

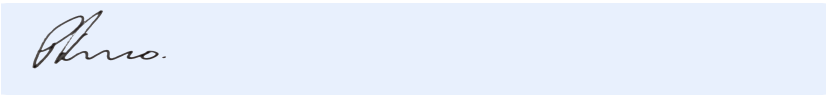
BSBPMG521

MANAGE PROJECT INTEGRATION

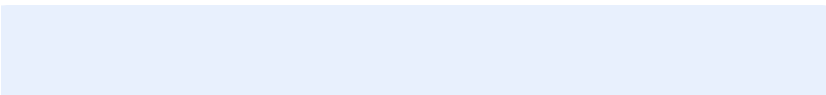
PRACTICAL ASSESSMENT INSTRUCTIONS

- The following practical assessment will require the participant to complete work related activities.
- Observations will be conducted of the participant's work to determine whether they display sufficient practical skills and knowledge.
- Please fill in the details below, providing your name, signature and date of assessment.
 - Your signature acknowledges that the assessor provided clear instructions and the participant understood what was required to complete this assessment.
- The assessor may substitute a Practical Task with another task of equal value.
 - Alternate tasks must be fully documented by the assessor.

Participant name PAUL RUSSO

Participant signature 

Assessor name _____

Assessor signature 

Date Click here to enter a date. 27/02/22

Number of tasks	Number of tasks completed	Satisfactory?	
		Yes	No
1		☐	☐

ASSESSOR COMMENTS

BSBPMG521

MANAGE PROJECT INTEGRATION

Practical Task 1

Description of task:

A suitable observer is to verify the participant's ability to:

- Integrate and balance overall project management functions of scope, time, cost, quality, human resources, communications, risk and procurement across the project life cycle; and
- Align and track project objective to comply with organisational goals, strategies and objectives

These tasks may be simulated or real. The participant is to gather evidence of how they have completed each component of the Practical Task, which is to be submitted with this Practical Assessment sheet. The observer is to provide detailed comments on the tasks completed by the participant. The assessor is to verify the observer's comments in the Assessor Comments section, and provide the Practical Assessment outcome on the front cover of this document.

Resources required:

Project documentation, Organisational documentation.

Assessment of task

Name of participant:	Paul Russo	
Name of observer:	Nick Brockhurst	
Role of observer (Confirm suitability to sign)	Senior Project Engineer	
Email address of observer	Nick.brockhurst@cbgujv.com.au	
Signature of observer:		
Date:	27/02/2022	
When completing the task, did the participant:		Tick if satisfactorily completed. Provide comments if left unticked.
1 Establish project		
1.1A.	Identify, clarify and prepare project initiation documentation.	☒
1.1B.	Identify relationship between the project and broader organisational strategies and goals.	☒
1.1C.	Negotiate and document project objectives, outcomes and benefits.	☒
1.1D.	Negotiate project governance structure with relevant authorities and stakeholders.	☒
1.1E.	Prepare and submit project charter for approval by relevant authorities.	☒
2 Undertake project planning and design processes		
1.2A.	Establish and implement a methodology to disaggregate project objectives into achievable project deliverables.	☒
1.2B.	Identify project stages, phases and structures – considering key requirements for stage completion against client requirements and project objectives.	☒

APPENDIX A

APPENDIX B

1.2C.	Analyse project management functions to identify interdependencies and impacts of constraints.	☒
1.2D.	Develop a project management plan integrating all project-management functions with associated plans and baselines.	☒
1.2E.	Establish designated mechanisms to monitor and control planned activity.	☒
1.2F.	Negotiate approval of project plan with relevant stakeholders and project authority.	☒

3 Execute project in work environment

1.3A.	Manage the project in an established internal work environment, ensuring effective work throughout the project.	☒
1.3B.	Maintain established links to align project objectives with organisational objectives throughout the project.	☒
1.3C.	Within authority levels, resolve conflicts negatively affecting attainment of project objectives.	☒

4 Manage project control

1.4A.	Ensure project records remained updated against project deliverables and plans at required intervals.	☒
1.4B.	Analyse and submit status reports on project progress and identified issues with stakeholders and relevant authorities.	☒
1.4C.	Analyse and submit impact analysis of change requests for approval, where required.	☒
1.4D.	Maintain relevant project logs and registers accurately and regularly to assist with project audit.	☒
1.4E.	Ensure associated plans remained updated to reflect project progress against baselines and approved changes.	☒

5 Manage project finalisation

1.5A.	Identify and allocate project finalisation activities.	☒
1.5B.	Ensure project products and associated documentation were prepared for handover to client in a timely manner.	☒
1.5C.	Finalise financial, legal and contractual obligations.	☒
1.5D.	Undertake project review assessments as input to future projects.	☒

The participant's performance was: ☒ Satisfactory ☐ Not Satisfactory

OBSERVER COMMENTS

1.1A – 1.1E

Paul participated in the development of a 'construction area plan' which is utilised for the initiation of a particular scope of works in an area on the job. In this case, Woolloongabba station. It is an overview of project initiation documentation & requires approval from numerous project stakeholders. It also outlines the scope of works & requirements which speaks to project objectives, outcomes & benefits.

1.2A – 1.2F

Paul was the author of a 'work pack' document which essentially is a master document for a particular scope of works (in this case, station slabs) which is vital for project planning & design processes. It exhibits numerous elements of project integration. It requires project stakeholder approvals (see first signed off page)

1.3A – 1.3C

Paul chairs the weekly engineers meeting within the structures team. The weekly meeting allows him to manage the work load of his team & delegate tasks as required to ensure project objectives are fulfilled & conflicts are resolved.

1.4A – 1.4E

Paul is a regular contributor to the Woolloongabba station weekly dashboard report. This is a snapshot of the current status of the project on a weekly basis, providing a summary of key issues, variations, material usage (concrete & waste) and status reports.

1.5A – 1.5D

Paul is noted as a project stakeholder on a subcontractor close out form for Woolloongabba station. In this instance, he provided the evidence for the final amount payable to the subcontractor & contributed to the close out checklist with the contract administrator

Construction Area Plan

Project:	Cross River Rail TSD	Project No.	Q80379		
Area:	Woolloongabba Station and Building	Doc No.	CRRSTD-CS-CAP-CBGU-000043	Rev:	A

SUMMARY SCOPE & LOCATION

The scope of works of this Construction Area Plan forms part of the overall CBGUJV *Woolloongabba Station - Civil & Concrete* scope of works.

This CAP covers construction activities facilitating the erection of the primary and ancillary station building structures (both temporary and permanent) including:

- Sub-basement drainage systems
- In-situ & pre-cast concrete elements (including pits, slabs, walls, columns, Super-t girders, Precast deck units) and associated substantial formwork & falsework

Works in the scope of this CAP will have significant interface with both the Tunnel Boring Machine (TBM), mined tunnel & cavern construction activities.

SCHEDULE

Planned Commencement Date:	28/09/2020	Planned Handover Date:	01/07/2023
ACTUAL Commencement Date:		ACTUAL Handover Date:	

SAFETY ESSENTIALS

✓	Working at Heights	✓	Cranes and Lifting Operations
✗	Working near Live Traffic	✓	Working In and Around Mobile Plant
✓	Working with Live Services	✓	Working with Temporary Works
✓	Electrical Work		

AUTHORISATION / APPROVALS

Prepared by:	Name	Position	Signature	Date
	Rory Church/Paul Russo	Senior Project Engineer		25/9/20
Authorised by:	Name	Position	Signature	Date
	Chris Russell	Project Manager		25/9/20
Approved by Client Signature (if applicable)	Name	Position	Signature	Date

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Reference	Requirements	Refer to Plan/Element
PSTR Annex D 4.6.1 (a)	The relevant IFC Design Documentation (both permanent and Temporary Works);	Section 3 & 4
PSTR Annex D 4.6.1 (b)	A program for the Construction Package	Section 2.3
PSTR Annex D 4.6.1 (c)	The relevant Inspection and Test Plans and Construction Procedures	Section 2.2 & 5.3 and Work Packs
PSTR Annex D 4.6.1 (d)	Relevant Construction Traffic Management Plans	Section 7 & Work Pack
PSTR Annex D 4.6.1 (e)	A risk assessment for all high risk activities for the Construction Package	Section 10
PSTR Annex D 4.6.1 (f)	Safety plans, including safety procedures required for any construction activities	Section 7 & Work Pack
PSTR Annex D 4.6.1 (g)	List of all construction Approvals and permits required	Section 9, project internal work permits identified in Work Pack
PSTR Annex D 4.6.1 (h)	Predicted construction impacts and proposed mitigation measures, including establishing monitoring equipment, for noise, vibration, ground movement, and other requirements of the State Approval, Outline Environmental Management Plan, and Construction Environmental Management Plan;	Section 7
PSTR Annex D 4.6.1 (i)	Contingency plans for track possessions, busway closures, pedestrian route closures, and road closures to ensure that rail, bus, pedestrian, and road services can be resumed on schedule	Section 7
PSTR Annex D 4.6.1 (j)	Any other documents deemed necessary by the State or the Project Independent Certifier to permit construction to proceed	Section 13
PSTR Annex D 4.7.1 (a)	The scope of activities covered	Section 2
PSTR Annex D 4.7.1 (b)	The materials, plant and equipment to be used	Section 8
PSTR Annex D 4.7.1 (c)	The personnel required and their roles, responsibilities and required competencies	Section 8 & ITP
PSTR Annex D 4.7.1 (d)	All induction requirements	WHS MP, Section 7.3.6 & Work Pack
PSTR Annex D 4.7.1 (e)	All permit requirements	Section 9
PSTR Annex D 4.7.1 (f)	The Inspection and Test Plans to be used and quality assurance documentation to be completed	Section 5.3 & 11
PSTR Annex D 4.7.1 (g)	The detailed construction procedures to be followed	Section 7

2.1. SCOPE OF WORKS & LIMITS

The Woolloongabba Station has been assigned into eight different areas and stages due to the construction program to get the Tunnel boring Machine installed commissioned and ready to commence excavation towards Albert Street Station as soon as possible. Stage 1 – 4 and 7 will be performed under Construction Area Plan CRRSD-CS-CAP-CBGU-000043. Stages 5,6 and 8 will be performed under a separate Construction area Plan. The Stages of construction are outlined below:

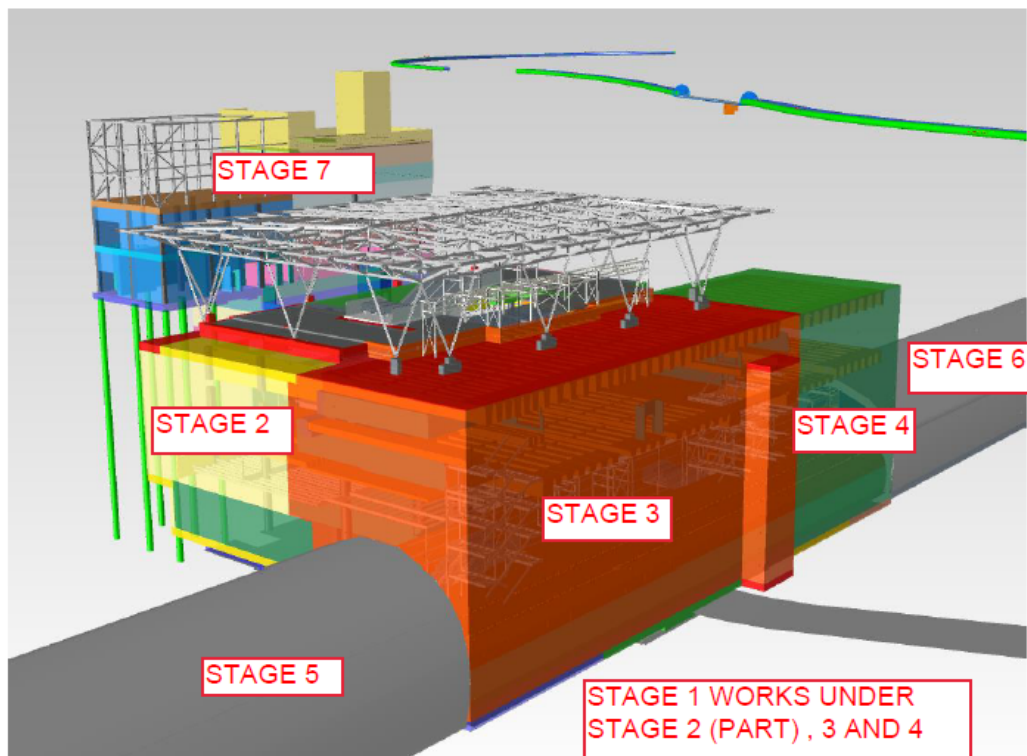


Figure 1 – Woolloongabba Station Staging Plan

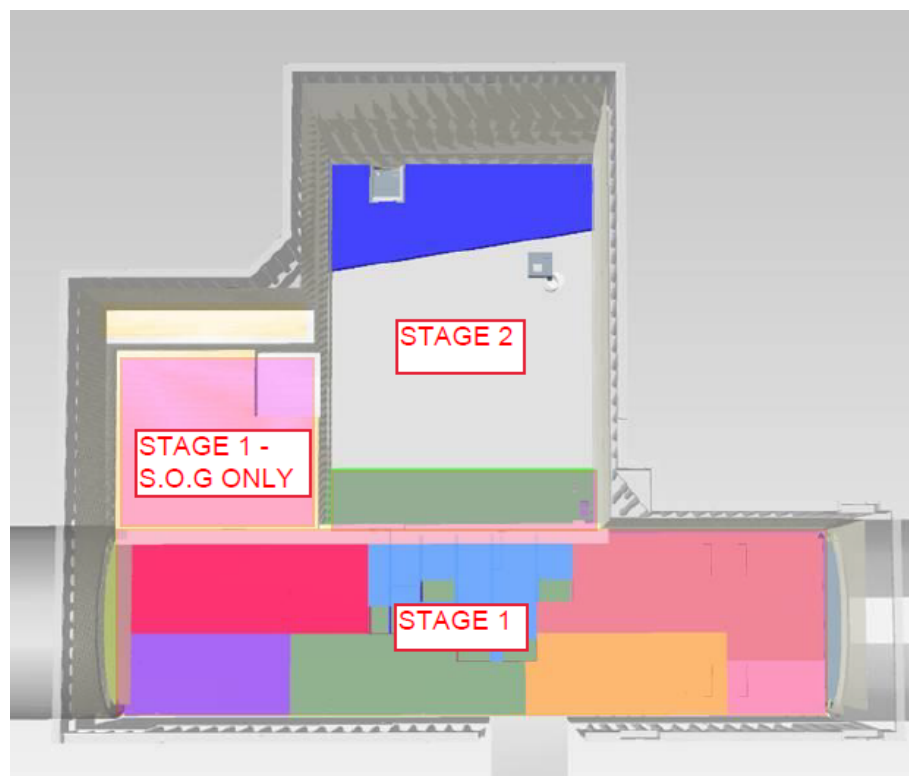


Figure 2 – Stage 1 and Stage 2 boundary

The stages are defined as follows:

STAGE 1 - Primary Structure – FOH Level B8/BOH level B9 and Dividing Wall SF level B8 to B4

- Cavi-drain and under slab drainage including blinding, trench drain and pipe installation & concrete Protection layer
- B8 SOG and associated cavi-drain and under slab drainage including drainage trenching, SW3, SW29 to Level B4, B8 Suspended Slab, B9 Slab on Ground Grid SF to SE and in Tunnel Ventilation Area. In addition to this, the B4 Slab on ground will be cast as part of the advanced works structures in the station.

STAGE 2 - Primary Structure - BOH & Station Entry

- Cavi-drain and under slab drainage including blinding, trench drain and pipe installation & concrete Protection layer
- Construction of reinforced concrete structure to B9, B8, B7, B6, B4, B3, B2, B1, L0,

STAGE 3 - Primary Structure - Station Box

- Construction of reinforced concrete structure to B9, B8, B6, B4, B3, B2, B1, L0 (including precast beams & Precast Mezzanine trusses)

STAGE 4 - Primary Structure - Station Box Shaft

- Construction of reinforced concrete structure to B8, B6, B4, B3, B2, B1, L0 (including precast beams & Precast Mezzanine trusses)

STAGE 7 - Services Building

- Construction of reinforced concrete structure to Level 1, 2 and 3 including precast Concrete walls.

Other Stages for Construction but not covered by this CAP are as follows:

STAGE 5 - Primary Structure - South Cavern

- B6, Mezzanine (FRP & Precast), Cavern linings – temporary and permanent

STAGE 6 - Primary Structure - North Cavern

B6, Mezzanine (FRP & Precast), Cavern linings – temporary and permanent

STAGE 8 - Above Ground canopy and Entry Structure

2.2. WORK PACK BREAKDOWN

List in sequence of commencement and responsible person

Project Manager: *Chris Russell*

Construction Manager: *Joel Purcell*

Senior Project Engineer: *Rory Church*

Superintendent: *Warren Tresider*

Work Pack	Work Pack Number	Project Engineer (Work Pack Owner)	Site Engineer(s)	Senior Supervisor	Foreman
Drainage – Excavation and Pipe Installation- Stage 1 & 2	CRRTSD-CS-WPK-CBGU-430001	Paul Russo	Annabelle Kissane	James Maher	Mark Wiese
Underground Platform and Cavern Structures – North & South	CRRTSD-CS-WPK-CBGU-430001	Wade McHarg/ Leon Watts	TBA	James Maher	Mark Wiese
Underground Primary Structure – Woolloongabba Station – FRP- Stage 1,2,3,4 and 7	CRRTSD-CS-WPK-CBGU-430001	Rory Church/Paul Russo	Annabelle Kissane/Patrick Rykiert	James Maher	Mark Wiese
Underground Primary Structure – Installation of precast Super T & Deck Units	CRRTSD-CS-WPK-CBGU-430001	Wade McHarg	Annabelle Kissane	James Maher	Mark Wiese
Above Ground Canopy and Entrance Structures	CRRTSD-CS-WPK-CBGU-430002	Paul Russo	Patrick Rykiert	James Maher	Mark Wiese

2.3. KEY MILESTONE DATES

Refer to attached Level 3 Programme

Milestone Description	Planned Completion
Stage 1	
B8 Slab Completion – North and South- Stage 1	9 February 2021
B9 Slab on Ground completion Zone 1	4 December 2021
B8 Suspended Slab Completion – Stage 1	21 January 2021
W29 – B8 to B4	28 January 2021
Stage 2	
B9 Slab on ground Completion – Stage 2	25 February 2021
B7 Suspended Slab Completion – Stage 2	9 July 2021
B4 – Suspended Slab completion – Stage 2	1 September 2021
B3 – Completion of suspended slab	25 October 2021
B2 – Suspended Slab completion	20 December 2021
B2 – Precast Beam installation and deck slab	10 January 2022
B1 – Suspended Slab completion	2 March 2022
L0 – Precast beam installation and topping slab completion	20 May 2022/27 May 2022
Stage 3	
Installation of Mezzanine truss from P10 to P15	19 November 2021
Installation of Precast culvert platforms P10 to P15	5 April 2021
Installation of Precast beams Level B2 P10 to P15	23 June 2022
Installation of Precast beam L0 Lower	25 August 2022

Installation of Precast beam L0 Upper	14 October 2022
Stage 4	
Installation of Mezzanine truss from P15 to P17	14 November 2022
Installation of Precast culvert platforms P15 to P17	22 November 2022
Installation of Precast beams Level B2 P15 to P17	31 January 2023
Installation of Precast beam L0 Lower	24 February 2023
Stage 7	
L0 – L3 Level FRP Complete	2 March 2022

3. DESIGN PACKAGES

List all the design packages related to this Construction Area Plan.

Package Number	Package Name
300-0520	Tunnel Drainage
410-0450	Underground Primary Structures – Advanced Works and Main Structure
410-0451	Underground Platform and Cavern Structures
410-0452	Underground Station Ancillary Structures
410-0453	Above Ground Structures and Canopy

4. TEMPORARY WORKS

During the construction of the Station Building, several activities require the use of temporary works. In accordance with the CPB Construction Safety Essential: “Temporary Works”, the table below summarises the activities requiring the design, installation and loading of Temporary Works, to be raised with the Temporary Works Coordinator and included in the Temporary Works Register.

Type of Temporary Work	Risk Category	Approval Required		
		Designer	Certifier	Inspector
Low rise formwork at ground / excavation level, less than 1.8m pour height. Applies to timber (site made) or proprietary systems, double sided. Anchors / fixings nominated by Structural Engineer				
Station Building Floor Falsework	High	TBC	TBC	TBC
Station Building External Wall Formwork – Lower Level (First lift)	High	TBC	Infrastructure Engineers	Infrastructure Engineers
Station Building External Wall Formwork – Lower Level (All other lifts excluding first lift)	High	TBC	TBC	TBC
Station building Internal Wall Formwork	High	TBC	Infrastructure Engineers	Infrastructure Engineers
Station Building W29 Double sided formwork and temporary support of wall	High	TBC	Infrastructure Engineers	Infrastructure Engineers
Station Building SW05 Double sided formwork and temporary support of wall	High	TBC	TBC	TBC
Station Building internal circular columns 900mm and 1100mm diameter	High	TBC	TBC	TBC

Station Building Internal rectangular columns – 1000mm x 750mm	High	TBC	TBC	TBC
Station building beams Level 3 and Level 2	High	TBC	TBC	TBC
Station Building – Shoring Walls – SW05, SW03 – Rock Anchor before Mezzanine Truss Installation	High	TBC	TBC	TBC
Station Building W32 – L2 to L0 and temporary support of wall	High	TBC	TBC	TBC
Station Building – Reinforced Concrete beams all levels	High	TBC	TBC	TBC
Station Building – Support of Super T beams – Level B2 FOH	High	TBC	TBC	TBC
Station Building – Support of Super T beams – Level L0 FOH	High	TBC	TBC	TBC
Station Building – Support of Precast Deck units Level B2 – BOH Station	High	TBC	TBC	TBC
Station Building – Support of Precast Deck units Level L0 – FOH Station	High	TBC	TBC	TBC

The required approvals and certifications will be identified by the Temporary Works Coordinator during the temporary works design and approval process and are to be included within respective Work Packs. Temporary Works designers will be advised when subcontractors have been contractually engaged.

