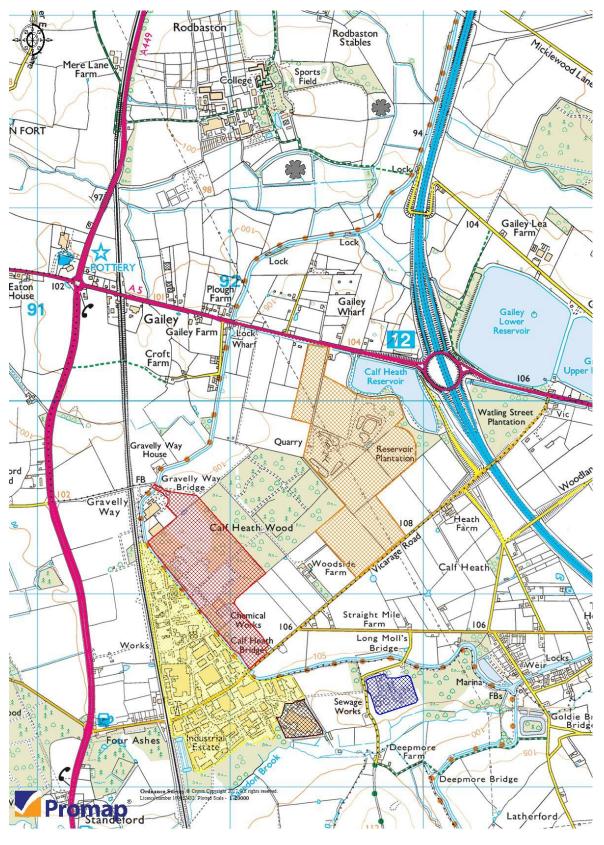
# Planning Statement - Appendices

The West Midlands Rail Freight Interchange Order 201X Regulation 5 (2) (q) Quod - July 2018





Site location in the context of industrial / urban uses





Calf Heath Quarry (SS.12/08/681)

Four Ashes Industrial Estate

Energy Recovery Facility

Severn Trent Sludge Disposal Centre



Rodbaston Wind Turbines

West Coast Main Line

M6 Junction 12

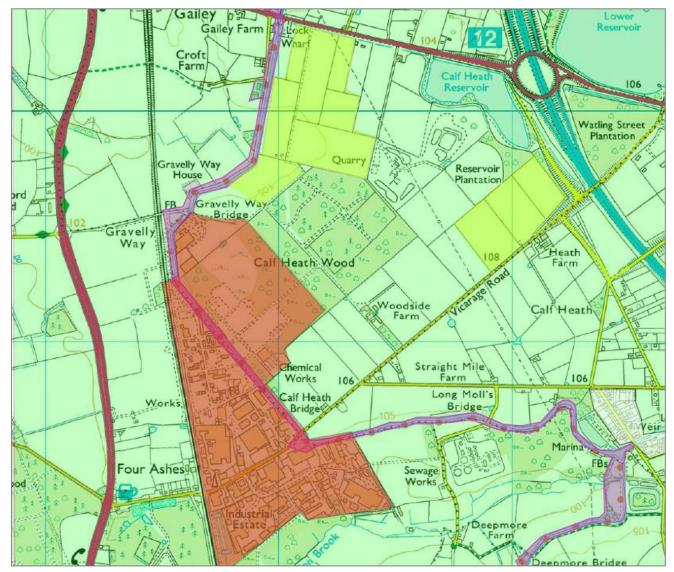
🚪 A5 / A449

Staffordshire and Worcestershire Canal

Reservoirs



Site location in the context of planning policy designations			



Indicative only

SSDC Green Belt

Staffordshire and Worcestershire Canal Conservation Area

Calf Heath Quarry Allocation (Minerals Local Plan)

Strategic Employment Site (SSDC Core Strategy Policy CP1)



Planning history (SSDC, December 2017)

Application Number	Location	Description	Decision	Date
85/00005	The Round House Watling Street Gailey-Rural Gailey Staffordshire ST19 5PR	Change Of Use To Grocery And Gift Shop With Future Use Of First Floor As Tea Room	APPROVE Subject to Conditions	25.06.1985
94/00048	Gravelly Way Four Ashes South Staffordshire	Gateways	REFUSE	22.02.1994
95/00054	Land Adjacent To Calf Heath Reservoir Watling Street Gailey Stafford South Staffordshire	Extraction Of Aggregates For The Construction Industry And Restoration To Agriculture By Means Of Inert Waste Infilling	APPROVE Subject to Conditions	28.11.1996
78/0046	Land Opposite Woodview Vicarage Road Gailey Wolverhampton South Staffordshire WV10 7DJ	The excavation of sand and gravel and restoration to agriculture	APPROVE Subject to Conditions	02.11.1978
80/00114	Gailey Park Industrial Estate Gravelly Way Four Ashes South Staffordshire	Proposed Warehousing And Distribution	APPROVE Subject to Conditions	07.05.1980
80/00131	Clovelly Watling Street Gailey Staffordshire ST19 5PR	Proposed Erection Of Three Bedroomed Bungalow	REFUSED	16.04.1980

80/00138	Gailey Park Industrial Estate Gravelly Way Four Ashes South Staffordshire	Construction of canal bridge	APPROVE Subject to Conditions	04.06.1980
79/00157	Midland Motorway Services Croft Lane Gailey Staffordshire ST19 5PY	Winter Storage Of Caravans And Repairs	REFUSED	24.07.1979
93/00185	Gailey Park Industrial Estate Gravelly Way Four Ashes South Staffordshire	Renewal Of Permission For Industrial Estate Class B	APPROVE Subject to Conditions	20.04.1993
96/00283	Gailey Park Industrial Estate Gravelly Way Four Ashes South Staffordshire	Renewal Of Permission 185/93 For Industrial Estate Class B	APPROVE Subject to Conditions	02.07.1996
86/00310	Straight Mile Farm Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	Extensions	APPROVE Subject to Conditions	20.05.1986
89/00399	Mile End Cottage Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	Extensions And Proposed Stable	APPROVE Subject to Conditions	06.06.1989
95/00431	East Part Of Gravelly Way Four Ashes South Staffordshire	Renewal Of Permission 0661/90 For New Canal Bridge	APPROVE Subject to Conditions	20.06.1995
85/00397	Clovelly Watling Street	Stables	APPROVE Subject to Conditions	04.06.1985

	Gailey Staffordshire ST19 5PR			
84/00394	Mile End Cottage Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	Porch	APPROVE Subject to Conditions	22.05.1984
95/00456	Croft House Croft Lane Gailey Stafford South Staffordshire ST19 5PY	Rebuilding Of Workshop For Repair Of Agricultural Machinery	REFUSE	10.08.1995
83/00474	Clovelly Watling Street Gailey Staffordshire ST19 5PR	Change Of Use To Storage	REFUSE	19.07.1983
96/00568	Castle Cottage Watling Street Gailey Stafford South Staffordshire ST19 5PS	Alterations And Extension	REFUSED	01.10.1996
90/00575	Land At Croft Lane Gailey South Staffordshire	Overhead Line	APPROVE Subject to Conditions	14.09.1990
88/00571	Mile End Cottage Straight Mile Calf Heath Wolverhampton South Staffordshire	Porch	APPROVE Subject to Conditions	28.06.1988

	WV10 7DW			
83/00557	Heath Farm Vicarage Road Gailey Stafford South Staffordshire ST19 5PU	Drill Site For An Exploratory Borehole/Flare Pit/Hydrocarbon Testing Purposes	APPROVE Subject to Conditions	31.08.1983
85/00572	Clovelly Watling Street Gailey-Rural Gailey Staffordshire ST19 5PR	LPG Gas Tank	APPROVE	13.08.1985
85/00582	Gailey Park Industial Estate Gravelly Way Four Ashes South Staffordshire	Renewal Of Permission Of New Canal Bridge	APPROVE Subject to Conditions	13.08.1985
90/00661	New Canal Bridge Next To Perfect Pizza Ltd Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BW	Renewal Of Permission No 0582/85 For A New Canal Bridge	APPROVE Subject to Conditions	03.08.1990
94/00810	Stoney Brook Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	Extension	APPROVE Subject to Conditions	03.11.1994
80/00703	Gailey Park Industrial Estate Gravelly Way Four Ashes South Staffordshire	Road bridge over canal to serve proposed industrial estate	APPROVE Subject to Conditions	15.07.1980

86/00765	Rest Haven Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	House And Garage	REFUSED	21.10.1986
92/00825	Oak Lea Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	First Floor Extension	APPROVE Subject to Conditions	20.10.1992
84/00772	Clovelly Watling Street Gailey-Rural Gailey Staffordshire ST19 5PR	Extension	APPROVE Subject to Conditions	18.09.1984
81/00796	Straight Mile Farm Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	Double Garage WC And Store	APPROVE Subject to Conditions	22.09.1981
83/00838	Gailey Park Industrial Estate Gravelly Way Four Ashes South Staffordshire	Proposed Bridge Over Canal	Withdrawn	16.11.1983
90/00913	Gravelly Way Farm Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BW	Renewal Of Permission For Gamekeepers Mobile Home	APPROVE Subject to Conditions	30.10.1990
74/00807	Schenectady Europe Ltd	The Erection Of 8 Warehouse	APPROVE Subject to	07.05.1975

	Gravelly Way Four Ashes Four Ashes Wolverhampton Staffordshire WV10 7BW	Units With Offices	Conditions	
78/00857	Land At Straight Mile Farm Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	Tipping of inert materials	APPROVE Subject to Conditions	04.10.1978
76/00854	Gravelly Way Farm Gravelly Way Four Ashes Four Ashes Staffordshire WV10 7BW	Bathroom Over Entrance And Septic Tank	APPROVE Subject to Conditions	15.09.1976
87/00980	Land Adjacent To Staffordshire Highways Watling Street Gailey Stafford South Staffordshire ST19 5PR	Service Area Comprising Restaurant Motel Petrol Station Tourist Information Car And Lorry Parking Picnic Area Accesses And Sewage Treatment Plant	REFUSED	12.01.1987
87/00981	Land Adjacent To Staffordshire Highways Watling Street Gailey Stafford South Staffordshire ST19 5PR	Service Area Comprising Restaurant Motel Petrol Station Tourist Information Car And Lorry Parking Picnic Area Accesses And Sewage Treatment Plant	REFUSED	12.01.1987
80/00982	The Cottage Watling Street Gailey	Block Of Four Stables And Tack Room	REFUSED	17.09.1980

