NORTH - EAST

Hobart Engineering Geology Map Series ~ Original overlay
Hob N.E

5 cm

6299BB

much outcrop
Soils less than 20cm thick

jf_v=6

much outcrop
Potential quarry sites

No deep weathering evident.

jf_v=4

much outcrop

Massive body of medium-coarse-grained dolerite displaying limited jointing. The topography suggests many lineaments (dotted lines) which could reflect either
i) principal joint directions; possibly with increased intensity of fracturing and deeper weathering, or
ii) small faults.
In either case the rocks will show more decomposition (especially if ii).

jf_v=3

much outcrop

No deep weathering evident

Potential quarry sites.

Dolerite mass dips steeply eastward.

ss~sh

Tb_v

ss>sh

Riedon Brook Invest^n
Jennings: Tech. Rept. 9 p.112

ss>sh
Tb=2

F*

•alluvium

Tb=0.2

LL=26
PI=12

Tb=0.3

LL_0.3=26
PI_0.3=7
LL_0.7=32
PI_0.7=15
jf_v=2-3
Tb=0.3-0.4
sls shows curved joint faces.

F* F*

Tb=0.4

Bed of coarse ss 5m thick in sls.

alluvium

Bed of coarse ss 5m thick

q_f (travertine lm)

LL_0.1=26
PI_0.1=5
LL_0.3=26
PI_0.3=15

Tb=0.3

Bed coarse ss 5m thick.

LL_0.1=25
PI_0.1=3
LL_0.2=35
PI_0.3=18

Basalt thickness: >8m
jf_vH=6-9

Dolerite mass dips westward beneath sls.

ss~sh
TD=90
Q=400

jf=6

ss>>sh

Soils: black loams

Boundary of class 3/7 not known precisely. It has the form of a buried cliff. Surface sand/soil conceal the junction.

much outcrop
Soils < 20cm

F*

Bed of ss 5m thick in sls.

ss~sh

8

jf_v=7

Tb=0.2

ss>sh

much outcrop

sls heat hardened and flinty

sls talus of soil wash.

Tb=0.3

5

Tb=0.4

6

Tb=0.3

V_1(w)=1760

possible fault.

Tbv
ss~sh

7

ss>sh
Thin (<0.5m) grit bands occur at the base of ss beds.

10

TD=11
Q=0

5

ss~sh

7

5

4

Tb=0.25

F*

8

Tb=1.5

5

ss>sh
Tb=2

8

8

F*

•alluvium

5

•sls talus

Tb=0.3

4

'Gravels': Hughes: Tech Rept 4. p.25
water-worked sls talus
•LL_0.6=24
PI_0.6=9

5

alluvium

•V_1(soil)=300
V_1(w.)=2-2800
V_1(un w.)=4500
Longman: Tech Rept 13 p.92

LL_0.9=38
•PI_0.9=22

ss>>sh

•Variable cover of ss derived material.

q_w (dol. used for road material)

sls flinty over this entire region - heat hardened
Irregular sls places on intrusion roof.

weathered q (dol used for road works)

F*

ss~sh

7

alluvium

10

fill

Dolerite mass dips westward beneath sls.

ss~sh/md
Tbv

12

sls heat hardened, flinty
jf_v(sls) = 15-20
jf_v(dol) = 15-20

LL_0.3=56
•PI_0.3=39

Exposures show intense fracturing and variable weathering.

jf_v=8

much bare outcrop

Threadgold: Tech Rept 11 p.53

Dolerite mass dips shallowly westward, q beneath sls. (dol. source for concrete aggregate, road material).

much bare outcrop

Tb=0.4

Jack: Tech Rept 7 p.81
Jennings: Tech Rept 8 p.115. Flagstaff Gully Dam (dol. fill/clay core)

Seepage: Learman: Tech Rept 11 p.116

Tb=1.0

13

900ppm

dol q/c in stream

F*

Bed coarse ss 5m thick in sls

sls talus used as road base material, and occurs as wedges against the slope which thicken downward.

Water-worked sls talus

Dolerite mass dips steeply westward beneath sls.

much outcrop

soil < 20cm thick.

Tb=0.5

Bed coarse ss 5m thick in sls.

Tb=0.5

Thin band of ss in sls. Thickness < 5m

water-worked sls talus

jf_v=3
Tb=0.4

LL_0.1=26
•PI_0.1=6

1600ppm

12 Tb=0.3

ss>>sh

•Variable cover of ss derived material.

ss>sh

weathered q (dol used for road works)

F*

ss~sh

V_1(w)=1520
V_1(unw)=2780
t(w)=20

Basalt talus

LL_0.5=36
•PI_0.5=21

High joint frequency in dol. near margin. (jf_v>10)

Basalt talus

Bad-land erosion likely in thick basalt or basalt derived soils if not treated with care.

