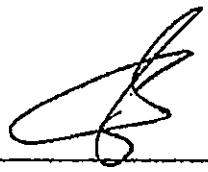
MTR Corporation Limited

West Island Line Project

Method Statement for capping slab removal for 714 site office area

Certified by: 

Position: Independent Environmental Checker

Date: 11 May 2015

MTR Corporation Limited

West Island Line Project

Method Statement for Removal of Additional Concrete Paving in Works Area B

Verified by: _____

Position: Independent Environmental Checker

Date: 11 MAY 2015

GAMMON CONSTRUCTION LIMITED

C705 KET Station and Overrun Tunnel

MTRC WIL Contract 705

J3295

Method Statement
for
capping slab removal for 714 site office area

Document No.: 3295-MS-0251 Effective Date : 8 May 2015

Rev. No. : E

Reviewed by : Reviewed by : Reviewed by :

_____ _____ _____

Production Manager Environmental Manager Safety Manager

Reviewed by : Approved by :

_____ _____

Engineering & Risk Manager Project Manager

0. REVISION STATUS SHEET

Rev. No.	Effective Date	Summary of Revision	Reviewed		Approved	
			By	Date	By	Date
A	28 Jan 2015	First Issue	HT		BG	
B	10 Mar 2015	Second Issue	ZH		DP	
C	22 Apr 2015	Third Issue	FM		DP	
D	30 Apr 2015	Fourth Issue	FM		DP	
E	8 May 2015	Fifth Issue	FM		DP	

*Note: All amendment and supplement are in Italic font

CONTENTS

1. INTRODUCTION

1.1 Background

An Environmental Impact Assessment (EIA) for the Demolition of Buildings and Structures in the Proposed Kennedy Town Comprehensive Development Area site (KTCDA) was submitted under the Environmental Impact Assessment Ordinance (EIAO) in September 2001 and an Environmental Permit (EP) issued in May 2002 (EP No: EP-136/2002). In response to the changes in work areas, a revised EP (EP No: EP-136/2002/B) was issued by Environmental Protection Department (EPD) in October 2007. The revised EP allows part of the KTCDA site (referred as "the Site") to be used as a works area for temporary site offices and materials storage for the West Island Line (WIL) project. The Site was originally Kennedy Town Incinerator Plant and Kennedy Town Abattoir sites.

The West Island Line (WIL) EIA includes the Site as a works area (referred as Works Area B in the EIA). In the EP of WIL (EP No.: EP-313/2008/J), Clause 3.3 lists the requirements for "Exit from, handing over, or ceasing temporary use of Works Area B". One of the requirements is the removal of the additional concrete paving and layer of general fill material.

With the removal of the additional concrete paving, a series of documents are required to be submitted to the EPD under EP Clause 3.3.2. The Sampling and Testing Proposal and the Sampling and Testing Report have been submitted and accepted by EPD. This document is the Method Statement for the removal of the additional concrete paving.

1.2 Scope of Work

This method statement describes the removal, temporary storage and treatment if necessary, and disposal of the additional concrete paving and general fill material in Works Area B for the WIL site office and storage area.

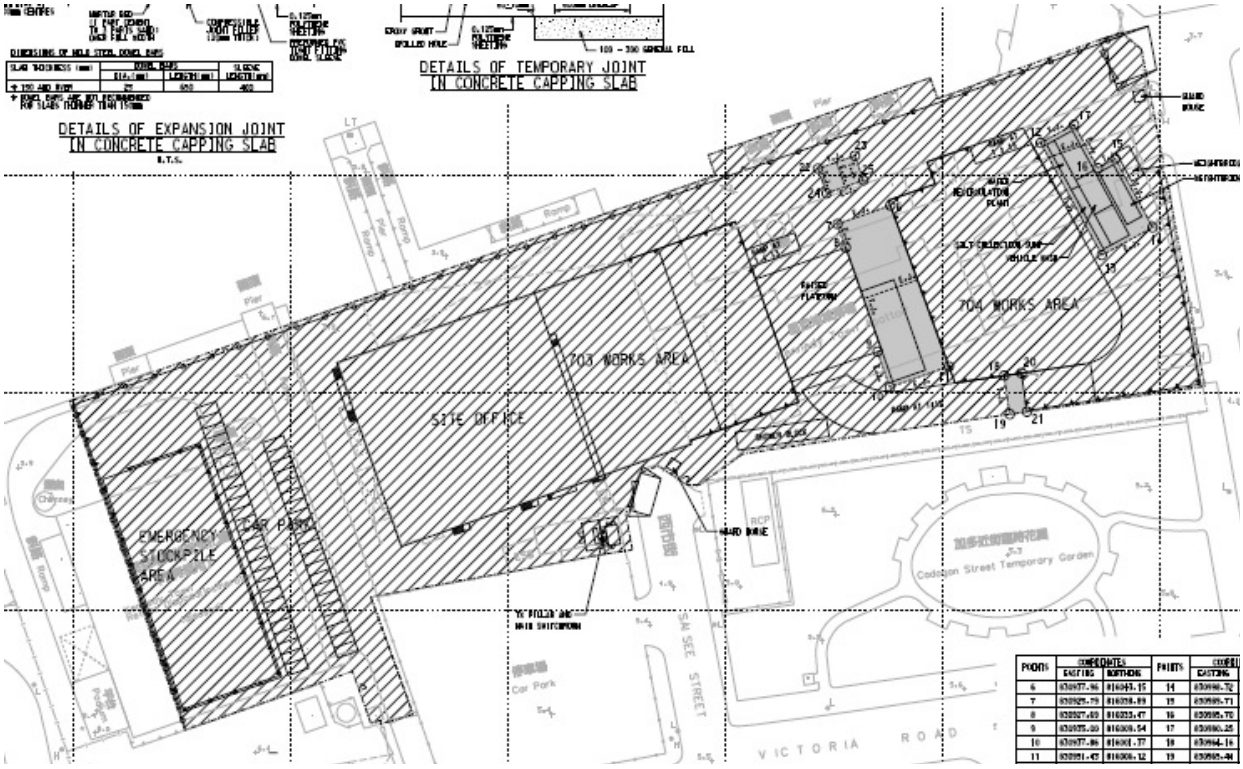


Figure 1.1 Site Office in Works Area B

Demolition of site office building as indicated in Figure 1.1 is not included in this method statement. The program of removal of whole site office and the additional concrete paving including the general fill material is attached in Appendix B. The program is for reference only and may subject to change.

