROPOSED PIVOTS ○

NOT TO SCALE

\\s112\media\11320040 - PFRA\Map\Deerboine\0-PF2-2.dwg
 03 May 2001, 08:11 AM By: vmmw



ORIGINAL SHEET - A3

MARCH 2001
 11320040

Client/Project

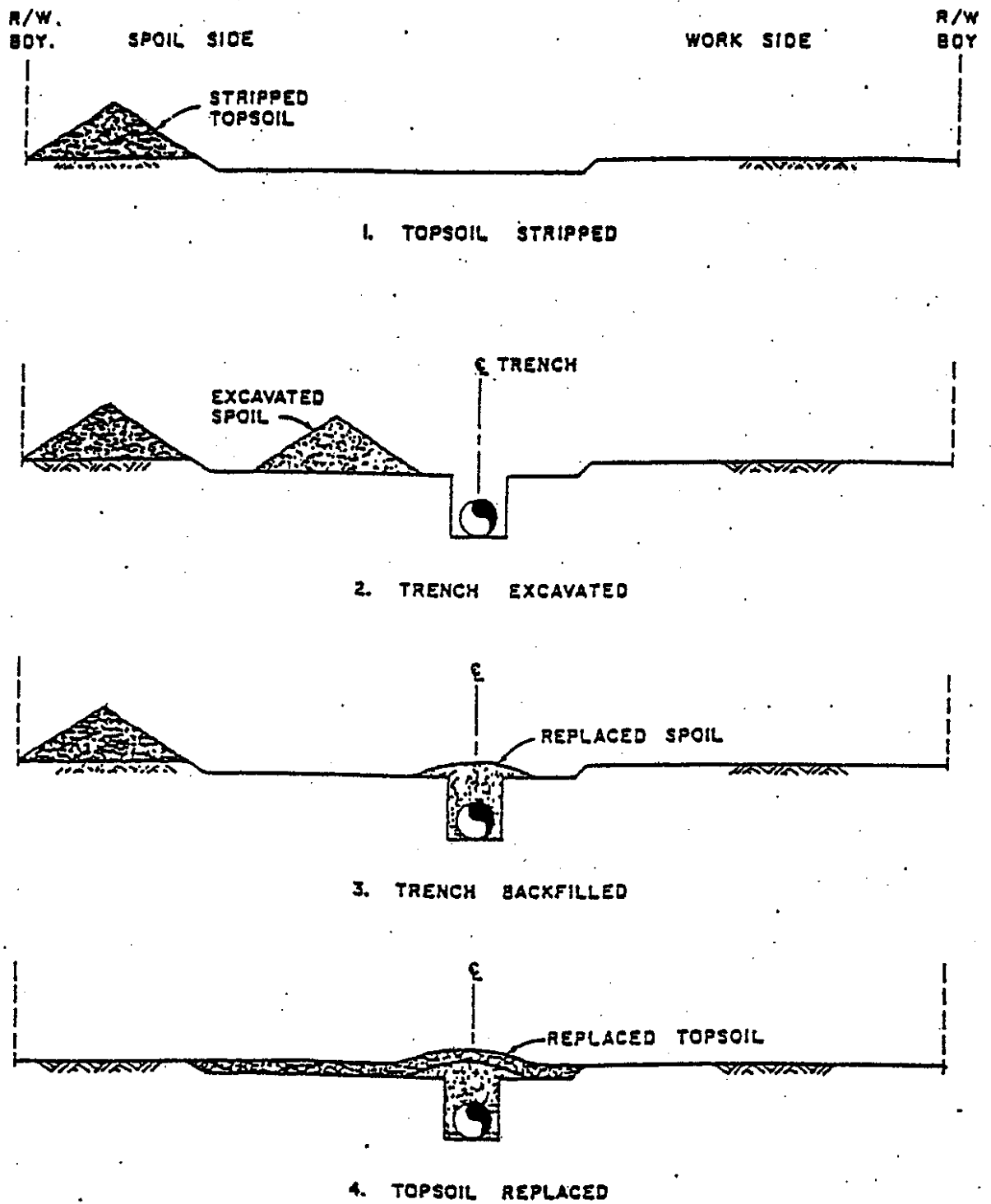
