

# LICENCE

Licence No. / Licence n° 2752

Issue Date / Date de délivrance January 24, 2007

In accordance with The Environment Act (C.C.S.M. c. E125) /  
Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Section 11(1) / Conformément au Paragraphe 11(1)

**THIS LICENCE IS ISSUED TO : / CETTE LICENCE EST DONNÉE À :**

**SHILO FARMS LTD.; "the Licencee"**

for the construction and operation of the Development being an irrigation system in the rural municipalities of Oakland and Cornwallis, with a water intake on the Assiniboine River in NW 30-8-16W in the Rural Municipality of South Cypress, in accordance with the Proposal filed under The Environment Act dated April 27, 2005, and additional information dated August 10, 2006, 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 collect and dispose of all used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the Development 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.

**\*\*A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES\*\***

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 Figure 1, attached to this Licence. These lands include NE 36-8-17W, 1-9-17W and 12-9-17W. Proposed amendments to this project must be submitted to the Director for approval with an accompanying discussion of the nature and purpose of the amendments.

#### **Construction**

5. The Licencee shall, not less than two weeks prior to beginning construction of the Development, provide notification to the Environment Officer responsible for the administration of this Licence of the intended starting date of construction and the name of the contractor responsible for the construction.
6. The Licencee shall establish any fuel storage areas required for the construction and operation of the Development:
  - (a) a minimum distance of 100 metres from any waterbody; and
  - (b) in compliance with the requirements of *Manitoba Regulation 188/2001*, or any future amendment thereof, respecting *Storage and Handling of Petroleum Products and Allied Products*.
7. The Licencee shall, during construction and operation of the Development,
  - (a) immediately report any reportable spills to Manitoba Conservation's Accident Reporting Line at (204) 944-4888; and
  - (b) provide a follow-up report to the Director on a reportable environmental accident outlining the cause(s) and proposing corrective action to prevent reoccurrence.
8. The Licencee shall, during construction of the Development, take all appropriate measures to prevent erosion and the deposition of sediment into the Assiniboine River.

9. The Licencee shall not undertake instream construction activities in connection with the Development between April 1 and June 30 of any year.
10. The Licencee shall not undertake instream construction activities in connection with the Development during periods of high streamflow.
11. The Licencee shall, during construction of water intake works in connection with the Development, minimize the extent of clearing of riparian vegetation adjacent to the Assiniboine River.
12. The Licencee shall install buried pipelines on cultivated land or land in its natural state in accordance with the methodology illustrated in Figures 2 to 4, 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**

13. The Licencee shall install and maintain instream water diversion works associated with the Development in accordance with the requirements of the Department of Fisheries and Oceans and the Canadian Coast Guard.
14. The Licencee shall screen the pump intake associated with the Development in accordance with the Department of Fisheries and Oceans publication "Freshwater Intake End-of-Pipe Fish Screen Guideline" (March, 1995). Final screen design shall be approved by the Department of Fisheries and Oceans prior to the operation of the Development.
15. The Licencee shall alter the screen on the pump intake associated with the Development if future research indicates that different design criteria are appropriate with respect to water withdrawals prior to July 1 of any year.
16. The Licencee shall maintain a minimum instream flow below the diversion point of the Development in NW 30-8-16W at all times while water is being diverted into the Development. The minimum instream flow at the diversion point shall be as determined by Manitoba Water Stewardship and in accordance with the provisions of a Water Rights Licence issued for the Development.
17. 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 16 of this Licence is not equalled or exceeded.
18. The Licencee shall limit the pumping rate at the water diversion point of the Development in NW 30-8-16W to 340 litres per second.

19. The Licencee shall, on a daily basis while irrigation is occurring from the Development, record volumes of water pumped, and durations of pumping. 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 and the Environmental Assessment and Licensing Branch. The report shall be provided in the format shown in Table 1, attached to this Licence.
20. The Licencee shall install backflow prevention devices and maintain them in operational condition at all times if fertilizer or crop protection products are applied through the irrigation systems of the Development.
21. The Licencee shall, if fertilizer or crop protection products are applied through the irrigation systems of the Development, not allow irrigation water containing these materials to be applied to or drain to surface water bodies.

