
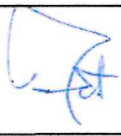


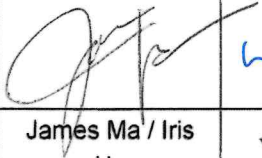







|                       |      |     |     |     |      |        |
|-----------------------|------|-----|-----|-----|------|--------|
| MS Reference Number:  | CSHK | CET | MS  | C   | 2024 | 000044 |
| ACC Reference Number: | 1701 | W   | 000 | CSC | 760  | 000204 |

| METHOD STATEMENT TITLE                   | Rev. - |
|--|--------|
| Method Statement for Seawall Arrangement |        |

|            | Prepared by:  | Checked by:   | Reviewed by:   | Reviewed by:  |
|------------|---|---|--|---|
| Signature: |  |  |  |  |
| Name:      | Andrew Lo   | CF Chan   | K F Leung / WK Hui   | MH Isa / WH Lam   |
| Position:  | Graduate Engineer   | Construction Manager  | SM/SO  | QM/QE   |
| Date:      | 8/5/2024  | 8 May 2024  | 8/5/2024   | 8/5/2024  |
|            | Reviewed by:  | Reviewed by:  | Reviewed by:   | Approved by:  |
| Signature: |  |  |  |  |
| Name:      | James Ma / Iris Ho  | Yeung Wai Lun   | Paul Freeman / Mark McGleenon  | Eric Fong   |
| Position:  | EM/EO   | A. Project Director   | Sr. Project Director / A. Project Director   | Project Director  |
| Date:      | 8/5/2024  | 8/5/2024  | 8/5/2024   | 10/5/24   |



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2. Reference Documents
3. Details of Sub-Contractor/Specialist Sub-Contractor
4. Responsibilities for Activities described within Method Statement
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8. Safety
9. Environmental
10. Quality Control
11. Appendices

| <b>1.</b>       | <b>Introduction (Overview of the operation/works)</b>   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
|-----------------|---|------|----------|--------------|----------------------------|---------|----------------------|------------|--------------------------------|-----------|------------|------------|-----------------|---------|----------|------------|----------|-----------|-------------------|------------|-------------------|-----------------|----------------|--------------|----------------|----------------|----------------|-----------|-----------------------|---------------|---------------|
|                 | <p>This Method Statement describes the arrangements for material delivery and removal of C&amp;D materials via the existing vertical seawall at Siu Ho Wan Depot under Contract 1701.</p> <p>This document shall be distributed to all relevant parties to introduce the work scope, present the sequence of works and to define the associated responsibilities to ensure all health, safety, environment and quality issues are addressed. The details of the procedures contained herewith shall be reviewed periodically and updated based on the actual site conditions. The principle methods as described in the following sections are subject to review during construction and may be amended if required.</p> <p>The general topics outlined in this method statement are the following:</p> <ul style="list-style-type: none"> <li>● Traffic Routing between W11 and the Seawall</li> <li>● Seawall Gate Arrangements</li> <li>● Arrangements at Seawall</li> </ul>   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| <b>2.</b>       | <b>Reference Documents (Identify relevant documents by name and reference number)</b>   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
|                 | <ul style="list-style-type: none"> <li>➢ General Specification for Civil Engineering Works (NEC4) (MTR Corporation Limited – 2022)</li> <li>➢ Materials and Workmanship Specification for Civil Engineering Works.</li> <li>➢ Scope for Contract 1701</li> </ul>  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| <b>3.</b>       | <b>Details of Sub-Contractor/Specialist Sub-Contractor</b>  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
|                 | N.A.  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| <b>4.</b>       | <b>Responsibilities for Activities described within Method Statement</b>  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
|                 | <p>CSHK is responsible to inspect, supervise and carry out the construction works. The following persons, as listed in the table below, will attend the specific tool-box talk and be responsible for the activities:</p> <table border="1"> <thead> <tr> <th>Name</th><th>Position</th></tr> </thead> <tbody> <tr> <td>Yeung Ho Lun</td><td>Assistant Project Director</td></tr> <tr> <td>CF Chan</td><td>Construction Manager</td></tr> <tr> <td>Anthony He</td><td>Assistant Construction Manager</td></tr> <tr> <td>Nick Wang</td><td>Site Agent</td></tr> <tr> <td>David Wong</td><td>Senior Engineer</td></tr> <tr> <td>Tim Cai</td><td>Engineer</td></tr> <tr> <td>Andrew Mak</td><td>Engineer</td></tr> <tr> <td>Andrew Lo</td><td>Graduate Engineer</td></tr> <tr> <td>Charles Xu</td><td>Graduate Engineer</td></tr> <tr> <td>Leung Kwok Fung</td><td>Safety Manager</td></tr> <tr> <td>Ernest Young</td><td>Safety Officer</td></tr> <tr> <td>Cheung Siu Kei</td><td>Superintendent</td></tr> <tr> <td>Ng Ho Lun</td><td>Senior Foreman / WPIC</td></tr> <tr> <td>Singh Nirdeep</td><td>Foreman /WPIC</td></tr> </tbody> </table> <p>(a) Assistant Project Director / Construction Manager</p> | Name | Position | Yeung Ho Lun | Assistant Project Director | CF Chan | Construction Manager | Anthony He | Assistant Construction Manager | Nick Wang | Site Agent | David Wong | Senior Engineer | Tim Cai | Engineer | Andrew Mak | Engineer | Andrew Lo | Graduate Engineer | Charles Xu | Graduate Engineer | Leung Kwok Fung | Safety Manager | Ernest Young | Safety Officer | Cheung Siu Kei | Superintendent | Ng Ho Lun | Senior Foreman / WPIC | Singh Nirdeep | Foreman /WPIC |
| Name            | Position  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Yeung Ho Lun    | Assistant Project Director  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| CF Chan         | Construction Manager  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Anthony He      | Assistant Construction Manager  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Nick Wang       | Site Agent  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| David Wong      | Senior Engineer   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Tim Cai         | Engineer  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Andrew Mak      | Engineer  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Andrew Lo       | Graduate Engineer   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Charles Xu      | Graduate Engineer   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Leung Kwok Fung | Safety Manager  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Ernest Young    | Safety Officer  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Cheung Siu Kei  | Superintendent  |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Ng Ho Lun       | Senior Foreman / WPIC   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |
| Singh Nirdeep   | Foreman /WPIC   |      |          |              |                            |         |                      |            |                                |           |            |            |                 |         |          |            |          |           |                   |            |                   |                 |                |              |                |                |                |           |                       |               |               |

