

## APPENDIX A

## BORE AND DRILL LOG RECORD SHEETS

## LOCATION OF BOREHOLES

| Borehole No. | Co-Ordinates |        | Reduced Level |        | Date    |         |
|--------------|--------------|--------|---------------|--------|---------|---------|
|              | N(m)         | E(m)   | Top           | Bottom | Start   | Finish  |
| Over Water:- |              |        |               |        |         |         |
| D1           | 257365       | 324804 | -7.0          | -57.32 | 30.3.76 | 8.4.76  |
| D2           | 257419       | 324851 | -8.0          | -50.60 | 9.3.76  | 24.3.76 |
| D3           | 257307       | 324754 | -5.7          | -40.14 | 21.4.76 | 11.5.76 |
| D4           | 257780       | 325160 | -8.0          | -30.33 | 2.6.76  | 8.6.76  |
| D5           | 257661       | 325060 | -14.0         | -43.85 | 24.5.76 | 28.5.76 |
| D6           | 257481       | 324904 | -6.8          | -43.23 | 17.5.76 | 20.5.76 |
| D7           | 257389       | 324825 | -8.0          | -52.69 | 10.6.76 | 15.6.76 |
| D8           | 257375       | 324813 | -8.0          | -51.54 | 16.6.76 | 18.6.76 |
| D9           | 257369       | 324813 | -8.0          | -54.28 | 21.6.76 | 6.7.76  |
| D10          | 257293       | 324744 | -2.0          | -25.66 | 8.7.76  | 27.7.76 |
| D11          | 257305       | 324753 | -6.0          | -29.84 | 2.8.76  | 4.8.76  |

## East Abutment:-

|    |        |        |       |       |         |         |
|----|--------|--------|-------|-------|---------|---------|
| E1 | 257985 | 325347 | +6.99 | -8.20 | 27.7.76 | 6.8.76  |
| E2 | 257996 | 325334 | +7.42 | -7.18 | 6.8.76  | 18.8.76 |

## West Abutment:-

|    |        |        |        |       |         |         |
|----|--------|--------|--------|-------|---------|---------|
| W1 | 257257 | 324712 | +12.07 | +0.00 | 27.4.76 | 5.5.76  |
| W2 | 257246 | 324702 | +17.35 | -2.92 | 18.8.76 | 31.8.76 |

## West Approach Cutting:-

|     |        |        |        |        |         |         |
|-----|--------|--------|--------|--------|---------|---------|
| WA1 | 257171 | 324638 | +33.80 | +16.44 | 6.5.76  | 25.5.76 |
| WA2 | 257086 | 324564 | +29.78 | +14.53 | 26.5.76 | 8.6.76  |
| WA3 | 257014 | 324473 | +24.78 | +13.51 | 10.6.76 | 21.6.76 |

