# Appendix to Proof of Evidence of Dan Aylward-Mills MSc MA (Hons)

The South Tees Development Corporation Compulsory Purchase Order

**Acquiring Authority: South Tees Development Corporation** January 2020

**STDC7/3** 

## Appendix 1: Economic Appraisal (STDC 7/3) All values in £'000s unless otherwise specified

Row	All values in £ 000s unless	raner wise specified
	Description	Source

Costs, Real	Source	Total 20/21 - 49/50
Demolition	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 35	71,957
Decommissioning/ cleaning of plant and facilities (COMAH)	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 36	13,158
Infrastructure - Highway	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 37	95,415
Infrastructure - Marine	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 38	26,000
Infrastructure - Rail	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 39	16,226
Infrastructure - Utilities (incl Elec. Infr. Provision)	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 40	77,680
Landscape and public realm	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 41	10,586
Site preparation	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 42	71,967
Capitalisable Strategic Costs	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 43	67,584
STDC Pick up of KS+I2S+Tier3 costs	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 44	98,433
Overheads (balances Serv. Ch. & KS+I2S+T3 once prep conclu	d Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 47	25,005
Assumed Land Purchase (incl. tax) & Compensation	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 49	31,572
Total	Sum of (3) - (12)	608,419
Costs, Present Value	Source	Total 20/21 - 49/50

Costs, Present Value	Source	Total 20/21 - 49/50
Demolition	[3] / [2]	61,092
Decommissioning/ cleaning of plant and facilities (COMAH)	[4] / [2]	11,667
Infrastructure - Highway	[5] / [2]	80,100
Infrastructure - Marine	[6] / [2]	20,793
Infrastructure - Rail	[7] / [2]	12,720
Infrastructure - Utilities (incl Elec. Infr. Provision)	[8] / [2]	65,542
Landscape and public realm	[9] / [2]	7,724
Site preparation	[10] / [2]	61,799
Capitalisable Strategic Costs	[11] / [2]	54,717
STDC Pick up of KS+125+Tier3 costs	[12] / [2]	66,277
Overheads (balances Serv. Ch. & KS+I2S+T3 once prep conclu	d [13] / [2]	15,147
Assumed Land Purchase (incl. tax) & Compensation	[14] / [2]	29,473
Total	Sum of [16] - [25]	487,052

Cost	Undiscounted Cost (Rows [3] - [12])	Present Value of costs (Rows [16] - [25]
Demolition	71,957	61,092
Decommissioning/ cleaning of plant and facilities (COMAH)	13,158	11,667
Infrastructure - Highway	95,415	80,100
Infrastructure - Marine	26,000	20,793
Infrastructure - Rail	16,226	12,720
Infrastructure - Utilities (incl Flec. Infr. Provision)	77,680	65,542
Landscape and public realm	10,586	7,724
Site preparation	71,967	61,799
Capitalisable Strategic Costs	67,584	54,717
Overheads (balances Serv. Ch. & KS+I2S+T3 once prep conclu	25,005	15,147
Assumed Land Purchase (incl. tax) & Compensation	31,572	29,473
Sub-total	507,150	420,775
Optimism bias adjustment factor (66%)	334,719	277,712
Total	841,869	698,487

Be	enefits, Real	Source	Total 20/21 - 49/50
Rei	ental	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 15	978,481
Bu	is. Rates	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 16	142,552
Sei	rvice Charge	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 17	83,220
Scr	гар	Appendix 3h to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 18	23,100
To	otal	Sum of [43] - [46]	1,227,352
To	otal	Sum of [43] - [46]	1,227,352
	enefits, Present Value	Sum of [43] - [46]   Source	1,227,352 Total 20/21 - 49/50
Bei			Total 20/21 - 49/50
Bei	nefits, Present Value	Source	Total 20/21 - 49/50 540,411
Bei Rei Bu	nefits, Present Value ental	   Source   [43] / [2]	Total 20/21 - 49/50 540,411 83,080
Bei Rei Bu	enefits, Present Value ental us. Rates		1,227,352 Total 20/21 - 49/50 540,411 83,080 45,831 16,720

### Relevant benefits (Table 2)

	Benefit	Undiscounted benefit (Rows [42] - [45])		Present value of benefit (Rows [47] - [50
53	Rental		978,481	540,411
54	Bus. Rates		142,552	83,080
55	Service Charge		83,220	45,831
56	Scrap		23,100	16,720
57	Sub total		1,227,352	686,041
58	Business Rates accruing to RCBC [54]		142,552	83,080
59	Total		1,369,904	769,121
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### Social Cost-Benefit Analysis

