ARUP

By post 12 December 2023 Level 5 Festival Walk 80 Tat Chee Avenue Kowloon Tong Kowloon Hong Kong

> t +852 2528 3031 f +852 2865 6493

> > arup.com

The EIA Ordinance Register Office, Environmental Protection Department, 27th floor, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong

Attn: Ms. Ada Fung

Our ref 273407/L047-EPD/FC/ht/jy

Dear Madam

### Contract No. SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk in Tai Po Submission of Final Audit Report

In accordance with Clause 2.6 of the Environmental Permit for Provision of Trunk Sewer to 3 Villages: Ta Tit Yan, Yuen Tun Ha and Lo Lau Uk in Tai Po (Register No. EP-556/2018), we are pleased to submit herewith two hard copies and one electronic copy of the Final Audit Report for your perusal.

Yours sincerely

ranki Chiu

Franki Chiu Independent Environmental Checker

e franki.chiu@arup.com

Encl.

cc DSD - Mr. YEUNG Fai Kiu

Drainage Services Department

**Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk in Tai Po** 

Final Audit Report

Version 2 | 12 Dec 2023

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 273407

Ove Arup & Partners Hong Kong Ltd Level 5 Festival Walk 80 Tat Chee Avenue Kowloon Tong Kowloon Hong Kong www.arup.com

## Contents

			Page
1	INTR	ODUCTION	1
	1.1	Background	1
	1.2	Scope of the Assignment	3
2	Const	ruction Activities	4
3	Status	s on Implementation of Environmental Mitigation	on Measures 4
4	Overv	view of Contractor Submission	8
5	Major	r Accomplishment	10
	5.1	Meetings	10
	5.2	Summary of Work Done	10
	5.3	IEC Site Audit	11
6	Concl	usion	11
App	endices		
Арр	endix A	Construction Programme	

- Appendix B Layout Plan
- Appendix C IEC Site Audit Checklists

# 1 INTRODUCTION

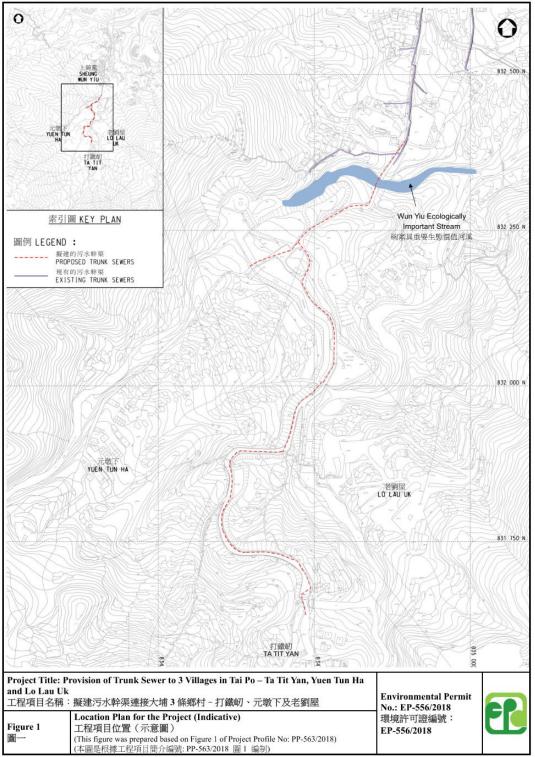
### 1.1 Background

Provision of Trunk Sewers (with diameter of around 250mm) to Ta Tit Yan, Yuen Tun Ha and Lo Lau Uk in Tai Po (the Project) is implemented so as to extend the existing gravity trunk sewer near San Uk along Wun Yiu Road for around one kilometres. Upon completion of the proposed works, a public sewer system will be ready for villagers' future connection to replace the private septic tank systems so as to collect and convey the wastewater generated in the villages to Tai Po Sewage Treatment Works for treatment and disposal.

The proposed works under the Project have been carried out under the Contract No. DC/2019/03 – Revitalisation Works of Jordan Valley Nullah and Minor Drainage and Sewerage Works in Urban Area and New Territories. The scope of the proposed works under the Project is as below.

- (a) construction of about 1 kilometre long gravity trunk sewers with diameter of 250 millimetres from San Uk Ka to Ta Tit Yan for provision of sewerage system to Ta Tit Yan, Yuen Tun Ha and Lo Lau Uk, including
  - (i) a section of about 60 metres (m) proposed sewer to be laid by trenchless method,
  - (ii) a section of about 350 m proposed sewer within the Tai Mo Shan Country Park,
  - (iii) a section of about 22m proposed sewer crossing the Wun Yiu Ecologically Important Stream (EIS) with pipe saddle supports at two sides of riverbank and one pre-cast or prefabricated pipe support at the middle of EIS; and
  - (iv) a section of about 50 m proposed sewer crossing three stream courses with pipe saddle supports at two sides of riverbank.
- (b) ancillary works; and
- (c) environmental mitigation measures.

Figure 1 shows the project location plan in the environmental permit EP556/2018.



### Figure 1 Project Location Plan

### **1.2** Scope of the Assignment

The scope of the Services comprises the IEC services for auditing the implementation of all mitigation measures recommended in the PP and the conditions of EP. The Service Provider shall discharge his duties in full compliance with the requirements of an IEC who shall confirm full compliance through an Audit Report deposited with the Director of Environmental Protection (DEP) within one month upon completion of the construction works of the Project. In undertaking the Services as described in this Technical Requirement, the Service Provider shall discharge, but without limitation to the following duties:

- (a) To submit to the DEP for approval, a proposal on the reporting mechanism covering the approaches for the IEC and the supporting team to report to the DEP;
- (b) To audit the implementation of all mitigation measures recommended in the PP and the conditions of EP;
- (c) To verify the environmental acceptability of permanent and temporary works, relevant plans and submissions required in the EP;
- (d) To notify the Director of EPD by fax or email, within 1 working day of receipt of notification from the ET leader, or identification by the IEC and his team, of each and every change of circumstances and emergency events.
- (e) To accompany the Director of EPD in carrying out site inspections and attending meetings when requested;
- (f) To offer objective and professional advice on environmental issues, when requested, and to respond to questions and enquires from the Director of EPD, with the support of relevant information, documents and records as appropriate;
- (g) To allocate adequate resources, including any necessary specialist support having regard to specialists in the ET, for discharging the duties required in the PP and the conditions of EP;
- (h) To report the findings of the site inspections and other environmental performance reviews to the Employer;
- (i) To advise on proactive actions;
- (j) To validate and confirm the accuracy of monitoring results, monitoring equipment, monitoring locations, monitoring procedures and locations of sensitive receivers;
- (k) To carry out random sample checks and audit the monitoring activities, monitoring data, results and sampling procedures, etc. (at least at monthly intervals);
- (l) To conduct random site inspections;
- (m)To audit the ET monitoring methodology;
- (n) To review and verify the monitoring reports submitted by the ET;

- (o) To review the effectiveness of environmental mitigation measures and project environmental performance;
- (p) To review the proposal on mitigation measures submitted by the Contractor.
- (q) To liaise with the ET on environmental considerations and advise the Employer for his action if the mitigation measures identified in the PP and the conditions of EP are not implemented in a timely manner;
- (r) To adhere to the agreed procedures where applicable those in this Contract for carrying out complaint investigations;
- (s) To feedback audit results to ET in writing;
- (t) To participate in Community Liaison Group(s); and
- (u) To verify the log-book for site activities.

## 2 Construction Activities

The construction programme and layout plan refer to Appendix A and Appendix B.

The construction works were started on 14 Feb 2022. All construction works including construction works within 20m from Wun Yiu EIS were completed on 15 July 2022.

# 3 Status on Implementation of Environmental Mitigation Measures

The potential environmental impacts and mitigation measures identified in the PP and the conditions of EP of the Project during construction stage are summarised in **Table 3.1** below.

**Table 3.1** Summary of potential environmental impacts and identified in the PP, the conditions of EP, Water Quality and Ecological Monitoring Plan and Waste Management Plan.

	Mitigation Measures	Implementation Status						
	Construction Stage							
Ai	r quality impact							
1.	Implement standard dust suppression measures as stipulated in APCO	Implemented						
No	bise impact							
1.	Erect temporary movable noise barrier	Not Implemented due to site constraint. <sup>[1]</sup>						
2.	Deploy quiet mechanical equipment	Implemented						
3.	Adopt good scheduling of works and site practices	Implemented						
4.	Comply with ProPECC PN 2/93 and NCO	Implemented						
Water quality impact								
1.	Adopt necessary silt removal facilities	Implemented						
2.	Construct temporary on-site drainage system	Implemented						

	Mitigation Measures	Implementation Status		
3.	Adopt good site practices	Implemented		
<i>4</i> .	Temporary on-site drainage and silt removal	Implemented		
т.	facilities comply with ProPECC PN 1/94,	Implemented		
	relevant technical circulars and guidelines	Implemented		
5.	Water quality monitoring of the Wun Yiu EIS			
	should be carried out before, during and after the			
	construction of the proposed pipe support and			
	any other construction works adjacent (within			
	20m) to the Wun Yiu EIS. An event and action	Implemented		
	plan should be provided for relevant parties to	L		
	take immediate action in case any deterioration			
	in water quality is observed in the monitoring			
	events.			
6.	Protection of natural watercourses will be in			
	compliance with Environment, Transport and			
	Works Bureau Technical Circular (Works)	Ture allowed and a l		
	(ETWB TC(W)) No. 5/2005 《 Protection of	Implemented		
	natural streams/rivers from adverse impacts			
	arising from construction works »			
7.	Adequate measures shall be taken to ensure that			
	no pollution or siltation occurs to the gathering	Implemented		
	grounds	_		
8.	Temporary drains with silt traps shall be			
	constructed at the boundary of the site prior to the	Implemented		
	commencement of any earthworks			
9.	Regular cleaning of the silt traps shall be carried			
	out to ensure that they function properly at all	Implemented		
	time.			
10.	All excavated or filled surfaces which have the			
	risk of erosion shall be protected from erosion at	Implemented		
11	all time.			
11.	Site formation plans shall be submitted to WSD for approval prior to commencement of work.	Implemented		
10		_		
12.	No structure or temporary works shall be erected in the catchwaters without prior approval of	Implemented		
	WSD	Implemented		
13	The Contractor shall be responsible for cleaning			
15.	frequently any waterworks roads and associated	Implemented		
	drainage works of mud and debris.	Implemented		
14.	The approval for using the access may be			
1.1	withdrawn on written notice to the Contractor by	Implemented		
	WSD at their absolute discretion.			
15.	The Contractor shall recover immediately his			
	vehicle which fell into the catchwater or stream			
	bed or pay to Government on demand the cost of	Implomented		
	recovery that may be necessary through the	Implemented		
	occurrence of any incident caused by the			
	Contractor			
16.	The Contractor shall carry out repair or			
	reinstatement works to the satisfaction of WSD	Implemented		
	or pay to Government on demand the cost of	Implemented		
	repair and reinstatement to any waterworks			

	Mitigation Measures	Implementation Status
	installations that shall or may be necessary at any	
	time as a result of damage caused by the	
	Contractor or others under his charge.	
17.	The Contractor shall enter and remain on and use	
	the access at his own risk and he shall indemnify	
	the Government of Hong Kong from all claims,	Implemented
	costs, damages and expense arising from the use	-
	of the access.	
18.	No excavation with depth more than 2m shall be	
	permitted within 120m from the centerline of	Implemented
	WSD water tunnels without the prior approval of	Implemented
	WSD.	
19.	All waterworks access roads must be maintained	Implemented
	unobstructed at all time.	Implemented
	aste impact	1
	Sort C&D materials on site	Implemented
	Reuse inert C&D materials for backfilling	Implemented
3.	Dispose non-inert C&D materials and general	
	refuse to PFRF and landfills through trip ticket	Implemented
	system	
4.	Comply with relevant technical circulars and	Implemented
	regulations	
	ological impact	1
l.	Confine works area to existing roads or on the	Implemented
	exposed dry rock surface in the Wun Yiu EIS	-
2.	Adopt good site practices	Implemented
3.	Implement practical dust, noise and site run-off control measures	Implemented
1.	Ecological monitoring of the Wun Yiu EIS	
	should be carried out before, during and after the	
	construction of the proposed pipe support and	
	any other construction works adjacent (within	
	20m) to the Wun Yiu EIS. The construction	Implemented <sup>[2]</sup>
	process should be supervised by qualified	Implemented
	ecologist all the time to ensure that no major	
	impact to the aquatic ecosystem. The details	
	should be agreed with AFCD and EPD before	
	construction.	
5.	To avoid or minimize impacts to the Wun Yiu	
	Ecologically Important Stream (WYEIS), the	
	following measures shall be implemented during	
	construction stage of the Project:	
	a. no construction activity within the water	
	body of WYEIS;	<b>T 1 1</b>
	b. no construction work shall be carried out	Implemented
	inside WYEIS in spring and wet seasons;	
	c. only hand-held tools may be used inside WYEIS; and	
	d. the natural bottom and water flow of	
	WYEIS shall be preserved and no access	
	track on riverbed shall be allowed.	
5.	No dredging, river training or river diversion	Implemented

	Mitigation Measures	Implementation Status
	shall be allowed in the Project.	
7.	The proposed pipe support in the Wun Yiu EIS	
1.	will be constructed on exposed dry rock surface	
	(instead of the riverbed) above the existing	
	stream course water body. All the construction	Implemented
	works involved will be above the water body.	
	Therefore, the water body will be totally	
	untouched during the construction stage.	
8.	Both the size of the proposed pipe support and	
	the scale of the construction works involved in	Implemented
	the Wun Yiu EIS will be rather small.	_
9.	In consideration of the available literature on	
	breeding season of freshwater fish in Hong	
	Kong, no construction works inside the extent of	Implemented
	the Wun Yiu EIS will be allowed in spring and	
	the wet season.	
10.	Ensure not disturbing the stream course water	Implemented
	body during the works will be imposed.	Implemented
11.	The proposed works site inside or in the	
	proximity of natural rivers and streams should be	
	temporarily isolated, such as placing of sandbags	Implemented
	or silt curtains with lead edge at bottom and	Impremented
	properly supported props, to prevent adverse	
10	impacts on the stream water qualities.	
12.	The natural bottom and existing flow in the river	
	should be preserved to avoid disturbance to the	Implemented
	river habitats. No access track on riverbed should be allowed.	<u> </u>
12	Stockpiling of construction materials including	
15.	cement, if necessary, should be properly covered	Implemented
	and protected with deployment of sandbags.	Implemented
14	Construction debris and spoil should be covered	
11.	up and/or properly disposed of as soon as	
	possible to avoid being washed into nearby	Implemented
	rivers/streams by rain.	
15.	Construction effluent including those from	
	cement grouting, site run-off and sewage should	
	be properly collected and/or treated. Wastewater	
	from a construction site should be managed with	
	the following approach in descending order: (1)	Implemented
	minimisation of wastewater generation; (2) reuse	Implemented
	and recycle; (3) treatment. Proper locations for	
	discharge outlets of wastewater treatment	
	facilities well away from the natural	
	streams/rivers should be identified.	
16.	Adequate lateral support may need to be erected	
	in order to prevent soil/mud from slipping into	Implemented
	the stream/river, but without unduly impeding	Implemented
1-	the flow during heavy rain.	
17.	Supervisory staff should be assigned to station on	Implemented
10	site to closely supervise and monitor the works.	-
18.	Removal of existing vegetation alongside the	Implemented

Mitigation Measures	Implementation Status
riverbanks should be avoided or minimised. When disturbance to vegetation is unavoidable, all disturbed areas should be hydroseeded or planted with suitable vegetation to blend in with the natural environment upon completion of works.	
19. Standard good site practice (e.g. hoarding of works areas, placement of equipment or stockpile at designated area, etc.) should be implemented in construction stage to minimize potential disturbance impact	Implemented
20. Practical dust and noise control measures (e.g. regular watering, use of quiet mechanical plant, temporary noise barrier, etc.) should be implemented during construction stage	Implemented
21. Effective site run-off control measures (e.g. provision of surface drainage system, use of sand/silt traps, etc.) should be provided during the construction stage to minimize impacts on adjacent water bodies	Implemented
Landscape and visual impact	
1. Carry out proper control over site cleanliness and stockpiling of materials	Implemented
Traffic impact	
1. Implement good practices on temporary traffic arrangement	Implemented
Operation Stage	
Water quality impact	
1. Install the sewer pipes spanning the individual watercourses inside a sleeve steel pipe for leaking prevention purpose.	Implemented
2. The design of temporary on-site drainage and silt removal facilities will comply with the guidelines stipulated in EPD's Practice Note for Professional Persons, Construction Site Drainage (ProPECC PN 1/94).	Implemented
3. All waterworks access roads must be maintained unobstructed at all time.	Implemented

Notes:

- [1] Adjustment of operation mode were made which Electric Hand-held Poker and Generator operated only when concrete lorry mixer left.
- [2] Post-Construction Ecological Survey have been conducted till end of July 2023, according to Water Quality and Ecological Monitoring Plan.

## 4 **Overview of Contractor Submission**

A concise list of contractor submission for the project is given in **Table 4.1** below:

**Table 4.1** List of contractor submission

Description	IEC verification /
Waste Management Plan prepared by DC/2019/03	Submission Record (Date)
Contractor for IEC comment	IEC comments returned on 16.4.2020
Water Quality and Ecological Monitoring Plan	
prepared by DC/2019/03 Contractor for IEC comment	IEC comment returned on 8.5.2020
Waste Management Plan prepared by DC/2019/03	2 <sup>nd</sup> IEC comments returned on
Contractor for IEC comment	20.5.2020
Water Quality and Ecological Monitoring Plan	20.3.2020
prepared by DC/2019/03 Contractor for IEC comment	IEC comment returned on 4.6.2020
Waste Management Plan prepared by DC/2019/03	1st IEC comments returned on
Contractor for IEC comment	10.7.2020
Waste Management Plan prepared by DC/2019/03	IEC verification letter submitted on
Contractor for IEC comment	24.7.2020
Layout plan of the Project under Condition 2.2 of EP-	
556/2018 prepared by DC/2019/03 Contractor for IEC	IEC comment sent on 29.7.2020
comment	
Layout plan of the Project under the Condition 2.2 of	27.4 2020
EP-556/2018 Contractor for IEC comment	27 Aug 2020
EPD provided comments on WQEMP of Location B4	10.5. 2020
– Wun Yiu Road	10 Sep 2020
Revised response to comment for WMP under EP	
condition 2.3	12 Oct 2020
Revised Layout Plan under EP condition 2.2	29 Oct 2020
Revised Edgout Fian under EF condition 2.2 Revised response to comment for WQEMP under EP	27 000 2020
condition 2.1	30 Oct 2020
Verification letter for the Waste Management Plan (Rev	
4) by ETL for IEC verification	5 Nov 2020
Verification letter for the WQEMP 2.1 by ETL for IEC	
verification	5 Nov 2020
Verification letter for the Layout Plan by ETL for IEC	
verification	5 Nov 2020
Resubmission of WQEMP and Layout Plans by ET	7 Jan 2021
Revised Layout Plan and WQEMP by ET	18 Feb 2021
Water Quality and Ecological Monitoring Report –	
Oct – Nov 2021	23 Aug 2022
Water Quality and Ecological Monitoring Report –	
Dec 2021	23 Aug 2022
Water Quality and Ecological Monitoring Report –	
	23 Aug 2022
Jan 2022	
Water Quality and Ecological Monitoring Report –	23 Aug 2022
Feb 2022	
Water Quality and Ecological Monitoring Report –	29 Aug 2022
Mar 2022	
Water Quality and Ecological Monitoring Report –	29 Aug 2022
Apr 2022	
Water Quality and Ecological Monitoring Report –	29 Aug 2022
May 2022	-
Ecology Monitoring Report for June 22 to July 22	28 Sep 2022
Water Quality and Ecological Monitoring Report –	12 Nov 2022
June 2022	
Water Quality and Ecological Monitoring Report –	12 Nov 2022
July 2022	12 1107 2022
Post-Construction Ecological Monitoring Report	15 Nov 2022
(August 2022)	
Post-Construction Ecological Monitoring Report	15 Nov 2022
(September 2022)	13 INUV 2022

Description	IEC verification / Submission Record (Date)
Post-Construction Ecological Monitoring Report (October 2022)	15 Nov 2022
Post-Construction Ecological Monitoring Report (November 2022)	21 Nov 2022
Post-Construction Ecological Monitoring Report Rev 1 (November 2022)	2 Dec 2022
Post-Construction Ecological Monitoring Report Rev 1 (December 2022)	6 Jan 2023
Post-Construction Ecological Monitoring Report Rev 1 (January 2023)	14 Feb 2023
Post-Construction Ecological Monitoring Report Rev 1 (March 2023)	24 Apr 2023
Post-Construction Ecological Monitoring Report Rev 1 (April 2023)	3 May 2023
Post-Construction Ecological Monitoring Report Rev 1 (May 2023)	19 Jun 2023
Post-Construction Ecological Monitoring Report Rev 1 (June 2023)	14 Jul 2023
Post-Construction Ecological Monitoring Report Rev 1 (July 2023)	9 Aug 2023

## 5 Major Accomplishment

### 5.1 Meetings

- Discussion between DSD, IEC, Best Build and ET on EPD's comments on the WQEMP submission was held on 18 Sep 2020.
- A site meeting was held on 10 Jan 2021 with the presence of DSD, ET, Best Build and IEC.

### 5.2 Summary of Work Done

Upon commencement of the Assignment, accumulated number of environmental submission verification and IEC monthly progress report are summarized in **Table 5.1**.

Work	Number
IEC Monthly Progress Report	38
Audit Report	1

## 5.3 IEC Site Audit

IEC site audits were conducted from Jan 2022 to May 2023 with the presence of Environmental Officer, Contractor and IEC. The IEC site audit checklists are given in Appendix C.

