Appendix 1

WKN/K3 DCO - Habitats Regulations Assessment Screening Matrices

Note that Construction below refers to WKN only. Construction effects of the K3 Proposed Development were addressed in the 2010 ES with a conclusion of no significant effect/no adverse effect on integrity.

Operation and Decommissioning are for both WKN Proposed Development and the practical effect of the K3 with any separation noted in the supporting evidence.

Matrix 1 - Screening of Likely Significant Effects: The Swale SPA

Name of Europe an Site				ecial	Protect	tion A	Area																										
EU	UK90	01201	1																														
Code Distanc e to Propos al site	160 i	m																															
Europe	dan habit by i	et loss nage ats us interes pecies	of sed st	l Mai	nange i Habitat nageme Regime	ent	sp all ma	of fut pace to low for anaged ignme	r d	Urba	anisati	on	Air -	qual dust	ity		quali - issio		Hyd Cł	rologio nange:	cal s		Vate ualit		Dist	urbar	nce	n c	trodu or spr of noi nativ nvasi specie	ead n- e ve	con	In- nbina	tion
an site feature s	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	O	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D
Migrator y Winterin g species regularl y occurrin g in internati	×a	x a	× a	x b	× b	x b	x c	x c	x c	x d	x d	× d	√ e	×	✓ e	x g	× h	x g	×	×	×	ý	ý	×	√ k	√ k	× k	×	×	×	× m	× m	× m



onally- importa nt number s over winter – Dark bellied brent geese																																	
Migrator y Winterin g species regularl y occurrin g in internati onally- importa nt number s over winter – Dunlin	×a	×a	×a	x b	x b	× b	×c	× c	× c	× d	x d	×d	√ e	x f	√ e	x g	× h	×g	×	×	×	√ j	ý	×	√ k	√ k	× k	×	×	×	× m	×m	× m
Regula rly support ing over 20,000 waterfo wl over winter	×a	x a	×a	x b	x b	× b	x c	x c	×c	x d	x d	× d	√ e	× f	√ e	x g	x h	x g	×	×	×	✓ j	√ j	×	✓ k	√ k	× k	×	×	×	× m	× m	× m
Diverse assem blage of	×a	x a	x a	x b	x b	x b	x c	x c	x	x d	x d	× d	✓ e	x f	✓ e	x g	x h	x g	x i	×	×	√ j	√ j	x j	√ k	√ k	x k	×	×	×	× m	× m	× m

breedin g birds																	

a.	No likely significant effect from direct loss of habitat on any interest feature. None of the surveys undertaken on site as being used by interest feature species. Therefore, it does not support habitat suitable for any citation species (ref HRAR para 5.21 – 5.28).
b.	Given the distance from the SPA, the DCO application will result in no change to current management regimes of any supporting habitat of The Swale SPA during either the construction of WKN or the operation/demolition of either WKN or K3 (ref HRAR para 5.29 – 5.32).
c.	The site comprises mostly hard standing and bare ground, with ruderal vegetation and dense scrub, it is circa 160 m from The Swale SPA. No loss of land for managed realignment is therefore expected (ref HRAR para 5.33 – 5.35).
d.	The Proposal Site is 160 m from The Swale SPA and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 – 5.40).
e.	Based on studies elsewhere, it is anticipated that the majority of dust generated during construction/demolition would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the Swale SPA site is 160 metres east of the proposal site and therefore outside the area potentially most affected. However, likely significant effects cannot be excluded without further assessment and/or application of mitigation as necessary (ref HRAR para 5.43-5.45)
f.	No dust-generating activities are associated with the operational phase of K3 / WKN. Therefore, no likely significant effect is predicted on any interest feature.
g.	All emissions arising from construction traffic are either below the necessary EQS, the Process Contribution is <1% of the EQS or the habitats are not considered sensitive to changes in air quality. Therefore, no likely significant effect is predicted from traffic emissions during construction (ref HRAR para 5.43-5.56).



h.	No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process contributions are <1% and/or the predicted environmental concentration is less than the Environmental Quality Standard and/or the features are not considered sensitive (ref HRAR para 5.57 – 5.62).
i.	The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of The Swale SPA will occur as a result of the proposed development (ref HRAR para 5.66-5.69).
j.	In the absence of mitigation, likely significant effects on The Swale SPA due to changes in water quality cannot be excluded due to the relatively close proximity of the nearest boundary to the proposed site (ref HRAR para 5.63-5.65)
k.	Because of the relative complexity of these issues, and their ability to have impacts on waterbirds/breeding marsh harrier within several hundred metres depending on the nature of the activity and the receptors, likely significant effects due to disturbance cannot be excluded at The Swale SPA without further assessment and/or application of mitigation as necessary (ref HRAR para 5.70-5.71)
I.	The only non-native invasive species currently known to be in the area, though not on the proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).
m.	No in-combination effects are considered likely due to a lack of overlapping pathways (ref HRAR Section 7).



Matrix 2 – Screening of Likely Significant Effects: The Swale Ramsar

Name of European Site	The	Sw:	ale R	ams	ar																												
EU Code	N/A																																
Distance to Proposal site	160	m																															
	or of l of l us in	ect lo dama habit sed lo tere pecie	age ats by st	Ma	hang Habit Inage Regi	at men	s _i a m	oss of future pace llow f anag lignm	to or ed	Urk	oanis n	atio		qual dust			qual nissio			drolog Chang			Wate qualit		Dis	sturb: e	anc	or o r in	oduc spre of nor native vasiv	ead n- e ve	COI	In- mbina n	atio
European site features	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D
Ramsar Criterion 2 - Nationally rare and scarce plant species	x a	x a	x a	x b	x b	x b	× c	× C	× c	x d	x d	x d	✓ e	× f	√ e	x g	× h	x g	×	×	×	ý	ý	×	√ k	✓ k	× k	×	×	×	× m	× m	× m
Ramsar Criterion 2 - Red Data Book invertebrate s	x a	×a	×a	x b	× b	x b	×c	×c	×c	× d	× d	× d	√ e	× f	> e	x g	× h	x g	×i	×	×	ý	ý	×	√ k	√ k	× k	×	×	×	× m	× m	× m
Ramsar Criterion 5 – Overwinter assemblage	x a	x a	x a	x b	x b	x b	x c	× c	x	x d	x d	x d	✓ e	x f	✓ e	x g	x h	x g	×	×	×	√ j	ý	×	√ k	√ k	× k	×	×	×	x m	x m	× m



