N.W.

Reedy - alluvial area part of Derwent River tidal delta

alluvium

Gravels subject to erosion and slippage

alluvium

High level river deposited gravels and boulders. All material locally derived with little transportation. Poorly sorted with sand base.

alluvium

Porous, scoriaceous basalt with tuffs, breccias

More massive basalt

alluvium

F*

lm

Tb = 0.25

Thickness of limestone ~40 m

sls cliffs

Region with very thin soils and much outcrop

Tb = 0.3

Tb$_v$

ss cliffs

Dol. talus

Dol talus

much outcrop

Dol. talus

Evidence of landslides in talus

sls cliffs

steep denuded slopes

Dol. talus

Some thick soil wedges

Steep denuded slopes

much outcrop

much outcrop

ss>sh

Limited exposures of river gravels subject to landslips when cut

Nearly vertical dolerite pipe

Subvertical dol boundary. Base of intrusion

clay pits
clay from deeply weathered ss, md (Hughes, *Tech.Rep.* 4:23)

Base of dolerite body which dips eastward at 30°

V (w) = 2540

Problem dip-slope conditions may arise in the fault blocks displaying high eastward dips

Tb = 0.3

Jf$_v$ = 10

Previous course of river (dammed by massive basalt flows)

Tb$_v$

High level river deposited sand and gravel

Jf$_v$ = 9

Up to 3.5 m sand and gravel overlying w basalt.
Moore, *Tech.Rep.* 9:121

alluvium

md

md

Deeply weathered and eroded ss
LL = 24
PI = 4

ss>sh

ss>sh

Water worked sls/md talus
Landslide potential

coal

Jf$_v$ = 6

lm, t=5

lm {t = 30 / Tb = 0.25} lm

soil slips have occurred

soil denuded slopes

much outcrop

much outcrop

dol. at shallow depth

dol. at shallow depth

3/1

3/1

3/1

1/5

Some thick soil wedges

much outcrop

soil denuded slopes

Knights Ck Res.
Dol. rockfill dam

G.C.C.
Lower Res.

steep denuded slopes

G.C.C.
Upper Res.

ss>sh

Heavy black alluvial soil, 1 m thick on gravels on clays

t$_8$ = 3

t = 200
t = 290
t = 1/5/1
TD =

t$_8$ = 6

t$_8$ = 5

t$_8$ = 7

Dol. gravels

5/7 boundary very approximately due to the presence of many boulder beds (old landslides) at the foot of the dolerite slope.

FOR DETAILS OF THIS REGION SEE MAP GLENORCHY CITY

V$_3$(w) = 2280

New Town Coal Basin:
Many pits once worked, now filled. Erratic compaction problems possible. Exact location of workings now unknown.

• V$_1$ = 2900 ε = 0.08
V$_2$ = 1700 k = 7.8x10^{9}nt/m^2
V$_3$ = 2900 E = 2x10^{10}nt/m^2

md

md, sh>ss

coal

alluvium

ss>sh
(ss>sh?)

Thick soils to be found in depressed areas and gullies subject to badland erosion.

Thin basalt flow

ss>sh

• V$_1$(w) = 1700

Very thin remnant of basalt flow

sh>ss

md

md

md>ss

Soil denuded slope

Medium grained ss : Tb$_{ss}$ = 0.2-2.0
Fine grained ss : Tb$_{fss}$ = <0.01-0.1

River section shows some small faults with crush zones, 0.1-0.2 m wide

ss>sh

Good exposure of sedimentation structures

md

much outcrop

t$_3$ = 0-2
3/5

Thin slab of ss on dol.

much outcrop

much outcrop

Dolerite soils very patchy but locally may be exceptionally thick. There is evidence of soil and rock creep downslope.

rockslides

much outcrop

Very thin soils

much outcrop

rockslides

Minor landslips and badland erosion in thick soils

much outcrop

High landslip potential. Dol. talus

Thin wedges of travertine rich soil and weathered dolerite occur at the base of steep slopes
Leamon, *Tech.Rep.* 11:67

Dol : V$_1$(soil) = 300
V$_1$(w) = 1600-1800
V$_1$(unw) = 4500-6000
V$_1$(jointed = 3000
sheared)

much outcrop

ss :
V$_1$(soil) = 300
V$_1$(w) = 1000-1700
V$_1$(unw) = 3000

Risdon Brook Res.
Concrete faced dol rock fill dam

basalt

turf breccia

sls : V$_1$(soil) = 300
V$_1$(w) = 1100-2800
V$_1$(unw) = 3000-5500
δ = 0.18-0.38
E = 1-2x10^{10}nt/m^2
P = 8% (unw)
17+6 (w)
ρ = 2.20 (w)
2.52 (unw)
P = 0-180 m/year

Tb = 0.4

coal

coal

ss>md

Tb = 0.1
fine bedded ss, minor md

Bridge site: Courtoy's Pt.
Jennings, *Tech.Rep.* 7:90
Tech.Rep. 8:121

V$_1$ = 2850

t$_{water}$ = 11
t$_7$ = 18
7/4

Tb = 0.2-0.3
Jf$_v$ = 3

Tb = 0.7

alluvium

q(sls used for road base)

Tb = 0.3
Jf = 2-3
Soil (rock) creep occurs on hills and a wedge of small blocks up to 2-3 m thick occurs near the foot of many slopes. Sls is brittle and many incipient joints and bedding partings may be opened up on exposure, weathering or working.

• V$_1$(w) = 1.7-2800
Longman, *Tech.Rep.* 13:100

t$_7$ = 43
t$_{water}$ = 9
t$_7$ = 86
7/4

Fill

High level river gravels

much outcrop, with very thin soils general

Tb = 0.3

Bedlam Walls:
Stevenson, *Tech.Rep.* 12:116

Scoriaceous basalt

Fill

much outcrop

ss>sh

Tb$_v$

Moonah Basin:
Sediments predominantly claystone with some sandstone, which have never been loaded by more than the equivalent of 25 m of their own weight. Point loadings in excess of this may cause settling.

Fill

t$_7$ = 2

Sand, with some gravel, on weathered or solid basalt

t$_7$ = 3

Fill

t$_7$>100

LL = 24
PI = 6
Dolerite boulders near present surface (old landslide from Domain?)

Previous course of river

LL = 51
PI = 22

Deep clay and sand filled channel, with minor basalt interbedded
"water"=
t$_7$>50