

Name of Department: Highways Department

Contract No.: HY/2013/01

Monthly Summary Waste Flow Table for 2018



| Month     | Actual Quantities of Inert C&D Materials Generated Monthly |  |                           |                             |   |                          | Actual Quantities of C&D Wastes Generated Monthly |  |   |                   |                                |
|-----------|--|--|---------------------------|-----------------------------|---|--------------------------|---|--|---|-------------------|--------------------------------|
|           | a. Total Quantity Generated<br>(see Note 8)                | b. Hard Rock and Large Broken Concrete<br>(see Note 9) | c. Reused in the Contract | d. Reused in Other Projects | e. Disposed as Public Fill<br>(see Note 10) | f. Imported Fill         | g. Metals<br>(see Note 5)                         | h. Paper / Cardboard Packaging<br>(see Note 5) | i. Plastics<br>(see Note 3)<br>(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   | 1.836  | 1.836  | 0.000                     | 0.000                       | 1.836                                       | 0.000                    | 437.36 <sup>(*)</sup>                             | 1.922  | 0.000                                       | 0.000             | 0.912                          |
| February  |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| March     |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| April     |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| May       |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| June      |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| Sub-total | 1.836  | 1.836  | 0.000                     | 0.000                       | 1.836                                       | 0.000                    | 437.36 <sup>(*)</sup>                             | 1.922  | 0.000                                       | 0.000             | 0.912                          |
| July      |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| August    |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| September |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| October   |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| November  |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| December  |  |  |                           |                             |   |                          |   |  |   |                   |                                |
| Total     | 1.836  | 1.836  | 0.000                     | 0.000                       | 1.836                                       | 0.000                    | 437.36 <sup>(*)</sup>                             | 1.922  | 0.000                                       | 0.000             | 0.912                          |

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

| Forecast of Total Quantities of C&D Materials to be Generated from the Contract* |  |                           |                             |   |                          |                           |  |   |                   |                                |
|--|--|---------------------------|-----------------------------|---|--------------------------|---------------------------|--|---|-------------------|--------------------------------|
| a.Total Quantity Generated<br>(see Note 8)                                       | b. Hard Rock and Large Broken Concrete<br>(see Note 9) | c. Reused in the Contract | d. Reused in Other Projects | e. Disposed as Public Fill<br>(see Note 10) | f. Imported Fill         | g. Metals<br>(see Note 5) | h. Paper / Cardboard Packaging<br>(see Note 5) | i. Plastics<br>(see Note 3)<br>(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> )       |
|  |  |                           |                             |   |                          |                           |  |   |                   |                                |

- 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
- (\*) The amount of metals generated in reporting month is preliminary data. The data will be updated in next monthly report if necessary.