of international importance																																	
Ramsar Criterion 6 - Numbers of International Importance during spring/autum n passage Redshank	x a	x a	x a	× b	x b	x b	×	x c	x c	x d	x d	x d		x f	⋄ e	x g	x h	x g	×	×	×	√ j	✓ j	×	√ k	✓ k	× k	×	×	×	x m	× m	× m
Ramsar Criterion 6 - Regularly Wintering in Numbers of International Importance - Dark bellied brent geese	×	x a	x a	× b	x b	x b	x c	x c	x c	x d	x d	x d	✓ e	× f	✓ e	x g	x h	x g	×	×	×	√ j	√ j	×	√ k	√ k	× k	×	×	×	× m	× m	× m
Ramsar Criterion 6 - Regularly Wintering in Numbers of International Importance - Grey Plover	x a	x a	× a	× b	x b	x b	x c	x c	x c	x d	x d	x d	✓ e	x f	✓ e	x g	x h	x g	×	×	×	√ j	✓ j	×	√ k	√ k	x k	×	×	×	× m	× m	× m

a.	No likely significant effect from direct loss of habitat on any interest feature. None of the surveys undertaken on site have identified the site as being used by interest feature species. Therefore, it does not support habitat suitable for any citation species (ref HRAR para 5.21 – 5.28).
b.	Given the distance from the Ramsar, the DCO application will result in no change to current management regimes of any supporting habitat of The Swale Ramsar during either the construction of WKN or the operation/demolition of either WKN or K3 (ref HRAR para 5.29 – 5.32).
C.	The site comprises mostly hard standing and bare ground, with ruderal vegetation and dense scrub, it is circa 160 m from The Swale Ramsar. No loss of land for managed realignment is therefore expected (ref HRAR para 5.33 – 5.35).
d.	The Proposal Site is 160 m from The Swale Ramsar and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 – 5.40).
e.	Based on studies elsewhere, it is anticipated that the majority of dust generated during construction/demolition would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the Swale Ramsar site is 160 metres east of the proposal site and therefore outside the area potentially most affected. However, likely significant effects cannot be excluded without further assessment and/or application of mitigation as necessary (ref HRAR para 5.44).
f.	No dust-generating activities are associated with the operational phase of K3 / WKN. Therefore, no likely significant effect is predicted on any interest feature.
g.	All emissions arising from construction traffic are either below the necessary EQS, the Process Contribution is <1% of the EQS or the habitats are not considered sensitive to changes in air quality. Therefore, no likely significant effect is predicted from traffic emissions during construction (ref HRAR para 5.46-5.47)).
h.	No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process contributions are <1% and/or the predicted environmental concentration is less than the Environmental Quality Standard and/or the features are not considered sensitive (ref HRAR para 5.57 – 5.62).
i.	The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of The Swale Ramsar will occur as a result of the proposed development (ref HRAR para 5.66-5.69).



j.	In the absence of mitigation, likely significant effects on The Swale Ramsar due to changes in water quality cannot be excluded due to the relatively close proximity of the nearest boundary to the proposed site (ref HRAR para 5.63-6.65)
k.	Because of the relative complexity of these issues, and their ability to have impacts on waterbirds/breeding marsh harrier within several hundred metres depending on the nature of the activity and the receptors, likely significant effects due to disturbance cannot be excluded at The Swale Ramsar without further assessment and/or application of mitigation as necessary (ref HRAR para 5.70-5.71).
I.	The only non-native invasive species currently known to be in the area, though not on the proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).
m.	No in-combination effects are considered likely due to a lack of overlapping pathways (ref HRAR Section 7).

Matrix 3 – Screening of Likely Significant Effects: Medway Estuary and Marshes SPA

Name of Europe an Site	Med	dway	Estua	ary a	nd Ma	arshe	s SP	A																									
EU Code	UKS	90120	31																														
Distanc e to Propos al site	2.1	km																															
Europo	da h u ii	ect los mage abitat sed b nteres pecie	of ts by st	H Mar	ange labita nagen Regim	at nent	futu to a ma	oss on the span of	ace for ed	Urb	anisa	tion	Air	quali dust	•		quality			Irolog hange			Vater uality		Dist	turba e	anc	or sp nor in	oducti oread i-nativ asive	of ∕e €	com	n- ibina on	ıti
Europe an site features	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D

Regularl y supporti ng more than 1% of the GB breeding populati on of an Annex 1 species in summer – Avocet	×a	×a	x a	x b	x b	x b	x c	×c	x c	x d	x d	x d	× e	× e	× e	x f	x g	× f	x h	x h	x h	×i	×i	×i	×	x j	×	x k	x k	× k	×	×	×
Regularl y supporti ng more than 1% of the GB breeding populati on of an Annex 1 species in summer – Little tern	×a	×a	×a	× b	x b	x b	x 0	x c	×c	× d	x d	x d	× e	× e	× e	× f	× g	×	× h	× h	× h	×	×	×	×	×	×	× k	× k	× k	×	×	×
Annex 1 Species Regularl y	x a	x a	x a	x b	x b	x b	x	× c	x	x d	x d	x d	× e	× e	× e	x f	x g	x f	x h	x h	× h	×	x i	x i	x j	x j	x j	× k	x k	× k	×	×	×

Winterin g in Number s of Europea n Importa nce - Avocet																																	
Annex 1 Species Regularl y on Passage in Number s of Europea n Importa nce – Grey Plover	× a	× a	×a	x b	x b	× b	×c	×c	×c	× d	× d	× d	× e	× e	× e	× f	x g	× f	× h	× h	× h	×i	×i	×i	×	×	×	× k	× k	× k	x -	×	×
Annex 1 Species Regularl y on Passage in Number s of Europea n Importa nce – Commo n Redsha nk	x a	x a	x a	a x	a x	x	o x	x c	o x	x a	x d	x a	× e	× e	Φ X	× f	& &	x f	x h	x h	x h	- x	- x	×i	× j	×	×j	x k	× k	×k	_ x	_ x	×
Migrator y Species Regularl	x a	x a	x a	x b	x b	x b	x	x	x	x d	x d	x d	× e	× e	× e	x f	x g	x f	x h	x h	x h	×	x i	×	x j	x j	x j	x k	x k	x k	×	×	×

y Winterin g in Number s of Europea n Importa nce - Dark- bellied Brent Goose																																	
Migrator y Species Regularl y Winterin g in Number s of Europea n Importa nce - Shelduc k	× a	x a	x a	× b	x b	x b	×c	×c	×c	x d	x d	x d	x e	x e	x e	× f	x g	× f	x h	× h	× h	×	×i	×	×	× j	×	x k	× k	× k	×	×	×
Migrator y Species Regularl y Winterin g in Number s of Europea n Importa nce - Pintail	×a	× a	×a	× b	x b	x b	x c	x c	x 0	x d	x d	x d	× e	× e	× e	× f	× g	× f	× h	x h	x h	×	×	×i	×	×	×	× k	× k	× k	×	×	×

