

**In the “Summary of the findings of the environmental assessment”, “Geomorphology and watercourse impacts”,** on page xiii is the statement that: *“Watercourses that are most likely to experience minor changes as a result of the project are: Summer Hill Creek, Cow Creek, Oaky Creek.”* There is no list of the changes (and their locations) and no evidence is provided to support the statement that they are minor and not major.

## **Appendix E Water Quality and Geomorphology Assessment**

There is no evidence that the stream bed scour calculations have been done.

There is no information on the proposed depth of pipeline burial at each stream crossing.

There is no assessment of the geomorphic impact of the extra flow in streams if the pipeline breaks.

The adopted stream sensitivity classification (Table 5-2: Stream stability assessment approach) has not been adhered to. “The stability of the creeks assessed was determined according to the material comprising the stream bed and banks”. That is, streams with soil, clay and silt are to be classified as ‘unstable’. In table 5-3, the streams at crossings 1, 2, 3, 4 and 5, have soil, clay and silt. However, crossings 1, 2, 3 and 5 are classified as ‘sensitive’. Crossing 4 is classified as ‘stable’.

There is no evidence in Appendix E that the whole of the “rock riffle” at the downstream end of Gardiners Hole pool is attached bedrock. Figure 5-6 shows that at least part of the riffle is composed of loose gravel and cobbles. These particles could be transported by the river during high flows, causing a lowering or draining of the Gardiners Hole pool. This would leave the water intake high and dry.

## **Appendix A of Appendix E**

Drawing W4916-1 upper left shows a diversion wall that would cause erosion of the opposite stream bank if it is composed of erodible material.

Drawing W4916-2 Detail 7 does not show the depth of burial relative to the calculated stream bed scour.

## **Appendix E of Appendix E**

The stream inspections (Stream Inspection Proforma Summary) did not look at bed erosion (e.g. headcuts and incised riffles) at the crossing sites and the reaches downstream from them. Accordingly, there is no assessment of the bed lowering hazard at the crossings.

Figure 6 shows what may be a headcut in the bed of Summer Hill Creek downstream of the crossing. If this progresses upstream, it may break the pipeline. Figure 13 shows that headcuts occur on these streams.