# 6 Conclusion

The potential environmental impacts and mitigation measures identified in the PP, the conditions of EP, Water Quality and Ecological Monitoring Plan and Waste Management Plan of the Project are implemented or compensate has been made and executed during construction stage

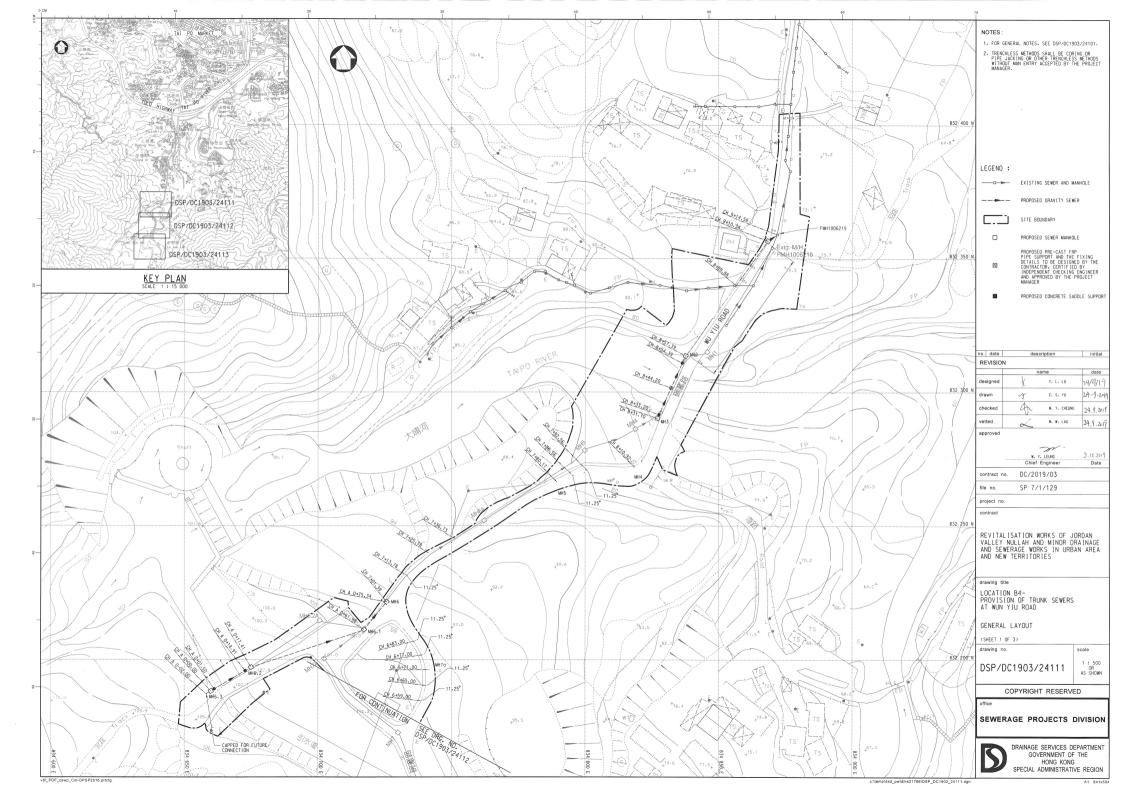
# Appendix A

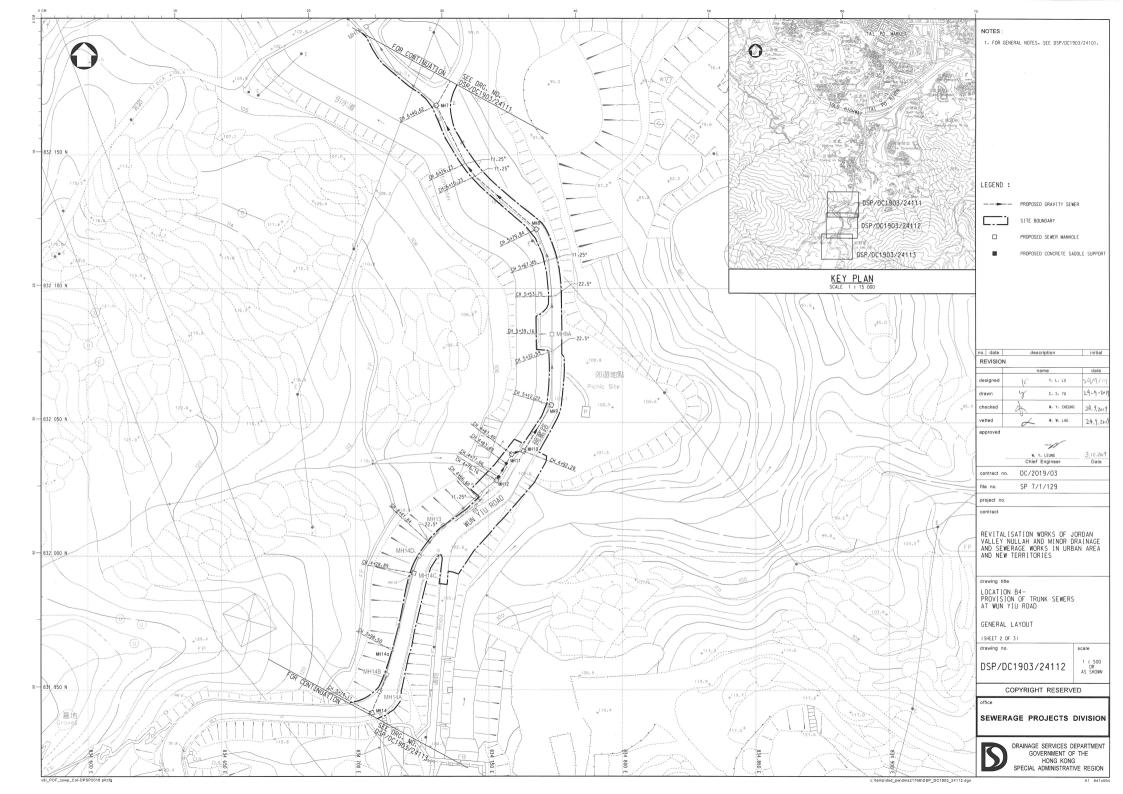
**Construction Programme** 

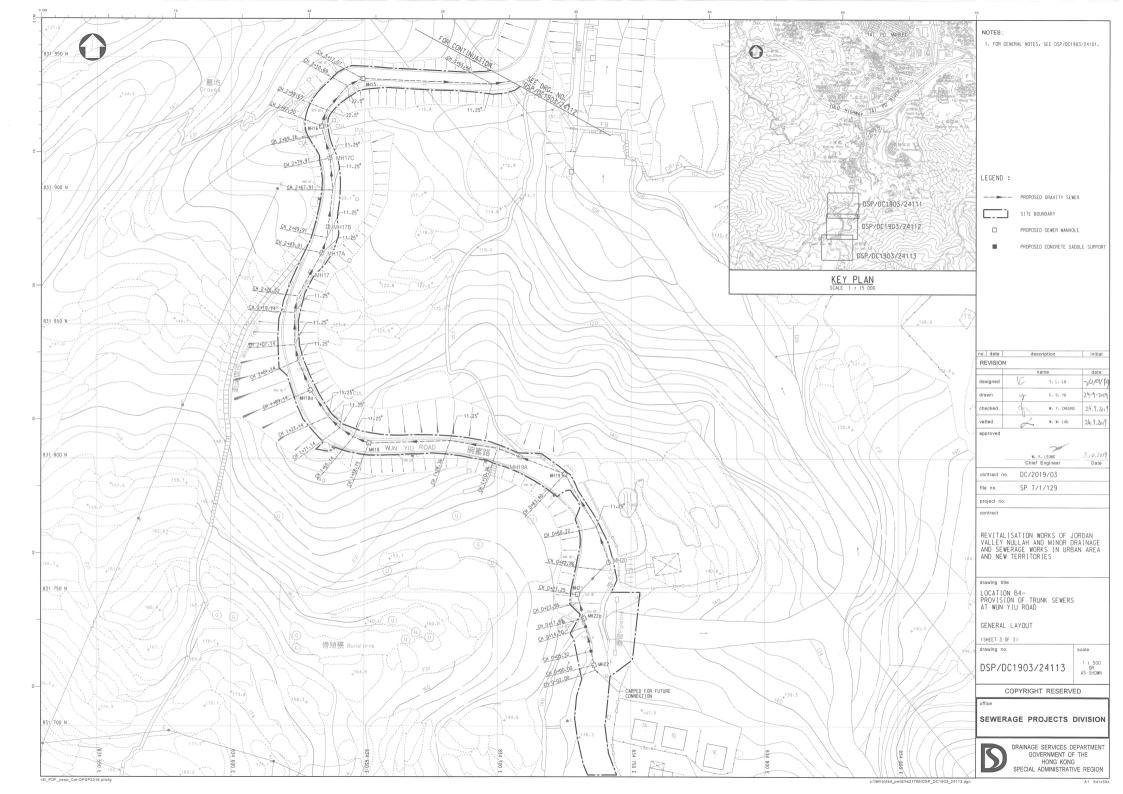
revitalis	isation Works of Jordan Valley Nullah and Minor Drainage and	l Sewera	ige Works in U	ban and New Teritories								Rev. 7 (14 Aug 2
ID 1		Duration	Start	Finish Predecessors	Successors Resource Names	r 1, 2020 Qtr 2, 2020 Qtr 3, 2020 Qtr 4, 2020 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan	Qtr 1, 2021         Qtr 2, 2021         Qtr 3, 2021           Feb         Mar         Apr         May         Jun         Jul         Aug         S	1 Qtr 4, 2021 Sep Oct Nov Dec J:	Qtr 1, 2022 Qtr 2, 2022 an Feb Mar Apr May Jun	Qtr 3, 2022         Qtr 4, 20           Jul         Aug         Sep         Oct         Nov	22 Qtr 1, 2023 Qtr 2, 2023 Dec Jan Feb Mar Apr May Jun	Qtr 3, 2023         Qtr 4, 2023         Qtr           Jul         Aug         Sep         Oct         Nov         Dec         Jan
2	Project Programme for DC/2019/03 Starting Date (Contract)	<b>1169 d</b> 0 d	Tue 25/2/20 Mon 2/3/20	Tue 23/1/24 Mon 2/3/20	+61 d,7FS+181 d,17,37,38	◆ 2/3						
3	Access date for S1 (within 60 days after the starting date)	0 d	Fri 1/5/20	Fri 1/5/20 2FS+61 d	0FS+911 d,1090FS+453 d	◆ 1/5						
4	Access date for portion 1 to 6, 8 to 10, 12, 13, 15 to 28 (starting date) Access date for portion 7 (within 60 days after starting date)	0 d 0 d	Mon 2/3/20 Fri 1/5/20	Mon 2/3/20 2 Fri 1/5/20 2FS+61 d		◆ 2/3 · · · · · · · · · · · · · · · · · · ·						
6	Access date for portion 11 (date of ordering commencement of the section	0 d	Mon 31/5/21	Mon 31/5/21			♦ 31/5			II II		
7 8	Access date for portion 14A and 14B (within 180 days after starting date) Commencement date of XPs/ STLA for Portion 1 to 6, 8 to 9, 12, 13 to		Sat 29/8/20 Wed 11/3/20	Sat 29/8/20 2FS+181 d Wed 31/8/22		◆ 29/8						
35	28									•		
35	Starting date of XPs/ STLA for portion 7 Starting date of XPs/ STLA for portion 11	21 d 0 d	Mon 9/11/20 Mon 4/7/22	Mon 30/11/20 Mon 4/7/22						▶ 4/7		
41	Starting date of XPs/ STLA for portion 14A & 14B (14 days after the starting date)	0 d	Mon 22/6/20	Mon 22/6/20		♦ 22/6						
43	Mobilization	30 d	Mon 2/3/20	Mon 6/4/20 2	6,271,246,253,183,162,9					1		
44	Submission and approval for the procurement and subletting procedures	7 d	Tue 25/2/20	Tue 3/3/20	,774,863,862,944,46,47,45					i i		
45	Subletting of Key Services (Such as Traffic Consultant, Survey Service, BIM Service and Subcontractor for PM's accommodation)	17 a	Wed 18/3/20	Tue 7/4/20 44	48,63							
48	Prepare and submit the 1st of TTM drawing for discussion with relevant p	5 d	Wed 8/4/20	Thu 16/4/20 46,45	49,156							
49	Submission of TTA schemes for discussion in TMLG meeting with all rel	580 d	Fri 29/5/20	Tue 10/5/22 48	1108,406SS					II II		
50 57	Submission of Testing and As-built BIM record	567 d	Wed 1/12/21	Thu 26/10/23								
57	General submission for health and safety requirements Draft Safety Plan	<b>55.5 d</b> 28 d	Mon 2/3/20 Mon 2/3/20	Tue 12/5/20 Thu 2/4/20 2	59							
59	Safety Plan (5th submission)	27 d	Fri 3/4/20	Mon 11/5/20 58	63					II		
60 61	Draft Environmental Management Plan Environmental Management Plan (3rd submission)	14 d 41 d	Mon 2/3/20 Wed 18/3/20	Tue 17/3/20 2 Tue 12/5/20 60	61							
62	S1 - Work Area 1	116 d	Sat 2/5/20	Wed 16/9/20						1		
66 180	Section 1 Section 2	495 d 814 d?	Tue 7/4/20 Tue 7/4/20									
317	Section 3	815 d?	Sun 22/3/20	Thu 15/12/22								
807 937	Section 4 Section 5	1035 d? 765 d	Tue 7/4/20 Tue 7/4/20							ii		
937	Section 5 Portion 3 - A3 - Canton Road (Team B3)	721 d	Tue 7/4/20 Sat 30/5/20									
964	Portion 4 - A4 - Waterloo Road (Xsun)	251 d	Tue 7/4/20	Sat 6/2/21								
996 1027	Portion 5 - A5 - Castle Peak Road (San Tin) (Team B3) Portion 14A and 14B - B4 Wun Yiu Road (Zap-in A)	749 d 685 d	Wed 29/4/20 Wed 29/4/20	Tue 1/11/22 Mon 15/8/22						Ţ		
1028	XP application with TTA submission and consultation with RMO/	74 d	Wed 29/4/20	Tue 28/7/20 43	1049					•		
1029 1030	Material Submission and approval (PE pipe outstanding) Order and delivery of PE pipe	50 d 55 d	Fri 29/5/20 Wed 29/7/20	Tue 28/7/20 43 Wed 30/9/20 1029	1036,1030 1049							
1031	Submission of method Statement	39 d	Sat 30/5/20		1049							
1032 1033	Submission of proposed pre-cast FRP pipe support including certifi Liaison with Others	60 d 14 d	Tue 7/7/20 Sat 11/7/20	Tue 15/9/20 1034 Mon 27/7/20 43	1053					II		
1034	Subletting - Subcontracting of the works (Draft subletting documer		Mon 18/5/20	Tue 7/7/20 44	1049					II II		
1035	TRA - Potential delay for retendering of the sub-contracts	0 d	Wed 8/7/20	Wed 8/7/20 1034	1049	◆ 8/7				i i		
1036 1037	Procurement for those are not including in subletting package (PE ] Tree survey	30 d 30 d	Wed 29/7/20 Mon 15/6/20	Tue 1/9/20 1029 Tue 21/7/20 43	1053					"		I I
1038	Utility survey	30 d	Mon 15/6/20	Tue 21/7/20 43	1049							
1039 1040	Submission and approval of temporary works design Submission of Water Quality and Ecological Monitoring Plan, Lay	30 d	Sat 20/6/20 Thu 2/7/20		1049					1		
1041	WQEMP (submitted to EPD and AFCD on 2/7/2020, consent fr		Thu 2/7/20	Sat 26/9/20 43	1046,1044		· · · · · · · · · · · · · · · · · · ·			i.		
1042 1043	WMP (draft resubmitted to DSD for Comment and submitted to Layout Plan (submitted on 27/7/2020 and consent by DSD on 2		Fri 31/7/20 Tue 1/9/20	Sat 24/10/20 43 Sat 3/10/20 43	1049,1044					"		I I
1043	Layout Plan (submitted on 21/1/2020 and consent by DSD on 2 Late consent of LP and WQEMP by EPD	28 d 240 d	Tue 1/9/20 Tue 27/10/20	Sat 3/10/20/43 Tue 17/8/21 1041,1042,1043	1049,1044		1 1			II II		
1045	Water Quality and Ecological Monitoring	214 d		Sat 7/5/22	1047,1053					1		
1046 1047	Baseline Duration Construction	28 d 158 d	Wed 18/8/21 Mon 20/9/21	Sat 18/9/21 1041,1044 Thu 31/3/22 1046,1071	1047,1053			i i		i i		
1048	Post Construction	28 d	Fri 1/4/22	Sat 7/5/22 1067,1047	1111			i i		"		I I
1049 1050	Starting date for the implementation of TTA General site clearance	1 d 1 d	Mon 7/12/20 Tue 8/12/20	Mon 7/12/20 1028,1035,1042,42,10 Tue 8/12/20 1049	4: 1050 Zap-in A 1051 Zap-in A	I Zap-in A I Zap-in A				II		
1051	Trial Pit and UU diversion	1 d	Wed 9/12/20	Wed 9/12/20 1050	1052 Zap-in A,Xsun	Zapin A				II II		
1052 1053	TRA - Potential delay for extended period for diversion of charted installation of one small pre-cast or prefabricated pipe support at th	2 d 27 d	Thu 10/12/20 Tue 1/3/22	Fri 11/12/20 1051 Thu 31/3/22 1032,1036,1046	Zap trenchless				Zap trenchless	i i		
1054	construction of the associated sewer manholes and pipe subjoint at the				Zap tieneniess							
1055	MH2 to MH3 (24m)	40 d	Mon 14/2/22	Thu 31/3/22	Xsun A				Xsun A	II		
1056 1057	MH6.3 to MH6.2 (16m) MH11-12 (10m)	40 d 40 d	Mon 14/2/22 Mon 14/2/22	Thu 31/3/22 Thu 31/3/22	Xsun A Xsun A				Xsun A Xsun A	1		
1058	MH22a-MH22 (16m)	40 d	Mon 14/2/22	Thu 31/3/22	Xsun A				Xsun A			
1059 1060	Construction of approximately 950m long 250mm diameter trunk Section 1 - MH3 to MH6 and MH6.2 to MH6 (178m)	473 d 241 d	Tue 12/1/21 Wed 6/10/21	Mon 15/8/22 Fri 29/7/22								
1061	Excavation	220 d	Wed 6/10/21	Tue 5/7/22	1062SS+14 d Xsun A					Xsun A		
1062 1063	Laying of pipe and construction of manhole Backfill and reinstatement	220 d 220 d	Sat 23/10/21 Mon 1/11/21	Thu 21/7/22 1061SS+14 d Fri 29/7/22 1062SS+7 d	1063SS+7 d Xsun A 1085 Xsun A					Xsun A Xsun A		
1064	Section 2 - MH7 to MH12 (203m)	221 d	Tue 16/11/21	Mon 15/8/22								
1065 1066	Excavation Laying of pipe and construction of manhole	200 d 200 d	Tue 16/11/21 Thu 2/12/21	Thu 21/7/22 Sat 6/8/22 1065SS+14 d	1066SS+14 d Xsun A 1067SS+7 d Xsun A					Xsun A		
1067	Backfill and reinstatement	200 d	Fri 10/12/21	Mon 15/8/22 1066SS+7 d	10073347 u Asun A					Xsun A		
1068 1069	Section 3 - MH17 to MH12 (241m) (Not located upstream of I Excavation	<b>135 d</b> 52 d	Sat 30/1/21 Sat 30/1/21	Sat 17/7/21 Wed 7/4/21	1070 Xsun A		Xsun A			II II		
1070	Laying of pipe and construction of manhole	47 d	Thu 8/4/21	Thu 3/6/21 1069	1071 Xsun A		Asun A Xsun A			1		
1071	Backfill and reinstatement	36 d	Fri 4/6/21	Sat 17/7/21 1070	1047,1073 Xsun A		Xsun A					
1072 1073	Section 4a - MH18 to 22A (130m) Excavation	<b>75 d</b> 25 d	Mon 19/7/21 Mon 19/7/21	Fri 15/10/21 Mon 16/8/21 1071	1074 Zap-in A			p-in A		II II		
1074	Laying of pipe and construction of manhole	31 d	Tue 17/8/21	Tue 21/9/21 1073	1075 Zap-in A			Zap-in A		1		
1075 1076	Backfill and reinstatement Section 4b - MH17 to 18 (67m) (Not located upstream of EIS)	19 d <b>64 d</b>	Wed 22/9/21 Tue 12/1/21	Fri 15/10/21 1074 Tue 30/3/21	1085 Zap-in A			Zap-in A		1		
1077	Excavation	17 d	Tue 12/1/21	Sat 30/1/21	1078SS+30 d Xsun A		Xsun A					
1078 1079	Laying of pipe and construction of manhole Backfill and reinstatement	23 d 20 d	Fri 19/2/21 Mon 8/3/21	Wed 17/3/21 1077SS+30 d Tue 30/3/21 1078SS+14 d	1079SS+14 d Xsun A 1085 Xsun A		Xsun A			II II		
1079	Construction of drainage pipe the associated manhole between	20 d 74 d			1065 ASUN A		Asull A		<b> </b>			
	MH1 and MH2 by trenchless method									1		
1081	Trialpit Excavation and coordination for UU diversion	5 d		Thu 21/4/22	1082 Xsun A				📕 Xsun A	l.		
1082 1083	Launching and receiving pit	9 d	Mon 23/5/22	Wed 1/6/22 1081	1083 Xsun A				💻 Xsun /			
1083	Pipe installation by trenchless method and MH1 (approx. 10m) Construction of MH1 and backfilling	24 d 2 d	Thu 2/6/22 Thu 14/7/22	Thu 30/6/22 1082 Fri 15/7/22 1083	1084 Xsun A 1085 Xsun A					Xsun A Xsun A		
1085	Planned Completion for Section 5	0 d	Tue 1/11/22	Tue 1/11/22 1026,995,963,1075,10	8· 1108,55SS-1 d,1086					♦ 1/11		
1086 1087	Terminal float for Section 5 End of Section 5 (911 day after the starting date i.e. 30/8/2022) Extend	0 d 0 d	Tue 1/11/22 Tue 1/11/22	Tue 1/11/22 1085 Tue 1/11/22 1086	1087					◆ 1/11 ◆ 1/11		
1088	Section 6 (Subject to excision)	388 d	Tue 2/11/21	Tue 21/2/23				<b> </b>		<b>↓</b> 1/11		
1108 1109	Planned completion (Completion of all sections ) Terminal float for all Sections	0 d 0 d	Tue 26/9/23 Tue 26/9/23	Tue 26/9/23 65,64,49,51,177,314, Tue 26/9/23 1108	0 1109					1		<ul> <li>♦ 26/9</li> <li>♦ 260</li> </ul>
1109	End of all Sections	0 d 0 d		Tue 26/9/23 3FS+911 d,1107,108								<ul><li>◆ 26/9</li><li>◆ 26/9</li></ul>
1111	Establishment Works	311 d		Thu 26/9/24 1110,1048			1	1	1 1		I I I	I