Soils 2-3m thick. t_w<3 t_w=2

Boundary of classes 3/7 not known precisely, but has the form of a buried cliff. Surface sand/soil conceal the junction.

•LL_0.6=61
PI_0.6=44

V_1(w)=1260 much outcrop
It is common for the seismic velocity to be low near the tops of hills and is related to rock relaxation and openness of joints.

750ppm

SS heat hardened to quartzite along boundary.

•LL_0.3=79
•PI_0.3=53

marsh

V_1=1500
Fractured clay with variable cover of wind-blown sand.

4500ppm
TD=24
Q=500
WT=+0.1

Deposit of wind-blown sand. Sand pits now virtually worked out.

TD=22
Q=1200

t_w>300

The sedimentary basin containing class 7 material has the form of eroded step-faulted blocks. The sediments have never been loaded by any more than the equivalent of 30m of their own weight. Point loadings in excess of this will induce compaction, consolidation and settling. No information is available on the scale of settling.

V_1=1600

TD=53
Q=0
TD=57

4500ppm
TD=35
Q=900

2200ppm
TD=45
Q=700
WT=21

•LL_0.3=58
PI_0.3=33
LL_0.6=43
PI_0.6=25

TD=33
Q=900

TD=34
Q=900
TD=42
Q=900

•LL_0.3=51
PI_0.3=28

3000ppm
WT=2

750 ppm

1500ppm

Danger of saltwater contamination in dune sands near sea level.

Coal-bearing rocks dip steeply westward.

•coal
TD=150
•coal

small basalt dyke.

Heat hardened ss

md

Md

1700ppm

2000ppm

ss~sh

t_7=2
alluvium

5000ppm

Thick sandy soils

TD=50
Q=0

Boundary of classes 3/7 not known precisely, but has the form of a buried cliff. Surface sand/soil conceal the junction.

Benched cliffs ss

much outcrop

ss>sh
Tb=1

Benched cliffs ss

soils, 2-3m thick

much outcrop

Soil < 20cm thick.

Tbv

Marsh deltaic deposits

Buried channel of a previous course of the Coal River.

WIDTH

•Thin bed of coarse qu. grit.

760ppm
TD=200
t_7=187
t_7/5
Q=2000
WT=7

Benched cliffs ss.

dol. jf_v=1-2
Irregular blocky jointing

3200ppm
t_7=55
t_7/65
TD=64
Q=5500
WT=11

t_7=130

V_1(7)=1700; V_1(3)=2900

t_7=130

TD=34, Q=1400
TD=20, Q=300

2900 ppm
t_7=35
TD=92
Q=2000
WT=5

Bad-land erosion: thick sand/alluvial deposit

V_1=1730
V_2=1630
V_3=1730
σ=-0.3
E=1×10^9 nt/m^2
E=6.5×10^9 nt/m^2

6000ppm

V_1=1630

9000ppm

Sandy clay. Cuttings weather and erode badly. Heights in excess of 6m or slopes >60° should be avoided as slippages in such cuts in this material are to be expected. [illegible]

800ppm

Minor heat hardening of ss adjacent to dol boundary.

3000ppm
TD=25
Q=280

TD=15
Q=0

Dolerite mass dips shallowly westward beneath sls.

marsh

t_7=50
V_1(7)=1650
V_1(3)=3000
t_7=85

t_7=130

Tb=0.3

5

Tb=0.4
V_1(w)=1760
Tb=0.3

6

jf_v=3

much bare outcrop

620ppm

TD=10, Q=0
620ppm, WT=4
TD=13
Q=500

Boulders of dolerite
TD=27
Q=0

2900ppm
TD=148
t_7/3
t_7=140
Q=5000
WT=15

jf=6-9

High joint intensity within 15m of the contact of 2/5 on the sls side and 40m on the dol. side.

F*

Bed of ss 5m thick in sls.

5000ppm

4500ppm

Craigow range dolerite mass composed of a near-vertical feeder system on the east side and another body from the west. There is therefore dolerite to great depth.

ss heat hardened

V_1=600
V_2=1500
V_3=3000

V_1<2000
t_w~3.5

1600ppm

1300ppm

sls flinty, heat hardened

640ppm

680ppm

much outcrop

Potential quarry sites
jf_v=5-6

jf_v=2

Dolerite gravels at shallow depth (thickness ~10m)

2300 ppm

TD=8
Q=0

1050ppm
TD=25
Q=1400

marsh

ss>>sh
Tb=0.2

Soils 2-3m thick

1200ppm

1200ppm
TD=38
Q=900
WT=22

Dolerite dips westward

TD=15
Q=0