5. REFERENCES

5.1. STANDARDS:

The following Australian and/or International Standards are applicable to this activity:

- AS 1319 Safety Signs for the Occupational Environment
- AS 1715 Selection, Use and Maintenance of Respiratory Protective Devices
- AS 1716 Respiratory Protective Devices
- AS 3544 Industrial Vacuum Cleaners for Particulates Hazardous to Health
- AS 4260 High Efficiency Particulate Air (HEPA) Filters – Classification, Construction and Performance
- AS 60529 Degrees of protection provided by enclosures
- AS 4349 Inspection of buildings – General requirements
- AS 3600 Concrete Structures
- AS/NZS 1680 Interior and workplace lighting – General principles and recommendations
- AS/NZS 4994 Temporary edge protection
- AS 3610 Formwork for concrete
- ISO 31000 Risk management – Principles and guidelines
- ISO 9001 Quality Management Systems
- AS 4671 Steel reinforcing materials
- AS 4672 Steel prestressing materials
- AS/NZS 3679.1 Structural steel Hot-rolled bars and sections
- AS 2159 Piling – Design and Installation
- AS 1379 Specification and supply of concrete
- AS1012.8 Methods of testing concrete - Method 8.3: Methods of making and curing concrete - Mortar and grout specimens
- AS1012.9 Methods of testing concrete, Method 9: Compressive strength tests - Concrete, mortar and grout specimens

5.2. SPECIFICATIONS

The following Specifications are applicable to this activity:

- CRRTSD-000-0404-SPE-CBGU-1470-000200 - Concrete for Stations, Station Precinct, Dive, Cut and Cover Tunnel Structures (Excluding Bridges)

- CRRTSD-000-0406-SPE-CBGU-1470-000100 - Reinforcing Steel (Excluding Bridges)
- CRRTSD-000-0407-SPE-CBGU-1470-000100 - Manufacture of Precast Concrete Elements (Excluding Bridges) - Technical Specification
- CRRTSD-000-0408-SPE-CBGU-1470-000100 - Manufacture of Precast Concrete Culverts (Excluding Bridges)
- CRRTSD-000-0409-SPE-CBGU-1470-000100 - Manufacture of Prestressed Concrete Members and Stressing Units (Excluding Bridges)
- CRRTSD-000-0410-SPE-CBGU-1470-000100 - Manufacture of Prestressed Concrete Members and Stressing Units (Excluding Bridges)
- CRRTSD-000-0411-SPE-CBGU-1470-000100 - Supply and Erection of Prestressed Concrete Girders (Excluding Bridges)
- CRRTSD-000-0412-SPE-CBGU-1470-000100 - Fabrication of Structural Steelwork (Excluding Bridges)
- CRRTSD-000-0414-SPE-CBGU-1470-000100 - Post-tensioned Concrete (Excluding Bridges)
- CRRTSD-000-0415-SPE-CBGU-1470-000100 - Cast-In-Place Piles (Excluding Bridges)
- MRTS03 Drainage, retaining structures and protective treatment

5.3. INSPECTION & TEST PLANS

The following Inspection and Test Plans have been produced to control this activity:

- CRRTSD-CS-ITP-CBGU-000141 - Station Cavern Subsoil, Cavidrain, Sheet and Strip Filter Drainage (MRTS)
- TBA - Concrete for Stations, Station Precinct, Dive, Cut and Cover Tunnel Structures (Excluding Bridges)
- CRRTSD-CS-ITP-CBGU-00004 Cast Insitu Concrete
- CRRTSD-CS-ITP-CBGU-000034 Install Structural Steel Work – Temporary
- CRRTSD-CS-ITP-CBGU-000065 Fabrication of Structural Steel Works (DTMR)
- CRRTSD-CS-ITP-CBGU-000085 Fabrication of Structural Steel Work (Australian Standards)
- CRRTSD-CS-ITP-CBGU-000133 Temporary Fencing (MRTS)

Any additional ITP's not listed above that are identified as being necessary will be added to the list by revising the CAP Section 5.3.

6. PROCUREMENT

6.1. SUBCONTRACT PACKAGES / MAJOR PROCUREMENT ITEMS

- Concrete supply and testing
- Geotechnical Assessors
- Reinforcement Supply
- Form, Reinforcement, Pour (FRP) Contractor
- Pre-cast Concrete Beam Supply
- Precast Concrete Beam Installation
- Precast Culvert Installation Contractor for Platforms
- Precast Mezzanine Truss Units
- Structural Steel
- Tower Crane Supply / Installation Contractor
- Scaffolding Contractor
- Concrete Pump Hire
- Miscellaneous Plant Hire
- Miscellaneous Equipment Hire
- Labour Hire

6.2. LONG LEAD ITEMS

- Cavidrain proprietary product
- Precast Concrete Mezzanine Beams – Global Project Procurement
- Precast Culverts for Platforms – Global Project Procurement
- Structural Steel

7. CONSTRUCTION STRATEGY

7.1. CONSTRUCTION SEQUENCE & METHODOLOGY

[List the sequence of work and insert adequate details to describe how this section of the work will be constructed]

Activity	Responsibility
Installation of sub-slab drainage system (including Cavidrain proprietary product) Stage 1	CBGUJV / Subcontractor
Installation of FRP elements (slab-on ground, suspended slabs, walls and columns) Stage 1	CBGUJV / Subcontractor
Installation of Pre-cast elements (Walls, Columns, girders) Stage 2,3 4 and 7	CBGUJV / Subcontractor
Installation of sub-slab drainage system (including Cavidrain proprietary product) Stage 2	CBGUJV / Subcontractor
Installation of FRP elements (slab-on ground, suspended slabs, walls and columns) Stage 2,3,4 and 7	CBGUJV / Subcontractor
Installation of Precast Mezzanine Truss Units (During Stage 3 and 4)	CBGUJV / Subcontractor
Installation of Precast Culvert Units for Platforms (During Stage 3 and 4)	CBGUJV / Subcontractor
Installation of Above ground Canopy (upon completion of Level L0 lower and upper)	CBGUJV / Subcontractor

The construction of the UPS (Station box) employs a traditional top-down excavation (temporary retention works package not included in this scope) followed by a bottom-up construction of the permanent UPS (Station Box) and services building. The Tunnel Boring Machines (TBM) are to be launched from the Station Box at Woolloongabba to construct the running tunnels towards Albert St. Station. As such, the construction of the UPS is to be sequenced to accommodate this critical path activity and will be split into eight stages (in order of completion) as described below;

1. Stage 1 – Level B9 base Slab from Grid SE to Grid SG, B8 Wall of Grid SF, Internal wall in under station TVS, Level 8 Slab on Ground from Grid SF to Grid SG, Grid P10 to Grid P17 and suspended slab over the TVS rooms.
2. Stage 2 – Level B9 to Level L0 from Grid SA to Grid SF/Grid P12 to P15
3. Stage 3- Level B8 to Level L0 from Grid SF to Grid SG/Grid P10 to P15
4. Stage 4 – Level B8 to Level L0 from Grid SF to Grid SG P15 to P17
5. Stage 5 – Level B8 to Level L4 from Grid P1 to P10 – **(Not Covered by this CAP)**
6. Stage 6 – Level B8 to Level L4 from Grid P17 to P25 - **(Not Covered by this CAP)**
7. Stage 7 – Level L0 to Level L3 Grid SA to Grid SB/ Grid P11 to Grid P15
8. Stage 8 – Above ground Station Canopy Steelwork and Entrance Structures **(Not Covered by this CAP)**

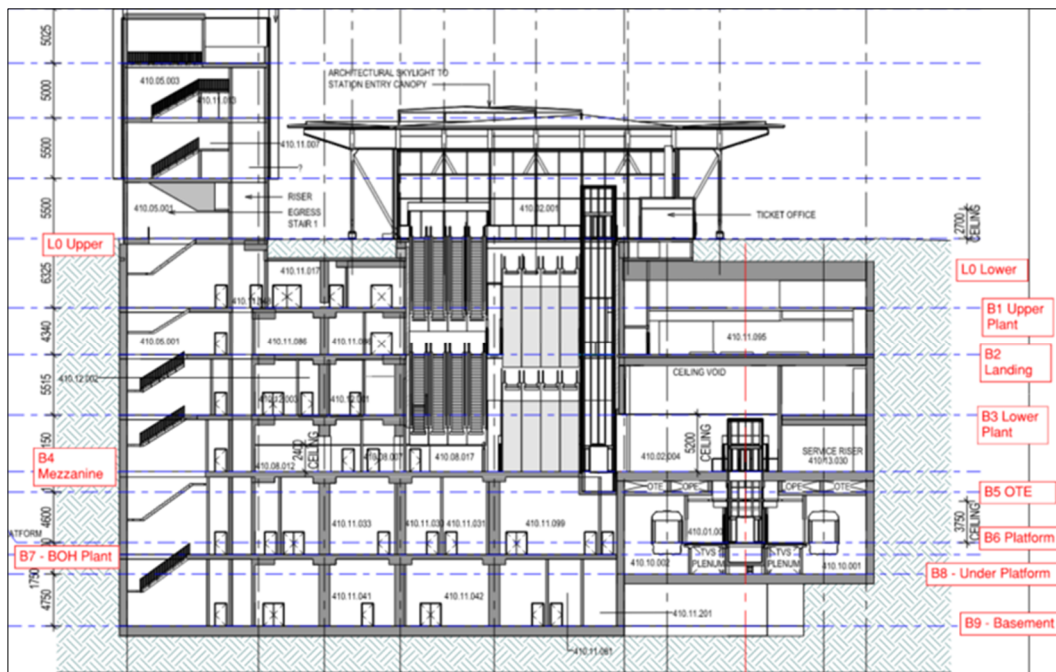


Figure 3 – Woolloongabba Station section by level

7.1.1. STAGE 1 WORKS

These works comprise the permanent works structure which can be constructed prior to the TBM launch along the eastern half of the station box as described below:

Level B9 reinforced concrete slab on ground

The base slab of level B9 is a 900mm thick reinforced concrete slab, shown on drawing CRRTSD-410-0450-DRG-RBGT-1470-131301. The pour size is approximately 507m³ (single pour) with 127t of reinforcing steel. This first pour for the B9 slab is required to the extent shown which is the minimum scope required to allow construction of B8 to allow TBM enabling works.

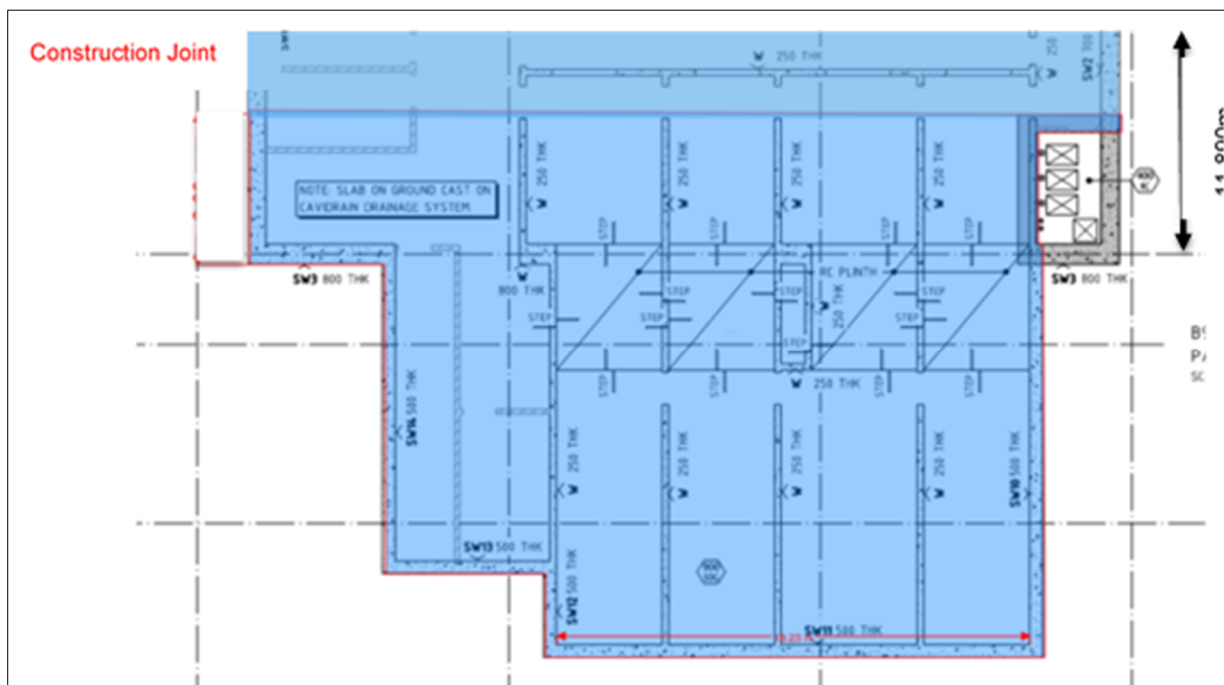


Figure 4 – B9 Stage 1 Zone 3

Level B8 Base slab

The level B8 slab is a combination of a suspended slab over level B9 area, with slab on ground to the northern and southern cavern interfaces. The B8 slab break up is shown below.

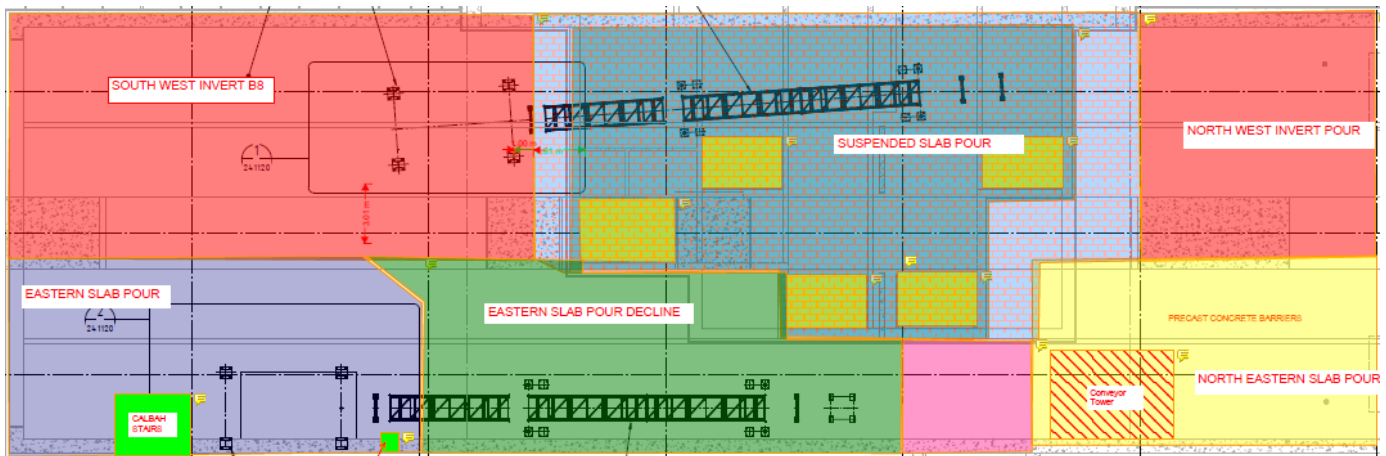


Figure 5 – B8 Invert Slab Pour Layout

The B8 north slab is a 900mm slab on ground, shown on drawing CRRTSD-410-0450-DRG-RBGT-1470-131314. The pour size is approximately 591m³, with 148t of reinforcing steel. The B8 north slab is to be split into two separate pours to accommodate the northern cavern excavation works which will occur concurrently with the slab construction.

The B8 south slab is a 900mm slab on ground, shown on drawing CRRTSD-410-0450-DRG-RBGT-1470-131311. The pour size is approximately 574m³, with 144t of reinforcing steel. The B8 south slab is to be split into two separate pours to accommodate the southern cavern excavation works which will occur concurrently with the slab construction. Any construction joints in slabs and walls will require to be water proofed as per detail CRRTSD-420-0440-DEG-RBGT-1470-149005.

The B8 suspended slab is a 500mm suspended slab over B9, shown on drawing CRRTSD-410-0450-DRG-RBGT-1470-131311. The pour size is approximately 199m³ with 40t of reinforcing steel.

The B8 east slab is a 900mm slab on ground, shown on drawing CRRTSD-410-0450-DRG-RBGT-1470-131311. The pour size is approximately 150m³ with 38t of reinforcing steel. The east slab & suspended slabs are to be poured monolithically.

Under Slab Drainage

The Underground Primary Structure is designed as a drained structure. Water is collected through the external perimeter walls and channelled into the under slab Cavi drain System. This flow is then conveyed into transverse & longitudinal channels cut in rock underneath the Cavi drain invert, which drain into the concrete sump of the Underground Primary Structure. Drainage works will be completed as part of Stage 1 along with the sump construction. The Cavi drain is placed upon a layer blinding concrete with 25mm diameter holes in it to allow any ground water to drain into the cavi drain sheeting and into the drainage trenches. The Cavi drain sheeting is also backfilled with concrete a minimum of 25mm above the sheet to protect the Cavi drain sheeting before reinforcement is installed and placed.

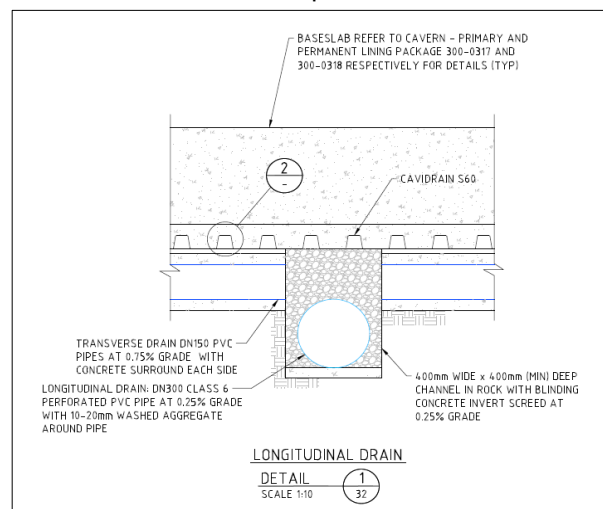


Figure 6 – Cavi drain / drainage trench detail section

Level B8 Wall – SW03/W29 on Grid SF

The B8 wall is highlighted below, shown on drawings CRRTSD-410-0450-DRG-RBGT-1470-131311. It is an 800mm thick, 57m long & 8.45m high. This is also known as the 'TBM Dividing Wall' as it provides delineation to the back of house station structure and allows construction of the concrete structure in this area to progress concurrent with the tunnelling operations. There is a 10m x 2.5m (approximate dimensions) section of this wall which is to be left out where the corbel conflicts with the TBM conveyor belt. The wall is to be poured at a later date (post removal of the TBM conveyor).

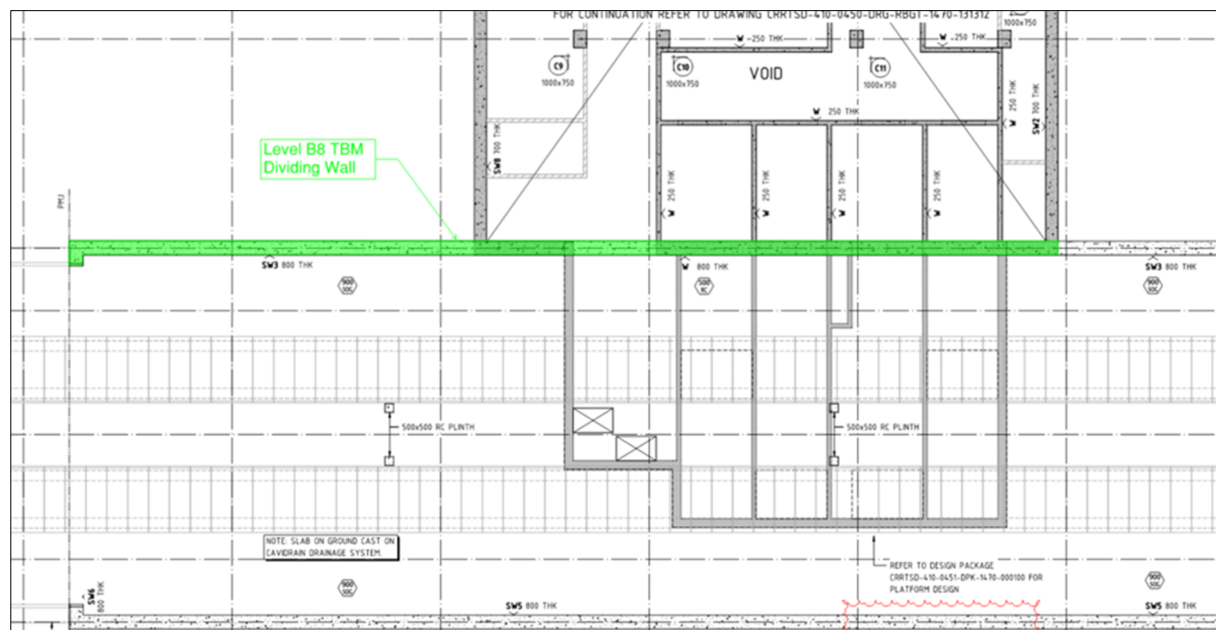


Figure 7 – SF Dividing Wall to Station Structure

Given the criticality of the TBM works for the entire project & subject to progress of the above works & adjacent works, there may be instances where some of the works must be staged differently/ceased to accommodate TBM enabling works.