|           |   |
|-----------|---|
|           | <p>Responsible for overall administration, monitoring, controlling progress and quality of work.</p> <p>(b) Assistant Construction Manager<br/>Responsible for assisting with contract administration, procurement, and stakeholder communication. Assisting in resolving issues or conflicts that arise during construction. Ensuring compliance with relevant regulations and building codes.</p> <p>(c) Site Agent / Senior Engineer / Engineer / Graduate Engineer<br/>Responsible for developing works procedures, controlling progress and quality of works in a safe manner. They also have to implement safety at works area for workers via guidance from safety officers.</p> <p>(d) Safety Manager/Safety Officer<br/>Responsible for assessing working conditions of work areas in safety means. To prepare risk assessment before works, enforce safety practice and environment in the workplace and work site</p> <p>(e) Superintendent<br/>Responsible for coordinating and supervising construction activities, including scheduling, resource allocation, and quality control</p> <p>(f) Senior Foreman / Foreman<br/>Responsible for supervising a team of construction workers and coordinating their activities.</p> |
| <b>5.</b> | <b>Programme and Working Hours</b> (Start & finish date of operation/works)   |
|           | <p>The general working hours will be 08:00 – 18:00 daily, from Monday to Saturday. However, it may be required to carry out works from 18:00 to 23:00 and Sunday and Public Holidays in case of essential speeding up of the working process. CSHK would check internally to fulfil the Construction Noise Permit Requirement.</p> <ul style="list-style-type: none"> <li>➤ The maximum permitted barge movements allowed in accordance with the approved Environmental Review Report (ERR) issued by EPD is 6 trips per day and 7 days per week (i.e. Maximum 42 trips per week) from mid-2024 to end of Year 2027 for the depot construction.</li> <li>➤ Average number of barge trips per day will be <ul style="list-style-type: none"> <li>- 3 barges for pre-cast units,</li> <li>- 2 barges for steel and rebar</li> <li>- 1 barge for the excavation material</li> </ul> </li> </ul> <p>The 6 barges will replace about 65 construction vehicles per day that would be required for land-based transportation.</p> <p>All the works within OA Area shall be supervised by a CP(T)/CP(NT) during the approved working period.</p>  |
| <b>6</b>  | <b>Plant, Equipment &amp; Material</b> (Identify type, model and specification of MAJOR plant &   |




equipment)

All plant and equipment will be inspected prior to mobilization on site to ensure that they are in good working condition and comply with all current regulations.

The major plant and equipment that will be deployed to carry out the works are as follow:

| Plant / Equipment used for Precast Beam / Slab Delivery Operation |   | Tentative Size (Overall Length x Breadth x Draft) |
|---|---|---|
| <b>Vessel Type:</b>   |   |   |
| Delivery Barge  |    | 49m x 15m x 3.5m                                  |
| Crane Barge   |  | 50m x 25m x 1.5m                                  |
| Heavy Lifting Barge   |  | 61.2m x 21.3m x 2.8m                              |
| <b>Supporting Vessel:</b>   |   |   |
| Tugboat   |  | 21.3m x 6.6m x 1.8m                               |



|   |  |  |
|---|--|--|
| Guard Boat / Rescue Boat  |   | 61.2m x 21.3m x 2.8m                                   |
| <b>Plant / Equipment used for Disposal of C&amp;D materials</b> |  | <b>Typical Size (Overall Length x Breadth x Draft)</b> |
| RoRo Barge with Tipping Hall                                    |   | 41.9m x 18.3m x 1.2m                                   |
| Hopper Barge  |  | 55.5m x 21.7m x 3m                                     |

## 7. Construction Methods / Construction Sequence Drawings

### 7.0 Existing Vertical Seawall

The seawall is located at the north side of Siu Ho Wan depot.



Figure 7.1 Existing Vertical Seawall

The existing vertical seawall is located adjacent to the northern boundary of the SHD.

