

DRAINAGE SERVICES DEPARTMENT



CONTRACT NO. DC/2011/06

**REPROVISIONING OF BOUNDARY PATROL ROAD AND
ASSOCIATED SECURITY FACILITIES BETWEEN
PING YUEN RIVER AND PAK FU SHAN AND
DRAINAGE WORKS IN NORTH DISTRICT**

**THIRD QUARTERLY EM&A SUMMARY REPORT FOR
ADVANCED WORKS UNDER EP-430/2011
(MARCH - MAY 2013)**

**PREPARED FOR
SANG HING CIVIL CONSTRUCTORS CO., LTD.**

Quality Index

Date	Reference No.	Prepared By	Approval By
	TCS00599/12/600/R0122	 F. N. Wong Senior Environmental Consultant	 T. W. Tam Environmental Team Leader

Version	Date	Description
0	27 June 2013	First submission.
1	3 July 2013	Amended against IEC's comments

This report has been prepared by Action-United Environmental Services & Consulting with all reasonable skill, care and diligence within the terms of the Agreement with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

Ref.: DSDBPRNDEM00_0_0155L.13

3 Jul 2013

By Post and Fax (2959 6079)

Action-United Environmental Services & Consulting
Unit A, 20/F,
Gold King Industrial Building,
New Territories, Hong Kong

Attention: Mr. TW Tam

Dear Sir,

**Re: Contract No. DC/2011/06
Reprovisioning of Boundary Patrol Road and Associated Security Facilities
between Ping Yuen River and Pak Fu Shan and Drainage Works in North
District
Third Quarterly EM&A Summary Report for Drainage Works under EP-
430/2011 (March – May 2013)**

Reference is made to the Environmental Team's submission of the captioned report (Version 1) dated 3 July 2013 received through E-mail on 3 July 2013 for our review and comment.

Please be informed that we have no adverse comment on the captioned submission.

Should you have any queries, please do not hesitate to contact the undersigned or our Mr. Simon Cheung at 3465 2810.

Yours sincerely,



Roger Leung
Independent Environmental Checker

c.c.	DSD	Mr. Eric Cheng	by fax: 2827 8700
	SHCCCL	Mr. Raymond W.M. Yau	by fax: 2403 1162

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EXECUTIVE SUMMARY

REPORTING OF THE CONTRACT

- ES01. In order to ease reporting of the Contract, it has been agreed among the Engineer, IEC, Contractor and ET that the EM&A reports for the Contract are split into three stand-alone reports, namely EM&A Report for Advanced Works under EP-430/2011, EM&A Report for Drainage Works under EP-277/2007/A and EM&A Report for Drainage Works at Ma Wat Wai.
- ES02. This is the third quarterly EM&A summary report for Advanced Works under EP-430/2011, covering the construction period of the Works from 1 March to 28 to 31 May 2013.
- ES03. The structure of this Report is as follows:

EXECUTIVE SUMMARY

- 1 *Introduction*
- 2 *Requirements for Construction Impact monitoring*
- 3 *Environmental monitoring Results*
- 4 *Solid and liquid Waste Management*
- 5 *Complaints, Notification of Summons and Successful Prosecution*
- 6 *Conclusions and Recommendations*

Annex

- Annex A Location plan for the Works*
- Annex B Environmental Management Organization and Communication Lines*
- Annex C Implementation Schedule for Environmental Mitigation Measures*
- Annex D Construction Program*
- Annex E Monthly Summary Waste Flow Table and Summary Table for Work Processes or Activities Requiring Timber for Temporary Works*

NON-CONFORMANCE WITH ENVIRONMENTAL REGULATIONS / STANDARDS

- ES04. No environmental monitoring was performed for the Advanced Works.
- ES05. No non-conformance with environmental regulations/standards was identified during the site inspection in the Reporting Period.

COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

- ES06. No environmental complaints, notifications of summons and successful prosecutions were registered during the Reporting Period.

CONCLUSIONS

- ES07. Neither non-conformance with environmental regulations/standards nor written or verbal environmental complaints, notification of summons and successful prosecutions were recorded during the Reporting Period, indicating the implemented environmental mitigation measures were effective and efficient to alleviate adverse environmental impacts generated from the construction activities of the Works.

RECOMMENDATIONS

- ES08. Nevertheless, fully implementation of the required environmental mitigation measures is reminded, in particular construction dust suppression measures during dusty construction activities under dry and windy conditions, as well as water quality mitigation measures during rainy conditions.
- ES09. In addition, attention should also paid to implementation of the construction noise mitigation measures during noisy construction works.

1 BACKGROUND INFORMATION

1.1 REGULATION OF SHENZHEN RIVER STAGE 4

1.1.1 Changjiang Water Resources Protection Institute (長江水資源保護科學研究所) in association with ERM-Hong Kong Ltd was jointly commissioned by Shenzhen River Regulation Office of Shenzhen Municipal Government (深圳市治理深圳河辦公室) and Drainage Services Department of the HKSAR Government (hereinafter “DSD” or “the Engineer”) to undertake an environmental impact assessment study (hereinafter “the EIA”) for a construction project *Regulation of Shenzhen River Stage 4*. Layout Plan for the Project is shown in *Annex A*.

1.1.2 The *Regulation of Shenzhen River Stage 4* will be constructed under two separate contracts, Advanced Works within the HKSAR and River Modification Works within both the HKSAR and the Shenzhen Municipality, comprising:

- 1) Improvement of an approximately 4.5 km long section of Shenzhen River;
- 2) Re-provisioning of the boundary patrol road and about 4.5km of boundary fence affected by the Project;
- 3) Dry weather flow interception of the sewage discharging from Shenzhen side into the Project area; and
- 4) The associated landscaping works.

1.1.3 The construction programme proposed in the EIA is summarized in *Table 1-1* as follow

Table 1.1 Summary of Construction Programme for the Project

Item	Phase	Period	Duration	Works Description
1	Advanced Works	February 2012 to January 2015	36 months	Construction of boundary fence and boundary patrol road on HK side
2	Preparation	March to July 2013	5 months	Tendering; land resumption
3	Reconstruction	August to September 2013	2 months	Construction of site access roads and site office, site clearance, site preparation works etc.
4	Construction	October 2013 to December 2016	39 months	Main construction works of the Project such as dredging of river sediment and soil excavation, construction of flood retardation pond, boundary fence and boundary patrol road on Shenzhen side, river modification works, dry weather flow interception works etc.
5	Post-construction	January to March 2017	3 months	Demolition of temporary structures, landscaping works etc.

1.2 DSD CONTRACT NO. DC/2011/06

1.2.1 Sang Hing Civil Contractors Company Limited (hereinafter “SHCCCL” or “the Contractor”) has been awarded by Drainage Services Department of the HKSAR Government (hereinafter “DSD” or “the Engineer”) since 31 March 2012 DSD Contract No. DC/2011/06 – Re-provisioning of Boundary Patrol Road and Associated Security Facilities between Ping Yuen River and Pak Fu Shan and Drainage Works in North District (hereafter “the Contract”).

1.2.2 The Contract comprises:

A. Reprovisioning of Boundary Patrol Road and Associated Security Facilities between Ping Yuen River and Pak Fu Shan, which is one of the two parts of Regulation of Shenzhen River Stage 4, i.e. the Advanced Works within the HKSAR to be implemented under Environmental Permit No. EP-430/2011 (hereinafter “EP-430/2011”) (hereinafter “the Advanced Works under EP-430/2011” or “the Works”). The Works include:

- 1) Re-provisioning of approximately 4.3 kilometres (km) long and 3.5 metres (m) wide boundary patrol road between Ping Yuen River and Pak Fu Shan;
- 2) Re-provisioning of approximately 4.3 km long primary boundary fence with associated lighting and Fence Protection System between Ping Yuen River and Pak Fu Shan;
- 3) Re-provisioning of the Hong Kong Police Force Lo Fong Bridge Post; and
- 4) Construction of about 3.3 km long secondary boundary fence.

B. Drainage Works in North District to be implemented under Environmental Permit No. EP-277/2007/A, which has been commenced in May 2012 and is scheduled to be completed by May 2013, including

- 1) Construction of about 400m of drainage channel at Man Uk Pin under Environmental Permit No. EP-277/2007/A (hereinafter “EP-277/2007/A”);
- 2) The associated ancillary works including drainage and landscaping works.

C. **Drainage Works in North District**, which is a non-designated project of drainage works at Ma Wat Wai in North District for construction of about 110 m of drainage channel at Ma Wat Wai.

- 1.2.3 Drawing of the area within the Works showing is shown in Annex A, whereas project organization, environmental management structure and communication lines, including contacts of key personnel under the Contract as well as the 3-monthly rolling program covering the Reporting Period are shown in **Annex B**.
- 1.2.4 Construction of the Advanced Works under EP-430/2011 has been commenced on 21 August 2012, and are scheduled to be completed in August 2014 within 29 months.

CONCURRENT PROJECTS IN THE VICINITY OF THE WORKS

- 1.3 The following projects are anticipated to be carried out concurrently in the vicinity of the Works:
- 1) The River Modification Works within HKSAR, which is part of the Regulation of Shenzhen River Stage 4 and to be implemented under EP-430/2011, is scheduled for commencement in mid-2013.
 - 2) The development of the proposed Liantang/Heung Yuen Wai Boundary Control Point (hereinafter “the LT/HYW BCP”) and the associated works. It is anticipated that the construction of the LT/HYW BCP and connecting roads will commence at the end of 2013 and be completed in end 2018. The planned construction period for the resite of Chuk Yuen Village is from late 2010 to early 2012 for population intake by early 2013.
 - 3) Construction of a Secondary Boundary Fence and New Sections of Primary Boundary fence and Patrol Road. Based on the advice from ArchSD, the latest tentative construction programme shall be from end 2011 to early 2013 (section from Ng Tung River to Ping Yuen River) and from end 2011 to end 2013 (section from Pak Fu Shan to Lin Ma Hang Road).
 - 4) Drainage Improvement in Northern New Territories, Package C (Remaining Works). The construction work is scheduled to commence in late 2012 and completed by 2016.

CUMULATIVE ENVIRONMENTAL IMPACTS

- 1.4 As concluded in the EIA report for Regulation of Shenzhen River Stage 4, adverse environmental impacts generated from the River Modification Works within HKSAR are predicted to be minimal provided the required environmental mitigation measures are fully implemented.
- 1.5 There is a potential of cumulative environmental impacts during construction phase, including construction dust, noise, water quality, waste, ecology and landscape and visual, to be generated from the concurrent works LT/HYW BCP and the associated works as well as construction of a secondary boundary fence and new sections of primary boundary fence and patrol road.
- 1.6 However, as the schedules and programs of those concurrent projects are subject to private initiatives and market-driven factors, it is not possible to assess the cumulative impact at this stage.
- 1.7 On the other hand, the Drainage Improvement in Northern New Territories, Package C (Remaining Works) project is subject to another future detailed EIA Study and detailed construction program is not available to date. The cumulative impact cannot be assessed at this stage. However, since the drainage improvement works is located at about 500 m from the Site and given its nature and scale of works, adverse cumulative environmental impacts are not anticipated.

2 SUMMARY OF EM&A REQUIREMENTS FOR THE WORKS

2.1 CONSTRUCTION ACTIVITIES UNDER THE WORKS

2.1.1 Construction activities under the Works comprise:

- 1) Approximately 4,300 m of 3.5 m wide Boundary Patrol Road on filled embankment along the Shenzhen River from Ping Yuen River estuary and Pak Fu Shan, Ta Kwu Ling;
- 2) Approximately 4,300 m of Primary Boundary Fence with XPM mesh;
- 3) Approximately 3,300 m of Secondary Boundary Fence with XPM mesh;
- 4) Approximately 4,300 m of border security lighting system including the associated electrical and mechanical works;
- 5) 4 box culverts and 12 drainage pipes under the proposed Boundary Patrol Road, and the associated inlets and outlets;
- 6) Reconstruction of Lo Fong Bridge Post for Hong Kong Police Force;
- 7) Peripheral drainage system associated with the above items;

- 8) Irrigation systems including associated electrical and mechanical works;
- 9) Landscaping works and environmental mitigation works;
- 10) Other ancillary works associated with the above items;

2.1.2 The construction areas under the Works are divided into the following three portions:

- 1) Portion A – Area between CH_R 0+000 and 2+050 for reprovisioning of Boundary Patrol Road and the associated security facilities;
- 2) Portion B – Area between CH_R 2+050 and 2+840 for reprovisioning of Boundary Patrol Road and the associated security facilities;
- 3) Portion C – Area between CH_R 2+840 and 4+300 approximately for reprovisioning of Boundary Patrol Road and the associated security facilities;

2.2 EM&A REQUIREMENTS FOR THE WORKS

CONSTRUCTION PHASE

2.2.1 The EIA report has concluded that, with full implementation of the recommended environmental mitigation measures, adverse environmental impacts are not envisaged during construction and operation of the Works. No environmental monitoring is therefore required for air quality, noise, water quality, ecology, cultural heritage as well as landscape and visual throughout the whole construction phase of the Works.

OPERATIONAL PHASE

2.2.2 No environmental monitoring and audit is required during operational phase of the Works.

BASELINE ENVIRONMENTAL MONITORING

2.2.3 Baseline monitoring is required for establishment of the environmental quality criteria, i.e. Action/ limit Levels, for the River Modification Works under EP-430/2010. The baseline monitoring was conducted upon confirmation of the acquirement of all access to the monitoring locations for air quality including 1-Hr and 24-Hr TSP and construction noise.

ENVIRONMENTAL QUALITY PERFORMANCE CRITERIA

2.2.4 The Action and Limit Levels have been established and presented in the *Baseline Environmental Monitoring Report* submitted to EPD after completion and upon certification by the ET and verification by the IEC, using the data obtained in the baseline environmental monitoring.

EVENT & ACTION PLAN

2.2.5 The Event and Action Plan (EAP) recommended in the EIA and summarized in the EM&A Manual will be used as a monitoring and response mechanism for handling exceedances of environmental standards during the construction phase of the River Modification Works in collaboration with relevant parties of other concurrent projects in the vicinity during construction of River Modification Works.

SITE INSPECTION

2.2.6 The ET will undertake site inspection of on-site practices and procedures each month. Joint site inspection is required to be conducted by related parties of the environmental management to verify the implementation status and evaluate the effectiveness and stability of the environmental mitigation measures, in collaboration with relevant parties of other concurrent projects in the vicinity.

2.2.7 Details of the scope and range of issues to be designed and addressed in the site inspection are presented in *Section 6* of this Report.

ENVIRONMENTAL REPORTING OF THE WORKS

2.3 In order to ease environmental reporting of the Contract, it has been agreed among the Engineer, IEC, Contractor and ET that the environmental reporting for the Contract is split into three stand-alone reports, namely Environmental Report for Advanced Works under EP-430/2011, EM&A Report for Drainage Works under EP-277/2007/A and EM&A Report for Drainage Works at Ma Wat Wai. They will be prepared and submitted separately.

2.4 This is the third Quarterly EM&A Summary Report for the Works (herein after “this Report”), covering construction period from 1 March to 31 May 2013 (hereinafter “the Reporting Period”).

3 DATA MANAGEMENT AND DATA QA/QC CONTROL

3.1 The impact monitoring data is handled by the ET’s systematic data recording and management, which complies with an in-house certified (ISO 9001:2000) Quality Management System. Standard Field Data Sheets (FDS) are used in the EM&A program.

- 3.2 The monitoring data recorded in the equipment e.g. 1-Hour TSP meters and noise meters are downloaded directly at the end of each monitoring day. The downloaded monitoring data are input into a computerized database properly maintained by the ET. The laboratory results are input directly into the computerized database and QA/QC checked by personnel other than those who input the data.
- 3.3 For monitoring activities which require laboratory analysis, the responsible laboratory, ALS, follows the QA/QC requirements as set out under their HOKLAS scheme for all laboratory testing.

4 ENVIRONMENTAL LICENSES AND PERMITS

- 4.1 Status of environmental licenses and permit is summarized in the following **Table 4-1**.

Table 4-1 Status of Environmental Licenses and Permit

Permit Type	Licenses / Permit No.	Date Issued by EPD	Expiry Date	Concerned Location	Status
Environmental Permit	EP-430/2011	09 July 2007	N.A.	Ping Yuen River	Valid
Notification pursuant to Section 3(1) of the Air Pollution Control Ordinance (APCO) (Construction Dust) Regulation	N.A.	N.A.	N.A.	Contract Area: Man Uk Pin, Ma Wat Wai & Ping Yuen River	Notification was made on 28 May 2012
Account for Disposal of Construction Waste	7015003	07 May 2012	N.A.	Contract Area: Man Uk Pin, Ma Wat Wai & Ping Yuen River	Valid
Application for Wastewater Discharge License under Water Pollution Control Ordinance (WPCO)	W5/1G41/1	3 October 2012	31 October 2017	Portions A, B and C near Lin Ma Hang Road, Ta Kwu Ling, N.T.	Valid
Register as a Chemical Waste Producer under Waste Disposal Ordinance	5123-642-S3565-03	3 October 2012	N.A.	3 October 2012	N.A.

SUBMISSION OF LAYOUT PLANS

- 4.2 Pursuant to *Clause 2.7* of EP-430/2011, 3 sets of the Layout Plans of scale 1:1000 with an explanatory statement detailing the works schedule, works boundary and the works areas have been submitted since 21 July 2012 to the Director of Environmental Protection of the HKSAR Government (hereinafter “DEP”) upon certification by the ET Leader and verification by the Independent Environmental Checker (hereinafter “the IEC”) as confirming to the information and recommendations contained in the EIA report.

SUBMISSION OF LANDSCAPE PLAN

- 4.3 Pursuant to *Clause 2.8* of EP-430/2011, 3 sets of the Landscape Plan have been submitted to the Director of Environmental Protection of the HKSAR Government (hereinafter “DEP”) since 21 July 2012 upon certification by the ET Leader and verification by the IEC as confirming to the information and recommendations contained in the approved EIA report.

SUBMISSION OF UPDATED ENVIRONMENTAL MONITORING AND AUDIT MANUAL

- 4.4 Pursuant to *Clause 2.10* of EP-430/2011, an updated environmental monitoring and audit manual for the Project, namely Updated EM&A Manual for Advanced Works under EP-430/2011 (hereinafter “the Updated EM&A Manual”), has been submitted since 21 May 2012 to the DEP upon certification by the ET Leader and verification by the Independent Environmental Checker (hereinafter “the IEC”) as confirming to the information and recommendations contained in the approved EIA report.

