

Environmental
Arguments
Against

M4 Junction 18a Eastern Options

Jacki Berry

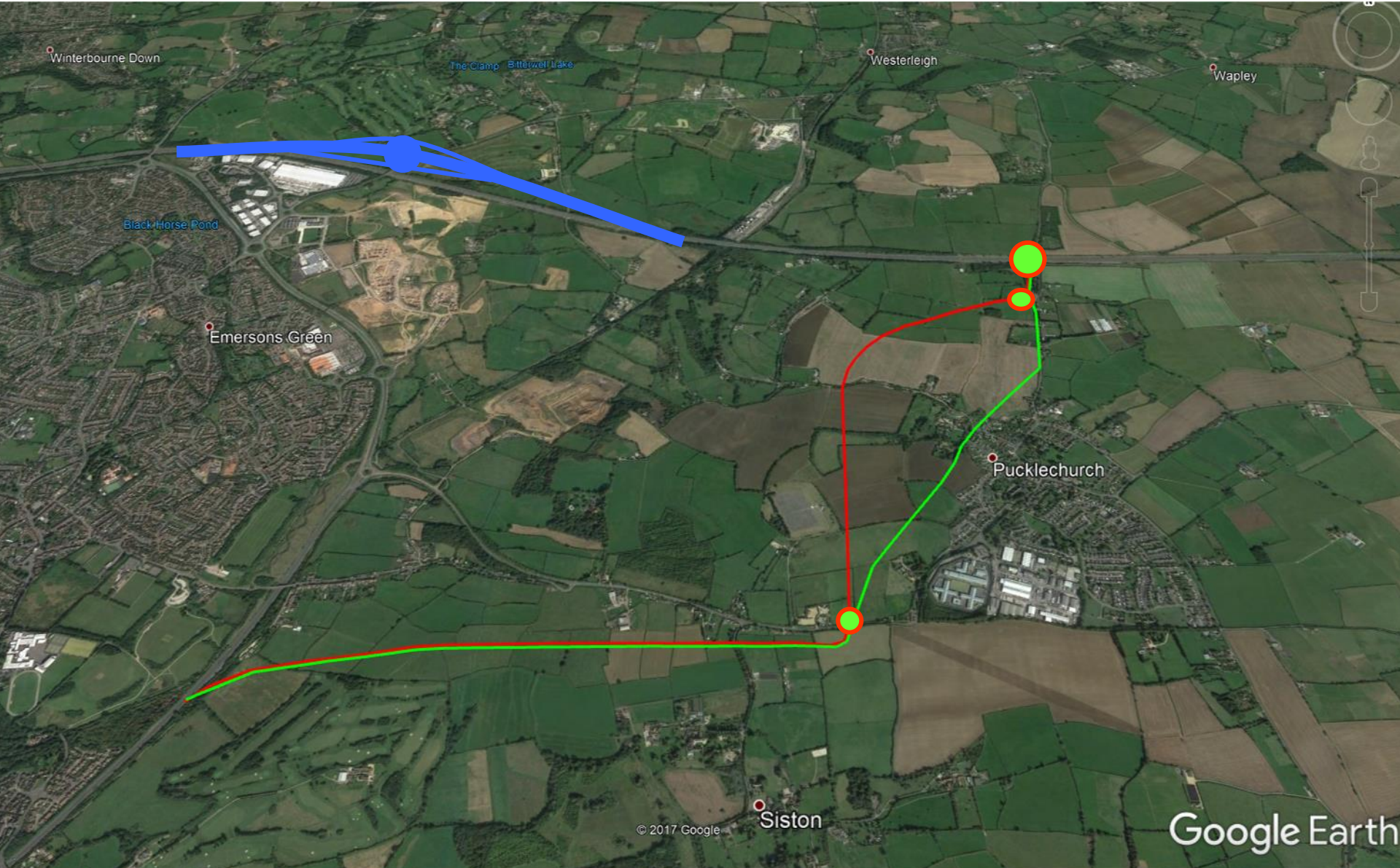
M4 J18a Link Study: Stated Objective #4

**“Minimise the impact of
traffic/infrastructure
to the environment
and, where possible,
deliver opportunities for
environmental enhancement”**

Mitigation Measures – An Unfulfilled Promise

- 80% of road-building projects had an adverse impact on the landscape
- These road-building projects damaged the environment because:
 - Right measures not identified
 - Measures identified but not implemented
 - Measures implemented but poorly
 - Measures implemented but not maintained

What choices do they offer?



