

BSBPMG516 MANAGE PROJECT INFORMATION AND COMMUNICATION

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

09/03/22

Date Click here to enter a date.

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

ASSESSOR COMMENTS

BSBPMG516

MANAGE PROJECT INFORMATION AND COMMUNICATION

Practical Task 1	
Description of task: A suitable observer is to verify the participant's ability to plan, implement, maintain and review information and communication management systems and processes. The participant is required to link people, ideas and information at all stages in the project life cycle, ensuring timely and appropriate generation, collection, dissemination, storage and disposal of project information through formal structures and processes.	
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, Computer.	
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:	7/03/2022
When completing the task, did the participant:	Tick if satisfactorily completed. Provide comments if left unticked.
1 Plan information and communication processes	
1.1A. Using input from stakeholders, identify, analyse and document information requirements – ensuring: • Consideration of alternative communication methods, media and systems, and their application on various projects • Use of clear language in verbal and written interactions with stakeholders • Consideration of non-verbal communication • Use of active listening and questioning to confirm understanding and agreement	☒
1.1B. Within delegated authority, develop an agreed communication management plan to support achievement of project objectives.	☒
1.1C. Establish and maintain a designated project-management information system to ensure quality, validity, timeliness and integrity of information and communication.	☒
2 Implement project information and communication processes	
1.2A. Manage generation, gathering, storage, retrieval, analysis and dissemination of information by project staff and stakeholders.	☒
1.2B. Implement, modify, monitor and control designated information-validation processes to optimise quality and accuracy of data.	☒

Appendix A

Appendix B

1.2C.	Implement and maintain appropriate communication networks.	☒
1.2D.	Identify and resolve communication and information-management system issues.	☒
3 Assess information and communication outcomes		
1.3A.	Finalise and archive records according to agreed project information ownership and control requirements.	☒
1.3B.	Review project outcomes to determine effectiveness of management of information and communication processes and procedures.	☒
1.3C.	Identify and document lessons learned and recommended improvements for application in future projects.	☒
The participant's performance was: ☒ Satisfactory ☐ Not Satisfactory		

OBSERVER COMMENTS

1.1A – 1.1C

Paul has provided the correspondence register for a particular subcontract. It is a collection & summary of the various correspondence with the subcontractor, of which Paul is a major contributor. This sheet is an excellent project management system which allows quick reference to information.

1.2A – 1.2D

Paul developed & implemented a reinforcement ordering process for Woolloongabba station which ensures effective communication is maintained with relevant stakeholders to ensure the timely & seamless delivery of reinforcement. This procedure also included in detail the review process between the stakeholders to ensure the correct reinforcement schedules are ordered.

1.3A – 1.3C

Paul coordinated a lessons learnt session with the internal team regarding a particular quality issue on site. The session was documented (as seen by the sign on page of attendees) & saved/archived in the project folder to prevent future re-occurrence.

