

East Anglia ONE North Offshore Windfarm

Appendix 26.21

Assignment of HGV and Employee Traffic to the Highway Network (Scenario 1)

Preliminary Environmental Information
Volume 3

EA1N-DEVWF-ENV-REP-IBR-000295_021

Employee Traffic Distribution (Scenario 1)

Landfall (Link 11 B1353)	Total employees	32
	Car-share ratio	1.5
	Total vehicles	21
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	7
Total in-migrant workers vehicles	14	

Point of entry to study area	Residents		In-migrant		Combined	Links																
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)	Total worker vehicles (one-way)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	31.0%	2.3	31.9%	4.5	6.7	7			7							7			7	7	7	
2	8.3%	0.6	13.0%	1.8	2.4		2		2					2					2	2	2	
3	42.4%	3.1	28.7%	4.0	7.1			7				7			7				7	7	7	
4	10.9%	0.8	0.1%	0.0	0.8				1							1			1	1	1	
8 or 10	1.6%	0.1	17.2%	2.4	2.5								3			3						
14 or 15	5.8%	0.4	9.0%	1.3	1.7											2			2	2	2	
Total worker vehicles (one-way)						7	2	7	8	2	7	2	3	10	3	21	0	19	9	19		
Total worker vehicles (two-way)						13	5	14	15	5	14	5	5	19	5	43	0	38	18	38		

Landfall (Link 12 Sizewell Gap)	Total employees	32
	Car-share ratio	1.5
	Total vehicles	21
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	7
Total in-migrant workers vehicles	14	

Point of entry to study area	Residents		In-migrant		Combined	Links																
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)	Total worker vehicles (one-way)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	31.0%	2.3	31.9%	4.5	6.7	7			7								7					
2	8.3%	0.6	13.0%	1.8	2.4		2		2								2					
3	42.4%	3.1	28.7%	4.0	7.1			7				7			7				7	7	7	
4	10.9%	0.8	0.1%	0.0	0.8				1							1						
8 or 10	1.6%	0.1	17.2%	2.4	2.5								3			3			3	3		
14 or 15	5.8%	0.4	9.0%	1.3	1.7											2			2	2	2	
Total worker vehicles (one-way)						7	2	7	10	0	7	0	3	7	3	0	21	0	11	9		
Total worker vehicles (two-way)						13	5	14	20	0	14	0	5	14	5	0	43	0	23	18		

Landfall (Link 11 access)
Landfall (Link 12 access)
Landfall (worst case)

Total worker vehicles (two-way)						13	5	14	15	5	14	5	5	19	5	43	0	38	18	38				
Total worker vehicles (two-way)						13	5	14	20	0	14	0	5	14	5	0	43	0	23	18				
Total worker vehicles (two-way)						13	5	14	20	5	14	5	5	19	5	43	43	38	23	38				

Cable Route, Section 1 (Link 12 Sizewell Gap)	Total employees	70
	Car-share ratio	1.5
	Total vehicles	47
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	16
Total in-migrant workers vehicles	31	

Point of entry to study area	Residents		In-migrant		Combined	Links																
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)	Total worker vehicles (one-way)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	31.0%	4.9	31.9%	9.8	14.7	15			15								15					
2	8.3%	1.3	13.0%	4.0	5.3		5		5								5					
3	42.4%	6.7	28.7%	8.8	15.6			16				16			16				16	16	16	
4	10.9%	1.7	0.1%	0.0	1.8				2								2					
8 or 10	1.6%	0.3	17.2%	5.3	5.6								6			6			6	6		
14 or 15	5.8%	0.9	9.0%	2.8	3.7												4		4	4	4	
Total worker vehicles (one-way)						15	5	16	22	0	16	0	6	16	6	0	47	0	25	19		
Total worker vehicles (two-way)						29	11	31	44	0	31	0	11	31	11	0	93	0	50	38		

Cable Route, Section 2 (Link 12 Sizewell Gap)	Total employees	53
	Car-share ratio	1.5
	Total vehicles	35
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	12
Total in-migrant workers vehicles	23	

Point of entry to study area	Residents		In-migrant		Combined	Links																
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)	Total worker vehicles (one-way)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	31.0%	3.7	31.9%	7.4	11.2	11			11								11					
2	8.3%	1.0	13.0%	3.0	4.0		4		4								4					
3	42.4%	5.1	28.7%	6.7	11.8			12				12			12				12	12	12	
4	10.9%	1.3	0.1%	0.0	1.3				1								1					
8 or 10	1.6%	0.2	17.2%	4.0	4.2								4			4			4	4		
14 or 15	5.8%	0.7	9.0%	2.1	2.8												3		3	3	3	
Total worker vehicles (one-way)						11	4	12	17	0	12	0	4	12	4	0	35	0	19	15		
Total worker vehicles (two-way)						22	8	24	33	0	24	0	8	24	8	0	71	0	38	29		

Cable Route, Section 3 (Link 9 B1069)	Total employees	44
	Car-share ratio	1.5
	Total vehicles	29
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	10
Total in-migrant workers vehicles	19	

Point of entry to study area	Residents		In-migrant		Combined	Links																
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)	Total worker vehicles (one-way)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	31.0%	3.1	31.9%	6.2	9.3	9			9					9					9	9	9	
2	8.3%	0.8	13.0%	2.5	3.4		3				3			3								
3	42.4%	4.2	28.7%	5.6	9.8			10				10			10							
4	10.9%	1.1	0.1%	0.0	1.1				1							1				1	1	
8 or 10	1.6%	0.2	17.2%	3.3	3.5								4			4						
14 or 15	5.8%	0.6	9.0%	1.7	2.3									2					2	2	2	
Total worker vehicles (one-way)						9	3	10	10	3	10	3	4	29	4	0	0	0	13	13		
Total worker vehicles (two-way)						19	7	20	21	7	20	7	7	59	7	0	0	0	25	25		

