A66 Northern Trans-Pennine Project
TR010062

3.4 Environmental Statement Appendix 10.5 Schedule of Landscape Effects

APFP Regulations 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A66 Northern Trans-Pennine Project Development Consent Order 202x

3.4 ENVIRONMENTAL STATEMENT APPENDIX 10.5 SCHEDULE OF LANDSCAPE EFFECTS

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10.5 Schedule of Landscape Effects

10.5.1 Introduction

10.5.1.1 This appendix sets out the significant and not significant landscape effects for the construction, year 1 and year 15 phases of the Project in relation to the landscape receptors identified in the baseline review.

10.5.1.2 The landscape receptors include published National Character Areas (NCA); Landscape Character Areas (LCA); Broad Landscape Types (BLT) and Broad Character Areas (BLA). The assessment also includes published character areas within National Parks (NP); Areas of Outstanding Natural Beauty (AONB), published Areas of Higher Landscape Value (AHLV) and Local Landscape Character Areas (LLCA) defined by the Applicant.

10.5.1.3 All assessment phases are based upon the drawings for determination and embedded mitigation as per the assumptions set out in the Landscape and Visual Impact Assessment. The year 15 assessment represents the residual effects.

10.5.2 Summary of construction landscape effects (winter)

10.5.2.1 The following table sets out a summary of the predicted landscape effects during the construction phase for each of the landscape receptors in relation to the individual Project sections.

Table 1: Predicted landscape effects – construction

Landscape Receptors			Landscape Receptor Sensitivity	Landscape Magnitude of impact (construction)	Significance of effect during the construction phase
M6 Junction 40 to Kemplay Bank					
National Character Area (NCA)	9	Eden Valley	High	Negligible Adverse	Slight Adverse
Landscape Character Area (LCA)	00	Urban Area	Low	Moderate Adverse	Slight Adverse
LCA	06	Intermediate Farmland	Medium	Minor Adverse	Slight Adverse
LCA	08b	Broad Valleys	Medium	Minor Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Minor Adverse	Neutral
LCA	12b	Rolling Fringe	High	Minor Adverse	Slight Adverse
LCA	12c	Limestone Foothills	Medium	Negligible Adverse	Neutral

Landscape Receptors			Landscape Receptor Sensitivity	Landscape Magnitude of impact (construction)	Significance of effect during the construction phase
		Penrith Conservation Area	High	No Change	Neutral
		Penrith New Streets Conservation Area	High	No Change	Neutral
Penrith to Temple Sowerby					
NCA	9	Eden Valley	High	Negligible Adverse	Slight Adverse
NCA	17	Orton Fells	High	Negligible Adverse	Slight Adverse
LCA	00	Urban Area	Low	Minor Adverse	Slight Adverse
LCA	06	Intermediate Farmland	Medium	Minor Adverse	Slight Adverse
LCA	08b	Broad Valleys	Medium	Minor Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Minor Adverse	Slight Adverse
LCA	11a	Foothills	High	Minor Adverse	Slight Adverse
LCA	12b	Rolling Fringe	High	Minor Adverse	Slight Adverse
		Temple Sowerby Conservation Area	High	Negligible Adverse	Slight Adverse
		Settle to Carlisle Railway Conservation Area	High	Minor Adverse	Slight Adverse
Temple Sowerby to Appleby					
NCA	9	Eden Valley	High	Negligible Adverse	Neutral
NCA	10	North Pennines	High	No Change	Neutral
NCA	17	Orton Fells	High	No Change	Neutral
LCA	06	Intermediate Farmland	Medium	Major Adverse	**Large** Adverse
LCA	08b	Broad Valleys	Medium	Major Adverse	**Large** Adverse
LCA	9	Intermediate Moorland Plateau	Medium	Minor Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Negligible Adverse	Slight Adverse

Landscape Receptors			Landscape Receptor Sensitivity	Landscape Magnitude of impact (construction)	Significance of effect during the construction phase
LCA	11a	Foothills	High	Minor Adverse	Slight Adverse
LCA	13b	Moorland High Plateau	High	Minor Adverse	Slight Adverse
		Appleby-in-Westmorland Conservation Area	High	Negligible Adverse	Slight Adverse
		Settle to Carlisle Railway Conservation Area	High	Minor Adverse	Slight Adverse
Appleby to Brough					
Area of Outstanding Natural Beauty (AONB)		North Pennines	High	Minor Adverse	Slight Adverse
National Park (NP)		Yorkshire Dales	Very High	Negligible Adverse	Slight Adverse
Area of Higher Landscape Value (AHLV)		Durham CC	High	Negligible Adverse	Neutral
NCA	9	Eden Valley	High	Negligible Adverse	Neutral
NCA	10	North Pennines	High	Minor Adverse	Slight Adverse
NCA	17	Orton Fells	High	Negligible Adverse	Neutral
LCA	08b	Broad Valleys	Medium	Moderate Adverse	**Moderate** Adverse
LCA	9	Intermediate Moorland Plateau	Medium	Minor Adverse	Slight Adverse
LCA	11a	Foothills	High	Moderate Adverse	**Large** Adverse
LCA	13a	Scarps	High	Negligible Adverse	Slight Adverse
LCA	13b	Moorland High Plateau	High	Negligible Adverse	Slight Adverse
		Church Brough Conservation Area	High	Negligible Adverse	Slight Adverse
Bowes Bypass					
NCA	10	North Pennines	High	No Change	Neutral

Landscape Receptors			Landscape Receptor Sensitivity	Landscape Magnitude of impact (construction)	Significance of effect during the construction phase
NCA	22	Pennine Dales Fringe	Medium	Negligible Adverse	Neutral
Broad Landscape Type (BLT)		Gritstone Upland Fringe	Medium	Negligible Adverse	Slight Adverse
Broad Character Area (BCA)		Bowes	Medium	Minor Adverse	Slight Adverse
BCA		Moorhouse and Gillbeck	High	No Change	Neutral
BLT		Lower Dale	High	Negligible Adverse	Slight Adverse
BCA		Lower Greta	High	Minor Adverse	Slight Adverse
BCA		Urban Area Bowes	High	Moderate Adverse	**Moderate** Adverse
BLT		Middle Dale	High	No Change	Neutral
BCA		Mid Greta Valley	High	Negligible Adverse	Slight Adverse
BLT		Moorland Plateau	Very High	No Change	Neutral
BCA		Cotherstone Moor	High	No Change	Neutral
BCA		Stainmore	Very High	No Change	Neutral
BLT		Moorland Fringe	Very High	No Change	Neutral
BCA		Deepdale Moorland Fringe	Very High	No Change	Neutral
BCA		Sleightholme	Very High	No Change	Neutral
BCA		Scargill and Barningham Fringes	Very High	No Change	Neutral
BLT		Gritstone Vale	Medium	No Change	Neutral
BCA		Boldron and Lartington	Medium	No Change	Neutral
BLT		Upper Dale	High	No Change	Neutral
BCA		Upper Greta Valley	High	No Change	Neutral
BLT		Moorland Ridges and Summits	Very High	No Change	Neutral
BCA		Barningham, Hope and Scargill Moors	Very High	No Change	Neutral

Landscape Receptors			Landscape Receptor Sensitivity	Landscape Magnitude of impact (construction)	Significance of effect during the construction phase
AONB		Moor and Fringe	High	Negligible Adverse	Slight Adverse
AONB		Moor and Scarp	High	No Change	Neutral
Cross Lanes to Rokeby					
NCA	22	Pennine Dales Fringe	Medium	Negligible Adverse	Neutral
BLT		Gritstone Upland Fringe	Medium	Negligible Adverse	Neutral
BCA		Bowes	Medium	No Change	Neutral
BCA		Moorhouse and Gillbeck	High	Negligible Adverse	Slight Adverse
BLT		Lower Dale	High	No Change	Neutral
BCA		Lower Greta	High	No Change	Neutral
BLT		Moorland Fringe	Very High	No Change	Neutral
BCA		Scargill and Barningham Fringes	Very High	No Change	Neutral
BLT		Gritstone Vale	Medium	Negligible Adverse	Slight Adverse
BCA		Boldron and Lartington	Medium	Negligible Adverse	Slight Adverse
BCA		Barningham, Brignall and Rokeby	High	Moderate Adverse	**Moderate** Adverse
BCA		Newsham and Cleatham	High	No Change	Neutral
BLT		Lowland River Terraces	Very High	No Change	Neutral
BCA		River Tees	High	No Change	Neutral
BLT		Lowland Vale	High	No Change	Neutral
BCA		Southern Tees Vale: Hutton Magna	High	No Change	Neutral
BCA		Barningham, Hope and Scargill Moors	Very High	No Change	Neutral
BCA		Urban Area Barnard Castle	High	No Change	Neutral

Landscape Receptors			Landscape Receptor Sensitivity	Landscape Magnitude of impact (construction)	Significance of effect during the construction phase
BCA		Urban Area Boldron	High	No Change	Neutral
BCA		Urban Area Boldron	High	No Change	Neutral
BCA		Urban Area Greta Bridge	High	No Change	Neutral
LLCA		Rokeby Park	High	Minor Adverse	**Moderate** Adverse
LLCT	B	Moors Fringe	High	No Change	Neutral
LLCA	B1	Newsham Moors Fringe	Medium	No Change	Neutral
Stephen Bank to Carkin Moor					
NCA 22		Pennine Dales Fringe	Medium	Negligible Adverse	Neutral
NCA 23		Tees Lowland	Low	No Change	Neutral
NCA 24		Vale of Mowbray	Low	No Change	Neutral
BLT		Lowland Vale	High	Negligible Adverse	Slight Adverse
BCA		Southern Tees Vale: Hutton Magna	High	Negligible Adverse	Slight Adverse
LLCT	B	Moors Fringe	High	Minor Adverse	Slight Adverse
LLCA	B1	Newsham Moors Fringe	Medium	No Change	Neutral
LLCA	B2	Dalton and Gayles Moors Fringe	High	No Change	Neutral
LLCA	B3	East and West Layton Fringe	Medium	Moderate Adverse	**Moderate** Adverse
LLCA	B4	Melsonby Moors Fringe	High	No Change	Neutral
LLCA	B5	Whaston Moors Fringe	High	No Change	Neutral
LLCT	D	Narrow Valley	High	Negligible Adverse	Slight Adverse
LLCA	D1	Ravensworth Narrow Valley	High	Negligible Adverse	Slight Adverse
LLCA	D2	Gilling Narrow Valley	High	No Change	Neutral
LLCA	D3	Skeeby Narrow Valley	High	No Change	Neutral

Landscape Receptors			Landscape Receptor Sensitivity	Landscape Magnitude of impact (construction)	Significance of effect during the construction phase
LLCA		West Layton	Medium	Moderate Adverse	**Moderate** Adverse
LLCA		East Layton	High	No Change	Neutral
Scotch Corner					
Landscape effects scoped out.					

10.5.3 Summary of operation year 1 effects (winter)

10.5.3.1 The following table sets out a summary of the predicted landscape effects during the operation year 1 phase for each of the landscape receptors in relation to the individual Project sections, including for the embedded mitigation.

Table 2: Predicted Landscape Effects – Year 1

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 1)	Significance of effect during operation (year 1) phase
M6 Junction to Kemplay Bank					
NCA	9	Eden Valley	High	Negligible Adverse	Slight Adverse
LCA	00	Urban Area	Low	Minor Adverse	Slight Adverse
LCA	06	Intermediate Farmland	Medium	Minor Adverse	Slight Adverse
LCA	08b	Broad Valleys	Medium	Minor Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Minor Adverse	Slight Adverse
LCA	12b	Rolling Fringe	High	Minor Adverse	Slight Adverse
LCA	12c	Limestone Foothills	Medium	No Change	Neutral
		Penrith Conservation Area	High	No Change	Neutral
		Penrith New Streets Conservation Area	High	No Change	Neutral

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 1)	Significance of effect during operation (year 1) phase
Penrith to Temple Sowerby					
NCA	9	Eden Valley	High	Negligible Adverse	Slight Adverse
NCA	17	Orton Fells	High	Negligible Adverse	Slight Adverse
LCA	00	Urban Area	Low	Moderate Adverse	Slight Adverse
LCA	06	Intermediate Farmland	Medium	Minor Adverse	Slight Adverse
LCA	08b	Broad Valleys	Medium	Minor Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Minor Adverse	Slight Adverse
LCA	11a	Foothills	High	Minor Adverse	Slight Adverse
LCA	12b	Rolling Fringe	High	Negligible Adverse	Neutral
		Temple Sowerby Conservation Area	High	Negligible Adverse	Slight Adverse
		Settle to Carlisle Railway Conservation Area	High	Minor Adverse	Slight Adverse
Temple Sowerby to Appleby					
NCA	9	Eden Valley	High	Negligible Adverse	Neutral
NCA	10	North Pennines	High	Negligible Adverse	Neutral
NCA	17	Orton Fells	High	Negligible Adverse	Neutral
LCA	06	Intermediate Farmland	Medium	Major Adverse	**Large** Adverse
LCA	08b	Broad Valleys	Medium	Major Adverse	**Large** Adverse
LCA	9	Intermediate Moorland Plateau	Medium	Negligible Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Negligible Adverse	Slight Adverse
LCA	11a	Foothills	High	Minor Adverse	Slight Adverse
LCA	13b	Moorland High Plateau	High	Minor Adverse	Slight Adverse

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 1)	Significance of effect during operation (year 1) phase
		Appleby-in-Westmorland Conservation Area	High	Negligible Adverse	Slight Adverse
		Settle to Carlisle Railway Conservation Area	High	Minor Adverse	Slight Adverse
Appleby to Brough					
AONB		North Pennines	High	Negligible Adverse	Neutral
NP		Yorkshire Dales	Very High	No Change Adverse	Neutral
AHLV		Durham CC	High	Negligible Adverse	Neutral
NCA	9	Eden Valley	High	Negligible Adverse	Neutral
NCA	10	North Pennines	High	Minor Adverse	Slight Adverse
NCA	17	Orton Fells	High	Negligible Adverse	Neutral
LCA	08b	Broad Valleys	Medium	Moderate Adverse	**Moderate** Adverse
LCA	9	Intermediate Moorland Plateau	Medium	Negligible Adverse	Slight Adverse
LCA	11a	Foothills	High	Moderate Adverse	**Moderate** Adverse
LCA	13a	Scarps	High	Negligible Adverse	Neutral
LCA	13b	Moorland High Plateau	High	Negligible Adverse	Neutral
		Church Brough Conservation Area	High	Negligible Adverse	Neutral
Bowes Bypass					
NCA	10	North Pennines	High	No Change	Neutral
NCA	22	Pennine Dales Fringe	Medium	Negligible Adverse	Neutral
BLT		Gritstone Upland Fringe	Medium	Negligible Adverse	Slight Adverse
BCA		Bowes	Medium	Minor Adverse	Slight Adverse
BCA		Moorhouse and Gillbeck	High	No Change	Neutral

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 1)	Significance of effect during operation (year 1) phase
BLT		Lower Dale	High	Negligible Adverse	Slight Adverse
BCA		Lower Greta	High	Minor Adverse	Slight Adverse
BCA		Urban Area Bowes	High	Minor Adverse	Slight Adverse
BLT		Middle Dale	High	No Change	Neutral
BCA		Mid Greta Valley	High	Negligible Adverse	Slight Adverse
BLT		Moorland Plateau	Very High	No Change	Neutral
BCA		Cotherstone Moor	High	No Change	Neutral
BCA		Stainmore	Very High	No Change	Neutral
BLT		Moorland Fringe	Very High	No Change	Neutral
BCA		Deepdale Moorland Fringe	Very High	No Change	Neutral
BCA		Sleightholme	Very High	No Change	Neutral
BCA		Scargill and Barningham Fringes	Very High	No Change	Neutral
BLT		Gritstone Vale	Medium	No Change	Neutral
BCA		Boldron and Lartington	Medium	No Change	Neutral
BLT		Upper Dale	High	No Change	Neutral
BCA		Upper Greta Valley	High	No Change	Neutral
BLT		Moorland Ridges and Summits	Very High	No Change	Neutral
BCA		Barningham, Hope and Scargill Moors	Very High	No Change	Neutral
AONB		Moor and Fringe	High	Negligible Adverse	Slight Adverse
AONB		Moor and Scarp	High	No Change	Neutral
Cross Lanes to Rokeby					
NCA	22	Pennine Dales Fringe	Medium	Negligible Adverse	Neutral

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 1)	Significance of effect during operation (year 1) phase
BLT		Gritstone Upland Fringe	Medium	No Change	Neutral
BCA		Bowes	Medium	No Change	Neutral
BCA		Moorhouse and Gillbeck	High	Negligible Adverse	Slight Adverse
BLT		Lower Dale	High	No Change	Neutral
BCA		Lower Greta	High	No Change	Neutral
BLT		Moorland Fringe	Very High	No Change	Neutral
BCA		Scargill and Barningham Fringes	Very High	No Change	Neutral
BLT		Gritstone Vale	Medium	Negligible Adverse	Slight Adverse
BCA		Boldron and Lartington	Medium	Negligible Adverse	Neutral
BCA		Barningham, Brignall and Rokeby	High	Moderate Adverse	**Moderate** Adverse
BCA		Newsham and Cleatham	High	No Change	Neutral
BLT		Lowland River Terraces	Very High	No Change	Neutral
BCA		River Tees	High	No Change	Neutral
BLT		Lowland Vale	High	No Change	Neutral
BCA		Southern Tees Vale: Hutton Magna	High	No Change	Neutral
BCA		Barningham, Hope and Scargill Moors	Very High	No Change	Neutral
BCA		Urban Area Barnard Castle	High	No Change	Neutral
BCA		Urban Area Boldron	High	No Change	Neutral
BCA		Urban Area Boldron	High	No Change	Neutral
BCA		Urban Area Greta Bridge	High	No Change	Neutral
		Rokeby Park	High	Minor Adverse	Slight Adverse

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 1)	Significance of effect during operation (year 1) phase
LLCT	B	Moors Fringe	High	No Change	Neutral
LLCA	B1	Newsham Moors Fringe	Medium	No Change	Neutral
Stephen Bank to Carkin Moor					
NCA 22		Pennine Dales Fringe	Medium	Negligible Adverse	Neutral
NCA 23		Tees Lowland	Low	No Change	Neutral
NCA 24		Vale of Mowbray	Low	No Change	Neutral
BLT		Lowland Vale	High	Negligible Adverse	Slight Adverse
BCA		Southern Tees Vale: Hutton Magna	High	Negligible Adverse	Slight Adverse
LLCT	B	Moors Fringe	High	Minor Adverse	Slight Adverse
LLCA	B1	Newsham Moors Fringe	Medium	No Change	Neutral
LLCA	B2	Dalton and Gayles Moors Fringe	High	No Change	Neutral
LLCA	B3	East and West Layton Fringe	Medium	Moderate Adverse	**Moderate** Adverse
LLCA	B4	Melsonby Moors Fringe	High	No Change	Neutral
LLCA	B5	Whaston Moors Fringe	High	No Change	Neutral
LLCT	D	Narrow Valley	High	No Change	Neutral
LLCA	D1	Ravensworth Narrow Valley	High	No Change	Neutral
LLCA	D2	Gilling Narrow Valley	High	No Change	Neutral
LLCA	D3	Skeeby Narrow Valley	High	No Change	Neutral
		West Layton	Medium	Minor Adverse	**Moderate** Adverse
		East Layton	High	No Change	Neutral
Scotch Corner					
Landscape effects scoped out.					

10.5.4 Summary of operation year 15 residual effects (summer)

10.5.4.1 The following table sets out a summary of the predicted landscape effects during the operation year 1 phase for each of the landscape receptors in relation to the individual Project sections, including for the embedded mitigation.

Table 3: Predicted residual landscape effects – year 15 (summer)

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 15)	Significance of effect during operation year 15 (residual)
M6 Junction to Kemplay Bank					
NCA	9	Eden Valley	High	Negligible Adverse	Neutral
LCA	00	Urban Area	Medium	Minor Adverse	Neutral
LCA	06	Intermediate Farmland	Medium	Negligible Adverse	Slight Adverse
LCA	08b	Broad Valleys	Medium	Negligible Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Negligible Adverse	Slight Adverse
LCA	12b	Rolling Fringe	High	Negligible Adverse	Neutral
LCA	12c	Limestone Foothills	Medium	No Change	Neutral
		Penrith Conservation Area	High	No Change	Neutral
		Penrith New Streets Conservation Area	High	No Change	Neutral
Penrith to Temple Sowerby					
NCA	9	Eden Valley	High	Negligible Adverse	Neutral
NCA	17	Orton Fells	High	Negligible Adverse	Neutral
LCA	00	Urban Area	Low	No Change	Neutral
LCA	06	Intermediate Farmland	Medium	Negligible Adverse	Slight Adverse
LCA	08b	Broad Valleys	Medium	Negligible Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Negligible Adverse	Slight Adverse
LCA	11a	Foothills	High	Minor Adverse	Slight Adverse

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 15)	Significance of effect during operation year 15 (residual)
LCA	12b	Rolling Fringe	High	Negligible Adverse	Neutral
		Temple Sowerby Conservation Area	High	No Change	Neutral
		Settle to Carlisle Railway Conservation Area	High	Minor Adverse	Slight Adverse
Temple Sowerby to Appleby					
NCA	9	Eden Valley	High	Negligible Adverse	Neutral
NCA	10	North Pennines	High	Negligible Adverse	Neutral
NCA	17	Orton Fells	High	Negligible Adverse	Neutral
LCA	06	Intermediate Farmland	Medium	Minor Adverse	**Moderate** Adverse
LCA	08b	Broad Valleys	Medium	Minor Adverse	**Moderate** Adverse
LCA	9	Intermediate Moorland Plateau	Medium	Negligible Adverse	Slight Adverse
LCA	10	Sandstone Ridge	Medium	Negligible Adverse	Slight Adverse
LCA	11a	Foothills	High	Negligible Adverse	Slight Adverse
LCA	13b	Moorland High Plateau	High	Negligible Adverse	Slight Adverse
		Appleby-in-Westmorland Conservation Area	High	Negligible Adverse	Slight Adverse
		Settle to Carlisle Railway Conservation Area	High	Negligible Adverse	Slight Adverse
Appleby to Brough					
AONB		North Pennines	High	Negligible Adverse	Neutral
NP		Yorkshire Dales	Very High	No Change	Neutral
AHLV		Durham CC	High	Negligible Adverse	Neutral
NCA	9	Eden Valley	High	Negligible Adverse	Neutral

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 15)	Significance of effect during operation year 15 (residual)
NCA	10	North Pennines	High	Minor Adverse	Slight Adverse
NCA	17	Orton Fells	High	No Change	Neutral
LCA	08b	Broad Valleys	Medium	Minor Adverse	Slight Adverse
LCA	9	Intermediate Moorland Plateau	Medium	Negligible Adverse	Neutral
LCA	11a	Foothills	High	Minor Adverse	Slight Adverse
LCA	13a	Scarps	High	Negligible Adverse	Neutral
LCA	13b	Moorland High Plateau	High	Negligible Adverse	Neutral
		Church Brough Conservation Area	High	Negligible Adverse	Neutral
Bowes Bypass					
NCA	10	North Pennines	High	No Change	Neutral
NCA	22	Pennine Dales Fringe	Medium	No Change	Neutral
BLT		Gritstone Upland Fringe	Medium	Negligible Adverse	Neutral
BCA		Bowes	Medium	Negligible Adverse	Neutral
BCA		Moorhouse and Gillbeck	High	No Change	Neutral
BLT		Lower Dale	High	No Change	Neutral
BCA		Lower Greta	High	Negligible Adverse	Slight Adverse
BCA		Urban Area Bowes	High	Negligible Adverse	Slight Adverse
BLT		Middle Dale	High	No Change	Neutral
BCA		Mid Greta Valley	High	No Change	Neutral
BLT		Moorland Plateau	Very High	No Change	Neutral
BCA		Cotherstone Moor	High	No Change	Neutral
BCA		Stainmore	Very High	No Change	Neutral

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 15)	Significance of effect during operation year 15 (residual)
BLT		Moorland Fringe	Very High	No Change	Neutral
BCA		Deepdale Moorland Fringe	Very High	No Change	Neutral
BCA		Sleightholme	Very High	No Change	Neutral
BCA		Scargill and Barningham Fringes	Very High	No Change	Neutral
BLT		Gritstone Vale	Medium	No Change	Neutral
BCA		Boldron and Lartington	Medium	No Change	Neutral
BLT		Upper Dale	High	No Change	Neutral
BCA		Upper Greta Valley	High	No Change	Neutral
BLT		Moorland Ridges and Summits	Very High	No Change	Neutral
BCA		Barningham, Hope and Scargill Moors	Very High	No Change	Neutral
AONB		Moor and Fringe	High	No Change	Neutral
AONB		Moor and Scarp	High	No Change	Neutral
Cross Lanes to Rokeby					
NCA	22	Pennine Dales Fringe	Medium	No Change	Neutral
BLT		Gritstone Upland Fringe	Medium	No Change	Neutral
BCA		Bowes	Medium	No Change	Neutral
BCA		Moorhouse and Gillbeck	High	No Change	Neutral
BLT		Lower Dale	High	No Change	Neutral
BCA		Lower Greta	High	No Change	Neutral
BLT		Moorland Fringe	Very High	No Change	Neutral
BCA		Scargill and Barningham Fringes	Very High	No Change	Neutral
BLT		Gritstone Vale	Medium	No Change	Neutral

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 15)	Significance of effect during operation year 15 (residual)
BCA		Boldron and Lartington	Medium	No Change	Neutral
BCA		Barningham, Brignall and Rokeby	High	Negligible Adverse	Slight Adverse
BCA		Newsham and Cleatham	High	No Change	Neutral
BLT		Lowland River Terraces	Very High	No Change	Neutral
BCA		River Tees	High	No Change	Neutral
BLT		Lowland Vale	High	No Change	Neutral
BCA		Southern Tees Vale: Hutton Magna	High	No Change	Neutral
BCA		Barningham, Hope and Scargill Moors	Very High	No Change	Neutral
BCA		Urban Area Barnard Castle	High	No Change	Neutral
BCA		Urban Area Boldron	High	No Change	Neutral
BCA		Urban Area Boldron	High	No Change	Neutral
BCA		Urban Area Greta Bridge	High	No Change	Neutral
		Rokeby Park	High	Negligible Adverse	Slight Adverse
LLCT	B	Moors Fringe	High	No Change	Neutral
LLCA	B1	Newsham Moors Fringe	Medium	No Change	Neutral
Stephen Bank to Carkin Moor					
NCA 22		Pennine Dales Fringe	Medium	No Change	Neutral
NCA 23		Tees Lowland	Low	No Change	Neutral
NCA 24		Vale of Mowbray	Low	No Change	Neutral
BLT		Lowland Vale	High	No Change	Neutral
BCA		Southern Tees Vale: Hutton Magna	High	No Change	Neutral

Landscape Receptor			Landscape Receptor Sensitivity	Landscape magnitude of impact (year 15)	Significance of effect during operation year 15 (residual)
LLCT	B	Moors Fringe	High	Negligible Adverse	Slight Adverse
LLCA	B1	Newsham Moors Fringe	Medium	No Change	Neutral
LLCA	B2	Dalton and Gayles Moors Fringe	High	No Change	Neutral
LLCA	B3	East and West Layton Fringe	Medium	Minor Adverse	Slight Adverse
LLCA	B4	Melsonby Moors Fringe	High	No Change	Neutral
LLCA	B5	Whaston Moors Fringe	High	No Change	Neutral
LLCT	D	Narrow Valley	High	No Change	Neutral
LLCA	D1	Ravensworth Narrow Valley	High	No Change	Neutral
LLCA	D2	Gilling Narrow Valley	High	No Change	Neutral
LLCA	D3	Skeeby Narrow Valley	High	No Change	Neutral
LLCA		West Layton	Medium	Minor Adverse	Slight Adverse
LLCA		East Layton	High	No Change	Neutral
Scotch Corner					
Landscape effects scoped out.					

10.5.5 Schedule of landscape effects

10.5.5.1 The following sections sets out the predicted effects to the landscape receptors for the construction, year 1 and year 15 phases of the Project.

Table 4: National Character Area 8 Cumbria High Fells

National Character Area 8 Cumbria High Fells	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Relevant Order Limits within the area: None
Relevant aspects of the published description: NCA 8 is located in the western part of the study area for M6 Junction 40 to Kemplay. The published description of the NCA includes: “The Cumbria High Fells covers the north and central Lake District and is largely within the Lake District National Park. It is a dramatic upland landscape, carved by past glaciations, with rugged peaks, ridges and open fells, separated by U shaped valleys with a radiating pattern of lakes and rivers."	
Relevant stated key characteristics: • "Spectacular mountain scenery of open fells and craggy peaks separated by U-shaped valleys with a radiating pattern of rivers and lakes. • Varied landform arising from the smooth sided fells of Ordovician Skiddaw Group rocks in the north, the more rugged, sharp peaks of the Borrowdale Volcanic Group, accompanied by granite intrusions in the central area. Complex geology includes Eycott Volcanic Group low-lying scarps in the north, Silurian slates and fissile mudstones to the south east and a fringe of Carboniferous limestone foothills. Extensive mineralisation has supported a mining heritage dating from the medieval period. • The most biologically diverse suite of upland habitats in England with internationally important fell habitats, rivers, lakes unimproved grasslands, and native woodland. The extensive mosaic of fell habitats includes montane and upland heath, blanket bog, scree and ledge communities, springs, flushes, tarns, valley mires, juniper scrub, remnant woodland and Arctic Alpine plant communities. • Valleys with rivers, lakes and surrounding wetlands, with a scattering of hay meadows, purple moor-grass and other species rich grasslands, in a matrix of improved pastures. • Native woodland, often extensive, on valley sides and bottoms, with some large conifer plantations, and scattered trees and scrub on the fells, with a few isolated woods, including in gills. Extensive woodlands in Borrowdale, Ullswater and other valleys, supporting the best oceanic western oak woods in England • Field pattern of pastoral hill-farming with small valley in-bye fields, rougher intakes/allotments on valley sides and common grazing on the open fells; separated by a network of dry stone walls, with some hedges and trees, including pollards. • Cultural heritage linked to the picturesque and the Romantic Movement and significant in the foundation of the conservation movement, with houses, burial places and specific features that inspired ideas, art and poetry. • Local stone-built farmsteads, hamlets and villages along the valleys, with the small markets towns of Keswick and Ambleside, which expanded from Victorian times with the growth of tourism. • Tourism and recreation with large numbers of visitors attracted by the natural beauty of the area, its wildlife, cultural heritage and access opportunities for walking, climbing, water-based and other activities.	

National Character Area 8 Cumbria High Fells	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Relevant Order Limits within the area: None	
• Large areas of relative tranquillity."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Due to most of the NCA being designated as National Park, the value is assessed as very high.	Whilst the NCA contains some settlements and road infrastructure, this landscape has only limited ability to accommodate change as a result of dualling a major road. Therefore, the susceptibility is assessed as very high.	The combination of the very high value and very high susceptibility results in a very high sensitivity.
Construction phase (winter) assessment M6 Junction 40 to Kemplay Bank		
Magnitude of Impact The construction activity will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the construction phase will be in the context of Penrith and the existing A66 and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the very high sensitivity will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment M6 Junction 40 to Kemplay Bank		
Magnitude of Impact The scheme will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the dualling will be in the context of the existing A66 and Penrith and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the very high sensitivity will result in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment M6 Junction 40 to Kemplay Bank		
The assessment will reflect that at year 1.		

Table 5: National Character Area 9 Eden Valley

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough
Relevant aspects of the published description: All schemes west of the Pennines lie within NCA 9. The published description of the NCA includes: "The Eden Valley National Character Area (NCA) in north-east Cumbria encompasses the broad valleys of the River Eden and its tributaries. The river contracts between wide flood plain areas to the steep, wooded Eden Gorge. It contrasts markedly with the scarp face of the North Pennines to the east, the Orton Fells to the south and the rugged upland fells of the Lake District to the west, and the NCA includes a small part of the North Pennines Area of Outstanding Natural Beauty. The undulating landform is largely the result of material deposited at the end of the last ice age, moulded into the characteristic mounds of drumlins and eskers, and giving rise to fertile soils. This gives the valley its characteristic intimate blend of undulating mixed farmland with significant areas of woodland, farm copses, mature hedgerow trees, stone walls and historic villages. This sense of shelter and containment is enhanced by the juxtaposition with its wilder' upland neighbours. The NCA is characterised by high levels of tranquillity. The River Eden is one of England's finest large river systems on limestone and sandstone. This fast-flowing river is of European importance for its habitats and wildlife, and flows northwards through the NCA, forming an important aquatic habitat corridor connecting to the Solway Firth. Strategically, this is also an important corridor: the valley hosts major transport routes between north and south, and historically was much fought-over borderland between England and Scotland. The remains of defensive structures from these turbulent medieval times are still evident in today's landscape."	
Relevant stated key characteristics are: • "An undulating valley landscape of sandstones, mudstones and shales covered by a thick layer of glacial till, bordered by and contrasting sharply with surrounding uplands: the prominent Pennine escarpment rises to the east; to the west are the fells of the Lake District and to the south, the Orton Fells. • Distinctive features of glacial deposition including eskers, deltas and meltwater channels, drumlins and kettle holes, the last now forming a series of small basin mires of high ecological importance. • The fast-flowing River Eden cuts south–north, joined by tributary rivers and gills; north of Penrith, separating the Eden from its tributary the Petteril, lies a range of prominent red sandstone hills, through which the Eden has in places eroded distinctive gorges. • Managed estate and farm woodlands characterise the valley floor, with numerous shelterbelts, copses and mature hedgerow trees giving a well-wooded character.	

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough

- Rich, fertile soils in the valley support mixed agriculture including arable cultivation. The poorer soils of the sandstone ridge and the foothills of the Pennine escarpment give rise to rough grassland, heath and plantations.
- Medium to large rectilinear fields are enclosed by mature hedgerows and hedgerow trees, walls, or, more commonly to the east, wire fences and thin and relict hedges. Limestone walls are a feature of the Pennines and Orton fringes, while red sandstone walls are a feature of the Penrith Sandstone Ridge.
- The River Eden and its tributaries support internationally important aquatic habitats and species communities, and important fisheries. Semi-natural native woodlands, including oak/ash/birch hangers and wet woodland, line the river valleys forming good woodland habitat networks. Coastal and flood plain grazing marsh are associated with the river valleys – wetland habitats supporting important numbers of breeding and wintering waders and wildfowl.
- The higher ground supports patches of heath forming the core of a heathland network, and small but important areas of lowland calcareous grassland, upland hay meadow and lowland meadow, including important species-rich roadside verges on the Orton fringes from Penrith to Kirkby Stephen.
- Visible archaeological or historic legacy: prehistoric stone circles, Roman forts, medieval castles and parkland are important features of the historic environment.
- Stone buildings reflect the underlying geology across the NCA: red sandstone is the predominant building material, for example in the area around Penrith, a unifying feature across much of the NCA, used in buildings, walls and gateposts; limestone is used in the east on the Pennine foothills and in Appleby-in-Westmorland near to the Orton Fells.
- Nucleated and linear stone-built villages are often planned around greens. Outside these villages, settlement is characterised by scattered hamlets and farms. The towns, Penrith and Appleby-in-Westmorland are the area's traditional market centres.
- Intricate network of narrow minor roads, with tall hedgerows and walls.
- Important transport corridor in predominantly upland region: Settle–Carlisle railway line, West Coast Main Line railway, and the M6 motorway and A66 trunk road."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
A small part of the NCA lies within the North Pennines AONB. Landscape features across the NCA include network of stone walls and hedgerows, traditional settlements, visible archaeological	As the NCA already contains settlements and road infrastructure, in particular the A66 it is expected that this landscape can accommodated some change. Therefore, the susceptibility to change as a result of road development is judged to be medium.	The combination of the high value and medium susceptibility results in a high sensitivity.

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough	
and historic features as well as distinctive glacial features. However, the area is also influenced by the A66 trunk road. The value is therefore assessed as high.		
Construction phase (winter) assessment schemes 01 and 02		
Magnitude of Impact All of the construction activity for schemes 01, 02, 03, 0405 and 06 will be located within NCA 9, covering the entire southern part of the NCA. The construction activity for schemes 01 and 02 will result in scheme wide changes to the road corridor environment due to the excavation adjacent to the existing dualled section of the A66 south of Penrith, these changes would include the removal of existing vegetation from this part of the existing A66. There would be the presence of construction activity and machinery to facilitate the excavation of the underpass beneath Kemplay Bank Roundabout and attenuation basins adjacent to the main road widening south of Penrith. There will be regrading of land adjacent to the A66 south of Penrith to form the embankments, the attenuation basin and the slip road between the A66 and the northern fringe of Eamont Bridge. This activity would also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation. At the western end of the Order Limits, the construction activity would include heavy machinery to facilitate the formation of widened embankments at Junction 40 of the M6/A66. Additionally, changes to surface landform and activity to enhance the existing access roads and junctions at this westerly end of the A66. There would also be changes to surface landform and localised vegetation removal to construct the attenuation basins and enhance the access road between the M6/A66 Junction 40 and the A592 at the Skirsgill Interchange western access to Penrith. At this western edge of the DCO boundary, the construction activity will result in localised excavation and changes to surface landform to construct the attenuation basin across sloping land to the south of Penrith. There will also be construction compounds, south of the A66, which will introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles, hoardings and temporary lighting. The geographic extent and physical change to the landscape features would be very small in relation to the wider extent of the NCA9. In addition, the construction machinery and activity would be located in a part of the NCA which is already noted by the published study as being of		

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough

lower tranquillity and where the A66 is a 'major road'. As only a very small alteration to the existing NCA is expected, the magnitude of impact is therefore assessed as negligible adverse.