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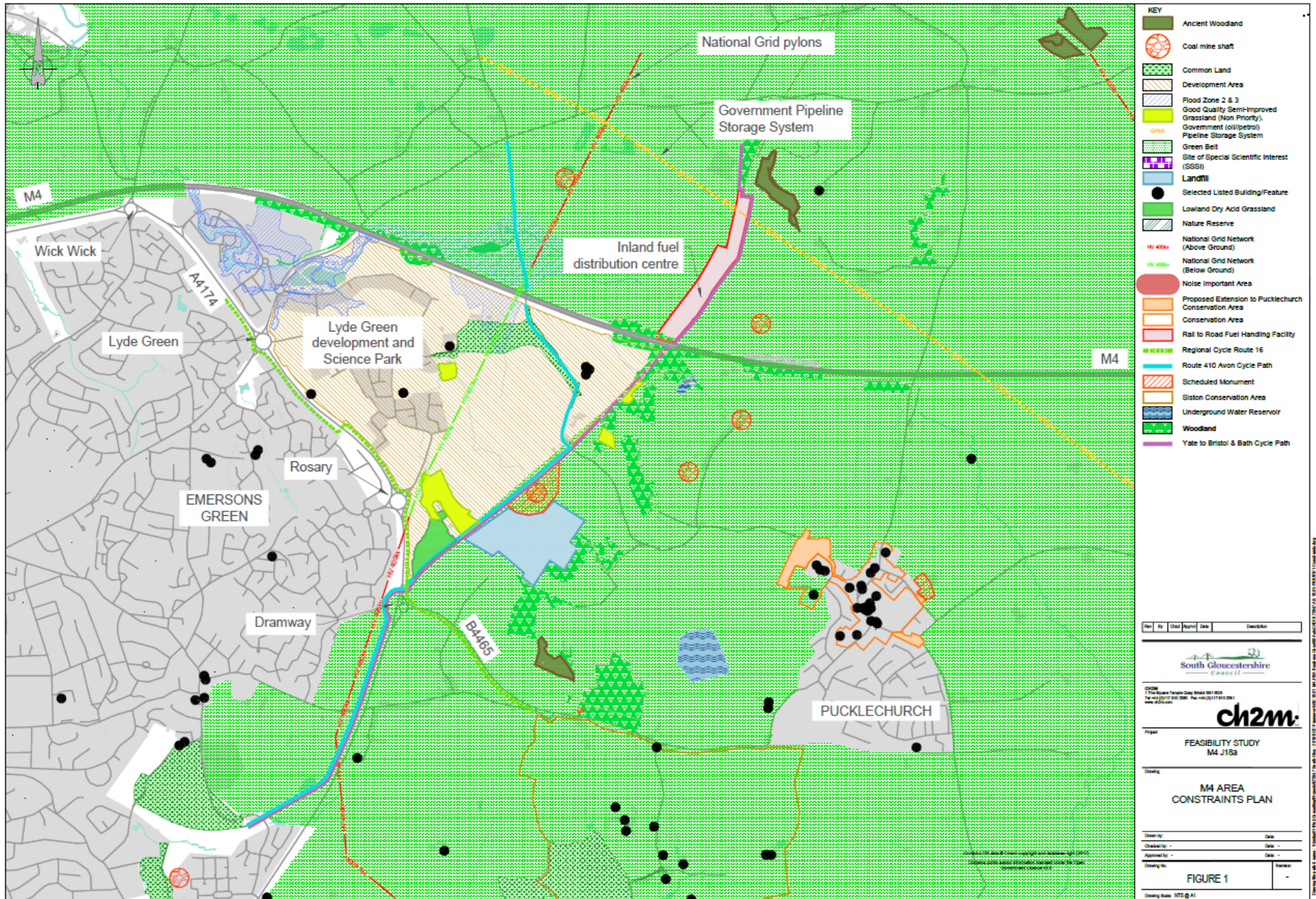


“Was road-building ever the solution?