Cable Routes, Section 3A (Link 10 B1122)	Total employees	9
	Car-share ratio	1.5
	Total vehicles	6

Point of entry to study area	Combined Total worker vehicles (one-way)	Links																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
9	6								6	6	6							

Total worker vehicles (one-way)	0	0	0	0	0	0	0	0	6	6	6	0	0	0	0	0	0
Total worker vehicles (two-way)	0	0	0	0	0	0	0	0	12	12	12	0	0	0	0	0	0

Cable Route Section 4 (Link 9 B1069)	Total employees	47
	Car-share ratio	1.5
	Total vehicles	31
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	11
	Total in-migrant workers vehicles	21

Point of entry to study area	Residents		In-migrant		Combined Total worker vehicles (one-way)	Links														
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	31.0%	3.3	31.9%	6.6	9.9	10				10									9	9
2	8.3%	0.9	13.0%	2.7	3.6		4				4		4							
3	42.4%	4.5	28.7%	5.9	10.4			10				10								
4	10.9%	1.2	0.1%	0.0	1.2				1					1					1	1
8 or 10	1.6%	0.2	17.2%	3.6	3.7								4	4	4					
14 or 15	5.8%	0.6	9.0%	1.9	2.5									2					2	2

Total worker vehicles (one-way)	10	4	10	11	4	10	4	4	4	31	4	0	0	0	0	13	13
Total worker vehicles (two-way)	20	7	21	22	7	21	7	7	7	63	7	0	0	0	25	25	

Substation (Link 9 B1069)	Total employees	92
	Car-share ratio	1.5
	Total vehicles	61
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	21
	Total in-migrant workers vehicles	40

Point of entry to study area	Residents		In-migrant		Combined Total worker vehicles (one-way)	Links														
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	31.0%	6.5	31.9%	13	19	19				19									9	9
2	8.3%	1.7	13.0%	5	7		7				7		7							
3	42.4%	8.8	28.7%	12	20			20				20								
4	10.9%	2.3	0.1%	0	2				2					2					2	2
8 or 10	1.6%	0.3	17.2%	7	7								7	7	7					
14 or 15	5.8%	1.2	9.0%	4	5									5					5	5

Total worker vehicles (one-way)	19	7	20	22	7	20	7	7	7	61	7	0	0	0	16	16
Total worker vehicles (two-way)	39	14	41	43	14	41	14	15	15	123	15	0	0	0	33	33

National Grid Substation (Link 5 B1121)	Total employees	19
	Car-share ratio	1.0
	Total vehicles	19
	Percentage resident workers	0.34
	Percentage in-migrant workers	0.66
	Total resident workers vehicles	7
	Total in-migrant workers vehicles	13

Point of entry to study area	Residents		In-migrant		Combined Total worker vehicles (one-way)	Links														
	Percentage split	Total worker vehicles (one-way)	Percentage split	Total worker vehicles (one-way)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	31.0%	2.0	31.9%	4	6	6	6				6									
2	8.3%	0.5	13.0%	2	2		2				2									
3	42.4%	2.8	28.7%	4	6			6	6											
4	10.9%	0.7	0.1%	0	1					1	1		1						1	1
8 or 10	1.6%	0.1	17.2%	2	2						2		2	2		2				
14 or 15	5.8%	0.4	9.0%	1	2						2		2		2				2	2

Total worker vehicles (one-way)	6	15	6	1	19	0	5	2	2	2	2	0	0	0	3	3
Total worker vehicles (two-way)	12	29	13	1	38	0	9	5	4	5	5	0	0	0	7	7

Total worker vehicles (two-way)	77	40	82	92	36	75	21	35	167	35	21	103	19	100	98
Total worker vehicles (two-way)	155	81	163	185	71	150	42	70	334	70	43	207	38	200	196

24HR AADT	132.5	69.32	139.8	158.2	61.05	128.8	35.86	60.13	286.3	60.13	36.57	177.1	32.2	171.8	167.8
18Hr AAWT	155	81	163	185	71	150	42	70	334	70	43	207	38	200	196

HGV Traffic Distribution (Scenario 1)

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Landfall	Sizewell Gap (link 12)	45	45	45	45	45								45			
	B1353 (Link 11)		45	45	45			45		45		45	45				
	Overlap	45	45	45	45	0	45	0	45	0	45	45	45	0	0	0	

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cable Route Section 1	Sizewell Gap (link 12)	54	54	54	54	54								54			

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cable Route Section 2	Sizewell Gap (Link 12)	53	53	53	53	53								53			

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cable Route Section 3	B1069 (Link 9)	48	48	48	48			48			48						

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cable Route Section 3B	B1122 (Link 10)	10								10	10	10					

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cable Route Section 4	B1069 (Link 9)	83	83	83	83			83			83						

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Substaion	B1069 (Link 9)	82	82	82	82			82			82						

	Access	Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
National Grid Substaion	B1121 (Link 9)	45	45	45	45			45			45						

		Peak deliveries (two-way movements)	Links														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total two-way HGV movements			410	410	410	152	0	303	0	55	268	55	45	152	0	0	0
Total two-way HGV movements (capped)			322	322	322	152	0	303	0	55	268	55	45	152	0	0	0

24HR AADT	276.4	276.4	276.4	130.3	0	260.1	0	47	229.8	47	39	130.3	0	0	0
18Hr AAWT	322	322	322	152	0	303	0	55	268	55	45	152	0	0	0