

PROPOSED SCHEME – APPRAISAL SUMMARY TABLE (AST)

Scheme Name: A47 Blofield to North Burlingham Dualling		Description: The Scheme is approximately 4 km in length and would comprise on-line widening of the current single carriageway to dual carriageway standard to the south of the existing road. The Scheme would commence at the eastern outskirts of the town of Blofield at Blofield Bypass dual carriageway and run east along the existing single carriageway past the Old Post Office, joining the dual carriageway Acle Bypass on the western outskirts of the town of Acle at White House junction, with closure of most existing side road junctions, construction of an off-line roundabout at the A47/C485 Yarmouth Road/C445 Hemblington Road junction, and construction of a grade separated junction, comprising an overbridge and two off-line roundabouts at the White House junction (B1140).		Problems: Congestion on main carriageway and problems of vehicular and non-vehicular access resulting in a poor accident record.		Present Value of Costs to Public Accounts = £4.785m Present Value Investment Cost = £21.672 m Gross Scheme Cost Estimate = £ 37.506m	
OBJECTIVE	SUB- OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE ASSESSMENT		ASSESSMENT		
ENVIRONMENT	Noise	Negligible / minor increases in noise levels over parts of Blofield due to changes in traffic flows on A47 and local roads as a result of the scheme. Minor/moderate (1 to 5 dB) decreases in noise levels at isolated properties adjacent to the Scheme between Blofield and North Burlingham as a result of scheme realignment and employment of noise barriers. Minor/moderate (1 to 5 dB) decreases in noise levels over parts of North Burlingham due to employment of noise barriers. The population exposed to noise levels > 69 dB L _{day} does not decrease as a result of the scheme.	People annoyed by noise: Published Scheme vs Do Minimum 2028. Total Population in Assessment = 8142 Do Minimum: 727 annoyed; Published Scheme: 745 annoyed.		Change in Population Annoyed (Year 15) = 17 PVB (Residential) = - £422,344		
	Local Air Quality	Overall negligible beneficial impact on exposure of NO ₂ and PM ₁₀ from road traffic pollution at residential properties. No exceedances of the current air quality objectives are likely at any properties with or without the Scheme.	Due to the scheme: 2294 properties where air quality would improve WRT NO ₂ in 2013 754 properties where air quality would worsen WRT NO ₂ in 2013 1607 properties where air quality would improve WRT PM ₁₀ in 2013 1441 properties where air quality would worsen WRT PM ₁₀ in 2013		Assessment Value: NO ₂ : -4499; PM ₁₀ : +7		
	Greenhouse Gases	Total road traffic CO ₂ emissions in the Traffic Model Study Area increase by +0.01% in 2013. This is due to the slight increase in the total vehicle kilometres travelled in the Traffic Model Study Area and the increase in speed on the A47 with the Scheme in place.	Total emission of CO ₂ (tonnes/yr): 2013 Do Minimum: 73,382, 2013 Do Something: 77,463		PVB (Residential) = - £2,407,000		
	Landscape	Scale and footprint of the road in the landscape would be increased, however a good landscape fit would be achieved through southwards widening, resulting in minimal loss of mature trees and hedgerows, and placing of westbound carriageway in shallow cutting for most of its length. New over-bridge and lighting proposals for grade-separated junction at eastern end of Scheme would be likely to increase visibility and intrusiveness of the road in the landscape. At-grade off line junction with Hemblington Road, requiring new street lighting, would remove existing roadside woodland and would be likely to increase visibility of the road towards Blofield.	Not applicable		Large adverse		
	Townscape	There is no development of sufficient scale to be considered townscape within the Study Area.	Not applicable		Neutral		
	Heritage of Historic Resources	A number of prehistoric, Saxon and medieval artefact scatters and undated anomalies have been found which infer occupation activity. Part of this potential resource will be affected by the Scheme. Out of a total of 28 listed buildings that occur within 500 m of the Scheme five will experience indirect impacts from the Scheme upon their setting. The Scheme would result in minor changes to the historic landscape.	Not applicable		Neutral		
	Biodiversity	No designated sites of nature conservation interest would be affected. Overall the features of nature conservation interest within the Study Area are of Lower value for nature conservation, with the exception of brown hare, which is of Medium value. In the longer term, mitigation including tree and hedgerow planting and the creation of semi-natural habitats and provision of artificial bat roosts would provide ecological benefits to the Study Area.	Not applicable		Slight beneficial		
	Water Environment	All highway runoff to be delivered to infiltration ponds via new Pollution Control Units. No discharge to groundwater within the groundwater Source Protection Zone, no discharges to watercourses as none within the Scheme area.	Not applicable		Slight beneficial		
	Physical Fitness	Improvements in the form of two at-grade crossings and an overbridge at White House Junction would improve the ease and safety of crossing the A47, and as a result would encourage increased pedestrian and cycle use.	Not known		Neutral		
	Journey Ambience	Travellers' stress would benefit due to the provision of more freely moving traffic between the existing dual carriageway sections at either end of the Scheme. Traveller care facilities would be improved with two enlarged new lay-bys and directional signage. Travellers' views by contrast would become more restricted and wider views to the surrounding countryside would be lost for much of the westbound carriageway.	Not applicable		Large beneficial		
SAFETY	Accidents	Accident assessment over 60 years and for all roads local to the Scheme and is based on Most Likely growth.	Number Of Personal Injury Accidents: 424 Casualties: Deaths 14 Serious 111 Slight 550		PVB £27.421M		
	Security	Two new lay-bys would be located to minimise security risks.	-		Neutral		
ECONOMY	Public Accounts	Scheme cost estimate on Annex 1 Form May 2007. Assessment based on the Most Likely Growth scenario over a 60 year appraisal period and are present values discounted to 2002, in 2002 prices, £Millions	Investment Costs: £21.672M Indirect Tax Revenue: -£16.942M Operating costs: £ 0.055M		PVC £4.785M		
	Transport Economic Efficiency: Business Users & Transport Providers	Assessment based on the Most Likely Growth scenario over a 60 year appraisal period and are present values discounted to 2002, in 2002 prices, £Millions.			PVB £19.701M		
	Transport Economic Efficiency: Consumers	Assessment based on the Most Likely Growth scenario over a 60 year appraisal period and are present values discounted to 2002, in 2002 prices, £Millions			PVB £14.443M		
ACCESSIBILITY	Reliability	The route assessed shows a moderate beneficial impact in terms of reliability based on an assessment of links using Most Likely growth forecasts.	Route Stress (Opening year 2013) Before: 125% After: 75%		Moderate Beneficial Impacts		
	Wider Economic Impacts	No assessment required.	-		No assessment required		
	Option Values	No substantial change to transport services created by this Scheme.	-		Neutral		
INTEGRATION	Severance	Severance would be increased due to the higher flows and speeds on the dual carriageway. Improvements in the form of an overbridge at the White House Junction would improve the ease and safety of crossing the A47 and as a result could encourage increased pedestrian and cycle use.	-		Neutral		
	Access to the Transport System	Access to the public transport system would remain unchanged for the Study Area.	-		Neutral		
INTEGRATION	Transport Interchange	No inter-modal interchanges would be provided as part of this Scheme.	-		Neutral		
	Land-Use Policy	The Scheme generally supports or has a neutral effect land use planning policies. However there will be some loss of best and most versatile agricultural land.	Not applicable		Beneficial		
	Other Government Policies	Published Scheme considered to have a Neutral effect in terms of other Government policies relating health, social inclusion, education etc.	Not applicable		Neutral		