

RIICWM401E

SUPERVISE CIVIL WORKS

ASSESSMENT SUMMARY

The assessment activities for *RIICWM401E Supervise civil works* cover all aspects of the unit of competency. For Apprentices/Trainees, this includes supervisor completion of the Apprentice/Trainee Record (ATR).

Participants must read all the information given before starting any assessment task. The assessment tasks are intended to be fair, flexible, valid and reliable. If a Participant has any questions or requires alternative arrangements to be made such requests should be directed to their Trainer/Assessor, who should note such arrangements in the 'Assessor Comments' on the affected assessment. If a Participant feels they are not yet ready to be assessed, they should discuss their options with their Trainer/Assessor.

To satisfactorily complete the assessment, the Participant is required to answer all questions correctly and demonstrate their skills to industry standards. If a Participant does not answer all questions or perform all tasks, they will be deemed 'Not Satisfactory' for the task and 'Not Yet Competent' for the unit of competency.

The Trainer/Assessor can provide the Participant with additional information on interpreting the assessment outcomes and guide the Participant's options. If a Participant is still deemed 'Not Satisfactory' they will have the opportunity to undertake a supplementary assessment or appeal the result as per the process in the Student Handbook.

By signing below, the Participant acknowledges:

- They understand the assessment instructions and requirements, and consent to being assessed.
- The work submitted is to be their own work – with the work of/with others needing to be clearly acknowledged and documented.
- They consent to any photo/video recording of their work that occurs during assessment.

Participant name	TREN BUTLER
Participant signature	

Pre-requisite unit(s) to be achieved and authenticated prior to undertaking assessment

☒ Not applicable

Task	Date completed	Assessment Results	
Theory Exam		☐ Satisfactory	☐ Not Satisfactory
Practical Assessment		☐ Satisfactory	☐ Not Satisfactory
Outcome for RIICWM401E		☐ Competent	☐ Not Yet Competent

Evidence requirements checklist (ticked by assessor and evidence supplied to RTO)

☐ Theory Exam	☐ Practical Assessment
	☐ Completed Job Plan

Assessor Name	
Assessor Signature	

RIICWM401E

SUPERVISE CIVIL WORKS

THEORY EXAM

Participant name	JOEY BUTLER
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FOR THE PARTICIPANT
Instructions
• You will complete written questions as outlined on the following pages. You must attempt all questions and provide enough detail in your responses to demonstrate your knowledge. • It is anticipated that you should complete this assessment within two (2) hours, 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.

Q1. Which on-going risk management procedures and documentation do you access when supervising civil work and how do these link to legislative requirements?

Answer

Safety management procedures



Recording and reporting of incidents

housekeeping

emergency response

hazard management

environmental management

site assess

SWMS

Q2. What important emergency response information must be shared with workers prior to work beginning?

Answer

response teams



master points

emergency call up response

Q3. What are (1) the objectives of the Environmental Management Plan and (2) why you should read this as part of planning the job.

Answer

1. To ensure that all impacts of a proposed activity on a managed area are managed to protect the relevant natural, cultural, social and economic values of the area by identifying and mitigating environment risks



2. Protect the environment from harm
Ensures compliance with environmental regulations
Improve the reputation of the project or organisation

Q4. What is (1) the 'scope' of work, (2) why is this important when developing a job plan and (3) where can you sources relevant information.

Answer

1. a detailed document that outlines the specific task/s



2. it gives you/your team and your client a clear outline of the tasks involved in meeting your project goals.

3. communicate with relevant personnel
work pac's

Q5. In the general principles of surveying, what is the importance of 'working from the whole to the part' (1) when surveying and (2) how this is achieved?

Answer

1. it localises errors and prevents their accumulation ☐

2. working from the whole (larger area) to the part (smaller area) make it more accurate and reliable final survey

Q6. Why can consulting the team enhance team practices? Include one (1) example.

Answer

better communication, collaboration and problem solving leading to improved decision making, innovation and overall team performance ☐

Q7. How do you communicate site safety requirements to ensure workers wear PPE suited to the site?

Answer

through training, signage and regular toolbox talks ☐

Q8. Why is it important to coordinate tasks with other work supervisors and schedule team activities?

Answer

maximising productivity, collaboration, ensuring smooth project execution by aligning efforts, minimising conflicts and creating a positive work environment ☐

Q9. What inclusions must be considered when preparing a job plan?

Answer



erased
safety
SWMS
clearing limits

Q10. What processes must you follow to acquire and confirm the acquisition of required resources at your workplace?

Answer



requirements to consult applicable personnel
compilation of a list of resources required
costing the acquisition of the resources
identifying approved suppliers or required or gain approval use nonapproved supplier
verifying availability, quality and delivery of resources
gain approval to place orders where value is above authorised limit
when purchasing resources and services you may need to
apply organisation purchase order procedures
issue the appropriate purchase orders
Keep a record of the purchase order
Forward a copy of the purchase order accounts payable

Q11. What is discussed during the daily pre-start meeting?