	Staffordshire ST19 5PR			
87/01148	Station Road Four Ashes Staffordshire	Second Canal Bridge Crossing	Planning Permission not Required	
88/01398	Gailey Park Industrial Estate Gravelly Way Four Ashes South Staffordshire	Industrial Development	Not Determined	
89/01449	Land And Buildings On The South East Side Of Station Road Four Ashes South Staffordshire	Proposed Overhead Line	APPROVE Subject to Conditions	04.12.1990
75/01274	A449tr Stafford Road From School Lane To Crateford Lane Crateford Staffordshire	A Wooden Bus Shelter	Approved	10.02.1976
80/01497	Mile End Cottage Straight Mile Calf Heath Wolverhampton South Staffordshire WV10 7DW	Extensions	APPROVE Subject to Conditions	13.01.1981
16/00664/FUL	Veolia Environmental Services (UK) Plc Staffordshire ERF Enterprise Drive Four Ashes Wolverhampton South Staffordshire WV10 7DF	Combined Heat and Power (CHP) Network, comprising: two below ground pipelines, and three below ground cable ducts; manhole covers; and a CHP building.	Pending Determination	

16/00720/FUL	Heath Farm Vicarage Road Calf Heath Stafford South Staffordshire ST19 5PU	Demolition of existing Farmhouse and erection of replacement farmhouse, with associated landscaping and parking.	REFUSED	17.10.2016
13/00584/COU	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Conversion and extension of existing building into a single storey dwelling	Application returned	
74/00002/ADV	Site At Gravelly Way Gailey Staffordshire	Display of advertisement	REFUSED	20.11.1974
SS/91/00259	Barr Farm House Stafford Road Standeford Wolverhampton South Staffordshire WV10 7BN	Landfill For Disposal Of Builders Rubble And Waste Reclamation And Planting Of Community Forest On 9 6HA	APPROVE Subject to Conditions	17.12.1991
SS/92/00931	Land At Station Road Four Ashes Staffordshire	Land Reclamation	REFUSED	18.06.1993
99/00815/TEL	Heath Farm Vicarage Road Calf Heath Stafford South Staffordshire ST19 5PU	Telecommunications equipment	Approved	06.09.1999
99/00938/FUL	Ash House Straight Mile Four Ashes	Kitchen, utility and breakfast room extension	APPROVE Subject to Conditions	21.10.1999

	Nr Wolverhampton South Staffordshire WV10 7DL			
99/01059/LUE	Ash House Straight Mile Four Ashes Nr Wolverhampton South Staffordshire WV10 7DL	Certificate of Lawfulness - variation of approved plans	APPROVE	01.12.1999
00/00145/COM	Four Ashes Quarry Watling Street Gailey Nr Stafford South Staffordshire	Variation of Conditions 3 and 41 of 54/95 to extend time limits for extraction and restoration	County Council Determination	23.03.2000
00/00052/FUL	Ash House Straight Mile Four Ashes Nr Wolverhampton South Staffordshire WV10 7DL	Boundary wall and railings	Withdrawn	04.04.2000
00/00334/COM	Four Ashes Quarry Watling Street Gailey Nr Stafford South Staffordshire	Variation of condition 5 & 40 of planning permission 54/95 - phasing	County Council Determination	04.05.2000
99/01098/HAZ	SI Group UK Ltd Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BT	Control of major accident hazards substances	Approved by Letter	16.05.2000
00/00418/FUL	Ash House Straight Mile Four Ashes Nr Wolverhampton South Staffordshire	Boundary wall and gates. repositioning of paddock gate and security fencing	APPROVE Subject to Conditions	13.06.2000

	WV10 7DL			
00/00646/COU	Ash House Straight Mile Four Ashes Nr Wolverhampton South Staffordshire WV10 7DL	Change of use of building to house alcoholic and soft drinks and distribution	APPROVE Subject to Conditions	26.07.2000
00/00396/COM	Four Ashes Quarry Watling Street Gailey Nr Stafford South Staffordshire	Concrete batching plant	WITHDRAWN	07.02.2002
01/01284/LUE	Gailey Farm Watling Street Gailey Nr Stafford South Staffordshire ST19 5PR	Parking of 1 mobile crane	APPROVE Subject to Conditions	09.04.2002
02/01240/FUL	Land Off Wolverhampton Road Gailey Nr Stafford South Staffordshire	Telecommunications equipment	Approved	04.11.2002
02/01271/COU	Straight Mile Dairy Farm Straight Mile Four Ashes Nr Wolverhampton South Staffordshire WV10 7DL	Change of use of agricultural building to form residential extension	APPROVE Subject to Conditions	20.01.2003
03/00257/FUL	Ash House Straight Mile Four Ashes Nr Wolverhampton	Detached garage	Planning Permission Not Required	04.03.2003
	South Staffordshire WV10 7DL			

	Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	use of warehouse to dwelling		
04/00446/TEL	Off Wolverhampton Road Gailey South Staffordshire	Telecommunications equipment	Approved by letter	25.05.2004
04/01226/COU	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Conversion of warehouse building into residential dwelling.	APPROVE Subject to Conditions	24.11.2004
05/00060/OUT	Land At Gravelly Way Four Ashes South Staffordshire	Use of land for development within use classes B1 (b + c) B2 an	Withdrawn	14.02.2005
05/00667/FUL	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Erection of residential unit on site of existing warehouse.	APPROVE Subject to Conditions	04.07.2005
05/01067/FU	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Erection of residential unit on site of existing warehouse	REFUSED	20.12.2005
05/01246/FUL	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Erection of stable block	APPROVE Subject to Conditions	18.01.2006

06/00121/FUL	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Alteration of existing warehouse with new building to form residential unit.	APPROVE Subject to Conditions	05.04.2006
07/00676/COU	Heath Farm Vicarage Road Gailey South Staffordshire ST19 5PU	Conversion of existing agricultural buildings to form two residential units and two industrial storage units	Withdrawn	15.08.2007
07/01363/OUT	SI Group (UK) Ltd Land Off Gravelly Way Four Ashes South Staffordshire	Development of warehouse units (B8) with access and associated works	APPROVE Subject to Section 106 Agreement	12.03.2008
08/00168/COM	Calf Heath Quarry Watling Street Gailey South Staffordshire ST19 5PR	Extension to sand extraction and restoration of the land to agriculture	County Council Determination	13.03.2008
08/00630/COU	Heath Farm Vicarage Road Gailey South Staffordshire ST19 5PU	Conversion of existing agricultural buildings to two residential units [resubmission of 07/00676/COU]	APPROVE Subject to Conditions	03.09.2008
09/00790/REN	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Renewal of permission 04/01226/COU - Conversion of warehouse building into residential dwelling	APPROVE Subject to Conditions	16.12.2009
09/00839/FUL	Ash House Straight Mile Calf Heath	Conversion of outbuilding to dwelling, including addition of first floor [amendment to	REFUSED	29.01.2010

	Wolverhampton South Staffordshire WV10 7DW	04/01226/COU]		
10/00699/FUL	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Conversion and extension of existing building into a singlestorey dwelling [resubmission of 09/00839/FUL]	REFUSE	08.11.2010
11/00297/FUL	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Conversion and extension of existing building into a singlestorey dwelling (resubmission of 10/00699/FUL)	APPROVE Subject to Conditions	06.06.2011
11/00530/REN	Heath Farm Vicarage Road Gailey Stafford South Staffordshire ST19 5PU	Conversion of existing buildings to two residential units [renewal of 08/00630/COU]	APPROVE Subject to Conditions	23.08.2011
11/00574/ADV	Gravelly Way Four Ashes South Staffordshire	Two marketing boards at site entrance	APPROVE Subject to Conditions	07.09.2011
11/00133/REN	Land Off Gravelly Way Four Ashes South Staffordshire	Development of warehouse units (B8) with access and associated works (renewal of 07/01363/OUT) (major development)	APPROVE Subject to Section 106 Agreement	30.11.2011
12/00015/COM	Calf Heath Quarry Watling Street Gailey South Staffordshire ST19 5PR	Submission of details in compliance with condition 16 (soil stripping and storage scheme), condition 28 (noise monitoring scheme), condition 29 (dust management plan), condition 31 (existing access	County Council Determination	09.02.2012

12/00006/FUL	Heath Farm	closure), condition 33 (details of wheel washing facilities), condition 35 (surfacing of parking and turning areas), condition 36 (provision of signage at the site entrance), condition 41 (foul and surface water drainage scheme), condition 44 (extend colour finish), condition 45 (stock pile areas), condition 46 (stand-off areas for hedges and trees), condition 47 (pond locations), and conditions 48/50/51/52/53 (ecological surveys) of planning permission SS.07/19/681 MW Erection of agricultural building	APPROVE Subject to	02.03.2012
, , , , , ,	Vicarage Road Gailey Stafford South Staffordshire ST19 5PU	and installation of new access	Conditions	
11/00530/AMEND	Heath Farm Vicarage Road Gailey Stafford South Staffordshire ST19 5PU	Conversion of existing buildings to two residential units [renewal of 08/00630/COU]	Approved by Letter	03.10.2012
12/00834/LUP	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Use as a residential care home for no more than four residents (including resident carers) living together as a single household and receiving care (Use Class C3b)	APPROVE	08.01.2013
13/00503/LUP	The Meadows	Use as a residential care home	Approved	19.07.2013

	Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	for three residents and two resident staff		
13/00637/FUL	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Retention of single-storey dwelling following its need to be rebuilt during the course of implementing planning permission ref: 11/00297/FUL for its conversion and extension	APPROVE Subject to Conditions	25.09.2013
13/00817/LUP	Woodside Farm Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DJ	Use as a residential childrens home [class C2] for a maximum of two children, aged between 7 and 18 years. No more than four adult carers would work at the premises at any one time along with one manager. The carers would rotate on a shift pattern involving changes after a period of 48 hours. The changeover of carers will take place between 7am and 9am in the morning. A maximum of six cars will be parked on Site at any one time	Approved	13.12.2013
14/00766/VAR	Land Off Gravelly Way Four Ashes South Staffordshire	See supporting statement - Permission is sought to vary the wording of conditions 3 and 15 from 'Prior to the submission of any reserved matters' to 'As part of any reserved matters submission'.	APPROVE Subject to Section 106 Agreement	13.11.2014

14/00961/REM	Land Off Gravelly Way Four Ashes South Staffordshire	Application is in respect of condition no. 2(i) of 11/00133/REN and 14/00766/VAR. It seeks reserved matters approval for the details of scale, layout, appearance and landscaping for plot 1 (representing the first 20,000 sq.m. of the overall consented development). Original outline application (07/01363/OUT) was accompanied by an Environmental Statement.	APPROVE Subject to Conditions	25.02.2015
15/00449/COM	Severn Trent Water Straight Mile Pumping Station Straight Mile Calf Heath South Staffordshire	Change of use of land to form new sewage pumping station	County Council Determination	08.06.2015
15/00451/COM	Severn Trent Water Straight Mile Pumping Station Straight Mile Calf Heath South Staffordshire	Change of use to the land to form new pumping station	County Council Determination	08.06.2015
15/00541/FUL	Heath Farm Vicarage Road Calf Heath Stafford South Staffordshire ST19 5PU	Installation of 4no multi band antennas mounted to a new antenna support bracket upon the existing headframe, replacing the existing 3no. Antennas. There will also be 2no. RRU's and 1no. Transmission dish affixed to the existing lattice tower and ancillary development there to.	APPROVE Subject to Conditions	05.08.2015

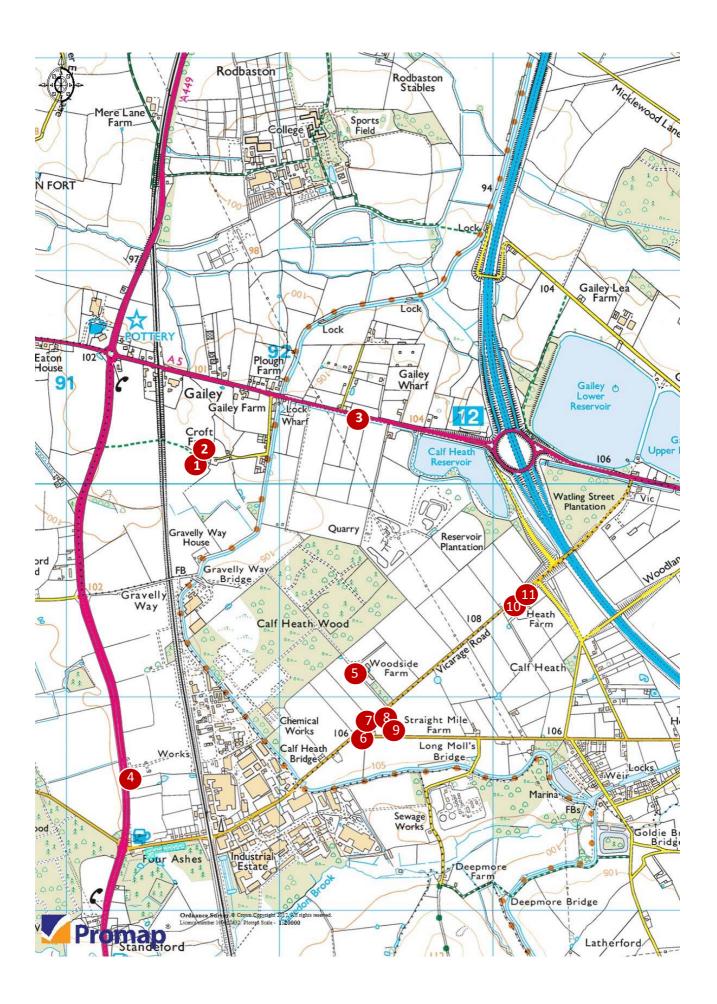
15/01090/FUL	The Meadows Vicarage Road Calf Heath Wolverhampton South Staffordshire WV10 7DW	Single storey lounge extension to existing dwelling	APPROVE Subject to Conditions	11.02.2016
14/00766/AMEND	Land Off Gravelly Way Four Ashes South Staffordshire	Non-material amendment to planning permission 14/00766/VAR to introduce a condition for the phasing of development along with a phasing plan and amendments to the wording of Conditions 4,5,8,10 and 12 to reflect phasing of development.	Approved by Letter	02.03.2016
14/00961/AMEND	Bericote Properties Ltd Land Off Gravelly Way Four Ashes South Staffordshire	Non material amendments to planning permission 14/00961/REM to introduce a new phasing plan into Condition 2; revised access road alignment drawing and an amendment to Condition 3 to reflect the phasing of development.	APPROVE Subject to Conditions	10.03.2016
16/00161/FUL	Heath Farm Vicarage Road Calf Heath Stafford South Staffordshire ST19 5PU	Demolition of existing Farmhouse and erection of replacement farmhouse, with associated landscaping; together with change of use of the existing curtilage to form an extension to the existing paddock and adjacent residential garden areas.	REFUSED	02.06.2016
16/00498/FUL	Bericote Properties Limited Land Off Gravelly Way	Erection of 4no. Industrial/distribution buildings (B1(c)/B2/B8) along with	APPROVE Subject to Section 106 Agreement	02.08.2016

	Four Ashes South Staffordshire	access and servicing arrangements, car parking, landscaping and associated works including attenuation ponds and biodiversity enhancement area.		
17/00795/FUL	Clovelly Watling Street Gailey Stafford South Staffordshire ST19 5PR	Demolition of existing dwelling and outbuilding and erection of replacement dwelling and conversion of remaining outbuilding into dental surgery	Pending Consideration	
08/01226/FUL	Gravelly Way Farm Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BW	Rebuilding works to complete barn conversion following approval 02/00297/COU	APPROVE Subject to Conditions	11.03.2009
07/00003/FUL	Gravelly Way Farm Gravelly Way Four Ashes South Staffordshire WV10 7BW	Alteration and extension to house	APPROVE Subject to Conditions	03.03.2007
02/00297/COU	Gravelly Way Farm Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BW	Change of use of farm buildings to form 3 dwellings	APPROVE Subject to Conditions	12.06.2002
15/00053/HEDGE	Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BW	Remove hedgerow - 340 metres	Approved	03.03.2015
17/00514/VAR	Land Off Gravelly Way	Application Reference Number: 16/00498/FUL Date of	APPROVE Subject to Conditions	09.08.2017

	Four Ashes South Staffordshire	Decision: 02/08/2016 Condition Number(s): 9, 11 and 17 Conditions(s) Removal: Minor material amendments arising from scheme changes. Update conditions to reflect new drawing references		
16/00329/FUL	The Stables Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BW	Single storey extension	Withdrawn	23.06.2016
07/00004/CAC	Gravelly Way Farm Gravelly Way Four Ashes South Staffordshire WV10 7BW	Demolition of extensions	Approved	08.03.2007
07/00636/VAR	Gravelly Way Farm Gravelly Way Four Ashes Wolverhampton South Staffordshire WV10 7BW	Variation of condition 4 of 02/00297/COU to allow repairs and rebuilding work on previously approved barn conve	Withdrawn	25.07.2007



Residential structures demolition schedule



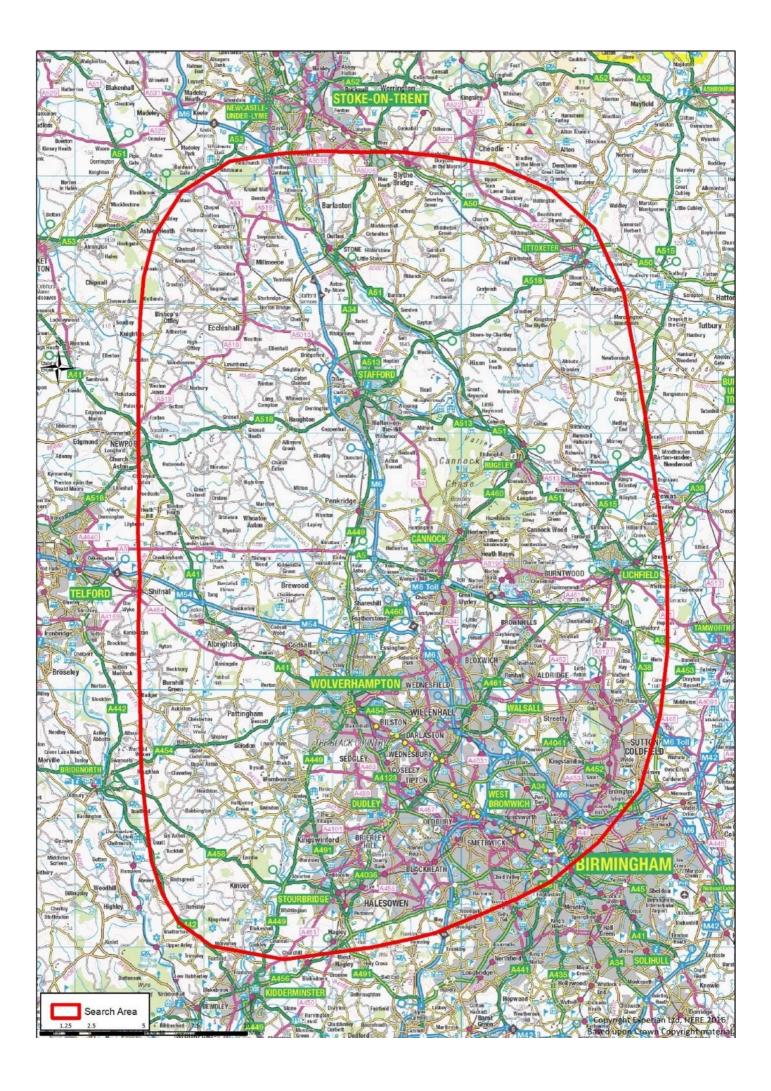
#### **Demolition of Residential Structures**