# Appendix B

Layout Plan







# Appendix C

IEC Site Audit Checklists

### ARUP

# Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

	Ref. No. Project	Provision of Trunk Sewers to 3 villages: Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk in Tai Po	IEC Contractor	Ove Arup & Partners Hong Kong Ltd.				
	Contract No. Inspected By	IEC's Rep. : Contractor's Rep. : Project Manager / Supervisor:	Engineer Inspection Date Time Period	$\frac{10 - 01 - 2022}{10:30} \sim 11:80$				
	Part I	Weather						
	Humidity	] Sunny ☐ Fine [Sovercast ] Storm ] High [Sovercast ] Low ] Calm [V] Light ] Breeze ] Strong		Drizzle 🗌 Hazy Temperature	<u>19</u> °C			
No. 1		Water Quality and Ecological Monitoring Plan (W t removal facilities	QEMP)	N/A N/O Yes Rdr Obs N/C	Photos / Remarks			
2		siltation occurs to the gathering ground			Obs TV			
3		t traps at drainage						
4		xcavated or filled surfaces for erosion control						
5	Regular clean	ng of waterwork roads and associated drainage	works					
6	-	waterworks installations						
7		with depth >2m within 120 m from the centreline	e of					
8		nnels except with WSD prior approval of waterworks access roads						
No.	Part II	Waste Management Plan (WMP)		N/A N/O Yes Rdr Obs N/C	Photos / Remarks			
1	Proper segreg	ation of different wastes and reusable/recyclable	e materials					
2	Good mainten	ance of waste storage areas						
3		on of inert C&D waste on site						
4		vered in enclosed containers						
5	through trip tic	e haulers to collect and transport wastes to licer	ised disposal site					
6	• .	f inert C&D waste as backfill materials on site						
No.	Part III	Nun Yiu Ecologically Important Stream (WYEIS)		N/A N/O Yes Rdr Obs N/C	Photos / Remarks			
1		area to existing roads or on the exposed dry roo	ck surface					
2		blogical and water quality in the Wun Yiu EIS						
3	No construction	activity within the water body of WYEIS						
4		work shall be carried out inside WYEIS in spring and	l wet seasons					
5	•	ools may be used inside WYEIS						
6		om and water flow of WYEIS shall be preserved and						
7		k on riverbed shall be allowed ver training or river diversion works were obsen	(ed	/				
-								
No.		Vater Quality and Drainage		N/A N/O Yes Rdr Obs N/C	Photos / Remarks			
1 2		tem adequate? tem well maintained?						
3		tem adequately designed for storm flow?						
4		s to surround areas of earthworks for flood prote	ection?					
5	Are there perin	neter channels at site boundaries to intercept sto	orm		<u></u>			
		side the site so that it will not wash across the s			. 1			
6 7	Are there temp	ontrol measures inspected & maintained after ra orary ditches for runoff discharge into appropria	•		Obs IV			
8	watercourse? Are these temr	orary ditches with silt retention and removal fac	ilities?					
9a		drainage channels have: sedimentation bas						
9b		traps and baffles?						
10		ohitated from entering the river channel?			O.bs TV			
11	via sedimentat	from tunnels or surface runoff collected and dis on traps/tanks?	-		Obs IV			
12		nentation tanks for settling runoff prior to dispos			Obs IV			
13a	Are the sedime	•	al cells?		Ob TV			
13b 13c		with adequate capacity?			Obs TV			
130	Are there neutr	free from silt and sediment? alisation tanks for concrete batching/mixing disc	harge?		Obs_ II			
15		e diverted to and treated in neutralisation tanks?			Ob TV			
16	-	e from neutralisation tanks routed to silt trap or s			065 7			
	tanks before di	sposal?						
17	Are there oil int	erceptors in drainage system?						

### Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

18 19	Are oil and grease removed regularly (at least weekly)? Is there any bypass for oil to prevent flushing during periods of heavy rain?	
20	Are vehicles and plant cleaned of earth, mud and debris before	
21	leaving the site? Is a wheel washing bay provided at every site exit?	
21 22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward wheel wash bay?	
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29 30	Are debris and rubbish on site collected and disposed of properly? Is wastewater discharge licence available for inspection?	
30	is wastewater uischarge incertee available for inspection:	
No.	Part IV-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2	Are site vehicle movement confined to designated haul roads?	
3	Is the public road around the site entrance kept clean and free from dust? Are areas of site with regular traffic movement having hard surface?	
4 5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with	
	water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation? Do the site vehicles use the wheel wash at the site exits?	
10 11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
	public access?	· · · · · · · · · · · · · · · · · · ·
13	Are incombustible screens not less than 1.8m tall provided in the public area	
	affected by exhaust fumes or smoke emission?	
14	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided?	
14 15	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered?	
14	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely?	
14 15 16	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered?	
14 15 16 17 18	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?	
14 15 16 17	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level	
14 15 16 17 18	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?	
14 15 16 17 18 19	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	
14 15 16 17 18 19 20 21 22	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities?	
14 15 16 17 18 19 20 21	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon	
14 15 16 17 18 19 20 21 22 23	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable?	
14 15 16 17 18 20 21 22 23 23	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon	
14 15 16 17 18 19 20 21 22 23	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are weighing hoppers vented to suitable filters? Are weighing hoppers vented to suitable filters? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided?	
14 15 16 17 18 19 20 21 22 23 24 25	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are weighing hoppers vented to suitable filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover?	
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are weighing hoppers vented to suitable filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively?	
14 15 16 17 18 20 21 22 23 24 25 26 27 28 29	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are weighing hoppers vented to suitable filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively? Is ULSD used in the construction activities?	
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are weighing hoppers vented to suitable filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively? Is ULSD used in the construction activities? Observable dust sources	
14 15 16 17 18 20 21 22 23 24 25 26 27 28 29	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively? Is ULSD used in the construction activities? Observable dust sources inde resion indexiding of materials	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively? Is ULSD used in the construction activities? Observable dust sourceswind erosion Loading/unloading of materials	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a	affected by exhaust fumes or smoke emission?         Is dark smoke emission avoided?         Are dusty materials properly covered?         Are the bags of cement (more than 20) covered entirely?         Are the excavated materials dropped at minimum practical height?         Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?         Are weighing hoppers vented to suitable filters?         Are there enclosures around the main dust-generating activities?         Are completed earthworks sealed and hydroseeded and planted as soon as practicable?         Is open burning avoided?         Are vehicles and equipment switched off while not in use?         Are materials transported by dump trucks with mechanical cover?         Do the truck covers work effectively?         Is ULSD used in the construction activities?         Observable dust sources       \u20ed materials         Part IV-III       Construction Noise Impact         Are the construction works scheduled to minimize airborne noise nuisance?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b	affected by exhaust fumes or smoke emission?         Is dark smoke emission avoided?         Are dusty materials properly covered?         Are the bags of cement (more than 20) covered entirely?         Are the excavated materials dropped at minimum practical height?         Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?         Are air vents on cements silos fitted with fabric filters?         Are weighing hoppers vented to suitable filters?         Are completed earthworks sealed and hydroseeded and planted as soon as practicable?         Is open burning avoided?         Are weiches and equipment switched off while not in use?         Are materials transported by dump trucks with mechanical cover?         Do the truck covers work effectively?         Is ULSD used in the construction activities?         Observable dust sources       Wind erosion         Closeing/untoading of materials         Part IV-III       Construction Noise Impact         Are the construction works scheduled to minimize airborne noise nuisance?         groundborne noise nuisance?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a	affected by exhaust fumes or smoke emission?         Is dark smoke emission avoided?         Are dusty materials properly covered?         Are the bags of cement (more than 20) covered entirely?         Are the excavated materials dropped at minimum practical height?         Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?         Are weighing hoppers vented to suitable filters?         Are there enclosures around the main dust-generating activities?         Are completed earthworks sealed and hydroseeded and planted as soon as practicable?         Is open burning avoided?         Are vehicles and equipment switched off while not in use?         Are materials transported by dump trucks with mechanical cover?         Do the truck covers work effectively?         Is ULSD used in the construction activities?         Observable dust sources       \u20ed materials         Part IV-III       Construction Noise Impact         Are the construction works scheduled to minimize airborne noise nuisance?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a	affected by exhaust fumes or smoke emission?         Is dark smoke emission avoided?         Are dusty materials properly covered?         Are the bags of cement (more than 20) covered entirely?         Are the excavated materials dropped at minimum practical height?         Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?         Are air vents on cements silos fitted with fabric filters?         Are weighing hoppers vented to suitable filters?         Are completed earthworks sealed and hydroseeded and planted as soon as practicable?         Is open burning avoided?         Are weiches and equipment switched off while not in use?         Are all trucks loaded to a level within the side and tail boards?         Are materials transported by dump trucks with mechanical cover?         Do the truck covers work effectively?         Is ULSD used in the construction activities?         Observable dust sources       Wind erosion         Cloading/unloading of materials         Part IV-III       Construction Noise Impact         Are the works or equipment sited to minimize airborne noise nuisance?         Are the works or equipment sited to minimize airborne noise nuisance?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively? Is ULSD used in the construction activities? Observable dust sources Part IV-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3	affected by exhaust fumes or smoke emission?         Is dark smoke emission avoided?         Are dusty materials properly covered?         Are the bags of cement (more than 20) covered entirely?         Are the excavated materials dropped at minimum practical height?         Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?         Are air vents on cements silos fitted with fabric filters?         Are weighing hoppers vented to suitable filters?         Are completed earthworks sealed and hydroseeded and planted as soon as practicable?         Is open burning avoided?         Are vehicles and equipment switched off while not in use?         Are all trucks loaded to a level within the side and tail boards?         Are materials transported by dump trucks with mechanical cover?         Do the truck covers work effectively?         Is ULSD used in the construction activities?         Observable dust sources	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively? Is ULSD used in the construction activities? Observable dust sources Undergunloading of materials <b>Part IV-III</b> Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? Groundborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6	affected by exhaust fumes or smoke emission?         Is dark smoke emission avoided?         Are dusty materials properly covered?         Are the bags of cement (more than 20) covered entirely?         Are the excavated materials dropped at minimum practical height?         Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?         Are use on cements silos fitted with fabric filters?         Are weighing hoppers vented to suitable filters?         Are completed earthworks sealed and hydroseeded and planted as soon as practicable?         Is open burning avoided?         Are valices and equipment switched off while not in use?         Are materials transported by dump trucks with mechanical cover?         Do the truck covers work effectively?         Is ULSD used in the construction activities?         Observable dust sources       Wind erosion         Loading/unloading of materials         Part IV-III       Construction Noise Impact         Are the works or equipment sited to minimize airborne noise nuisance?         Groundborne noise nuisance?         Are the works or equipment well maintained and in good operating condition?         Are the works or equipment well maintained and in good operating condition?         Are all plant and equipment well maintained and in goo	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided? Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely? Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height? Are conveyor belts fitted with windboards, transfer points and hoppers enclosed? Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator? Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters? Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities? Are completed earthworks sealed and hydroseeded and planted as soon as practicable? Is open burning avoided? Are vehicles and equipment switched off while not in use? Are all trucks loaded to a level within the side and tail boards? Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively? Is ULSD used in the construction activities? Observable dust sources Undergunloading of materials <b>Part IV-III</b> Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? Groundborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

9	Do Quality Powered Mech	anical Equipments (QPME) have valid noise labels?		
10	Do air compressors have	valid noise labels?		
11	Do compressors operate v	vith doors closed?		
12	Are Construction Noise Pe	rmits available for inspection?		
13	Major noise source(s)	Traffic	Construction activities inside of site	
		Construction activities outside of site	Others	

Part VIII Follow-up for the Pervious Site Audit

Part X Signatures	
IEC's Representative	Engineer's Representative
Hu	chan
(Name: 4776-11 TAM) (Date: 16 Jan 2022)	(Name: Felix CHAN ) (Date: 10 Jan 2022 )
	Contractor's Representative
	(Name: Charles V)
	(Date: 10/1/2022
Part IX Remarks	
or impermeable sheet	-
Obs I: Drip tray shall be up	ed under the chemicals, generic
i j n i - prac	the Chemicals, generic
und while replacing hyd	Wallic Gowapping Components
Obs II ! Ducty materials shall	be covered impermable shoe
share	me covered impermable she
or sprayed with wat	ar.
	appropriate
Obs TIL: NR 19M& labels sha Mashirany	ill be displayed on the Mob
Machineny.	the displayed on the Mobi
J	
obs IV : Sedimentary tanks s	shall be deployed of
	shall be deployed to collect :
run out.	

#### Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

	Ref. No. Project Provision of Trunk Sewers to 3 villages: IEC Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk Contractor in Tai Po	Ove Arup & Partners Hong Kong	Ltd.
	Contract No. Inspected By IEC's Rep. : total Contractor's Rep. : Inspection D Project Manager / Supervisor: Time Period		
	Part I     Weather       Condition	Drizzle Hazy Temperature	<u>4</u> .℃
No.	Part II Water Quality and Ecological Monitoring Plan (WQEMP)	N/A N/O Yeş/ Rdr Obs N/C	Photos / Remarks
1	Provision of silt removal facilities		
2	No pollution or siltation occurs to the gathering ground		
3 4	Provision of silt traps at drainage Protection of excavated or filled surfaces for erosion control		
5	Regular cleaning of waterwork roads and associated drainage works		
6	Damage of the waterworks installations		
7	No excavation with depth >2m within 120 m from the centreline of		
	WSD water tunnels except with WSD prior approval		
8	No obstruction of waterworks access roads		
No.	Part III Waste Management Plan (WMP) Proper segregation of different wastes and reusable/recyclable materials		Photos / Remarks
1 2	Good maintenance of waste storage areas		
3	No accumulation of inert C&D waste on site		1
4	Wastes are covered in enclosed containers		
5	Licensed waste haulers to collect and transport wastes to licensed disposal sil		
	through trip ticket system		
6	Proper reuse of inert C&D waste as backfill materials on site		
No	Part IV Wun Yiu Ecologically Important Stream (WYEIS)	N/A N/O Yes, Rdr Obs N/C	Photos / Remarks
No. 1	Part IV Wun Yiu Ecologically Important Stream (WYEIS) Confine works area to existing roads or on the exposed dry rock surface		-notos / Remaiks
	in the Wun Yiu EIS		
2	Monitor the ecological and water quality in the Wun Yiu EIS		
3	No construction activity within the water body of WYEIS		
4	No construction work shall be carried out inside WYEIS in spring and wet seasons		
5	Only hand-held tools may be used inside WYEIS		
6	The natural bottom and water flow of WYEIS shall be preserved and no access track on riverbed shall be allowed		
7	No dredging, river training or river diversion works were observed		
No.	Part V-I Water Quality and Drainage	N/A N/O Yes Rdr Obs N/C	Photos / Remarks
1	Is drainage system adequate?		
2	Is drainage system well maintained?		
3	Is drainage system adequately designed for storm flow?		
4 5	Are there dykes to surround areas of earthworks for flood protection? Are there perimeter channels at site boundaries to intercept storm		
0	runoff from outside the site so that it will not wash across the site?		
6	Are sediment control measures inspected & maintained after rainy storms?		OBSI
7	Are there temporary ditches for runoff discharge into appropriate		
	watercourse?	1	
8	Are these temporary ditches with silt retention and removal facilities?		
9a	Do permanent drainage channels have: sedimentation basin?		ODSI
9b 10	traps and baffles? Is site runoff prohitated from entering the river channel?		OBSI
11	Is groundwater from tunnels or surface runoff collected and discharged		OLST
	via sedimentation traps/tanks?		
12	Are there sedimentation tanks for settling runoff prior to disposal?		
13a	Are the sedimentation tanks: constructed of pre-formed individual cells?		
13b	with adequate capacity?		
13c	free from silt and sediment?		
14	Are there neutralisation tanks for concrete batching/mixing discharge?		
15 16	Is the discharge diverted to and treated in neutralisation tanks? Is the discharge from neutralisation tanks routed to silt trap or sedimentation		
10	tanks before disposal?		
17	Are there oil interceptors in drainage system?		
18	Are oil and grease removed regularly (at least weekly)?		e 1
19	Is there any bypass for oil to prevent flushing during periods of heavy rain?		ODST
20	Are vehicles and plant cleaned of earth, mud and debris before		

## ARUP

# Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

	leaving the site?	
21	Is a wheel washing bay provided at every site exit?	
22a 22b	Is the wheel washing bay with: adequate design? adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
23	wheel wash bay? Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	$\frac{1}{2} \frac{1}{2} \frac{1}$
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27 28	Are accessed roads protected by crushed stones or gravels? Are toilets connected to foul sewer or chemical toilets provided?	
29	Are debris and rubbish on site collected and disposed of properly?	
30	Is wastewater discharge licence available for inspection?	
No.	Part V-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1 2	Are vehicles in the site travelling within speed limit of 10 km/h?	
2	Are site vehicle movement confined to designated haul roads? Is the public road around the site entrance kept clean and free from dust?	
4	Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7 8	Does the water spraying truck work effectively? Is working area of excavation or earth moving operation sprayed with	
U	water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11 12	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with public access?	
13	Are incombustible screens not less than 1.8m tall provided in the public area	
14	affected by exhaust fumes or smoke emission?	
14 15	Is dark smoke emission avoided? Are dusty materials properly covered?	DOD ROD COST Rill T
16	Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?	
19	Are bulk fine grained materials stored in closed silos fitted with high level	
	alarm indicator?	
20 21	Are air vents on cements silos fitted with fabric filters? Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	
24	as practicable? Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28	Do the truck covers work effectively?	
29 30	Is ULSD used in the construction activities? Observable dust sources Undersion	
	Loading/unbading of materials	verilde/equipment movements votres
No.	Part V-III Construction Noise Impact	
1a	Are the construction works scheduled to minimize airborne noise nuisance?	N/A N/O Yes, Rdr Obs N/C Photos / Remarks
1b	groundborne noise nuisance?	
2a	Are the works or equipment sited to minimize airbrone noise nuisance?	
2b 3	groundborne noise nuisance? Are all plant and equipment well maintained and in good operating condition?	
4	Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate	
0	acoustic materials?	/
6 7	Are silenced equipment used where practicable? Are noise enclosure, noise barrier, or portable noise barrier used	
2	where necessary?	
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9 10	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10	Do air compressors have valid noise labels? Do compressors operate with doors closed?	
12	Are Construction Noise Permits available for inspection?	
13	Major noise source(s)	Construction activities inside of site
	Construction activities outside of site	Others

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

	Par	t VII	Remarks
ob	S	I	= Sedimentary tanks shall be deployed to collect site runout or wastewater generated from site.
ob	S	TL	= Drip tray or impermeable sheet shall be placed under the chemicals, generators and while replacing hydraulic components.
Rdr	C	I	= Dusty Materials / open stackpiles / exposed slope surface shall be covered by impermeable sheet.

Part VIII	Signatures	
	IEC's Representative	
	1.h	
	(Name: 1-1-17	7

#### Engineer's Representative

Contractor's Representative

(Name: (Date: )) 02 2022

#### Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tal Po Environmental Site Inspection Checklist

	Ref. No. Project			vers to 3 villag Ha & Lo Lau U		IEC Contractor	<u>Ove</u>	e Aru	p & P	artnei	rs Ho	ong Ko	ng Ltd.				
	Contract No. Inspected By	IEC's Rep	- and the second s	on Tam		Engineer	( <del>***</del> ***				-						
		Contractor Project Ma	r's Rep. : anager / Supe	ervisor:		Inspection Date Time Period	°	3-03-2022 9-30 - 12:00									
*****		Weather															
	Humidity [	Sunny High Catm	Fine Moderate	Overcast  Cow Breeze	Storm	🗌 Rah	Drizzle	ipera	ture .	łazy			26 °c				
No.	Part II V	Nater Quality	and Ecologi	ical Monitoring		MDI	N/A	N/O	Yes	Rdr	Obe		Photos / Re	amarke			
1	Provision of sil	t removal fa	cilities						d/					omarka			
2 3	No pollution or Provision of sil			thering groun	d					12022							
4	Protection of ex			s for erosion	control				R.				1				
5	Regular cleanin	17.2			drainage w	orks			. 🖬								
6 7	Damage of the No excavation				centreline o	f			$\mathbb{P}$								
2	WSD water tur	nels except	with WSD p	rior approval			L.		~/								
8	No obstruction	of waterwor	ks access ro	ads					D⁄								
No.			gement Plan (				N/A	N/O	Yes,	Rdr	Obs	N/C	Photos / Re	emarks			
1 2	Proper segrega Good maintena				recyclable m	naterials											
3	No accumulation		•						H								
4 5	Wastes are con							10	Ø				2				
5	Licensed waste through trip tick		collect and tr	ansport waste	es to license	d disposal site	1	9									
6	Proper reuse o	5	waste as bac	ckfill materials	on site		$\nabla$										
No.				ortant Stream			N/A	N/O	Yes	Rdr	Obs	N/C	Photos / Re	emarks			
1	Confine works in the Wun Yiu		ting roads or	on the exposi	ed dry rock	surface			Q				·				
2	Monitor the eco		water quality	in the Wun Y	iu EIS		П		$\mathbf{\nabla}$								
3	No construction	and the second second				SSI 535			₹/								
4 5	No construction Only hand-held t				spring and w	et seasons			M.								
6	The natural botto	om and water	flow of WYEI	S shall be pres	erved and												
7	no access tracl No dredging, ri				ere observe	4			$\sim$	-	E						
									LM				·····				
No. 1	Part V-I V Is drainage sys	and the second	/ and Drainag	le	8				Yes				Photos / Re	emarks			
2	ls drainage sys																
3	ls drainage sys								$\overline{\mathbf{N}}$			ο.					
4 5	Are there dykes Are there perim				States and a strate for the second												
	runoff from out	side the site	so that it will	l not wash acr	oss the site	?		136	<u>،</u>								
6 7	Are sediment c Are there temp		A STREET SHOP IN THE REPORT OF STREET			y storms?			Ø								
,	watercourse?	orary unone	s for runon u	ischarge into	appropriate		LV		,								
8	Are these temp																
9a 9b	Do permanent	drainage ch	annels have:		tation basin? d baffles?								<del></del>				
10	Is site runoff pr			e river channe	el?				₩,				_				
11	ls groundwater via sedimentati			runoff collecte	ed and disch	arged			<b>d</b>								
12	Are there sedin			ng runoff prior	to disposal?	?	Ø										
13a	Are the sedime	ntation tank				cells?											
13b 13c				quate capacity? silt and sedime									2				
14	Are there neutr		ks for concre	ete batching/m	nixing discha	arge?	d,										
15 16	Is the discharge Is the discharge					limentation	Ø										
10	tanks before di		ansation tall	to routed to SI	ir and or sec	intentation	Ø										
17	Are there oil int	erceptors in					ě	1									
18 19	Are oil and greater Is there any by				5	avy rain?							Rar	ī —			
20	Are vehicles an												_ner				

#### Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Severs to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

# ARUP

	have the star O	
21	leaving the site? Is a wheel washing bay provided at every site exit?	
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c 22d	paved access road leading to exit? access road sufficiently backfill toward	
220	wheel wash bay?	
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain? Are manholes covered and sealed?	
26 27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29	Are debris and rubbish on site collected and disposed of properly?	DOLO DO O RVII
30	Is wastewater discharge licence available for inspection?	
No.	Part V-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	e/o o o o o
2	Are site vehicle movement confined to designated haul roads?	
3 4	Is the public road around the site entrance kept clean and free from dust? Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with public access?	
13	Are incombustible screens not less than 1.8m tall provided in the public area	
	affected by exhaust fumes or smoke emission?	
14	Is dark smoke emission avoided?	
15 16	Are dusty materials properly covered? Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
	enclosed?	1
19	Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	g'a a a a a
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon as practicable?	
24	Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27 28	Are materials transported by dump trucks with mechanical cover? Do the truck covers work effectively?	
29	Is ULSD used in the construction activities?	
30	Observable dust sources 🔲 Wind erosion	Vehicle/equipment movements
	Loading/unloading of materials	Wothers Construction activities
No.	Part V-III Construction Noise Impact	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1a	Are the construction works scheduled to minimize airborne noise nuisance?	
1b	groundborne noise nuisance?	
2a 2b	Are the works or equipment sited to minimize airbrone noise nuisance?	
3	groundborne noise nuisance? Are all plant and equipment well maintained and in good operating condition?	
4	Are idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate	
6	acoustic materials?	
6 7	Are silenced equipment used where practicable? Are noise enclosure, noise barrier, or portable noise barrier used	
(*)	where necessary?	×·····································
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10 11	Do air compressors have valid noise labels? Do compressors operate with doors closed?	
12	Are Construction Noise Permits available for inspection?	
13	Major noise source(s) 🛛 Traffic	Construction activities inside of site
	Construction activities outside of site	Others

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance Part VI Follow-up for the Pervious Site Audit

### Part VII Remarks

RdrI: Chamicals and generations shall per be placed on doip tray. II: Sound bags and other construction debris shall be removed after completion of construction at correspondence section, to maintain good house keeping.