Appendix A

CRR TSD - Woolloongabba Station

Q80379-WG-WC-20321

20321 - FRP Stage 2,3,4 & 7 – Primary Underground & Above Ground Structure Works

Heinrich Constructions Pty Ltd

Correspondence register

Date	Teambinder Ref:	From	Ref Correspondence	Issue	Status	Latest comment
18-Dec-20	TSD-GEN-CBGU-008516.00	Adrian Abeya	Q80379-WG-WC-20321-LTR-001	Letter of award	Closed	N/A
18-Dec-20	TSD-GEN-CBGU-008516.00	Paul Russo	Q80379-WG-WC-20321-LTR-002	Secondary subcontractor approval - Arrow Access Services Pty Ltd	Closed	N/A
18-Dec-20	TSD-GEN-CBGU-008516.00	Adrian Abeya	Q80379-WG-WC-20321-LTR-005	Secondary subcontractor approval - Boxer Engineering Pty Ltd	Closed	N/A
18-Dec-20	TSD-GEN-CBGU-008516.00	Paul Russo	Q80379-WG-WC-20321-LTR-006	Secondary subcontractor approval - Construc Pty Ltd	Closed	N/A
18-Dec-20	TSD-GEN-CBGU-008516.00	Paul Russo	Q80379-WG-WC-20321-LTR-004	Secondary subcontractor approval - East Coast Concrete Contractors	Closed	N/A
18-Dec-20	TSD-GEN-CBGU-008516.00	Paul Russo	Q80379-WG-WC-20321-LTR-003	Secondary subcontractor approval - IPR Contracting Pty Ltd Pty Ltd	Closed	N/A
15-Jan-21	Sent via email	Paul Russo	Q80379-WG-WC-20321-LTR-007	Positive alcohol test	Closed	N/A
22-Jan-21	TSD-GEN-CBGU-008939.00	Paul Russo	Q80379-WG-WC-20321-LTR-008	Date for Commencement on Site – Separable Portion 1 Stage 2	Closed	
22-Jan-21	TSD-GEN-CBGU-008939.00	Paul Russo	Q80379-WG-WC-20321-LTR-009	Key contract provisions	Closed	N/A
9-Feb-21	TSD-GEN-CBGU-009153.00	Adrian Abeya	Q80379-WG-WC-20321-LTR-011	Separable Portion 1 Stage 2 – Zone 2 B9	Closed	N/A
9-Feb-21	TSD-GEN-CBGU-009152.00	Paul Russo	Q80379-WG-WC-20321-LTR-010	Social media reminder	Closed	N/A
15-Feb-21	15/02/21 email	Jeff Bedsor	VN01	VN01 - Goods lift door landing B9 up	Open	
15-Feb-21	15/02/21 email	Jeff Bedsor	VN02	VN02 - SW8 wall penetrations	Open	
15-Feb-21	15/02/21 email	Jeff Bedsor	VN03	VN03 - Revised drawings 11 February	Open	
15-Feb-21	15/02/21 email	Jeff Bedsor	VN04	VN04 - Revised specification 11 February revision B5 (informal revision issue)	Open	
22-Feb-21	22/02/21 email	Paul Russo	VN05	VN05 - Temp services penos SW2	Open	
1-Mar-21	TSD-GEN-CBGU-009472.00	Paul Russo	Q80379-WG-WC-20321-LTR-012	Contractor's program	Closed	N/A
1-Mar-21	TSD-GEN-CBGU-009472.00	Paul Russo	Q80379-WG-WC-20321-LTR-012	Contract program for Stages 2, 3, 4 & 7	Closed	N/A
3-Mar-21	03/03/21 email	Jeff Bedsor	VN06	VN06 - IFC 02 March 1st notice	Open	