No	Property address	Commentary
1	Croft House Croft Lane ST19 5PY	Demolition of building to enable mitigation works, including bunding, around the Croft Lane area to mitigate Development Zone A3 and to enable the creation of the Croft Lane Community Park.
2	Croft Cottage Croft Lane ST19 5PY	Demolition of building to enable mitigation works, including bunding, around the Croft Lane area to mitigate Development Zone A3 and to enable the creation of the Croft Lane Community Park.
3	Clovelly Watling Street ST19 5PR	Demolition of building to enable the construction of the new access onto the A5, bunding and other landscaping mitigation works along the A5 to mitigate the impact of Development Zone A4.
4	Fir Tree Cottage Stafford Road Standeford Wolverhampton WV10 7BN	Demolition of building and outbuildings to enable the construction of bunding and the provision of a water attenuation area for drainage, in addition to other landscaping works to mitigate the impact of Development Zones A1, B and C.
5	Woodside Farm House Vicarage Road Wolverhampton WV10 7DJ	Demolition of buildings to enable the construction of landscaping areas to mitigate the impact of Development Zones A5 and A6 and to enable the construction of new road infrastructure to access Development Zones A5 and A6.
6	Mile End Cottage Straight Mile Road Four Ashes Wolverhampton WV10 7DL	Demolition of buildings to enable the provision of landscaping works to mitigate the impact of Development Zone A7.
7	Stoney Brook Straight Mile Wolverhampton WV10 7DL	Demolition of buildings to enable the provision of landscaping works to mitigate the impact of Development Zone A7.
8	Meadow View Vicarage Road Wolverhampton	Demolition of buildings to enable the construction of bunding and the provision of a water attenuation area for drainage, in addition

	WV10 7DW	to other landscaping works to mitigate the impact of Development Zone A7.
9	Ash House Straight Mile Wolverhampton WV10 7DL	Demolition of buildings to enable the construction of bunding and the provision of a water attenuation area for drainage, in addition to other landscaping works to mitigate the impact of Development Zone A7.
10	The Shippen Vicarage Road Wolverhampton	Demolition of buildings to enable the construction of Development Zone A7 and the provision of landscaping works to mitigate the impact of the Development Zone.
11	Heath Farm, Vicarage Road Wolverhampton	Demolition of buildings to enable the construction of Development Zone A7 and the provision of landscaping works to mitigate the impact of the Development Zone.

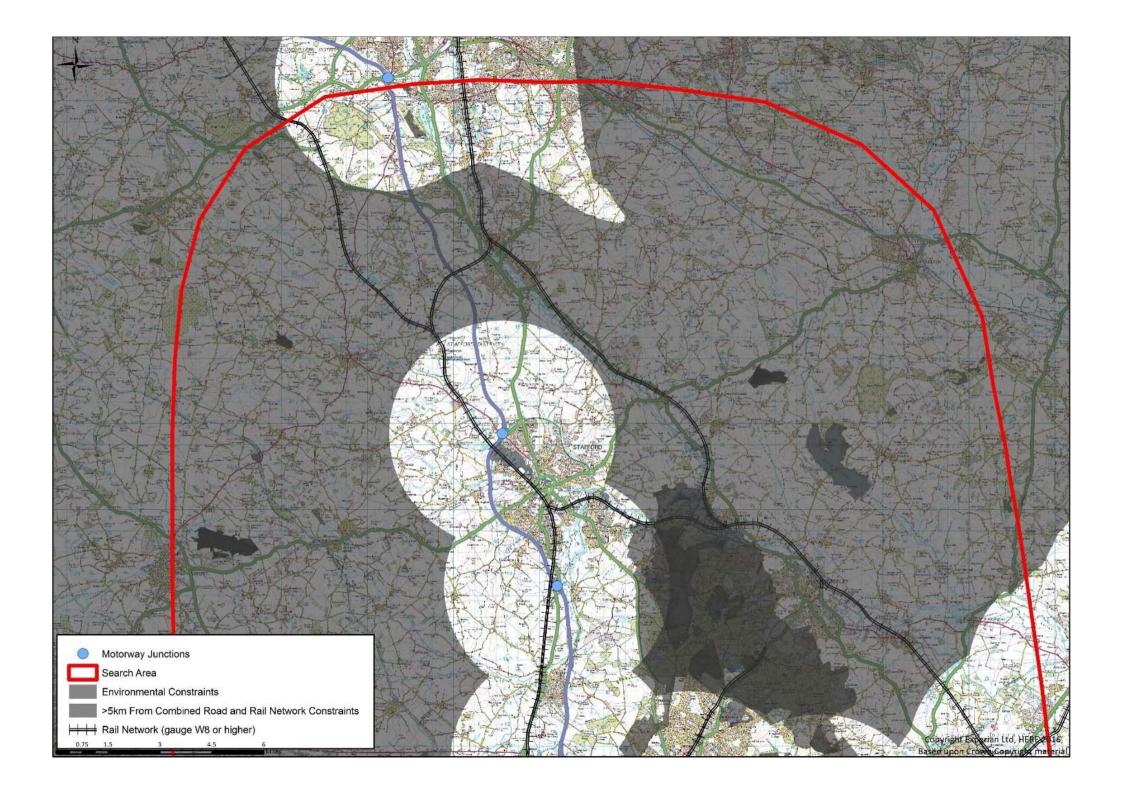


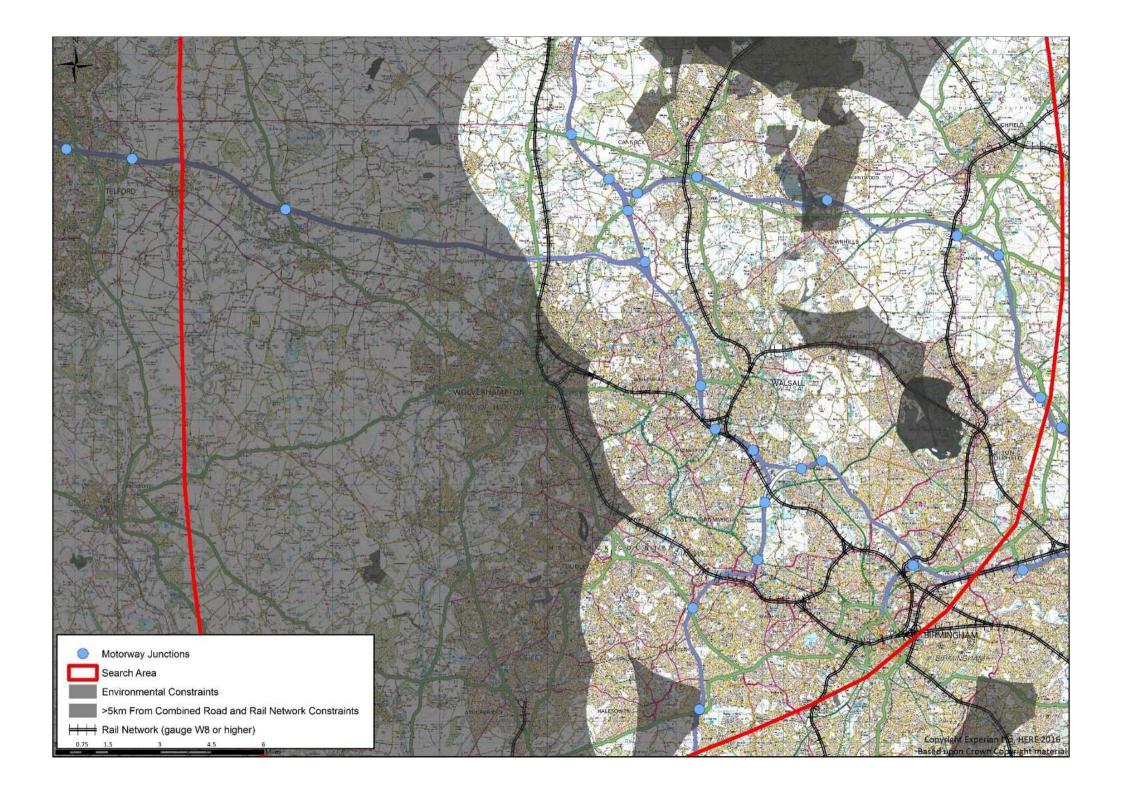
Initial ASA search area





Refined ASA search area







JLR letter of support



FAO: Peter Frost Director Four Ashes Limited c/o Kilbride Holdings Ltd

10th June 2016

Dear Peter,

#### West Midlands Interchange, Four Ashes, Staffordshire

I was very interested to learn of the proposed West Midlands Interchange project at Four Ashes.

As Jaguar Land Rover grows, we are always seeking supply chain improvements to support our global growth ambitions. Infrastructure developments such as these are therefore of great importance to Jaguar Land Rover, together with other developments in the region and nationally.

Jaguar Land Rover has an interest in infrastructure developments that represent growth opportunities in the local economy; helping both our company and Jaguar Land Rover's supply chain.