CONSTRUCTION ACTIVITIES

CONSTRUCTION ACTIVITIES DURING THE REPORTING PERIOD

- 4.5 Major construction activities are detailed in the construction program enclosed in **Annex D**, including:
- 1) Pruning, felling and transplanting of existing trees;
 - 2) Setting out of structure /fence/gate, underground utility detection and laying of blinding layer;
 - 3) Construction of base slabs, wall stems, drain pipe, box culvert and deep well;
 - 4) Installation of drain pipe and the associated manholes, extension of existing drain pipe;
 - 5) Temporary road diversion, filling works, road works and installation of temporary fence footing, fill rock embankment for eroded portion, road formation, pavement and EMSD cable diversion;

- 6) Construction of wheel washing bay at Gate 58 and CH1+800;
- 7) Construction of primary and secondary fence footing;
- 8) Fill between security fence footing; and
- 9) Erection of permanent security fence;

EM&A ACTIVITIES

BASELINE MONITORING AND ESTABLISHMENT OF ENVIRONMENTAL QUALITY CRITERIA

- 4.6 The baseline environmental monitoring of air quality and construction noise for the River Modification Works within the HKSAR was completed and the associated environmental quality criteria, i.e. A/L Levels of the monitored parameters, has been proposed in the baseline monitoring report, which was submitted to EPD upon verification by the IEC.

IMPACT MONITORING

- 4.7 No environmental monitoring was conducted during the Reporting Period.

5 WASTE MANAGEMENT

- 5.1 Pursuant to the Updated EM&A Manual, the waste management during the Reporting Period was carried out in close accordance with the Waste Management Plan, which has been submitted since 20 August 2012 to the Engineer for approval prior to commencement of the Works upon certification by the ET Leader and verification by the IEC.
- 5.2 The quantity of waste for disposal or reuse during the Reporting Period was summarized in Monthly Summary of Waste Flow Table and Disposal Records of Construction Waste in *Annex K*.
- 5.3 To ensure satisfactory performance of the waste management, the Contractor is reminded to comply with all relevant regulatory waste management requirements, including as appropriate those stipulated in the effluent discharge licenses and chemical waste producer registration, etc. The Contractor is also required to fully implement all the waste management mitigation measures recommended in the Updated EM&A Manual.
- 5.4 Where possible, construction materials should be reused on-site as far as practicable to reduce the construction waste, which should then be sorted or classified on site for proper recycling and disposal as recommended in the Environmental Management Plan and the associated Waste Management Plan.

6 SITE INSPECTION

- 6.1 Monthly site inspection was jointly conducted by representatives of the Engineer, IEC, ET and Contractor. During the Reporting Period, three occasions of the site inspection and audit were conducted on **7 March**, **26 April** and **24 May 2013** respectively.

FINDINGS/DEFICIENCIES OF THE SITE INSPECTION AND ENVIRONMENTAL AUDIT

- 6.2 Findings or deficiencies identified during the site inspection are summarized in *Table 6-1*.

Table 6-1 Observations of Site Inspection during the Reporting Period

Date	Findings / Deficiencies	Follow-Up
7 March 2013	No adverse environmental impacts were observed during the inspection. However, full implementation of the required environmental mitigation measures is reminded.	Not required for general reminders
26 April 2013	Stagnant water due to heavy rain was observed within the site. Clearance of the stagnant water after rain is required to prevent mosquito breeding. In addition, appropriate pre-treatment prior to discharge is reminded.	Situation was rectified by 24 May 2013.
24 May 2013	No adverse environmental impacts were observed during the inspection. However, full implementation of the required environmental mitigation measures is reminded.	Not required for general reminders

- 6.3 Site inspection checklists completed and endorsed by all related parties are kept by the ET and are available for inspection upon request.

DISCUSSION AND CONCLUSION

- 6.4 No deficiencies and non-compliance with the relevant regulatory requirements were identified during the regular site inspection and environmental audit, indicating no adverse environmental impacts were generated from the construction of the Works.

RECOMMENDATION

- 6.5 Although no adverse environmental impacts were identified during the regular site inspection and environmental audit conducted by representatives of the Engineer, IEC, ET and Contractor, full implementation of the recommended environmental mitigation measures, particularly construction dust

suppression measures e.g. watering during dusty activities under dry and windy conditions, as well as sedimentation of the site run off during rainy conditions, are reminded.

7 ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION

7.1 No environmental complaint was received during the Reporting Period. Summary of environmental complaint is presented in *Table 7-1* below.

Table 7-1 Summary of Environmental Complaints

Reporting Month	Environmental Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
December 2012 to February 2013	0	0	Not Applicable
March to May 2013	0	0	Not Applicable

7.2 No summons and prosecution was received during the Reporting Period. Summary of summon and prosecution is presented in *Table 7-2* and *Table 7-3* below.

Table 7-2 Summary of Environmental Summons

Reporting Month	Environmental Summons Statistics		
	Frequency	Cumulative	Nature
December 2012 to February 2013	0	0	Not Applicable
March to May 2013	0	0	Not Applicable

Table 7-3 Summary of Environmental Prosecution

Reporting Month	Environmental Prosecution Statistics		
	Frequency	Cumulative	Nature
December 2012 to February 2013	0	0	Not Applicable
March to May 2013	0	0	Not Applicable

8 IMPACT FORECAST

KEY ENVIRONMENTAL ISSUES

8.1 Potential environmental issues to be considered in the coming month include:-

- 1) Air quality In dry season under dry and windy conditions, dusty construction activities may generate potential construction dust impacts and dry/loose/exposure soil surface/stock piles of dusty material within the site may pose fugitive dust under dry and windy weather conditions;
- 2) Water quality In wet season, surface runoff during heavy storm/rain may pollute the surrounding water bodies with high suspended solids or turbidity, and concrete washing may increase alkalinity or pH value of the water bodies;
- 3) Chemical waste Oil & grease spillage or leakage from construction equipment and the associated oil containers within site areas may contaminate lands or other environment;
- 4) Noise Construction noise impacts may be caused from noisy construction activities;

ENVIRONMENTAL MITIGATION MEASURES FOR THE COMING MONTH

8.2 Environmental Mitigation Measures to be considered in the coming month includes:-

- 1) Dust suppression measures, in particular proper watering during dusty construction activities under dry and dusty conditions, should be fully implemented;
- 2) Sedimentation or silt removal facilities of adequate capacity should be used, for proper treatment of any site effluent generated from stockpiles of construction materials/waste or dusty haul roads or excavated surfaces within the site during storm rain, prior to discharge to nearby water bodies in order to remove suspended solids or turbidity;
- 3) Good management of chemical wastes should be maintained;
- 4) Follow-up actions for any defects identified during regular site inspection should be promptly taken to rectify the situation; and
- 5) As high noise levels were sometimes recorded during the Reporting Period, special attention is drawn to implementation of the construction noise mitigation measures during noisy construction works.

9 CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

- 9.1 No environmental monitoring was conducted during the Reporting Period.
- 9.2 No non-compliance with the regulatory requirements was recorded in the IEC and ET regular site inspection jointly conducted by representatives of the Engineer, IEC, ET and Contractor during the Reporting Period, indicating no adverse environmental impacts were generated from construction activities under the Works during the Reporting Period.
- 9.3 Defects of minor environmental significance were sometimes observed. The identified defects were normally rectified on site or within the specified time prior to the next site inspection.
- 9.4 No environmental complaint, notification of summons or successful prosecution was registered during the Reporting Period.

RECOMMENDATION

- 9.5 The Contractor is reminded to fully comply with all the relevant regulatory environmental requirements, including environmental mitigation measures stipulated in all the environmental ordinances, EM&A Manual, EMP and the associated WMP, effluent discharge license and the chemical waste producer registration, etc.
- 9.6 Attention is drawn to implementation of air quality mitigation measures, in particular construction dust suppression measures during dusty construction activities under dry and windy conditions.
- 9.7 In addition, full implementation of the required water quality mitigation measures is reminded to eliminate adverse water quality impacts generated from site water runoff, surfaces of haul roads, stock pile of excavated materials, etc.
- 9.8 Attention is also drawn to implementation of the construction noise mitigation measures during noisy construction works.

ANNEX A

LOCATION PLAN FOR THE WORKS

Key

 Project Area

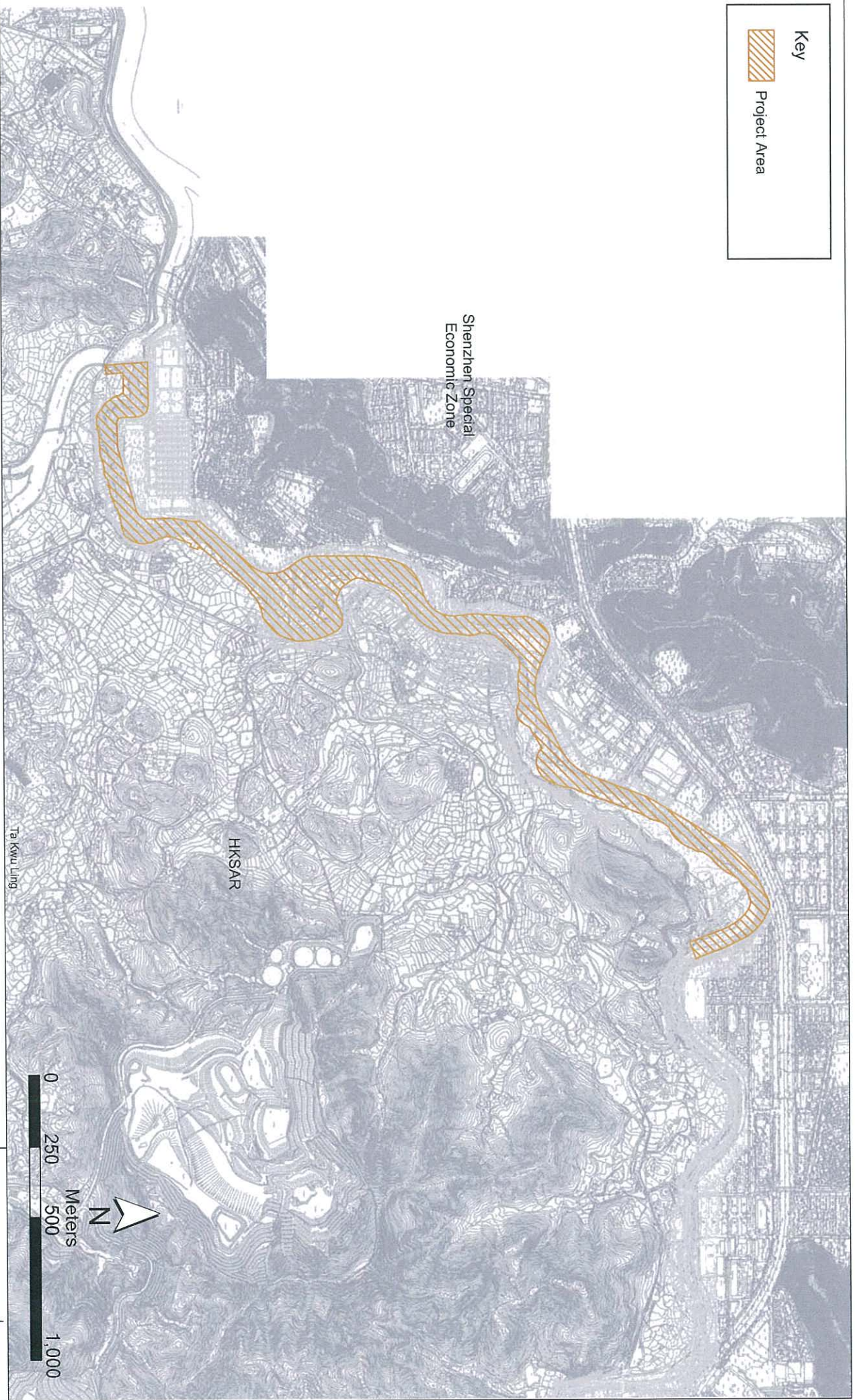
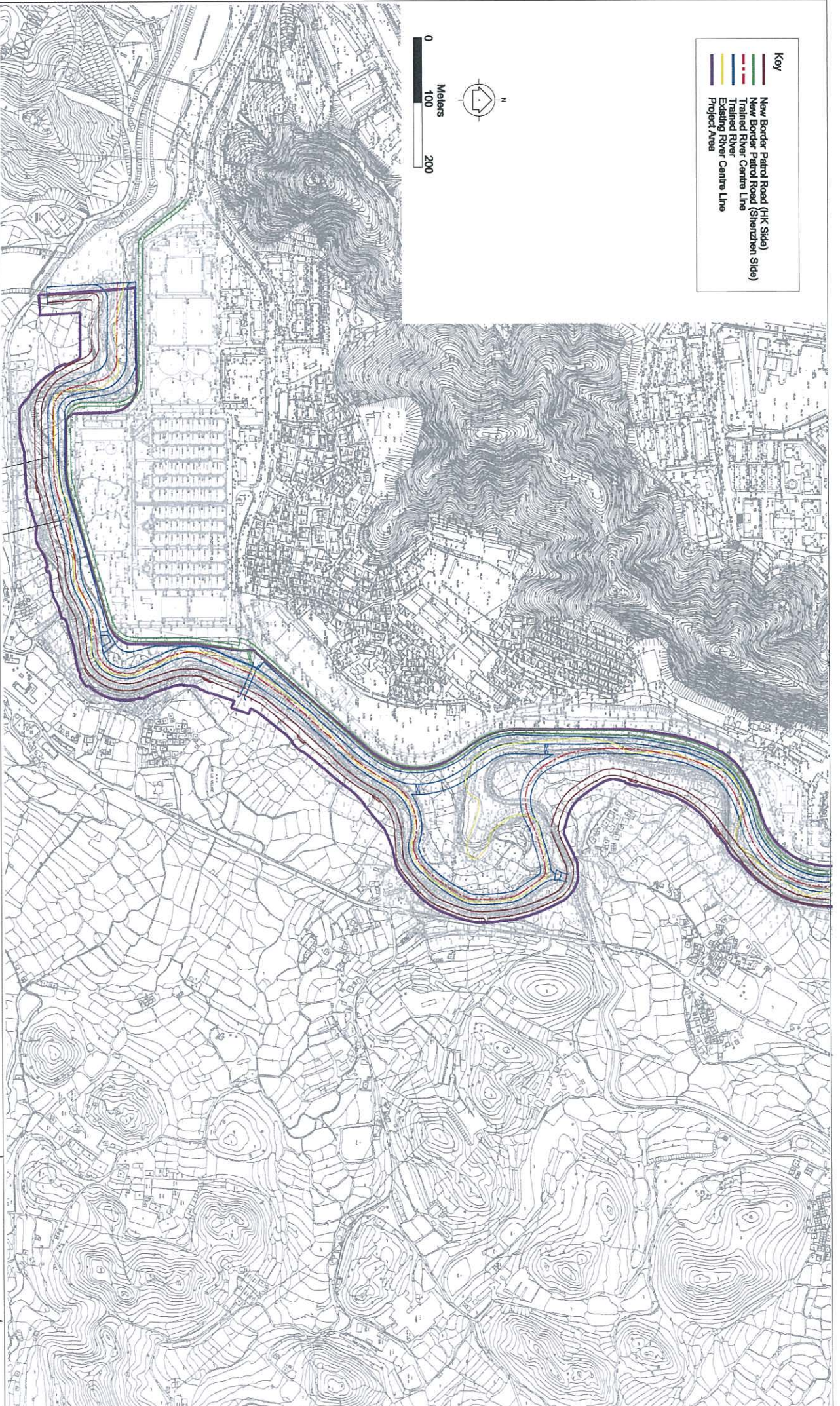


Figure A1-1

Location of Project Site



- Key**
- New Border Patrol Road (HK Side)
 - New Border Patrol Road (Shenzhen Side)
 - Trained River Centre Line
 - Existing River Centre Line
 - Project Area

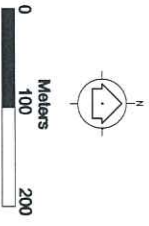
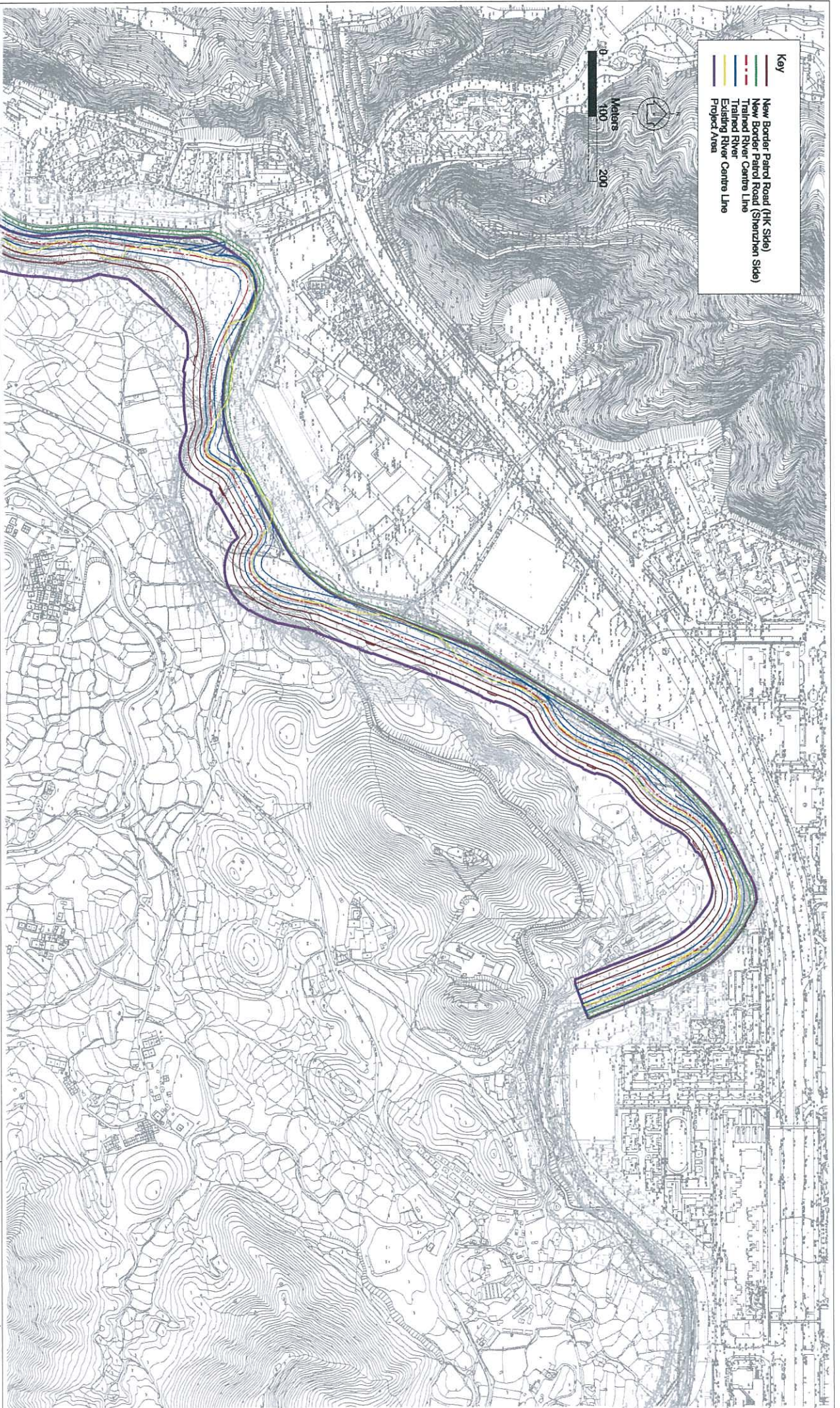