Answer

safety
productivity
other relevant information ensuring awareness of hazards
and how to work safely



Q12. What is the 'rule of thumb' basis for matching a machine to a job?

Answer

operational distances best suited to each type of machine
Zone 1 - Zone 4, Zone 1 are machines with more power
less speed, distance use
Zone 4 are machines sacrifice power but speed
becomes more for transporting materials over distance



Q13. Supervisors must have knowledge of factors affecting plant performance. What are four (4) factors that can affect plant performance and output and why must supervisors monitor these?

Answer

1. Experience of operators - check competencies and monitor for poor workmanship
2. Suitability for work/task - conditions such as material type site conditions, weather must be considered
3. Pre and Post operational checks - must be conducted to maintain Plant at optimal operating conditions
4. Safety guidelines - is plant handling being conducted according to manufacture and site requirements



Q14. What methods do you use to ensure team members adhere to safety requirements such as PPE during the work tasks?

Answer

establish and communicate the rules and expectations for PPE use, and apply them consistently and fairly



Q15. What is the supervisor's role during site set out?

Answer

communicate scope of works
communicate site safety and compliance



Q16. What are two (2) things you would tell the workers when explaining what the pegs mean during road set out? (30 words)

Answer

they act as physical markers, ensuring accurate construction
within legal boundaries



change markers

Q17. What methods do you apply when monitoring civil works to ensure the required outcomes or met on a daily basis?

Answer

site inspections

pre starts

daily diary reports

daily program meeting



Q18. Name and explain the purpose for three (3) of the different test results the supervisor must be able to read and understand at different hold or witness points of a project?

Answer

1. soil tests - moisture, plasticity, permeability



2. concrete slump test - workability of freshly made concrete

3. sub-grade and sub-base test - compaction

Q19. What is the purpose of road surface drainage and what are four (4) elements used to achieve this effectively?

Answer
Purpose

drainage of stormwater runoff ^{from} the road surface
and surface of adjacent road formation



Element

1. Kerb and channel

2. table drains and blocks

3. gutter drains

4. pipe networks

Q20. What are the effects of inappropriate road drainage infrastructure?

Answer

flood heights
peak water levels
water velocities, through bridges + culverts
erosion and sedimentation patterns
fauna transfer
terrestrial and aquatic fauna habitats



Q21. What are the three (3) main parts of roadway design and the importance of these features?

Answer

1. horizontal alignments (the route of the road)
2. profile / vertical alignment (the roads elevation changes)
3. cross section (the roads width and features)



Q22. How can you support sub-contractors to achieve their responsibilities?

Answer

establish clear communication channels
set realistic expectations
provide necessary resources
offer regular feedback and recognition for good performance



Q23. How do supervisors determine human resources and sub-contractors needed for the job plan?

Answer

site program meeting with team members (engineers)
• scopes of works
• skills
• Budget



Q24. How do you, as the supervisor, (1) determine and (2) share the communication systems to be used during site tasks with others? Include in your response (3) the communication systems generally used.

Answer

1. Size of team, location, Type of works, urgency of communication ☐
Safety Considerations

2. Pre start, Clear Signage and Guidelines, written

3. Two-Ways, Mobile phones, hand signals

Q25. What methods do you apply when monitoring worker performance for safety and compliance?

Answer

Regular Inspections and Audits ☐

Risk assessments

training and communication

Q26. How is quality assessed and confirmed?

Answer

a structured process of evaluating against specific standards, identifying areas for improvement and implementing corrective actions to ensure consistent quality often through self assessment and regulatory oversight



Q27. What are four (4) events that might occur on a normal working day that may significantly affect progress of civil works tasks and force the use of contingency plans.

Answer

1. Unexpected equipment failure



2. Unexpected weather event

3. Unforeseen site conditions

4. Sudden labor shortage

Q28. What are four (4) contingency plans that may be in place to support a civil construction operational plan?

Answer

1. financial contingency plan



2. resource contingency plan

3. weather contingency plan

4. Safety contingency plan

Q29. What is the relationship between various areas of civil work and how are these relationships relevant when developing job plans and work schedules?

Answer

interconnected and independent



understanding these relationships is crucial for developing effective job plans and work schedules that ensure effective project execution

Q30. Elaborate on four (4) different types of estimates used when developing job plans.

Answer

1. Estimating Materials - What materials and in what quantities



2. Estimating labour - The number and kind of workers of different categories

3. Estimating Plant - amount and kind of equipment needed

4. Estimating Time - estimate closely the length of time required

Q31. What is the relationship between waste management and environmental protection?

Answer

Effective waste management is crucial for environmental protection because it - minimises pollution



- conserves resources

- reduces negative impacts of waste on ecosystems