Significance of Effect

Therefore, in relation to the high sensitivity of the NCA, the negligible adverse magnitude of impact during construction is assessed as resulting in a slight adverse (not significant) effect. This is because the overall landscape character and sense of place across the NCA will be maintained due to the very localised extent of the construction activity.

Operation year 1 phase (winter) assessment schemes 01 and 02

Magnitude of Impact

At year 1 of operation, the scheme would reflect the existing alignment of the A66, remaining to the south of Penrith and with an interchange with the M6/J40 characterised by the widened slip road A592 accessing the existing A66.

There would also be changes to the junction and road alignments associated with the A6 north and south of the Kemplay underpass.

The scheme would result in a reduction of the existing massing via the construction of the underpass between the existing A66 and the A6.

There would be a reduction in the density of vegetation adjacent to the road corridor from the removal of the existing vegetation. This would locally increase the perception of the road and vehicles, specifically in relation to the emergency services area south of the road.

The scheme would introduce substantial new planting in accordance with the stated landscape guidelines of increasing the extent of small woodlands; although this would not have established at year 1 and would not be in leaf.

The scheme would represent a very small and localised addition of road infrastructure to a part of the NCA already consisting of the A66. The magnitude of impact at year 1 is assessed as negligible.

Significance of Effect

In relation to the high sensitivity of the NCA, the negligible adverse magnitude of impact is assessed as resulting in a slight adverse (not significant) effect. This is because the overall landscape character and sense of place across the NCA will be maintained due to the very localised extent of the alteration caused by the schemes.

Operation year 15 phase (summer) assessment schemes 01 and 02

Magnitude of Impact

The assessment will largely reflect that at year 1. At year 15 the proposed replacement planting will integrate the A66 within its surroundings. The scheme at year 15 would still result in a very minor alteration. Hence the magnitude of impact remains negligible adverse.

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough
Significance of Effect Considering the high sensitivity and the negligible adverse magnitude of impact the schemes 01 and 02 will result in a neutral (not significant) effect for the same reasons set out above during operation year 1.	
Construction phase (winter) assessment scheme 03	
Magnitude of Impact The construction activity will result in localised changes to landform due to the construction of an overbridge west of Brougham Castle along with the removal of existing vegetation from this part of the existing A66. There will be the presence of construction activity and machinery to excavate the attenuation basins adjacent to the main road widening and underpass construction at Whinfell Park. Likewise, there will be regrading of land to the north and west of Center Parcs junction to form the embankments, underpass, an attenuation basin and the slip road between the widened A66 and the northern entrance to Center Parcs. This activity will also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation. At the north western end of the Order Limits, the construction activity will include heavy machinery to construct the underpass, along with the formation of embankments, changes to surface landform and activity to construct the new access road and junction along the north and south sides of the A66. There will also be changes to surface landform and localised vegetation removal to construct the attenuation basins and the access road under the A66 to Whinfell Park. There will be construction compounds across the Order Limits, which would introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles and hoardings and temporary lighting. In relation to NCA 9, the geographic extent and physical change to these landscape features would be very small in relation to the wider extent of the NCA. In addition, the construction machinery and activity would be located in a part of the NCA which is already noted by the published study as being of lower tranquillity and where the A66 is a ‘major road’. The magnitude of impact is therefore assessed as negligible. Significance of Effect In relation to the high sensitivity of the receptor the construction activities caused by scheme 03 will result in a slight (not significant) effect during construction as the change will be very small in relation to wider NCA.	
Operation year 1 phase (winter) assessment scheme 03	
Magnitude of Impact	

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough
At year 1 of operation, the scheme will reflect the existing alignment of the A66 with the acceptation of the revised Center Parcs junction. The scheme will result in additional road infrastructure features, via the additional width in the carriageways, from one lane (in each direction) to two lanes. The scale and extent of the junction with Center Parcs will be greater than the existing junction, due to the east bound off-slip being located to the north of the existing alignment and the two new slip roads to the northeast of Center Parcs. There will be a reduction in the density of vegetation adjacent to the road corridor because of the removal of the existing vegetation. This will locally increase the perception of the road and vehicles, specifically in relation to the west bound traffic after the Center Parcs under pass. The scheme would introduce substantial new planting in accordance with the stated landscape guidelines of increasing the extent of small woodlands; although this will not have established at year 1 and would not be in leaf. In relation to NCA 9 the scheme will represent a very small and localised addition of road infrastructure to a part of the NCA's already consisting of the A66. The magnitude of impact at year 1 is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 03 will result in a slight adverse (not significant) effect during the first year of operation as the change will be very small in relation to wider NCA.	
Operation year 15 phase (summer) assessment scheme 03	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. Across the revised A66/B6262 junction east of Brougham Castle east of Penrith, the proposed planting would consist of species rich grassland, broadleaved woodland trees along the southern edge of the A66, between the B6262 and the road, to reflect the existing vegetation cover. On the northside of the A66 and around the overbridge connecting with the B6262, the woodland and species rich grassland would have established to likewise reflect the existing vegetation cover, integrate the B6262 / Moor Lane overbridge and reduce the perception of the earthworks and structures. The area immediately adjacent to the Countess Pillar on the southern fringe of the A66 would be species rich grassland to ensure that the sight lines towards the pillar remain uninterrupted. Compared to the arable land cover adjacent to the existing A66, this species rich grassland would provide a more diverse vegetation cover and improve the opportunities for biodiversity, which would have established to form an integrated sward by year 15.	

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough
The species rich grassland would continue across the proposed embankments of the underpass in the eastern part of the Order Limits, which as an established sward would reduce the perception of the engineered gradients. The scale and mass of the underpass would remain as per the year 1 assessment, with vehicles in apparently elevated position in relation to the existing alignment of the A66. The proposed planting reducing the perception of the A66, including the Moor lane/B6262 overbridge and the Center Parcs underpass, the attenuation basins and embankments, such the magnitude of impact of the scheme would be lessened in comparison to year 1. At year 15, the scheme would result in a negligible impact and the effect due to reflecting the character of the existing A66 and highways infrastructure across the NCA. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 03 will result in a neutral (not significant) effect during year 15 of operation as the change will be very small in relation to wider NCA.	
Construction phase (winter) assessment scheme 0405	
Magnitude of Impact There will be substantial construction works associated with the new offline bypass around the north of Kirby Thore which would lie mainly in cutting. This would comprise large earth movements to accommodate the new road infrastructure to the north of the village which would include cutting to accommodate the scheme mainline and loosely graded embankments to allow a return to agriculture where possible. The works would also include the provision of a multi-span viaduct across Trout Beck, the re-routing of several minor roads and PRoW, the construction of overbridges and balancing ponds. The works would locally reduce the tranquility of the NCA. However, overall the substantial increase in infrastructure would only have a negligible magnitude of impact as it would represent only a minor loss on the wider Eden Valley NCA. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 0405 would result in a neutral (not significant) effect during the construction phase as the change would be very small in relation to wider NCA.	
Operation year 1 phase (winter) assessment scheme 0405	
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. The extensive bypass which mainly lies in cutting would result in a substantial alteration of the local topography. There would be a new multi-span viaduct across Trout Beck, several re-routed minor roads and PRoW, overbridges and balancing ponds. There would be a loss and alteration of agricultural	

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough
land and associated field patterns and boundaries, loss of field boundary vegetation including the potential loss of avenue woodland along the Roman road, historic lanes and stone walls. The new bypass would locally reduce the tranquility of the NCA. However, overall the substantial increase in infrastructure would only have a negligible magnitude of impact as it would represent only a minor loss on the wider Eden Valley NCA. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 0405 would result in a neutral (not significant) effect during year 1 of operation as the change would be very small in relation to wider NCA.	
Operation year 15 phase (summer) assessment scheme 0405	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. This would provide some restoration to the landscape character . However, overall the substantial increase in infrastructure would only have a negligible magnitude of impact as it would represent only a minor loss on the wider Eden Valley NCA. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 0405 would result in a neutral (not significant) effect during year 15 of operation as the change would be very small in relation to wider NCA.	
Construction phase (winter) assessment scheme 06	
Magnitude of Impact With the exception of sections north of Warcop, Flitholme and Lanrigg, the scheme lies broadly online. It's proximity, and at times incursion into, the highly sensitive North Pennines AONB has been limited where possible, ensuring limited impact on the AONB itself. Major earthworks would be undertaken to accommodate the scheme. The proposed road widening would cause loss of roadside vegetation and field boundaries. There would be many overbridges and underpasses along the scheme. The western end of the scheme, which is outwith the AONB, would experience road widening, relocated access tracks, introduction of balancing ponds and earthworks, particularly around Café Sixty Six. At the junction with the B6259 north of Sandford, there would be significant roadside tree loss to accommodate road widening and a new underpass in addition to several balancing ponds. North-east of Warcop a new grade separated junction will result in loss of woodland, agricultural land to the south and MOD land within the AONB to the north.	

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough
Further west the mainline drops south of the existing A66 which would be re-routed slightly further north resulting in further tree loss within the AONB and LCA 11a Foothills. Realigned minor roads and several balancing ponds would provide localised landscape character changes to LCA 8b Broad Valleys. Towards the eastern end of the scheme road widening, realigned PRoW in the form of an overpass north-east of West View Farm would incur loss of agricultural land, roadside vegetation and field boundaries. Alteration of existing field patterns as a result of the scheme by severing existing areas of agricultural land and loss of field boundaries including stone walls Provision of a new road formed as a realignment of the existing A66 which would provide access to Brough High Street. This may also incur additional landscape impacts on the AONB through encroachment. Overall, the substantial increase in infrastructure would only have a negligible magnitude of impact as it would represent only a very minor loss on the wider Eden Valley NCA. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 06 would result in a neutral (not significant) effect during the construction phase as the change would be very small in relation to wider NCA.	
Operation year 1 phase (winter) assessment scheme 06	
Magnitude of Impact A year 1 mitigation planting will not have established and would not be in leaf. Overall the magnitude of impact as a result of scheme 6 is judged to remain negligible on the wider NCA. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 06 would result in a neutral (not significant) effect at year 1 of operation as the change would be very small in relation to wider NCA.	
Operation year 15 phase (summer) assessment scheme 06	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. This would provide some restoration to the landscape character . However, overall the substantial increase in infrastructure would only have a negligible magnitude of impact as it would represent only a minor loss on the wider Eden Valley NCA. Significance of Effect	

National Character Area 9 Eden Valley	Relevant Scheme Study Areas within area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough Relevant Order Limits within the area: M6 Junction 40 to Kemplay Bank Penrith to Temple Sowerby Temple Sowerby to Appleby Appleby to Brough
In relation to the high sensitivity of the receptor the change caused by scheme 06 would result in a neutral (not significant) effect during year 15 of operation as the change would be very small in relation to wider NCA.	

Table 6: National Character Area 10 North Pennines

National Character Area 10 North Pennines	Relevant Scheme Study Areas within area: 06, 07
Relevant aspects of the published description: NCA 10 is located in the eastern part of the study area for scheme 06 and the western part of the study area for scheme 07. The published description of the NCA includes: “The North Pennines National Character Area (NCA), at the northern end of the Pennine ridge, has a distinct identity, with its remote upland moorlands divided by quiet dales. It is characterised by a sense of remoteness, with few settlements, slow change and cultural continuity. It comprises some of the highest and most exposed moorland summits in England, with several major rivers, including the South Tyne, Wear and Tees, draining out to the north, east and south-east. It is bordered to the west by the Eden valley, to the north by the Tyne valley, to the east by the Durham lowlands and to the south by the Yorkshire Dales. There are dramatic and panoramic views both across the moorlands and outwards, especially towards the west. The area’s natural beauty is reflected in the fact that 88 per cent of it has been designated as the North Pennines Area of Outstanding Natural Beauty (AONB).”	
Relevant stated key characteristics: • "A distinctive upland landscape of upland plateaux divided by broad pastoral dales, each with its own distinctive character, most of it designated as an AONB. • Strong landform of summits capped by Millstone Grit, with underlying alternating limestones, sandstones and shales of the Yoredale Series, creating stepped profiles to the dales. • Igneous intrusions of dolerite forming Whin Sill, with striking crag outcrops and waterfalls. A dramatic scarp slope along the western edge, falling to the Eden valley. • Much of the area is designated as a UNESCO European and Global Geopark for its many geological sites and features, including minerals. • Remote and extensive moorlands of blanket bog, heathland and acidic grassland, managed for sheep and grouse. These moorlands support internationally important habitats, including arctic-alpine flora and populations of waders and raptors.	

National Character Area 10 North Pennines	Relevant Scheme Study Areas within area: 06, 07	
• A long tradition of livestock rearing combined with mining has created a landscape of enclosed pastures and meadows within the dales, with strong field patterns defined by drystone walls. • Significant grassland habitats, including limestone grasslands, upland hay meadows, and calamarian grasslands on mining spoil, along with extensive acid grasslands. • Area of high rainfall, with many fast-flowing streams and several major rivers flowing outwards from the hills, down the wide dales. These provide clean water and create a range of freshwater habitats. • A very tranquil landscape, with a sense of remoteness. A low population, little light pollution, a slow rate of change, extensive open moorlands with panoramic views and a unique sense of wildness, all providing an inspirational recreational experience. • The use of local sandstone and gritstone, with stone or slate for roofs, gives a strong vernacular character and unity to the villages, farmsteads and field barns. • Tree cover is limited to river gorges, gills and stream sides, with copses around dispersed farmsteads. There are fragments of juniper scrub and some large conifer plantations on moorland fringes. • A rich cultural history – from prehistoric settlements and defensive bastle houses to more recent industrial activity – with extensive evidence of early lead mining, extraction of other minerals and quarrying."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Due to most of the NCA being an AONB, the value is assessed as high.	As the NCA contains some settlements and road infrastructure, including the A66 the susceptibility is assessed as medium.	The combination of the high value and medium susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 06		
Magnitude of Impact The construction activity will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the construction phase will be in the context of Brough and Warcop and the existing A66 and will not result in any overall change to the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity will result in a neutral (not significant) effect as overall the scheme will maintain the character of the landscape. The sense of place will be maintained.		
Operation year 1 phase (winter) assessment scheme 06		
Magnitude of Impact The scheme will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the dualling will be in the context of the existing A66 and Bowes and will not alter the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect		

National Character Area 10 North Pennines	Relevant Scheme Study Areas within area: 06, 07
The no change magnitude of impact in relation to the high sensitivity will result in a neutral (not significant) effect. as overall the scheme will maintain the character of the landscape. The sense of place will be maintained.	
Operation year 15 phase (summer) assessment scheme 06	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 07	
Magnitude of Impact The construction activity will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the construction phase will be in the context of Bowes and the existing A66 and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact The scheme will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the dualling will be in the context of the existing A66 and Bowes and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1.	
Combined 06 and 07 Schemes	
As the above schemes result in magnitude of impact as no change, it is assessed that the intra-project effects (i.e. the combination of 06 and 07) would similarly result in no change magnitude of impact to the NCA during the assessment phases.	

Table 7: National Character Area 17 Orton Fells

National Character Area 17 Orton Fells	Relevant Scheme Study Areas within area: 01 and 02 Relevant Order Limits within the area: None
Relevant aspects of the published description: NCA 17 is located in the western part of the study area for scheme 01 and 02. The published description of the NCA includes: “The Orton Fells National Character Area comprises a limestone plateau with a complex mix of limestone pavements, upland heath, and calcareous and acid grassland. The fells are open, exposed and sweeping, with long-distance panoramic views out to the skylines of the adjacent	

National Character Area 17 Orton Fells	Relevant Scheme Study Areas within area: 01 and 02 Relevant Order Limits within the area: None	
uplands – the Cumbria High Fells, the Howgills, the Yorkshire Dales and the North Pennines. Nine per cent of the NCA lies within the Lake District National Park. The Asby Complex is an extensive Special Area of Conservation (SAC) designated for its karst features, particularly its long stretches of limestone pavement as well as its mix of acid and alkaline habitats; part of the SAC is also designated as a National Nature Reserve (NNR). Smardale Gill, with its ash woodlands and calcareous grasslands that support outstanding butterfly populations, is likewise designated as an SAC and an NNR. The predominant land use is livestock rearing, with some dairy farms, so that along with the rough grazing there are extensive managed grasslands in pastures and meadows defined by drystone walls on lower-lying land. Some of the best upland hay meadows can be found here, together with wide species-rich verges along the quiet straight roads, making it an exceptional experience to travel through the area." Relevant stated key characteristics are: • "Wide, open and sweeping upland landscape with extensive limestone pavements, outcrops, heather moorland and limestone grasslands. • A quiet rural area, with a strong sense of remoteness and long views out to the dramatic landforms of the surrounding upland landscapes. • A pastoral landscape, with sheep and cattle grazing on the open moors, species-rich hay meadows and pastures and improved grasslands on lower-lying land within valleys and on the fringes. • Fields bounded by drystone walls of local limestone which, along with field barns, form very strong patterns and reflect historical settlement and farming. • Largely treeless on the higher land, with isolated windswept ash and rowan, with broadleaved woodlands in narrow gills and copses sheltering the isolated farmsteads and villages. • Small mixed and coniferous woodlands and shelterbelts on lower land, especially to the north-west. • Small historic villages, built with local limestone, often centred on long greens, with strong patterns of long tofts defined by walls, and isolated farmsteads. • Several small rivers with high-quality water rising in the upland and flowing either to the north or south, many of which support internationally significant plant and animal communities. • Long straight drove roads with wide verges, often very rich in flowering species. • A rich legacy of visible archaeological evidence which, combined with a slow pace of development, gives the fells, the settlements and the wider landscape a visible time depth. • Of considerable geological interest, with many extensive karst features and natural outcrops, along with evidence of past and current limestone extraction and quarrying."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Due to most of the NCA being designated as National Park (Lake District and Yorkshire Dales), the value is assessed as very high.	The NCA is characterised as quiet rural area, with a strong sense of remoteness and slow-paced development which resulted in high integrity of historic settlements and field patterns. The only detracting feature is the largely contained main north–south transport corridor of the M6 and quarries in the west. Therefore, the susceptibility is judged to be high.	The combination of the very high value and the high susceptibility results in a high sensitivity as there is already a detracting substantial road corridor within this landscape.
Construction phase (winter) assessment schemes 01 and 02		

National Character Area 17 Orton Fells	Relevant Scheme Study Areas within area: 01 and 02 Relevant Order Limits within the area: None
Magnitude of Impact The construction activity will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the construction phase will be in the context of Penrith and the existing A66 and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment schemes 01 and 02	
Magnitude of Impact The schemes will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the dualling will be in the context of the existing A66 and Penrith and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the very high sensitivity will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment schemes 01 and 02	
The assessment will reflect that at year 1.	

Table 8: National Character Area 22 Pennine Dales Fringe

National Character Area 22 Pennine Dales Fringe	Relevant Scheme Study Areas within area: 07, 08, 09 Relevant Order Limits within the area: 07, 08, 09
Relevant aspects of the published description: NCA 22 covers the study areas and DCO boundaries of schemes 07, 08 and 09. The published description for NCA 22 includes: “The Pennine Dales Fringe National Character Area (NCA) lies between the uplands of the Pennines to the west, and the Magnesian Limestone ridge and arable lowlands to the east. Almost 23 per cent of the area falls within the Nidderdale Area of Outstanding Natural Beauty (AONB) and almost one per cent in the North Pennines AONB. The land has a varied topography of exposed upland moorland fringes and plateaux dropping to lower foothills, separated by major river valleys and incised by numerous minor tributary valleys. It is underlain by Yoredale rocks in the north (limestone, sandstone and mudstone) and Millstone Grit in the south. It is a transitional landscape between upland and lowland. Drystone walls are common in the west while hedges, often thick and tall with frequent hedgerow trees, are more prevalent at lower elevations in the east. Broad valleys, widening to the east, with their more fertile soils support arable crops, while steeper, higher land in the west supports predominantly livestock farming.”	

National Character Area 22 Pennine Dales Fringe	Relevant Scheme Study Areas within area: 07, 08, 09 Relevant Order Limits within the area: 07, 08, 09

Relevant Stated Key Characteristics:

- Side slopes of Pennine Dales uplands, predominantly sloping down to the east, but with locally varied topography formed by several significant river valleys running from west to east, including the Wharfe, Washburn, Nidd, Ure, Swale and the broad vale of the Tees.
- A transitional landscape between the Pennine uplands to the west and the low-lying fertile landscape of the Vale of York to the east; mainly pastoral in the west, with rough grazing on the moorland edge, merging into mixed farming, with arable on the lighter soils in the east.
- A well-wooded landscape, with woodland along valleys, many copses and plantations on the side slopes, and hedges with hedgerow trees in the lower-lying arable areas.
- Several historic parklands, with woodlands and veteran trees.
- Field boundaries of drystone walls on higher ground and hedges in lower areas.
- A generally tranquil and rural area, with a distinctly ancient character in some parts, with several small, historic market towns including Kirkby Malzeard, Middleham, Masham, Richmond and Barnard Castle, linked by a network of minor roads.
- Vernacular buildings predominantly built of Millstone Grit, mingling with Magnesian Limestone in the east, with roofs of stone flags, Welsh slate and some pantiles, creating strong visual unity to rural settlements and farmsteads.
- Many rivers, including the Tees, Ure, Nidd and Wharfe, forming important landscape features along with their broad, glacially widened valleys. Smaller rivers, such as the Burn, Laver, Kex Beck and the Skell flow through steep-sided valleys following courses cut by glacial meltwaters.
- Historically rich area with many parklands, abbeys and historic buildings, well visited by adjacent urban populations, as well as medieval and Roman earthworks.

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The NCA covers parts of the Nidderdale AONB and the North Pennines AONB. Landscape features across the NCA include ancient woodlands and there is a notable cultural association, along with an extensive network of recreational routes. The value is therefore assessed as high.	As the existing A66 forms one of the main roads across the NCA and has already altered the pattern of landform and the published study notes the influence of the existing road on tranquillity the susceptibility is assessed as low.	The combination of the high value and low susceptibility results in a medium sensitivity to the scheme.

Construction phase (winter) assessment scheme 07

Magnitude of Impact

All of the construction activity for scheme 07 will be located within NCA 22, covering land in the northern part of the NCA.

The construction activity will result in localised changes to landform due to the excavation across the existing A66 cutting, along with the removal of existing vegetation. There will be the presence of construction activity and machinery to excavate the underpass and attenuation basins adjacent to the A66 to the north of Bowes.

The construction activity will include tall machinery to construction the overbridge, along with the formation of embankments to the north of the A66, along with the changes to surface landform and activity to construction the new access roads and junctions along the north side of the A66.

National Character Area 22 Pennine Dales Fringe	Relevant Scheme Study Areas within area: 07, 08, 09 Relevant Order Limits within the area: 07, 08, 09
There will also be construction compounds, which will introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles and hoardings and temporary lighting. In relation to the stated key characteristics of the NCA, the construction activity will be located across the slopes of part of the Greta Valley and where some of the field boundaries are defined by drystone walls and hedges. However, the geographic extent and physical change to these landscape features would be very small in relation to the wider extent of the NCA. In addition, the construction machinery and activity would be located in a part of the NCA which is already noted by the published study as being of lower tranquillity and where the A66 is a 'major road'. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect Therefore, in relation to the medium sensitivity of the NCA, the negligible adverse magnitude of impact during construction is assessed as resulting in a neutral (not significant) effect. This is because the overall landscape pattern and sense of place across the NCA will be maintained due to the very localised extent of the construction activity.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact All of the proposed scheme would be located within NCA 22. The scheme will reflect the existing alignment of the A66, via remaining to the north of Bowes and with an interchange with the A67 characterised by the slip roads at a lower topographic level than the existing A66. This is considered to retain a sense of place within this part of the NCA, in accordance with the stated Statements of Environmental Opportunity. The scheme will result in additional road surfacing and structures, due to the dualling and overbridges and underbridges. However, parts of the existing A66 are already dualled across the NCA, along with their being several overbridges along the road alignment. In relation to the geographic extent of the NCA there would be a very small reduction in the existing vegetation within the DCO boundary and a very small reduction in the length of stone walls dividing the fields. The scheme would respond positively to the Statements of Environmental Opportunity via new broadleaved woodland planting, although this would not have established at year 1. Due to the very small and localised addition of road infrastructure to a part of the NCA already consisting of the A66, the magnitude of impact at year 1 is assessed as negligible adverse. Significance of Effect In relation to the medium sensitivity of the NCA, the negligible adverse magnitude of impact is assessed as resulting in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact Compared to the year 1 assessment the proposed planting across the DCO boundary will have established. This will consist of broadleaved trees along the southern edge of the cutting, between Bowes and the road, along with species rich grassland across the eastern part of the DCO boundary. The magnitude of impact will be no change due to the scheme reflecting the existing character of the A66. Significance of Effect	

National Character Area 22 Pennine Dales Fringe	Relevant Scheme Study Areas within area: 07, 08, 09 Relevant Order Limits within the area: 07, 08, 09
The magnitude of impact at year 15 is assessed as remaining no change, due to the very small and localised extent of the scheme in relation to the wider geographic extent of the NCA. In relation to the medium sensitivity of the NCA, the effect at year 15 will be neutral (not significant).	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The construction phase will result in changes to surface landform across the DCO boundary, from the excavation for the dual lanes, the realignment of Rutherford Lane and associated junctions at Cross Lanes, attenuation basins and the new junction to the south-west of the Church of St Mary. In addition to the excavation there will also be the formation of embankments, including in the western part of the DCO boundary, as part of the construction of the overbridge and re-alignment of Rutherford Lane. These activities will also result in tonal and textural changes to the landscape. The construction activity will also include the removal of roadside vegetation and field boundaries within the footprint of the proposed road and embankment areas. The presence of construction machinery and compounds and the associated changes to the landform and vegetation, will locally reduce the tranquillity, although to a part of the NCA where the published study notes the tranquillity is impacted upon by the existing A66. The scale and extent of the above activities will be very localised in relation to the wider geographic extent of the NCA. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the medium sensitivity of the NCA, the negligible adverse magnitude of impact during construction is assessed as resulting in a neutral (not significant) effect. This is because the overall landscape pattern and sense of place across the NCA will be maintained due to the very localised extent of the construction activity.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact At year 1 of operation, the scheme will increase the extent and scale of road infrastructure across an existing road corridor. This will be via the additional lanes and junctions, in addition to the retention of parts of the existing A66 to form part of the secondary road network, specifically adjacent to the Church of St Mary. The scheme will result in a very localised reduction to the key characteristics of hedgerows, trees and stone walls. These changes will be very localised within the context of the wider geographic extent of the NCA, such that there will no noticeable change to the NCA and the magnitude of impact is assessed as negligible adverse. Significance of Effect The combination of the medium sensitivity of the NCA and the negligible adverse magnitude of impact will result in a neutral (not significant) effect at year 1 of operation.	
Operation year 15 phase (summer) assessment scheme 08	
Magnitude of Impact Compared to the year 1 assessment the proposed planting will have established across the DCO scheme boundary. The woodland around the overbridge will reduce the perception of this elevated structure and the alterations to the landform associated with the proposed junction to the south-west of the Church of St Mary. The establishment of the proposed specie rich	

National Character Area 22 Pennine Dales Fringe	Relevant Scheme Study Areas within area: 07, 08, 09 Relevant Order Limits within the area: 07, 08, 09
grassland will also integrate the changes to landform to a greater degree than at year 1, increase the tonal and textural qualities and opportunities for biodiversity in relation to the agricultural land cover. As the additional road infrastructure will remain in a part of the NCA where the character is already defined by the A66, the magnitude of impact will be no change. Significance of Effect In relation to the medium sensitivity of the NCA, the effect at year 15 will be neutral (not significant).	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact All of the construction activity for scheme 09 will be located within NCA 22, covering land in the northern part of the NCA. The construction activity will result in localised changes to landform due to the excavation and the removal of existing vegetation. There will be the presence of construction activity and machinery to excavate the underpass and the formation of embankments for the overbridge. There will also be construction compounds, which will introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles and hoardings and temporary lighting. In relation to the stated key characteristics of the NCA, the construction activity will result in the alteration to field boundaries and hedges. However, the geographic extent and physical change to these landscape features would be very small in relation to the wider extent of the NCA. In addition, the construction machinery and activity would be located in a part of the NCA which is already noted by the published study as being of lower tranquillity and where the A66 is a 'major road'. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect Therefore, in relation to the medium sensitivity of the NCA, the negligible adverse magnitude of impact during construction is assessed as resulting in a neutral (not significant) effect. This is because the overall landscape pattern and sense of place across the NCA will be maintained due to the very localised extent of the construction activity.	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact All of the proposed scheme would be located within NCA 22. The scheme will in part follow a similar alignment as the existing A66, with additional road infrastructure between the existing A66 and West Layton, to the north of Mainsgill Bridge and to the south of the existing A66, extending to the realignment of Warrener Lane. The sections of separated west and east bound carriageways will reflect existing parts of the A66 in this part of the NCA which are similarly separated by verges. In relation to the geographic extent of the NCA there will be a very small reduction in the existing vegetation within the DCO boundary. The new planting will consist of mixed scrub and woodland to provide new connectivity between woodlands and linear tree belts within the DCO boundary, including around the proposed junction to the north of Mainsgill Bridge and to the south of Carkin Moor Farm; although at year 1 this will be low in height. The scheme will respond positively to the Statements of Environmental Opportunity via new broadleaved woodland planting, although this would not have established at year 1.	

National Character Area 22 Pennine Dales Fringe	Relevant Scheme Study Areas within area: 07, 08, 09 Relevant Order Limits within the area: 07, 08, 09
Due to the very small and localised addition of road infrastructure to a part of the NCA already consisting of the A66, the magnitude of impact at year 1 is assessed as negligible adverse. Significance of Effect In relation to the medium sensitivity of the NCA, the negligible adverse magnitude of impact is assessed as resulting in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 09	
Magnitude of Impact Compared to the year 1 assessment the proposed planting across the DCO boundary will have established. This will increase the vegetation structure across the DCO boundary and reduce the perception of the additional road infrastructure. The establishment of the planting will also provide additional opportunities for biodiversity in comparison to the agricultural land uses. The magnitude of impact at year 15 is assessed as remaining no change, due to the very small and localised extent of the scheme in relation to the wider geographic extent of the NCA. Significance of Effect In relation to the medium sensitivity of the NCA, the effect at year 15 will be neutral (not significant).	
Construction phase (winter) assessment intra project (schemes 07, 08 and 09)	
Magnitude of Impact The construction activity will reflect that stated above, resulting in a negligible adverse impact. Significance of Effect In comparison to the individual schemes, the effect will be slight adverse (not significant).	
Operation year 1 (winter) assessment intra project (schemes 07, 08 and 09)	
Magnitude of Impact The operation year 1 activity will reflect that stated above, resulting in a negligible adverse impact. Significance of Effect In comparison to the individual schemes, the effect will be slight adverse (not significant).	
Operation year 15 (summer) assessment intra project (schemes 07, 08 and 09)	
Magnitude of Impact At year 15, the establishment of the proposed planting will reduce the perception of the additional highways infrastructure across all of the schemes and provide additional opportunities for biodiversity in comparison to the agricultural land use. Significance of Effect The magnitude of impact at year 15 is assessed as remaining no change, due to the very small and localised extent of the schemes in relation to the wider geographic extent of the NCA. In relation to the medium sensitivity of the NCA, the effect at year 15 will be neutral (not significant).	

Table 0-9: National Character Area 23 Tees Lowlands

National Character Area 23 Tees Lowlands	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None	
Relevant aspects of the published description: NCA 23 is located across the northern part of the study area of scheme 09. The published description includes: “The Tees Lowlands National Character Area (NCA) forms a broad, open plain dominated by the meandering lower reaches of the River Tees and its tributaries, with wide views to distant hills. The large conurbation around the Lower Tees and Teesmouth contrasts with the rural area to the south and west, which is largely agricultural in character. The mosaic of intertidal and wetland habitats within the Tees Estuary are internationally designated as Teesmouth and Cleveland Coast Special Protection Area and Ramsar site, due to their importance for waterfowl. These areas are in close proximity to heavy industry, which has developed due to the estuary’s strategic location close to; mineral reserves, a network of main roads, railways and transport. Industrial installations form a dramatic skyline when viewed from the surrounding hills. Early successional grasslands and scrub have also emerged on previously developed land; these brownfield sites have significant biodiversity value.”		
Relevant Stated Key Characteristics: • "A broad, low-lying and open plain of predominantly arable agricultural land, with low woodland cover and large fields, defined by wide views to distant hills. • A distinctive area of low-lying farmland with remnants of former wetland habitat in the flood plain of the River Skerne to the north-west. • Principal transport corridors, power lines and energy infrastructure are conspicuous elements in the landscape."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As only a very small part of the NCA is within the North York Moors National Park the value is reduced to medium.	As the NCA is crossed by several major transport corridors and has large scale settlements the susceptibility is assessed as negligible.	The combination of the medium value and negligible susceptibility results in a low sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		

National Character Area 23 Tees Lowlands	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the construction phase will be in the context of the existing A66 and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the low sensitivity will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The scheme will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the dualling will be in the context of the existing A66 and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the low sensitivity will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 10: National Character Area 24 Vale of Mowbray

National Character Area 24 Vale of Mowbray	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Relevant aspects of the published description: NCA 24 is located in the eastern part of the study area for scheme 09. The published description includes: “The Vale of Mowbray lies immediately to the north of the Vale of York, occupying the undulating flood plains associated with the rivers Swale, Wiske and Cod Beck. It is framed by the uplands of the Pennines to the west and the North York Moors to the east. The whole National Character Area overlies the Sherwood Sandstone aquifer, the second largest aquifer in England and a major drinking water supply. The orientation of the Vale and its position between the Pennines and North York Moors, have made it a significant transport and communications route between north and south. The route of the A1 today is largely the same as that of the Roman Dere Street, along which Roman settlement and military activity were concentrated. Today the only sizeable towns are the county town of Northallerton and Thirsk, both historic market towns.”	
Relevant Stated Key Characteristics:	

National Character Area 24 Vale of Mowbray	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None	
• "A mixed agricultural landscape of arable and grassland: dairying is predominant in the north, with grass leys and fodder crops; and arable to the south of Northallerton, with some pig and poultry rearing throughout the area. • Small and fragmented remnants of semi-natural vegetation, most notably the areas of rough grazed riverine meadows in the north, and small woodlands. • Woodland and tree cover is sparse: small game coverts and parkland landscapes contribute locally to the tree cover, for example along the ridges on the eastern side where plantation woodlands extend into the North York Moors. • Medium-scale fields enclosed by low hedgerows in the north, more open in the south. • Settlement pattern characterised by small villages on higher ground, often linear in form and of medieval origin, with brick-built vernacular cottages and dispersed farmsteads. • Churches with towers or spires create prominent visual landmarks within the wider landscape. • The Coast to Coast long-distance route passes through the Vale of Mowbray."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As only a very small part of the NCA is within the North York Moors National Park the value is reduced to medium.	As the NCA is crossed by several major transport corridors and has large scale settlements the susceptibility is assessed as negligible.	The combination of the medium value and negligible susceptibility results in a low sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 09		
Magnitude of Impact The construction activity will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the construction phase will be in the context of the existing A66 and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the low sensitivity will result in a neutral (not significant) effect.		

National Character Area 24 Vale of Mowbray	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The scheme will not be located in the NCA and therefore there will be no physical change to the landscape features. Any perception of the dualling will be in the context of the existing A66 and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the low sensitivity will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 11: Penrith Urban Area

Penrith Urban Area	Relevant Scheme Study Areas within area: 01, 02 Relevant Order Limits within the area: 01, 02	
Relevant aspects: The Penrith Urban Area lies immediately to the north of schemes 01 and 02. The Penrith Urban Area is defined by the Applicant as a predominantly residential and industrial areas, with associated infrastructure and areas of open space There is cultural association via listed buildings.		
Relevant key characteristics are: • Two storey residential land uses • Industrial buildings • Settlement pattern defined by road networks • Area of open space including Wetheriggs Country Park		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The Penrith Urban Area LCA comprises Wetheriggs Country Park, network of PRoW on the outskirts of the built up area, Penrith Conservation Area, Scheduled monuments and Listed Buildings which are all contributing to the	Susceptibility is judged medium as change can be expected in an urban environment. As a developed area, with properties and road infrastructure there is some ability to accommodate change.	The combination of the medium value and medium susceptibility is judged to results in a medium sensitivity.

