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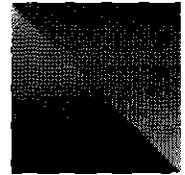
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TASMANIAN DEVELOPMENT AND RESOURCES

STOREYS CREEK PRECIPITATION DAM

REPORT ON REHABILITATION

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94-3575

TASMANIAN DEVELOPMENT AND RESOURCES

STOREYS CREEK PRECIPITATION DAM

REPORT ON REHABILITATION

INTRODUCTION

This report describes the rehabilitation works carried out to the Storeys Creek Precipitation Dam which have now been completed.

The works have comprised revision to the surface drainage system, capping of the storage and tidying up of the downstream area, as shown on the construction drawings attached. The intention of the work has been to de-water and cap the storage and reduce the potential for leachate, effectively converting the structure from a "dam" to a "dump".

CONSTRUCTION

Construction works commenced in January 1994 with awarding of a contract to D. R. & V. M. Wagner Contractors, of Fingal.

Initial work comprised dewatering the pondage by pumping and construction of an access road. A borrow area for cover soil was developed with consultation with the Forestry Department.

Access to the storage was obtained by pushing clay fill to 0.75 m thick and using corduroy (timber base) over particularly soft areas. It was found that the precipitate was readily trafficable with only a nominal soil cover.

Reshaping of the precipitate material proceeded from a central working strip by excavator trim on the northern side and side casting to the southern side. Once areas were trimmed to level they were covered with clay fill.

The diversion of the upstream creek was achieved by excavation around the perimeter of the storage to a rock base. This was lined with selected plastic clay. The new creek outlet on the western side of the storage was widened and based on insitu rock.

Construction included the installation of two stand pipe piezometers which can be used to monitor groundwater levels in the storage. Measurements of water levels in the piezometers are shown in Table 1.

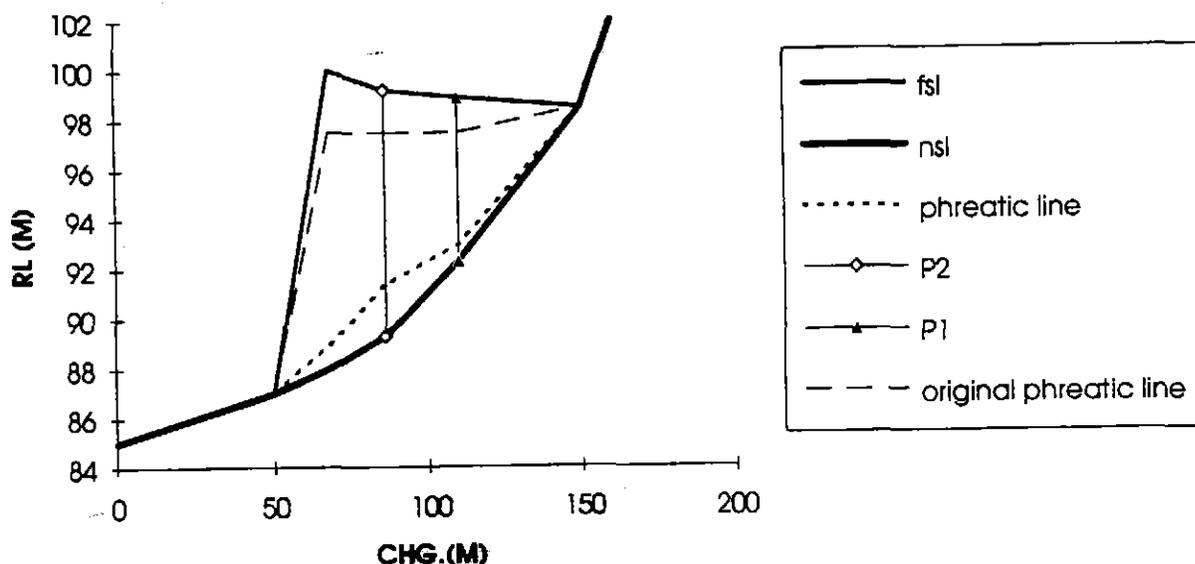
Table 1
Piezometer Water Levels (depth below SL)

<i>Date</i>	<i>P1 (inner)</i>	<i>P2 (outer)</i>
30/3/94	5.65	
11/5/94	5.9	7.85

This shows a very low water table which is continuing to drop. An appropriate cross section is shown in Figure 1.

