

Appendix 7-1

ETWB TCW No. 31/2004

**“Trip Ticket System for Disposal of
Construction and Demolition Materials”**

香港特別行政區政府
The Government of the Hong Kong Special Administrative Region

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環境運輸及工務局
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Environment, Transport and Works Bureau
Technical Circular (Works) No. 31/2004

Trip Ticket System for
Disposal of Construction & Demolition Materials

Scope

This Circular promulgates the amended trip ticket system (TTS) for public works contracts including capital works contracts, term contracts and design and build contracts, where construction and demolition (C&D) materials including waste generated on site require disposal. The Director of Housing has agreed to the contents of this Circular.

Effective Date

2. This Circular is applicable to all public works contracts for which tenders are invited on or after 1 February 2005.

Effect on Existing Circulars

3. From 1 February 2005, this Circular supersedes WBTC No. 21/2002. However, WBTC No. 21/2002 continues to apply to existing contracts for which tenders were invited before 31 January 2005.

4. This Circular shall be read in conjunction with the following circulars:

Number	Subject
WBTC No. 4/98 & 4/98A	Use of Public Fill in Reclamation and Earth Filling Projects
WBTC Nos. No. 25/99, 25/99A & 25/99C	Incorporation of Information on Construction and Demolition Material Management in Public Works Sub-committee Papers
WBTC No. 12/2000	Fill Management
WBTC No. 15/2002	Contract Advisers and Technical Audits on Works Contracts
ETWB TCW No. 33/2002	Management of Construction and Demolition Materials Including Rock
ETWB TCW No. 15/2003	Waste Management on Construction Sites

5. For the purposes of interpreting this Circular, should there be any ambiguity or discrepancy between this Circular and those set out above, this Circular shall prevail.

Policy

6. The policy objective behind the TTS is to ensure the proper disposal of C&D materials generated by public works contracts.

Background

7. WBTC No. 5/99 was issued in 1999 to introduce the TTS to track the disposal of C&D materials arising from public works contracts. In the light of the experience gained, the system was revised in 2002 with the promulgation of WBTC No. 21/2002, which incorporated a number of improvement measures. To further enhance the TTS,

additional improvement measures are introduced in this Circular, in particular where the place for disposal is proposed by the Contractor.

8. In general, C&D materials should be disposed of at designated public filling facilities or landfills. Disposal of the materials for use at other construction sites is subject to the approval of the Architect/Engineer/Supervising Officer/Maintenance Surveyor (which for the convenience of this Circular will be referred to as Architect/Engineer only). The Particular Specification to govern the proper disposal of C&D materials including the procedures for disposing C&D materials for use at another construction site is given in **Appendix A**. Furthermore, unauthorised disposal of C&D materials in particular on private agricultural land is prohibited and may be subject to relevant enforcement and regulating actions.

Application by Project Office for a Disposal Ground

Disposal ground for inert C&D materials

9. For all contracts that are expected to generate inert C&D materials (e.g. soil, broken rock, broken concrete and building debris etc.) requiring disposal from the site, the project office shall write to the Public Fill Committee (PFC) through the Secretary of the PFC [housed at Fill Management Division, Civil Engineering and Development Department (CEDD)] to request a designated disposal ground for incorporation into the tender documents. The project office shall submit the following details to the PFC for consideration:

- (a) Contract number;
- (b) Contract title;
- (c) Expected dates of commencement and completion of the contract;
- (d) Site location;
- (e) Expected quantity (in m³) of inert C&D materials to be disposed of at public fill reception facilities; and
- (f) PWP Item number (if any) and its category/status.

10. Where the estimated amount of inert C&D materials requiring disposal equal or exceed 50,000 m³, the project office shall provide the following additional information in the submission:

- (a) a planned quarterly disposal programme; and
- (b) a breakdown of the quantity of inert C&D materials (to be disposed of at public fill reception facilities) into different types: soil, broken rock, broken concrete, building debris and reclaimed asphalt pavement.

11. The PFC will designate public filling facilities, if available, for the contract normally within 2 weeks upon receipt of the request. The PFC will assign a unique bar code for each contract for use in the Disposal Delivery Form (DDF) (see Annex 1 to **Appendix A**). The PFC will also advise on the corresponding acceptance criteria (e.g. no mixing of construction waste, nominal size of the materials less than 250 mm, etc.) for disposal of the C&D materials. The project office shall incorporate such designated public filling facilities and acceptance criteria in the tender documents.

For disposal of non-inert C&D materials

12. For contracts where the estimated amount of non-inert C&D materials requiring disposal at landfill facilities equal or exceed 50m³, the project office shall seek confirmation from the Director of Environmental Protection (DEP) (for the attention of PEPO(FM)) as to whether landfill facilities will be available for disposal of such materials. The DEP will designate landfill facilities, if available, for the contract. The project office shall submit the following details to DEP for consideration:

- (a) Contract number;
- (b) Contract title;
- (c) Expected dates of commencement and completion of the contract;
- (d) Site location plan;
- (e) Expected quantity (in m³) of non-inert C&D materials to be disposed of at landfill facilities;
- (f) A breakdown of the types and quantities of non-inert C&D materials to be disposed of; and
- (g) Recommended disposal arrangement in environmental impact assessment/contamination assessment report.

The DEP will also advise on the acceptance criteria of the landfill facilities. The project office shall specify such criteria in the tender documents.