B4 Slab on Ground

The slab on ground at Level B4 will also be constructed as part of the advanced works package of the Underground Primary Structure. Once excavation is completed, a concrete footing will be constructed so that a handrail can be installed. The handrail will be two metres high. The area involves the installation of Cavi-drain, forming the slab edge, fixing reinforcement in place and placing concrete to finish the slab to the prescribed levels. The formed edge for the construction joint will have couplers installed that will be used in the future to tie back into the SW3 wall from Level B4 to Level B8.

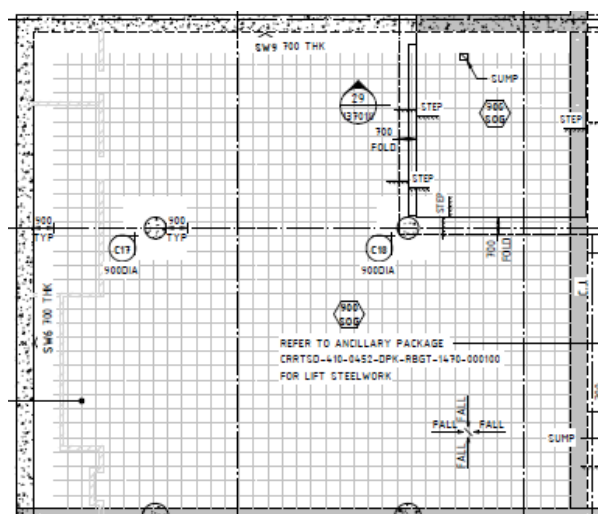


Figure 8 – General Layout for B4

7.1.2. STAGE 2 WORKS: – Level B9 to Level L0 from Grid SA to Grid SF/Grid P12 to P15

Completion of Stage 1 will allow the TBM to be launched northerly towards Albert St. Station. This eastern half of the station box will function as the primary access to the north & south caverns, materials & spoil handling for the TBM & road header tunnel construction.

Stage 2 comprises the construction of the Underground Primary Structure from Grid SA to Grid SF/Grid P10 to Grid P15 from Level B9 to Level L0. The western half or 'Back of House' structure shall be constructed concurrent to tunnelling operations, with the remaining eastern half or 'Front of House' structure to be completed after tunnelling operations have ceased.

The below figure is a cross section of the UPS showing the Construction Staging from Stage 1 to Stage 8.

The current methodology of construction for the Back of House (BOH) area, the BOH is to be split into in two discrete sections, a western and eastern section. At Level B9, the western section is from Grid SA to Grid SC and Grid SC to Grid SE. At Level B7 upwards, the western section is from Grid SA to Grid SC, Grid SC to SE and the eastern section from Grid SE to SF. This will allow the beams, slabs and walls to be constructed in manageable quantities of concrete and allow any elements that by pass slabs to continue to the next floor level without being constrained to another element of construction.

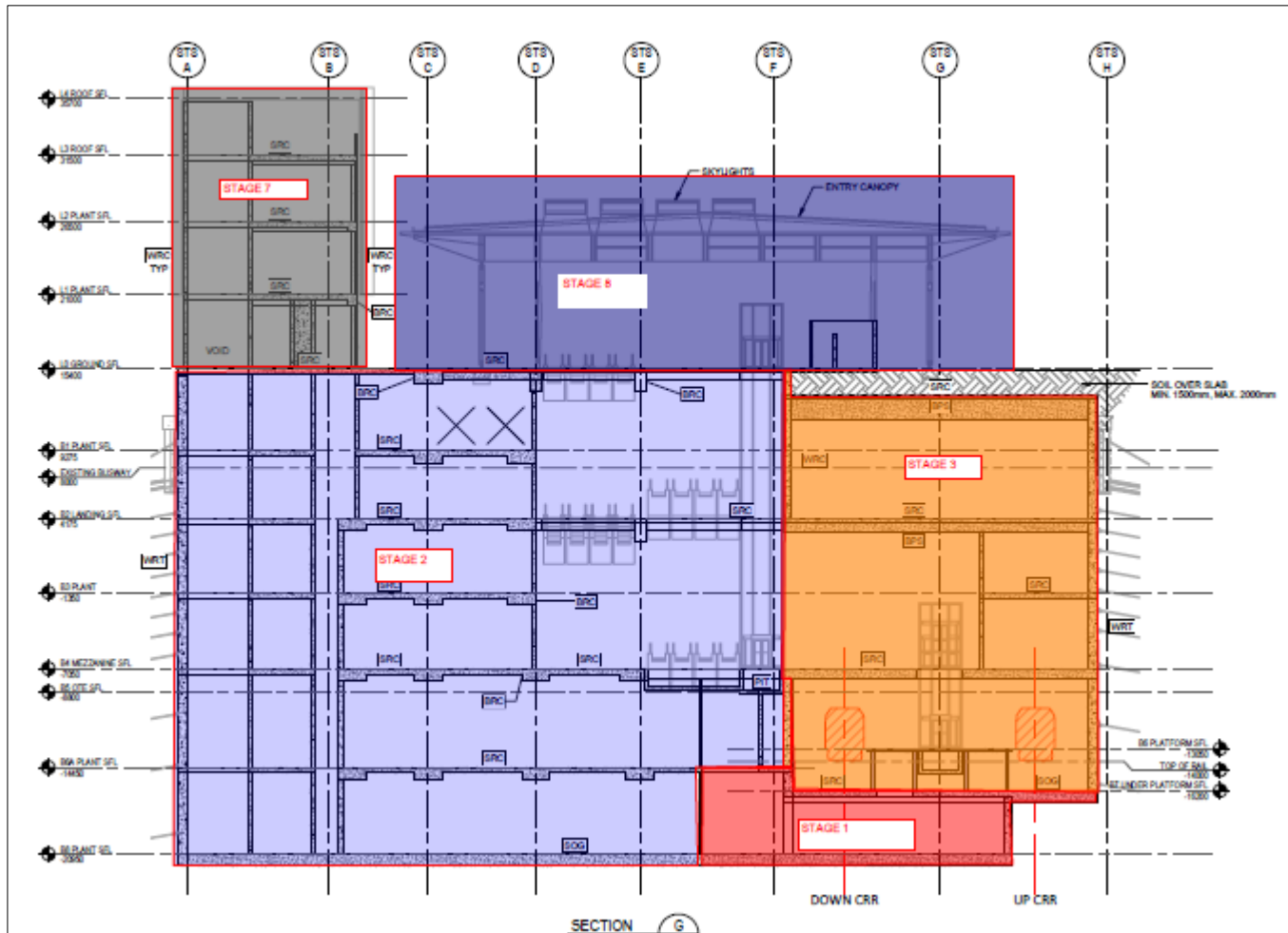


Figure 9 – Woolloongabba Station Section by Stage

- B9 plant level
 - Reinforced concrete slab on ground, cast on a Cavi-drain sub-slab drainage system, including water proofing at construction joint at Grid SE. The base slab from Grid SA to SE will be split into two pours of approximately 600m³ each with a construction joint at Grid SC (see plan view below)
 - Perimeter retention walls – single sided construction against rock or shotcrete retention structure. (Including waterproofing at Construction joints)
 - Internal load bearing walls
 - Reinforced concrete columns
 - Reinforced concrete internal walls
 - Goods lift Pits – Base and Walls

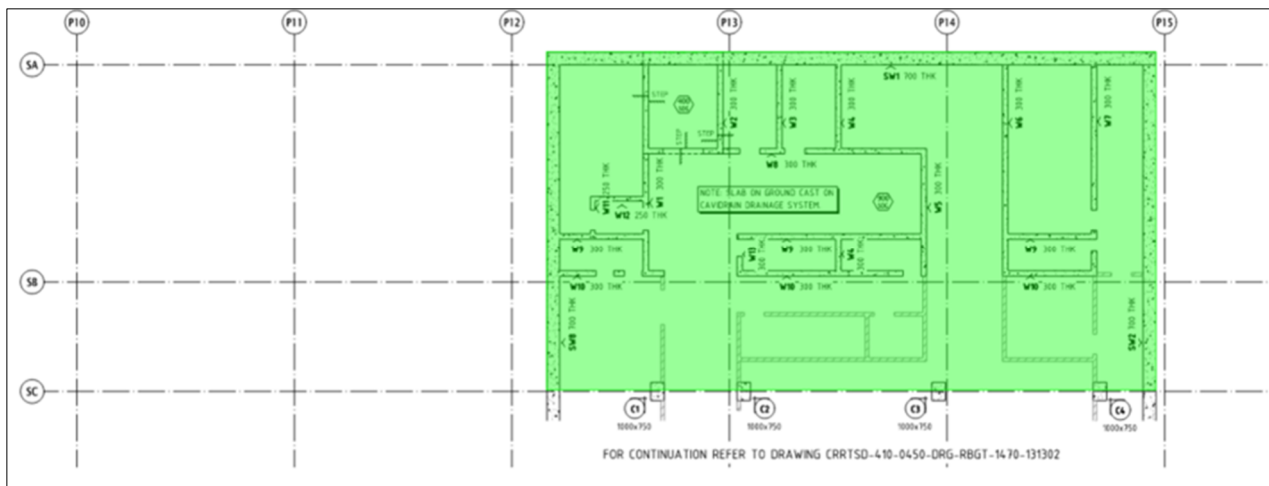


Figure 10 – B9 Zone 1 area

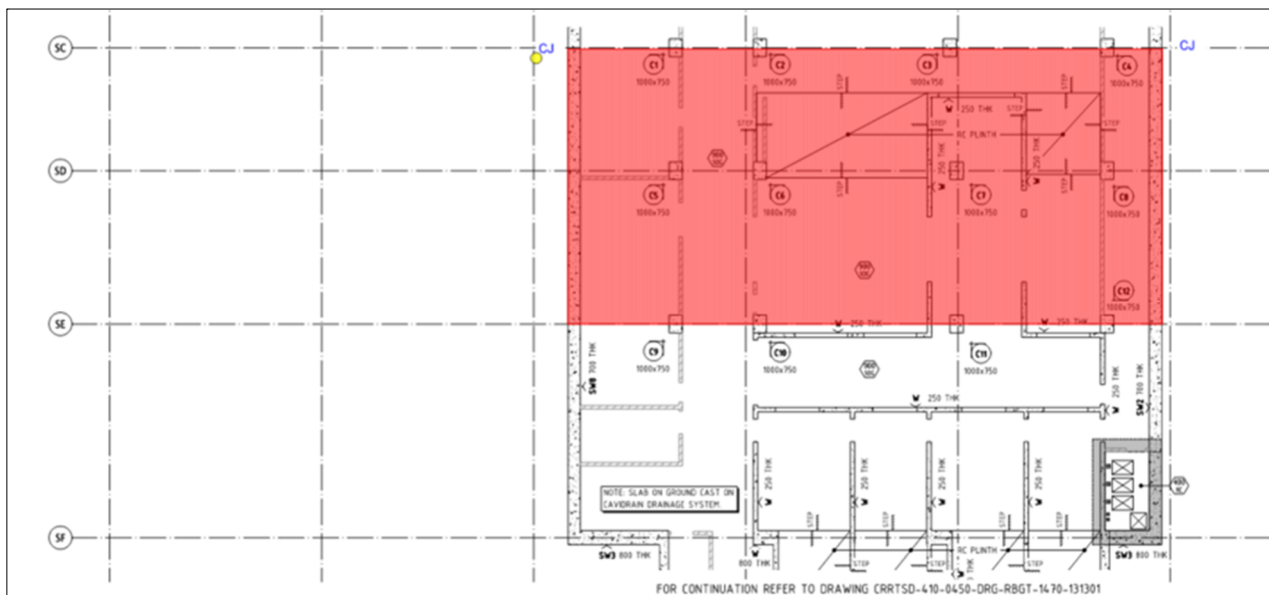


Figure 11 – B9 Zone 2 Area

- B7 back-of-house plant area
 - Concrete infill between Precast Culvert Platform at SW5
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure. (Including waterproofing at Construction joints)
- B6 platform (note: the precast elements not included in this package)
 - Internal load bearing reinforced concrete walls
 - Reinforced concrete columns
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure ((Including waterproofing at Construction joints)
 - Topping slabs to precast concrete platform
- B5 Rail Corridor
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure ((Including waterproofing at Construction joints)
- B4 Station BOH)
 - Reinforced concrete columns
 - Escalator Pit Base Construction
 - Lift Pit base Construction (Lift 3 and 4)
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Slab on Ground

- B3 Station
 - Suspended reinforced concrete slab
 - Reinforced concrete beams
 - Reinforced concrete columns
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
- B2 Station – Plant Rooms
 - Suspended reinforced concrete
 - Reinforced concrete beams
 - Reinforced concrete columns
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Topping slabs to precast beams (Super T and deck units).
 - Concrete plinths to Plant room equipment
- B1 Station
 - Suspended reinforced concrete slab over rail corridor
 - Reinforced concrete beams
 - Reinforced concrete columns
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
- L0 lower buried structure below external precinct area
 - Suspended reinforced concrete slabs
 - Reinforced concrete columns
 - reinforced concrete beams
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Topping slabs to precast deck units and Super T Beams
- L0 ground floor station concourse area and ground floor service building
 - Suspended reinforced concrete slab to service building including waterproofing at construction (hydrophilic water stop)
 - Internal load bearing reinforced concrete walls
 - Reinforced concrete columns
 - reinforced concrete beams
 - Topping slabs to precast deck units and Super T Beams

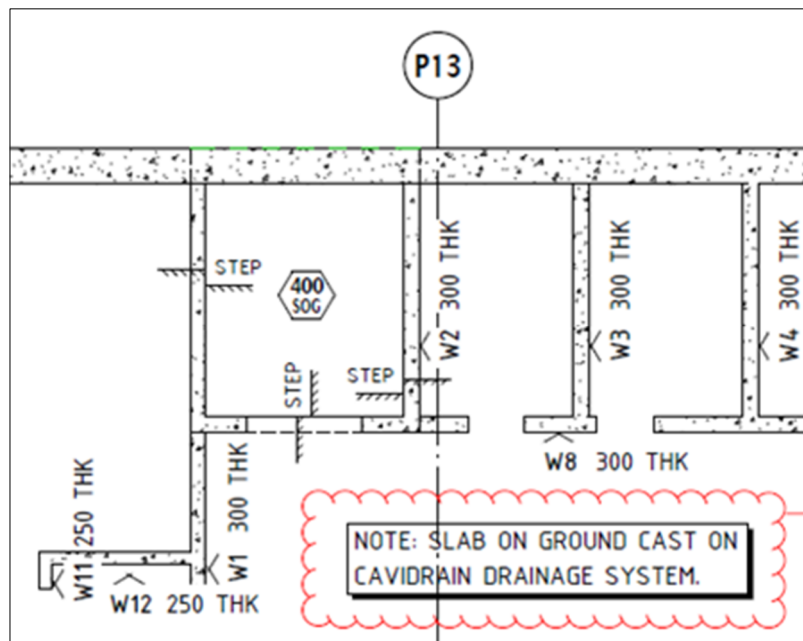


Figure 12 – B9 Goods lift pits

7.1.3. STAGE 3 WORKS – B8 to Level 0 Grid SF to SG / Grid 10 to Grid 15

Stage 3 works will commence after the majority of tunnelling works have been completed and the spoil conveyors and associated infrastructure have been removed from the area. This is envisaged to commence in fourth quarter of 2022.

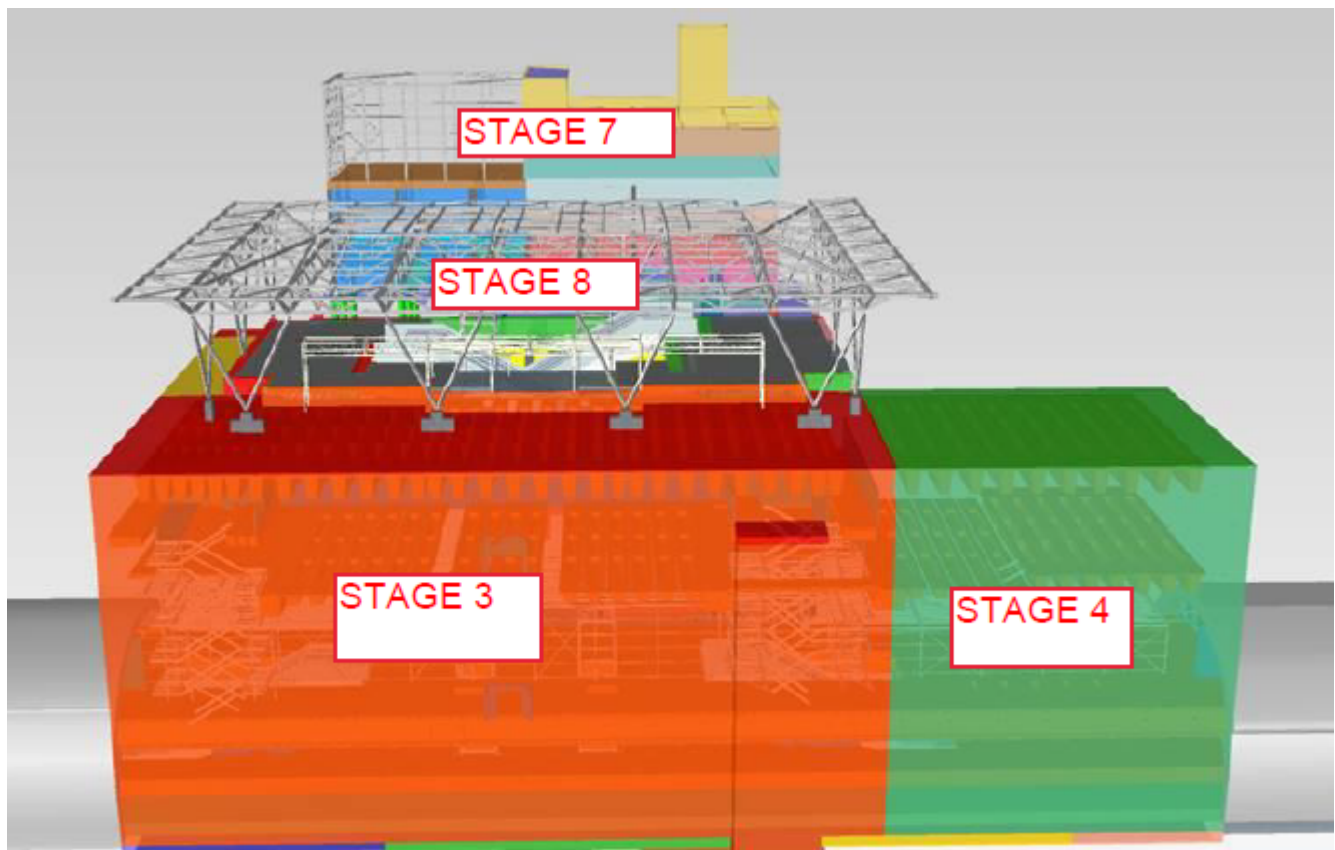


Figure 13 – Stage 3 Elevation

- B8 rail corridor
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure. (Including waterproofing at Construction joints)

- B6 platform
 - Reinforced concrete columns
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure ((Including waterproofing at Construction joints)
 - Topping slabs to precast concrete platform
- B5 Rail Corridor
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure ((Including waterproofing at Construction joints)
- B4 comprises Front of House (Mezzanine)
 - Installation of Precast Mezzanine Trusses
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Topping slabs to precast slab Vierendeel truss beams.
- B3 Station
 - Suspended reinforced concrete slab
 - Reinforced concrete beams
 - Reinforced concrete columns
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
- B2 Station – Plant Rooms
 - Reinforced concrete beams
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Installation of Precast Concrete beams including Super T Beams
 - Topping slabs to precast beams (Super T and deck units).
 - Concrete plinths to Plant room equipment
- B1 Station
 - Suspended reinforced concrete slab over rail corridor
 - Reinforced concrete beams
 - Reinforced concrete columns
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
- L0 lower buried structure below external precinct area
 - Suspended reinforced concrete slabs
 - Reinforced concrete columns
 - reinforced concrete beams
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Installation of Precast Concrete beams including Super T Beams
 - Topping slabs to precast deck units and Super T Beams

