P.A, Cape Dorset (cont'c)

WATER BOARD UPDATE FOR SEPTEMBER 29 1992

SUBJECT: Cape Dorset -Design brief for water supply improvements in the community: comments and recommendations

BACKGROUND: Cape Dorset is an unlicenced community. MACA recently submitted a MAY 1991 Design brief to the Board for their information. This 2 volume set outlines 6 site layout alternatives with recommendations, in vol. 1, while vol. 2 discusses the various components and systems involved. The main facilities to be constructed are a new water storage tank, truckfill station and connecting improvements,ie piping, road etc. The report recommended site 6, attached. The water source remains Tee Lake.

STATUS: good question. As with similar reports being provided for other projects, no clarification is provided as to what final option and /or recommendations were chosen. This report is 17 months old. For example, recommendation 3 (attached) alludes to site works being constructed in 1991..were they ?
A quick scan of this report did not reveal any major concerns from my perspective, but others with more familiarity with municipal matters might.

A call was made to Ron Kent at MACA to get more information, but he is away. Similarily, Paul Smith is out of the office in Iqaluit until Monday.

RECOMMENDATIONS: Get clarification from MACA and NAP district office as to current plans and status of any new facilities built or under construction. Facilities should be built to accomodate future growth, something not discussed in the reports.
-send the reports and any updated information to TAC for comment.
-send an acknowledgement letter from the Water Board to MACA, noting that the reports will be reviewed, or if inadequate information is obtained re current planned facilities, to please provide it .
-File correspondence from NAP Baffin district to Water Resources in 1991 suggested "some form of parallel activity" be considered if/when licencing of Cape Dorset, Clyde River, and Pond Inlet is considered.
-MACA could also be reminded at this point that licencing will require prior environmental screening, and to include such considerations in final site selection and construction- if not already undertaken.

? clear = Andy's phrase - means all 3 licences at same time I presume

Attach. FI.

cc

1991

supply line down hill from the heater house has been identified. These works fall outside the scope of this project.

4. Six alternative layouts for the truck fill station have been considered. These alternatives have been evaluated within the areas of: operation and maintenance convenience; reliability; economics; future expansion, and geotechnical considerations. This evaluation is summarized in Table 4.9 of this report. Alternative 6 which is depicted in Figure 4.6 has been determined to be the most desirable alternative.

5.2 Recommendations

Based upon the above conclusions the following recommendations are provided.

1. It is recommended that a site specific geotechnical investigation be carried out. The results of this investigation should be incorporated into the final design details for the project.

2. It is recommended that Alternative 6 be selected as the preferred site layout.

3. It is recommended that detailed design of the site works be initiated. These activities should be initiated immediately if site works are to be constructed during the 1991 construction season.

4. It is recommended that predesign activities for the various systems required within the truck fill station be initiated. These systems include water recirculation and reheat, truck loading, stand-by power, instrumentation and control, and chemical feed.

PREPARED BY:

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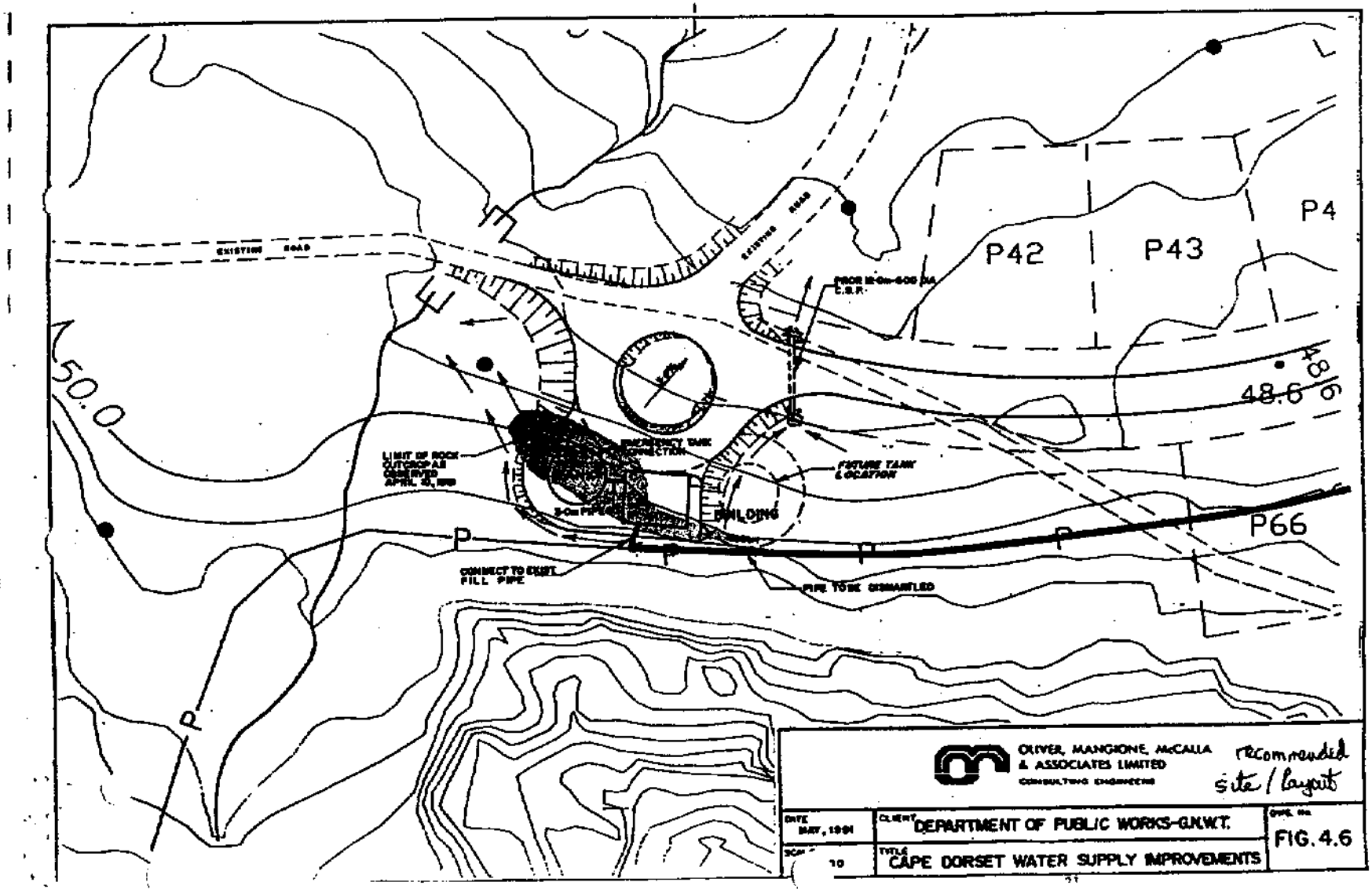
DFM:mw


