

CPCCBC4013A

PREPARE AND EVALUATE TENDER DOCUMENTATION

ASSESSMENT SUMMARY

The assessment activities for *CPCCBC4013A Prepare and evaluate tender documentation* cover all aspects of the unit of competency required. To demonstrate competence in this unit, a participant must undertake all tasks and complete them satisfactorily and consistently. For Apprentices and Trainees, this includes employer completion of the Employer Record Book (ERB).

Participants must read all the information given before starting any assessment task. The assessment tasks are intended to be equitable, fair and flexible. 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 some questions or perform some tasks, they will be deemed 'Not Satisfactory' for the task and 'Not Yet Competent' for the unit of competency. The Trainer/Assessor is able to provide the participant with additional information on interpreting the assessment outcomes and provide guidance on the participant's options. Should a participant still be deemed 'Not Satisfactory' they will have the opportunity to undertake a supplementary assessment or appeal the result.

By signing the cover page for each assessment item, the participant acknowledges they understand the assessment instructions and requirements and consent to being assessed. The participant also verifies and assures the RTO that the work submitted is their own work.

Participant Name	UAA Darshika
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Theory Exam	☐ Satisfactory	☐ Not Yet Satisfactory
Practical Assessment	☐ Satisfactory	☐ Not Yet Satisfactory
	☐ Competent	☐ Not Yet Competent

Assessor Name	Myles Walder
Assessor Signature	
Unit Competence Determination Date	Click here to enter a date.

CPCBC4013A

PREPARE AND EVALUATE TENDER DOCUMENTATION

THEORY EXAM INSTRUCTIONS

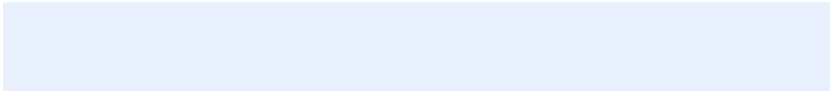
- This exam will occur under standard assessment conditions.
 - An oral examination may be allowed under certain circumstances, whereby the Participant's answers will be documented by a party other than the Participant. This must be acknowledged in writing (e.g. FT001 and Assessor Comments)
- Participants must provide enough detail in their responses to demonstrate their knowledge and skills.
- Please fill in the details below, providing your name, signature and date of assessment.
 - Your signature acknowledges that this is your own work.
- Assessors are to complete marking in pen of a different colour to the Participant.
- If a Participant initially answers a question incorrectly but modifies their response, they must follow the instructions below:
 - If a Participant changes their response in writing, they must put their initials next to the written change.
 - If a Participant changes their response verbally, this must be noted on the exam paper by the assessor.

Participant name UAA Darshika

Participant signature Darshika

Date 01/04/2021.