It has been proven that the general fill material between the additional concrete paving and existing concrete paving is NOT contaminated. Please refer to Sampling and Testing Report for details.

2. WORK METHODOLOGY

2.1 Working Hours

The works will be carried out from 08:00 to 18:00, Monday to Saturday.

2.2 Preparation Works

1. Remove all loose material in all areas. Subcontractor site offices located in the *yellow and* blue area *as indicated in Figure 2.1 will first be demobilized. The project site office located in the green area occupied by the main contractor and client as indicated in Figure 2.1 will then be vacated and demolished. Simultaneously, site offices located in* the orange area as indicated in Figure 2.1 will be demobilized.

2. *Before breaking of additional concrete paving at each area,* demarcate works area to avoid unauthorized entry. Close parking lot for crane lorry mobilization and breaking up and excavation works by several excavators.

3. Set up rubbish skip / designated loading area.

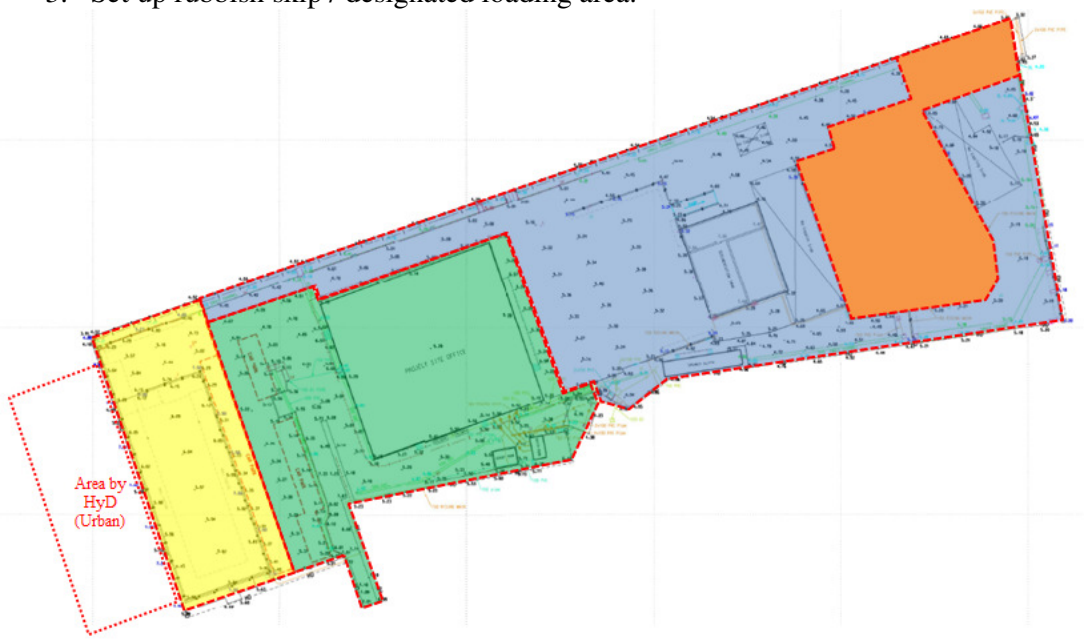


Figure 2.1 Different zonings for removal works of Works Area B

2.3 Working Procedures

1. Inspect and remove all loose material on the working area.

2. Set up the portable noise barrier **as shown in Figure 2.2** in the blue area first in order to mitigate the noise level during the breaking of the additional concrete paving.

Figure 2.2 Adoption of Portable Noise Barrier

3. Set up the temporary water point for spraying of water to mitigate the dust production during the concrete breaking.

4. Prepare sufficient 2" and 4" pumps to collect the waste water to the water treatment facilities.

5. Set up the temporary barrier by sand bags of 300mm high and water-filled barrier along the coast to prevent any worker and material fall to the sea.

6. Mobilization of excavator with breaker (length of hammer head within 200mm or 225mm – depending on the thickness of additional concrete paving) on the working area.

7. Installation of red barriers to set up the "Fatal Zone" to enclose the working area ***(Figure 2.3).***

Figure 2.3 Set up of Fatal Zone

8. Banksmen should be provided to control the traffic.

9. Breaking up of the additional concrete paving by breaker and removal of broken concrete by dump truck. As the majority of the additional concrete paving was constructed on top of a layer of the general fill material, which serves as a cushion layer avoiding damage on the existing concrete paving during the demolition. In additional to this, the existing concrete paving would not be harmed as the length of breaker head is equal to or shorter than maximum depth of the additional concrete paving is proposed to be used for this concrete breaking works. *A hammer head with 225mm in*

length will be used for breaking most of the additional concrete paving. Particularly for the green area underneath the project site office, a shorter hammer head, i.e. 200mm in length will be used. Setting out of this area will be made to demarcate this area before breaking. During breaking, the breaker head will only break through the reinforcement layer inside the additional concrete paving but not down to the bottom of the slab. The cracks produced as such can normally propagate directly down to the de-bonding layer above the existing concrete paving. Flame cutting workers will be employed to cut all broken concrete reinforcements to disconnect all the debris to aid removal. To ensure the structural integrity of the existing concrete paving, an Event and Action Plan (Appendix D) will be implemented during the removal works.

10. Concrete debris from broken concrete paving is removed by dump truck and there will be on-site storage of debris. The dump truck is covered and wheel-washed before leaving the demolition area through both Sai See Street and Cadogan Street entrance. The dump truck drivers will be given trip tickets and shall either transport the concrete debris to public fill banks or the soil to designated backfilling construction site if any.

11. After the completion of a particular area, move the temporary fatal zone barrier and noise barrier to another location and repeat the above steps.

