Department of State Growth
MINERAL RESOURCES TASMANIA

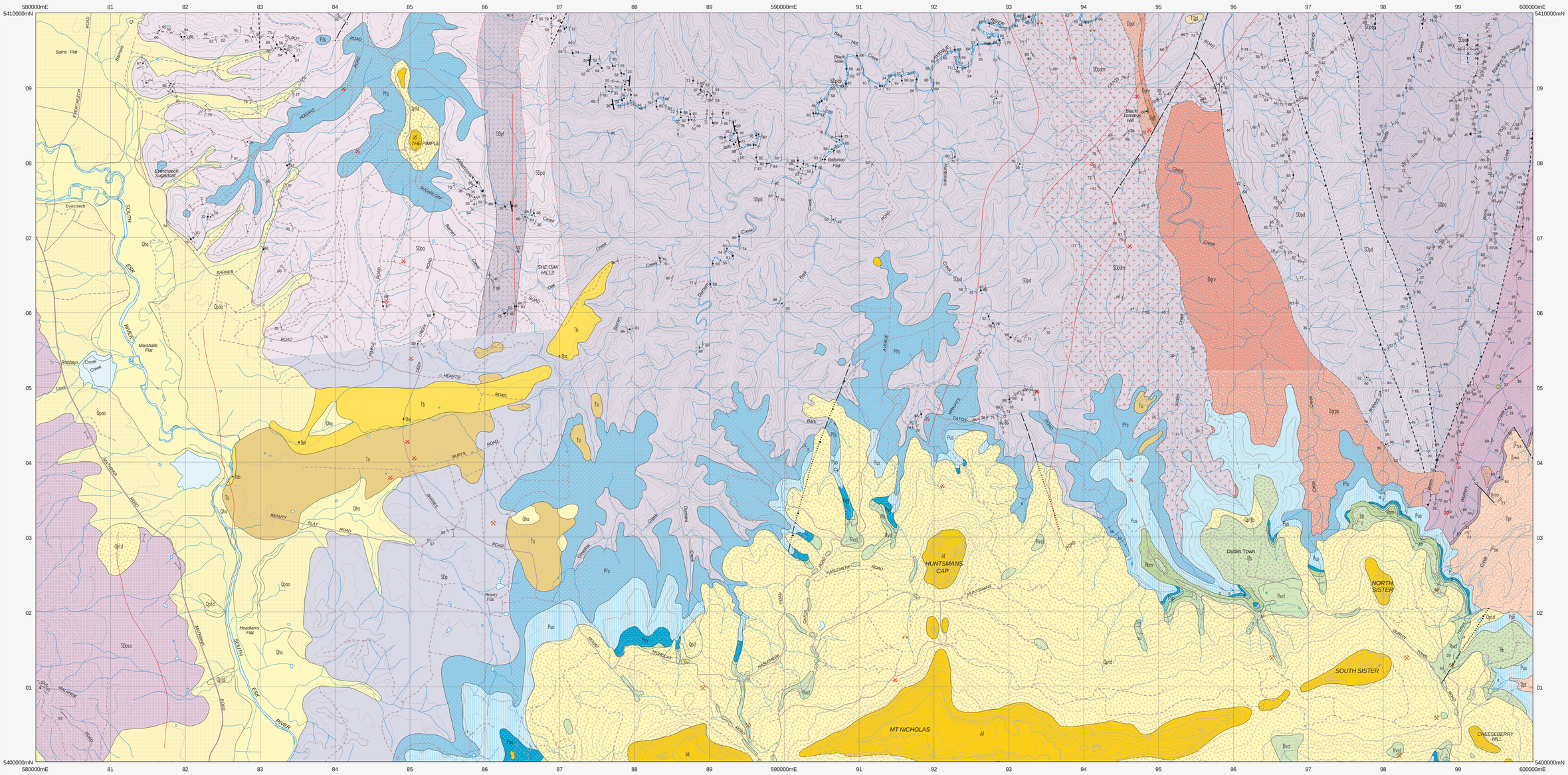
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
DUBLIN TOWN, SHEET 5840

DUBLIN TOWN

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmanian Government



CENOZOIC

QUATERNARY

- **Qha** — *Stream alluvium, swamp and marsh deposits (Qha).*
- **Qpao** — *Older alluvium of river terraces (Qpao).*
- **Qptd** — *Talus consisting dominantly of dolerite boulders (Qptd); of Triassic basalt (Qpttb); of Triassic lithic sandstone (Qptl).*

PALEOGENE – NEOGENE

- **Tb** — *Basalt (Tb).*
- **Ts** — *Quartzose sand and gravel (Ts).*
- **TQpl** — *Gravel, sand and derived lag (TQpl).*

MESOZOIC

TRIASSIC

UPPER PARMENIER SUPERGROUP

- **Rvcl** — *Dominantly lithic sandstone with minor mudstone and coal (Rvcl).*
- **Rvclm** — *Dominantly mudstone (Rvclm).*
- **Rb** — *Alkali olivine basalt/hawaiite (Rb).*
- **Rvcq** — *Interbedded cross-bedded white quartzose sandstone, quartz-rich lithic sandstone, siltstone and mudstone (Rvcq).*
- **Rbm** — *Alkali olivine basalt/hawaiite with plagioclase megacrysts (Rbm).*

