

EXTRA MSA GROUP

MOTORWAY SERVICES, WARRINGTON

BIODIVERSITY OFFSETTING REPORT

DECEMBER 2019



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DECEMBER 2019

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ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT



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Appendix 2 Biodiversity Metric 2.0 Calculation Tool

DRAWINGS	TITLE	SCALE
SH11739/007	Extended Phase 1 Habitat Survey Results	1:3,000@A3
LC-1	Warrington MSA J11/M62 Indicative Wider Landscape	1:5,000@A2
	Context	
0751	Indicative Site Plan Warrington MSA, J11 M62	1:1250@A1



1 INTRODUCTION

1.1 Scope of Report

- 1.1.1 A scoping report was issued to Warrington Borough Council (WBC) during December 2018 in relation to the proposed Warrington Motorway Service Area (MSA) scheme. This reported included a calculation of biodiversity change arising from the proposed development. Initially, The Warwickshire, Coventry and Solihull Biodiversity Impact Assessment (BIA) calculator was been used to conduct this assessment.
- 1.1.2 In clarification of this initial work, and following consultation with Natural England this data has now been entered into the DEFRA Biodiversity Metric 2.0 as this is now considered the industry standard. This report updates the previous version and discusses differences in the results.
- 1.1.3 In order to calculate the areas of habitat, both drawings LC-1- Warrington MSA J11/M62 Indicative Wider Landscape Context and 0751- Indicative Site Plan Warrington MSA, J11, M62 were used.



2 METHODS

2.1 Distinctiveness

2.1.1 Existing information on habitat types within the Application Site is taken from the Extended Phase 1 Habitat Survey data (Wardell Armstrong, 2018), and shown on Drawing No. SH11739/007. This data is then inputted into the biodiversity metric 2.0 and habitats are pre-assigned to one of four habitat bands, based on their distinctiveness:

High: 6Medium: 4Low: 2None 0

2.1.2 Distinctiveness is defined as a collective measure of biodiversity based on parameters including species richness, diversity and rarity.

2.2 Condition Assessment

2.2.1 Each habitat type identified is then given a condition weighting. The methodology used to assign a condition weighting to each habitat type is based on the 'Higher Level Stewardship Scheme: Farm Environment Plan (FEP) Manual' (Natural England 2010¹), although ecological expertise and experience is also used. Condition weightings are:

Good: 3Moderate: 2Poor: 1

2.2.2 In the FEP manual, each habitat type is assigned a number of habitat assessment criteria and it is these that allow an assessment of condition to be made:

Good condition: All criteria met

Moderate Condition: All but one criterion met
 Poor Condition: Two or more criteria failed

2.2.3 Drawing number LC-1 'Warrington MSA J11/M62 Indicative Wider Landscape -Landscape Context' provided by SLR (July 2019) has been used to inform details of proposed habitats following completion of the development.

¹ http://adlib.everysite.co.uk/resources/000/251/202/NE264.pdf



3 RESULTS

3.1 The Biodiversity Metric 2.0

The results of the Biodiversity Matrix 2.0 are summarised below, taken from the full metric which is provided in Appendix 2. Plate 1 provides an extract from the headline results table.

	Habitat units	43.30
On-site baseline	Hedgerow units	2.48
OII-site paseille	River units	19.02
	Kiver utilits	19.02
On-site post-intervention	Habitat units	50.68
(Including habitat retention, creation, enhancement &	Hedgerow units	2.48
succession!	River units	20.61
	Habitat units	0.00
Off-site baseline	Hedgerow units	0.00
	River units	0.00
Off site past intervention	Habitat units	0.00
Off-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation, enhancement &	River units	0.00
Total not unit change	Habitat units	7.38
Total net unit change	Hedgerow units	0.00
(including all on-site & off-site habitat retention/creation)	River units	1.59
Total not % change	Habitat units	17.05%
Total net % change	Hedgerow units	0.00%
(including all on-site & off-site habitat creation + retained habitats)	River units	8.37%

Plate 1: Extract from DEFRA Metric 'Headline Results' summary

- 3.1.1 The existing habitats within the application site have a biodiversity value of 43.30 units. For area-based habitats, 50.68 units will be created and enhanced as a result of the proposed development, resulting in an overall Habitat Biodiversity Impact Score of +7.38/17.05% (Gain).
- 3.1.2 The Proposed Development will result in no change in hedge or connectivity biodiversity value, as hedge and connectivity features will be retained. The overall Hedgerow Biodiversity Impact Score is 0.00/0% (no change).
- 3.1.3 The Proposed Development will result in an overall River Impact Score of +1.59/8.37% (Gain).