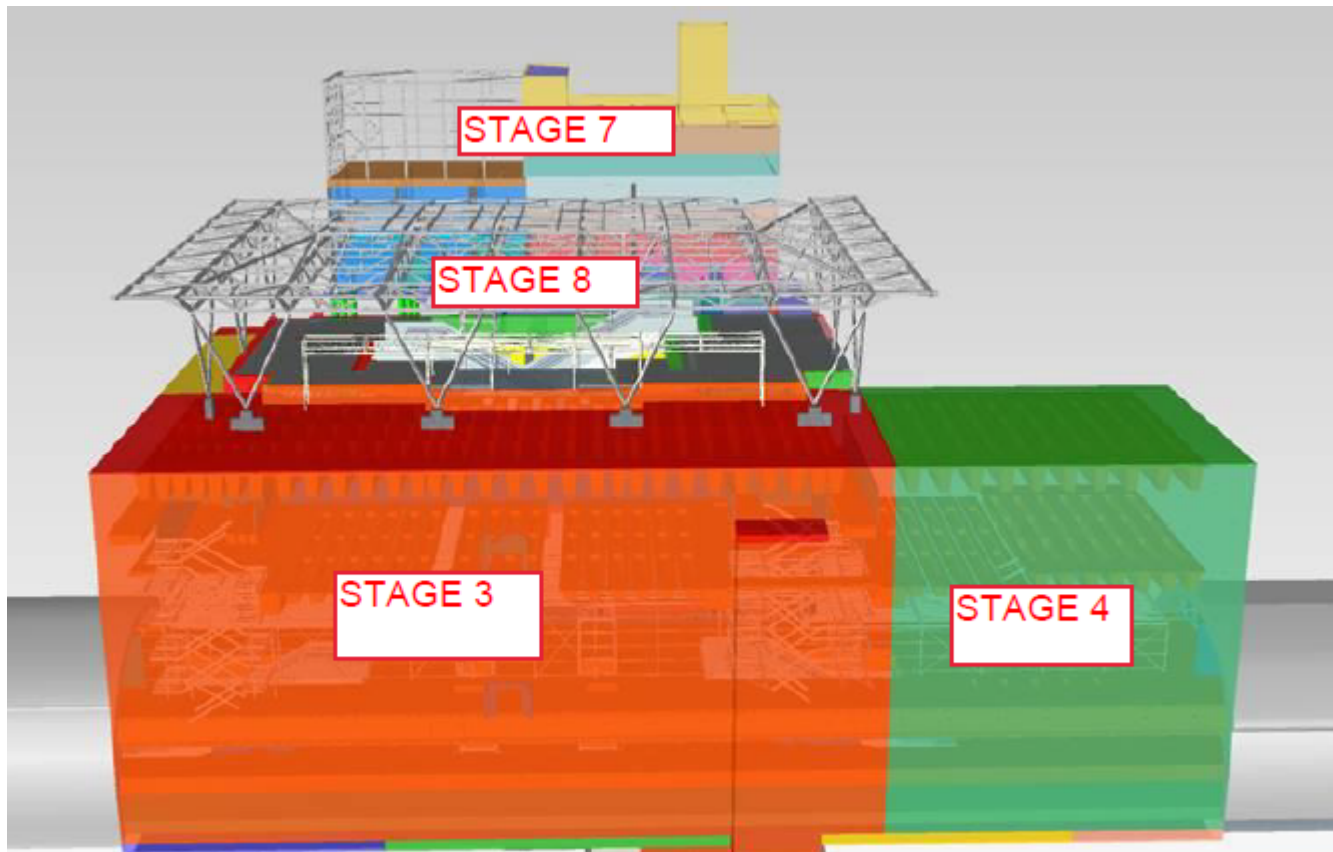


Figure 14 – Stage 4 Elevation Tunnel Side

- B8 rail corridor
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure. (Including waterproofing at Construction joints)
- B7 Rail Corridor
 - Escalator Pit Base Construction
 - Concrete infill between Precast Culvert Platform at SW5
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure. (Including waterproofing at Construction joints)
- B6 platform (note: the precast elements not included in this package)
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure ((Including waterproofing at Construction joints)
 - Topping slabs to precast concrete platform
- B5 Rail Corridor
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure ((Including waterproofing at Construction joints)
- B4 comprises Front of House (mezzanine)
 - Suspended reinforced concrete slab over the rail corridor
 - Reinforced concrete columns
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Topping slabs to precast slab Vierendeel beams.
- B3 Station
 - Suspended reinforced concrete slab
 - Reinforced concrete beams
 - Reinforced concrete columns

- Internal load bearing reinforced concrete walls
- Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
- B2 Station – Water Holding Tank/Water Holding Tank Pump Room
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Topping slabs to precast beams (Super T and deck units).
 - Concrete Plinths
 - Stairs to Water Holding Tank access
- B1 Station
 - Internal load bearing reinforced concrete walls
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at construction joints)
- L0 lower buried structure below external precinct area
 - Suspended reinforced concrete slabs
 - reinforced concrete beams
 - Perimeter retention walls, – single sided construction against rock or shotcrete retention structure (Including waterproofing at Construction joints)
 - Topping slabs to precast deck units and Super T Beams
 - Plinths/Upstands to Station Canopy Steelwork

7.1.5. STAGE 7 WORKS – Services Building to Woolloongabba Station

Services Building

The services building is a small three (3) Level composite building structure consisting of reinforced concrete slabs and walls, precast concrete walls with steel structure frame and some blockwork internal walls. The building also has a steel louvre installation around the western side of the structure on Level 2, where the plant room area is located. There is also a steel frame and steel roof panel structure on Level 3 of the services building.

Level L0 –

- Piling (Cast In situ or Precast Hexagonal driven piles)
- Slab on Ground
- Cast insitu concrete walls
- Precast concrete panel walls

Level 1

- Reinforced Concrete Suspended Slab
- Reinforced Concrete Walls

Level 2

- Reinforced Concrete Suspended Slab
- Reinforced Concrete Walls

Level 3

- Reinforced Concrete Suspended Slab
- Reinforced Concrete Walls

7.3.1. Interfaces

Heavy and Light vehicles will be managed with designated reverse parking locations throughout the project sites specific to the class of vehicle.

Public and workforce is managed by the separation and barricading of the work zones from the public in accordance with relevant standards and codes of practice. This is achieved by installation of specific barriers and signage at locations across the site initially.

Movement of any site vehicles throughout the project site will be managed through specific vehicle management plan (VMP) that are required to be understood by all persons prior to entering the project site. This will demonstrate the entry and exits, zoning (i.e LV and HV haul routes) and UHF channels for each area of the site. All this will be included and managed by an overarching Traffic Guidance Scheme or Management Plan that will be communicated to all subcontractors, stakeholders and approved by the delivery authority.

Notification and approval to isolate or work on existing services within the buildings requires prior coordination with the utilities companies. Any coordination with the below utility providers / owners should include notification to the CRR DA.

- AAPT / Power Tel
- APA Group Networks
- Brisbane City Council
- Energex
- NBN Co
- Nextgen NCC
- Optus
- Uecomm
- PIPE Networks
- Powerlink
- Queensland Urban Utilities
- Telstra

7.3.2. Access and Egress

Site Access and Egress is as follows:

LOCATION ENTRY/EXIT POINT	VEHICLE TYPE
Leopard Street South Bound	Light Vehicles and Heavy Vehicles Entry/Exit Point
Main Street North Bound	Light Vehicle Entry Point
Vulture Street Off Ramp – South Bound	Light Vehicle/heavy Vehicle Exit Point

7.3.3. Delivery / Haul Routes

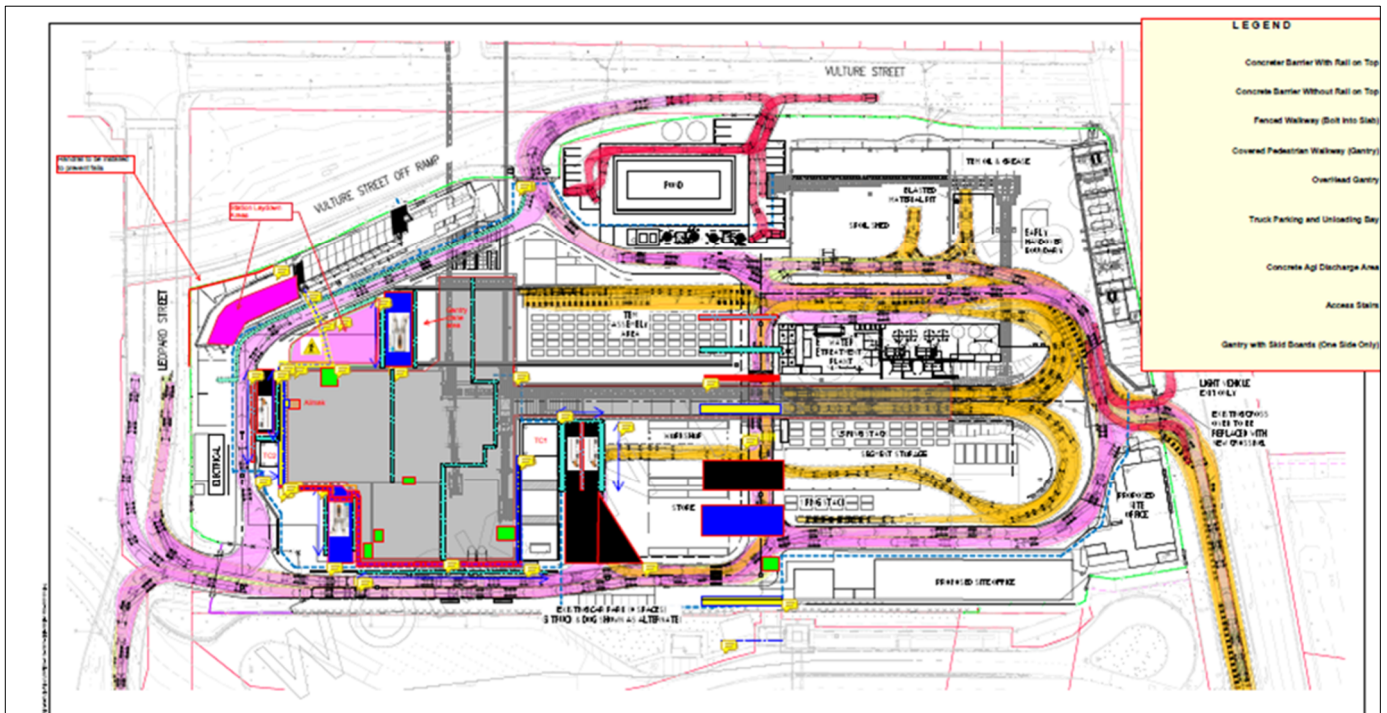
Existing public roads will be utilised for the delivery and removal of construction materials, once vehicles enter site designated routes will be communicated through daily pre-starts and tool boxes due to the constant change of work force. All suppliers entering site will receive the most recent revision of the onboarding guidelines supplied prior to the intended delivery to ensure drivers are aware of conditions for entry and specific site based requirements i.e. UHF channels, exit and entry points and interface with stakeholders. Site haul routes will be further developed as work fronts are established.

7.3.4. Communication Protocols

Primary means of communication onsite is via UHF which will be illustrated via call up signage onsite and throughout onboarding guidelines provided to delivery contractors. UHF channels will also be displayed at site vehicle entrance points. Current UHF Channel for the Woolloongabba Site is 17.

7.3.5. Laydown Area

There are two laydown areas for the Station are as shown in the below diagram. The laydown areas are bounded by Walls TS2 and TS3 and to the west of the Woolloongabba Station sheds. There are two truck delivery unloading areas, one adjacent to Tower Crane 1 and one adjacent to Tower Crane 2.

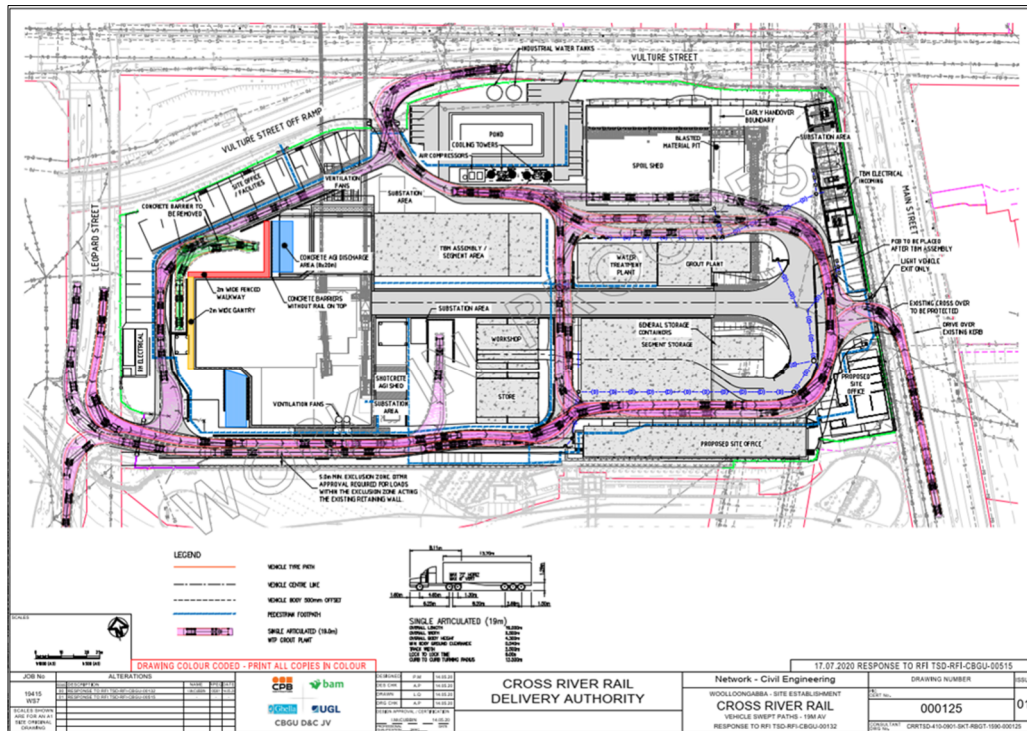


7.3.6. Delivery Inductions

Delivery drivers are required to undergo a Delivery Driver's induction with a CBGU JV representative and must:

- Have a general construction induction card (white/blue card)
- Wear full PPE, including Cut 3 gloves
- Be escorted while onsite
- Use engineered ramps if unloading plant
- Ensure people are out of plant operating zones when unloading
- Complete a Pre-Start Briefing (JHA) before unloading.
- COVID 19 Declaration for delivery drivers

7.3.7. Traffic Management



8. RESOURCES

Attach supporting information such as schedules or registers, as required. *Consider specialist items, long lead time items, etc.*

8.1. PEOPLE

- Drainage Works
 - 6 x Labour
 - 1 x Supervisor
- FRP Works
 - 25 x /Formworker
 - 15 x Steel Fixer
 - 10 x Concretor
 - 2 x Supervisor
- Pre-cast Installation - Platform
 - 8 x Labour
 - 1 x Supervisor
 - 1 x Forklift operator
 - 1 x Crane operator
 - 1 x Leading hand
 - 1 x Dogman/rigger
- Pre-cast Installation - Mezzanine
 - 1 x Precast Truss Loader operator
 - 3 x Labour (PT)
 - 1 x Supervisor
 - 2 x EWP operator
 - 2 x Labour
 - 1 x Leading Hand
 - 2 x Rigger
- Tower Crane Crews
 - 2 x Tower Crane operators
 - 4 x Riggers
- CBGUJV Direct Labour
 - 7 No x Labour

8.2. PLANT

- Static concrete pump/s and lines
- Vehicle mounted concrete pump/s and lines
- Concrete Agitator trucks
- Tower crane x 2
- Concrete Kibble (from tower cranes)
- Light Vehicles
- Mobile Cranes – 200T-500T
- Franna 25T
- Flex tool motors and pneumatic vibrators
- Dewatering Pump/s
- Manitou Fork lift/360 degree fork lift/
- Skip bins
- “Jump” Formwork system
- Compressors
- Jack hammers and hoses
- Skidsteer Pozitrack
- Excavator/hammer attachment/Rocksaw attachment/GP buckets/Tiger tyne/tilt bucket

8.3. MATERIAL

- Pre-mixed concrete
- Steel Reinforcement
- Reinforcement chairs
- Form ply and steel forms
- Tie wire
- Welding rods
- Aspros
- Plastic fillet strip
- Silicon
- Curing Compound
- Formwork
- Temporary Props
- Consumables

8.4. SUBCONTRACT

- Cavidrain Installation – Stage 1 – Rocktown Pty Ltd
- Cavidrain Installation Stage 2 - TBA
- Drainage Installation - TBA
- Stage 1 -Rocktown (FRP & Precast)
- Stage 2,3,4,5,6 and 7 Concrete FRP Works - TBA
- Precast Super T Beam and Precast deck unit supply – TBA
- Precast Super T Beam and Precast deck unit installation - TBA
- Scaffolding access - TBA

8.5. CLIENT SUPPLIED ITEMS

- Nil

9. EXTERNAL APPROVALS

The following external approvals are required for this activity,

- MRTS70 5.2 Concrete Procedures
- Design Drawings – 300 – 0520 -Tunnel Drainage
- Design Drawings – 410 – 0450 Advanced Works Underground Primary Structure
- Design Drawings – 410 - 0450 Underground Primary Structure
- Design Drawings – 410- 0451 -Underground Platform and Cavern Structures
- Design Drawings – 410 – 0452 Underground Station Ancilliary Structures
- Design Drawings – 410 – 0453 Above Ground Structures and Canopy

10. CONSTRUCTION AREA RISK REVIEW

Identification and Control of Risks

Construction methodology and high level construction activity risks and controls have been identified for the construction of the *Woolloongabba Station Civil and Concrete CAP*. Refer to Appendix A.

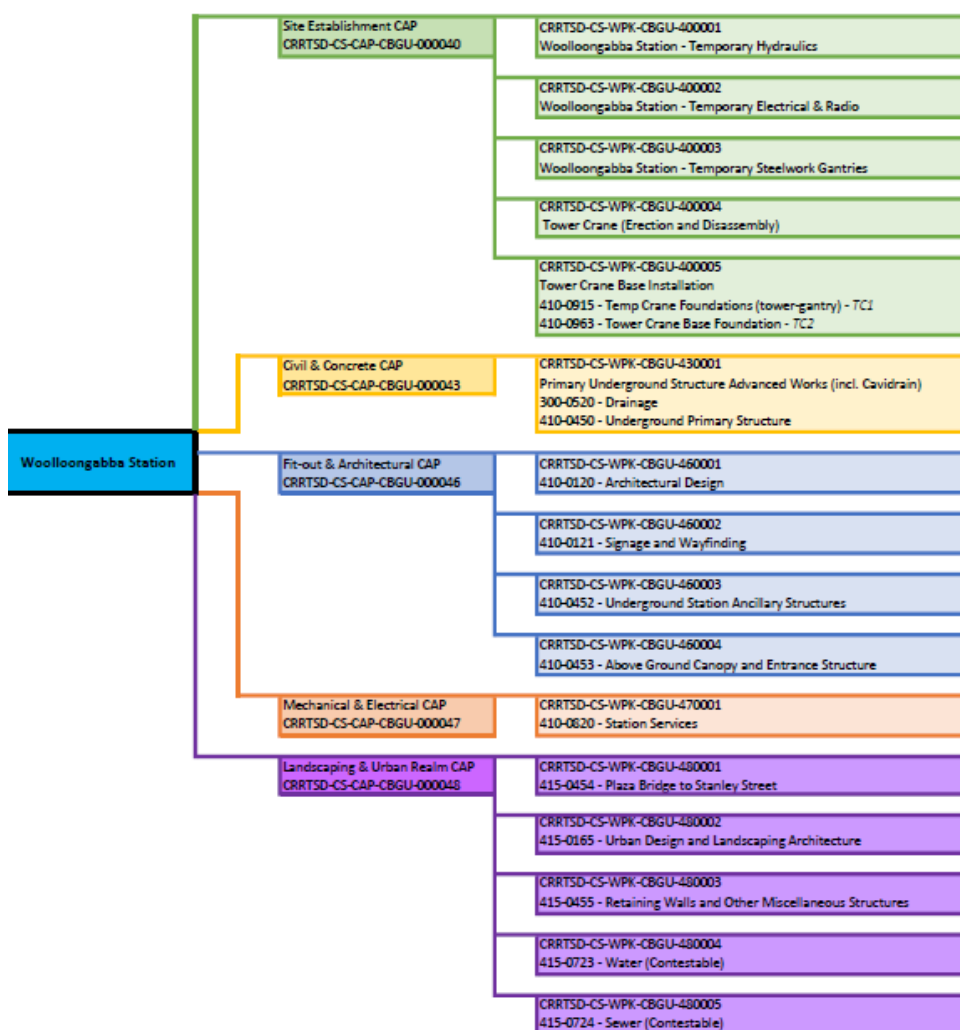
Construction Area Risk Review to be completed and attached.

11. LOT/SYSTEM MANAGEMENT AND TRACEABILITY

Listed below is the planned lot/system structure to be used:

The figure below shows the current structure of CAP and Workpack break down structure proposed to be utilised for the construction of the Woolloongabba Station

Woolloongabba Station - Work Breakdown Structure



TeamBinder – Lot (lot form structure will be created referencing CAP, Work Pack, ITP and Design Package number). Lots will be created to capture an area of work within a defined boundary of stage location, level and element of structure.

12. COMMISSION, CLOSEOUT & HANDOVER

Provide description of key considerations and requirements for commissioning and handover of this construction area.

The following outputs (records) will be produced for the Construction Lots and uploaded onto TeamBinder for closeout and handover:

- Completed/Signed off ITP's and Work Packs
- Construction Verification checklists
- Material conformance certificates: concrete, rebar, etc.
- Concrete compressive strength NATA Certificates
- Details of NCR's (if applicable)
- As-built surveys
- Other

13. APPENDICES

Attach appendices referenced in this Construction Area Plan here.