PALEOZOIC

PERMIAN

LOWER PARMENIER SUPERGROUP

- **Pus** — *Undifferentiated unfossiliferous, poorly sorted mudstone and poorly sorted glauconitic sandstone (Puy).*
  Poorly sorted grey mudstone, siltstone and rare siltstone, unfossiliferous except for rare forams (Pug).
- **Pug** — *Thickly bedded usually poorly sorted sandstone passing upwards into interbedded sandstone, siltstone and mudstone. Marine fossils abundant in places (Pug).*
- **Puo** — *Marine limestone, calcareous mudstone and sandstone: usually richly fossiliferous (Puo).*
- **Pfs** — *Dominantly well sorted quartz sandstone, usually cross-bedded and commonly with interbedded and interlaminated carbonaceous shale lesser conglomerate and rare coal (Pfs).*

DEVONIAN

MIDDLE DEVONIAN

- **Dpr** — *Two pyroxene bearing, quartz porphyrite with very fine-grained groundmass. Single cooling unit of rhyodacite, with sporadic basal rhyolitic pyroclastics; crystal-lithic-lapilli tuff preserved at base (Dpr).*
- **Dpb** — *Brecciated and undisturbed layers of interbedded quartzwacke and mudstone (Dpb).*
  (Dpr, Dpb – St Marys Porphyry).

SILURIAN(?)–DEVONIAN

LUDLOW(?)–LOWER DEVONIAN

PANAMA GROUP — MATHINNA SUPERGROUP

- **Dpsf** — *Undifferentiated Upper Panama Group sandstone, siltstone, and mudstone, primarily turbiditic in origin (SDp). Contains graptolite fossils of Ludlow age (SDpg). Dominantly turbiditic quartz-rich sandstone, with some interbedded siltstone. Rare vascular plant fossils (possible correlate of Sideling Sandstone) (SDpso).*
  Turbidite succession dominated by quartz-rich sandstones with minor siltstone and mudstone.Current related sedimentary structures abundant. Contains Devonian marine macrofossils, graptolites and vascular plant fossils (Dpsf). (Dpsf: Scamander Formation).
- **Dpsfm** — *Turbidite succession dominated by quartz-rich sandstone with interbedded massive grey mudstones which locally predominate. Current related sedimentary structures common in coarser sandstones. No fossils recorded (SDpq). Mappable mudstone within SDpq (SDpqp).*
- **SDpsm** — *Turbidite succession of fine-grained sandstone and cleaved siltstone. Subordinate very thick bedded massive sandstone increases toward west. Current related sedimentary structures common. No fossils recorded (SDpd). Metamorphosed by granitoid intrusion (SDpdm). Massive sandstone unit within SDpd (SDpds). Metamorphosed by granitoid intrusion (SDpdsm).*
- **SDpd** — *Dominantly foliated grey siltstone, with slate and rare fine-grained sandstone (SDpf).*

IGNEOUS ROCKS

CENOZOIC — PALEOGENE – NEOGENE

- **Tb** — *Basalt (Tb); quartz tholeiite (Tbq), olivine tholeiite (Tbt) and basanite (Tbb) indicated; basanite dated at 41.0 +/- 0.2 Ma (Ar/Ar) near 582700mE 5403700mN.*

MESOZOIC — JURASSIC

- **Jd** — *Dolerite (Jd).*

TRIASSIC

- **Rb** — *Alkali olivine basalt/hawaiite (Rb).*
- **Rbm** — *Alkali olivine basalt/hawaiite with plagioclase megacrysts (Rbm). Dated at 233 +/- 5 Ma (K/Ar) near 595300mE 5403100mN.*

MINOR GRANITIC INTRUSIONS

- **Dgf** — *Quartz-feldspar porphyry (Dgf).*

BLUE TIER BATHOLITH

PALEOZOIC — DEVONIAN — MIDDLE DEVONIAN

- **Dpr** — *Two pyroxene bearing, quartz porphyrite with very fine-grained groundmass. Single cooling unit of rhyodacite, with sporadic basal rhyolitic pyroclastics; crystal-lithic-lapili tuff preserved at base (Dpr). (Dpr – St Marys Porphyry).*
- **Dgrv** — *Variably porphyritic coarse- to fine-grained hornblende granodiorite (Dgrv).*
- **Dgrpp** — *Porphyritic, biotite-hornblende-trace pyroxene microgranodiorite (Dgrpp).*
  (Dgrv, Dgrpp – Scamander Tier Granodiorite).
- **Dgai** — *Coarse-grained, porphyritic to seriate to equigranular biotite-minor muscovite monzogranite with numerous intrusions of fine- to medium-grained pink biotite granite (Dgai).*