12. Clean the area by water and brush. An inspection would be carried out with the MTR Environmental Team on the condition of the exposed existing concrete paving. Remedial works to the paving scratched surface / cracks will be provided if necessary*, including remedial works for the crack width which is equal to or smaller than 0.5cm*. Materials for remedial works may refer to Appendix C. For the crack observed with the width larger than 0.5cm, an Event and Action Plan (Appendix D) will be followed.

13. Repeat the above steps for the yellow, orange and green area once available.

14. Surveyors to provide final check of formation after the whole additional concrete paving and general fill material is removed.

15. Erect fencing along the sea wall.

16. Joint inspection and handover all working area to relevant government department.

3. ENVIRONMENTAL MEASURES

3.1 Construction Waste Management

During the removal of the additional concrete paving and the general fill material, the following waste will be generated:

- Inert *C&D* Materials
- Non-inert *C&D Materials*
- Metal Waste
- General Refuse
- Chemical Waste

Inert C&D Materials

The majority of construction waste to be generated during this removal works would be the broken concrete and soil as the general fill material between the additional concrete paving to be removed and the existing concrete paving. As stated in the Sampling and Testing Report for Works Area B, no contamination was identified on the soil to be removed. All waste concrete and soil will be disposed*/ reused* as normal inert *C&D* materials, either at Tuen Mun Area 38 Fill Bank or alternative disposal site*/ other construction site(s),* if any, to be approved by MTR.

Non- inert *C&D Materials*

Small amount of non-inert C&D materials would be generated including the polythene de-bonding material which would be collected and disposed of *at SENT Landfill*.

Metal Waste

Waste steel bar and steel mesh will be cut out from the additional concrete paving. All waste steel will be temporary stored on site for recycling as practicable.

General Refuse

Throughout the removal works, the workforce would generate refuse comprising food scraps, waste paper, empty containers, etc. A designated area would be set up onsite for refuse collection and regular disposal of refuse will be arranged.

Chemical Waste

Minimal chemical will be used during the removal works. To prevent land contamination, oil drums, if any, will be put inside drip trays. Suitable labels and designated storage area will be assigned to these materials. A chemical waste storage area would be set up for any chemical waste generated during accidental release.

3.2 Dust Control

All surfaces which are prone to generation of excessive amount of dust should be watered continuously for dust suppression. For transportation of dusty materials, trucks should be equipped with suitable sides and tailboard. The load of dusty material inside truck skips should be entirely covered by impervious sheeting. Dump trucks will be used for disposal of waste concrete and soil. Before leaving the site, the mechanical cover should cover the dusty loads. Trucks drivers are requested to wash the wheels before exiting the site.

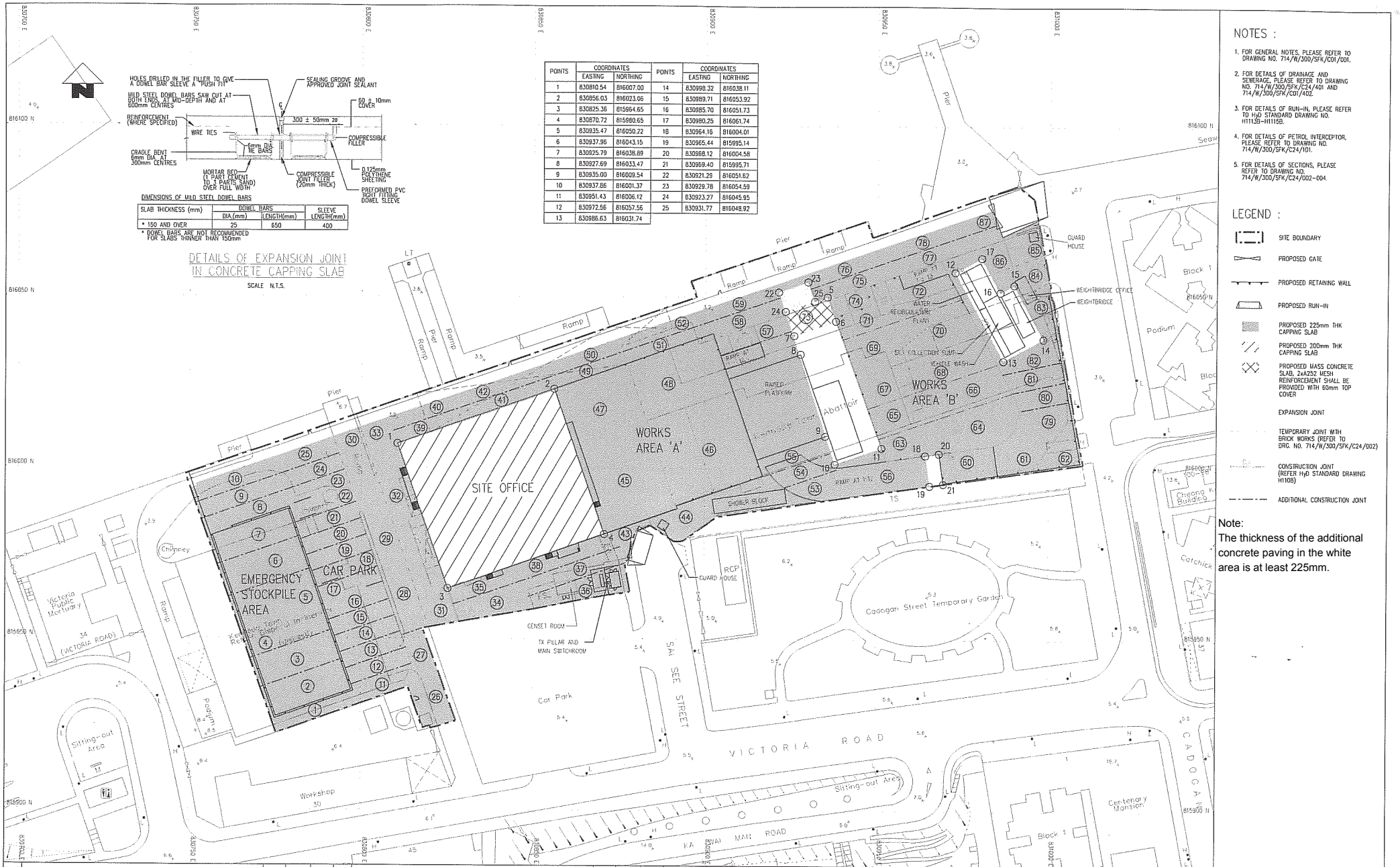
3.3 Construction Noise Control

The removal works would normally be carried out from 08:00 to 18:00 on normal days not being general holidays. If it is necessary to work during the restricted hours, a Construction Noise Permit will be applied for operation of power mechanical equipment and carrying out of prescribed construction works. The conditions stipulated in the approved Construction Noise Permit should be strictly adhered to.