13. Where the estimated amount of non-inert C&D materials to be generated from the contract is less than 50 m³, the project office is not required to apply to DEP for designated landfill facilities. However, the project office should still specify in the tender documents appropriate landfill facilities (e.g. Outlying Islands Transfer Facilities managed by the EPD, SENT Landfill at Tseung Kwan O, NENT Landfill at Ta Kwu Ling and WENT Landfill at Nim Wan.).

Preparation of Tender Documents

14 The project office shall incorporate the following provisions in tender documents for public works contracts for which tenders are invited on or after 1 February 2005:

(a) Notes for Tenderers

Include the following note:

“The unauthorised disposal of construction and demolition materials from the Site to any place other than that designated in the Contract or approved by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor is forbidden. The tenderer shall refer to the relevant part of the Particular Specification for detailed requirements on dealing with disposal of C&D materials. Failure to observe the requirements will result in regulating action. The tenderer is referred to the ETWB TCW No. 31/2004 on the “Trip Ticket System for Disposal of Construction and Demolition Materials”. (* delete where appropriate)”

(b) Particular Specification

Incorporate the Particular Specification (PS) from **Appendix A**, which sets out the requirements for the Contractor to draw up a site management plan for implementation of the TTS and regulating action for non-compliance.

(c) Particular Preamble to the Method of Measurement

Incorporate the Particular Preamble from **Appendix B**.

(d) Bills of Quantities

In accordance with the Particular Preamble two new items are to be included in the Bills of Quantities (BQ):

- (i) Complete site management plan for trip ticket system; and
- (ii) Implementation of site management plan for trip ticket system.

(e) Definition of Site

The definition of "Site" in the General Conditions of Contract Clause 1(1) does not include public filling facilities or landfill facilities. Care should be taken in the preparation of tender documentation not to indicate a contrary intention. If it is intended to include a designated public filling facility and/or landfill facilities as part of the Site, then that needs to be specifically stated in the Drawings, Particular Specification or elsewhere in the tender documents.

15. For projects with an Independent Environmental Checker (IEC), the following should be included in the duty lists of the IEC in the relevant contract documents or consultancy brief:

- (a) The IEC shall check the records of disposal for the different types of C&D materials, including the Daily Record Summary (DRS) maintained by the Contractor during the monthly environmental auditing;
- (b) The IEC shall also check the disposal records kept by the Architect/Engineer, especially the name of the designated public filling facilities or alternative disposal grounds, the time and date of disposal; and
- (c) Non-compliance with the trip ticket system observed during the environmental auditing should be properly recorded and promptly brought to the attention of the Architect/Engineer and the Contractor for follow-up action.

16. The project office may also consider imposing additional requirements to suit specific project needs as necessary, with the approval of a D1 or above officer.

Notification to PFC and EPD at Contract Commencement and Completion

17. Upon the commencement of the contract, the Architect/Engineer should inform the PFC and EPD at least 2 weeks prior to the commencement of disposal of C&D materials from the site and provide details including contact person(s) such as the Architect's/Engineer's Representative and his corresponding telephone number, fax number and email address(es). Should there be any subsequent changes to the information provided, the Architect/Engineer should immediately inform the PFC. In addition, the Architect/Engineer shall copy to the PFC the Maintenance Certificate or Final Certificate for the Contract. The Maintenance Certificate or Final Certificate should also be copied to EPD if the Architect/Engineer has applied for disposal of C&D materials to landfill facilities.

Estimates of Quantity of C&D Materials Generated

18. Whenever the project office find that the total quantity of inert C&D materials to be disposed of at public filling facilities is likely to be significantly different from the previously submitted estimates, the project office should report the changes to the PFC as soon as possible. Similarly, EPD should be informed of the changes in the quantity of non-inert C&D materials which are to be disposed of at landfill facilities.

Records of Disposal from Public Filling and Landfill Facilities

19. For disposal at public filling and landfill facilities, the disposal records will be posted at the CEDD website [<http://www.cedd.gov.hk/eng/services/tripticket/index.html>] normally within three working days after the disposal to facilitate checking.

Duties and Responsibilities of Supervisory Staff in Enforcing the TTS

20. The duties and responsibilities of the Architect's/Engineer's Representative and his site supervisory staff in enforcing the TTS are summarised below:

- (a) Prepare the DDF, see Annex 1 to **Appendix A**, and hand it to the Contractor on the day of disposal. For term contracts, the DDF may be issued to the Contractor one working day before he is to remove the C&D materials from the site.
- (b) Keep a comprehensive register of DDF issued.
- (c) Conduct daily checks on the DRS records submitted by the Contractor against the register of DDF issued, and disposal records provided by the PFC at the website as given in paragraph 19 of this Circular (or the DDF from the alternative disposal grounds) during the period when surplus C&D materials are generated.
- (d) For capital works contracts, or Works Orders (of term contracts) for which the estimated amount of surplus C&D materials to be generated exceeds 5 m³ per day, conduct the following checks during the period when C&D materials are being removed from site:
 - (i) daily spot checks on the Contractor staff manning each exit of the site (or on the Contractor's alternative method of control approved by the Architect/Engineer for term contracts, see Clause 5(a)(iii) of the Particular Specification in **Appendix A**) and on the truck carrying C&D materials leaving the site to see if they bear a duly completed DDF; and
 - (ii) surprise checks at least once a month on the disposal activities at the disposal ground proposed by the Contractor.
- (e) For Works Orders (of term contracts) for which the estimated amount of surplus C&D materials to be generated from each site is less or equal to 5 m³ per day, conduct spot checks on the disposal activities including whether the truck driver bears a duly completed DDF before leaving the sites, at least once every two weeks when C&D materials are being removed from the site. Such spot checks should be carried out on at least 10% of the works orders with disposal of C&D materials.