3-Mar-21	03/03/21 email	Jeff Bedsor	VN07	VN07 - IFC 02 March 2nd notice	Open	
8-Mar-21	TSD-SC-CBGU-001391.00	Rory Church	VQ01	VQ01 - B9 drainage sump roof	Open	
17-Mar-21	17/03/2021 email	Jeff Bedsor	VAR-001	VAR-001 Stage 1 B9 slab	Open	
19-Mar-21	19/03/21 email	Jeff Bedsor	VN08	VN08 - Many new wall penetrations	Open	
26-Mar-21	Assumed via email	Nick Forde	Q80379-WG-WC-20321-LTR-013	IR Forum	Closed	N/A
28-Mar-21	28/03/2021 email	Jeff Bedsor	VN09	VN09 - New grout check size for all joints in vertical elements	Open	29/03 Heinrich need to double up a 30mm x10mm pine strip to create the joint. The change is for horizontal joints, not vertical joints
28-Mar-21	28/03/2021 email	Jeff Bedsor	VN10	VN10 - New concrete specification revision B5 (formal revision issue)	Open	
29-Mar-21	29/03/21 email	Jeff Bedsor	Delay	Delay SW2 & SW8	Open	
6-Apr-21	06/04/21 email	Jeff Bedsor	Delay	Delay SW2 & SW8	Open	
7-Apr-21	07/04/21 email	Jeff Bedsor	VAR-002	VAR-002 Stage 1 B4 slab	Open	
7-Apr-21	07/04/21 email	Jeff Bedsor	VAR-003	VAR-003 IFC Drawings	Open	
15-Apr-21	15/04/2021 email	Jeff Bedsor	VN11	VN11 - new wall elevations	Open	
16-Apr-21	16/04/2021 email	Jeff Bedsor	VN12	VN12 - TSD-GEN-CBGU-009716.01 – 28 new structural dwgs	Open	
19-Apr-21	19/04/2021 email	Jeff Bedsor	VN13	VN13 - Concrete supply 15/04 and 16/04	Open	
27-Apr-21	27/04/21 email	Jeff Bedsor	Email	Email - steel plate supply costs (Jeff Bedsor to Chris Russell)	Open	
10-May-21	10/05/2021 email	Jeff Bedsor	VN14	VN14 – IFC stage 7 drawings	Open	
11-May-21	TSD-GEN-CBGU-010361.00	Rory Church	VQ02	VQ02 - Deletion of wall 54 B7 to L0	Open	
12-May-21	TSD-GEN-CBGU-010350.00	Rory Church	VQ03	VQ03 - Additional Propping to Jump Form in Cells 8 and Cell 10	Open	
12-May-21	TSD-GEN-CBGU-010381.00	Rory Church	VQ04	VQ04 - Installation of Anchors to B7 Soffit, B4 Soffit and L2 Soffit	Open	
13-May-21	13/05/2021 email	Jeff Bedsor	VN15	VN15 - Castin for equipment	Open	
13-May-21	13/05/2021 email	Jeff Bedsor	VN16	VN16 – Propping cell walls	Open	
14-May-21	TSD-GEN-CBGU-010410.00	Adrian Abeya	Q80379-WG-WC-20321-LTR-014	Delay letters 29 March & 6 April 2021 – auto wall climber system loading to Woolloongabba Station perimeter walls SW2 and SW8	Closed	N/A
20-May-21	TSD-GEN-CBGU-010455.00	Adrian Abeya	CD#01	Contract direction #01 - U-Bars internal wall 22 on B9 slab	Open	
20-May-21	20/05/2021 email	Jeff Bedsor	VN17	VN17 - U-Bars internal wall 22 on B9 slab	Open	