PFRA
 DEERBOINE IRRIGATION PROJECT

Figure No. 2.2

Title

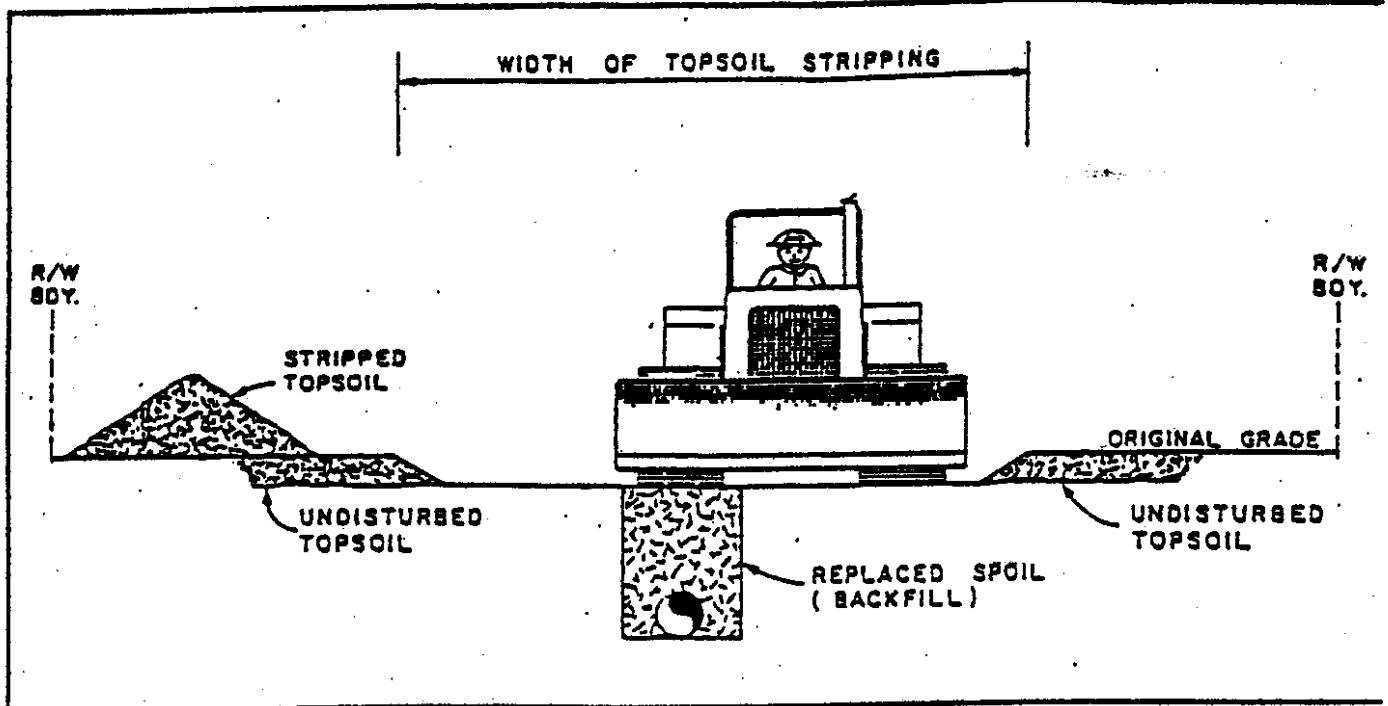
IRRIGATION SYSTEM WORKS
 -PUMP INTAKE SITE, PIPELINE
 ROUTE, AND IRRIGATION FIELDS