## Boreholes Over Water for Feasibility Studies:-

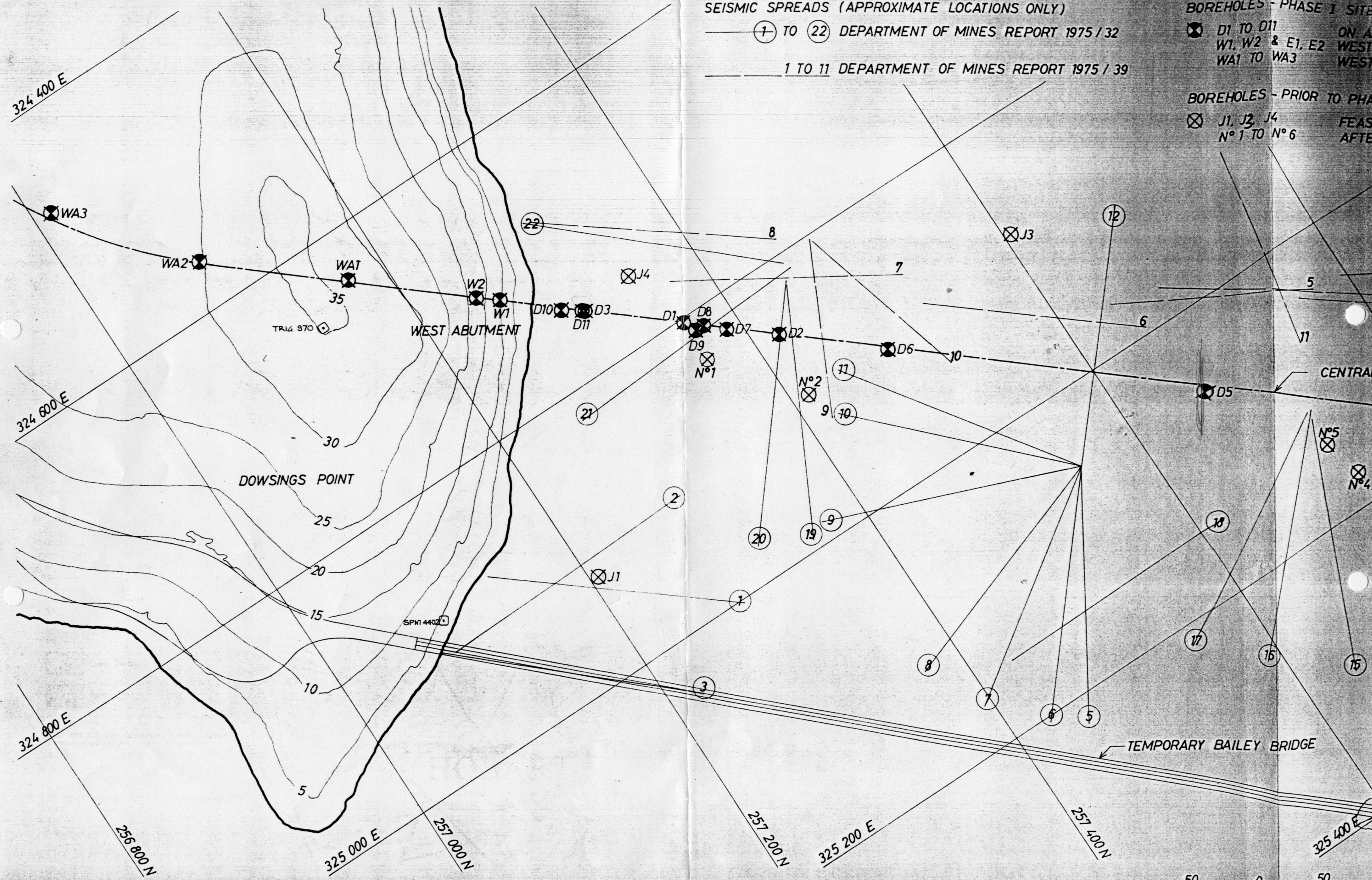
|      |        |        |      |        |            |
|------|--------|--------|------|--------|------------|
| X J1 | 257206 | 324925 | -7.5 | -48.08 | May 1975   |
| J3   | 257605 | 324882 | -8.8 | -42.17 | Sept. 1975 |
| J4   | 257349 | 324750 | -6.3 | -48.60 | Sept. 1975 |

No. 1 Six Boreholes put down in August to October, 1963,  
to approximate locations shown on Drawing No. 2,  
No. 6 Results reported by I. B. Jennings, 1964.

Note: Holes J1, J3 and J4 were previously  
No. BH1, BH3, and BH4 respectively.

