

NON-TECHNICAL PROJECT PROPOSAL SUMMARY

9. The existing fuel storage facility in Kugluktuk, NT, requires upgrading to ensure that it has enough capacity to provide fuel to the community. It is currently running very low on diesel capacity and Jet A1 capacity and will likely experience shortfalls within the next few years. Other problems include:

- The secondary containment volume (in all but one of the diked areas within the existing facility) does not meet current National Fire Code requirements; and
- The secondary containment system is in poor shape. The existing liner, dike, and berm (which was constructed of fine sand) have been damaged by rodents over the years.

The facility upgrade is intended to improve the containment system (berm) to meet current codes, and expand the containment area to allow for a growth in the communities fuel usage. The berm is being designed for a twenty-year life span. The liner is being changed from an HPDE 40 mil liner to an HDPE 60 mil liner and the surface of the berm will be constructed with hard packed crushed rock to dissuade hikhik's from using the area as habitat.

One new diesel tank will be added and two existing vertical tanks will be increased in height to provide for storage to meet the communities needs for a ten year period.

Resupply:

It is proposed that new resupply lines will be run down to the proposed new sea lift beach. This portion of the contract is being delayed until 2001 to allow for final approvals on the sea lift beach to be obtained. Assuming the sea lift project is approved then the existing resupply lines that run through town can be removed.

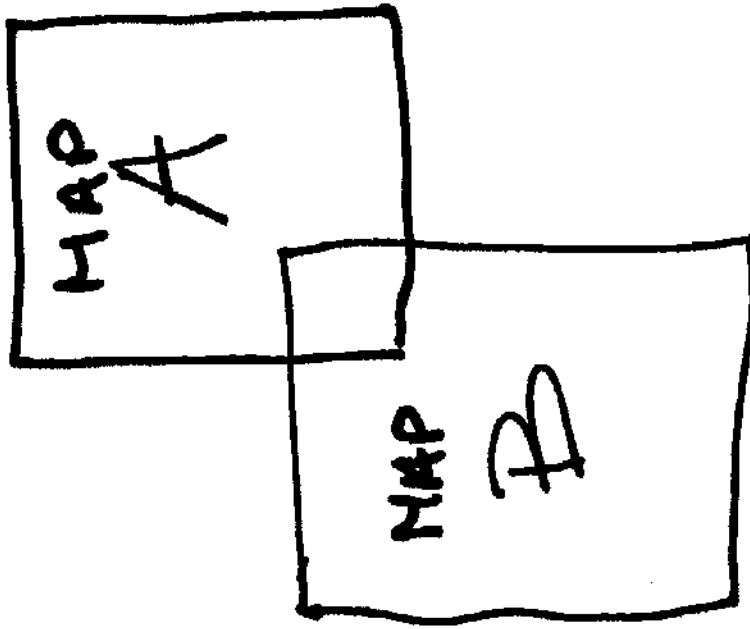
If the resupply relocation is not approved; other options are available including:

- Resupply with new lines in new location without new dock
- Upgrade existing resupply lines and continue resupply with existing lines (not the community preferred option)

Remediation:

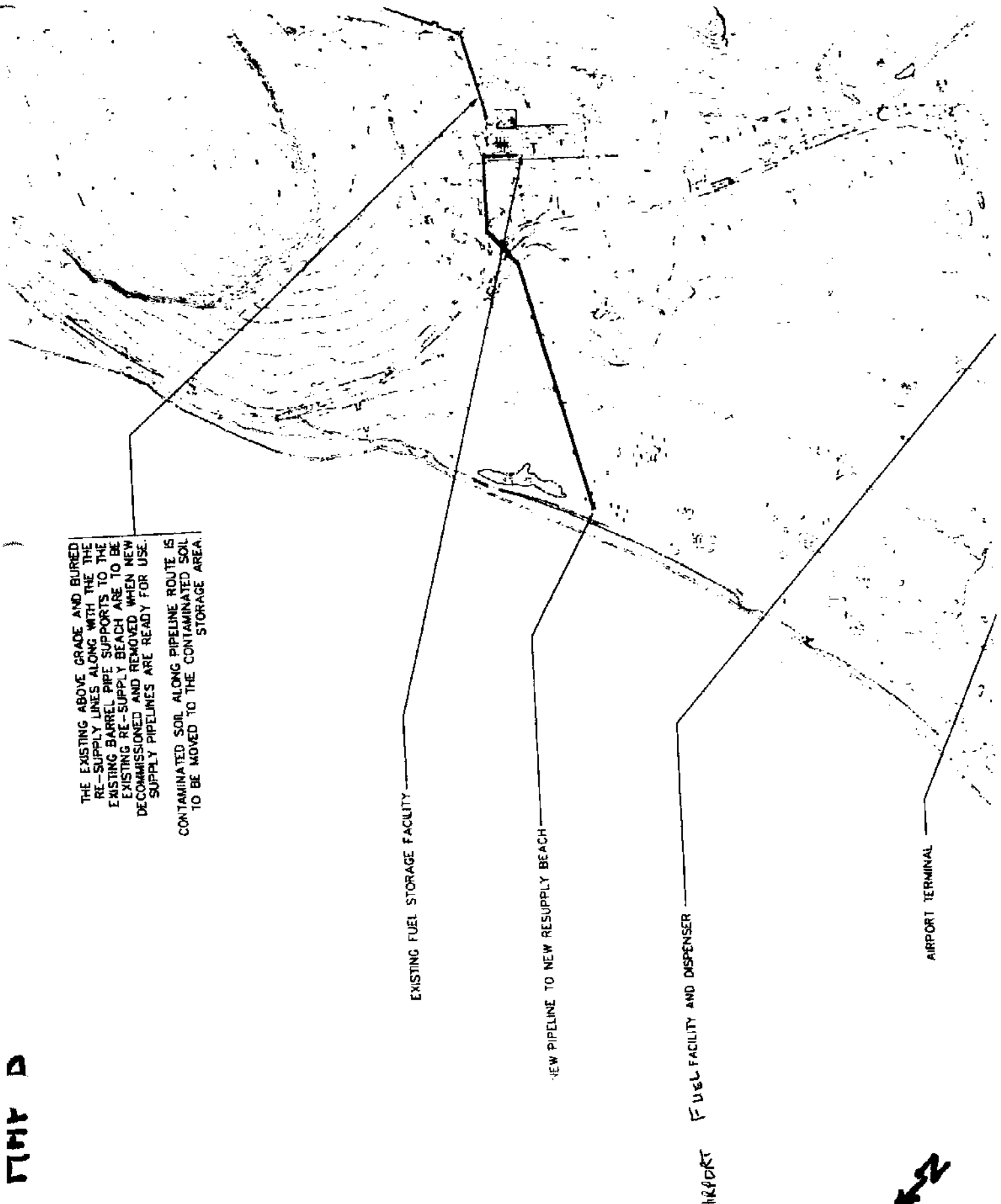
It is anticipated that some remediation (environmental clean-up) work will need to be done along with the upgrade of the tank farm. A Phase II environmental assessment has been completed. A Phase III environmental assessment will be done as soon as possible to determine a good estimate of the quantity of contaminated soil. The remediation of the soil will be done as a separately, but the initial soil removal work will be done as part of this work. Any contaminated soil will be excavated and stored in a contained area (refer to plans). The location of this temporary storage area will be determined with assistance of the community. (In order to select a suitable site the results of the Phase III study will be needed.)

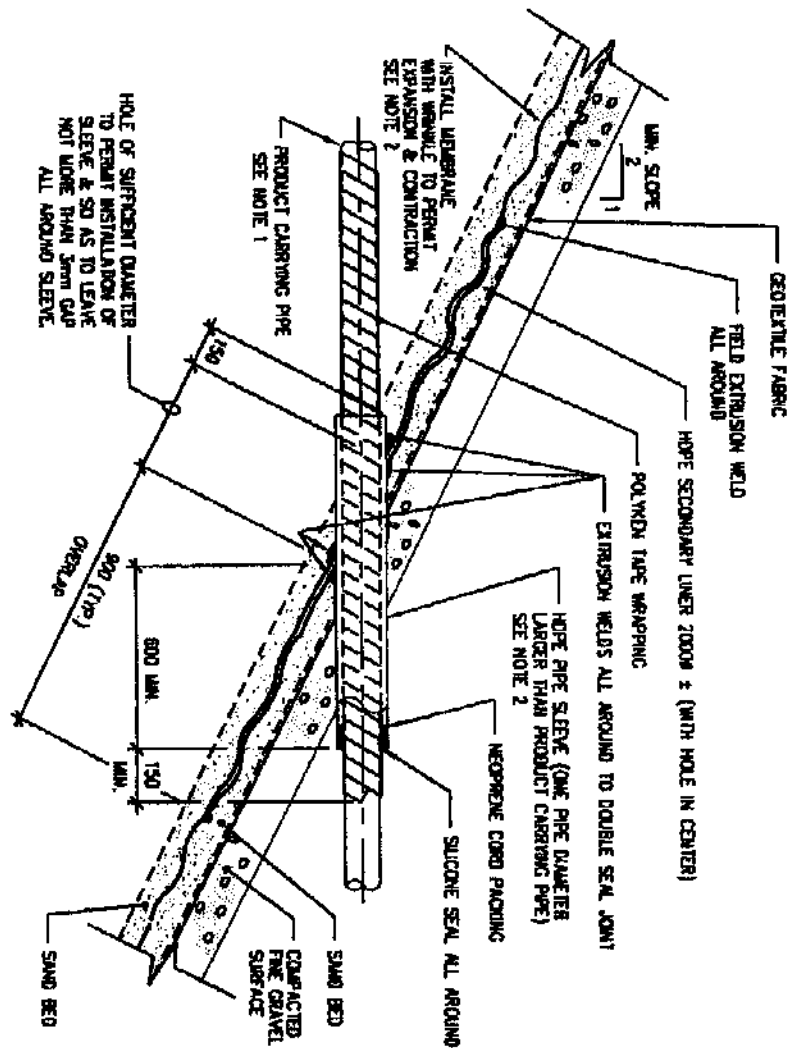
FUEL STORAGE UPGRADE / EXPANSION, KUGLUKTUK
MAP PLAN





