

JOB No.: TCS00491/09

DSD CONTRACT No.: DC/2009/08



**CONSTRUCTION OF YUEN LONG SOUTH BRANCH
SEWERS AND EXPANSION OF HA TSUEN SEWAGE
PUMPING STATION**

**THE NINETEENTH RESULTS OF LANDSCAPE AND VISUAL IMPACT
MONITORING
FOR AUGUST 2011 (No.19)**

PREPARED FOR

**CHINA STATE CONSTRUCTION ENGINEERING
(HONG KONG) COMPANY LIMITED**

Quality Index

| Date | Reference No. | Prepared By | Certified By |
|-------------|--------------------------|---|---|
| 12 Dec 2011 | TCS00491/09/600/R00315v2 | Wong Fu Nam (Senior Environmental Consultant) | T.W. Tam (Environmental Team Leader) |
| | |  |  |

| Version | Date | Description |
|---------|-------------|--------------------------------|
| 1 | 23 Nov 2011 | First submission |
| 2 | 12 Dec 2011 | Amended against IEC's comments |

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4 January 2012

By Post

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Your Ref:

Our Ref: EB000586-F/THW12-3742

For attention of: Mr. T. W. Tam

Dear Mr. Tam,

Contract No.: DC/2009/08

**Construction of Yuen Long South Branch Sewers and Expansion of Ha Tsuen Sewage
Pumping Station**

**Monthly EM&A Report for Designated Project, Landscape and Visual Impact Sections, April to
September 2011 – IEC Verification**

With reference to ET's captioned Landscape and Visual Impact section of monthly EM&A reports for six reporting months, April to September 2011 inclusive (ET's ref.: TCS00491/09/600/R0298v2, TCS00491/09/600/R0312v2, TCS00491/09/600/R0313v2, TCS00491/09/600/R0314v2, TCS00491/09/600/R0315v2 and TCS00491/09/600/R0316v2, all dated 12 December 2011) received on 30 December 2011, we have no comment and hereby verify the captioned Landscape and Visual Impact section of monthly EM&A reports.

Should there be any queries, please feel free to contact our William Law on 2911 2511.

Yours sincerely

F.C. TSANG
Independent Environmental Checker
HYDER CONSULTING LIMITED

FCT/WL/my

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***APPENDIX A* SITE INSPECTION CHECKLIST**

1. INTRODUCTION

- 1.01 This Results of Landscape and Visual Impact Monitoring (hereinafter “the LVIM Results”) is part of the monthly EM&A report under DSD Contract No.: DC/2009/08 Construction of Yuen Long South Branch Sewers and Expansion of Ha Tsuen Sewage Pumping Station: *Results of Landscape and Visual Impact* of Chapter 4 *Impact Monitoring Results*. The LVIM Results should therefore be read in conjunction with the corresponding monthly EM&A reports.
- 1.02 Pursuant to Chapter 6 *Landscape and Visual* of the EM&A Manual, EM&A for landscape and visual resources is considered to be a key aspect during both the construction and operational phases of the Project. The implementation and maintenance of landscape compensatory planting measures should therefore be checked to ensure that they are fully realized and that potential conflicts between the proposed landscape measures and any other project works and operational requirements are resolved at the earliest possible date and without compromise to the intention of the mitigation measures.
- 1.03 Monitoring of the recommended implementation of the mitigation measures is required to be conducted throughout the construction phase of the Project.
- 1.04 As a member of the ET, the landscape architect is responsible for the implementation of landscape construction works and subsequent maintenance operations during the 12 month establishment period. The establishment works should be undertaken throughout the Contractor's one year maintenance period which will be within the first operational year of the Project.
- 1.05 All measures undertaken by both the Contractor and the Landscape Contractor during the construction phase and first year of the operational phase should be audited by the landscape architect on a regular basis to ensure compliance with the intended aims of the measures.
- 1.06 Site inspections should be undertaken at least once every two weeks throughout the construction period and once every two months during the operational phase.
- 1.07 The LVIM Results has been prepared by the landscape architect and compiled by the ET upon receipt for submission to EPD after verification by the IEC.
- 1.08 To cater to closer compliance of the EM&A reporting with the EP requirements, it has been agreed among the RE, IEC and ET that The LVIM Results is submitted separately as a stand-alone submission.
- 1.09 This is the Nineteenth (No. 19) LVIM Results, covering the construction period from 1 to 31 August 2011 (hereinafter “the Result Period”).

CONTENT OF THE LVIM RESULTS

- 2.01 This LVIM Results contains the site inspection checklist for the Result Period, where landscape and visual impact monitoring results are presented and where necessary, the associated recommendations are included.
- 2.02 The site inspection checklist is enclosed in *Appendix A*.

Appendix A

Site Inspection Checklist

Contract No.: DC/2009/08
Contract title: Construction of Yuen Long South Sewer and Expansion of Ha Tsuen Sewage Pumping Station
Contractor: China State Construction Engrg. (HK) Ltd.
Location: Ha Tsuen Sewage Pumping Station
Inspection Date: 15-Aug-2011

| | | Satisfactory | | | Rectified | | Remarks |
|-------------------|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------|
| | | N/A | Yes | No | Yes | No | |
| I. General | | | | | | | |
| 1. | Erect hoarding around site boundary properly | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 2. | Keep well maintenance of hoarding | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 3. | All construction works are carried out within site boundary properly | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 4. | Carry out the initial tree survey prior to construction | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 5. | Provide tree labels according to tree survey records | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |

Comments:

Standard hoarding was erected and well maintained around the works area at Ha Tsuen Sewage Pumping Station (HTSPS).

