

**Summary of key features/items added to the tender documents in 2013 for the OWTF Phase 1 project
as compared with that of the tender exercise in 2011**

Key Features/ items	Tender documents in 2011	Tender documents in 2013	Remarks
Procurement Approach	Prequalify tendering	Open tendering	<ul style="list-style-type: none"> Adopting open tendering without prequalification to increase competition and shorten the tendering period.
Time for Completion	<p>Appendix A – General Information of the Form of Tender</p> <p>Time for Completion 730 days</p>	<p>Appendix A – General Information of the Form of Tender</p> <p>Time for Completion 820 days</p>	<ul style="list-style-type: none"> Extending design and construction period from 24 months (approximately 730 days) to 27 months (approximately 820 days) could allow a number of activities to be carried out in sequences rather than in parallel and thus a reduction in labour demand and construction cost given the tight and uncertain labour market in the construction industry of Hong Kong at that

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			time.
Schedule of Milestones	<p>Appendix F – Schedule of Milestones of the Form of Tender 25 numbers of milestone items</p> <p>8 numbers of items under SCHEDULE NO. MC1 MILESTONES FOR PRELIMINARIES AND GENERAL REQUIREMENTS</p> <p>2 numbers of items under SCHEDULE NO. MC2 MILESTONES FOR DESIGN OF THE WORKS</p> <p>15 numbers of items under SCHEDULE NO. MC3- MILESTONES FOR CONSTRUCTION OF THE WORKS</p>	<p>Appendix F – Schedule of Milestones of the Form of Tender 63 numbers of milestone item</p> <p>25 numbers of items under SCHEDULE NO. MC1 MILESTONES FOR PRELIMINARIES AND GENERAL REQUIREMENTS</p> <p>10 numbers of items under SCHEDULE NO. MC2 MILESTONES FOR DESIGN OF THE WORKS</p> <p>28 numbers of items under SCHEDULE NO. MC3 MILESTONES FOR CONSTRUCTION OF THE WORKS</p>	<ul style="list-style-type: none"> • Introducing more milestone payments (from 25 to 63) to reduce the financing costs during design and construction stage. • In the revised milestone payment schedule adopted in the 2013 re-tender exercise, we introduced payment provision for the Contractor to receive intermediate payments commensurate with the percentage of works done under each milestone instead of just one single payment upon completion of the corresponding key component or system in question so as to reduce the financing costs and improve the cashflow to the

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			Contractor.
Guaranteed tonnage of food waste	There was no provision for guaranteed tonnage in the 2011 tender documents.	<p><u>Conditions of Contract Clause 71.4</u></p> <p><i>If the Minimum Tonnage of Treatable Waste to be treated at the Facility is not achieved in any month during the Operation, the Employer shall nevertheless ascertain the Operation Fees for the relevant month as if the Contractor had treated the Minimum Tonnage of Treatable Waste at the Facility for the said month.</i></p> <p><u>Appendix A – General Information of the Form of Tender</u></p> <p><i>Minimum Tonnage of Treatable Waste1,500 tonnes per</i></p>	<ul style="list-style-type: none"> • Introducing a guaranteed tonnage of 50 tpd to share out the risk of waste quantity uncertainty.

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		<i>month</i>	
Specifications	<p><u>Specification Part C – Requirements for Electrical and Mechanical Works</u> <u>Clause 1.1.1.18</u></p> <p><u>The Contractor is required to provide the specified no. and type of redundancy units.</u></p>	<p><u>Specification Part C – Requirements for Electrical and Mechanical Works</u> <u>Clause 1.1.1.18</u></p> <p>The Contractor is allowed to propose the no. and type of redundancy units required in the design package.</p>	<ul style="list-style-type: none"> • Allowing the Contractor to propose own design and operational management regime rather than specifying the redundancy units to meet the service level requirements as an incentive to the Contractor to come up with optimized design to lower the construction cost as well as the maintenance cost.
Relaxation of height restriction	<p><u>Specification Part A – General Requirements</u> <u>Clause 3.1.1.6</u></p> <p>3.1.1.6 Portion 1 of the Site provides area available for construction of the Facility. For the avoidance of doubt, the</p>	<p><u>Specification Part A – General Requirements</u> <u>Clause 3.1.1.6</u></p> <p>3.1.1.6 Portion 1 of the Site provides area available for construction of the Facility. For the avoidance of doubt, the</p>	<ul style="list-style-type: none"> • Relaxing the building height limit from 20m to 25m to increase design flexibility. • The height of buildings at the Project site was restricted to a maximum of 20m under the Siu Ho Wan Layout Plan No. L/1-SHW/1.