Seepage outflow is visibly much reduced from initial values but no measurements are available.

Figure 1
Indicated Change to Phreatic Line



PHOTOGRAPHIC RECORD

The attached plates give a photographic record of the works.

CONCLUSIONS

Rehabilitation of the Storeys Creek Precipitate Dam has been completed satisfactorily. Drainage diversion has been successful and groundwater levels within the storage have dropped substantially.

Soil for capping has a high clay content and is expected to substantially reduce infiltration to the area.

It is suggested that the Storeys Creek Precipitate "Dam" no longer acts as a dam and could reasonably be now termed a dump.

DATE

This report is dated 12 May, 1994.

*check
phreatic levels
after winter*

*If OK "classify
as dump"*

*MWJ
30/5/94*



Plate 1
September 1992, prior to works

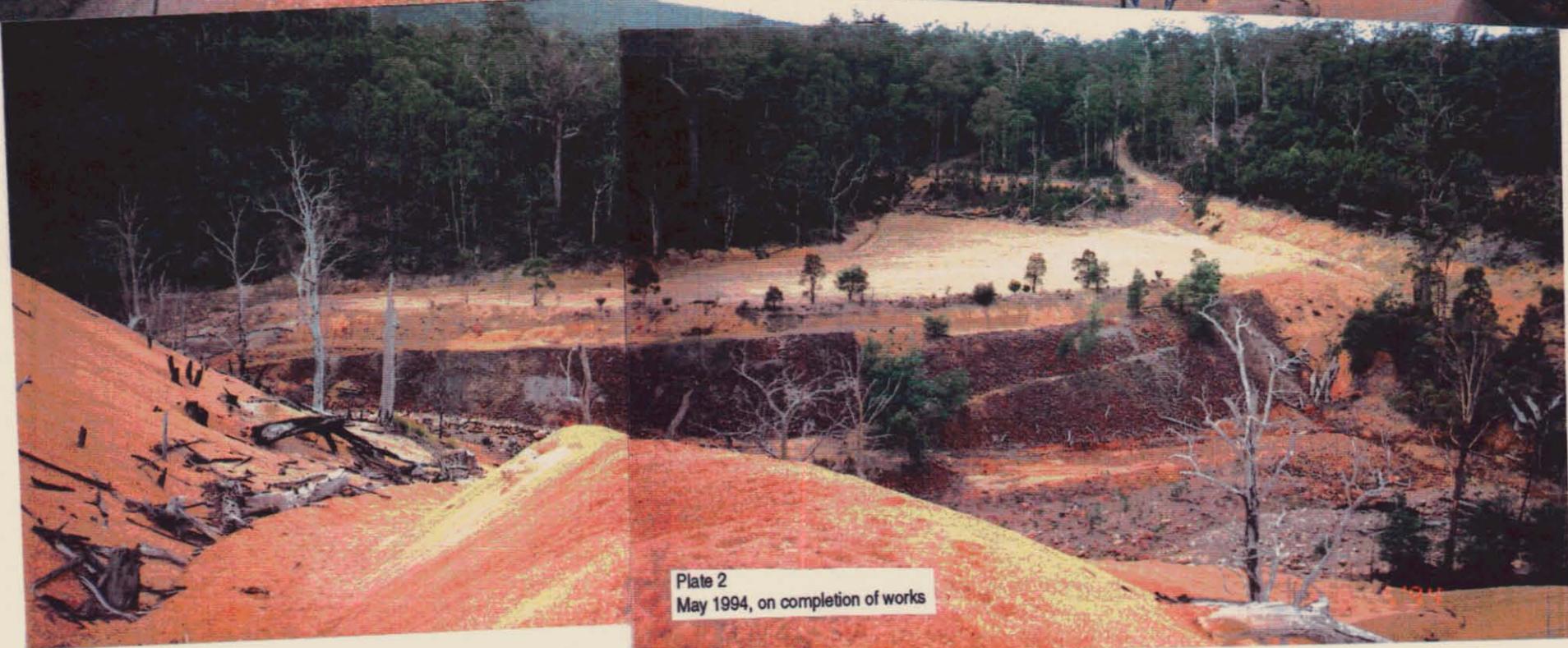
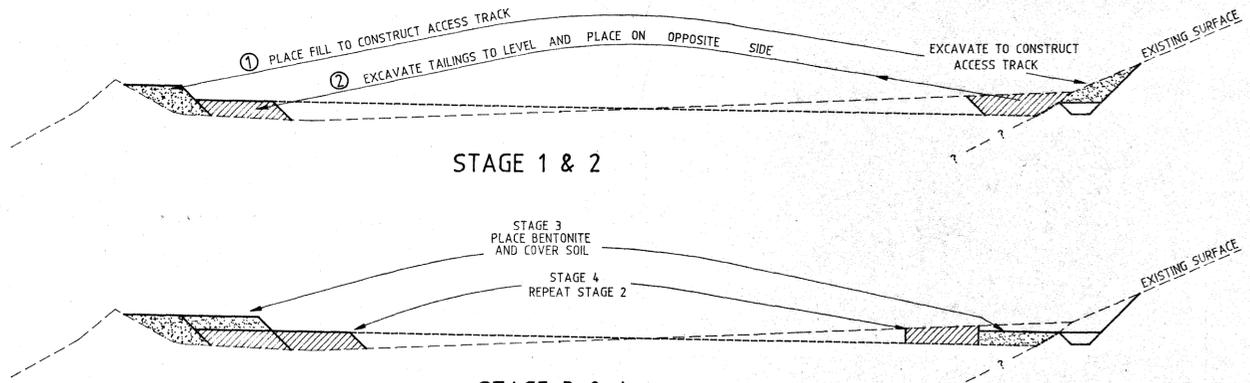
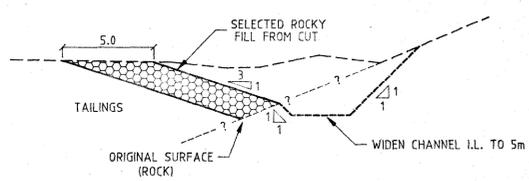