4 CONCLUSION

- 4.1.1 Originally the BIA metric results demonstrated that the landscape proposals within the site boundary are adequate to mitigate biodiversity losses. 'Good' condition habitats should be targeted following the development. The landscape proposals will result in a percentage increase of 22% in biodiversity value overall, using the original BIA metric.
- 4.1.2 The DEFRA Metric 2.0 concludes that the total biodiversity net gain results are a percentage increase of 17.05% in biodiversity value overall, therefore further off-site mitigation through an offset provider is not considered necessary. This is the final biodiversity net gain for the site.
- 4.1.3 The updated metric 2.0 resulted in some minor changes to the net change of biodiversity on site. Most noticeably the previous BIA included the rivers within the habitats impact score, in the revised metric 2.0 this is now an independent feature instead of the connectivity impact assessment. This was an important feature to distinguish as the habitat creation involved removing previous running waterways and redirecting the waterways, which in turn increased the length of the waterways. The final result of the revised metric 2.0 returned a slightly lower value of net unit change (7.38 as opposed to 9.11).

APPENDICES

Biodiversity Impa	Appendix 1 ct Assessment (B	IA) Calculator	

Warwickshire, Coventry & Solihull - Habitat Impact Assessment Calculator

KEY	
	No action required
	Enter value
	Drop-down menu
	Calculation
	Automatic lookup
	Automatic Condition setting
	Result

Local Planning Authority:	Other
Site name:	Warrington Motorway Service Area
Planning application reference number:	
Assessor:	K Smith
Date:	02/08/2019

Please fill in both tables
Please do not edit the formulae or structure
To condense the form for display hide vacant rows, do not delete them
If additional rows are required, or to provide feedback on the calculator please contact WCC Ecological Services 01926 418060

		Result					-	02/00/2010		_				
											odiversity Value]
		Existing habitats on site Please enter <u>all</u> habitats within the site boundar	•		tinctiveness	Habitat	condition	no char	e <u>retained</u> with nge within opment	enhanc	e retained and ed within opment		o be <u>lost</u> within elopment	
T. Note	code	Phase 1 habitat description	Habitat area (ha)	Distinctiveness	Score	Condition	Score	Area (ha)	Existing value	Area (ha)	Existing value	Area (ha)	Existing value	Comment
1.14010	oouc	Direct Impacts and retained habitats	(****)		A		В	C	AxBxC=D	E	AxBxE=F	G	A x B x G = H	onmen.
	J11	Other: Arable	11.56	Low	2	Poor	1	·				11.56	23.12	Condition assessment preset. Lost to development and new habitat proposals.
	B5	Grassland: Marsh / Marshy grassland	0.69	High	6	Poor	1					0.69	4.14	Considered poor condition due to presence of undesireable species. Lost to development and new habitat prop
	B22	Grassland: Semi-improved neutral grassland	1.86	Medium	4	Poor	1					1.86	7.44	Considered poor condition due to presence of undesireable species. Lost to development and new habitat prop
		Woodland: Broad-leaved semi-natural woodland	0.57	High	6	Poor	1					0.57	3.42	Considered poor condition. Lost to development and new habitat proposals.
	n/a	Built Environment: Buildings/hardstanding	1.70	none	0	Poor	1					1.70	0.00	Condition assessment preset. Lost to development and new habitat proposals.
		Wetland: Standing water	0.02	High	6	Good	3	0.02	0.36				0.00	Standing Water - Eutrophic. Condition assessment W03. Considered good condition. Retained
	G2	Wetland: Running water	0.10	High	6	Poor	1	5.52				0.10	0.60	Wet Ditch. Assessed as area habitat due to realignment and increased width following development.
														· · ·
		To	otal 16.50	1			Tota	0.02	2 0.36	0.00	0.00	16.48	38.72	
		10	Diai 10.50	<u>u</u>			Tola	0.02	2] 0.30	0.00	0.00	10.40	$\Sigma D + \Sigma F + \Sigma H$	
											Site habitat b	iodiversity value	20 T Z F T Z H	
		Indirect Negative Impacts		_				Value of lose for	rom indirect impa	note	Oite Habitat b	louiversity value	39.00	
Re	fore/afte	r Including off site habitats						KxAxB	om muneot impa	Cl3				
ВС	impac		К					= Li, Lii	Li - Lii					
	Before									1				
	Afte													
	Before				i					1				
	Afte													
	Before													
	Afte													
	Before													
	Afte													
	Before													
	Afte													
		To	otal 0.00	0					0.00	M			HIS = J + M	
											Habitat Imp	act Score (HIS)	38.72	
														-

