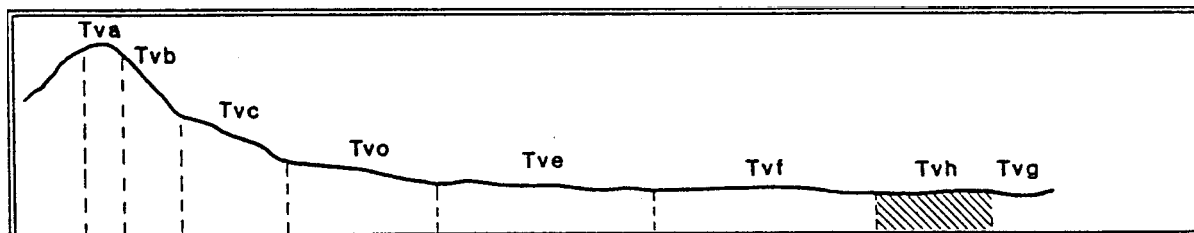


Map Unit:	TERTIARY VOLCANIC, FLATS	Map Unit Symbol: Tvh
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General Description:

Within the volcanic plains to the west and north-west of Newham, there are several broad, flat areas adjacent to the main drainage depressions. They have deep uniform clay soils that are well structured and fertile, but are also imperfectly drained and have a very slow permeability. The moderate risk of flooding does restrict the land use options.

Site characteristics: Site No. 40

Parent material Age: Lithology:	Tertiary Volcanic alluvium	Depth seasonal watertable:	> 2 m
Landform Pattern: Element:	Gently undulating plain with isolated cones Plain	Potential recharge to groundwater:	Low
Slope common: range:	1% 0 – 1%	Flooding risk:	Moderate
Rock outcrop:	0%	Drainage:	Imperfectly drained
		Depth to hardrock:	> 2 m
		Proportion of Shire:	1.1%

Native vegetation: Manna Gum, Swamp Gum
Present land use: Grazing (introduced pasture)

Land degradation:	Water erosion		Wind	Salting	Acidification
	Sheet/rill	Gully			
Susceptibility	Low	Low	Very low	Low	Very low
Incidence	Low	Nil	Nil	Nil	Nil

Soil profile characteristics:

Permeability (measured - average, range): (estimated):	- Very slow
Available water capacity:	260 mm H ₂ O
Linear Shrinkage (B horizon):	Moderate (estimate)

Soil profile description:

- A₁** 0-5 cm Dark grey (10YR 3/1) light clay, moderate subangular blocky structure 3 mm, smooth fabric, moderately firm consistence, pH 7.0. Clear transition to
- B₂₁** 5-50 cm Very dark greyish brown (10YR 3/2) medium clay, strong angular blocky structure 4 mm, smooth fabric, moderately firm consistence pH 8.0. Diffuse transition to
- B₂₂** 50-200+ cm Olive brown (2.5YR 4/4) medium clay, weak angular blocky structure 8 mm smooth fabric plastic consistence pH 8.0

Soil classification:

Factual Key (Northcote): Uf 6.32
 Australian Soil Classification: Haplic, Mesotrophic, Black, Dermosol very deep, thin, clayey, non-gravelly
 Unified Soil Group: NA

Interpretation of soil analyses*

Horizon	pH	Gravel	E.C.	Nutrient status	P	K	Al	Org. matter	Dispersibility
A	7.0	0	NA	M	S	S	S	M	L
B ₂₁	8.0	0	NA	M	S	S	S	L	L
B ₂₂	8.0	0	NA	L	S	S	S	L	L

VL : Very Low L : Low M : Moderate H: High VH : Very High
 D: Deficient S: Satisfactory T: Toxic ** Acid NA : Not available

Land capability assessment

Land use	Class	Major limiting feature (s)
Agriculture (CTS values)	C ₃ T ₁ S ₄	Low permeability : rainfall index for plant growth, shallow topsoil
Effluent disposal (septic tanks)	5	Very slow permeability
Farm dams (earthen)	3	Moderate depth to hard rock
Building foundations * slab * stumps/footings	4 4	Imperfectly drained Imperfectly drained