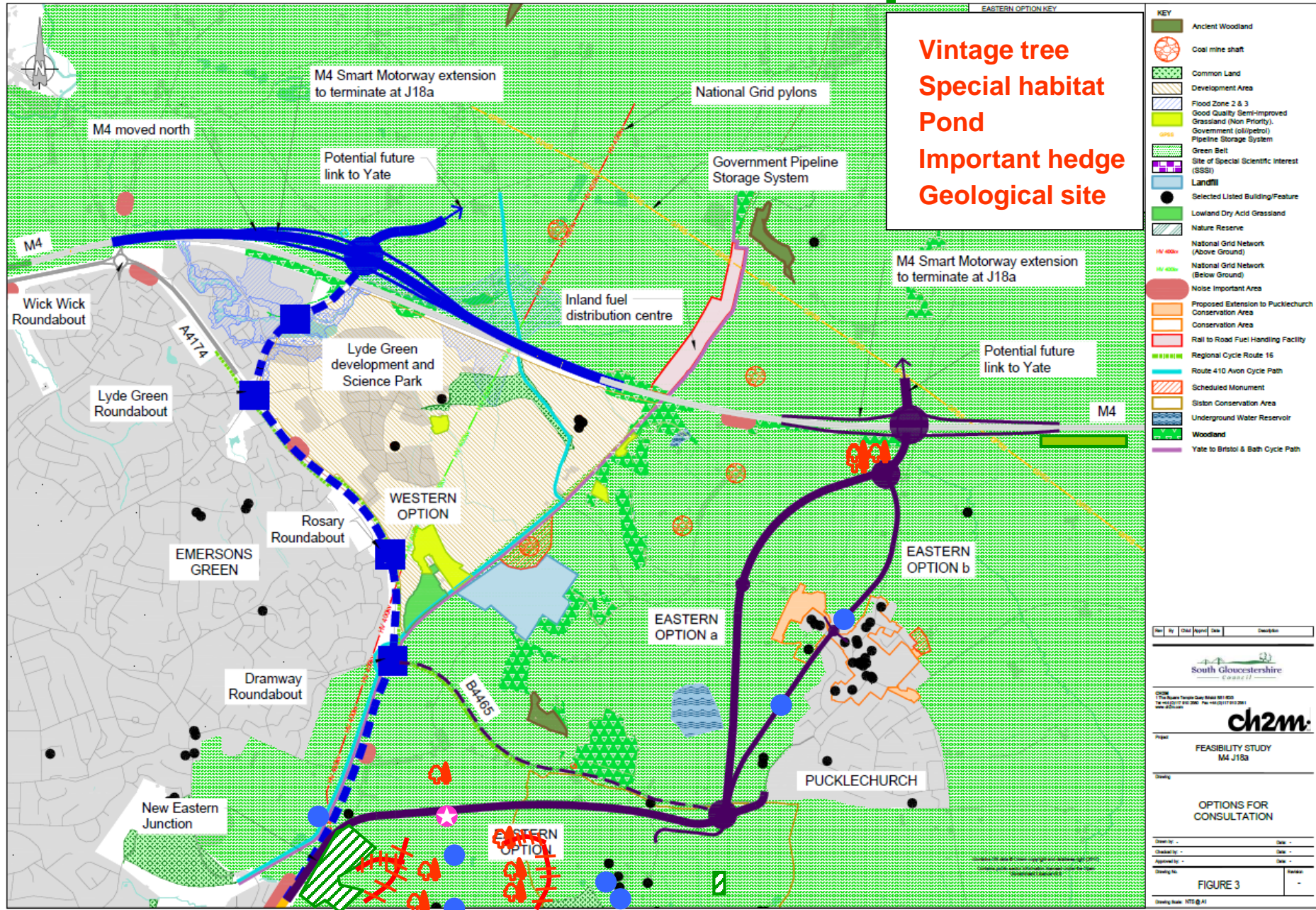
It does improve the ‘driving experience’ in the short run because the extra traffic takes time to appear, but, because of the effects on patterns of development, these effects are temporary.

