

Environment Act Licence

Manitoba
Environment



Licence No. 1566

Issue Date JUNE 18, 1992

In accordance with the Manitoba Environment Act (C.C.S.M. c. E125)

THIS LICENCE IS ISSUED TO:

RURAL MUNICIPALITY OF VICTORIA: "The Licencee"

for the construction and operation of the Development being the Village of Cypress River Well and Pipeline originating at the Well Site located in Section 15-7-13W in the Rural Municipality of South Cypress then extending south along the Municipal Road allowance to Provincial Trunk Highway #2 and east along Provincial Trunk Highway #2 for a distance 2 miles to the truck loading facility and reservoir located at the Village of Cypress River in the Rural Municipality of Victoria subject to the following specifications, limits, terms and conditions:

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

- 1) The Licencee shall locate the Well Site on the land described as Section 15-7-13W in the Rural Municipality of South Cypress in accordance with the Plan filed on April 14, 1992 as additional information to the Environment Act Proposal filed on November 12, 1991.
- 2) The Licencee shall separate and replace topsoil from backhoe and trenching operations in accordance with the methodology described in Figures 1, 2 and 3 attached to this Licence.
- 3) The Licencee shall re-establish the profile, compact and seed all excavated areas within the Provincial Highway and Municipal Roads rights-of-way.
- 4) The Licencee shall reseed areas of disturbed natural vegetation with a mixture of native or introduced grasses.
- 5) Construction shall not proceed until the Licencee has provided written evidence to the Director that a Licence has been obtained from the Water Resources Branch, Manitoba Department of Natural Resources pursuant to The Water Rights Act.
- 6) The domestic water supply shall be operated in accordance with Manitoba Regulations under the Public Health Act and all operating requirements as recommended by Manitoba Environment.

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- 7) All waste petroleum products generated by the machinery used in the construction of the Development shall be collected and disposed of in accordance with Manitoba Environment requirements.

REVOCATION

If, in the opinion of the Director, the Licencee has exceeded or is exceeding the specifications, limits, terms and conditions set out herein, the Director may revoke this Licence either temporarily or permanently.



Larry Strachan, P. Eng.
Director
Environment Act

FILE.: 3391.00



Environment

Environmental Management

Building 2
139 Tuxedo Avenue
Winnipeg, Manitoba, CANADA
R3N 0H6

FAXED

Client File: 3391.00

June 29, 1992

Reeve Harold W. Purkess
Rural Municipality of Victoria
P.O. Box 40
HOLLAND, Manitoba
ROG 0XQ

Dear Reeve Purkess:

In reviewing Environment Act Licence #1566 dated June 18, 1992 issued in accordance with the Manitoba Environment Act to the Rural Municipality of Victoria, we discovered that Figures 1, 2 and 3 were inadvertently not attached to the Licence.

Attached for inclusion of the Licence are Figures 1, 2 and 3. Please append Figures 1, 2 and 3 to the original Environment Act Licence No. 1566 issued June 18, 1992 to the Rural Municipality of Victoria.

We apologize for any inconvenience this may have caused.

Yours truly,

Larry Strachan, P. Eng.
Director
Environment Act

Attachment

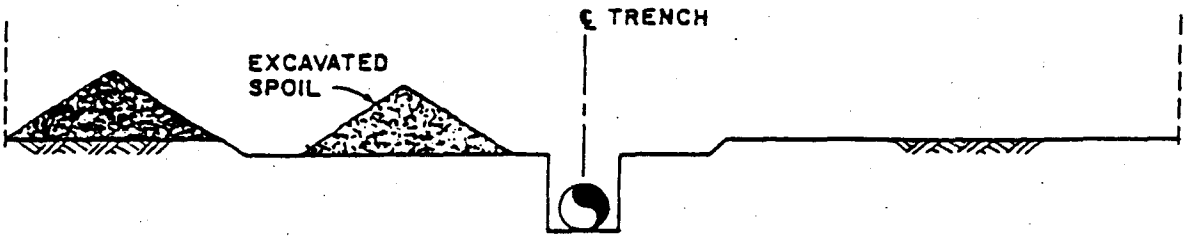
cc: Distribution List
Reeve Earl E. Malyon
Les Ciapala - MWSB
J. Romeo, P. Eng. - Highways