Appendix A

24-May-21	24/05/2021 email	Jeff Bedsor	VAR-004	VAR-004 Ferrules	Open	
25-May-21	25/05/2021 email	Jeff Bedsor	VAR-005	VAR-005 B9 plinths	Open	
28-May-21	28/05/2021 email	Jeff Bedsor	VAR-006	VAR-006 SW2 penetrations	Open	
1-Jun-21	TSD-GEN-CBGU-010582.00	Paul Russo	CD#02	Contract direction #02 - Penetrations in W18 & W23	Open	
7-Jun-21	TSD-GEN-CBGU-010654.00	Paul Russo	CD#03	Contract direction #03 - B7 slab	Open	
7-Jun-21	07/06/2021 email	Jeff Bedsor	VAR-007	VAR-007 Welding U Bars	Open	
7-Jun-21	07/06/2021 email	Jeff Bedsor	VAR-008	VAR-008 Propping cell walls	Open	
8-Jun-21	08/06/2021 email	Jeff Bedsor	VN18	VN18 - Reo fix 7 June 2021	Open	
13-Jun-21	13/06/2021 email	Jeff Bedsor	VAR-011	VAR-011 - 7 June reo fixers	Open	
16-Jun-21	TSD-GEN-CBGU-010769.00	Paul Russo	Q80379-WG-WC-20321-LTR-016	Program for Separable Portion 1	Closed	N/A
17-Jun-21	TSD-GEN-CBGU-010791.00	Paul Russo	Q80379-WG-WC-20321-LTR-017	Variation notice 18 dated 8 June 2021 & Variation letter 11 dated 13 June 2021	Closed	N/A
22-Jun-21	TSD-GEN-CBGU-010832.00	Adrian Abeya	CD#04	Contract direction #04 - Welding of Cog Bars - W29 - SW8 Connection	Open	
1-Jul-21	TSD-GEN-CBGU-010914.00	Adrian Abeya	CD#05	Contract direction #05 - B4 & B7 penetration	Open	
8-Jul-21	08/07/2021 email	Jeff Bedsor	VN19	VN19 - Jump form walls cured with Multicure AC 90	Open	
13-Jul-21	13/07/2021 email	Paul Russo	VN20	VN20 - Wall changes W7, W8, W53,W1,W10,W33	Open	
23-Jul-21	TSD-GEN-CBGU-011135.00	Adrian Abeya	CD#06	Contract Direction #06 - penetrations B7 slab, W11, W1	Open	
27-Jul-21	TSD-GEN-CBGU-011162.00	Paul Russo	Q80379-WG-WC-20321-LTR-018	High flow mix credit - clause 33.4	Open	To be deducted in progress claims
2-Aug-21	TSD-GEN-CBGU-011216.00	Paul Russo	Q80379-WG-WC-20321-LTR-019	Security – Clause 5.2	Closed	N/A
30-Jul-21	30/07/2021 email	Jeff Bedsor	VAR-012	VAR-012 Labour stand down 27/07 + 28/07	Open	
30-Jul-21	30/07/2021 email	Jeff Bedsor	VAR-014	VAR-014	Open	
19-Aug-21	TSD-GEN-CBGU-011460.00	Adrian Abeya	CD#07	Q80379-WG-WC-20321-CD-007 - Heinrich contract direction #07 - W8 Penetration Update	Open	
23-Sep-21	TSD-GEN-CBGU-011815.00	Adrian Abeya	CD#08	Q80379-WG-WC-20321-CD-008 - Installation of lift pit ferrules		
1-Oct-21	TSD-GEN-CBGU-002123.00	Paul Russo	CD#09	Q80379-WG-WC-20321-CD-009 - B7-B4 scaffolding	Closed	
5-Nov-21	TSD-SC-CBGU-002228.00	Paul Russo	CD#10	Q80379-WG-WC-20321-CD-010-B3 slab set down	Closed	
11-Nov-21	TSD-GEN-CBGU-012271.00	Ben Walker	Updated Design Drawing	Updated Design Drawings - B2 AHU Plinths	Closed	
11-Nov-21	TSD-GEN-CBGU-012275.00	Paul Russo	Gabba Station - Above Ground Architectural Elevations	Gabba Station - Above Ground Architectural Elevations	Closed	
11-Nov-21	TSD-SC-CBGU-002266.00	Paul Russo	CD#11	Contract Direction 11 - Scaffold Alterations	Closed	
2-Dec-21	TSD-SC-CBGU-002355.00	Paul Russo	CD#12	Contract Direction 12 - Arch Wall Overpour zone		

Russo, Paul

From: Russo, Paul
Sent: Tuesday, 22 June 2021 4:44 PM
To: Jeff Bedsor; Ross - Heinrich; Clarke, Sophie; Rykiert, Patrick; Walker, Ben
Cc: Tresider, Warren; Wiese, Mark; Purcell, Joel; Russell, Chris; Church, Rory; Abeya, Adrian
Subject: Woolloongabba Station - Reinforcement Ordering/Scheduling Process
Attachments: PROCESS FOR ORDERING REINFORCING STEEL AT WOOLLOONGABBA STATION.docx

Hi All,

Attached is the process that we will be following for the ordering & review of Infrabuild reinforcement schedules.

The implementation of this process is a necessary requirement to help with traceability & control of reinforcement schedules

As the process improves we can refine & tweak as necessary to make this less cumbersome.

Please give me a call if there are any queries.