- (f) the Architect's/Engineer's Representative should also:
- (i) report to the PFC (using the standard form given in **Appendix C**) any irregularities, e.g. a DDF has been issued but there is no disposal record at the designated disposal grounds, or non-compliance with the TTS requirements;
 - (ii) report the irregularities promptly to the relevant authorities for possible regulating action. Details of the reporting procedures for unauthorised disposal incidents are given in paragraphs 26 and 27 of this Circular; and
 - (iii) where an approved alternative disposal is used (see clause (2) in **Appendix A**), inform the PFC details of the disposal ground such as the location and nature of the site, disposal programme, etc.

21. The Architect/Engineer is responsible for overseeing the Contractor's performance in implementing the TTS. In this regard, the Architect/Engineer should:

- (a) fully reflect in the Report on the Contractor's Performance his performance with respect to the implementation of the TTS, including timely submission of the DRS; and
- (b) rate Item 4.8 in Section 4 of the Report on Contractor's Performance as "Poor" and overall "Poor" for Section 4 if one of the following situations occurs, unless the Architect/Engineer is convinced that the improper disposal is justifiable due to exceptional circumstances (e.g. under emergency situation):
 - the number of established improper disposal (see Clause (16) of the Particular Specification in **Appendix A**) within the quarterly reporting period exceeds 3¹ (where the number of truckloads is equal or less than 300) or 1% of the number of truckloads (where the number of truckloads exceeds 300); and
 - a major improper disposal (see Clause (17) of the Particular Specification in **Appendix A**) has been identified such as unauthorized disposal on private agricultural land.

¹ Where the reporting period is 6-week, the threshold for the number of improper disposal should be adjusted from 3 to 2.

For the purpose of assessing the Contractor's performance, the number of established improper disposal should not include incidents where it is established that the truck driver has disposed of the C&D materials on an unauthorised disposal ground without the Contractor's knowledge, and the Architect/Engineer is satisfied that the Contractor has taken appropriate remedial action to rectify the affected site and has implemented effective measures to prevent similar incidents from occurring in the future.

- (c) withhold the appropriate portion of the payment for disposal of the C&D materials until such materials have been delivered to the designated disposal ground to the satisfaction of the Architect/Engineer.
- (d) certify no payment to the Contractor for the BQ item "Implementation of site management plan for trip ticket system" for the month during which there is any improper disposal, or non-compliance with the TTS requirements under the contract.

Auditing of Trip Ticket System

22. Implementation of the TTS should be included as a standard item in the technical audit carried out by works departments in accordance with WBTC No. 15/2002. The audit should include the following aspects:

- (a) The implementation of the TTS.
- (b) The implementation of follow-up actions for any non-compliance with the requirements of the TTS.

23. Reporting of the audit results should follow the WBTC No. 15/2002. In addition, the Contract Adviser of each works department should report to the Secretary of the PFC the relevant part of audit results on non-compliance with the TTS, while the individual project officer should report the progress of implementation of the follow-up actions direct to the PFC.

Consultant-managed Contracts

24. For contracts supervised by consultants, the duties of the project office and site supervisory staff referred to in this Circular shall be performed by the respective consultants. Their performance should be fully reflected in the Performance Reports. Where the consultants have failed to supervise the implementation of the TTS, the Reporting Officer should consider rating item 3.1 on supervision of contracts and quality of works as "unacceptable", thus rendering the overall performance "unacceptable".

Term Contracts

25. Given the unique nature of term contracts, the scheme of control for disposal of C&D materials may need to be tailor-made to suit specific project requirements. The project office may adopt an alternative scheme of control for term contracts instead of following the guidelines given in paragraph 20(d) & (e) of this Circular. In such case, he should obtain the approval of a D2 or above officer from his department on the alternative control scheme prior to its implementation.

Reporting of Unauthorized Disposal Incidents

26. Where the Contractor has disposed of C&D materials at an unauthorized disposal ground, the Architect's/Engineer's Representative shall report the incident immediately to the relevant authorities (e.g. EPD, relevant District Lands Office (DLO) and Planning Department) for taking possible enforcement actions and copy the report to the PFC (Attention: CE/FM, Fax No.: 2714 0113) for information. The relevant e-mail addresses and telephone numbers for reporting of unauthorized disposal incidents are given in **Appendix D**.

27. Where the unauthorized disposal ground consists of government land or both government and private land, the relevant DLO will arrange to set up roadblocks or barriers to restrict access to or through the government portion of the land. DLO will also erect warning signs at appropriate locations. For cases involving dumping of construction waste, EPD will investigate the incident and undertake surveillance where necessary, so as to collect evidence for the purpose of taking prosecution action against the offender under the Waste Disposal Ordinance.

Request for Contractor to Return the Stamped DDF

28. The Engineer's/Architect's Representative or his site supervisory staff should only request the Contractor to return the stamped DDF after disposal under special circumstances where an irregularity is observed or suspected (e.g. a DDF has been issued but there is no disposal record at the designated disposal facilities), pursuant to Clause 10(g) in **Appendix A**. Such a request, if necessary, should be made as soon as possible and in any case within 6 months after the intended date of disposal.

