

CPCBC4012

READ AND INTERPRET PLANS AND SPECIFICATIONS

WORKBOOK

Participant name	Tyanna Childs
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FOR THE PARTICIPANT	
Instructions	
- You will complete written activities as outlined on the following pages. You must attempt all questions and provide enough detail in your responses to demonstrate your knowledge. - The timeframe for these tasks will be established by your Assessor or Training Plan, but additional time may be allowed upon negotiation with the Assessor. - You must complete all questions unassisted by the Assessor or other personnel but may refer to reference material as needed. All questions must be answered correctly for a 'Satisfactory' assessment outcome to be awarded. - An oral examination may be allowed under certain circumstances, whereby your answers will be documented by another party. - Any written questions that are incomplete, or not answered satisfactorily will need to be completed again after further training support. - If you answer a question incorrectly but modify your response, put your initials next to the written change (or the Assessor must initial a verbal change).	
Resources required	
Pen	

FOR THE ASSESSOR	
Instructions	
- Where oral examination has occurred, ensure that this is acknowledged in writing (e.g. FT001 and Assessor Comments) - All questions must be satisfactorily demonstrated by the Participant for a Satisfactory determination (indicated by an Assessor tick to the right of the question). - Assessors are to complete marking in pen of a different colour to the Participant. - If the Participant verbally modifies their response, write in the modified response verbatim and put your initials next to the written change.	

ASSESSOR COMMENTS

As necessary, outline:

- Details on reattempts, alternative arrangements or reasonable adjustments made.
- Where a Participant is deemed 'Not Satisfactory', provide recommendations for future training.

I found Tyanna's answers to be more than satisfactory.

On activity 2 Item C, I could not see where the roof cladding was nominated.

Thank you,

Jeff

NOTE

At times, you will be provided with a specific business context to which you must respond, otherwise it is anticipated that you will use a workplace of your choosing (your own, or hypothetical) to provide the context to the task.

At all times, the responses in your assessment must reference **Australian** (Queensland or Federal) documentation, including legislation, regulations, codes of practice, standards and guidance publications.

For the following activities, name the State/Territory you will base your research on.

State/ Territory	Queensland
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ACTIVITY 1

Research and document your findings regarding legislation and codes that apply in your state/territory relevant to the following three (3) items. Summarise the requirements relevant to building drawings and sketches you identified and provide the URL where you sourced your responses.

- Smoke alarms in a new building
- Pool fences
- Protection of waterways

a) Smoke alarms**Name of Legislation (Commonwealth or State)**

Building Fire Safety Regulations – 55C Prescribed locations for installation of smoke alarms – Act, s 104RBA (State)
AND AS 3786:204 (Commonwealth)

Summary of relevant excerpt/requirement

As of the 01st of January 2017, All new build homes or dwellings with substantial renovations require to adhere to AS 3786-2014 – Australia standard for smoke alarms using scattered light, transmitted light or ionization.

They must not also contain ionisation sensor and be hardwired to the mains power supply with a secondary power source (i.e. battery). Smoke alarms must be connected to every other smoke alarm in the house so that they sound off simultaneously.

It is a requirement to have smoke alarms installed on each storey, in each bedroom and in hallways that link the bedrooms to the rest of the dwelling.

If there are no bedrooms on a storey and there are no hallways linking rooms, then at least one smoke alarm needs to be installed in the most travelled path that exists on that storey that leads to the exit of the dwelling.

Source (URL or web source)

[Building Fire Safety Regulation 2008 \(legislation.qld.gov.au\)](http://legislation.qld.gov.au)

[Info Sheet - Smoke Alarm Legislation \(qfes.qld.gov.au\)](http://qfes.qld.gov.au)

b) Pool fence installation

Name of Legislation (Commonwealth or State)
Queensland Development Code – MP 3.4 – Swimming Pool Barriers (State)
Summary of relevant excerpt/requirement
A pool fence/ barrier is required to a body of water of, or greater, than 30cm in depth. The fence/barrier must fully enclose the entirety of the pool/spa and be a minimum of 1200mm in height. The pool fence/barrier must be from materials that are strong and durable to withstand the foreseeable impact of people. The bottom of the fence/barrier and its gate must not exceed 100mm from the ground, with the gate requiring to be fitted with latching devices that are inaccessible by young children and with the mechanism to be self-closing and self-latching. The gate must extend outwards from the pool, with a latch to unlock the gate at a minimum height of 1500mm from the ground. On the outside and inside of the fence/barrier, a 900mm non-climbable zone should be established.
Source (URL or web source)
<u>180712 QDC MP 3.4 Swimming Pool Barriers Revised clean (hpw.qld.gov.au)</u>