Figure A1-2

**General Layout and Extent of the Trained River
(1 of 2)**



- Key**
- New Border Patrol Road (HK Side)
 - New Border Patrol Road (Shenzhen Side)
 - Trained River Centre Line
 - Existing River Centre Line
 - Project Area

0 100 200
Meters

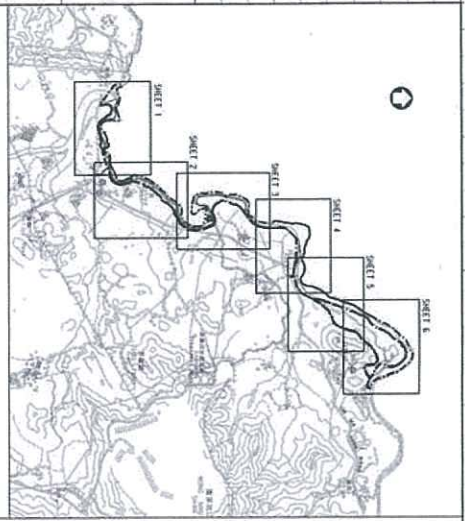
Figure A1-2

**General Layout and Extent of the Trained River
(2 of 2)**

FILE: 0101726M1-3-4.dgn
DATE: 23/10/2009

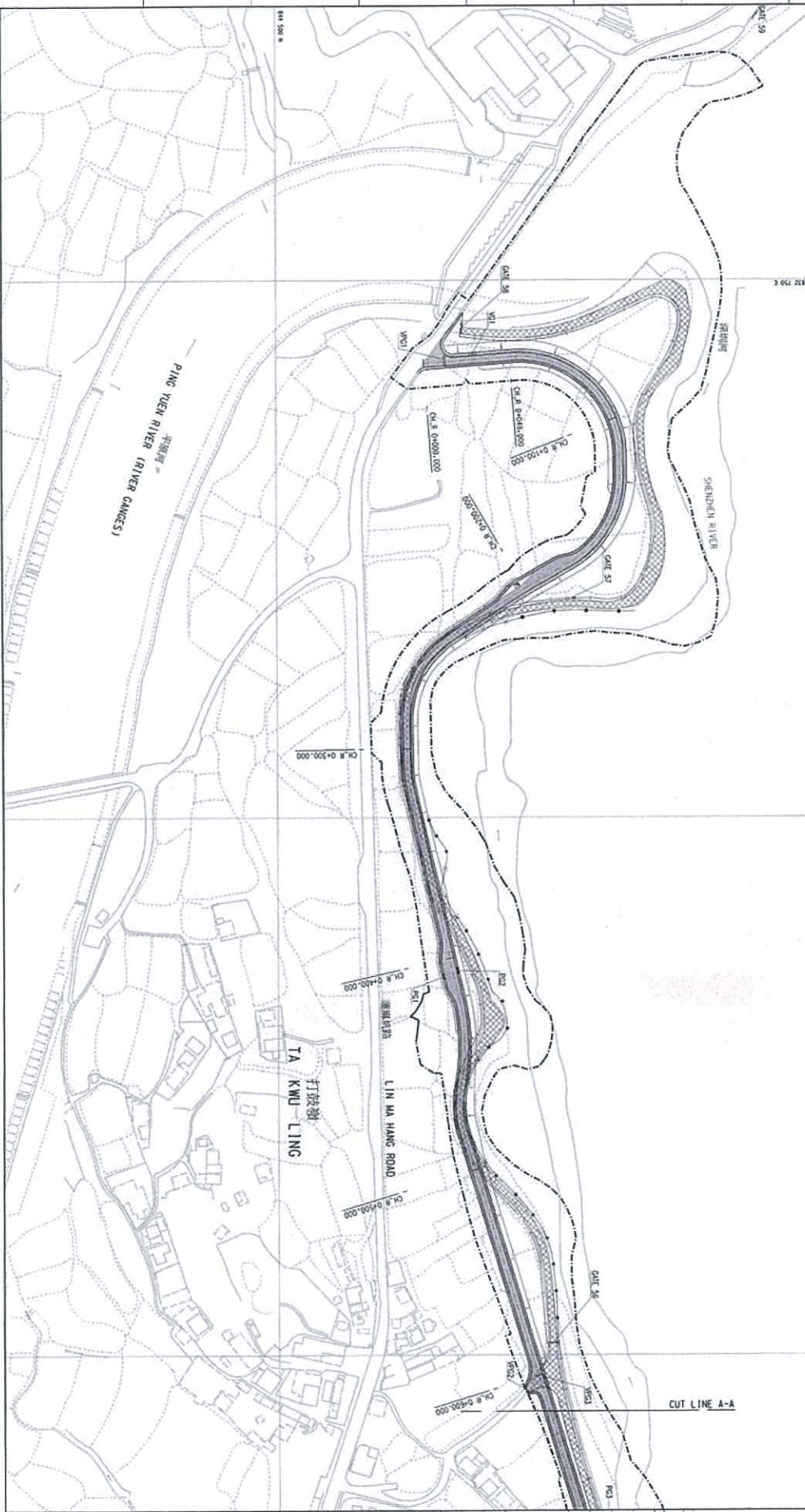
**Environmental
Resources
Management**





LOCATION PLAN
SCALE 1:20000

深圳市
SHENZHEN SHI



NOTES:

1. CHAIN LINKS ARE HONG KONG GR10 1880.
2. ALL LENGTHS ARE IN METRES AND REFERRED TO IN METRES.

LEGEND:

- LIMIT OF THE SITE
- EXISTING BOUNDARY PATROL ROAD
- EXISTING BOUNDARY PATROL ROAD TO BE RECONSTRUCTED
- PROPOSED BOUNDARY PATROL ROAD
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT PRIMARY
- PROPOSED PAVEMENT SECONDARY
- EXISTING BOUNDARY FENCE AND ASSOCIATED LAMP POSTS AND PILLAR BOX
- EXISTING BOUNDARY FENCE AND ASSOCIATED LAMP POSTS AND PILLAR BOX TO BE DEMOLISHED
- PROPOSED BOUNDARY FENCE AND ASSOCIATED LAMP POSTS AND PILLAR BOX
- EXISTING CHAIN LINK FENCE TO BE DEMOLISHED
- EXISTING CHAIN LINK FENCE TO BE RECONSTRUCTED
- PROPOSED CUT SLOPE
- PROPOSED FILL SLOPE
- CH. A 1+000.000 CHAINAGE FROM BOUNDARY ROAD
- PROPOSED VERGEE AS AND RESTRICTION GATE (VSG)
- PROPOSED VERGEE AT GATE 1P2
- PROPOSED RESTRICTION GATE 1P2
- EXISTING GATE
- EXISTING GATE TO BE DEMOLISHED
- PILLAR BOX
- SWITCH ROOM

NO.	DATE	DESCRIPTION	INITIALS
1	28 NOV 2011	DESIGNED	C. L. CHAN
2	28 NOV 2011	CHECKED	W. H. LIU
3	28 NOV 2011	APPROVED	W. H. NG

REPRODUCTION OF BOUNDARY PATROL ROAD AND ASSOCIATED SECURITY FACILITIES BETWEEN PING YUEN RIVER AND PAK FU SHAN AND DRAINAGE WORKS IN NORTH DISTRICT

Project no. 501808
Contract no. DP/8/501808
Contract no. DC/2011/06
Contract no. DP/8/501808

By: *[Signature]*
K. Y. TUNG
Date: 28 NOV 2011

drawing title: GENERAL LAYOUT

drawing no.: DDP/DC/1106/11021

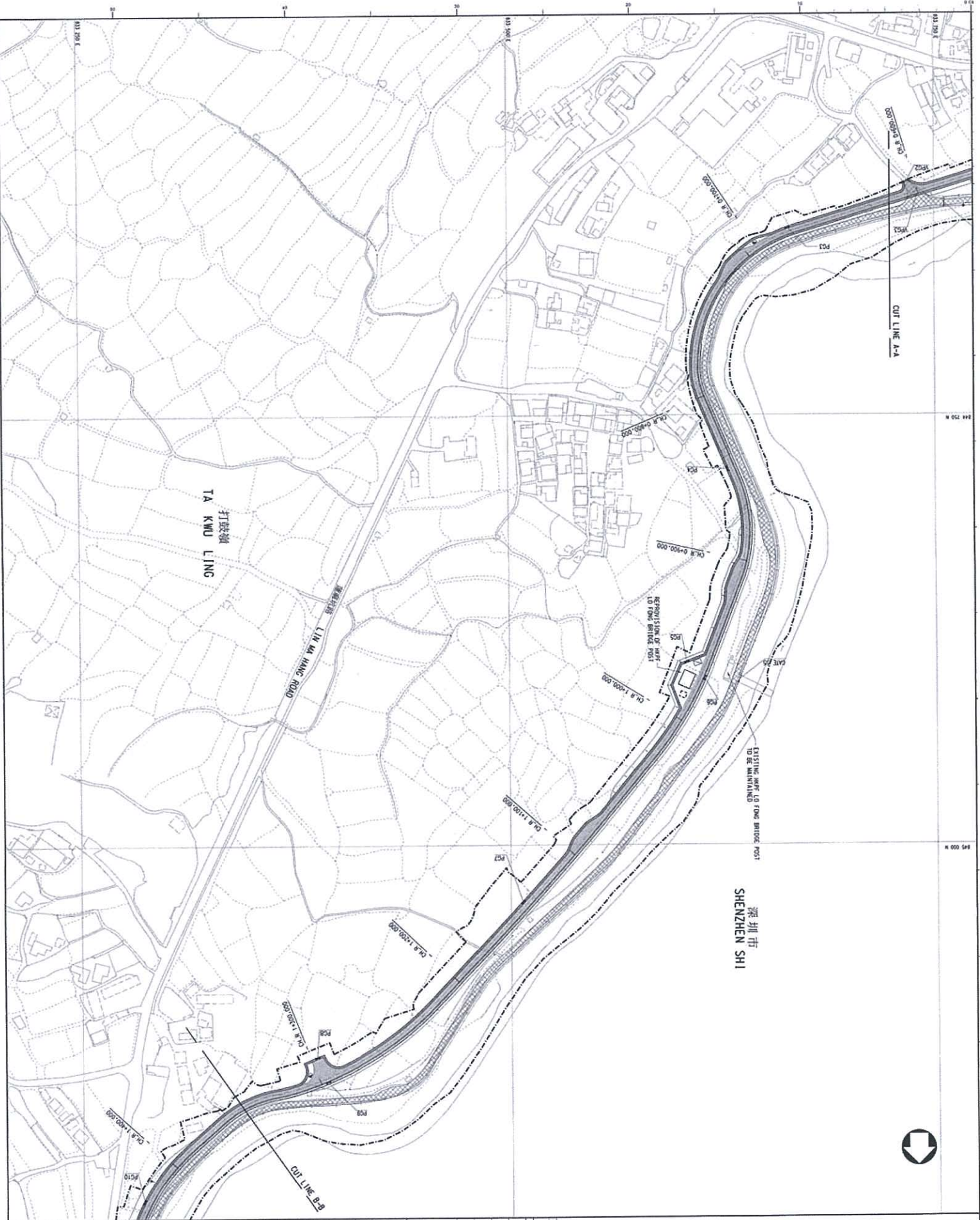
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DRAINAGE PROJECTS DIVISION

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6	28 NOV 2011	DESIGN	
7	28 NOV 2011	DESIGN	
8	28 NOV 2011	DESIGN	
9	28 NOV 2011	DESIGN	
10	28 NOV 2011	DESIGN	

Ag. Chief Engineer
 S. L. LING
 28 NOV 2011
 12:50

contract no. DC/2011/05
 file no. DP/8/5018CB
 project no. 5018CB

REPROVISIONING OF BOUNDARY PATROL ROAD AND ASSOCIATED SECURITY FACILITIES BETWEEN PING TSEN RIVER AND PAU AND DRAINAGE WORKS IN NORTH DISTRICT

drawing title
 GENERAL LAYOUT

(SHEET 2 OF 5)

drawing no. DDP/DC1106/11022
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2	28 NOV 2011	DRAWN	
3	28 NOV 2011	CHECKED	
4	28 NOV 2011	VERIFIED	
5	28 NOV 2011	APPROVED	

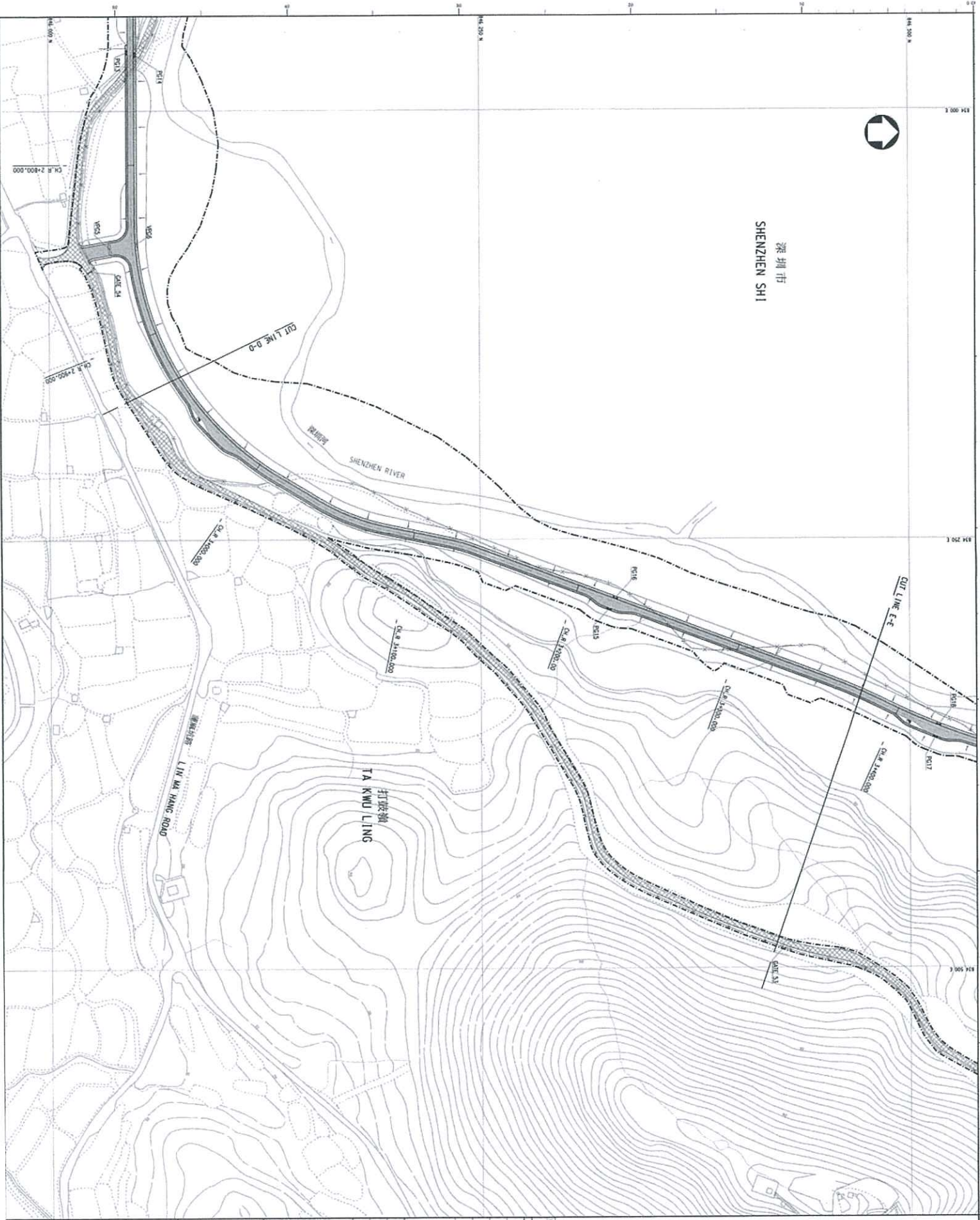
designed by: *[Signature]* S. F. CHAN 28 NOV 2011
 drawn by: *[Signature]* L. M. LIU 28 NOV 2011
 checked by: *[Signature]* K. M. NGAN 28 NOV 2011
 verified by: *[Signature]* S. C. LAU 28 NOV 2011
 approved by: *[Signature]* S. L. TSIANG 28 NOV 2011
 As Chief Engineer
 Date

contract no. DC/2011/05
 file no. DP/R/5018CB
 project no. 5018CB
 contract

REPRODUCTION OF BOUNDARY PATROL ROAD
 AND ASSOCIATED SECURITY FACILITIES
 BETWEEN PING TUEN RIVER
 AND PAK FU SHAN AND DRAINAGE WORKS
 IN NORTH DISTRICT

drawing title
 GENERAL LAYOUT
 SHEET 3 OF 51
 drawing no. DDP/DC1106/11023
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NO.	DATE	DESCRIPTION	INITIAL
1		DESIGNED	C. F. CHAN
2		DRAWN	L. M. LEE
3		CHECKED	M. H. NG
4		VERIFIED	L. L. YAU
5		APPROVED	[Signature]

Ag. Chief Engineer
 Contract no. DC/2011/05
 file no. DP/8/501808
 project no. 501808

REPROVISIONING OF BOUNDARY PATROL ROAD AND ASSOCIATED SECURITY FACILITIES BETWEEN PING TIER RIVER AND PAK FU SHAN AND DRAINAGE WORKS IN NORTH DISTRICT

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NO.	DATE	DESCRIPTION	INITIAL
1			

REVISION	NAME	DATE
DESIGNED	L. F. CHAN	28 NOV 2011
DRAWN	L. M. LEE	28 NOV 2011
CHECKED	N. N. HOON	28 NOV 2011
VALID	L. C. LAM	28 NOV 2011
APPROVED		