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	<p>boundary of the Facility is within the boundary of the Portion 1 of the Site. The Contractor shall note that no part of any structure(s) or building(s) to be erected on this area may exceed the height of 20m above mean formation level. Structure(s) or building(s) of other heights may be permitted subject to prior written approval from District Lands Officer. Any areas outside Portion 1 are designated as nonbuilding area for the purpose of access road and works area.</p>	<p>boundary of the Facility is within the boundary of the Portion 1 of the Site. The Contractor shall note that no part of any structure(s) or building(s) to be erected on this area may exceed the height of 25m above mean formation level. Structure(s) or building(s) of other heights may be permitted subject to prior written approval from District Lands Officer. Any areas outside Portion 1 are designated as nonbuilding area for the purpose of access road and works area.</p>	<ul style="list-style-type: none"> • During the review of 2011 tender exercise, it was observed that the height limit of the site had cost implications to the design of the treatment facilities. Owing to the height restriction of 20m, a number of smaller anaerobic digestion (AD) tanks were required to provide the required treatment capacity, which led to a higher construction cost as well as maintenance cost. If the height restriction was relaxed to 25m, a much more cost-effective design of AD tanks could be afforded. Therefore it was considered that the relaxing the building height limit of the project site from 20m to 25m could enhance the cost-effectiveness

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			of the project.
Natural Terrain Mitigation /Stabilization Works	<p>There was no natural terrain clause in the engineering conditions attached to the 2011 tender documents. Before the close of tender in November 2011, EPD had also taken the step to inform the tenderers on 21 September 2011 that slope mitigation and/ or stabilization works might be required and the Contractor would be informed and might be required to undertake the necessary slope mitigation and/ or stabilization and maintenance works via tender addendum.</p> <p>Tender Queries and Responses No. 2 issued to the Tenderers</p>	<p><u>Specification Part A – General Requirements</u> <u>Clause 3.4</u></p> <p><i>3.4.1.1 Engineering Conditions for the allocation of the Site to the Employer are given in Appendix A3.01 to the Specification Part A.</i></p> <p><i>3.4.1.2 Further to Clause 27 of the Conditions of Contract, the Contractor shall comply with the requirements of these Engineering Conditions in executing the Design, the Works, and the Operation, including but not limited to all liaison, coordination, submissions and any other obligations as the case</i></p>	<ul style="list-style-type: none"> • When commenting on the Permanent Government Land Allocation (PGLA) for this project, it was noted that a natural terrain hazard study and any appropriate mitigation measures, if found necessary, should be carried out as part of the proposed development. While awaiting the Lands Department to finalize the engineering conditions for the PGLA, EPD had taken the step to instruct the Consultant to carry out the natural terrain hazard study (NTHS) to assess the requirements of the slope and natural terrain protection works. Before the close of tender in November 2011, EPD had also taken the step to

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	<p>dated 21 September 2011</p> <p>2. Tenderer shall also note that the Employer is arranging with concerned parties on the execution of the Natural Terrain Hazard Study (NTHS). The Contractor will be informed regarding the outcome of the NTHS.</p> <p>In case any slope mitigation and/ or stabilization works are necessary for the development of the Organic Waste Treatment Facilities, Phase 1, the Contractor will be informed and may be required to undertake the necessary slope mitigation and/ or stabilization and maintenance works. For the purpose of this</p>	<p><i>may be.</i></p> <p><u>Appendix A3.01 Engineering Conditions Issued by DLO to EPD</u></p> <p><i>Natural Terrain Clause (38)</i> <i>The site could be affected by potential geotechnical hazards in the form of landslips including boulder falls arising particularly from the area shown coloured ‘green cross-hatched black’ on the attached plan (hereinafter referred to as ‘the Green Cross-Hatched Black Area’). The allocatee shall carry out all necessary geotechnical investigations, design, construction and supervision of mitigation/stabilisation works,</i></p>	<p>inform the tenderers on 21 September 2011 that slope mitigation and/ or stabilization works might be required and the Contractor would be informed and might be required to undertake the necessary slope mitigation and/ or stabilization and maintenance works via tender addendum.</p> <ul style="list-style-type: none"> • If the 2011 tender exercise was not cancelled on public interest ground, EPD could instruct the Contractor to carry out any necessary slope and natural terrain protection works via a variation order. • The necessary natural terrain and slope protection mitigation requirements had been properly incorporated in the 2013 tender

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	Tender, slope mitigation and/ or stabilization and maintenance works 'not within the Site are outside the scope of the Tender.	<i>and the maintenance of such works on the Green Cross-Hatched Black Area and on the site. A submission covering the investigation and design of all such works shall be made to the Geotechnical Engineering Office for checking.</i>	exercise.