Penrith Urban Area	Relevant Scheme Study Areas within area: 01, 02 Relevant Order Limits within the area: 01, 02	
value of this LCA. However, there are also large areas of industrial development and standard housing estates which are overall detracting features. On balance it is therefore judged that the landscape value is medium.		
Construction phase (winter) assessment scheme 01 and 02		
Magnitude of Impact There will be changes to the road corridor environment due to the excavation adjacent to the existing dualled section of the A66 south of Penrith, these changes will include the removal of existing vegetation from this part of the existing A66. There will be the presence of construction activity and machinery to facilitate the excavation of the underpass beneath Kemplay Bank Roundabout and attenuation basins adjacent to the main road widening south of Penrith. There will be regrading of land adjacent to the A66 south of Penrith to form the embankments, the attenuation basin and the slip road between the A66 and the northern fringe of Eamont Bridge. This activity will also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation. At the western end of the DCO boundary, the construction activity will include heavy machinery to facilitate the formation of widened embankments at Junction 40 of the M6/A66. Additionally, changes to surface landform and activity to enhance the existing access roads and junctions at this westerly end of the A66. There will also be changes to surface landform and localised vegetation removal to construct the attenuation basins and enhance the access road between the M6/A66 Junction 40 and the A592 at the Skirsgill Interchange western access to Penrith. There will also be construction compounds, south of the A66, which will introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles, hoardings and temporary lighting. The construction activity will result in localised changes to the vegetation cover. It would locally reduce the tranquillity of the Penrith Urban Area, in particular the Wetheriggs Country Park due to the sound and perception of the machinery, activity, the varied state of the landform, including changes to the colour and texture of the landform from the excavation. However, given the construction activity would be localised to a small part of the LCA, where the tranquillity is already reduced by the existing A66 and there is no sense of remoteness due to the road and settlement pattern, the magnitude of impact to the LCA during construction is assessed as moderate. Significance of Effect In relation to the medium sensitivity of the LCA, the effect will be moderate during construction.		
Operation year 1 phase (winter) assessment scheme 01 and 02		
Magnitude of Impact At year 1 of operation, the scheme will reflect the existing alignment of the A66, remaining to the south of Penrith and with an interchange with the M6/J40 characterised by the widened slip road A592 accessing the existing A66.		

Penrith Urban Area	Relevant Scheme Study Areas within area: 01, 02 Relevant Order Limits within the area: 01, 02
There will also be changes to the junction and road alignments associated with the A6 north and south of the Kemplay underpass. The scheme will result in a reduction of the existing massing via the construction of the underpass between the existing A66 and the A6. There will be a reduction in the density of vegetation adjacent to the road corridor from the removal of the existing vegetation. This will locally increase the perception of the road and vehicles, specifically in relation to the emergency services area south of the road. The scheme will introduce substantial new planting in accordance with the stated landscape guidelines of increasing the extent of small woodlands; although this would not have established at year 1 and would not be in leaf. There will be a reduction in the density of vegetation adjacent to the road corridor. This will locally increase the perception of the road and vehicles, specifically in relation to Wetheriggs Country Park. The scale and extent of the scheme would be very localised in relation to the wider geographic area of the Penrith Urban Area. The scheme will remain within the LCA which is already defined by the existing A66. The magnitude of impact is therefore assessed as minor adverse at year 1. Significance of Effect In relation to the medium sensitivity of the LCA, the effect at year 1 will be slight adverse (not significant).	
Operation year 15 phase (summer) assessment scheme 01 and 02	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting will have established across the DCO boundary and would be in leaf. The woodland adjacent to the underpass at the A6 & A66 will further reduce the perception of the scale and integrate the remodelling of the Kemplay junction. Due to the increased integration of the scheme within the landscape and its reduced perception due to the underpass construction, establishment of the proposed planting, the magnitude of impacts will reduce in relation to those predicted at year 1. With the scheme remaining across a part of the landscape already characterised by the A66, there will negligible adverse effects to the Penrith Urban Area LCA, at year 15 of operation. Significance of Effect In relation to the medium sensitivity of the LCA, the effect at year 15 will be neutral (not significant).	
Construction phase (winter) assessment scheme 03	
Magnitude of Impact Barely noticeable alteration to setting of the Penrith Urban Area is possible due to the construction activities along the western end of scheme 3. However, construction works would be perceived in context of the existing heavily travelled A66 and they would not alter the overall character of the Penrith Urban Area. Therefore, the magnitude of impact during the construction phase is assessed as no change. Significance of Effect The combination of the medium sensitivity and no change magnitude of impact will result in a neutral (not significant) effect during construction.	

Penrith Urban Area	Relevant Scheme Study Areas within area: 01, 02 Relevant Order Limits within the area: 01, 02
Operation year 1 phase (winter) assessment scheme 03	
Magnitude of Impact There will be no noticeable alteration to the Penrith Urban Area LCA as a result of scheme 03. Therefore, the magnitude of impact is no change. Significance of Effect The combination of the medium sensitivity and no change magnitude of impact will result in a neutral (not significant) effect during construction.	
Operation year 15 phase (summer) assessment scheme 03	
The assessment will reflect that at year 1.	

Table 12: Intermediate Farmland (06)

Intermediate Farmland (06)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 01, 02, 03 and 0405	
Relevant aspects of the published description: "The Intermediate Farmland LCT stretches as narrow bands north west to south east between the Lake District National Park to the south west and the North Pennines AONB to the north east. The published description of the Intermediate Farmland is: This is a large-scale open landscape of intermediate farmland that occupies land between the lowland and the rolling upland areas. A transitional area between the turbid steams of the broader wooded lowlands and the exposed rocky outcrops of a on the whole treeless upland. The land use is predominately grazing land with boundary hedgerows and characteristic dry-stone walls. Both the field boundary walls and scattered farm buildings, constructed with the Cumbrian limestone, are characteristic and fundamental elements that illustrate the connection between the Cumbrian geology and vernacular agricultural infrastructure. This wind swept and kempt transitional landscape reflects the agrarian life, structure and work practises of these agricultural communities."		
Relevant stated key characteristics: • "Transitional farmland between the lowland and upland landscapes. • Extensive areas of improved pasture with some arable farming. • Planned villages with greens displaying topographical and archaeological evidence of their medieval origins. • In parts the landscape is dissected by the deeply incised or open river valleys. • Wooded valleys and ghylls. • Sandstone and limestone vernacular. Sensitive Features: Traditional villages with greens and vernacular stone architecture are sensitive to unsympathetic village expansion. Wooded valleys and ghylls, isolated parkland and hedge bounded fields are sensitive to changes in land management. The intersecting open valleys and deeply incised rivers are sensitive to valley side development."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Whilst this LCA is large-scale open and its tranquility influenced by the	This LCA is judged to have a medium susceptibility to change associated with road infrastructure development	The combination of the medium value and medium susceptibility is judged to results in a medium sensitivity.

Intermediate Farmland (06)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 01, 02, 03 and 0405	
transport corridors and settlements, this landscape also comprises features worthy of conservation (e.g. characteristic dry-stone walls and vernacular villages and farmsteads). Therefore, its value is judged to be medium.	as it can accommodate some change.	
Construction phase (winter) assessment scheme 01 and 02		
Magnitude of Impact The construction activity for schemes 01 and 02 will result in scheme wide changes to the road corridor environment due to the excavation adjacent to the existing dualled section of the A66 south of Penrith, these changes would include the removal of existing vegetation from this part of the existing A66. There would be the presence of construction activity and machinery to facilitate the excavation of the underpass beneath Kemplay Bank Roundabout and attenuation basins adjacent to the main road widening south of Penrith. There will be regrading of land adjacent to the A66 south of Penrith to form the embankments, the attenuation basin and the slip road between the A66 and the northern fringe of Eamont Bridge. This activity would also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation. At the western end of the Order Limits, the construction activity would include heavy machinery to facilitate the formation of widened embankments at Junction 40 of the M6/A66. Additionally, changes to surface landform and activity to enhance the existing access roads and junctions at this westerly end of the A66. There would also be changes to surface landform and localised vegetation removal to construct the attenuation basins and enhance the access road between the M6/A66 Junction 40 and the A592 at the Skirsgill Interchange western access to Penrith. At this western edge of the DCO boundary, the construction activity will result in localised excavation and changes to surface landform to construct the attenuation basin across sloping land to the south of Penrith. There will also be construction compounds, south of the A66, which will introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles, hoardings and temporary lighting. Most of the construction activity would be located in LCA Type 6. Intermediate Farmland. In relation to the stated key characteristics of the LCA, the construction activity would result in localised changes to the river valley topography, the regular field patterns, dry stone walls and variable vegetation cover. The construction activity would locally reduce the tranquillity of the LCA due to the sound and perception of the machinery, activity, the varied state of the landform, including changes to the colour and texture of the landform from the excavation. There would be localised vegetation removal from within the LCA, along with the presence of construction activity and compounds, with localised changes to landform associated with the underpass construction and around the A6 on and off-slip roads and Carleton Avenue at the eastern edge of the scheme. However, given the construction activity would be localised to a small part of the LCA, where the tranquillity is already reduced by the existing A66 and there is no sense of remoteness due to the		

Intermediate Farmland (06)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 01, 02, 03 and 0405
road and settlement pattern, the magnitude of impact to the LCA during construction is assessed as minor adverse. Significance of Effect In relation to the medium sensitivity, the minor adverse magnitude of impact during construction is assessed as resulting in a slight adverse (not significant) effect. This is because the overall landscape character and sense of place across the LCA will be maintained due to the very localised extent of the construction activity.	
Operation year 1 phase (winter) assessment scheme 01 and 02	
Magnitude of Impact At year 1 of operation, the scheme would reflect the existing alignment of the A66, remaining to the south of Penrith and with an interchange with the M6/J40 characterised by the widened slip road A592 accessing the existing A66. There would also be changes to the junction and road alignments associated with the A6 north and south of the Kemplay underpass. The scheme would result in a reduction of the existing massing via the construction of the underpass between the existing A66 and the A6. There would be a reduction in the density of vegetation adjacent to the road corridor from the removal of the existing vegetation. This would locally increase the perception of the road and vehicles, specifically in relation to the emergency services area south of the road. The scheme would introduce substantial new planting in accordance with the stated landscape guidelines of increasing the extent of small woodlands; although this would not have established at year 1 and would not be in leaf. The LCA covers most of the Order Limits. There would be a reduction in the density of vegetation adjacent to the road corridor. This would locally increase the perception of the road and vehicles, specifically in relation to Wetheriggs Country Park. The scale and extent of the scheme would be very localised in relation to the wider geographic area of the LCA's. The scheme would remain within the LCA which is already defined by the existing A66. The magnitude of impact is therefore assessed as negligible adverse at year 1. Significance of Effect In relation to the medium sensitivity of the LCA, the negligible adverse magnitude of impact is assessed as resulting in a slight adverse (not significant) effect. This is because the overall landscape character and sense of place across the LCA will be maintained due to the very localised extent of the alteration caused by the schemes and because the area is already affected by the existing A66.	
Operation year 15 phase (summer) assessment scheme 01 and 02	
Magnitude of Impact The assessment will largely reflect that at year 1. Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. At year 15 the proposed replacement planting will integrate the A66 within its surroundings. The woodland adjacent to the underpass at the A6 and A66 would further reduce the perception of the scale and integrate the remodelling of the Kemplay junction. The schemes at year 15 would still result in a very minor alteration. Hence the magnitude of impact remains negligible adverse. Significance of Effect	

Intermediate Farmland (06)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 01, 02, 03 and 0405
Considering the medium sensitivity and the negligible adverse magnitude of impact the schemes 01 and 02 will result in a slight adverse (not significant) effect for the same reasons set out above during operation year 1.	
Construction phase (winter) assessment scheme 03	
Magnitude of Impact A very small part of the LCA will be affected by the construction works along the A66. These include the works around the Countess Pillar, the nearby proposed overbridge and a minor junction improvement as well as earthworks and vegetation removal. As the direct impact would be only very small the magnitude is judged to be negligible adverse. Significance of Effect Considering the medium sensitivity and the negligible adverse magnitude of impact the scheme 03 during the construction phase will result in a slight adverse (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 03	
Magnitude of Impact A very small part of the LCA will be directly affected by scheme 3. These include the changes around the Countess Pillar, addition of the nearby proposed overbridge and a minor junction improvement as well as earthworks and vegetation removal. As the direct impact would be only very small the magnitude of impact is judged to be negligible adverse. Significance of Effect Considering the medium sensitivity and the negligible adverse magnitude of impact the scheme 03 at year 1 will result in a slight adverse (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 03	
Magnitude of Impact The assessment will largely reflect that at year 1. Compared to the year 1 assessment, the proposed planting would have established and would be in leaf. At year 15 the proposed replacement planting will integrate the new overbridge and earthworks within its surroundings. The magnitude of impact as a result of scheme 03 at year 15 remains negligible adverse. Significance of Effect Considering the medium sensitivity and the negligible adverse magnitude of impact the scheme 03 at year 15 will result in a slight adverse (not significant) effect.	
Construction phase (winter) assessment 0405	
Magnitude of Impact There would be substantial alterations on a localised area south of the British Gypsum Works, north of Kirby Thore within the Order Limits. Loss of agricultural land, field patterns and boundaries will incur a change in localised landscape character. Landworks would include cutting to accommodate the scheme mainline and loosely graded embankments to allow a return to agriculture where possible. Therefore, the magnitude of impact is judged to be major adverse. Significance of Effect Considering the medium sensitivity and the major adverse magnitude of impact the scheme 0405 during the construction would result in a large adverse (not significant) effect.	

Intermediate Farmland (06)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 01, 02, 03 and 0405
Operation year 1 (winter) assessment 0405	
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. The extensive bypass which mainly lies in cutting would result in a substantial alteration of the local topography. There would be re-routed minor roads and PRoW, overbridges and balancing ponds. There would be a loss and alteration of agricultural land and associated field patterns and boundaries, loss of field boundary and historic lanes. The new bypass would locally reduce the tranquility of the LCA. Therefore, the magnitude of impact is judged to be major adverse. Significance of Effect Considering the medium sensitivity and the major adverse magnitude of impact the scheme 0405 during year 1 would result in a large adverse (not significant) effect.	
Operation year 15 (summer) assessment 0405	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. This would provide some restoration to the landscape character. The extensive bypass which mainly lies in cutting would result in a substantial alteration of the local topography. There would be re-routed minor roads and PRoW, overbridges and balancing ponds. There would be a loss and alteration of agricultural land and associated field patterns and boundaries, loss of field boundary and historic lanes. The new bypass would locally reduce the tranquility of the LCA. Therefore, the magnitude of impact is judged to be minor adverse. Significance of Effect Considering the medium sensitivity and the minor adverse magnitude of impact the scheme 0405 during the year 15 would result in a moderate adverse (not significant) effect.	

Table 13: Broad Valleys (08b)

Broad Valleys (08b)	Relevant Scheme Study Areas within area: 01, 02, 03, 0405 and 06 Relevant Order Limits within the area: 03, 04, 05 and 06
Relevant aspects of the published description: "Broad Valleys LCT stretches as a narrow band from north west to south east between the bands of Intermittent Farmland LCT between the Lake District National Park to the south west and the North Pennines AONB to the north east." The published description of the Broad Valleys is: "These broad valleys with a high point of 175m AOD often coinciding with rivers flowing towards the Lake District National Park and these valleys support the characteristic small agricultural holdings. Hedge and stone walls are the local characteristic boundaries containing a matrix of improved pasture, woodland, scrub and commercial plantations. Over the smaller faster flowing section of rivers there are locally distinctive small stone bridges, these historic bridges have determined the location of many of the traditional villages. These villages built of local sandstone and limestone frequently follow the course of the adjacent river and in turn the small rural roads and old railway lines follow the contours of the river valley. This landscape is generally medium in scale with a lot of variety along the length of the valleys. The narrow enclosed wooded sections can feel remote and wild. In more open parts there is a sense of calm within a working farmland.	

Broad Valleys (08b)	Relevant Scheme Study Areas within area: 01, 02, 03, 0405 and 06 Relevant Order Limits within the area: 03, 04, 05 and 06	
Close to large towns and roads there is a busier feeling but the rural qualities still dominate. Low level views are often intimate, contained by the valley sides and woodland. More expansive views are possible from the top of some valley sides towards the Lakeland fells and the North Pennines."		
Relevant stated key characteristics: • "Wide and deep valleys with open floodplains. • Rural farmland comprising significant areas of improved pasture. • Pockets of scrub, woodland and coniferous plantations. • Hedges and stone walls form a matrix of field boundaries. • Roads and railway lines often follow the linear valley contours. Sensitive Features: Woodlands, orchards and the matrix of hedges and hedgerow trees and open meandering undeveloped river plains are sensitive to changes in land management. The planned nature of estate parkland and historic deer parks is sensitive to changes in estate management and the expansion of estate buildings. The limestone and sandstone vernacular, traditional scale of villages and their siting that follows the grain of the valleys are sensitive to unsympathetic expansion. Traditional stone bridges and roads that follow the grain of the valleys could be sensitive to flooding events and highway improvements. Undeveloped valley rims and their relationships with adjacent landscapes are sensitive to rim edge development. The remoteness and wildness associated with the rivers, and the sense of calm associated with the more open farmland, are sensitive to changes in land management."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Whilst this LCA has open working farmland and its tranquillity reduced near roads and towns, this landscape is also mostly rural in character and comprises features worthy of conservation (e.g. characteristic hedges, stone walls, historic stone bridges and traditional villages). Therefore, its value is judged to be medium.	This LCA is judged to have a medium susceptibility to change associated with road infrastructure development as it can accommodate some change.	The combination of the medium value and medium susceptibility is judged to results in a medium sensitivity.
Construction phase (winter) assessment scheme 01 and 02		
Magnitude of Impact There will be the perception of construction activity adjacent to the LCA, via the vegetation removal, construction activity and compounds along the alignment of the A66. The landscape setting to the LCA, whilst consisting of the existing A66, will experience a partial change along the edges of the LCA due to the excavation and construction activity. The magnitude of impact is therefore assessed as minor adverse.		

Broad Valleys (08b)	Relevant Scheme Study Areas within area: 01, 02, 03, 0405 and 06 Relevant Order Limits within the area: 03, 04, 05 and 06
Significance of Effect In relation to the medium sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.	
Operation year 1 phase (winter) assessment scheme 01 and 02	
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the existing A66 and Penrith. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the medium sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during year 1 of operation.	
Operation year 15 phase (summer) assessment scheme 01 and 02	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established and would be in leaf. This would provide some restoration to the landscape character. There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Penrith and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect In relation to the medium sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during year 15 of operation.	
Construction phase (winter) assessment scheme 03	
Magnitude of Impact The construction activity will result in localised changes to landform due to the construction of an overbridge west of Brougham Castle along with the removal of existing vegetation from this part of the existing A66. There will be the presence of construction activity and machinery to excavate the attenuation basins adjacent to the main road widening and underpass construction at Whinfell Park. Likewise, there will be regrading of land to the north and west of Center Parcs junction to form the embankments, underpass, an attenuation basin and the slip road between the widened A66 and the northern entrance to Center Parcs. This activity will also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation. At the north western end of the Order Limits, the construction activity will include heavy machinery to construct the underpass, along with the formation of embankments, changes to surface landform and activity to construct the new access road and junction along the north and south sides of the A66. There will also be changes to surface landform and localised vegetation removal to construct the attenuation basins and the access road under the A66 to Whinfell Park. There will be construction compounds across the Order Limits, which would introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles and hoardings and temporary lighting.	

Broad Valleys (08b)	Relevant Scheme Study Areas within area: 01, 02, 03, 0405 and 06 Relevant Order Limits within the area: 03, 04, 05 and 06
In relation to the stated key characteristics of the LCA the construction activity will result in localised changes to the open large-scale landscape, the mosaic field patterns, dry stone walls and variable vegetation cover. The construction activity will locally reduce the tranquillity of the LCA's due to the sound and perception of the machinery, activity, the varied condition of the landform, including changes to the colour and texture of the landform from the excavation. For LCA Broad valleys, there would be localised vegetation removal from the south of the LCA, along with the presence of construction activity and compounds, with localised changes to landform associated with the over and under bridges and construction around the east bound on-slip and the access track to Whinfell Park at the Southern fringe of the LCA. However, given the construction activity will be localised to a very small part of the LCA, where the tranquillity is already reduced by the existing A66 and there is no sense of remoteness due to the road and settlement pattern, the magnitude of impact to the LCA during construction is assessed as minor adverse. Significance of Effect In relation to the medium sensitivity of the LCA, the effect will be slight adverse (not significant) during construction.	
Operation year 1 phase (winter) assessment scheme 03	
Magnitude of Impact At year 1 of operation, the scheme would reflect the existing alignment of the A66 with the acceptation of the revised Center Parcs junction. The scheme would result in additional road infrastructure features, via the additional width in the carriageways, from one lane (in each direction) to two lanes. The scale and extent of the junction with Center Parcs would be greater than the existing junction, due to the east bound off-slip being located to the north of the existing alignment and the two new slip roads to the northeast of Center Parcs. There would be a reduction in the density of vegetation adjacent to the road corridor because of the removal of the existing vegetation. This would locally increase the perception of the road and vehicles, specifically in relation to the west bound traffic after the Center Parcs under pass. The scheme would introduce substantial new planting in accordance with the stated landscape guidelines of increasing the extent of small woodlands; although this would not have established at year 1 and would not be in leaf. Broad Valleys LCA constitute the northern half of the Order Limits and the scheme would result in a localised reduction in the extent of the stone boundary walls on the margins of the A66 and some post and wire field boundaries adjacent to the A66, which are a stated key characteristic of the LCA. There would be a reduction in the density of vegetation adjacent to the road corridor, which is a stated characteristic of the LCA. The scale and extent of the scheme would be very localised in relation to the wider geographic area of the LCA. The LCA is already influenced by the existing A66. The magnitude of impact is therefore assessed as minor adverse at year 1. Significance of Effect In relation to the medium sensitivity of the LCA's, the effect at year 1 would be slight adverse (not significant).	
Operation year 15 phase (summer) assessment scheme 03	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf.	

Broad Valleys (08b)	Relevant Scheme Study Areas within area: 01, 02, 03, 0405 and 06 Relevant Order Limits within the area: 03, 04, 05 and 06
Across the revised A66/B6262 junction east of Brougham Castle east of Penrith, the proposed planting would consist of species rich grassland, broadleaved woodland trees along the southern edge of the A66, between the B6262 and the road, to reflect the existing vegetation cover. On the northside of the A66 and around the overbridge connecting with the B6262, the woodland and species rich grassland would have established to likewise reflect the existing vegetation cover, integrate the B6262 / Moor Lane overbridge and reduce the perception of the earthworks and structures. The area immediately adjacent to the Countess Pillar on the southern fringe of the A66 would be species rich grassland to ensure that the sight lines towards the pillar remain uninterrupted. Compared to the arable land cover adjacent to the existing A66, this species rich grassland would provide a more diverse vegetation cover and improve the opportunities for biodiversity, which would have established to form an integrated sward by year 15. The species rich grassland would continue across the proposed embankments of the underpass in the eastern part of the Order Limits, which as an established sward would reduce the perception of the engineered gradients. The scale and mass of the underpass would remain as per the year 1 assessment, with vehicles in apparently elevated position in relation to the existing alignment of the A66. At year 15, the scheme will result in an impact of negligible adverse. This is due to the proposed planting reducing the perception of the A66, including the Moor lane/B6262 overbridge and the Center Parcs underpass, the attenuation basins and embankments, such the magnitude of impact of the scheme would be lessened in comparison to year 1. Significance of Effect In relation to the medium sensitivity of the LCA's, the effect at year 15 would be slight adverse (not significant).	
Construction phase (winter) assessment scheme 0405	
Magnitude of Impact The construction activity of scheme 0405 primarily lies within this LCA. There will be substantial construction works associated with the new offline bypass around the north of Kirby Thore which would lie mainly in cutting. This would comprise large earth movements to accommodate the new road infrastructure to the north of the village which would include cutting to accommodate the scheme mainline and loosely graded embankments to allow a return to agriculture where possible. The works would also include the provision of a multi-span viaduct across Trout Beck, the re-routing of several minor roads and PRoW, the construction of overbridges and balancing ponds. The works would reduce the tranquillity of the LCA. Therefore, the magnitude of impact is judged to be major adverse. Significance of Effect Considering the medium sensitivity and the major adverse magnitude of impact the scheme 0405 during the construction would result in a large adverse (not significant) effect.	
Operation year 1 (winter) assessment scheme 0405	
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. The extensive bypass which mainly lies in cutting would result in a substantial alteration of the local topography. There would be a new multi-span viaduct across Trout Beck, several re-routed minor roads and PRoW, overbridges and balancing ponds. There would be a loss and alteration of agricultural	

Broad Valleys (08b)	Relevant Scheme Study Areas within area: 01, 02, 03, 0405 and 06 Relevant Order Limits within the area: 03, 04, 05 and 06
land and associated field patterns and boundaries, loss of field boundary vegetation including the potential loss of avenue woodland along the Roman road, historic lanes and stone walls. The new bypass would locally reduce the tranquillity of the LCA. Therefore, the magnitude of impact is judged to be major adverse. Significance of Effect Considering the medium sensitivity and the major adverse magnitude of impact the scheme 0405 during year 1 would result in a large adverse (not significant) effect.	
Operation year 15 (summer) assessment scheme 0405	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. This would provide some restoration to the landscape character. Therefore, the magnitude of impact is judged to be minor adverse. Significance of Effect Considering the medium sensitivity and the minor adverse magnitude of impact the scheme 0405 during year 15 would result in a moderate adverse (not significant) effect.	
Construction phase (winter) assessment scheme 06	
Magnitude of Impact The southern part of scheme 6 lies within this LCA. With the exception of sections north of Warcop, Flitholme and Lanrigg, the scheme lies broadly online. It's proximity, and at times incursion into, the highly sensitive North Pennines AONB has been limited where possible, ensuring limited impact on the AONB itself. Major earthworks would be undertaken to accommodate the scheme. The proposed road widening would cause loss of roadside vegetation and field boundaries. There would be many overbridges and underpasses along the scheme. The western end of the scheme, which is outwith the AONB, would experience road widening, relocated access tracks, introduction of balancing ponds and earthworks, particularly around Café Sixty Six. At the junction with the B6259 north of Sandford, there would be significant roadside tree loss to accommodate road widening and a new underpass in addition to several balancing ponds. North-east of Warcop a new grade separated junction will result in loss of woodland, agricultural land to the south and MOD land within the AONB to the north. Further west the mainline drops south of the existing A66 which would be re-routed slightly further north resulting in further tree loss within the AONB. Realigned minor roads and several balancing ponds would provide localised landscape character changes to the LCA. Towards the eastern end of the scheme road widening, realigned PRoW in the form of an overpass north-east of West View Farm would incur loss of agricultural land, roadside vegetation and field boundaries. Alteration of existing field patterns as a result of the scheme by severing existing areas of agricultural land and loss of field boundaries including stone walls Provision of a new road formed as a realignment of the existing A66 which would provide access to Brough High Street. This may also incur additional landscape impacts on the AONB through encroachment. As the substantial earthworks are judged to cause noticeable damage to the existing landscape character, the magnitude of impact is judged to be moderate adverse.	

Broad Valleys (08b)	Relevant Scheme Study Areas within area: 01, 02, 03, 0405 and 06 Relevant Order Limits within the area: 03, 04, 05 and 06
Significance of Effect In relation to the medium sensitivity of the receptor the change caused by scheme 06 would result in a moderate adverse (significant) effect during the construction phase.	
Operation year 1 phase (winter) assessment scheme 06	
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. Overall, the magnitude of impact as a result of scheme 6 is judged to remain moderate. Significance of Effect In relation to the medium sensitivity of the receptor the change caused by scheme 06 would result in a moderate adverse (significant) effect at year.	
Operation year 15 phase (summer) assessment scheme 06	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. This would provide some restoration to the landscape character. However, overall the substantial increase in infrastructure would have a minor magnitude of impact. Significance of Effect In relation to the medium sensitivity of the receptor the change caused by scheme 06 would result in a slight adverse (not significant) effect during year 15 of operation.	

Table 14: Sandstone Ridge (10)

Sandstone Ridge (10)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 03
Relevant aspects of the published description: "Sandstone Ridge LCT stretches as a narrow band north to south between the bands of Intermittent Farmland LCT between the Lake District National Park to the south west and the North Pennines AONB to the north east." The published description of the Sandstone Ridge is: "This is a large scale, open landscape with a mixture of open and rough areas with colourful patches of heather and smoother managed pastoral fields. Tree lined roads provide a feeling of enclosure in places. There are large and expansive uninterrupted long distance views over the Petteril valley to the Lake District and the Eden Valley towards the North Pennines. This predominantly north south geological feature is distinctive within the Cumbria landscape with summits of between 100-300m AOD. The lower slopes are dominated by improved farmland with middle and upper parts of the ridge interspersed with large blocks of commercial plantations and deciduous woodlands. The contrast these woodlands provides often softens the more rectilinear form of the coniferous planting."	
Relevant stated key characteristics: • "Prominent north south ridge. • Improved pasture with a mosaic field pattern. • Coniferous plantation blocks and mixed woodland punctuate farm and heathland.	

Sandstone Ridge (10)	**Relevant Scheme Study Areas within area: 01, 02, 03 and 0405** **Relevant Order Limits within the area: 03**	
• Significant areas of improved heathland. • Open, expansive long distance views. Sensitive Feature: The summit and ridge top areas of heathland and geometric mosaic of fields and boundaries and woodland shelterbelts are sensitive to changes in land management and large scale infrastructure development. The strong road enclosure from woodlands and hedges is sensitive to improvements to highway safety and access to new development. Discretely sited small scale vernacular settlements are sensitive to unsympathetic expansion."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The significant presence of ancient woodland and expansive views from other areas, the landscape value is assessed as high.	The existing A66 exerts a limited influence of the on the character of the LCA. The landscape susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 01 and 02		
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 and Penrith. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.		
Operation year 1 phase (winter) assessment scheme 01 and 02		
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the existing A66 and Penrith. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during year 1 of operation.		
Operation year 15 phase (summer) assessment scheme 01 and 02		
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established and would be in leaf. This would provide some restoration to the landscape character. There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Kirby Thore and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect		

Sandstone Ridge (10)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 03
In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during year 15 of operation.	
Construction phase (winter) assessment scheme 03	
Magnitude of Impact The construction activity will result in localised changes to landform due to the construction of an overbridge west of Brougham Castle along with the removal of existing vegetation from this part of the existing A66. There will be the presence of construction activity and machinery to excavate the attenuation basins adjacent to the main road widening and underpass construction at Whinfell Park. Likewise, there will be regrading of land to the north and west of Center Parcs junction to form the embankments, underpass, an attenuation basin and the slip road between the widened A66 and the northern entrance to Center Parcs. This activity will also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation. At the north western end of the Order Limits, the construction activity will include heavy machinery to construct the underpass, along with the formation of embankments, changes to surface landform and activity to construct the new access road and junction along the north and south sides of the A66. There will also be changes to surface landform and localised vegetation removal to construct the attenuation basins and the access road under the A66 to Whinfell Park. There will be construction compounds across the Order Limits, which would introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles and hoardings and temporary lighting. In relation to the stated key characteristics of the LCA the construction activity will result in localised changes to the open large-scale landscape, the mosaic field patterns, dry stone walls and variable vegetation cover. The construction activity will locally reduce the tranquillity of the LCA's due to the sound and perception of the machinery, activity, the varied condition of the landform, including changes to the colour and texture of the landform from the excavation. For LCA Broad valleys, there would be localised vegetation removal from the south of the LCA, along with the presence of construction activity and compounds, with localised changes to landform associated with the over and under bridges and construction around the east bound on-slip and the access track to Whinfell Park at the Southern fringe of the LCA. However, given the construction activity will be localised to a very small part of the LCA, where the tranquillity is already reduced by the existing A66 and there is no sense of remoteness due to the road and settlement pattern, the magnitude of impact to the LCA during construction is assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect will be slight adverse (not significant) during construction.	
Operation year 1 phase (winter) assessment scheme 03	
Magnitude of Impact At year 1 of operation, the scheme would reflect the existing alignment of the A66 with the exception of the revised Center Parcs junction. The scheme would result in additional road infrastructure features, via the additional width in the carriageways, from one lane (in each direction) to two lanes. The scale and extent of the junction with Center Parcs would be greater than the existing junction, due to the east bound off-slip being	

Sandstone Ridge (10)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 03

located to the north of the existing alignment and the two new slip roads to the northeast of Center Parcs.

There would be a reduction in the density of vegetation adjacent to the road corridor because of the removal of the existing vegetation. This would locally increase the perception of the road and vehicles, specifically in relation to the west bound traffic after the Center Parcs under pass.

The scheme would introduce substantial new planting in accordance with the stated landscape guidelines of increasing the extent of small woodlands; although this would not have established at year 1 and would not be in leaf.

Broad Valleys LCA constitute the northern half of the Order Limits and the scheme would result in a localised reduction in the extent of the stone boundary walls on the margins of the A66 and some post and wire field boundaries adjacent to the A66, which are a stated key characteristic of the LCA. There would be a reduction in the density of vegetation adjacent to the road corridor, which is a stated characteristic of the LCA. The scale and extent of the scheme would be very localised in relation to the wider geographic area of the LCA. The LCA is already influenced by the existing A66. The magnitude of impact is therefore assessed as minor adverse at year 1.

Significance of Effect

In relation to the high sensitivity of the LCA's, the effect at year 1 would be slight adverse (not significant).

Operation year 15 phase (summer) assessment scheme 03

Magnitude of Impact

Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf.

Across the revised A66/B6262 junction east of Brougham Castle east of Penrith, the proposed planting would consist of species rich grassland, broadleaved woodland trees along the southern edge of the A66, between the B6262 and the road, to reflect the existing vegetation cover. On the northside of the A66 and around the overbridge connecting with the B6262, the woodland and species rich grassland would have established to likewise reflect the existing vegetation cover, integrate the B6262 / Moor Lane overbridge and reduce the perception of the earthworks and structures.

The area immediately adjacent to the Countess Pillar on the southern fringe of the A66 would be species rich grassland to ensure that the sight lines towards the pillar remain uninterrupted. Compared to the arable land cover adjacent to the existing A66, this species rich grassland would provide a more diverse vegetation cover and improve the opportunities for biodiversity, which would have established to form an integrated sward by year 15.

The species rich grassland would continue across the proposed embankments of the underpass in the eastern part of the Order Limits, which as an established sward would reduce the perception of the engineered gradients. The scale and mass of the underpass would remain as per the year 1 assessment, with vehicles in apparently elevated position in relation to the existing alignment of the A66.

At year 15, the scheme will result in an impact of negligible adverse.

This is due to the proposed planting reducing the perception of the A66, including the Moor lane/B6262 overbridge and the Center Parcs underpass, the attenuation basins and embankments, such the magnitude of impact of the scheme would be lessened in comparison to year 1.

Significance of Effect

Sandstone Ridge (10)	Relevant Scheme Study Areas within area: 01, 02, 03 and 0405 Relevant Order Limits within the area: 03
In relation to the high sensitivity of the LCA the effect at year 15 would be slight adverse (not significant).	
Construction phase (winter) assessment scheme 0405	
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 or the village of Kirkby Thore. The magnitude of impact is therefore assessed as negligible. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.	
Operation year 1 (winter) assessment scheme 0405	
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the existing A66 or the village of Kirkby Thore. The magnitude of impact is therefore assessed as negligible. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the year 1 of operation.	
Operation year 15 (summer) assessment scheme 0405	
Magnitude of Impact There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Kirby Thore and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect The negligible magnitude of impact in combination with the high sensitivity of the LCA results in a slight adverse (not significant) effect.	