CAUTION - Destruction of habitats of high distinctiveness, e.g. lowland meadow or ancient woodland, may be against local policy. Has the mitigation hierarchy been followed, can impact to these habitats be avoided? Any unavoidable loss of habitats of high distinctiveness must be replaced like-for-like.

		Proposed habitats on site (Onsite mitigation)		Target habitats	distinctiveness	Target habita	at condition		Time till targ			of creation /	Habitat biodiversity value	
T. Note	ode	Phase 1 habitat description	Area (ha)	Distinctiveness	Score	Condition	Score		Time (years)		Difficulty Score			Comment
		Habitat Creation	N		0		Р			Q		R	(N x O x P) / Q / R	
		Built Environment: Buildings/hardstanding	7.72	none	0	Poor	1		3 Years	1.1	Low	1	0.00	Time till target condtiion N/A
	132	Woodland: Mixed plantation	1.61	Low	2	Good	3		32+ years	3	Medium	1.5	2.15	Target good condition for overall net gain.
	3 2	Wetland: Running water	0.29	High	6	Good	3		5 years	1.2	Medium	1.5	2.93	Target good condition for overall net gain.
	312	Grassland: Semi-improved acidic grassland	3.67	Medium-High	5	Good	3		5 years	1.2	Medium	1.5	30.58	Target good condition for overall net gain.
J	12	Grassland: Amenity grassland	3.19	Low	2	Good	3		3 Years	1.1	Low	1	17.40	Target good condition for overall net gain.
		Total	16.48											
		Habitat Enhancement						Existing value					((NxOxP)-S)/Q/R	
								S(=F)					((11/0/1 /-0/10/11	
_														
_														
_														
		Total	0.00								Trading down	correction value	5.00	
		i otal	0.00							ı		on Score (HMS)		
													HBIS = HMS - HIS	
										Ual	itat Biodiversi	ty Impact Score	0.44	Gain
												ersity impact loss		Cum
										Perce	iliage of blodive	rsity impact loss		

	Loss	Gain	Impact
Woodland Habitat	3.42	2.15	-1.27
Grassland Habitat	11.58	47.98	36.40
Wetland Habitat	0.60	2.93	2.33
Other Habitat (including Built Environment)	23.12	0.00	-23.12
Total	38.72	53.06	14.34
<u> </u>		Trading down	-5.23
			9.11

Warwickshire, Coventry & Solihull - Hedge Impact Assessment Calculator

KEY

No action required

Enter value

Drop-down menu

Calculation

Automatic lookup

Result

This sheet calculates the impacts to hedges and lines of trees in and around the site.

These units are not transferrable as compensation for either the Habitat or Connectivity Impact Assessment scores.

Please fill in both tables

Please do not edit the formulae or structure
To condense the form for display hide vacant
rows, do not delete them
If additional rows are required,
or to provide feedback on the calculator
please contact WCC Ecological Services