FUEL STORAGE UPGRADE/EXPANSION
KUURLUKTUK
MAP A





TYPICAL SECTION

NOTES:

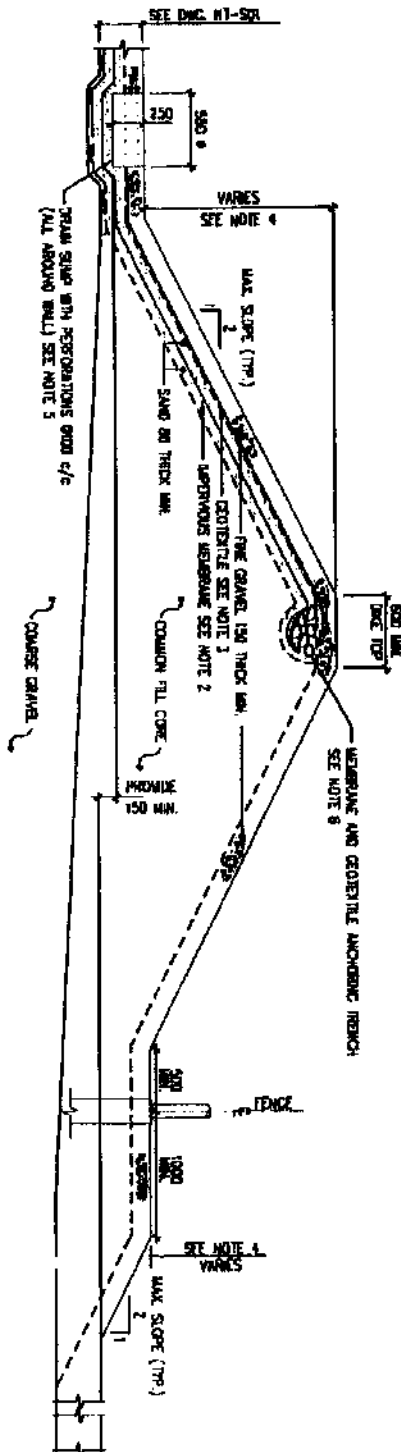
- 1- FOR SIZE OF PRODUCT PIPING SEE PARTICULAR PROJECT DRAWINGS
- 2- FOR MEMBRANE & SLEEVE MATERIAL, SEE SPECIFICATIONS



Public Works & Services

Drawing Title
TYPICAL SLEEVE AT PIPE THROUGH DIKE MEMBRANE DETAIL

Design	Ver.	Scale	Reviewed By	Drawing No.
EDZ	EDZ	N.I.S.	ALNE	NT-S04
Drawn	Appr.	Date	Reviewed On	
CAO/SL		99/04/29	99/02/08	



SECTION

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APR 27 1999

NOTES:

- 1- FOR BACKFILL MATERIAL & SOIL CLASSIFICATION SEE SPECIFICATIONS.
- 2- FOR WEIRBANE MATERIAL SEE SPECIFICATIONS.
- 3- FOR GEOTEXTILE MATERIAL SEE SPECIFICATIONS.
- 4- FOR EXISTING & FINISH CHANGES SEE PARTICULAR PROJECT DRAWINGS.
- 5- FOR DRAIN SLUMP SEE SPECIFICATIONS.
- 6- FOR ANCHORING TRENCH SEE SPECIFICATIONS.