Regards

Paul Russo

Project Engineer



91 Leopard Street, Woolloongabba, QLD 4102, Australia

T +0417 247 069 **M** 0417 247 069

E Paul.Russo@cbgujv.com.au

PROCESS FOR ORDERING REINFORCING STEEL AT WOOLLOONGABBA STATION

PRy: Patrick Rykiert

PR: Paul Russo

BW: Ben Walker

SC: Sophie Clarke

RC: Rory Church

CRRTSD Woolloongabba Engineer – SC/BW/PRy

CRRTSD Woolloongabba Representative (PR)

1. CRRTSD Woolloongabba Engineer (SC/BW/PRy) email Infrabuild to request a production schedule/code for a structural element. Engineer to CC CRRTSD Woolloongabba Representative (PR) in request.
2. Infrabuild generate a production schedule/code for that element in the request and send to CRRTSD Woolloongabba Engineer (SC/BW/PRy)
3. CRRTSD Woolloongabba Representative (PR) send the production schedule/code to Heinrich Constructions Pty Ltd.
4. Heinrich Constructions send to IPR Contractors for review
5. IPR Contracting review production schedule/code
 - 6a IPR Contracting review production/schedule/code has comments, IPR Contracting liaise with Infrabuild reinforcing scheduler, CC to CRRTSD Woolloongabba Engineer (SC/BW/PRy) by email/phone to revise production schedule/code. Infrabuild send revised production schedule /code to IPR for review and approval. IPR Contracting review production schedule/code and approve production schedule/code.
 - 6(b) IPR Contracting review production schedule /code, have no comments and approve production schedule/code.
6. Once IPR Contracting approve of the production schedule/code, IPR Contracting send the production schedule/code to Heinrich Constructions.
7. Heinrich Constructions send approved production schedule/code to CRRTSD Woolloongabba Representative (PR), CC to CRRTSD Woolloongabba Engineer (SC/BW/PRy)
8. CRRTSD Woolloongabba Representative/Engineer sends approved production schedule/code to Infrabuild.
9. Infrabuild add a Schedule number to the Production schedule/code and send back to CRRTSD Woolloongabba Representative.

10. CRRTSD Woolloongabba Representative send approved Schedule with the production schedule/code to Heinrich Constructions. This is the schedule which is to be claimed against.

Russo, Paul

From: Russo, Paul
Sent: Friday, 26 November 2021 9:27 AM
To: Tresider, Warren; Wiese, Mark; Ivory, Aaron
Cc: McHarg, Wade; Purcell, Joel
Subject: B3 Suspended Slab - Lessons Learnt
Attachments: Lessons Learnt - B3.xlsx

Warren/Mark/Aaron,

We had a number of issues on the B3 suspended slab pour 2 pertaining to quality which was highlighted by RBG on Friday afternoon and which were still evident on Tuesday morning just prior to the pour. This led to questions & queries regarding the state of workmanship & overall quality of the work. Ultimately, it came down to time, whereby the slab had simply not been completed prior to the inspection due to program & resourcing constraints, which we all acknowledge.

We've completed a lessons learnt sheet specifically for that slab which is attached. The main points which I believe that we need to consider & implement going forward is:

- If a suspended slab is not completed by midday, then the pour cannot proceed for the following day. We need to allocate at least half a day such that the slab is 100% complete (less the clean out etc) so that the steel can be inspected in its entirety. Understand that this may cause issues in relation to program & will be up for discussion. Keen to hear your thoughts? I'm happy to limit this requirement just to the suspended slabs for now as they are quite intensive in terms of inspections & checks required due to larger areas.
- The engineer/inspector responsible for the works is to physically check off each reinforcing bar mark on each of the design drawings, as well to initial each drawing progressively, as proof that the checks are actually occurring. This would help to identify any issues a lot earlier. This is the lesson learnt & we need to be better at this.

I'm also hopeful that with Josh primarily looking at steel deliveries on the surface & organising steel, that this will free up a lot of Baz's time from IPR so that he can be across these issues earlier.

I want to run this through with Ross & Bazz however I'd like your input/thoughts prior? Happy to discuss.

Cheers.