Migrator y Species Regularl y Winterin g in Number s of Europea n Importa nce - Ringed plover	×a	×a	×a	× b	x b	x b	×c	×c	x c	x d	x d	x d	× e	× e	× e	× f	x g	×f	x h	× h	× h	×	×	×	×	×	×	× k	× k	× k	×	×	×
Migrator y Species Regularl y Winterin g in Number s of Europea n Importa nce - Knot	×a	x a	x a	× b	x b	x b	x c	×c	x c	x d	x d	x d	× e	x e	x e	× f	x g	× f	× h	x h	x h	×	×i	×	×	×	×	x k	x k	× k	×	×	×
Migrator y Species Regularl y Winterin g in Number s of Europea n Importa	×	x a	×a	× b	× b	x b	× c	×	× c	x d	x d	x d	x e	× e	x e	× f	x g	×	× h	× h	× h	×	x i	×	x j	×	×	× k	× k	× k	×	×	×

nce - Dunlin																																	
Regularl y supports in winter a diverse assembl age of winterin g species	x a	x a	x a	x b	× b	x b	x c	×c	× c	x d	× d	× d	× e	× e	× e	× f	x g	× f	× h	× h	× h	×	×	×	×	× j	×	× k	× k	× k	× -	× -	×
Regularl y supports over 20,000 waterfo wl	× a	x a	x a	x b	x b	x b	x	× c	x c	x d	x d	x d	× e	× e	× e	× f	x g	× f	x h	x h	x h	×	×	×	x j	× j	×	× k	× k	× k	×	×	×
Diverse assembl age of breeding migrator y waterfo wl	x a	x a	x a	x b	x b	x b	x c	× c	x c	x d	x d	x d	x e	x e	x e	× f	x g	× f	x h	x h	x h	×	×	×	x j	× j	×	× k	× k	× k	×	×	×

a.	No likely significant effect from direct loss of habitat on any interest feature. None of the surveys undertaken on site have identified the site as being used by interest feature species. Therefore, it does not support habitat suitable for any citation species (ref HRAR para 5.21 – 5.28).
b.	Given the distance from the SPA, the DCO application will result in no change to current management regimes of any supporting habitat of the SPA during either the construction of WKN or the operation/demolition of either WKN or K3 (ref HRAR para 5.29 – 5.32)).
C.	The site is already developed land and >2 km from the Medway Estuary & Marshes SPA. No loss of land for managed realignment is therefore expected (ref HRAR para 5.33 – 5.35).
d.	The Proposal Site is 2.1 km from the Medway Estuary and Marshes SPA and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 – 5.40).
e.	Based on studies elsewhere, it is anticipated that the majority of dust generated would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the SPA site is over 2 km to the north of the proposal site and therefore outside the area potentially affected by any dust. Therefore, no likely significant effect is predicted on any interest feature (ref HRAR para 5.43 – 5.45)
f.	All emissions arising from construction traffic are either below the necessary EQS, the Process Contribution is <1% of the EQS or the habitats are not considered sensitive to changes in air quality. Therefore, no likely significant effect is predicted from traffic emissions during construction (ref HRAR para 5.46-5.57).
g.	No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process contributions are <1% and/or the predicted environmental concentration is less than the Environmental Quality Standard (ref HRAR para 5.57 – 5.62).
h.	The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of the Medway Estuary & Marshes SPA or area which supports a SPA species will occur as a result of the proposed development (ref HRAR para 5.66- 5.69).
i.	Given the distance between the proposal site and the SPA, no changes to water quality are anticipated (ref HRAR para 5.63-5.65).
j.	Given the distance between the proposal site and the SPA, no likely significant effect on any interest feature is predicted from disturbance (ref HRAR para 5.70-5.71)).
k.	The only non-native invasive species currently known to be in the area, though not on the Proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).
I.	Given the distance between the proposal site and the Ramsar, no in-combination effects are anticipated (ref HRAR Chapter 7).



Matrix 4 – Screening of Likely Significant Effects: Medway Estuary and Marshes Ramsar

Name of Europea n Site	Med	dway	Estu	ary a	nd Ma	arshe	s Ra	msar	,																								
EU Code	N/A																																
Distance to Proposal site	2.1	km																															
	da h u ii	ect los mage abita sed b nteres pecie	e of ts by st	H Mar	nange Habita nager Regim	at nent	futu to m	oss on the contract of the con	ace for ed	Urb	anisa	ition	Air	quali dust			qualit nissio		Hyd C	drolog hang	jical es		Vate ualit		Dis	turba e	anc	spi n in	rodu on or read non- ative vasiv	of e /e	COI	In- mbin on	ati
Europea n site features	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D
Ramsar Criterion 2 - Nationall y rare and scarce plant species	x a	x a	x a	x b	x b	x b	×	×	×	x d	× d	× d	× e	× e	× e	× f	x g	× f	x h	× h	× h	×	×	×	×	×	×	x k	× k	× k	×	×	×
Ramsar Criterion 2 - Red Data Book invertebr ates	x a	×a	× a	× b	× b	× b	×	×	x c	× d	× d	× d	× e	× e	× e	×	x g	× f	× h	× h	× h	×	×i	×	×	×	×	× k	× k	× k	× -	×	× -



