

LAND SYSTEMS OF THE MIRIAM VALE AND KOLAN SHIRES



Queensland Government
Natural Resources,
Mines and Energy

NUMBERED GRID LINES ARE 20000 METRE INTERVALS OF THE MAP GRID OF AUSTRALIA, ZONE 56, GDA94
UNIVERSAL TRANSVERSE MERCATOR PROJECTION

SCALE 1:250,000

0 5 10 15 20 25 Kilometres

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ACCURACY STATEMENT

Due to varying sources of data sets, spatial locations may not coincide when overlaid.

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BASE MAP - Compiled from the Digital Cadastral Data Base, 2004, Department of Natural Resources, Mines and Energy, Brisbane.

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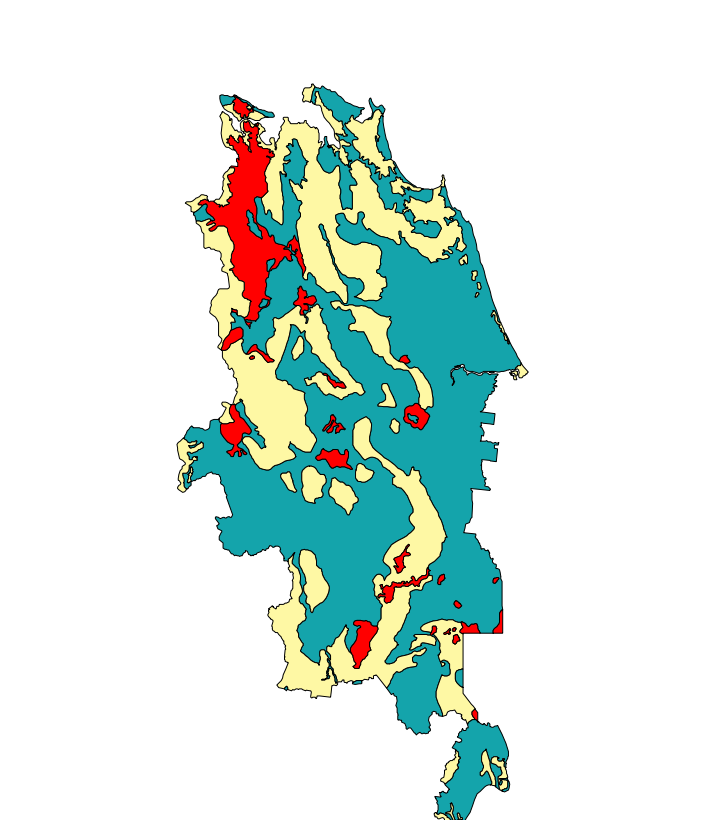