**The environmental effects are,
by contrast, permanent.”**

CH2M Constraints Plan



BRERC Data for Eastern Option Routes



Species Under Threat

www.brerc.org.uk



Skylark



Linnet



Yellowhammer



House Sparrow



Hedgehog



Starling



Tree Sparrow



Peregrine



Song Thrush



Air Pollution

“The UK government continues to flout its duty to ensure adequate air quality”

– report to the UN Human Rights Council

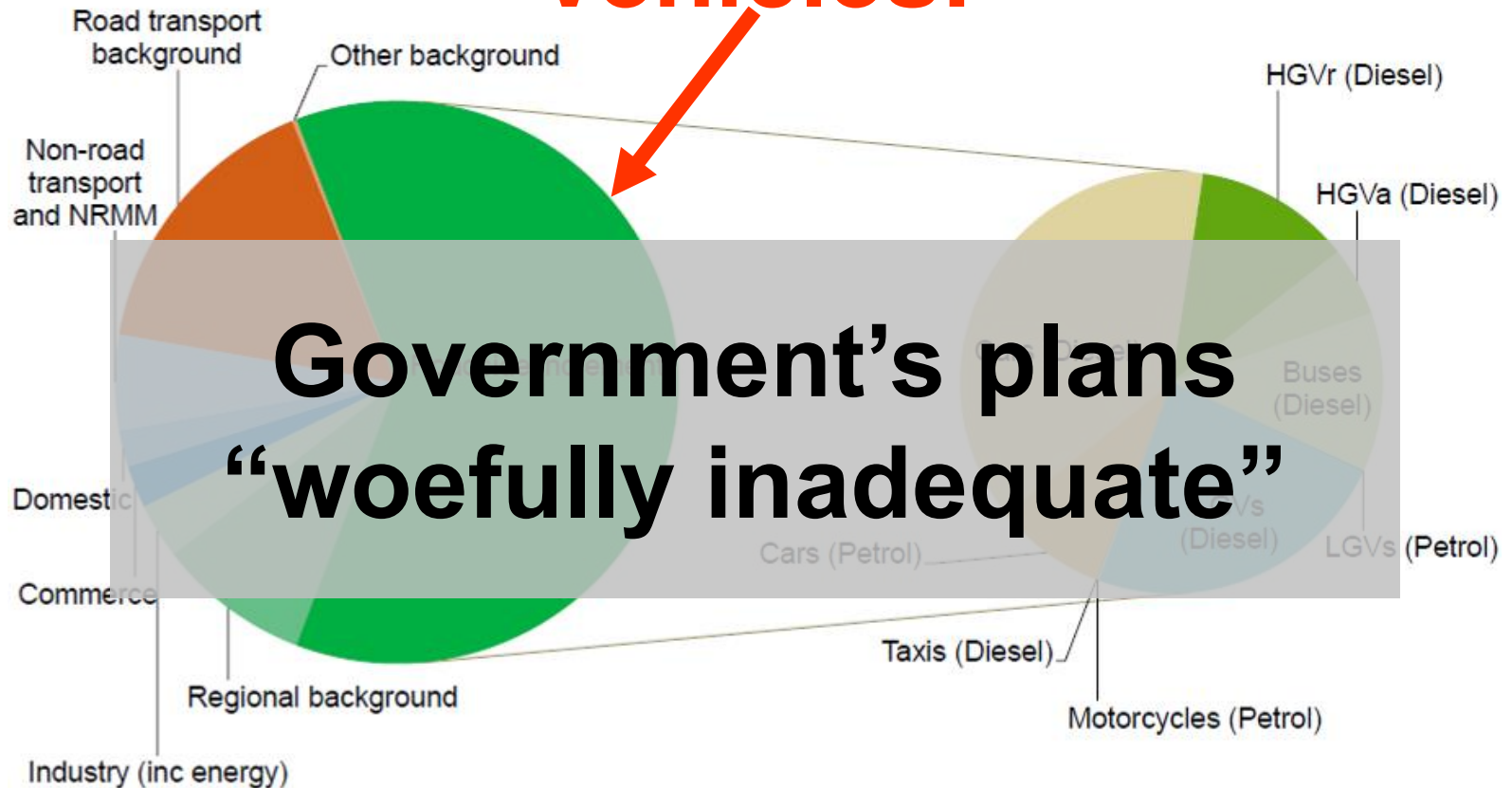


The UK's Air Pollution Crisis

- Air pollution has a serious adverse impact on public health, the natural environment, and the economy
- Report concludes that air pollution:
 - Largest environmental risk to public health in the UK
 - Affects both animals and plants and reduces biodiversity
 - Damages agricultural crops and forests
- The UK is failing to meet safe levels of nitrogen dioxide (NO²) concentrations around roads
 - ...even in South Gloucestershire**

The biggest contributor to air pollution at a roadside?

Vehicles!



What Doctors Say About Air Pollution

- 40,000 deaths per year in UK from outdoor air pollution – costing £20 billion
- Some people suffer more than others because:
 - They live in deprived areas, which often have higher levels of air pollution
 - They are more vulnerable because of their age or medical condition
 - They live, learn or work near busy roads

Zones of Compromised Air Quality

Existing Corridors



Zones of Compromised Air Quality

150m from Eastern Option a



Zones of Compromised Air Quality

150m from Eastern Option b



Summary:

Environmental Objections

- This consultation – despite its expense – included no environmental assessment for the eastern options
- This project would cause permanent environmental degradation and habitat loss
- The eastern option brings dangerous air pollution to our doorstep

~ Thank You ~

Background Material

How will this objective be met?

- Minimise impact of scheme & construction on environment & heritage
- Ensure design considers environment & provides mitigation
- Reduce volume of slow-moving traffic
- Reduce rat-running on minor roads
- Reduce stop-start traffic on M32 and A4174

How will success be measured?

- Traffic volume & speed data
- Environmental indicators in line with impacts & mitigation

Vital Statistics

	Western Option	Eastern Option a	Eastern Option b
Length of new road	2.4 km	4.62 km	4.42 km
	1.5 mi	2.9 mi	2.7 mi
Green belt area taken by new road*	23 hectares	35 hectares	31 hectares
	57 acres	87 acres	77 acres
Homes		1%	2%
Grassland		74%	71%
Cultivated		20%	21%
Woodland		5%	6%