- The overall length of this vertical seawall: ~ 140 m
- Constructed with precast concrete blocks
- toe level is -5.5 mPD (Figure 7.1-1)

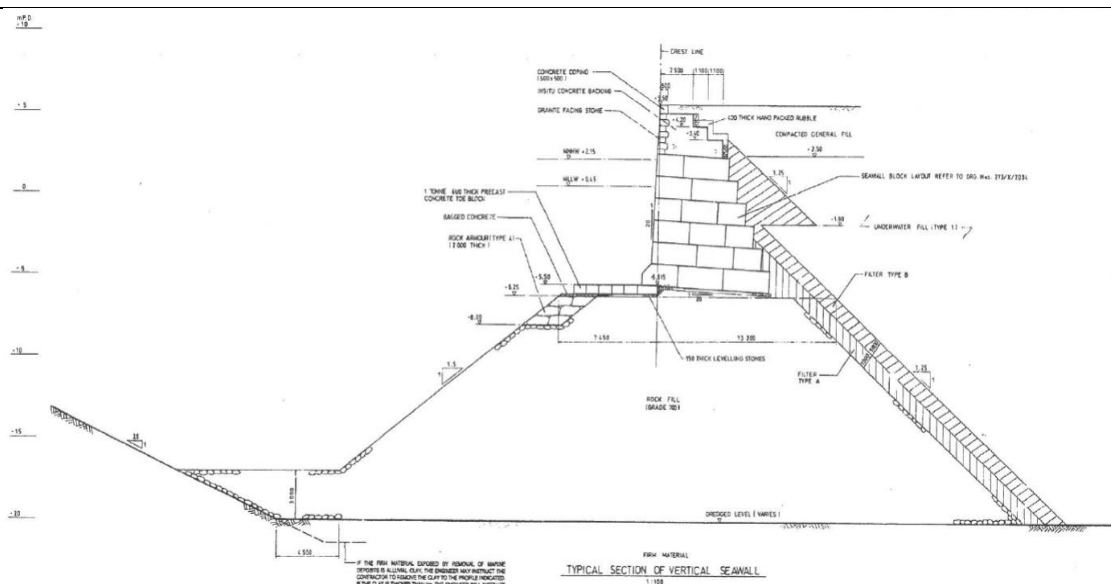


Figure 7.1.1 Typical Section of Existing Vertical Seawall



Figure 7.1.2 Existing Vertical Seawall and the Associated 20t Cast Iron Bollards (4 nos.)

Since the completion of the vertical seawall, it has been utilised by various parties for the delivery of materials (e.g. train cars etc) on an as-needed basis. As advised by MTR Depot Operations team, the existing vertical seawall has been used for delivery of tracks at a frequency of approximately 1 barge trip per delivery day. The existing vertical seawall has also been used for delivery of new train car units in Q4 2022 and Q1 2023, also at a frequency of 1 barge trip per delivery day.

### 7.1 Use of Seawall

The seawall will be used for material delivery to site, such as precast materials and DfMA modules, and material disposal offsite, such as C&D materials. The precast materials will mainly be delivered to W11. Also, the C&D materials will mainly be excavated from W11.

### 7.2 Traffic Arrangements from W11 to Seawall through VAB

To facilitate the traffic arrangement between W11 and the vertical seawall, the traffic routing from W11 to the seawall is shown in the following figures. There are 2 routings which are for shorter vehicles (below 12m) and longer vehicles (12m to 18m) respectively. The tentative dump truck traffic volume at the barging point will be 12 dump trucks per hour.

The traffic routing from W11 to the seawall for longer vehicles (12m to 18m) is proposed in order to avoid using the existing depot road to the West of AB1 and to minimize the use of the main depot road, such that we do not affect the MTR depot daily operation and the operation of the MTR shuttle bus stop. The use of the existing west level crossing or level crossings at the east side of main building is required to allow the long vehicles to deliver to Works Area W11 as they are unable to turn around to access the Works Area via the temporary vehicular bridge when leaving the seawall.

The traffic routing utilizes the water-filled barriers to reduce the traffic arms. The level crossing located east of the main building can be used occasionally for special cases. However, MTR does not recommend CSHK to use it frequently. Therefore, MTR advised CSHK to adopt the routing passing through west level crossing. A CP(T) escort shall be provided and CSHK shall maintain the 4m permissible height rule when using the level crossings.

The swept path analysis for this routing is included in the Traffic Management Plan (Main Stage) under separate submission.



Figure 7.2.1 Traffic Routing between W11 to Seawall



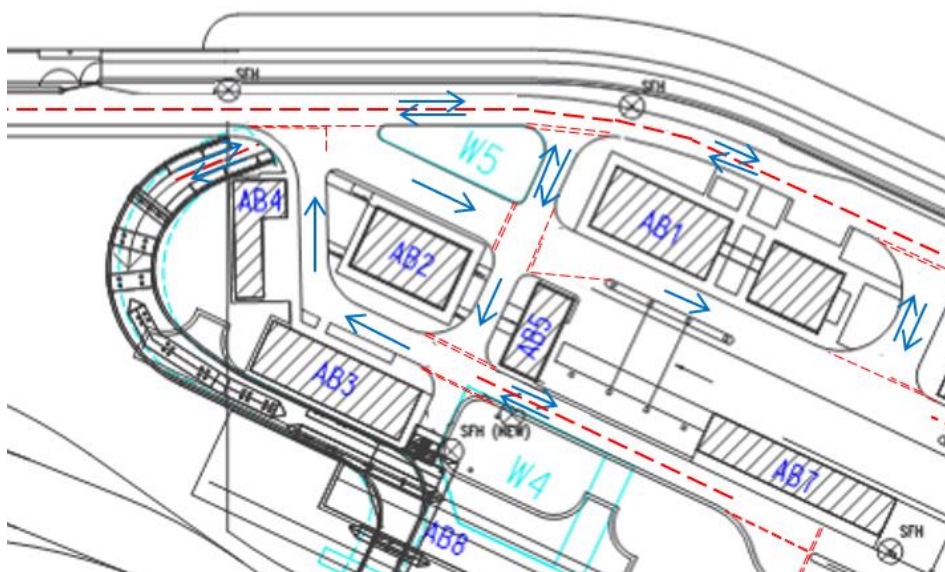


Figure 7.2.2 Traffic Directions



Figure 7.2.3 Traffic Routing from W11 to Seawall through west level crossing

### 7.3 Seawall Gate Arrangement

For the seawall gate arrangements, please refer to the Traffic Management Plan (Main Stage) under separate submission.

