

Environment Act Licence

Loi sur l'environnement Licence

Manitoba
Conservation
Conservation
Manitoba



Licence No./Licence n° 2668
Issue Date/Date de délivrance August 31, 2004

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

HULME AGRA PRODUCTS INC.;
"the Licencee"

for the construction and operation of the Development being a reservoir in SW 14-11-10W and an irrigation system on land in Township 11, Range 10W in the Rural Municipality of North Norfolk, in accordance with the Proposal filed under The Environment Act dated June 9, 2004, 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.
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.

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

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. The following portions of fields are excluded from the project unless specifically approved by the Director in writing:
 - (a) Field 1 in NW 10-11-10W – Portions with Land Suitability for Irrigated Potato Production rated as Class 4 due to salinity considerations;
 - (b) Field 5 in NW 15-11-10W - Portions with Land Suitability for Irrigated Potato Production rated as Class 4 due to salinity considerations;
 - (c) Field 10 in NE 21-11-10W - Portions with Land Suitability for Irrigated Potato Production rated as Class 5;

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 immediately report fuel spills in excess of 100 litres to an Environment Officer.
8. The Licencee shall, during construction of the Development, construct instream works in accordance with the requirements of the May, 1996 publication "Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat".
9. The Licencee shall not undertake instream construction activities in connection with the Development between April 1 and June 15 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 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.
12. The Licencee shall, prior to beginning construction in areas of natural habitat affected by the Development, conduct a survey of rare or endangered plant species. If rare or endangered species are found, a report on their presence, including appropriate mitigation measures for their protection, shall be provided to the Director for approval prior to beginning construction in the affected areas.
13. The Licencee shall not construct the Development in areas likely to provide bird habitat before August 1 of any year. Construction in wetland areas shall not occur before August 15 of any year.
14. The Licencee shall, prior to construction of the Development, obtain an agreement with Manitoba Transportation and Government Services respecting the placement of pipeline adjacent to and across Provincial Road 350.

Operation – Matters Respecting Water Management and Water Quality Protection

15. 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.
16. The Licencee shall, if required by the Department of Fisheries and Oceans, screen the Image Creek 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. 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.
17. The Licencee shall maintain a minimum instream flow of 0.042 cubic metres per second or as otherwise determined by Manitoba Water Stewardship below the diversion point of the Development in Image Creek in SW 14-11-10W at all times while water is being diverted into the Development.
18. The Licencee shall immediately cease diverting water from Image Creek or reduce the diversion rate if the minimum instream flow provided for in Clause 17 of this Licence is not equalled or exceeded.

19. The Licencee shall limit the pumping rate at the water diversion point of the Development in SW 14-11-10W to 315 litres per second.
20. The Licencee shall, on a daily basis while water is being diverted from Image Creek and/or the tile drain systems associated with the Development to the reservoir in SW 14-11-10W, and when 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, the Environmental Approvals Branch, and the Water Licensing Section of Manitoba Water Stewardship. The report shall be provided in the format shown in Table 1, attached to this Licence.
21. 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.
22. 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

23. 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. The area of potatoes irrigated in any year by the Development shall not exceed approximately 105 hectares. Deviations from this limit 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 area more frequently than one year in three with lesser amounts of water shall not occur.
24. The Licencee shall implement agronomic practices described in the following documents:
 - (a) Section 3 of the report “Agronomic Assessment for the Hulme Irrigation Development Project”, prepared by AXYS Agronomics in November, 2003; and
 - (b) “Draft Best Management Practices Manual 1999” by the Central Manitoba Irrigators Association and Central Manitoba Resource Management Ltd., concerning general agronomic practices.

Monitoring

25. The Licencee shall, within three months of the date of this Licence, provide a report for the approval of the Director proposing a monitoring plan for surface water and groundwater, including tile drain water, and soil salinity. The plan shall describe monitoring locations, monitoring frequencies, parameters to be monitored, and reporting frequencies.
26. The Licencee shall implement the monitoring program approved pursuant to Clause 25 of this Licence. Reports on the monitoring program shall be provided on the schedule approved by the Director to the Red River Region and Environmental Approvals Branch of Manitoba Conservation, and the Water Licensing Section of Manitoba Water Stewardship.
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 Approvals 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.