3.4 Wastewater Management

A discharge licence is in place for this works area. Wastewater would be diverted via the temporary drainage to the wastewater treatment facility for treatment before discharge to the storm drain.

Appendix A – Site Layout Plan



DIMENSIONS OF MILD STEEL DOWEL BARS

SLAB THICKNESS (mm)	DOWEL BARS		SLEEVE
	DIA.(mm)	LENGTH(mm)	LENGTH(mm)
* 150 AND OVER	25	850	400

* DOWEL BARS ARE NOT RECOMMENDED FOR SLABS THINNER THAN 150mm

DETAILS OF EXPANSION JOINT IN CONCRETE CAPPING SLAB

SCALE N.T.S.

POINTS	COORDINATES		POINTS	COORDINATES	
	EASTING	NORTHING		EASTING	NORTHING
1	830810.54	816007.00	14	830998.32	816038.11
2	830856.03	816023.06	15	830989.71	816053.92
3	830825.36	815964.65	16	830985.70	816051.73
4	830870.72	815980.65	17	830980.25	816061.74
5	830935.47	816050.22	18	830964.16	816004.01
6	830937.96	816043.15	19	830965.44	815995.14
7	830925.79	816038.89	20	830968.12	816004.58
8	830927.69	816033.47	21	830969.40	815995.71
9	830935.00	816009.54	22	830921.29	816051.62
10	830937.86	816001.37	23	830929.78	816054.59
11	830951.43	816006.12	24	830923.27	816045.95
12	830972.56	816057.56	25	830931.77	816048.92
13	830986.63	816031.74			

NOTES :

1. FOR GENERAL NOTES, PLEASE REFER TO DRAWING NO. 714/W/300/SFK/C01/001.
2. FOR DETAILS OF DRAINAGE AND SEWERAGE, PLEASE REFER TO DRAWING NO. 714/W/300/SFK/C24/401 AND 714/W/300/SFK/C01/402.
3. FOR DETAILS OF RUN-IN, PLEASE REFER TO HyD STANDARD DRAWING NO. H1113B-H1115B.
4. FOR DETAILS OF PETROL INTERCEPTOR, PLEASE REFER TO DRAWING NO. 714/W/300/SFK/C24/101.
5. FOR DETAILS OF SECTIONS, PLEASE REFER TO DRAWING NO. 714/W/300/SFK/C24/002-004.

LEGEND :

- SITE BOUNDARY
- PROPOSED GATE
- PROPOSED RETAINING WALL
- PROPOSED RUN-IN
- PROPOSED 225mm THK CAPPING SLAB
- PROPOSED 200mm THK CAPPING SLAB
- PROPOSED MASS CONCRETE SLAB, 2xA252 MESH REINFORCEMENT SHALL BE PROVIDED WITH 60mm TOP COVER
- EXPANSION JOINT
- TEMPORARY JOINT WITH BRICK WORKS (REFER TO DRG. NO. 714/W/300/SFK/C24/002)
- CONSTRUCTION JOINT (REFER HyD STANDARD DRAWING H1108)
- ADDITIONAL CONSTRUCTION JOINT

Note:
The thickness of the additional concrete paving in the white area is at least 225mm.

REV	DESCRIPTION	BY	DATE	APPROVED
A	AS FITTED DRAWING	FH	17 MAR 10	KMF

DRAWN	JACKY CHEUNG
DESIGNED	DAN TANG
CHECKED	FRANCIS HO
APPROVED	K. M. FUNG
DATE	12 MARCH 2010

MTR

WEST ISLAND LINE

MAIN CONTRACTOR: SFK SUN FOOK KONG CONSTRUCTION LTD.

