File 78104 - McLeod River near Peers

Hydrotechnical File History

1976 New bridge built approx. 1 mile east of File 74155. Two guidebanks with concrete slope protection and rock riprap aprons built. The longer guidebank is on the right bank, where the deepest part of the flow was located. Floods known to have occurred in 1915, 1944, 1954, 1965, and 1969. Gravel mining by the department has been ongoing between 1950's and the present. Point bars used as source of gravel. Temporary improvement in flow alignment occurs, but the overall movement of the channel is not retarded.

1977 Highwater - no scour observed. HWL = 19.5' below deck level. Estimated surface velocity 8 to 9 fps.

1980 Highwater and scour inspection. Observed highwater mark elevation = 2627.5'.

1982 Drawing 6905-C indicated July 7, 1982 HWL = 2626.3', approx. bottom elevation of Pier #2 footing = 2598.54'.

1982 Drawing DD-771 indicated July 7, 1982 HWL = 2626.3', estimated design HWL = 2630'.

1984 Bank protection measures considered in the vicinity of the bridge by AEP for protection of local landowners.

1986 Highwater inspection on July 22, 1986. HWL = 801.4 m (2629.2').

1987 Photos show most of flow is still near the right bank at the bridge, but the channel is moving downstream and a skew has developed.

1993 Site inspection, noted that the river is continuing to move d/s, with the channel eroding the left bank u/s and will soon outflank the left guidebank.

1994 A pier scour survey shows that significant local scour has occurred due to the large increase in skew of the approach flow.

1996 Scour survey and report by Hydroconsult.

1998 Scour survey and report by Trillium.

1998 Drawing M-78104-98-A indicated July 7, 1982 HWL = 800.5 m, approx. bottom elevation of Pier #2 footing = 792.035 m.

2013 Scour survey by MMM. AT completed scour report.

2018 Scour survey by Core Geomatics. AT completed scour report.