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REFERENCE

MAP CODE	LAND SYSTEM	LANDFORM AND GEOLOGY	DOMINANT VEGETATION	MAJOR SOILS	MAP CODE	LAND SYSTEM	LANDFORM AND GEOLOGY	DOMINANT VEGETATION	MAJOR SOILS
Marine Plains					MV3	Miriam Vale 3	Gently undulating rises to undulating low hills on Miriam Vale Granodiorite.	Open forest. Narrow-leaved iron bark, bloodwoods, Moreton Bay ash, Queensland blue gum, gum-topped box, spotted gum and swamp mahogany.	Moderately deep to deep, brown, grey and yellow, sodic duplex soils (Sodosols and Chromosols) and grey, gradational soils and non cracking clays (Tenosols).
Bt	Bustard	Coastal wetlands.	Closed forest to saline grassland. Swamp paperbark, Casuarina species and cabbage palms, mangrove communities and salt marshes.	Deep*, saline clays, muds and sands (Hydrosols) 1**.	W11	Watalgan 1	Undulating rises to undulating low hills on Watalgan Granite.	Open forest. Narrow-leaved iron bark, bloodwoods, yellow stringybark, Moreton Bay ash, Queensland blue gum, swamp mahogany and spotted gum with an understory of wattles.	Moderately deep to deep, brown and yellow, sodic duplex soils (Sodosols and Chromosols), shallow, uniform coarse textured soils (Tenosols) and deep to very deep, black and brown, non cracking clay and gradational soils (Demossols).
Coastal Dunes and Sand Plains					Tw	Tawah	Undulating low hills on Tawah Granite.	Open forest. Narrow-leaved iron bark, bloodwoods, spotted gum, Queensland blue gum, yellow stringybark and swamp mahogany.	Shallow to moderately deep, brown, grey and yellow, sodic duplex soils (Sodosols) and uniform, coarse textured soils (Tenosols).
Em	Eumibula	Level to gently undulating beach ridge plains.	Open to closed forest. Pink and brown bloodwood and Moreton Bay ash with wattles, coastal and wattle banksia and cabbage palms or rainforest species.	Deep to very deep, uniform coarse textured* soils, dominated by the accumulation of iron compounds (Podzols).	MV4	Miriam Vale 4	Undulating low hills to rolling low hills on Miriam Vale Granodiorite.	Open forest to woodland. Narrow-leaved iron bark, bloodwoods, Queensland blue gum, Moreton Bay ash, and grey sodic duplex soils (Sodosols) and black and grey, cracking clays (Vertosols) and ironbark.	Shallow to moderately deep, brown and red, gradational soils (Demossols) and non sodic duplex soils (Sodosols) and non sodic duplex soils (Sodosols) and moderately deep, uniform, coarse textured soils (Tenosols).
Wt	Wreckrock	Level to rolling beach ridge plains.	Open forest to woodland. Pink and brown bloodwoods, Moreton Bay ash, Queensland blue gum with coastal and wattle banksia, cabbage palms and wattles.	Deep to very deep, uniform coarse textured soils (Podzols), (Tenosols), and (Hydrosols).	Pt	Perry	Undulating low hills to rolling low hills on Tenningering Granodiorite.	Open forest to woodland. Narrow-leaved iron bark, spotted gum, Moreton Bay ash, Queensland blue gum, rough-barked apple, bloodwoods and swamp mahogany.	Moderately deep to deep, grey, yellow and brown, sodic duplex soils (Sodosols) and uniform, coarse textured soils (Tenosols).
Coastal Alluvial Plains					Wb	Worabah	Rolling low hills on Worabah Granodiorite.	Open forest to woodland. Narrow-leaved iron bark, spotted gum, gum-topped bloodwood, Moreton Bay ash, Queensland blue gum and wattles.	Shallow to moderately deep, red, brown and brown, sodic duplex soils (Sodosols) and uniform, coarse textured soils (Tenosols) and moderately deep to deep, brown, yellow and grey, gradational soils (Demossols) and sodic duplex soils (Sodosols and Chromosols).
Dw	Deepwater	Level to gently undulating plains of recent alluvia.	Closed to open forest. Swamp paperbark and broad-leaved tea tree with yellow stringybark, brown bloodwood and smooth-barked apple as emergents and Queensland blue gum, gum-topped box, bloodwoods, Moreton Bay ash and yellow stringybark.	Deep to very deep, grey, gradational soils and non cracking clays (Demossols and Hydrosols) and grey and brown, sodic duplex soils (Sodosols).	MV5	Miriam Vale 5	Undulating low hills to rolling hills on Miriam Vale Granodiorite.	Open forest. Narrow-leaved iron bark, bloodwoods, spotted gum, Queensland blue gum, Moreton Bay ash, swamp mahogany and smoothbarked apple.	Moderately deep to deep, brown, red, grey and yellow, sodic duplex soils (Sodosols and Chromosols) and red and brown gradational soils (Demossols and Kandosols) and shallow to moderately deep, uniform, coarse textured soils (Tenosols).