*Source: M4 Junction 18a Link Study -- FAQs

Enq 3634
Pucklechurch
M4 18a
Location

Phase 1
Habitats

0.5km Buffer

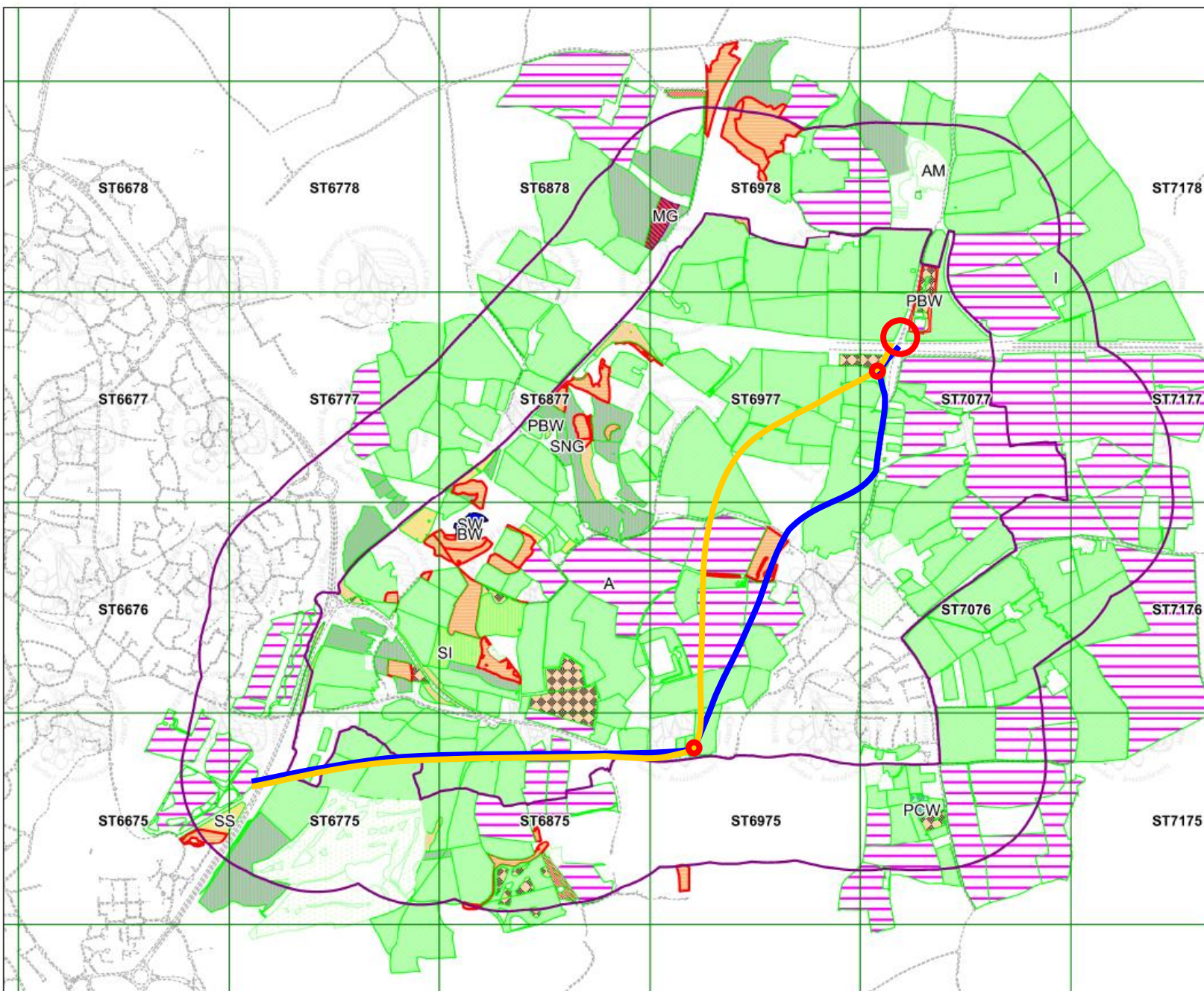


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Farmland Classification*

Grade 3 - good to moderate quality agricultural land

- **Subgrade 3a - good quality agricultural land**

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

- **Subgrade 3b - moderate quality agricultural land**

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land

- Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

* Taken from the Agricultural Land Classification of England and Wales

BRERC Data for Flora & Fauna

Red listed plant species

- Carnation sedge
- Danish scurvygrass
- Southern marsh-orchid
- Compact rush
- Heath wood-rush
- Yellow loosestrife
- Aspen
- Ragged robin
- Wych elm
- Dwarf spurge
- Spiny retharrow
- Devil's-bit scabious
- Zig-zag clover
- Columbine
- Fennel
- Pale flax
- Smooth tare
- Meadow brome
- Grass vetchling
- Kidney vetch
- Velvet bent
- Sainfoin
- Rough hawk's beard

Red listed animal species

- Hedgehog
- House sparrow
- Tree sparrow
- Skylark
- Starling
- Spotted flycatcher
- Linnet
- Yellowhammer
- Song thrush
- Peregrine

Amber listed species

- Willow warbler
- Bullfinch
- Little grebe
- Mistle thrush
- Swift
- Golden plover

Other species

- Badger
- Buzzard
- Kestrel
- Sparrowhawk
- Blackbird
- Wren
- Robin
- Green finch
- Blue tit
- Great tit
- Swallow
- House martin
- Great spotted woodpecker
- Gull
- Pied wagtail
- Grey wagtail
- Chiffchaff
- Dunnock
- Goldcrest
- Blackcap
- Grey heron
- Mallard

From examining road-building
over the past 20 years,
the researchers found clear evidence
that road schemes lead to
**permanent and significant
environmental and landscape damage**