	Economic appraisal	Source	
60	BCR	Present Value of Benefits [59] / Present Value of Costs [42]	1,10
61	BCR (expected)	Present Value of Benefits [59] / Present Value of Costs [40]	1,83
62	NSPV	Present Value of Benefits [59] - Present Value of Costs [42]	70,634
63	NSPV (eppected)	Present Value of Benefits [59] - Present Value of Costs [40]	348,346

### IRR Calculations

	IRR Calculations	Source	Total 20/21 - 49/50
4	Direct Income	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 19	1,227,352
5	Assumed Loan for Land Purchase (incl. tax) & Compensation	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 21	31,572
6	TVCA Prairie Site Support	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 22	9,637
7	MHCLG funding for Priarie Site Reegeneration (pre-CSR)	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 23	13,082
3	BEIS switch of budgetted KS costs (within CSR period)	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 24	10,544
9	Ask of Govt (CSR Funding)	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 25	55,858
0	Cash inflows	Sum of [64] - [69]	1,348,046
1	Direct costs	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 45	- 549.005
2	Overheads (balances Serv. Ch. & KS+I2S+T3 once prep conclud	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 47	- 25,005
3	Assumed Land Purchase Loan Costs	Appendix 3b to Proof of Evidence of Gary MacDonald (STDC 3/3), Row 52	. 74,159
1	Cash outflows	Sum of [71] - [73]	- 648,170
5	Net income	Sum of [70] and [74]	699,876
6	Cash flow before funding	[47] - [15]	
7	Cumulative cash flow before funding	Cumulative sum of [76]	
8	Max deficit	Minimum value of Row [77]	341,519
9	Internal Rate of Return	IRR of Row [75]	11,3%

Description	Source	
Total years	Master Plan	23
Total jobs	Master Plan	20,000
Jobs per year	82 / 81	870
Duration of jobs (years)	DCLG Guidelines	5
Jobs added	[83]	
Jobs lost	[85] lagged by [84] years	
Net job creation	[85] - [86]	
Cumulative jobs	Cumulative of [87]	
Average GVA	ONS	54.33
Wage impact	[88] x [89]	
Discount rate	Green Book	3,50
Discount factor	(1 + [91])^years from 2020	
1 6	Ited (test	
Present value of wages	[90] / [92]	2.500.257
SNPV	Sum of [93]	3,569,257
SNPV (£ millions)	[94] / 1,000,000	3,569

	Costs	Source	National only (£ millions, NPV)	National + regional (£ millions, NPV)
95	Expected Costs	[39]	421	421
96	Optimism bias @ 66%	[40]	278	278
7	Total Costs	[41]	698	698
	Benefits			
8	Revenues	[46]	769	769
9	Economic impacts	[95]		3,569
00	Total benefits	[99] + [100]	769	4,338
	Economic Appraisal			
01	SNPV	[101] - [98]	71	3,640
02	BCR	[101] / [98]	1.10	5.21