Ag. Chief Engineer

 28 NOV 2011
 DATE

contract no. DC/2011/06
 H/S no. DP/8/501808
 project no. 501808
 contract

REPROVISIONING OF BOUNDARY PATROL ROAD AND ASSOCIATED SECURITY FACILITIES BETWEEN PING VIEN RIVER AND PAK TU SHAN AND DRAINAGE WORKS IN NORTH DISTRICT

drawing title
 GENERAL LAYOUT

SHEET 6 OF 61
 drawing no. DDP/DC/1106/11026
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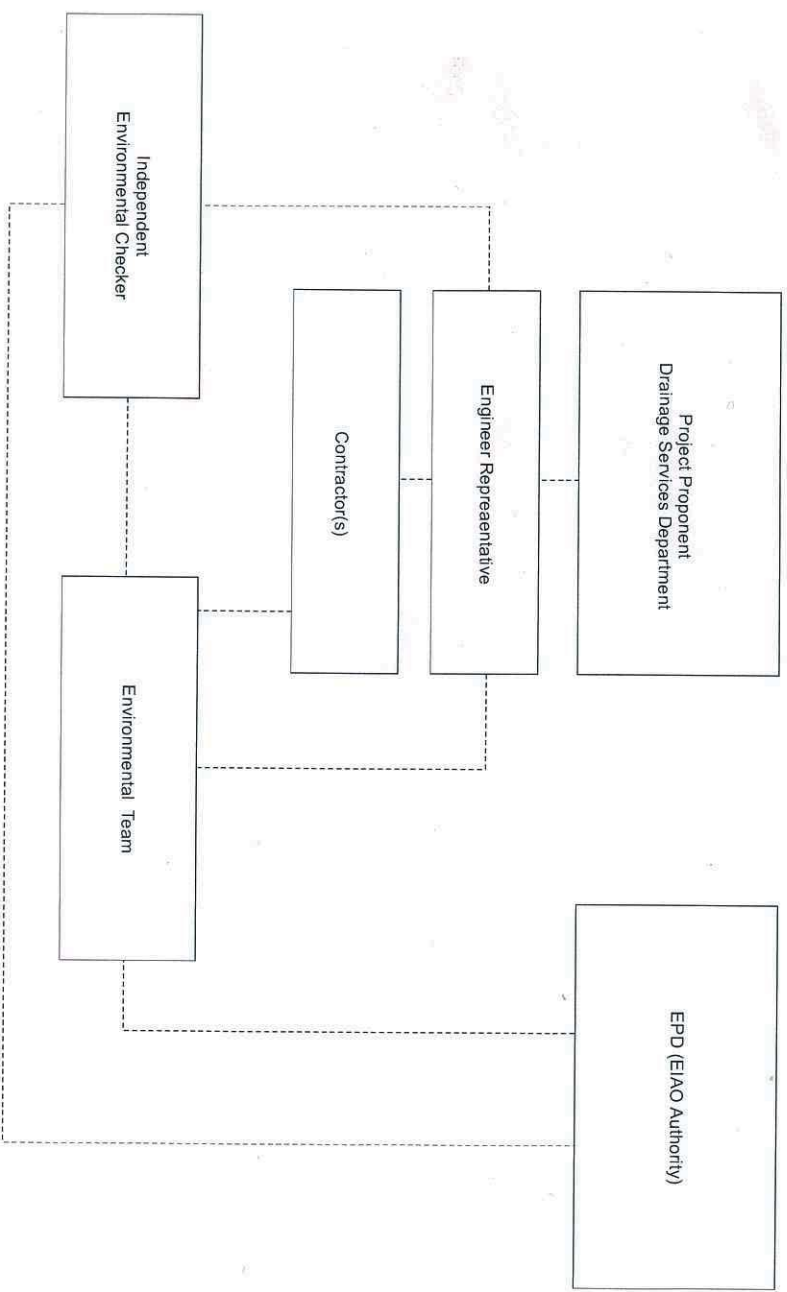
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ANNEX B

***ENVIRONMENTAL MANAGEMENT ORGANIZATION
AND COMMUNICATION LINES***



Key
----- Line of Communication

EM&A Organisation Chart

KEY CONTACT INFORMATION UNDER THE CONTRACT

Contact Details of Key Personnel

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
DSD	Project Proponent / Employer	Mr. Eric Y. M. Cheng	2594-7341	2827-8700
Environ	Independent Environmental Checker	Mr. Roger W. K. Leung	3743-0754	3548-6988
CHCC	Project Manager	Mr. Raymond Yau	2403 1165	2403 1165
SHCC	Site Agent	Mr. Elvin Lam	2640 9286	2640 9286
AUES	Environmental Team Leader	Mr. T. W. Tam	2959-6059	2959-6079
AUES	Senior Environmental Consultant	Mr. Wong Fu Nam	2959-6059	2959-6079
AUES	Environmental Team Supervisor	Mr. Ben Tam	2959-6059	2959-6079

Project Proponents' Contact Numbers

Project Proponent	The Engineer	Telephone Number	Fax Number	24-Hour Hotline
DSD	Mr. Poon W. H.	2594 7450	2827 8700	6770 3827

24-Hour Hotline Telephone Number for the Public to Make Enquiries

24-Hour Hotline
6770 3827

Legends:

DSD (Project Proponent / Engineer) – Drainage Services Department

SHCC (Main Contractor) – Sang Hing Civil Constructors Co., Ltd

Environ (IEC) – Environ Hong Kong Limited

AUES (ET) – Action-United Environmental Services & Consulting

ANNEX C

**IMPLEMENTATION SCHEDULE
FOR ENVIRONMENTAL MITIGATION MEASURES**

Annex D Implementation Schedule for Environmental Protection Measures

EIA Ref.	Environmental Protection Measures	Location/Duration of Measures/Timing of Completion of Measures	Implementati on Agent	Implementation Stage			Relevant Legislation & Guidelines
				Des C	Post-C	O	
1. Air Quality							
S4.8	<p>Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) Regulation</i> will be implemented during the construction phase to control the potential fugitive dust emissions. In particular:</p> <ol style="list-style-type: none"> i. Water spraying on haul roads and dusty areas for every hour during construction; ii. Covering the stockpile areas of at least 70% area with tarpaulin sheet or impervious sheet; iii. Covering of dusty materials/spoils on trucks by impervious sheets; iv. Controlling the dropping height of fill materials; v. Covering or storing all debris and materials in a sheltered debris collection area; vi. Storing dredged sediment in a separate enclosed tank; and vii. Providing wheel washing facility at each exit of the works site. 	Whole Site / During Construction	Contractor	✓			Air Pollution Control (Construction Dust) Regulation
S4.8	Site practices such as regular maintenance and checking of the diesel powered mechanical equipment will be adopted to avoid any black smoke emissions and to minimize gaseous emissions.	Whole Site / During Construction	Contractor	✓			
2. Construction Noise							
S5.8	<p>The following site practices should be followed during the construction of the Project:</p> <ol style="list-style-type: none"> i. Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction phase; ii. Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction phase; iii. Mobile plant, if any, should be sited as far from NSRs as possible; iv. Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; v. Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and vi. Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities. 	Whole Site / During Construction	Contractor	✓			
S5.8	Use quiet PME as far as practicable to mitigate the construction noise impacts.	Whole Site / During Construction	Contractor	✓			
S5.8	Use temporary noise barriers to mitigate the noise impact arising from the construction works, particularly for low-rise NSRs. Movable noise barriers of 3 m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. With reference to A Practical Guide for the Reduction of Noise from Construction Works, the noise barrier material should have a superficial surface density of at least 7 kg m ⁻² and have no openings or gaps.	Works Area III and IV/ During Construction	Contractor	✓			A Practical Guide for the Reduction of Noise from Construction Works

S5.8	Scheduling of construction activities with identified grouping of PMEs.	Works Area III / During Construction	Contractor	✓			
S5.10	Monthly site inspection and audit of construction activities.	Whole Site / During Construction	ET & IEC	✓			EIAO
3. Water Quality							
S6.8	Maximum loss rate during the wet excavation should be kept at or below the limits specified in the EIA Report.	Excavation area / During Construction	Contractor	✓			
S6.8	<i>Construction Site Runoff and Drainage</i> Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities. The design of silt removal facilities will make reference to the guidelines in Appendix A1 of ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Land Site / During Construction	Contractor	✓			ProPECC PN 1/94 TM standard under the WPCO
S6.8	Non-active area along the river bank will be covered by impermeable sheets or hydroseeding completed sections immediately whenever possible to minimise erosion of soil by runoff particularly during heavy rainstorms	River bank / During Construction	Contractor	✓			
S6.8	Earthworks to form the final surfaces will be followed up with surface protection and drainage works to prevent erosion caused by rainstorms.	Land Site / During Construction	Contractor	✓			
S6.8	Appropriate surface drainage will be designed and provided where necessary. In particular, surface runoff will be collected along the river bank and be diverted to sedimentation tank/pond before being discharged into the river.	Land Site / During Construction	Contractor	✓			
S6.8	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94.	Land Site / During Construction	Contractor	✓			ProPECC PN 1/94 TM
S6.8	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages.	Land Site / During Construction	Contractor	✓			
S6.8	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge will be adequately designed for the controlled release of storm flows	Land Site / During Construction	Contractor	✓			
S6.8	The temporary diverted drainage will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land Site / During Construction	Contractor	✓			
S6.8	An adequate number of portable toilets will be provided for the on-site construction workforce. Wastewater/sewage will be handled by registered collector in Hong Kong.	Whole Site / During Construction	Contractor	✓			
S6.8	Debris and refuse generated on-site will be collected, handled and disposed of properly to avoid entering the nearby WSRs. Stockpiles of cement and other construction materials will be covered when not being used.	Whole Site / During Construction	Contractor	✓			
S6.8	Oil leakage or spillage will be contained and clean up immediately. Waste oil will be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	Whole Site / During Construction	Contractor	✓			Waste Disposal Ordinance

4. Terrestrial Ecology									
S7.11	Avoid potential impacts on the trees whenever possible during the detailed design stage. The retained trees will be fenced off as protection from the construction works. If the trees cannot be avoided due to the engineering constraint, the affected individual(s) will be transplanted to compensatory woodland planting site near Pak Fu Shan or a similar habitat in the vicinity of the Project Site if considered suitable (subject to the detailed assessment of the feasibility of transplantation).	Whole Site / During Construction	Contractor	✓	✓				
S7.11	A detailed vegetation survey on the trees within the impacted area would be conducted by a suitably qualified botanist/ ecologist to identify and record the affected individuals prior to the commencement of site clearance works. Feasibility and suitability of transplanting the affected plant species of conservation interest would be carefully studied and suitable receptor sites would be identified during Tree Felling Application.	Whole Site / During Construction	Contractor	✓	✓				
S7.11	Avoid any damage and disturbance, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal.	Whole Site / During Construction	Contractor	✓	✓				
S7.11	Regularly check the Site boundaries to ensure that they are not breached and that no damage occurs to surrounding areas Whole Site / During	Whole Site / During Construction	Contractor	✓	✓				
S7.11	Prohibit and prevent open burning within the site boundary during construction and provide temporary fire fighting equipment in the work areas.	Whole Site / During Construction	Contractor	✓	✓				
S7.11	Reinstate temporary work sites/disturbed areas immediately after completion of the construction works	Whole Site / During Construction	Contractor	✓	✓				
S7.11	Provide additional stream/river habitat with natural bottom (~2.1 ha) after the advanced works	Whole Site / During Construction	Contractor	✓	✓				
S7.14	Adopt proper ecological design for the landscape works along the river banks, including the floodplain (the 1.9ha marshy low-lying grassland will be reinstated in the floodplains at Hong Kong side.	Along river bank and water retardation pond / During Design Stage	Designer(s)	✓					
S7.14	The implementation of landscape works (including compensatory planting) adopting ecological design at Hong Kong side shall be monitored.	Whole Site / During Construction	Designer(s)		✓				
S7.14	One-year bird monitoring programme shall be conducted to monitor the effectiveness of the re-provisioned/reinstated habitats	Operation	Project Proponent/ Contractor					✓	
5. Waste Management									
S9.6	<u>General</u> The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges	Contract mobilisation / During construction	Contractor	✓					Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes; WBTC No 5/99, Trip ticket System for Disposal of Construction and Demolition Material; Water Pollution Control Ordinance

S9.6	Nomination of approved personnel to be responsible for standard site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the Project Site	Contract mobilisation / During construction	Contractor	✓		
S9.6	Training shall be provided to site personnel in proper waste management and chemical handling procedures, the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling.	Contract mobilisation / During construction	Contractor	✓		
S9.6	Provision of sufficient waste disposal points and regular collection for disposal.	Whole Site / During Construction	Contractor	✓		WBTC Nos. 6/2002 and 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness. Works Bureau, Hong Kong SAR Government
S9.6	Appropriate measures to reduce windblown litter and dust transportation of waste by either covering trucks or by transporting wastes in enclosed containers	Whole Site / During Construction	Contractor	✓		
S9.6	Separation of chemical wastes for special handling and appropriate Treatment Chemical Waste Treatment Centre at Tsing Yi.	Whole Site / During Construction	Contractor	✓		Waste Disposal (Chemical Waste) (General) Regulation
S9.6	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors	Whole Site / During Construction	Contractor	✓		
S9.6	A recording system for the amount of wastes generated/recycled and disposal sites.	Whole Site / During Construction	Contractor	✓		
S9.6	<i>Waste Reduction Measures</i> i. Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal. ii. Encourage collection of aluminium cans and waste paper by individual collectors during construction with separate labelled bins provided to segregate these wastes from other general refuse by the workforce. iii. Any unused chemicals and those with remaining functional capacity will be recycled as far as possible	Whole Site / During Construction	Contractor	✓		WBTC Nos. 6/2002 and 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness
S9.6	iv. Use of reusable non-timber formwork to reduce the amount of C&D materials	Whole Site / During Construction	Contractor	✓		Works Branch Technical Circular (WBTC) No.32/92, The Use of Tropical Hard Wood on Construction Site
S9.6	v. Prior to disposal of construction waste, wood, steel and other metals will be separated to the extent practical, for re-use and/or recycling to reduce the quantity of waste to be disposed of to landfill	Whole Site / During Construction	Contractor	✓		
S9.6	vi. Proper storage and site practices shall be adopted to reduce the potential for damage or contamination of construction materials	Whole Site / During Construction	Contractor	✓		
S9.6	vii. Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste	Whole Site / During Construction	Contractor	✓		

S9.6	<p><i>Excavated Materials</i></p> <p>The contractor of the advanced work should open a billing account with EPD for the payment of disposal charges. A trip-ticket system will be established in accordance with ETWB TC(W) No. 31/2004 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at landfills, and to control fly-tipping</p>	Contract mobilisation / During construction	Contractor	✓	✓	Waste Disposal (Charges for Disposal of Construction Waste) Regulation ETWB TC(W) No.31/2004
S9.6	<p>Ways to minimise generation of C&D materials include:</p> <p>(i) The Contractor is required to submit the Waste Management Plan (WMP) for approval by the Engineer with appropriate mitigation measures to deal with and allow space for waste segregation. Different C&D materials should be sorted into different categories for re-use/recycle. Day-to-day site operations of the Contractor should be closely monitored to ensure compliance with the approved WMP.</p> <p>(ii) The Designer shall ensure that the design of levels and dimensions are reasonably accurate to avoid unnecessary demolition, excavation and fill.</p> <p>(iii) The Contractor shall be encouraged to use long lasting materials such as steel and poly-fibre for formwork on site.</p> <p>(iv) The RSS shall control the disposal of public fill and C&D waste to the designated public filling facilities and landfills respectively through the implementation of a trip-ticket system according to ETWB TC(W) No. 31/2004.</p>	Whole Site / During Construction	Contractor	✓		
	<p>Ways to maximize the use of inert C&D material include:</p> <p>i. The Contractor shall review the WMP quarterly to improve the site practice and maximise the use of inert C&D material</p> <p>ii. Different sections of works shall be programmed to ensure the C&D materials generated could be re-used by the other sections of works or works contracts.</p> <p>iii. Temporary storage areas should be identified to resolve programming mismatch between excavation and filling works.</p> <p>iv. The excavated soft inert C&D materials should be reused for backfilling the boundary patrol road, channel embankment, etc. whenever practicable.</p> <p>v. Good quality top soil should be reused for landscaping.</p>	Whole Site / During Construction	Contractor	✓		
	<p>Ways to maximise the re-use/recycle of C&D material and/or rock on site include:</p> <p>i. Recyclable materials such as wood and metal should be salvaged for reuse and inert materials utilized as public fill.</p> <p>ii. Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal. Prior to disposal of C&D waste, it is recommended that wood, steel and other metals be separated for re-use and/or recycling and inert waste utilized as fill material to minimize the quantity of waste to be disposed of at landfills.</p>	Whole Site / During Construction	Contractor	✓		
S9.6	<p>Ways to maximise the use of recycled C&D materials include:</p> <p>i. Relevant clauses would be incorporated in the Particular Specifications to facilitate the use of recycled aggregates as far as practicable, such as, temporary works, general fills and road sub-base.</p>	Whole Site / During Construction	Contractor	✓		
S9.6	<p>To reduce the potential dust impacts of the excavation works, the C&D materials will be wetted as quickly as possible to the extent practice after filling.</p>	Whole Site / During Construction	Contractor	✓		