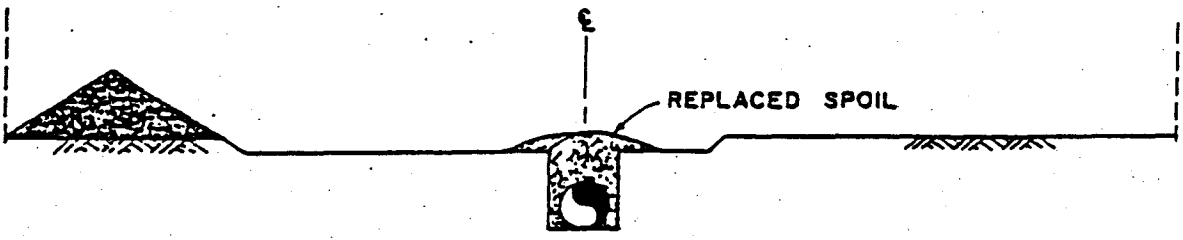
R/W BDY. SPOIL SIDE WORK SIDE R/W BDY.



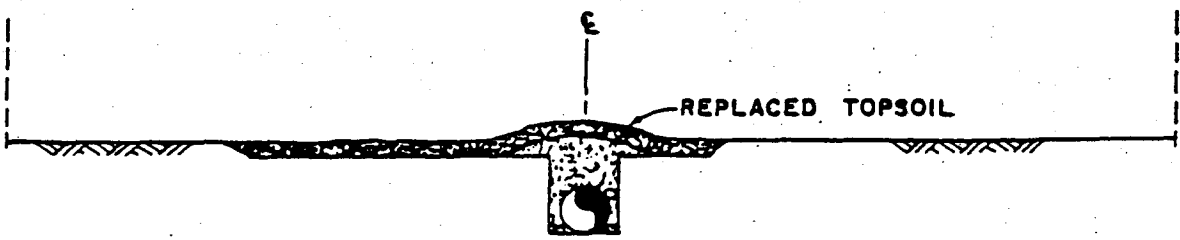
1. TOPSOIL STRIPPED
N.T.S.



2. TRENCH EXCAVATED
N.T.S.



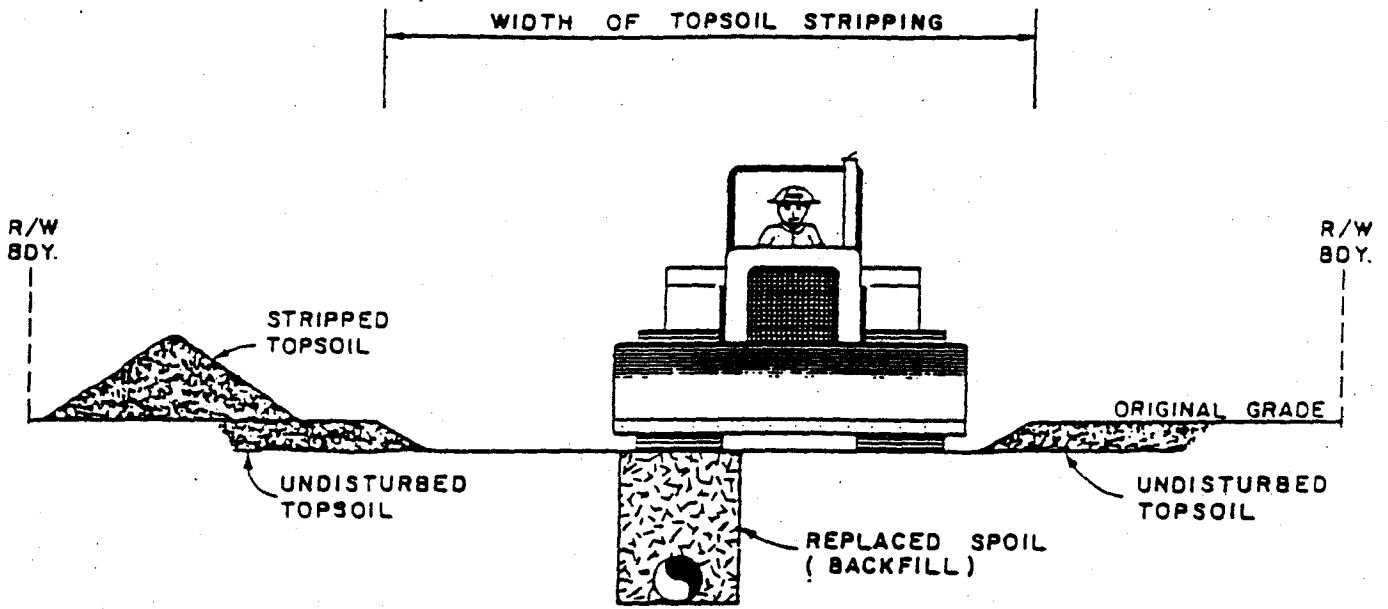
3. TRENCH BACKFILLED
N.T.S.