CSHK will provide CCTV at the seawall access gates to allow depot staff to monitor the seawall site condition.

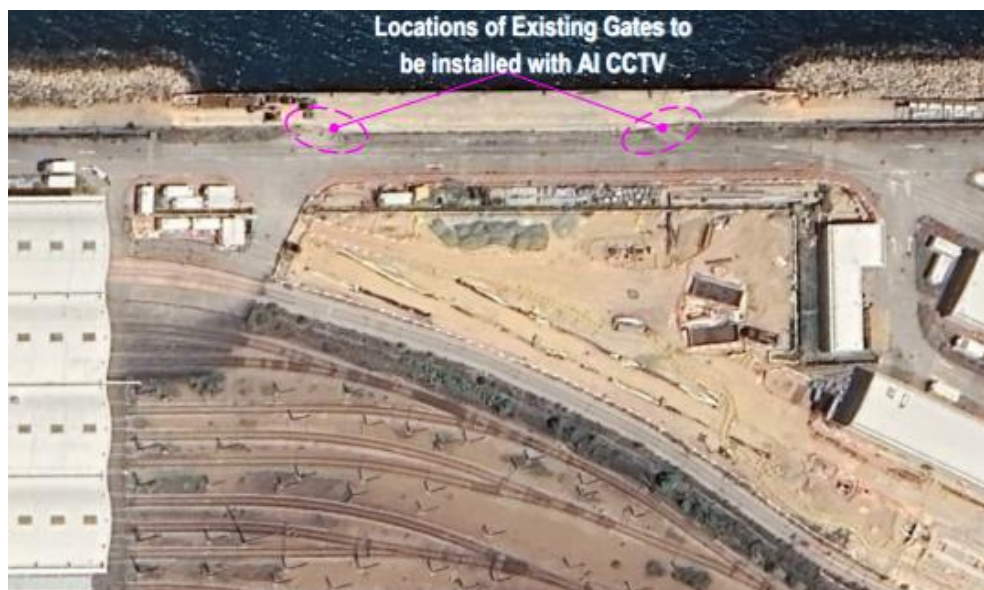


Figure 7.2.4 Location of CCTV to be installed at the 2 seawall gates

#### 7.4 Joint Use of Seawall with CEDD Contract C7

Contract C7 is currently utilizing the seawall for their construction works. CSHK is required to liaise with CEDD to arrange joint use of the seawall. According to Contract C7, they will utilise the seawall until the end of 2024. For the booking arrangements of the seawall with the depot and Contract C7, please refer to the separate submission 'Method Statement of Disposal of C&D materials'.



Figure 7.2.5 Contract C7 Utilizing dates of seawall



### 7.5 Traffic Controller Arrangement

Traffic Controllers will be deployed at the junctions along the main depot road to control the traffic and manage traffic queues. The deployed Traffic Controllers layout is shown in Figure 7.2.3.

### 7.6 Berthing Arrangement for Disposal of C&D materials

For the Disposal of C&D Materials arrangement, please refer to 1701/W/000/CSC/760/000201 Method Statement of Disposal of C&D Materials.

The berthing arrangement for the disposal of C&D materials is shown in the Figures below:

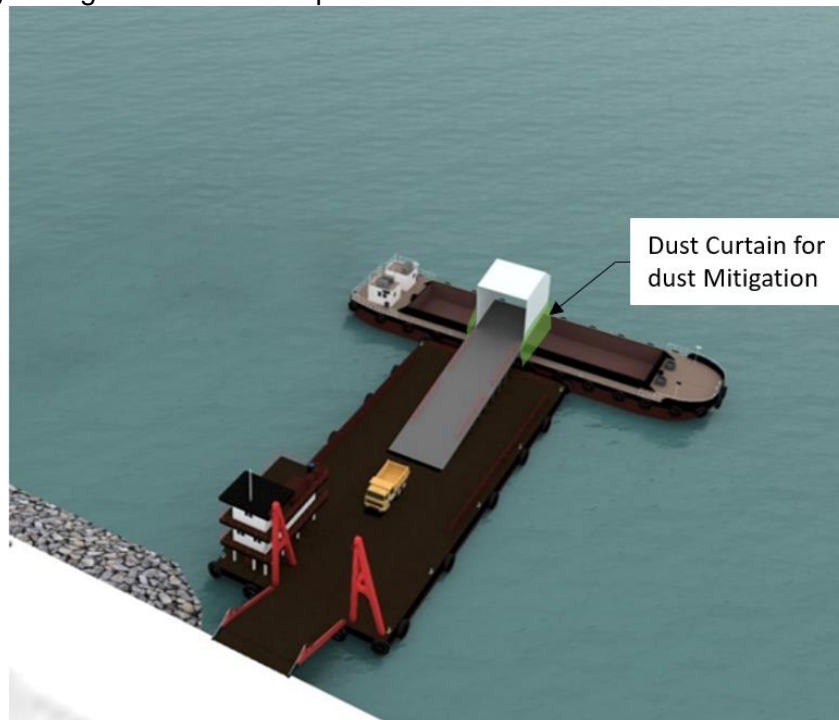


Figure 7.6.1 Disposal Operation with a RoRo Barge

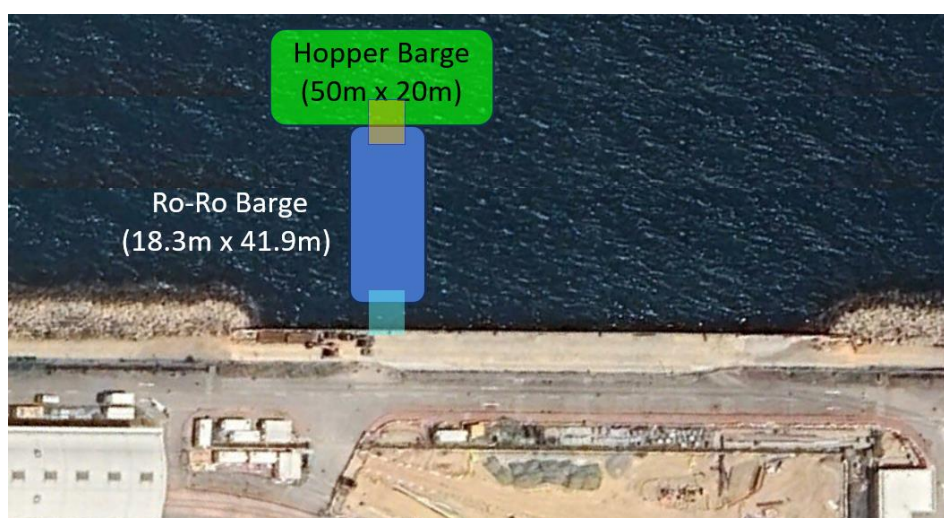


Figure 7.6.2 RoRo Barge Arrangement for Disposal Operation

## 7.7 Material Delivery

### 7.7.1 Estimation of Material Required for Delivery:

- The following is the estimation of materials to be delivered via marine transportation:
1. Steel trusses for the construction of the of OYB Link Bridges.
  2. Precast I-beams for L-Shape Link Bridge construction and precast RC units for Phase 3D Sewerage Deck construction
    - Total 8 nos. of Precast I-Beams
  3. Precast RC beams and slabs for OYB construction (see Figures 7.7.2-1 to 7.7.2-3 below).
    - Over 370 nos. of pre-cast U-shaped beam shells
    - Over 1000 nos. of pre-cast slabs
  4. Phase 3D Sewerage Deck construction
    - 101 nos. of precast RC units

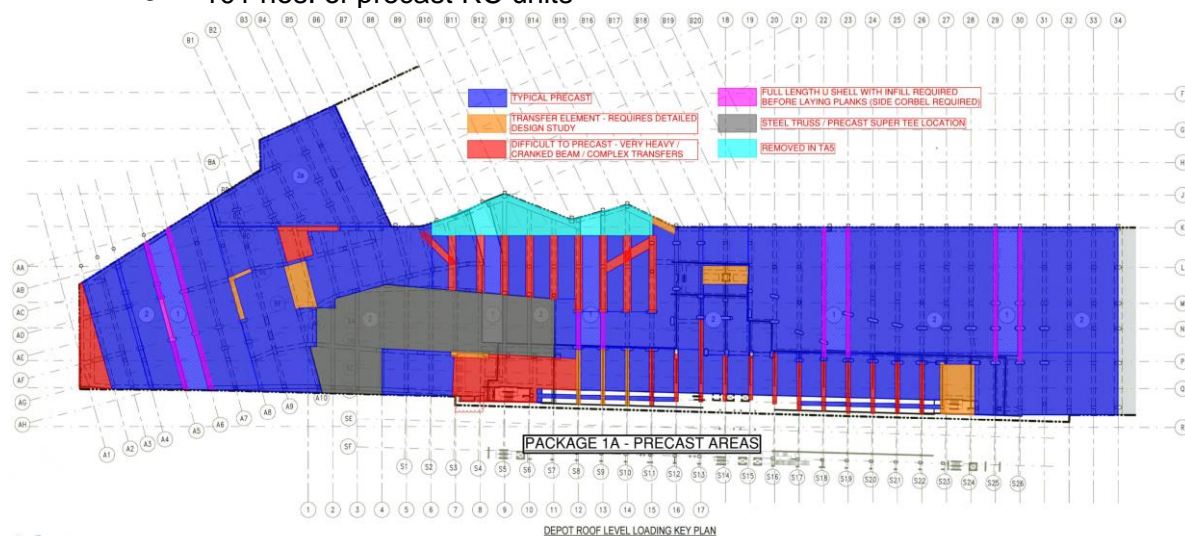


Figure 7.7.2-1 of Extent of Precast RC Beam and Slabs for OYB construction (Package 1A)

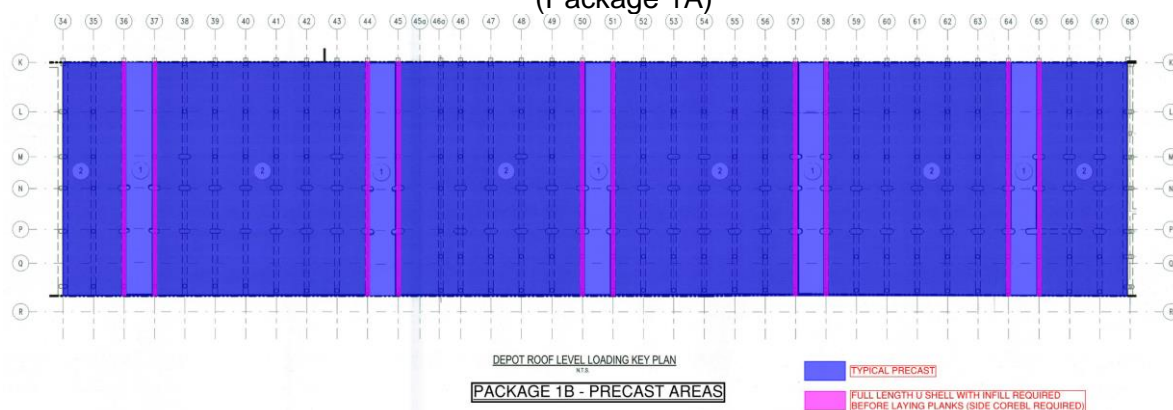


Figure 7.7.2-2 of Extent of Precast RC Beam and Slabs for OYB construction (Package 1B)



