



CARBON ACCOUNTING

The content of this document is draft and relates to material [or data] which is still in the course of completion in travel to Gate 2 and should not be relied upon at this early stage of development. We continue to develop our thinking and our approach to the issues raised in the document in preparation for Gate 2.

Table 4-23 – Baseline carbon accounting the Grove

Sites (Treatment plants)	Element	Construction stage embodied GHG emissions (LCA module A1-A3) tCO ₂ e	Operational stage embodied GHG emissions (LCA Modules B1- B4) tCO ₂ e	Operational stage energy related GHG emissions (LCA module B6) emissions tCO ₂ e	Total lifetime GHG emissions tCO ₂ e	% of total GHG emissions
The Grove	Earth Works	968			968	0.1%
	Stainless Steel (pumps & screens)	106,365	106,550	-	212,915	15.0%
	Iron Pipes	11,965	12,051	-	24,016	1.7%
	Steel Reinforcing bar (within concrete)	3,064	3,068	-	6,131	0.4%
	0% GGBS Concrete (Total)	1,619	1,789	-	3,408	0.2%
	Asphalt	77	127	-	204	<0.01%
	Aggregate (Crushed Rock subbase)	8	22	-	30	<0.01%
	Copper	24,149	120,821	-	144,970	10.2%
	Electricity	-	-	173,352	173,352	12.2%
	Treatment Chemicals		854,737		854,737	60.2%
	Total	148,214	1,099,165	173,352	1,420,731	



Table 4-24 – Revised carbon accounting The Grove

Sites (Treatment plants)	Element	Construction stage embodied GHG emissions (LCA module A1-A3) tCO ₂ e	Operational stage embodied GHG emissions (LCA Modules B1- B4) tCO ₂ e	Operational stage energy related GHG emissions (LCA module B6) emissions tCO ₂ e	Total lifetime GHG emissions tCO ₂ e	% of total GHG emissions
The Grove	Earth Works	968			968	0.1%
	Stainless Steel (pumps, screens & fencing)	106,365	106,550	-	212,915	15.0%
	Steel Pipes	11,965	12,051	-	24,016	1.7%
	Steel Reinforcing bar (within concrete)	3,064	3,068	-	6,131	0.4%
	Concrete (Pre-cast-20% GGBS)	1,376	1,470	-	2,846	0.2%
	Concrete (In-Situ- 20% GGBS)	10	12	-	22	<0.01%
	Asphalt (low temp)	69	76	-	145	<0.01%
	Aggregate (Crushed Rock subbase)	8	22	-	30	<0.01%
	Copper	24,149	120,821	-	144,970	10.2%
	Electricity	-	-	173,352	173,352	12.2%
	Treatment Chemicals		854,737		854,737	60.2%
	Total		147,973	1,098,807	173,352	1,420,132