29. Any further queries on this Circular or related issues should be directed to AS(WP)1 of this Bureau.

(C S Wai)
Deputy Secretary for the Environment,
Transport and Works (Works) 2

Particular Specification for Trip Ticket System

Disposal of Construction and Demolition Materials to Designated Disposal Ground

1. The Contractor shall implement a trip ticket system (TTS) for the removal of construction and demolition (C&D) materials from the Site to the designated disposal ground. The inert portion of the C&D materials comprising soil, broken rock and concrete, etc. shall be disposed of at [*specify public filling facilities or sorting facilities as advised by the Public Fill Committee*] or other disposal outlets as directed by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor. The non-inert portion of the C&D materials that are not recyclable shall be disposed of at [*specify landfills locations as advised by EPD*].

Alternative Disposal Grounds Proposed by Contractor and Approval Procedures

2. In order to make use of C&D materials generated by the Site, the Contractor shall use his best endeavours to identify other construction projects where such materials can be used. Where the Contractor has identified such a project which can be used as an alternative disposal ground, he shall obtain the written approval of the *Architect/Engineer/Supervising Officer/Maintenance Surveyor, who will process the Contractor's request expeditiously. In support of the request for such approval the Contractor shall provide relevant information including:
 - (a) A detailed description of the alternative disposal ground, including location, lot number (where appropriate) and location plan;
 - (b) Where the alternative disposal ground is a private construction project, submit a letter from the Authorised Person of the development (as defined under the Buildings Ordinance) to confirm that :
 - (i) the C&D materials for use in the development is acceptable;
 - (ii) the use of land so formed by the C&D materials is in conformity with the statutory town plan/lease conditions;

- (iii) the *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's staff are allowed to enter the alternative ground to conduct inspections where necessary; and
 - (iv) the estimated quantity and type of C&D materials to be used in the construction works and the approximate delivery programme, together with the name, post and specimen signature of the competent person to sign the DDF.
- (c) Where the alternative disposal ground is a private land but not a construction site, submit a letter from the relevant authorities, such as the Lands Department and Planning Department, to confirm the suitability of the alternative disposal ground in receiving the proposed amount of C&D materials for use, and a written consent from the landowner.
- (d) Where the alternative disposal ground is a government construction project, submit written consent from the project office of the alternative disposal ground to use the C&D materials generated from the Site, and to confirm the estimated quantity and type of C&D materials required and the approximate delivery programme.
- (e) A system for transmitting disposal records from the alternative disposal ground to the *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative (e.g. by adopting the TTS or alike).
3. Illegal dumping of C&D materials generated by the Site, or disposal of the C&D materials to a private agricultural land without prior approval of the *Architect/Engineer/Supervising Officer/Maintenance Surveyor constitutes a major improper disposal (as defined in **Clause 17** of the Particular Specification) for the purposes of assessing the performance of the Contractor and may be subject to relevant regulating action.
4. The Contractor is not entitled for compensation for any additional cost and time incurred due to the approval of the *Architect/Engineer/Supervising Officer/Maintenance Surveyor on the Contractor's request for alternative disposal ground.

Site Management Plan for Trip Ticket Implementation

5. The Contractor shall prepare a site management plan for implementation of the TTS. The plan shall include the following details:

(a) Site organization and staff duties

A site organisational chart showing the manpower resources and duties of each staff for implementation of the TTS. The Contractor shall:

- (i) appoint a senior staff member (with at least two years experience in site management) fully responsible for implementing and overseeing the operation of the TTS; and
- (ii) appoint experienced person(s) to man each exit from the Site for the purpose of checking every truck carrying C&D materials leaving the Site so as to ensure that the truck driver bears a duly completed, signed and stamped Disposal Delivery Form (DDF). A sample of the DDF is given at **Annex 1**;

For term contracts, the project office may consider including the following additional sub-clause:

- (iii) *Instead of manning each exit from the Site as required under sub-clause (ii) above, the Contractor may propose alternative methods of control to the *Engineer/Architect/Supervising Officer/Maintenance Surveyor, who may accept such proposals if he is satisfied that the proposals are equally effective for ensuring that every truck carrying C&D materials leaving the Site will bear a duly completed, signed and stamped DDF.*

(b) Disposal Programme

The Contractor shall prepare a monthly programme [*or bi-weekly programme as determined by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor*] for disposal of C&D materials off the Site, and indicate the estimated quantities, types of the C&D materials and corresponding disposal grounds. The Contractor shall update the programme on a monthly basis and submit it to the

*Architect/Engineer/Supervising Officer/Maintenance Surveyor for information by 15th day of each month, or a later date as agreed by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor.

(c) Site procedures

The Contractor shall establish site procedures to ensure that each truckload of C&D materials leaving the Site will bear a duly completed DDF. The Contractor shall also establish a mechanism to ensure timely retrieval of the DDF and/or receipt from the disposal grounds where irregularities are observed.

(d) Surveillance

The Contractor shall establish a surveillance system within the Site and at any alternative disposal grounds to check that the disposal activities comply with the requirements as set out in the Particular Specification.

(e) Recording system

The Contractor shall maintain a comprehensive register of the DDF issued, and make it available for inspection by *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative upon request. *Where required, the *Architect/Engineer/Supervising office/Maintenance Surveyor may request such records to include a register of all Works Orders with disposal of C&D materials and the quantity of inert and non-inert materials generated from each of such Works Order and the disposal record of the materials against each Works Order. [The last sentence may be included for term contracts.]*

(f) Control Measures to track internal movement of materials

Where trucks need to exit and re-enter the Site for delivery of C&D materials generated by the Site, the Contractor shall devise control measures to ensure that the C&D materials are not disposed of outside the Site in breach of the Contract.