Part VIII	Signatures
Part VIII	Signatures

IEC's Representative

(Name: 47/12. 7AM (Date: 3022-03-3) )

Engineer's Representative

(Name: Felix CHAN ) (Date: 13/4/2022

Contractor's Representative

(Name: K.L. (HAN (Date: 2072-03-3) ))

### Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

	Ref. No. Project Contract No. Inspected By	Ta Tit Ya in Tai Po IEC's Rep Contracto		ton Tan	Jk	IEC Contractor Engineer Inspection Date Time Period		Ove Arup & Partners Hong Kong Ltd. 28 - 04 - 2022 $9 - 30 - 12 \pm 07$							
		Weather											-		
	11 1 11	Sunny		Overcast	Storm	🔲 Rain	Drizzle		] Hazy						
		Tam	Light	Breeze	Strong		Temp	erature				31	°C		
No.	Part II N	Water Qualit	ty and Ecolog	ical Monitorin	g Plan (WQE	MP)	N/A N	VO Yeş	Rdr	Obs	N/C	Photo	s / Remarks		
1	Provision of sil				. ~			۶ø,							
2 3	No pollution or Provision of sil	silitation oc	curs to the ga	thering groun	d							-			
4	Protection of e			es for erosion	control			- /				-			
5	Regular cleani	ng of waten	work roads ar	nd associated		orks						2			
6 7	Damage of the	waterwork:	s installations			,		Ζċ,	• 🗆						
1	No excavation WSD water tur	mels excen	t with WSD n	tion approval	centreline o	t									
8	No obstruction	of waterwo	rks access ro	ads				ס ד				3 <del></del>			
No.	Part III V	Nasto Mana	gement Plan (						- 5500 S		1000				
1	Proper segrega				recyclable m	aterials		VO Yes	Rdr	Obs	1.00.00	Photo	s / Remarks		
2	Good maintena	ance of was	te storage are	eas		latorialo									
3 4	No accumulatio														
4 5	Wastes are con Licensed waste				es to liconco	d diaponal alta						-			
	through trip tick	ket system	concot and a	unsport wast	es to license	u uisposai site	Ø					3			
6	Proper reuse o	f inert C&D	waste as bac	kfill materials	on site		Ø								
No.	Part IV V	Vun Yiu Eco	ologically Impo	ortant Stream	(WYEIS)		N/A N	/O Yes	Rdr	Obs	N/C	Photos	/ Remarks		
1	Confine works	area to exis	ting roads or	on the expos	ed dry rock :	surface		ש נ							
2	in the Wun Yiu						1.5385 - 1.8 <del>8</del>	,			_	A-			
2	Monitor the eco No construction				IU EIS										
4	No construction				spring and w	et seasons									
5	Only hand-held t	iools may be	used inside W	YEIS											
6	The natural botto no access tract				erved and										
7	No dredging, ri				ere observed	ł		1 M		П					
No.			y and Drainag			-			la-set.						
1	Is drainage sys	and the second sec	Contraction and a second second	e				/O Yes		Obs		Photos	/ Remarks		
2	Is drainage sys	tem well ma	aintained?												
3	Is drainage sys	tem adequa	tely designed	d for storm flo	w?										
4 5	Are there dykes							1/1							
0	Are there perim runoff from out											-			
6	Are sediment c	ontrol meas	sures inspecte	ed & maintaine	ed after rain	y storms?	Ø. C	םנ							
7	Are there tempo watercourse?	orary ditche	s for runoff di	ischarge into a	appropriate										
8	Are these temp	orary ditche	as with silt reto	ention and rer	noval faciliti	ae?		1-	_		_				
9a	Do permanent	drainage ch	annels have:	sedimen	tation basin?	65:									
9b					d baffles?		d c		Ξ.						
10 11	ls site runoff pro	from funnel	in entering the	e river channe	d and diash				$\Box$			R	lr I		
•••	via sedimentati			unon conecte	u anu uisch	argeo		עם נ				-			
12	Are there sedim	nentation tai	nks for settlin	g runoff prior	to disposal?										
13a 13b	Are the sedime	ntation tank		ed of pre-forme		ells?	M) C								
130 13c				uate capacity? silt and sedime											
14	Are there neutra	alisation tan	ks for concre	te batching/m	ixing discha	rae?									
15	Is the discharge	diverted to	and treated I	in neutralisatio	on tanks?										
16	Is the discharge	from neutr	alisation tank	s routed to sil	t trap or sed	imentation									
17	tanks before dis Are there oil inte		drainaga eur	tom?						2					
18	Are oil and grea				?	*									
19	Is there any byp	ass for oil to	o prevent flus	hing during p	eriods of he	avy rain?									
20	Are vehicles and	d plant clea	ned of earth,	mud and deb	ris before	un an <mark>1</mark> 0 000 Algo (1939)									

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

### Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

and the second
N/A, N/O Yes       Rdr Obs       N/C       Photos / Remarks         Image: Construction of the state of
N/A N/O Yes, Rdr Obs, N/C       Photos / Remarks         Image: Image
Image: Construction activities inside of site         Image: Construction activities inside of site

Page 2 of 3

Part VI Follow-up for the Pervious Site Audit

Part VII Remarks Part VII Remarks Rdr I: Dusty Materials / open stockpilles / exposed slope surface shell be covered by impermeable sheet. Rdr II: Contractor shall maintain good house beeping.

Part VIII Signatures

IEC's Representative

(Name: Hilton (Date: 7.77) 2022/04/28

#### Engineer's Representative

(Name: Felix CHAN 5 May 2022 (Date:

Contractor's Representative

(Name: C.K.Ko ) ) (Date: 28 (Spr 2017)

#### Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tal Po Environmental Site Inspection Checklist

	Ref. No. Project	Provision of Trunk Sewers to 3 villages: IEC Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk Contracto In Tai Po	Ove Arup & Partners Hong Kong Ltd.		
	Contract No. Inspected By	IEC's Rep. : H) Ton Tam Engineer Contractor's Rep. : Inspectio Project Manager / Supervisor: Time Peri			
( <del>4)</del>	Part I Condition Humidity Wind	Weather       Sunny     Fine     Overcast     Storm     Rain       High     Moderate     Low       Calm     Light     Breeze     Strong	Drizzle Hazy TemperatureC°C		
No. 1 2 3 4 5 6 7	Provision of s No pollution of Provision of s Protection of Regular clear Damage of th No excavation WSD water tu	Water Quality and Ecological Monitoring Plan (WQEMP) Ilt removal facilities r siltation occurs to the gathering ground ilt traps at drainage excavated or filled surfaces for erosion control ing of waterwork roads and associated drainage works e waterworks installations n with depth >2m within 120 m from the centreline of innels except with WSD prior approval	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Rem         I       I       I       I       I       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	arks	
8 No. 1 2 3 4 5 6	Part III Proper segreg Good mainter No accumula Wastes are c Licensed was through trip tie	n of waterworks access roads Waste Management Plan (WMP) gation of different wastes and reusable/recyclable materials hance of waste storage areas tion of inert C&D waste on site overed in enclosed containers te haulers to collect and transport wastes to licensed disposal cket system of inert C&D waste as backfill materials on site	N/A N/O Yes, Rdr Obs N/C Photos / Rem	jarks	
No. 1 2 3 4 5 6	Confine work in the Wun Yi Monitor the e No construction No construction Only hand-helo The natural bo	Wun Yiu Ecologically Important Stream (WYEIS) s area to existing roads or on the exposed dry rock surface u EIS cological and water quality in the Wun Yiu EIS n activity within the water body of WYEIS n work shall be carried out inside WYEIS in spring and wet seasons it tools may be used inside WYEIS (tom and water flow of WYEIS shall be preserved and ck on riverbed shall be allowed	N/A N/O Yes       Rdr Obs       N/C       Photos / Rem         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D	iarks	
7 1 2 3 4 5	Part V-I Is drainage sy Is drainage sy Is drainage sy Are there dyk Are there per	river training or river diversion works were observed Water Quality and Drainage ystem adequate? ystem well maintained? ystem adequately designed for storm flow? es to surround areas of earthworks for flood protection? imeter channels at site boundaries to intercept storm utside the site so that it will not wash across the site?	N/A N/O Yes       Rdr Obs       N/C       Photos / Rem         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D         D       D       D       D       D	narks	
6 7 8 9a 9b 10 11	Are there tem watercourse? Are these ten Do permaner Is site runoff Is groundwate via sedimenta	nporary ditches with silt retention and removal facilities? t drainage channels have: sedimentation basin? traps and baffles? prohitated from entering the river channel? er from tunnels or surface runoff collected and discharged ation traps/tanks?			
12 13 13 13 13 14 15 16 17 18 19	Are the sedim Are there neu Is the dischar Is the dischar tanks before Are there oil i Are oil and gr	imentation tanks for settling runoff prior to disposal? nentation tanks: constructed of pre-formed individual cells? with adequate capacity? free from silt and sediment? tralisation tanks for concrete batching/mixing discharge? ge diverted to and treated in neutralisation tanks? ge from neutralisation tanks routed to silt trap or sedimentation disposal? nterceptors in drainage system? ease removed regularly (at least weekly)? ypass for oil to prevent flushing during periods of heavy rain?			

# Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

	leaving the site?	
21	Is a wheel washing bay provided at every site exit?	
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward wheel wash bay?	
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28 29	Are toilets connected to foul sewer or chemical toilets provided?	
30	Are debris and rubbish on site collected and disposed of properly? Is wastewater discharge licence available for inspection?	
00		
No.	Part V-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2 3	Are site vehicle movement confined to designated haul roads?	
4	Is the public road around the site entrance kept clean and free from dust? Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with	
9	water to maintain the entire surface wet? Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
172528	public access?	/
13	Are incombustible screens not less than 1.8m tall provided in the public area	
14	affected by exhaust fumes or smoke emission? Is dark smoke emission avoided?	
15	Are dusty materials properly covered?	
16	Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
19	enclosed?	
19	Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	
24	as practicable? Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28	Do the truck covers work effectively?	
29 30	Is ULSD used in the construction activities? Observable dust sources Uning erosion	C     Vehicle/equipment movements
	Loading/unloading of materials	Joiners Construction activities
No.	Part V-III Construction Noise Impact	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1a 1b	Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance?	
2a	Are the works or equipment sited to minimize airbrone noise nuisance?	
2b	groundbome noise nuisance?	
3	Are all plant and equipment well maintained and in good operating condition?	
4	Are idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate acoustic materials?	
6	Are silenced equipment used where practicable?	
7	Are noise enclosure, noise barrier, or portable noise barrier used	
	where necessary?	/
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10 11	Do air compressors have valid noise labels? Do compressors operate with doors closed?	
12	Are Construction Noise Permits available for inspection?	
13		
10	Major noise source(s)	Construction activities inside of site
	Major noise source(s) Construction activities outside of site	Construction activities inside of site

Part VI Follow-up for the Pervious Site Audit

Part VII Remarks Rdr: Constructor shall remove good house leapping.

Part VIII Signatures

IEC's Representative

(Name: Hilton TAM ) (Date: 2022-05-24

Engineer's Representative

(Name: Felix CHAN AE/08) (Date: 24/5/2022

Contractor's Representative (Name: C.K. (Date: 24/05/2022

	Ref. No. Project			vers to 3 villag la & Lo Lau U		IEC Contractor	Ove A	rup & Partr	ners Ho	ong Ko	ng Ltd.
	Contract No. Inspected By	IEC's Rep Contracto Project Ma	n: r's Rep. : anager / Supe		<u>114</u>	Engineer Inspection Date Time Period	e	27-0 930	) ) ) )	202 122	2.
		Weather	1								
	Humidity	□ Sunny □ High ↓ Catm	Fine Moderate	Overcast  Cue Overcast  Due Due Due Due Due Due Due Due Due Du	Storm	🔲 Rain	Drizzle	🗌 Hazy erature		-	<u>30</u> °c
No.	Part II	Water Qualit	y and Ecologi	ical Monitorin	g Plan (WQ	EMP)	N/A N	O Yes Ro	r Obs	N/C	Photos / Remark
1	Provision of si	It removal fa	cilities		•			1			
2	No pollution or			thering groun	d						
3 4	Provision of si Protection of e		100 m 100	s for erosion	control				.0		
5	Regular cleani					vorks		· · · -			
6	Damage of the							/ // -			
7	No excavation				centreline	of					-
8	WSD water tu No obstruction										
	H 44						20-20-20-			1.245	
No.			gement Plan (	80				/O Yes Ro			Photos / Remark
1 2	Proper segreg Good mainten				recyclable	materials					
3	No accumulati		Contraction of the Decourt								
4	Wastes are co					·					
5			collect and tr	ansport wast	es to licens	ed disposal site		ιčο			
6	through trip tic Proper reuse o		waste as bac	ckfill materials	s on site						
No.	Part IV	Wun Yiu Eco	logically Imp	ortant Stream	(WYEIS)	VEALAN.	N/A N	/O Yes Ro	lr Obs	N/C	Photos / Remark
1	Confine works in the Wun Yiu		ting roads or	on the expos	ed dry rock	<pre>surface</pre>					<u> </u>
2	Monitor the ec		water quality	in the Wun Y	iu EIS						
3	No construction										
4	No construction				spring and	wet seasons					2
5 6	Only hand-held The natural bott				anuad and						
0	no access trac				serveu anu						
7	No dredging, r	iver training	or river diver	sion works w	ere observe	ed					
No.			y and Drainag	16			N/A N	O Yes Ro	r Obs	N/C	Photos / Remark
1	Is drainage sy										
2 3	Is drainage sys Is drainage sys			d for storm flo	2			_ /			
4	Are there dyke					ction?		. /			
5	Are there perir				service and the service se						
0	runoff from ou						1.				
6 7	Are sediment of Are there temp watercourse?		16 CORE 1								
8	Are these tem	oorary ditche	es with silt ret	ention and re	moval facili	ities?					
9a	Do permanent	drainage ch	annels have:	sedimer	ntation basin	17	VI				
9b	1			the second s	d baffles?		y c		/□		
10 11	Is site runoff p Is groundwate via sedimentat	r from tunne	ls or surface			harged					Rdr 2
12	Are there sedir										
13a	Are the sedime	entation tank				l cells?					
13b 13c				uate capacity? silt and sedim						0.	
14	Are there neut	ralisation tar				narge?					· · · · · · · · · · · · · · · · · · ·
15	Is the discharg	e diverted to	and treated	in neutralisati	ion tanks?			_			
16	Is the discharg		alisation tank	is routed to si	It trap or se	edimentation	М				\
17	tanks before di Are there oil in		drainage eu	stem?			_/_		-	-	
18	Are oil and gre		Contraction of the second second second		/)?						• • • • • • • • • • • • • • • • • • • •
19	Is there any by	pass for oil t	to prevent flue	shing during p	periods of h	neavy rain?					
20	Are vehicles a										

.

	leaving the site?	
21	Is a wheel washing bay provided at every site exit?	
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
	wheel wash bay?	1
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29	Are debris and rubbish on site collected and disposed of properly?	a a a a a <u>Rari</u>
30	Is wastewater discharge licence available for inspection?	
No.	Part V-II Alr Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2	Are site vehicle movement confined to designated haul roads?	
3	Is the public road around the site entrance kept clean and free from dust?	
4	Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with	
đ.	water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
	public access?	1
13	Are incombustible screens not less than 1.8m tall provided in the public area	
-	affected by exhaust fumes or smoke emission?	
14	Is dark smoke emission avoided?	
15	Are dusty materials properly covered?	
16 17	Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
10	enclosed?	
19	Are bulk fine grained materials stored in closed silos fitted with high level	
	alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	
	as practicable?	1
24	Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28 29	Do the truck covers work effectively? Is ULSD used in the construction activities?	
30	Observable dust sources	
50	Loading/unloading of materials	Sothers Construction activities
		Construction der (110)
No.	Part V-III Construction Noise Impact	N/A N/O Yes, Rdr Obs N/C Photos / Remarks
1a	Are the construction works scheduled to minimize airborne noise nuisance?	
1b	groundborne noise nuisance?	
2a	Are the works or equipment sited to minimize airbrone noise nuisance?	
2b	groundborne noise nuisance?	
3	Are all plant and equipment well maintained and in good operating condition?	
4	Are idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate	
6	acoustic materials?	
6	Are silenced equipment used where practicable?	
7	Are noise enclosure, noise barrier, or portable noise barrier used where necessary?	
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10	Do air compressors have valid noise labels?	
11	Do compressors operate with doors closed?	
12	Are Construction Noise Permits available for inspection?	
13	Major noise source(s) 🛛 Traffic	Construction activities inside of site
	Construction activities outside of site	C Others

....

.

### Part VI Follow-up for the Pervious Site Audit

### Part VII Remarks

Rdr1: Contractor shall remain good house keeping. Rdr 2: Sandbags or similar shall be ready for rain season to probribit site run out entering river channel.

Part VIII Signatures

IEC's Representative

(Name: (Date:

Engineer's Representative

(Name: Felix CHAN ) (Date: 2017/2022

### Contractor's Representative

(Name: C. F.- K.S. (Date: ))

	Ref. No. Project		of Trunk Sew n, Yuen Tun H			IEC Contractor	Ove Ar	up & Partn	ers Hong ł	Kong Ltd.	
	Contract No.			-				1			
	Inspected By	IEC's Rep		ton T	am	Engineer	-	50	<u> </u>	200	
		Contracto Project M	anager / Supe	nisor		Inspection Date Time Period	θ	29-		22	,
		110/00011	anager / Oupe	141301.		Time Feriou		7-30	~ 12		
		Weather									
		Sunny	Fine	Overcast	Storm	🗌 Rain	Drizzle	🗌 Hazy			
		High	Moderate		-		7			33	°C
	wind	₽ <sup>calm</sup>	🗌 Ught	Breeze	Strong		Temper	ature			
No.	Part II	Water Qualit	y and Ecologi	cal Monitorin	ng Plan (WQ	EMP)	N/A N/0	Yes Rdr	Obs N/C	Photos	/ Remarks
1	Provision of si							N/D			
2	No pollution or			thering groui	nd			$\square \square$			
3	Provision of si		100 B		n uman 200 ka mercura k					1	
4 5	Protection of e									(	
6	Regular clean Damage of the			u associated	i drainage v	VORKS				-	
7	No excavation			0 m from the	centreline	of					
8	WSD water tu					01					
8	No obstruction	and the second	ang protei na mangana kera							-	
		Li.					00		<u> </u>	÷	
No.			gement Plan (				N/A N/0	) Yes, Rdr	Obs N/C	Photos	/ Remarks
1	Proper segreg				/recyclable	materials		$\overline{a}_{j}$			
2	Good mainten										
3	No accumulati Wastes are co									-	
5					tes to licens	ed disposal site					
U	through trip tic		concor and a	ansport was		ed disposal site					
6	Proper reuse of		waste as bac	kfill material	s on site		MO			11	
	*										
No.			ologically Impo				N/A N/0	Yes, Rdr	Obs N/C	Photos	/ Remarks
1	Confine works		sting roads or	on the expos	sed dry rock	surface					
2	in the Wun Yiu			1- 4h - 10/				1 -			
2 3	Monitor the ec No construction				YIU EIS					-	
4	No construction			-	n spring and	wet seasons				()	
5	Only hand-held				·						
6	The natural bott	om and wate	r flow of WYEIS	5 shall be pre	served and					-	
-	no access trac							1			
7	No dredging, r	iver training	or river divers	sion works w	ere observe	bd		à D			
No.	Part V-I	Water Qualit	y and Drainag	A			N/A N/C	Yes, Rdr	Obs N/C	Photos	/ Remarks
1	Is drainage sys			<b>7</b> 0				/		1 Hotoc	, ritemante
2	Is drainage sys									**	
3	Is drainage sys			for storm flo	ow?						
4	Are there dyke									-	
5	Are there perir									1	
G	runoff from out								_		
6 7	Are sediment of Are there temp									()	
•	watercourse?	ionaly until		sonarge into	appropriate	2					
8	Are these tem	porary ditche	es with silt rete	ention and re	emoval facili	ties?	<b>D</b> , <b>D</b>				
9a	Do permanent	drainage ch	annels have:	sedime	ntation basin	?	a'o				
9b	2 		14 15 1.52	the second s	nd baffles?						+
10	Is site runoff p							$\Box / \Box$		R	1r 2
11	ls groundwater via sedimentat			unoff collect	ed and disc	harged				() <del></del>	
12	Are there sedi			a runoff prior	r to disnosa	2	MA				
13a	Are the sedime										
13b		8 250 - 870 M		uate capacity		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.					
13c			Construction and a	silt and sedim							
14	Are there neut					arge?	$\nabla / \Box$				
15	Is the discharg						Ø Ø			-	
16	Is the discharg		ralisation tank	s routed to s	lit trap or se	dimentation					
17	tanks before di Are there oil in		drainage eve	tem?							
18	Are oil and gre	A CONTRACTOR OF THE OWNER OF			v)?						
19	Is there any by				Contraction of the second	eavy rain?				÷	
20	Are vehicles a				A State of the second se					a <del>1</del>	

	leaving the site?	
21 22a	Is a wheel washing bay provided at every site exit?	
22a 22b	Is the wheel washing bay with: adequate design? adequate settling & removal of sand/silt?	
220 22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
	wheel wash bay?	
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29	Are debris and rubbish on site collected and disposed of properly?	o o o o <u>Rar 1</u>
30	Is wastewater discharge licence available for inspection?	
No.	Part V-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2 3	Are site vehicle movement confined to designated haul roads?	
4	Is the public road around the site entrance kept clean and free from dust? Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with	
	water to maintain the entire surface wet?	· · · · · · · · · · · · · · · · · · ·
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with public access?	
13	Are incombustible screens not less than 1.8m tall provided in the public area	
	affected by exhaust fumes or smoke emission?	
14	Is dark smoke emission avoided?	g,
15	Are dusty materials properly covered?	
16	Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
19	enclosed?	
19	Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	
	as practicable?	
24	Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27 28	Are materials transported by dump trucks with mechanical cover?	
20	Do the truck covers work effectively? Is ULSD used in the construction activities?	
30	Observable dust sources  Wind erosion	
00	Loading/unloading of materials	Deters CONStruction activities
No.	Part V-III Construction Noise Impact	N/A N/O Yes, Rdr Obs N/C Photos / Remarks
1a	Are the construction works scheduled to minimize airborne noise nuisance?	
1b	groundborne noise nuisance?	
2a 2b	Are the works or equipment sited to minimize airbrone noise nuisance? groundborne noise nuisance?	
3	Are all plant and equipment well maintained and in good operating condition?	
4	Are Idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate	
6	acoustic materials? Are silenced equipment used where practicable?	
7	Are noise enclosure, noise barrier, or portable noise barrier used	
-	where necessary?	1
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10	Do air compressors have valid noise labels?	
11 12	Do compressors operate with doors closed? Are Construction Noise Permits available for inspection?	
12	Are Construction Noise Permits available for inspection? Major noise source(s)	
10	Construction activities outside of site	Construction activities inside of site
	L1 construction activities offside of site	·

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

Part VI Follow-up for the Pervious Site Audit

#### Part VII Remarks

Rdr 1: Contractor shall remain good house keeping. Rdr 2: Sandbags or, barrier or similar shall be provided for bain season to prohibit site hun-out entering river channel.