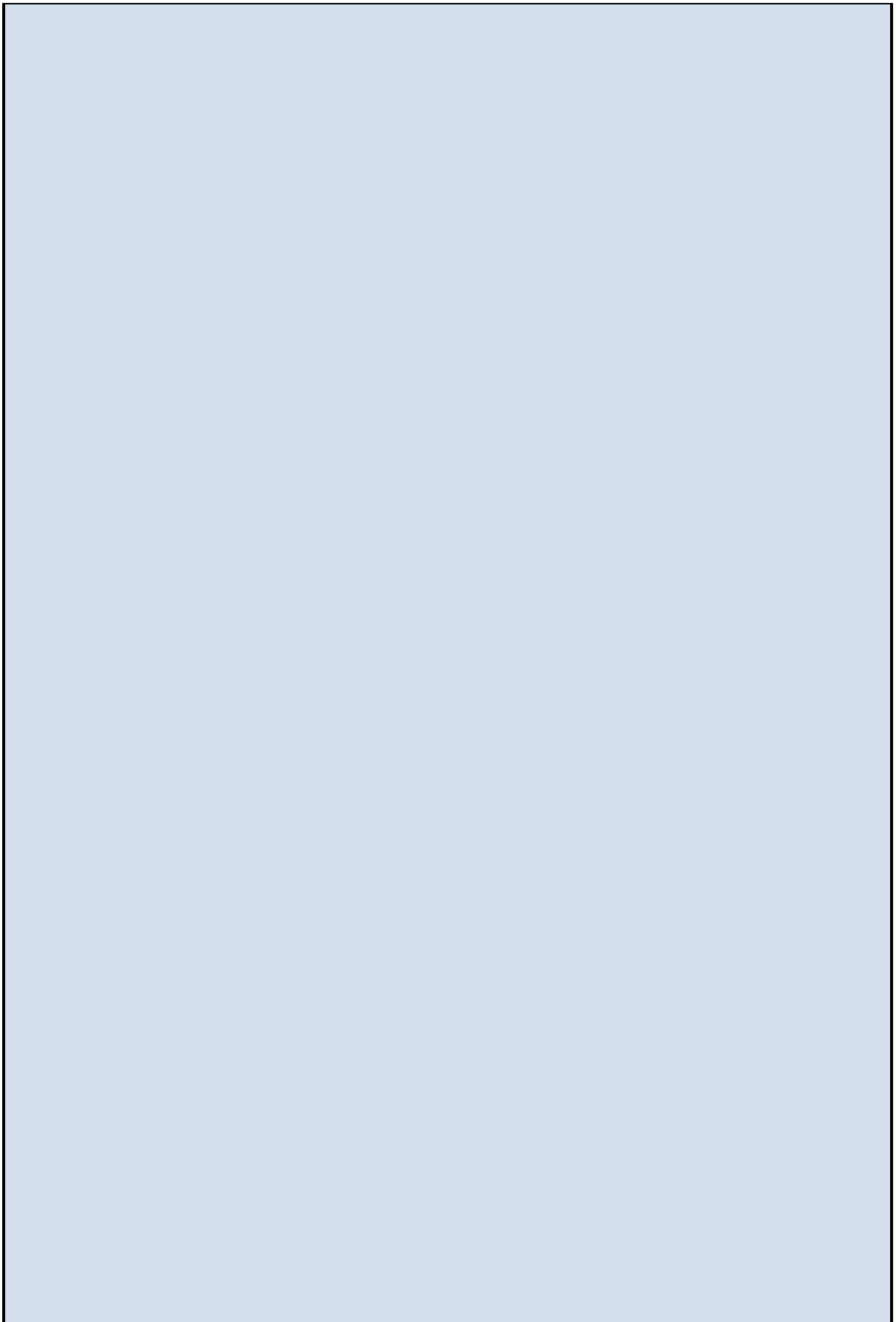
Assessor name Myles Walder

Assessor signature 

Date Click here to enter a date.

Number of questions	Number of questions answered correctly	Task outcome (Tick)	
26		Satisfactor y	Not Yet Satisfactor y
		☐	☐

ASSESSOR COMMENTS



Q1. Describe each of the listed types of building contract.

Answer

Contract	Description
Cost-plus	Cost-plus contract: Not often used, but takes two forms: • The builder is entitled to be paid the cost of the work plus a commission • The builder is paid the cost plus a fixed fee (which also may be reduced if the estimated cost of the work is exceeded by the actual cost)
Lump sum	Lump-sum contract: Where the builder is to complete the works according to specification, within an agreed timeframe and for an agreed sum. Lump-sum contracts can be of two types: • 'Fixed' or 'firm' price – which have no provision for variation on price due to cost fluctuations • 'Subject to rise and fall' – which allows for price variations
Nominated subcontract	A subcontract within the scope of the main contract for works, whereby the subcontractor is chosen by the architect.
Schedule of rates	The cost of the work is calculated by applying an agreed schedule of rates to the work actually performed, which is measured. This occurs where the extent of the works cannot be specified at the time of letting the contract (e.g. jobs with extensive earthworks)



Q2. Name and describe four (4) documents that may be referred to by a builder considering submitting a tender.