6. Recyclable materials such as metal, paper, plastics and milled bituminous materials etc., which have been sorted on the Site for the purposes of recycling those materials, shall not be considered as C&D materials for the purposes of the Contract. For such sorted recyclable materials, the Contractor shall devise appropriate control measures to ensure that the materials are delivered to a proper recycling outlet for processing. The Contractor shall highlight such control measures in the site management plan or the waste management plan pursuant to ETWB TCW No. 15/2003 where appropriate.
7. The Contractor shall submit within 45 days of the date of the Employer's letter of acceptance of the Tender the site management plan to the *Architect/Engineer/Supervising Officer/Maintenance Surveyor for approval. If the *Architect/Engineer/Supervising Officer/Maintenance Surveyor is of the opinion that the site management plan does not meet the requirements of this Particular Specification, he shall request the Contractor to revise the plan by notice in writing. The Contractor shall then revise the plan and resubmit it within 7 days of the date of the notice. The Contractor shall review the site management plan on a monthly basis. The updated section of the plan (if any) should be submitted to the *Architect/Engineer/Supervising Officer/Maintenance Surveyor for approval.
8. The Contractor shall obtain the approval of the *Architect/Engineer/Supervising Officer/Maintenance Surveyor for the site management plan before disposing any C&D materials from the Site.

Informing the Truck Drivers

9. The Contractor shall write to all truck drivers whom he has engaged for removal of C&D materials from the Site and draw their attention to the following particular points:
 - (a) Each truck carrying C&D materials leaving the Site for a disposal ground must bear a duly completed and stamped DDF, irrespective of the location and nature of the disposal ground;
 - (b) The C&D materials must be disposed of at the disposal grounds as stipulated in the DDF; and

- (c) What constitutes an improper disposal (as defined in **Clauses 16 & 17** of this Particular Specification) and that the Public Fill Committee (PFC) will consider revoking the Dumping Licence from the holder of the offending trucks.
- (d) Truck drivers must bear a valid Dumping Licence which he can apply from the Civil Engineering and Development Department (CEDD).

General Procedures of the TTS and Record Keeping

10. The procedures for implementation of the TTS are as follows:

- (a) The *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative will prepare and hand the DDF to the Contractor on the day of disposal [*the project office may amend the time frame to "one working day before the Contractor is to remove the materials off Site" for term contracts*].
- (b) For each truckload of C&D materials leaving the Site, the Contractor's truck driver must bear a duly completed, signed and stamped DDF.
- (c) The truck shall proceed to the disposal ground as stipulated in the DDF. Where the disposal ground is a government disposal facility², the Contractor's truck driver shall present the DDF to the facility operator. If the C&D materials accords with the acceptance criteria, disposal of the materials will be permitted and the facility operator will give the Contractor's truck driver a transaction receipt and stamp the DDF.
- (d) The Contractor shall maintain a daily record of disposal of C&D materials from the Site including details of the C&D materials, the truck number, departure time, etc, using the Daily Record Summary (DRS), a sample of which is given in **Annex 2**.

² A government disposal facility can be a public fill reception facility managed by the PFC or a landfill or Outlying Islands Transfer Facilities managed by the EPD. Currently, there are six public fill reception facilities, namely two Fill Banks at Tuen Mun Area 38 and Tseung Kwan O Area 137, three public filling barging points at Kai Tak, Sai Ying Pun and Quarry Bay and one stockpiling area at Mui Wo. There are three strategic landfills, namely SENT Landfill at Tseung Kwan O, NENT Landfill at Ta Kwu Ling and WENT Landfill at Nim Wan.

- (e) The Contractor shall submit the duly completed Part 1 of the DRS form promptly to the *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative by **1:00 pm** of the working day following the date of disposal.
 - (f) For disposal at government disposal facilities, the Contractor shall check the information recorded in the DRS against available information including his own records and data from CEDD's website [<http://www.cedd.gov.hk/eng/services/tripticket/index.html>] and then complete Part 2 of the DRS form for submission to the *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative within **3** working days after the date of disposal.
 - (g) Where an irregularity is observed or where requested by the *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative under special circumstances (e.g. a DDF has been issued but there is no disposal record at the designated disposal facilities), the Contractor shall submit to the Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative within **5** working days after the recorded date of disposal the supporting evidence such as duly stamped DDF and/or the transaction receipt (where relevant) to confirm proper completion of the delivery trips in question, or within **2** working days after the *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative has requested for such evidence, whichever is later. A fax copy of the DDF and transaction receipt is acceptable, unless otherwise directed by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor.
11. Where the disposal ground is proposed by the Contractor and has been approved by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor, the Contractor shall ensure that the DDF is signed off by a competent person as agreed by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor at the disposal ground to confirm completion of each trip. The Contractor shall also maintain a daily record with details of each disposal trip from the Site to the disposal ground.

Performance monitoring

12. The following items shall be included in the agenda for discussion at every Site Safety and Environmental Management Committee meeting, and Site Safety and Environmental Committee meeting, or other established channels for performance monitoring as agreed by the *Architect's/Engineer's/Supervising Officer's/Maintenance Surveyor's Representative:
 - (a) review the site management plan and implementation of the TTS, and identify areas for improvement;
 - (b) review incidents of non-compliance and discuss the necessary follow-up actions; and
 - (c) monitor the follow-up action on defects and deficiencies identified.