SEISMIC SPREADS (APPROXIMATE LOCATIONS ONLY)  
 — (1) TO (22) DEPARTMENT OF MINES REPORT 1975 / 32  
 — 1 TO 11 DEPARTMENT OF MINES REPORT 1975 / 39

BOREHOLES - PHASE 1 SITE  
 ⊗ D1 TO D11 ON ALL WEST WEST  
 W1, W2 & E1, E2 WEST  
 WA1 TO WA3 WEST  
 BOREHOLES - PRIOR TO PHASE 1  
 ⊗ J1, J2, J4 FEASIBILITY AFTER  
 N° 1 TO N° 6



21 244



SEISMIC SPREADS (APPROXIMATE LOCATIONS ONLY)

① TO ②② DEPARTMENT OF MINES REPORT 1975 / 32

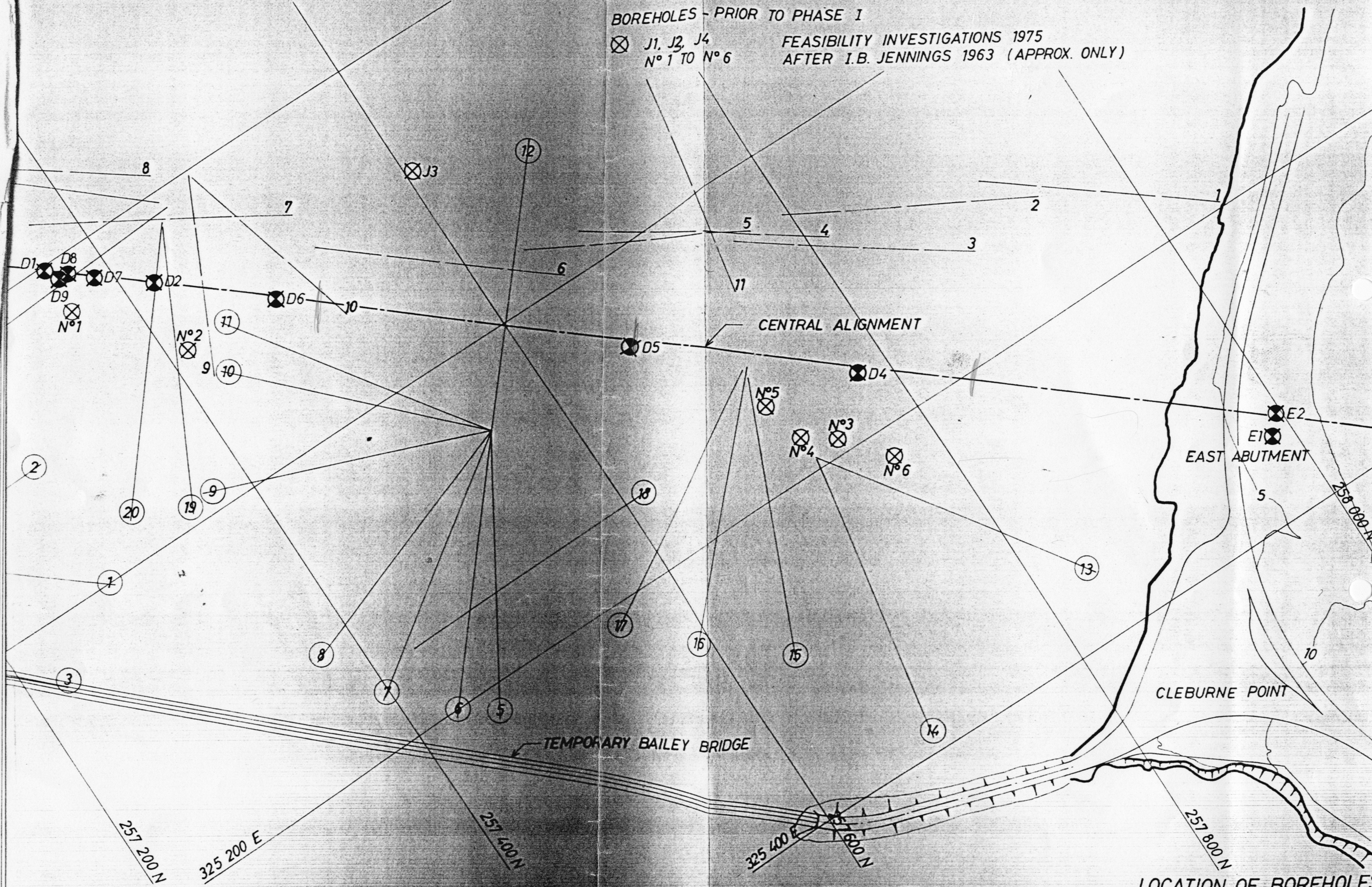
① TO ①① DEPARTMENT OF MINES REPORT 1975 / 39