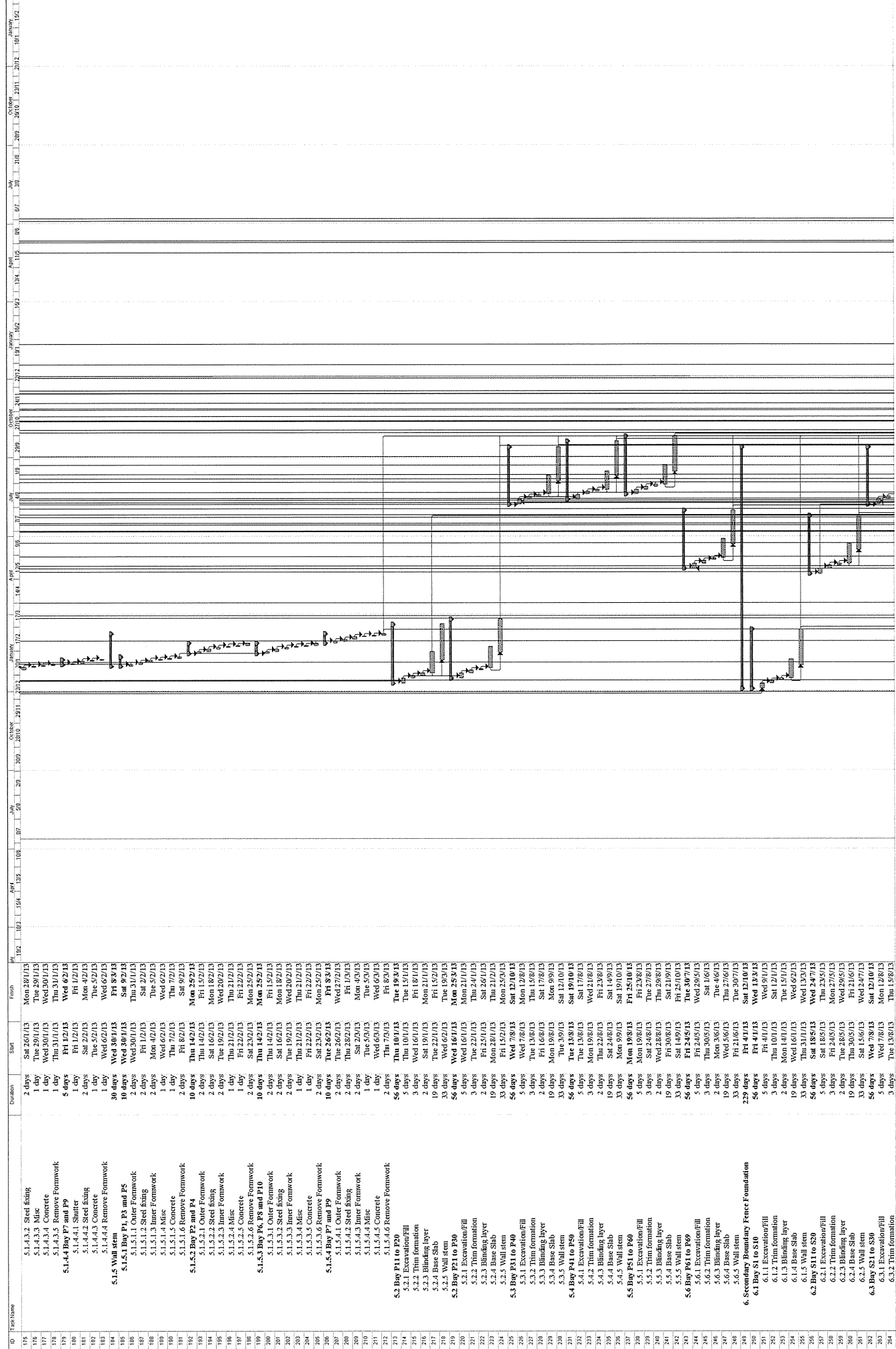
S9.6	<p><i>Chemical Waste</i> Containers used for storage of chemical waste shall be:</p> <ol style="list-style-type: none"> Maintained in good condition and clearly labelled in both English and Chinese; Suitable for the substance they are holding, resistant to corrosion, and securely closed; and Capacity of less than 450 L unless the specifications have been approved by the EPD. 	All facilities / During construction	Contractor	✓		Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling, and Storage of Chemical Wastes
S9.6	<p>Storage areas for chemical waste shall:</p> <ol style="list-style-type: none"> Be clearly labelled and used solely for the storage of chemical waste; Be enclosed on at least 3 sides; Have adequate ventilation; Be arranged so that incompatible materials are appropriately separated Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; and Be covered to prevent rainfall from entering 	All facilities / During construction	Contractor	✓		
S9.6	Any unused chemicals and those with remaining functional capacity shall be recycled to the extent practical.	Land Site / During Construction	Contractor	✓		
S9.6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	Chemical Waste Treatment Centre at Tsing Yi/ During construction	Contractor	✓		Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling, and Storage of Chemical Wastes
S9.6	<i>General Refuse</i> General refuse shall be timely cleared and shall be disposed of to the nearest licensed facility by reputable waste collector on regular basis to reduce odour, pest and litter impacts.	All areas / During construction	Contractor	✓		WBTC Nos. 6/2002 and 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness.
S9.6	No waste shall be burnt on site. Wastes shall be collected by licensed waste haulier and be disposed of at licence sites.	Land Site / During Construction	Contractor	✓		Air Pollution Control Ordinance
S9.6	Training will be provided to workers on the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling at the beginning of the construction works.	All areas / During construction	Contractor	✓		
S9.8	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site inspection and audit programme shall be undertaken.	All facilities / During construction	ET and IEC	✓		
S9.8	Waste Management Plan (WMP) will be prepared and implemented in accordance with ETWB TC(W) No. 19/2005.	All facilities / During construction	Contractor	✓		ETWB TC(W) No.19/2005

6. Cultural Heritage							
		Pursuant to the Antiquities and Monuments Ordinance, the project proponent should inform the AMO immediately in case of discovery of antiquities or supposed antiquities in the course of soil excavation works in construction stage.	Whole Site / During Construction	Project Proponent	✓		Antiquities and Monuments Ordinance
S11.8.1		In case the works boundary of the Project changes during the detailed design stage to cover additional area not being assessed, the need for further archaeological survey and subsequent impact assessment should be reviewed and AMO should be consulted.	Additional works boundary not covered in EIA / During design stage	Design Team and the Project Proponent (i.e. DSD)			EIAO TM, Guidelines for CHIA, Antiquities and Monuments Ordinance
7. Landscape & Visual							
S12.6.10	MM1: Tree Protection and Preservation - Trees/ woodland within the Project Site will be protected and preserved as far as possible in accordance with ETWB TCW No. 29/2004 and 3/2006.		Land Site / During Construction	Contractor	✓		
S12.6.10	MM2: Tree Transplantation – Should removal of trees be unavoidable due to construction impacts, trees will be transplanted or felled according to the Detailed Tree Survey and Tree Felling Application. Established trees of value are to be re-located where practically feasible.		Land site / During Construction	Contractor(s)	✓		
S12.6.10	MM3: Minimize Disturbance – temporary structures and construction works should be planned with care to minimize disturbance to existing built structures as well as vegetation including riparian vegetation along the river.		Land Site / During Construction	Contractor	✓		
S12.6.10	MM4: Compensatory Tree Planting - Where loss of existing trees is unavoidable, compensatory planting of trees should be provided in accordance with ETWB TCW No. 03/2006 to compensate for those trees felled. Space is to be allowed within the Project Site (mainly planting in riverbank landscape areas of ~4.1 ha) for such planting. Plants will have 12 months to establish. Approximately 0.5 ha of compensatory woodland planting (in addition to the reinstatement of the woodland (LR4) if unavoidably affected) will be provided within the Project Site near Pak Fu Shan. The proposed compensatory woodland planting site will locate adjoining to the reinstated and existing (undisturbed by the Project) woodland on hillside. The selection of planting species shall be made with reference to the species identified in the Tree Survey and be native to Hong Kong or the South China region. The compensatory woodland planting should also adopt ecological design, ie provision of rare butterfly species larval food plant (Trema sp.), and further details refer to Section 7.1.3 of the EIA Report. The arrangement of the on-site compensatory planting, ie tree/ shrub mix and Trema sp., will be subject to detailed landscape design and planting plan, and recommended to be implemented prior to the construction activities as far as practical		Compensatory planting area / During Construction	Contractor	✓		
S12.6.10	MM5: Screening – Stockpiles of materials should be covered or hoarding erected where possible to reduce undesirable views of the construction site (such as stockpile areas), having consideration of safety and security. It is proposed that screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used. Hoarding should be taken down at the end of the construction period.		Land Site / During Construction	Contractor	✓		

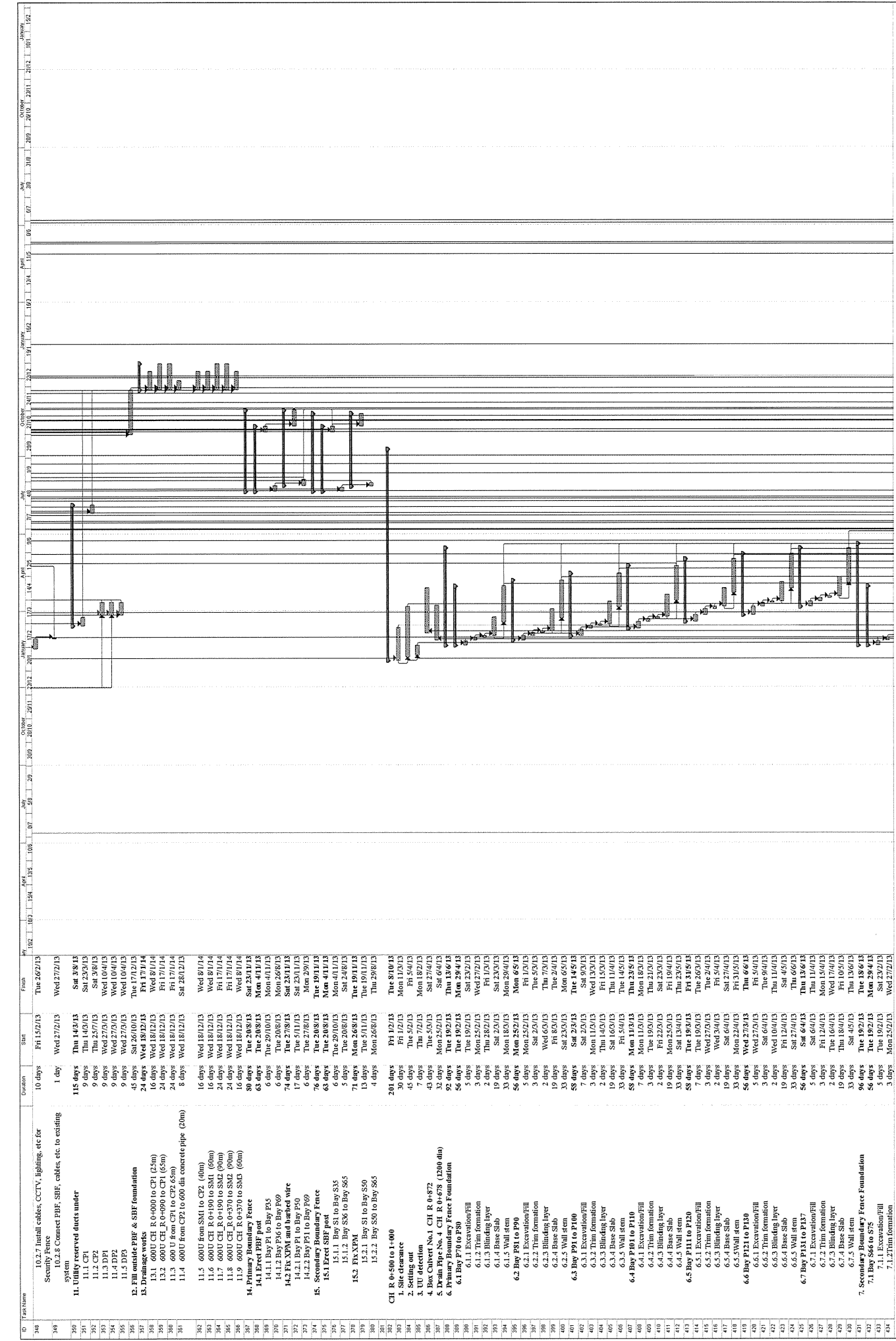
S12.6.10	MM6: Light Control – Control of night time lighting glare shall be implemented to minimize glare impact to adjacent VSRs.	Whole Site / During Construction	Contractor	✓			
S12.6.10	MM7: Reinstatement – Terrestrial areas temporarily disturbed by the Project during construction, should be re-vegetated with shrubs, ground cover or grass in order to restore the green ambience or LR as existed before the commencement of the Project to blend with the new environment, eg the earth embankment underneath the boundary patrol road near Pak Fu Shan should be planted to ensure the embankment structure blends in with the new environment.	Whole Site / During Construction	Contractor	✓			
S12.6.10	MM8: Buffer Planting – Tree and Shrub planting shall be provided for screening the natural watercourse, woodland and shrubby grassland on lowland, proposed boundary control road and fencing, where needed and taking into account security and boundary control limitations.	Appropriate location / During Construction	Contractor	✓			
S12.6.10	MM9: River Area Enhancement Landscaping – The river bed should be non-concreted as far as practical. The River bank and margins of approximately 4.1 ha should be enhanced with vegetation to compensate for the loss of existing vegetation and to enhance the visual and landscape value of the river where slope gradient allows. The typical design of riverbank landscaping areas for the Project is presented in Section 7.11.3 and Figure 7.11 of the EIA Report. The overall objectives for the landscaping works will be mainly concerned with ecological enhancement but also include landscape enhancement. For the sloping banks of the river, in order to guarantee safety of flood prevention, ecologically and environmentally friendly materials will be used as far as possible. The preliminary proposed landscape treatment along the sloping river banks can be classified into three types: natural vegetation, semi-natural and artificial. Further details of the river area enhancement plans can be found in Section 3 of the EIA Report, including protection of river bed with armour rock only where necessary and provision of grassed, cellular, reinforced concrete eco-friendly slope protection. Eco-bags are made of UV-resistant Polyethylene gas filled with fiber soil. Final details of the landscaping will be prepared during the detailed design stage of the Project.	Appropriate location / During Construction	Contractor	✓	✓		
S12.6.10	MM11: Floodplain Areas - The areas bound by sharp turns in the natural meander of the river should be made into floodplain areas to retain some of the riparian landscape at the river margins. The overall objectives for the landscaping works will be mainly concerned with ecological enhancement but also include landscape enhancement (also refer to Section 7.11.3 of the EIA Report). Further details will be developed during Detailed Design Stage.	Floodplain areas / During Construction	Contractor	✓	✓		
S12.6.10	MM12: Colours of Structures - Colours for the structures eg fences should be chosen to complement the surrounding area. Lighter colours such as shades of light grey, off-white and light brown may be utilised where technically feasible to reduce the visibility of the structures.	Whole Site / During Construction	Contractor	✓			
S12.6.10	MM13: Topsoil Reuse - Excavated topsoil should be conserved for re-use by the Project or other projects.	Whole Site / During Construction	Contractor	✓			
S12.9	The completed landscape works adopting ecological design on the Hong Kong side will be monitored during the one year establishment period.	Whole site / During 1 year Establishment period	Landscape Contractor	✓			