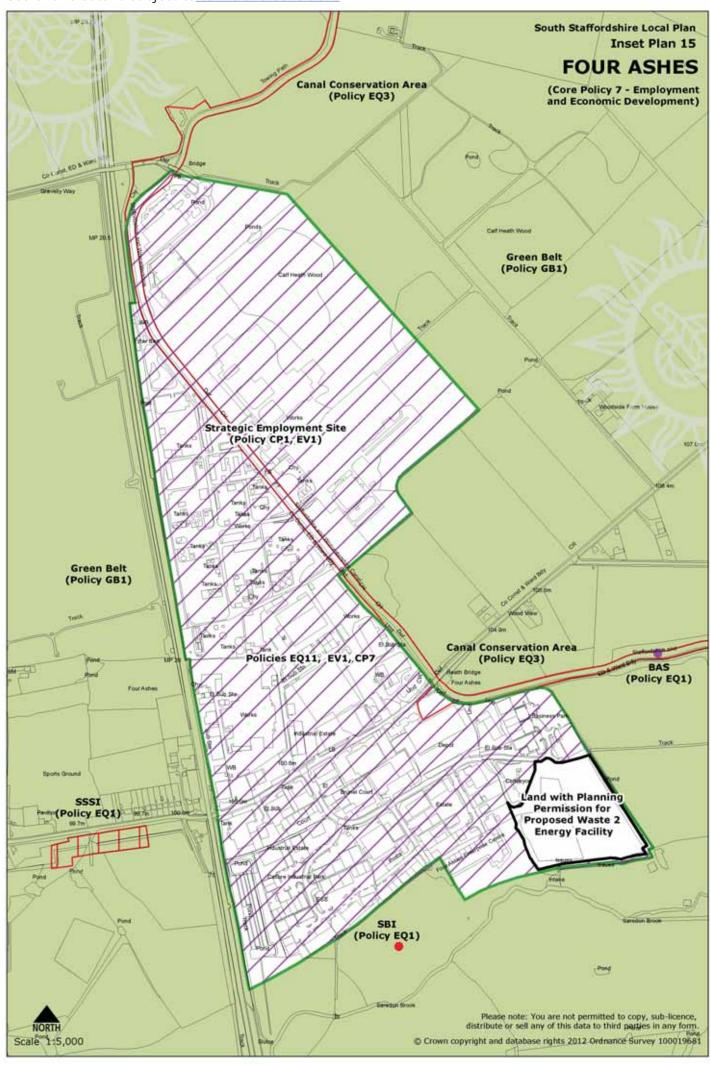
We welcome any future infrastructure provision that could help to serve our sector needs and look forward to continuing to work with you on potential costings and operational benefits that can be achieved.

I wish you every success in your project application.

Yours sincerely, Al Jeory International Freight and Packaging senior manager



Four Ashes Strategic Employment Site (Policy CP1)





2008 Network Rail letter of support



Mailbox 100 Wharfside Street Birmingham B1 1RT Tel. +44 (0) 121 345 3366 Fax:+44 (0) 121 345 4004

Mr P Frost

15 April 2008

Dear Peter

#### Re: Four Ashes Rail Freight Terminal Development

Kilbride Properties Ltd is proposing to promote a new rail freight terminal at Four Ashes, Staffordshire, which would require a new connection onto the West Coast Mainline and sufficient paths to service the terminal.

We have received Kilbride's pathing study in support of this project and their outline designs for the terminal and rail infrastructure and have held several meetings with your team to discuss the potential for the project, as well as signalling and engineering requirements.

Network Rail has agreed to take the project forward through the GRIP process and will be forwarding a formal Basic Services Agreement (BSA), which will involve a commitment to develop the scheme as an option in connection with the Wolverhampton area signalling renewals.

The project is supported by Network Rail in the context of the current GRIP stage in that the outputs will determine the next stage of involvement.

The proposed location is on an existing W10 gauge cleared route, with good links to both the north and south. Subject to strategic fit with other rail infrastructure developments (which will become clear as the scheme is developed) we would support the further development of the location as a Regional Logistics site/Strategic Rail freight Interchange and look forward to developing the detailed proposals for the scheme.

Yours sincerely

Steve Rhymes Senior Route Freight Manager



2016 Network Rail letter of support

From:

Crampton Jon

Sent:

22 April 2016 15:42

To:

Peter Frost

Subject:

Amended quote

Peter,

I've discussed with Guy Bates, we have agreed the below amended statement:

"Network Rail is supportive of the West Midlands Interchange proposal and will be engaged with the Four Ashes team as it progresses through the normal process of rail technical investigation, planning and design"

Many thanks,

Jon

Jon Crampton Senior communications manager Network Rail

@networkrailPR www.networkrailmediacentre.co.uk



HE Stage 2 Consultation response



Four Ashes Limited c/o WSP Parsons Brinkerhoff

Via Email: contactus@communityrelations.co.uk

Operations Directorate
The Cube
199 Wharfside Street
Birmingham
B1 1RN
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Direct Line: 0300 470 3045

29th August 2017

Dear Sir/Madam,

#### WEST MIDLANDS INTERCHAGE STAGE 2 CONSULTATION

Thank you for contacting Highways England in relation to this consultation. Highways England has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN).

The SRN is a national asset and as such works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity. The SRN in close proximity to the site comprises the A5, A449, M6 and M54.

Highways England welcomes the opportunity to provide further comment on the proposals at this stage of the Development Consent Order process.

As you are aware, following our response to the Stage 1 consultation we have continued to engage with you to consider further the detail of the proposals and how the traffic impacts of the development on the SRN may be managed. We are pleased that the general principles of how the development will interact with our network now are largely agreed, however, we have set out in the attached technical note detailing those matters that still remain to be agreed.

At this time we would particular emphasise the important role of proposed link road as a through route for traffic between the A5 and A449 Trunk Roads. The proposed road provides mitigation of the development's impacts upon the operation of the A5/A449 Gailey roundabout via the provision of an alternative route between the A5 and A449.





We look forward to continue to work with you to resolve remaining outstanding matters and attach a note setting out our current position. To ensure that the proposals can be practically delivered we are also keen to work with you to ensure necessary protective provisions are drawn up and that agreement be reached prior to the next stage of the Development Consent Order process.

Yours sincerely

Neil Hansen Asset Manager Operations Directorate Midlands

Email: Neil.Hansen@highwaysengland.co.uk







# WEST MIDLANDS INTERCHANGE STAGE 2 CONSULTATION NOTE OF HIGHWAYS ENGLAND'S POSITION ON 29/08/2017

#### Overview

Highways England supports the principles of the establishing of Strategic Rail Freight Interchange (SRFI) sites, including at this site, in the West Midlands as a sustainable way of managing the need for long distance freight transport. SRFI facilities provide the opportunity for the modal shift of goods traffic from road to rail for the majority of the length of journey.

The transport benefits of such a facility located in the West Midlands are likely to be beneficial to the wider Strategic Road Network (SRN) across the UK, in particular in reducing good vehicle traffic along strategic routes between the West Midlands and international gateways such as ports and the Channel Tunnel. We recognise that the proposed West Midlands Interchange has specific localised traffic implications for our infrastructure in terms of direct access to the SRN for the facility and proposals to mitigate the traffic impacts of the development upon adjacent networks.

### **Transport Assessment**

## New Link Road

The development proposes, as its primary vehicular access strategy, the provision of a publically adopted new link road that will connect the A5 and A449 Trunk Roads. A number of access points along the link road as well as ancillary accesses provide for access to the site by vehicular traffic.

The link road is bounded by two new roundabout junctions on the SRN comprising:

- A new junction on A5 between M6 Junction 12 and Gailey Roundabout
- Upgrade of the A449 / Crateford Lane/Gravelly Way priority junction

Additional access points include from Vicarage Road and a retained existing junction access from the A5 as an only Emergency Access. This access should have sufficient restrictions upon general traffic that it can only be used in the event of incident (blockage) or temporary restriction of the main access to the development site.

The above approach to site access has been subject to discussion with us. The general approach is agreed by Highways England to be appropriate subject to finalisation and completion of matters relating to Traffic Modelling and Engineering Design necessary demonstrate the proposal can be delivered in accordance with the requirements of the Design Manual for Roads and Bridges (DMRB).

Based upon existing traffic modelling undertaken, the proposed link road arrangement will act as mitigation of the site's immediate traffic implications upon A449 and A5 trunk roads. Agreement has been reached that the link road through



the site, between A5 and A449, is required to allow a proportion of general traffic to bypass the A5/A449 Gailey roundabout junction. Highways England's final agreement to this approach does, however, remain subject to the completion of traffic modelling and engineering design processes.

It remains to be demonstrated how the proposed private estate road that provides access to the development from Vicarage Road operates for local traffic which may seek to utilise it. As this link may affect the operation of the A5 and M6 Junction 12 as well as the surrounding local highway network further traffic modelling is necessary to ensure this has been fully considered.

#### Traffic Modelling

An agreed approach to traffic modelling has been reached which is capable of considering the developments implications upon the SRN. We acknowledge considerable progress has been made such that the general approach within the Transport Assessment (TA) is acceptable subject to a number of minor amendments being made to the 2021 'opening year' assessment and the provision of a supplementary 2036 assessment which specifically considers the new roundabout junctions to be formed on the A5 and A449 trunk road. Our comments on these assessments are as follows:

### 2021 Assessments & Modelling

We can confirm we are content with the principles of the VISSIM modelling of our network and have previously confirmed the suitability of the base model. Following consideration of an earlier version of the 2021 opening year modelling, we are content that only a number of limited further amendments are necessary. These comprise:

- M6 Junction 11 signals optimisation
- Amendments to WMI (development traffic) HGV routing
- Amendments to the intermodal access junctions on the proposed link road east of the A449 to be reconfigured to current drawings

The need for a sensitivity test within the 2021 model has been agreed as necessary to consider the role of the proposed privately maintainable link road through the site (connecting to Vicarage Road). As this road is not proposed to be publically adopted it is important that all parties are aware of its role in distributing traffic from and through the site.

#### 2036 Assessment

The need for a 2036 assessment of the proposed new roundabout junctions on A5 and A449 has been identified and agreed as suitable to consider the requirements of the DMRB.