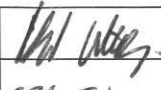
*Yellow highlight may be removed if sufficient detail within CAP, any **BOLD** item un-highlighted must be attached.*

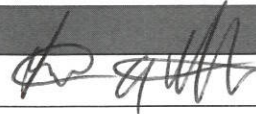
- ☐ **Level 3 Construction Programme**
- ☐ Erosion and Sediment Control Plan (where applicable)
- ☐ Site Environmental Plan/s N/A
- ☐ **Construction Area Risk Review**
- ☐ **Other** (give details) _____

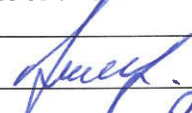
Work Pack

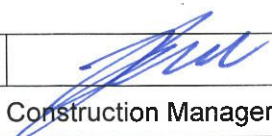
Project:	<i>Cross River Rail TSD - Woolloongabba</i>		Project No.	
Work Pack:	Stage 1 FRP Base Slabs		Doc No.	CRRSTD-CS- WPK-CBGU- 430001
Rev: 0				
ACTIVITY SCOPE & LOCATION (ANNEX D 4.7.1(a))				
Scope of Work: This work pack outlines the staging for the construction of the reinforced concrete base slabs & under slab drainage for stage 1 works of Woolloongabba station. - Level B4 slab on ground - Level B8 slab on ground - Level B8 suspended slab - Level B9 slab on ground to grid SE - Level B9 sump slab on ground				
SCHEDULE				
Start Date: 15-Oct-2020		Planned Completion Date: 01-Feb-2020		Programed Duration:
ACTUAL Start Date:		ACTUAL Completion Date:		Actual Duration:
COST CODES				
COST TYPE	COST CODE	ELEMENT OF ACTIVITY (ALL or PART)		
1404	22110	FRP		
1403	22140	Concrete Supply		
1403	22140	Reinforcement Supply		
1404	22155	Waterproofing		
1404	22190	Cavidrain		

DOCUMENT REVIEW AND APPROVAL

PREPARED BY (Project Engineer or nominated SE, Foreman):			
Acknowledgement that we have consulted with the project's functional managers in the development of this Work Pack.			
Name:	Paul Russo	Signature:	 Date: 13/10/20
Position:	Project Engineer	Company:	CB&I JV
Mobile:			
Name:	Mark Wiese	Signature:	 Date: 14/10/20
Position:	Foreman	Company:	CB&I JV
Mobile:			

REVIEWED BY (minimum to be Project SHEQ Manager/s)			
Name:	Justin O'Neill	Signature:	 Date: 14/10/2020
Position Title:	Health and Safety Director, or delegate		
Name:	Michael Bertlesen	Signature:	 Date: 14/10/20
Position Title:	Quality Manager or delegate		
Name:	JP Carey	Signature:	
Position Title:	Environmental Manager or delegate		
Name:	Rory Church	Signature:	 Date: 13/10/20
Position Title:	Senior Project Engineer		

SUBCONTRACTOR ACKNOWLEDGEMENT (where required)			
Acknowledgement that I have been consulted in the development of this Work Pack and agree to perform works in accordance with this Work Pack.			
Name:	Danny McGrath	Signature:	 Date: 13/10/20
Position:	Supervisor	Company:	Rockaway

AUTHORISATION / APPROVAL			
Line Manager Approval			
Name:	Joel Purcell	Signature:	 Date: 14/10/20
Project Position Title	Construction Manager		

ACCEPTANCE			
Acceptance of Work Pack by Responsible Supervisor in control of works under this Work Pack.			
Name:	Mark Wiese	Signature:	 Date: 5/11/20

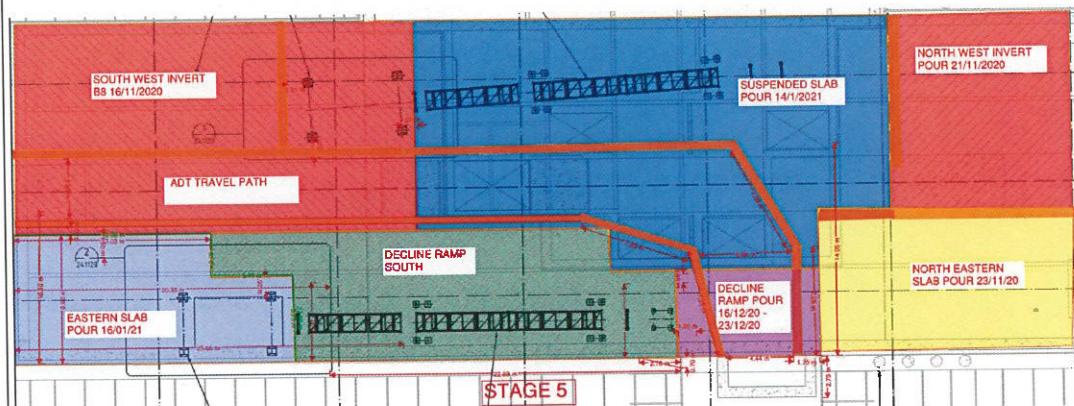
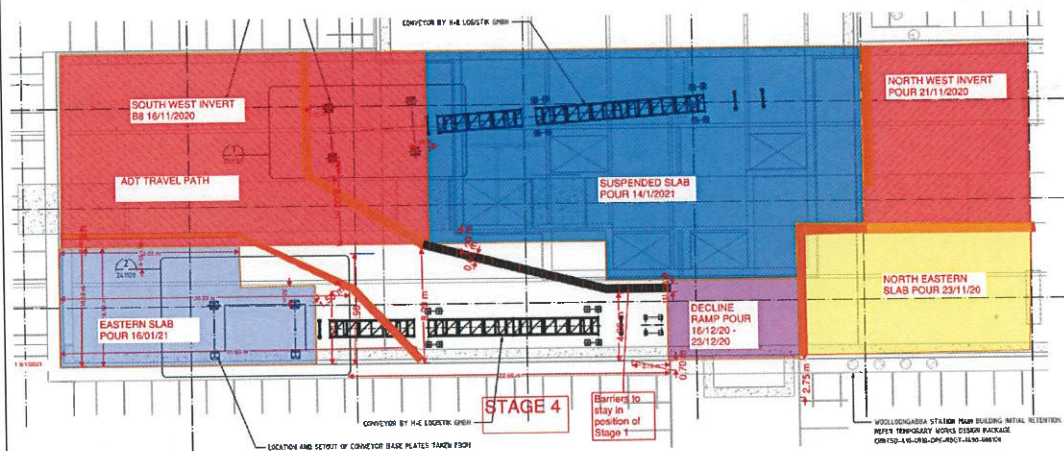
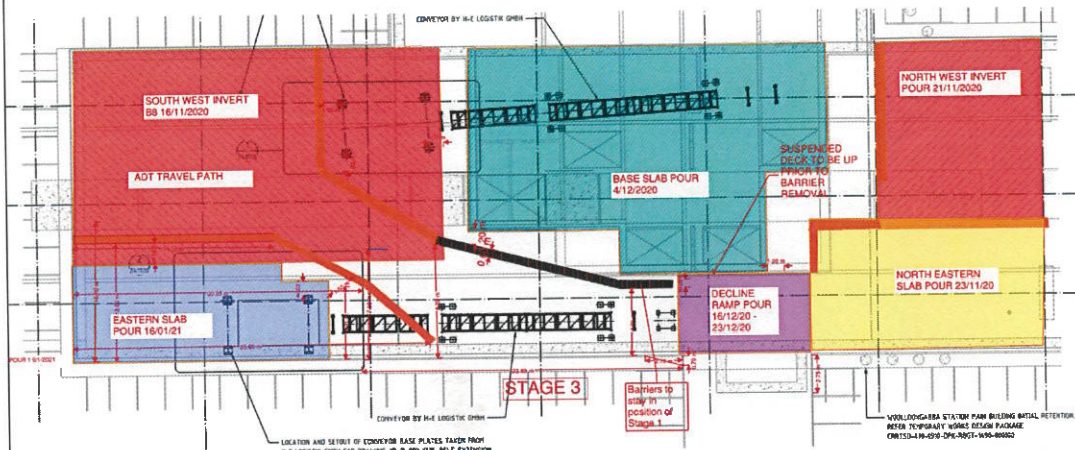
Part A

WORK METHOD / SEQUENCING (Annex D 4.7.1(g))

The following table should detail step-by-step the tasks required to complete construction activities associated with this Work Pack. A construction program extract / look ahead specific to this Work Pack can be used as a guide when detailing the requirements in a sequential order, i.e. duration of the nominated works, roster, productivity, milestones, etc. All relevant controls identified in the Work Pack risk assessment must be associated with tasks below. Note: Controls nominating reference documents (e.g. ITPs, SWMS, Site Environment Plan/s, Permits, Welding Procedures etc. must be included as attachments to this Work Pack).

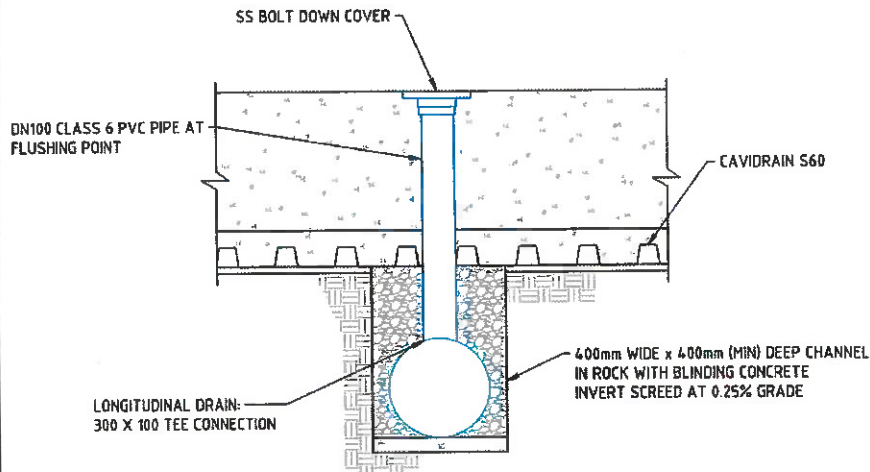
Task	Control
1. Site Preliminaries & Constraints	* Site Preliminaries and Constraints • Project Induction • Site Induction • Daily Pre-start • VMP / TMP • Site Access / Egress • All personnel to read and comprehend the task activities in the work pack before signing onto it. • Relevant Safe Work Method Statement (SWMS) has been signed and approved by CBGU JV and subcontractor representatives All personnel to sign onto SWMS prior to starting work. Supervisor competencies to be completed by all persons operating mobile plant/high risk equipment • All plant to be inspected prior to arrival on site by plant department and have an inspection sticker placed on before starting (i.e. all plant to be plant packed prior to arriving onsite). • Main site entry and exit at gate L1 at Leopard St. • Concrete barriers are to be utilised to provide hard delineation between station & tunnelling team and to prevent plant & people interaction
2. Slab Staging	• Access to B4 slab will be provided first. Below is the extent of the pour & the C.J. locations. C.J. locations are indicative only and subject to change FOR CONTINUATION REFER TO DRAW Level B4 slab to be poured Level B4 slab to be poured at a later date SW 700 THK C.J. SQUARE HATCH DENOTES EXTENT OF SUB-SLAB DRAINAGE SYSTEM. REFER TO DESIGN PACKAGE CRTSD-300-4520-DPK-HATC-1380-000100. REFER TO ANCILLARY PACKAGE CRTSD-410-0452-DPK-RBGT-1478-000100 FOR LIFT STEEL WORK

-
- CONCRETE BY H&E LOGSTON SPIN
- SOUTH WEST INVERT B8 16/11/2020
- FORMWORK/FORMWORKER WORK AREA 1.5M WIDE (600MM FORMS AND 900MM WALK WIDTH)
- STAGE 1
- CONCRETE BY H&E LOGSTON SPIN
- DPK-HATC-1300-000100.
- NORTH WEST INVERT SLAB 21/11/2020
- PRECAST CONCRETE BARRIERS
- NORTH DECLINE POUR 23/11/2020
- NORTH EAST INVERT 15/12/2020
- STAGE 1 NORTH
- SQU
DRA
CRR
- CONCRETE BY H&E LOGSTON SPIN
- SOUTH WEST INVERT B8 16/11/2020
- ADT TRAVEL PATH
- EASTERN SLAB POUR 16/01/21
- BASE SLAB POUR 4/12/2020
- NORTH WEST INVERT POUR 21/11/2020
- NORTH EASTERN SLAB POUR 23/11/20
- STAGE 2
- Barriers to stay in position of Stage 1
- MOELLER-KARABA STATION HALL BUILDING INITIAL PROTECTION



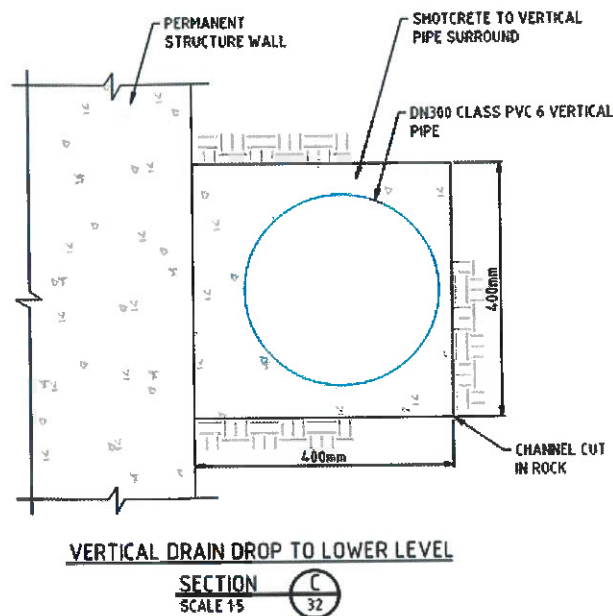
- B9 slab shall be poured from grid PA back to grid SE (just shy of the line of columns on grid SE).

		• A mix with a minimum strength of N20 will be utilised • Pour sizes will be planned around resource numbers. Concrete will be delivered from 9am which is a further consideration. It is envisaged that a maximum of 400m² – 500m² can be completed on a typical shift which is a manageable surface area • Perforations are to be incorporated into the blinding layer to relieve any potential water pressure/uplift through the blinding layer into the cavidrain layer. 25mm diameter holes will be drilled in a 2m x 2m grid through the blinding into the foundation. This will be undertaken upon initial set of the blinding layer
	Installation of Cavidrain & Associated under slab drainage (incl. excavation)	• Prior to installation of the cavidrain, all drainage in the open trenches is to be installed • All of the open trenches are to be excavated with appropriate fall as nominated on the drawings. This is to allow the water collected by the cavidrain and vertical walls to convey to the station sump. It is imperative that the required fall is maintained on the pipes prior to backfilling. • The trenches shall be excavated using a small excavator with a rock saw attachment. The trench shall be cut on both sides. Following this the trench will then be broken out using a breaker attachment. All spoil is to be loaded out of the box via a Moxy or lifted out vertically. • DN300 PVC pipe is to be installed in the open trench drains. The pipe shall bear directly on the blinding concrete screed at the base of the drain. Refer to below typical detail BASESLAB REFER TO CAVERN - PRIMARY AND PERMANENT LINING PACKAGE 300-0317 AND 300-0318 RESPECTIVELY FOR DETAILS (TYP) CAVIDRAIN S6B TRANSVERSE DRAIN DN150 PVC PIPES AT 0.75% GRADE WITH CONCRETE SURROUND EACH SIDE LONGITUDINAL DRAIN: DN300 CLASS 6 PERFORATED PVC PIPE AT 0.25% GRADE WITH 10-20mm WASHED AGGREGATE AROUND PIPE 400mm WIDE x 400mm (MIN) DEEP CHANNEL IN ROCK WITH BLINDING CONCRETE INVERT SCREED AT 0.25% GRADE LONGITUDINAL DRAIN DETAIL SCALE 1:10 • Flush points are nominated on the drawings. A 300 x 100 tee connection is required with a DN100 PVC riser which is cast in the slab on ground. An SS bolt down cover shall be positioned to stop ingress of foreign material. Provision of this connection needs to be made prior to backfilling the pipe

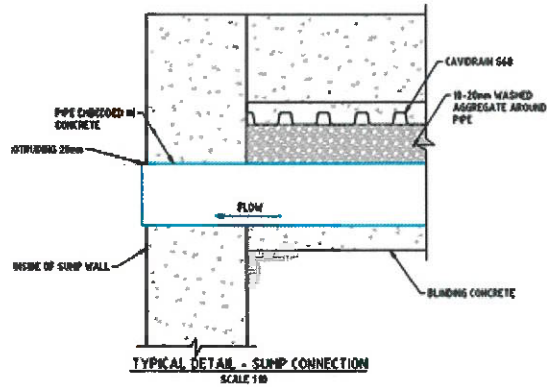


TYPICAL DETAIL - FLUSHING POINT CONNECTION TO LONGITUDINAL DRAIN
SCALE 1:10

- Once position & fall of the pipe towards to the sump has been confirmed, the pipe shall be backfilled with no fines concrete
- Where the drainage trenches underneath B8 drop down to B9, the pipe shall be positioned in a vertical channel cut into the excavated wall. The pipe shall be shotcreted in position



- The drainage pipe shall tie into the main station sump as per the below detail

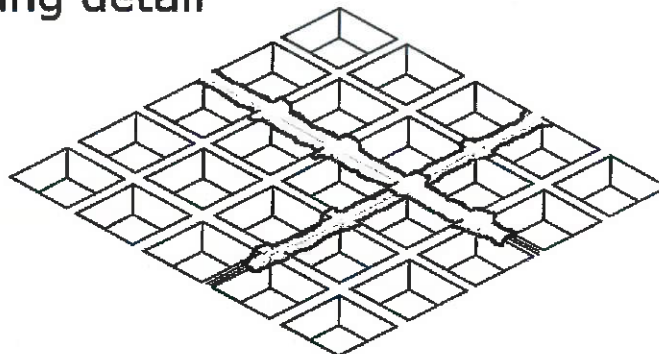


- Sheets will be laid out on the blinding manually by hand. The sheets will be butt directly against each and sealed with butyl tape. When joining sheets together it is imperative that the cusps align in both directions to permit the flow of water



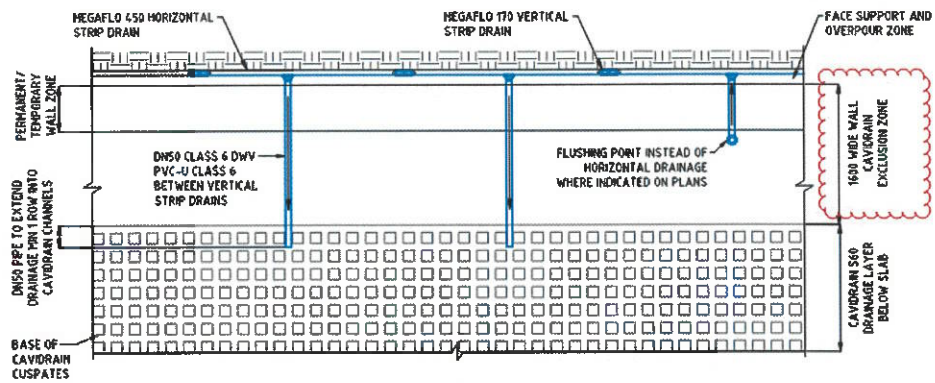
Butt joint profiled sheet and seal with tape

Jointing detail

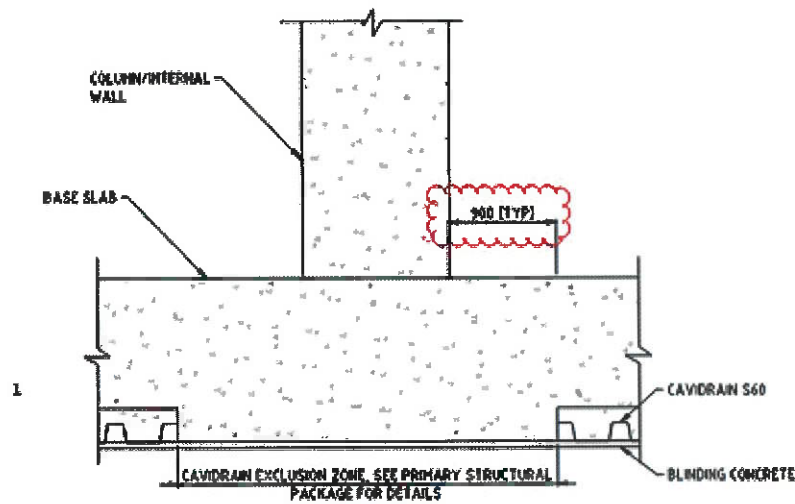


Butt joint sheets aligning cups in both directions and seal with strong maleable ABG Butyl ABseal IS75 (75mm wide). Fit tape over joint and mould into cups

- Cavidrain sheets are 3.92m long x 0.92m wide. These sheets are delivered pallets and will be lifted into the station box as required
- The cavidrain is to terminate 1.6m from the edge of the shotcrete wall at the base of the excavation for the perimeter of the slabs on ground. There is also a 900mm exclusion zone either side of internal walls



