

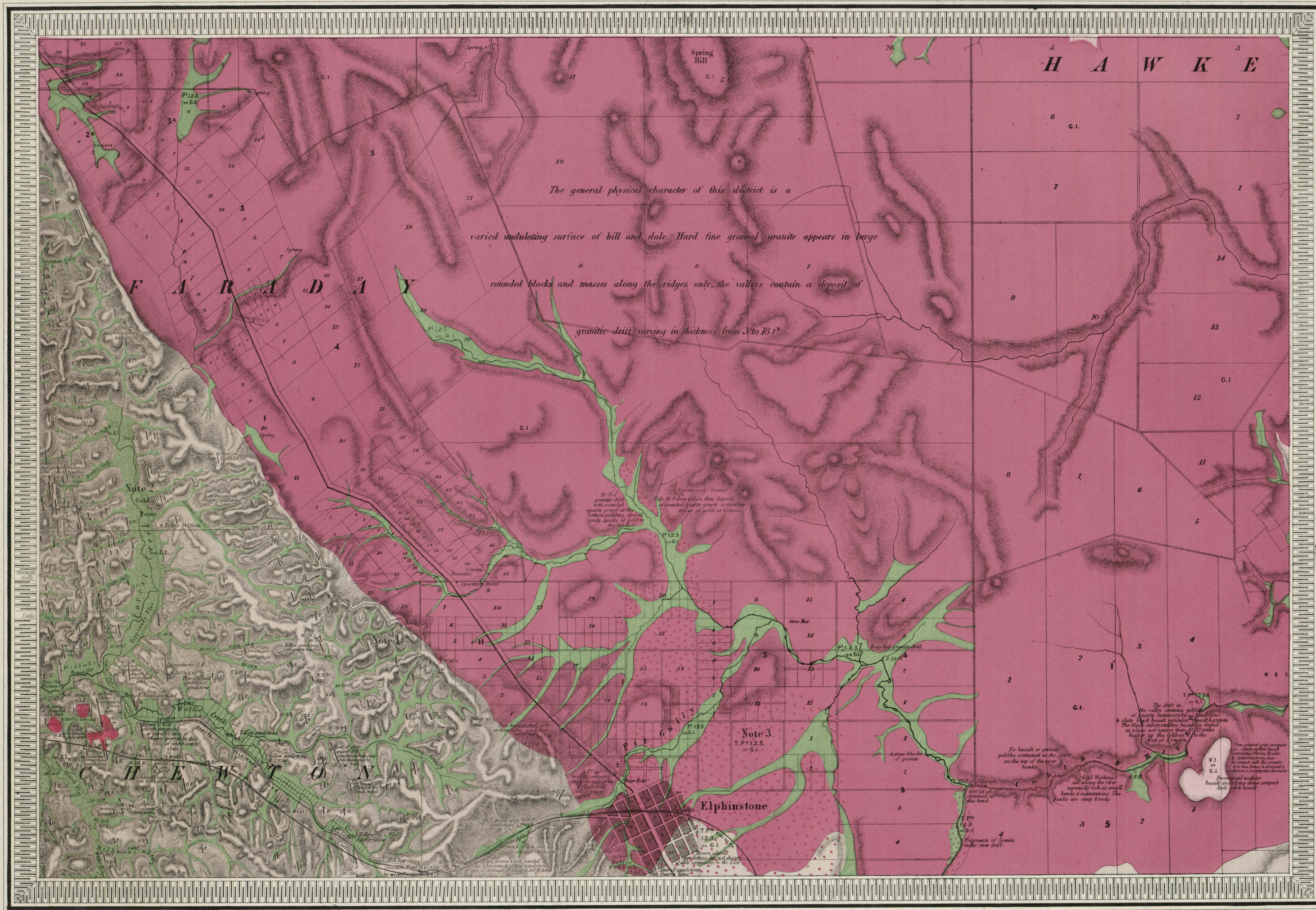
GEOLOGICAL SURVEY OF VICTORIA.