ANNEX D

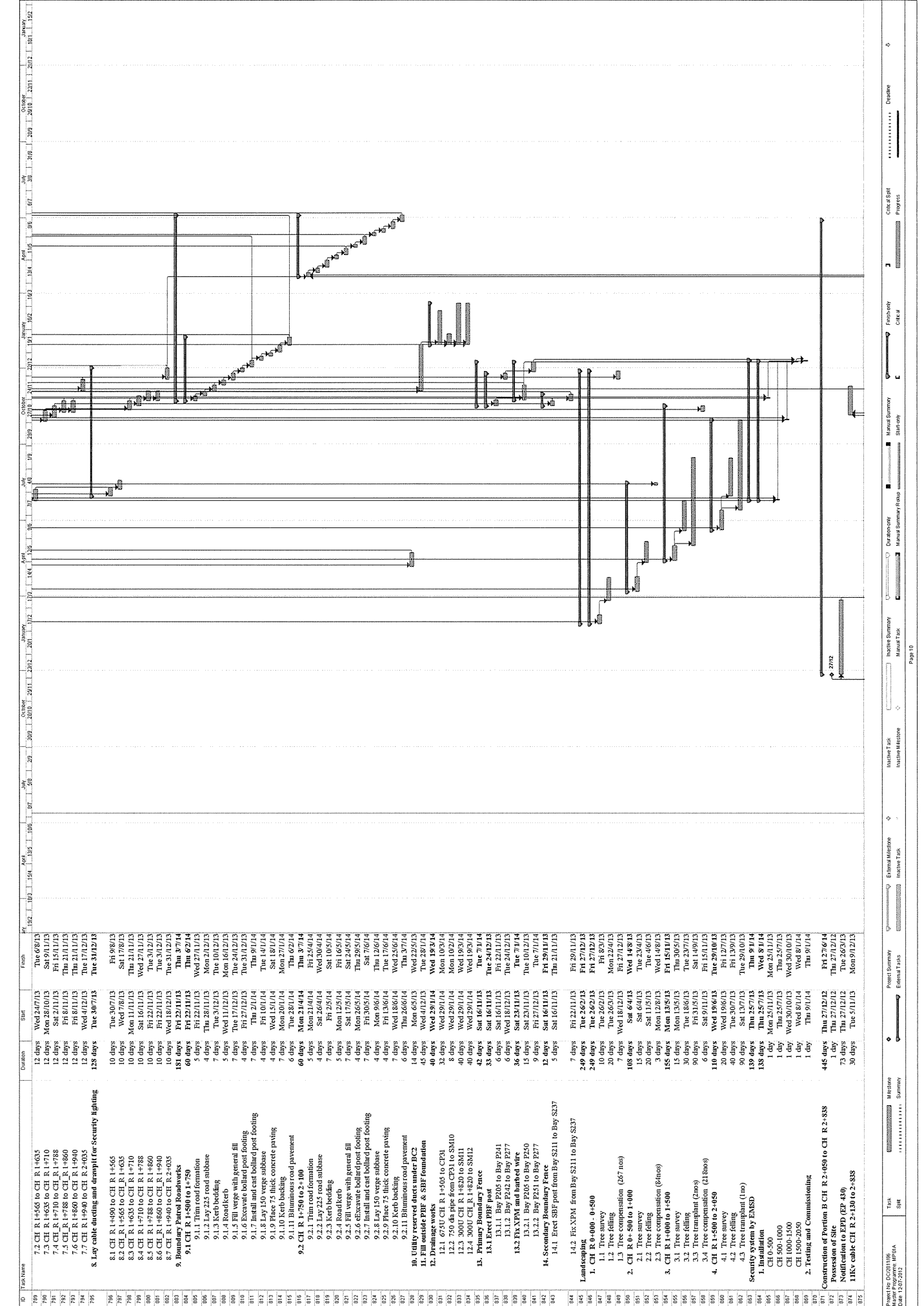
CONSTRUCTION PROGRAM



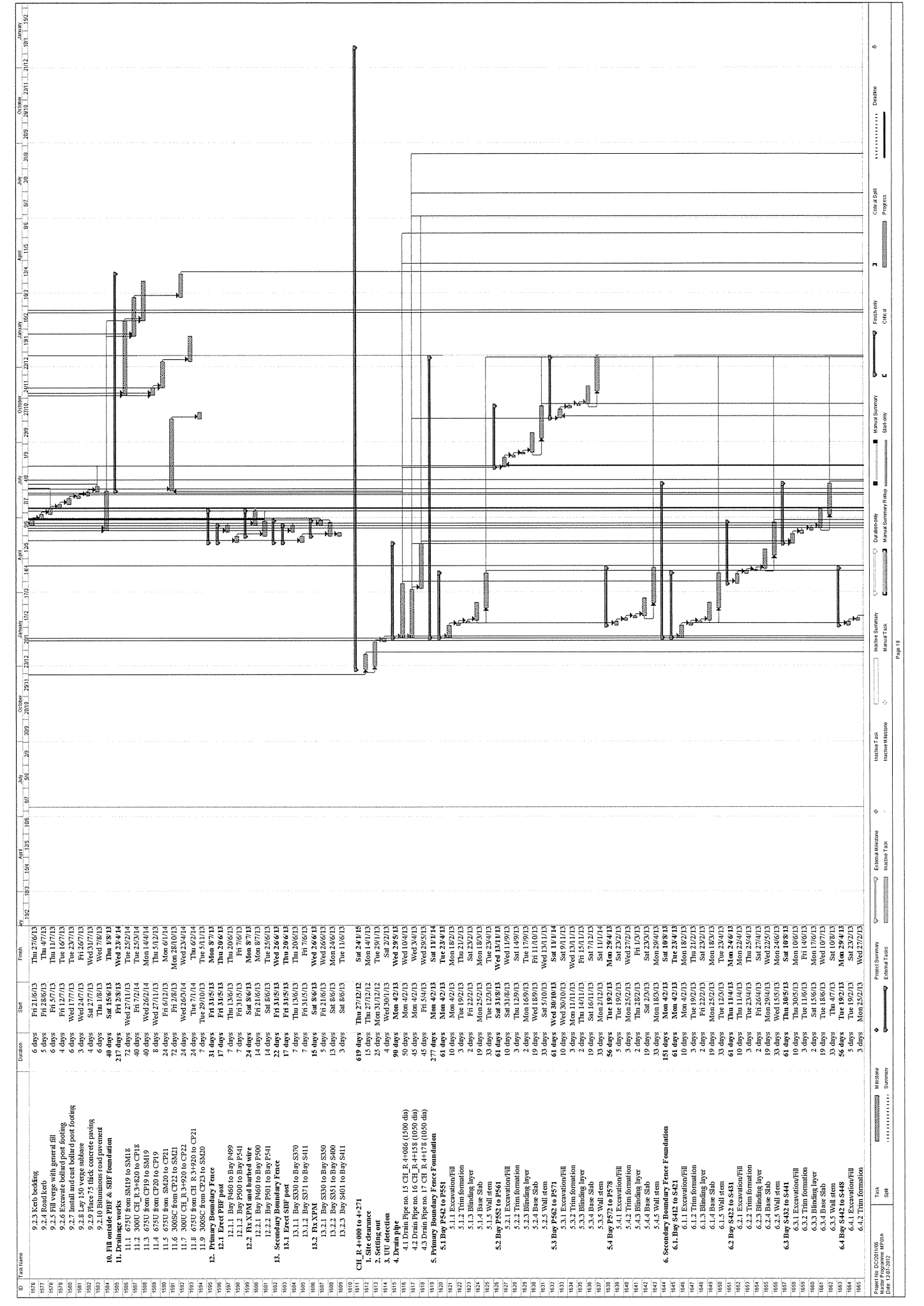
ID	Task Name	Duration	Start	Finish
175	5.1.4.3.2 Steel framing	2 days	Sat 2/26/13	Mon 2/28/13
176	5.1.4.3.3 Misc	1 day	Wed 3/01/13	Wed 3/01/13
177	5.1.4.3.4 Concrete	1 day	Wed 3/01/13	Wed 3/01/13
178	5.1.4.3.5 Remove Formwork	1 day	Thu 3/11/13	Thu 3/11/13
179	5.1.4.4 Bay P7 and P9	5 days	Fri 1/2/13	Wed 6/2/13
180	5.1.4.4.1 Shutter	1 day	Fri 1/2/13	Fri 1/2/13
181	5.1.4.4.2 Steel framing	2 days	Sat 2/2/13	Mon 4/2/13
182	5.1.4.4.3 Concrete	1 day	Thu 5/2/13	Thu 5/2/13
183	5.1.4.4.4 Remove Formwork	1 day	Wed 6/2/13	Wed 6/2/13
184	5.1.5 Wall stem	30 days	Fri 8/3/13	Fri 8/3/13
185	5.1.5.1 Bay P4, P8 and P5	10 days	Wed 3/01/13	Sat 3/1/13
186	5.1.5.1.1 Outer Formwork	2 days	Wed 3/01/13	Thu 3/01/13
187	5.1.5.1.2 Concrete	2 days	Fri 1/2/13	Thu 3/01/13
188	5.1.5.1.3 Inner Formwork	2 days	Mon 4/2/13	Thu 3/01/13
189	5.1.5.1.4 Misc	1 day	Wed 6/2/13	Thu 3/01/13
190	5.1.5.1.5 Concrete	1 day	Thu 7/2/13	Thu 3/01/13
191	5.1.5.1.6 Remove Formwork	2 days	Fri 8/2/13	Sat 9/2/13
192	5.1.5.2 Bay P2 and P4	10 days	Mon 1/4/13	Mon 2/5/13
193	5.1.5.2.1 Outer Formwork	2 days	Thu 1/4/13	Fri 1/5/13
194	5.1.5.2.2 Steel framing	2 days	Sat 1/6/13	Mon 1/8/13
195	5.1.5.2.3 Inner Formwork	2 days	Thu 1/22/13	Wed 2/02/13
196	5.1.5.2.4 Misc	1 day	Thu 2/12/13	Thu 2/12/13
197	5.1.5.2.5 Concrete	1 day	Fri 2/22/13	Fri 2/22/13
198	5.1.5.2.6 Remove Formwork	10 days	Mon 4/2/13	Mon 4/2/13
199	5.1.5.3.1 Outer Formwork	2 days	Thu 1/4/13	Fri 1/5/13
200	5.1.5.3.2 Steel framing	2 days	Sat 1/6/13	Mon 1/8/13
201	5.1.5.3.3 Inner Formwork	2 days	Thu 1/22/13	Wed 2/02/13
202	5.1.5.3.4 Misc	1 day	Thu 2/12/13	Thu 2/12/13
203	5.1.5.3.5 Concrete	2 days	Fri 2/22/13	Fri 2/22/13
204	5.1.5.3.6 Remove Formwork	10 days	Thu 2/22/13	Mon 2/5/13
205	5.1.5.4.1 Outer Formwork	2 days	Thu 2/6/13	Fri 8/3/13
206	5.1.5.4.2 Steel framing	2 days	Thu 2/6/13	Fri 8/3/13
207	5.1.5.4.3 Inner Formwork	2 days	Thu 2/6/13	Fri 8/3/13
208	5.1.5.4.4 Misc	1 day	Thu 2/6/13	Fri 8/3/13
209	5.1.5.4.5 Concrete	2 days	Thu 2/6/13	Fri 8/3/13
210	5.1.5.4.6 Remove Formwork	2 days	Thu 2/6/13	Fri 8/3/13
211	5.2 Bay P11 to P20	56 days	Thu 10/1/13	Thu 1/9/13
212	5.2.1 Excavation/Fill	5 days	Thu 10/1/13	Thu 10/1/13
213	5.2.2 Trim formation	3 days	Wed 1/6/13	Fri 1/6/13
214	5.2.3 Blinding layer	2 days	Sat 1/9/13	Mon 2/1/13
215	5.2.4 Base Slab	19 days	Thu 2/21/13	Fri 1/5/13
216	5.2.5 Wall stem	33 days	Wed 6/2/13	Thu 1/9/13
217	5.2.6 Bay P7 to P9	56 days	Wed 1/6/13	Mon 2/1/13
218	5.2.1 Excavation/Fill	5 days	Thu 10/1/13	Thu 10/1/13
219	5.2.2 Trim formation	3 days	Wed 1/6/13	Fri 1/6/13
220	5.2.3 Blinding layer	2 days	Sat 1/9/13	Mon 2/1/13
221	5.2.4 Base Slab	19 days	Thu 2/21/13	Fri 1/5/13
222	5.2.5 Wall stem	33 days	Wed 6/2/13	Thu 1/9/13
223	5.2.6 Bay P3 to P4	56 days	Wed 7/8/13	Sat 12/10/13
224	5.2.1 Excavation/Fill	5 days	Wed 7/8/13	Mon 12/9/13
225	5.2.2 Trim formation	3 days	Thu 13/6/13	Thu 15/6/13
226	5.2.3 Blinding layer	2 days	Fri 1/6/13	Sat 1/7/13
227	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
228	5.2.5 Wall stem	33 days	Thu 3/9/13	Sat 12/10/13
229	5.2.6 Bay P4 to P5	56 days	Thu 13/6/13	Sat 17/8/13
230	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Wed 21/6/13
231	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
232	5.2.3 Blinding layer	2 days	Mon 1/6/13	Mon 21/6/13
233	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
234	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
235	5.2.6 Bay P5 to P6	56 days	Mon 1/6/13	Mon 12/9/13
236	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
237	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
238	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
239	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
240	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
241	5.2.6 Bay P6 to P7	56 days	Mon 1/6/13	Mon 12/9/13
242	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
243	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
244	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
245	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
246	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
247	5.2.6 Bay P7 to P8	56 days	Mon 1/6/13	Mon 12/9/13
248	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
249	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
250	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
251	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
252	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
253	5.2.6 Bay P8 to P9	56 days	Mon 1/6/13	Mon 12/9/13
254	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
255	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
256	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
257	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
258	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
259	5.2.6 Bay P9 to P10	56 days	Mon 1/6/13	Mon 12/9/13
260	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
261	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
262	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
263	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
264	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
265	5.2.6 Bay P10 to P11	56 days	Mon 1/6/13	Mon 12/9/13
266	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
267	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
268	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
269	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
270	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
271	5.2.6 Bay P11 to P12	56 days	Mon 1/6/13	Mon 12/9/13
272	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
273	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
274	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
275	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
276	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
277	5.2.6 Bay P12 to P13	56 days	Mon 1/6/13	Mon 12/9/13
278	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
279	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
280	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
281	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
282	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
283	5.2.6 Bay P13 to P14	56 days	Mon 1/6/13	Mon 12/9/13
284	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
285	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
286	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
287	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
288	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
289	5.2.6 Bay P14 to P15	56 days	Mon 1/6/13	Mon 12/9/13
290	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
291	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
292	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
293	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
294	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
295	5.2.6 Bay P15 to P16	56 days	Mon 1/6/13	Mon 12/9/13
296	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
297	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
298	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
299	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
300	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
301	5.2.6 Bay P16 to P17	56 days	Mon 1/6/13	Mon 12/9/13
302	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
303	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
304	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
305	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
306	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
307	5.2.6 Bay P17 to P18	56 days	Mon 1/6/13	Mon 12/9/13
308	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
309	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
310	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
311	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
312	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
313	5.2.6 Bay P18 to P19	56 days	Mon 1/6/13	Mon 12/9/13
314	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
315	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
316	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
317	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
318	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
319	5.2.6 Bay P19 to P20	56 days	Mon 1/6/13	Mon 12/9/13
320	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
321	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
322	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
323	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
324	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
325	5.2.6 Bay P20 to P21	56 days	Mon 1/6/13	Mon 12/9/13
326	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
327	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
328	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
329	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
330	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
331	5.2.6 Bay P21 to P22	56 days	Mon 1/6/13	Mon 12/9/13
332	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
333	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
334	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
335	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
336	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
337	5.2.6 Bay P22 to P23	56 days	Mon 1/6/13	Mon 12/9/13
338	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
339	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
340	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
341	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
342	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
343	5.2.6 Bay P23 to P24	56 days	Mon 1/6/13	Mon 12/9/13
344	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
345	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
346	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13
347	5.2.4 Base Slab	19 days	Mon 1/6/13	Mon 9/9/13
348	5.2.5 Wall stem	33 days	Mon 1/6/13	Sat 12/10/13
349	5.2.6 Bay P24 to P25	56 days	Mon 1/6/13	Mon 12/9/13
350	5.2.1 Excavation/Fill	5 days	Mon 1/6/13	Thu 21/6/13
351	5.2.2 Trim formation	3 days	Mon 1/6/13	Thu 21/6/13
352	5.2.3 Blinding layer	2 days	Mon 1/6/13	Thu 21/6/13



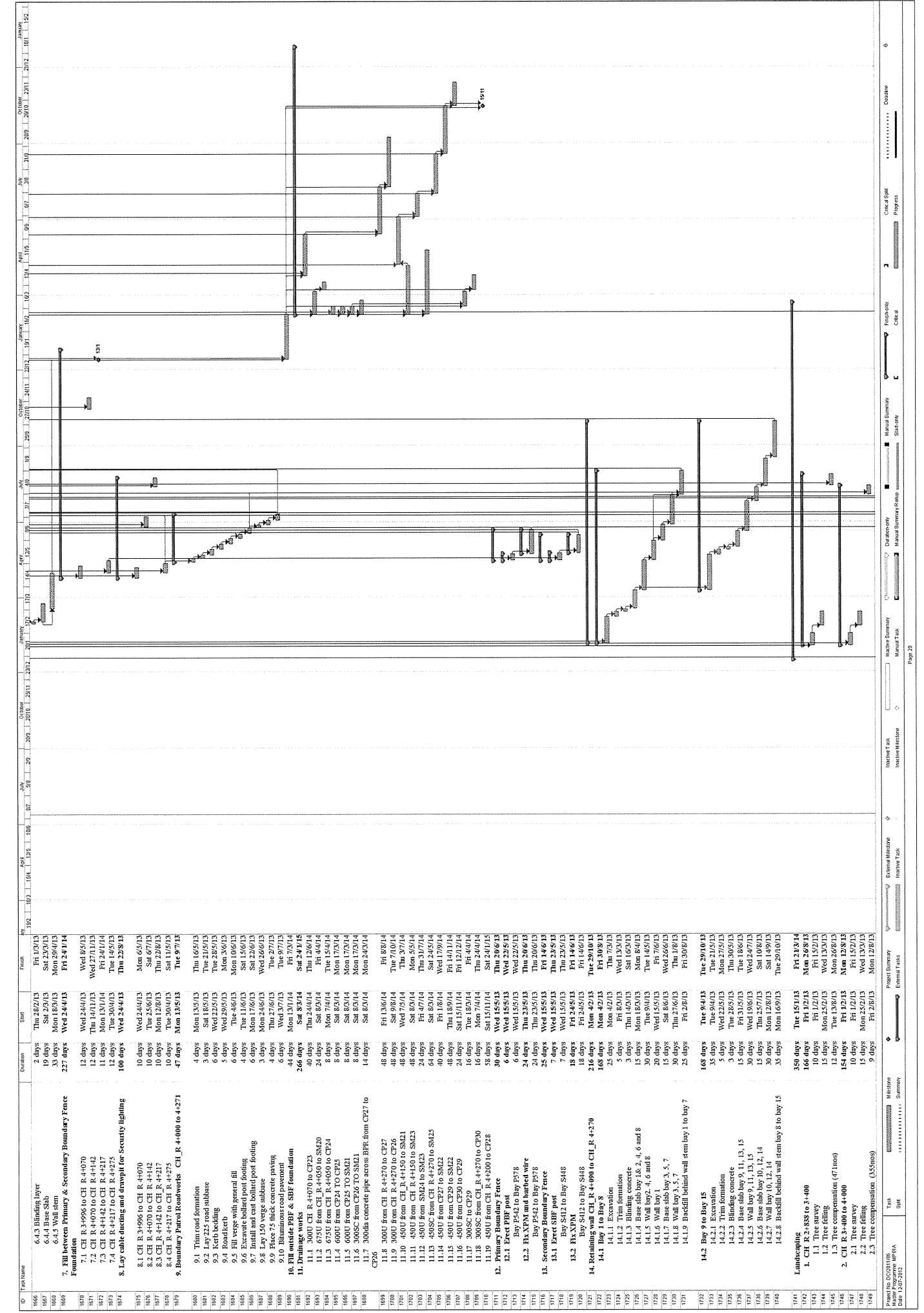
ID	Task Name	Start	Finish	Duration	Summary
346	10.2.8 Install cables, CCTV, lighting, etc for Security Enclosure PBF, SBF, cables etc to existing system	Fri 15/2/13	Thu 26/2/13	10 days	Final
347	11. Utility reserved ducts under system	Thu 14/3/13	Sat 3/8/13	115 days	Wed 27/2/13
348	11.1 CP1	Thu 14/3/13	Sat 23/3/13	9 days	
349	11.2 CP2	Thu 14/3/13	Sat 3/8/13	9 days	
350	11.3 DPF1	Thu 14/3/13	Wed 27/3/13	9 days	
351	11.4 DPF2	Thu 14/3/13	Wed 10/4/13	9 days	
352	11.5 DPF3	Thu 14/3/13	Wed 10/4/13	9 days	
353	12. Fill outside PBF & SBF foundation	Sat 23/3/13	Thu 17/12/13	45 days	
354	13. Drainage works	Thu 17/12/13	Fri 11/1/14	24 days	
355	13.1 600U CH R-0-600 to CP1 (55m)	Thu 17/12/13	Wed 18/12/13	2 days	
356	13.2 600U CH R-0-600 to CP1 (55m)	Thu 17/12/13	Fri 11/1/14	24 days	
357	13.3 600U CH R-0-600 to CP2 (55m)	Thu 17/12/13	Fri 11/1/14	24 days	
358	13.4 600U CH R-0-600 to CP2 (55m)	Thu 17/12/13	Fri 11/1/14	24 days	
359	13.5 600U CH R-0-600 to CP2 (55m)	Thu 17/12/13	Fri 11/1/14	24 days	
360	13.6 600U CH R-0-600 to CP2 (55m)	Thu 17/12/13	Fri 11/1/14	24 days	
361	13.7 600U CH R-0-600 to CP2 (55m)	Thu 17/12/13	Fri 11/1/14	24 days	
362	14. Erect PBF post	Wed 18/12/13	Wed 8/1/14	16 days	
363	14.1.1 Bay P1 to Bay P5	Wed 18/12/13	Wed 8/1/14	16 days	
364	14.1.2 Bay P6 to Bay P10	Wed 18/12/13	Wed 8/1/14	16 days	
365	14.2 Fix XPM and barbed wire	Wed 18/12/13	Wed 8/1/14	16 days	
366	14.2.1 Bay P1 to Bay P5	Wed 18/12/13	Wed 8/1/14	16 days	
367	14.2.2 Bay P6 to Bay P10	Wed 18/12/13	Wed 8/1/14	16 days	
368	15. Secondary Boundary Fence	Mon 29/1/13	Mon 29/1/13	6 days	
369	15.1 Erect SBF post	Mon 29/1/13	Mon 29/1/13	6 days	
370	15.1.1 Bay S1 to Bay S35	Mon 29/1/13	Mon 4/1/13	6 days	
371	15.1.2 Bay S36 to Bay S65	Mon 29/1/13	Mon 4/1/13	6 days	
372	15.2 Fix XPM	Mon 29/1/13	Mon 29/1/13	6 days	
373	15.2.1 Bay S1 to Bay S50	Mon 29/1/13	Mon 29/1/13	6 days	
374	15.2.2 Bay S51 to Bay S65	Mon 29/1/13	Mon 29/1/13	6 days	
375	16. Site clearance	Mon 11/2/13	Mon 11/2/13	201 days	
376	16.1 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
377	16.2 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
378	16.3 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
379	16.4 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
380	16.5 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
381	16.6 Bay P91 to P90	Mon 11/2/13	Mon 11/2/13	201 days	
382	16.7 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
383	16.8 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
384	16.9 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
385	16.10 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
386	16.11 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
387	16.12 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
388	16.13 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
389	16.14 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
390	16.15 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
391	16.16 Bay P91 to P90	Mon 11/2/13	Mon 11/2/13	201 days	
392	16.17 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
393	16.18 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
394	16.19 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
395	16.20 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
396	16.21 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
397	16.22 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
398	16.23 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
399	16.24 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
400	16.25 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
401	16.26 Bay P91 to P100	Mon 11/2/13	Mon 11/2/13	201 days	
402	16.27 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
403	16.28 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
404	16.29 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
405	16.30 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
406	16.31 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
407	16.32 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
408	16.33 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
409	16.34 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
410	16.35 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
411	16.36 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
412	16.37 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
413	16.38 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
414	16.39 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
415	16.40 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
416	16.41 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
417	16.42 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
418	16.43 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
419	16.44 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
420	16.45 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
421	16.46 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
422	16.47 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
423	16.48 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
424	16.49 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
425	16.50 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
426	16.51 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
427	16.52 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
428	16.53 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
429	16.54 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
430	16.55 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
431	16.56 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
432	16.57 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
433	16.58 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
434	16.59 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
435	16.60 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
436	16.61 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
437	16.62 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
438	16.63 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
439	16.64 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
440	16.65 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
441	16.66 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
442	16.67 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
443	16.68 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
444	16.69 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
445	16.70 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
446	16.71 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
447	16.72 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
448	16.73 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
449	16.74 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
450	16.75 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
451	16.76 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
452	16.77 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
453	16.78 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
454	16.79 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
455	16.80 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
456	16.81 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
457	16.82 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
458	16.83 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
459	16.84 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
460	16.85 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
461	16.86 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
462	16.87 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
463	16.88 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
464	16.89 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
465	16.90 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
466	16.91 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
467	16.92 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
468	16.93 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
469	16.94 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
470	16.95 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
471	16.96 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
472	16.97 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
473	16.98 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
474	16.99 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
475	17.00 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
476	17.01 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
477	17.02 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
478	17.03 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
479	17.04 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
480	17.05 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
481	17.06 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
482	17.07 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
483	17.08 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
484	17.09 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
485	17.10 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
486	17.11 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
487	17.12 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
488	17.13 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
489	17.14 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
490	17.15 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
491	17.16 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
492	17.17 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
493	17.18 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
494	17.19 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
495	17.20 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
496	17.21 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
497	17.22 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
498	17.23 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
499	17.24 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
500	17.25 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
501	17.26 Wall stem	Mon 11/2/13	Mon 11/2/13	201 days	
502	17.27 Excavation/Fill	Mon 11/2/13	Mon 11/2/13	201 days	
503	17.28 Trench formation	Mon 11/2/13	Mon 11/2/13	201 days	
504	17.29 Blinding layer	Mon 11/2/13	Mon 11/2/13	201 days	
505	17.30 Base Slab	Mon 11/2/13	Mon 11/2/13	201 days	
506					