SUB-CONTRACTOR

CADD REF. 714-Z-300-SFK-C24-201

TITLE
CONTRACT 714
PROJECT SITE OFFICE AND WORKS AREAS
EXTERNAL WORKS
EXTERNAL LAYOUT OF CAPPING SLAB

SCALE 1 : 500 @A1

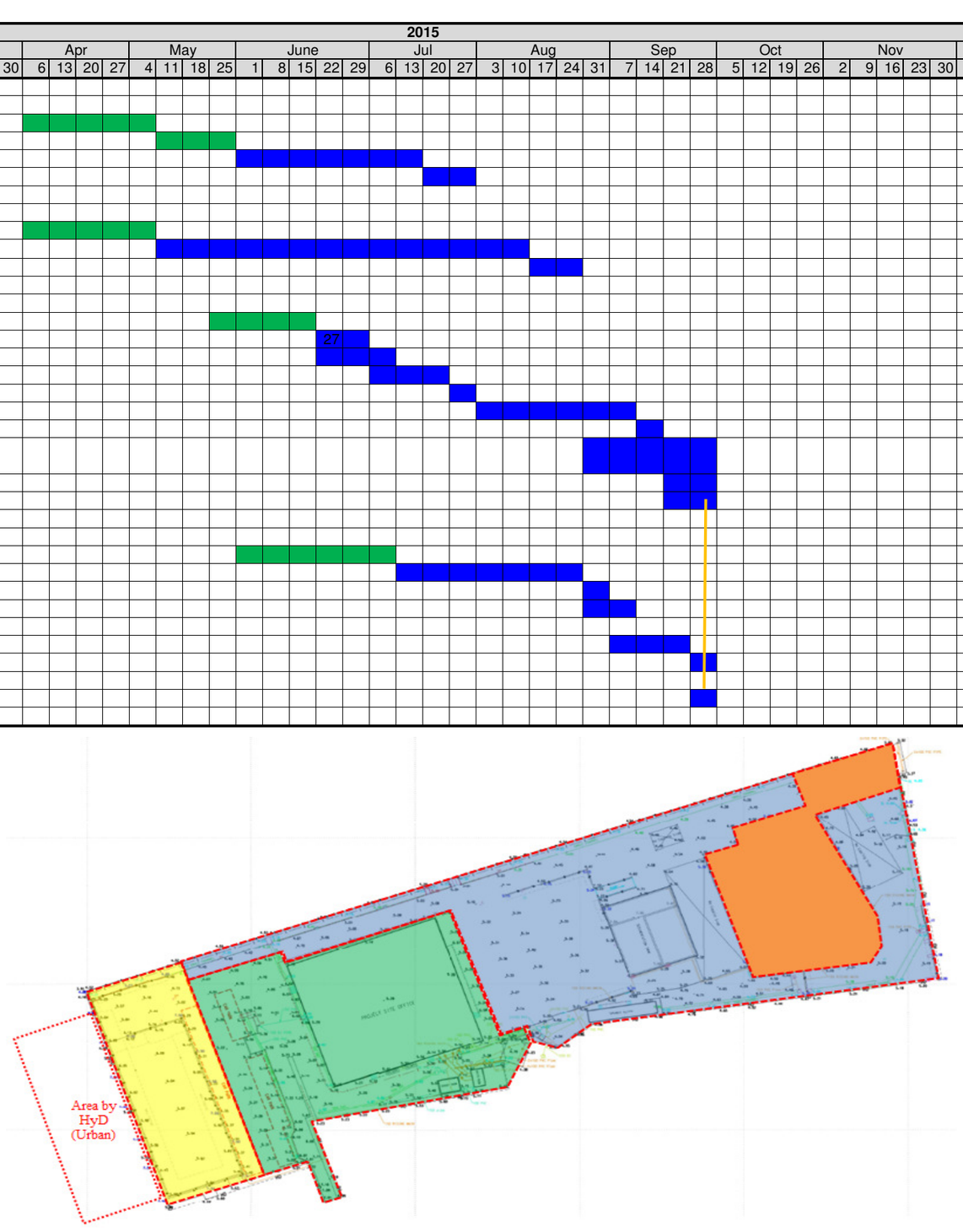
DRAWING NO. 714/Z/300/SFK/C24/201

REV. 0

Appendix B – Tentative Program of Demolition

714 DEMOLITION PROGRAMME

	Activity	Duration (weeks)
1	**Yellow Area (Storage / Works Area)**	
1a	Contractor's Demobilise from Works Areas	5
1b	Ppreparation works / local clearance of HyD area (By Others)	3
1c	Removal of Additional Concrete Paving and General Fill Materials (Yellow Area)	8
1d	Making Good of Existing Concrete Paving	2
2	**Blue Area (Storage / Works Area)**	
2a	Contractor's Demobilise from Works Areas	5
2b	Removal of Additional Concrete Paving and General Fill Materials (Blue Area)	15
2c	Making Good of Existing Concrete Paving	2
3	**Green Area (Project Office)**	
3a	Vacate / Relocate Site Office	4
3b	Decommissioning of Site Office	2
3c	Erection of External Scaffoldings (First Stage)	3
3d	Erection of Internal Proppings (First Stage)	3
3e	BD Inspection on the Compliance to the approval plans	1
3f	Demolition of Site Office	6
3g	BD Inspection after Completion of Works	1
3h	Removal of Additional Concrete Paving (Whole Green Area) and General Fill Materials (except Project Site Office Area)#	5
3i	Making Good of Existing Concrete Paving	2
3j	Ramp and Gates Modifications at Sai See Street (link with item 4d)	2
4	**Orange Area (704 Area)**	
4a	704 to Vacate / Remove Sub Office	6
4b	Removal of Additional Concrete Paving and General Fill Materials (Orange Area)	7
4c	Making Good of Existing Concrete Paving	1
4d	Ramp and Gate Modifications at Cadogan Street (link with item 3i)	2
5	Erection of Fencings along Sea Wall	3
6	Pre-handover Inspection	*
7	Addressing Government Comments + sealing slab further remedial (if any)	4
8	Handover	*



Note:
BLUE = WORKS
GREEN = DEMOBILIZATION
# There is no general fill materials in the area underneath the Project Site Ofiice.

TAKEOVER DATE OF PROJECT OFFICE	24/Jun/15
TAKEOVER DATE OF 704 AREA	15/Jul/15
LAND HANDOVER TO GOVERNMENT	30/Sep/15

Appendix C – Materials for Remedial of Existing Concrete Paving

constructive solutions

Nitofill EPLV

Fosroc
Hong Kong Ltd

2001-05A Pacific Plaza
410 Des Voeux Road West
Hong Kong

www.fosroc.com

telephone:
++ (852) 2882 8662

fax:
++ (852) 2895 2931

email:
hongkong@fosroc.com

Nitofill EPLV*

constructive solutions

Low viscosity epoxy injection resin system

Uses

For injecting into cracks in concrete or masonry, to form a permanent bond or seal.

Advantages

- Low viscosity allows penetration into the finest cracks
- Formulated for hot climates
- Suitable for structural repairs
- Excellent bond to concrete, brick and masonry
- Minimum creep under sustained load
- Resistant to wide range of chemicals
- Non-shrink, adheres with no loss of bond

Description

Nitofill EPLV two part, solvent-free, low viscosity epoxy resin system is mixed in the proportions supplied to form a strong permanent bond and seal in cracks in concrete and masonry. Nitofill EPLV is designed to be injected into cracks using suitable resin injection equipment.

Design criteria

Nitofill EPLV is designed to seal and bond cracks in concrete and masonry. Crack widths of between 0.2 mm and 9 mm can be treated. Please consult Fosroc for further details.

Typical Properties

The following properties were obtained at a temperature of 25ºC and at 7 days unless otherwise specified.