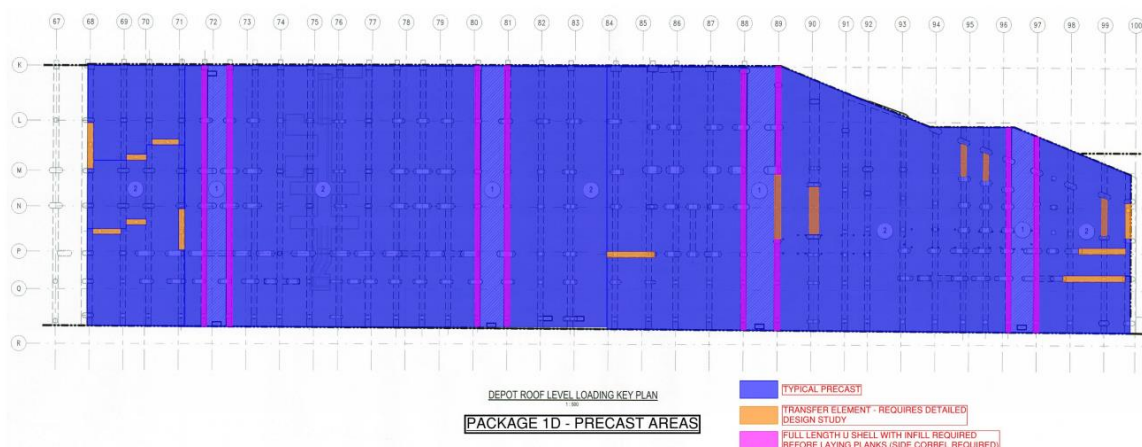


Figure 7.7.2-3 of Extent of Precast RC Beam and Slabs for OYB construction  
(Package 1D)

### 7.7.2 Delivery Schedule

The precast components will be delivered to site for assembly, including beams and slabs, starting from Feb 2025 to 2027 tentatively. The estimated delivery schedule of the precast components is shown in the figure below:

There are two main components of precast:

| Precast Component | Seawall Usage (Period) for Delivery | Max Dimension                        | For Planning Purpose = Total Beams is calculated using an average size | Total No. |
|-------------------|-------------------------------------|--------------------------------------|--|-----------|
| <b>Beam</b>       | February 2025 - April 2027          | 3.2m wide * 4.25m deep * 26.3m long  | 2.25m wide * 1.85m deep * 12.5m long                                   | 755       |
| <b>Slab</b>       | February 2025 - April 2027          | 1.2m wide * 0.5m (deep T) * 10m long | 1.2m wide * 0.5m (Deep T) * 10m long                                   | 3200      |

Figure 7.7.3 Precast Component Summary for Barge Delivery Planning

| Description                               | 2025     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |    |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----|
| Seawall Usage<br>(Date in<br>normal 7 day | 10/02/25 | 17/02/25 | 24/02/25 | 03/03/25 | 10/03/25 | 17/03/25 | 24/03/25 | 31/03/25 | 07/04/25 | 14/04/25 | 21/04/25 | 28/04/25 | 05/05/25 | 12/05/25 | 19/05/25 | 26/05/25 | 02/06/25 | 09/06/25 | 16/06/25 | 23/06/25 | 30/06/25 | 07/07/25 | 14/07/25 | 21/07/25 | 28/07/25 | 04/08/25 | 11/08/25 | 18/08/25 | 25/08/25 | 01/09/25 | 08/09/25 | 15/09/25 | 06/10/25 | 13/10/25 | 20/10/25 | 27/10/25 | 03/11/25 | 10/11/25 | 17/11/25 | 24/11/25 | 01/12/25 | 08/12/25 | 15/12/25 | 22/12/25 | 29/12/25 |          |          |          |          |          |          |          |    |
| Beam Total                                | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 10       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       |          |          |          |          |          |    |
| Slab Total                                | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 14       | 17       | 17       | 17       | 21       | 21       | 17       | 21       | 21       | 21       | 17       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 43       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       | 47       |          |          |          |          |    |
| Description                               | 2026     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |    |
| Seawall Usage<br>(Date in<br>normal 7 day | 09/01/26 | 19/01/26 | 29/01/26 | 26/01/26 | 02/02/26 | 09/02/26 | 16/02/26 | 23/02/26 | 02/03/26 | 09/03/26 | 16/03/26 | 23/03/26 | 30/03/26 | 06/04/26 | 13/04/26 | 20/04/26 | 27/04/26 | 04/05/26 | 11/05/26 | 18/05/26 | 25/05/26 | 01/06/26 | 08/06/26 | 15/06/26 | 22/06/26 | 29/06/26 | 06/07/26 | 13/07/26 | 20/07/26 | 27/07/26 | 03/08/26 | 10/08/26 | 17/08/26 | 24/08/26 | 31/08/26 | 07/09/26 | 14/09/26 | 21/09/26 | 28/09/26 | 05/10/26 | 12/10/26 | 19/10/26 | 26/10/26 | 02/11/26 | 09/11/26 | 16/11/26 | 23/11/26 | 30/11/26 | 07/12/26 | 14/12/26 | 21/12/26 | 28/12/26 |    |
| Beam Total                                | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 11       | 5        | 5        | 5        | 5        | 9        | 9        | 9        | 9        | 8        | 9        | 9        | 9        | 7        | 7        | 5        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        |          |    |
| Slab Total                                | 47       | 47       | 47       | 47       | 47       | 28       | 41       | 41       | 38       | 38       | 36       | 18       | 22       | 26       | 26       | 26       | 47       | 47       | 47       | 47       | 47       | 40       | 40       | 40       | 22       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 18       | 18       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21       | 21 |
| 2027                                      |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |    |
| Seawall Usage<br>(Date in<br>normal 7 day | 04/01/27 | 11/01/27 | 18/01/27 | 25/01/27 | 01/02/27 | 08/02/27 | 15/02/27 | 22/02/27 | 01/03/27 | 08/03/27 | 15/03/27 | 22/03/27 | 29/03/27 | 05/04/27 | 12/04/27 |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |    |
| Beam Total                                | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |    |
| Slab Total                                | 21       | 21       | 18       | 18       | 21       | 21       | 21       | 21       | 21       | 18       | 18       | 18       | 18       | 21       | 21       | 18       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |    |