IEC's Representative (Name: Hn/Con 7/AM (Date: 29/7/2

Signatures

Part VIII

Notes

Engineer's Representative

Felix CHAN E108) (Name:

(Date: 29/7/2022 Contractor's Representative

(Name: C.K.KU (Date: 29/7/202

	Ref. No. Project	Provision of Trunk Sewers to 3 villages: IEC Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk Co in Tai Po	C ntractor	Ove Aru	p & Partne	ers Hong H	Kong Ltd.
	Contract No. Inspected By	IEC's Rep.: Hilton Tain En	gineer			_	
	mapected by	Contractor's Rep. : Ins	pection Date		30-0		022
		Project Manager / Supervisor: Tin	ne Period	<u></u>	9:30	~ 12	200
	Part I	Veather					
		Sunny 🔲 Fine 🗌 Overcast 🗌 Storm	🗌 Rain 🗌	] Drizzle	🗌 Hazy		
		☐ H/gh		Tempera	ture		32 °C
						Oha NIC	
No. 1		Nater Quality and Ecological Monitoring Plan (WQEMP) t removal facilities				Obs N/C	Photos / Remarks
2		siltation occurs to the gathering ground					
3		t traps at drainage			$\nabla / \Box$		
4 5		xcavated or filled surfaces for erosion control ng of waterwork roads and associated drainage works					
6	Concernation and the second second	waterworks installations					•
7		with depth >2m within 120 m from the centreline of					·
		nnels except with WSD prior approval			1		
8	No obstruction	of waterworks access roads					
No.	Part III	Waste Management Plan (WMP)		N/A N/O	Yes, Rdr	Obs N/C	Photos / Remarks
1		ation of different wastes and reusable/recyclable mater	rials				
2		ance of waste storage areas					
3 4		on of inert C&D waste on site vered in enclosed containers					
5		e haulers to collect and transport wastes to licensed dis	sposal site				
	through trip tic			41			
6	Proper reuse of	of inert C&D waste as backfill materials on site					1 1
No.	Part IV	Nun Yiu Ecologically Important Stream (WYEIS)		N/A N/O	Yes/ Rdr	Obs N/C	Photos / Remarks
1		area to existing roads or on the exposed dry rock surfa	ace				2
2	in the Wun Yiu Monitor the on					1 -	obs 1
3		ological and water quality in the Wun Yiu EIS activity within the water body of WYEIS					1
4		work shall be carried out inside WYEIS in spring and wet se	easons				-
5	Only hand-held	tools may be used inside WYEIS					
6		om and water flow of WYEIS shall be preserved and					
7		k on riverbed shall be allowed iver training or river diversion works were observed					
No. 1		Water Quality and Drainage stem adequate?		N/A N/O	1		Photos / Remarks
2		stem well maintained?					
3		stem adequately designed for storm flow?					-
4	Are there dyke	s to surround areas of earthworks for flood protection?					-
5	i series and a series of the s	neter channels at site boundaries to intercept storm					
0		Iside the site so that it will not wash across the site?		to	-		
6 7		control measures inspected & maintained after rainy sto porary ditches for runoff discharge into appropriate	ormsr				
1.40	watercourse?						
8	Are these tem	porary ditches with silt retention and removal facilities?		$\Box, \nabla$			
9a	Do permanent	drainage channels have: sedimentation basin?		D'D			
9b		traps and baffles?		$\square$			101 2
10 11	Is groundwate	rohitated from entering the river channel? r from tunnels or surface runoff collected and discharge ion traps/tanks?	ed				Rair_2
12		mentation tanks for settling runoff prior to disposal?		MI			
13a		entation tanks: constructed of pre-formed individual cells	?				
13b		with adequate capacity?					
13c	1	free from silt and sediment?	•				
14		ralisation tanks for concrete batching/mixing discharge	1				
15 16	Discretion Strengthered	e diverted to and treated in neutralisation tanks? e from neutralisation tanks routed to silt trap or sedime	entation				
10	tanks before d	The second se					
17		terceptors in drainage system?					
18		ase removed regularly (at least weekly)?		<b>□/</b> □			
19		pass for oil to prevent flushing during periods of heavy	rain?				
20	Are vehicles a	nd plant cleaned of earth, mud and debris before		$\square'$			

### ARUP

N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         Image: Constraint of the state
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
N/A N/O Yes     Rdr     Obs     N/C     Photos / Remarks       I     IV     IV     IV     IV       IV     IV     IV     IV     IV
Image: Construction activities inside of site         Others

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

### Part VI Follow-up for the Pervious Site Audit

### Part VII Remarks

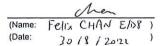
Rdr 1: Constructor shall maintain good house keeping. Rdr 2: Constructor shall remore the stockpile as soon as possible to prevent and provide untigation measures site run-out entering steers the river channel. Obs 1: Water quality monitoring ended.

Part VIII Signatures

IEC's Representative

(Name: 1-1740 7AM) (Date: 30/08/2022

### Engineer's Representative



Contractor's Representative

CV.KO (Name: (Date: 30/0/22

	Ref. No. Project	Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk	EC contractor	Ove Arup & Partners Hong K	Kong Ltd.
	Contract No.	in Tai Po			
	Inspected By	IEC's Rep.: Hilton Tam E	ngineer		
			spection Date	15-09-2	
		Project Manager / Supervisor: T	ime Period	9=30 ~ 12:	00
		Weather ∑Sunny □ Fine □ Overcast □ Storm	Rain	Drizzle Hazy	
		High Moderate Low			2.2
	Wind	Calm Light Breeze Strong		Temperature	<u>32</u> °c
No.	Part II	Water Quality and Ecological Monitoring Plan (WQEMF	')	N/A N/O Yes, Rdr Obs N/C	Photos / Remarks
1		It removal facilities			-
2 3		siltation occurs to the gathering ground			
4		It traps at drainage xcavated or filled surfaces for erosion control			
5		ng of waterwork roads and associated drainage work			
6	-	e waterworks installations	5		
7	-	with depth >2m within 120 m from the centreline of			
		nnels except with WSD prior approval			
8	No obstruction	of waterworks access roads			
No.	Part III	Waste Management Plan (WMP)		N/A N/O Yes, Rdr Obs N/C	Photos / Remarks
1		ation of different wastes and reusable/recyclable mate	erials		, notice , nonicinal no
2		ance of waste storage areas			-
3	No accumulati	on of inert C&D waste on site			
4		vered in enclosed containers			
5		e haulers to collect and transport wastes to licensed o	isposal site		
6	through trip tic Proper reuse o	ket system of inert C&D waste as backfill materials on site			
				<b>*</b>	
No. 1		Nun Yiu Ecologically Important Stream (WYEIS) area to existing roads or on the exposed dry rock sur	face	N/A N/O Yes Rdr Obs N/C	Photos / Remarks
	in the Wun Yiu		lace		
2		ological and water quality in the Wun Yiu EIS			6bc 1
3		activity within the water body of WYEIS			
4	No construction	work shall be carried out inside WYEIS in spring and wet s	easons		
5		tools may be used inside WYEIS			
6		om and water flow of WYEIS shall be preserved and			
7		k on riverbed shall be allowed ver training or river diversion works were observed			
'	No areaging, n	ver training of fiver diversion works were observed			
No.		Nater Quality and Drainage		N/A N/O Yes Rdr Obs N/C	Photos / Remarks
1		stem adequate?			
2 3		stem well maintained?			
4		stem adequately designed for storm flow? s to surround areas of earthworks for flood protection	2		
5		neter channels at site boundaries to intercept storm			
		side the site so that it will not wash across the site?			
6	Are sediment of	control measures inspected & maintained after rainy s	torms?		
7	Are there temp	orary ditches for runoff discharge into appropriate			
	watercourse?			/	
8		porary ditches with silt retention and removal facilities	?		
9a Oh	Do permanent	drainage channels have: sedimentation basin?			
9b 10	ls site runoff pr	traps and baffles? ohitated from entering the river channel?			
11		from tunnels or surface runoff collected and discharge	ed		
	-	ion traps/tanks?			
12		nentation tanks for settling runoff prior to disposal?			
13a	Are the sedime	entation tanks: constructed of pre-formed individual cells	\$?		
13b		with adequate capacity?			
13c		free from silt and sediment?			
14		alisation tanks for concrete batching/mixing discharge	97		
15 16		e diverted to and treated in neutralisation tanks?	optotion		
16	tanks before di	e from neutralisation tanks routed to silt trap or sediments and sposal?	entation		
17		erceptors in drainage system?			
18		ase removed regularly (at least weekly)?			
19		pass for oil to prevent flushing during periods of heav	y rain?		
20		nd plant cleaned of earth, mud and debris before			

	looving the site?	
21	leaving the site? Is a wheel washing bay provided at every site exit?	
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
	wheel wash bay?	4 C C C C
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29 30	Are debris and rubbish on site collected and disposed of properly? Is wastewater discharge licence available for inspection?	
50	is wastewater discharge intende available for inspection?	
No.	Part V-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2	Are site vehicle movement confined to designated haul roads?	
3	Is the public road around the site entrance kept clean and free from dust?	
4	Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6 7	Are unpaved areas watered regularly to avoid dust disturbance?	
8	Does the water spraying truck work effectively? Is working area of excavation or earth moving operation sprayed with	
0	water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
	public access?	/
13	Are incombustible screens not less than 1.8m tall provided in the public area	
	affected by exhaust fumes or smoke emission?	1
14	Is dark smoke emission avoided?	
15	Are dusty materials properly covered?	
16 17	Are the bags of cement (more than 20) covered entirely? Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
10	enclosed?	
19	Are bulk fine grained materials stored in closed silos fitted with high level	
	alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	
24	as practicable?	
24 25	Is open burning avoided? Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28	Do the truck covers work effectively?	
29	Is ULSD used in the construction activities?	
30	Observable dust sources Ukind erosion	Vehicle/equipment movements
	Loading/unloading of materials	Journers <u>construction activities</u>
No.	Part V-III Construction Noise Impact	N/A N/O Yes , Rdr Obs N/C Photos / Remarks
1a	Are the construction works scheduled to minimize airborne noise nuisance?	
1b	groundborne noise nuisance?	
2a	Are the works or equipment sited to minimize airbrone noise nuisance?	
2b	groundborne noise nuisance?	
3	Are all plant and equipment well maintained and in good operating condition?	
4	Are idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate	
e	acoustic materials?	
6 7	Are silenced equipment used where practicable?	
'	Are noise enclosure, noise barrier, or portable noise barrier used where necessary?	
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10	Do air compressors have valid noise labels?	
11	Do compressors operate with doors closed?	
12	Are Construction Noise Permits available for inspection?	
13	Major noise source(s)	Construction activities inside of site
	Construction activities outside of site	Others

### Part VI Follow-up for the Pervious Site Audit

Part VII Remarks Rdr 1: Countractor shall maintain good house-keeping. RJr 2: Constractor shall cover the over opened est soil soid surface with impervios to prevent soit soil erosion, and a conduct read stort reinstatement as soon as possible 6 bs 1: Water que 12ty monitoring ended, but strontractor shall vesume water monitoring as per EPD and comment and Monitoring Plan. approved.

Part VIII Signatures

IEC's Representative

(Name: Hill TAM) (Date: 15 Sep 7022)

Engineer's Representative

Felix CHAN E/DB) (Name: (Date: 15 Sept 2022

Contractor's Representative

(Name: K.L.CHAN (Date: 15 Sept 2022 )

	Ref. No.         Project       Provision of Trunk Sewers to 3 villages:       IEC         Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk       Contractor         in Tai Po       Contractor	Ove Arup & Partners Hong Kong Ltd.	
	Contract No. Inspected By IEC's Rep. : Hittoh Taw Engineer		
	Inspected By IEC's Rep. : Hilton Tawn Engineer Contractor's Rep. : Inspection Dat	27 - 10 - 2022	
	Project Manager / Supervisor: Time Period	9=30 ~ 12:00	
	Part I Weather		
	Condition sunny Fine Overcast Storm Rain Humidity High Moderate Vow	Drizzle Hazy	
	Wind Calm Ught Breeze Strong	Temperature <u>26</u> °c	
No.	Part II Water Quality and Ecological Monitoring Plan (WQEMP)	N/A N/O Yes Rdr Obs N/C Photos / Rem	harks
1	Provision of silt removal facilities		
2 3	No pollution or siltation occurs to the gathering ground Provision of silt traps at drainage		
4	Protection of excavated or filled surfaces for erosion control		
5	Regular cleaning of waterwork roads and associated drainage works		
6 7	Damage of the waterworks installations No excavation with depth >2m within 120 m from the centreline of		-
1	WSD water tunnels except with WSD prior approval		
8	No obstruction of waterworks access roads		
No.	Part III Waste Management Plan (WMP)	N/A N/O Yes Rdr Obs N/C Photos / Rem	arks
1	Proper segregation of different wastes and reusable/recyclable materials		anto
2	Good maintenance of waste storage areas		
3 4	No accumulation of inert C&D waste on site Wastes are covered in enclosed containers		
5	Licensed waste haulers to collect and transport wastes to licensed disposal site		
	through trip ticket system		
6	Proper reuse of inert C&D waste as backfill materials on site		
No.	Part IV Wun Yiu Ecologically Important Stream (WYEIS)	N/A N/O Yes Rdr Obs N/C Photos / Rem	arks
1	Confine works area to existing roads or on the exposed dry rock surface in the Wun Yiu EIS		
2	Monitor the ecological and water quality in the Wun Yiu EIS	$\Box \Box \Box, \Box \sigma \Box = 0651$	
3	No construction activity within the water body of WYEIS		
4 5	No construction work shall be carried out inside WYEIS in spring and wet seasons		_
6	Only hand-held tools may be used inside WYEIS The natural bottom and water flow of WYEIS shall be preserved and		
	no access track on riverbed shall be allowed		
7	No dredging, river training or river diversion works were observed		
No.	Part V-I Water Quality and Drainage	N/A N/O Yes Rdr Obs N/C Photos / Rem	arks
1 2	Is drainage system adequate? Is drainage system well maintained?		
3	Is drainage system adequately designed for storm flow?		_
4	Are there dykes to surround areas of earthworks for flood protection?		_
5	Are there perimeter channels at site boundaries to intercept storm		_
6	runoff from outside the site so that it will not wash across the site? Are sediment control measures inspected & maintained after rainy storms?		
7	Are there temporary ditches for runoff discharge into appropriate		
0	watercourse?		
8 9a	Are these temporary ditches with silt retention and removal facilities? Do permanent drainage channels have: sedimentation basin?		
9b	traps and baffles?		_
10	Is site runoff prohitated from entering the river channel?	DDD/MDD <u>Kdr</u> :	1
11	Is groundwater from tunnels or surface runoff collected and discharged via sedimentation traps/tanks?		
12	Are there sedimentation tanks for settling runoff prior to disposal?		
13a	Are the sedimentation tanks: constructed of pre-formed individual cells?		
13b 13c	with adequate capacity? free from silt and sediment?		
14	Are there neutralisation tanks for concrete batching/mixing discharge?		
15	Is the discharge diverted to and treated in neutralisation tanks?		
16	Is the discharge from neutralisation tanks routed to silt trap or sedimentation tanks before disposal?		
17	Are there oil interceptors in drainage system?		
18	Are oil and grease removed regularly (at least weekly)?		_
19 20	Is there any bypass for oil to prevent flushing during periods of heavy rain? Are vehicles and plant cleaned of earth, mud and debris before		
<b>T 1</b>	and beine beine and beine and and debite beine		

1       Are vehicles in the site travelling within speed limit of 10 km/h?	of sand/silt?     Image: Constraint of the sand/silt?     Image: Constraint of the sand of
24       Are exposed slope surfaces covered (by tarpaulin or other means)?	
30       Is wastewater discharge licence available for inspection?       Image: Construct of the state of the st	means)?  ided?
1       Are vehicles in the site travelling within speed limit of 10 km/h?	
3       Is the public road around the site entrance kept clean and free from dust?         4       Are areas of site with regular traffic movement having hard surface?         5       Are the haul roads watered regularly to avoid dust disturbance?         6       Are unpaved areas watered regularly to avoid dust disturbance?         7       Does the water spraying truck work effectively?         8       Is working area of excavation or earth moving operation sprayed with water to maintain the entire surface wet?         9       Are the dusty materials sprayed with water during transfer operation?         11       Does the wheel wash work effectively?         12       Are hoarding not less than 2.4m tall provided beside roads or areas with public access?         13       Are incombustible screens not less than 1.8m tall provided in the public area affected by exhaust fumes or smoke emission?         14       Is dark smoke emission avoided?         15       Are the excavated materials dropped at minimum practical height?         16       Are the excavated materials stored in closed silos fitted with high level alarm indicator?	n/h? 🗖 🗖 🗖 🗖
<ul> <li>Are unpaved areas watered regularly to avoid dust disturbance?</li> <li>Does the water spraying truck work effectively?</li> <li>Is working area of excavation or earth moving operation sprayed with water to maintain the entire surface wet?</li> <li>Are the dusty materials sprayed with water during transfer operation?</li> <li>Do the site vehicles use the wheel wash at the site exits?</li> <li>Does the wheel wash work effectively?</li> <li>Are hoarding not less than 2.4m tall provided beside roads or areas with public access?</li> <li>Are incombustible screens not less than 1.8m tall provided in the public area affected by exhaust fumes or smoke emission?</li> <li>Is dark smoke emission avoided?</li> <li>Are the bags of cement (more than 20) covered entirely?</li> <li>Are the excavated materials dropped at minimum practical height?</li> <li>Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?</li> <li>Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?</li> </ul>	ds?
9       Are the dusty materials sprayed with water during transfer operation?         10       Do the site vehicles use the wheel wash at the site exits?         11       Does the wheel wash work effectively?         12       Are hoarding not less than 2.4m tall provided beside roads or areas with public access?         13       Are incombustible screens not less than 1.8m tall provided in the public area affected by exhaust fumes or smoke emission?         14       Is dark smoke emission avoided?         15       Are dusty materials properly covered?         16       Are the bags of cement (more than 20) covered entirely?         17       Are the excavated materials dropped at minimum practical height?         18       Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         19       Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	ance?
public access?         13       Are incombustible screens not less than 1.8m tall provided in the public area affected by exhaust fumes or smoke emission?         14       Is dark smoke emission avoided?         15       Are dusty materials properly covered?         16       Are the bags of cement (more than 20) covered entirely?         17       Are the excavated materials dropped at minimum practical height?         18       Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         19       Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	
affected by exhaust fumes or smoke emission?         14       Is dark smoke emission avoided?         15       Are dusty materials properly covered?         16       Are the bags of cement (more than 20) covered entirely?         17       Are the excavated materials dropped at minimum practical height?         18       Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?         19       Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?	
<ul> <li>16 Are the bags of cement (more than 20) covered entirely?</li> <li>17 Are the excavated materials dropped at minimum practical height?</li> <li>18 Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?</li> <li>19 Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?</li> </ul>	* <sub>,</sub>
<ul> <li>18 Are conveyor belts fitted with windboards, transfer points and hoppers enclosed?</li> <li>19 Are bulk fine grained materials stored in closed silos fitted with high level alarm indicator?</li> </ul>	
alarm indicator?	nd hoppers
	· · · · · · · · · · · · · · · · · · ·
20       Are air vents on cements silos fitted with fabric filters?       Image: Comparison of the silos fitted with fabric filters?         21       Are weighing hoppers vented to suitable filters?       Image: Comparison of the silos fitted with fabric filters?         22       Are there enclosures around the main dust-generating activities?       Image: Comparison of the silos filters?	
23 Are completed earthworks sealed and hydroseeded and planted as soon as practicable?	anted as soon
24       Is open burning avoided?       Image: Constraint of the second	
27       Are materials transported by dump trucks with mechanical cover?       Image: Covers with mechanical cover?         28       Do the truck covers work effectively?       Image: Covers work effectively?         29       Is ULSD used in the construction activities?       Image: Covers work effectively?	
30 Observable dust sources	Vehicle/equipment movements
	1
1a       Are the construction works scheduled to minimize airborne noise nuisance?       Image: Construction works scheduled to minimize airborne noise nuisance?         1b       groundborne noise nuisance?       Image: Construction works or equipment sited to minimize airborne noise nuisance?         2a       Are the works or equipment sited to minimize airborne noise nuisance?       Image: Construction works or equipment sited to minimize airborne noise nuisance?	oise nuisance?               sance?
2b     groundborne noise nuisance?     Image: Constraint of the second s	
<ul> <li>Are idling equipment throttled down or turned off?</li> <li>Are powered mechanical equipment covered or shielded by appropriate acoustic materials?</li> </ul>	
<ul> <li>6 Are silenced equipment used where practicable?</li> <li>7 Are noise enclosure, noise barrier, or portable noise barrier used where necessary?</li> </ul>	
8       Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?       0	e valid noise labels?
11       Do compressors operate with doors closed?         12       Are Construction Noise Permits available for inspection?         13       Major noise source(s)         Image: Traffic Construction activities outside of site	Construction activities inside of site

### Part VI Follow-up for the Pervious Site Audit

# Part VII Remarks Obs 2: Water quality montaring ended. Rdr 1: Contractor shall maintain good house keeping. Rdr 2: Contractor shall plant and reinstateoment as soon us possible.