Regards

Paul Russo

Senior Project Engineer



91 Leopard Street, Woolloongabba, QLD 4102, Australia

T +0417 247 069 M 0417 247 069

E Paul.Russo@cbgujv.com.au

Russo, Paul

From: Russo, Paul
Sent: Friday, 26 November 2021 5:01 PM
To: Michael BARKER
Cc: Greg HOGG; Michael DI SIPIO
Subject: B3 Suspended Slab Pour 2 Lessons Learnt
Attachments: Lessons Learnt - B3 suspended slab.pdf

Hi Michael,

Following on from last week's B3 suspended slab inspection, we have undertaken an internal lessons learnt session to review all of the issues identified & how to prevent future re-occurrence for pre-pour inspections.

We appreciate the feedback given & have taken this seriously.

This is attached for your information.

Thanks.

Regards

Paul Russo

Senior Project Engineer



91 Leopard Street, Woolloongabba, QLD 4102, Australia

T +0417 247 069 M 0417 247 069

E Paul.Russo@cbgujv.com.au

Russo, Paul

From: Russo, Paul
Sent: Friday, 26 November 2021 5:01 PM
To: Michael BARKER
Cc: Greg HOGG; Michael DI SIPIO
Subject: B3 Suspended Slab Pour 2 Lessons Learnt
Attachments: Lessons Learnt - B3 suspended slab.pdf

Hi Michael,

Following on from last week's B3 suspended slab inspection, we have undertaken an internal lessons learnt session to review all of the issues identified & how to prevent future re-occurrence for pre-pour inspections.

We appreciate the feedback given & have taken this seriously.

This is attached for your information.

Thanks.