Table 15: Rolling Fringe (12b)

Rolling Fringe (12b)	Relevant Scheme Study Areas within area: 01, 02 and 03 Relevant Order Limits within the area: 01	
Relevant aspects of the published description: Rolling Fringe LCT is situated around the fringe of the Lake District National Park, an area to the south east of scheme 1. The published description of the Rolling Fringe is: "This is a large scale undulating landscape with high points above 150 – 300m AOD and rising to a high point of 380m AOD. This topography is given additional variation with the incidence of small streams and rivers. The lower levels have a traditionally strong farmland structure with well-defined wall and hedge field boundaries. This form changes as the elevation increases to areas of rough pasture with moorland and mosses found at the higher levels, these areas contribute interest and reinforce the wild character of these more isolated uplands. This is largely a simple, open landscape, with a more intimate feel in the valleys, and a contrasting feel of wildness in the moorland areas. The landscape has a pastoral feel with some tranquillity and a sense of peacefulness."		
Relevant Stated Key Characteristics • "Large-scale undulating topography. • Large Fields of improved pasture. • Stone walls mainly in the east, occasional hedge and fence boundaries. • Very sparse tree cover. • Some large scale conifer plantations. • Small streams and rivers cut through the rolling topography. Sensitive Feature: Walls and hedge mosaics to improved pasture are sensitive to changes in land management. Nucleated and discrete vernacular villages reinforce the farmland character and are sensitive to village expansion. Scarce limestone outcrops, features and grassland provide important interest and biodiversity and are sensitive to changes in land management. Open, uninterrupted views across moorland to a backdrop of hills are sensitive to large prominent infrastructure or other development."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
This landscape is of local to regional value with some features worthy of conservation as creating sense of place. However, this landscape is also influence by development and change. Therefore, the value of the LCA is judged to be medium.	The landscape is able to accommodate some change as a result of road infrastructure development. Therefore, the susceptibility is judged to be medium.	The combination of the medium value and medium susceptibility is judged to results in a high sensitivity.
Construction phase (winter) assessment scheme 01 and 02		
Magnitude of Impact Only a very small part of scheme 01 lies within the eastern edge of this LCA near Penrith. Works associated with the road widening and the construction of the balancing pond will directly affect a very small part of this LCA and result in a very minor alteration. There will be the presence of construction activity and machinery to facilitate the excavation of the attenuation basins and the		

Rolling Fringe (12b)	Relevant Scheme Study Areas within area: 01, 02 and 03 Relevant Order Limits within the area: 01
road widening, which will include the removal of existing vegetation from this part of the existing A66. The scale and extent of the scheme will be very localised and contained in relation to the wider geographic area of the LCA. The scheme would remain within the LCA which is already defined by the existing A66. The magnitude of impact is therefore assessed as negligible adverse at year 1. Significance of Effect In relation to the high sensitivity of the LCA, the negligible adverse magnitude of impact is assessed as resulting in a neutral (not significant) effect. This is because the overall landscape character and sense of place across the LCA will not be affected.	
Operation year 1 phase (winter) assessment scheme 01 and 02	
Magnitude of Impact The scale and extent of the scheme will be very localised in relation to the wider geographic area of the LCA. The scheme would remain within the LCA which is already defined by the existing A66. The magnitude of impact is therefore assessed as negligible adverse at year 1. Significance of Effect In relation to the high sensitivity of the LCA, the negligible adverse magnitude of impact is assessed as resulting in a neutral (not significant) effect. This is because the overall landscape character and sense of place across the LCA will not be affected.	
Operation year 15 phase (summer) assessment scheme 01 and 02	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 03	
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 and Penrith. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.	
Operation year 1 phase (winter) assessment scheme 03	
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the existing A66 and Penrith. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the year 1 of operation.	
Operation year 15 phase (summer) assessment scheme 03	
Magnitude of Impact	

Rolling Fringe (12b)	Relevant Scheme Study Areas within area: 01, 02 and 03 Relevant Order Limits within the area: 01
There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Penrith and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect The negligible magnitude of impact in combination with the high sensitivity of the LCA results in a neutral (not significant) effect.	

Table 16: Limestone Foothills (12c)

Limestone Foothills (12c)	Relevant Scheme Study Areas within area: 01 Relevant Order Limits within the area: None	
Relevant aspects of the published description: Limestone Foothills LCT is located around Greystoke and the Lake District National Park. The published description of the Limestone Foothills is: "This is a large scale, open landscape which becomes smaller and more intimate in the wooded areas and in the southern part. This landscape is tranquil and peaceful, and has a strong relationship with the Lake District fells and national park. The land rises to the adjacent Lakeland fells at an elevation of 220-360m AOD. The rolling undulating topography is occasionally steep and sometimes appears plateau-like."		
Relevant stated key characteristics • "Rolling undulating topography with occasional plateaus. • Limestone pavements, crags and other rock outcrops are rare. • Areas of unimproved and improved pasture. • Stone walls and hedges reinforce the pastoral features. • In the south, small pasture fields with the presence of both disused and active quarries. • Ancient woodland and parkland. • Large forestry plantations. Sensitive features include: The matrix of walls and hedges reinforcing farmland and enclosing rural roads, ecologically sensitive roadside verges and the sense of remoteness are sensitive to change."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
A locally valued landscape, influenced to a degree by infrastructure and small developments. The value is assessed as medium.	The existing A66 and influence of other local routes result in medium susceptibility to the type of development proposed.	The combination of the medium value and medium susceptibility results in a medium sensitivity.
Construction phase (winter) assessment scheme 01		
Magnitude of Impact The construction activity will not be located in the LCA and therefore there will be no physical change to the landscape features. Any perception of the construction phase will be in the context of Penrith and the existing A66 and will not change the tranquillity and perception of the LCA, such that the magnitude of impact is assessed as negligible adverse.		

Limestone Foothills (12c)	Relevant Scheme Study Areas within area: 01 Relevant Order Limits within the area: None
Significance of Effect The negligible impact in relation to the medium sensitivity will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 01	
Magnitude of Impact The schemes will not be located in the LCA and therefore there will be no physical change to the landscape features. Any perception of the dualling will be in the context of the existing A66 and Penrith and will not change the tranquillity and perception of the NCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the medium sensitivity will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 01	
The assessment will reflect that at year 1.	

Table 17: Intermediate Moorland Plateau, Rolling Farmland Heath (9b)

Intermediate Moorland Plateau, Rolling Farmland Heath (9b)	Relevant Scheme Study Areas within area: 0405 and 06 Relevant Order Limits within the area: None	
Relevant aspects of the published description: Rolling Farmland and Heath LCT can be found in the east of the county south of Appleby running alongside the Eden Valley. The published description of the Rolling Farmland and Heath is: "The landscape is medium to large scale and open. On higher land there are some wide views of surrounding fell and dale tops and adjacent valleys."		
Relevant Stated Key Characteristics: • "Shallow relief plateau with ridges and hollows. • Rolling farmland. • Occasional rocky outcrops. • Rough pasture with wet flushes and semi heathland. • Coniferous plantations. • Narrow wooded valleys with wetland features. Sensitive features include open ridges along plateau edges and expansive views to the Yorkshire Dales and Lakeland Fells which are sensitive to poorly sited and scaled development, including large scale infrastructure development."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
A landscape of local value, influenced to a	The landscape is	The combination of the medium value and medium susceptibility results in a medium sensitivity.

Intermediate Moorland Plateau, Rolling Farmland Heath (9b)	Relevant Scheme Study Areas within area: 0405 and 06 Relevant Order Limits within the area: None	
degree by development. The landscape value is assessed as medium.	influenced by existing B-roads and the railway line. The landscape susceptibility is considered medium.	
Construction phase (winter) assessment scheme 0405		
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 or the village of Kirkby Thore. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the medium sensitivity of the LCA, the effect is predicted to be slight during the construction phase.		
Operation year 1 phase (winter) assessment scheme 0405		
Magnitude of Impact There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Kirby Thore and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect The negligible magnitude of impact in combination with the medium sensitivity of the LCA results in a slight adverse (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 0405		
Magnitude of Impact The assessment will reflect that at year 1, with a slight adverse (not significant) effect.		
Construction phase (winter) assessment scheme 06		
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 and Warcop. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the medium sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.		
Operation year 1 phase (winter) assessment scheme 06		

Intermediate Moorland Plateau, Rolling Farmland Heath (9b)	**Relevant Scheme Study Areas within area: 0405 and 06** **Relevant Order Limits within the area: None**
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the existing A66 and Warcop. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the medium sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during year 1 of operation.	
Operation year 15 phase (summer) assessment scheme 06	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established and would be in leaf. This would provide some restoration to the landscape character. There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Kirby Thore and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect The negligible magnitude of impact in combination with the medium sensitivity of the LCA results in a neutral (not significant) effect.	

Table 18: Foothills (11a)

Foothills (11a)	**Relevant Scheme Study Areas within area: 0405 and 06** **Relevant Order Limits within the area: 06**	
Relevant aspects of the published description: Foothills LCT is situated along the North Pennines scarps, and to the south, east and west of the Lake District fells. The published description of the Foothills is: "This area is characterised by rolling, hilly or plateau farmland and moorland generally 150-250m AOD adjoining the North Pennines AONB. This is a transitional landscape of small to medium scale enclosed landscapes with open moorland in higher parts. At lower levels the feeling is more intimate due to the topography and woodland cover containing views in some places. On higher land open views to the surrounding fells and sea give an expansive feeling to the area. The landscapes are diverse varying from pasture to woodland to moorland. Easy to access the countryside is attractive and peaceful and is highly valued locally."		
Relevant stated key characteristics • "Rolling, hilly or plateau farmland and moorland. • Occasional rocky outcrops. • Hills are dissected by numerous streams and minor river valleys. • Areas of improved grassland, unimproved heathland and extensive conifer plantations. • Semi natural woodland in the small valleys. • Large areas of farmland are bounded by stone walls and hedges. Sensitive features are the strong matrix of stone walls and hedges which provide a framework to pastures. Other features include woodlands and hedgerow trees, and rural roads which follow the flow of topography. More intimate farms and woodland are sensitive to large scale infrastructure development."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The LCT lies partially within the AONB, therefore the landscape value is assessed as high.	Although the LCT is partially influenced by the existing A66, its association with the AONB and strong pastoral nature results in the landscape susceptibility being assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 0405		
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 or the village of Kirkby Thore. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.		
Operation year 1 phase (winter) assessment scheme 0405		
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the		

Foothills (11a)	Relevant Scheme Study Areas within area: 0405 and 06 Relevant Order Limits within the area: 06
existing A66 or the village of Kirkby Thore. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.	
Operation year 15 phase (summer) assessment scheme 0405	
Magnitude of Impact There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Kirby Thore and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect The negligible magnitude of impact in combination with the high sensitivity of the LCA results in a slight adverse (not significant) effect.	
Construction phase (winter) assessment scheme 06	
Magnitude of Impact The southern part of scheme 6 lies within this LCA. With the exception of sections north of Warcop, Flitholme and Lanrigg, the scheme lies broadly online. It's proximity, and at times incursion into, the highly sensitive North Pennines AONB has been limited where possible, ensuring limited impact on the AONB itself. Major earthworks would be undertaken to accommodate the scheme. The proposed road widening would cause loss of roadside vegetation and field boundaries. There would be many overbridges and underpasses along the scheme. The western end of the scheme, which is outwith the AONB, would experience road widening, relocated access tracks, introduction of balancing ponds and earthworks, particularly around Café Sixty Six. At the junction with the B6259 north of Sandford, there would be significant roadside tree loss to accommodate road widening and a new underpass in addition to several balancing ponds. North-east of Warcop a new grade separated junction will result in loss of woodland, agricultural land to the south and MOD land within the AONB to the north. Further west the mainline drops south of the existing A66 which would be re-routed slightly further north resulting in further tree loss within the AONB. Realigned minor roads and several balancing ponds would provide localised landscape character changes to the LCA. Towards the eastern end of the scheme road widening, realigned PRoW in the form of an overpass north-east of West View Farm would incur loss of agricultural land, roadside vegetation and field boundaries. Alteration of existing field patterns as a result of the scheme by severing existing areas of agricultural land and loss of field boundaries including stone walls Provision of a new road formed as a realignment of the existing A66 which would provide access to Brough High Street. This may also incur additional landscape impacts on the AONB through encroachment. As the substantial earthworks are judged to cause noticeable damage to the existing landscape character, the magnitude of impact is judged to be moderate adverse. Significance of Effect	

Foothills (11a)	Relevant Scheme Study Areas within area: 0405 and 06 Relevant Order Limits within the area: 06
In relation to the high sensitivity of the receptor the change caused by scheme 06 would result in a large adverse (significant) effect during the construction phase.	
Operation year 1 phase (winter) assessment scheme 06	
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. Overall, the magnitude of impact as a result of scheme 6 is judged to remain moderate. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 06 would result in a moderate adverse (significant) effect at year.	
Operation year 15 phase (summer) assessment scheme 06	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established across the Order Limits and would be in leaf. This would provide some restoration to the landscape character. However, overall the substantial increase in infrastructure would have a minor magnitude of impact. Significance of Effect In relation to the high sensitivity of the receptor the change caused by scheme 06 would result in a slight adverse (not significant) effect during year 15 of operation.	

Table 19: Scarps (13a)

Scarps (13a)	Relevant Scheme Study Areas within area: 06 Relevant Order Limits within the area: None	
Relevant aspects of the published description: Scarps LCT is situated along the western edge of the North Pennines, and much of it is located within the North Pennines AONB. The published description of the Scarps is: "This landscape has an open, expansive and undeveloped character that gives a sense of remoteness. The open moorland and vast, uninterrupted skies add a sense of wildness."		
Relevant stated key characteristics: • "Horizontal outcrops of limestone and volcanic rock form distinct features. • Unimproved grassland dominates. • Steep slopes often filled with bracken and scrub. • Ghylls and gullies intersect the scar and moorland. • Improved pasture on lower slopes. • Small fields bounded by stone walls. Sensitive characteristic features include the steep limestone grassland slopes intersected by streams, low lying wooded areas as well as the tranquil character, the remoteness of the area and the sense of wilderness."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The LCTs connection to the North Pennines, including areas within the AONB result in the	The very limited influence of development within the LCT results in landscape	The combination of the high value and high susceptibility results in a high sensitivity.

Scarps (13a)	Relevant Scheme Study Areas within area: 06 Relevant Order Limits within the area: None	
landscape value being assessed as high.	susceptibility being assessed as high.	
Construction phase (winter) assessment scheme 06		
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 and Warcop and Brough. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.		
Operation year 1 phase (winter) assessment scheme 06		
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the existing A66 and Warcop and Brough. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be neutral (not significant) during the construction phase.		
Operation year 15 phase (summer) assessment scheme 06		
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established and would be in leaf. This would provide some restoration to the landscape character. There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Warcop and Brough and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be neutral (not significant) during the construction phase.		

Table 20: Moorland High Plateau (13b)

Moorland High Plateau (13b)	Relevant Scheme Study Areas within area: 06 Relevant Order Limits within the area: None
Relevant aspects of the published description: Moorland High Plateau LCT is located along the western side of the North Pennines and to the east of Kendal. The published description of the Moorland High Plateau is: "This is an extensive area of upland moorlands located on a plateau with many valleys and ghylls. There is a strong sense of remoteness due to the lack of settlements and development. Its	

Moorland High Plateau (13b)	Relevant Scheme Study Areas within area: 06 Relevant Order Limits within the area: None	
sweeping topography provides wide expansive views and uninterrupted skylines providing a sense of wildness."		
Relevant stated key characteristics: • "Fells, summits and moorland plateau. • Incised by deep valleys and ghylls. • Extensive areas of blanket bog. • Acid grassland and dwarf heath shrub provide contrast to bog. • Valley slopes have varied land cover. Sensitive features include the wide expansive uninterrupted views."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Extensive areas of the LCT lie within the AONB. The landscape value is assessed as high.	Very limited influence of development within the LCT. The landscape susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 06		
Magnitude of Impact As the scheme lies outside the Order Limits there would be no physical change to their landscape features due to the construction activity not being present within this area. Any perception of the construction activity would be in the context of the existing A66 and Warcop and Brough. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be slight adverse (not significant) during the construction phase.		
Operation year 1 phase (winter) assessment scheme 06		
Magnitude of Impact At year 1 mitigation planting will not have established and would not be in leaf. As the scheme lies outside the Order Limits there would be no physical change to their landscape features as a result of the scheme. Any perception of the scheme would be in the context of the existing A66 and Warcop and Brough. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the LCA, the effect is predicted to be neutral (not significant) during the construction phase.		
Operation year 15 phase (summer) assessment scheme 06		
Magnitude of Impact Compared to the year 1 assessment, the proposed planting would have established and would be in leaf. This would provide some restoration to the landscape character. There will be no physical changes to the landscape features within the LCA. Any perception of the scheme will be in the context of the existing A66 and Warcop Brough and will not alter the character or setting to the LCA, such that the magnitude of impact is assessed as negligible. Significance of Effect		

Moorland High Plateau (13b)	Relevant Scheme Study Areas within area: 06 Relevant Order Limits within the area: None
In relation to the high sensitivity of the LCA, the effect is predicted to be neutral (not significant) during the construction phase.	

Table 21: North Pennines AONB LCA Upland Fringe Foothills

North Pennines AONB LCA Upland Fringe Foothills	Relevant Scheme Study Areas within Area: 06 Relevant Order Limits within the area: 06	
Relevant aspects of the published description: This forms part of the north eastern study area for scheme 06.		
Relevant stated key characteristics: • "Broad ridges and shallow valley heads. • Gently rounded topography of drift-free, thinly bedded sandstones, mudstones, shales and coals. • Occasional steep bluffs and incised denes. • Heavy, seasonally waterlogged clay soils with pockets of peaty soils supporting heathland vegetation. • Pastoral land use of improved or semi-improved pasture with some arable cropping on drier ridges. • Regular grids of Parliamentary enclosures bounded by dry stone walls or overgrown hawthorn hedges. • Few trees — scattered hedgerow oak, ash, rowan or birch. • Sparsely wooded; scattered conifer plantations and shelterbelts. • Isolated farms connected by straight enclosure roads. • A visually open landscape with commanding views across adjacent valleys to distant ridges."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an AONB the value is high.	As an area of varied landform and a generally open landscape, but which is already crossed by the A66, the susceptibility is high.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 6		
Magnitude of Impact The construction activity will be partially located in the character area, and therefore result in physical change to the landscape features. However, only a very small part along the edges of this character area will be directly affected by the works. The change will be perceived in the context of the existing A66 and Brough, which already locally reduce tranquillity via movement and noise such that the magnitude of impact is assessed as minor adverse. Significance of Effect The combination of the high sensitivity and minor magnitude of impact will result in a slight adverse (not significant) effect during construction as the works will be at variance with the characteristics of this character area but not be in conflict with the character of this landscape due to the influence of the existing A66. The works will be detracting from the sense of place but not diminishing it.		
Operation year 1 phase (winter) assessment scheme 06		

North Pennines AONB LCA Upland Fringe Foothills	Relevant Scheme Study Areas within Area: 06 Relevant Order Limits within the area: 06
Magnitude of Impact The scheme is partially located in the character area. The alignment of the A66 will reflect the existing alignment of the road, such that the spatial relationship between the scheme and the character area will remain. Only a very small part along the edges of this character area will be directly affected by the scheme. There will be a reduction in vegetation, in particular along the woodland to the north of the A66. However, the stated key characteristics of this character area will remain. The change will be perceived in the context of the existing A66 and Brough. The magnitude of impact is assessed as negligible. Significance of Effect The combination of the high sensitivity and the negligible impact will result in a slight adverse significance (not significant) of effect.	
Operation year 15 phase (summer) assessment scheme 06	
Magnitude of Impact Compared to the year 1 assessment the establishment of the proposed planting will reflect the existing context. There will be no noticeable alteration of this character area. The magnitude of impact will be no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	

Table 22: North Pennines AONB LCA Moor and Fringe

North Pennines AONB LCA Moor and Fringe	Relevant Scheme Study Areas within Area: 06 and 07 Relevant Order Limits within the area: None
Relevant aspects of the published description: This area is within the study area for scheme 06, to the east of Brough and beyond the DCO boundary. This area is within the study area for scheme 07, to the west of Bowes and beyond the DCO boundary. The area is characterised as an upland landscape of improved moorland fringes, intakes and allotments, between the open moors and settled dales. The area is characterised as an "upland landscape of improved moorland fringes, intakes and allotments, between the open moors and the settled dales."	
Relevant stated key characteristics: • "Varied topography including valleys and upper dale sides. • The contrasting hardness of layers of limestone, sandstones and shales give the hillsides a stepped appearance. • The Whin Sill outcrops locally in low crags. • Shallow, infertile or waterlogged peaty soils. • A pastoral landscape of wet, rushy pastures, rough grazing and enclosed moorland. • Large regular fields of Parliamentary enclosures bounded by low stone walls and wire fences. • Varying degrees of improvement and grazing creates a patchwork of muted and brighter greens.	

North Pennines AONB LCA Moor and Fringe	Relevant Scheme Study Areas within Area: 06 and 07 Relevant Order Limits within the area: None	
• Isolated farms built of stone with roofs of stone flag or slate, connected by straight roads from the enclosure period. The farms and field barns of the Raby Estate in Teesdale are painted white. • The landscape is generally open with few trees or woodlands. • There are occasional clumps of sycamore planted as shelter trees around exposed farms, and scattered conifer plantations and shelterbelts with occasional large tracts of commercial forestry on the fringes of the AONB. • Relics of the lead mining industry are common – mine buildings, waste heaps, smelter flues, reservoirs and hushes. • Visually open and often broad in scale with extensive views across adjacent dales and moors. • A remote and tranquil landscape on the margins of settlement and agriculture, sometimes with a slightly neglected quality."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an AONB the value is assessed as high.	As an area of varied landform and a generally open landscape, but which is already crossed by the A66, the susceptibility is high.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 06		
Magnitude of Impact The construction activity will not be located in the character area, and therefore there will be no physical change to the landscape features. The construction activity will be perceived due to the proximity of the DCO scheme boundary to the character area, which extends across more elevated landform in relation to the DCO boundary. This perception will be in the context of the existing A66 and Brough, which already locally reduce tranquillity via movement and noise such that the magnitude of impact is assessed as negligible. Significance of Effect The combination of the high sensitivity and negligible magnitude of impact will result in a slight adverse (not significant) effect during construction.		
Operation year 1 phase (winter) assessment scheme 06		
Magnitude of Impact The scheme will not be located in the character area and the alignment of the A66 will reflect the existing alignment of the road, such that the spatial relationship between the scheme and the character area will remain. The reduction in vegetation to the north of Bowes will be perceived to a greater extent than existing, but the stated key characteristics will remain. The magnitude of impact is assessed as negligible. Significance of Effect The combination of the high sensitivity and the negligible impact will result in a slight adverse significance (not significant) of effect.		
Operation year 15 phase (summer) assessment scheme 06		
Magnitude of Impact Compared to the year 1 assessment the establishment of the proposed planting will reflect the existing context and the magnitude of impact will be no change.		

North Pennines AONB LCA Moor and Fringe	Relevant Scheme Study Areas within Area: 06 and 07 Relevant Order Limits within the area: None
Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 07	
Magnitude of Impact The construction activity will not be located in the character area, and therefore there will be no physical change to the landscape features. The construction activity will be perceived due to the proximity of the DCO scheme boundary to the character area, which extends across more elevated landform in relation to the DCO boundary. This perception will be in the context of the existing A66 and Bowes, which already locally reduce tranquillity via movement and noise such that the magnitude of impact is assessed as negligible. Significance of Effect The combination of the high sensitivity and negligible magnitude of impact will result in a slight adverse (not significant) effect during construction.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact The scheme will not be located in the character area and the alignment of the A66 will reflect the existing alignment of the road, such that the spatial relationship between the scheme and the character area will remain. The reduction in vegetation to the north of Bowes will be perceived to a greater extent than existing, but the stated key characteristics will remain. The magnitude of impact is assessed as negligible. Significance of Effect The combination of the high sensitivity and the negligible impact will result in a slight adverse significance (not significant) of effect.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact Compared to the year 1 assessment the establishment of the proposed planting will reflect the existing context and the magnitude of impact will be no change Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Schemes 06 and 07	
The intra-project effects (i.e. those of schemes 06 and 07) will reflect those stated above, with slight adverse effects during construction and year 1, reducing to a neutral effect at year 15.	

Table 23: North Pennines AONB LCA Moor and Scarp

North Pennines AONB LCA Moor and Scarp	Relevant Scheme Study Areas within Area: 06 and 07 Relevant Order Limits within the area: None
This area is within the study area for scheme 06, to the north of Brough and beyond the DCO boundary. The area also forms the western part of the study area for scheme 07.	

North Pennines AONB LCA Moor and Scarp	Relevant Scheme Study Areas within Area: 06 and 07 Relevant Order Limits within the area: None	
Relevant aspects of the published description: The area is characterised as an "upland landscape of improved moorland fringes, intakes and allotments, between the open moors and the settled dales."		
Relevant stated key characteristics: • "Dramatic landforms. • A sweep of unimproved rough grazing contrasting with the lower landscape of the foothills and pikes. • Exposures of bands of Carboniferous limestone and sandstone. • A lack of enclosure. • Largely treeless. • Long views outwards to the Eden Valley and the Lake District and Howgill Fells."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an AONB the value is high.	Due to the elevated landform and open character the susceptibility is assessed as high.	The combination of the high value and the high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 06		
Magnitude of Impact The construction activity will not be located in the character area. Due to the distance from the scheme, any perception of the construction activity will be in the context of the existing A66 and Brough, which already introduce movement and activity. The magnitude of impact will be no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 06		
Magnitude of Impact The scheme will not be located in the character area and will reflect the existing alignment of the A66, such that the spatial relationship between the scheme and the character area will remain. Due to the distance from the scheme, any perception of the vehicles and the scheme will reflect the existing context. The stated key characteristics will remain. The magnitude of impact will be no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 06		
The assessment will reflect that at year 1.		
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the character area. Due to the distance from the scheme, any perception of the construction activity will be in the context of the existing A66 and Bowes, which already introduce movement and activity. The magnitude of impact will be no change.		

North Pennines AONB LCA Moor and Scarp	Relevant Scheme Study Areas within Area: 06 and 07 Relevant Order Limits within the area: None
Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact The scheme will not be located in the character area and will reflect the existing alignment of the A66, such that the spatial relationship between the scheme and the character area will remain. Due to the distance from the scheme, any perception of the vehicles and the scheme will reflect the existing context. The stated key characteristics will remain. The magnitude of impact will be no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1.	
Schemes 06 and 07	
The intra-project effects (i.e. those of schemes 06 and 07) will reflect those stated above.	

Table 24: Durham BLT Gritstone Upland Fringe

Durham BLT Gritstone Upland Fringe	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08
Relevant aspects of the published description: BLT Gritstone Upland Fringe covers three separate geographic areas, to the north of Bowes, to the south-east of Bowes and to the north of Barnard Castle. The BLT covers land across the study areas of scheme 07 and 08. The published description of the BLT is: “An upland fringe landscape of broad, high ridges and plateaux and shallow valleys. Thinly bedded sandstones, limestones and mudstones ground down by glacial ice sheets are overlain by boulder clays giving rise to gently rolling rounded topography. Thicker, more resistant sandstone beds are marked very occasionally by steeper bluffs. Small becks drain the plateaux and valleys, some lying in shallow incised denes. Soils are heavy, seasonally waterlogged clays with pockets of lighter brown earths. A pastoral landscape of improved and semi-improved pastures with occasional rougher grazing and wet rushy pasture. Field boundaries are a mixture of dry stone walls and hedgerows. Walls are made of locally quarried sandstones and limestones. Hedges are dominated by hawthorn and are often tall, leggy and grazed through or supplemented by wire fences. Field systems are regular in pattern, dating from the enclosure of moorland wastes in the 18th century. Older, pre-enclosure, field systems are found locally but are very similar in character.	

Durham BLT Gritstone Upland Fringe	**Relevant Scheme Study Areas within area: 07, 08** **Relevant Order Limits within the area: 07, 08**

Tree cover is low, with scattered hedgerow oak and ash, occasional lines of alder along watercourses and tall overgrown hedgerow hawthorn trees. Woodland cover varies - generally the landscape is very open but some areas are relatively well wooded with scattered plantations of pine or larch.

A sparsely settled landscape of isolated farms connected by straight enclosure roads. Buildings are of local stone with roofs of stone flag or Welsh slate. Farms and farm buildings of the Raby estate, covering most of the land north of the Tees, are painted white.

The landscape is visually open and broad in scale though locally defined by minor ridgelines. From some vantage points there are panoramic views across the Tees vale and west into Teesdale from higher ground. A remote and tranquil rural landscape."

Relevant Stated Key Characteristics

The published study sets out a number of key characteristics. The following are considered to be relevant to the study area:

- "Broad ridges and plateaux.
- Gently rounded topography of thinly bedded sandstones, limestones and mudstones overlain by glacial boulder clay.
- Small becks, occasionally in narrow incised valleys.
- Heavy, seasonally waterlogged clay soils.
- Pastoral land use of improved, semi-improved or wet rushy pasture.
- Regular grids of parliamentary enclosures bounded by dry stone walls or hawthorn hedges, often gappy and overgrown. Occasional older field systems.
- Few trees - scattered hedgerow oak and ash.
- Variable woodland cover - generally sparsely wooded but with scattered conifer plantations in places.
- Isolated farms connected by straight enclosure roads. Farms of the Raby estate north of the Tees are painted white.
- A visually open landscape, broad in scale though locally defined by minor ridgelines and with occasional panoramic views across the Tees vale.
- A remote and tranquil rural landscape."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BLT is covered by an Area of Higher Landscape Value and forms part of the setting to the North Pennines AONB. The BLT is characterised by distinctive rectilinear field pattern, watercourses and landform and therefore the value is assessed as high.	The DCO boundary is located across and in proximity to the existing A66 and A67, which are the main infrastructure features in the BLT, and were there has already been alteration to the underlying pattern of landform and vegetation cover, the susceptibility is assessed as low.	The combination of the high value and low susceptibility results in a medium sensitivity to the scheme.

Construction phase (winter) assessment scheme 07

Magnitude of Impact

The majority of the construction activity will be located across the southern part of the BLT which covers land to the north and east of Bowes. To the west of Bowes, the construction activity will result in localised changes to landform due to the excavation across the existing cutting, along with

Durham BLT Gritstone Upland Fringe	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08

the removal of existing vegetation from this part of the existing A66. There will be the presence of construction activity and machinery to excavate the underpass and attenuation basins adjacent to the main road widening to the north of Bowes.

Likewise there will be regrading of land to the east of Bowes, to form the embankments, the attenuation basin and the slip road between the proposed A66 and the eastern edge of Bowes. This activity will also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation. At the eastern end of the DCO boundary, the construction activity will include tall machinery to construction the overbridge, along with the formation of embankments to the north of the A66, along with the changes to surface landform and activity to construction the new access roads and junctions along the north side of the A66.

There will also be construction compounds within the BLT, which will introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles and hoardings and temporary lighting.

In relation to the stated key characteristics of the BLT, the construction activity will result in localised changes to the rounded topography, the regular field patterns, dry stone walls and variable vegetation cover. The construction activity would locally reduce the tranquillity of the BLT due to the sound and perception of the machinery, activity, the varied state of the landform, including changes to the colour and texture of the landform from the excavation.

However, given the construction activity would be localised to a very small part of the BLT, where the tranquillity is already reduced by the existing A66 and there is no sense of remoteness due to the road and settlement pattern, the magnitude of impact to the BLT during construction is assessed as negligible adverse.

Significance of Effect

The combination of the medium sensitivity and negligible adverse impact would result in a slight adverse (not significant) effect during the construction phase.

Operation year 1 phase (winter) assessment scheme 07

Magnitude of Impact

At year 1, the scheme will retain the pattern of road infrastructure in the southern part of the BLT, reflecting the pattern of the existing A66 via its alignment remaining to the north and east of Bowes. This will include the scheme remaining in cutting to the north of Bowes and that the interchange with the A67 is demarcated by slip roads.

The scheme will result in additional road infrastructure features, via the additional width in the carriageways, from one lane (in each direction) to two lanes. The scale and extent of the junction with the A67 will be greater than the existing junction, due to the west bound off-slip being located to the north of the existing alignment and the two new slip roads to the east of Bowes.

There will also be changes to the junction and road alignments along The Street, with a new access road replacing the existing junction. The alignment of the new access road would reflect that of the A66 by being parallel to it, until the proposed overbridge, which would be a raised structure, with associated embankments. This overbridge will increase the number of road structures and locally increase the perception of engineered earthworks and in traduce additional massing within the road corridor. However, given the overbridge will remain below the skyline and the remainder of the scheme will reflect the alignment of the existing A66, the stated visually open and broad scale character of the BLT will remain.

The scheme will result in a reduction of the existing massing via the removal of the large barn located between the existing A66 and the A67. There will also be localised reduction in the extent of

Durham BLT Gritstone Upland Fringe	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08
stone walls dividing the fields to the east of Bowes, which are a stated key characteristics of the BLT. There will be a reduction in the density of vegetation adjacent to the road corridor, which is a stated characteristics of the BLT. The scheme will introduce substantial new planting in accordance with the stated landscape guidelines of increasing the extent of small woodlands; although this would not have established at year 1 and would not be in leaf. This will locally increase the perception of the road and vehicles, specifically in relation to Bowes overbridge. The scale and extent of the scheme would be very localised in relation to the wider geographic area of the BLT. The scheme will remain within a part of the BLT which is already defined by the existing A66. The magnitude of impact is therefore assessed as negligible adverse at year 1. Significance of Effect The combination of the medium sensitivity and negligible adverse impact would result in a slight adverse (not significant) effect at year 1 (winter) of operation.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact Compared to the year 1 assessment, the proposed planting will have established across the DCO boundary and would be in leaf. Across the cutting to the north of Bowes, the proposed planting will consist of broadleaved trees along the southern edge of the cutting, between Bowes and the road, to reflect the existing vegetation cover. On the northside of the cutting and around the junction with the A67, the woodland and mixed scrub will have established to likewise reflect the existing vegetation cover, integrate the Bowes overbridge and reduce the perception of the earthworks and structures in this part of the BLT. Compared to the arable land cover to the south of the existing A66, to the north of the existing A66 and The Street and across the eastern part of the DCO boundary, there will be species rich grassland, to provide a more diverse vegetation cover and improve the opportunities for biodiversity, which will have established to form an integrated sward by year 15. There will be a reduction in the vegetation between Stone Bridge Cottages and the proposed slip road and dual carriageway, with the existing trees replaced with mixed scrub and species rich grassland. The species rich grassland will continue across the proposed embankments of the overbridge in the eastern part of the DCO boundary, which as an established sward will reduce the perception of the engineered gradients. The scale and mass of the overbridge will remain as per the year 1 assessment. The magnitude of impact at year 15 is assessed as remaining negligible adverse due to the retained additional road infrastructure and perception of the overbridges. Significance of Effect However, in combination with the improved land cover and vegetation structure, via the establishment of the proposed planting and the increase opportunities for biodiversity in comparison to the existing arable land use, the effect is assessed as reducing to neutral (not significant) at year 15.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact A very small part of the construction activity will be located in the BLT, covering the south-west edge of DCO boundary, relating to the realignment of the junction on Rutherford Lane. The construction	

Durham BLT Gritstone Upland Fringe	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08
activity across the remainder of the western and central part of the DCO boundary will be perceived from the BLT. However, the very small physical change and the perception of the construction activity in the context of the existing A66 will result in a negligible adverse magnitude of impact. Significance of Effect In relation to the medium sensitivity of the BLT, the negligible adverse magnitude of impact will result in a neutral (not significant) effect, as there will be no change to the character of the BLT.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact At year 1, the re-alignment of Rutherford Lane will be located in a part of the BLT already characterised by the A66, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the medium sensitivity of the BLT, the no change magnitude of impact will result in a neutral (not significant) effect, as there will be no change to the character of the BLT.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The construction activity will reflect that stated above for schemes 07 and 08, with the magnitude of impact increasing to minor adverse. Significance of Effect In relation to the medium sensitivity of the BLT, the effect will be slight adverse (not significant).	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The activity will reflect that stated above for schemes 07 and 08, with the magnitude of impact increasing to minor adverse. Significance of Effect In relation to the medium sensitivity of the BLT, the effect will be slight adverse (not significant).	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The activity will reflect that stated above for schemes 07 and 08, with the magnitude of impact increasing to minor adverse.	

Durham BLT Gritstone Upland Fringe	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08
Significance of Effect In relation to the medium sensitivity of the BLT, the effect will be slight adverse (not significant).	