Answer

Tender document	Description
Drawings and specifications	Working drawings and specifications are the primary working documents used by a contractor to bid and execute a project. Specifications are the written documents that go with the construction documents and describe the materials as well as the installation methods. Construction drawings are the written and graphic record of decisions taken during the design phase. These are the lifeline of the construction project. They drive communication regarding changes in design to builders and on-site workers.
Bill of quantities	A bill of quantities is a document that provides specific measured quantities of the items of work identified by the drawings and specifications in the tender document. Every tender process benefits from using a bill of quantities to provide a clear list of the work items for pricing. Formal quantities determined by a professional quantity surveyor using the architect's specifications and drawings. By referring to this document, builders should avoid the risk of making



	errors in measuring such quantities themselves. It also provides a common basis for competitive tendering.
Project parameters	Project parameters define the scope, budget, schedule, and quality of the project. There is an interrelationship among these parameters. If you choose to increase the scope, you must also increase the schedule or budget. If you reduce the budget, you must increase the schedule, reduce the quality, and/or reduce the scope of the project. cost schedules, estimated timeframes.
Site layout information	Site layout plans are prepared by contractors as part of their mobilisation activities before work on site commences. They are a crucial part of construction management, as sites can be very complex places involving the co-ordination and movement of large quantities of materials as well as high-value products, plant and people. Effectively and accurately laying out a site can help ensure that the works are undertaken efficiently and safely. Careful sizing and positioning of temporary facilities can help reduce travel times, congestion, waiting times, and so on, and help to make the site a more effective workplace with better worker morale. Site layout plans might include locations for and sizes of: ● Zones for particular activities. ● Cranes (including radii and capacities). ● Site offices. ● Welfare facilities. ● Off-loading, temporary storage and storage areas (laydown area) ● Sub-contractor facilities. ● Car parking. ● Emergency routes and muster points. ● Access, entrances, security and access controls, temporary roads and separate pedestrian routes. ● Vehicle wheel washing facilities. ● Waste management and recycling areas. ● Site hoardings and existing boundaries. ● Protection for trees, existing buildings, neighbouring buildings, and so on. ● Signage. ● Temporary services (including electrical power, lighting, water distribution,

	drainage, information and communications technology, site security systems, and so on) • Temporary works (such as propping solutions to retained structures, sheet piling details, and so on). • Areas for the construction of mock-ups for testing. • Fabrication facilities.
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Q3. Identify five (5) risks that should be considered by a builder interested in submitting a tender.

Answer

- Breaches of contract
- Circumstances, such as:
 - Delivery delays that impact upon project completion
 - Subsequent delays in progress payments
 - Labour shortages
 - Weather
- Disputes over payments
- Exposure through clauses that work against the organisation
- Failure to adequately anticipate labour or materials costs



Q4. Describe two (2) company policies that may impact on whether a contract is selected for tender.

Answer

Policy	Description
1	The type of contract (or its terms) may not be appealing to the builder
2	The costs involved in preparing the tender may be too high, weighed with a high risk of not winning the tender bid



Q5. Identify two (2) financial guidelines and two (2) administrative guidelines that must be observed when considering a tender.

Answer

Guidelines	Description
Financial	• Check your calculations – mistakes in a tender could result in bankruptcy • Be sure to verify costs – relying on previous tenders may not account for increase in rates and prices
Administrative	• Ensure that the documentation meets the quality standards established by the organisation • Check the tender documents against the contract



Q6. Which of the following are considered direct costs? Tick all that apply.

Answer

Choice	Possible Answers
X	Labour costs
X	Material costs
☐	Office overheads
X	Plant costs
☐	Profit
☐	Site overheads
X	Subcontract costs



Q7. Which of the following are considered indirect costs? Tick all that apply.

