Monitoring and Controls	Trigger	Action
Public Roads – LW30 -31		
 Centennial to establish subsidence monitoring / inspection sites for public roads prior to mining. Centennial to mark the centreline and edges of current longwall panel one month prior to public road being affected by subsidence. Centennial to notify Crown Lands one month prior to public road affected by subsidence from each longwall panel. Centennial to conduct weekly visual inspections of public roads when located within Active Subsidence Zone. Record results on the Subsidence Inspection Checklist. Centennial to conduct post-mining surveys following the development of subsidence (majority of subsidence developed when LW is completed or LW face is 800m past feature). Centennial to provide pre and post mining subsidence monitoring results to stakeholders. 	LEVEL 1 – LOW Operations within prediction and approved impact Development of subsidence and impact as expected. Subsidence within predicted range (U95% CL). Negligible visible impact on gravel access roads. Possible minor tensile and compressive cracking to pavement not requiring immediate repairs. LEVEL 2 – MEDIUM Operations within approved impact but exceed or potentially exceed predictions Development of subsidence exceeding or potentially exceeding prediction (Upper 95% Confidence Limits). Tensile and compressive strains may increase 2 times predicted values due to crack development. Vertical subsidence greater than predicted. Typically minor impact to gravel access roads. Cracking may be visible on roads – development of minor compression hump near centre of longwall and minor tensile cracking to pavement at edges. Repairs to pavement may be required to reseal pavement.	 Centennial to conduct post mining inspection and subsidence monitoring and provide results to the Landowner, RR and Crown Lands. Centennial to advise Landowner and Crown Lands of observed damage to the public road. Centennial to erect warning signs near affected area of road if necessary. Centennial to conduct post mining inspection and subsidence monitoring and provide results to the Landowner, RR and Crown Lands. Centennial to conduct repairs to damaged pavement.
CONTROLS Flood Modelling and Assessment LW30-31 (Umwelt 2020) determined that there was no predicted increase in flood hazard category on the access road at both the 1 year and 100 year ARI Storm Events.	 LEVEL 3 – HIGH Operations exceed approved impact Development of subsidence and impact greater than expected (Upper 95% Confidence Limits). Cracking to road pavement requiring immediate repairs to ensure public safety. Repairs required, reshaping road, restoring drainage and resealing pavement. 	 Centennial to immediately advise Landowner and Crown Lands of observed damage to the public road. Centennial to erect warning signs near affected area of road. Centennial to conduct post mining inspection and subsidence monitoring and provide results to Landowner, RR and Crown Lands. Centennial to conduct repairs to damaged pavement. Centennial to review results and predictions as per Extraction Plan. Centennial to notify external stakeholders including relevant government agencies in accordance with Incident Reporting S6 Condition 10 and WHS Regulations.