Further justification is however required to confirm the suitability of the proposed use of Junctions 8 ARCADY modelling; these assessment will need to be approved by us and the results considered to confirm the proposed roundabouts are adequate in capacity to accommodate future traffic growth,

We are content with the general principles by which the future traffic growth to 2036 will be calculated comprising an agreed approach based upon the 2021 assessment + 15 years further growth derived from TEMPRO + additional growth from anticipated housing needs in South Staffordshire + the WMI development traffic.

#### M6 Junction 11

The implications of the development on M6 Junction 11 remain to be confirmed through further consideration using the agreed approach to traffic modelling. The need for additional mitigation at this junction cannot therefore be ruled out.

## **Highways Engineering Design**

Amendments to the A5 and A449 trunk roads have been submitted as part of the proposals and we have undertaken a detailed review of the documents and drawings submitted. Our comments below summarise items we have identified as outstanding or likely to have consequence to the detailed proposal and technical drawings included within the consultation, for confirmation these include the following design drawings:

70001979-GA-100 - General Arrangement Key Plan

70001979-GA-101 - Four Ashes Crossroad junction, A449.

70001979-GA-102 - Footway Works North of Four Ashes Junction, A449

70001979-GA-103 - Proposed Roundabout on A449 to replace Signalised Junction

70001979-GA-104 - Link Road to be Adopted by SCC

70001979-GA-105 - Proposed Parking Layby on A449 to replace loss of A5 layby.

70001979-GA-106 - Pedestrian Footway improvements on A5 east of Gailey Roundabout

70001979-GA-107 - Proposed Roundabout on A5 to accommodate Proposed Link Road.

70001979-GA-108 - Proposed Private estate road off link road

70001979-GA-109 - Proposed Private estate road off link road and proposed roundabout on Vicarage Road.



### Link Road

It is proposed that the link road between A5 and A449 be adopted as a principal standard highway with a 30mph speed limit. It is our view that adoption of the road at primary route standard is necessary to ensure the route is designed, constructed and remain open in future as a route suitable for all traffic. This is to ensure that the link reduces the implications of the development on the SRN in particular at the A5/A449 Gailey roundabout junction.

While the detailed engineering design of the link road beyond the A5 and A449 roundabouts is predominantly a matter for Staffordshire County Council, where the design may affect the flow of traffic upon the SRN it is relevant to Highways England. In this regard matters related to the design layout consulted upon may require amendment, or further detail to be submitted, if the risk of through-traffic blocking back onto our network may arise.

We note particularly the proximity of the (unnamed) Intermodal Terminal Access junction and associated Ghost Right turn facility situated on the link road immediately east of the proposed roundabout on A449. Further traffic modelling is required to demonstrate whether the traffic storage within the Ghost right turn facility is appropriate to accommodate traffic to the Intermodal terminal and ancillary warehouses within peak hours. This is required to demonstrate the safe operation of the proposed A449 Roundabout will not be affected.

## General Requirement of the DMRB

The A449 and A5 roundabout junctions are proposed to be adopted by Highways England forming part of the SRN. It is necessary therefore that these proposals confirm with all necessary design standards under the requirements of DMRB as well as according with the requirements of DfT Circular 002/2013 The Strategic Road Network and Sustainable Development.

Comments of the current designs of these roundabouts can be found below; at this stage these designs may evolve as they are subject to DMRB requirements for Walking Cycling & Horse-Riding Assessment and Review (WCHAR) and Road Safety Audit (RSA) Stage 1.

A requirement for the applicant to provide a traffic signage strategy has been identified as an outstanding item. The signing plan is required to confirm that the proposed roads and new junctions can be signed in accordance with the requirements for the DMRB and Traffic Signs Regulations and General Directions 2016, to ensure that assumptions relating to routing considered within the traffic modelling are reinforced through appropriate road signage,

Notwithstanding the outcomes of these requirements we note that matters related to the design of the roundabout and laybys require at least 9 (nine) Departures from Standard from the DMRB to be approved by us. We are broadly content with the rationale for these departures such that we agreed than an application for us to formally consider them is appropriate. The potential need for a 10<sup>th</sup> Departure from Standard is a matter that requires further consideration; details of this issue are set out below.



Should there be doubt regarding the need for a further Departure from Standard this should be discussed with our Safety Engineering and Standards (SES) division who will consider the detail of all such applications made.

## A449 / Crateford Lane / Gravelly Way Roundabout

The proposed design of the new roundabout junction may require further development of the proposed design to resolve or confirm matters related to:

- The method of calculation of the entry angle on the Crateford Lane entry arm
- The geometric layout to provide a one way arrangement from Crateford Lane which is non-typical; this should be a matter for specific consideration and recorded in the RSA brief.
- A requirement for two Departures from Standard related to the spacing of the proposed Bus laybys near to the Roundabout Junction
- Geotechnical Assessment of proposed earthworks within the vicinity of the SRN boundary should be provided for review. This should include setting out how earthworks consented to be constructed as part of the works to provide a signalised crossroads for the Bericote development will, as appears likely, need to be amended.

#### A5 Link Road Roundabout

The proposed design of the new roundabout junction may require further development of the proposed design to resolve or confirm matters related to:

- A requirement for four Departures from Standard related to approach visibility and visibility at existing access points at Gailey Marina Access and residential access situated to the west of the marina access.
- The proximity of the proposed roundabout to the existing Harrision Lane junction may require an additional departure from standard in relation to exit visibility of the roundabout to the junction. The need for this should be considered further through engagement with Highways England's SES division.

In addition to the above changes to the A5 roundabout, consequential proposed alterations to the retained A5 'left-in, left-out' Calf Heath Quarry access should adhere to the recommendations set out in TD 41/95 Layout 3-4. At present this does not appear to have been followed; the design decision should be justified and it be demonstrated how it adheres to DMRB standards, including the identification of any relaxations or Departures from Standard that may be necessary,

Swept path analysis should also be undertaken to demonstrate that the kerbed central reservation to be provided on the A5 can be implemented in such a way that it is sufficient to restrict unauthorised rights turn and u-turn movements arising from the access to quarry.



## Proposed Parking Layby on A449

Works to provide a Parking Layby on A449 to replace the loss of the A5 layby are proposed. Supporting evidence and justification is required to demonstrate the approach taken including whether alternative locations have been considered. The approach set out is further subject to the granting of three Departures from Standard.

#### **Provision for Sustainable Modes**

A Sustainable Transport Strategy has been provided and outlines how travel by sustainable modes will be provided. It is considered that the Sustainable Transport Strategy is fit for purpose and comprehensively provides a clear range of sustainable transport solutions for the WMI. It is clear that this strategy will be the overarching document for Sustainable Travel to the site and therefore there is a need for further clarity as to how this will interact with and, be underpinned by the measures in the Framework Travel Plan (FTP).

There is an indication that enhanced bus services will be key in meeting the requirements of shift workers. The exact provision of services will be decided nearer to occupation. We would suggest that this be clearly stated as occurring for each unit as the FTP is proposed to develop into a specific Travel Plan for each unit within the site. We would further recommend that the development of the bus service offer is based on actual staff postcodes.

### Travel Plan

No trip rate reduction has been applied to the trip rates in the TA and therefore it is accepted that trip generation assumptions underpinning the assessment are not dependent on the Framework Travel Plan. Notwithstanding this, we have set out our recommendations on the FTP below.

We recommend that more measures should be included in the Travel Plan that will promote the provision of cycle parking on site and encourage end occupiers to promote these facilities for cyclists. A significant number of cyclists are forecast at WMI based on employee numbers and mode share targets. A key part of this is ensuring that cyclists know what facilities are available to them and where they are located.

The Travel Plan is a key opportunity for influencing travel behaviour with new employees beginning new habits as they arrive at the site. It will be essential that the Travel Plan Coordinator (TPC) begins work alongside the build-out, and that many of the new measures are in place (such as the bus service and active travel infrastructure) prior to employees arriving on site. This will ensure the TPC can advise on all options and influence behaviour from the very beginning of occupation.

As a large strategic site attracting trips from around the region, there are clear opportunities to car share and make a positive impact on the surrounding road network.



# Freight Plan

A Framework HGV management Plan (FHGVMP) has been provided by the applicant which introduces information on relevant government policy for the HGV transport strategy, explains a wide range of measures available for use at the site and provides a strategy for freight and HGV management.

Highways England are generally content with the proposed FGHVMP. The proposed strategy favourably aims to ensure a shift, where possible, of goods to non-road modes, the minimisation of HGV movements in peak periods, and the streamlining and mitigation of any remaining road movements created by the site.

The implementation measures such as the Vehicle Booking System, Early Arrivals Bays, ANPR Cameras, Freight Quality Partnership (FQP) and Back-Loading are satisfactory in reducing the impact of HGV movements. We therefore note the importance of role of the FHGVMP in enabling there to be sufficient management of on-site HGV parting to discourage off-site implications.

Plans are proposed within the FGHVMP to introduce systems such as Variable Message Signs (VMSs) to manage HGV traffic. This would require further consultation with us to avoid conflict with other such messages that may concurrently be displayed by signage on the SRN.

# Construction (Phasing/Traffic)

As an appendix to the draft Transport Assessment a full Framework Construction Traffic Management Plan (FCTMP) has been provided by the applicant which outlines the Development Proposals, Development Phasing, possible Construction Traffic Impact and Construction Impact Mitigation for the Strategic Rail Freight Interchange (SRFI).

Highways England welcome the proposed FCTMP and are generally content with its content and the outline approach to phasing of construction traffic. We appreciate that the FCTMP will need to be an evolving document that may need to be split into separate Construction Travel Management Plans (CTMPs) for individual phases of construction.

Paragraph 2.1.3 of the FCTMP implies that the highway infrastructure for the development will be built prior to other facilities to be constructed. It is understood that this is the intention of the applicant. This is likely to be necessary to mitigate the implications of construction traffic on the operation of the SRN.

Detail of the delivery highway infrastructure works have not been included within the phases of development proposed. More detail is required in regard to the proposed staging of the infrastructure works to come forward in relation to the phases of the WMI.