Table 25: Durham BCA Bowes

Durham BCA Bowes	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
Relevant aspects of the published description: BCA Bowes is a smaller area of land within BLT Gritstone Upland Fringe, covering land to the north and north-east of Bowes. The BCA includes the existing A66. The published study describes the BCA as: “An area of high almost flat ground on the edges of the moorland plateau of the Stainmore Gap. An open pastoral landscape of improved pasture and wet, rushy pasture with few trees or woodlands. Regular grids of parliamentary enclosures cover much of the area. In the north across Deepdale, large fields are bounded by dry stone walls. East of Bowes, narrow linear parliamentary enclosures and older curvilinear town field enclosures are bounded by a mixture of leggy, overgrown hedges and stone walls with scattered, locally abundant, ash and Sycamore trees. Isolated farms are scattered across the area.”	
Relevant Stated Key Characteristics (as part of the Gritstone Upland Fringe): The published study sets out key characteristics for the BCA. The following are considered to be relevant to the study area: • "Broad ridges and plateaux. • Gently rounded topography of thinly bedded sandstones, limestones and mudstones overlain by glacial boulder clay. • Small becks, occasionally in narrow incised valleys. • Heavy, seasonally waterlogged clay soils. • Pastoral land use of improved, semi-improved or wet rushy pasture. • Regular grids of parliamentary enclosures bounded by dry stone walls or hawthorn hedges, often gappy and overgrown. Occasional older field systems. • Few trees - scattered hedgerow oak and ash. • Variable woodland cover - generally sparsely wooded but with scattered conifer plantations in places. • Isolated farms connected by straight enclosure roads. Farms of the Raby estate north of the Tees are painted white. • A visually open landscape, broad in scale though locally defined by minor ridgelines and with occasional panoramic views across the Tees vale. • A remote and tranquil rural landscape."	

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
BCA Bowes is covered by a designated Area of Higher Landscape Value and forms part of the setting to the North Pennines AONB. The BCA consists of several recreational routes and the central and northern parts of the BCA have	The BCA contains part of the existing A66 and part of the A67, such that there is some ability to accommodate the scheme, such that the susceptibility is assessed as medium.	The combination of the high value and medium susceptibility results in a medium sensitivity to the scheme.

Durham BCA Bowes	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07	
an increased sense of remoteness and tranquillity. The value is therefore assessed as high.		
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction impacts would reflect those stated for LCT Gritstone Upland Fringe, due to BCA covering the same geographic area as the LCT, as the DCO scheme boundary also mostly being within BCA Bowes. To the west of Bowes, the construction activity will result in localised changes to landform due to the excavation across the existing cutting, along with the removal of existing vegetation from this part of the existing A66. There will be the presence of construction activity and machinery to excavate the underpass and attenuation basins adjacent to the main road widening to the north of Bowes. Likewise there will be regrading of land to the east of Bowes, to form the embankments, the attenuation basin and the slip road between the proposed A66 and the eastern edge of Bowes. This activity will also result in vegetation removal and changes to surface landform, as well as the removal of parts of stone wall field boundaries and field boundary vegetation within the BCA and the local landscape character areas of the high plateau farmland: walled pasture and high plateau farmland: pasture. At the eastern end of the DCO boundary, the construction activity will include tall machinery to construction the overbridge, along with the formation of embankments to the north of the A66, along with the changes to surface landform and activity to construction the new access roads and junctions along the north side of the A66. There will also be construction compounds within the BCA, which will introduce temporary buildings via offices and welfare facilities, external parking areas, stockpiles and hoardings and temporary lighting. In relation to the stated key characteristics of the BCA, the construction activity will result in localised changes to the rounded topography, the regular field patterns, dry stone walls and variable vegetation cover. The construction activity would locally reduce the tranquillity of the BCA due to the sound and perception of the machinery, activity, the varied state of the landform, including changes to the colour and texture of the landform from the excavation. The construction activity would be localised to a small part of the BCA and would result in alteration to some of the key features, in terms of the landform, vegetation and stone walls, the magnitude of impact to the BCA during construction is assessed as minor adverse. Significance of Effect The combination of the medium sensitivity and minor adverse impact would result in a slight adverse (not significant) effect during the construction phase.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact At year 1 of operation, the scheme would result in impacts like those stated for BLT Gritstone Upland Fringe, with additional road infrastructure features, via additional width in the carriageways, from one lane (in each direction) to two lanes, including additional signage. The scale and extent of the junction with the A67 will be greater than the existing junction, due to the west bound off-slip being located to the north of the existing alignment and the two new slip roads to the east of Bowes. There will also be changes to the junction and road alignments along The Street, with a new access road replacing the existing junction. The alignment of the new access road would reflect that of the A66 by being parallel to it, until the proposed overbridge, which would be a raised structure, with		

Durham BCA Bowes	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
associated embankments. This overbridge will increase the number of road structures and locally increase the perception of engineered earthworks and in traduce additional massing within the road corridor. The scheme will result in a reduction of the existing massing via the removal of the large barn located between the existing A66 and the A67. There will also be localised reduction in the extent of stone walls dividing the fields to the east of Bowes, which are a stated key characteristics of the BCA, as part of the BLT. There will be a reduction in the density of vegetation adjacent to the road corridor, which is a stated characteristics of the BCA. The scheme will introduce substantial new planting, although this would not have established at year 1 and would not be in leaf. This will locally increase the perception of the road and vehicles, specifically in relation to Bowes overbridge. The scale and extent of the scheme would be very localised in relation to the wider geographic area of the BCA. The scheme will remain within a part of the BCA which is already defined by the existing A66 and the scheme will retain the pattern of road infrastructure in the southern part of the BCA, reflecting the pattern of the existing A66 via its alignment remaining to the north and east of Bowes. This will include the scheme remaining in cutting to the north of Bowes, with the interchange with the A67 to the north-east of Bowes. The reduced amount of vegetation and the slightly more elevated position of the A66 will result in a minor adverse impact. Significance of Effect The combination of the medium sensitivity and minor adverse impact would result in a slight adverse (not significant) effect at year 1 (winter) of operation.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact The proposed planting would have established and be in leaf in comparison to the year 1 assessment. Across the cutting to the north of Bowes, the proposed planting will consist of broadleaved trees along the southern edge of the cutting, between Bowes and the road, to reflect the existing vegetation cover. On the northside of the cutting and around the junction with the A67, the woodland and mixed scrub will have established to likewise reflect the existing vegetation cover, integrate the Bowes overbridge and reduce the perception of the earthworks and structures in this part of the BCA. Compared to the arable land cover to the south of the existing A66, to the north of the existing A66 and The Street and across the eastern part of the DCO boundary, there will be species rich grassland, to provide a more diverse vegetation cover and improve the opportunities for biodiversity, which will have established to form an integrated sward by year 15. There will be a reduction in the vegetation between Stone Bridge Cottages and the proposed slip road and dual carriageway, with the existing trees replaced with mixed scrub and species rich grassland. The species rich grassland will continue across the proposed embankments of the overbridge in the eastern part of the DCO boundary, which as an established sward will reduce the perception of the engineered gradients. The scale and mass of the overbridge will remain as per the year 1 assessment. The magnitude of impact at year 15 is assessed as negligible adverse due to the retained additional road infrastructure and perception of the overbridges. Significance of Effect However, in combination with the improved land cover and vegetation structure, via the establishment of the proposed planting and the increase opportunities for biodiversity in comparison	

Durham BCA Bowes	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
to the existing arable land use, the effect is assessed as reducing to neutral (not significant) at year 15.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The construction phase for scheme 08 will not be located in the BCA. The intervening ridgelines across Kilmond quarry will negate any perception of the construction activity, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact There will be no physical change to the BCA due to scheme 08 and no perception due to the distance and intervening features. The magnitude of impact is assessed as no change. Significance of Effect In relation to the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impacts will reflect those set out above, such that the physical change will remain in scheme 07 and the magnitude of impact will therefore be minor. Significance of Effect In relation to the medium sensitivity of the receptor, the minor impact will result in a slight adverse (not significant) effect.	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impacts will reflect those set out above, such that the physical change will remain in scheme 07 and the magnitude of impact will therefore be minor. Significance of Effect In relation to the medium sensitivity of the receptor, the minor impact will result in a slight adverse (not significant) effect.	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	

Durham BCA Bowes	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
Magnitude of Impact The magnitude of impacts will reflect those set out above, such that the physical change will remain in scheme 07 and the magnitude of impact will therefore be negligible. Significance of Effect In relation to the medium sensitivity of the receptor, the negligible impact will result in a neutral (not significant) effect.	

Table 26: Durham BCA Moorhouse and Gillbeck

Durham BCA Moorhouse and Gillbeck	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08
Relevant aspects of the published description: BCA Moorhouse and Gillbeck is located in the south-east part of the study area of scheme 07 and the southern part of the study area for scheme 08. The published study describes the BCA as: “Areas of high, almost flat ground either side of the River Greta. An open pastoral landscape of improved pasture and wet, rushy pasture with few trees and scattered conifer plantations and shelterbelts. Regular systems of parliamentary enclosures are crossed by straight enclosure roads. Field boundaries are a mixture of stone walls and leggy, overgrown hedges. Isolated farms are scattered across the area.”	
Relevant Stated Key Characteristic (as part of the Gritstone Upland Fringe): The published study sets out key characteristics for the BCA. The following are considered to be relevant to the study area: • "Broad ridges and plateaux. • Gently rounded topography of thinly bedded sandstones, limestones and mudstones overlain by glacial boulder clay. • Small becks, occasionally in narrow incised valleys. • Heavy, seasonally waterlogged clay soils. • Pastoral land use of improved, semi-improved or wet rushy pasture. • Regular grids of parliamentary enclosures bounded by dry stone walls or hawthorn hedges, often gappy and overgrown. Occasional older field systems. • Few trees - scattered hedgerow oak and ash. • Variable woodland cover - generally sparsely wooded but with scattered conifer plantations in places. • Isolated farms connected by straight enclosure roads. Farms of the Raby estate north of the Tees are painted white. • A visually open landscape, broad in scale though locally defined by minor ridgelines and with occasional panoramic views across the Tees vale. • A remote and tranquil rural landscape."	

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BCA is within an Area of Higher Landscape Value and the value is assessed as high.	As elevated land with notable vegetation cover, the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.

Durham BCA Moorhouse and Gillbeck	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08
Construction phase (winter) assessment scheme 07	
Magnitude of Impact There would be no physical change to the landscape features within the BCA. The construction activity will not be perceived due to distance and intervening features and the magnitude of impact is assessed as no change. Significance of Effect combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape The magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The construction activity will be very localised and small in scale within the BCA, being located at an existing lane. The perception of the construction activity across the remainder of the DCO boundary will also be localised. The magnitude of impact is assessed as negligible adverse. Significance of Effect The negligible adverse impact in relation to the high sensitivity of the BCA results in a slight adverse (not significant) effect during the construction phase.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact In operation, the realignment of Rutherford Lane will be located in a part of the BCA already characterised by road infrastructure and the A66. The additional perception of increased road infrastructure adjacent to the BCA will not alter the key characteristics of the area and the magnitude of impact is assessed as negligible adverse. Significance of Effect The negligible adverse impact in relation to the high sensitivity of the BCA results in a slight adverse (not significant) effect during the construction phase.	
Operation year 15 phase (summer) assessment scheme 08	
Magnitude of Impact With the establishment of the proposed planting, the re-aligned junction will be integrated within the landscape to a greater degree than at year 1. The perception of the remaining parts of scheme 08	

Durham BCA Moorhouse and Gillbeck	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07, 08
will also reduce due to the vegetation being leaf. The magnitude of impact is assessed as reducing to no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the BCA results in a neutral (not significant) effect during the construction phase.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond study area.	
Construction phase (winter) assessment intra project (schemes 07, 08 and 09)	
Magnitude of Impact The construction activity will reflect that above for scheme 08. The magnitude of impact is assessed as negligible adverse. Significance of Effect The negligible adverse impact in relation to the high sensitivity of the BCA results in a slight adverse (not significant) effect during the construction phase.	
Operation year 1 (winter) assessment intra project (schemes 07, 08 and 09)	
Magnitude of Impact In operation, the magnitude of impacts will reflect those stated above for scheme 08, such that the magnitude of impact is assessed as negligible adverse. Significance of Effect The negligible adverse impact in relation to the high sensitivity of the BCA results in a slight adverse (not significant) effect during the construction phase.	
Operation year 15 phase (summer) assessment intra project (schemes 07, 08 and 09)	
Magnitude of Impact The magnitude of impact is assessed as reducing to no change, as per the assessment for scheme 08. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the BCA results in a neutral (not significant) effect during the construction phase.	

Table 27: Durham BLT Lower Dale

Durham BLT Lower Dale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
Relevant aspects of the published description: BLT Lower Dale covers land in four different parts of Durham, relating to the river valleys.	

Durham BLT Lower Dale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07

In relation to the study area for schemes 07 and 08 the BLT covers land extending to the north and south of the River Greta, with the existing A66 and Bowes forming part of the northern boundary of the BLT.

The published description of the BLT is:

“Broad upland valleys with narrow flood plains or incised gorges on the valley floor. Alternating strata of Carboniferous limestones, sandstones and softer shales and mudstones give a gently stepped profile to the dale side in places, and outcrop occasionally in gorges and dale side quarries. On lower slopes they are masked by glacial boulder clays, or sands and gravels marked by undulating terrain. Fast flowing rivers course on rocky beds through steep sided gorges or meander across floodplains of river terrace gravels and alluvium. Soils are heavy, often waterlogged clays, with more fertile brown earths and alluvial soils on the dale floor.

The lower dales are pastoral landscapes with mosaics of improved and semi-improved pasture and occasional flower-rich hay meadows. Field systems are sub-regular or linear in pattern and have their origins in the enclosure of common town fields surrounding the dales villages that took place mostly in the 17th century. Relics of ancient agriculture - rigg and furrow, lynchets and cultivation terraces - are widespread. Field boundaries are a mixture of hedgerows and stone walls. Walls are made of locally quarried stone or rounder boulders from river beds and field clearances. Hedgerows are often tall and overgrown and rich in trees, with frequent ash, oak, sycamore and wych elm. Regular parliamentary enclosures are found on more recently enclosed land on the higher dale sides.

Ancient ash and oak woodlands are found along rivers and streams and in gills and gorges. Plantations of pine and larch are scattered across the dale side. Woodland cover is not high, but the frequency of small woodlands, hedgerow and field trees, tree-lined watercourses and overgrown hedgerows gives the landscape a well-wooded feel.

Small and medium sized villages lie on the valley floor connected by winding roads. Most villages are of medieval origins and some still retain a central village green. Others were enlarged in the 18th and 19th centuries with housing for workers in the quarrying, lead mining and steel working industries. Farms and field barns are scattered across the dale side or stung out along minor roads. Buildings are of local stone with roofs of stone flag or slate and have a strong vernacular character. Active and abandoned quarries are prominent on the dale side in places following outcrops of the Great Limestone.

The landscape is relatively broad in scale, defined by encircling moorland ridgelines, but locally it is visually enclosed by woodlands, trees and hedgerows giving it a more intimate scale. A settled and largely tranquil upland fringe landscape that, with its vernacular buildings, old villages and pastoral land use, has a strong sense of both visual unity and cultural continuity.”

Relevant Stated Key Characteristics are:

- "Broad valleys with narrow floodplains or gorges on the valley floor.
- Winding, rocky fast flowing rivers.
- Carboniferous rocks covered by glacial drift, river gravels or alluvium.
- Limestones, sandstones and shales outcrop occasionally on the sides of gorges and dale side quarries.
- Heavy clay soils with more fertile brown earths and alluvial soils on the dale floor.
- Pastoral farmland of improved and semi-improved pastures.
- Old field systems with sub regular or linear patterns of hedges and walls.
- Relics of rig and furrow, and cultivation terraces.

Durham BLT Lower Dale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07	
• Frequent hedgerow oak, ash, sycamore and wych elm, tree lined watercourses and overgrown hedgerows. • Ancient ash and oak woods in gorges and denes. • Old villages of vernacular sandstone buildings on the dale floor. • Scattered stone farmsteads and field barns. • Limestone quarries are locally prominent on the dale side. • Visually enclosed by woodlands, trees and hedgerows and defined by high moorland ridgelines."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Parts of the BLT are within the Pennine AONB and those areas beyond the AONB are considered to form part of AONB setting. Part of the BLT is also an Area of Higher Landscape Value. There are numerous recreational routes across the BLT and the tranquillity and remoteness increase in the lower lying valley floors, such that the value is assessed as high.	As a valley landform, with the River Greta, along with small scale road infrastructure overall and intermittent farms, the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact At the western part of the DCO boundary, the construction activity will result in localised excavation and changes to surface landform to construct the attenuation basin across sloping land to the south of Bowes. There will also be construction activity to implement the access track between The Street and the basin. The scale of this construction activity would be small and localised and offset from the retained existing field boundary vegetation. To the east of The Street, the construction phase would also result in changes to surface landform and localised vegetation removal to construct the embankments as part of the overbridge, the attenuation basins and the access road between The Street and the overbridge. Tall machinery and lifting equipment will be used as part of this construction activity, along with the movement of construction lorries adjacent to the existing A66 and construction compounds. Localised excavation would also occur adjacent to the existing A66 to form the linear attenuation basin and the attenuation tracks. The construction activity will result in alteration to the stated key characteristics of linear patterns of hedges and walls. But the overall scale and extent of the construction activity would be very small in relation to the wider geographic area of the BLT. The construction activity would also be located in a part of the BLT where the sense of remoteness and tranquillity are substantially reduced by the existing A66. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the high sensitivity, the negligible adverse magnitude of impact would result in a slight adverse (not significant) effect to BLT Lower Dale during the construction phase.		
Operation year 1 phase (winter) assessment scheme 07		

Durham BLT Lower Dale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
Magnitude of Impact At year 1 of operation, the attenuation basin in the western part of the DCO boundary result in a very small reduction in the extent of arable land use across the valley side between the River Greta and Bowes. The proposed wet woodland planting to the south of the attenuation basing would respond positively to the stated guidelines to extend woodland coverage, although it would not have established fully at year 1. Attenuation basins are present in the BLT, although located on the valley floors, rather than across the valley sides, such that the additional attenuation basins within the DCO boundary would increase the number of engineered waterbodies. With the proposed landscape not established, the engineered embankments would be locally perceived. Similarly, the engineered embankments of the overbridge would be perceived, with vehicles in a higher position on the valley side in comparison to the existing A66. The additional road infrastructure would be consolidated to adjacent to the existing A66 alignment and within part of the valley side already consisting of properties and access tracks. The magnitude of impact would be localised in relation to the wider geographic extent of the BLT, such that the magnitude of impact is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity, the negligible adverse magnitude of impact would result in a slight adverse (not significant) effect to BLT Lower Dale at year 1 of operation.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact Compared to the year 1 assessment, the proposed wet woodland would have established to the south of the attenuation basin, in the western part of the DCO boundary. This would reflect and increase the extent of riverside woodland along the valley floor and respond positively to the published guidance. The species rich grassland will also have established to improve the vegetation cover and opportunities for biodiversity in comparison to the arable field. The establishment of this planting will also integrate the engineered profile of the earthworks and reduce the perception of the engineered landform. At the eastern part of the DCO boundary, the proposed species rich grassland will have also established across the overbridge embankments, similarly softening and reducing the perception of the engineered earthworks. Vehicles across the overbridge will remain in an elevated position in relation to the existing A66, although the perception will be localised due to the existing vegetation being in leaf and the overbridge remaining below the ridgeline line. Compared to the year 1 assessment, the magnitude of impact at year 15 is assessed as reducing to no change, due to the balance between the retained additional road infrastructure and the improved land cover and vegetation structure. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect at year 15.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact	

Durham BLT Lower Dale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
The construction activity will not be located in the BLT and the distance and intervening landform will negate any perception of the construction phase. The magnitude of impact is assessed as no change. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact The operational activity will not be located in the BLT and the distance and intervening landform will negate any perception of this phase. The magnitude of impact is assessed as no change. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The construction activity will reflect that above for scheme 07. The magnitude of impact is assessed as negligible adverse. Significance of Effect The negligible adverse impact in relation to the high sensitivity of the BLT results in a slight adverse (not significant) effect during the construction phase.	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact In operation, the magnitude of impacts will reflect those stated above for scheme 07, such that the magnitude of impact is assessed as negligible adverse. Significance of Effect The negligible adverse impact in relation to the high sensitivity of the BLT results in a slight adverse (not significant) effect during the operation phase.	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact In operation, the magnitude of impacts will reflect those stated above for scheme 07, such that the magnitude of impact is assessed as no change.	

Durham BLT Lower Dale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
Significance of Effect The no chance impact in relation to the high sensitivity of the BCA results in a neutral (not significant) effect during the operation year 15.	

Table 28: Durham BCA Lower Greta

Durham BCA Lower Greta	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07

Relevant aspects of the published description:

BCA Lower Greta covers land the valley floor and rising land adjacent to the River Greta, as part of the River Greta valley, extending from the west of Bowes to the east of Scargill. The existing A66 and The Street form part of the northern boundary to the BCA. The published study describes the BCA as:

“A shallow dale running across the high plateau of the Stainmore Gap. The river Greta meanders across a narrow floodplain in the west before entering a narrow wooded gorge in the east. The wooded limestone scar of Kilmond Wood rises above the dale in the north. A pastoral landscape of improved and semi-improved pastures, sub regular patterns of old hedges and walls, with a linear grain in places, and scattered hedgerow trees. Farms and farm clusters are scattered along the dale.”

Relevant Stated Key Characteristics (as part of the Lower Dale BLT):

:

- "Broad valleys with narrow floodplains or gorges on the valley floor.
- Winding, rocky fast flowing rivers.
- Carboniferous rocks covered by glacial drift, river gravels or alluvium.
- Limestones, sandstones and shales outcrop occasionally on the sides of gorges and dale side quarries.
- Heavy clay soils with more fertile brown earths and alluvial soils on the dale floor.
- Pastoral farmland of improved and semi-improved pastures.
- Old field systems with sub regular or linear patterns of hedges and walls.
- Relics of rig and furrow, and cultivation terraces.
- Frequent hedgerow oak, ash, sycamore and wych elm, tree lined watercourses and overgrown hedgerows
- Ancient ash and oak woods in gorges and denes.
- Old villages of vernacular sandstone buildings on the dale floor.
- Scattered stone farmsteads and field barns.
- Limestone quarries are locally prominent on the dale side.
- Visually enclosed by woodlands, trees and hedgerows and defined by high moorland ridgelines."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The western part of the BCA is within the Pennine AONB and those areas beyond the AONB are considered to form part of AONB setting. The BCA is also	As a valley landform, with the River Greta, along with small scale road infrastructure overall and intermittent farms, the	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.

Durham BCA Lower Greta	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07	
an Area of Higher Landscape Value. There are numerous recreational routes across the BCA and the tranquillity and remoteness increase in the lower lying valley floors, such that the value is assessed as high.	susceptibility is assessed as high.	
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The magnitude of impacts would reflect those stated for BLT Lower Dale, with localised excavation along the northern edge of the BCA, via excavation for the attenuation basins, resulting in changes to surface landform and the presence of construction machinery across the fields forming the valley sides. The construction activity will also include the implementation of embankments to form the overbridge, with tall machinery and lifting equipment. There will also be the presence of construction compounds, along with localised vegetation removal The construction activity will result in alteration to the stated key characteristics of linear patterns of hedges and walls. But the overall physical scale and extent of the construction activity would be small in relation to the wider geographic area of the BLT. The perception of the construction activity would be from across most of the BCA due to the valley landform and relatively elevated position of the construction activity; however, the perception would be in the context of the existing A66, such that the magnitude of impact is assessed as minor adverse. Significance of Effect In relation to the high sensitivity, the minor adverse magnitude of impact would result in a slight adverse (not significant) effect to BLT Lower Dale during the construction phase.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact At year 1 of operation, the attenuation basin in the western part of the DCO boundary result in a very small reduction in the extent of arable land use across the valley side between the River Greta and Bowes. The proposed wet woodland planting to the south of the attenuation basing would respond positively to the stated guidelines to extend woodland coverage, although it would not have established fully at year 1. Attenuation basins are present in the BLA, although located on the valley floors, rather than across the valley sides, such that the additional attenuation basins within the DCO boundary would increase the number of engineered waterbodies. With the proposed landscape not established, the engineered embankments would be locally perceived. Similarly, the engineered embankments of the overbridge would be perceived, with vehicles in a higher position on the valley side in comparison to the existing A66. The additional road infrastructure would be consolidated to adjacent to the existing A66 alignment and within part of the valley side already consisting of properties and access tracks. The magnitude of impact would be localised in relation to the wider geographic extent of the BLA, such that the magnitude of impact is assessed as minor adverse. Significance of Effect		

Durham BCA Lower Greta	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
In relation to the high sensitivity, the minor adverse magnitude of impact would result in a slight adverse (not significant) effect at year 1 of operation. The significance of effect is assessed as not being moderate adverse, as the scheme would not conflict with the character of their being main road infrastructure at the boundary of the BCA and that the change to the landform and vegetation patterns would be localised and would not diminish a sense of place as the integrity of the wider valley landform and River Greta would remain.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact At year 15, the proposed woodland planting would have established, including to the south of the attenuation basin. The proposed species rich grassland would have established to form an integrated sward, to provide additional opportunities for biodiversity in comparison to the arable fields and represent a more valued vegetation cover. The establishment of the proposed planting will reduce the perception of the engineered landform, including the overbridge, although its scale and height above the A66 will remain as per the year 1 assessment. Compared to the year 1 assessment, the magnitude of impact at year 15 is assessed as reducing to negligible adverse due to the balance between the retained additional road infrastructure and the improved land cover and vegetation structure. Significance of Effect In relation to the high sensitivity of the receptor, the effect is assessed as slight adverse (not significant) at year 15.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The construction will not be located in the BCA and the distance and intervening landform will negate any perception of this phase. The magnitude of impact is assessed as no change. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact The operational activity will not be located in the BCA and the distance and intervening landform will negate any perception of this phase. The magnitude of impact is assessed as no change. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	

Durham BCA Lower Greta	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 07
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The changes will reflect those for scheme 07, resulting in a minor impact. Significance of Effect In relation to the high sensitivity of the receptor, the effect is assessed as slight adverse (not significant).	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The changes will reflect those for scheme 07, resulting in a minor impact. Significance of Effect In relation to the high sensitivity of the receptor, the effect is assessed as slight adverse (not significant).	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The changes will reflect those for scheme 07, resulting in a negligible impact. Significance of Effect In relation to the high sensitivity of the receptor, the effect is assessed as slight adverse (not significant) at year 15.	

Table 29: Durham BCA Urban Area Bowes

Durham BCA Urban Area Bowes	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: 07
Relevant aspects of the published description: The area is identified in the published studies as an 'urban area' covering the scheme 07 study area; but no additional detail is provided by the published study. The Applicants analysis of BCA Bowes is that Bowes is predominantly a linear settlement, with terraced residential properties situated adjacent to The Street. The residential properties are predominantly two storey in height, constructed of stone and with slate roofs. There are several barns and outbuildings situated to the north of residential properties adjacent to The Street extend the overall settlement pattern towards the vegetation bordering the existing A66.	
Key Characteristics: As the published study does not define any key characteristics, the following have been defined by the Applicant: • Linear settlement pattern situated across the valley side, with the existing A66 forming its northern boundary. • Predominantly 2 storey residential properties.	

Durham BCA Urban Area Bowes	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: 07	
• Conservation Area designation with several listed buildings, along with Bowes Castle. • Well vegetated settlement, specifically adjacent to the River Greta and along the northern edge, adjacent to the existing A66, such that the perception of the existing A66 is localised. • Recreational value via public rights of way and national cycle route.		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As the BCA is covered by a Conservation Area and contains several recreational routes the value is assessed as high.	As a developed area, with properties and road infrastructure there is some ability to accommodate change, such that the susceptibility is assessed as medium.	The combination of the high value and medium susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact There would be localised vegetation removal from within the BCA, along with the presence of construction activity and compounds, with localised changes to landform associated with the underbridge and construction around the west bound on-slip and the access track at the eastern edge of the BCA. There would also be the perception of construction activity adjacent to the BCA, via the vegetation removal, construction activity and compounds along the alignment of the A66. The landscape setting to the BCA, whilst consisting of the existing A66, would experience a partial change from being areas of excavation and construction activity to the east and west of the BCA. The magnitude of impact is therefore assessed as moderate adverse. Significance of Effect In relation to the high sensitivity of the BCA, the moderate adverse impact would result in a moderate adverse (significant) effect during the construction phase.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact At year 1 of operation, the scheme would retain the landscape pattern of the northern edge of the BCA consisting of the A66. The small scale field pattern within the DCO boundary would be retained, along with the individual trees. There would be an increased perception of the A66 due to the reduction of vegetation around the Bowes overbridge and the additional attenuation basins and earthworks in the setting of the BCA. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the receptor, the effect is assessed as slight adverse (not significant). The effect is reduced from moderate adverse (significant) due to the very limited physical change to the landscape features across the BCA and there is already the perception of the existing A66.		
Operation year 15 phase (summer) assessment scheme 07		
Magnitude of Impact By year 15, the proposed planting bordering the BCA would have established to reduce the perception of the A66, including the cutting, Bowes overbridge, the attenuation basins and embankments, such that the magnitude of impact would reduce to negligible adverse.		

Durham BCA Urban Area Bowes	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: 07
Significance of Effect In relation to the high sensitivity of the receptor, the effect would be slight adverse (not significant).	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond study area.	

Table 30: Durham BLT Middle Dale

Durham BLT Middle Dale	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: 07
Relevant aspects of the published description: BLT Middle Dale covers numerous separate geographic valley systems between Bowes and Stanhope, within the scheme 07 study area. The published description of the BLT is: “Broad upland valleys with moderately sloping valley sides, incised by narrow steep-sided gills. Alternating strata of Carboniferous limestones, sandstones and softer shales and mudstones give a gently stepped profile to the upper dale side in places. On lower slopes they are overlain by boulder clays. Hard igneous dolerites with a vertical columnar grain outcrop locally in prominent scars. Rocky fast flowing rivers and streams with braided boulder-strewn channels run through narrow floodplains of alluvium or glacial sands and gravels. Locally, outcropping dolerites form spectacular waterfalls. Soils are heavy, often waterlogged clays with more fertile brown earths on the valley floors. Improved and semi-improved pastures, occasionally rush-infested, and flower-rich upland hay meadows cover the valley floor and dale side. Field systems are regular or sub-regular in pattern and date largely from 18th and 19th centuries enclosures. Strong patterns of dry stone walls are prominent features of the dale-side. Walls are of locally quarried sandstones, limestones and whin stone, or rounder boulders from river beds and field clearances. Tree cover is generally sparse with scattered field and shelter trees of ash, oak and sycamore. The middle dale is generally sparsely wooded, with narrow ash, alder or oak-birch woodlands along rivers and streams, in dale side gills or on steeper dale sides. Plantations of pine, larch or spruce are scattered across the dale side, with localised concentrations creating some heavily wooded local landscapes. Small villages, hamlets and farm clusters follow valley floor roads. Many of these have their origins in the lead mining industry, as do many of the small farms that line the dale sides, often close to the moor wall at the limits of agriculture. Buildings are of local stone with roofs of stone flag or slate and have a strong vernacular character.	

Durham BLT Middle Dale	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: 07

Other legacies of the lead mining industry include mine buildings, waste heaps, smelter flues, reservoirs and deep hushes which scar the dale side. Active and abandoned quarries are prominent on the dale side following outcrops of the Great Limestone and the Great Whin Sill. Large water supply reservoirs occupy a number of dales.

The landscape is visually open but enclosed by encircling moorland ridgelines. A settled and largely tranquil upland landscape that, with its vernacular buildings, field boundaries and traditionally managed meadows and pastures, has a strong sense of both visual unity and cultural continuity."

Relevant Stated Key Characteristics:

The relevant key characteristics from the published study are:

- "Broad upland valleys with moderately sloping, often gently stepped valley sides, incised by narrow steep-sided gills
- Carboniferous rocks overlain on lower slopes by boulder clays. Hard igneous dolerites outcrop locally in prominent scars.
- Narrow floodplains of alluvium or glacial sands and gravels.
- Rocky fast flowing rivers and streams.
- Heavy, often waterlogged, clay soils with more fertile brown earths on valley floors.
- Improved and semi-improved pastures and flower-rich upland hay meadows.
- Strong regular or sub-regular patterns of dry stone walls with occasional ash, oak and sycamore field trees.
- Sparsely wooded. Narrow ash and oak-birch woodlands along rivers and streams and dale side gills.
- Scattered plantations of pine, larch or spruce.
- Small villages, hamlets and farm clusters follow valley floor roads - scattered farms and field barns on the dale side. Buildings of local stone with roofs of stone flag or slate.
- Active and abandoned limestone and whinstone quarries prominent on the dale side.
- Relics of the lead mining industry - mine buildings, waste heaps, smelter flues, reservoirs and hushes.
- Major reservoirs in some dales.
- Visually open but enclosed by encircling moorland ridgelines.
- Settled tranquil upland landscapes with a strong sense of cultural continuity."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Parts of the BLT are within the North Pennines AONB or are in close proximity to it, such that they form the setting to the AONB. The value is assessed as high.	As extensive areas of moorland with small scale infrastructure, such that the susceptibility is assessed as high.	The combination of the high sensitivity and the high susceptibility results in a high sensitivity to the scheme.

Construction phase (winter) assessment scheme 07

Magnitude of Impact

The construction activity will be located in close proximity to the existing A66, with localised excavation and vegetation removal to construct the road alignment, laybys and cuttings. The scale and extent of the construction activity will be very small and localised in relation to the wider geographic scale of the BLT. In addition, the additional vehicles, machinery and activity associated with the construction activity will be located adjacent to an existing main road which forms the boundary of the BLT. There will be no change to the stated landscape characteristics. The magnitude of impact is therefore assessed as no change at construction.