TYPICAL PLAN - DRAINAGE CONNECTION AT BASE OF EXCAVATION
SCALE 1:20

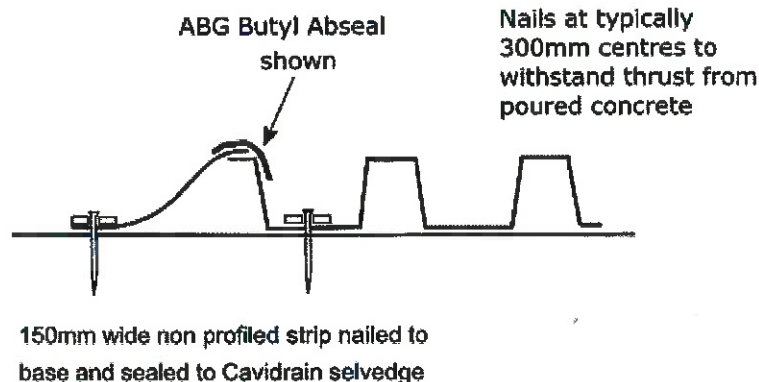


TYPICAL DETAIL - COLUMN INTERNAL WALL
SCALE 1:10

- Along the perimeter of the cavidrain, a 150mm wide selvedge (same material as cavidrain) shall be nailed at 300mm centres to prevent

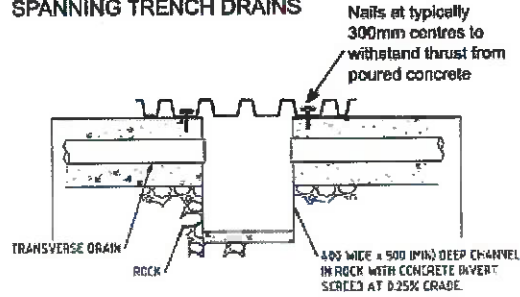
concrete ingress under the cavidrain as per the below detail

Sloping Non profile Cavidrain method

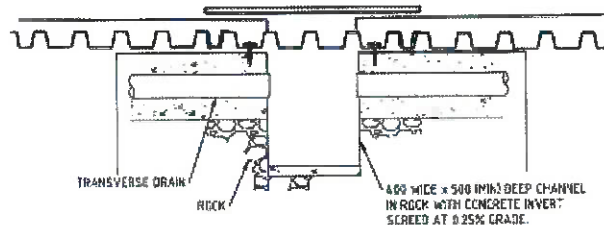
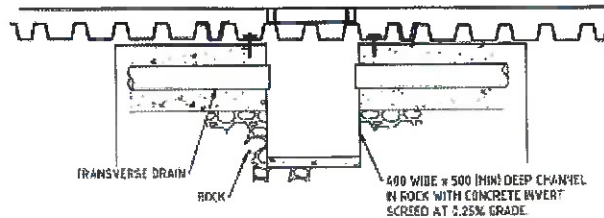


- A 50mm min. unreinforced concrete protection layer is to be placed on top of the cavidrain. Works will be staged such that the protection layer is poured on the same day the cavidrain is laid. A manageable surface area of cavidrain & protection will be agreed with the crew
- Refer to below detailed methodology for cavidrain interface with the under slab drainage trenches

SPANNING TRENCH DRAINS



First concrete lift
50mm above top of
Cavidrain

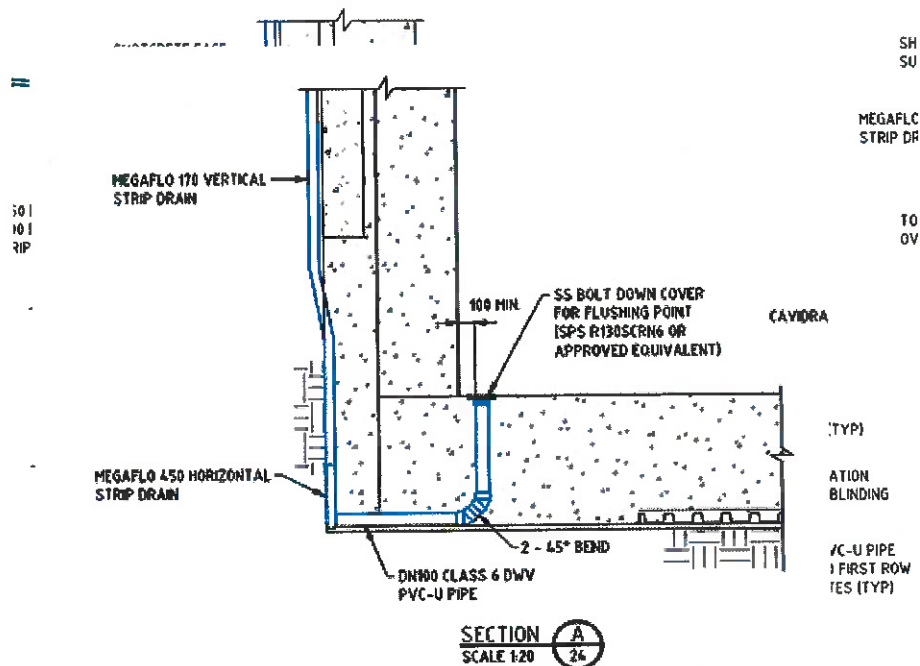


1. Place Cavidrain panel lengthways along trench spanning trench with one full cusp sitting on each side
2. Nail every other cusp base along trench on either side ensuring cusps are held horizontally across the trench

3. Place box shuttering to depth of first fill (50mm) spanning to top of ribs just spanning the trench width
4. Interlock additional panels either side for stiffness along edge
5. Pour concrete to first lift

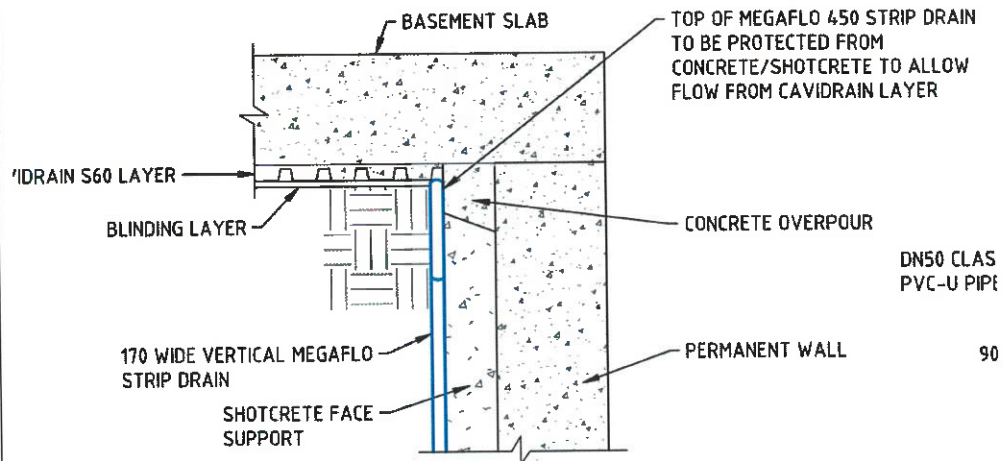
6. Remove shuttering
7. Place steel/timber plate for access until main floor slab is to be placed

- The cavidrain shall be connected to the vertical wall system via DN50 PVC conduit. The conduit is to connect into the horizontal megalo 450 strip drain via a reducer. The PVC pipe shall daylight into the cavidrain beyond the first row of cusps. The PVC pipe is required at the vertical megalo locations from behind the shotcrete
- Where flushing points & gully pits are nominated on the drawing, the below detail shall apply.



FLUSHING POINT CONNECTION (WHERE INDICATED ON DRAINAGE LAYOUT DRAWINGS)

- Where the cavidrain flows down from B4 to B9, B4 to B8 & B8 to B4, the below detail will apply. Megaflo 450 is to be installed which connects the vertical megalo. The cavidrain will butt to the top of the megaflo

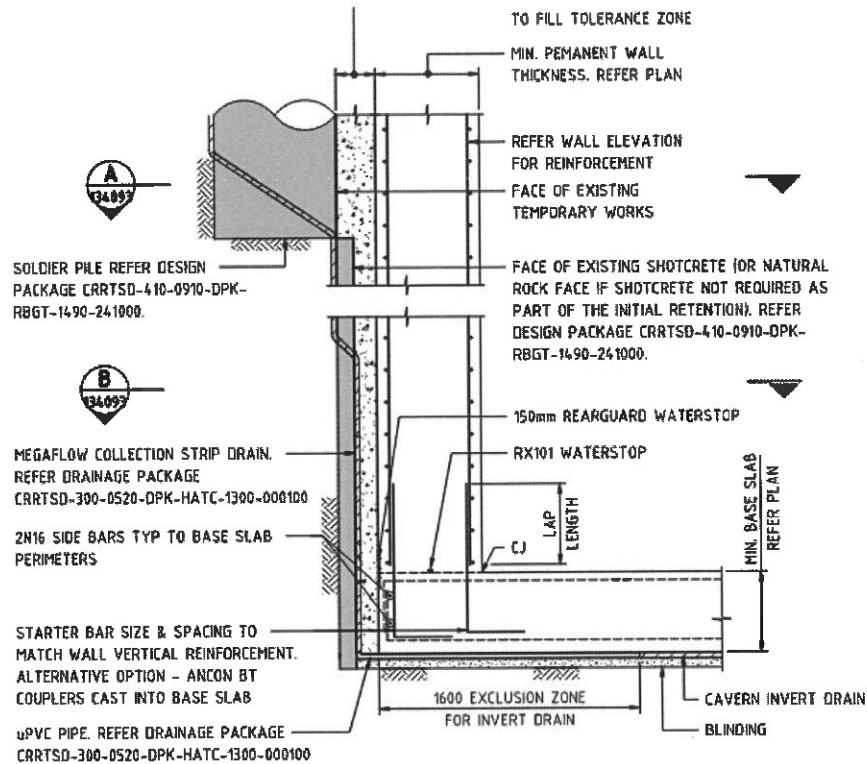


Installation of steel reinforcement & cast ins

- Reinforcement shall be lifted in & out of the station box using tower cranes
- Requirements for cover are in the general notes of design package 410-450

CONCRETE CLASSIFICATION TABLE			
MEMBER LOCATION	EXPOSURE CLASSIFICATION	CONCRETE GRADE	COVER
IN-SITU BASE SLABS - BOTTOM EXTERNAL SURFACE CAST ONTO DRAINAGE SYSTEM	B2	S50	80mm
IN-SITU BASE SLABS - TOP INTERNAL SURFACE	B2	S50	50mm
IN-SITU BEAMS - INTERNAL SURFACES ALL LEVELS UNO	B2	S40	60mm
IN-SITU BEAMS - L0 AND L0 LOWER	B2	S50	50mm
IN-SITU SLABS - INTERNAL SURFACES ALL LEVELS UNO	B2	S40	60mm
IN-SITU SLABS - L0 AND L0 LOWER	B2	S50	50mm
IN-SITU COLUMNS	B2	REFER SCHEDULE	60mm
IN-SITU EXTERNAL PERIMETER WALLS - EXTERNAL FACE	B2	S50	50mm REFER NOTE 2
IN-SITU EXTERNAL WALLS - INTERNAL FACE UNO	B2	S50	50mm
IN-SITU EXTERNAL WALLS - INTERNAL FACE EXPOSED TO TRAIN FIRE WITHIN RAIL CORRIDOR, SW3, SW4, SW5, SW6 AND W29 FROM LEVEL B8 TO LEVEL B4. REFER HATCHED ELEVATIONS FOR EXACT EXTENT.	B2	S50 REFER NOTE 1	60mm
IN-SITU INTERNAL WALLS - ALL FACES INTERNAL	B2	S50	50mm
PRECAST DECK UNITS AND SUPER T-GIRDERS	B2	REFER NOTE 3	REFER NOTE 3
IN-SITU PRECAST TOPPING SLAB	B2	S50	50mm

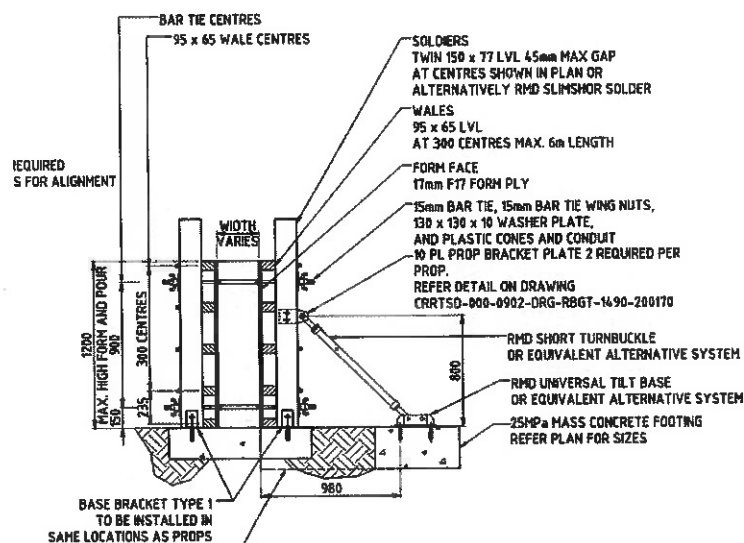
- Reinforcement is detailed in a table on each of the reinforcement drawings. Any additional reinforcement over & above the traditional 'A', 'B', 'C' & 'D' layers are noted on the drawing in the relevant location
- N12/N16 dummy bars shall be placed on concrete aspros to provide a level base to commence A & B layer installation
- 'Hurdles' or 'Top Hats' shall be scheduled to provide separation between the two layers within the required cover limits
- A top dummy bar may be utilised to provide a working base to lay 'C' & 'D' layer.
- Shear ties will be installed where required on the drawings
- Starter bars for columns & walls are to be installed as per the drawings. Splice couplers will be utilised where required by the Contractor so long as permitted by the designer



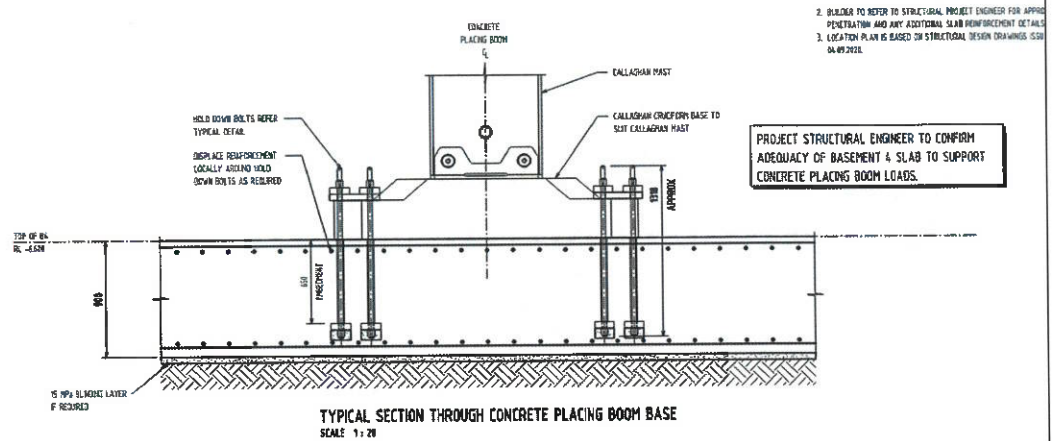
- Survey is to confirm locations & lines of columns, external walls & internal walls to identify starter bar/coupler locations in slabs

Formwork & Cast Ins

- Formwork to slab on ground shall be constructed using ply, LVLs & other proprietary formwork materials
- Materials to be lifted in & out of the station box via tower crane
- Formwork shall be constructed in accordance with an approved temporary works design. Typical detail for a 1200mm (max) high shutter is shown below



- Forms shall be set and maintained to line & level such that the finished concrete shall conform within the specified dimensional tolerances & contours as shown on the IFC drawings
- Formwork to be set such that it is structurally sound & watertight. Fillets & chamfers (19mm x 19mm)
- Formwork to be coated with oil prior to pour to prevent adhesion to concrete
- A hold down bolt arrangement is to be cast into the B4 slab which is the foundation for the static concrete pump. Refer to below arrangement

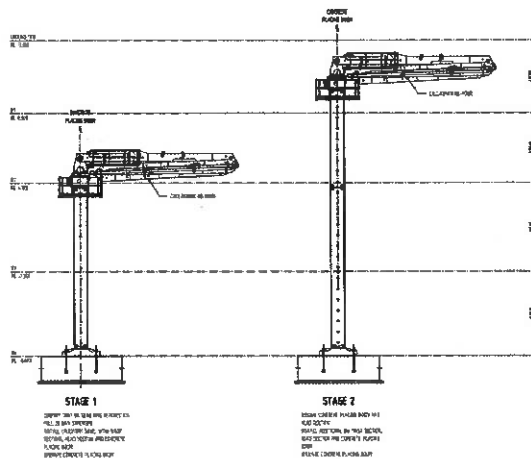


- Flush points shall be installed where nominated on the drainage design drawings. A stainless steel cover shall be installed at the top of the flushing point (refer to drainage installation section in this work pack)
- Hold down bolts for the TBM conveyor shall be installed as per design package 410-971

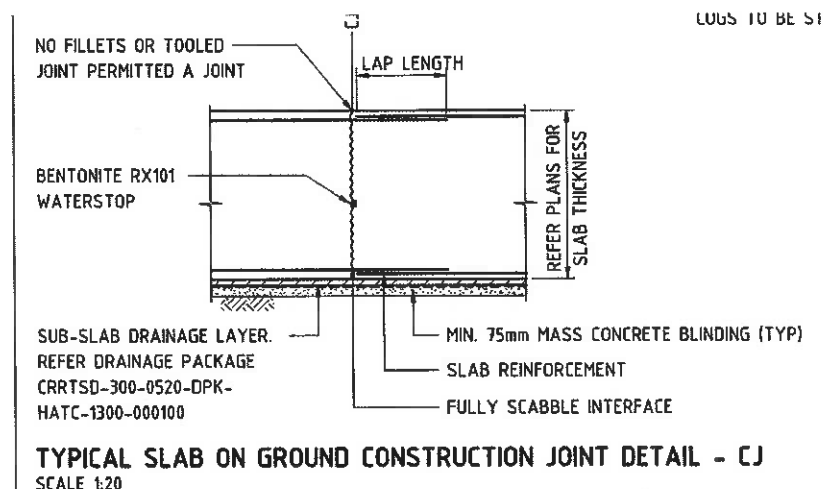
FORMWORK DESIGN FOR B8 SUSPENDED SLAB TO BE INCLUDED ONCE AVAILABLE

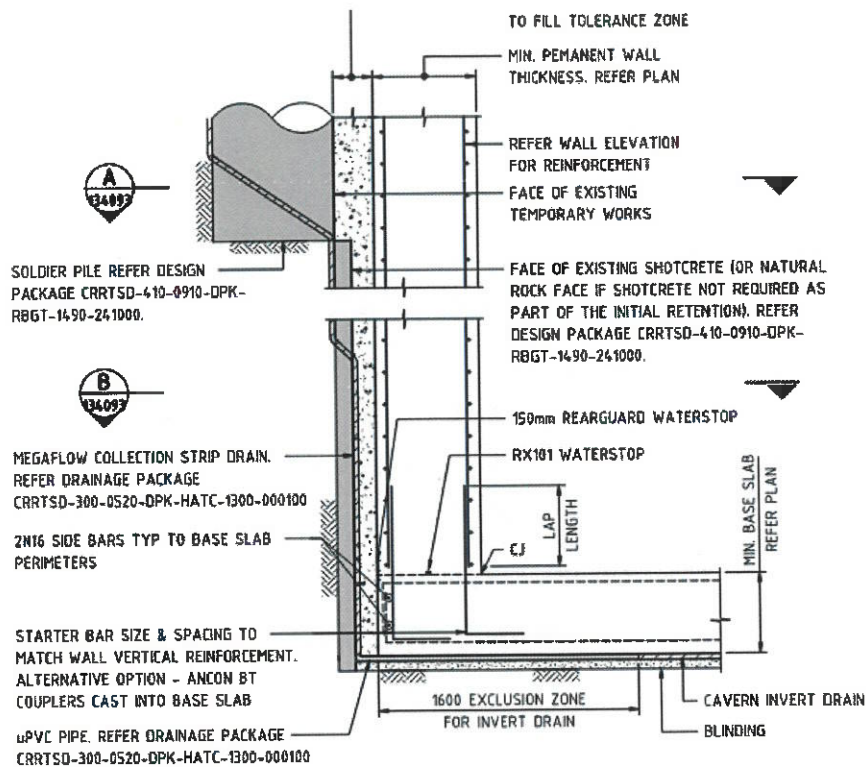
Placement of concrete to slab & waterproofing

- Confirm approved concrete mix design
 - Blinding & protection layer – N32
 - Slab on ground – S50/20/120
- Complete pre-pour Slump testing and cylinders as per MRTS70. **(HOLD POINT)**
- Slump shall comply with MRTS70 requirements.
- Blinding shall be clean and free of any debris, tie wire and loose items. A compressor is advised to remove all loose material.
- A pre-pour inspection shall be completed prior to placement of any concrete. **(HOLD POINT)**
- Concrete will be placed utilising a concrete boom pump. This will either be a mobile boom pump on the surface or a static pump situated on the B4 slab.
- The static boom pump shall be a Callaghan KB-M36R, installed in accordance with staging drawing S101 (provided by the supplier). The B4 slab is to reach full 28 day compressive strength prior to installation.