#### **Operation – Matters Respecting Land Management and Soil Quality Protection**

22. The Licencee shall not, with water diverted by the Development, irrigate any land parcel other than a land parcel described in Clause 4 of this Licence and identified in Figure 1 attached to this Licence.
23. The Licencee shall implement agronomic practices described in the following documents:
  - (a) Section 4 of the report “Shilo Farms Ltd Irrigation Project Environmental Act Proposal Final Report”, prepared by AXYS Agronomics, March, 2005.
  - (b) Section 6 of the report “Land and Agronomic Assessment for the Shilo Farms Irrigation Project”, prepared by AXYS Agronomics, December, 2004; and
  - (c) “Draft Best Management Practices Manual 1999” by the Central Manitoba Irrigators Association and Central Manitoba Resource Management Ltd., concerning general agronomic practices, or future versions thereof.
24. The Licencee shall manage phosphorus as well as nitrogen in all nutrient management plans developed pursuant to Clause 23 of this Licence.
25. The Licencee shall not remove cereal crop residue from the lands of the Development.

#### **Monitoring**


26. The Licencee shall implement the monitoring program described in Section 6 of the report listed in Clause 23 (a) of this Licence. Phosphorus shall be added to all groundwater and soil monitoring programs. Yearly reports on the monitoring program shall be provided by March 1 of the following year to the Western Region

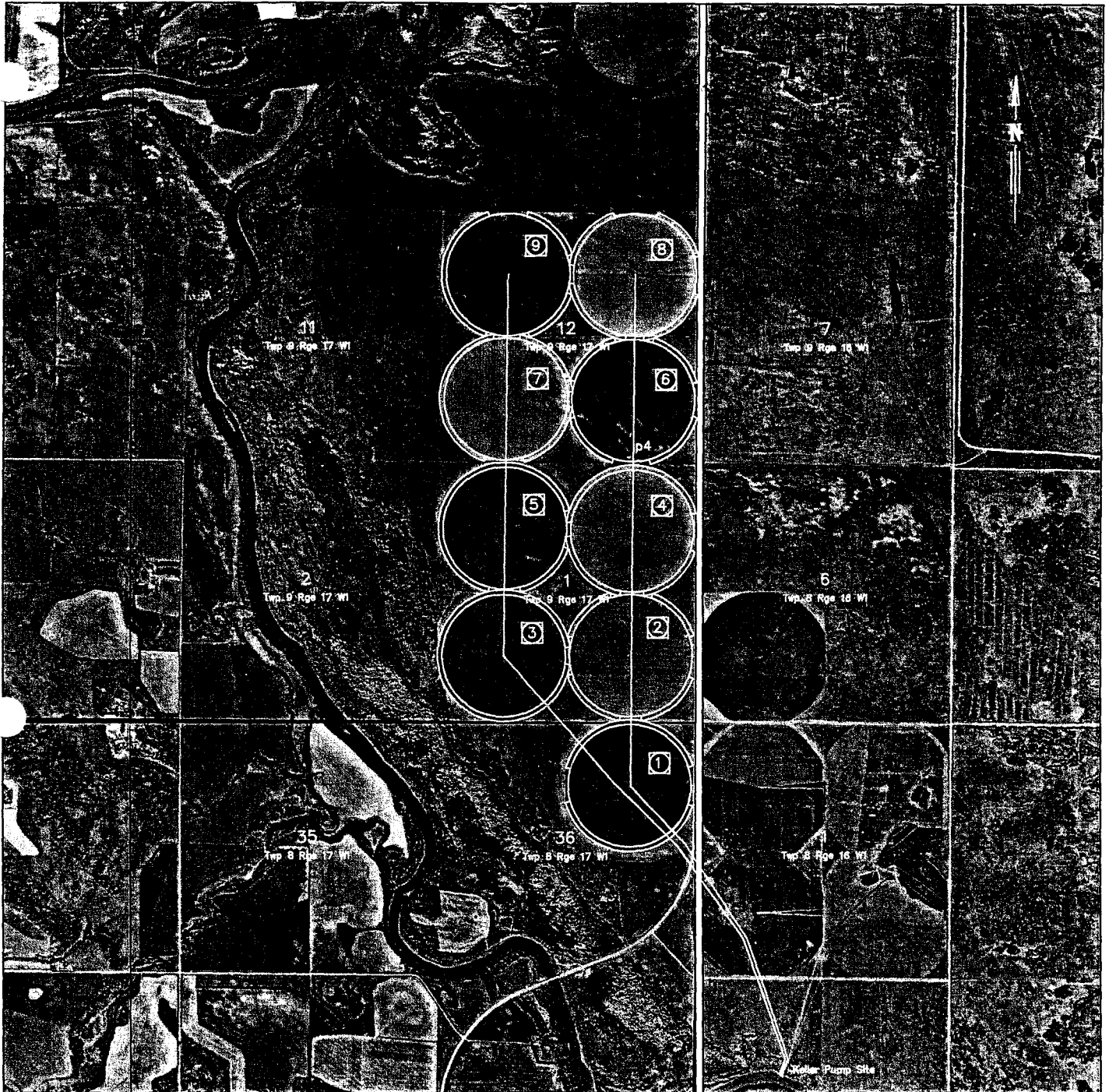
and the Environmental Assessment and Licensing Branch of Manitoba Conservation. Alterations in the groundwater monitoring program may be proposed and implemented with the prior written approval of the Director.