Test method		Typical results
Compressive strength (BS 6319)	:	80.0N/mm^2 @ 25°C
Tensile strength (BS 6319)	:	>15.0 N/mm^2 @ 25°C
Flexural strength (BS 6319)	:	>47.0 N/mm^2 @ 25°C
Youngs modulus in compression	:	16 GPa
Pot life	:	2.5 hrs @ 25°C
Specific gravity	:	1.04
Mixed viscosity	:	5 poise @ 25°C

Instructions for use

Nitofill EPLV can be applied using either injection packers fixed into holes drilled directly into the crack or drilled diagonally from concrete adjacent to the crack or by the fixing of injection nipples bonded to the surface using Nitomortar FC*†.

Preparation

Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae.

The surface should preferably be prepared using high pressure water jetting or light abrasive blasting, followed by thorough washing to remove dust and remaining particles. Dirt alone may be removed with wire brushes or similar mechanical means.

Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should be assessed by a pull-off test.

Blow the cracks and treated surface with oil free air to ensure complete removal of all dust and loose particles. Ensure that the surfaces are blown dry.

In the presence of running water the flow must be stopped using Nitofill UR50*† which produces a rapid setting water-stopping foam. When the water is stopped the cracks are re-injected with Nitofill UR50*†.

Fixing injection packers

The injection packers shall be inserted into pre-drilled holes at intervals along the length of each crack. The distance between each packer will depend upon the width and depth of the crack. Spacing shall be close enough to ensure that the resin will penetrate along the crack to the next point of injection.

The surface of the cracks between the packers shall be sealed with a band of Nitomortar FC, 30 to 40mm wide and 2 to 3 mm thick. Both sides of any cracks which go all the way through a wall or slab shall be sealed in this way. In the case of a wall or slab cracked all the way through, packers shall be located on both sides with those at the back placed at midway points between those at the front.

The Nitomortar FC shall be allowed to cure for 8 hours at 35°C. At low ambient temperatures (5°C to 12°C) the curing time will be extended and the applicator shall ensure that the surface sealant has adequately cured prior to continuing. One end of the injection hose shall be attached to the lowest packer on vertical cracks or to either end of the horizontal cracks.

Alternative methods of resin injection are currently in use, they include the system where injection nipples are bonded to the substrate.

Nitofill EPLV application

Thoroughly mix the entire hardener and base resin contents until the liquid becomes clear.

Nitofill EPLV should be used with standard injection equipment having closed containers. The injection pressure should be at least 0.4N/mm^2 (4 bar).

Only mix sufficient resin that can be used within the pot life of the material.

Following completion of the injection works the injection system shall be allowed to cure for 24 hours and shall be left undisturbed for this time.

Making good

Remove the packers and make good any holes or voids with Nitomortar FC and allow to cure. The Nitomortar FC can be ground off or softened with a blow lamp and peeled off. Do not allow to burn.

Cleaning

Nitofill EPLV and Nitomortar FC should be removed from tools, equipment and mixers with suitable solvent immediately after use. Hardened material can only be removed mechanically.

Limitations

- Nitofill EPLV is only to be used in dry or damp concrete or masonry.
- Nitofill EPLV should not be used on live cracks or where further movement is expected. In these cases contact the local Fosroc office.
- Nitofill EPLV should not be used in the presence of running water. In these cases Nitofill UR50 should be used.

If any doubts arise concerning temperature, application or substrate conditions, consult the local Fosroc office.

High temperature working

It is suggested that, for temperatures above 35°C, the following guidelines are adopted as good working practice:

(i) Store unmixed material in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.

(ii) Keep equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come into direct contact with the material itself.

(iii) Try to eliminate application during the hottest times of the day and in direct sunlight.

(iv) Make sufficient material, plant and labour available to ensure that application is a continuous process.

Technical support

Fosroc offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

Nitofill EPLV*

Estimating

Supply	
Nitofill EPLV	: 7.5 litre packs
Nitomortar FC	: 1 and 5 litre packs

Note: In accordance with Commercial or Health & Safety requirements packaging detail may alter. Please contact your local Fosroc office for detail.

Storage

Shelf life

All products have a shelf life of 6 months at 20ºC if kept in a dry store in the original, unopened containers.

Storage conditions

Store in dry conditions in the original, unopened containers. If stored at high temperatures and/or high humidity conditions the shelf life may be reduced to 2 to 3 months.

Precautions

Health and safety

Nitofill EPLV contains resins which may cause sensitisation by skin contact. During use of Nitofill EPLV, Nitomortar FC and suitable solvent avoid contact with skin and eyes. Ensure adequate ventilation and avoid inhalation of vapours.

Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye/face protection. Use only in well ventilated areas. If working in confined areas or in cases of insufficient ventilation, suitable respiratory protective equipment must be used.

The use of barrier creams provide additional skin protection. Should accidental skin contact occur, remove immediately with a resin removing cream followed by soap and water. **Do not** use solvent.

In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice.

If swallowed seek medical attention immediately - **do not** induce vomiting.

Fire

Nitofill EPLV and Nitomortar FC are non-flammable.

For further information see relevant Material Safety Data Sheet.

Additional Information

Fosroc manufactures a wide range of complementary products which include :

- waterproofing membranes & waterstops
- joint sealants & filler boards
- cementitious & epoxy grouts
- specialised flooring materials

Fosroc additionally offers a comprehensive package of products specifically designed for the repair and refurbishment of damaged concrete:

- hand-placed repair mortars
- spray grade repair mortars
- fluid micro-concretes
- chemically resistant epoxy mortars
- anti-carbonation/anti-chloride protective coatings
- chemical and abrasion resistant coatings

For further information on any of the above please consult Fosroc.

Nitofill EPLV*

* Denotes the trademark of Fosroc International Limited

† See separate data sheet

Fosroc
Hong Kong Ltd.

2001-5A, Pacific Plaza
410 Des Voeux Road West
Hong Kong

Tel: (852) 2882 8662
Fax: (852) 2895 2931
Email: hongkong@fosroc.com

www.fosroc.com

SALES OFFICES IN GREATER CHINA REGION

Fosroc Guangzhou Limited
No. 7 Hong Yuan Road, Eastern Section, Guangzhou Economic & Technological Development District, Guangzhou 510760, China
Tel: +(86-20) 8226 9245 Fax: +(86-20) 8226 8010 email: china@fosroc.com

We also have offices in the following locations :
Macao, Taiwan (Distributor), Beijing, Chongqing, Shanghai and Suzhou

For Macao & Taiwan, please contact Fosroc Hong Kong office.
For other cities in China, please contact Fosroc Guangzhou office.