- Once a concrete truck has dispensed the load, the chute will be brushed and cleaned, and the truck will wash chute in the nominated wash out bay.
- All exposed concrete surfaces shall be cured using approved curing compound (Aquron 2000n or equivalent) Curing compound to be stored onsite as per SDS.
- All concrete shall be vibrated whilst placing the concrete.
 - Concrete shall be distributed and raised evenly & in a continuous manner
 - Fresh concrete shall not be placed against concrete which has taken its initial set (initial set is defined for this purpose only as the concrete surface not being able to be easily penetrated with a 12mm bar). If an interruption to pouring greater than 60 minutes or initial set has occurred, a construction joint approved by the Administrator shall be placed, or the laid concrete rejected. A concrete pour plan shall be completed and discussed with the placement crew to determine access requirements, testing location, pump location, concrete agitator discharge positions, direction of concrete placement in the slab, layer thicknesses etc
- A concrete pour record shall be completed for every pour noting delivery times, truck intervals, mix, slump measurement, testing requirements, temperature etc.
- Rugasol is to be applied to all faces of construction joints to facilitate the green cutting of the joint with high pressure water. Failing this, the construction joint will be scabbled to ensure aggregate is exposed to promote bond to the adjoining pour
- All waterproofing is to be installed prior to the slab pour as per the below details





TYPICAL WALL TO BASE SLAB DETAIL
SCALE 1:20

Post Pour

- Any exposed faces of concrete shall comply with Class 2 finished concrete, if not stated other on the drawings.
- Loading requirements:
 - It is anticipated that the slabs on ground (B8) will be loaded prior to 28 day strength achieved (to allow tunnelling operations to progress). CBGU will confirm any early loading restraints stipulated by the designer

NOTE: Should works or conditions CHANGE in the execution of the works, the works MUST STOP and the process and controls re-assessed and recorded using the pre-start briefing, and/or this work pack.

RESOURCE REQUIREMENTS (Annex D 4.7.1(b))

Subcontract Resources: Rocktown

CBGUJV Labour: 3 x labourers

Plant: Concrete truck, tower cranes, mobile cranes, concrete pump, manitou, water cart

Equipment: Generators, Water Pressure Washer, Small Tools, Power Pack, Nips, floats, Tie bolt anchors, Vibrators, Air compressor, Bolt cutters, Oxy sets, Lasers, Screeds, Jackhammer, Concrete saw

Materials: Concrete, Grout, Curing Compound, Duct Tape, Reinforcement, Spray Paint, Builders Plastic, Spacers, Formwork, Tie wire, rearguard water stop, drainage permanent cast in

Transportation of Materials/Personnel

Method of Refuelling Requirements, Tunnel/Rail

Rail Requirements

Tunnel Requirements

Comments:

ROLES, RESPONSIBILITIES AND COMPETENCIES (ANNEX D 4.7.1(c))

ROLE	RESPONSIBILITIES	COMPETENCIES
Foreman	Monitor safety Waste disposal management	Relevant industry experience and approved by the Construction Manager
Leading Hand	Manage work force and allocate tasks	Relevant industry experience and approved by the Superintendent
Plant Operator	Operate plant / machinery	Relevant RII or VOC issued by RTO
Crane Operator	Operate crane	High Risk Work Licence
Dogman	Slings the load.	High Risk Work Licence
Electrician	Connection of ablation block to temporary generator	Electrical Work Licence
Labourer	Assist operators with tasks	Relevant industry experience or Traineeship

INDUCTION REQUIREMENTS (Annex D 4.7.1(d))

The following induction requirements are to be completed prior to being able to work on site:

Type	Scope
General Construction Industry Induction (White Card or other State equivalent)	For people undertaking defined construction work
CBGU JV Project Induction	For all people working on any site, including: site assessments, audits, testing and defined construction work – (Must have completed a General Construction Industry Induction).
Precinct Induction/Site Familiarisation	For all people working on a Precinct, including: site assessments, audits, testing and defined construction work – (Must have completed a CBGU JV Project Induction).
Visitor's induction	For those people attending site but not working in the construction area – completed with CBGUJV responsible person. Must be escorted at all times by fully inducted person.
Delivery Drivers Induction	For delivery drivers who make infrequent deliveries to site – such as float drivers.
Work activity induction (SWMS/Work Pack)	For those people authorised for site access who are undertaking a high-risk activity, or construction work with a risk ranking of HIGH – SWMS must be reviewed and authorised by a CBGU JV representative.
Rail Industry Worker	As per relevant Rail Infrastructure Manager's (RIM): Queensland Rail, or CBGUJV Contractors
Office induction	For those CBGU JV personnel working at Milton Office – Issued by Jo Campbell

PERMITS / APPROVALS REQUIRED (Annex D 4.7.1(e))

Permits	✓ / ✗	Permit	✓ / ✗
Safety Essentials Exception	☐	Isolation	☐
Hot Work	☒	Excavation	☒
Dewater	☒	Confined Space	☐
Disturb Land	☐	Enter No-Go Zone	☐
Permit to Penetrate	☐	Other (specify)	☐
Permit to Work Near OHW (Rail)	☐	Traffic Control Permits	☐

Add any other activity requiring a permit.

Other: e.g. Environmental Permit/Approvals – Out of hours works, Planning Permits, EPA license.
[Attach Permits and Approvals as applicable]

CONSTRUCTION VERIFICATION (Annex D 4.7.1(f))

ITP Doc. No.	Inspection and Test Plan Title
CRRTSD-CS-ITP-000004	ITP – Insitu Concrete (DTMR Works) (Excluding Cast-In-Place Piles)
1h1	

h
Arrange ITP
Foundation ITP

Part B – For Internal Use Only - Construction

SAFE WORK METHOD STATEMENTS (SWMS)

A SWMS must be developed for all activities that may involve a Business defined High Risk Construction Work task/s.

List the SWMS required to be prepared under this work pack (Activity based)

SWMS ID	SWMS Title	CBGUJV or Subcontractor
CRRTSD-SH-SWMS-CBGU-410-000001	FRP	Subcontractor (Jemna)
CRRTSD-SH-SWMS-CBGU-410-000002	Mobile Plant	Subcontractor (Rocktown)
CRRTSD-SH-SWMS-CBGU-410-000003	General Lifting Operations	Subcontractor (Rocktown)
CRRTSD-SH-SWMS-CBGU-410-000004	MEWP Use	Subcontractor (Rocktown)

SAFETY ESSENTIAL EXCEPTIONS

Are any Safety Essential Exceptions required for this work? No ☒ Yes ☐ If Yes, (Attach Safety Essential Exception Requests);

[Enter details of each Safety Essential Exception]

STAKEHOLDER NOTIFICATIONS

Are Stakeholders required to be notified for this work? No ☒ Yes ☐ If Yes, By Whom (Attach resulting document);

[Enter Details e.g. emergency services, change traffic notifications, nightshift works, community awareness, media]

ENVIROMENTAL

Are The Works Within The Approved Project Footprint?	☒	YES	☐	NO	☐	N/A
CEMP Covers The Relevant Works And Environmental Risks?	☒	YES	☐	NO	☐	N/A
Environmental Approvals / Permits / Notifications Required?	☒	YES	☐	NO	☐	N/A
Cultural Heritage Impacts?	☐	YES	☒	NO	☐	N/A
Soil Disturbance?	☐	YES	☒	NO	☐	N/A
Native Vegetation Disturbance?	☐	YES	☒	NO	☐	N/A
Noise / Vibration / Dust?	☒	YES	☐	NO	☐	N/A

Details:

(include details and attachments as required)

List key environmental risks and controls related to the activity:

[Example text has been provided below]

Environmental Aspect	Risk Rating	Control Action / Procedure – Relevant to this Work Pack
Acid Sulphate Soil	Medium	Follow ASS procedures including • Characterisation of suspected ASS material • Stockpiling, handling and transportation of ASS • Treatment and verification of excavated ASS • Dewatering management/monitoring
Air Quality	Low	Implement appropriate dust control measures such as dust suppression Be aware of meteorological conditions to provide an early warning system to upcoming adverse conditions Mitigate the migration of fine soil particles on open roads Enforce requirements for haulage trucks travelling on public roads Stabilise stockpiles of material that may subject to wind dispersion such as lime used for the treatment of ASS Airborne contamination as a result of the removal of asbestos and other hazardous material – follow Code of Practice 2011 protocols regarding waste control for asbestos and hazardous material – Air quality monitoring systems will be set up on-site during asbestos and hazardous materials. Demolition waste should be separated properly to maximise recycling.
Biosecurity	Low	All machinery / equipment will be inspected and declared weed seed and Fire Ant free prior to arriving on site, using Unity's Plant and Equipment Clean Down Declaration which will be kept with the Plant Department. Work closely with any subcontractors and suppliers to ensure that the import of potential RIFA carrier is managed in accordance with the Biosecurity Act 2014 requirements.
Community	Low	Notify community of works and hours of works. Note up to 44 days notice may be required.
Construction Activities	Low	Adhere to the site CTMP (Construction Traffic Management Plan), Communicate requirements to subcontractors Subcontractors have suitably maintained vehicles for works (haulage, deliveries, floats etc) Park only in designated construction parking areas. Install & Maintain safety fencing, hoarding, gantries, barriers, signage and clear demarcation of restricted work areas
Contaminated Land	Medium	Where reasonable and practicable avoid ground-disturbance works in known areas of contamination. No removal of spoil from site without Soil Disposal Permit. Material backfilled following borehole / test pit / hand auger completion. Contaminated materials are temporarily stored in such a manner that accidental impact to the receiving environment is practicably and reasonably mitigated Removal from site in accordance with Soil Disposal permit / regulated waste requirements. Management of asbestos or asbestos-containing materials are managed in accordance with the relevant WHS legislation and the WHSMP (refer to section 2 below), particularly during demolition activities Management of hazardous substances is in accordance with the WHSMP (refer to section 2 below)
Erosion & Sediment Control	Low	ESC controls installed, updated and maintained as per certified sediment and erosion control plans. Stockpiles must not be placed in drainage lines, channels or paths.
Indigenous Cultural Heritage	Medium	Cultural monitors are to be contacted in the event any items of heritage significance are un-earthed during the course of the works. Stops works should potential heritage item be unearthed in accordance with Unexpected Finds Procedure.
Nature Conservation	Low	Minimise disturbance to significant vegetation and habitat during construction. Consult environment if vegetation is required to be removed.
Noise and Vibration	High	A Noise model / screening needs to be produced to determine extent of potential impacts Minimise mobile equipment reversing movements and use alternative beepers, such as broadband beepers. Use Main Roads for Site traffic. Prioritise loud activities during the day where practical. Avoid the use of horns.

		Where practicable use noise attenuation devices (i.e. noise curtains / plywood) to screen high noise generating activities. All works that occur outside of standard of the standard construction hours (6:30 am – 6:30 pm) must obtain an Out of Hours Work Permit.
Non-Indigenous Heritage	Medium	Heritage monitors are to be contacted in the event any items of heritage significance are un-earthed during the course of the works. No storage against / within heritage areas.
Waste	Low	Signed suitable bins and skips to be provided for segregation of waste Contaminated waste disposed of offsite at a licenced facility and tracked by soil disposal permit
Waterways and Water Quality	Medium	Any Trapped water is tested prior to release by the Environment Team/Trained supervisory personnel

Does the activity have Regulated Waste? No ☒ Yes ☐ If Yes, (Attach Details)

Is a Site Environmental Plan applicable to this Work Pack? No ☐ Yes ☒ If Yes, (Include details below & attach)

SEP Doc. No.	Site Environment Plan Title
↳	Insert no.

IDENTIFICATION OF SERVICES

Are services present or positively identified, above, below or within the work area?

No ☒ Yes ☐ If Yes, By Whom (Attach resulting document);

Provide details of service:

No services in the area (no excavation).

Is an isolation required? No ☒ Yes ☐ If Yes, By Whom (Attach resulting document);
[Enter Isolation Details]{Consider Electrical, Water, Gas, etc}

Is an Excavation or Penetration Permit Required? No ☐ Yes ☒ If Yes, By Whom (Attach resulting document);

LIFTING

Is a Lift Plan / Study required? No ☐ Yes ☒ If Yes, By Whom (Attach resulting document);

Will be provided as required

Have overhead/underground services been identified? No ☒ Yes ☐ If Yes, By Whom (Attach resulting document);
[Enter service identification details]

TEMPORARY WORKS

The following temporary works are required for this WORK PACK & need to be designed & certified in accordance with Temporary Works Procedure (e.g. access, special formwork, temporary support). Reference any applicable design/work method documentation.

Type of Temporary Work	Risk Category	Identify relevant approver		
		Designer	Certifier	Inspector
Formwork – shutters & soffit	CAT 4	TBA	TBA	CBGU

Scaffold				

WORK INTERFACE / SIMULTANEOUS OPERATIONS		
Detailed interfaces that affect this scope of work, other disciplines, contractors or operations including reference of any specific traffic control and/or logistical requirements.		
Interface (Where?)	Party (Who?)	Control/s
Level B8	Tunnel team	Concrete barriers setup to delineate & protect workers
Level B9	Tunnel team – TBM conveyor	Conveyor works will occur on night shift i.e. works will not overlap
Push test?		
Is a Vehicle Movement Plan required? No ☐ Yes ☒ If Yes, attach resulting document; - Calbah stairs in both locations in station box - Scaffold access from L0 to B3, B3 to B4, B4 to B9		

SURVEY / TESTING REQUIREMENTS			
List survey / testing requirements and responsibility			
Description of Survey or Testing Required	Resource	When	Frequency
Initial setout	CBGU Surveyor	Prior to new workfront	Once
As-built survey	CBGU Surveyor	Completion of each work front	
Push test?			

DRAWINGS / SPECIFICATIONS	
List a layout drawing and other relevant key drawings, specifications and standards to clarify above work method. List associated Design Package. (One Design Package per Work Pack).	
Design Pack	Design Pack Name
410-450	Underground Primary Structure – Advance Works
300-520	Drainage
000-900	Temporary Works
Drawing Number	Drawing Description/Title
REFER TO ATTACHED DRAWING LIST	

COMMENTS / ADDITIONAL ACTIONS
Emergency Equipment / Emergency Plans/ Maps

WORK PACK CREW BRIEFING

I have briefed the work crew on the methodology and content of this Work Pack, which details the requirements that must be met to effectively undertake the work.

Supervisors Name: James Maher

16/10/20

Signature: [Signature]

Date: 16/10/20

Work Crew Members (Print, Sign Name & Date)

Name (Print)	Signature	Date	Sections Briefed	Supervisor Initial
D Woods	[Signature]	16/10/20	All	[Initials]
Joseph Berk	[Signature]	16/10/20	All	[Initials]
Wes Wetheridge	[Signature]	16/10/20	All	[Initials]
Sean Russell	[Signature]	16/10/20	All	[Initials]
Colm O Mahony	[Signature]	16/10/20	All	[Initials]
Nathan Cook	[Signature]	16/10/20	All	[Initials]
Joe Retonova	[Signature]	16/10/20	All	[Initials]
Darion Conolly	[Signature]	19/10/20	All	[Initials]
Laurence Long	[Signature]	19/10	All	[Initials]
Samuel Kelly	[Signature]	19/10	All	[Initials]
Josh Larkham	[Signature]	20/10	All	[Initials]
Sam Kincade	[Signature]	20-10	All	[Initials]
Braden Rice	[Signature]	20/10	All	[Initials]
David Sharp	[Signature]	29/10	All	[Initials]
Conor Devereux	[Signature]	29/10	All	[Initials]
Danny McCrae	[Signature]	29/10	All	[Initials]
WAYNE BRABAZON	[Signature]	30/10	All	[Initials]
NOEL EHMANW	[Signature]	30/10	All	[Initials]
Craig Liddell	[Signature]	30/10	All	[Initials]
FIERHAN MCHUGH	[Signature]	30/10	All	[Initials]
BRENT HECKERDORF	[Signature]	30.10	All	[Initials]
NATHAN LOVE	[Signature]	30.10	All	[Initials]
PETER WARSON	[Signature]	30.10.20	All	[Initials]
Simon Toner	[Signature]	2-11-20	All	[Initials]
Glenn Caldwell	[Signature]	2-11-20	All	[Initials]
Joe Barber	[Signature]	2-11-20	All	[Initials]
Adam Carroll	[Signature]	2/11/20	All	[Initials]
Beau Colman	[Signature]	2/11/20	All	[Initials]
KERRY BRAUN	[Signature]	2/11/20	All	[Initials]
Arrian King	[Signature]	2/11/20	All	[Initials]
Jordan Mc Gree	[Signature]	4/11/20	All	[Initials]
Anthony Collins	[Signature]	4.11.20	All	[Initials]
Patty Cash	[Signature]	4-11-20	All	[Initials]
JOHN ALLEN	[Signature]	6/11/20	All	[Initials]
Stephen Moran	[Signature]	10/11/20	All	[Initials]

Name	Sign	date	briefed
Dave O'D.	<i>[Signature]</i>	9/11/2020	ALL
Dave Byrnes	<i>[Signature]</i>	9-11-20	ALL
Paul Curran	<i>[Signature]</i>	9-11-20	ALL
Declan Mc Gee	<i>[Signature]</i>	9/11/20	ALL
Keith Samuel	<i>[Signature]</i>	9-11-20	ALL
Dean Flanagan	<i>[Signature]</i>	12/11/20	ALL
J. Silby	<i>[Signature]</i>	12/11/20	ALL
Z. Olsen	<i>[Signature]</i>	12/11/20	ALL
M. Richter	<i>[Signature]</i>	12/11/20	ALL
S Jones	<i>[Signature]</i>	16/11/20	ALL
M. Cannon	<i>[Signature]</i>	16/11/20	ALL sections
R. Bowe.	<i>[Signature]</i>	26-11-2020	ALL sections
C. Simon	<i>[Signature]</i>	27-11-2020	ALL sections
K. Thompson	<i>[Signature]</i>	30-11-20	" "
H. Trump	<i>[Signature]</i>	30-11-20	" "
N O BATES	<i>[Signature]</i>	30-11-20	" "

WORK PACK COMPLETION RECORD

Comments:

< What worked well? What didn't work well? Are there any "Lessons Learnt" improvements? >

RESPONSIBLE SUPERVISOR:

RESPONSIBLE ENGINEER:

Authorisation:

The work covered within this WORK PACK has been completed and the records have been checked and are ready for presentation

Name

Signature

Date

Responsible Engineer

CHECKLIST

[Insert/attach appendices referenced in this Work Pack here:]

- ☐ Work Pack Risk Assessment
- ☒ Safe Work Method Statements
- ☐ Safety Essential Exceptions Request
- ☐ Stakeholder Notifications
- ☐ Regulated Waste
- ☐ Site Environmental Plan/s
- ☐ Identification of Services
- ☒ Lift Plan
- ☒ Permits / Approvals
- ☐ Temporary Works
- ☒ Vehicle Movement Plan
- ☐ Traffic Control Plan
- ☐ Inspection and Test Plans
- ☐ Relevant Layout Drawings
- ☐ Emergency Response Action Plans (Extract from Emergency Response Management Plan)
- ☐ Other _____

Weekly Structures Engineering Team Meeting



CBGU D&C JV

Date | Time – 8/12/2021 | 10.00

Location – Gabba Room – Site Office

Attendees

✓	Paul Russo	PR	✓	Wade Mcharg	WM
✓	Patrick Rykiert	PRy	✓	Annabelle Kissane	AK
	Sophie Clarke	SC	✓	Gabriel Nahabia	GN
✓	Ben Wal8ker	BW	✓	Connie Lee	CL

Chairperson – Paul Russo

APPENDIX C

Agenda Items (New items in blue text, old items will be removed when closed)

No.	Description	Action Owner
1.0 Safety		
1.1	<u>SWMS – check register</u> - Dismantle jump form system – Joel’s desk - Construct & remove temporary deck – in development - SWMS – SW6 – Heinrich to develop - SWMS – stair construction – with CBGU for review -	Everyone
1.2	Work Packs - SW6 Arch Pour - updated, awaiting final barrier layout - Precast installation WP has been developed – with quality for review - Slabs workpack – updated to include topping slabs, being circulated for signatures - Piling - AK - Retaining wall - AK	
2.0 Quality		
2.1	<u>Lots</u> - Awaiting on Brent for ECR – keep escalating - Concrete test reports holding up – PR to follow up - SC committed to 100% lot closure prior to leave – 2 remaining awaiting ECR	Note
2.3	NCRs to be raised Refer to attached register Need to focus on closing out NCRs on punch list WM/PR to follow up with CPS on status 400	
2.4	RFI SW6 post fix anchors – with PSM – action with Construc Beam detail above SW6 – queries with RBG, progressing well. Slab ties in topping slabs on B2, RBG to review with proof engineer L0 precast slabs – penetration - with RBG (CBGU to confirm fee) WM to action with CR L2 Control panel rebate – responded Decline strut – clash with SW5 – meeting with RBG today (8/12) Temporary penetration SW5 for services – awaiting information on revised locations – need to confirm we can fit blockwork pump line – services to action WM to task LP Beam B2 – step clarification – with CPS PR to follow up Precast shop drawing approval & product – with CPS	PRy PR

