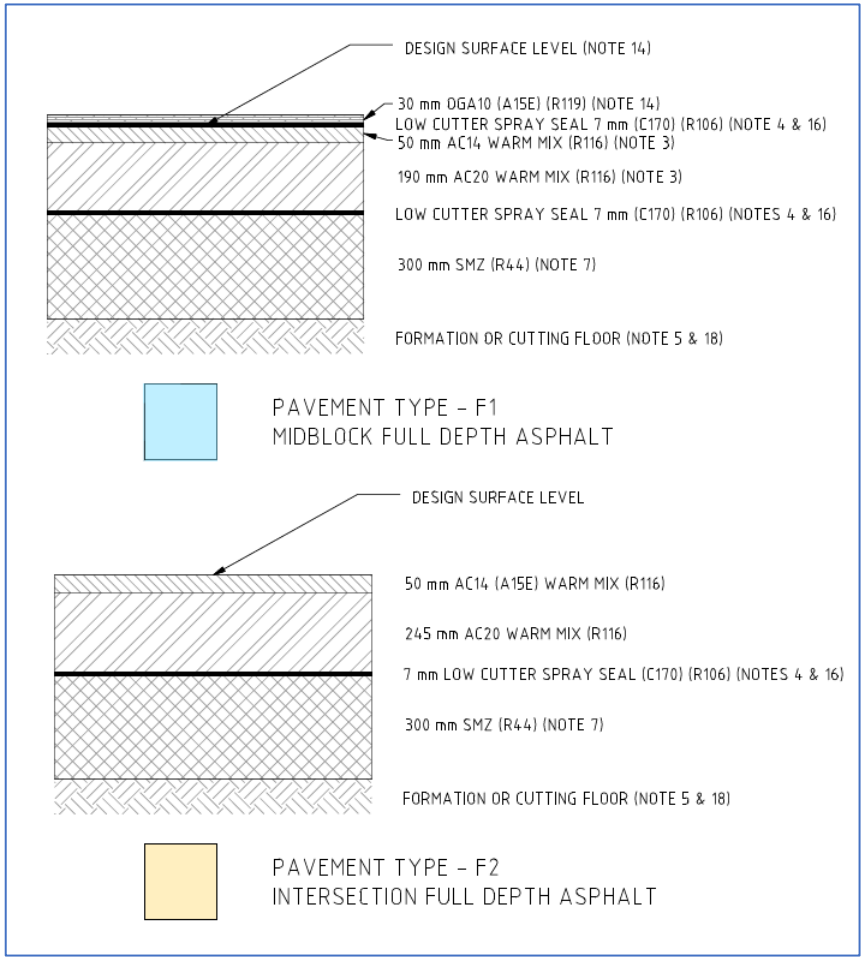
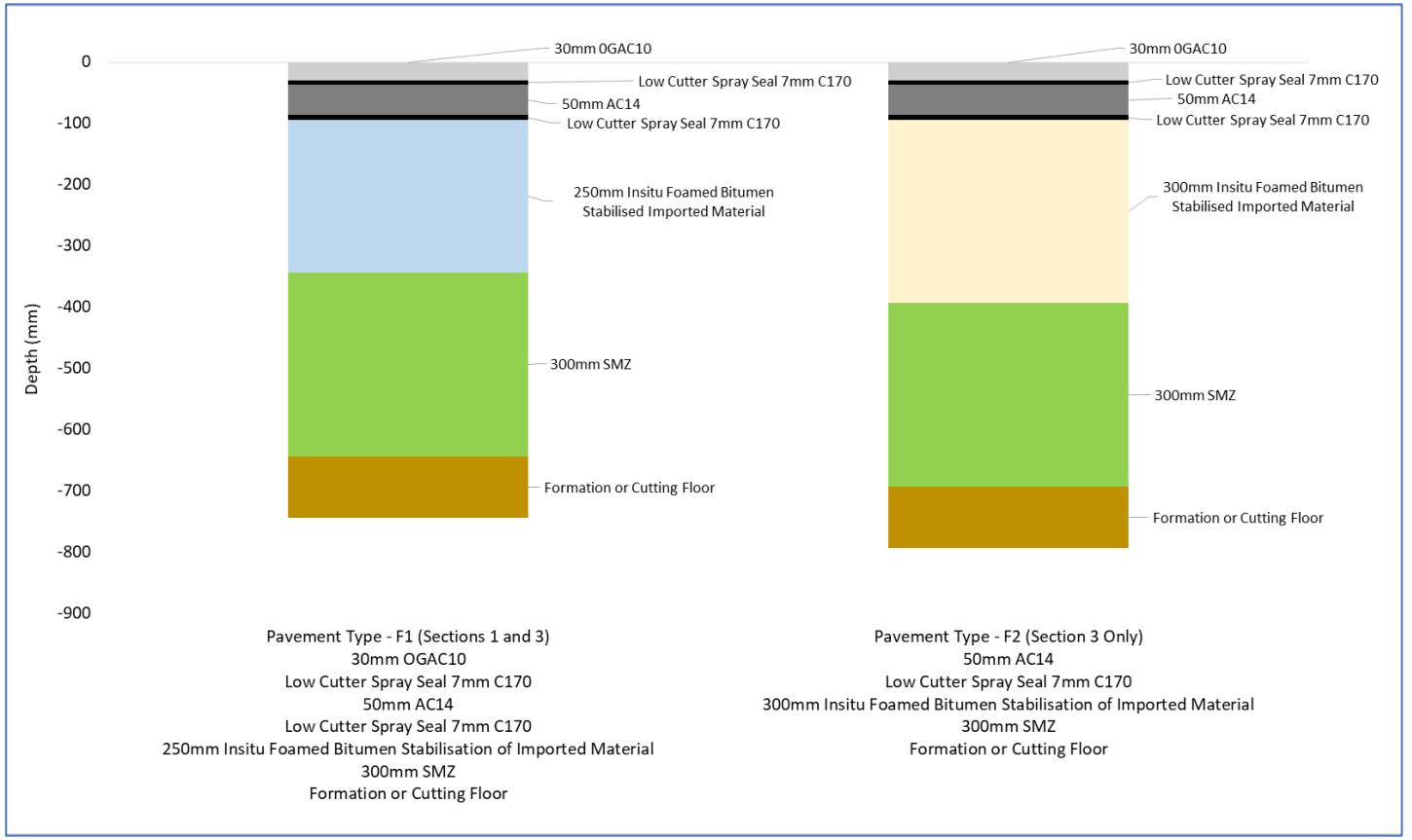