Ramsar Criterion 5 - Overwint er assembla ge of internatio nal importan ce	x a	x a	x a	x b	x b	x b	x c	x c	×	x d	x d	x d	× e	× e	× e	× f	x g	× f	x h	× h	× h	×i	×	×	×	×	×	× k	× k	× k	×	×	×
Ramsar Criterion 6 - Regularly on Passage in Numbers of Internatio nal Importanc e - Grey Plover	×a	×a	x a	x b	x b	x b	o x	x 0	x c	x a	x d	x d	× e	× e	× e	× f	ω x	× f	x h	x h	x h	× -	- x	- ×	×	×j	×	× k	× k	× k	×	×	×
Ramsar Criterion 6 - Species Regularly on Passage in Numbers of Internatio nal Importanc e – Common Redshan k	×a	×a	x a	x b	x b	x b	x c	x c	×c	x d	x d	x d	× e	× e	× e	×	x	×f	x h	× h	× h	×i	×i	×i	×	×	×	× k	× k	× k	×	×	×



Ramsar Criterion 6 - Regularly Wintering in Numbers of Internatio nal Importanc e - Dark- bellied Brent Goose	×a	×a	×a	× b	× b	x b	x c	x	x c	× d	× d	× d	× e	× e	× e	× f	x g	×f	x h	× h	× h	×	×	×	×	×	×	×k	× k	× k	×	×	×
Ramsar Criterion 6 - Regularly Wintering in Numbers of Internatio nal Importanc e - Shelduck	x a	x a	x a	× b	× b	x b	× c	× c	× c	× d	× d	x d	× e	× e	× e	× f	x g	x f	x h	× h	× h	×i	×	×	× j	×	×	x k	× k	× k	×	×	×
Ramsar Criterion 6 - Regularly Wintering in Numbers of Internatio nal Importanc e – Pintail	×a	x a	x a	× b	× b	д х	x c	x c	×c	× d	× d	× d	× e	× e	× e	x f	& &	× f	x h	x h	x h	× i	- x	- x	r. x	r. x	т. х	× k	× k	× k	×	×	×

Ramsar Criterion 6 - Regularly Wintering in Numbers of Internatio nal Importanc e - Ringed plover	×a	×a	×a	x b	× b	x b	x c	x c	x c	× d	x d	x d	× e	× e	× e	× f	x g	× f	× h	× h	× h	×i	×	×	×	×	×	× k	× k	× k	×	×	×
Ramsar Criterion 6 - Regularly Wintering in Numbers of Internatio nal Importanc e - Knot	x a	x a	x a	x b	x b	x b	x c	x c	x c	x d	x d	x d	x e	x e	× e	× f	x g	x f	x h	x h	x h	×	×	×	×	× j	×	× k	× k	× k	×	×	×
Ramsar Criterion 6 - Regularly Wintering in Numbers of Internatio nal Importanc e - Dunlin	x a	x a	×a	x b	x b	x b	x c	x c	x c	× d	x d	× d	x e	x e	x e	× f	x g	× f	x h	× h	× h	×	×	×	×	×	×	× k	× k	× k	×	×	×

 a. No likely significant effect from direct loss of habitat on any interest feature. None of the surveys undertaken on site have identified the site as being used by interest feature species. Therefore, it does not support habitat suitable for any citation species (ref HRAR para 5.21 – 5.28). b. Given the distance from the Ramsar, the DCO application will result in no change to current management regimes of any supporting habitat of the Ramsar during either the construction of WKN or the operation/demolition of either WKN or K3 (ref HRAR para 5.29 – 5.32). c. The site is already developed land and >2 km from the Medway Estuary & Marshes Ramsar. No loss of land for managed realignment is therefore expected (ref HRAR para 5.35 – 5.45). d. The Proposal Site is 2.1 km from the Medway Estuary and Marshes Ramsar and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 – 5.40). e. Based on studies elsewhere, it is anticipated that the majority of dust generated would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the Ramsar site is over 2 km to the north of the proposal site and therefore outside the area potentially affected by any dust. Therefore, no likely significant effect is predicted on any interest feature (ref HRAR para 5.46 – 5.47). f. All emissions arising from construction traffic are either below the necessary EQS, the Process Contribution is <1% of the EQS or the habitats are not considered sensitive to changes in air quality. Therefore, no likely significant effect is predicted from traffic emissions during construction (ref HRAR) para 5.46–5.47). g. No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process c		
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 j. Given the distance between the proposal site and the Ramsar, no likely significant effect on any interest feature is predicted from disturbance (ref HRAR para 5.70-5.71). k. The only non-native invasive species currently known to be in the area, though not on the Proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73). 	h.	drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of the Medway Estuary & Marshes Ramsar or area which supports a Ramsar species will occur as a result of the
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material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).		
I. Given the distance between the proposal site and the Ramsar, no in-combination effects are anticipated (ref HRAR Chapter 7).		
	j.	HRAR para 5.70-5.71). The only non-native invasive species currently known to be in the area, though not on the Proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely



Matrix 5 - Screening of Likely Significant Effects: Thames Estuary and Marshes SPA

Name of Europea n Site	Tha	mes	Estua	ary ar	nd Ma	arshe	s SPA	4																									
EU Code	UKS	90120	21																														
Distanc e to Proposa I site	8.7	km																															
	da hab by	ect los mage itats u interes pecie	of used est	H Mar	nange Habita nagen Regim	at nent	futu to : m	oss on the spansor of	ace for ed	Urb	anisa	tion	Air	qualit dust	y –		qualit nissio			drolog hang			Vate ualit <u>y</u>		Dis	turba e	anc	spi n in	rodu on or read non- ative vasiv	of e e		In- mbin on	ati
Europea n site features	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D
Annex 1 Species Regularl y Winterin g in Numbers of Europea n Importan ce – Avocet	×	× a	×	× b	× b	× b	x c	x c	x c	x d	x d	× d	× e	× e	× e	× f	x g	× f	× h	× h	× h	×i	×i	×	×	×	×	× k	× k	× k	×	×	×