Durham BLT Middle Dale	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: 07
Significance of Effect In relation to the high sensitivity of the BLT, the no change magnitude of impact would result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact At year 1 of operation, the alignment of the scheme along the southern edge of the BLT would reflect that of the existing A66, with a relatively small increase in the amount of road surfacing and localised changes engineered ditches for drainage. There will be new planting consisting of heathland and shrub and species rich grassland, although these will not have established at year 1. There will be no overall change to the character of the BLT due to the retained alignment of the scheme and the very localises changes, such that the magnitude of impact is assessed as no change at year 1. Significance of Effect In relation to the high sensitivity of the BLT, the no change magnitude of impact would result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact At year 15 the proposed planting will have established to integrate the earthworks within the landscape to a greater degree than at year 1 and to reduce the perception of the earthworks. The scale and extent of the change will remain very localised, such that the magnitude of impact is assessed as remaining no change at year 15. Significance of Effect In relation to the high sensitivity of the BLT, the no change magnitude of impact would result in a neutral (not significant) effect at year 15 of operation.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 31: Durham BCA Mid Great Valley

Durham BCA Mid Greta Valley	**Relevant Scheme Study Areas within area: 07** **Relevant Order Limits within the area: 07**	
Relevant aspects of the published description: The Mid Greta Valley is the southernmost BCA within the BLT Middle Dale, situated to the west of Bowes and extending southwards across the River Greta, covering the scheme 07 study area. The published study describes the Mid Greta Valley as: “A shallow dale of walled pastures and meadows between the low moorland plateaux of Ravock and Gilmonby moors. Field systems are generally regular, and isolated farms are strung out along the dale floor. The landscape is visually open with few trees or woodlands and is dominated in places by the busy A66.”		
Relevant Stated Key Characteristics (as part of the Middle Dale): • "Broad upland valleys with moderately sloping, often gently stepped valley sides, incised by narrow steep-sided gills • Carboniferous rocks overlain on lower slopes by boulder clays. Hard igneous dolerites outcrop locally in prominent scars. • Narrow floodplains of alluvium or glacial sands and gravels. • Rocky fast flowing rivers and streams. • Heavy, often waterlogged, clay soils with more fertile brown earths on valley floors. • Improved and semi-improved pastures and flower-rich upland hay meadows. • Strong regular or sub-regular patterns of dry stone walls with occasional ash, oak and sycamore field trees. • Sparsely wooded. Narrow ash and oak-birch woodlands along rivers and streams and dale side gills. • Scattered plantations of pine, larch or spruce. • Small villages, hamlets and farm clusters follow valley floor roads - scattered farms and field barns on the dale side. Buildings of local stone with roofs of stone flag or slate. • Visually open but enclosed by encircling moorland ridgelines."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Most of the Mid Greta Valley is within the North Pennines AONB and those parts beyond the boundary form the setting to the AONB or parts of the Area of Higher Landscape Value. There are several recreational routes and there is an increased sense of tranquillity and remoteness within the valley floor. The value is assessed as high.	As an area of varied landform and the River Greta, with small scale infrastructure, the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will reflect that stated for the BLT and will be located in close proximity to the existing A66. There will be localised excavation and vegetation removal to construct the road alignment, laybys and cuttings. The scale and extent of the construction activity will be small and localised in relation to the wider geographic scale of the BCA. In addition, the additional vehicles, machinery and activity associated with the construction activity will be located adjacent to an		

Durham BCA Mid Greta Valley	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: 07
existing main road which forms the boundary of the part of the BCA, with no physical change to the majority of the area, which extends to the west of Bowes and across the River Greta. There will be the perception of the construction activity across the remainder of the DCO boundary. The magnitude of impact is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the BCA, the negligible adverse magnitude of impact would result in a slight adverse (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact At year 1 of operation, the alignment of the scheme along will reflect that of the existing A66, with a relatively small increase in the amount of road surfacing and localised changes engineered ditches for drainage. There will be new planting consisting of heathland and shrub and species rich grassland, although these will not have established at year 1. There will be no overall change to the character of the BCA due to the retained alignment of the scheme, the very localised changes and that the perception of the remainder of the scheme will reflect that of the existing A66. The magnitude of impact is assessed as negligible adverse at year 1. Significance of Effect In relation to the high sensitivity of the BCA, the negligible adverse magnitude of impact will result in a slight adverse (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact At year 15 the proposed planting will have established to integrate the earthworks within the landscape to a greater degree than at year 1 and to reduce the perception of the earthworks. The scale and extent of the change will remain very localised, such that the magnitude of impact is assessed as no change at year 15. Significance of Effect In relation to the high sensitivity of the BCA, the no change magnitude of impact will result in a neutral (not significant) effect at year 15 of operation.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 32: Durham BLT Moorland Plateau

Durham BLT Moorland Plateau	**Relevant Scheme Study Areas within area: 07** **Relevant Order Limits within the area: None**
Relevant aspects of the published description: BLT Moorland Plateau covers three separate areas or moorland to the east of Bowes, covering land in the scheme 07 study area. The published description of the BLT is a: “High moorland plateau. The gently rolling, often flat, topography of the plateau is the legacy of a major ice sheet in the last glacial period. Sandstones, mudstones and shales of the Carboniferous Millstone Grit series are generally masked by a thick blanket of peat and are rarely expressed at the surface. They outcrop locally in small rocky flat-topped summits (Shacklesborough, Goldsborough) of resistant sandstones, or as screes on the sides of the narrow steep sided gullies, gills or sikes, which drain the plateau. Thick peats are exposed as dark eroding peat edges and hags. Much of the landscape is covered by near continuous blanket bog of heather and cross-leaved heath, bilberry and crowberry, cottongrass, deergrass and bog mosses. This is replaced in the drier moorland fringes to the east by heather moorland or acid grassland. The moors are managed for grouse shooting and the extensive grazing of hardy upland breeds of sheep like Swaledales. In places the bog has been degraded by drainage or gripping to improve its grazing potential, and this together with high stocking levels promotes a shift towards grass or sedge dominated vegetation. On grouse moors burning patterns create a patchwork of older and younger heather creating a diversity of colour and texture. Some of the wetter bogs are too wet for heather burning in most years. The plateau is remote and inaccessible and is crossed by very few roads, tracks or footpaths. The landscape is largely devoid of man-made features other than occasional fences, grouse butts and sheep folds in the more accessible moorland edges. Relics from the Bronze Age survive in a few places (Ravock Moor) in the form of cairn fields but are difficult to find in the featureless moor. The landscape is visually open and broad in scale with panoramic views to distant summits. A remote, elemental, often bleak landscape of great simplicity with a severe climate of high rainfall, cold winters and short summers. This coupled with an almost complete absence of man-made features gives it a near wilderness quality.”	
Relevant Stated Key Characteristics: The published study sets out key characteristics for the BLT. The following are considered to be relevant to the study area: • "High moorland plateau. • Gently rolling, almost flat, terrain cut into by steep sided gullies. • Occasional small, low, flat-topped, summits. • Carboniferous rocks masked by deep peat which is exposed in eroded hags and peat edges. • Millstone grits outcrop locally in summits, gullies and stone bands. • Continuous blanket bog of heather, cotton grass and sphagnum mosses. • Extensive grazing by hardy hill sheep. • Burning patterns on grouse moors create a patchwork of older and younger heather. • Few man-made features other than occasional fences, grouse butts, cairns and sheepfolds. • A remote and inaccessible landscape with few roads or tracks. • A broad scale landscape with long distance views across open moorland to distant summits. • An exposed, elemental and simple, often bleak, landscape with a near wilderness quality."	
Landscape Value	Landscape Susceptibility	Landscape Sensitivity

Durham BLT Moorland Plateau	**Relevant Scheme Study Areas within area: 07** **Relevant Order Limits within the area: None**	
Parts of the BLT are within the North Pennines AONB and an Area of Higher Landscape Value. There are numerous recreational routes across the BLT and a high level of remoteness and tranquillity. The value is therefore assessed as high.	As an area of moorland, with very small scale infrastructure, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility results in a very high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact There would be no physical change to the landscape features within the BLT as the construction activity will be located beyond the boundaries of the area. The construction activity will be perceived from very localised parts of the BLT, specifically around Clint Lane, due to the proximity of this part of the BLT to the DCO boundary. However, the perception of the construction activity will not alter the character of the BLT and the magnitude of impact is assessed as no change. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact operation the scheme will not be located in the BLT and therefore there will be no physical change to the landscape features. The scheme will remain in cutting to the north of Bowes, but there will be an increased perception from the reduction in vegetation within the scheme boundary. This increased perception will not alter the landscape character of the BLT due to the very localised change. The magnitude of impact is therefore assessed as no change. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 07		
Magnitude of Impact With the establishment of the proposed planting the perception of the scheme will reduce, to reflect the existing baseline. The magnitude of impact is therefore assessed as no change. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 09		
Scoped out as beyond the study area.		

Durham BLT Moorland Plateau	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: None
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 33: Durham BCA Cotherstone Moor

Durham BCA Cotherstone Moor	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: None	
Relevant aspects of the published description: BCA Cotherstone Moor extends to the north-west of Bowes, covering part of Clint Lane, with the scheme 07 study area. The published study describes the BCA as: “Extensive tracts of flat or gently rolling blanket bog incised by deep moorland gills. The distinctive low flat-topped summits of Shacklesborough and Goldsborough are notable features on the open sweeping horizon. The moors of Ravock contain the remains of Bronze Age cairn fields.”		
Relevant Stated Key Characteristics (as part of the Moorland plateau): • "High moorland plateau. • Gently rolling, almost flat, terrain cut into by steep sided gullies. • Occasional small, low, flat-topped, summits. • Carboniferous rocks masked by deep peat which is exposed in eroded hags and peat edges. • Millstone grits outcrop locally in summits, gullies and stone bands. • Continuous blanket bog of heather, cotton grass and sphagnum mosses. • Extensive grazing by hardy hill sheep. • Burning patterns on grouse moors create a patchwork of older and younger heather. • Few man-made features other than occasional fences, grouse butts, cairns and sheepfolds. • A remote and inaccessible landscape with few roads or tracks. • A broad scale landscape with long distance views across open moorland to distant summits. • An exposed, elemental and simple, often bleak, landscape with a near wilderness quality."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Most of the BCA is within the North Pennines AONB, with those parts bordering the AONB within an Area of Higher Landscape Value. The value is therefore assessed as high.	As moorland with very small amounts of infrastructure the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact There will be no physical change to the landscape features within the BCA as the construction activity will be located beyond the boundaries of the area. The construction activity will be perceived from very localised parts of the BCA, specifically around Clint Lane, due to the proximity of this part of the BCA to the DCO boundary. However, the perception of the construction activity will not alter the character of the BCA and the magnitude of impact is assessed as no change. Significance of Effect		

Durham BCA Cotherstone Moor	Relevant Scheme Study Areas within area: 07 Relevant Order Limits within the area: None
The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact In operation the scheme will not be located in the BCA and therefore there will be no physical change to the landscape features. The scheme will remain in cutting to the north of Bowes, but there will be an increased perception from the reduction in vegetation within the scheme boundary. This increased perception will not alter the landscape character of the BCA due to the very localised change. The magnitude of impact is therefore assessed as no change. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
Magnitude of Impact With the establishment of the proposed planting the perception of the scheme will reduce, to reflect the existing baseline. The magnitude of impact is therefore assessed as no change. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 34: Durham BCA Stainmore

Durham BCA Stainmore	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Relevant aspects of the published description: BCA Stainmore is located across the south-west part of the study area for scheme 07, covering the rising land to the south of the River Greta. The published study describes the area as:	

Durham BCA Stainmore	**Relevant Scheme Study Areas within Area: 07** **Relevant Order Limits within the area: None**	
"Extensive tracts of almost flat blanket bog incised by deep moorland gills. The low but pronounced moorland edge of White Brow overlooks the River Greta on Bowes Moor. The higher moorland ridge of Arkengarthdale Moor forms a strong horizon to the south."		
Relevant Stated Key Characteristics (as part of the Moorland Plateau): • "High moorland plateau. • Gently rolling, almost flat, terrain cut into by steep sided gullies. • Occasional small, low, flat-topped, summits. • Carboniferous rocks masked by deep peat which is exposed in eroded hags and peat edges. • Millstone grits outcrop locally in summits, gullies and stone bands. • Continuous blanket bog of heather, cotton grass and sphagnum mosses. • Extensive grazing by hardy hill sheep. • Burning patterns on grouse moors create a patchwork of older and younger heather. • Few man-made features other than occasional fences, grouse butts, cairns and sheepfolds. • A remote and inaccessible landscape with few roads or tracks. • A broad scale landscape with long distance views across open moorland to distant summits. • An exposed, elemental and simple, often bleak, landscape with a near wilderness quality."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BCA is within the North Pennines AONB and the value is assessed as high.	As an area of elevated moorland with very little infrastructure, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility results in a very high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BCA is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 07		
The assessment will reflect that at year 1, with a neutral (not significant) effect.		

Durham BCA Stainmore	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 0-35: Durham BLT Moorland Fringe

Durham BLT Moorland Fringe	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None
Relevant aspects of the published description: BLT Moorland Fringe covers 11 several separate geographic upland areas across the northern, western and southern parts of the study area for schemes 07 and 08. The published description of the BLT is: “An upland fringe landscape of marginal land lying between the open moors and the more settled, fertile dales. The topography of the moorland fringe is varied and includes minor valleys branching off the main dales and the upper slopes of the dale sides. On the convex slopes of higher dale sides Carboniferous sandstones, limestones, mudstones and shales are bare of drift and the terrain often has a stepped quality reflecting the alternating strata of harder and softer rocks. On lower ground these are masked by glacial drift of boulder clays. Soils are impoverished and often waterlogged - peaty gleys, podzols and heavy surface water gleys. This is a pastoral landscape of wet, rushy pastures and rough grazing of acid grassland, enclosed from moorland wastes in successive waves of agricultural improvement and expansion since the late 18th century. Regular grids of parliamentary enclosures or larger moorland intakes are bounded by low dry-stone walls or wire fences. The diversity of grasslands, grazed by hardy upland sheep and beef cattle, creates a patchwork of muted and brighter greens reflecting varying degrees of improvement by drainage, liming, and fertilising. The landscape is sparsely settled with a scattering of isolated farmsteads dating from the period of enclosure - most are small and built of stone with roofs of stone flag or slate. In Teesdale the farms and field barns of the Raby estate in Teesdale are painted white. Roads and tracks also date from the period of enclosure and are characteristically straight and uniform in width. The landscape is generally open with few trees or woodlands. There are occasional clumps of sycamore planted as shelter trees around exposed farms, and scattered conifer plantations and shelterbelts. Parts of the moorland fringe have been given over to larger scale forestry with large Forestry Commission holdings at Hamsterley Forest and The Stang. Relics of the lead mining industry are common in parts of the moorland fringe. Some of the enclosures and farmsteads date from the expansion of the lead industry and the miner-smallholder	

Durham BLT Moorland Fringe	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None	
economy it generated. Derelict mine buildings, waste heaps, smelter flues, reservoirs and hushes are locally prominent features. The landscape is visually open and broad in scale with extensive panoramic views across adjacent dales and moors. A remote and tranquil landscape on the margins of settlement and agriculture, often with a neglected 'run-down' quality."		
Relevant Stated Key Characteristics: The published study states a number of key characteristics for the BLT, of which the following are considered to be relevant: • "Upland landscape of improved moorland fringes, intakes and allotments. • Varied topography including valleys and upper dale sides. • Carboniferous rocks bare of drift or covered by boulder clays. • Hard igneous dolerites outcrop locally in low crags. • Shallow, infertile or waterlogged peaty soils. • Wet, rushy pastures, rough grazing and enclosed moorland. • Large regular fields bounded by low stone walls and wire fences. • Isolated farms connected by straight roads. • Scattered conifer plantations and shelterbelts - occasional large tracts of commercial forestry. • Relics of the lead mining industry - mine buildings, waste heaps, smelter flues, reservoirs and hushes. • Visually open and often broad in scale with extensive views across adjacent dales and moors. • A remote and tranquil landscape on the margins of settlement and agriculture."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BLT is within the AONB and the value is assessed as high.	As moorland and elevated land, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility is assessed as very high.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact There would be no physical change to the landscape features within the BLT as the construction activity will be located beyond the boundaries of the area. The construction activity will be perceived from very localised parts of the BLT, specifically around Clint Lane, due to the proximity of this part of the BLT to the DCO boundary. However, the perception of the construction activity will not alter the character of the BLT and the magnitude of impact is assessed as no change. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact In operation the scheme will not be located in the BLT and therefore there will be no physical change to the landscape features. The scheme will remain in cutting to the north of Bowes, but there will be an increased perception from the reduction in vegetation within the scheme boundary. This increased perception will not alter the landscape character of the BLT due to the very localised change. The magnitude of impact is therefore assessed as no change. Significance of Effect		

Durham BLT Moorland Fringe	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None
The combination of the very high sensitivity and the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1, resulting in a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The construction activity will not be located in the BLT, which covers land at the south-west edge of the study area. The distance from the construction activity, along with the intervening vegetation will negate any perception of the construction phase. The magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect during the construction phase.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact There will be no physical change to the BLT and no change to the character due to the distance from the scheme and the intervening features. The magnitude of impact will be no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect during the year 1 operation phase.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact There will be no physical change to the BLT and no change to the character due to the distance from the schemes and the intervening features. The magnitude of impact will be no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect during the construction phase.	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact There will be no physical change to the BLT and no change to the character due to the distance from the schemes and the intervening features. The magnitude of impact will be no change.	

Durham BLT Moorland Fringe	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None
Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect during the operation phase.	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact There will be no physical change to the BLT and no change to the character due to the distance from the schemes and the intervening features. The magnitude of impact will be no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect during the operation phase.	

Table 0-36: Durham BCA Deepdale Moorland Fringe

Durham BCA Deepdale Moorland Fringe	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None	
Relevant aspects of the published description: The BCA is located across the north-west part of the study area for scheme 07. The published description of the BCA is: “Open flat or gently rolling pastures and rougher moorland intakes in the eastern edges of the moorland plateau. Large regular enclosures bounded by stones walls and wire fences cover Battle Hill. Smaller and less regular field systems surround older farms at Loups Hill, Stony Keld and Levy Pool, the last surviving heather thatched farm in the North Pennines. There are areas of MOD land at Battle Hill Range and abandoned bunkers at Stony Keld.”		
Relevant Stated Key Characteristics (as part of the Moorland Fringe): • "Upland landscape of improved moorland fringes, intakes and allotments. • Varied topography including valleys and upper dale sides. • Carboniferous rocks bare of drift or covered by boulder clays. • Hard igneous dolerites outcrop locally in low crags. • Shallow, infertile or waterlogged peaty soils. • Wet, rushy pastures, rough grazing and enclosed moorland. • Large regular fields bounded by low stone walls and wire fences. • Isolated farms connected by straight roads. • Scattered conifer plantations and shelterbelts - occasional large tracts of commercial forestry. • Relics of the lead mining industry - mine buildings, waste heaps, smelter flues, reservoirs and hushes. • Visually open and often broad in scale with extensive views across adjacent dales and moors. • A remote and tranquil landscape on the margins of settlement and agriculture."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BLT is within the AONB and the value is assessed as high.	As moorland and elevated land, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility is assessed as very high.
Construction phase (winter) assessment scheme 07		

Durham BCA Deepdale Moorland Fringe	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BCA is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction Phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 37: Durham BCA Sleightholme and Great Fringes

Durham BCA Sleightholme and Greta Fringes	**Relevant Scheme Study Areas within Area: 07** **Relevant Order Limits within the area: None**	
Relevant aspects of the published description: The BCA is located across the south-western parts of the study area for scheme 07. The published description of the BCA is: “Open pasture and rough moorland intakes in the edges of the Moorland Plateau of Stainmore Forest fringing the valleys of the Greta and the Sleightholme Beck. The beck is incised in a narrow steep side gill surrounded by irregular walled pastures and larger irregular moorland intake.”		
Relevant Stated Key Characteristics (as part of Moorland Fringe): • "Upland landscape of improved moorland fringes, intakes and allotments. • Varied topography including valleys and upper dale sides. • Carboniferous rocks bare of drift or covered by boulder clays. • Hard igneous dolerites outcrop locally in low crags. • Shallow, infertile, or waterlogged peaty soils. • Wet, rushy pastures, rough grazing and enclosed moorland. • Large regular fields bounded by low stone walls and wire fences. • Isolated farms connected by straight roads. • Scattered conifer plantations and shelterbelts - occasional large tracts of commercial forestry. • Relics of the lead mining industry - mine buildings, waste heaps, smelter flues, reservoirs and hushes. • Visually open and often broad in scale with extensive views across adjacent dales and moors. • A remote and tranquil landscape on the margins of settlement and agriculture."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BLT is within the AONB and the value is assessed as high.	As moorland and elevated land, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility is assessed as very high.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BCA is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change.		

Durham BCA Sleightholme and Greta Fringes	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction Phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 38: Durham BCA Scargill and Barningham Fringes

Durham BCA Scargill and Barningham Fringes	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None
Relevant aspects of the published description: The BCA is located across the southern parts of the study area for schemes 07 and 08. The published description of the BCA is: “The Stang forest lies on steep slopes overlooking the Greta Valley, falling to flat or gently undulating wet pastures and larger enclosures of rough grazing fringing Barningham and Scargill Low Moors. Small conifer plantations are scattered across the area. Tree lines follow the sinuous Scargill and Gregory becks. There are a small number of isolated farms.”	
Relevant Stated Key Characteristics (as part of Moorland Fringe): • "Upland landscape of improved moorland fringes, intakes and allotments. • Varied topography including valleys and upper dale sides. • Carboniferous rocks bare of drift or covered by boulder clays. • Hard igneous dolerites outcrop locally in low crags. • Shallow, infertile or waterlogged peaty soils. • Wet, rushy pastures, rough grazing and enclosed moorland. • Large regular fields bounded by low stone walls and wire fences. • Isolated farms connected by straight roads. • Scattered conifer plantations and shelterbelts - occasional large tracts of commercial forestry. • Relics of the lead mining industry - mine buildings, waste heaps, smelter flues, reservoirs and hushes. • Visually open and often broad in scale with extensive views across adjacent dales and moors. • A remote and tranquil landscape on the margins of settlement and agriculture."	

Durham BCA Scargill and Barningham Fringes	**Relevant Scheme Study Areas within Area: 07, 08** **Relevant Order Limits within the area: None**	
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BLT is within the AONB and the value is assessed as high.	As moorland and elevated land, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility is assessed as very high.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BCA is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 07		
The assessment will reflect that at year 1, with a neutral (not significant) effect.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 08		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. The magnitude of impact is assessed as no change.		

Durham BCA Scargill and Barningham Fringes	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None
Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impacts will reflect those stated above for scheme 07 and 08 and the magnitude of impact will be no change. Significance of Effect In relation to the high sensitivity, the effect will be neutral (not significant).	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impacts will reflect those stated above for scheme 07 and 08 and the magnitude of impact will be no change. Significance of Effect In relation to the high sensitivity, the effect will be neutral (not significant).	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impacts will reflect those stated above for scheme 07 and 08 and the magnitude of impact will be no change. Significance of Effect In relation to the high sensitivity, the effect will be neutral (not significant).	

Table 39: Durham BLT Gritstone Vale

Durham BLT Gritstone Vale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 08
Relevant aspects of the published description: The Gritstone Vale BLT covers several contiguous areas of undulating land around Barnard Castle. The only part of the DCO scheme boundary directly within the BLT is scheme 08, although the BLT also forms part of the study area for scheme 07.	

Durham BLT Gritstone Vale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 08

The published study description for the BLT is:

"A broad rolling vale, made up of the valleys of the river Tees and its tributaries. Rivers and streams are incised in narrow steep sided denes. A thick mantle of glacial drift made up of boulder clays and sands and gravels overlies thinly bedded Carboniferous limestones, sandstones and mudstones. The resulting soils are a mosaic of heavy, seasonally waterlogged clays and more fertile and free draining brown earths.

Agricultural land use reflects the underlying variety of soils with a mixture of improved pasture and arable cropping - mostly of cereals and oil-seed rape. There is a strong pastoral emphasis on higher ground bordering the Upland Fringe. Field boundaries are largely hedgerows, with occasional dry stone walls. Hedges tend to be dominated by hawthorn, with blackthorn and holly common - trimmed in arable areas but often leggy and overgrown in pastoral areas.

Field systems are semi-regular in pattern, most dating from the enclosure of common fields of villages in the 16th and 17th centuries. Some hedges retain the sinuous shapes of arable strips. Relics of medieval cultivation in the form of rigg and furrow, and lynchets - are common in older, less improved, pastures. There are small areas of more regular 'surveyor enclosed' field systems dating from the enclosure of manorial wastes in the 18th century.

The landscape is rich in trees with abundant hedgerow ash, oak and sycamore. In places it is well wooded, with ancient ash and oak woodlands in narrow denes along rivers and streams, and scattered coniferous or mixed plantations. The vale contains a number of historic parklands on ancient sites and areas of heavily wooded estate farmland. Set within these are imposing country houses and castles.

The landscape has a long history of settlement and a nucleated pattern of small green villages, most of Saxon or later medieval origins, centered on the historic market town of Barnard Castle. Buildings are of local sandstone with roofs of stone flag, Welsh slate, or less frequently clay pan tile, and are set around a central village green. Between the villages lie scattered farms. Those of the Raby Estate, which covers much of the northern vale, are painted white. Villages are connected by a network of narrow hedged lanes.

The vale has long been an important communications corridor and carries a number of busy modern roads, as well as some long abandoned railway lines. There are a number of disused army camps dating from the mid-20th century.

A well-timbered landscape creating a high degree of enclosure in places, but with broad scale panoramic views across the vale from higher vantage points. A tranquil, settled, rural landscape with a strong sense of cultural continuity."

Relevant Stated Key Characteristics are:

- "Broad rolling vale, incised by the narrow denes of rivers and streams
- Gently rounded topography of thinly bedded sandstones, limestones and mudstones overlain by glacial drift.
- Mosaic of heavy, seasonally waterlogged clay soils and more fertile brown earths.
- Mixed farmland of improved pasture and arable cropping.
- Semi-regular, sometimes linear, patterns of old enclosures bounded by thorn hedges, with occasional dry stone walls.
- Abundant hedgerow ash, oak and sycamore.
- Ancient ash and oak woodlands in narrow denes. Scattered coniferous or mixed plantations.
- Areas of old parklands and heavily wooded estate farmland.
- Nucleated settlement pattern of small green villages centred on the historic market town of Barnard Castle. Scattered farms.

Durham BLT Gritstone Vale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 08	
• Buildings of local stone with roofs of stone, slate or clay pan tile. Farms of the Raby Estate painted white. • Narrow winding lanes and some busy modern highways. • Occasional disused army camps. • A well-timbered landscape creating a high degree of enclosure in places, but with broad scale panoramic views across the vale from higher vantage points. • A tranquil settled rural landscape."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Parts of the BLT is covered by the Area of Higher Landscape Value. There are numerous recreational routes and cultural association, such that the value is assessed as high.	As the BLT is crossed by several main roads and consists of several settlements, the susceptibility is assessed as low.	The combination of the high value and low susceptibility results in a medium sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BLT and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BLT is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the BLT results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BLT will remain. There will be no physical changes to the landscape features within the BLT. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BLT, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the BLT results in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 07		
The assessment will reflect that at year 1, with a neutral (not significant) effect.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact All of the construction activity will be located within the BLT. The construction phase will result in changes to surface landform across the DCO boundary, from the excavation for the dual lanes, the realignment of Rutherford Lane and associated junctions at Cross Lanes, attenuation basins and the new junction to the south-west of the Church of St Mary. In addition to the excavation there will also be the formation of embankments, including in the western part of the DCO boundary, as part of the construction of the overbridge and re-alignment of Rutherford Lane. These activities will also result in tonal and textural changes to the landscape.		

Durham BLT Gritstone Vale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 08
The construction activity will also include the removal of roadside vegetation and field boundaries within the footprint of the proposed road and embankment areas. The scale and extent of the above activities will be very localised in relation to the wider geographic extent of the BLT, although there will be very localised impacts to the key characteristics of rounded topography, vegetation cover, field patterns and the lanes. The presence of construction machinery and compounds and the associated changes to the landform and vegetation, will locally reduce the tranquillity, although to a part of the BLT where the tranquillity is impacted upon by the existing A66. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the medium sensitivity of the BLT, the negligible adverse magnitude of impact during construction is assessed as resulting in a slight adverse (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact At year 1, the scheme will increase the extent and scale of road infrastructure across an existing road corridor. This will be via the additional lanes and junctions, in addition to the retention of parts of the existing A66 to form part of the secondary road network, specifically adjacent to the Church of St Mary. The scheme will result in a very localised reduction to the key characteristics. These changes will be very localised within the context of the wider geographic extent of the BLT, such that the magnitude of impact is assessed as negligible adverse. Significance of Effect The combination of the medium sensitivity of the BLT and the negligible adverse magnitude of impact will result in a slight adverse (not significant) effect at year 1 of operation.	
Operation year 15 phase (summer) assessment scheme 08	
Magnitude of Impact Compared to the year 1 assessment the proposed planting will have established across the DCO scheme boundary. The woodland around the overbridge will reduce the perception of this elevated structure and the alterations to the landform associated with the proposed junction to the south-west of the Church of St Mary will reduce. The establishment of the proposed species rich grassland will also integrate the changes to landform to a greater degree than at year 1, increase the tonal and textural qualities and opportunities for biodiversity in relation to the agricultural land cover. As the additional road infrastructure will remain in a part of the BLT where the character is already defined by the A66, the magnitude of impact will be no change. Significance of Effect In relation to the medium sensitivity of the BLT, the effect at year 15 will be neutral (not significant).	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impacts will reflect those stated for scheme 08 above, at negligible. Significance of Effect The effect will be slight adverse (not significant).	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	

Durham BLT Gritstone Vale	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 08
Magnitude of Impact The magnitude of impacts will reflect those stated for scheme 08 above, at negligible. Significance of Effect The effect will be slight adverse (not significant).	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impacts will reflect those stated for scheme 08 above, at no change Significance of Effect The effect will be neutral (not significant).	

Table 40: Durham BCA Boldron and Lartington

Durham BCA Boldron and Lartington	**Relevant Scheme Study Areas within area: 07, 08** **Relevant Order Limits within the area: 08**	
Relevant aspects of the published description: The BCA is located across the eastern part of the study area for scheme 07 and covers a small part of the western part of the DCO boundary for scheme 08. The published description is: "Gently sloping farmland falling from the fringes of the moorland plateau to the River Tees. A pastoral landscape of improved and semi-improved pastures bounded by old hedges and walls with scattered, locally abundant, hedgerow trees. The River Tees is lined by steep wooded bluffs; its tributaries, including the Deepdale Beck, lie in narrow steep-sided denes containing ancient ash and oak woodlands. The small villages of Boldron, Lartington and Cotherstone lie on the upper slopes of the vale. There are historic parklands at Lartington."		
Relevant Stated Key Characteristics (as part of the Gritstone Vale): • "Broad rolling vale, incised by the narrow denes of rivers and streams • Gently rounded topography of thinly bedded sandstones, limestones and mudstones overlain by glacial drift. • Mosaic of heavy, seasonally waterlogged clay soils and more fertile brown earths. • Mixed farmland of improved pasture and arable cropping. • Semi-regular, sometimes linear, patterns of old enclosures bounded by thorn hedges, with occasional dry stone walls. • Abundant hedgerow ash, oak and sycamore. • Ancient ash and oak woodlands in narrow denes. Scattered coniferous or mixed plantations. • Areas of old parklands and heavily wooded estate farmland. • Nucleated settlement pattern of small green villages centred on the historic market town of Barnard Castle. Scattered farms. • Buildings of local stone with roofs of stone, slate or clay pan tile. Farms of the Raby Estate painted white. • Narrow winding lanes and some busy modern highways. • Occasional disused army camps. • A well-timbered landscape creating a high degree of enclosure in places, but with broad scale panoramic views across the vale from higher vantage points. • A tranquil settled rural landscape."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As a designated Area of Higher Landscape Value, along with recreational routes and cultural association, the value is assessed as high.	As there are several main roads across the NCA, including the A66 and B627, the susceptibility is assessed as low.	The combination of the high value and medium susceptibility results in a medium sensitivity.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BCA is assessed as no change.		

Durham BCA Boldron and Lartington	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 08
Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the BLT results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The western part of the DCO boundary is located in the BCA, covering the existing A66 and the southern parts of the proposed junction and overbridge at Cross Lanes. The construction impacts will reflect those stated for BLT Gritstone Vale, with changes to surface landform and vegetation patterns due to the excavation for the new road, re-alignment to Rutherford Lane and the formation of part of the overbridge and embankment. This activity will require tall lifting equipment and machinery, in addition to the activity, compounds and hoardings associated with road construction. The scale of the construction activity will be very localised in relation to the extent of the BCA and located where the character is influenced by the existing A66. The magnitude of impact is therefore assessed as negligible adverse. Significance of Effect In relation to the medium sensitivity of the BCA, the negligible adverse impact will result in a slight adverse (not significant) effect during the construction phase.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact At year 1, the scheme will increase the extent and scale of road infrastructure within a very small geographic part of the BCA and within an existing road corridor. The perception of the scheme will be very localised due to the undulating pattern of landform and vegetation cover surrounding the DCO boundary. The dualled section of the scheme will reflect the existing dualled A66 which extends across the remainder of the southern part of the BCA. The scheme will result in a very localised reduction to the key characteristics. These changes will be very localised within the context of the wider geographic extent of the BCA. The stated description of gently sloping farmland will remain, such that the magnitude of impact is assessed as negligible adverse. Significance of Effect	

Durham BCA Boldron and Lartington	Relevant Scheme Study Areas within area: 07, 08 Relevant Order Limits within the area: 08
The combination of the medium sensitivity of the BCA and the negligible adverse magnitude of impact will result in a neutral effect (not significant) effect at year 1 of operation as the overall sense of place across the BCA will be maintained.	
Operation year 15 phase (summer) assessment scheme 08	
Magnitude of Impact Compared to the year 1 assessment the proposed planting will have established across the DCO scheme boundary. The woodland around the overbridge will reduce the perception of this elevated structure and the alterations to the landform associated with the proposed junction to the south-west of the Church of St Mary. The establishment of the proposed specie rich grassland will also integrate the changes to landform to a greater degree than at year 1, increase the tonal and textural qualities and opportunities for biodiversity in relation to the agricultural land cover. As the additional road infrastructure will remain in a part of the BCA where the character is already defined by the A66, the magnitude of impact will be no change. Significance of Effect In relation to the medium sensitivity of the BCA, the effect at year 15 will be neutral (not significant).	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impact will be negligible as per the assessment for scheme 08. Significance of Effect In relation to the medium sensitivity of the BCA, the effect at year 15 will be slight adverse (not significant).	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impact will be negligible as per the assessment for scheme 08. Significance of Effect In relation to the medium sensitivity of the BCA, the effect at year 15 will be slight adverse (not significant).	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impact will be no change as per the assessment for scheme 08. Significance of Effect In relation to the medium sensitivity of the BCA, the effect at year 15 will be neutral (not significant).	

Table 41: Durham BCA Barningham, Brignall and Rokeby

Durham BCA Barningham, Brignall and Rokeby	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: 08
Relevant aspects of the published description: The BCA extends to the south of Barnard Castle, in the southern part of BLT Gritstone Vale and scheme 08 study area. The stated description of the BCA is:	

Durham BCA Barningham, Brignall and Rokeby	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: 08	
"Gently sloping farmland on the southern flanks of the Tees Vale. A patchwork of arable fields and improved pastures is defined by sub-regular patterns of old hedgerows with scattered hedgerow oak, ash and sycamore. There are frequent small plantations of conifers or broadleaves. The River Tees is lined by low wooded bluffs or narrow riparian woods. Its tributaries, including the River Greta, lie in narrow steep-sided denes containing ancient ash and oak woodlands. There are historic parklands along the lower Greta at Rokeby Eastwood Hall, and remains of a medieval abbey at Egglestone. The small villages of Barningham and Brignal lie on the upper vale side."		
Relevant Stated Key Characteristics (as part of the Gritstone Vale): • "Broad rolling vale, incised by the narrow denes of rivers and streams. • Gently rounded topography of thinly bedded sandstones, limestones and mudstones overlain by glacial drift. • Mosaic of heavy, seasonally waterlogged clay soils and more fertile brown earths. • Mixed farmland of improved pasture and arable cropping. • Semi-regular, sometimes linear, patterns of old enclosures bounded by thorn hedges, with occasional dry stone walls. • Abundant hedgerow ash, oak and sycamore. • Ancient ash and oak woodlands in narrow denes. Scattered coniferous or mixed plantations. • Areas of old parklands and heavily wooded estate farmland. • Nucleated settlement pattern of small green villages centered on the historic market town of Barnard Castle. Scattered farms. • Buildings of local stone with roofs of stone, slate or clay pan tile. Farms of the Raby Estate painted white. • Narrow winding lanes and some busy modern highways. • Occasional disused army camps. • A well-timbered landscape creating a high degree of enclosure in places, but with broad scale panoramic views across the vale from higher vantage points. • A tranquil settled rural landscape."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As the BCA is within the Area of Higher Landscape Value and consists of recreational routes, cultural association and Rokeby Park, the value is assessed as high.	As the A66 is the main road across the BCA and the remaining patterns of development are small villages, hamlets and lanes there is notable variation in landform, the susceptibility is high.	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		

Durham BCA Barningham, Brignall and Rokeby	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: 08
Magnitude of Impact Most of the construction activity will be located within the BCA, extending from Cross Lanes to Greta Bridge. The construction of the northern part of the proposed Cross Lanes junction will result in hedgerow and roadside trees being removed and alterations to the surface landform within the fields between Ivy Cottage and the DCO boundary. There will also be tall machinery to construct the overbridge and the formation of the embankments, with associated stockpiles, hoardings and compounds. Similar activities will occur to the west of the Organic Farm Shop, with removal of vegetation, formation of embankments and the construction of the new road to the south of the existing A66. Between Cross Lanes and Street Side Farm, there will be localised vegetation removal and alteration to surface landform as part of the construction of the proposed access road to the north of the existing A66. There will also be excavation to the south of the Farm, on the opposite side of the existing A66 to construct the attenuation basin. To the east of Street Side Farm, the construction activity will be located between the existing A66 and the Tutta Beck in order to construct the dualled section of road and the proposed junction to the south-west of the Church of St Mary. This activity will result in alterations to landform, removal of roadside trees and hedgerows dividing the fields. The construction of the junction will result in the formation of embankments and excavation for the cutting and underpass beneath the proposed A66 alignment. There will also be smaller scale excavation, changes to surface landform and road construction between Tutta Beck cottages and The Old Rectory. To the south of the Old Rectory, there will be similar construction activity to implement the dualled alignment of the proposed A66 and the attenuation basin, as well as smaller scale alterations to the existing A66 to the north of the property. The construction activity for the proposed dualling will extend across fields to the existing junction with Abbey Road. The construction will result in changes to areas of existing hard surfacing, to implement the roundabout, as well as localised changes to the alignments of the kerbs adjacent to the stone walls and piers of Rokeby Park. There will be removal of roadside trees to the south of the existing A66. This construction activity will be located in the central part of the BCA, along and adjacent to the existing A66. The perception of the construction activity will extend across the southern parts of the BCA, such that the combination of the physical change and perception results in a moderate adverse magnitude of impact. Significance of Effect In relation to the high sensitivity of the BCA, the moderate adverse magnitude of impact during construction is assessed as resulting in moderate adverse (significant) effect. The effect is reduced from large adverse (significant) as the scale and extent of the construction activity along the existing A66 will not damage the sense of place across the BCA.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact At year 1, the scheme will increase the extent and scale of road infrastructure across and adjacent to an existing A66 road corridor. At the western part of the scheme, the overbridge will result in new massing and a locally elevated highways structure in comparison to the alignment of the existing A66. In combination with the re-positioned Cross Lanes junction, there will be an alteration to the small scale geometric field pattern in this part of the BCA, although at an area which is already characterised by an existing junction.	