It is accepted that it is not currently possible to gain an exact estimate of the quantum of trip generation of construction traffic as this is affected by method of construction, as well as being dependent on the final composition of the development.

We note two site layout options are set out in the Illustrative Masterplan included within the Transport Assessment. As more information is known about the final composition of the development the FCTMP should be updated and a full CTMP should later be provided that is capable of managing the construction traffic implications during construction phases of the development

## **Environmental & SRN Boundary Implications**

We gave a detailed response to the initial environmental and SRN boundary issues arising from the development within our Stage 1 consultation response. In addition to the issues arising from the construction of the purposed roundabouts set out above our main outstanding concern relates to confirmation of details related to land drainage in the form of the planned attenuation ponds proposed within close proximity of the A449 corridor.

Details of the outfall and design of the proposed land drainage system will need to be provided to ensure the safety of the SRN in terms of potential flooding and to ensure the SRN highway drainage system will not be affected.

### Other Matters

We are working with the applicant to develop a set of 'protective provisions' for inclusion in the Development Consent Order. Whilst this work is still ongoing we expect that the protective provisions will cover at least:

- Design approvals
- Legal agreements with Highways England
- Timing of road infrastructure delivery and mitigation provision
- Finance and commuted sum for maintenance of new SRN infrastructure
- The carrying out of the works and warranties/indemnities



HGV kilometre savings calculations



# **HGV Kilometre Savings Methodology**

# 1.1 HGV Kilometre Savings

1.1.1 A conservative estimate of the HGV kilometres that would be saved as a result of WMI are shown in the table below.

	Intermodal Rail Traffic	Conventional Wagon Rail Traffic	TOTAL
Number of trains per day (each way)	8	2	10
Equivalent HGV loads saved per day	656	178	834
Estimated average HGV journey length saved	195 km	195 km	195 km
Total HGV km saved per day	127,920 km	34,710 km	162,630 km
Total HGV kms saved per train per day (on average)	15,990 km	17,355 km	-
Total HGV km saved per year by WMI (based on 312 operational days)	39,911,040	10,829,520	50,740,560

**Table 1: HGV Kilometre Savings** 

# 1.2 Basic Principle

To calculate the savings in heavy good vehicles ('HGVs') kilometres ('kms'), a basic calculation is applied.

The distance from the Origin (e.g. port, Channel Tunnel or RFI) to the End Destination (e.g. warehouse or end user) minus the distance from WMI to the End Destination equals the km saved.

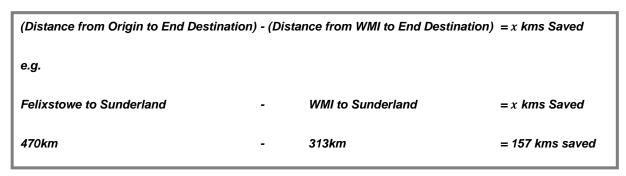


Figure 1: kms saved calculation

The assumption as part of the calculation is that goods would need delivering to their End Destination, whether WMI was built or not.



If WMI did not exist, it is assumed that goods would travel direct by lorry from their Origin to their End Destination, but if WMI was built, goods would first travel to WMI on rail and then travel via HGV to their End Destination, to complete the journey.

The journey from Origin to WMI would not happen if WMI was not constructed, and so does not form part of the calculation.

The km saving is made as the Origin to WMI journey is made by rail.

# 1.3 Origins

The Origin locations and the average number of intermodal and conventional freight trains arriving from each origin per week has been calculated, informed by studies of existing and anticipated freight patterns.

Location	Trains to WMI	Distribution
Felixstowe Docks	2.71	33.9%
Southampton Docks	2.71	33.9%
Wentloog Terminal, Cardiff	0.58	7.3%
Willesden Junction, London	0.58	7.3%
Doncaster Freight Terminal	0.58	7.3%
Mossend Freight Terminal	0.58	7.3%
Folkstone Channel Tunnel Terminal	0.26	3.3%
	8	100%
Folkstone Channel Tunnel Terminal	1	50%
Wentloog Terminal, Cardiff	0.25	12.5%
Willesden Junction, London	0.25	12.5%
Doncaster Freight Terminal	0.25	12.5%
Mossend Freight Terminal	0.25	12.5%
	Felixstowe Docks  Southampton Docks  Wentloog Terminal, Cardiff  Willesden Junction, London  Doncaster Freight Terminal  Mossend Freight Terminal  Folkstone Channel Tunnel Terminal  Wentloog Terminal, Cardiff  Willesden Junction, London  Doncaster Freight Terminal	Felixstowe Docks  2.71  Southampton Docks  2.71  Wentloog Terminal, Cardiff  0.58  Willesden Junction, London  Doncaster Freight Terminal  Mossend Freight Terminal  Folkstone Channel Tunnel Terminal  Wentloog Terminal, Cardiff  Wentloog Terminal, Cardiff  0.25  Willesden Junction, London  0.25  Doncaster Freight Terminal  0.25



Туре	Location	Trains to WMI	Distribution
Total conventional		2	100%

Table 2: Distribution of trains by Origin

# 1.4 End Destinations

The End Destinations are based on British regions, with the population centroid of each taken as the average destination within each region.

However, as WMI is expected to mainly serve the West Midlands region, this has been broken down by district.

Region	Destination / Centroid
North East	Sunderland
North West	Preston
Yorkshire & Humber	Leeds
East Midlands	Loughborough
	Birmingham
	Bromsgrove
	Cannock
	Coventry
	Dudley
	East Staffordshire
	Herefordshire
	Lichfield
	Malvern Hills
	Newcastle-under-
	Lyme
	North Warwickshire
	Nuneaton and
West Midlands	Bedworth
West Midiands	Redditch
	Rugby
	Sandwell
	Shropshire
	Solihull
	South Staffordshire
	Stafford
	Staffordshire
	Moorlands
	Stoke-on-trent
	Stratford-on-Avon
	Tamworth
	Telford and Wrekin
	Walsall



	Warwick
	Wolverhampton
	Worcester
	Wychavon
	Wyre Forest
East of England	Thetford
London	Central London
South East	Guildford
South West	Exeter
Wales	Merthyr Tydfil
Scotland	Stirling
Northern Ireland	Belfast

Table 3: End Destinations

# 1.5 HGV Distribution

The number of HGVs travelling to or from each Origin to each End Destination has been informed by studies of existing and anticipated freight patterns.

It has been assumed that all goods are distributed via the HGV distribution pattern set out in Table 5 below, regardless of which Origin the goods arrive from.

Train Type	Equivalent HGV loads	per day (fully operation	al)
	Inbound	Outbound	Two way
Intermodal	328	328	656
Conventional	142	36	178

Table 4: Equivalent HGV loads per day

It is possible to calculate the number of HGVs originating from each Origin for each train type by combining the data in Tables 1 and 3, this is set out in Table 4.

	Total HGV Loads Inbound	Total HGV Loads Outbound	Total
Intermodal			
Felixstowe Docks	111	111	222
Southampton Docks	111	111	222



Wentloog Terminal	24	24	48
Willesden Junction	24	24	48
Doncaster Freight Terminal	24	24	48
Mossend Freight Terminal	24	24	48
Folkstone Channel Tunnel Terminal	11	11	21
Total			656
Conventional  Channel Tunnel	71	18	89
	40	5	
Wentloog Terminal	18	5	22
Willesden Junction	18	5	22
Doncaster Freight Terminal	18	5	22
Mossend Freight Terminal	18	5	22

Table 5: Number of HGVs from each Origin to WMI

Destination	Distribution
North East	0.6%
North West	7.3%
Yorkshire & Humber	4.2%
East Midlands	9.3%
Birmingham	11.7%
Bromsgrove	0.7%
Cannock	3.3%
Coventry	1.7%
Dudley	3.5%
East Staffordshire	1.1%
Herefordshire	0.6%
Lichfield	1.5%
Malvern Hills	0.3%
Newcastle-under-Lyme	1.0%
North Warwickshire	0.5%
Nuneaton and Bedworth	0.7%
Redditch	0.5%



Rugby	0.5%
Sandwell	5.1%
Shropshire	2.1%
Solihull	1.4%
South Staffordshire	3.6%
Stafford	1.60%
Staffordshire Moorlands	0.60%
Stoke-on-Trent	2.10%
Stratford-on-Avon	0.50%
Tamworth	0.80%
Telford and Wrekin	1.90%
Walsall	5.50%
Warwick	0.70%
Wolverhampton	6.40%
Worcester	0.50%
Wychavon	0.50%
Wyre Forest	0.70%
East of England	3.7%
London	1.4%
South East	4.0%
South West	4.0%
Wales	3.4%
Scotland	0.6%
Northern Ireland	0.0%
	100%

Table 6: Distribution of all goods trips from WMI

HGVs are assigned by region through combining Tables 4 and 5. This is shown in Tables 6-10 for the different train types and directions.