27. The Licencee shall, upon the request of the Director:
- (a) sample, monitor, analyze or investigate specific areas of concern regarding groundwater, surface water and soil for such duration and at such frequencies as may be specified;
  - (b) determine the environmental impact associated with the specific areas of concern; and
  - (c) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, and such other information as may from time to time be requested.
28. 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 Assessment and Licensing Branch of Manitoba Conservation to review the monitoring and reporting requirements of this Licence.

#### **REVIEW AND REVOCATION**

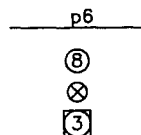
- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If construction of the development has not 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.

  
**Tracey Braun, M. Sc.**  
**Director**  
**Environment Act**



**LEGEND**

PIPELINE  
 WATERCAD JUNCTION NODES  
 VALVES  
 FIELD NO



**NOTES:**

1. ACRES (PIVOTS): 1 - 9: 119.9
2. ACRES (ENDGUNS): 1- 15.7, 2- 12.3, 3- 18.4, 4- 15.6,  
 5- 15.9, 6- 12.1, 7- 15.4, 8- 13.6, 9- 13.4

**PLANS**



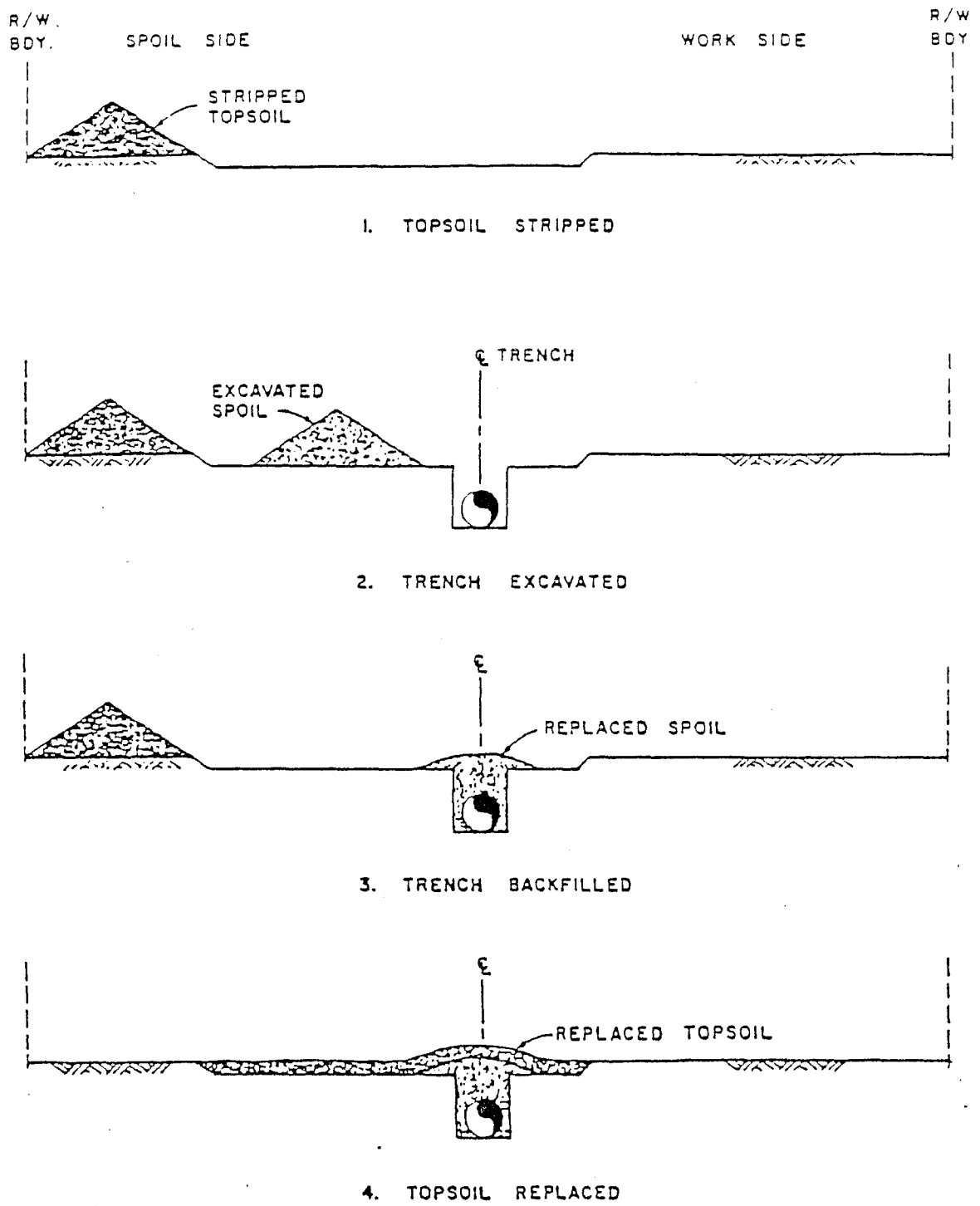
Designed J Botha P Eng	Approved
Drawn J Botha P Eng	Position Title
Checked	Date SEPT 2003