APPENDIX C

2.4	B9 punch list D. Eustace running with punch list, SC to follow up Emphasis to be placed on ensuring correct link between lots & concrete orders. Improving.	SC
3.0 Construction		
3.2	Reinforcement ordering Revised delivery procedure to be sent out with minutes. Elements coming up - SW6 arch pour 1 – delivered - SW6 pour 2 & 3 – awaiting response on queries prior to scheduling - B1 slab connections – Heinrich approved, need to approve schedule with Ibuild. Send to Ancon this year - B2 pour 2 – with Ibuild - Jump lift 14 – with CBUGU - Jump lift 15 – 20 schedules received. - L0 lowe slab connections – schedules to be revised with Ibuild - L0 upper - B2 internal walls with Heinrich* - B1 internal walls – with Heinrich - L1 slab connections – awaiting schedules - L2 Slab Connections – awaiting schedules - B2 beams – with Heinrich* with Connie - SW5 – scheduling commenced I'build Xmas shut down period – closed 22nd December, back on 4/1 (deliveries commencing)	
3.3	Concrete ordering Setup the planned/actual bookings on the whiteboard for the 2pm meeting All site engineers are responsible for ensuring that their TB orders are in the system after the 2pm meeting SC to send confirmation email for concrete after 2pm meeting for the following day. Note to include additional testing on this email Connie to look after this while SC is away	
4.0 Program		
4.1	SW6 arch pour B2 by Xmas – target	
7.0 Procurement		
7.1	- Nil	
General Business		
8.1	SW6 propping/staging to be worked through – PR to follow up with Bruno (Doka)	PR

APPENDIX C

8.2	De-stressing anchors - SW2 – with JP – backfill to progress to 1.6m above B3**	PR
8.4	SW4 bars that have been cut – being raised as an NCR	
8.5	Door opening levels B4 – Heinrich to advise & confirm rectification? ;	BW/GN
8.7	Bluebeam session drawings – doc. Control to setup packages for auto document transmittal	BW
8.8	Scaffold handover certificates from TJM – PR to speak to Heinrich to be on distribution list	
8.9	Cast in ferrules – circular columns – PR to issue CD	
8.10	RPEQ certification – further information to come	
8.11	PR to follow up with PP on hold point release for mix designs – awaiting 56 day shrinkage	
8.12	CAP updated - WM to run through with PR. PR to update	
8.13	Maturity testing – recalibration of spread mix required	
8.14	Alimak demobilisation Dates to be discussed with WT	

Woolloongabba Station & Precinct - Weekly Report										
Program Detailed Weekly Report										
Report Date:		2/03/2022		Reported By:		Chris Russell				
Week No.		134		Approved By:						
1. Executive Summary										
Progress;										
- 5 days lost duw to intense rain, flooding and the impact of. - Pumping of B9 Basement ongoing, - Plumbed toilets out of action across site as sewer tank and pumps on B9. Currently replaced with portaloos - Both Alimaks are out of action due to power supply. Alimak out to rectify at the end of the week (pending B9 pumping) to repair and should be able to get one operational by Monday - B9 will require a full clean w/c 07 March following safety assessment of electrical equipment etc - Fugen (blocklayer) impacted this week and next with no access to B9, should be able to access B7 early next week when Alimak is back up and running (needed for materials). - Scaffolders impacted at B7, 1 week lost - Heinrich lost 5 day - due to Rain plus the effect of, whilst new access scaffolds were installed to supplement out of action alimaks, and lighting and power supply rectified. - Flooding impacted the supply of Concrete as Hansen supply chain network was cutoff due to road closures and localised flooding.										
Planning;										
Structures										
The commencement of the station box FRP works has been delayed due to late finish of TBM and subsequent stripping of conveyor structures etc. Reinforcement for SW05 on GL P12 to P14 finally commenced on 14 February 2022, works will open up further in the Station Box following the transition of the doka form. Paper for the canopy skating option completed and a meeting will be scheduled to review next week.										
Mechanical & Electrical										
All service package activities are in the new TP.03 programme, the electrical activities and timings have been peer reviewed by the electrical contractor. Electrical Package has been awarded, however; Mechanical, Hydraulic and Fire contracts are still yet to be awarded. Delays to the approval will impact the TP03 dates. Scope being developed to go to market to procure works transferred from systemwide. The service install activities were due to commence at the start of February 2022, the start of these activities are likely to slip due to the delay in sign off of service packages. All packages are required to be signed up so as design and coordination can be complete prior to commencing any works onsite										
Finishes & Fit-Out										
Blockwork nearing completion on B9, corefill to block walls complete to full height on B9. Blockwork was to commence on B7 this week. Other fitout work packages are due to commence in the second quarter of this year Procurement on going for key packages.										
Key Issues;										
High priority procurement packages are as follows in order of priority Structural Steel, Mechanical, Hydraulics, Fire, Doors, and CnP. Resources - Staff resignations continue with another SE resigning this week. Roles vacacted before Christmas still not filled the shortage of resource is starting to impact. Commercial Team significantly impacted and recruitment of vacant roles urgent. Recruitment ongoing with a number of interviews scheduled. Heinrich additional Formwork, Steelfixing and scaffold resources commenced onsite.										
2. Design										
a) IFC										
410-0453 Underground Platforms and Caverns - Full and final IFC is outstanding. 415-0455 Retaining Walls and Other Misc. Structures - IFC outstanding 415-0560 Various - Civils - IFC outstanding 410-0560 Stanley St Bridge - IFC outstanding										
b) Temporary Works										
3. Key Procurement										
	Item	Procurement Package Description / Particulars		Indicator	Current Status	Req'd RFA / PO (TP03)	Execution Date	Δ in Week	Comment	
	1	Station Electrical		✖	RFA Approval	6/02/2022	TBC		RFA signed off at project level and sent to Steer Co. Contract issued to successful contractor for review and acceptance.	
	2	Station Mechanical & Ventilation		✖	RFA Approval	24/01/2022	TBC		RFA issued for review 23/12/21. Package to be split station by station. Market pricing received and being assessed.	
	3	Station Fire Protection System		✖	RFA Preparation	24/01/2022	TBC		To be prepared as Project wide RFA	
	4	Station Hydraulics		✖	RFA Preparation	8/02/2022	TBC		Final tender queries to be closed out. Tender interviews complete	
	5	Structural Steel - Below Ground & Service Building		✖	RFA Approval	18/02/2022	TBC		RFA issued. Comments received, reviewed and responded to. Closing out Fixed vs Rise and Fall offer from preferred contractor	
4. Progress										
	Item	Key Milestone		Indicator	TP03 BASELINE	Current Program Position	Variance to TP03	Position Last Week	Δ in Week	Comments
BOH Primary Structure	1	Station Box – Zone 5 – Commence Piling		●	24-Feb-22	7-Mar-22	-7	28-Feb-22	-5	Lost 1 week due to intense rain and flooding and the effects of.
	2	Station Box – Zone 1, 5 – BOH FRP Complete – Services Building		●	2-Jun-22	6-Jul-22	-20	28-Jun-22	-5	Lost 1 week due to intense rain and flooding and the effects of.
	4	Station Box BOH – B1 Slab Zone 2 & 4 Complete		●	26-Mar-22	12-May-22	-24	5-May-22	-5	Lost 1 week due to intense rain and flooding and the effects of.
	5	Station BOH – Zone 1,2 and 4 - Ground Slab Complete		●	8-Jun-22	19-Jul-22	-25	11-Jul-22	-5	Lost 1 week due to intense rain and flooding and the effects of.
Station Box Primary Structure (Post TBM Tunneling)	6	Station Box – Close of Gabba Decline		●	15-Feb-22	29-Mar-22	-24	21-Mar-22	-5	We have looked at the closure of the decline and the 21/03/22 is latest possible date that the decline closure can be postponed until. We have reviewed this to alleviate further costs and logistic implications to the tunnels team. Slipped 1 week due to the effect of rain.
	7	Station Box – Mezzanine Corbel Complete and Ready to Install Mezzanine Precast		●	6-Jun-22	12-Jul-22	-22	5-Jul-22	-5	Knock on effect from viereindeel delay, we are reviewing the adjustment sequence of the scaffold to accommodate and earlier viereindeel install which should hopefully realign with TP.03 Slipped 1 week due to the effect of rain.
	8	Commence Culverts to Station Box GL P10 to P12		●	1-Jul-22	1-Aug-22	-19	25-Jul-22	-5	Culverts have held their date from last week, we are now looking at improve the cycle times on the FRP works in the Station Box, this may allow us to install the Viereindeels as per TP.03 baseline Slipped 1 week due to the effect of rain.
	9	Station Box – Station Box FRP Walls Complete		●	6-Aug-22	6-Sep-22	-16	29-Aug-22	-5	Knock on effect from the late access to start on the FRP works Slipped 1 week due to the effect of rain.
	10	Commence Mezz Install		●	9-Jun-22	12-Jul-22	-20	5-Jul-22	-5	The movement has occurred due to using the recently communicated mezz delivery date. This has been adjusted to follow the South Cavern Install. The flow on effect from the late FRP works, this is being worked around as per scaffold adjustments as above. Still awaiting update from the Mezz team on the extent of the impact to Veirendee! manufacture.
Station Box Shaft	11	Station Box Shaft – Commence Closing Shaft (1st Mezz Beam Installed)		●	21-Nov-22	21-Nov-22	0	21-Nov-22	0	We are potentially looking at options to close up the shaft earlier, however the date of November is still being retained. This is running independent of the struture.
	12	Station Box – Station Box Shaft FRP complete		●	21-Feb-23	21-Feb-23	0	21-Feb-23	0	On Programme
Canopy	13	Commence Assembly of Steelwork		●	30-Jul-22	13-Sep-22	-26	6-Sep-22	-5	The delay to the commencement of Steel canopy construction is based on an design feasibility and approval. This is being looked at closely and will be reviewed dependent upon approval of canopy skating option. Slipped 1 week due to the effect of rain.
	14	Complete Installation of Steelwork		●	29-Sep-22	17-Nov-22	-27	4-Nov-22	-5	As Above
	15	Complete Soffit		●	4-Nov-22	5-Jan-23	-26	13-Dec-22	-5	As Above
	16	Complete Glazing and Elevation Finishes		●	10-Mar-23	4-May-23	-29	26-Apr-23	-5	As Above
North Cavern	17	Complete FRP BOH		●	13-Jul-22	29-Jul-22	-11	22-Jul-22	-5	The impact of the TBM Delay and clearance of the station box to allow the traverse of the Arch Form Slipped 1 week due to the effect of rain and concrete supply.
	18	Commence Mezzanine Install		●	8-Jul-22	4-Aug-22	-18	28-Jul-22	-5	The movement has occurred due to using the recently communicated mezz delivery date. This has been adjusted to follow the South Cavern Install. The flow on effect from the late FRP works, this is being worked around as per scaffold adjustments as above. Still awaiting update from the Mezz team on the extent of the impact to Veirendee! manufacture.
Southern Cavern	19	Complete FRP BOH		●	16-Mar-22	6-May-22	-26	28-Apr-22	-5	Currently impacted by loss of resource due to covid. However the critical date of completion is for the commencement of the mezz install Slipped 1 week due to the effect of rain and concrete supply.
Mezzanine	20	Deliver 1st Precast Unit to Site for Assembly		●	18-Mar-22	28-Apr-22	-20	11-Apr-22	-5	Latest Update From the Mezz Team as of 18/02. mezz team looking at mitigation strategies. Still awaiting update from the Mezz team on the extent of the impact to Veirendee! manufacture.
	21	Commence Assembly of Loader		●	23-Mar-22	16-Apr-22	-14	16-Apr-22	0	Latest Update From the Mezz Team as of 18/02. mezz team looking at mitigation strategies.
	22	Southern Cavern – Install 1st Precast Mezzanine Unit against BOH		●	28-Apr-22	27-May-22	-18	20-May-22	-5	Latest update from the Mezz team shows that Mezz install will commence on the 20/05/22. This has yet to be confirmed. We are working around mitigating the effects. Still awaiting update from the Mezz team on the extent of the impact to Veirendee! manufacture.

M&E Fit out	23	B9 Commence MEP Fit Out		2-Feb-22	3-May-22	-48	14-Apr-22	-5	Currently awaiting contract signing for the electrical package. The electrical package can start some of the works around 22/03/22. However Mechanical, Hydraulic and Fire need to be installed prior to the majority of electrical install and are still awaiting RFA Approval Note: programme dates assume a 6 week lead period which we will look to reduce for critical activities to mitigate the delay.
	24	B7 Commence MEP Fit Out		2-Feb-22	3-May-22	-48	14-Apr-22	-5	Currently awaiting contract signing for the electrical package. The electrical package can start some of the works around 22/03/22. However Mechanical, Hydraulic and Fire need to be installed prior to the majority of electrical install and are still awaiting RFA Approval Note: programme dates assume a 6 week lead period which we will look to reduce for critical activities to mitigate the delay.

5. Progress Photos:

Photo 1: 28 Feb 22 - B9 Flooding

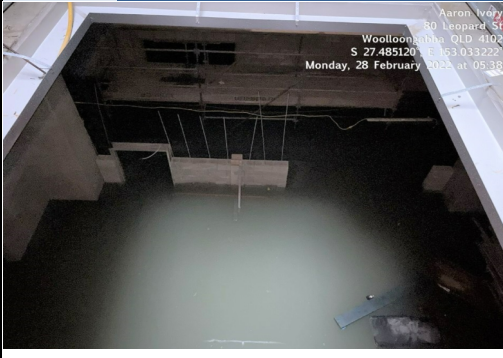


Photo 2: 2 Mar 22 - BOH Structure - Jump Form Lift 14 modification

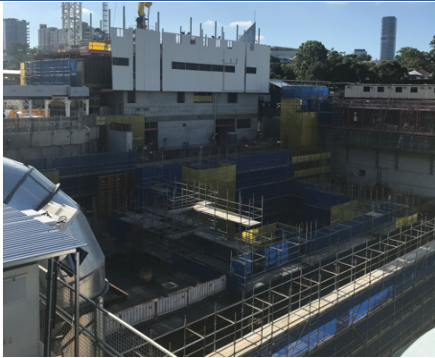
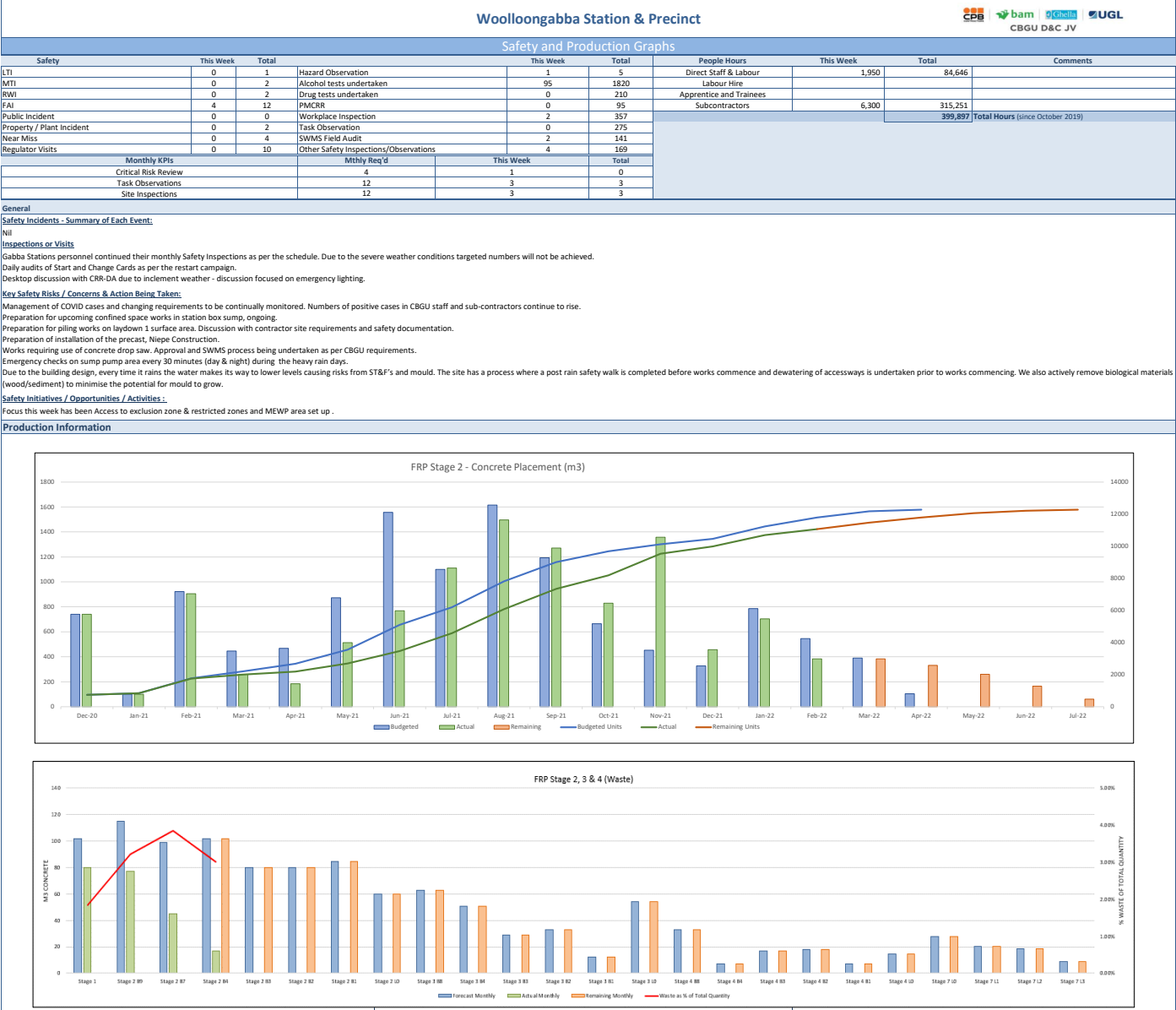


Photo 3: 2 Mar 22 - BOH Zone 2 & 4





Substantial Completion and Close-Out Authorisation Form

JDE Supplier (S) No: 125710 JDE OS No: 6355994



CBGU D&C JV

CONTRACT DETAILS	
Contract Number	Q80379-WG-WC-20306
Contractor Name	Rocktown Pty Ltd
Description of Works	Stage 1 PreTBM Works
Date of Substantial Completion	01 st April 2021

The financial reconciliation should be populated using the Order Recap function within JDE.

FINANCIAL RECONCILIATION			
Original Contract Value	\$3,440,410.00		
Approved Variations	\$808,935.71		
Backcharges	\$0		
Final Contract Value	\$4,249,345.71		
Total Payments (to date)	\$4,036,878.42		
Securities Held (include details)	Cash Retention	Bank Guarantee	\$212,467.29
Excess Commitment (to be closed)	\$0		

Note: Purchase Orders have been reviewed and included in the totals above.

CLOSE-OUT AUTHORISATION			
The Project Stakeholder (or their delegate) is to ensure all of their department specific requirements under the contract have been met.			
Project Stakeholder	Name	Signature	Date
Contract Administrator	Aaron Poustie		
Senior Project Engineer	Paul Russo		
Area Project Manager	Chris Russell		
Area Commercial Manager	Justin Perkins		

Substantial Completion and Close-Out Authorisation Form
JDE Supplier (S) No: 125710 JDE OS No: 6355994



CONTRACT SETTLEMENT AUTHORISATION			
Authority is provided to release the Form of Release to the Contractor for execution and (subject to receipt by CBGU JV of the executed Form of Release) proceed with the release of first Security under the Contract in accordance with the CRR - TSD Procurement Procedure.			
Position	Name	Signature	Date
Commercial Director	Andy Higgs		

Annexure 1. Commercial Closeout Checklist

CONTRACT CLOSE-OUT CHECKLIST	
Contract Administration Items	
1. The site team (Area Managers / Engineers) have verified the contracted scope of works is complete (including variations) and/or all Goods have been received.	☒
2. Omissions and defects (if any) previously notified by CBGU JV to the Contractor have been addressed and rectified.	☒
3. Certificate of Substantial Completion for the contracted scope of works (including variations) has been signed off by the applicable Area Manager (or delegate)	☒
4. All documents (deliverables) as required by the contract have been received and reviewed and approved as compliant with the project requirements by CBGU JV verifiers (Area Managers / Quality team)	☒
5. Notices of delay and requests for extensions of time are agreed and resolved with Contractor.	☒
6. All variations are agreed and resolved with Contractor.	☒
7. All applicable back charges have been applied (Defects Disposition, Plant Inspections, etc)	☒
8. Disputed claim entitlements and amounts have been resolved	☒
9. Progress claims have been reviewed and reconciled with Final Contract Value agreed with Contractor.	☒
10. Payments made to the Contractor under both the Subcontractor (S) and Vendor (V) modules have been run out of JDE and reconciled to identify any duplicated payments.	☒
11. Retention held by CBGU JV is in accordance with Contract requirements and is commensurate with the with Final Contract Value	☒
12. Bank guarantees (if any) are current (and will remain current for the duration of the Defect Correction Period) and are commensurate with the with Final Contract Value.	☐
13. Contractor Form of Release has been completed and attached to this approval	☒

Substantial Completion and Close-Out Authorisation Form
JDE Supplier (S) No: 125710 JDE OS No: 6355994



Annexure 2. Close-out Verification

For Contract Administrator use only

CLOSE-OUT VERIFICATION			
1.	Where required, the Contractor has returned the Form of Release duly executed in accordance with Contract requirements.	☒	
2.	First Security (where applicable) has been released in accordance with the CRR - TSD Procurement Procedure.	☒	
3.	Excess commitment (if applicable) has been closed out in JDE – attached JDE Order Recap below	☒	
4.	Defect Correction Period and release of remaining Security is applicable under the Contract	Yes ☒ No ☐	
Role	Name	Signature	Date
Contract Administrator	Aaron Poustie		
Area Commercial Manager	Justin Perkins		