Durham BCA Barningham, Brignall and Rokeby	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: 08
The dualling between the Organic Farm Shop and Street Side Farm will reflect the alignment and width of the existing A66. The two access roads to the north and south of the A66 will be parallel to the existing A66, reflecting its alignment and therefore consolidated to the existing road corridor. In proximity to the Church of St Mary, the existing A66 will be retained, although the volume of traffic will be less, such that locally the perception of the A66 will reduce due to the realignment of the road and the increased distance from the Church and that the proposed junction and underpass will be sited in a lower topographic position within the landscape. The overall extent of road infrastructure will increase due to the combination of the dualled section of the A66 and the retention of the existing A66 alignment. The scale of the proposed junction and overbridge will be result in alteration to the field patterns between the existing A66 and Jack Wood. The scale of the roundabout adjacent to Rokeby Park will reflect that of the existing T junction. The dualled sections of the A66 and the attenuation basin will increase the overall extent of highways infrastructure adjacent to this part of the Park. Overall, there will be an increase in the extent of road infrastructure and an increased perception of the existing A66 due to the reduction of roadside vegetation and the elevated overbridge and scale of the junctions. The scheme will result in a localised reduction to the key characteristics of small field patterns. However, these changes will be localised within the context of the wider geographic extent of the BCA and located either along or adjacent to the existing alignment of the A66, where the landscape pattern consists of existing large junctions and the tranquillity is reduced. The magnitude of impact is assessed as minor adverse. Significance of Effect The combination of the high sensitivity of the BCA and the minor adverse magnitude of impact will result in a moderate adverse (significant) effect at year 1 of operation.	
Operation year 15 phase (summer) assessment scheme 08	
Magnitude of Impact Compared to the year 1 assessment the proposed planting will have established across the BCA. The woodland around the overbridge will reduce the perception of its scale and mass. The alterations to the landform associated with the proposed junction to the south-west of the Church of St Mary will also be reduced. The establishment of the proposed species rich grassland will also integrate the changes to landform to a greater degree than at year 1, increase the tonal and textural qualities and opportunities for biodiversity in relation to the agricultural land cover. As the additional road infrastructure will remain in a part of the BCA where the character is already defined by the A66, the magnitude of impact will reduce to negligible adverse. Significance of Effect In relation to the high sensitivity of the BCA, the negligible adverse effect at year 15 will result in a slight adverse (not significant) effect.	

Table 42: Durham BCA Newsham and Cleatham

Durham BCA Newsham and Cleatham	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
Relevant aspects of the published description: The BCA is located across the north-east part of the study area for scheme 08, covering rising land to the north of the River Tees. The published description of the BCA is:	

Durham BCA Newsham and Cleatham	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None

"Gently rolling or undulating farmland in the floor of the vale east of Barnard Castle. A patchwork of arable and pastoral farmland with sub-regular patterns of clipped hedgerows and occasional dry stone walls with frequent oak, ash and sycamore and scattered plantations. Small hamlets and farms are connected by narrow winding lanes. The farms and farm buildings of the Raby Estate are painted white."

Relevant Stated Key Characteristics (as part of the Gritstone Vale):

- "Broad rolling vale, incised by the narrow denes of rivers and streams.
- Gently rounded topography of thinly bedded sandstones, limestones and mudstones overlain by glacial drift.
- Mosaic of heavy, seasonally waterlogged clay soils and more fertile brown earths.
- Mixed farmland of improved pasture and arable cropping.
- Semi-regular, sometimes linear, patterns of old enclosures bounded by thorn hedges, with occasional dry stone walls.
- Abundant hedgerow ash, oak and sycamore.
- Ancient ash and oak woodlands in narrow denes. Scattered coniferous or mixed plantations.
- Areas of old parklands and heavily wooded estate farmland.
- Nucleated settlement pattern of small green villages centered on the historic market town of Barnard Castle. Scattered farms.
- Buildings of local stone with roofs of stone, slate or clay pan tile. Farms of the Raby Estate painted white.
- Narrow winding lanes and some busy modern highways.
- Occasional disused army camps.
- A well-timbered landscape creating a high degree of enclosure in places, but with broad scale panoramic views across the vale from higher vantage points.
- A tranquil settled rural landscape."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an Area of High Landscape Value the value is assessed as high.	Whilst the BCA is crossed by the A67 and contains several secondary roads, the sloping landform is not able to accommodate change, such that the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity.

Construction phase (winter) assessment scheme 07

Scoped out as beyond the study area.

Operation year 1 phase (winter) assessment scheme 07

Scoped out as beyond the study area.

Operation year 15 phase (summer) assessment scheme 07

Scoped out as beyond the study area.

Construction phase (winter) assessment scheme 08

Magnitude of Impact

The construction phase will not be located in the BCA, such that there will be physical change to any of the landscape features. The rising landform across the BCA will enable the perception of the

Durham BCA Newsham and Cleatham	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
construction activity; however this will be in the context of the existing A66 and other land uses, such that in combination with the distance from the DCO scheme boundary, the magnitude of impact is assessed as no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact There will be no physical change to the landscape features as the scheme is not located within the BCA. With the scheme being partly located to the south of the existing A66 and on the existing alignment, the perception of vehicles on the A66 would reduce. However, the distance from the BCA would negate any impact, such that the magnitude of impact is assessed as no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 43: Durham BLT Lowland River Terraces

Durham BLT Lowland River Terraces	**Relevant Scheme Study Areas within Area: 08** **Relevant Order Limits within the area: None**

Relevant aspects of the published description:

In relation to scheme 08, the BLT extends across the eastern part of the study area, along the alignment of the River Tees. The published study describes the BLT as:

"Flat, narrow (200-400m) floodplains merging with the gently rolling topography of the wider vale or fringed by steep-sided bluffs. Rivers are meandering with alternating shallow, quick flowing riffles and broader slow moving reaches. Soils are coarse loamy or sandy brown earths on alluvial river terrace drift.

Agricultural land use is mixed, with arable cropping - mostly of cereals - on the flat floodplain haughs and improved and semi-improved pastures on the steeper ground of bluffs and valley sides. Field boundaries are hedgerows with scattered hedgerow oak and ash. Field systems are generally irregular or sub-regular in pattern, dating from the enclosure of common meadows and pastures of the surrounding villages in and around the 17th century. They include many older boundaries and occasional fragments of rigg and furrow in less improved pastures.

The landscape is well wooded, with ancient oak woodlands on steeper bluffs overlooking the floodplain and narrow riparian woods or tree lines of alder, oak, ash and willow on the river banks.

The floodplain terraces are followed by a chain of old villages that are closely associated with the river, often on bridging or fording points. Villages are of Saxon or later medieval origins with buildings of local stone with roofs of slate or clay pan tile set around a central green. Also associated with the river are occasional recreational sites like lidos and caravan parks. Road and railway bridges from several different periods cross the river.

The landscape is often visually enclosed and intimate in scale, though forming part of the broader vale landscape in many views. It is a settled and tranquil rural landscape of high scenic quality and strong sense of historical depth."

Relevant Stated Key Characteristics are:

- "Flat, narrow floodplain fringed in places by low, steep-sided bluffs.
- Coarse loamy and sandy soils on alluvial river terrace drift.
- Meandering rivers with alternating riffles and pools.
- Arable cropping on the floodplain.
- Semi-improved pastures on bluffs.
- Low hawthorn hedges with scattered hedgerow oak and ash.
- Fragments of rigg and furrow survive in older pastures.
- Ancient oak woodlands on steeper bluffs.
- Narrow riparian woods or tree lines of alder, oak, ash and willow on river banks.
- Old villages closely associated with the river, often on bridging or fording points.
- Buildings of local stone with roofs of slate or clay pan tile.
- Occasional recreational sites - lidos and caravan parks.
- A visually enclosed landscape of an intimate scale.
- A settled but tranquil rural landscape of high scenic quality and historical depth."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an Area of Higher Landscape Value the value is assessed as high.	Due to the river and floodplains the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility results in a very high sensitivity.

Durham BLT Lowland River Terraces	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
Construction phase (winter) assessment scheme 07	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 07	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 07	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The construction phase will not be located in the BLT, nor will there be any perception of the construction phase due to distance and intervening landform and features. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact There will be no change to the character of the BLT, nor will there be any perception of the operational phase due to distance and intervening landform and features. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 44: Durham BCA River Trees

Durham BCA River Tees	**Relevant Scheme Study Areas within Area: 08** **Relevant Order Limits within the area: None**	
Relevant aspects of the published description: In respect of scheme 08, the BCA is located across the eastern part of the study area for scheme 08. The published description of the BCA is: “The River Tees meanders across a narrow floodplain between low river terrace bluffs of pasture, rough pasture or broadleaved woodland, or flows through narrow wooded denes flanked by low scars. Narrow riparian woodlands line the banks of the river. The floodplain is a mosaic of arable fields and improved or semi-improved pastures, open in places, divided in others by old hedges with scattered hedgerow trees. Fragments of rigg and furrow survive in the less improved pastures. Small green villages, hamlets, halls and building clusters line the river terraces above the floodplain.”		
Relevant Stated Key Characteristics (as part of the Lowland River Terraces are: • "Flat, narrow floodplain fringed in places by low, steep-sided bluffs. • Coarse loamy and sandy soils on alluvial river terrace drift. • Meandering rivers with alternating riffles and pools. • Arable cropping on the floodplain. • Semi-improved pastures on bluffs. • Low hawthorn hedges with scattered hedgerow oak and ash. • Fragments of rigg and furrow survive in older pastures. • Ancient oak woodlands on steeper bluffs. • Narrow riparian woods or tree lines of alder, oak, ash and willow on river banks. • Old villages closely associated with the river, often on bridging or fording points. • Buildings of local stone with roofs of slate or clay pan tile. • Occasional recreational sites - lidos and caravan parks. • A visually enclosed landscape of an intimate scale. • A settled but tranquil rural landscape of high scenic quality and historical depth."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an Area of Higher Landscape Value the value is assessed as high.	Due to the river and floodplains the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility results in a very high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact The construction phase will not be located in the BCA, nor will there be any perception of the construction phase due to distance and intervening landform and features. Significance of Effect		

Durham BCA River Tees	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
The combination of the very high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact There will be no change to the character of the BCA, nor will there be any perception of the operational phase due to distance and intervening landform and features. Significance of Effect The combination of the very high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 45: Durham BLT Lowland Vale

Durham BLT Lowland Vale	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
Relevant aspects of the published description: In relation to scheme 08, the BLT is located across the south-east part of the study area. In relation to scheme 09, the BLT is located across the north-west part of the study area and covers part of the DCO boundary to the north of the existing A66, between Stephen Bank and land to the west of West Layton. The published description of the BLT is: “A broad lowland vale defined by higher ground to the north and south. Carboniferous and Permian rocks are overlain in most places by a thick mantle of boulder clay, morainic drift and sands and gravels. The topography is gently rolling or gently undulating with occasional flats. Soils are a patchwork of seasonally waterlogged loamy clay soils and more free-draining brown earths. In areas where the drift is absent on Permian magnesian limestones there are small pockets of calcareous brown earths. Agricultural land use is mixed, with much of the landscape being dominated by arable cropping - primarily of cereals and oil-seed rape - but with a mosaic of pasture and arable in some areas. Field boundaries are hawthorn hedges and are usually cut low. Field patterns are semi-regular, most dating from the enclosure of the common fields of villages in the 1600s. Field systems are heavily fragmented in places by amalgamation into large arable fields. Relics of rigg and furrow are found in older, less improved pastures. There are small areas of more regular 'surveyor enclosed' field systems dating from the enclosure of manorial wastes in the 18th century. Tree cover is variable with scattered hedgerow ash, oak and sycamore typical of arable farms and more abundant hedgerow trees in areas of mixed or pastoral farming. The landscape is generally	

Durham BLT Lowland Vale	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09

sparsely wooded with occasional small broadleaved woodlands and a single example of a larger ancient oak wood. There are several heavily wooded areas of old parkland and estate farmland where parkland features such as mature field trees, avenues and park walls are found.

The landscape has a long history of settlement and a nucleated pattern of small green villages, most of Saxon or later medieval origins. Buildings are of local sandstone with roofs of clay pan tile or slate, and are set around a central village green. Between the villages lie scattered farms. Farms and farm buildings of the Raby Estate, which covers much of the northern vale, are painted white. Villages are connected by a network of narrow hedged lanes. There are occasional very small, abandoned limestone and sandstone quarries worked in the past for building stone and lime.

A broad scale landscape in which the high ground of the coalfield to the north, and the Yorkshire Dales to the south, form strong middle distance horizons. Locally the high incidence of hedgerow trees creates a degree of enclosure and an intimacy of scale. Hedgerow trees are often important skyline features and help articulate and define space. A settled rural landscape."

Relevant Stated Key Characteristics are:

- "Broad lowland vale.
- Gently rolling or undulating topography of glacial moraines, boulder clays and sands and gravels.
- Occasional flats.
- Mixed, but predominantly arable farmland - a mosaic of improved pasture and arable cropping.
- Semi-regular patterns of old enclosures bounded by thorn hedges.
- Relics of rigg and furrow in older pastures.
- Scattered hedgerow ash, oak and sycamore - abundant in places.
- Sparsely wooded but with some heavily wooded areas of old parkland and estate farmland.
- Nucleated pattern of small green villages connected by narrow, winding, hedged lanes.
- The high incidence of hedgerow trees creates a degree of enclosure in places, but the landscape remains fairly broad in scale with views to distant high ground.
- A tranquil settled rural landscape."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As part of the BLT is within an Area of Higher Landscape Value, the value is assessed as high.	The predominantly agricultural land use and small scale settlements result in a medium susceptibility.	The combination of the high value and medium susceptibility results in a high sensitivity to the scheme.

Construction phase (winter) assessment scheme 07
Scoped out as beyond the study area.
Operation year 1 phase (winter) assessment scheme 07
Scoped out as beyond the study area.
Operation year 15 phase (summer) assessment scheme 07
Scoped out as beyond the study area.
Construction phase (winter) assessment scheme 08
Magnitude of Impact The construction phase will not be located in the BLT, nor will there be any perception of the construction phase due to distance and intervening landform and features. The magnitude of impact will be no change.

Durham BLT Lowland Vale	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
Significance of Effect The combination of the high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact There will be no change to the character of the BLT, nor will there be any perception of the operational phase due to distance and intervening landform and features. The magnitude of impact will be no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will result in alteration to surface landform and vegetation removal to construct the dualled section of the scheme to the north of the existing A66. The construction activity will include the formation of embankments to the north of the existing A66 covering an area of a former road, but resulting in the removal of roadside vegetation. The construction of the access road will also result in localised changes to surface landform and the removal of field boundary hedgerows and vegetation, with excavation between the access road and the dualled A66 for a linear attenuation ditch. In addition to the above, there will be the presence and movement of construction activity and compounds, along with hoardings and fencing, stockpiles and traffic management measures. The above activities will be very localised in relation to the wider scale of the BLT and therefore the magnitude of impact is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact At year 1, the scheme will result in additional road infrastructure within the southern part of the BLT, via the dualling, access roads and additional junctions. The movement of vehicles will be perceived to a greater extent than on the existing A66 due to the removal of vegetation. There will be localised changes to the stated key characteristics of field patterns and vegetation patterns. However, as the scheme will be located adjacent to the existing A66, where the character is already defined by the road corridor, the magnitude of impact is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 09	

Durham BLT Lowland Vale	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
Magnitude of Impact With the establishment of the proposed woodland across the embankments, the planting will reflect the vegetated character of this part of the A66 and reduce the perception of the dualling, additional road infrastructure, vehicle movement and signage. The magnitude of impact is therefore assessed as no change. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Construction phase (winter) assessment intra project (schemes 08 and 09)	
Magnitude of Impact As the construction phase will only result in physical change within the DCO boundary of scheme 09, the magnitude of impact will reflect those stated above, at negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 1 (winter) assessment intra project (schemes 08 and 09)	
Magnitude of Impact As the physical change will only occur to the landscape within the DCO boundary for scheme 09, the magnitude of impacts will reflect those stated above, at negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 15 (summer) assessment intra project (schemes 08 and 09)	
Magnitude of Impact As the physical change will only occur to the landscape within the DCO boundary for scheme 09, the magnitude of impacts will reflect those stated above, at no change. Significance of Effect In relation to the high sensitivity of the receptor, the neutral impact will result in a neutral (not significant) effect.	

Table 46: Durham BCA Southern Trees Vale: Hutton Magma

Durham BCA Southern Tees Vale: Hutton Magna	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
Relevant aspects of the published description: In relation to scheme 08, the BCA is located across the south-east part of the study area. In relation to scheme 09, the BCA is located across the north-west part of the study area and covers part of the DCO boundary to the north of the existing A66, between Stephen Bank and land to the west of West Layton. The published description of the BCA is:	

Durham BCA Southern Tees Vale: Hutton Magna	**Relevant Scheme Study Areas within area: 08, 09** **Relevant Order Limits within the area 09**	
"Gently rolling or undulating farmland in the south of the vale. An open, predominantly arable, landscape with old pre-enclosure field systems of clipped hawthorn hedges and scattered hedgerow trees. The area is sparsely wooded, with occasional small broadleaved plantations. Small hamlets and scattered farms are connected by narrow winding lane."		
Relevant Stated Key Characteristics (as part of the Lowland Vale): • "Broad lowland vale. • Occasional flats. • Mixed, but predominantly arable farmland - a mosaic of improved pasture and arable cropping. • Semi-regular patterns of old enclosures bounded by thorn hedges. • Relics of rigg and furrow in older pastures. • Scattered hedgerow ash, oak and sycamore - abundant in places. • Sparsely wooded but with some heavily wooded areas of old parkland and estate farmland. • Nucleated pattern of small green villages connected by narrow, winding, hedged lanes. • The high incidence of hedgerow trees creates a degree of enclosure in places, but the landscape remains fairly broad in scale with views to distant high ground. • A tranquil settled rural landscape."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As part of the BLT is within an Area of Higher Landscape Value, the value is assessed as high.	The predominantly agricultural land use and small scale settlements result in a medium susceptibility.	The combination of the high value and medium susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact construction phase will not be located in the BCA, nor will there be any perception of the construction phase due to distance and intervening landform and features. The magnitude of impact is assessed as no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 08		
Magnitude of Impact There will be no change to the character of the BCA, nor will there be any perception of the operational phase due to distance and intervening landform and features. The magnitude of impact is assessed as no change.		

Durham BCA Southern Tees Vale: Hutton Magna	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
Significance of Effect The combination of the high sensitivity and the no change magnitude of impact results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will result in alteration to surface landform and vegetation removal to construct the dualled section of the scheme to the north of the existing A66. The construction activity will include the formation of embankments to the north of the existing A66 covering an area of a former road, but resulting in the removal of roadside vegetation. The construction of the access road will also result in localised changes to surface landform and the removal of field boundary hedgerows and vegetation, with excavation between the access road and the dualled A66 for a linear attenuation ditch. In addition to the above, there will be the presence and movement of construction activity and compounds, along with hoardings and fencing, stockpiles and traffic management measures. The above activities will be very localised in relation to the wider scale of the BCA and therefore the magnitude of impact is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact At year 1, the scheme will result in additional road infrastructure within the southern part of the BCA, via the dualling, access roads and additional junctions. The movement of vehicles will be perceived to a greater extent than on the existing A66 due to the removal of vegetation. There will be localised changes to the stated key characteristics of field patterns and vegetation patterns. However, as the scheme will be located adjacent to the existing A66, where the character is already defined by the road corridor, the magnitude of impact is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 09	
Magnitude of Impact With the establishment of the proposed woodland across the embankments, the planting will reflect the vegetated character of this part of the A66 and reduce the perception of the dualling, additional road infrastructure, vehicle movement and signage. The magnitude of impact is therefore assessed as no change. Significance of Effect	

Durham BCA Southern Tees Vale: Hutton Magna	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Construction (winter) assessment intra project (schemes 08 and 09)	
Magnitude of Impact As the construction phase will only result in physical change within the DCO boundary of scheme 09, the magnitude of impact will reflect those stated above, at negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 1 (winter) assessment intra project (schemes 08 and 09)	
Magnitude of Impact As the physical change will only occur to the landscape within the DCO boundary for scheme 09, the magnitude of impacts will reflect those stated above, at negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 15 (summer) assessment intra project (schemes 08 and 09)	
Magnitude of Impact As the physical change will only occur to the landscape within the DCO boundary for scheme 09, the magnitude of impacts will reflect those stated above, at no change. Significance of Effect In relation to the high sensitivity of the receptor, the neutral impact will result in a neutral (not significant) effect.	

Table 47: BLT Upper Dale

BLT Upper Dale	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Relevant aspects of the published description: BLT Upper Dale covers several separate geographic areas across the western part of Durham and covers land in the north-east part of the study area for scheme 07. The published study describes the BLT as: “A pastoral landscape at the limits of agriculture high in the upper reaches of the Pennine dales. The topography of the dale floor in the upper dales is varied. Most upper dales are relatively shallow and broad, incised by narrow gullies - gills or sikes - cut by rocky, fast flowing streams. The underlying Carboniferous sandstones, shales and limestones are generally masked by glacial boulder clay and morainic drift. Soils are heavy waterlogged or peaty gleys. This is a pastoral landscape of wet, rush-infested pastures, upland hay meadows and rough grazing enclosed from the moor. Field patterns tend to be regular and date from enclosure and agricultural improvements from the late 18th century onwards. Fields are generally large and bounded by low dry stone walls or wire fences, often in a poor state of repair. The diversity of grasslands, grazed by	

BLT Upper Dale	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None	
hardy upland sheep and beef cattle, creates a patchwork of muted and brighter greens reflecting varying degrees of improvement by drainage, liming, and fertilising. There are scattered stone field barns and sheepfolds. Most upper dales are open or sparsely wooded with occasional small streamside woods, sparse lines of alder trees and willow scrub following watercourses, or isolated conifer plantations or shelterbelts. In places land in the dale head has been afforested with large regular blocks of pine and spruce. Small farms and farm clusters are scattered across the dale floor and onto the dale sides, occasionally marked by wind-blown groups of sycamore or pine shelter trees. In Teesdale the tenanted farms of the Raby estate are painted white. Many farms date from the expansion of the lead mining industry which brought miner-small holders to the limits of agriculture. Relics of the lead mining industry include derelict mine buildings, waste heaps, smelter flues, reservoirs and hushes. The heads of a number of dales are now occupied by large reservoirs. The landscape is visually open and exposed and defined by the encircling moorland skyline. A remote and tranquil landscape on the margins of settlement and agriculture, often with a rather bleak and neglected quality.”		
Relevant Stated Key Characteristics are: • "Upper reaches of the Pennine dales. • Varied valley topography. • Carboniferous rocks bare of drift or covered by glacial boulder clays. • Fast flowing rocky streams. • Shallow, infertile or waterlogged soils. • Wet rushy pastures, upland hay meadows and rough grazing in the moorland fringes. • Regular field patterns of dry stone walls. Scattered field barns. • Few trees or woodlands - occasional concentrations of conifer plantations. • Scattered small farms with occasional farm clusters and hamlets. • Relics of the lead mining industry - mine buildings, waste heaps, smelter flues, reservoirs and hushes. • Visually open but enclosed by encircling moorland ridgelines. • Remote and tranquil landscapes on the margins of settlement and agriculture."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Parts of the BLT are within the North Pennines AONB and therefore the value is high.	As areas of varied landform and with very small scale settlement and infrastructure networks, the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BLT and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BLT is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the high sensitivity of the BLT results in a neutral (not significant) effect.		

BLT Upper Dale	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Operation year 1 phase (winter) assessment scheme 07	
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 07	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 48: BCA Upper Great Valley

BCA Upper Greta Valley	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Relevant aspects of the published description: BCA Upper Greta Valley is located in the western part of the study area for scheme 07, adjacent to the existing A66, beyond the DCO boundary. The published study describes the BCA as: “The shallow dalehead of the Greta valley follows the Stainmore Gap across the moorland plateau between Bowes Moor and Stainmore Forest. The course of the Greta is lined with low limestone scars in places and crossed by a natural limestone arch at God's Bridge. A very open landscape of wet rushy pastures divided by low walls or wire fences, dominated in places by the trans-Pennine A66, with distant views out across the moorland plateau.”	
Relevant Stated Key Characteristics (as part of the Upper Dale) are: • "Upper reaches of the Pennine dales. • Varied valley topography. • Carboniferous rocks bare of drift or covered by glacial boulder clays. • Fast flowing rocky streams. • Shallow, infertile or waterlogged soils.	

BCA Upper Greta Valley	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None	
• Wet rushy pastures, upland hay meadows and rough grazing in the moorland fringes. • Regular field patterns of dry stone walls. Scattered field barns. • Few trees or woodlands - occasional concentrations of conifer plantations. • Scattered small farms with occasional farm clusters and hamlets. • Relics of the lead mining industry - mine buildings, waste heaps, smelter flues, reservoirs and hushes. • Major reservoirs in some dales. • Visually open but enclosed by encircling moorland ridgelines. • Remote and tranquil landscapes on the margins of settlement and agriculture."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The BCA is within the North Pennines AONB and the value is assessed as high.	As an area of sloping landform, forming part of the valley side and the River Greta, but where the existing A66 forms part of the northern boundary to the BCA, the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity to the scheme.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BCA is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 07		
The assessment will reflect that at year 1, with a neutral (not significant) effects.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		

BCA Upper Greta Valley	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 49: Durham BLT Moorland Ridges and Summits

Durham BLT Moorland Ridges and Summits	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Relevant aspects of the published description: The BLT consists of 11 geographic areas, predominantly across the north-west of Durham and covers land in the north-west part of the study area for scheme 07. The published study describes the BLT as: “Remote upland landscapes of elevated moorland ridges and high summits. The topography of the landscape is heavily influenced by its geology. Alternating strata of Carboniferous limestones, sandstones and softer shales give a stepped profile to slopes and a strong horizontal grain to the topography. Millstone grits cap the higher fells and form distinctive flat-topped summits. Thick layers of peat cover much of the terrain but underlying rocks outcrop locally to form low grey scars and stone bands. Igneous dolerites of the Great Whin Sill form prominent crags and screes. Ridges are broad and deeply divided by valleys on their flanks, drained by rocky, quick-flowing becks or burns in steep sided gullies - gills or sikes. Thick peats are exposed as dark eroding peat edges and hags. The highest ground is occupied by extensive tracts of blanket bog of heather, cotton grass and sphagnum mosses. This gives way on drier ground to moorland of heather and bilberry or acid grassland on peaty gleys and podzols. The moors are managed for grouse shooting and the extensive grazing of hardy upland breeds of sheep like Swaledales. On heavily grazed moors heather is replaced by 'white moor' dominated by Mat-grass. Burning patterns on grouse moors create a patchwork of older and younger heather, creating a diversity of colour and texture. The landscape is largely devoid of man-made features other than occasional fences, grouse butts, cairns, sheepfolds and fields. Roads across the moor are unfenced and marked by snow poles with gates or cattle-grids at the moor wall. Occasional radio and telecommunications masts break the skyline. Relics from the Bronze Age survive in a few places in the form of stone circles, cairn fields and burial mounds - these are generally cryptic features, difficult to find in the moorland heather. Remains of the 18th and 19th century lead mining industry - including bell pits, mine entrances, derelict mine buildings, waste heaps, reservoirs and water leats - can be found on some moors following the line of ore-bearing veins. The most prominent in the landscape are smelter flues and chimneys and the deep hushes which scar the hillsides and occasionally notch the skyline. The landscape is visually very open with panoramic long distance views out across unbroken moorlands or adjoining dales. The visual simplicity of the landscape coupled with a severe climate of high rainfall, cold winters and short summers gives it an austere and elemental character. In the heart of the moorlands, where man-made features are few, the landscape has a near wilderness quality.”	

Durham BLT Moorland Ridges and Summits	**Relevant Scheme Study Areas within Area: 07** **Relevant Order Limits within the area: None**

Relevant Stated Key Characteristics are:

- "Broad divided ridges and high flat-topped summits.
- A strong horizontal grain to the topography.
- Grits and limestones outcrop locally in low grey crags and stone bands.
- Hard igneous dolerites outcrop in larger crags and scree slopes.
- Rocky, quick flowing becks or burns in steep sided gullies.
- Extensive tracts of blanket bog of heather, cotton grass and sphagnum mosses.
- Deep peat exposed in eroded hags and peat edges.
- Drier slopes clothed in upland heath of heather and bilberry or acid grasslands.
- Extensive grazing by hardy hill sheep.
- Few man-made features other than occasional fences, grouse butts, cairns and sheepfolds.
- Unfenced roads marked by snow poles with gates or cattle-grids at the moor wall.
- Relics of lead mining - bell pits, hushes, waste heaps, railways, reservoirs and water leats, smelter flues and chimneys.
- Panoramic long distance views out across unbroken moorlands or adjoining dales.
- A remote and elemental landscape with a near wilderness quality in places."

Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Part of the BCA is within the North Pennines AONB and the value is high.	As moorland with dominant landform and very limited engineered features, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility results in a very high sensitivity.

Construction phase (winter) assessment scheme 07

Magnitude of Impact

The construction activity will not be located in the BLT and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BLT is assessed as no change.

Significance of Effect

The no change magnitude of impact in combination with the high sensitivity of the BLT results in a neutral (not significant) effect.

Operation year 1 phase (winter) assessment scheme 07

Magnitude of Impact

The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BLT will remain. There will be no physical changes to the landscape features within the BLT. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BLT, such that the magnitude of impact is assessed as no change.

Significance of Effect

The no change magnitude of impact in combination with the medium sensitivity of the BLT results in a neutral (not significant) effect.

Operation year 15 phase (summer) assessment scheme 07

The assessment will reflect that at year 1.

Durham BLT Moorland Ridges and Summits	Relevant Scheme Study Areas within Area: 07 Relevant Order Limits within the area: None
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 50: Durham BCA Barningham, Hope and Scargill Moors

Durham BCA Barningham, Hope and Scargill Moors	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None
Relevant aspects of the published description: The BCA is located across the central southern parts of the study area for scheme 07 and the south-west part of the study area for scheme 08. The published study describes the BCA as: “Moorland slopes to the south of the Greta around the large forestry plantation of The Stang. The high ridge top of Hope moor is clothed in blanket bog or the 'white moor' of modified bog. The lower moors of Barningham Moor and Scargill Low Moor are drier heath with a mosaic of burning patterns. Barningham moor contains relics of a Bronze Age ritual landscape including a stone circle, cup and ring marked stones and burial mounds.”	
Relevant Stated Key Characteristics (as part of the BLT Moorland Ridges and Summits): • "Broad divided ridges and high flat-topped summits. • A strong horizontal grain to the topography. • Grits and limestones outcrop locally in low grey crags and stone bands. • Hard igneous dolerites outcrop in larger crags and scree slopes. • Rocky, quick flowing becks or burns in steep sided gullies. • Extensive tracts of blanket bog of heather, cotton grass and sphagnum mosses. • Deep peat exposed in eroded hags and peat edges. • Drier slopes clothed in upland heath of heather and bilberry or acid grasslands. • Extensive grazing by hardy hill sheep. • Burning patterns on grouse moors create a patchwork of older and younger heather. • Few man-made features other than occasional fences, grouse butts, cairns and sheepfolds. • Unfenced roads marked by snow poles with gates or cattle-grids at the moor wall. • Relics of lead mining - bell pits, hushes, waste heaps, railways, reservoirs and water leats, smelter flues and chimneys. • Panoramic long distance views out across unbroken moorlands or adjoining dales.	

Durham BCA Barningham, Hope and Scargill Moors	**Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None**	
• A remote and elemental landscape with a near wilderness quality in places."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Part of the BCA is within the North Pennines AONB and the value is high.	As moorland with dominant landform and very limited engineered features, the susceptibility is assessed as very high.	The combination of the high value and very high susceptibility results in a very high sensitivity.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. Any perception of the construction activity will be in the context of the existing A66 and Bowes, such that the magnitude of impact to the BCA is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. Any perception of the scheme will be in the context of the existing A66 and will not alter the character or setting to the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 07		
The assessment will reflect that at year 1, with a neutral (not significant) effect.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact The construction activity will not be located in the BCA and therefore there will be no physical change to the landscape features. The magnitude of impact to the BCA is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 08		
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. The magnitude of impact is assessed as no change.		

Durham BCA Barningham, Hope and Scargill Moors	Relevant Scheme Study Areas within Area: 07, 08 Relevant Order Limits within the area: None
Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1, with a neutral (not significant) effect.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	
Construction phase (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impact is assessed as no change, reflecting the assessments for scheme 07 and 08. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 1 (winter) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The alignment of the scheme will reflect that of the existing A66, such that the spatial relationship with the BCA will remain. There will be no physical changes to the landscape features within the BCA. The magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	
Operation year 15 (summer) assessment intra project (schemes 07 and 08)	
Magnitude of Impact The magnitude of impact is assessed as no change, as per the assessments of 07 and 08. Significance of Effect The no change magnitude of impact in combination with the very high sensitivity of the BCA results in a neutral (not significant) effect.	

Table 0-51: Durham BCA Urban Area Barnard Castle

Durham BCA Urban Area Barnard Castle	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
Relevant aspects of the published description: The BCA is located in the northern part of the study area for scheme 08.	

Durham BCA Urban Area Barnard Castle	**Relevant Scheme Study Areas within Area: 08** **Relevant Order Limits within the area: None**	
The published study identifies the BCA as an urban area but does not provide any additional information. The following key characteristics are defined by the applicant.		
Key Characteristics defined by the Applicant: • Historic market town with notable cultural association including a Conservation Area. • Coherent pattern of two and three storey terraced properties forming the high street. • High levels of vehicles due to the A67 extending through the BCA which lower tranquillity. • Recreational routes and historic parks and gardens. • Contemporary residential development and larger industrial estates at the periphery of the BCA.		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Due to the cultural association and scenic quality of the architecture along the high street, balanced the value is assessed as high.	As an area of varied land uses and building styles, along with the A67, the susceptibility is assessed as medium.	The combination of the high value and medium susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact The construction activity will not be located in the character area. Due to the distance and intervening features there will be no change to the landscape features, nor perception. The magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 08		
Magnitude of Impact The scheme will not be located within the BCA and therefore there will be no physical change to the landscape and townscape features. The distance and intervening features will negate any change to the perception of the scheme. The magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 08		
The assessment will reflect that at year 1, with a neutral (not significant) effect.		
Construction phase (winter) assessment scheme 09		
Scoped out as beyond the study area.		

Durham BCA Urban Area Barnard Castle	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 52: Durham BCA Urban Area Boldron

Durham BCA Urban Area Boldron	Relevant Scheme Study Areas within Area: 07, 09 Relevant Order Limits within the area: None	
Relevant aspects of the published description: The BCA is located in the eastern part of the study area for scheme 07 and the western part of the study area for scheme 08. There is no published description, such that the following key characteristics are defined by the applicant.		
Key Characteristics defined by the Applicant: • Small scale residential village bordered to the east by a geometric pattern of narrow fields divided by vegetation. • Linear settlement pattern consisting mainly of terraced two storey properties. • Consistent pattern of stone buildings with white windows. • On street parking. • Recreational routes from the village and across the wider landscape. • Audible noise from the existing A66.		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As a residential area with some local vernacular the value is assessed as low.	As a small scale area the susceptibility is assessed as medium.	The combination of the low value and medium susceptibility results in a medium sensitivity.
Construction phase (winter) assessment scheme 07		
Magnitude of Impact Due to the distance from the construction phase and the intervening elevated landform, there will be no physical change to the BCA, nor a perception of the construction activity. The magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the receptor will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 07		
Magnitude of Impact There will be no physical change to the townscape features of the BCA, nor perception of the scheme due to the distance. The magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in combination with the medium sensitivity of the receptor will result in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 07		
The magnitude of impact and effects will reflect those at year 1.		

Durham BCA Urban Area Boldron	Relevant Scheme Study Areas within Area: 07, 09 Relevant Order Limits within the area: None
Construction phase (winter) assessment scheme 08	
Magnitude of Impact The construction activity will not be located in the BCA and the distance from the construction activity at Cross Lanes will negate any impact to the character of the village. The magnitude of impact is therefore assessed as no change. Significance of Effect In relation to the medium sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact There will be no physical change to the BCA. The slightly closer proximity of the proposed Cross Lanes junction and the height of the overbridge with associated vehicles will not alter the setting to the BCA and the existing perception of the A66, to the south of the BCA. The magnitude of impact is therefore assessed as no change. Significance of Effect In relation to the medium sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 00	
Scoped out as beyond the study area.	

Table 53: Durham BCA Urban Area Brignall

Durham BCA Urban Area Brignall	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
Relevant aspects of the published description: The BCA is located in the southern part of the scheme 08 study area. The published study defines the BCA as an ‘urban area’; however there is no stated description. The following key characteristics are defined by the applicant.	
Key Characteristics defined by the Applicant: • Small scale hamlet bordered by fields. • Land use characterised by two storey residential properties and farm buildings adjacent to Brignall Lane. • Hamlet situated in an elevated position within the landscape. • Established vegetation adjacent to parts of Brignall Lane. • Church located at the eastern edge of the hamlet.	