Annex 1 Species Regularl y Winterin g in Numbers of Europea n Importan ce – Hen harrier	x a	x a	x a	x b	x b	× b	× c	×c	×c	x d	× d	× d	× e	× e	x e	× f	x g	× f	× h	× h	× h	×i	×	×	×	×	×	× k	× k	× k	×	×	×
Migrator y species regularly occurrin g on passage - Ringed plover	x a	x a	x a	x b	x b	x b	x c	x c	x c	x d	× d	x d	× e	x e	x e	× f	x g	× f	x h	x h	x h	×	×	×	x j	×	×	× k	x k	× k	×	×	×
Migrator y Species Regularl y Winterin g in Numbers of Europea n Importan ce - Dunlin	× a	× a	x a	д х	x p	× b	x 0	× c	x 0	x d	× d	× d	× e	Ф х	Ф х	× f	x g	× f	x h	x h	× h	× -	- ×	x -	×	×	×	× k	× k	× k	×	×	×
Migrator y Species Regularl y Winterin g in	x a	x a	x a	x b	x b	x b	x	x c	x c	x d	x d	x d	× e	x e	x e	× f	x g	x f	x h	x h	x h	×	×	×	×	×	x j	× k	× k	× k	×	×	×

Numbers of Europea n Importan ce - Knot																																	
Migrator y Species Regularl y Winterin g in Numbers of Europea n Importan ce – Black- tailed godwit	×a	×a	×a	×b	×b	× b	× o	x 0	×c	× d	×d	× d	× e	× •	× •	× f	×g	x f	× h	×h	× h	×	×	×i	×	×	×	× k	× k	× k	×	×	×
Migrator y Species Regularl y Winterin g in Numbers of Europea n Importan ce - Redsha nk	×a	x a	×a	x b	x b	x b	x c	x c	x c	x d	x d	x d	× e	x e	× e	× f	x g	× f	x h	x h	x h	×	×	×	×	×	×	× k	x k	× k	×	×	×
Migrator y Species Regularl y Winterin	x a	x a	x a	x b	x b	x b	x c	x c	x c	x d	x d	x d	× e	x e	x e	x f	x g	x f	x h	x h	x h	× i	×	×	×	x j	×	× k	x k	× k	×	×	×

g in Numbers of Europea n Importan ce - Grey plover																																	
Assembl age regularly supporti ng over 20,000 waterfow	x a	x a	x a	x b	x b	x b	x c	x 0	x c	x d	x d	x d	× e	× e	x e	x f	x g	x f	x h	x h	x h	×	×	×	×	×	×	× k	× k	× k	×	×	×

a.	No likely significant effect from direct loss of habitat on any interest feature. None of the surveys undertaken on site have identified the site as
	being used by interest feature species. Therefore, it does not support habitat suitable for any citation species (ref HRAR para ref HRAR para 5.21 –
	5.28).

- **b.** Given the distance from the SPA, the DCO application will result in no change to current management regimes of any supporting habitat of the SPA during either the construction or operation of the plant (ref HRAR para 5.29 5.32).
- c. The site is already surrounded by developed land and 8.7 km from the Thames Estuary & Marshes SPA. No loss of land for managed realignment is therefore expected (ref HRAR para 5.33 5.35).
- d. The proposal site is 8.7 km from the Thames Estuary and Marshes SPA and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 5.40).
- e. Based on studies elsewhere, it is anticipated that the majority of dust generated during construction would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the SPA site is 8.7 km to the north east of the proposal site and therefore outside the area potentially affected by any dust. Therefore, no likely significant effect is predicted on any interest feature (ref HRAR para 5.43 5.45)..
- **f.** Given the distance to the designated site (8.7 km), no effect from construction traffic emissions are predicted (ref HRAR para 5.46 5.47).
- g. No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process contributions are <1% and/or the predicted environmental concentration is less than the Environmental Quality Standard (ref HRAR para 5.57 5.62).



h.	The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of the SPA or area which supports a SPA species will occur as a result of the proposed development (ref HRAR para 5.66-5.69).
i.	Given the distance between the proposal site and the SPA, no changes to water quality are anticipated (ref HRAR para 5.63-5.65).
j.	Given the distance between the proposal site and the SPA, no likely significant effect on any interest feature is predicted from disturbance (ref HRAR para 5.70-5.71).
k.	The only non-native invasive species currently known to be in the area, though not on the Proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).
I.	Given the distance between the proposal site and the SPA, no in-combination effects are anticipated (ref HRAR Chapter 7).

Matrix 6 – Screening of Likely Significant Effects: Thames Estuary and Marshes Ramsar

Name of Europea n Site EU Code	N/A		Estua	ary ar	nd Ma	rshe	s Rar	nsar																									
Distance to Proposal site	8.7	km																															
_	da h u ir	ect los mage abitat sed b nteres pecie	of s y st	H Mar	ange labita lagem legim	t nent	futu to a ma	oss on the second secon	ace for ed	Urb	anisa	tion	Air	quali dust	•		qualit issio	-		drolog hange			Vater uality		Dist	turba e	anc	spi n in	rodure on or read non- native vasive	of e	con	In- nbin on	ati
Europea n site features	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D



Ramsar Criterion 2 - Nationall y rare and scarce plant species	x a	x a	x a	x b	x b	x b	x c	x c	x c	x d	x d	x d	× e	x e	x e	x f	x g	× f	x h	x h	x h	×	×	×	x j	x j	×	× k	× k	× k	×	×	×
Ramsar Criterion 2 - Red Data Book invertebr ates	x a	x a	x a	x b	× b	× b	x c	x c	x c	x d	x d	x d	× e	x e	× e	x f	x g	x f	× h	x h	× h	×	×	x i	× j	×	x j	× k	× k	× k	×	×	×
Ramsar Criterion 5 – Assembl age of internatio nal importan ce	x a	x a	x a	x b	x b	x b	× c	×	x c	x d	x d	x d	x e	x e	x e	x f	x g	× f	x h	x h	x h	×	×	×	x j	x j	×	× k	× k	× k	×	×	×
Ramsar Criterion 6 - Species Regularly occurring on passage in Numbers of Internatio nal Importanc e - Black- tailed godwit	×a	x a	x a	x b	x b	x b	×c	×c	×c	x d	x d	× d	× e	× e	× e	×	x g	×	× h	× h	× h	×	×	×	×	×	×	× k	×k	×k	×	×	×

Ramsar Criterion 6 - Species Regularly Wintering in Numbers of Internatio nal Importanc e - Knot	× a	×a	x a	× b	× b	× b	x c	× c	× c	× d	x d	x d	× e	× e	× e	× f	x g	× f	x h	x h	x h	×	×	×	×	×	×	× k	× k	× k	×	×	×
Ramsar Criterion 6 - Species Regularly Wintering in Numbers of Internatio nal Importanc e - Dunlin	× a	x a	× a	× b	x b	x b	x c	×c	× c	x d	x d	x d	× e	× e	× e	× f	x g	× f	x h	x h	x h	×i	×i	×i	×	×	×	× k	x k	× k	×	×	×

- a. No likely significant effect from direct loss of habitat on any interest feature. None of the surveys undertaken on site have identified the site as being used by interest feature species. Therefore, it does not support habitat suitable for any citation species (ref HRAR para ref HRAR para 5.21 5.28).
- **b.** Given the distance from the Ramsar, the DCO application will result in no change to current management regimes of any supporting habitat of the Ramsar during construction of WKN, or the operation/demolition of K3 or WKN (ref HRAR para 5.29 5.32).
- c. The site is already surrounded by developed land and 8.7 km from the Thames Estuary & Marshes Ramsar. No loss of land for managed realignment is therefore expected (ref HRAR para 5.33-5.35).