Part VIII Signatures

IEC's Representative

(Name: FIFHON TAM) (Date: 27 Oct 2022

Engineer's Representative

(Name: Felix CHAN, EADS) (Date: 78 00+ 2022

Contractor's Representative

(Name: ERIK CAPIA ) (Date: 27/1e/22

	Ref. No. Project	Provision of Trunk S Ta Tit Yan, Yuen Tu in Tai Po			IEC Contractor	Ove A	rup & Partn	ers Hong K	Kong Ltd.
	Contract No.		11+==						-
	Inspected By	IEC's Rep. : Contractor's Rep. : Project Manager / S	yilton Tay upervisor:	<u>A_</u>	Engineer Inspection Date Time Period		28 - 9:30	11-202 123	2- 20
	Part I	Weather							
	o	Sunny Sine	Overcast	Storm	Rain	Drizzle	🗌 Hazy		
	Humidity	High 🗌 Modera				_			-11.
	Wind	Calm 🗌 Light	Breeze	Strong		Tempe	rature		24°C
No.	Part II	Water Quality and Ecol	ogical Monitoring	Plan (WQE	MP)	N/A N/	O/Yes Rd	Obs N/C	Photos / Remarks
1	Provision of si	t removal facilities							
2		siltation occurs to the	gathering ground				10 0		
3 4		It traps at drainage	and for oracion o	ontrol					
4 5		excavated or filled surfa ng of waterwork roads			orks		_/ _		
6		waterworks installation		nunuge we			/		
7		with depth >2m within		entreline o	f				
		nnels except with WSE					/		
8	No obstruction	of waterworks access	roads						
No.	Part III	Waste Management Pla	an (WMP)			N/A N/	O Yes Rd	Obs N/C	Photos / Remarks
1		ation of different waste		ecyclable m	aterials		/		
2	Good mainten	ance of waste storage	areas				1		
3		on of inert C&D waste							
4 5		vered in enclosed con e haulers to collect an		to liconco	d disposal site				
5	through trip tic		u transport wastes	s to license	u uisposai site				
6	-	of inert C&D waste as I	backfill materials of	on site					
No.	Part IV	Nun Yiu Ecologically Ir	nportant Stream ()	WYEIS)		N/A N/	O Yes∕ Rdi	Obs N/C	Photos / Remarks
1		area to existing roads			surface				
	in the Wun Yiu	EIS						/	1
2		ological and water qua	•	l EIS			$\Box_{I}$	$\nabla$	0651
3 4		activity within the water work shall be carried ou		pring and w	at accord				
5		tools may be used inside		pring and w	etseasons				
6		om and water flow of W		rved and					
-		k on riverbed shall be					/		
7	No dredging, r	iver training or river div	version works wer	e observed	1				
No.	Part V-I	Water Quality and Drain	nage			N/A N/	O Yes, Rdr	Obs N/C	Photos / Remarks
1		stem adequate?							
2		stem well maintained? stem adequately desig	ned for starm flau	.0					
3 4	• •	s to surround areas of			on?				
5	5-51 C.2.	neter channels at site I							
	runoff from out	side the site so that it	will not wash acro	ss the site?	?	/		]	
6		control measures inspe			y storms?				
7	Are there temp watercourse?	orary ditches for runot	f discharge into a	ppropriate		$\bigtriangledown$			
8		orary ditches with silt	retention and rem	oval faciliti	es?				
9a	3262 Constraint Constraint Constraint Constraints	drainage channels ha		ation basin?					
9b			traps and						
10		ohitated from entering					$\Box / \Box$		Rdr 1
11		from tunnels or surfaction traps/tanks?	ce runom collected	i and disch	arged		ờ d		
12		nentation tanks for set	tling runoff prior to	o disposal?					
13a	Are the sedime		ucted of pre-formed						
13b			dequate capacity?			2/0			
13c	Are there are t		om silt and sedimer			Ø/D			
14 15		alisation tanks for con e diverted to and treat	-	-	iger				
16	-	e from neutralisation ta			imentation				
	tanks before di								
17	Are there oil in	terceptors in drainage					$\Box / \Box$		
18	Second Second Second Second Second Second	ase removed regularly				$\Box, \varphi$	$\overline{\mathbf{Q}}$		
19		pass for oil to prevent			avy rain?				
20	Are venicles al	nd plant cleaned of ear	in, muu anu uebr	is neiore					

	leaving the site?		
21 22a 22b 22c 22d	leaving the site? Is a wheel washing bay provided Is the wheel washing bay with:	adequate design? adequate settling & removal of sand/silt? paved access road leading to exit? access road sufficiently backfill toward wheel wash bay?	
23 24 25 26 27 28 29 30	Are open stockpiles covered du Are manholes covered and seal Are accessed roads protected b Are toilets connected to foul sew Are debris and rubbish on site c Is wastewater discharge licence	ered (by tarpaulin or other means)? ring heavy rain? ed? y crushed stones or gravels? /er or chemical toilets provided? ollected and disposed of properly?	
No. 1	Part V-II Air Quality Are vehicles in the site travelling	within speed limit of 10 km/b2	N/A N/O Yes Rdr Obs N/C Photos / Remarks
2	Are site vehicle movement confi		
3		e entrance kept clean and free from dust?	
4	Are areas of site with regular tra	ffic movement having hard surface?	
5	Are the haul roads watered regu		
6		ularly to avoid dust disturbance?	
7 8	Does the water spraying truck w	ork effectively? earth moving operation sprayed with	
0	water to maintain the entire surfa		
9		with water during transfer operation?	
10	Do the site vehicles use the whe	eel wash at the site exits?	
11	Does the wheel wash work effect		
12	Are hoarding not less than 2.4m public access?	tall provided beside roads or areas with	
13		ess than 1.8m tall provided in the public area noke emission?	
14	Is dark smoke emission avoided		
15	Are dusty materials properly cov		
16 17	Are the bags of cement (more the	an 20) covered entirely? pped at minimum practical height?	
18		ndboards, transfer points and hoppers	
10	enclosed?		/
19	-	stored in closed silos fitted with high level	
	alarm indicator?		_/
20 21	Are air vents on cements silos fi Are weighing hoppers vented to		
22		e main dust-generating activities?	
23	Are completed earthworks seale as practicable?	d and hydroseeded and planted as soon	cccqccc <u>Rdr2</u>
24	Is open burning avoided?	tabled off while pat in use?	
25 26	Are vehicles and equipment swi Are all trucks loaded to a level w		
27		mp trucks with mechanical cover?	
28	Do the truck covers work effective		
29	Is ULSD used in the construction	n activities?	
30		☑ Wind erosion	Vehicle/equipment movements
	L	Loading/unloading of materials	Others
No.	Part V-III Construction Nois	e Impact	N/A N/O Yes, Rdr Obs N/C Photos / Remarks
1a	Are the construction works schedul	ed to minimize airborne noise nuisance?	
1b		groundborne noise nuisance?	
2a	Are the works or equipment sited to	o minimize airbrone noise nuisance?	
2b 3	Are all plant and equipment well	groundborne noise nuisance? maintained and in good operating condition?	
4	Are idling equipment throttled do		
5		nent covered or shielded by appropriate	
	acoustic materials?		1
6	Are silenced equipment used wi		
7	Are noise enclosure, noise barri	er, or portable noise barrier used	
	where necessary?		
8	where necessary? Do hand-held breakers (larger ti	nan or equal to 10kg) have valid noise labels?	
8 9	Do hand-held breakers (larger the	nan or equal to 10kg) have valid noise labels? I Equipments (QPME) have valid noise labels?	
	Do hand-held breakers (larger the	Equipments (QPME) have valid noise labels?	
9 10 11	Do hand-held breakers (larger the Do Quality Powered Mechanical Do air compressors have valid re Do compressors operate with do the dot operate with the dot	I Equipments (QPME) have valid noise labels? noise labels? pors closed?	
9 10	Do hand-held breakers (larger the Do Quality Powered Mechanical Do air compressors have valid re Do compressors operate with do Are Construction Noise Permits	I Equipments (QPME) have valid noise labels? noise labels? pors closed?	

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

Part VI Follow-up for the Pervious Site Audit

obs 1 = Water quality monitoring ended. Rdr 1 = contractor shall maintain good house leeping. Rdr 2 = contractor shall plant and reinstatement as soon as possible.

Part VIII Signatures

Part VII

Remarks

IEC's Representative (Name: Holton TAM) (Date: 28/11/2022

Engineer's Representative

(Name: Felix CHAN (Date: 28/11/2022

Contractor's Representative

(Name: Grie Curulo (Date: 28/11/22)

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

	Ref. No. Project	Provision of Trunk Sewers to 3 villages:	IEC	Ove Arup & Partners Hong k	Kong Ltd.
		<u>Ta Tit Yan, Yuen Tun Ha &amp; Lo Lau Uk</u> in Tai Po	Contractor		
	Contract No.				
	Inspected By	IEC's Rep. : Hilton Tam Contractor's Rep. :	Engineer Inspection Date	30-12-20	22
		Project Manager / Supervisor:	Time Period		20
	Part I	Weather			
		🗹 Sunny 🔲 Fine 🗌 Overcast 🔲 Storm	🛄 Rain	Drizzle Hazy	
		☐ High		Temperature	13 °C
				remperature	
No. 1		Nater Quality and Ecological Monitoring Plan (WQE t removal facilities	MP)	N/A N/O Yes Rdr Obs N/C	Photos / Remarks
2		siltation occurs to the gathering ground			
3	Provision of sil	t traps at drainage			
4		xcavated or filled surfaces for erosion control			
5 6		ng of waterwork roads and associated drainage we waterworks installations	orks		
7	-	with depth >2m within 120 m from the centreline o	f		
	WSD water tur	nels except with WSD prior approval			
8	No obstruction	of waterworks access roads			
No.	Part III \	Vaste Management Plan (WMP)		N/A N/O Yes Rdr Obs N/C	Photos / Remarks
1		ation of different wastes and reusable/recyclable m	aterials		i noto i ritoriante
2 3		ance of waste storage areas			·
3		on of inert C&D waste on site vered in enclosed containers			
5		a haulers to collect and transport wastes to license	d disposal site		<u> </u>
	through trip ticl				
6	Proper reuse c	f inert C&D waste as backfill materials on site			
No.	Part IV V	Vun Yiu Ecologically Important Stream (WYEIS)		N/A N/O Yes /Rdr Obs N/C	Photos / Remarks
1		area to existing roads or on the exposed dry rock	surface		
2	in the Wun Yiu	EIS plogical and water quality in the Wun Yiu EIS			01. 1
3		activity within the water body of WYEIS			
4		work shall be carried out inside WYEIS in spring and w	et seasons		······································
5 6		ools may be used inside WYEIS			
0		om and water flow of WYEIS shall be preserved and < on riverbed shall be allowed			
7		ver training or river diversion works were observed	I		
No.	Part V-I V	Vater Quality and Drainage	· · · · · ·		
1		tem adequate?		N/A N/O Yes Rdr Obs N/C	Photos / Remarks
2	• •	tem well maintained?			
3		tem adequately designed for storm flow?	_		
4 5		s to surround areas of earthworks for flood protecti leter channels at site boundaries to intercept storm			<u> </u>
Ū		side the site so that it will not wash across the site?			
6		ontrol measures inspected & maintained after rain	/ storms?		
7	Are there temp watercourse?	orary ditches for runoff discharge into appropriate			
8		orary ditches with silt retention and removal faciliti	es?		
9a		drainage channels have: sedimentation basin?			
9b 10	lo oite	traps and baffles?			
11		phitated from entering the river channel? from tunnels or surface runoff collected and discha	arged		Rdv I
	via sedimentati	on traps/tanks?	0		<u> </u>
12		nentation tanks for settling runoff prior to disposal?			
13a 13b	Are the sedime	ntation tanks: constructed of pre-formed individual c with adequate capacity?	ells?		
13c		free from silt and sediment?			
14		alisation tanks for concrete batching/mixing discha	rge?		
15 16	Is the discharge	e diverted to and treated in neutralisation tanks?	in a static -		
10	tanks before dis	e from neutralisation tanks routed to silt trap or sed sposal?	imentatión		
17		erceptors in drainage system?			
18		se removed regularly (at least weekly)?			
19 20		ass for oil to prevent flushing during periods of he	avy rain?		
20	Are venicles an	d plant cleaned of earth, mud and debris before			

.

.

A	R	U	Р
---	---	---	---

	leaving the site?	
21	Is a wheel washing bay provided at every site exit?	
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
	wheel wash bay?	
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29	Are debris and rubbish on site collected and disposed of properly?	
30	Is wastewater discharge licence available for inspection?	
No.	Part V-II Air Quality	N/A/N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2	Are site vehicle movement confined to designated haul roads?	
3	Is the public road around the site entrance kept clean and free from dust?	
4	Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	is working area of excavation or earth moving operation sprayed with	
	water to maintain the entire surface wet?	1
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
	public access?	1
13	Are incombustible screens not less than 1.8m tall provided in the public area	
	affected by exhaust fumes or smoke emission?	/
14	Is dark smoke emission avoided?	
15	Are dusty materials properly covered?	
16	Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
	enclosed?	/
19	Are bulk fine grained materials stored in closed silos fitted with high level	
	alarm indicator?	1
20	Are air vents on cements silos fitted with fabric filters?	
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	
	as practicable?	
24	Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28	Do the truck covers work effectively?	
29	Is ULSD used in the construction activities?	
30	Observable dust sources Wind erosion	Vehicle/equipment movements
	Loading/unloading of materials	Others
No.	Part V-III Construction Noise Impact	N/A N/O Yes, Rdr Obs N/C Photos / Remarks
1a	Are the construction works scheduled to minimize airborne noise nuisance?	
1b	groundborne noise nuisance?	
2a	Are the works or equipment sited to minimize airbrone noise nuisance?	
2b	groundborne noise nuisance?	
3	Are all plant and equipment well maintained and in good operating condition?	
4	Are idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate	
-	acoustic materials?	
6	Are silenced equipment used where practicable?	
7	Are noise enclosure, noise barrier, or portable noise barrier used	
-	where necessary?	/
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10	Do air compressors have valid noise labels?	
11	Do compressors operate with doors closed?	
12	Are Construction Noise Permits available for inspection?	
13	Major noise source(s)	Construction activities inside of site
	Construction activities outside of site	Others

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

Part VI Follow-up for the Pervious Site Audit

Part VII Remarks Obs 1: Water quality monitoring ended. Rdr 1: Contractor shall maintain good house keeping. Rdr 2: Contractor shall plant and reinstatement as soon as possible.

Part VIII Signatures

IEC's Representative

1/20 (Name: H7/10- TAM) (Date: 20/12/2022

#### Engineer's Representative

Felix CHAN (Name: (Date: 30/12/2022 Contractor's Representative (Name: CLIK CHANG (Date: 30/12/27 )

	Ref. No. Project	Provision of Trunk Sewers to 3 Ta Tit Yan, Yuen Tun Ha & Lo in Tai Po		IEC Contractor	Ove Arup	& Partners Hon	g Kong Ltd.
	Contract No.						
	Inspected By		Tam_	Engineer			
		Contractor's Rep. :	<u> </u>	Inspection Date		30-01-	-2023
		Project Manager / Supervisor:		Time Period		- 9320-	~ (2500
		Veather			_	_	
		Sunny 🗌 Fine 🗌 Overc ] Hjgh 🗌 Moderate 💟 Low	ast 🗌 Storm	🗌 Rain	Drizzle	🗌 Hazy	
	<u>-</u>	Calm Light Breez	e Strong		Temperatu	ıre	16 ∘c
<del></del>							
No. 1		Vater Quality and Ecological Mon removal facilities	itoring Plan (WQ	EMP)			
2		siltation occurs to the gathering	around				
3	-	traps at drainage	<b>3</b> ,				
4	Protection of e	cavated or filled surfaces for en	osion control				
5		ng of waterwork roads and assoc	ciated drainage v	vorks			
6 7	-	waterworks installations with depth >2m within 120 m fro	m the controline	of			
'		nels except with WSD prior appl		01			J
8		of waterworks access roads					]
	Part III V	aste Management Plan (WMP)			N/A N/O	Yes Roir Obs N	
No. 1		tion of different wastes and reus	able/recyclable	materials			I/C Photos / Remarks
2		nce of waste storage areas	abie/recyclable	naterials			
3		n of inert C&D waste on site					
4		vered in enclosed containers					]
5		haulers to collect and transport	wastes to licens	ed disposal site			
6	through trip tick Proper reuse o	i inert C&D waste as backfill mat	erials on site				
Ŭ		mont oub waste as backing ma					
No.		/un Yiu Ecologically Important S			N/A N/O Y	Yes Rdr Obs N	I/C Photos / Remarks
1		area to existing roads or on the e	exposed dry rock	surface			]
2	in the Wun Yiu Monitor the ecc	EIS logical and water quality in the V	Nun Viu EIS			/ -	obs 1
3		activity within the water body of WY					
4		vork shall be carried out inside WY		wet seasons			
5		ools may be used inside WYEIS					
6		m and water flow of WYEIS shall b	e preserved and			y	]
7		on riverbed shall be allowed ver training or river diversion wo	rks were observe	ed			7
		-				<b>v</b> u u u	J
No. 1		ater Quality and Drainage				Yes Rdr Obs N	
2	ls drainage sys	tem adequate?					
3		em adequately designed for sto	rm flow?				
4		to surround areas of earthwork		tion?			
5		eter channels at site boundaries					
e		ide the site so that it will not was					_
6 7		ontrol measures inspected & ma prary ditches for runoff discharge					
	watercourse?	stary anoneo for ranon alconarge					J
8	Are these temp	orary ditches with silt retention a	nd removal facili	ties?			]
9a	Do permanent	-	dimentation basin	?			
9b 10	la aita runoff na	tra bhitated from entering the river o	aps and baffles?				
11	•	from tunnels or surface runoff of		harged			
	via sedimentati						J
12	Are there sedin	entation tanks for settling runof	prior to disposal	?			]
13a	Are the sedime	ntation tanks: constructed of pre		cells?			
13b 13c		with adequate cap free from silt and	-		•/		
14	Are there neutr	alisation tanks for concrete batcl		arge?			]
15	is the discharge	diverted to and treated in neutr	alisation tanks?	-			
16		from neutralisation tanks route	d to silt trap or se	dimentation			
47	tanks before dis	•				<b>-</b> . <b>_</b> _	_
17 18		erceptors in drainage system? ise removed regularly (at least v	(eekiv)?				
19	-	ass for oil to prevent flushing du	••	eavy rain?	/ /		
20		d plant cleaned of earth, mud ar	• •	-			

ARU	P
-----	---

	leaving the site?	<b>-</b>
21	Is a wheel washing bay provided at every site exit?	
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
	wheel wash bay?	1
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29 30	Are debris and rubbish on site collected and disposed of properly? Is wastewater discharge licence available for inspection?	
50	is wastewater discharge neerice available for inoposition.	
No.	Part V-II Air Quality	N/A, N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2	Are site vehicle movement confined to designated haul roads?	
3	Is the public road around the site entrance kept clean and free from dust?	
4	Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with	
•	water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation? Do the site vehicles use the wheel wash at the site exits?	
10 11	Do the site venicles use the wheel wash at the site exits? Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
12	public access?	
13	Are incombustible screens not less than 1.8m tall provided in the public area	
•-	affected by exhaust fumes or smoke emission?	
14	Is dark smoke emission avoided?	
15	Are dusty materials properly covered?	
16	Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
	enclosed?	
19	Are bulk fine grained materials stored in closed silos fitted with high level	
	alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	
21 22	Are weighing hoppers vented to suitable filters? Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	e e e e e e e e e e e e e e e e e e e
20	as practicable?	
24	Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28	Do the truck covers work effectively?	
29	Is ULSD used in the construction activities?	
30	Observable dust sources Wind erosion	Vehicle/equipment movements
	Loading/unloading of materials	Others
No.	Part V-III Construction Noise Impact	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1a	Are the construction works scheduled to minimize airborne noise nuisance?	
1b	groundborne noise nuisance?	
2a	Are the works or equipment sited to minimize airbrone noise nuisance?	
2b	groundborne noise nuisance?	
3	Are all plant and equipment well maintained and in good operating condition?	
4	Are idling equipment throttled down or turned off?	
5	Are powered mechanical equipment covered or shielded by appropriate	
	acoustic materials?	
6	Are silenced equipment used where practicable?	
7	Are noise enclosure, noise barrier, or portable noise barrier used	
-	where necessary?	
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9 10	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10 11	Do air compressors have valid noise labels? Do compressors operate with doors closed?	
11 12	Are Construction Noise Permits available for inspection?	
13	Major noise source(s)	Construction activities inside of site
10		Others

Part VI Follow-up for the Pervious Site Audit

Part VII Remarks Obs 1: Water quality monitoring ended. Redr 1: Contractor Shall maintain good house keeping Redr 2: Contractor shall plant and reinstatement as soon as possible.