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Financial Yea 20/21		22/23	23/24	24/25	25/26 2	26/27	27/28	28/29	29/30	30/31	1/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	44/45	45/46	10/10		- (10 T	
3,5%	21/22	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3,5%	3.5%	3,5%	3.5%	3,5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	46/47	3.5%	18/49 4	19/50
1.000	1.035	1.071	1.109	1.148	1.188	1.229	1.272	1.317	1,363	1.411	1.460	1.511	1.564	1.619	1.675	1.734	1.795	1.857	1.923	1.990	2.059	2.132	2.206	2.283	2.363	2.446		2.62017	WHEN PROPERTY AND ADDRESS.
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900	900	10,982	975	10,625		21,588	7,588	500				-	-					-	· ·	· ·	•								-
	-		6,579	6,579		-					-		-		•		· ·	•					· ·	•	•	-	-		· .
3,625	4,140	5,076	18,586	13,626	13,323	10,961	6,512	5,356	1,235	6,902	1,802	1,802	1,235	1,235	-			-	-	-	· ·			· ·	· ·		-	-	-
-	•	-	4.570	2017	2 100	13,000	13,000	4 222	4.004	1.001	1.001	4 004	4 001	•					-	· ·		-							
2174	1000		1,570	2,027	2,480	1,995	1,366	1,333	1,091	1,091	1,091	1,091	1,091	1.070	· ·	•	<del>.</del>		- :	· ·						•	•	-	·
3,174	4,939	4,739	14,070 833	11,069	10,007 925	9,080 689	5,416	4,464 336	1,070	5,304 1,179	1,104 864	864	1,070	1,670										<u>:</u>					-
900	2.377	10,847	19,122	9,3\$1	5,835	7,305	6,972	4,872	- 69	3.167	167	610	443	1,000		<del></del>	<u>:</u> -				<del></del> +						-:-		
5.365	5.637	5,661	5,495	5,253	3,991	3,473	3,453	3,386	4.914	4,744	4,769	4.795	4.648	2.000						- :					-:-		-:-		
5,505	3,037	11,355	7,678	5,000	5.000	5.000	5,000	2,700	2,700	2,700	2,700	2,700	2.700	2,700	2,700	2,700	2,700	2,700	2.700	2,700	2.700	2,700	2,700	2,700		2,700	2,700		2,700
600	620	818	645	657	670	683	690	696	703	710	717	724	731	738	974	974	974	974	974	974	974	974	974	974	974	974	974	974	974
-		31,572	-															-					-	-		-	-		
14,563	18,614	81,049	75,554	65,116	59,731	73,774	50,412	23,643	12,202	25,796	13,213	13,688	13,694	9,431	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674
900	870	10,251	879	9,2\$9	14,735	17,561	5,964	380	293	-					-	-				-	-	-	-		-				
-	-	-	5,934	5,733	-		· ·	-	-	-	-	-		•					•	-	-	-		-	-	-		·	-
3,625	4,000	4,738	16,764	11,874	11,218	8,916	5,119	4,068	906	4,893	1,234	1,192	790	763						-	-							-	-
-		· ·			-	10,576	10,218	- 4.040	-			-	-	-		· ·	·			·					-		-	-	-
3,174	4,772	4,423	1,416	1,766 9,646	2,088 8,426	7,386	4,257	1,012 3,390	800 785	773 3,760	747 756	722	698	661		-		-:-	-:	-	-:-	-	•		-	-	-		
3,174	4,772	4,423	752	810	779	561	326	255	65	836	592	572	1,136	1.043		-								<u>:</u>	-	- :	-		
900	2,297	10,126	17,247	8,149	4,913	5,943	5,480	3,700	- 63	2,245	114	404	283	1,043		-													
5,365	5,446	5.284	4.957	4,578	3,360	2,825	2,714	2,571	3,606	3,363	3,267	3,173	2,972	1,236		-								-					
3,505	3,440	10,600	6,925	4,3\$7	4,210	4.068	3,930	2,050	1,981	1.914	1.849	1.787	1,726	1,668	1,612	1,557	1,504	1.454	1.404	1.357	1.311	1,267	1,224	1,182	1.142	1,104	1,067	1.030	996
600	599	764	581	573	564	556	542	529	516	503	491	479	467	456	581	561	543	524	506	489	473	457	441	426	412	398	385	372	359
-	-	29,473	-	-	-	-	-	-		-	-	-	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-
14,563	17,984	75,660	68,145	56,745	50,292	60,015	39,623	17,955	8,953	18,287	9,050	9,059	8,756	5,826	2,193	2,119	2,047	1,978	1,911	1,846	1,784	1,723	1,665	1,609	1,554	1,502	1,451	1,402	1,355

0/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	44/45	45/46	46/47	47/48	48/49	- 4
	188	600	3,935	9,881	17,576	23,621	25,391	30,680	32,606	35,225	35,555	36,965	36,965	37,383	38,027	38,417	40,604	40,604	41,021	41,730	42,119	44,306	44,306	44,724	45,503	45,893	48,079	48,07	9
-		-	79	126	337	2,557	4,170	4,949	5,364	7,064	7,450	7,745	7,745	7,833	7,968	8,049	8,507	8,507	8,595	8,743	8,825	9,283	9,283	9,371	-	-	-	-	
-		-	63	100	353	1,412	2,222	2,842	3,007	3,422	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,674	3,67	4
	-		466	466	626	493	2,635	3,358	3,198	3,198	3,198	2,548	2,548	291	74		-			-		-				-		-	
				10.000	40.000	22 222	21.112	44.020	44.176	48.910	49.876	50.933	50.933	49.181	49.742	50.139	52.785	52.785	53.290	54,147	54,618	57.263	57.263	57.768	49.177	49 566	E4 7E3	51.75	
	188	600	4,542	10,572	18,892	28,083	34,418	41,830	44,176	40,910	45,676	30,933 [	30,733	45,101	45,742	30,133	32,763	32,763	33,230	34,147	34,010	37,263	37,263	37,766	45,177	49,566	31,/33	31,7	-
	188	T 560		10,511	14.798																					15/500	1 32,732	1 18 35	
· 	188		3,549 71	8,611 110	18,892 14,798 284	19,216 2,080	19,957	23,299 3,758	23,924	24,972	24,353	24,463	23,636	23,095	22,698	22,155	22,624 4,740	21,859	21,338	20,972	20,452	20,786	20,083	19,587 4.104	19,255	18,763	1 32,732	18,35	
	181			10,511	14,798	19,216	19,957	23,299	23,924	24,972	24,353	24,463	23,636	23,095	22,698	22,155	22,624	21,859	21,338	20,972	20,452	20,786 4,355	20,083	19,587		15/500	1 32,732	18,35	
	181			10,511	14,798 284	19,216 2,080	19,957 3,277	23,299 3,758	23,924 3,936	24,972 5,008	24,353 5,103	24,463 5,126	23,636 4,952	23,095 4,839	22,698 4,756	22,155 4,642	22,624 4,740	21,859 4,580	21,338 4,471	20,972 4,394	20,452 4,285	20,786 4,355	20,083 4,208	19,587 4,104	19,255	18,763	1 32,732	18,35	