- *Geological boundary – position accurate or approximate.*
- *Geological boundary – inferred.*
- *Geological boundary – inferred from airborne magnetic and/or radiometric data.*
- *Unconformable boundary – position accurate or approximate.*
- *Intrusive boundary – position accurate or approximate.*
- *Metamorphic boundary – position approximate.*
- *Lineament visible in airborne magnetic data.*
- *Fault – position accurate or approximate.*
- *Fault – inferred.*
- *Fault – concealed.*
- *Normal fault (downthrown side indicated) – position accurate or approximate.*
- *Normal fault (downthrown side indicated) – concealed.*
- *Thrust fault (teeth on upper plate) – inferred.*
- *Strike-slip fault (sinistral) – position accurate or approximate.*
- *(white line) Limit of mapping of sub-unit within undifferentiated rock unit.*

- *Strike and dip of bedding – right way up; vertical, facing indicated by single tic; overturned; facing unknown; vertical.*
- *Strike and dip of cleavage of unspecified type and relative age; vertical.*
- *Strike and dip of cleavage – relative local age S1; S2.*
- *Strike and dip of penetrative cleavage; vertical.*
- *Trend and plunge of lineation L2 formed by intersection of cleavages or foliations of relative local ages S1 and S2.*
- *Trend and plunge of minor fold hinge line, unspecified relative age; with dip and dip direction of axial surface; antiform; with dip and dip direction of axial surface.*
- *Trend and plunge of minor fold hinge line – relative local age F1; with dip and dip direction of axial surface; relative local age F2, with dip and dip direction of axial surface.*
- *Trend and plunge of minor fold hinge line – vergence sinistral; with dip and dip direction of axial surface.*
- *Trend and plunge of minor fold hinge line, with dip and dip direction of axial surface, vergence dextral; symmetrical.*
- *Trend and plunge of minor fold hinge line with dip and dip direction of axial surface – chevron; vertical.*
- *Trend and plunge of kink-fold hinge line, with dip and dip direction of axial surface, and sense of displacement viewed down plunge – dextral.*
- *Strike and dip of kink band with sense of displacement viewed down plunge – dextral.*
- *Strike of vertical kink band – dextral; sinistral.*
- *Strike and dip of outcrop-scale fault of unspecified relative age – thrust.*
- *Trend and plunge of non-horizontal slickensides, HW relative movement up plunge; movement sense unspecified.*
- *Strike and dip of foliation due to alignment of K-feldspar phenocrysts in granitic rock.*
- *Strike and dip of foliation due to alignment of hornblende and/or biotite in granitic rock.*
- *Notable small outcrop with rock unit indicated.*
- *Notable small float with rock unit indicated.*
- *Mineral deposit location – hard-rock*
- *Mineral deposit location – alluvial/tailings*
- *Construction material/industrial mineral/gemstone location*

Data derived from Mineral Resources Tasmania DEPOSITS database. Data point position has not been verified in every case.

Compiled by M.P. McClenaghan, B.Sc. (Hons), Ph.D. 2004 from the following sources (see responsibility diagram):

A McCLENAGHAN, M.P., EVERARD, J.L.E., GOSCOMBE, B.D., FINDLAY, R.H. and CALVER, C.R. 1993. Geological Atlas 1:50 000 Series. Sheet 40 (8415S), Alberton.

B McCLENAGHAN, M.P., TURNER, N.J. and WILLIAMS, P.R. 1987. Geological Atlas 1:50 000 Series. Sheet 41 (8515S), St. Helens.

C CALVER, C.R., EVERARD, J.L., FINDLAY, R.H. and LENNOX, P.G. 1988. Geological Atlas 1:50 000 Series. Sheet 48 (8414N), Ben Lomond.

D TURNER, N.J., CALVER, C.R., CASTLEDEN, R.H. and BAILLIE, P.W. 1984. Geological Atlas 1:50 000 Series. Sheet 49 (8514N), St Marys.

Updated by:

E M. Worthing 2008 –2010: Stratigraphic revision and re–mapping of Mathinna Supergroup, supported by airborne geophysical data, as part of the TasExplore Project. Mineral Resources Tasmania.

F I. Woolward 2008 –2010: Stratigraphic revision and re–mapping of Mathinna Supergroup, supported by airborne geophysical data, as part of the TasExplore Project. Mineral Resources Tasmania.

REFERENCE THIS MAP AS:

WORTHING, M.A. and WOOLWARD, I.R. (compilers) 2010. Digital Geological Atlas 1:25 000 Series. Sheet 5840 Dublin Town. Mineral Resources Tasmania.

Base data from the LIST, Copyright State of Tasmania.

Map produced by Spatial Information Services, Mineral Resources Tasmania using G.I.S. software.

Website: www.mrt.tas.gov.au

GDA94 – MGA Zone 55. Contour Interval: 20 metres.

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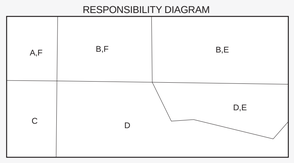
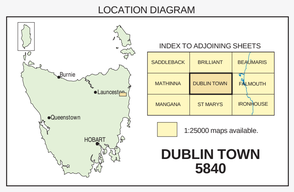
RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



Plotfile for this map generated from digital data as at: 17-AUG-2018

WARNING: INKS ARE LIGHT SENSITIVE