Northwest Territories
Public Works & Services

TYPICAL SECTION THROUGH
DIKE WALL & DRAIN SLUMP

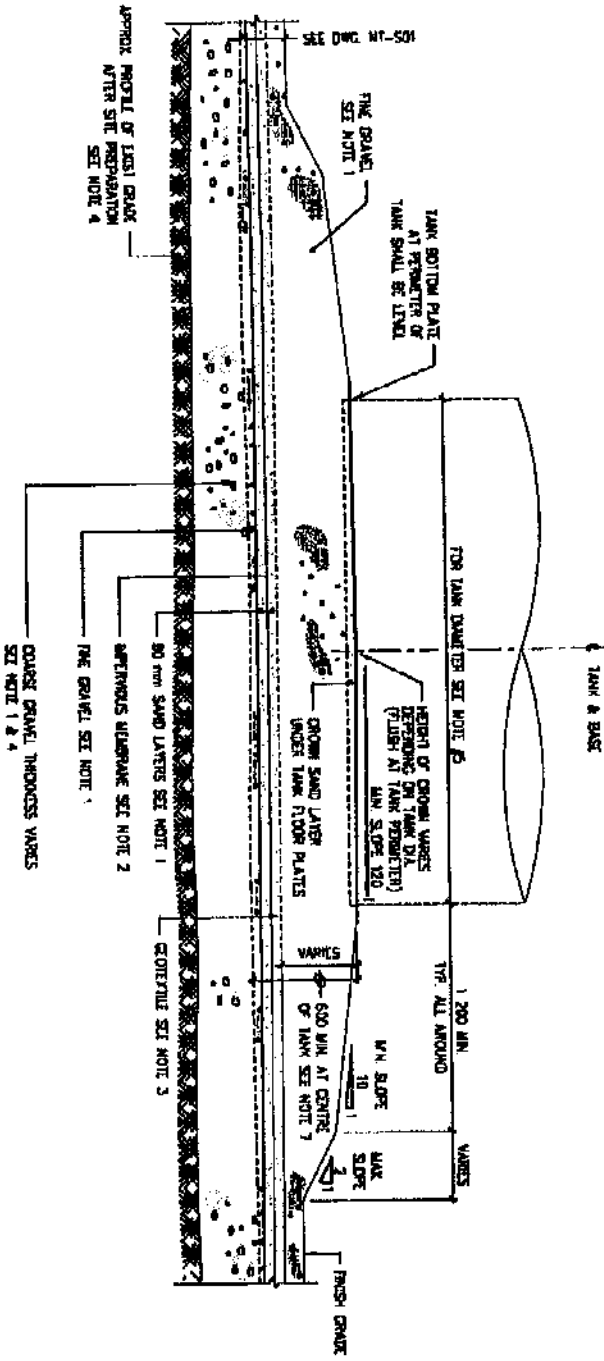
Design	Rev.	Scale
EDZ	EDZ	N.T.S.
Drawn	Rev.	Date
CAB/23	1/1	14/04/99
Reviewed By	Checked By	Drawn By
LOREL	LOREL	NT-S03
Issued On		
09/02/00		

- NOTES
- 1- FOR MATERIAL & SOIL CLASSIFICATION SEE SPECIFICATIONS AND DRAWING N1-S01.
 - 2- FOR REBAR/STEEL MATERIAL SEE SPECIFICATIONS
 - 3- FOR GEOTEXTILE MATERIAL SEE SPECIFICATIONS
 - 4- FOR LIFTING & TIE-IN GRADES SEE PARTICULAR PROJECT DRAWINGS
 - 5- FOR VERTICAL TANK DIAMETER SEE PARTICULAR PROJECT DRAWINGS
 - 6- MIN SLOPES AT EDGES OF GRANULAR BASE SHALL BE MAINTAINED AS SHOWN.
 - 7- FOR ACTUAL THICKNESS OF TANK BASE FORMATION SEE PARTICULAR PROJECT DRAWINGS.

Northwest Territories Public Works & Services

Drawing Title
TYPICAL GRANULAR BASE
FOR VERTICAL TANKS

Design	Rev.	Scale
ED1	02	N.T.S.
Drawn	Appr.	Date
CAD/TS		09/04/99
Reviewed By	Checked By	Drawing No.
AMBL		NT-S02
Revised On		09/02/99



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