0/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	44/45	45/46	46/47	47/48	48/49	49/50
	188	600	4,542	10,572	18,892	28,083	34,418	41,830	44,176	48,910	49,876	50,933	50,933	49,181	49,742	50,139	52,785	52,785	53,290	54,147	54,618	57,263	57,263	57,768	49,177	49,566	51,753	51,753	52,17
-	-	31,572		-			-										-	-					-			-	-	-	-
1,940	2,536	3,251	1,082	829		-	-							-		-		-	-			-		-	-	-	-		
5,623	4,909	2,550	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
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7,000	10,982	32,531	5,345	-					-								-	-					-	-	-	- 1			-
14,563	18,614	81,049	10,969	11,401	18,892	28,083	34,418	41,830	44,176	48,910	49,876	50,933	50,933	49,181	49,742	50,139	52,785	52,785	53,290	54,147	54,618	57,263	57,263	57,768	49,177	49,566	51,753	51,753	52,17
13,963	- 17,993	- 48,658 -	74,909	- 64,459	- 59,061	- 73,091	- 49,722	- 22,947	- 11,499	- 25,086	- 12,496	- 12,965 -	12,963	- 8,693	- 2,700	- 2,700	- 2,700 -	2,700	- 2,700	- 2,700	- 2,700	- 2,700	- 2,700	- 2,700	- 2,700	- 2,700	- 2,700	- 2,700	- 2,70
600	- 620	- 818 -	645	- 6\$7	- 670	- 683	- 690	- 696	- 703	- 710	- 717	- 724 -	731	- 738	- 974	- 974	- 974 -	974	- 974	- 974	- 974	- 974	- 974	- 974	- 974	- 974	- 974	- 974	- 97
		- 31,572		-			second House	- 2,129	- 2,129	- 2,129	- 2,129	- 2,129 -	2,129	- 2,129	- 2,129	- 2,129	- 2,129 -	2,129	- 2,129	- 2,129	- 2,129	- 2,129	- 2,129	- 2,129	- 2,129	- 2,129	- 2,129		
14,563	- 18,614	- 81,049 -	75,554	- 65,116	- 59,731	- 73,774	- 50,412	- 25,773	- 14,331	- 27,925	- 15,342	- 15,818 -	15,823	- 11,560	- 5,803	- 5,803	- 5,803 -	5,803	- 5,803	- 5,803	- 5,803	- 5,803	- 5,803	- 5,803	- 5,803	- 5,803	- 5,803	- 3,674	- 3,67
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.	- 1	-  -	64,585	- 53,715	- 40,840	- 45,691	- 15,994	16,057	29,845	20,985	34,534	35,115	35,109	37,621	43,939	44,336	46,982	46,982	47,487	48,344	48,815	51,460	51,460	51,965	43,374	43,763	45,950	48,079	48,49
																													2002-1-2007
14,563	- 18,426	- 80,449 -	71,012	- 54,544	- 40,840	- 45,691	- 15,994	18,187	31,974	23,114	36,664	37,244	37,239	39,750	46,069	46,466	49,111	49,111	49,616	50,473	50,944	53,589	53,589	54,095	45,503	45,893	48,079	48,079	48,45
14.563	- 32,989	- 113,438 -			- 279,833	- 325,524		- 323,332	- 291,358	- 268,244	- 231,580	- 194,336 -	157,097	- 117.347	- 71,278	- 24,812	24.299	73.410	123,027	173,500	224,444	278,033	331,623	385,717	431,221			******	

20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	44/45	45/46	46/47	47/48	48/49	49/50
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				-	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	870	-	
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870	870	870	870	870		-	-		-	-	-	-	-	-	-		-	-	-	-		-	(870)	(870)	(870)	(870)	(870)	-	-
870	1,739	2,609	3,478	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	3,478	2,609	1,739	870	-		
47,243	94,487	141,730	188,974	236,217	236,217	236.217	236.217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	236,217	188,974	141,730	94,487	47,243	- 1	-	-
												-							-	-									

47,243 91,992 132,307 170,444 205,8 to 198,889 192,163 185,665 179,386 173,320 167,459 161,796 156,325 151,038 145,931 140,996 136,228 131,621 127,170 122,870 118,715 114,700 110,822 85,659 62,072 39,982 19,315 - - -