Regards

Paul Russo

Senior Project Engineer



91 Leopard Street, Woolloongabba, QLD 4102, Australia

T +0417 247 069 M 0417 247 069

E Paul.Russo@cbgujv.com.au

Appendix C



B3 SUSPENDED SLAB POUR 2 LESSONS LEARNT

Issue	Cause	Lesson Learnt
A large number of D layer bars were installed as N20-200 instead of N24-200. N20 bars to be removed and replaced with the correct bar size. This was mainly between the CJ of pour 1 and the first beam	Due to the change in CJ there was a lack of bars to fulfill the design requirement, additional bars were required to make up the lack on site	If a CJ needs to change, then the effect on the steel detail needs to be reviewed immediately
Beam Ties installed in wrong location, requiring hours to fix	Design detail was not followed. Ties were mistakenly installed in the wrong location.	Sitting down with the steel fixers to walk them through the slab details and design on a more direct meeting could be beneficial to avoid most of the installation issues. To the steel fixer's credit, they raised the issue & rectified it prior to the full construction of the beam
Beam top layer bars connecting to the SW8 infill pour currently cog at the inside face of the wall. These bars are to extend to the back face of the wall.	Design detail was not followed	Sitting down with the steel fixers to walk them through the slab details and design on a more direct meeting could be beneficial to avoid most of the installation issues.
No slab ties had been installed at the time of the inspection.	Slab had not been fully completed at time of inspection, due to inspection not being possible on Saturday, and would have delayed the pour if it had been Monday	Short of including a day into the program after steel completion for inspection and rectification this is unavoidable, the designer stated they wouldn't be back Saturday and wouldn't be in for the inspection on the day of the pour until an hour after the pour was meant to start, yet still requested we not pour until his inspection had been completed and actioned.
A large number of B layer bars were not tied down to the A layer and were sitting mid height in the slab. Bars must be tied down prior to pouring.	The B layer bars are tied to the top mat to facilitate slab tie installation. The B layer bars had not been re-positioned down to the A layer bar	Engineering/supervision to ensure that this is picked up prior to inspection
Coupler in SW2 at the northern end of the grid SC beam on the bottom face had no side face cover to the coupler. Coupler to be treated for corrosion. Coupler not utilised due to this and beam bar to be coggled.	Coupler installed to wall was out of horizontal position.	Wall couplers should be installed in the correct position and alignment with consideration as to the elements they are affixing to. Review of all couplers to be completed prior to steel fixing. This needs to be flagged prior to the inspection
At the southern end of the grid SC beam connecting into the B3 slab on ground, the top reinforcement couplers cast into the slab on ground were installed too low (approx 190mm cover). Lapped bars onto these screw in bars to be installed above the screw in bars at the top layer of the beam. Note this zone will be susceptible to cracking due to this increased cover at the joint.	Due to high congestion in the prior pour these bars were forced downwards and into tighter groupings to ensure the correct number were installed. Further to this the top layer appears to have been cast in low, which did not become apparent until the top of concrete level was installed to mark the top of the slab concrete on the morning of the pour.	Higher priority could be assigned to couplers over regular reinforcing bar. Further to this, the top of concrete level is to be reviewed prior to steel fixing to identify if there are any issues with top cover.
Generally in beams at lap locations bars have been joggled and stacked instead of being installed side by side. This is acceptable for this inspection but for future beams open the lig bend to be able to accommodate two bars side by side to allow the bars to be lapped as per the design intent.	Bars were stacked vertically due to prior conversations with designers, also beam ties scheduled only permitted stacking of vertical bars.	Beam bars are no longer to be joggled in all beam designs approved henceforth. Beam ties to be formed around an 80mm pin for all yet unproduced bar. To allow conventional horizontal lapping of bars in beams
Bottom bars in the beams have no spacer bar to separate the BB1 and BB3 bar layers and therefore there is no control over the spacing between these layers. Ensure these bars are installed in the correct depth and in future ensure spacers are used for quality control.	Design Detail was not followed	Time to be taken to install spacer bars between BB1 & BB3 layer bars. Supervision also to monitor this closely
A number of bars were installed hard up against cast in pipes. Bars to be pulled away from pipes to allow for min cover. Where not possible to get bars in between penetrations, combine the size of penetrations and apply the typ peno details with coggled bars and trimmers	In most instances it is assumed the steel had been installed prior to the penetrations being installed, thus there was no accommodation for the penetration	Sitting down with the steel fixers to walk them through the slab details and design on a more direct meeting could be beneficial to avoid most of the installation issues. Steel fixers to seek direction where cover to penetration is not present - bars to be cut & penetrations trimmed in most situations
Rectangular peno at north west corner of pour missing some trimmers and some trimmers that were installed did not extend far enough past penetration - replace with longer bars here.	In most instances it is assumed the steel had been installed prior to the penetrations being installed, thus there was no accommodation for the penetration	Sitting down with the steel fixers to walk them through the slab details and design on a more direct meeting could be beneficial to avoid most of the installation issues.
Generally, There were instances where steel had not been tied, and was loose, This was the case for all slab ties	The program delivery date was tight and as such time ran out to adequately secure all 4300 ties to the slab	All reinforcement is to be securely tied to reinforcement.
Generally, there were numerous quality issues (listed above) which should have been identified prior to the inspection occurring. It is acknowledged that some of the issues were not avoidable as the works had not completed so they could not have been checked prior to the pour	The slab was not progressively checked to confirm issues prior to the pour	The site engineer responsible is to physically mark off each bar mark on each of the drawings for each pour & to initial the drawing. This will be a requirement prior to each pour and will be completed progressively. At 12pm the day prior to a pour, the engineer is to do a full list/sweep of the outstanding items remaining. If the timeframe required to complete the remaining items is too long, the pour will be pushed back a day.

Attendance Sheet

Title / Topic: Woollongabba Station – B3 Lessons Learnt

Chairperson: Paul Russo

Date: 26/11/21

Venue: Gabba Room, Gabba Station

	Surname	First Name	Company	Position	Signature
1	Lupo	Paul	CBGU	SPE	
2	Holmes	David	CBGU	Supervisor	
3	EUSTACE	DAVID	CBGU	PI	
4	NAHABIA	HABRIEL	CBGU	SITE ENGINEER	
5	Serov	Sams	CBGU	Supervisor	
6	Rykert	Patrick	CBGU	Site Engineer	
7	Maher	Ben	CBGU	Project Engineer	
8	Troby	Athan	CBGU	Supervisor	
9	CLARKE	Sophie	CBGU	SITE ENGINEER	
10					