4. TOPSOIL REPLACED
N.T.S.

SEQUENCE OF TOPSOIL HANDLING

FIGURE I



PROFILE
N.T.S.

Notes

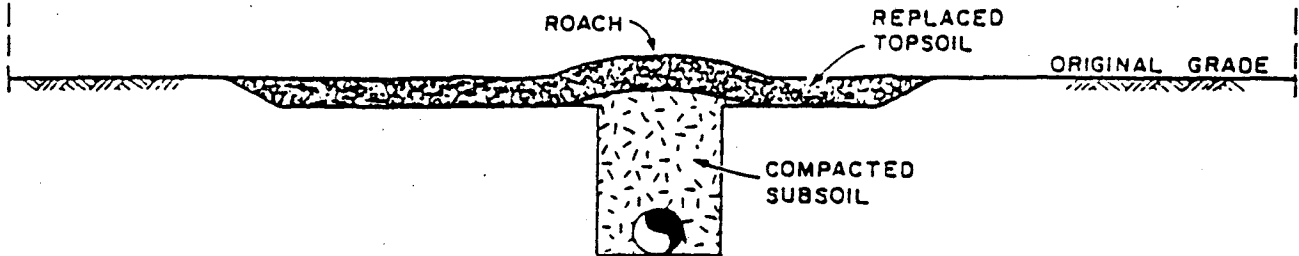
1. Except in rocky or muskeg areas, compact the backfilled subsoil to minimize settlement. The degree of compaction which can be achieved is limited by soil type, frost and moisture content, depth of cover, pipe strength and insulation, and other factors. Typically, compaction is achieved by a few passes with a crawler tractor. In special cases such as irrigated fields and open cut road crossings, 100% compaction is desirable and requires special equipment and compaction in multiple lifts.
2. Dispose of excess subsoil in locations satisfactory to the landowner and in a manner which will prevent mixing with topsoil.

COMPACTION OF BACKFILL

FIGURE 2

R/W
BDY.

R/W
BDY.



PROFILE

N.T.S.

Notes

1. Roach the trench to compensate for settlement and changes in natural drainage patterns. The height of the roach depends upon land use, the degree of compaction achieved, and soil frost. Frozen soils require higher roaches than non-frozen soils. In agricultural lands, including forested lands in the yellow area, the roach should be low and wide (unfrozen case) to facilitate topsoil replacement. A higher roach is acceptable on forested land provided drainage and wildlife are unaffected. Typical values for roaching of representative soil types are presented below. The higher numbers in the range represent the worst case (frozen or clods).

Type of Backfill	Swell Coefficient (r)
blasted rock	.00 - .05
sand & gravel	.05 - .10
sand	.08 - .15
silty sand	.10 - .15
silt	.10 - .20
clay	.10 - .25
organic (muskeg)	.50 - 1.00

$$R = r \times D \quad \text{where } R = \text{height of roach}$$
$$r = \text{swell coefficient}$$
$$D = \text{depth of trench}$$

2. Leave periodic gaps in roach (e.g., 250 m), at all obvious drainage courses and at trench breakers (Dwgs. No. 12-3a and 3b) to allow for surface run-off. These gaps may require maintenance the following year to fill in settled areas.
3. Replace topsoil evenly after trench has settled or has been compacted.

Source: Formula adapted from Transcanada Pipelines, 1979.

ROACHING THE TRENCH

FIGURE 3