Answer

Choice	Possible Answers
☐	Labour costs
☐	Material costs
X	Office overheads
☐	Plant costs
☐	Profit
X	Site overheads
☐	Subcontract costs



Q8. Explain how labour costs are established, referring to:

- Labour constant
- Labour quantities
- Labour rates

Answer

Labour costs

- These costs can be broken down into:
 - Labour constant: Anticipated time required for a particular item of work (e.g. 2 hours/m³ to excavate trench)
 - Labour quantities: Quantity of work required for the item of work in question (e.g. 20m³ to be excavated)
 - Labour rates: Monetary rate for work performed (e.g. \$x per m³ of trench excavated or \$y per hour)



Q9. Explain the following types of direct material waste that must be considered when calculating material costs.

Answer

Type	Description
Design	Design to Cost is an organizational methodology for integrating cost management with decision making at the design stage. - having to purchase a particular amount, but not all is needed - Lack of information in the drawings - Selection of low quality products - Last minute client requirement (resulting in rework) - Poor/ wrong specifications - Variations in the design while construction is in progress - Designers unfamiliarity with alternative products - Error in Contract Document - Incomplete Contract Document during commencement - Lack of attention paid to standard size available on the market
Rejection	If the material quality level changes, this can alter the amount of quality rejections. If an entirely different material is substituted, this can also alter the amount of rejections. quality control
Mishandling	- breakage - Damages during transportation - Inappropriate storage leading to damage or deterioration - Materials supplied in loose form - Unfriendly attitudes of project team and laborers



Q10. Explain the following types of indirect material waste that must be considered when calculating material costs.

Answer

Type	Description
Substitution	Occurs when the previously purchased materials are substituted by new materials due to inferior quality or interest of the client. (using in a way other than intended)
Production	Occurs when contractor does not receive any payments for the works he has carried out. (construction technique different from originally planned) Errors by tradesmen or operatives
Negligence	Occurs when more materials are used than specified, due to the unfit machineries and workmanship (mistakes in production or estimating) Accidents due to negligence Use of incorrect material, thus requiring replacement
Criminal actions	Occurs due to theft and vandalism.



Q11. Identify three (3) costs that must be considered when calculating plant costs.

Answer

- Plant purchase or hire costs
- Running and maintenance
- Labour or operator costs



Q12. List the two ways in which subcontractors may provide a price for their work.

Answer

- An all-inclusive price
- A schedule of unit rates, considering the work to be involved and applying the subcontractor's rates (which may or may not include waste as part of the unit rate)



Q13. Identify ten (10) trades that may be required for a residential or commercial building project.

Answer

- Earthworks (e.g. excavation and filling – considering compaction, trenches and dewatering requirements)
- Site works (e.g. roads, kerbs, fencing)
- Concrete work (e.g. formwork, reinforcement, footings, slabs, beams, columns)
- Brickwork (e.g. bricks, mortar, lintels, flashing, damp-proof courses)
- Carpentry and joinery (e.g. roofing, floors, partitions, skirting, doors, fittings, hardware)
- Plastering and tiling
- Structural steelwork
- Metalwork (e.g. aluminium windows, brackets)
- Plumbing and drainage
- Painting

☐

Q14. True or False (Tick your response): Each subcontractor is individually responsible to the client for a job tendered by a builder.

Answer

X	True
☐	False

☐

Q15. Name one (1) type of project costing software.

Answer

Buildsoft

☐

Q16. True or False (Tick your response): Using costing software can assist builders undertake calculations in short timeframes during the tendering process.

Answer

X	True
☐	False

☐

Q17. True or False (Tick your response): Profit is usually calculated as a percentage of the total, rather than on each item throughout the tender.

Answer

X	True
☐	False

☐

Q18. True or False (Tick your response): Each level of government (i.e. federal, state and local) has its own rules regarding tender submissions.

