

Plews' first plans for engineering on the Fitzroy.

In response to a letter from the Australasian Steam Navigation Company which voiced complaints about the poor state of navigation in the Fitzroy River, Engineer of Roads in the new colony of Queensland, Henry Plews, undertook a detailed survey of the problematic Upper Flats which was presented to parliament in January 1864. He suggested the cheapest and quickest remedy was to dredge out the shoals. For the long-term, he advised that once the channel had been opened by dredging, stone 'training' walls be constructed on both sides of the river to narrow the stream so that the concentrated flow naturally scoured out any loose material entering the channel.

Plews recommended that the walls be of 'pierre perdu' or rubble stone, running parallel to the stream, as had been employed successfully on the River Clyde in Scotland and elsewhere.¹ Dredging proceeded in 1865 but not wall construction, probably because of the enormous cost for the latter. Plews estimated £35,000 for the walls, but the newly appointed Harbours and Rivers Chief Engineer Brady claimed the bill would be over £200,000. He cited the case of Newcastle (NSW) where stone could be acquired cheaply because ballast from incoming colliers could be discharged along the lines of training walls in the Hunter River. In Rockhampton, however, fresh stone would have to be quarried locally and transported from the Berserker Ranges by a mile-long tramway to the Fitzroy, then carried across the river by barges to the proposed southern wall.²

Unfortunately, the new channel dredged through the Upper Flats repeatedly silted and Queensland Portmaster George Heath admitted that 'dredging such a river must be an unceasing work, and a never-ending expense'.³ By 1869, the new cut was even shallower than the natural channel with only one foot of water at low tide. The local newspaper, *Morning Bulletin*, complained that while navigation of the river was 'a matter of vital interest to the town and to the whole district', dredging only seemed to move 'one heap of shifting sand to make room for another'.⁴ In 1874, Heath again advised parliament that the loose and shifting nature of the riverbed made it unsuitable for dredging and that construction of a training wall to make the river scour its bed clear was essential for successful navigation.⁵

References:

1. 'Navigation of the River Fitzroy: A Report from H.T. Plews, Esq., Engineer of Roads, Northern Districts, on a Survey Relative to the Existing Obstructions', *Queensland Votes and Proceedings (QV&P)*, 1864, p. 2.
2. 'Fitzroy River Improvements', *QV&P*, 1875, vol. 2, p. 2.
3. 'Report of the Portmaster upon the Ports and Harbours of the Colony', *QV&P*, 1868, vol. 2, p. 4.
4. *MB*, 23 January 1869.
5. Heath, cited in Rhodes, *Port of Rockhampton*, p. 3.