															Hadaaa 1		Hedgerow Bi	odiversity Valu eatures to be			1
		Existing Hedgerow features on site		Hedgerow dis	stinctiveness				Hedger	ow condition as	ssessments				retained wit	Hedgerow features to be retained with no change within development		d enhanced velopment	Hedgerow features to be <u>lo</u> within development		
T. No	e code	Hedgerow habitat description	Feature length (km)	Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1		Condition Score			Length (km)	Existing value	Length (km)	Existing value	
		Direct Impacts and retained features			Α										С	$A \times B \times C = D$	E	AxBxE=F	G	AxBxG=H	
	n/a	Hedges: Line of trees	0.62	Low	2	Pass	Pass	Pass	Fail	Pass	Fail	Fail	Pass	2	0.62	2.47					Retained line of trees. B1 not applicable. Presence of invasive plant species.
<u> </u>																					
_																					
<u> </u>																					
																					1.
		Tota	0.62	4										Totals	0.62	2.47	0.00	0.00	0.00	0.00) n
																				$\Sigma D + \Sigma F + \Sigma H$	
																		Cito Hodgo	Biodiversity Value		
		Indirect Negative Impacts													Malus of lass fo	rom indirect impa		Site neuge	bloulversity value	2.47	
	efore/aft	Indirect Negative impacts													K x A x B	rom indirect impa	icis				
	impa		к												= Li, Lii	Li - Lii					
	Befo														21, 211	2, - 21					
- 1	Aft																				
—	Befo																				
	Aft																				
	Befo																				
- 1	Aft																				
	Befo																				
1	Aft																				
	Befo																				
- 1	Aft																				
		Tota	0.00													0.00	М			HIS = J + M	
			0.00													3.00		Hedge Impa	ct Score (HIS)	0.00	
																		<u> </u>		0.00	-

		Proposed hedge features on site (Onsite mitigation)		Target hedge di	istinctiveness				Hedgero	w condition as	sessments					Time till tar	get condition	Difficulty res	y of creation / storation		
T. Note	code	Phase 1 habitat description	Lenath (km)	Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score		Time (years)	Score	Difficulty	Score	Linear biodiversity value	Comment
		Hedgerow Creation	N		0											- G	Q		R	(N x O x P) / Q / R	
																			,	70/10	
\vdash																					
\vdash																					
\vdash																					-
\vdash																					
		Total Hedgerow Enhancement	0.00	1											Existing value					((N x O x P) -	
		neugerow Emilancement													Existing value S (= F)					S) /Q/R	
\vdash																					
\vdash																					
\vdash																					-
\vdash																					
																		Ŧ			
		Total	0.00																wn correction value ation Score (HMS		
																		neage Mitig	HBIS = HMS -	0.00	
																			HBIS		
																He	dge Biodiversit Percentage of lir	y Impact Scor	e 0.00	1	
																	Percentage of lir	near impact los	s]	

No action required
Action required
Drop-down menu
Calculation
Automatic lookup
Overall Gain
Overall Loss

Warwickshire Coventry and Solihull - Connectivity Impact Assessment [optional]

KEY	
	No action required
	Enter value
	Drop-down menu
	Calculation
	Automatic lookup
	Result

Connectivity Features
This sheet gives and indication as to whether the development will enhance connectivity thorugh or around the site.

These units are not transferrable as compensation for either the Habitat or Hedgerow Impact Assessment scores.

Please fill in both tables

Please do not edit the formulae or structure
To condense the form for display hide vacant
rows, do not delete them
If additional rows are required,
or to provide feedback on the calculator
please contact WCC Ecological Services

		Result	_					Connectivity Biodiversity Value Connectivity features to be Connectivity features to be lest			lue		1	
						I		Connectivity	features to be	Connectivity	features to be			1
		Existing Connectivity features on site		Connectivity of	listinctiveness	Connectivity	condition	retained wit	th no change	retained ar	nd enhanced	Connectivity	features to be lost	
		•		'		'		within de	velopment	within de	velopment	within d	levelopment	
			Feature											Comment
T. Note	code	Phase 1 habitat description	length (km)	Distinctiveness		Condition	Score	Length (km)	Existing value	Length (km)	Existing value	Length (km)	Laisting value	Comment
		Direct Impacts and retained features			A		В	С	$A \times B \times C = D$	E	AxBxE=F	G	A x B x G = H	
	J26	Ditches: Dry ditch	0.48	Low	2	Poor	1	0.48	0.95					Dry ditch retained. Condition poor due to presence of invasive plant species.
-														
\vdash														
\vdash														
\vdash														
\vdash														
\vdash					1									
oxdot														
\vdash														
-														
		Tota	al 0.48				Total	0.48	0.95	0.00	0.00	0.00	0.00	
		TOE	0.48	2			Total	0.48	0.95	0.00	0.00	0.00	ΣD + ΣF + ΣH	
										Site	Connectivity Bio	ndiversity Value	0.95	
		Indirect Negative Impacts	_					Value of loss fr	om indirect impa		Commodivity Bit	Salversity Value	0.93	
Bef	ore/after	man cot regative impacts						KxAxB						
	impact		K					= Li, Lii	Li - Lii					
	Before													
\Box	After													
	Before													
$\vdash \vdash$	After													
	Before After													
$\vdash \vdash$	After Before													
	After													
$\vdash \vdash$	Before													
	After													
		Tota	0.00)					0.00				CIS = J + M	
										Connec	tivity Impact Sc	ore (CIS)	0.00	
											•		•	_