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada  
**PFRA ARAP**  
 Prairie Farm Rehabilitation Administration / Administration du rétablissement agricole des Prairies

PROJECT: SHILO IRRIGATION PROJECT 2005

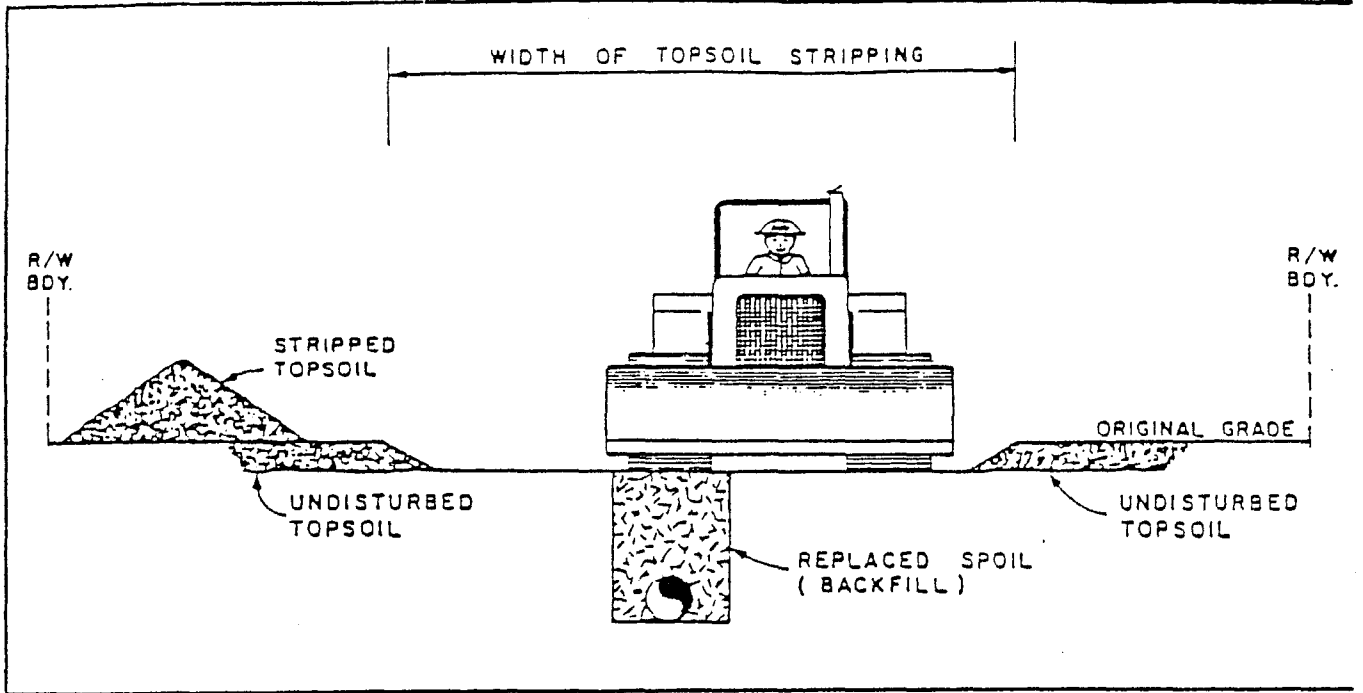
**FIGURE 1**

**IRRIGATION SYSTEM LAYOUT**



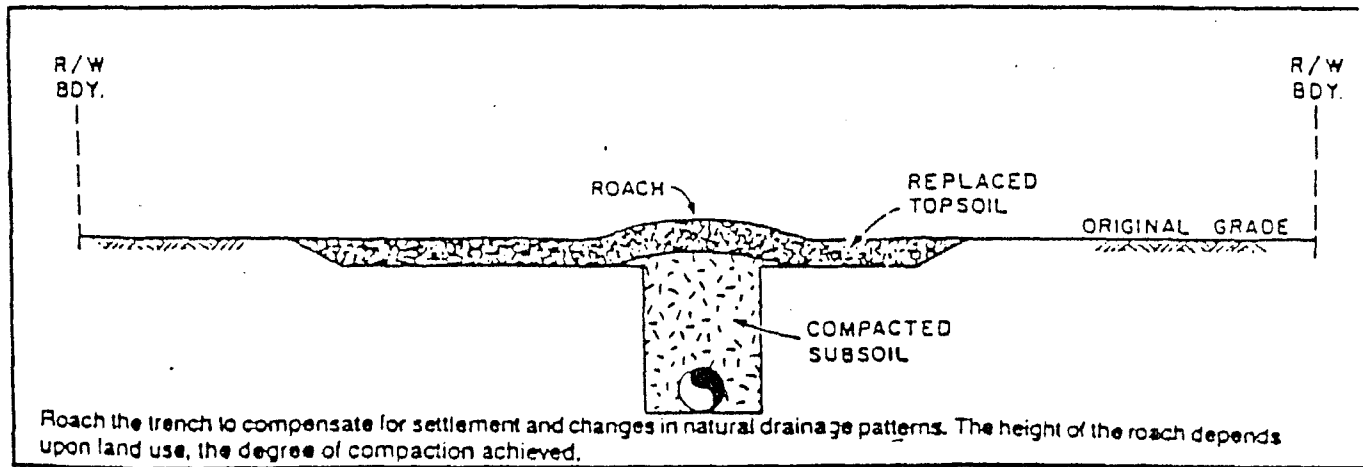
SEQUENCE OF TOPSOIL HANDLING

Figure 2



COMPACTION OF BACKFILL

Figure 3



ROACHING THE TRENCH

Figure 4

**TABLE 1 TO ENVIRONMENT ACT LICENCE NO. 2752**

Shilo Farms Ltd. Irrigation Project

Annual Water Use Report      Year: \_\_\_\_\_

Intake Location: NW 30-8-16W				
Pump Capacity: _____ m3/s or cfs Minimum Instream Flow: _____ m3/s or cfs      Measured at: _____				
Conversions:    1 acre (ac.) = 0.405 hectares (ha.)    1 ha. = 2.471 ac. 1 acre-foot (ac.-ft.) = 1.233 cubic decametres (dam3)    1 dam3 = 0.811 ac.-ft. 1 cubic foot per second (cfs) = 0.0283 cubic metres per second (m3/s) 1 m3/s = 35.31 cfs 1 imperial gallon per minute (IGPM) = 0.000076 m3/s 1 US gallon per minute (USGPM) = 0.000063 m3/s				
Date	Pumping Rate	Duration hours	Vol. Pumped dam3	Parcel(s) Irrigated
<b>TOTAL</b>		sum	sum	

Table 1