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- 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: 5043.00

Hulme Irrigation Project

Irrigated Potato Rating

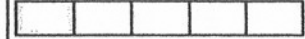
Field	Pivot	Endgun	Total Acres
1	98.2	0.0	98.2
2	116.6	0.0	116.6
3	77.6	2.9	80.5
4	119.9	11.1	131.0
5	119.9	11.3	131.2
6	119.9	9.2	129.1
7	119.9	9.9	129.8
8	119.9	12.5	132.4
9	47.3	4.0	51.3
10	117.4	11.3	128.7
11	67.7	5.3	73.0
12	108.1	9.7	117.8
13	119.9	12.1	132.0
14	129.2	2.1	131.3
Total	1481.3	101.4	1582.7


Legend

-  Pivot/Endgun
-  Pipeline
-  Drainage
-  Reservoir

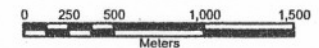
Irrigated Potato Suitability Rating

Class 1 Class 2 Class 3 Class 4 Class 5



 Excluded Area

1:40,000

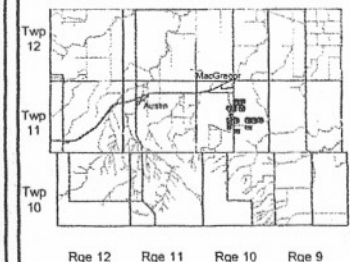


Data Source:
 Drainage from 1:20,000 Topo sheets.
 Irrigated Suitability rating from Soil Classification 1:20,000.

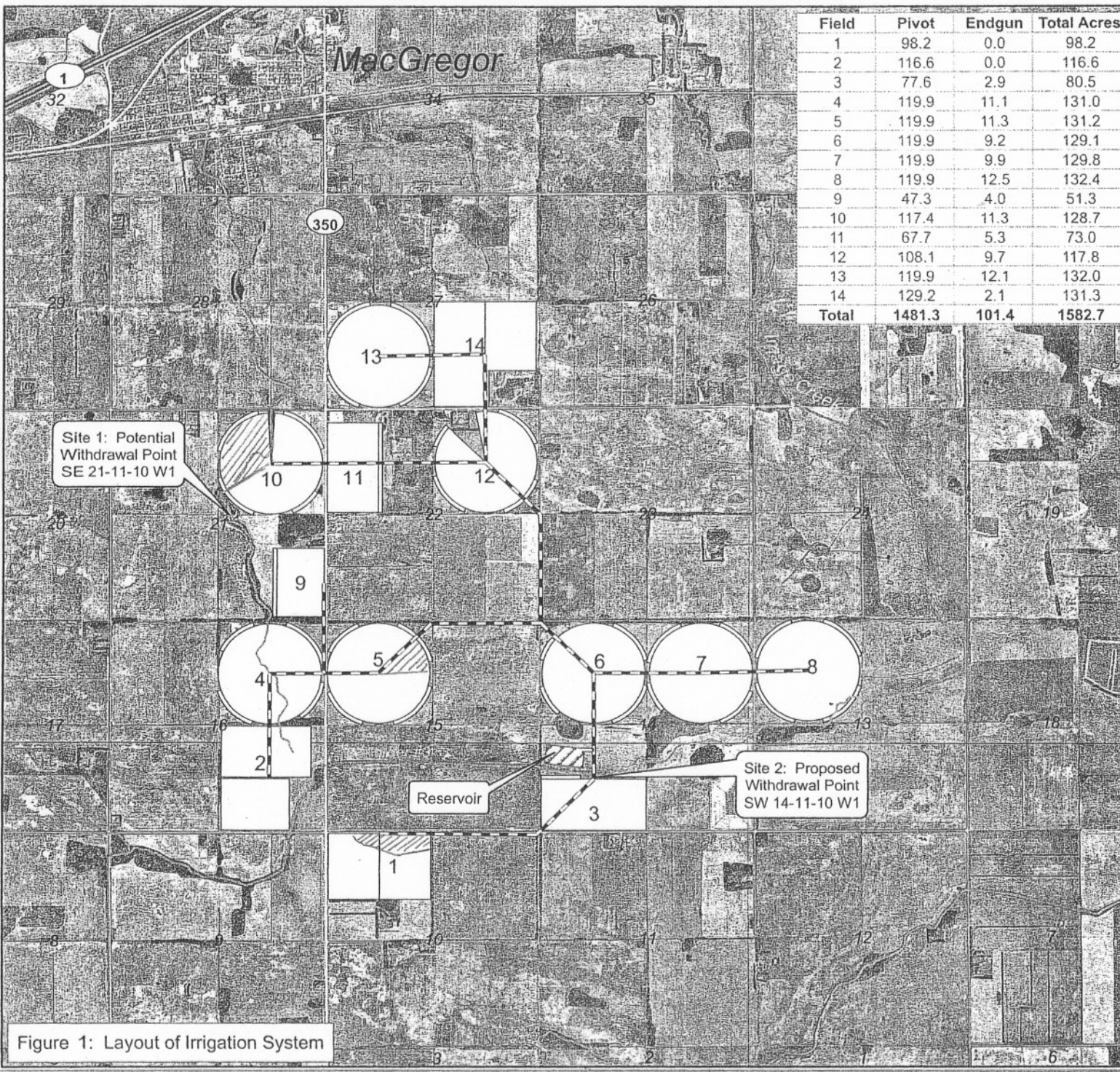
Map Design: Kurt Gottfried, PRFA Morden.
 Created in ArcMap 8.3.
 Printed on June 7, 2004.
 File Reference: G:\AV_2003\Irrigation\HulmeMap_Spudrating.mxd