Plate 2
May 1994, on completion of works

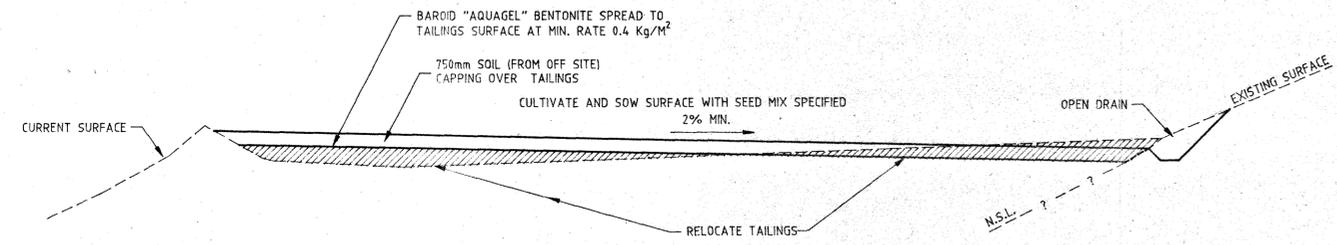
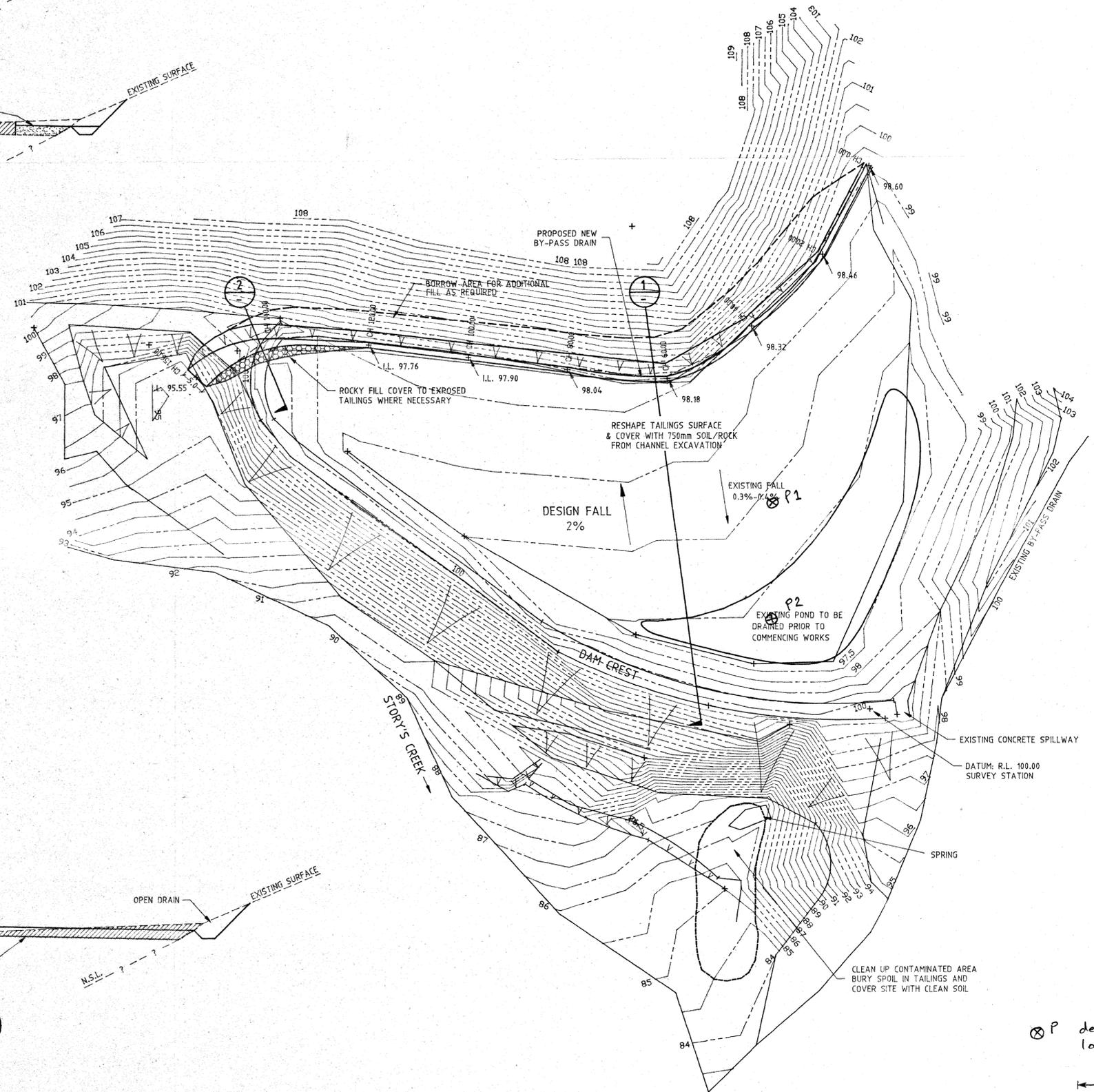
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STAGE 1 & 2
STAGE 3 & 4
(STAGE 5 & 6 ETC. SIMILAR UNTIL WORK IS COMPLETED)
CONSTRUCTION DETAIL
(TYPICAL CROSS SECTION)



DRAIN OUTLET CROSS SECTION (2)

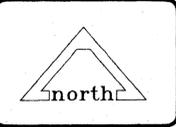


TYPICAL CROSS SECTION (1)
SCALE 1:200

⊗ P denotes piezometer location

5 cm

910006 **94-3575**



Rev. No.	Description	Date

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Drawn E.B.	Date 11-1993	Scale 1:500
Approved <i>[Signature]</i>	Director	
File MINES-01	Geocomp 1654 23	

Client & Project
DEPARTMENT OF ENERGY AND RESOURCES
STORY'S CREEK PRECIPITATION POND

Drawing Title	REHABILITATION WORKS PLAN AND DETAILS
Drawing No.	93-989-01