Figure 7.7.4 Precast Delivery Schedule:

### 7.7.3 Unloading of material from barge

- The process of unloading materials from a barge involves transferring goods or supplies from the barge to a designated location on land. This can be accomplished using various methods and equipment, depending on the type of cargo and the available infrastructure.
- A crane is positioned on the dock or shoreline, and it utilizes a lifting mechanism and cables to hoist the cargo from the barge and place it onto the designated area. The crane operator carefully maneuvers the cargo, following specific instructions and safety protocols.
- Where large quantities of construction materials, such as steel beams or concrete blocks, need to be unloaded from a barge. A crane with a suitable lifting capacity is positioned on the dock adjacent to the barge. The crane operator communicates with the crew on the barge, who attach the cargo to be unloaded to the crane's lifting hook. The crane operator then operates the crane, lifting the materials from the barge and placing them onto the long vehicle.

### 7.7.4 Berthing Arrangement for Material Delivery on-site

For transporting of precast materials, a Derrick Lighter will transport the construction materials to the Site via marine access. the proposed berthing arrangement is as shown in the Figure below:



Figure 7.9 of General Arrangement for Material Delivery

- 2 vessels can be accommodated at the barging facility concurrently. One can berth at the seawall for loading/unloading operations whilst the 2<sup>nd</sup> vessel will be berthed at the Spoil removal barge for disposal of excavated materials.

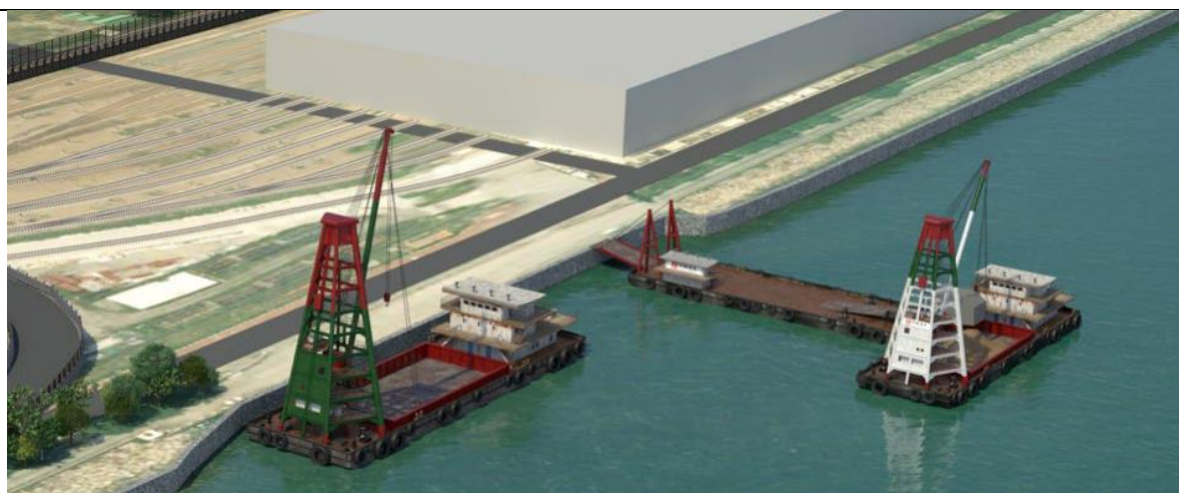


Figure 7.10 Proposed Berthing Arrangement for Spoil Removal & Material Delivery (2-barging arrangement)