RM of North Norfolk



Canada

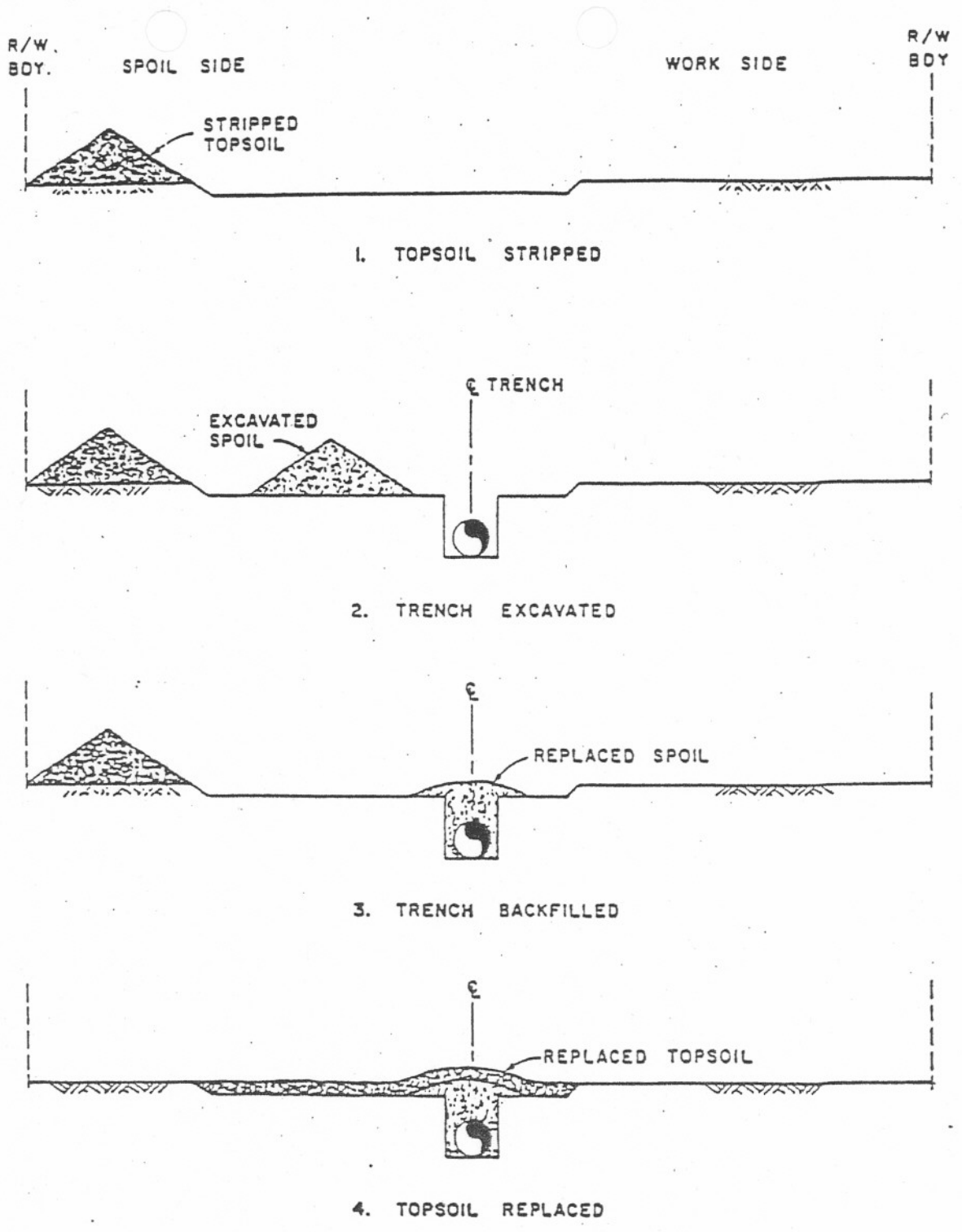


Site 1: Potential Withdrawal Point SE 21-11-10 W1

Site 2: Proposed Withdrawal Point SW 14-11-10 W1

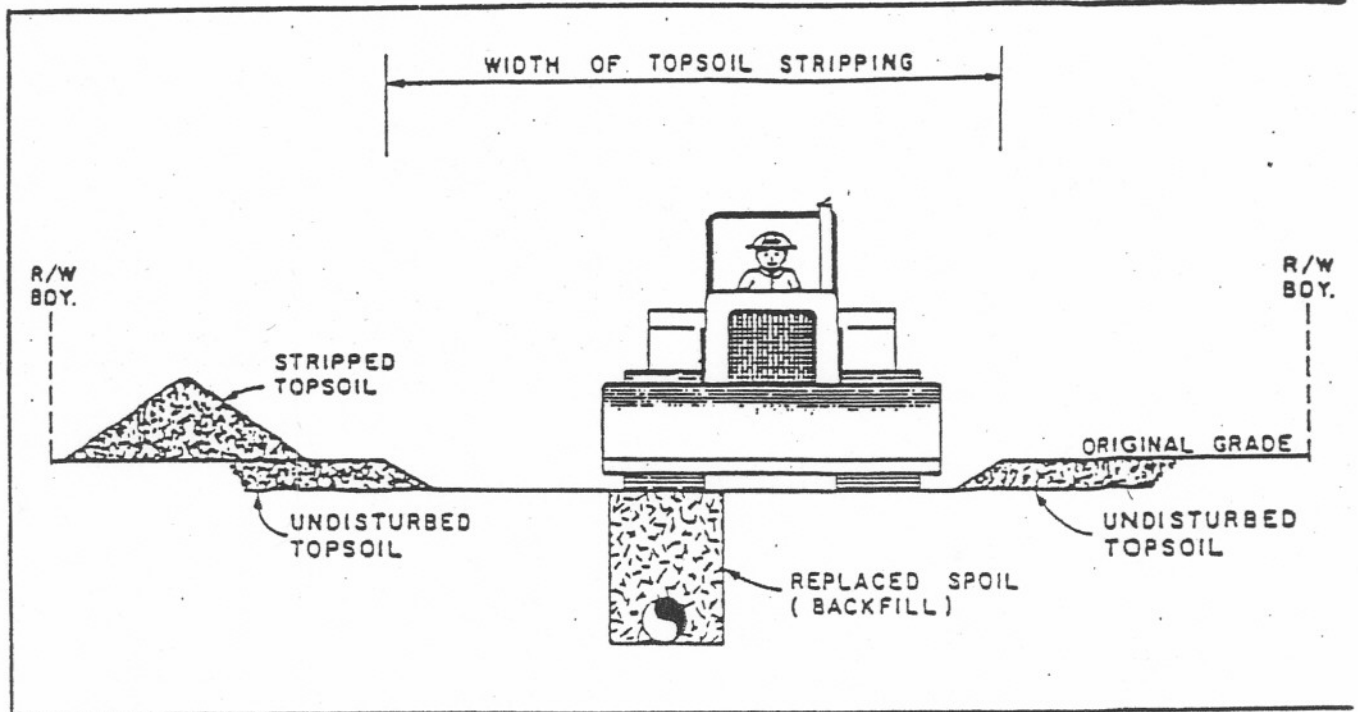
Reservoir

Figure 1: Layout of Irrigation System



SEQUENCE OF TOPSOIL HANDLING

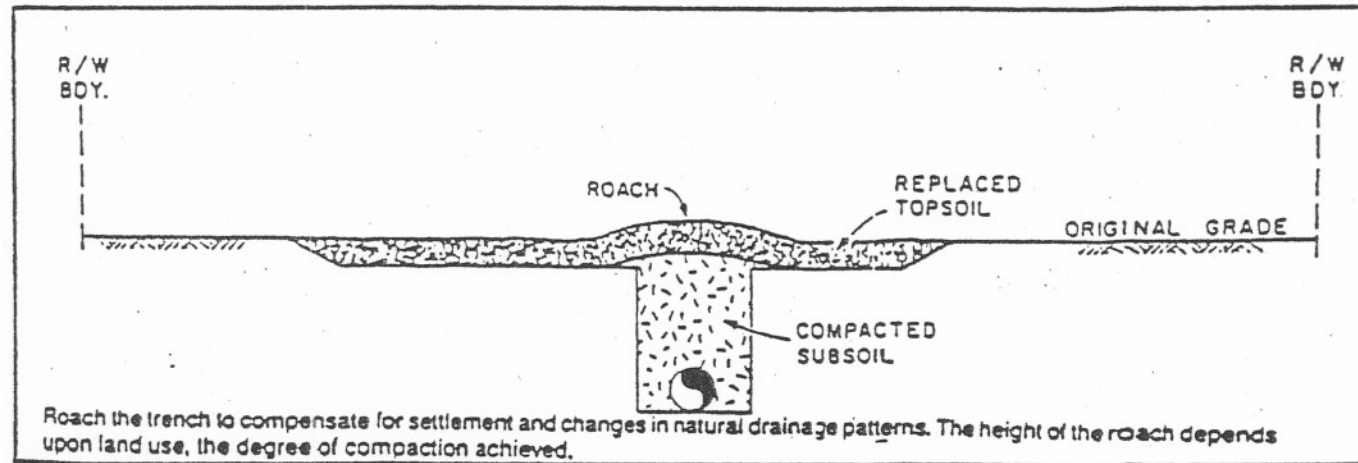
Figure 2



COMPACTION OF BACKFILL

Figure 3 to Environment Act Licence No. 2668

Figure 3



ROACHING THE TRENCH

Figure 4 to Environment Act Licence No. 2668

Figure 4

Table 1 to Environment Act Licence No. 2668

Hulme Irrigation Project Reservoir in SW 14-11-10W							
Year: _____							
Dugout capacity: _____ dam3 or acre-feet							
Pump Capacities: Filling from Image Creek: _____ m3/s or cfs							
Filling from tile drain system: _____ m3/s or cfs							
Irrigation: _____ m3/s or cfs							
Minimum instream flow: 0.042 m3/s MIF Monitoring Location: _____							
Notes:							
1. d/s Q - Flow measured at downstream point of interest (specify _____) or downstream of pump intake _____							
2. Elevation - dugout elevation (Geodetic - metres)							
3. Volume Pumped - as measured by change in reservoir elevation _____ or pumping rate x time pumped _____							
1. Filling		From Image Creek				From Tile Drain System	
Day	Date	d/s Q (1)	Elevation (2)	Hours Pumped	Vol. Pumped (3)	Hours Pumped	Vol. Pumped (3)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total				0.00	0.00	0.00	0.00