	The proposal site is 8.7 km from the Thames Estuary and Marshes Ramar and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 – 5.40).
	Based on studies elsewhere, it is anticipated that the majority of dust generated during construction would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the Ramsar site is 8.7 km to the north east of the proposal site and therefore outside the area potentially affected by any dust. Therefore, no likely significant effect is predicted on any interest feature (ref HRAR para 5.43 – 5.45)
f.	Given the distance to the designated site (8.7 km), no effect from construction traffic emissions are predicted (ref HRAR para 5.46-5.47).
	No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process contributions are <1% and/or the predicted environmental concentration is less than the Environmental Quality Standard (ref HRAR para 5.57 – 5.62).
	The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of the Ramsar or area which supports a Ramsar species will occur as a result of the proposed development (ref HRAR para 5.66- 5.69).
i.	Given the distance between the proposal site and the Ramsar, no changes to water quality are anticipated (ref HRAR para 5.63-5.65).
	Given the distance between the proposal site and the Ramsar, no likely significant effect on any interest feature is predicted from disturbance (ref HRAR para 5.70-5.71).
	The only non-native invasive species currently known to be in the area, though not on the Proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).
I.	Given the distance between the proposal site and the Ramsar, no in-combination effects are anticipated (ref HRAR Chapter 7).

Matrix 7 – Screening of Likely Significant Effects: Outer Thames Estuary SPA

Name	Outer Thames Estuary SPA
of	
Europe	
an Site	
EU	UK9020309
Code	



Distan ce to Propos al site	>9 k	ĸm																															
Europe	da hab by	ect los mage itats u intere pecie	of sed est	H Mar	nange Habita nagen Regim	ıt nent	futu to m	oss o lre sp allow anago llignm	ace for ed	Urb	anisa	tion	Air	quali dust	ty -		quali nissio	-		drolog hange			Wate _l ualit		Dis	turba e	anc	spi n in	rodu on or read non- native vasiv	of e e	cor	In- mbin no	ati
an site feature s	С	0	D	C	0	D	С	0	D	O	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	C	0	D	С	0	D
Red throate d diver	x a	x a	x a	x b	x b	x b	x	X C	x	x d	x d	x d	x e	× e	× e	× f	x g	x f	x h	x h	x h	× i	× i	×	x j	x j	× j	x k	x k	x k	×	×	×
Comm on tern	x a	x a	x a	x	x b	x	x	x	x c	x d	x d	x d	× e	× e	× e	x f	x g	x f	x h	x h	x h	×	× i	×	x j	x j	x j	x k	x k	x k	×	_ x	_ x
Little tern	x a	x a	x a	x b	x b	x b	x C	x	x	x d	x d	x d	× e	× e	× e	x f	x g	× f	× h	x h	× h	×	×	×	× j	× j	x j	x k	x k	x k	×	x	×

a.	No likely significant effect from direct loss of habitat on any interest feature. None of the surveys undertaken on site have identified the site as being used by interest feature species. Therefore, it does not support habitat suitable for any citation species (ref HRAR para ref HRAR para 5.21 – 5.28).
b.	Given the distance from the SPA, the DCO application will result in no change to current management regimes of any supporting habitat of the SPA during either the construction or operation of the plant (ref HRAR para 5.29 – 5.32).
c.	The site is already surrounded by developed land and 9 km from the Thames Estuary & Marshes SPA. No loss of land for managed realignment is therefore expected (ref HRAR para 5.33 – 5.35).
d.	The proposal site is 9 km from the Thames Estuary and Marshes SPA and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 – 5.40).
e.	Based on studies elsewhere, it is anticipated that the majority of dust generated during construction would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the SPA site is 9 km to the north east of the proposal site and therefore outside the area potentially affected by any dust. Therefore, no likely significant effect is predicted on any interest feature (ref HRAR para 5.43 – 5.45)
f.	Given the distance to the designated site (9 km), no effect from construction traffic emissions are predicted (ref HRAR para 5.46-5.47).
g.	No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process contributions are <1% and/or the predicted environmental concentration is less than the Environmental Quality Standard (ref HRAR para 5.57 – 5.62).
h.	The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of the SPA or area which supports a SPA species will occur as a result of the proposed development (ref HRAR para 5.66-5.69).
i.	Given the distance between the proposal site and the SPA, no changes to water quality are anticipated (ref HRAR para 5.63-5.65).
j.	Given the distance between the proposal site and the SPA, no likely significant effect on any interest feature is predicted from disturbance (ref HRAR para 5.70-5.71).
k.	The only non-native invasive species currently known to be in the area, though not on the Proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).
I.	Given the distance between the proposal site and the SPA, no in-combination effects are anticipated (ref HRAR Chapter 7).