Removal of C&D Materials from Unauthorised Disposal Grounds


13. Where C&D materials from the Site have been dumped at a place other than that designated under the Contract or approved by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor, the Contractor shall at his own cost undertake the following remedial action:
 - (a) remove the dumped C&D materials from the unauthorised disposal ground;
 - (b) reinstate the unauthorized disposal ground to the condition before dumping of the C&D materials; and
 - (c) remove the C&D materials to the disposal ground as designated under the Contract or approved by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor to his satisfaction.
14. Where the unauthorised disposal ground is private property, the Contractor shall be responsible for obtaining the landowner's consent before removal of the dumped C&D materials.

15. Should the Contractor fail to remove the C&D materials from the unauthorised disposal ground or fail to reinstate the unauthorized disposal ground as set out in **Clause 13** above, the Employer may in accordance with Clause 82 of General Conditions of Contract instruct another contractor to perform the work and the Employer shall be entitled to recover such costs from the Contractor in accordance with Clause 83 of General Conditions of Contract. *[The corresponding clauses from relevant General Conditions of Contract should be used for term contracts or D&B contracts.]*

Improper disposal and major improper disposal

16. Either one of the following shall constitute an “improper disposal”:
- (a) A Contractor’s truck loaded with C&D materials having left the Site without a DDF completed in accordance with this Particular Specification;
 - (b) Disposal of C&D materials at a disposal ground other than that designated in the Contract or approved by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor; and
 - (c) The Contractor fails or is unable to produce the stamped DDF or the transaction receipt (where relevant) in accordance with **Clause 10(g)** of this Particular Specification.
17. The following shall constitute a “major improper disposal”:
- (a) Disposal of C&D materials at a disposal ground other than that designated in the Contract or approved by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor and where the disposal ground is private agricultural land; or
 - (b) Illegal dumping of C&D materials.
18. The Contractor shall also note that the Employer takes a very serious view of any non-compliance with the TTS requirements. The Contractor’s performance in implementing the TTS will be fully reflected in the Report on the Contractor’s Performance. The Contractor may also be subject to relevant regulating actions.

19. Furthermore, the Public Fill Committee will consider revoking the Dumping Licence from the holder of the offending trucks.

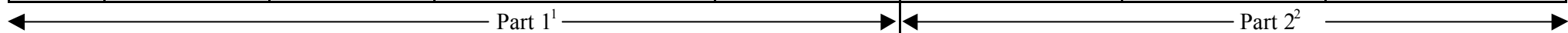
<p>Serial No. 0012345678</p>  <p>Date: 日期: _____</p> <p>Designated PFF/Landfill : 指定公眾填土設施 / 堆填區: _____</p> <p>Vehicle Licence Plate Number. : 車牌號碼 _____</p> <p>Issued By: 簽發: _____</p> <p>Approximate Load : 大約承載量: <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 3/4 <input type="checkbox"/> Full 滿</p> <p>Remark: 備註: _____</p> <p><small>(This part retained by issuing office) (此部分由簽發部門保留) CEDD(CEO)84</small></p>	<p>Serial No. 0012345678</p> <p>Date: 日期: _____</p> <p>Designated PFF/Landfill : 指定公眾填土設施 / 堆填區: _____</p> <p>Vehicle Licence Plate Number. : 車牌號碼: _____</p> <p>Issued By: 簽發: _____</p> <p>Chop of Designated Public Filling Facility/ Landfill 公眾填土設施 / 堆填區蓋印 _____</p>	<p align="center">Construction and Demolition Materials Disposal Delivery Form 拆建物料運載記錄票</p> <p align="center"><small>(Information contained in this form may be displayed on Internet 此表格所載資料可被上載於互聯網)</small></p> <p>Date: _____ Time of departure from site: _____ Vehicle Licence Plate Number: _____ 日期: _____ 離開地盤時間: _____ 車牌號碼: _____</p> <p>Designated Public Filling Facility/Landfill: _____ Location of Site: _____ 指定公眾填土設施 / 堆填區: _____ 地盤位置: _____</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <table style="width:100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> Central & Western 中西區</td> <td><input type="checkbox"/> Wanchai 灣仔</td> <td><input type="checkbox"/> Eastern 東區</td> <td><input type="checkbox"/> Southern 南區</td> <td><input type="checkbox"/> Sai Kung 西貢</td> </tr> <tr> <td><input type="checkbox"/> Yau, Tsim, Mong 油尖旺</td> <td><input type="checkbox"/> Shamshuipo 深水?</td> <td><input type="checkbox"/> Kowloon City 九龍城</td> <td><input type="checkbox"/> Wong Tai Sin 黃大仙</td> <td><input type="checkbox"/> Outlying Islands 離島</td> </tr> <tr> <td><input type="checkbox"/> Kwun Tong 觀塘</td> <td><input type="checkbox"/> Kwai Tsing 葵青</td> <td><input type="checkbox"/> Tsuen Wan 荃灣</td> <td><input type="checkbox"/> Tuen Mun 屯門</td> <td><input type="checkbox"/> Shatin 沙田</td> </tr> <tr> <td><input type="checkbox"/> Yuen Long 元朗</td> <td><input type="checkbox"/> North 北區</td> <td><input type="checkbox"/> Tai Po 大埔</td> <td colspan="2"></td> </tr> </table> </div> <p>Approximate Load: <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 3/4 <input type="checkbox"/> Full 滿 大約承載量:</p> <div style="border: 1px solid black; width: 200px; height: 80px; margin: 10px auto; background-color: #f0f0f0;"></div> <p align="center"><small>Please stick contract no. barcode above 請在上方貼上合約編號條碼</small></p> <p>Chop of Designated Public Filling Facility/Landfill 公眾填土設施 / 堆填區蓋印 _____</p> <p>Chop of Engineer' s/Architect' s Representative 工程師 / 建築師代表蓋印 _____</p>	<input type="checkbox"/> Central & Western 中西區	<input type="checkbox"/> Wanchai 灣仔	<input type="checkbox"/> Eastern 東區	<input type="checkbox"/> Southern 南區	<input type="checkbox"/> Sai Kung 西貢	<input type="checkbox"/> Yau, Tsim, Mong 油尖旺	<input type="checkbox"/> Shamshuipo 深水?	<input type="checkbox"/> Kowloon City 九龍城	<input type="checkbox"/> Wong Tai Sin 黃大仙	<input type="checkbox"/> Outlying Islands 離島	<input type="checkbox"/> Kwun Tong 觀塘	<input type="checkbox"/> Kwai Tsing 葵青	<input type="checkbox"/> Tsuen Wan 荃灣	<input type="checkbox"/> Tuen Mun 屯門	<input type="checkbox"/> Shatin 沙田	<input type="checkbox"/> Yuen Long 元朗	<input type="checkbox"/> North 北區	<input type="checkbox"/> Tai Po 大埔		
<input type="checkbox"/> Central & Western 中西區	<input type="checkbox"/> Wanchai 灣仔	<input type="checkbox"/> Eastern 東區	<input type="checkbox"/> Southern 南區	<input type="checkbox"/> Sai Kung 西貢																		
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<input type="checkbox"/> Yuen Long 元朗	<input type="checkbox"/> North 北區	<input type="checkbox"/> Tai Po 大埔																				