FIL/DEC/06/C

Appendix D – Event and Action Plan

EVENT	ACTION			
	ET	IEC	ER	Contractor
Small crack(s)# observed at the existing concrete paving	1. Notify IEC, ER and EPD; 2. Report the observations to the IEC and ER for situation before and after completion of the maintenance of the existing concrete paving.	1. Review and verify the observations by the ET for situation before and after the completion of the maintenance of the existing concrete paving.	1. Confirm receipt of notification in writing; 2. Arrange and Supervise necessary maintenance of the existing concrete paving as soon as possible to rectify the situation.	1. Carry out necessary maintenance of the existing concrete paving as soon as possible to rectify the situation as agreed by ER. (Please refer to Section 2.3 Working Procedure, step 12)
Large crack(s)* observed at the existing concrete paving	1. Notify IEC, ER and EPD; 2. Report the observations to the IEC and ER for situation before and after completion of the maintenance of the existing concrete paving.	1. Review and verify the observations by the ET for situation before and after the completion of the maintenance of the existing concrete paving.	1. Confirm receipt of notification in writing; 2. Notify CEDD; 3. Arrange and carry out necessary maintenance of the existing concrete paving as soon as possible to rectify the situation.	1. Suspend work as determined by the ER until necessary maintenance is completed; 2. Carry out necessary maintenance of the existing concrete paving as soon as possible to rectify the situation as agreed by ER. (Please refer to Section 2.3 Working Procedure, step 12)

Note: # Small crack(s) is defined as where crack width is larger than 0.5cm.

* Large crack(s) is defined as where crack is observed with underneath soil exposed.

Appendix E – Response to Comments received from EPD

Comments received from EPD dated 8 May 2015	Response to Comments
We have no further comment on the revised method statement and RtC except for the minor comment below: <u>RtC - 3rd bullet of item (vi)</u> • The general fill materials (if any) in the area underneath the project site office should also be removed. However, if the project proponent/ consultants confirm that there is no general fill materials in the area underneath the project site office, please state accordingly to avoid any confusion.	It is confirmed that there is no general fill materials in the area underneath the project site office, a remark was added in the program.

Comments received from EPD dated 30 April 2015	Response to Comments
<u>Waste</u> (i) Steps 6 and 9 of Section 2.3 and Appendix A • As the thickness of additional concrete paving at some areas (e.g. Site Office) is only 200mm, the project proponent need to propose necessary measure(s) to avoid the mis-use of hammer head longer than 200mm (i.e. 225mm) at such areas. Please revise texts as appropriate.	Noted. Step 9 of Section 2.3 was revised to include demarcation of area for additional concrete paving with depth of 200mm
• Re. Appendix A, please clarify what is the thickness of additional concrete paving for some areas which are shown as "white". Please also state the thickness of additional concrete paving for these areas as appropriate.	The thickness of additional concrete paving for the white area is at least 225mm.
(ii) It is clarified in RtC item (ix) that "remedial works will still be carried out if the width is equal to or smaller than 0.5cm". To avoid any confusion, please clearly state in Step 12 of Section 2.3 accordingly.	Text was revised in Step 12 of Section 2.3.
(iii) Section 3.1 - To avoid any confusion, please use the terms "Inert C&D Materials" and "Non-inert C&D Materials" to replace "Inert Waste - C&D Materials" and "Non-inert Waste" respectively in the whole section.	Noted and relevant text was revised in Section 3.1.
(iv) 2nd Para., Section 3.1 - Should last senetence read as "All waste concrete and soil will be disposed<u>/ reused</u> as normal inert <u>C&D</u> material, either at Tuen Mun Area 38 Fill Bank or alternative disposal site<u>/ other construction site(s)</u>, if any, to be approved by MTR." ?	Relevant sentence was revised.

(v) 3rd Para., Section 3.1 • Please state the disposal outlet for the "Non-inert C&D material".	Noted and SENT Landfill will be the disposal outlet for the non-inert C&D materials.
• Please note that "Non-inert C&D material" and "general refuse" are two different types of wastes and their handling/disposal are different. Please delete/revise texts as appropriate.	Noted and relevant text was revised in Section 3.1.
(vi) Appendix B • Please clarify whether the notes for "Removal Plan", "STR", "RAP" and "Potential Contaminants" under the table are to be removed.	Relevant notes were deleted.
• Please ensure the sequence of works in this programme be consistent with that stated in Step 1 of Section 2.2. Please revise as appropriate.	Noted and the text in Step 1 of Section 2.2 was revised to suit.
• Item 3h - Please clarify whether there is any removal of "general fill materials" for Green Area. Please revise as appropriate.	Removal of general fill materials will also be carried out in the Green Area, except the area underneath the project site office. Relevant text in the programme was revised.
• The item "Making Good of Existing Concrete Paving" is missing under the "Green Area (Project Office)". Please clarify.	Noted and the programme was revised in Appendix B.

Comments received from EPD dated 17 April 2015	Response to Comments
General The project proponent is reminded to follow strictly to the EM&A Manual when carrying out the works.	Noted.
General Figures in Section 1.2 and Section 2.2: - Please improve on the readability of the figures and reference shall be added under each figure.	Noted and reference has been added under each figure.
Air Quality Section 2.3: Step 12. It is advised that completed area shall be conducted by responsible persons, eg. Surveyor / ET such that any cracks or contamination leakage can be detected at an	Noted and text in Step 12 has been revised.