Figure 2 to Environment Act Licence No. 2516



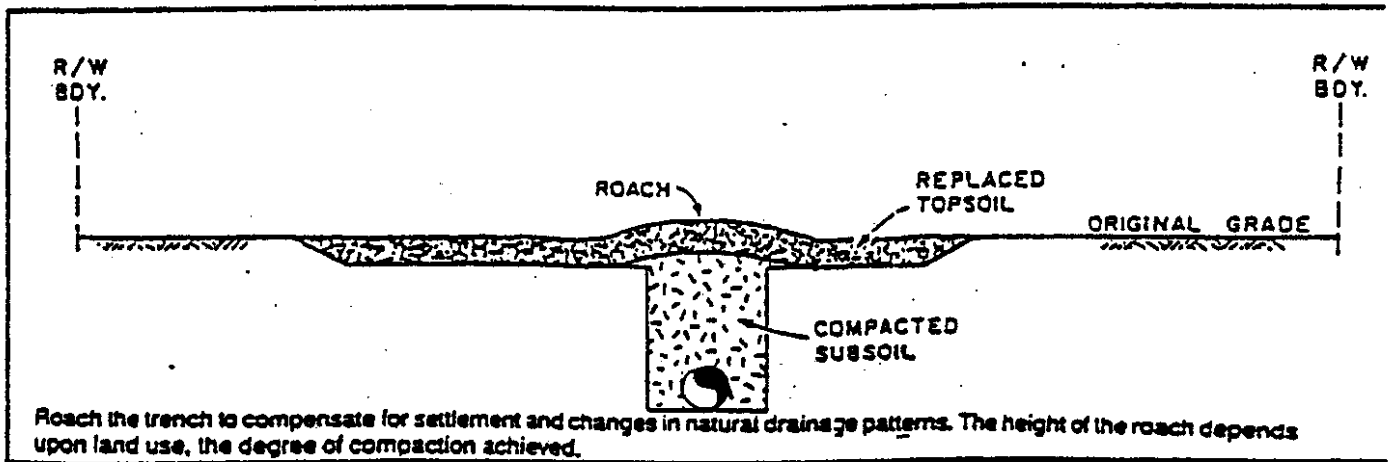
SEQUENCE OF TOPSOIL HANDLING

Figure 3



COMPACTION OF BACKFILL

Figure 4



ROACHING THE TRENCH

Figure 5

**Table 1 - Sundance
To Environment Act Licence No. 2516**

Central Manitoba Resource Management Limited				
Sundance Irrigation Project				
Annual Water Use Report				
Intake Loc.:	_____	Year:	_____	
Pump Capacity:	_____		m ³ /s or cfs	
Conversions:	1 acre (ac.) = 0.405 hectares (ha.) 1 ha. = 2.471 ac.			
	1 acre-foot (ac.-ft.) = 1.233 cubic decametres (dam ³) 1 dam ³ = 0.811 ac.-ft.			
	1 cubic foot per second (cfs) = 0.0283 cubic metres per second (m ³ /s)			
	1 m ³ /s = 35.31 cfs			
	1 imperial gallon per minute (IGPM) = 0.000076 m ³ /s			
	1 US gallon per minute (USGPM) = 0.000063 m ³ /s			
Date	Pumping Rate	Duration	Volume Pumped	Parcel(s) Irrigated
		hours	dam3	
TOTAL		sum	sum	

**Table 1 - Deerboine
To Environment Act Licence No. 2516**

Central Manitoba Resource Management Limited				
Deerboine Irrigation Project				
Annual Water Use Report				
Intake Loc.:	_____	Year:	_____	
Pump Capacity:	_____		m ³ /s or cfs	
Conversions:	1 acre (ac.) = 0.405 hectares (ha.) 1 ha. = 2.471 ac.			
	1 acre-foot (ac.-ft.) = 1.233 cubic decametres (dam ³) 1 dam ³ = 0.811 ac.-ft.			
	1 cubic foot per second (cfs) = 0.0283 cubic metres per second (m ³ /s)			
	1 m ³ /s = 35.31 cfs			
	1 imperial gallon per minute (IGPM) = 0.000076 m ³ /s			
	1 US gallon per minute (USGPM) = 0.000063 m ³ /s			
Date	Pumping Rate	Duration	Volume Pumped	Parcel(s) Irrigated
		hours	dam ³	
TOTAL		sum	sum	