Part VIII Signatures

IEC's Representative

(Name: H7(ton TAM) (Date: 2)

Engineer's Representative

Felix CHAN (Name: (Date: 30/1/2023

Contractor's Representative

(Name: Chap Ka (Vai ) (Date: 30/0(/2023)

	Ref. No. Project Contract No. Inspected By	Provision of Trunk Sewers to 3 villages: Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk in Tai Po IEC's Rep. : Hilloh Tam Contractor's Rep. : Project Manager / Supervisor:	IEC Contractor Engineer Inspection Date Time Period	<u>Ove Arup &amp; Partners Hong</u> <u> 27 -02 - 2</u> 9:30 - 12	2023
	Condition	Veather Sunny Fine Qvercast Storm High Moderate QLow Calm Light Breeze Strong	🗌 Rain	Drizzle Hazy	<u>18</u> °c
No.	Part II	Vater Quality and Ecological Monitoring Plan (WQEM	(P)	N/A N/O Yes Rdr Obs N/	C Photos / Remarks
1		t removal facilities	,		
2		siltation occurs to the gathering ground			
3		t traps at drainage			]
4 5		cavated or filled surfaces for erosion control	de a		
6	2000 C	ng of waterwork roads and associated drainage wor waterworks installations	KS		
7		with depth >2m within 120 m from the centreline of			
		nels except with WSD prior approval			
8		of waterworks access roads			
No.	Part III V	Vaste Management Plan (WMP)			
1		ation of different wastes and reusable/recyclable ma	atoriale	N/A N/O Yes Rdr Obs N/	
2		ance of waste storage areas			
3		on of inert C&D waste on site			
4	Wastes are co	vered in enclosed containers			
5		e haulers to collect and transport wastes to licensed	disposal site		
6	through trip ticl				
6	Proper reuse d	f inert C&D waste as backfill materials on site			
No.	Part IV V	Vun Yiu Ecologically Important Stream (WYEIS)		N/A N/O Yeş Rdr Obs N/	C Photos / Remarks
1		area to existing roads or on the exposed dry rock si	urface		
	in the Wun Yiu			/	101
2 3		ological and water quality in the Wun Yiu EIS			
4		activity within the water body of WYEIS work shall be carried out inside WYEIS in spring and we	t 2000022		
5		ools may be used inside WYEIS	l seasons		
6		om and water flow of WYEIS shall be preserved and			
	no access trac	c on riverbed shall be allowed			
7	No dredging, ri	ver training or river diversion works were observed			
No.	Part V-I V	Vater Quality and Drainage		N/A N/O Yes Rdr Obs N/	C Photos / Remarks
1		tem adequate?			
2	Is drainage sys	tem well maintained?			
3		tem adequately designed for storm flow?			
4		s to surround areas of earthworks for flood protectic	n?		
5	A REAL CONTRACTOR DUTING	eter channels at site boundaries to intercept storm side the site so that it will not wash across the site?			
6		ontrol measures inspected & maintained after rainy	storms?		
7		prary ditches for runoff discharge into appropriate	otornio :		
	watercourse?	•		<u> </u>	
8		orary ditches with silt retention and removal facilitie	s?		
9a	Do permanent	drainage channels have: sedimentation basin?			
9b 10	le site runoff pr	traps and baffles? bhitated from entering the river channel?			
11		from tunnels or surface runoff collected and discha	raed		
	via sedimentati				
12	Are there sedin	nentation tanks for settling runoff prior to disposal?			
13a	Are the sedime	ntation tanks: constructed of pre-formed individual ce	lls?		
13b		with adequate capacity?			
13c 14	Are there neutr	free from silt and sediment? alisation tanks for concrete batching/mixing dischar	ne?		
15		e diverted to and treated in neutralisation tanks?	901		
16		from neutralisation tanks routed to silt trap or sedir	mentation		
	tanks before di		a a 1997 120 - 05		
17		erceptors in drainage system?			
18	N	ase removed regularly (at least weekly)?			
19		bass for oil to prevent flushing during periods of hea	vy rain?		
20	Are vehicles an	d plant cleaned of earth, mud and debris before			

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

	T	<b>x</b> 3	
Λ.	D		D
n	1		-
			-

21 22a	leaving the site? Is a wheel washing bay provided Is the wheel washing bay with:	d at every site exit? adequate design?	
22b 22c 22d		adequate settling & removal of sand/silt? paved access road leading to exit? access road sufficiently backfill toward	
224		wheel wash bay?	
23	Is exposed earth stabilized after		
24 25	Are exposed slope surfaces cov Are open stockpiles covered dur	rered (by tarpaulin or other means)? ring heavy rain?	
26	Are manholes covered and seal		
27	Are accessed roads protected b	<ul> <li>Description of the second secon</li></ul>	
28 29	Are toilets connected to foul sew	ollected and disposed of properly?	
30	Is wastewater discharge licence		
No.	Part V-II Air Quality		N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling		
2 3	Are site vehicle movement confi	e entrance kept clean and free from dust?	
4		iffic movement having hard surface?	
5	Are the haul roads watered regu	larly to avoid dust disturbance?	
6	· · · · · · · · · · · · · · · · · · ·	ularly to avoid dust disturbance?	
7	Does the water spraying truck w		
8	water to maintain the entire surfa	earth moving operation sprayed with ace wet?	
9		with water during transfer operation?	
10	Do the site vehicles use the whe		
11	Does the wheel wash work effect	and the second	
12	Are noarding not less than 2.4m public access?	tall provided beside roads or areas with	
13	Are incombustible screens not le affected by exhaust fumes or sn	ess than 1.8m tall provided in the public area	
14	Is dark smoke emission avoided		
15	Are dusty materials properly cov		
16	Are the bags of cement (more th		
17	Are the excavated materials dro	pped at minimum practical height?	
	Are conveyor belts fitted with wi	ndboards, transfer points and hoppers	
18	Are conveyor belts fitted with win enclosed?	ndboards, transfer points and hoppers	
	enclosed?	ndboards, transfer points and hoppers stored in closed silos fitted with high level	
18 19 20	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi	stored in closed silos fitted with high level tted with fabric filters?	
18 19 20 21	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to	stored in closed silos fitted with high level tted with fabric filters? suitable filters?	
18 19 20	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale	stored in closed silos fitted with high level tted with fabric filters?	
18 19 20 21 22	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable?	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities?	
18 19 20 21 22 23 24 25	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi	stored in closed silos fitted with high level (tted with fabric filters? suitable filters? e main dust-generating activities? ed and hydroseeded and planted as soon tched off while not in use?	
18 19 20 21 22 23 24 25 26	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w	stored in closed silos fitted with high level (tted with fabric filters? suitable filters? e main dust-generating activities? ed and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards?	
18 19 20 21 22 23 24 25 26 27	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? ed and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover?	
18 19 20 21 22 23 24 25 26	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? ed and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely?	
18 19 20 21 22 23 24 25 26 27 28	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectiv Is ULSD used in the construction	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? ed and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely?	
<ol> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> <li>26</li> <li>27</li> <li>28</li> <li>29</li> </ol>	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effective Is ULSD used in the construction Observable dust sources	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? ed and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities?	
<ol> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> <li>26</li> <li>27</li> <li>28</li> <li>29</li> </ol>	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effective Is ULSD used in the construction Observable dust sources	stored in closed silos fitted with high level itted with fabric filters? suitable filters? e main dust-generating activities? ed and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? / Wind erosion _ Loading/unloading of materials	
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectin Is ULSD used in the construction Observable dust sources	stored in closed silos fitted with high level itted with fabric filters? suitable filters? e main dust-generating activities? e d and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? / Wind erosion _ Loading/unloading of materials e Impact ed to minimize airborne noise nuisance?	Image: Constraint of the second state of the second sta
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effecti Is ULSD used in the construction Observable dust sources	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? e d and hydroseeded and planted as soon tched off while not in use? within the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion Loading/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance?	N/A N/O Yes       Rdr Obs       N/C       Photos / Remarks
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effecti Is ULSD used in the construction Observable dust sources	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? e d and hydroseeded and planted as soon tched off while not in use? within the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion Loading/unloading of materials e Impact ed to minimize airborne noise nuisance? p minimize airborne noise nuisance?	N/A       N/O       Yes       Rdr Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rdr Obs       N/C       Photos / Remarks         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks sealer as practicable? Is open burning avoided? Are vehicles and equipment swith Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effective Is ULSD used in the construction Observable dust sources Part V-III Construction Nois Are the construction works schedul	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? e d and hydroseeded and planted as soon tched off while not in use? within the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion Loading/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance?	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I       I       I         I
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks sealer as practicable? Is open burning avoided? Are vehicles and equipment swith Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effective Is ULSD used in the construction Observable dust sources Part V-III Construction Nois Are the construction works schedul	stored in closed silos fitted with high level itted with fabric filters? suitable filters? a main dust-generating activities? ad and hydroseeded and planted as soon tched off while not in use? within the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion coading/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition?	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         I       I       I       I       I       I       I       I         I       I       I       I       I       I       I       I       I         I <t< th=""></t<>
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3	enclosed? Are bulk fine grained materials a alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectiv Is ULSD used in the construction Observable dust sources <b>Part V-III</b> Construction Nois Are the construction works schedul Are the works or equipment sited to Are all plant and equipment well Are idling equipment throttled do	stored in closed silos fitted with high level itted with fabric filters? suitable filters? a main dust-generating activities? ad and hydroseeded and planted as soon tched off while not in use? within the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion coading/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition?	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectin Is ULSD used in the construction Observable dust sources <b>Part V-III</b> Construction Nois Are the construction works schedul Are the works or equipment sited to Are all plant and equipment well Are journed mechanical equipment used wh acoustic materials? Are silenced equipment used wh	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? e da and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? // Wind erosion Leading/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance? o minimize airborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition? own or turned off? ment covered or shielded by appropriate here practicable?	N/A       N/O       Yes       Rd       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rd       Obs       N/C       Photos / Remarks         Image: State of the sta
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effecting Is ULSD used in the construction Observable dust sources Part V-III Construction Nois Are the construction works schedul Are the works or equipment sited to Are all plant and equipment well Are silenced equipment used wh Are noise enclosure, noise barri	stored in closed silos fitted with high level itted with fabric filters? suitable filters? e main dust-generating activities? e d and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? // Wind erosion coundborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition? own or turned off? ment covered or shielded by appropriate	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I         I       I       I       I       I       I       I       I         I
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effecting Is ULSD used in the construction Observable dust sources Part V-III Construction Nois Are the construction works schedul Are the works or equipment sited to Are all plant and equipment well Are all plant and equipment well Are owered mechanical equipment acoustic materials? Are silenced equipment used wh Are noise enclosure, noise barri where necessary?	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? e da and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? // Wind erosion Leading/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance? o minimize airborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition? own or turned off? ment covered or shielded by appropriate here practicable?	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         Image: State Stat
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6 7	enclosed? Are bulk fine grained materials a alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectiv Is ULSD used in the construction Observable dust sources <b>Part V-III</b> Construction Nois Are the construction works schedul Are the works or equipment sited to Are all plant and equipment well Are all guipment throttled do Are powered mechanical equipment acoustic materials? Are silenced equipment used wh Are noise enclosure, noise barri where necessary? Do hand-held breakers (larger th	stored in closed silos fitted with high level tted with fabric filters? suitable filters? e main dust-generating activities? e da and hydroseeded and planted as soon tched off while not in use? within the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion coding/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance? minimize airborne noise nuisance? groundborne noise nuisance? minimize airborne noise nuisance? groundborne noise nuisance? minimize airborne noise nuisance? minimize airborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? minimize airborne noise nuisance? minimize airborne noise nuisance? groundborne noise nuisance? minimize airborne noise nuisance? groundborne noise nuisance? minimize airborne noise nuisance? groundborne noise nuisanc	N/A       N/O       Yes       Rd       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rd       Obs       N/C       Photos / Remarks         Image: State of the sta
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8 9 10	enclosed? Are bulk fine grained materials a alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectiv Is ULSD used in the construction Observable dust sources <b>Part V-III</b> Construction Nois Are the works or equipment sited to Are all plant and equipment well Are idling equipment throttled do Are powered mechanical equipm acoustic materials? Are silenced equipment used wh Are noise enclosure, noise barri where necessary? Do hand-held breakers (larger th Do quality Powered Mechanical Do air compressors have valid r	stored in closed silos fitted with high level itted with fabric filters? suitable filters? a main dust-generating activities? ad and hydroseeded and planted as soon tched off while not in use? within the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion coading/unloading of materials e Impact ed to minimize airborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition? own or turned off? ment covered or shielded by appropriate here practicable? er, or portable noise barrier used han or equal to 10kg) have valid noise labels? I Equipments (QPME) have valid noise labels?	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         Others       Others       Others       Others       Others       Others
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8 9 10 11	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectin Is ULSD used in the construction Observable dust sources <b>Part V-III</b> Construction Nois Are the works or equipment sited to Are all plant and equipment well Are noise enclosure, noise barri where necessary? Do hand-held breakers (larger th Do compressors operate with do	stored in closed silos fitted with high level itted with fabric filters? suitable filters? a main dust-generating activities? ad and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion cading/unloading of materials e <b>Impact</b> ed to minimize airborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition? own or turned off? ment covered or shielded by appropriate here practicable? er, or portable noise barrier used han or equal to 10kg) have valid noise labels? hoise labels? pors closed?	N/A N/O Yes       Rdr Obs       N/C       Photos / Remarks         Others       Image: Constraint of the second
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8 9 10 11 12 12 12 12 12 12 12 12 12	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks seale as practicable? Is open burning avoided? Are vehicles and equipment swi Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effectin Is ULSD used in the construction Observable dust sources <b>Part V-III</b> Construction Nois Are the works or equipment sited to Are all plant and equipment well Are noise enclosure, noise barri where necessary? Do hand-held breakers (larger th Do compressors have valid r Do compressors have valid r	stored in closed silos fitted with high level itted with fabric filters? suitable filters? a main dust-generating activities? ad and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion cading/unloading of materials e <b>Impact</b> ed to minimize airborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition? own or turned off? ment covered or shielded by appropriate here practicable? er, or portable noise barrier used han or equal to 10kg) have valid noise labels? hoise labels? pors closed? available for inspection?	N/A N/O Yes       Rdr Obs       N/C       Photos / Remarks         Others       Image: State of the state o
18 19 20 21 22 23 24 25 26 27 28 29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8 9 10 11	enclosed? Are bulk fine grained materials s alarm indicator? Are air vents on cements silos fi Are weighing hoppers vented to Are there enclosures around the Are completed earthworks sealed as practicable? Is open burning avoided? Are vehicles and equipment swith Are all trucks loaded to a level w Are materials transported by dur Do the truck covers work effecting Is ULSD used in the construction Observable dust sources <b>Part V-III</b> Construction Nois Are the construction works schedul Are the works or equipment sited to Are all plant and equipment well Are idling equipment throttled do Are noise enclosure, noise barri where necessary? Do hand-held breakers (larger th Do Quality Powered Mechanical Do air compressors have valid of Are Construction Noise Permits Major noise source(s)	stored in closed silos fitted with high level itted with fabric filters? suitable filters? a main dust-generating activities? ad and hydroseeded and planted as soon tched off while not in use? vithin the side and tail boards? mp trucks with mechanical cover? vely? n activities? wind erosion cading/unloading of materials e <b>Impact</b> ed to minimize airborne noise nuisance? groundborne noise nuisance? groundborne noise nuisance? maintained and in good operating condition? own or turned off? ment covered or shielded by appropriate here practicable? er, or portable noise barrier used han or equal to 10kg) have valid noise labels? hoise labels? pors closed?	N/A N/O Yes       Rdr Obs       N/C       Photos / Remarks         Others       Image: Constraint of the second

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

Part VI Follow-up for the Pervious Site Audit

obs 1 = Water quality monitoring ended.

Rdr 1 : Contractor shall maintain good house keeping.

Rdr 2 : contractor shall plantand reinstatement as soon as possible.

Part VIII Signatures

Notes

Part VII

Remarks

IEC's Representative

(Name: H7/ton TAM ) (Date: 77/101 27/1/2023

Engineer's Representative

Felix CHAN (Name: ) (Date: 27/2/2023

Contractor's Bepresentative In

(Name: Mark Chan Ka Wai ) (Date: 27/2/2023 )

N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

	Ref. No. Project	Provision of Trunk Sewers to 3 villages: Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk in Tai Po	IEC Contractor	Ove Arup & Partners Hong K	ong Ltd.
	Contract No.	* /			
	Inspected By	IEC's Rep. : Hitton Tam Contractor's Rep. :	Engineer Inspection Date	27-03-000	2
		Project Manager / Supervisor:	Time Period	9:20 10 12:0	5
				1-20-10-10-1	
-	Part I	Neather			
		Sunny 🗌 Fine 🔽 Overcast 🗌 Storm	Rain	Drizzle Hazy	
		flighModerateLow CalmLightBreezeStrong		Temperature	19°C
No. 1		Vater Quality and Ecological Monitoring Plan (W t removal facilities	(QEMP)	N/A N/O Yes Rdr Obs N/C	Photos / Remarks
2		siltation occurs to the gathering ground			
3		t traps at drainage			
4 5		xcavated or filled surfaces for erosion control ng of waterwork roads and associated drainage	works		
6		waterworks installations			
7		with depth >2m within 120 m from the centrelin	e of		
8		nnels except with WSD prior approval of waterworks access roads			
0		of waterworks access roads			
No.		Vaste Management Plan (WMP)		N/A N/O Yes Rdr Obs N/C	Photos / Remarks
1		ation of different wastes and reusable/recyclabl	e materials		
2 3		ance of waste storage areas on of inert C&D waste on site			
4	Wastes are co	vered in enclosed containers			
5		e haulers to collect and transport wastes to lice	nsed disposal site		
6	through trip tick Proper reuse of	f inert C&D waste as backfill materials on site			
	Tropor Todoo e				
No.		Vun Yiu Ecologically Important Stream (WYEIS)		N/A N/O Yes Rdr Obs N/C	Photos / Remarks
1	in the Wun Yiu	area to existing roads or on the exposed dry ro EIS	ck surrace		
2		blogical and water quality in the Wun Yiu EIS			obs 1
3		activity within the water body of WYEIS			
4 5		work shall be carried out inside WYEIS in spring ar ools may be used inside WYEIS	d wet seasons		
6		om and water flow of WYEIS shall be preserved and	t		
7		k on riverbed shall be allowed		/	
7	No dredging, ri	ver training or river diversion works were obse	rved		
No.		Vater Quality and Drainage		N/A N/O Yes Rdr Obs N/C	Photos / Remarks
1 2		tem adequate?			
2		tem well maintained? tem adequately designed for storm flow?			
4		s to surround areas of earthworks for flood pro	ection?		
5		neter channels at site boundaries to intercept st			
6		side the site so that it will not wash across the s control measures inspected & maintained after			
7		orary ditches for runoff discharge into appropri-			
0	watercourse?		-11111 0	/	
8 9a		orary ditches with silt retention and removal fa drainage channels have: sedimentation bas			
9b		traps and baffles?			
10		ohitated from entering the river channel?			Rdr 1
11		from tunnels or surface runoff collected and di on traps/tanks?	scharged		
12		nentation tanks for settling runoff prior to dispos	sal?		
13a	Are the sedime	ntation tanks: constructed of pre-formed individ	ual cells?		
13b 13c		with adequate capacity? free from silt and sediment?			
14	Are there neut	alisation tanks for concrete batching/mixing dis	charge?		
15	-	e diverted to and treated in neutralisation tanks			
16	Is the discharg tanks before di	e from neutralisation tanks routed to silt trap or sposal?	sedimentation		
17		erceptors in drainage system?			
18	Are oil and gre	ase removed regularly (at least weekly)?			
19		pass for oil to prevent flushing during periods o			
20	Are venicles ar	nd plant cleaned of earth, mud and debris befor	e		

<ul><li>22b</li><li>22c</li><li>22d</li><li>23 Is exposed earth stabilized after compared to the st</li></ul>	adequate design? adequate settling & removal of sand/silt? paved access road leading to exit? access road sufficiently backfill toward wheel wash bay? completion of earthworks? ered (by tarpaulin or other means)? ng heavy rain? d? crushed stones or gravels? er or chemical toilets provided? llected and disposed of properly?	
<ul> <li>Are areas of site with regular traff</li> <li>Are the haul roads watered regula</li> <li>Are unpaved areas watered regula</li> <li>Does the water spraying truck wo</li> <li>Is working area of excavation or water to maintain the entire surface</li> <li>Are the dusty materials sprayed with the dusty materials consistent and the stark smoke emission avoided?</li> <li>Are the bags of cement (more tha Are the bags of cement sprayed with wind enclosed?</li> <li>Are bulk fine grained materials stralarm indicator?</li> <li>Are air vents on cements silos fitt Are weighing hoppers vented to sprayed are the enclosures around the final strained materials around the final strained materials around the s</li></ul>	ed to designated haul roads? entrance kept clean and free from dust? fic movement having hard surface? arly to avoid dust disturbance? larly to avoid dust disturbance? with effectively? earth moving operation sprayed with ce wet? with water during transfer operation? el wash at the site exits? ively? all provided beside roads or areas with es than 1.8m tall provided in the public area oke emission? ered? an 20) covered entirely? ped at minimum practical height? dboards, transfer points and hoppers ored in closed silos fitted with high level ed with fabric filters? suitable filters?	N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         V       0       0       0       0       0       0       0         V       0       0       0       0       0       0       0       0         V       0
<ul> <li>Are vehicles and equipment switc</li> <li>Are all trucks loaded to a level witien</li> <li>Are materials transported by dum</li> <li>Do the truck covers work effective</li> <li>Is ULSD used in the construction</li> <li>Observable dust sources</li> </ul>	thin the side and tail boards? ip trucks with mechanical cover? ely?	Image: Constraint of the second se
No. Part V-III Construction Noise		N/A N/O Yes, Rdr Obs N/C Photos / Remarks
<ul> <li>1b</li> <li>2a Are the works or equipment sited to 1</li> <li>2b</li> <li>3 Are all plant and equipment well r</li> <li>4 Are idling equipment throttled dow</li> <li>5 Are powered mechanical equipment acoustic materials?</li> <li>6 Are silenced equipment used whe</li> <li>7 Are noise enclosure, noise barrier where necessary?</li> <li>8 Do hand-held breakers (larger that</li> </ul>	groundborne noise nuisance? maintained and in good operating condition? wn or turned off? ent covered or shielded by appropriate ere practicable? r, or portable noise barrier used an or equal to 10kg) have valid noise labels? Equipments (QPME) have valid noise labels? bise labels?	
	Vailable for inspection? Traffic Construction activities outside of site -	Construction activities inside of site

Part VI Follow-up for the Pervious Site Audit

Part VII

Remarks

obs 1 = water quality monitoring ended. Rdr 1 = contractor shall maintain good house keeping. Rdr 2 = contractor shall plantand reinstatement as Soon as possible.