BOREHOLES - PHASE I SITE INVESTIGATION

⊗ D1 TO D11 ON ALIGNMENT OVER WATER  
W1, W2 & E1, E2 WEST / EAST ABUTMENTS  
WA1 TO WA3 WEST APPROACH CUTTING

BOREHOLES - PRIOR TO PHASE I

⊗ J1, J2, J4 FEASIBILITY INVESTIGATIONS 1975  
N° 1 TO N° 6 AFTER I.B. JENNINGS 1963 (APPROX. ONLY)



LOCATION OF BOREHOLES AND SEISMIC SPREADS  
SECOND HOBART BRIDGE

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iage

ation

76

Ltd  
neers

21 245

50 0 50 100 150 200  
SCALE IN METRES



**BORE LOG RECORD**

|  |                       |                         |               |
|--|-----------------------|-------------------------|---------------|
| <b>PROJECT</b><br>SECOND HOBART CROSSING<br>PHASE 1 - SITE INVESTIGATION |                       | <b>BORE No.</b><br>D4   |               |
| Bore co-ordinates: 325160E 257780N E=524930 N=5259150                    |                       | <b>FILE No.</b> 01.0500 |               |
| Surface R.L.: 0.00   | Datum: State          | <b>Sheet no.</b> 1 of 2 |               |
| Angle from horizontal: 90°   | Direction: —          |                         |               |
| Rig type: Meyhew 1000  | Drill size: 6" Casing | Commenced: 2-6-76       | Logged: T.S.  |
| Drilling by: Mines Dept.   | Water level: River    | Completed: 8-6-76       | Checked: W.K. |

| R.L.   | Depth | Sample | Core | SAMPLE TYPE | Description                               | Log | Additional Information     |
|--------|-------|--------|------|-------------|---|-----|----------------------------|
|        | 2     |        |      |             |   |     |                            |
|        | 4     |        |      |             | WATER                                     |     |                            |
|        | 6     |        |      |             |   |     |                            |
| -8.0   | 8     |        |      |             |   |     | River BED                  |
|        | 10    |        |      | D4/1        | Very soft black clayey silt with shells   | B   | Insitu Vane Tests →        |
| -10.96 | 10.96 |        |      | D4/2        |   |     | mudstone in tube at -10.96 |
|        | 12    |        |      |             | Continued on Drill Log Record Sheet No. 2 |     |                            |
|        | 14    |        |      |             |   |     |                            |
|        | 16    |        |      |             |   |     |                            |
|        | 18    |        |      |             |   |     |                            |
|        | 20    |        |      |             |   |     |                            |

Units: S.I.

Symbols: 75 mm Ø U.D. Sample



DEPARTMENT OF PUBLIC WORKS TASMANIA  
MATERIALS AND RESEARCH DIVISION

DRILL LOG RECORD

|   |              |                  |
|---|--------------|------------------|
| PROJECT<br>SECOND HOBART CROSSING<br>PHASE 1 - SITE INVESTIGATION |              | BORE No.<br>D4   |
| Bore co-ordinates: 325160E 257780N                                |              | FILE No. 01.0500 |
| Surface R.L.: 0.00  | Datum: State | Sheet no. 2 of 2 |
| Angle from horizontal: 90°  | Direction: - |                  |