Matrix 8 - Screening of Likely Significant Effects: Queendown Warren SAC

Name of Europe an Site	Que	endo	wn V	Varre	n SA	С																											
EU Code	UKO	0128	33	_	_						_						_		_		_	_				_							
Distanc e to Propos al site	>9 F	ĸm																															
	da hab by	ect los mage itats u intere pecie	of used est	H Mar	nange Habita nager Regim	at nent	futu to m	oss on the contract of the con	ace for ed	Urb	anisa	tion	Air	quali dust			quali nissio		Hyd C	drolog hange	ical es		Vater uality		Dis	turba e	anc	spi n in	rodu on or read non- ative vasiv	of e		In mbin on	ati
Europe an site features	С	0	D	C	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	C	0	D	C	0	D	С	0	D	С	0	D
emi- natural dry grasslan ds and scrublan d facies on calcareo us substrat es (Festuco - Brometa lia) (* importan t orchid sites)	×a	×a	x a	x b	× b	x b	x c	× c	x c	x d	× d	× d	× e	× e	× e	x f	× g	× f	× h	× h	× h	x -	x i	×i	×	×	×	× k	x k	x k	×	×	×



a.	No likely significant effect from direct loss of habitat on any interest feature given the distance to the SAC (ref HRAR para ref HRAR para 5.21 – 5.28).
b.	Given the distance from the SAC, the DCO application will result in no change to current management regimes of any supporting habitat of the SAC during either the construction or operation of the plant (ref HRAR para 5.29 – 5.32).
c.	The site is already surrounded by developed land and 9 km from SAC. No loss of land for managed realignment is therefore expected (ref HRAR para 5.33 – 5.35).
d.	The proposal site is 9 km from the SAC and set against a backdrop of existing industrial buildings. No likely significant effect on any interest feature from increased urbanisation is therefore predicted (ref HRAR para 5.36 – 5.40).
е.	Based on studies elsewhere, it is anticipated that the majority of dust generated during construction would be deposited in the area immediately surrounding the source (up to 50 metres away) and that no change in level of exposure is expected beyond 300 metres from the site. The boundary of the SAC site is 9 km to the north east of the proposal site and therefore outside the area potentially affected by any dust. Therefore, no likely significant effect is predicted on any interest feature (ref HRAR para 5.43 – 5.45).
f.	Given the distance to the designated site (9 km), no effect from construction traffic emissions are predicted (ref HRAR para 5.46-5.47).
g.	No likely significant effects from operational emissions are predicted on any interest feature or supporting habitat as all process contributions are <1% and/or the predicted environmental concentration is less than the Environmental Quality Standard (ref HRAR para 5.57 – 5.62).
h.	The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the FGT area) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching). The clean water will be stored in the lagoon and used to top up the 'dirty' water tank. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale. Therefore, no hydrological changes to terrestrial areas of the SPA or area which supports a SPA species will occur as a result of the proposed development (ref HRAR para 5.66-5.69).
i.	Given the distance between the proposal site and the SAC, no changes to water quality are anticipated (ref HRAR para 5.63-5.65).
j.	Given the distance between the proposal site and the SAC, no likely significant effect on any interest feature is predicted from disturbance (ref HRAR para 5.70-5.71).
k.	The only non-native invasive species currently known to be in the area, though not on the Proposal site, is Japanese Knotweed. No importation of material is required to build WKN and no final planting is proposed that could inadvertently import non-native invasive to site, as such no likely significant effect is predicted (ref HRAR para 5.72 – 5.73).
I.	Given the distance between the proposal site and the SAC, no in-combination effects are anticipated (ref HRAR Chapter 7).



Appendix 2:

WKN – Habitats Regulations Assessment Integrity Matrices

Matrix 9 - Integrity matrices: The Swale SPA

Name of European Site	The S	The Swale SPA																
EU Code	UK90	UK9012011																
Distance to Proposal site	160 m	160 m																
	Air Quality - dust			Water quality			Disturbance – Activity			Disturbance – Recreation			Disturbance – Noise			Disturbance - Lighting		
European site features	С	0	D	С	0	D	С	0	D	C	0	D	С	0	D	С	0	D
Migratory Wintering species regularly occurring in internationally- important numbers over winter – Dark bellied brent geese	x a	x a	x a	x b	x b	× b	x c	x c	x c	x d	× d	x d	x e	×	x e	× g	× g	x g
Migratory Wintering species regularly occurring in internationally- important	x a	x a	× a	x b	x b	× b	x c	x c	x c	x d	x d	x d	× e	× f	x e	x g	x g	x g



numbers over winter – Dunlin																		
Regularly supporting over 20,000 waterfowl over winter	x a	x a	x a	x b	x b	x b	x c	x c	x c	x d	x d	x d	× e	× f	x e	x g	x g	x g
Diverse assemblage of breeding birds	x a	x a	x a	д х	x b	x b	x c	x c	x c	x d	x d	x d	× e	x f	x e	x g	x g	x g

a. Whilst studies suggest most dust from construction of the proposed project would be deposited in the area immediately surrounding the source (up to 50 m, which is outside the boundary of the Swale SPA), and that no change in level of exposure is expected beyond 300 m from the site, this does mean that some impacts are possible within the Swale SPA boundary, which is located 160 m to the north east of the Proposal site.

To ensure compliance with relevant standards and guidelines relating to dust and airborne particulate matter, various techniques not relating to the avoidance or reduction in effect on a European site will be implemented during the construction phase. This will ensure that dust is managed in line with good practice such that a conclusion of no adverse effect on integrity, once mitigation is incorporated, can be reached (ref HRAR – para 6.5-6.7). It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the SPA.

A site-wide surface water pollution prevention system will be developed to prevent the discharge of any contaminated surface water from the site. The overall philosophy for the design of the surface water pollution prevention system for the site is to manage surface water sustainably and to ensure that discharged waters do not constitute a pollution risk.

Therefore, a conclusion of no adverse effect on integrity can be reached, once this mitigation is included (ref HRAR – 6.8-6.14). It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the SPA.