		Proposed linear features on site (Onsite mitigation)		disting	onnectivity tiveness	Target Connect	-		Time till tarç		Difficulty o	ration	Connectivity
T. Note c	ode	Phase 1 habitat description	Length (km)	Distinctiveness	Score	Condition	Score		Time (years)	Score	Difficulty	Score	biodiversity value
	(Connectivity Creation	N		0		Р			Q		R	(N x O x P) / Q / R
		Tota	0.00	0									
		Connectivity Enhancement	-	_				Existing value S (= F)					((N x O x P) - S) /Q/R
								S(=F)					/Q/R
		Tota	0.00	0							Trading down of	correction value	0.00
										Conne	Trading down o	n Score (CMS)	0.00
													CBIS = CMS - CIS
										Connectiv	ity Biodiversity	Impact Score	0.00
											Percentage of lin		

APPENDIX 2 BIODIVERSITY METRIC 2.0 CALCULATION TOOL

		Habitats and areas		Habitat distinctiv	eness	Habitat cor	ndition	E	cological connectiv	ity		Strategic significance		Suggested action	Ecological baseline
Ref	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	to address habitat losses	Total habitat units
1	Cropland	Cropland - Cereal crops	11.37	Low	2	N/A - Agricultural	1	Low	Unconnected habitat	1	Area/compensatio n not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	22.74
2	Wetland	Wetland - Reedbeds	0.69	High	6	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same habitat required	9.11
3	Sparsely vegetated land	Sparsely vegetated land - Ruderal/Ephemeral	1.86	Low	2	Fairly Poor	1.5	Medium	Moderately connected habitat	1.1	Area/compensatio n not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	6.14
4	Woodland and forest	odland and forest - Lowland mixed deciduous woodl	0.57	High	6	Fairly Poor	18	Low	Unconnected habitat	1	Area/compensatio n not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required	5.13
5	Urban	Urban - Developed land; sealed surface	1.7	V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Area/compensatio n not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00
6	Lakes	Lakes - Ponds (Non- Priority Habitat)	0.02	High	6/	Fairly Poor	1.5	Low	Unconnected habitat	1	Area/compensatio n not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required	0.18
		Total site area ha	16.21	/										Total Site baseline	43.30

			Retention o	ategory biodiversity va	lue			Bespoke compensation agreed for unacceptable	Comments	
Area retained	Area enhanced	Area succession	Baseline units retained	Baseline units enhanced	Baseline units succession	Area lost	Units lost	losses	Assessor comments	Reviewer comments
			0.00	0.00	0.00	11.37	22.74		Condition assessment preset. Lost to development and new habitat proposals.	
			0.00	0.00	0.00	0.69	9.11		Relatively uniform stands of neutral grassland of low species fiversity and recently created from former agricultural	
			0.00	0.00	0.00	1.86	6.14		Tall ruderal habitat of fairly poor diversity (procautionary) with invasives (R.rugosa and I.glandulifera).	
			0.00	0.00	0.00	0.57	5.13		Isolated stand of woodland within Mersey Forest area but insignificant contribution to overall network	
			0.00	0.00	0.00	1.70	0.00			
0.02			0.18	0.00	0.00	0.00	0.00		Standing Water - Eutrophic Retained	
0.02	0.00	0.00	0.18	0.00	0.00	16.19	43.12			