The construction has no implication to protected tree.

II. Transplanting Works

| | | | | | | |
|--|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--|
| 1. All transplanting works are carried out in accordance with the specifications | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. The transplanted trees are kept in regular inspection within the establishment period | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. The transplanted trees are kept in maintenance throughout the establishment period as followings: | | | | | | |
| (i) Watering | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (ii) Weeding | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (iii) Fertilising | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (iv) Littering | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (v) Grass cutting | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (vi) Firming up | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (vii) Pest control | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (viii) Disease control | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (ix) Pruning | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (x) Replacement | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Comments:

There had total 73 nos. of transplanted trees in Ha Tsuen Sewage Pumping Station due to construction works under this contract.

All tree have been handover back to DSD.

III. Landscaping Works

| | | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--|
| 1. All landscaping works are carried out in accordance with the specifications | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. The landscaping plants are kept in regular inspection within the establishment period | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Landscape and Visual Impact Assessment Site Inspection Checklist

| | Satisfactory | | | Rectified | | Remarks |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------|
| | N/A | Yes | No | Yes | No | |
| 3. The landscaping plants are kept in maintenance throughout the establishment period as followings: | | | | | | |
| (i) Watering | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (ii) Weeding | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (iii) Fertilising | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (iv) Littering | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (v) Grass cutting | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (vi) Firming up | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (vii) Pest control | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (viii) Disease control | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (ix) Pruning | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (x) Replacement | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Comments:

No landscaping works were carried out in the reporting month

IV. Preservation and Protection of Trees

| | | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| 1. All preserved trees are protected in accordance with the specifications | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2. All preserved trees are fenced off properly | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3. No construction activities are carried out in the protection zone of the preserved trees | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Comments:

All retained trees were fenced off and protected properly within the works area of the site.

Conclusion

Generally, the overall conditions of transplanting and visual are normal at Ha Tsuen Sewage Pumping Station. The conditions of hoarding were satisfactory. The trees which were at Ha Tsuen Pumping Station have been returned to Drainage Services Department for management and monitoring since January 2011.

Remarks

Signatures:

Senior Landscape Architect



(Name: David Bloxham MLI (UK Chartered))

Landscape and Visual Impact Assessment

Site Inspection Checklist

Contract No.: DC/2009/08

Contract title: Construction of Yuen Long South Sewer and Expansion of Ha Tsuen Sewage Pumping Station

Contractor: China State Construction Engrg. (HK) Ltd.

Location: Ha Tsuen Sewage Pumping Station

Inspection Date: 31-Aug-2011

| | | Satisfactory | | | Rectified | | Remarks |
|-------------------|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------|
| | | N/A | Yes | No | Yes | No | |
| I. General | | | | | | | |
| 1. | Erect hoarding around site boundary properly | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 2. | Keep well maintenance of hoarding | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 3. | All construction works are carried out within site boundary properly | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 4. | Carry out the initial tree survey prior to construction | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 5. | Provide tree labels according to tree survey records | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |

Comments:

Standard hoarding was erected and well maintained around the works area at Ha Tsuen Sewage Pumping Station (HTSPS).

All trees were labelled as requirement.

II. Transplanting Works

| | | | | | | |
|---|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--|
| 1. All transplanting works are carried out in accordance with the specifications | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. The transplanted trees are kept in regular inspection within the establishment period | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. The transplanted trees are kept in maintenance throughout the establishment period as follows: | | | | | | |
| (i) Watering | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (ii) Weeding | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (iii) Fertilising | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (iv) Littering | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (v) Grass cutting | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (vi) Firming up | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (vii) Pest control | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (viii) Disease control | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (ix) Pruning | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| (x) Replacement | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Comments:

There had total 73 nos. of transplanted trees in Ha Tsuen Sewage Pumping Station due to construction works under this contract.

Watering and weeding should be undertaken periodically.

III. Landscaping Works

| | | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|--|
| 1. All landscaping works are carried out in accordance with the specifications | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. The landscaping plants are kept in regular inspection within the establishment period | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

| | Satisfactory | | | Rectified | | Remarks |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------|
| | N/A | Yes | No | Yes | No | |
| 3. The landscaping plants are kept in maintenance throughout the establishment period as follows: | | | | | | |
| (i) Watering | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (ii) Weeding | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (iii) Fertilising | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (iv) Littering | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (v) Grass cutting | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (vi) Firming up | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (vii) Pest control | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (viii) Disease control | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (ix) Pruning | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| (x) Replacement | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Comments:

No landscaping works were carried out in the reporting month

IV. Preservation and Protection of Trees

| | | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| 1. All preserved trees are protected in accordance with the specifications | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2. All preserved trees are fenced off properly | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3. No construction activities are carried out in the protection zone of the preserved trees | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Comments:

All retained trees were fenced off and protected properly within the works area of the site. DSD is carrying out the preservation and protection.

Conclusion

Generally, the overall conditions of transplanting and visual are normal at Ha Tsuen Sewage Pumping Station. The conditions of hoarding were satisfactory. The trees which were at Ha Tsuen Pumping Station have been returned to Drainage Services Department for management and monitoring since January 2011.

Remarks

Signatures:

Senior Landscape Architect



(Name: David Bloxham MLI (UK Chartered))



Ha Tusen Pumping Station



Ha Tusen Pumping Station