Ck	Cook	Level to gently undulating plains of recent alluvia.	Open forest to woodland. Broad-leaved tea tree, wattle banksia, paper-barked tea tree and swamp paperbark with yellow stringybark and pink bloodwood as emergents with an understory of grass trees, Casuarina and Greivillea species.	Deep to very deep, uniform, coarse textured soils (Podzols, Tenosols, and Hydrosols).	MV6	Miriam Vale 6	Undulating low hills to rolling hills on Miriam Vale Granodiorite.	Open forest to woodland. Narrow-leaved iron bark, bloodwoods, Queensland blue gum, spotted gum, Moreton Bay ash, Queensland blue gum and swamp mahogany.	Shallow to moderately deep, uniform, coarse textured soils (Tenosols) and red and brown gradational soils (Demossols and Kandosols) and moderately deep to deep, brown, yellow and grey, gradational soils (Demossols) and sodic duplex soils (Sodosols and Chromosols).
Alluvial Plains of Rivers and Creeks					MV2	Matchbox 2	Undulating low hills to steep hills on undifferentiated granites.	Open forest. Yellow stringybark, bloodwoods, narrow-leaved iron bark with an understory of Casuarina, Greivillea and Banksia species.	Shallow to moderately deep, uniform, coarse textured soils (Tenosols) and moderately deep to deep, brown, yellow and grey, gradational soils (Demossols) and sodic duplex soils (Sodosols and Chromosols).
BF	Baffle	Level to gently undulating alluvial plains.	Open forest to woodland. Queensland blue gum, gum-topped box, narrow-leaved iron bark, swamp mahogany, Moreton Bay ash and bloodwoods.	Deep to very deep, brown, grey and yellow, sodic and non sodic duplex soils (Sodosols and Chromosols), black, brown and red, uniform, coarse textured soils (Tenosols), gradational soils (Kandosols and Demossols) and black and grey cracking clays (Vertosols).	MV3	Watalgan 2	Shallow to rolling hills to rolling hills on Watalgan Granite.	Open forest. Narrow-leaved iron bark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany, Moreton Bay ash and wattles.	Shallow to moderately deep, uniform, coarse textured soils (Tenosols) and moderately deep to deep, brown, yellow and grey, gradational soils (Demossols) and sodic duplex soils (Sodosols and Chromosols).
BD	Boondilla	Level to gently undulating alluvial plains and pediments and minor gently undulating rises on Miriam Vale Granodiorite.	Open forest to woodland. Queensland blue gum, swamp mahogany, gum-topped box, corkato apple, bloodwoods and narrow-leaved iron bark.	Moderately deep to very deep, grey and brown sodic duplex soils (Sodosols and Kandosols), deep to very deep, black, cracking clays (Vertosols), black and grey, non cracking clays and gradational soils (Demossols) and coarse textured, uniform and gradational soils (Tenosols and Kandosols).	Hb	Hogback	Rolling hills to steep hills on Hogback Granite.	Open forest to woodland. Narrow-leaved iron bark, bloodwoods, Queensland blue gum, Moreton Bay ash, swamp mahogany and yellow stringybark with an understory of wattles, Casuarina species and grasses.	Shallow to moderately deep, uniform, coarse textured soils (Tenosols), brown, yellow and red gradational soils (Kandosols and Demossols) and grey, sodic duplex soils (Sodosols and Chromosols).
Deeply Weathered Basic Volcanic Rocks					MV7	Miriam Vale 7	Rolling hills to steep mountains on Miriam Vale Granodiorite.	Open forest. Broad-leaved white mahogany, bloodwoods, narrow-leaved iron bark, bloodwoods, Queensland blue gum and Casuarina species.	Shallow to moderately deep, uniform coarse textured soils (Tenosols), just red and brown gradational soils (Kandosols and Demossols) and sodic duplex soils (Sodosols and Chromosols).