c) Protection of waterways

Name of Legislation (Commonwealth or State)
Water Act 2000 (State) AND Environmental Protection Act 1994 (State) AND Environmental Protection regulation 2019 (State)
Summary of relevant excerpt/requirement
A Riverine Protection Permit is required if you wish to destroy vegetation, excavate, or fill in a watercourse, lake or spring. Construction sites are likely to cause water contamination and/or environmental harm via stormwater run-off. These contaminations may include, but not limited to, concrete, sediment, plaster, clay, among other construction materials. It is the duty of the construction personnel to ensure appropriate measures are in place to prevent environmental harm. Effective and well-maintained ESC (Erosion and sediment control) measures need to be in place for an issue of a good practice notice.
Source (URL or web source)
<u>Water Act 2000 (legislation.qld.gov.au)</u> <u>Water – Queensland Law Handbook Online</u> <u>Environmental Protection Act 1994 - Queensland Legislation - Queensland Government</u> <u>Environmental Protection Regulation 2019 - Queensland Legislation - Queensland Government</u>

**Satisfactory
Outcome**



ACTIVITY 2

Access Handout 1 (HO1- Floor Plan with dimensions) and respond to the following:

- a) What is used for the internal wall lining?
- b) What is used for the external cladding?
- c) What roofing cladding is required?
- d) How do you identify the smoke alarm installation points?

a) What is used for the internal wall lining?

Clay bricks to all internal walls.

b) What is used for the external cladding?

Painted Render finish to external walls.

c) What roof cladding is required?

Roof cladding is not located on the floor plan provided. The roof cladding will be located on the elevation plans or roof plans.

d) How do you identify the smoke alarm installation points?

The Title Block is to the right-hand of the plan and to the left of the title block, towards the lower portion, is a label that shows what label denotes smoke alarms. The location of the smoke alarm installation points on the plan are: Hallways beside bedroom 2 and another in the hallway just before Master Suite.

**Satisfactory
Outcome**



ACTIVITY 3

Access Handout 2 (HO2- Footing Plan) and Handout 3 (HO3- Slab Plan) and respond to the following:

- a) Specify the size and type of reinforcing to be used for BP.1 in Handout 2 (HO2- footing plan)
- b) How do you determine where each BP.1 footing pier should be placed?
- c) Mark each of the load bearing points in Hand out 3 (HO3- Slab Plan)

a) Specify the size and type of reinforcing to be used for BP.1

450mm diameter concrete bored pier. The reinforcement is 'Vertical 5.N12' and 'LIGS R6 HELIX – 200mm PITCH'.

b) How do you determine where each BP.1 footing pier should be placed?

Refer to the footing plan and footing legend.

c) Mark each of the load bearing points in Hand out 3 (HO3- Slab Plan)

**Satisfactory
Outcome**



ACTIVITY 4

Access Handout 4 (HO4- Residential Floor Plan) and respond to the following:

- a) Which drawings are shown in these plans?
- b) Which Australian Standard must be referenced when installing termite protection?
- c) Make a list of the finishes noted on the document.

a) Which drawings are shown in these plans?

Architectural Plans - Floor Plans and Elevation Plans.

b) Which Australian Standard must be referenced when installing termite protection?

AS 3660.1 - 2014

c) Make a list of the finishes noted on the document.

Roof: Custom Orb deep ocean Colourbond.
 Gutter/Fascia: Deep Ocean Colourbond
 Walls: Dulux Cargo river
 Corbells: Duluc Calf skin
 Window frames: Powder coat anotech grey
 Paving: Lifestyle paving liquid limestone

**Satisfactory
Outcome**



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PRACTICAL ASSESSMENT

Participant name	Tyanna Childs
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FOR THE PARTICIPANT
Instructions
• The tasks outlined on the following pages will require performance of normal workplace activities, as a result of a structured activity set by an Observer in the workplace or a simulated activity set by your Assessor/Observer. • The timeframe for these tasks will be established by your Assessor/Observer, in consideration of location conditions and industry requirements. • You must complete all tasks unassisted by the Assessor or other personnel, unless the steps note this assistance. • You must attempt all tasks (and itemised steps) for a 'Satisfactory' assessment outcome to be awarded. ○ For any observation conducted that is incomplete, or without satisfactory performance, the observation will need to be completed again after further training support.