						Post developr	ment/ post inter	vention habita	its							
								Spatial	Quality				Risk Mult	•		
						Eco	logical connecti	vity	Stra	tegic significano	е	Temporal	multiplier	Difficulty	multipliers	
Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Time to target condition/years	Time to target multiplier	Difficulty of creation category	Difficulty of creation multiplier	Habitat units delivered
Urban - Developed land; sealed surface	7.72	V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Area/compens ation not in local strategy/ no local strategy	Low Strategic Significance	1	0	1.000	Low	1	0.00
Woodland and forest - Other woodland; mixe	1.61	Medium	4	Good	3	High	Highly connected habitat	1.15	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	32+	0.320	Medium	0.67	5.24
Grassland - Other neutral grassland	3.67	Medium	4	Good	3	High	Highly connected habitat	1.15	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	15	0.586	Low	1	32.65
Urban - Amenity grassland	3.19	Low	2	Moderate	2	Medium	Moderately connected habitat	1.1	Area/compens ation not in local strategy/ no local strategy	Low Strategic Significance	1	3	0.899	Low	1	12.61
Totals	0.00														Total Units	50.50

		UK Habita	its - existing habit	ats	Habitat distinctiv	veness	Habitat condition		Eco	logical connectivity			Strategic significance			Ecological baseline
Baseli	ne ref	Hedge number	Hedge number Hedgerow type length KM Distinctiveness Score Condition Score Ec		Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Suggested action to address habitat losses	Total hedgerow units				
1	1		Line of Trees	Line of Trees 0.62		2	Moderate	2	Low	Unconnected habitat	1	Area/compensation not in local strategy/ no local strategy		1	Same distinctiveness band or better	2.48
			Total Site length/KM	0.62					•			•			Total Site baseline	2.48

	Ecological baseline			Retention cate	gory biodiversity	/alue		Comn	nents
gested action to ess habitat losses	Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	Assessor comments	Reviewer comments
e distinctiveness and or better	2.48	0.62		2.48	0	0	0		
Site baseline	2.48	0.62	0.00	2.48	0.00	0.00	0.00		

E	xisting river type		Habitat distinc	tiveness	Habitat co	ndition	St	rategic signific	ance	Sugested	Ecological baseline
Baseline ref	River type	length KM	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	action	Total river units
1	Class 4 or 5 - Riv	0.48	Medium 4		Poor	1	Low potential/ action not identified in any plan.		1	Avoid	1.92
2	Class 2 or 3 -Riv	0.57	High	6	Good	5	Low potential/ action not identified in any plan.	Low Strategic Significance	1	Avoid	17.1
	Total site length KM	1.05				Total Site baseline	19.02				

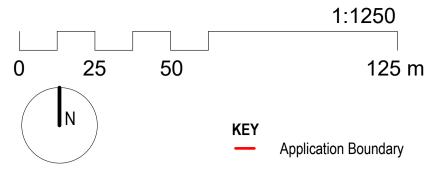
	Retent	Comm	ents				
Length retained	Length enhanced	Units retained	Units enhanced	Length impacted	Units Lost	Assessor Comments	Reviewer comments
0.48		1.92	0	0	0	Dry Ditch	
0.57		17.1	0	0	0	Running Water	
1.05	0.00	19.02	0.00	0.00	0.00		

	Proposed habitats		Habitat distinct	veness	Habitat con	dition		Strategic significance	e	Temporal	multiplier	Difficulty of	Difficulty of	Riparian en	croachment		Com	ments
Baseline ref	River type	Length km	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Time to target condition/years			creation	Extent of encroachment	Multiplier	River units delivered	Assessor comments	Reviewer comments
1	Class 2 or 3 -River Naturalness Assessment	0.27	High	6	Good	5	Low potential/ action not identified in any plan.	Low Strategic Significance	1	10	0.700	High	0.33	4.01 - 6 m	0.85	1.59	Extension of running water	

DRAWINGS





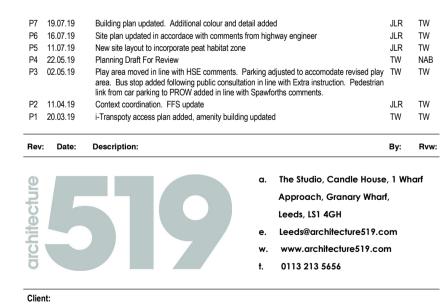


The site boundary is based on Wardell Armstrong drawing no SH11739-006 with amendments discussed with Wardell Armstrong, Shoosmiths, Spawforths and i-transport and approved by Extra.

This red line boundary is to be used for planning purposes only.

Location of HS2 safe guarding zone as Wardell Armstrong drawing SH11739-003.

This drawing is indicative and the plan, elevation, massing and detailing are all subject to change within the bounds of the parameter drawings submitted as part of this application.