Md1	Monduran 1	Gently undulating rises on a plateau and associated Tertiary basalt.	Open forest. Queensland blue gum, Moreton Bay ash, bloodwoods, narrow-leaved iron bark and rough-barked apple.	Deep to very deep, red, yellow and brown, gradational soils and non cracking clays (Ferosols).	Cw	Castle Tower	Rolling hills to steep mountains on Castle Tower Granite.	Open forest. Yellow stringybark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany and wattles.	Shallow to moderately deep, grey and brown, sodic duplex soils (Sodosols and Kandosols) and red and brown gradational soils (Kandosols and Demossols) and sodic duplex soils (Sodosols and Chromosols).
Basic and Intermediate, Intrusive and Extrusive Igneous Rocks					Bw	Brooweena	Gently undulating to undulating rises on Brooweena Formation.	Open forest. Yellow stringybark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Moderately deep to deep, brown, grey and yellow, red and sodic duplex soils (Sodosols and Kandosols) and gradational soils and non cracking clays (Vertosols).
Md2	Monduran 2	Gently undulating to undulating rises on a plateau and associated bedrock slopes on Tertiary basalt.	Open forest. Narrow-leaved iron bark, silver-leaved iron bark and bloodwoods, with minor rough-barked apple and swamp mahogany.	Shallow to moderately deep, black and brown, cracking and non cracking clays (Vertosols and Demossols).	Rd1	Rosedale 1	Gently undulating to undulating rises on Rosedale Beds.	Open forest to woodland. Yellow stringybark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Moderately deep to deep, brown, grey and yellow, red and sodic duplex soils (Sodosols and Kandosols) and gradational soils and non cracking clays (Vertosols).
Wg	Wateranga	Undulating rises to undulating low hills on Wateranga Gabbro and an undifferentiated diorite.	Woodland. Silver-leaved iron bark, narrow-leaved iron bark, bloodwoods, Queensland blue gum and Moreton Bay ash.	Shallow to deep, brown and black, non cracking and cracking clays (Demossols and Vertosols).	Et	Elliot	Undulating rises to rolling rises on Elliot Formation.	Open forest. Broad-leaved white mahogany, bloodwoods, narrow-leaved iron bark, bloodwoods, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and coast banksia.	Deep, red and brown, gradational soils (Kandosols and Demossols) and grey, brown and yellow, sodic duplex soils (Sodosols and Chromosols) and deep to very deep, grey, gradational soils and sodic duplex soils (Sodosols and Chromosols).
Mc1	Muncon 1	Undulating rises to rolling low hills on Muncon Volcanics.	Open forest to woodland. Silver-leaved iron bark, Moreton Bay ash, bloodwoods, silver-leaved iron bark, spotted gum, Queensland blue gum and swamp mahogany.	Shallow to moderately deep, red, brown and black, gradational soils (Demossols) and brown and grey, sodic duplex soils (Sodosols and Chromosols) and cracking clays (Vertosols) and brown, red, and yellow non sodic and sodic duplex soils (Sodosols and Chromosols).	Rd2	Rosedale 2	Rolling low hills to steep hills on Rosedale Beds.	Open forest to woodland. Narrow-leaved iron bark, spotted gum, Moreton Bay ash, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Shallow to moderately deep, stony, brown, yellow and red, gradational soils (Kandosols and Demossols) and sodic duplex soils (Sodosols and Chromosols) and moderately deep to deep, brown, grey and red, sodic duplex soils (Sodosols and Chromosols).
Mo	Moonta	Undulating rises to rolling low hills on Moonta Diorite.	Woodland to open woodland. Silver-leaved iron bark, black, bloodwoods, Queensland blue gum, Moreton Bay ash and narrow-leaved iron bark.	Deep, brown, black, cracking clays (Vertosols) and non cracking clays (Demossols) and brown and grey, sodic duplex soils (Sodosols and Chromosols).	Ba1	Bania 1	Rolling hills to steep hills on Bania Formation.	Open forest. Yellow stringybark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Moderately deep to deep, brown, grey and yellow, red and sodic duplex soils (Sodosols and Kandosols) and gradational soils and non cracking clays (Vertosols).