Part VIII Signatures IEC's Representative Engineer's Representative (Name: Hilton Then) (Date: 27 Mar 223 Felix CHAN (Name: (Date: 27/3/2023 Contractor's Representative GULE Cum G ) ) (Name: (Date: 13123

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

Page 3 of 3

	Ref. No.			
	Project Provision of Trunk Sewers to 3 villages: Ta Tit Yan, Yuen Tun Ha & Lo Lau Uk	IEC	Ove Arup & Partners Hong	Kong Ltd.
	in Tai Po	Contractor		· · · · · · · · · · · · · · · · · · ·
	Contract No.	<b>.</b>		
	Inspected By IEC's Rep. : Hon Tam Contractor's Rep. :	Engineer Inspection Date	24-04-2	122
	Project Manager / Supervisor:	Time Period	9:20 ~ 10	2:00
	Part I Weather		···· ,	
	Condition Sunny Fine Vovercast Storm Humidity High Maderate Low	Rain	Drizzle Hazy	
	Wind Catm Light Breeze Strong		Temperature	<u>04</u> °c
No.	Part II Water Quality and Ecological Monitoring Plan (WQ	EMP)	N/A N/O ,Yes Rdr Obs N/	C Photos / Remarks
1	Provision of silt removal facilities			
2 3	No pollution or siltation occurs to the gathering ground Provision of silt traps at drainage			
4	Protection of excavated or filled surfaces for erosion control			
5	Regular cleaning of waterwork roads and associated drainage w	vorks		
6 <sup>-</sup> 7	Damage of the waterworks installations No excavation with depth >2m within 120 m from the centreline	of		
,	WSD water tunnels except with WSD prior approval	01		<u> </u>
8	No obstruction of waterworks access roads			
No.	Part III Waste Management Plan (WMP)		N/A N/O Yes Rdr Obs N/	C Photos / Remarks
1	Proper segregation of different wastes and reusable/recyclable	materials		
2 3	Good maintenance of waste storage areas No accumulation of inert C&D waste on site			
4	Wastes are covered in enclosed containers			
5	Licensed waste haulers to collect and transport wastes to licens	ed disposal site		
6	through trip ticket system Proper reuse of inert C&D waste as backfill materials on site			
	-			
No. 1	Part IV Wun Yiu Ecologically Important Stream (WYEIS) Confine works area to existing roads or on the exposed dry rock	surface	N/A N/O Yes Rdr Obs N/	
	in the Wun Yiu EIS			
2 3	Monitor the ecological and water quality in the Wun Yiu EIS No construction activity within the water body of WYEIS			ODS1
4	No construction work shall be carried out inside WYEIS in spring and	wet seasons		<u> </u>
5	Only hand-held tools may be used inside WYEIS			
6	The natural bottom and water flow of WYEIS shall be preserved and no access track on riverbed shall be allowed			·
7	No dredging, river training or river diversion works were observe	ed		·
No.	Part V-I Water Quality and Drainage		N/A N/O Yes Rdr Obs N/	C Photos / Remarks
1	Is drainage system adequate?			
2 3	Is drainage system well maintained?			
4	Is drainage system adequately designed for storm flow? Are there dykes to surround areas of earthworks for flood protect	ction?		
5	Are there perimeter channels at site boundaries to intercept stor			
6	runoff from outside the site so that it will not wash across the site Are sediment control measures inspected & maintained after rai			
7	Are there temporary ditches for runoff discharge into appropriate			
•	watercourse?			
8 9a	Are these temporary ditches with silt retention and removal facil Do permanent drainage channels have: sedimentation basin			
9b	traps and baffles?	-		
10 11	Is site runoff prohitated from entering the river channel? Is groundwater from tunnels or surface runoff collected and disc	borned		
	via sedimentation traps/tanks?	alargeo		
12	Are there sedimentation tanks for settling runoff prior to disposa			<u></u>
13a 13b	Are the sedimentation tanks: constructed of pre-formed individual with adequate capacity?	cells?		
13c	free from silt and sediment?			
14 15	Are there neutralisation tanks for concrete batching/mixing disch	harge?		
15 16	Is the discharge diverted to and treated in neutralisation tanks? Is the discharge from neutralisation tanks routed to silt trap or se	dimentation		
	tanks before disposal?			
17 18	Are there oil interceptors in drainage system? Are oil and grease removed regularly (at least weekly)?			<u> </u>
19	Is there any bypass for oil to prevent flushing during periods of h	eavy rain?		
20	Are vehicles and plant cleaned of earth, mud and debris before	-		

## ARUP

## Contract No SPW 09/2019 Independent Environmental Checker for Provision of Trunk Sewers to 3 Villages: Ta Tit Yan, Yuen Tun Ha Lo Lau Uk in Tai Po Environmental Site Inspection Checklist

	leaving the site?	
24	Is a wheel washing bay provided at every site exit?	
21		
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
	wheel wash bay?	— <u> </u>
23	Is exposed earth stabilized after completion of earthworks?	
	•	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29	Are debris and rubbish on site collected and disposed of properly?	
30	Is wastewater discharge licence available for inspection?	
No.	Part V-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
2	Are site vehicle movement confined to designated haul roads?	
3	Is the public road around the site entrance kept clean and free from dust?	
4	Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with	
	water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
	public access?	/
13	Are incombustible screens not less than 1.8m tall provided in the public area	
, -	affected by exhaust fumes or smoke emission?	+ C C C C C
4.4	•	
14	Is dark smoke emission avoided?	
15	Are dusty materials properly covered?	
16	Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
	enclosed?	/
19	Are bulk fine grained materials stored in closed silos fitted with high level	
10		
	alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
23	Are completed earthworks sealed and hydroseeded and planted as soon	COOPOO Rdr2
	as practicable?	
24	Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28	Do the truck covers work effectively?	
29	Is ULSD used in the construction activities?	
30	Observable dust sources 🛛 🕅 Wind erosion	Vehicle/equipment movements
	Loading/unloading of materials	Others
Ma	Part V-III Construction Noise Impact	N/A N/O Yes, Rdr Obs N/C Photos / Remarks
No.		
1a	Are the construction works scheduled to minimize airborne noise nuisance?	
. 1b	groundborne noise nuisance?	
2a	Are the works or equipment sited to minimize airbrone noise nuisance?	
2b	groundborne noise nuisance?	
3	Are all plant and equipment well maintained and in good operating condition?	
	Are idling equipment throttled down or turned off?	
4		
5	Are powered mechanical equipment covered or shielded by appropriate	
	acoustic materials?	
6	Are silenced equipment used where practicable?	
7	Are noise enclosure, noise barrier, or portable noise barrier used	
	where necessary?	
8	Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	
9	Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	
10	Do air compressors have valid noise labels?	
11	Do compressors operate with doors closed?	
· 12	Are Construction Noise Permits available for inspection?	
13	Major noise source(s)	Construction activities inside of site
	Construction activities outside of site	Others

Part VI Follow-up for the Pervious Site Audit

Part VII Remarks obs 1 : water quality monitoring ended. Rdr 1 = contractor shall maintain good house keeping. Rdr 2 : contractor shall plantand reinstatement as soon as possible.

IEC's Representative (Name: H7/fon 7AM) (Date: (6/5/2023)

Signatures

Part VIII

Engineer's Representative

Chen Felix CHAN 16/5/2023 (Name: (Date:

Contractor's Representative (Name: K. L. CHAN) (Date: 24-4-2023)

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

Page 3 of 3

	Ref. No. Project	Ta Tit Yan, Yu	runk Sewers to 3 villag en Tun Ha & Lo Lau L		IEC Contractor	Ove Ar	up & Partr	iers Hon	ig Kon	g Ltd.
	Contract No. Inspected By	IEC's Rep. : Contractor's R Project Manag	Hilton Tak ep.: jer/Supervisor:	4	Engineer Inspection Date Time Period	29	9-05	-20	23 m	
	Condition Humidity	High	Fine Overcast Moderate Low Light Breeze	Storm	🗌 Rain	Drizzle Temper	Hazy			?9_°c
No.	Part II W	Vater Quality and	d Ecological Monitoring	g Plan (WQE	EMP)	N/A N/C	) Yes Rd	r Obs M	N/C	Photos / Remarks
1 2	Provision of silt						and the second sec			
2	Provision of silt		to the gathering groun	a						
4	Protection of excavated or filled surfaces for erosion control									
5	Regular cleaning of waterwork roads and associated drainage works						, Ď Ō		5	
6 7	Damage of the waterworks installations No excavation with depth >2m within 120 m from the centreline of								] .	
'			WSD prior approval	centreline c	II.		$\Box / \Box$			
8	No obstruction									
No.	Part III W	Vaste Manageme	ent Plan (WMP)			N/A N/C	) Yes Rd	r Obs N	V/C	Photos / Remarks
1			wastes and reusable/	recyclable r	naterials	$\mathbf{M}_{,\mathbf{D}}$				r notos / rtemarks
2	Good maintena		0			VO	$\Box, \Box$		5 3	
3 4	No accumulatio Wastes are cov								] .	
5			ect and transport waste	es to license	ed disposal site				] .	
	through trip tick									
6	Proper reuse of	f inert C&D was	te as backfill materials	on site						
No.	Part IV W	/un Yiu Ecologie	cally Important Stream	(WYEIS)		N/A N/C	) Yes Rd	Obs N	1/C	Photos / Remarks
1			roads or on the expos	ed dry rock	surface	₽⁄ o			1.	
2	in the Wun Yiu		or quality in the Mun M					_/	_	obs 1
2			er quality in the Wun Y water body of WYEIS	IU EIS						005 1
4			ied out inside WYEIS in	spring and v	vet seasons					
5	Only hand-held to								3 3	
6	The natural botto no access track		of WYEIS shall be pres	erved and			$\nabla \Box$			
7			ver diversion works we	ere observe	d					
No.	Part V-I W	ater Quality and	1 Drainage			N/A N/C	) Yes Rd	Obs N	V/C	Photos / Remarks
1	ls drainage syst		Diamage							Photos / Remarks
2	Is drainage syst	tem well mainta	ined?							
3			designed for storm flo				Ø, D			
4 5			eas of earthworks for f t site boundaries to int							
0			hat it will not wash acr			$\Box \Box /$				
6			inspected & maintain		iy storms?					
7		orary ditches for	runoff discharge into	appropriate		$\nabla / \Box$				
8	watercourse? Are these temp	orarv ditches wi	th silt retention and rer	moval facilit	ies?				-	
9a	Do permanent o			tation basin?					] _ ] _	
9b				d baffles?		$\Box \Box$				
10 11	- 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20		tering the river channe			$\overline{Q'}$				
	via sedimentatio		surface runoff collecte	and discr	largeo	$\bigtriangledown$ $\Box$				
12			or settling runoff prior	to disposal'	?	g d				
13a	Are the sedimer		constructed of pre-forme		cells?					
13b 13c			with adequate capacity? free from silt and sedime						_	
14	Are there neutra		or concrete batching/m		arge?					
15			I treated in neutralisati			$\vec{\varphi}, \Box$				
16			tion tanks routed to sil	It trap or see	dimentation	ū∕ □				
17	tanks before dis	·				1				
17 18	Are there oil inte Are oil and grea		nage system? Jularly (at least weekly	)?						
19		ACCESS OF A DECEMBER OF A	event flushing during p		eavy rain?					
20		1977 N 12 VAV * 20	of earth, mud and deb		.=.				10	

Notes: N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance

	leaving the site?	/
21	Is a wheel washing bay provided at every site exit?	
22a	Is the wheel washing bay with: adequate design?	
22b	adequate settling & removal of sand/silt?	
22c	paved access road leading to exit?	
22d	access road sufficiently backfill toward	
224	wheel wash bay?	
00		
23	Is exposed earth stabilized after completion of earthworks?	
24	Are exposed slope surfaces covered (by tarpaulin or other means)?	
25	Are open stockpiles covered during heavy rain?	
26	Are manholes covered and sealed?	
27	Are accessed roads protected by crushed stones or gravels?	
28	Are toilets connected to foul sewer or chemical toilets provided?	
29	Are debris and rubbish on site collected and disposed of properly?	
30	Is wastewater discharge licence available for inspection?	
No.	Part V-II Air Quality	N/A N/O Yes Rdr Obs N/C Photos / Remarks
1	Are vehicles in the site travelling within speed limit of 10 km/h?	
	Are site vehicle movement confined to designated haul roads?	
2		
3	Is the public road around the site entrance kept clean and free from dust?	
4	Are areas of site with regular traffic movement having hard surface?	
5	Are the haul roads watered regularly to avoid dust disturbance?	
6	Are unpaved areas watered regularly to avoid dust disturbance?	
7	Does the water spraying truck work effectively?	
8	Is working area of excavation or earth moving operation sprayed with	
0		
	water to maintain the entire surface wet?	
9	Are the dusty materials sprayed with water during transfer operation?	
10	Do the site vehicles use the wheel wash at the site exits?	
11	Does the wheel wash work effectively?	
12	Are hoarding not less than 2.4m tall provided beside roads or areas with	
	public access?	
40		
13	Are incombustible screens not less than 1.8m tall provided in the public area	
	affected by exhaust fumes or smoke emission?	
14	Is dark smoke emission avoided?	
15	Are dusty materials properly covered?	
16	Are the bags of cement (more than 20) covered entirely?	
17	Are the excavated materials dropped at minimum practical height?	
		,
18	Are conveyor belts fitted with windboards, transfer points and hoppers	
	enclosed?	
19	Are bulk fine grained materials stored in closed silos fitted with high level	
	alarm indicator?	
20	Are air vents on cements silos fitted with fabric filters?	
21	Are weighing hoppers vented to suitable filters?	
22	Are there enclosures around the main dust-generating activities?	
	Are completed earthworks sealed and hydroseeded and planted as soon	/
23		
	as practicable?	_/
24	Is open burning avoided?	
25	Are vehicles and equipment switched off while not in use?	
26	Are all trucks loaded to a level within the side and tail boards?	
27	Are materials transported by dump trucks with mechanical cover?	
28		
	Do the truck covers work effectively?	
	Do the truck covers work effectively?	
29	Is ULSD used in the construction activities?	
	Is ULSD used in the construction activities? Observable dust sources 🛛 Wind erosion	Vehicle/equipment movements
29	Is ULSD used in the construction activities?	
29	Is ULSD used in the construction activities? Observable dust sources Loading/unloading of materials	Vehicle/equipment movements
29	Is ULSD used in the construction activities? Observable dust sources 🛛 Wind erosion	Vehicle/equipment movements
29 30	Is ULSD used in the construction activities? Observable dust sources Loading/unloading of materials	Vehicle/equipment movements         Vehicle/equipment movements         Vothers         N/A N/O Yes         Rdr Obs       N/C         Photos / Remarks
29 30 No. 1a	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Coading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance?	Vehicle/equipment movements         Vehicle/equipment movements         Vothers         N/A N/O Yes         Rdr Obs         V/A
29 30 No. 1a 1b	Is ULSD used in the construction activities? Observable dust sources Unind erosion Loading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance?	Image: Constraint of the constraint
29 30 No. 1a 1b 2a	Is ULSD used in the construction activities? Observable dust sources Unique rosion Loading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance?	M       I       I       I       I         M       I       I       I       I         Vehicle/equipment movements       M/A       M/A         Mothers       M/A       M/A         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         M/       I       I       I       I       I       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
29 30 No. 1a 1b 2a 2b	Is ULSD used in the construction activities? Observable dust sources Wind erosion Loading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? groundborne noise nuisance?	M       I       I       I       I         M       I       I       I       I         Vehicle/equipment movements       M/A       M/A         Vothers       IV/A       IV/A         N/A       N/O       Yes       Rdr       Obs       N/C       Photos / Remarks         V/I       I       I       I       I       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
29 30 No. 1a 1b 2a 2b 3	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Coading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition?	Image: Constraint of the second se
29 30 No. 1a 1b 2a 2b 3 4	Is ULSD used in the construction activities? Observable dust sources Unind erosion Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off?	Vehicle/equipment movements
29 30 No. 1a 1b 2a 2b 3	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Coading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition?	Image: Constraint of the constraint
29 30 No. 1a 1b 2a 2b 3 4	Is ULSD used in the construction activities? Observable dust sources Unind erosion Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off?	Vehicle/equipment movements       V//A         Vehicle/equipment movements       V//A         Vothers       V//A         N/A N/O Yes       Rdr Obs       N/C         Photos / Remarks       V//A         V/       0       0         V/       0       0       0         V       0       0       0         V       0       0       0 </th
29 30 1a 1b 2a 2b 3 4 5	Is ULSD used in the construction activities? Observable dust sources Unid erosion Coading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials?	Vehicle/equipment movements       V//A         Vehicle/equipment movements       V//A         Vothers       V//A         N/A N/O Yes       Rdr Obs       N/C         Photos / Remarks       //       Image: Comparison of the state of the s
29 30 No. 1a 1b 2a 2b 3 4 5 6	Is ULSD used in the construction activities? Observable dust sources Wind erosion Loading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airbrone noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are silenced equipment used where practicable?	Vehicle/equipment movements       V//A         Vehicle/equipment movements       V//A         Vothers       V//A         N/A N/O Yes       Rdr Obs       N/C         V/       O       O       O         V/       O
29 30 1a 1b 2a 2b 3 4 5	Is ULSD used in the construction activities? Observable dust sources Wind erosion Loading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are silenced equipment used where practicable? Are noise enclosure, noise barrier, or portable noise barrier used	Vehicle/equipment movements       V//A         Vehicle/equipment movements       V//A         Vothers       V//A         N/A N/O Yes       Rdr Obs       N/C         V/       C       C         V       C       C         V       C       C
29 30 No. 1a 1b 2a 2b 3 4 5 6 7	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Cadding/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are silenced equipment used where practicable? Are noise enclosure, noise barrier, or portable noise barrier used where necessary?	M
29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Codeding/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airbrone noise nuisance? Are the works or equipment sited to minimize airbrone noise nuisance? Are the works or equipment well maintained and in good operating condition? Are all plant and equipment well maintained and in good operating condition? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are noise enclosure, noise barrier, or portable noise barrier used where necessary? Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	Vehicle/equipment movements       V//A         Vehicle/equipment movements       V//A         Vothers       V//A         N/A N/O Yes       Rdr Obs       N/C         Photos / Remarks       V//A         V/       0       0         V/       0       0       0
29 30 No. 1a 1b 2a 2b 3 4 5 6 7	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Cading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are noise enclosure, noise barrier, or portable noise barrier used where necessary? Do hand-held breakers (larger than or equal to 10kg) have valid noise labels? Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	Vehicle/equipment movements       V//A         Vehicle/equipment movements       V//A         Vothers       V//A         N/A N/O Yes       Rdr Obs       N/C         V/ 0       0       0       0         V/ 0       0       0       0   <
29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Codeding/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airbrone noise nuisance? Are the works or equipment sited to minimize airbrone noise nuisance? Are the works or equipment well maintained and in good operating condition? Are all plant and equipment well maintained and in good operating condition? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are noise enclosure, noise barrier, or portable noise barrier used where necessary? Do hand-held breakers (larger than or equal to 10kg) have valid noise labels?	Vehicle/equipment movements       V//A         Vehicle/equipment movements       V//A         Vothers       V//A         N/A N/O Yes       Rdr Obs       N/C         Photos / Remarks       V//A         V/ 0       0       0         V/ 0       0
29 30 No. 1a 2b 3 4 5 6 7 8 9	Is ULSD used in the construction activities? Observable dust sources  Unind erosion Cading/unloading of materials Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are noise enclosure, noise barrier, or portable noise barrier used where necessary? Do hand-held breakers (larger than or equal to 10kg) have valid noise labels? Do Quality Powered Mechanical Equipments (QPME) have valid noise labels?	Vehicle/equipment movements       N/A         Vehicle/equipment movements       N/A         Vothers
29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8 9 10 11	Is ULSD used in the construction activities? Observable dust sources  Wind erosion Code dust sources Wind erosion Code dust sources Wind erosion Code dust sources Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are silenced equipment used where practicable? Are noise enclosure, noise barrier, or portable noise barrier used where necessary? Do hand-held breakers (larger than or equal to 10kg) have valid noise labels? Do Quality Powered Mechanical Equipments (QPME) have valid noise labels? Do compressors have valid noise labels? Do compressors operate with doors closed?	Vehicle/equipment movements       N/A         Vehicle/equipment movements       N/A         Vothers       N/C         Vothers
29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8 9 10 11 12	Is ULSD used in the construction activities? Observable dust sources  Wind erosion Code dust sources Wind erosion Code dust sources Wind erosion Code dust sources Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are silenced equipment used where practicable? Are noise enclosure, noise barrier, or portable noise barrier used where necessary? Do hand-held breakers (larger than or equal to 10kg) have valid noise labels? Do air compressors have valid noise labels? Do compressors operate with doors closed? Are Construction Noise Permits available for inspection?	Vehicle/equipment movements       N/A         Vehicle/equipment movements       N/A         Vothers       N/A         Vothers       N/A         Value       0         V       0
29 30 No. 1a 1b 2a 2b 3 4 5 6 7 8 9 10 11	Is ULSD used in the construction activities? Observable dust sources  Wind erosion Code dust sources Wind erosion Code dust sources Wind erosion Code dust sources Part V-III Construction Noise Impact Are the construction works scheduled to minimize airborne noise nuisance? groundborne noise nuisance? Are the works or equipment sited to minimize airborne noise nuisance? Are all plant and equipment well maintained and in good operating condition? Are idling equipment throttled down or turned off? Are powered mechanical equipment covered or shielded by appropriate acoustic materials? Are silenced equipment used where practicable? Are noise enclosure, noise barrier, or portable noise barrier used where necessary? Do hand-held breakers (larger than or equal to 10kg) have valid noise labels? Do Quality Powered Mechanical Equipments (QPME) have valid noise labels? Do compressors have valid noise labels? Do compressors operate with doors closed?	Vehicle/equipment movements       N/A         Vehicle/equipment movements       N/A         Vothers       N/C         Vothers

ARUP

Part VI Follow-up for the Pervious Site Audit

Obs 1: Water Quality monitoring ended. Obs 2: C&D wastes and Equipment were removed from site. No works to Further works will be Conducted under this contract

Part VIII Signatures

Notes

Part VII

Remarks

### IEC's Representative

1/m (Name: H7/How TAM) (Date: 29 May 2523)

Engineer's Representative

(Name: (Date: 2915/2023 Contractor's Representative BRIF CHARGE ) 27 MAT 23 ) (Name:

(Date:

Page 3 of 3

N/A - Not Applicable; N/O - Not Observed; Yes - Compliance; Rdr - Reminder; Obs - Observation; and N/C - Non Compliance