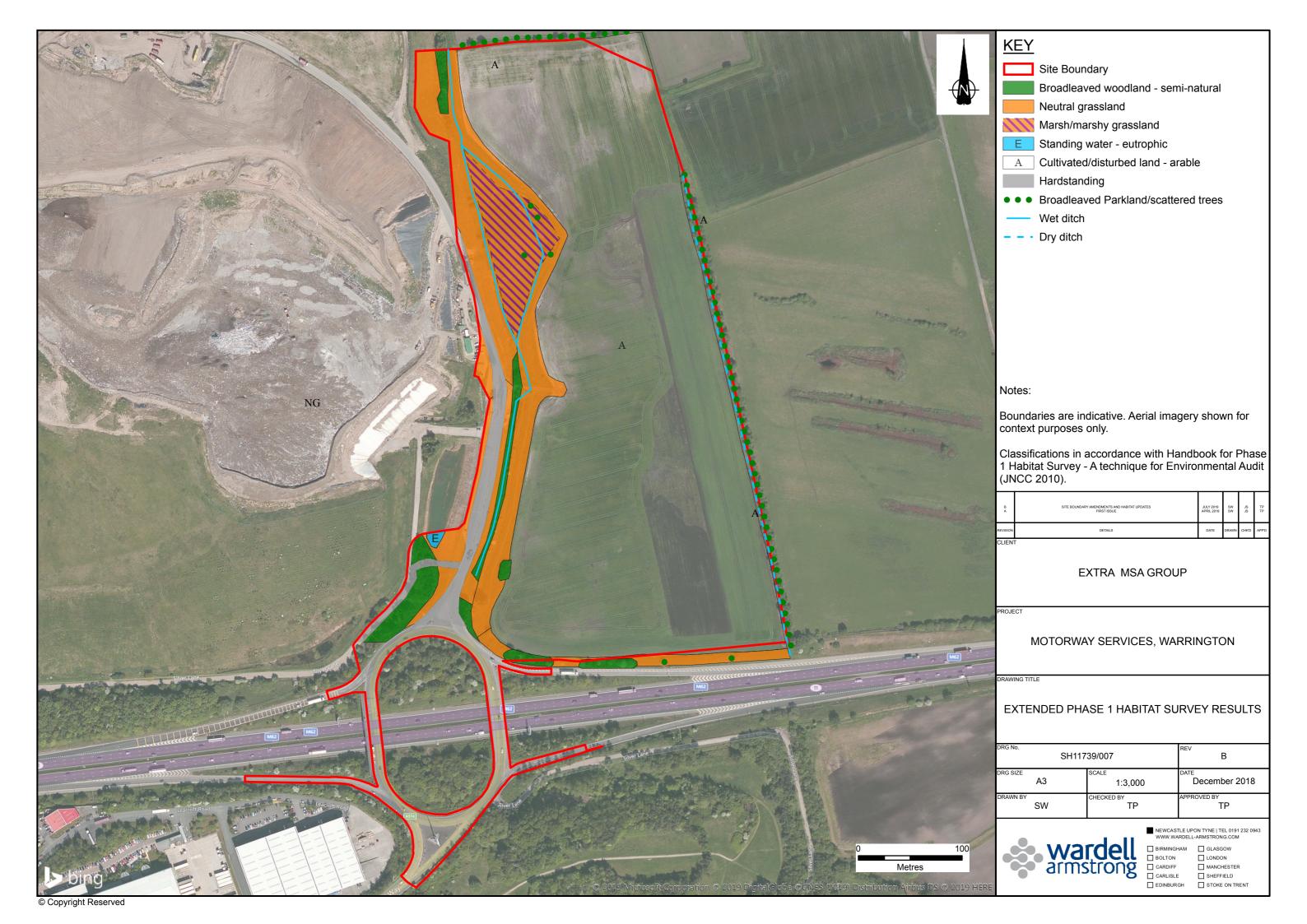


WARRINGTON MOTORWAY SERVICE AREA, J11 M62

Document Re	eference:		
	Projec	ect - Originator - Volume - Level - Type - Role - Number	
	R	MS - 519 - ZZ - XX - DR - A - 0751	
		INDICATIVE SITE PLAN	
Status:	Code	Suitability description	

P7 Preliminary Scale at A1:

01.04.19 1:1250



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