

Mamre and Aerotropolis Operation and maintenance requirements

Operation/maintenance activity	Frequency (no. per year)	Likely frequency (once in x years)	Trunk channel	Waterways	Sediment basin	Wetland	Bioretention	Storage Pond	WSUD batters	Trunk pipeline	Type	Trigger	Expertise	Plant/equipment	Waste	Odour	Noise or vibration
CCTV inspections		10	No	No	No	No	No	No	No	Yes	Routine	Time	Civil engineer	CCTV camera/robot	Fuel emissions	No	No
Pipe cleaning		10	No	No	No	No	No	No	No	Yes	Reactive	>20% pipe blockage	Civil contractor	Eductor truck	Fuel emissions, solid waste	No	Yes - Noise
Root cutting in pipe		30	No	No	No	No	No	No	No	Yes	Reactive	Impeding flow	Civil contractor	Eductor truck	Fuel emissions, green waste	No	Yes - Noise
Gross pollution trap cleaning	2		Yes	No	No	No	No	No	No	Yes	Routine	>50% full	Civil contractor	Eductor truck or backhoe & truck	Fuel emissions, solid waste	Yes	Yes - Noise
Weed and rubbish mgt (natural waterways)	5		Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Routine	>20% weed	Landscaper/natural areas	Sprayer, hand tools, Ute	Fuel emissions, green and solid waste	No	No
Weed and rubbish mgt (WSUD and trunk)	10		Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Routine	>10% weed	Landscaper/natural areas	Sprayer, hand tools, Ute	Fuel emissions, green and solid waste	No	No
Revegetation	1		Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Reactive	<75% cover	Landscaper/natural areas	Hand tools, auger, Ute	Fuel emissions, green and solid waste	No	Yes - Noise
Erosion control (mulch or jute matting)		15	Yes	Yes	No	No	No	No	Yes	No	Reactive	Visual erosion	Landscaper/natural areas	Hand tools, small excavator, Ute/small truck	Fuel emissions, green and solid waste	No	Unlikely
Inspection	3		Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Routine	Time	Landscaper/natural areas	Car	Fuel emissions	No	No
Sediment/rubbish removal (sediment basin)		5	No	No	Yes	No	No	No	No	No	Reactive	<1m of water to NWL	Civil contractor	Large truck, excavator, bobcat, hand tools	Fuel emissions, solid waste	Yes	Yes - Both
Sediment/rubbish removal (other)		15	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Reactive	≥300mm of sediment	Civil contractor	Large truck, excavator, bobcat, hand tools	Fuel emissions, solid waste	Yes	Yes - Both
Irrigation system		5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Reactive	Not operational or leaking	Irrigation/pump contractor	Hand/power tools, Ute	Fuel emissions, solid waste	No	No
Flushing point inspection/maintenance		5	No	No	No	No	Yes	No	No	No	Routine	Time	Civil contractor	Eductor truck	Fuel emissions, liquid/solid waste	Yes	Yes - Noise
Monitoring (hydraulic conductivity etc.)		5	No	No	No	No	Yes	No	No	No	Reactive	Wet for >24 hours after rain	Civil contractor	Science equipment, hand tool, Ute	Fuel emissions	No	No
Spray/fountain/aeration pump/system		5	No	No	No	No	No	Yes	No	No	Reactive	Not operational	Irrigation/pump contractor	Hand/power tools, Ute	Fuel emissions, solid waste	No	No
Pond screen maintenance	2		No	No	No	No	No	Yes	No	No	Routine	Time	Civil contractor	Eductor truck	Fuel emissions, liquid/solid waste	No	Yes - Noise
Water quality monitoring equipment clean/calibration	4		No	No	No	No	No	Yes	No	No	Routine	Time	Irrigation/pump contractor	Hand/power tools	Fuel emissions	No	No
Maintenance track re-grade and compaction		10	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Reactive	When unsafe/failed	Civil contractor	Large truck, excavator, bobcat, hand tools	Fuel emissions, solid waste	Yes	Yes - Both
Dam wall inspection by qualified engineer	1		No	No	No	No	No	Yes	No	No	Routine	Time	Civil engineer	Car	Fuel emissions	No	No
Renewal (<30years)																	
Pump and monitoring equipment replacement		7	No	No	No	No	No	Yes	No	No	Reactive	Failure	Irrigation/pump contractor	Hand/power tools, Ute	Fuel emissions, solid waste	No	No
Pond screen replacement		15	No	No	No	No	No	Yes	No	No	Reactive	Rusted or broken	Civil contractor	Hand/power tools, Ute	Fuel emissions, solid waste	No	No
Bioretention filter media removal and replacement		25	No	No	No	No	Yes	No	No	No	Reactive	wet for >48 hours after rain	Civil contractor	Large truck, excavator, bobcat, hand tools	Fuel emissions, solid/green waste	No	Yes - Both