Remark: Original form with a light red and inclined watermark “DDF”.

A sample of "Daily Record Summary" to record daily disposal of construction & demolition (C&D) materials from the Site

- (1) Contract no. & title: _____
- (2) Date of disposal: _____
- (3) Designated disposal ground(s): (a) _____
 (b) _____
 (c) _____
 others _____
- (4) Approved alternative disposal grounds: _____

DDF Serial no.	Vehicle registration no.	Departure time from site	Approx. vol (e.g. Full/Three Quarter/Half/One quarter)	C&D material type (e.g. inert or non-inert)	Actual disposal ground	Arrival time at disposal ground	Remarks



Submitted by : _____ [Name of Contractor's Designated Person]
 Signature : _____
 Date : _____
 Received by : _____ [Name and signature of the officer]
 Post : _____
 Date & Time : _____

Submitted by : _____ [Name of Contractor's Designated Person]
 Signature : _____
 Date : _____
 Received by : _____ [Name and signature of the officer]
 Post : _____
 Date & Time : _____

¹ Part 1 - The Contractor shall complete Part 1 and submit it to the Architect's/Engineer's Representative by 1:00 pm of the following working day of the disposal trip.

² Part 2 - The Contractor shall complete Part 2 and submit it to the Architect's/Engineer's Representative within 3 working days of the disposal trip.

**Particular Preamble to amend the Standard Method of Measurement to Introduce the
“Pay for Site Management Plan for Trip Ticket System”**

Section (XX) – Site Management Plan for Trip Ticket System

**IMPLEMENTATION OF SITE MANAGEMENT PLAN FOR
TRIP TICKET SYSTEM**

xx.01 Rates appearing in this Section shall be deemed to allow for the value of work in connection with meeting all statutory and contractual obligations in ensuring proper disposal of construction and demolition (C&D) materials generated from the Site to designated disposal ground under the Contract or other disposal grounds approved or as directed by *Architect/Engineer/Supervising Officer/Maintenance Surveyor, and any other related obligations, liabilities, risks and profit. In the event that the rates are insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the rates inserted elsewhere in the Bills of Quantities.

SITE MANAGEMENT PLAN FOR TRIP TICKET SYSTEM

Units

xx.02 The units of measurement shall be :

- (i) complete site management plan for trip ticket system item.
- (ii) implementation of site management plan for trip ticket systemmonth.

Measurement

xx.03 The item for “complete site management plan for trip ticket system” shall be measured when the *Architect/Engineer/Supervising Officer/Maintenance Surveyor approves the site management plan.

xx.04 The measurement of the “implementation of site management plan for trip ticket system” shall be the period of time commencing from the date of approval by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor of the site management plan until all C&D materials have been removed from the Site, or an earlier or later date notified by the *Architect/Engineer/Supervising Officer/Maintenance Surveyor.

xx.05 No measurement shall be made for the “implementation of site management plan for trip ticket system” for any month during which there is any incident of improper disposal or major improper disposal as defined in Particular Specification Clauses [16] & [17], or late submission of the records as required in Particular Specification Clause [10], or there is no disposal of C&D materials off the Site during the month.

Itemisation

xx.06 Separate items shall be provided for the site management plan for the trip ticket system in accordance with General Principles paragraphs 3 and 4 and the following :

Group	Feature
I	1. Complete site management plan for trip ticket system 2. Implementation of site management plan for trip ticket system

Complete Site Management Plan for Trip Ticket System

xx.07 The item for “complete site management plan for trip ticket system” shall, in accordance with General Preambles paragraph 2, include for :

- (a) Prepare the site management plan for trip ticket system to the satisfaction of the *Architect / Engineer / Supervising Officer / Maintenance Surveyor*;
- (b) distribute or inform all relevant parties details of the site management plan for trip ticket system; and
- (c) inform truck drivers engaged in the disposal of C&D materials the requirements under the trip ticket system.