Hm	Hindmarsh	Undulating low hills to rolling low hills on a plateau on Tertiary Basalt.	Woodland with minor rainforest. Silver-leaved iron bark, spotted gum, narrow-leaved iron bark, bloodwoods, Queensland blue gum, crows ash and rainforest species.	Deep, red, gradational soils and non cracking clays (Ferosols) and shallow to moderately deep, brown and black, non cracking clays (Demossols) and cracking clays (Vertosols).	Ba2	Bania 2	Rolling hills to steep hills on Bania Formation.	Open forest. Yellow stringybark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Shallow to moderately deep, brown, grey and yellow, red and sodic duplex soils (Sodosols and Kandosols) and gradational soils and non cracking clays (Vertosols).
Sp	Serpent	Undulating low hills to rolling hills on serpentinite.	Open forest. Spotted gum, narrow-leaved iron bark, bloodwoods, gum-topped box and Queensland blue gum.	Moderately deep to deep, brown and red, non cracking clays (Ferosols).	Ec1	Electra 1	Undulating low hills to rolling hills on Electra Island Group.	Open forest to woodland. Narrow-leaved iron bark, bloodwoods, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Moderately deep to deep, brown, grey and yellow, red and sodic duplex soils (Sodosols and Kandosols) and gradational soils and non cracking clays (Vertosols).
Em	Blackman	Rolling low hills to rolling hills on diorite.	Open forest to woodland. Narrow-leaved iron bark, Queensland blue gum, bloodwoods, Moreton Bay ash and Melaleuca species, with small areas of "softwood scrub" species.	Shallow to deep, black and brown, gradational soils and non cracking clays (Demossols).	Ec2	Electra 2	Undulating low hills to rolling hills on Electra Island Group.	Open forest to woodland. Narrow-leaved iron bark, bloodwoods, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Shallow, uniform, medium textured soils (Tenosols) and brown, sodic duplex soils (Sodosols) and moderately deep to deep, brown, grey and red, sodic duplex soils (Sodosols and Chromosols).
Ga	Goyan	Rolling hills on Goyan Andesite.	Open forest. Narrow-leaved iron bark, silver-leaved iron bark, spotted gum and Queensland blue gum.	Shallow, brown and red, gradational soils (Demossols) and non sodic duplex soils (Sodosols) and moderately deep, brown, black and yellow, gradational soils and non cracking clays (Demossols) and sodic and non sodic duplex soils (Sodosols and Chromosols).	Go1	Goodnight 1	Rolling low hills to hills on Goodnight Beds.	Open forest. Yellow stringybark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Shallow to moderately deep, brown, yellow and grey, sodic duplex soils (Sodosols) and red and brown gradational soils and non cracking clays (Vertosols).
MV2	Muncon 2	Rolling mountains to very steep mountains on Muncon Volcanics.	Open to closed forest. Rainforest species or yellow stringybark, bloodwoods, narrow-leaved iron bark, Queensland blue gum, gum-topped box, swamp mahogany, forest the-ash and eucalyptus.	Shallow to deep, brown and red, non cracking clays and gradational soils (Demossols), brown and yellow, non sodic duplex soils (Sodosols and Chromosols) and shallow, uniform, medium textured soils over rock (Tenosols).	Go2	Goodnight 2	Rolling low hills to steep hills on Goodnight Beds.	Open forest. Yellow stringybark, bloodwoods, spotted gum, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca species and grass trees.	Shallow to moderately deep, brown, yellow and grey, sodic duplex soils (Sodosols) and red and brown gradational soils and non cracking clays (Vertosols).
Acid to Intermediate Volcanic Rocks					Cs	Curtis	Rolling low hills to steep hills on Curtis Island Group.	Open forest to woodland. Spotted gum, narrow-leaved iron bark, Queensland blue gum, Moreton Bay ash and wattles.	Very shallow to shallow, stony, uniform, medium textured soils (Tenosols) and brown and red, gradational soils (Demossols) and sodic duplex soils (Sodosols and Chromosols).
Aw1	Agnes Water 1	Gently undulating rises to undulating low hills on Agnes Water Volcanics.	Woodland. Narrow-leaved iron bark, Queensland blue gum, Moreton Bay ash, bloodwoods, spotted gum, gum-topped box and silver-leaved iron bark.	Moderately deep to deep, brown and red, gradational soils (Demossols) and brown, grey and yellow, sodic duplex soils (Sodosols).					