| Rock type and degree of weathering | Description<br>Colour, Hardness, etc.      | Log | Core loss<br>Lift % | Casing | Core size<br>Dmth<br>R.L. | Fracture<br>log | R.O.D.<br>mm | Discontinuities<br>Joints, bedding, seams, faults<br>Description<br>Attitude, smoothness,<br>filling cement, aperture<br>and coating | Drilling<br>water<br>loss | Water level | Remarks  |
|------------------------------------|--|-----|---------------------|--------|---------------------------|-----------------|--------------|--|---------------------------|-------------|--|
|                                    |  |     |                     |        |                           |                 |              |  |                           |             |  |
|                                    |  |     |                     |        |                           |                 |              | -10.96   |                           |             | Cont. from Bore Log Record Sheet   |
| Mudstone<br>HW<br>12 MW            | Yellow - brown<br>hard                     |     |                     |        |                           |                 | 20-70        | Joints sub-hor-<br>izontal, clay<br>lined  |                           |             | Tricone used<br>to 22.73   |
| 14 CW                              | Red - brown<br>Yellow - brown<br>Soft      |     |                     |        |                           |                 | 0 0          | Bedding<br>indistinct  |                           |             | *<br>11.73-13.01 55min<br>13.01-14.48 30min<br>14.48-15.85 30min<br>15.85-17.38 30min<br>17.38-18.52 60min |
| MW-HW<br>16                        |  |     |                     |        |                           |                 | 60 170       |  |                           |             |  |
| Sandstone<br>MW-HW                 | Blue - grey<br>medium grained              |     |                     |        |                           |                 | 40-63 250    | Joints sub-<br>horizontal  |                           |             |  |
| 18                                 |  |     |                     |        |                           |                 | 30-76 240    |  |                           |             |  |
| Mudstone<br>HW                     | Dark grey<br>soft                          |     |                     |        |                           |                 | 0 0          | Clay-like,<br>shrinkage crack<br>on drying   |                           |             | 18.52-20.05 40min<br>20.05-21.54 40min<br>21.54-23.08 40min  |
| 20                                 |  |     |                     |        |                           |                 | 40-62 220    |  |                           |             |  |
| Sandstone<br>SW                    | Grey - white<br>micaceous<br>medium - hard |     |                     |        |                           |                 | 300 47       | Joints & bedding<br>sub-horizontal<br>some cross-<br>bedding   |                           |             | 23.08-24.60 10min<br>24.60-26.12 20min<br>26.12-27.66 30min<br>27.66-29.07 25min<br>29.07-30.33 20min      |
| 24                                 |  |     |                     |        |                           |                 | 90 64        |  |                           |             |  |
| MW                                 | As above<br>increasingly<br>carbonaceous   |     |                     |        |                           |                 | 70-300       | As above,<br>cross-bedding<br>more evident<br>black streaks  |                           |             |  |
| 26                                 |  |     |                     |        |                           |                 | 64 300       |  |                           |             | Casing to -11.50   |
|                                    | Mudstone (HW)<br>horizons                  |     |                     |        |                           |                 | 51 40-180    |  |                           |             |  |
| 28                                 |  |     |                     |        |                           |                 | 76 70-290    |  |                           |             |  |
| 30                                 |  |     |                     |        |                           |                 | 80 290       |  |                           |             | END -30.33   |

|                                      |  |  |                                 |
|--------------------------------------|--|--|---------------------------------|
| Drill type<br>Meynew 1000            | FRACTURE LOG<br>   | EXPLANATION<br>Breaks in core per foot of equivalent diameter, inches<br>*Coring rates | Vertical scale<br>1 unit = 0.2m |
| Core barrel type<br>NMLC Triple Tube |  |  | Logged<br>W.K.                  |
| Driller<br>Mines Dept.               | WEATHERING<br>CW - Completely weathered<br>HW - Highly weathered<br>MW - Moderately weathered<br>SW - Slightly weathered<br>FS - Fresh, rock laminae stained joints<br>Fr - Fracture | Direction of dip is 120°<br>angle of dip is 45°  | Drawn<br>W.K.                   |
| Comm'd<br>2-6-76                     |  |  | Date<br>22-6-76                 |
| Comp'd<br>8-6-76                     |  |  | Checked                         |