Folkstone	Mossend	Doncaster	Willesden	Wentloog	Soton	Felixstowe	
0	0	0	0	0	_		Sunderland
1	2	2	2	2	8	8	Preston
0	1	1	1	_	5	5	Leeds
1	2	2	2	2	10	10	Loughboroug
1	з	з	ω	ω	13	13	Birmingham
0	0	0	0	0	_	_	Bromsgrove
0	٦	1	_	<b>-</b>	4	4	Cannock
0	0	0	0	0	2	2	Coventry
0	1	1	1	_	4	4	Dudley
0	0	0	0	0	_	٦	East Staffs
0	0	0	0	0	2	_	Herefordshire
0	0	0	0	0	2	2	Lichfield
0	0	0	0	0	0	0	Malvern Hills
0	0	0	0	0	_	_	Newcastle-u-
1	_	1	_	<u> </u>	_	_	North Warwks
0	0	0	0	0	_	٦	Nuneaton 8
0	0	0	0	0	_	_	Redditch
0	0	0	0	0	_	_	Rugby
1	_	1	1	_	6	6	Sandwell
0	0	0	0	0	2	2	Shropshire
0	0	0	0	0	2	2	Solihull
0	_	1	1		4	4	South Staffs
1	0	0	0	0	_	2	Stafford
0	0	0	0	0	_	_	Staffs
0	0	0	0	0	2	2	Stoke-on-
0	0	0	0	0	ے	_	Stratford-u-
0	0	0	0	0	_	٦	Tamworth
0	0	0	0	0	2	2	Telford 8
1	1	1	1	1	6	6	Walsall
0	0	0	0	0	_	1	Warwick
1	2	2	2	2	7	7	Wolverhampt
0	0	0	0	0	1	1	Worcester
0	0	0	0	0	1	1	Wychavon
0	0	0	0	0	_	_	Wyre Forest
0	_	1	_	_	4	4	Thetford
0	0	0	0	0	2	2	London
0	1	1	1	1	4	4	Guildford
0	1	1	1	1	4	4	Exeter
0	1	1	1	1	4	4	Merthyr Tydfil
0	0	0	0	0	1	1	Stirling
12	24	24	24	24	111	111	Total

Table 7: Number of Intermodal HGVs from each Origin to each End Destination (inbound and outbound)



Mossend	Doncaster	Willesden	Wentloog	Folkstone	
0	0	0	0	0	Sunderland
_	_	_	1	5	Preston
	_	_	1	3	Leeds
	2	2	2	7	Loughboroug
2	2	2	2	8	Birmingham
0	0	0	0	0	Bromsgrove
_	_	_	1	2	Cannock
0	0	0	0	_	Coventry
	_	_	1	2	Dudley
	0	0	0	_	East Staffs
0	0	0	0	0	Herefordshire
0	0	0	0	_	Lichfield
0	0	0	0	0	Malvern Hills
0	0	0	0	_	Newcastle-u-
0	0	0	0	0	North Warwks
0	0	0	0	0	Nuneaton 8
0	0	0	0	0	Redditch
0	0	0	0	0	Rugby
	_	_	1	4	Sandwell
0	0	0	0	_	Shropshire
0	0	0	0	1	Solihull
1	1	1	1	3	South Staffs
	0	0	0	1	Stafford
0	0	0	0	0	Staffs
0	0	0	0	1	Stoke-on-
0	0	0	0	0	Stratford-u-
0	0	0	0	_	Tamworth
0	0	0	0	_	Telford 8
_	_	_	1	4	Walsall
0	0	0	0	0	Warwick
1	1	1	1	5	Wolverhampt
0	0	0	0	0	Worcester
0	0	0	0	0	Wychavon
0	0	0	0	0	Wyre Forest
1	1	1	1	3	Thetford
0	0	0	0	1	London
1	1	1	1	3	Guildford
1	1	1	1	3	Exeter
1	1	1	1	2	Merthyr Tydfil
0	0	0	0	0	Stirling
18	18	18	18	71	Total

Table 8: Number of Conventional HGVs from each Origin to each End Destination (inbound)



L_	Mossend	Doncaster	Willesden	Wentloog	Folkstone	
0		0	0	0	0	Sunderland
0		0	0	0	_	Preston
0		0	0	0	_	Leeds
0		0	0	0	2	Loughboroug
_		1	_	_	2	Birmingham
0		0	0	0	0	Bromsgrove
0		0	0	0		Cannock
0		0	0	0	0	Coventry
0		0	0	0	_	Dudley
0		0	0	0	0	East Staffs
0		0	0	0	0	Herefordshire
0		0	0	0	0	Lichfield
0		0	0	0	0	Malvern Hills
0		0	0	0	0	Newcastle-u-
0		0	0	0	0	North Warwks
0		0	0	0	0	Nuneaton 8
0		0	0	0	0	Redditch
0		0	0	0	0	Rugby
0		0	0	0	_	Sandwell
0		0	0	0	0	Shropshire
0		0	0	0	0	Solihull
0		0	0	0	1	South Staffs
0		0	0	0	0	Stafford
0		0	0	0	0	Staffs
0		0	0	0	0	Stoke-on-
0		0	0	0	0	Stratford-u-
0		0	0	0	0	Tamworth
0		0	0	0	0	Telford 8
0		0	0	0	_	Walsall
0		0	0	0	0	Warwick
0		0	0	0	1	Wolverhampt
0		0	0	0	0	Worcester
0		0	0	0	0	Wychavon
0		0	0	0	0	Wyre Forest
0		0	0	0	_	Thetford
0		0	0	0	0	London
0		0	0	0	1	Guildford
0		0	0	0	1	Exeter
0		0	0	0	1	Merthyr Tydfil
0		0	0	0	0	Stirling
5		5	5	5	18	Total

Table 9: Number of Conventional HGVs from each Origin to each End Destination (outbound)



Folkstone	Mossend	Doncaster	Willesden	Wentloog	Soton	Felixstowe	
0	0	0	0	0	1	_	Sunderland
6	3	з	3	ω	8	8	Preston
ы	2	2	2	2	5	ΟΊ	Leeds
8	4	4	4	4	10	10	Loughboroug
10	5	Ŋ	5	ъ	13	13	Birmingham
1	0	0	0	0	1	ے	Bromsgrove
ω	_	_	٦	_	4	4	Cannock
<b>-</b>	٦	1	1	_	2	2	Coventry
3	1	٦	1	ے	4	4	Dudley
<b>-</b>	0	0	0	0	1	ے	East Staffs
0	0	0	0	0	2	ے	Herefordshire
<b>-</b>	_	_	1	_	2	2	Lichfield
0	0	0	0	0	0	0	Malvern Hills
<b>-</b>	0	0	0	0	_	_	Newcastle-u-
<b>-</b>	_	_	٦	<b>-</b>	_	_	North Warwks
_	0	0	0	0	1	_	Nuneaton 8
0	0	0	0	0	1	ے	Redditch
0	0	0	0	0	1	_	Rugby
4	2	2	2	2	6	6	Sandwell
2	_	_	1		2	2	Shropshire
_	_	_	1		2	2	Solihull
3	_	_	1		4	4	South Staffs
2	_	0	0	_	_	2	Stafford
0	0	0	0	0	_	_	Staffs
2	_	_	_	_	2	2	Stoke-on-
0	0	0	0	0	1	_	Stratford-u-
٦	0	0	0	0	1	٦	Tamworth
2	_	_	1	_	2	2	Telford 8
4	2	2	2	2	6	6	Walsall
1	0	0	0	0	1	1	Warwick
5	3	3	3	ы	7	7	Wolverhampt
0	0	0	0	0	1	1	Worcester
0	0	0	0	0	1	1	Wychavon
_	0	0	0	0	1	_	Wyre Forest
3	2	2	2	2	4	4	Thetford
_	_	_	٦	<b>-</b>	2	2	London
З	2	2	2	2	4	4	Guildford
3	2	2	2	2	4	4	Exeter
3	_	_	٦	<b>-</b>	4	4	Merthyr Tydfil
0	0	0	0	0	_	_	Stirling
83	42	42	42	42	111	111	Total

Table 10: Total number of inbound HGVS from each Origin to each End Destination



Folkstone	Mossend	Doncaster	Willesden	Wentloog	Soton	Felixstowe	
-	0	0	0	0	_		Sunderland
	2	2	2	2	8	8	Preston
	_	_	_	_	51	51	Leeds
	ω	ω	ω	ω	10	10	Loughboroug
	ω	ω	ω	ω	13	13	Birmingham
	0	0	0	0	_	_	Bromsgrove
	_	_	_	_	4	4	Cannock
	0	0	0	0	2	2	Coventry
	_	_	_	_	4	4	Dudley
	0	0	0	0	_	_	East Staffs
-	0	0	0	0	2	_	Herefordshire
	0	0	0	0	2	2	Lichfield
	0	0	0	0	0	0	Malvern Hills
	0	0	0	0	_	_	Newcastle-u-
	1	_	_	ے	1	_	North Warwks
	0	0	0	0	_	_	Nuneaton 8
-	0	0	0	0	_	_	Redditch
-	0	0	0	0	_	_	Rugby
	_	_	_	_	6	6	Sandwell
	٦	_	_	ے	2	2	Shropshire
	0	0	0	0	2	2	Solihull
	_	_	_	_	4	4	South Staffs
	٦	0	0	_	_	2	Stafford
	0	0	0	0	_	_	Staffs
	_	_	_	_	2	2	Stoke-on-
	0	0	0	0	1	1	Stratford-u-
	0	0	0	0	_	_	Tamworth
	_	_	_	_	2	2	Telford 8
	2	2	2	2	6	6	Walsall
	0	0	0	0	_	٦	Warwick
	2	2	2	2	7	7	Wolverhampt
	0	0	0	0	_	_	Worcester
	0	0	0	0	1	1	Wychavon
	0	0	0	0		_	Wyre Forest
	_	_	_	_	4	4	Thetford
	0	0	0	0	2	2	London
	_	_	_	<b>-</b>	4	4	Guildford
	_	_	_	_	4	4	Exeter
	_	_	_	_	4	4	Merthyr Tydfil
	0	0	0	0	_	_	Stirling
	29	29	29	67			

Table 11: Total number of outbound HGVS from each Origin to each End Destination



# 1.6 HGV KMs saved

To obtain distances between Origins and End Destinations, google has been used, as is standard practice.

Using this information the calculation has been applied to give the number of kilometres saved for each Origin and End Destination combination.

Not all combinations result in a saving, depending on how close the End Destination is to the Origin, or how far away from WMI it is. An example calculation is shown at Figure 1.

Applying the number of HGVs from Tables 9 and 10 to the kilometres saved for each origin / end destination combination provides the total number of HGV kilometres saved per day.

It is assumed that, when fully operational, 10 trains per day will operate for an average 312 days per day.

Daily kilometres saved	Annual kilometres saved
162,311 km	50,641,091 km

Table 12: WMI HGV kms saved