Implementation of Site Management Plan for Trip Ticket System

xx.08 The item for the “Implementation of site management plan for trip ticket system” shall, in accordance with General Preambles paragraph 2, include for:

Item Coverage

- (a) review, update and revise the site management

plan for trip ticket system taking into account the comments made by the *Architect / Engineer / Supervising Officer / Maintenance Surveyor or any other parties;

- (b) assign staff and necessary facilities/equipment for overseeing and implementation of site management plan for trip ticket system;
- (c) implement measures to ensure that trucks carrying C&D materials from the Site proceed to the designated disposal grounds;
- (d) devise and implement appropriate measures to ensure that the sorted recyclable materials, which are sorted on the Site for the purpose of recycling such materials, are delivered to a proper recycling outlet for processing;
- (e) compile, submit and maintain disposal records;
- (f) investigate and report on incidents of improper disposal and non-compliance with the trip ticket system;
- (g) monitor performance of trip ticket system and implement improvement measures;
- (h) implement additional measures to control disposal of C&D materials to alternative disposal ground which the *Architect / Engineer / Supervising Officer / Maintenance Surveyor has approved;
- (i) distribute revisions of the site management plan for trip ticket system to all relevant parties including the truck drivers engaged in delivery of C&D materials for disposal; and
- (j) Other requirements for implementation of the trip ticket system as stipulated in Particular Specification clauses [5] and [10] to [14].

Note: The sample is based on the Hong Kong Government Standard Method of Measurement for Civil Engineering Works. For Bill of Quantities based on other standard methods of measurement, appropriate amendments shall be made.

(* Delete or amend as appropriate to suit departmental contract arrangements)

REPORT ON IRREGULARITY OF DISPOSAL OF C&D MATERIALS
(To be submitted within 2 weeks after the date of disposal)

To : Secretary, Public Fill Committee
Civil Engineering and Development Department

Fax : 2714 0113

Contract No. _____

After checking against the “Disposal Records” at the website [<http://www.cedd.gov.hk/eng/services/tripticket/index.html>], I note the following irregularities pertaining to disposal(s) made on _____ :

PART A No. of Disposal Delivery Form (DDF) issued : _____
No. of disposals recorded at the “Disposal Records” : _____

PART B DDF issued but Disposal Trip not found in the “Disposal Records”

Vehicle Licence Plate No.	Production of evidence (i.e. stamped DDF and/or transaction record slip) by the Contractor/truck driver upon request of Architect's/Engineer's Representative (please tick the appropriate box).		If ticked “NO”, please give the actual location that the disposal was made.
	“YES”	“NO” (See Note below)	

PART C DDF not issued but disposal trip found in the “Disposal Records”

Vehicle Licence Plate No. (in column “REG_Mark” in “Disposal Records” file)	Transaction Reference No. (in column “REF_NO” in “Disposal Records” file)

Remarks (e.g. root cause of the non-compliance and corrective actions taken by the Contractor)

.....
.....
.....

Signature of Architect's/Engineer's Representative _____

Name of Architect's/Engineer's Representative _____

Department / Consultant _____

Telephone No. _____ Fax _____ Date _____

Note :-

The Architect/Engineer is reminded to take follow-up action in case of non-compliance with the trip ticket system in accordance with the Circular ETWB TCW No. 31/2004 and relevant departmental procedures. Usually, a “NO” entry in Part B constitutes a non-compliance with the trip ticket system. The Secretary of the Public Fill Committee will only provide a formal reply to the report upon request.

**Enforcement Authorities for Illegal Disposal of
Construction and Demolition Materials**

	Enforcement authorities	E-mail	Tel no.
(i)	EPD	hq-hotline@epd.gov.hk	2838 3111
	Regional Office (East) - Kwun Tong, Sai Kung, Wong Tai Sin, Kowloon City, Yau Tsim Mong	teg-hotline@epd.gov.hk	2117 7501
	Regional Office (West) - Shamshuipo, Tsuen Wan, Kwai Tsing, Tuen Mun	uwg-hotline@epd.gov.hk	2417 6074
	Regional Office (North) - Shatin, Tai Po, North, Yuen Long	tng-hotline@epd.gov.hk	2158 5800
	Regional Office (South) - Wanchai, Southern, Central & Western, Eastern, Islands	tsg-hotline@epd.gov.hk	2516 1800
(ii)	Relevant DLOs :		
	Hong Kong East	dlohke@landsd.gov.hk	2835 1660
	Hong Kong West & South	dlohks@landsd.gov.hk	2835 1688
	Kowloon East	dloke@landsd.gov.hk	2300 1724
	Kowloon West	dlokww@landsd.gov.hk	2300 1736
	Islands	gendlois@landsd.gov.hk	2852 4265
	North	lnddlon@landsd.gcn.gov.hk	2675 1809
	Sai Kung	gendlosk@landsd.gov.hk	2791 7019
	Sha Tin	gendlost@landsd.gov.hk	2158 4700
	Tuen Mun	lnddlotm@landsd.gcn.gov.hk	2451 1176
	Tai Po	gendlotp@landsd.gov.hk	2654 1263
	Tsuen Wan & Kwai Tsing	gendlotwkt@landsd.gov.hk	2402 1164
	Yuen Long	gendloyl@landsd.gov.hk	2443 3575
(iii)	PlanD	ceppd@pland.gov.hk	2158 6070