Water Board.

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REGULATORY REPORT ON CONSTRUCTION OF GRISE FIORD SEWAGE LAGOON

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Prepared: July 21, 1997
Prepared by: Ken Johnson, P.Eng.

The construction of the Grise Fiord Sewage Lagoon is proceeding into its second year of construction. Construction completion is anticipated by the end of the current construction season, however, this cannot be guaranteed because of the potential difficulties that may be encountered with equipment operation, and resource allocation (competing project with the bridge construction).

The existing sewage lagoon system is immediately uphill from the construction site (See attached sketch), and is presenting a problem for the project construction because of effluent runoff into the project site.

The existing system lagoon system consists of a series of ponds through which the sewage flows through upon pumpout truck discharge from a primary cell through a secondary cell and into secondary containment. The flow mechanism between the cells is infiltration into and through the pond berms. The secondary containment pond following the secondary cell was a "ad hoc" structure to improve the detention in the existing cells, and without this secondary containment the existing cells apparently completely drain themselves. From the secondary containment pond, the sewage effluent flows overland approximately 180 metres to the ocean.

The effluent flow from the secondary containment is flowing directly into the new construction area and adding to the water problem which already exists from other sources. In addition, this sewage flow presents a potential public health concern for the operators on the new construction site.

In order to improve the site construction conditions, we wish to breach the secondary containment and direct the sewage flow around the construction site (south end of construction site). This will reduce the overall retention of the existing system, however, it will improve the constructibility of the new site by reducing the water in the project area, and reduce the health hazard for the operators on the site. The bypassed sewage stream would be identified for the public accordingly, as it flows 180 metres overland to the ocean.

The breach of the secondary containment would be temporary in nature (until approximately August 31), and would be repaired if the new lagoon is not ready to be put into service.

Upon review of this action with the GNWT Department of Health (Nicole Ritchie, July 21, 1997), we have received an agreement in principle. We are approaching all of the other regulatory bodies (INAC, DFO, GNWT RR) for their input in advance of implementing this action.

Post-it® Fax Note 7671	Date 7-23	# of pages 2
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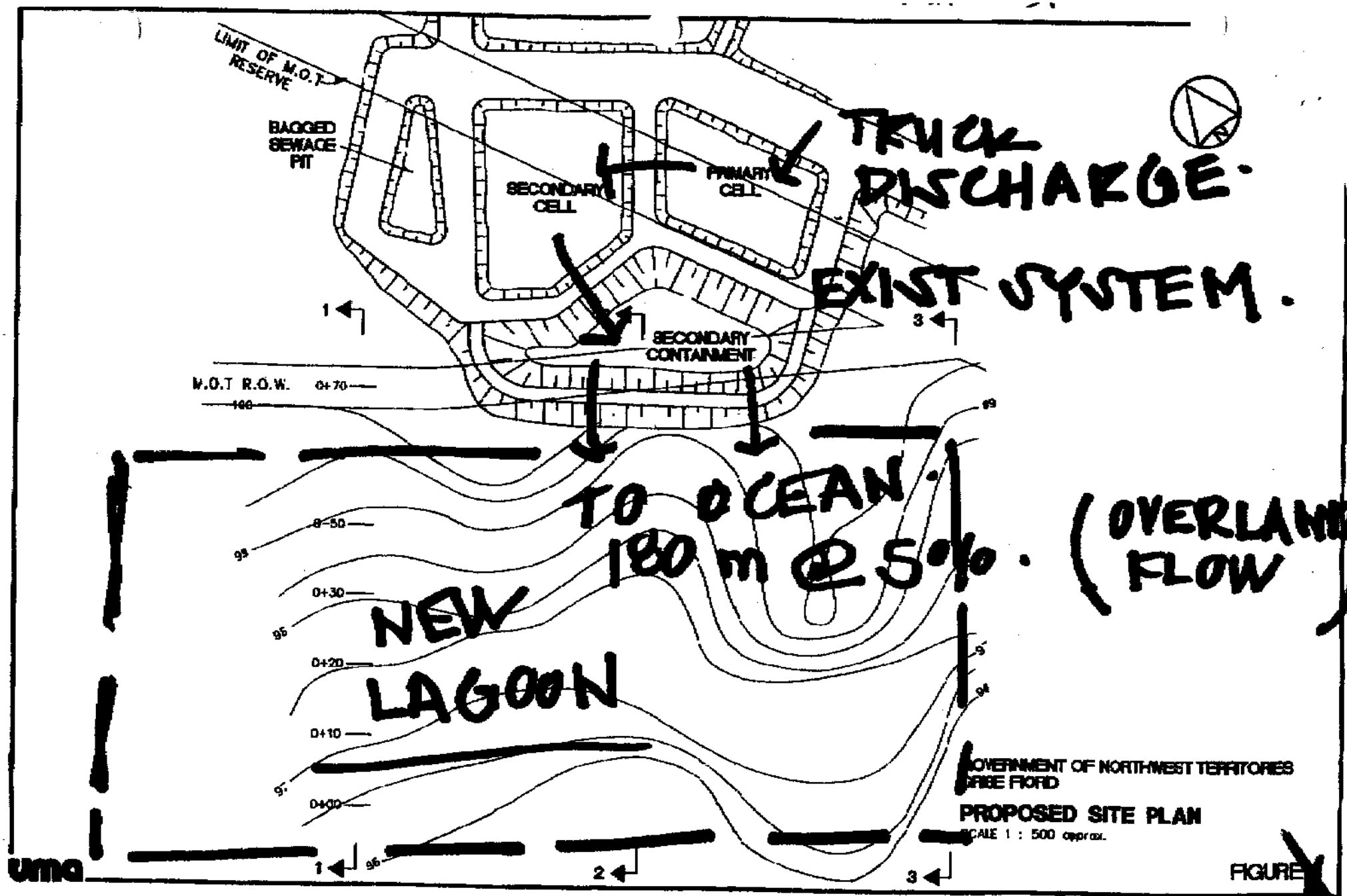

PREPARED BY.
KEN JOHNSON. PENG. 7·21·97.