ID	Task Name	Start	Finish	Duration
789	7.3 CH R 1-565 to CH R 1-635	Wed 24/7/13	Fri 26/7/13	12 days
790	7.4 CH R 1-635 to CH R 1-710	Mon 28/07/13	Mon 28/07/13	12 days
791	7.5 CH R 1-710 to CH R 1-788	Sat 20/1/13	Fri 15/1/13	12 days
792	7.6 CH R 1-788 to CH R 1-860	Thu 21/1/13	Thu 21/1/13	12 days
793	7.7 CH R 1-860 to CH R 1-940	Fri 8/1/13	Thu 21/1/13	12 days
794	7.8 CH R 1-940 to CH R 2-035	Wed 4/12/13	Thu 21/1/13	12 days
795	8. Lay cable ducting and dropoff for security lighting	Thu 30/7/13	Thu 30/7/13	128 days
796	8.1 CH R 1-490 to CH R 1-565	Thu 30/7/13	Fri 9/8/13	10 days
797	8.2 CH R 1-565 to CH R 1-635	Sat 17/8/13	Sat 17/8/13	10 days
798	8.3 CH R 1-635 to CH R 1-710	Mon 11/1/13	Thu 21/1/13	10 days
799	8.4 CH R 1-710 to CH R 1-788	Wed 27/1/13	Wed 27/1/13	10 days
800	8.5 CH R 1-788 to CH R 1-860	Thu 14/1/13	Thu 14/1/13	10 days
801	8.6 CH R 1-860 to CH R 1-940	Fri 22/1/13	Fri 22/1/13	10 days
802	8.7 CH R 1-940 to CH R 2-035	Wed 18/12/13	Thu 14/1/13	10 days
803	9. Boundary Patrol Roadworks	Thu 22/1/13	Thu 22/1/13	181 days
804	9.1 CH R 1-500 to 1-750	5 days	Thu 22/1/13	60 days
805	9.1.1 Tim road formation	4 days	Thu 22/1/13	5 days
806	9.1.2 Lay 22.5 read subbase	7 days	Thu 28/1/13	4 days
807	9.1.3 Kerb bedding	5 days	Thu 9/12/13	7 days
808	9.1.4 Roadkerb	7 days	Thu 11/12/13	5 days
809	9.1.5 Fill verge with general fill	Thu 17/12/13	Thu 17/12/13	4 days
810	9.1.6 Excavate bollard post footing	Fri 27/12/13	Fri 27/12/13	7 days
811	9.1.7 Install and cast bollard post footing	Thu 19/1/14	Thu 19/1/14	4 days
812	9.1.8 Lay 150 verge subbase	Fri 15/1/14	Fri 15/1/14	4 days
813	9.1.9 Lay 150 curb concrete paving	Mon 20/1/14	Mon 20/1/14	7 days
814	9.1.10 150 curb bedding	Mon 20/1/14	Mon 20/1/14	7 days
815	9.1.11 Bituminous road pavement	Thu 28/1/14	Thu 28/1/14	6 days
816	9.2 CH R 1-750 to 2-100	Mon 21/4/14	Mon 21/4/14	60 days
817	9.2.1 Tim road formation	5 days	Mon 21/4/14	5 days
818	9.2.2 Lay 22.5 read subbase	Sat 26/4/14	Wed 30/4/14	4 days
819	9.2.3 Kerb bedding	Fri 25/14	Sat 10/5/14	7 days
820	9.2.4 Roadkerb	Mon 12/5/14	Fri 16/5/14	5 days
821	9.2.5 Fill verge with general fill	Sat 17/5/14	Sat 24/5/14	7 days
822	9.2.6 Excavate bollard post footing	Mon 26/5/14	Thu 29/5/14	4 days
823	9.2.7 Install and cast bollard post footing	Fri 30/5/14	Thu 29/5/14	7 days
824	9.2.8 Lay 150 verge subbase	Mon 9/6/14	Thu 29/5/14	4 days
825	9.2.9 Lay 150 curb concrete paving	Thu 29/5/14	Thu 29/5/14	7 days
826	9.2.10 150 curb bedding	Wed 18/6/14	Wed 18/6/14	7 days
827	9.2.11 Bituminous road pavement	Thu 26/6/14	Thu 26/6/14	6 days
828	10. Utility reserved areas under RCB	Mon 6/5/13	Wed 22/5/13	14 days
829	11. Fill outside PBF & SBF foundation	Wed 4/12/13	Wed 28/1/14	45 days
830	12. Drainage works	Wed 29/1/14	Wed 19/3/14	40 days
831	12.1 675U CH R 1-565 to CP31	Wed 29/1/14	Mon 10/3/14	32 days
832	12.2 750 dn pipe from CP31 to SM10	Wed 29/1/14	Mon 10/3/14	8 days
833	12.3 300U CH R 1-820 to SM11	Wed 29/1/14	Mon 10/3/14	40 days
834	12.4 300U CH R 1-820 to SM12	Wed 29/1/14	Wed 19/3/14	40 days
835	15. Primary Boundary Fence	Thu 29/1/14	Thu 29/1/14	42 days
836	15.1 Erect PBF posts to Bay P241	Sat 16/11/13	Thu 29/1/14	33 days
837	15.2 Erect PBF posts to Bay P242	Mon 18/12/13	Thu 29/1/14	36 days
838	15.3 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
839	15.4 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
840	15.5 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
841	15.6 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
842	15.7 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
843	15.8 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
844	15.9 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
845	15.10 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
846	15.11 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
847	15.12 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
848	15.13 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
849	15.14 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
850	15.15 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
851	15.16 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
852	15.17 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
853	15.18 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
854	15.19 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
855	15.20 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
856	15.21 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
857	15.22 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
858	15.23 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
859	15.24 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
860	15.25 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
861	15.26 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
862	15.27 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
863	15.28 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
864	15.29 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
865	15.30 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
866	15.31 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
867	15.32 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
868	15.33 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
869	15.34 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
870	15.35 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
871	15.36 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
872	15.37 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
873	15.38 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
874	15.39 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
875	15.40 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
876	15.41 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
877	15.42 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
878	15.43 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
879	15.44 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
880	15.45 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
881	15.46 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
882	15.47 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
883	15.48 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
884	15.49 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
885	15.50 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
886	15.51 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
887	15.52 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
888	15.53 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
889	15.54 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
890	15.55 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
891	15.56 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
892	15.57 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
893	15.58 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
894	15.59 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
895	15.60 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
896	15.61 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
897	15.62 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
898	15.63 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
899	15.64 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
900	15.65 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
901	15.66 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
902	15.67 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
903	15.68 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
904	15.69 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
905	15.70 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
906	15.71 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
907	15.72 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
908	15.73 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
909	15.74 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
910	15.75 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
911	15.76 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
912	15.77 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
913	15.78 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
914	15.79 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
915	15.80 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
916	15.81 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
917	15.82 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
918	15.83 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
919	15.84 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
920	15.85 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
921	15.86 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
922	15.87 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
923	15.88 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
924	15.89 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
925	15.90 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
926	15.91 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
927	15.92 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
928	15.93 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
929	15.94 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
930	15.95 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
931	15.96 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
932	15.97 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
933	15.98 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
934	15.99 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
935	16.00 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
936	16.01 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
937	16.02 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
938	16.03 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
939	16.04 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
940	16.05 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
941	16.06 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
942	16.07 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
943	16.08 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
944	16.09 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
945	16.10 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
946	16.11 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days
947	16.12 Erect PBF posts to Bay P277	Wed 18/12/13	Thu 29/1/14	6 days