c.	It is considered there is a limited potential for disturbance to waterbirds to be caused by activity associated with the Proposal when account is taken of the fact that, given the distance to The Swale from the proposal site and existing, intervening buildings. To ensure no visual disturbance On this basis, a conclusion of no adverse effect on integrity can be reached (ref HRAR – 6.22-6.148).
d.	The potential for disturbance to SPA Citation species from recreational activities by either construction or subsequent operational/demolition staff is considered low. Whilst there is access to the Saxon Shore Way from the wider Kemsley Paper Mill, currently very little or no use is made of this by Kemsley Mill staff. It is possible that there will be increased recreational usage made of the Saxon Shore Way during both construction/demolition of the site, as Sittingbourne is within potential travel distance over lunch break. However, it should be borne in mind that Milton Creek is outside the SPA and that dogs will not be permitted on site. It is anticipated that few if any construction, operational or demolition staff will access the Swale SPA. On this basis, no adverse effect on integrity is predicted (ref HRAR – 6.17 – 6.18).
e.	An assessment of the potential for each of the interest feature/intertidal assemblage bird species to be susceptible to noise disturbance, based on survey data undertaken across the intertidal area between 2009 and 2018 has been undertaken (ref HRAR - 6.22 – 6.148). This has concluded that, subject to the implementation of suitable avoidance measures (ref HRAR – 6.147-148), no adverse effect on integrity with respect to the interest feature/intertidal assemblage is predicted. It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the SPA.
f.	Under normal operating conditions, the Proposed Development will produce a low hum, rather than any loud, sudden noises that might elicit a disturbance response from nearby interest-feature birds using the intertidal areas of The Swale. It will furthermore not result in noise levels of greater than 55 dBL _{Amax} within the SPA. On this basis, no adverse effect on integrity is predicted (ref HRAR – para 6.24).
g.	Given the distance of the proposed development to the SPA, and that there is further development between the Proposal Site and designated site, light from the proposed development does not have the potential to illuminate either the terrestrial or inter-tidal habitats above that which it is currently. All lighting will be designed as per best practice standards to ensure that no additional light spill above the current situation would occur. On this basis, no adverse effect on integrity is predicted (ref HRAR – 6.19 – 6.21, DCO Requirement 22). It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the SPA.

Matrix 9 – Integrity matrices: The Swale Ramsar

Name of European Site	The Swale Ramsar
EU Code	N/A
Distance to Proposal site	160 m



	Air Quality - dust			Water quality			Disturbance – Activity			Disturbance – Recreation			Disturbance – Noise			Disturbance - Lighting		
European site features	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D	С	0	D
Ramsar Criterion 2 - Nationally rare and scarce plant species	× a	× a	x a	x b	x b	× b	× c	× c	×	x d	× d	× d	× e	× f	x e	× g	× g	x g
Ramsar Criterion 2 - Red Data Book invertebrates	x a	x a	× a	x b	x b	× b	x c	x c	× c	x d	× d	× d	× e	× f	× e	× g	x g	x g
Ramsar Criterion 5 – Overwinter assemblage of international importance	x a	x a	× a	x b	x b	x b	x c	x c	x c	x d	x d	x d	x e	× f	x e	x g	x g	x g
Ramsar Criterion 6 - Regularly Wintering in Numbers of International Importance Redshank	x a	x a	× a	x b	x b	x b	x c	× c	×	x d	x d	x d	× e	×	× e	x g	x g	x g
Ramsar Criterion 6 - Regularly Wintering in Numbers of International	x a	x a	× a	x b	x b	x b	x c	x c	x c	x d	x d	x d	× e	× f	x e	x g	x g	x g

Importance - Dark bellied brent geese																		
Ramsar Criterion 6 - Regularly Wintering in Numbers of International Importance - Grey Ployer	× a	x a	× a	× b	× b	x b	x c	× c	× c	x d	× d	x d	× e	× f	× e	x g	x g	x g

a.	Whilst studies suggest most dust from construction of the proposed project would be deposited in the area immediately surrounding the source (up to 50 m, which is outside the boundary of the Swale Ramsar), and that no change in level of exposure is expected beyond 300 m from the site, this does mean that some impacts are possible within the Swale Ramsar boundary, which is located 160 m to the north east of the Proposal site.
	To ensure compliance with relevant standards and guidelines relating to dust and airborne particulate matter, various techniques not relating to the avoidance or reduction in effect on a European site will be implemented during the construction phase. This will ensure that dust is managed in line with good practice such that a conclusion of no adverse effect on integrity, once mitigation is incorporated, can be reached (ref HRAR – para 6.5-6.7). It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the Ramsar.
b.	A site-wide surface water pollution prevention system will be developed to prevent the discharge of any contaminated surface water from the site. The overall philosophy for the design of the surface water pollution prevention system for the site is to manage surface water sustainably and to ensure that discharged waters do not constitute a pollution risk.
	Therefore, a conclusion of no adverse effect on integrity can be reached, once this mitigation is included (ref HRAR – 6.8-6.14). It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the Ramsar.
c.	It is considered there is a limited potential for disturbance to waterbirds to be caused by activity associated with the Proposal when account is taken of the fact that, given the distance to The Swale from the proposal site and existing, intervening buildings. To ensure no visual disturbance On this basis, a conclusion of no adverse effect on integrity can be reached (ref HRAR – 6.22 - 6.148).
d.	The potential for disturbance to Ramsar Citation species from recreational activities by either construction or subsequent operational/demolition staff is considered low. Whilst there is access to the Saxon Shore Way from the wider Kemsley Paper Mill, currently very little or no use is made of this by Kemsley Mill staff. It is possible that there will be increased recreational usage made of the Saxon Shore Way during both construction/demolition of the site, as Sittingbourne is within potential travel distance over lunch break. However, it should be borne in mind that Milton Creek is outside the Ramsar and that dogs will not be permitted on site. It is anticipated that few if any construction, operational or demolition staff will access the Swale Ramsar. On this basis, no adverse effect on integrity is predicted (ref HRAR – 6.17 – 6.18).
e.	An assessment of the potential for each of the interest feature/intertidal assemblage bird species to be susceptible to noise disturbance, based on survey data undertaken across the intertidal area between 2009 and 2018 has been undertaken (ref HRAR - 6.22 – 6.148). This has concluded that, subject to the implementation of suitable avoidance measures (ref HRAR – 6.147-148), no adverse effect on integrity with respect to the interest feature/intertidal assemblage is predicted.
	It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the Ramsar.



- f. Under normal operating conditions, the Proposed Development will produce a low hum, rather than any loud, sudden noises that might elicit a disturbance response from nearby interest-feature birds using the intertidal areas of The Swale. It will furthermore not result in noise levels of greater than 55 dBL_{Amax} within the Ramsar. On this basis, no adverse effect on integrity is predicted (ref HRAR para 6.24).
- g. Given the distance of the proposed development to the Ramsar, and that there is further development between the Proposal Site and designated site, light from the proposed development does not have the potential to illuminate either the terrestrial or inter-tidal habitats above that which it is currently. All lighting will be designed as per best practice standards to ensure that no additional light spill above the current situation would occur. On this basis, no adverse effect on integrity is predicted (ref HRAR 6.19 6.21, DCO Requirement 22). It is assumed that similar avoidance measures would be included, as necessary, within any demolition plan to ensure no adverse effect on the Ramsar.