EXISTING ROAD
EXISTING ROAD
P42
P43
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48.6
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LIMIT OF ROCK OUTCROP AS OBSERVED APRIL 6, 1991
EMERGENCY TANK CONNECTION
FUTURE TANK LOCATION
BUILDING
CONNECT TO EXIST. FILL PIPE
FIRE TO BE DISMANTLED
OLIVER, MANGIONE, McCALLA & ASSOCIATES LIMITED
CONSULTING ENGINEERS
recommended site / layout
DATE MAY, 1991
CLIENT DEPARTMENT OF PUBLIC WORKS-G.N.W.T.
DWG. No. FIG. 4.6
SCALE 1:0
TITLE CAPE DORSET WATER SUPPLY IMPROVEMENTS

unlicensed community

1990 Inspection report

INTRODUCTION

On August 3 and 4, David Jessiman, Water Resources Officer of the Baffin District conducted an inspection of the water use and waste disposal practices of the Hamlet of Cape Dorset, N.W.T.. The inspector met Mr. Chuck Gilhuly, Senior Administrative Officer, Mr. Naudla Oshoweetok, Assistant Administrative Officer, and Mr. Ray Faubert, Hamlet Foreman to review and discuss the inspection. A point of contact with the Government of the N.W.T. - Department of Public Works and Highways was Mr. Chris Freda, Acting Settlement Maintainer. Mr. Oshoweetok and Mr. Faubert accompanied the inspector for portions of the inspection.

INSPECTION

Water Supply

The Hamlet's freshwater supply is obtained from Tee Lake located approximately one kilometre southwest of Cape Dorset. The intake facilities are located on the southern end of the Lake. Water flows from a submersible pump located 60 metres from the lakeshore to the heater house. The water is gravity fed from the 1 230 litre tank in the heater house through a 75 millimetre insulated pipeline to the Truckfill Building located approximately 2 050 metres away.

The intake facilities and water conveyance pipeline were inspected and no concerns were observed. The heater house was not inspected. The house is located at the high point of the system and contains three circulating water heaters. During periods of extremely cold weather the heat trace lines along the pipeline is activated.

The Truckfill Building contains a 91 000 litre holding tank and truck-fill dispenser. Water Treatment consists of Javex TM Bleach being added to the 4 550 litre water trucks prior to distribution. The Hamlet has two water trucks that operate five days a week. The Hamlet consumes between 13.5 and 15 million litres of water per year. The present population of Cape Dorset is approximately 1022 persons.

Sewage Disposal

Liquid sewage is collected by two 4 550 litre pumpout trucks and sewage bags are collected in a garbage truck. The sewage trucks operate five days per week.

Liquid sewage is discharged into a partial sewage lagoon measuring approximately 30 by 52 metres. Sewage is held within a rock bluff and a 50 metre sand gravel berm. The berm retains the waters prior to an uncontrolled drainage through a rock rip-rap depression. Sewage flows into a shallow trench to an access road. The trench is approximately 0.60 by 0.20 metres deep and 25 metres long.

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