early stage.	
Waste General (i) The terms "additional concrete paving", "existing concrete paving" and "general fill material" are used in the Clauses 3.3.2 & 3.3.3 of the Environmental Permit No. EP-313/2008/J. To avoid any confusion, please avoid using other different terms (e.g. capping slab, original capping slab, temporary paving layer, soil, general fills, etc.) and use a consistent term in the Method Statement. Please revise relevant texts as appropriate.	Relevant text has been revised to avoid confusion.
Specific (ii) Figure in Section 1.2 - The areas highlighted with "green" / "yellow" colour in this Figure do not tally with the "site boundary" as shown in Appendix A. To avoid any confusion, please revise the Figure as appropriate.	The figure is replaced by extract from Appendix A.
(iii) 1st para., Section 1.2 - According to Clause 3.3.2(c) of the Environmental Permit No. EP-313/2008/J, the Method Statement shall include the removal, temporary storage and treatment if necessary, and disposal of the additional concrete paving and general fill material. Please revise as appropriate.	Noted and the text in Section 1.2 has been revised.
(iv) 3rd para., Section 1.2 - To avoid any confusion, please clarify whether the 1st sentence should read as "It has been proven that the general fill material between the additional concrete paving and existing concrete paving is NOT contaminated".	Noted and the text in Section 1.2 has been revised.
(v) Section 2.2 and Appendix B - The "blue and orange area" will be vacated first for the removal works according to Step 1 of Section 2.2, while the steps will be repeated for "yellow and green area" once available (i.e. Step 13 of Section 2.3 refers). However, it seems that such works programme for various areas does not tally with the programme as shown in Appendix B. Please clarify and revise as appropriate.	Updated programme is attached in Appendix B and the relevant text in Section 2.2 has been revised.
(vi) Steps 6 and 9, Section 2.3 * Referring to Figure 15 of the Environmental Permit No. EP-313/2008/J, the thickness of "additional concrete paving" is "225 mm". Please clarify whether the thickness of the additional concrete paving is "225 mm" or "350mm" for the whole site. Please revise the length of hammer head and	The additional concrete paving is either 200mm or 225mm. Please refer to the as-built drawing of capping slab 714/Z/300/SFK/C24/201 Rev 0 for the area in Appendix A. The length of hammer

relevant texts as appropriate if the thickness is "225 mm". However, in case the thickness is "350 mm", please provide documentary evidence for confirmation.	head will follow the thickness of the additional concrete paving according to this plan. Text in Steps 6 and 9 of section 2.3 have been revised.
* Please further elaborate whether there will be any measures to avoid the damage of the existing concrete paving by the excavator/hammer, in particular for those areas that there is only a layer of "de-bonding material" in between the additional concrete paving and existing concrete paving (i.e. Section 3.1.7 of "Justification of Alternative Capping Slab Design for Works Area B" submitted for application of VEP in 2010 refers).	Text revised for further elaboration.
(vii) 2nd para., Section 3.1	
* Please clarify whether the "filling material" should be the "general fill material" between the additional concrete paving to be removed and the existing concrete paving. If affirmative, please revise as appropriate.	Noted and the text has been revised.
* Please clarify whether "original capping slab" should read as "existing concrete paving" which is the term used in the Environmental Permit No. EP-313/2008/J.	Noted and the text has been revised.
* Please further elaborate what is the "alternative disposal site as approved by MTR" ?	As the general fill material is confirmed not contaminated, in order to enhance the material reuse and release the burden of Fill Bank, alternative disposal sites such as reclamation projects, projects with backfilling works, etc. will be sought for disposal, subject to approval.
* As there is a layer of "de-bonding material" in between the additional concrete paving and existing concrete paving, please clarify whether the "de-bonding material" is non-inert C&D material or not. Please also address the proper handling and disposal of the "de-bonding material" as appropriate.	A polythene sheet was used as the de-bonding material between two concrete pavings. Handling and disposal of this material has been included in Section 3.1.
(viii) Appendix C - As the site will subsequently be handed over to the CEDD via LandsD, please seek written advice from the CEDD / LandsD on whether the proposed remedial material (i.e. Renderoc FC) for the cracks of "existing concrete paving" is acceptable.	Alternative material, Nitofill EPLV, was proposed and approved by CEDD. Relevant approval is attached in this Appendix.

(ix) Appendix D * Please clarify whether the "temporary paving layer" is referring to the "additional concrete paving" or "existing concrete paving". Please revise texts to avoid any confusion.	Noted and the text has been revised.
* It is stated in Clause 3.3.3 of the Environmental Permit No. EP-313/2008/J that "..... an inspection shall be carried out on the condition of the existing concrete paving, the site drainage and the foul sewerage systems to identify, with the view to repair/remedy, any surface cracks such that the structural integrity of these systems is maintained and the soil underneath will not be disturbed or exposed as far as practicable.". However, it appears that there is no action proposed for the crack if its width is "equal to or smaller than 0.5cm". Please clarify and revise as appropriate.	Noted and remedial works will still be carried out for crack if its width is equal to or smaller than 0.5cm. For the Event and Plan, it is only applicable to the crack width larger than 0.5cm. Relevant text in Step 12 of Section 2.3 has been rewritten to address this.

Michelle Shuk Han Tang

From: IEONG Rebecca Kin Wan (楊健韞) <RIEONG@mtr.com.hk>
Sent: Friday, April 24, 2015 4:05 PM
To: Michelle Shuk Han Tang
Subject: RE: (Urgent): Re: Meeting to discuss the handover issue of WIL works area (STT No. RDS/WIL-002)

From: derekhfkwok@cedd.gov.hk [mailto:derekhfkwok@cedd.gov.hk]
Sent: Friday, 24 April, 2015 15:40
To: MAK KW Kam Woon (麥錦垣)
Cc: alex.kwok@gammonconstruction.com; NG Brian Siu Lun (吳紹倫); eshkww@landsd.gov.hk; ewil4.rdo@hyd.gov.hk; WONG Felice Wing Yee (黃詠儀); Felix Hui Sing Mak; psvrrdu1@landsd.gov.hk; IEONG Rebecca Kin Wan (楊健韞); sesrdu2@landsd.gov.hk; sewil1.rdo@hyd.gov.hk; ssohkwslc1@landsd.gov.hk; tkleung@cedd.gov.hk
Subject: RE: (Urgent): Re: Meeting to discuss the handover issue of WIL works area (STT No. RDS/WIL-002)

Dear Robert, Kam,

We have no further comments on your proposed crack sealing material "Nitofill EPLV" pls. Thanks.

Regards,
Derek Kwok
E/5, SD(W), CEDD
TEL: 2762 5535

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