ID	Task Name	Duration	Start	Finish
1976	9.2.3 Kerb bedding	6 days	Fri 21/6/13	Thu 27/6/13
1977	9.2.4 Road kerb	5 days	Fri 28/6/13	Thu 11/7/13
1978	9.2.5 Fill verge with general fill	6 days	Fri 5/7/13	Thu 16/7/13
1979	9.2.6 Excavate bollard post footing	4 days	Fri 12/7/13	Thu 23/7/13
1980	9.2.7 Install and cast bollard post footing	6 days	Wed 17/7/13	Fri 26/7/13
1981	9.2.8 Lay 150 verge subbase	3 days	Wed 24/7/13	Wed 31/7/13
1982	9.2.9 Place 75 thick concrete paving	4 days	Sat 27/7/13	Wed 7/8/13
1983	9.2.10 Bituminous road pavement	6 days	Thu 15/8/13	Thu 1/9/13
1984	10. Fill outside PBF & SBF foundation	40 days	Sat 15/6/13	Thu 1/8/13
1985	11. Drainage works	17 days	Fri 21/6/13	Thu 27/6/13
1986	11.1.1 Bay S60 to Bay S61	40 days	Wed 27/6/13	Mon 1/8/13
1987	11.1.2 Bay S62 to Bay S63	40 days	Wed 27/6/13	Mon 1/8/13
1988	11.1.3 Bay S64 to Bay S65	40 days	Wed 27/6/13	Mon 1/8/13
1989	11.1.4 Bay S66 to Bay S67	40 days	Wed 27/6/13	Mon 1/8/13
1990	11.1.5 Bay S68 to Bay S69	40 days	Wed 27/6/13	Mon 1/8/13
1991	11.1.6 Bay S70 to Bay S71	40 days	Wed 27/6/13	Mon 1/8/13
1992	11.1.7 Bay S72 to Bay S73	40 days	Wed 27/6/13	Mon 1/8/13
1993	11.1.8 Bay S74 to Bay S75	40 days	Wed 27/6/13	Mon 1/8/13
1994	11.1.9 Bay S76 to Bay S77	40 days	Wed 27/6/13	Mon 1/8/13
1995	11.1.10 Bay S78 to Bay S79	40 days	Wed 27/6/13	Mon 1/8/13
1996	11.1.11 Bay S80 to Bay S81	40 days	Wed 27/6/13	Mon 1/8/13
1997	11.1.12 Bay S82 to Bay S83	40 days	Wed 27/6/13	Mon 1/8/13
1998	11.1.13 Bay S84 to Bay S85	40 days	Wed 27/6/13	Mon 1/8/13
1999	11.1.14 Bay S86 to Bay S87	40 days	Wed 27/6/13	Mon 1/8/13
2000	11.1.15 Bay S88 to Bay S89	40 days	Wed 27/6/13	Mon 1/8/13
2001	11.1.16 Bay S90 to Bay S91	40 days	Wed 27/6/13	Mon 1/8/13
2002	11.1.17 Bay S92 to Bay S93	40 days	Wed 27/6/13	Mon 1/8/13
2003	11.1.18 Bay S94 to Bay S95	40 days	Wed 27/6/13	Mon 1/8/13
2004	11.1.19 Bay S96 to Bay S97	40 days	Wed 27/6/13	Mon 1/8/13
2005	11.1.20 Bay S98 to Bay S99	40 days	Wed 27/6/13	Mon 1/8/13
2006	11.1.21 Bay S100 to Bay S101	40 days	Wed 27/6/13	Mon 1/8/13
2007	11.1.22 Bay S102 to Bay S103	40 days	Wed 27/6/13	Mon 1/8/13
2008	11.1.23 Bay S104 to Bay S105	40 days	Wed 27/6/13	Mon 1/8/13
2009	11.1.24 Bay S106 to Bay S107	40 days	Wed 27/6/13	Mon 1/8/13
2010	11.1.25 Bay S108 to Bay S109	40 days	Wed 27/6/13	Mon 1/8/13
2011	11.1.26 Bay S110 to Bay S111	40 days	Wed 27/6/13	Mon 1/8/13
2012	11.1.27 Bay S112 to Bay S113	40 days	Wed 27/6/13	Mon 1/8/13
2013	11.1.28 Bay S114 to Bay S115	40 days	Wed 27/6/13	Mon 1/8/13
2014	11.1.29 Bay S116 to Bay S117	40 days	Wed 27/6/13	Mon 1/8/13
2015	11.1.30 Bay S118 to Bay S119	40 days	Wed 27/6/13	Mon 1/8/13
2016	11.1.31 Bay S120 to Bay S121	40 days	Wed 27/6/13	Mon 1/8/13
2017	11.1.32 Bay S122 to Bay S123	40 days	Wed 27/6/13	Mon 1/8/13
2018	11.1.33 Bay S124 to Bay S125	40 days	Wed 27/6/13	Mon 1/8/13
2019	11.1.34 Bay S126 to Bay S127	40 days	Wed 27/6/13	Mon 1/8/13
2020	11.1.35 Bay S128 to Bay S129	40 days	Wed 27/6/13	Mon 1/8/13
2021	11.1.36 Bay S130 to Bay S131	40 days	Wed 27/6/13	Mon 1/8/13
2022	11.1.37 Bay S132 to Bay S133	40 days	Wed 27/6/13	Mon 1/8/13
2023	11.1.38 Bay S134 to Bay S135	40 days	Wed 27/6/13	Mon 1/8/13
2024	11.1.39 Bay S136 to Bay S137	40 days	Wed 27/6/13	Mon 1/8/13
2025	11.1.40 Bay S138 to Bay S139	40 days	Wed 27/6/13	Mon 1/8/13
2026	11.1.41 Bay S140 to Bay S141	40 days	Wed 27/6/13	Mon 1/8/13
2027	11.1.42 Bay S142 to Bay S143	40 days	Wed 27/6/13	Mon 1/8/13
2028	11.1.43 Bay S144 to Bay S145	40 days	Wed 27/6/13	Mon 1/8/13
2029	11.1.44 Bay S146 to Bay S147	40 days	Wed 27/6/13	Mon 1/8/13
2030	11.1.45 Bay S148 to Bay S149	40 days	Wed 27/6/13	Mon 1/8/13
2031	11.1.46 Bay S150 to Bay S151	40 days	Wed 27/6/13	Mon 1/8/13
2032	11.1.47 Bay S152 to Bay S153	40 days	Wed 27/6/13	Mon 1/8/13
2033	11.1.48 Bay S154 to Bay S155	40 days	Wed 27/6/13	Mon 1/8/13
2034	11.1.49 Bay S156 to Bay S157	40 days	Wed 27/6/13	Mon 1/8/13
2035	11.1.50 Bay S158 to Bay S159	40 days	Wed 27/6/13	Mon 1/8/13
2036	11.1.51 Bay S160 to Bay S161	40 days	Wed 27/6/13	Mon 1/8/13
2037	11.1.52 Bay S162 to Bay S163	40 days	Wed 27/6/13	Mon 1/8/13
2038	11.1.53 Bay S164 to Bay S165	40 days	Wed 27/6/13	Mon 1/8/13
2039	11.1.54 Bay S166 to Bay S167	40 days	Wed 27/6/13	Mon 1/8/13
2040	11.1.55 Bay S168 to Bay S169	40 days	Wed 27/6/13	Mon 1/8/13
2041	11.1.56 Bay S170 to Bay S171	40 days	Wed 27/6/13	Mon 1/8/13
2042	11.1.57 Bay S172 to Bay S173	40 days	Wed 27/6/13	Mon 1/8/13
2043	11.1.58 Bay S174 to Bay S175	40 days	Wed 27/6/13	Mon 1/8/13
2044	11.1.59 Bay S176 to Bay S177	40 days	Wed 27/6/13	Mon 1/8/13
2045	11.1.60 Bay S178 to Bay S179	40 days	Wed 27/6/13	Mon 1/8/13
2046	11.1.61 Bay S180 to Bay S181	40 days	Wed 27/6/13	Mon 1/8/13
2047	11.1.62 Bay S182 to Bay S183	40 days	Wed 27/6/13	Mon 1/8/13
2048	11.1.63 Bay S184 to Bay S185	40 days	Wed 27/6/13	Mon 1/8/13
2049	11.1.64 Bay S186 to Bay S187	40 days	Wed 27/6/13	Mon 1/8/13
2050	11.1.65 Bay S188 to Bay S189	40 days	Wed 27/6/13	Mon 1/8/13
2051	11.1.66 Bay S190 to Bay S191	40 days	Wed 27/6/13	Mon 1/8/13
2052	11.1.67 Bay S192 to Bay S193	40 days	Wed 27/6/13	Mon 1/8/13
2053	11.1.68 Bay S194 to Bay S195	40 days	Wed 27/6/13	Mon 1/8/13
2054	11.1.69 Bay S196 to Bay S197	40 days	Wed 27/6/13	Mon 1/8/13
2055	11.1.70 Bay S198 to Bay S199	40 days	Wed 27/6/13	Mon 1/8/13
2056	11.1.71 Bay S200 to Bay S201	40 days	Wed 27/6/13	Mon 1/8/13
2057	11.1.72 Bay S202 to Bay S203	40 days	Wed 27/6/13	Mon 1/8/13
2058	11.1.73 Bay S204 to Bay S205	40 days	Wed 27/6/13	Mon 1/8/13
2059	11.1.74 Bay S206 to Bay S207	40 days	Wed 27/6/13	Mon 1/8/13
2060	11.1.75 Bay S208 to Bay S209	40 days	Wed 27/6/13	Mon 1/8/13
2061	11.1.76 Bay S210 to Bay S211	40 days	Wed 27/6/13	Mon 1/8/13
2062	11.1.77 Bay S212 to Bay S213	40 days	Wed 27/6/13	Mon 1/8/13
2063	11.1.78 Bay S214 to Bay S215	40 days	Wed 27/6/13	Mon 1/8/13
2064	11.1.79 Bay S216 to Bay S217	40 days	Wed 27/6/13	Mon 1/8/13
2065	11.1.80 Bay S218 to Bay S219	40 days	Wed 27/6/13	Mon 1/8/13
2066	11.1.81 Bay S220 to Bay S221	40 days	Wed 27/6/13	Mon 1/8/13
2067	11.1.82 Bay S222 to Bay S223	40 days	Wed 27/6/13	Mon 1/8/13
2068	11.1.83 Bay S224 to Bay S225	40 days	Wed 27/6/13	Mon 1/8/13
2069	11.1.84 Bay S226 to Bay S227	40 days	Wed 27/6/13	Mon 1/8/13
2070	11.1.85 Bay S228 to Bay S229	40 days	Wed 27/6/13	Mon 1/8/13
2071	11.1.86 Bay S230 to Bay S231	40 days	Wed 27/6/13	Mon 1/8/13
2072	11.1.87 Bay S232 to Bay S233	40 days	Wed 27/6/13	Mon 1/8/13
2073	11.1.88 Bay S234 to Bay S235	40 days	Wed 27/6/13	Mon 1/8/13
2074	11.1.89 Bay S236 to Bay S237	40 days	Wed 27/6/13	Mon 1/8/13
2075	11.1.90 Bay S238 to Bay S239	40 days	Wed 27/6/13	Mon 1/8/13
2076	11.1.91 Bay S240 to Bay S241	40 days	Wed 27/6/13	Mon 1/8/13
2077	11.1.92 Bay S242 to Bay S243	40 days	Wed 27/6/13	Mon 1/8/13
2078	11.1.93 Bay S244 to Bay S245	40 days	Wed 27/6/13	Mon 1/8/13
2079	11.1.94 Bay S246 to Bay S247	40 days	Wed 27/6/13	Mon 1/8/13
2080	11.1.95 Bay S248 to Bay S249	40 days	Wed 27/6/13	Mon 1/8/13
2081	11.1.96 Bay S250 to Bay S251	40 days	Wed 27/6/13	Mon 1/8/13
2082	11.1.97 Bay S252 to Bay S253	40 days	Wed 27/6/13	Mon 1/8/13
2083	11.1.98 Bay S254 to Bay S255	40 days	Wed 27/6/13	Mon 1/8/13
2084	11.1.99 Bay S256 to Bay S257	40 days	Wed 27/6/13	Mon 1/8/13
2085	11.1.100 Bay S258 to Bay S259	40 days	Wed 27/6/13	Mon 1/8/13
2086	11.1.101 Bay S260 to Bay S261	40 days	Wed 27/6/13	Mon 1/8/13
2087	11.1.102 Bay S262 to Bay S263	40 days	Wed 27/6/13	Mon 1/8/13
2088	11.1.103 Bay S264 to Bay S265	40 days	Wed 27/6/13	Mon 1/8/13
2089	11.1.104 Bay S266 to Bay S267	40 days	Wed 27/6/13	Mon 1/8/13
2090	11.1.105 Bay S268 to Bay S269	40 days	Wed 27/6/13	Mon 1/8/13
2091	11.1.106 Bay S270 to Bay S271	40 days	Wed 27/6/13	Mon 1/8/13
2092	11.1.107 Bay S272 to Bay S273	40 days	Wed 27/6/13	Mon 1/8/13
2093	11.1.108 Bay S274 to Bay S275	40 days	Wed 27/6/13	Mon 1/8/13
2094	11.1.109 Bay S276 to Bay S277	40 days	Wed 27/6/13	Mon 1/8/13
2095	11.1.110 Bay S278 to Bay S279	40 days	Wed 27/6/13	Mon 1/8/13
2096	11.1.111 Bay S280 to Bay S281	40 days	Wed 27/6/13	Mon 1/8/13
2097	11.1.112 Bay S282 to Bay S283	40 days	Wed 27/6/13	Mon 1/8/13
2098	11.1.113 Bay S284 to Bay S285	40 days	Wed 27/6/13	Mon 1/8/13
2099	11.1.114 Bay S286 to Bay S287	40 days	Wed 27/6/13	Mon 1/8/13
2100	11.1.115 Bay S288 to Bay S289	40 days	Wed 27/6/13	Mon 1/8/13
2101	11.1.116 Bay S290 to Bay S291	40 days	Wed 27/6/13	Mon 1/8/13
2102	11.1.117 Bay S292 to Bay S293	40 days	Wed 27/6/13	Mon 1/8/13
2103	11.1.118 Bay S294 to Bay S295	40 days	Wed 27/6/13	Mon 1/8/13
2104	11.1.119 Bay S296 to Bay S297	40 days	Wed 27/6/13	Mon 1/8/13
2105	11.1.120 Bay S298 to Bay S299	40 days	Wed 27/6/13	Mon 1/8/13
2106	11.1.121 Bay S300 to Bay S301	40 days	Wed 27/6/13	Mon 1/8/13
2107	11.1.122 Bay S302 to Bay S303	40 days	Wed 27/6/13	Mon 1/8/13
2108	11.1.123 Bay S304 to Bay S305	40 days	Wed 27/6/13	Mon 1/8/13
2109	11.1.124 Bay S306 to Bay S307	40 days	Wed 27/6/13	Mon 1/8/13
2110	11.1.125 Bay S308 to Bay S309	40 days	Wed 27/6/13	Mon 1/8/13
2111	11.1.126 Bay S310 to Bay S311	40 days	Wed 27/6/13	Mon 1/8/13
2112	11.1.127 Bay S312 to Bay S313	40 days	Wed 27/6/13	Mon 1/8/13
2113	11.1.128 Bay S314 to Bay S315	40 days	Wed 27/6/13	Mon 1/8/13
2114	11.1.129 Bay S316 to Bay S317	40 days	Wed 27/6/13	Mon 1/8/13
2115	11.1.130 Bay S318 to Bay S319	40 days	Wed 27/6/13	Mon 1/8/13
2116	11.1.131 Bay S320 to Bay S321	40 days	Wed 27/6/13	Mon 1/8/13
2117	11.1.132 Bay S322 to Bay S323	40 days	Wed 27/6/13	Mon 1/8/13
2118	11.1.133 Bay S324 to Bay S325	40 days	Wed 27/6/13	Mon 1/8/13
2119	11.1.134 Bay S326 to Bay S327	40 days	Wed 27/6/13	Mon 1/8/13
2120	11.1.135 Bay S328 to Bay S329	40 days	Wed 27/6/13	Mon 1/8/13
2121	11.1.136 Bay S330 to Bay S331	40 days	Wed 27/6/13	Mon 1/8/13
2122	11.1.137 Bay S332 to Bay S333	40 days	Wed 27/6/13	Mon 1/8/13
2123	11.1.138 Bay S334 to Bay S335	40 days	Wed 27/6/13	Mon 1/8/13
2124	11.1.139 Bay S336 to Bay S337	40 days	Wed 27/6/13	Mon 1/8/13
2125	11.1.140 Bay S338 to Bay S339	40 days	Wed 27/6/13	Mon 1/8/13
2126	11.1.141 Bay S340 to Bay S341	40 days	Wed 27/6/13	Mon 1/8/13
2127	11.1.142 Bay S342 to Bay S343	40 days	Wed 27/6/13	Mon 1/8/13
2128	11.1.143 Bay S344 to Bay S345	40 days	Wed 27/6/13	Mon 1/8/13
2129	11.1.144 Bay S346 to Bay S347	40 days	Wed 27/6/13	Mon 1/8/13
2130	11.1.145 Bay S348 to Bay S349	40 days		



ID	Task Name	Start	Finish	Duration	Task Type
1666	6.4.3 Blinding layer	Thu 28/2/18	Fri 1/3/18	2 days	Manual Task
1667	6.4.4 Base slab	Sat 2/3/18	Sat 2/3/18	19 days	Manual Task
1668	6.4.5 Wall stem	Mon 5/3/18	Mon 5/3/18	33 days	Manual Task
1669	7. Fill between Primary & Secondary Boundary Fence Foundation	Wed 24/4/18	Wed 24/4/18	227 days	Manual Task
1670	7.1 CH R 3+996 to CH R 4+070	Wed 24/4/18	Wed 24/4/18	12 days	Manual Task
1671	7.2 CH R 4+070 to CH R 4+142	Wed 24/4/18	Wed 24/4/18	12 days	Manual Task
1672	7.3 CH R 4+142 to CH R 4+217	Wed 24/4/18	Wed 24/4/18	11 days	Manual Task
1673	7.4 CH R 4+217 to CH R 4+275	Wed 24/4/18	Wed 24/4/18	12 days	Manual Task
1674	8. Lay cable ducting and ductwork for Security lighting	Wed 24/4/18	Wed 24/4/18	100 days	Manual Task
1675	8.1 CH R 3+996 to CH R 4+070	Wed 24/4/18	Wed 24/4/18	10 days	Manual Task
1676	8.2 CH R 4+070 to CH R 4+142	Wed 24/4/18	Wed 24/4/18	10 days	Manual Task
1677	8.3 CH R 4+142 to CH R 4+217	Wed 24/4/18	Wed 24/4/18	10 days	Manual Task
1678	8.4 CH R 4+217 to CH R 4+275	Wed 24/4/18	Wed 24/4/18	10 days	Manual Task
1679	9. Boundary Patrol Roadworks CH R 4+000 to 4+271	Mon 13/5/18	Mon 13/5/18	47 days	Manual Task
1680	9.1 Trim road formation	Mon 13/5/18	Mon 13/5/18	4 days	Manual Task
1681	9.2 Lay 225 road subbase	Tue 15/5/18	Tue 15/5/18	3 days	Manual Task
1682	9.3 Kerb bedding	Wed 22/5/18	Wed 22/5/18	6 days	Manual Task
1683	9.4 Roadkerb	Wed 29/5/18	Wed 29/5/18	5 days	Manual Task
1684	9.5 Fill verge with general fill	Thu 31/5/18	Thu 31/5/18	6 days	Manual Task
1685	9.6 Excavate bollard post footing	Fri 1/6/18	Fri 1/6/18	4 days	Manual Task
1686	9.7 Install and cast bollard post footing	Sat 2/6/18	Sat 2/6/18	5 days	Manual Task
1687	9.8 Excavate and cast bollard post	Mon 4/6/18	Mon 4/6/18	5 days	Manual Task
1688	9.9 Blk 75 bollard	Mon 4/6/18	Mon 4/6/18	5 days	Manual Task
1689	9.10 Bituminous road pavement	Wed 27/6/18	Wed 27/6/18	6 days	Manual Task
1690	10. Fill outside PBF & SBF foundation	Mon 13/7/18	Mon 13/7/18	44 days	Manual Task
1691	10.1 300U CH R 4+070 to CP23	Sat 8/7/18	Sat 8/7/18	266 days	Manual Task
1692	10.2 300U CH R 4+070 to SM20	Thu 2/4/18	Thu 2/4/18	40 days	Manual Task
1693	10.3 300U CH R 4+070 to CP24	Fri 4/4/18	Fri 4/4/18	21 days	Manual Task
1694	10.4 600U from CP24 TO CP25	Mon 7/4/18	Mon 7/4/18	8 days	Manual Task
1695	10.5 600U from CP25 TO SM21	Sat 8/3/18	Sat 8/3/18	8 days	Manual Task
1696	10.6 300SC from CP26 TO SM21	Mon 17/3/18	Mon 17/3/18	8 days	Manual Task
1697	10.7 300dia concrete pipe across BFR from CP27 to CP28	Mon 24/3/18	Mon 24/3/18	14 days	Manual Task
1698	10.8 300U from CH R 4+270 to CP27	Fri 13/6/18	Fri 13/6/18	48 days	Manual Task
1699	10.9 300U from CH R 4+270 to CP26	Sat 9/8/18	Sat 9/8/18	48 days	Manual Task
1700	11.0 450U from CH R 4+150 to SM21	Thu 3/7/18	Thu 3/7/18	48 days	Manual Task
1701	11.1 450U from CH R 4+150 to SM21	Mon 5/5/18	Mon 5/5/18	48 days	Manual Task
1702	11.2 450U from SM24 to SM23	Thu 31/7/18	Thu 31/7/18	24 days	Manual Task
1703	11.3 450SC from CH R 4+270 to SM25	Sat 24/5/18	Sat 24/5/18	64 days	Manual Task
1704	11.4 450U from CP27 to SM22	Thu 17/9/18	Thu 17/9/18	40 days	Manual Task
1705	11.5 450U from CP29 to SM22	Fri 14/11/18	Fri 14/11/18	48 days	Manual Task
1706	11.6 450U from CP30 to CP29	Thu 12/12/18	Thu 12/12/18	24 days	Manual Task
1707	11.7 300SC from CH R 4+270 to CP30	Thu 14/11/18	Thu 14/11/18	16 days	Manual Task
1708	11.8 300SC from CH R 4+270 to CP28	Thu 14/11/18	Thu 14/11/18	16 days	Manual Task
1709	11.9 300U from CH R 4+200 to CP28	Sat 15/11/18	Sat 15/11/18	58 days	Manual Task
1710	12. Erection Boundary Fence	Wed 15/5/18	Wed 15/5/18	30 days	Manual Task
1711	12.1 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1712	12.2 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1713	12.3 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1714	12.4 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1715	12.5 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1716	12.6 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1717	12.7 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1718	12.8 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1719	12.9 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1720	12.10 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1721	12.11 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1722	12.12 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1723	12.13 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1724	12.14 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1725	12.15 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1726	12.16 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1727	12.17 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1728	12.18 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1729	12.19 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1730	12.20 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1731	12.21 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1732	12.22 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1733	12.23 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1734	12.24 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1735	12.25 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1736	12.26 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1737	12.27 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1738	12.28 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1739	12.29 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1740	12.30 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1741	12.31 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1742	12.32 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1743	12.33 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1744	12.34 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1745	12.35 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1746	12.36 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1747	12.37 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1748	12.38 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1749	12.39 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1750	12.40 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1751	12.41 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1752	12.42 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1753	12.43 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1754	12.44 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1755	12.45 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1756	12.46 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1757	12.47 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1758	12.48 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1759	12.49 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1760	12.50 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1761	12.51 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1762	12.52 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1763	12.53 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1764	12.54 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1765	12.55 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1766	12.56 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1767	12.57 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1768	12.58 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1769	12.59 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1770	12.60 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1771	12.61 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1772	12.62 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1773	12.63 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1774	12.64 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1775	12.65 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1776	12.66 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1777	12.67 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1778	12.68 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1779	12.69 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1780	12.70 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1781	12.71 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1782	12.72 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1783	12.73 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1784	12.74 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1785	12.75 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1786	12.76 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1787	12.77 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1788	12.78 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1789	12.79 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1790	12.80 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1791	12.81 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1792	12.82 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1793	12.83 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1794	12.84 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1795	12.85 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1796	12.86 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1797	12.87 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1798	12.88 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1799	12.89 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1800	12.90 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1801	12.91 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1802	12.92 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1803	12.93 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1804	12.94 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1805	12.95 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1806	12.96 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1807	12.97 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1808	12.98 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1809	12.99 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1810	13.00 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1811	13.01 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1812	13.02 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1813	13.03 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1814	13.04 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1815	13.05 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1816	13.06 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
1817	13.07 Erect PBF post	Wed 15/5/18	Wed 15/5/18	6 days	Manual Task
18					

ANNEX E

MONTHLY SUMMARY WASTE FLOW TABLE

AND

**SUMMARY TABLE FOR WORK PROCESSES
OR ACTIVITIES REQUIRING TIMBER FOR TEMPORARY WORKS**

Summary Table for Work Processes or Activities Requiring Timber for Temporary Works

Contract No.: DC/2011/06

Contract Title: *Reprovisioning of Boundary Patrol Road and Associated Security Facilities between Ping Yuen River and Pak Fu Shan and Drainage Works in North District*

Report Period: May-13

Item No	Description of Works Process or Activity [see note (a) below]	Justifications for Using Timber in Temporary Construction Works	Est. Quantities of Timber Used (m ³)	Actual Quantities used (m ³)	Remarks
1	Transition formwork & falsework (Portion A,B,E)	Temporery formwork & falsework design	10	9	
2	Transition formwork & falsework (Portion A,B,C)	Temporery formwork & falsework design	25	18	
3	Transition formwork & falsework (Portion A,B,C,E)	Temporery formwork & falsework design	52	40	
4	Transition formwork & falsework (Portion A,B,C,E)	Temporery formwork & falsework design	77	72	
5	Transition formwork & falsework (Portion A,B,C,E)	Temporery formwork & falsework design	102	86	
6	Transition formwork & falsework (Portion A,B,C,E)	Temporery formwork & falsework design	115	103	
7	Transition formwork & falsework (Portion A,B,C,E)	Temporery formwork & falsework design	121	112	
8	Transition formwork & falsework (Portion A,B,C,E)	Temporery formwork & falsework design	145	139	

Notes

(a) The Contractor shall list out all the work items requiring timber for use in temporary construction works. Several minor work items may be grouped into one for ease of updating.

(b) The summary table shall be submitted to the Engineer's Representative monthly together with the Waste Flow Table for review and monitoring