Sample Report 3

Options in Details

Conforming



Alternative



Replace intermediate AC20 layer with insitu Foamed Bitumen Stabilisation of locally sourced, overburden stockpiled material

Recycling of Materials

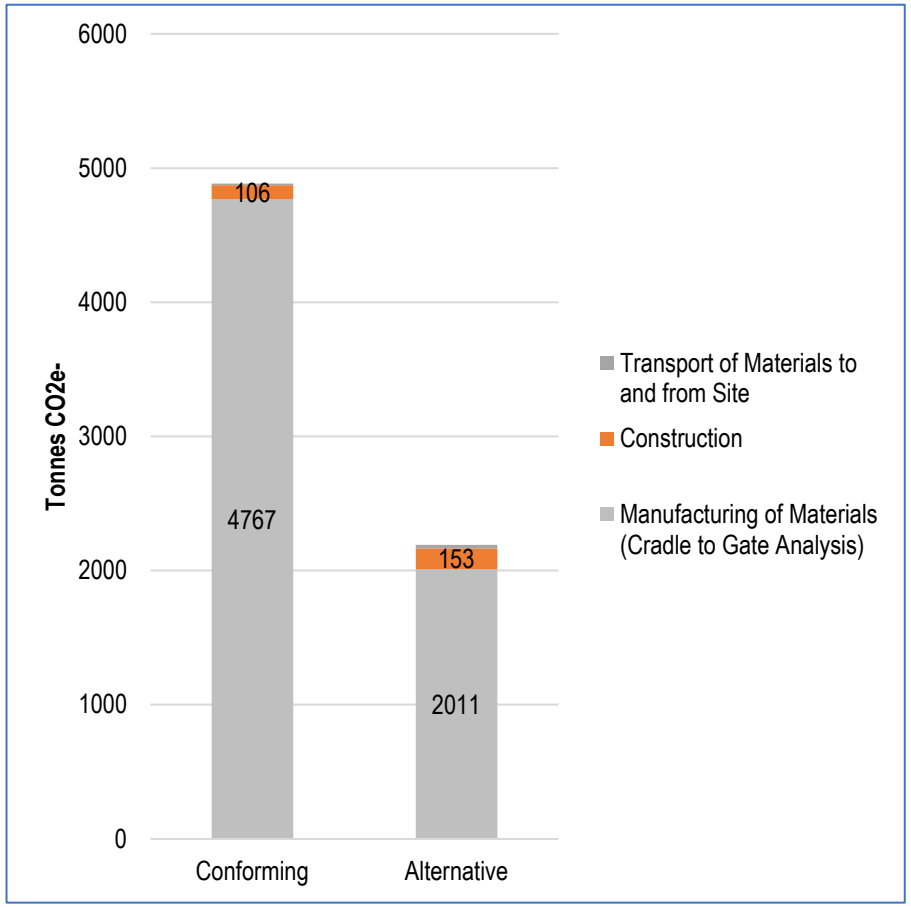
	Conforming	Alternative
New Material Manufactured	19,500 tonnes of new, manufactured asphalt	Reduce asphalt required to 5,345 tonnes Reduced costs and preservation of resources
Recycling of Materials	SMZ layer optional site won material or lime stabilised existing materials	15,230 tonnes of stockpiled material locally sourced proposed to be reused and improved through foamed bitumen stabilisation. A lower cost solution that recycles overburden materials. Also retains conforming SMZ layer optional site won material or lime stabilised existing materials

Material Dry Density:
Existing Material = 2.0t/m^3
Asphalt = 2.4t/m^3

Energy Consumption and Greenhouse Gas Emissions

Measured in Carbon Dioxide Equivalents (CO^2_{e-})

Lifecycle Stage		Conforming	Alternative
Manufacturing of Materials (Cradle-to-Gate Analysis)	Hydrated Lime (SMZ)	369.89	369.89
	Hydrated Lime and Bitumen (Stabilised Material)	0.00	435.88
	Imported Material to be Stabilised (No Manufacturing - Locally Sourced Overburden Stockpiled Mtaerial)	0.00	0.00
	Warm Mix Asphalt (0GAC10, AC14, AC20)	4,396.86	1205.19
Construction	Stabilise SMZ layer	29.72	29.72
	Place material for stabilisation, shape and compact	0.00	32.79
	Insitu Foamed Bitumen Stabilisation of Imported Mateial	0.00	59.12
	Warm Mix Asphalt place, pave and compact (average 65mm layers)	66.11	15.71
	One coat sprayed seal intermediate layers (including material manufacturing)	10.62	15.93
Transport of Materials to and from Site	Fuel consumption from 13t bogie or 25t semi trucks	164.42	231.62
Total Tonnes of Emissions (CO2-e)		**5037.62**	**2395.86**



Prevent Emitting 2,641 CO_{2e-} tonnes of Greenhouse Gases

52% Reduction