Aw2	Agnes Water 2	Gently undulating rises to undulating low hills on Agnes Water Volcanics.	Open forest. Yellow stringybark, bloodwoods, gum-topped box, Queensland blue gum, swamp mahogany, narrow-leaved iron bark with an understory of broad-leaved tea tree, wattles, Casuarina and Banksia species.	Moderately deep to deep, grey, brown and yellow, sodic duplex soils (Sodosols, Kandosols and Chromosols) and brown and yellow, gradational soils (Demossols).					
Ab	Aranbanga	Rolling low hills on Aranbanga Volcanic Group.	Open forest to woodland. Narrow-leaved iron bark, spotted gum, bloodwoods, Queensland blue gum and Moreton Bay ash.	Shallow, stony, uniform, medium to coarse textured soils (Tenosols), red and brown, non sodic duplex soils (Sodosols) and black, grey, brown and yellow, non cracking clays (Demossols) and sodic duplex soils (Sodosols).					
Ed	Eddington	Undulating low hills to rolling hills on Undivided Oryzite Group.	Woodland to open woodland. Narrow-leaved iron bark, Moreton Bay ash, Queensland blue gum, bloodwoods and minor silver-leaved iron bark.	Shallow to moderately deep, brown and red, gradational soils (Demossols) and non sodic duplex soils (Sodosols) and moderately deep to deep, brown, grey and yellow, sodic duplex soils (Sodosols).					
Aw3	Agnes Water 3	Undulating hills to steep mountains on Agnes Water Volcanics.	Closed forest. Narrow-leaved iron bark, bloodwoods, gum-topped box, yellow stringybark, Queensland blue gum, Moreton Bay ash and spotted gum with an understory of wattles, Casuarina and Greivillea species or rainforest species.	Very shallow to shallow, uniform, medium to coarse textured soils (Tenosols) and moderately deep to deep, brown, yellow and grey, gradational soils (Demossols) and sodic duplex soils (Sodosols and Chromosols).					
Acid to Intermediate Intrusive Rocks									
MV1	Miriam Vale 1	Gently undulating rises to undulating rises on Miriam Vale Granodiorite.	Open forest to woodland. Narrow-leaved iron bark, bloodwoods, Moreton Bay ash, Queensland blue gum and silver-leaved iron bark.	Shallow to deep, brown and red, gradational soils (Demossols) and non sodic duplex soils (Sodosols) and moderately deep to deep, brown, yellow and grey, sodic duplex soils (Sodosols and Chromosols) and deep, black and grey, cracking clays (Vertosols).					
MV2	Miriam Vale 2	Gently undulating rises to undulating rises on Miriam Vale Granodiorite.	Open forest to woodland. Broad-leaved iron bark, bloodwoods, Queensland blue gum, swamp mahogany and wattles, with an understory of wattles, Melaleuca and Banksia species.	Moderately deep to deep, uniform, coarse textured soils (Tenosols) and deep, grey and yellow, non sodic and sodic duplex soils (Sodosols, Sodosols and Kandosols).					
Mb1	Matchbox 1	Gently undulating rises to undifferentiated granites.	Open forest to woodland. Brown bloodwood, narrow-leaved iron bark, yellow stringybark, Queensland blue gum, spotted gum, swamp mahogany and Moreton Bay ash with an understory of wattles, Casuarina and Greivillea species.	Moderately deep to deep, brown, grey and yellow, gradational soils (Demossols, Kandosols and Chromosols) and sodic duplex soils (Sodosols and Chromosols) and very shallow to shallow uniform coarse textured soils (Tenosols).					

RELIABILITY DIAGRAM



This is a reconnaissance land resource survey. It is based on aerial photography interpretation and field traverses with site descriptions ranging from one observation to an area of 200 ha to an area of 1000 ha.

A. Aerial photography interpretation with many field traverses and site descriptions.

B. Aerial photography interpretation with some field traverses and site descriptions.

C. Aerial photography interpretation with very limited field traverses and site descriptions.

LEGEND

— Roads
— Rivers
— Cadastral Boundaries

MIRIAM VALE - KOLAN
LAND SYSTEMS
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