Name of Department: Highways Department

## Contract No.: HY/2013/01



## Monthly Summary Waste Flow Table for 2016

	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly				
Month	a.Total Quantity Generated (see Note 8)	b. Hard Rock and Large Broken Concrete (see Note 9)	c. Reused in the Contract	d. Reused in Other Projects (see Note 11)	e. Disposed as Public Fill (see Note 10)	f. Imported Fill	g. Metals (see Note 5)	h. Paper / Cardboard Packaging (see Note 5)	i. Plastics (see Note 3) (see Note 5)	j. Chemical Waste	k. Others, e.g. general refuse	
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )	
January	3.209	0.233	0.000	2.079	1.130	0.000	145.240	0.935	0.000	1.200	0.123	
February	1.526	0.025	0.000	0.000	1.526	0.000	74.800	0.000	0.000	0.000	0.125	
March	3.698	0.364	0.000	0.099	3.599	0.036	100.720	1.908	0.000	0.000	0.170	
April	3.300	0.605	0.000	0.198	3.102	0.000	102.030	0.000	0.000	0.000	0.169	
May	1.016	0.264	0.000	0.000	1.016	0.000	88.010	1.062	0.000	2.600	0.278	
June	0.903	0.038	0.000	0.000	0.903	5.382	139.740	1.197	0.000	0.000	0.262	
Sub-total	13.652	1.529	0.000	2.376	11.276	5.418	650.540	5.102	0.000	3.800	1.127	
July	1.863	0.220	0.000	1.238	0.625	21.896	16.520	0.000	0.000	0.600	0.445	
August	4.056	0.000	4.056	0.000	0.000	9.290	15.930	1.344	0.000	0.000	0.390	
September	0.806	0.000	0.806	0.000	0.000	2.591	30.360	1.290	0.000	0.000	0.469	
October	1.629	0.075	1.554	0.000	0.075	4.851	28.220	0.000	0.000	0.000	0.472	
November	0.898	0.023	0.875	0.000	0.023	0.000	38.370	1.838	0.000	0.000	0.745	
December												
Total	22.904	1.847	7.291	3.614	11.999	44.046	779.940	9.574	0.000	4.400	3.648	

Total C&D waste generated = a+b+f+g+h+i+j+k

Total C&D waste generated (excluded excavated material) = g+h+i+j+k

Total C&D waste recycled = c+d+g+h+i

% of recycled C&D waste = (Total C&D waste generated - Total C&D waste recycled) / Total C&D waste generated

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Notes: (1) The performance target are given in PS Clause 6(14)

(2) The waste flow table shall also include C&D materials that are not specified in the Contract to be imported for use at the Site.

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

(4) The Contractor shall also submit the latest forecast of the amount of C&D materials expected to be generated from the Works, together with a break down of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m<sup>3</sup>.

(5) All recyclable materials, including metals, paper / cardboard packaging, plastics, etc. will be collected by registered collector for recycling.

(6) Conversion factors for reporting purpose:

in-situ: rock = 2.5 tonnes/m<sup>3</sup>; soil = 2.0 tonnes/m<sup>3</sup>

excavated: rock = 2.0 tonnes/m<sup>3</sup>; soil = 1.8 tonnes/m<sup>3</sup>; broken concrete and bitumen = 2.4 tonnes/m<sup>3</sup>

C&D Waste = 0.9 tonnes/m<sup>3</sup>; bentonite slurry = 2.8 tonnes/m<sup>3</sup>

Diesel density: 0.8kg/l

(7) Numbers are rounded off to the nearest three decimal places.

(8) The "Total Quantity Generated" equals to the sum of "Reuse in the Contract", "Reuse in Other Projects" and "Disposed as Public Fill".

(9) The "Hard Rock and Large Broken Concrete" were disposed as public fill.

(10) The amount in "Disposed as Public Fill" included the "Hard Rock and Large Broken Concrete" disposed as public fill.

(11) The item d "Reused in Other Projects" includes sand only. Other projects refer to Contracts No. HY/2010/02 and HY/2014/05. Inert C&D Materials were transferred to Contract No. HY/2010/02 in January 2016 and to Contract No. HY/2014/05 in March and April 2016.

Month	a. Estimated Volume of Excavated Marine Sediment Generated (m <sup>3</sup> )	b. Estimated Volume of Accumulated Excavated Marine Sediment Treated (m <sup>3</sup> )	c. Reused in the Contract (m³)	d. Estimated Volume of Excavated Marine Sediment Reused in Other Project (m <sup>3</sup> ) <sup>(2)</sup>	e. Estimated Volume of Treated Excavated Marine Sediment Stored on Site (Unused) (m <sup>3</sup> )							
Year 2016												
Jan 2016	511	400	0	0	2155							
Feb 2016	693	275	0	0	2430							
Mar 2016	672	1,363	1215	0	2578							
Apr 2016	259	756	700	0	2634							
May 2016	287	402	0	0	3036							
Jun 2016	240	336	2836	0	536							
Jul 2016	331	464	1000	0	0							
Aug 2016	0	0	0	0	0							
Sep 2016	0	0	0	0	0							
Oct 2016	0	0	0	0	0							
Nov 2016	0	0	0	0	0							
Total	2,993	3,996	5,751	0	<b>0</b> <sup>(1)</sup>							

## Monthly Summary of Excavated Marine Sediment for 2016

Notes: (1) This presents the total quantity of unused treated excavated marine sediment stored on site during the reporting month. This figure includes 1,755 m<sup>3</sup> of treated excavated marine sediment from 2015.