N^o 13

PART OF HARCOURT

PART OF SUTTON GRANGE

S.W.



Note 1

Very steep gullies & ranges of metamorphic slates & sandstone. The drift generally composed of fragments of hard metamorphic shale and sandstone occasionally mixed with angular quartz.

Note 2

In some parts of the broad flat there are two 'bottoms' or layers of 'wash-drift'. The upper one is a hard conglomerate or 'cement' of slate, sandstone & partly rounded quartz pebbles. The lower one is like a granitic drift and is often exceedingly rich. The gold is rounded & is frequently found in cracks and fissures in the bottom upwards of two feet deep.

Note 3

The granite of this locality is more or less covered by tertiary deposits. Owing to the undulating smooth nature of the ground the boundaries are very uncertain. Beds which have been sunk in many places to various depths generally show gray conglomerates of granitic drift cemented by hyaline oxide of iron overlying white yellow or bluish white felspathic clay intermixed with fine quartz sand. In some localities recombined granite & white sandy clay cover a thin layer of rounded quartz gravel which contains traces of gold. From the gray appearance of the quartz and the frequent occurrence of fine scales of black & white mica, it is probable that the drift is derived from the quartz veins along the granite boundary.

The general physical character of this district is a varied undulating surface of hill and dale. Hard fine grained granite appears in large rounded blocks and masses along the ridges only, the valleys contain a deposit of granitic drift varying in thickness from 3 to 13 ft!

Note 3.

T.P. 12, 3. on G.I.

The drift in the valleys contains pebbles of quartz metamorphic sandstone & slate. Much black sand is also found. The black subcrystalline basalt is found in places not more than 20 miles back of the Harcourt to the West of Ararat.

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<p>Recent Alluvial A 1 Sand A 2 Clay & Mud A 3 Gravel - Recent Gold drift</p>	<p>Post Pliocene Basal benches Estuary beds & blown sand Upper gold drift</p>	<p>P 1 Sand P 2 Clay & Mud P 3 Gravel & Conglomerate (Cement)</p>	<p>Newer Pliocene Marine & Freshwater Flemington & Upper Brighton beds Middle gold drift</p>	<p>T.P. 1 Sandy beds T.P. 2 Clay & Mud T.P. 3 Gravel & Conglomerate (Cement)</p>	<p>Older Pliocene Marine & Freshwater Brighton beds Lower gold drift</p>	<p>T.P. 1 Sandy beds T.P. 2 Clay Shale &c T.P. 3 Gravel & Conglomerate (Cement)</p>	<p>This capping & outline of Tertiary on older rocks</p>	<p>Lower Silurian C 1 Sandstone C 2 Slates Flays & Mudstone C 3 Conglomerate</p>
<p>Granite G 1 Tertiary G 2 Devonian G 3 Quaternary</p>	<p>Quartz Diabase or Hornblende or Quartz Mass & Diabase Quartz & Mass of Quartz & Diabase Quartz Mass Diabase & Hornblende or Schorite</p>	<p>40 Chains 200 Fathoms</p>	<p>Scale - Two inches to a Mile.</p>	<p>40 80 120 160 200 240 280 320 360 400 440 480 520 560 600 640 680 720 760 800 840 880 920 960</p>	<p>Deposits of sand clay & gravel at the age of the upper gold drifts. Diluvial or Post Pliocene occur at intervals along the course of all the valleys. These deposits are frequently cut through & redistributed by existing river action during floods.</p>	<p>Upper Pliocene V 1 Basalt Diorite V 2 Basaltic V 3 Lava V 4 Ash Conglomerate Breccia &c</p>		

+ Horizontal beds / Dip / General Dip of undulating beds / Dip contorted in all directions / Perpendicular beds longest line the Strike / Anticline line / Syncline line / Dip & Strike of Ravine / Gold / Iron / Quartz Reef / Ewan Dike / Locality and mark of Specimen in the Museum (N^o 13)