FOR THE ASSESSOR/OBSERVER
Instructions
• The following observation record should be used to judge and record your observations of the Participant as they complete the task(s) set. You must record your observations of the Participant's performance. ○ For each occasion, indicate the task performed and whether it was a simulation or workplace-based task. ▪ Any simulated assessment must ensure the Participant still performs under workplace conditions which reflect industry standards. ○ In the comments, provide clear detail regarding the task that the Participant was required to do (e.g. PPE used, materials handled, attachments connected, plant types). • All steps must be satisfactorily demonstrated by the Participant for a 'Satisfactory' determination (indicated by an Assessor tick to the right of each itemised step, or an Observer tick to the right of each itemised step, and confirmation by an Assessor in the Assessor Comments). ○ Where you have determined that one or more task steps have not been satisfactorily demonstrated, provide the Participant with additional support and outline details of such assistance in the Assessor/Observer Comments. Allow the Participant two (2) further opportunities to demonstrate the task again to allow an opportunity for a 'Satisfactory' assessment outcome to be achieved. ○ If after three (3) attempts the Assessor determines that the Participant cannot demonstrate the required steps, a 'Not Satisfactory' outcome is to be determined.

TASK OUTCOME					
Task	Date	Task Type (Tick)	Location	Task outcome (Tick)	
				Satisfactory	Not Satisfactory
Task 1	20/12/2023	☐ Workplace ☒ Simulation	Head Office	☒	☐

ASSESSOR COMMENTS: GENERAL

As necessary, outline:

- Details on reattempts, alternative arrangements or reasonable adjustments made.
- Where a Participant is deemed 'Not Satisfactory', provide recommendations for future training.

Happy with answers, no reattempts.

Jeff

ASSESSOR COMMENTS: PRACTICAL TASK 1: OCCASION 1

☒ Individual student (as named on cover page)

☐ Multiple students [☐ All from Attendance Report, ☐ Specific students involved – identify students]

Task	Provide detail
1.1A. 1.1B.	Specify type of plan and NCC class determined: Tyanna correctly identified the type of plan and the classification for the type of building, being a site plan and the class being 1A building.
1.1A. 1.1C.	Specify how currency of documents was confirmed: Tyanna confirmed it was the correct revision based on checking against the latest document register provided from the consultant
1.1D.	Specify environmental controls determined from plans/specifications. Tyanna identified that civil plans include sediment and erosion control details and plans and environmental management plans that outline project specific requirement.
1.2B. 1.2C.	Specify how building layout, material requirements spaces and dimensions were determined from plans and specifications. Tyanna reviewed a architectural unit floor plan and identified the layout, floor coverings and dimensions of rooms.
1.2G.	Specify services identified on site: Looking at a Survey drawing Tyanna identified a number of existing services along the property boundary such as water main, water meter, Comms Pit & Telstra Pits.
1.2H.	Specify site features located to be removed/ retained: Tyanna reviewed a Demolition Plan and identified what works were to be demolished, retained and cut down.
1.2J.	Specify variations found: Tyanna compared two structural slab plans of different revisions and spotted the cloud that showed the amended slab thickness that resulted in a variation.

1.3A.	Specify concrete footing and slab information identified: Tyanna reviewed a structural foundation plan identified the Pad Footing PF4 and went to the legend and described the size and reinforcement specified. We then went to a Level 1 Slab plan where she noted the slab thickness and wet area set downs.
1.3B.	Specify how load bearing points were recognised: Looking at the Structural Level 1 plan the loadbearing points are indicated as grey in the legend, locating the supporting columns below the slab.
1.3C.	Specify how wind bracing and tie down requirements were confirmed: On review of a house roof framing plan Tyanna identified the X bracing on the roof trusses and located in the legend the tie down requirements.
1.4B. 1.4C.	Specify how installation points and fixtures were determined: After reviewing a electrical plan Tyanna identified the location of different types of light fittings, fans and the associated switch location for each fixture.
1.4B.	Specify how connection points were determined: The electrical drawing noted the circuit layout and location of the Unit Distribution Board.
1.4C.	Specify where finishing details were located: The lighting schedule identified the different types of light fixtures

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Practical Task 1

Description of task:

The participant must demonstrate skills and knowledge to identify and interpret building and construction information from plans and specifications in a workplace (or a similar environment) in the context of a construction project including:

- Identify types of plans.
 - Check and confirm that the current version of plans, specifications and amendments is being used.
 - Use the appropriate plans and aspects of drawings for relevant purposes.
 - Confirm that the details on plans comply with the specifications.
 - Identify environmental controls from plans/specifications.
- Read and interpret the plans.
 - Read and confirm standards of work and tolerances from job specifications.
 - Determine building layout, spaces and dimensions from floor plan.
 - Determine material sizes, thickness and construction methods from detail drawings for estimates. *(Template available for use HO5_ Cost Estimation)*
 - Recognise and confirm job specifications located in drawings, notes, and descriptions.
 - Determine internal linings, external cladding and roof materials needed for estimates from plans and specifications. *(Template available for use HO5_ Cost Estimation)*
 - Apply information from plans to estimation, planning and supervisory tasks. *(Template available for use HO5_ Cost Estimation)*
 - Gain access to the site, achieve orientation and identify services, datum and reduced levels.
 - Locate site features to be removed or retained.
 - Determine the building location from the site plans to actual.
 - Verify plans recognising variations between the plans and the actual site, reporting findings as required.
 - Appropriately communicate with others to be understood.
 - Adhere to site safety requirements, including requirements relating to hazard identification.
- Identify structural details.
 - Identify concrete footing and slab sizes and position and type of reinforcing required.
 - Identify structural load bearing points of the building and compare information from specification.
 - Identify wind bracing and tie-down requirements checking for accuracy against the wind bracing table.
- Identify non-structural details.
 - Identify provisional sum (PS) and prime cost (PC) items when estimating costs. *(Template available for use HO5_ Cost Estimation)*
 - Locate installation and connection points of services to the building.
 - Identify location of fixtures from plans and details of finishes from specifications.

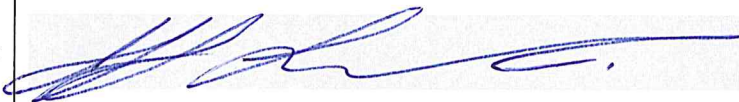
These tasks may be simulated or real. The Participant is to gather evidence of how they have completed each component of the Practical Task, which is to be submitted with this Practical Assessment sheet. The Observer is to provide detailed comments on the tasks completed by the Participant (on the Observer Comments, overleaf). The Assessor is to verify the Observer's comments, noting their findings in the Assessor Comments (on the back of the Practical Assessment cover page) and provide the assessment outcome.

Resources required:

Work site; plans and specifications, quality documentation; access to the internet/access legislation, current building and construction codes and standards and the NCC. PC applications and software to access CAD. Templates for estimating.

Observer details

Name of observer:	Jeff Lewandowski
Role of observer (Confirm suitability to sign)	Senior Contracts Administrator
Email address of observer	jeff.lewandowski@aldercon.com.au

Signature of observer:	
Date:	21/12/2023

When completing the task, did the Participant:		Tick if satisfactorily completed. Provide comments if left unticked.
1 Identify types of plans		
1.1A.	Check and confirm that the current version of plans, specifications and amendments is being used.	☒
1.1B.	Use the appropriate plans and aspects of drawings for relevant purposes.	☒
1.1C.	Confirm that the details on plans comply with the specifications.	☒
1.1D.	Identify environmental controls from plans/specifications.	☒
2 Read and interpret the plan		
1.2A.	Read and confirm standards of work and tolerances from job specifications.	☒
1.2B.	Determine building layout, spaces and dimensions from floor plan.	☒
1.2C.	Determine material sizes, thickness and construction methods from detail drawings. <i>(Template available for use HO5_ Cost Estimation)</i>	☐
1.2D.	Recognise and confirm job specifications located in drawings, notes, and descriptions.	☒
1.2E.	Determine internal linings, external cladding and roof materials from plans and specifications. <i>(Template available for use HO5_ Cost Estimation)</i>	☒
1.2F.	Apply information from plans to estimation, planning and supervisory tasks. <i>(Template available for use HO5_ Cost Estimation)</i>	☐
1.2G.	Gain access to the site, achieve orientation and identify services, datum and reduced levels.	☒
1.2H.	Locate site features to be removed or retained.	☒
1.2I.	Determine the building location from the site plans to actual.	☒
1.2J.	Verify plans recognising variations between the plans and the actual site, reporting findings as required.	☒
1.2K.	Appropriately communicate with others to be understood.	☒
1.2L.	Adhere to site safety requirements, including requirements relating to hazard identification.	☒
3 Identify structural details		
1.3A.	Identify concrete footing and slab sizes and position and type of reinforcing required.	☒
1.3B.	Identify structural load bearing points of the building and compare information from specification.	☒
1.3C.	Identify wind bracing and tie-down requirements checking for accuracy against the wind bracing table.	☒
4 Identify non-structural details		
1.4A.	Identify provisional sum (PS) and prime cost (PC) items when estimating costs.	☒
1.4B.	Locate installation and connection points of services to the building.	☒
1.4C.	Identify location of fixtures from plans and details of finishes from specifications.	☒

Observer comments:

Overall happy with Tyanna's progress and understanding of what information is contained in each discipline and how to interpret the drawings & associate items on the plans with legends, fixtures and finishes schedules and specifications as well as check revisions, compare plans for variations.

Further training required on the cost estimation side of things in 1.2C & 1.2F but not part of this module.