## 8. Safety

### 8.1 General Safety

- All workers shall attend a site-specific induction course conducted by CSHK Safety Team. The Safety Officer shall explain the necessary safety requirements as identified in the Risk Assessment Record and the Construction Manager/ Engineer / Foreman in charge of the work shall explain the system of work to his supervisors and workers.
- All workers shall be equipped with reflective vests and safety helmets during operation. All workers must go through a briefing by the Construction Manager / Safety Officer / Safety Supervisor before commencement of any works. All workers on site shall obtain an approved "Mandatory Basic Safety Training Certificate".
- Toolbox talk training with reference to the recommended safety and environmental control measures listed in the Construction Risk Assessment will be provided to the site personnel prior to commencing works.
- A pre-meeting will be arranged before commencement of the work among Foreman / Engineer / Construction Manager, MTR's representatives and Safety Department to brief the nature of works, the safety aspects and the requirements.
- Safety helmets fitted with chin straps must be worn within the site, safety boots, hearing protectors (if needed), high visibility jackets / sashes, reflective vest, goggles, gloves and full body harnesses for work at height will be provided to all staff working on site. Warning signs and barriers will be erected where necessary.
- Particular care needs to be taken when working on or near busy roads. No works will be undertaken unless safe access, including approved and fully implemented TTM / TTAs where necessary.
- Any emergency situation shall be reported to Subcontractor and Contractor (i.e. Construction Manager / Engineer / Foreman and Safety Department, etc.) for prompt response.
- All workers should have RSI qualification when working at OA Area such as near the seawall / main road.
- Workers working on a vessel shall have the qualification of the "Shipboard Cargo Handling Basic Training Course"/ "Blue Card".
- All workers working on vessels and inside the seawall gates shall wear life vests.

### 8.2. Safety for Material Delivery at seawall



|    |   |
|----|---|
|    | <p>During the operation of the material delivery at the seawall, all the lifting appliances / mobile plant will comply with the following safety measures:</p> <ul style="list-style-type: none"> <li>● Lifting appliances and lifting gear shall be tested and examined by a competent examiner before use and at regular intervals and inspected by a competent person at regular intervals.</li> <li>● Lifting appliances/mobile plant shall be operated by qualified operators.</li> <li>● Operators of lifting appliances/mobile plant on vessels shall be authorised by the master or owner of the vessel/ the site management before carrying out any work.</li> <li>● Lifting appliances on vessels shall be fixed and securely anchored.</li> <li>● Lifting appliances/mobile plant shall be kept away from dangerous locations such as openings, edges close to water.</li> <li>● The operation zone shall be clearly demarcated and properly fenced off.</li> <li>● A signaller shall be provided if the view of the operator is obstructed.</li> <li>● No lifting appliance/mobile plant or lifting gear shall be loaded beyond its safe working load.</li> <li>● Lifting appliances/mobile plant and lifting gear shall be properly maintained in safe working order.</li> </ul> <p><b>8.3 Risk Assessment</b><br/>The risk for the works shall be assessed and the Risk Assessment Analysis is shown in Appendix A.</p>   |
| 9. | <p><b>Environmental</b> (Environmental aspect &amp; impact identification as well as mitigation measures)</p>   |
|    | <p>The works shall follow relevant mitigation measures as required under the Environmental Permit (EP) / EP submission and <i>Contractor's</i> Environmental Management Plan (EMP).</p> <p><b>9.0 General mitigation measures:</b></p> <ul style="list-style-type: none"> <li>• General works shall be carried out during normal working hours (08:00 to 18:00). However, should the progress demand for the works to be undertaken from 19:00 to 07:00 next day or on public holidays, a construction noise permit shall be obtained as necessary.</li> <li>• Plant with QPME label will be deployed if available.</li> <li>• Only plant with NRMM label will be used unless exempted.</li> <li>• For disposal of C&amp;D materials, water spray will be carried out during the work to prevent dust generation.</li> <li>• C&amp;D material for disposal will be water sprayed to suppress dust.</li> <li>• Wheel-washing facilities should be provided at the exits from work areas. A hard-surfaced road between any washing facility and the public road should also be provided.</li> <li>• Regular watering of active works areas, exposed areas and paved haul roads.</li> <li>• Drip tray should be provided to chemical waste containers. The drip tray should be clean up regularly. Clean up should be done before foreseeable inclement weather such as typhoon or heavy rain.</li> </ul> <p><b>9.1 Mitigate the risks associated with dust pollution</b></p> <ul style="list-style-type: none"> <li>➤ The application of water to suppress dust by maintaining moisture in the soil and materials, the utilisation of covers such as tarps or other appropriate materials to prevent the escape of dust during transportation.</li> <li>➤ the implementation of controls during the dumping process to regulate the speed and height of dumping, site preparation activities such as watering or the application of dust</li> </ul> |



|            |  |
|------------|--|
|            | <p>suppressant chemicals, and regular monitoring of the site and its surrounding areas to promptly detect and address any dust-related concerns that may arise.</p> <p><b>9.2 Mitigation Measures for Potential Water Quality Impacts</b></p> <p>As the barging point is located near to the Brothers Marine Park, the following good site practices should be implemented to minimise the potential water quality impact due to the usage the barging point:</p> <ul style="list-style-type: none"> <li>• Waste water shall be collected within site and would not discharge to the sea;</li> <li>• All vessels shall be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to minimise that undue turbidity is not generated by turbulence from vessel movement or propeller wash;</li> <li>• Loading of barges shall be controlled to prevent the splashing of material into the surrounding water;</li> <li>• Barges shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation;</li> <li>• Excess materials shall be cleaned from the decks and exposed fittings of barges before the vessels are moved; and</li> <li>• Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action.</li> </ul> |
| <b>10.</b> | <b>Quality Control</b>   |
|            | The use of the vertical seawall does not form part of the permanent works construction and therefore an ITP is not relevant for this Method Statement and is not provided.   |
| <b>11.</b> | <b>Appendices</b> (Identify and include additional information in the submission package)  |
|            | Appendix A - Risk Assessment   |