Durham BCA Urban Area Brignall	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None	
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The cultural association is assessed as resulting in a medium value.	The small scale of the hamlet and consistent pattern of buildings, along with the church results in a high susceptibility.	The combination of the medium value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact Due to the distance from the DCO boundary there will be no change to the character of the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor results in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 08		
Magnitude of Impact Due to the distance from the DCO boundary there will be no change to the character of the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor results in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 08		
Magnitude of Impact Due to the distance from the DCO boundary there will be no change to the character of the BCA, such that the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor results in a neutral (not significant) effect.		
Construction phase (winter) assessment scheme 09		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 09		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 09		
Scoped out as beyond the study area.		

Table 54: Durham BCA Urban Area Great Bridge

Durham BCA Urban Area Greta Bridge	**Relevant Scheme Study Areas within Area: 08** **Relevant Order Limits within the area: None**	
Relevant aspects of the published description: The BCA is located in the eastern part of the study area for scheme 08. The published study does not provide a description for the BCA, such that the following key characteristics are defined by the applicant.		
Key Characteristics defined by the Applicant: • Small scale hamlet either side of the River Greta. • Cultural association via Conservation Area and individual structures, including Greta Bridge. • Two storey residential properties with a consistent use of stone. • Three storey hotel with external car-parking. • Existing dualled A66 is perceived via vehicles noise and has altered the form of the BCA via truncating Greta Bridge Bank Road. • Registered Park and Garden form the setting to the north of the BCA.		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The cultural association and listed features results in a high value.	The small scale of the BCA, balanced with the existing A66 already forming part of the setting results in a medium susceptibility.	The combination of the high value and medium susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact The construction activity will not be located in the BCA and the intervening vegetation and rising landform will reduce the perception of the construction activity. Given the existing perception of the A66, the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 08		
Magnitude of Impact At year 1 the alignment of the scheme will reflect the existing alignment of the A66, which is already dualled in proximity to the BCA. Given the existing perception of the A66, the magnitude of impact is assessed as no change. Significance of Effect The no change magnitude of impact in relation to the high sensitivity of the receptor will result in a neutral (not significant) effect.		

Durham BCA Urban Area Greta Bridge	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 55: Rokeby Park Registered Historic Park and Garden Character Area

Rokeby Park Registered Historic Park and Garden Character Area	**Relevant Scheme Study Areas within Area: 08** **Relevant Order Limits within the area: None**	
Relevant aspects of the published description: Rokeby Park RHPG is located in the eastern part of the study area for scheme 08. The area predominantly covers land between the existing A66 and the River Tees, but also extends to the Church of St Mary, via Church Plantation and to the Tutta Beck, to the south of the existing A66. The area is predominantly parkland with established trees. The main house is located in the northern part of the area and is bordered by several outbuildings and stables. The main access into the park is via the west lodge, adjacent to Abbey Road. In proximity to the DCO boundary, there are stone piers and railings (Grade II) and gate adjacent to the existing junction of Abbey Road and the A66. The designed intent of the layout enables views between the main house and the piers and gates.		
Key Characteristics defined by the Applicant: • Extensive woodland and individual mature trees set within parkland. • Three storey Grade I Rokeby Park House. • Neoclassical lodges, with the main access from Abbey Road. • Numerous listed buildings. • Layout of the Park is already influenced by the existing A66, with the east lodge physically and visually separated from the remainder of the park and that Church Plantation is not contiguous with the Park, due to Abbey Road. • No tranquillity or sense of remoteness within the grounds of the Church of St Mary due to the noticeable presence of vehicles on the existing A66 at close range. • Part of an Area of Higher Landscape Value. • Ancient woodland adjacent to the River Tees.		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Given the designated nature of Rokeby Park the landscape value is assessed as high.	As an area of parkland but which is already crossed by part of the A66 and Abbey Road, the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact The construction of the new roundabout junction will be located in and adjacent to the character area, as the designation extends across Abbey Road. The construction activity will also be perceived from the Church of St Mary churchyard, the south-west part of the parkland and the main		

Rokeby Park Registered Historic Park and Garden Character Area	Relevant Scheme Study Areas within Area: 08 Relevant Order Limits within the area: None
house. The physical change to the landscape will be to areas of existing road infrastructure and the key landscape structure across the area will be retained. The perception of the construction activity in proximity to the Church of St Mary will not adversely impact the tranquillity, given the existing presence of the A66. The magnitude of impact is therefore assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the receptor, the minor adverse impact will result in a moderate adverse (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact The proposed roundabout junction will reflect the scale and extent of the existing junction bordering the area, as will the perception of vehicles on this part of the scheme. Therefore the scheme is assessed as maintaining the existing landscape character to this part of the character area. There will be a reduction in the extent of vegetation within the setting of the area. In relation to Church Plantation and the Church of St Mary, the proposed alignment of the A66 will be further from these parts of the character area than the existing A66. The proposed alignment will also be set at a lower position within the landscape and beyond retained vegetation, such that the perception of the A66 will be reduced, which is assessed as beneficial. As the existing A66 will be retained as part of the access between Abbey Road and the proposed A66 alignment, there will still be vehicles in close proximity to these parts of the character area. However, the number of vehicles in considered to be less than those on the existing A66, such that the overall impact is assessed as negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the negligible adverse impact will result in a slight adverse (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 08	
Magnitude of Impact Compared to the year 1 assessment, with the intervening retained vegetation in leaf, the perception of the re-aligned A66 will reduce. This is assessed as enabling an improved sense of place within the grounds of the Church of St Mary and adjacent to Church Plantation. The magnitude of impact will be negligible. Significance of Effect In relation to the high sensitivity of the receptor, the negligible impact will result in a slight adverse (not significant) effect.	
Construction phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 09	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 09	
Scoped out as beyond the study area.	

Table 56: Richmond Local Landscape Character Type (LLCT) B: Moors Fringe

Richmond Local Landscape Character Type (LLCT) B: Moors Fringe	**Relevant Scheme Study Areas within area: 08, 09** **Relevant Order Limits within the area 09**	
Relevant aspects of the published description: The LCT covers the south-east part of the study area for scheme 08 and most of the study area and DCO boundary for scheme 09, from the west of West Layton to Carkin Moor. The published description of the LCT is: “It forms the slopes at the edge of the Moors, into the valley areas and transitioning into the Vale. It comprises the gently sloping eastern fringes of the Yorkshire Dales to the north and Gritstone Moors and Fells to the south. There is local variation in topography.”		
Relevant Stated Key Characteristics: • "Gently sloping landscape which forms a transition between higher moors and fells to the west and the vale landscape to the east. • Predominantly rural landscape with an associated relatively strong sense of tranquillity. • The LLCT is dissected by several significant river valleys running from west to east, including the Swale and Ure. • A patchwork of arable and pastoral fields which are delineated by stone walls and hedgerow field boundaries. • A mosaic of landscapes including moorland and acid grassland with variety of woodland cover, particularly associated with the valleys, many copses and plantations on the side slopes, and hedges and trees in the lower-lying arable areas. • Dispersed settlement pattern of small villages and large farmsteads linked by a network of minor roads. • Settlements generally display buildings which are predominantly constructed from local stone, resulting in strong visual unity. • Historic parklands and wooded estates enclosing a number of country houses are scattered throughout the landscape."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
There are several historic parklands across the LCT and wooded estates, such that the value is assessed as high.	The undulating landform and the presence of several rivers results in a high susceptibility.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact Due to the distance from the DCO boundary and that there will be no change to the landscape features, the magnitude of impact is assessed as no change.		

Richmond Local Landscape Character Type (LLCT) B: Moors Fringe	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
Significance of Effect In relation to the no change magnitude of impact and the high sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact Due to the distance from the DCO boundary and that there will be no change to the landscape features, the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the high sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity to the west of West Layton will resulting in excavation to the fields and removal of vegetation to construction the cutting between the southern edge of the village and the existing A66. This will also result in the removal of part of the low stone wall and hedgerow adjacent to Collier Lane. The construction of the overbridge will require tall lifting equipment. To the south of West Layton there will be the excavation within the fields for the proposed A66 alignment within cutting, along with the excavation for the attenuation basin within the fields to the south if the existing A66. The construction activity will also include the removal of vegetation from within Ravensworth Copse. The changes to surface landform and construction of the dualled road on a shallow embankment will extend to the east of Ravensworth Cope, resulting in the removal of field boundary vegetation and vegetation within Fox Grove and Fox Well plantation. There will also be the construction of a new access road to the east of Foxwell Farm to a proposed attenuation basin, including excavation of surface landform as the road alignment will be in cutting. To the west of Moor Lane, the construction activity will alter the geometric field patterns and field boundary vegetation via the construction of the proposed junction and the associated excavation for the road alignment to be in cutting. There will also be vegetation removal from Mainsgill Plantation. In the western part of the DCO boundary the construction activity will extend across fields to the south of the existing A66, with changes to surface landform to construct the dualled A66 on embankment to the south of Street Plantation and the excavation for the attenuation basins between the proposed dualled embankment and the realignment of Warrener Lane. This activity will also result in the removal of field boundary vegetation and vegetation between the existing dualled sections of the A66. In addition to the above, there will be construction compounds, with associated storage and buildings and the movement of vehicles across the DCO boundary. The construction activity will be located across and adjacent to the A66 and therefore within a part of the LLCT where the character is already defined by the road corridor and tranquillity is lowered. Whilst the physical change will be localised, the construction activity will be perceived from other parts of the LLCT, covering land across the elevated valley sides to the south of the DCO scheme boundary.	

Richmond Local Landscape Character Type (LLCT) B: Moors Fringe	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
The combination of the physical change and perception of the construction activity will result in a minor adverse magnitude of impact. Significance of Effect In relation to the high sensitivity of the receptor, the significance of effect will be slight adverse (not significant). The effect is reduced from moderate adverse (significant) as the construction activity will be localised within the wider extent of the LLCT, such that the construction activity will not diminish the sense of place across the LLCT.	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact At year 1, the scheme will result in additional road infrastructure across the northern part of the LLCT, but within or adjacent to an existing road corridor. The removal of vegetation will increase the perception of the vehicles on the former A66 and the proposed dualling where located on embankment. The overbridge to the south of West Layton will introduce additional structure and massing within the landscape, with vehicles in an elevated position in relation to the existing alignment of the A66 with the associated gradients of the embankments contrasting with the gently undulating landform. In relation to the key characteristics, the scheme will result in localised alteration to the gently sloping landform, reduce the tranquillity, alter the patchwork of fields and reduce the extent of stone walls and reduce the extent of established woodland cover. There will also be localised alteration to the alignment of the minor roads, including Moor Lane. Due to the localised extent of these changes, the magnitude of impact is assessed as minor adverse. Significance of Effect In relation to the high sensitivity of the receptor, the significance of effect will be slight adverse (not significant). The effect is reduced from moderate adverse (significant) as the scheme will be localised within the wider extent of the LLCT, such that the scheme activity will not diminish the sense of place across the LLCT.	
Operation year 15 phase (summer) assessment scheme 09	
Magnitude of Impact Compared to the year 1 assessment the proposed planting will have established, including the woodland adjacent to the dualling. With the establishment of this woodland, the scheme will reflect the vegetated character of the existing context and the perception of the scheme, including the cuttings, embankments and the scale and mass of the overbridge will be reduced. The reduction in the vegetation cover within several of the plantations will remain due to the alignment of the scheme, however the new planting adjacent to the road alignment will provide new linkages between existing woods. The significance of effect is therefore predicted to reduce to negligible adverse. Significance of Effect In relation to the high sensitivity of the receptor, the significance of effect will be slight adverse (not significant).	
Construction phase (winter) assessment intra project (schemes 08 and 09)	
As the physical change will only occur from scheme 09, the magnitude of impacts will reflect those stated above, resulting in a slight adverse (not significant) effect.	

Richmond Local Landscape Character Type (LLCT) B: Moors Fringe	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area 09
Operation year 1 (winter) assessment intra project (schemes 08 and 09)	
As the physical change will only occur from scheme 09, the magnitude of impacts will reflect those stated above, resulting in a slight adverse (not significant) effect.	
Operation year 15 (summer) assessment intra project (schemes 08 and 09)	
As the physical change will only occur from scheme 09, the magnitude of impacts will reflect those stated above, resulting in a slight adverse (not significant) effect.	

Table 57: Richmond B1: Newsham Moors Fringe

Richmond B1: Newsham Moors Fringe	**Relevant Scheme Study Areas within area: 08, 09** **Relevant Order Limits within the area: None**	
Relevant aspects of the published description: Area B1 is located at the south-east edge of the study area for scheme 08 and at the western part of the study area for scheme 09, covering Newsham and land to the west of the village. The published study describes this area as: “This is the transitional area between the high moorland of Barningham Moor to the lower lying land in the Ravensworth Valley and includes the village of Newsham. It forms part of the north edge of the study area. It is bounded to the north and west by County Durham, north-east by Caldwell Vale LCA F1, to the east by Ravensworth Narrow Valley LCA D1 and to the south by Dalton and Gayles Moors Fringe LCAB2.” The published study also notes that the tranquillity of the area is interrupted by the existing A66 in respect of its landscape condition. Also that the existing A66 has some local visual intrusion in the landscape.		
Relevant Stated Key Characteristics: • "A gently sloping, transitional landscape between the upland moorland to the west and the lower, lying landscape of the Ravensworth Valley to the east and River Tees Valley to the north-east. • A patchwork of arable and pastoral fields which are delineated by a combination of stone walls and hedgerow field boundaries with trees. • Predominantly rural landscape with an associated relatively strong sense of tranquillity. • Dispersed settlement pattern of small villages and large farmsteads linked by a network of minor roads. • Generally enclosed pattern and visibility."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an area of valued features including stone walls and hedgerows, along with recreational routes, the value is assessed as medium.	As the existing A66 is noted by the published studies for existing matters of visual intrusion and tranquillity, balanced with the consistent pattern of small scale regular shaped fields, the susceptibility is medium.	The combination of the medium value and medium susceptibility results in a medium sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Magnitude of Impact Due to the distance from the DCO boundary and that there will be no change to the landscape features, the magnitude of impact is assessed as no change.		

Richmond B1: Newsham Moors Fringe	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area: None
Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 08	
Magnitude of Impact Due to the distance from the DCO boundary and that there will be no change to the landscape features, the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 08	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will not be located in the area and therefore there will be change to landscape features. The distance from the construction activity will also negate any changes to the tranquillity or perception of the area. The magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The scheme will not be located in the character area and any perception of the scheme will be in the context of the existing A66, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	
Construction phase (winter) assessment intra project (schemes 08 and 09)	
Magnitude of impact As none of the construction activity will be located in the area, there will be no physical changes to the landscape features. The distance from schemes 08 and 09 will negate impacts to tranquillity or perception of the area. The magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 (winter) assessment intra project (schemes 08 and 09)	

Richmond B1: Newsham Moors Fringe	Relevant Scheme Study Areas within area: 08, 09 Relevant Order Limits within the area: None
Magnitude of Impact The scheme will not be located in the character area and any perception of the scheme will be in the context of the existing A66, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 (summer) assessment intra project (schemes 08 and 09)	
The assessment will reflect that at year 1.	

Table 58: Richmond B2: Dalton and Gayles Moors Fringe

Richmond B2: Dalton and Gayles Moors Fringe	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None	
Relevant aspects of the published description: Area B2 is located at the western part of the study area for scheme 09, extending between Newsham and Gayles. The published study describes this area as: “The predominant land use is arable farming. Medium, irregular fields are characteristic of the area. Smaller, more regular shaped fields often surround the settlements. The LCA has an overall wooded character, created by the scattered woodland blocks linked by field boundary trees and trees along watercourses, and occasional field trees. There is a small block of ancient and semi-natural woodland at Swinery Wood.”		
Relevant Stated Key Characteristics are: • "Undulating, often steeply sloping landform across mid-valley slopes. • Predominantly rural landscape with an associated relatively strong sense of tranquillity. • A patchwork of arable and pastoral fields which are delineated by stone walls and hedgerow field boundaries. • Dispersed settlement pattern of small villages and large farmsteads linked by a network of minor roads. • Settlements nestled within undulating contours and small-scale enclosure pattern. • Woodland on the upper slopes defines the edge between Moors and Moors Fringe and form the skyline in views across the LCA."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an area of representative features defined in the character assessments along with recreational routes the value is assessed as medium.	Due to the small scale settlement pattern and sloping landform the susceptibility is high.	The combination of the medium value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		

Richmond B2: Dalton and Gayles Moors Fringe	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 07	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will not be located in the area and therefore there will be change to landscape features. Any perception of the construction activity will be in the context of the existing A66. The magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The scheme will not be located in the character area and any perception of the scheme will be in the context of the existing A66, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 59: Richmond B3: East and West Layton Fringe

Richmond B3: East and West Layton Fringe	**Relevant Scheme Study Areas within area: 09** **Relevant Order Limits within the area 09**	
Relevant aspects of the published description: Area B3 is located at the central part of the study area for scheme 09 and covers most of the DCO boundary, extending from the south of the existing A66 to the north of the East Layton. The published study describes this area as: “The predominant land use is arable farming comprising a mixture of small, regular often linear fields in proximity to settlements and large, irregular fields on lower slopes. The landscape has a variety of tree cover, including remnant parkland planting around West Layton, blocks of plantation on slopes to the north and south of East Layton, disperse woodland blocks, hedgerows and shelterbelts.”		
Relevant Stated Key Characteristics are: • "Rounded, gently sloping hillsides; • A rural landscape with an associated sense of tranquillity. • Well-wooded slopes with a number of small, plantation woodlands. • A predominately arable landscape with irregular field pattern delineated by hedgerow field boundaries. • Dispersed settlement pattern of small villages and large farmsteads linked by a network of minor roads. • Settlements generally display buildings and walls which are predominantly constructed from local stone, resulting in strong visual unity. Areas of aggregate quarrying." Notwithstanding the above characteristics, the published study also notes that the existing A66 results in local intrusion in the landscape.		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an area of representative features defined in the character assessments along with recreational routes the value is assessed as medium.	Due to the small scale settlement pattern and the existing A66, the susceptibility is medium.	The combination of the medium value and medium susceptibility results in a medium sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		

Richmond B3: East and West Layton Fringe	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area 09
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity to the west of West Layton will result in excavation to the fields and removal of vegetation to construction the cutting between the southern edge of the village and the existing A66. This will also result in the removal of part of the low stone wall and hedgerow adjacent to Collier Lane. The construction of the overbridge will require tall lifting equipment. To the south of West Layton there will be the excavation within the fields for the proposed A66 alignment within cutting, along with the excavation for the attenuation basin within the fields to the south if the existing A66. The construction activity will also include the removal of vegetation from within part of Ravensworth Copse. The changes to surface landform and construction of the dualled road on a shallow embankment will extend to the east of Ravensworth Cope, resulting in the removal of field boundary vegetation and parts of Fox Grove and Fox Well plantation. There will also be the construction of a new access road to the east of Foxwell Farm to a proposed attenuation basin, including excavation of surface landform to construct the cutting. To the west of Moor Lane, the construction activity will alter the geometric field patterns and field boundary vegetation via the construction of the proposed junction and the associated excavation for the road alignment to be in cutting. There will also be vegetation removal from Mainsgill Plantation. In the western part of the DCO boundary the construction activity will extend across fields to the south of the existing A66, with changes to surface landform to construct the dualled A66 on embankment to the south of Street Plantation and the excavation for the attenuation basins between the proposed dualled embankment and the realignment of Warrener Lane. This activity will also result in the removal of field boundary vegetation and vegetation between the existing dualled sections of the A66. In addition to the above, there will be construction compounds, with associated storage and buildings and the movement of vehicles across the DCO boundary. The construction activity will be located across and adjacent to the A66 and therefore within a part of the area where the character is already defined by the road corridor and tranquillity is lowered. Whilst the physical change will be localised, the construction activity will be perceived from other parts of the area, covering land to the south of the existing A66. The combination of the physical change and perception of the construction activity will result in a moderate adverse magnitude of impact. Significance of Effect In relation to the medium sensitivity of the receptor, the significance of effect will be moderate adverse (significant).	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact At year 1, the scheme will result in additional road infrastructure across the southern part of the character area, but within or adjacent to an existing road corridor. The removal of vegetation will increase the perception of the vehicles on the former A66 and the proposed dualling where located on embankment. The overbridge to the south of West Layton will introduce additional structure and massing within the landscape, with vehicles in an elevated position in relation to the existing alignment of the A66 with the associated gradients of the embankments contrasting with the gently undulating landform. In relation to the key characteristics, the scheme will result in localised alteration to the gently sloping landform, reduce the tranquillity, reduce the extent of stone walls and reduce the extent of	

Richmond B3: East and West Layton Fringe	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area 09
established woodland and plantation cover. There will also be localised alteration to the alignment of the minor roads, including Moor Lane. Due to the localised extent of these changes, the magnitude of impact is assessed as moderate adverse. Significance of Effect In relation to the medium sensitivity of the receptor, the significance of effect will be moderate adverse (significant).	
Operation year 15 phase (summer) assessment scheme 09	
Magnitude of Impact Compared to the year 1 assessment the proposed planting will have established, including the woodland adjacent to the dualling. With the establishment of this woodland, the scheme will reflect the vegetated character of the existing context and the perception of the scheme, including the cuttings, embankments and the scale and mass of the overbridge will be reduced. The reduction in the vegetation cover within several of the plantations will remain due to the alignment of the scheme, however the new planting adjacent to the road alignment will provide new linkages between existing woods. The significance of effect is therefore predicted to reduce to minor adverse. Significance of Effect In relation to the medium sensitivity of the receptor, the significance of effect will be slight adverse (not significant).	

Table 60: Richmond B4: Melsonby Moors Fringe

Richmond B4: Melsonby Moors Fringe	**Relevant Scheme Study Areas within area: 09** **Relevant Order Limits within the area: None**	
Relevant aspects of the published description: Area B4 is located at the central part of the study area for scheme 09, extending to the east of the B6274, to the north of the existing A66. The published study describes this area as: “This is a largely open landscape of large fields across an elevated plateau and gentle slopes with limited vegetation cover. There is local variation in this particularly considering the parkland including woodland around Sedbury Park to the south of the A66 and small blocks of woodland near Langdale. The land use is typically arable farming with large, modern fields present. Field boundaries are commonly low hedgerows with occasional trees. Scattered, small tree clumps and shelterbelts are often located in proximity to farmsteads and settlement. Overall, it is a sparsely vegetated, large-scale arable landscape. There are no nationally designated landscape or biodiversity sites within this LCA.”		
Relevant Stated Key Characteristics are: • "Rounded, gently sloping hillsides. • Sparsely vegetated landscape, with concentration of woodland on steeper, lower slopes in the south. • Primary village with scattered farms, granges and cottages with access tracks from main routes. • Pockets of aggregate quarrying. • A rural landscape with an associated sense of tranquillity. • Irregular pattern of medium- to large-scale arable fields with historic strip fields in proximity to Melsonby. • Designed parkland characterises the lower, edge of valley slopes. • Strong intervisibility with the vale landscapes."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an area of representative features defined in the character assessments along with recreational routes and designed parkland, the value is assessed as high.	Due to the small scale settlement pattern balanced with areas of quarrying and the existing A66, the susceptibility is medium.	The combination of the high value and medium susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		

Richmond B4: Melsonby Moors Fringe	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will not be located in the area and therefore there will be no change to landscape features. Any perception of the construction activity will be in the context of the existing A66. The magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The scheme will not be located in the character area and any perception of the scheme will be in the context of the existing A66, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 61: Richmond B5: Whaston Moors Fringe

Richmond B5: Whaston Moors Fringe	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Relevant aspects of the published description: Area B5 is located in the southern part of the study area for scheme 09, extending across sloping land around Whaston. The published study describes this area as: “Landcover varies across the LCA, including exposed rough grassland, pockets of heath, small areas of arable, blocks of woodland, formal parkland and meadow near Low Moor that is designated as SSSI. The land use follows a general west-east direction from rough grassland and moorland habitats to mixed pastoral and arable, enclosed fields in the east. There is substantial tree cover across this LCA with a number of large blocks of mixed woodland plantations and more sinuous bands of deciduous woodland that are largely ancient woodland that follows the line of steeper contours. Mixed woodland, including a band of ancient, replanted woodland forms a large part of the Aske Hall registered park and garden in the south of the LCA.”	
Relevant Stated Key Characteristics are: • "Undulating, often steep, exposed slopes. • Mosaic of vegetation and land cover with significant plantation woodland. • A patchwork of arable and pastoral fields which are delineated by a combination of stone walls and hedgerow field boundaries.	

Richmond B5: Whaston Moors Fringe	**Relevant Scheme Study Areas within area: 09** **Relevant Order Limits within the area: None**	
• Predominantly rural and agricultural landscape with an associated relatively strong sense of tranquillity. • A number of springs and tributary becks rise across this landscape, contributing to the undulating landform. • Dispersed, low-density settlement pattern including small villages in the north, and scattered halls, farms and cottages across the south. • Significant designed landscape at Aske Hall on the eastern slopes."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As an area of representative features defined in the character assessments along with recreational routes and designed parkland, the value is assessed as high.	Due to sloping landform and low density of the area, the susceptibility is assessed as high.	The combination of the high value and high susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 09		
Magnitude of Impact The construction activity will not be located in the area and therefore there will be no change to landscape features. Any perception of the construction activity will be in the context of the existing A66. The magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).		
Operation year 1 phase (winter) assessment scheme 09		
Magnitude of Impact The scheme will not be located in the character area and any perception of the scheme will be in the context of the existing A66, such that the magnitude of impact is assessed as no change. Significance of Effect		

Richmond B5: Whaston Moors Fringe	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 62: Richmond LLCT D: Narrow Valley

Richmond LLCT D: Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area 09	
Relevant aspects of the published description: LLCT D is located at the central part of the study area for scheme 09, covering a narrow tract of low lying land to the south of the existing A66. A small part of the DCO boundary covers the western part of the LLCT. The published study describes this area as: “The valley is formed by moderately steep, lower slopes that begin to rise more steeply in the adjacent Moors Fringe LLCT. It has a narrow valley floor that is generally well-treed. Vegetation comprises of sinuous lines of riparian trees and shrubs that define watercourses, hedgerow boundaries with trees, scattered field trees and small blocks of woodland particularly concentrated in the centre of the LLCT.”		
Relevant Stated Key Characteristics are: • "Relatively flat valley floors with gently rising sides to the higher ground of the Moors Fringes. • Fast flowing watercourses (becks) especially after heavy rainfall on the upland moors. • The becks flow generally north-west to southeast joining the River Swale to the northwest of Brompton-on-Swale. • The watercourses are often tree lined. • Generally open landscape with little tree cover away from the course of the river. • Arable farming is the predominant land use within the LLCT. • This is a predominantly rural landscape with a relatively strong sense of tranquillity throughout. • Numerous ponds and wetlands along the valley floor of the LLCT."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As there are several conservation areas, a strong cultural association and areas of ancient woodland, the value is high.	Due to the small scale settlement pattern, the susceptibility is high.	The combination of the high value and high susceptibility is assessed as a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		

Richmond LLCT D: Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area 09
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact There will be small scale and localised excavation for the attenuation basin and implementation of the proposed landscape design. The scale of this activity will reflect agricultural machinery. The construction activity beyond the LLCT will be perceived, but in the context of the A66, such that the magnitude of impact is assessed as negligible. Significance of Effect In relation to the high sensitivity of the receptor, the negligible impact will result in a slight adverse (not significant) effect.	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact In operation, the attenuation basin will be a very small scale change and the field pattern and key characteristics will remain. With the proposed alignment of the A66 further from the LLCT, the magnitude of impact will be no change. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 63: Richmond D1: Ravensworth Narrow Valley

Richmond D1: Ravensworth Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area 09
Relevant aspects of the published description: Area D1 is located at the central part of the study area for scheme 09, bordering Newsham and covers part of the western extent of the DCO boundary. The published study describes this area as: “This is a rural landscape that comprises a mixture of arable and pastoral farming. The sinuous watercourses combine with more angular field boundaries to create an irregular field pattern of small-to large-scale fields. Field boundaries are predominantly hedgerows and verges with trees. Stone walls occasionally form boundaries to the west of the LCA and in proximity to settlement.”	
Relevant Stated Key Characteristics are: • "Shallow valley where a number of becks confluence. • Sinuous, often tree-lined watercourses cross the landscape. • Ponds and wetlands within valley floor, particularly focussed around Ravensworth Castle and Smallways.	

Richmond D1: Ravensworth Narrow Valley	**Relevant Scheme Study Areas within area: 09** **Relevant Order Limits within the area 09**	
• Variety of dispersed tree cover Scattered farmsteads and manors, and historic village at Ravensworth. • A rural landscape with a relatively strong sense of tranquillity throughout. • Irregular pattern of arable and pastoral fields."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As there are conservation areas, a strong cultural association and areas of ancient woodland, the value is high.	Due to the small scale settlement pattern, the susceptibility is high.	The combination of the high value and high susceptibility is assessed as a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 09		
Magnitude of Impact There will be small scale and localised excavation for the attenuation basin and implementation of the proposed landscape design. The scale of this activity will reflect agricultural machinery. The construction activity beyond the area will be perceived, but in the context of the A66, such that the magnitude of impact is assessed as negligible. Significance of Effect In relation to the high sensitivity of the receptor, the negligible impact will result in a slight adverse (not significant) effect.		
Operation year 1 phase (winter) assessment scheme 09		
Magnitude of Impact In operation, the attenuation basin will be a very small scale change and the field pattern and key characteristics will remain. With the proposed alignment of the A66 further from the area, the magnitude of impact will be no change. Significance of Effect In relation to the high sensitivity of the receptor, the no change magnitude of impact will result in a neutral (not significant) effect.		
Operation year 15 phase (summer) assessment scheme 09		

Richmond D1: Ravensworth Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area 09
The assessment will reflect that at year 1.	

Table 64: Richmond D2: Gilling Narrow Valley

Richmond D2: Gilling Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None	
Relevant aspects of the published description: Area D2 is locate at the central part of the study area for scheme 09, to the south of the existing A66. The published study describes this area as: “The valley floor is narrow and contains Holme Beck that becomes Hartforth Beck where watercourses from the moors confluence at Hartforth Wood. Watercourses meander through the landscape and are generally identified by sinuous lines of vegetation. Several fishing lakes have been formed in the south of the LCA, near to Gilling West. “		
Relevant Stated Key Characteristics are: • "Narrow valley with gently sloping valley sides. • A sinuous, treed beck flows through the centre of the LCA. • Dispersed vegetation with woodland blocks • Irregular pattern of arable field with hedgerow boundaries. • Dispersed settlement with a number of halls, manor houses and large farmhouses • Vernacular properties built from local stone. • Tourism features including fishing lakes, barn conversions and hotels."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As there are conservation areas, a strong cultural association and areas of ancient woodland, the value is considered high.	Due to the small scale settlement pattern, the susceptibility is high.	The combination of the high value and high susceptibility is assessed as a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 09		
Magnitude of Impact		

Richmond D2: Gilling Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
The construction activity will not be located in the area and therefore there will be no change to landscape features. Any perception of the construction activity will be in the context of the existing A66. The magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The scheme will not be located in the character area and any perception of the scheme will be in the context of the existing A66, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 65: Richmond D3: Skeeby Narrow Valley

Richmond D3: Skeeby Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None	
Relevant aspects of the published description: Area D3 is located at the central part of the study area for scheme 09, to the south of the existing A66. The published study describes this area as: “The land use is dominated by arable farming across a generally regular field pattern delineated by hedgerows and occasionally grass verges with trees. Field boundaries are often tangent to the slope contours and link from the outer edges of the LCA towards the central watercourse. Narrow, sinuous strips of pasture follow much of the course of Gilling Beck and Skeeby Beck. Small woodland blocks and tree groups break up the pasture in the south of the LCA.”		
Relevant Stated Key Characteristics are: • "Shallow valley with gently rising valley sides. • Meandering, vegetated watercourse flows through the centre of the LCA. • Arable landscape with limited tree cover. • Central village with dispersed farms, granges and cottages. • Medium-scale, open, rural landscape. • Open valley views and strong intervisibility with surrounding LCA."		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As there are conservation areas, a strong cultural association and areas of ancient woodland, the value is considered high.	Due to the small scale settlement pattern, the susceptibility is high.	The combination of the high value and high susceptibility is assessed as a high sensitivity.

Richmond D3: Skeeby Narrow Valley	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Construction phase (winter) assessment scheme 07	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 07	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 07	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 1 phase (winter) assessment scheme 08	
Scoped out as beyond the study area.	
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will not be located in the area and therefore there will be no change to landscape features. Any perception of the construction activity will be in the context of the existing A66. The magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The scheme will not be located in the character area and any perception of the scheme will be in the context of the existing A66, such that the magnitude of impact is assessed as no change. Significance of Effect In relation to the no change magnitude of impact and the medium sensitivity of the receptor, the effect will be neutral (not significant).	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	

Table 66: West Layton

West Layton	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: 09
Relevant aspects of the published description: West Layton is located at the central part of the study area for scheme 09 and forms a smaller part of the published area B3.	
Relevant Stated Key Characteristics defined by the applicant: • Clustered settlement pattern. • Walled gardens and paddocks.	

West Layton	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: 09	
• Manor house and church. • Collier Lane connects the village with the existing A66. • Linear woodlands divide the fields forming the setting to the village. • Limited inter-visibility with the existing A66.		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As a small village with areas of vegetation and a consistent scale and form to buildings and low stone walls, the value is considered medium.	As a small village, the susceptibility is medium.	The combination of the medium value and medium susceptibility results in a medium sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 08		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 09		
Magnitude of Impact The construction activity will not be located in the village. The construction will be located in the fields to the south of the village and adjacent to the southern part of Collier Lane. The construction activity will remove the low stone wall and hedgerows and result in excavation and change to surface landform to construct the alignment of the proposed A66 and overbridge. The combination of the changes to the setting of the area and the perception of the construction activity will result in a moderate impact. Significance of Effect The combination of the medium sensitivity and the moderate impact will result in a moderate adverse (significant) adverse effect.		
Operation year 1 phase (winter) assessment scheme 09		
Magnitude of Impact The key characteristics of the clustered settlement pattern, vegetation and building form will remain. The scheme will increase the extent of road infrastructure in the southern setting of the village, with the overbridge forming a new structure of a greater scale and mass in relation to the existing A66, along with an increased perception of the road. The reduction in the stone wall and roadside hedgerows will result in minor impact to the character area. Significance of Effect		

West Layton	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: 09
The combination of medium sensitivity and the minor impact will result in a moderate adverse (significant) adverse effect.	
Operation year 15 phase (summer) assessment scheme 09	
Magnitude of Impact With the establishment of the proposed woodland, the perception of the re-aligned A66 will reduce and the engineered earthworks will be integrated into the landscape to a greater degree. The magnitude of impact will reduce to minor. Significance of Effect The combination of medium sensitivity and the minor impact will result in a slight adverse (not significant) adverse effect.	

Table 67: East Layton

East Layton	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None	
Relevant aspects of the published description: East Layton is located in the central part of the study area for scheme 09 and forms a smaller part of the published area B3.		
Relevant Stated Key Characteristics defined by the applicant: • Linear settlement pattern. • Range of buildings styles, although generally 2 storeys in height. • Church and community hall at the southern edge of the village. • Moor Lane connects village to the A66. • Rural landscape forms the setting to the village. • No perception of the existing A66 due to distance and intervening vegetation. • Conservation Area covers most of the village (although no Conservation Area appraisal at the time of the assessment).		
Landscape Value	Landscape Susceptibility	Landscape Sensitivity
As a small village with areas of vegetation and a consistent scale and form to buildings and within a Conservation Area, the value is assessed as high.	As a small village, the susceptibility is medium.	The combination of the high value and medium susceptibility results in a high sensitivity.
Construction phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 07		
Scoped out as beyond the study area.		
Operation year 15 phase (summer) assessment scheme 07		
Scoped out as beyond the study area.		
Construction phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		
Operation year 1 phase (winter) assessment scheme 08		
Scoped out as beyond the study area.		

East Layton	Relevant Scheme Study Areas within area: 09 Relevant Order Limits within the area: None
Operation year 15 phase (summer) assessment scheme 08	
Scoped out as beyond the study area.	
Construction phase (winter) assessment scheme 09	
Magnitude of Impact The construction activity will not be located in the village, nor its immediate setting. Therefore there will be no physical change to the village and any perception of the construction activity on the approaches to the village will not alter the village character. The magnitude of impact is assessed as no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) adverse effect.	
Operation year 1 phase (winter) assessment scheme 09	
Magnitude of Impact The key characteristics of the village will remain as the scheme will neither be located in the village, nor its immediate setting. The magnitude of impact is assessed as no change. Significance of Effect The combination of the high sensitivity and the no change magnitude of impact will result in a neutral (not significant) adverse effect.	
Operation year 15 phase (summer) assessment scheme 09	
The assessment will reflect that at year 1.	