Answer

X	True
☐	False

☐

Q19. Identify one (1) example of each of the following documents that impacts on building work conducted in Queensland.

Answer

Type	Description
Building and Construction Code	Queensland Development Code
Standard	standards for pool fences and safety barriers in Queensland.
Government regulation	Building Regulation 2006

☐

Q20. Identify four (4) types of supporting documentation that you may include with a tender submission.

Answer

- Artist's impressions
- Documentation processes required by building information modelling (BIM)
- Organisational information
- Product information



Q21. Explain the importance of checking the accuracy of a tender.

Answer

A contractual arrangement comes into existence at the moment a tenderer is informed that their tender has been accepted.

It can create a legally binding process contract or leave the Agency liable for misleading or deceptive conduct.

Ensuring Tender Documentation is accurate and reflects the way in which the Agency will conduct the tender is not just an efficiency or probity consideration, there are potentially legal and financial consequences for the Agency for not adhering to the terms set out in the Tender Documentation.



Q22. Identify an appropriate staff member within an organisation who may approve/endorse/modify a tender prior to submission to the client.

Answer

management or another designated person - Senior quantity surveyor/Project manager/ General manager



Q23. True or False (Tick your response): There is a general rule for how long tenders are called for, so specific due dates are not listed.

Answer

☐	True
X	False



- Q24. You have a formwork job that will take three (3) weeks to complete. You are required to hire a range of materials, according to the Bill of Quantities listed below. Allow 15% for loss and damage.

Complete the calculations to determine the costs for the required materials.

Materials	Quantity	Hire rate per week
Frame 1	18	\$0.60
Frame 2	18	\$0.55
Brace	2 x 30	\$0.20
Base plate	36	\$0.10
'U' plate	36	\$0.30
Pin	36	\$0.10
Bearer	39.6m	\$0.20
Joints	165m	\$0.15

Answer

$$\begin{aligned} &= 18 \times 0.60 + 18 \times 0.55 + 2 \times 30 \times 0.20 + 36 \times 0.10 + 36 \times 0.30 + 36 \times 0.10 + \\ &39.6 \times 0.20 + 165 \times 0.15 \\ &= 10.8 + 9.9 + 12 + 3.6 + 10.8 + 3.6 + 7.92 + 24.75 \\ &= 83.37 \\ &= 83.37 \times 0.15 + 83.37 \\ &= \underline{\underline{\$95.88}} \end{aligned}$$



- Q25. For the job in Q24. you must also hire workers to install the plywood for the formwork, at a rate of \$15/hour. There is 70m² of plywood to be installed. Assume the labour constant is 1.10hrs/m².

Complete the labour calculations.

Answer

$$\begin{aligned} &= 1.1 \times 70 \times 15 \\ &= \$1155.00 \end{aligned}$$



- Q26. For the job in Q24. and Q25. you have determined that the overheads and profit will constitute 10% of the materials and labour cost.

Calculate the total project cost.

Answer

$$\begin{aligned} &= 95.88 + 1155.00 \\ &= 1,250.88 + 1,250.88 \times 0.10 \\ &= \underline{\$1,375.97} \end{aligned}$$



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PRACTICAL ASSESSMENT INSTRUCTIONS

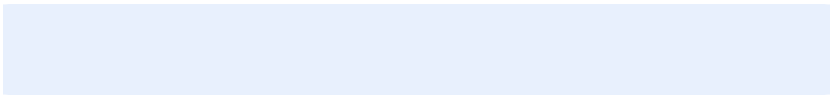
- The following practical assessment will require the Participant to complete work related activities.
- The Assessor will conduct observations of the Participant's work to determine whether they display sufficient practical skills and knowledge.
- Please fill in the details below – providing your name, signature and date of assessment.
 - The Participant's 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 an alternate task of equal value.
 - Alternate tasks must be fully documented by the assessor in the Assessor Comments area.

Participant name UAA Darshika

Participant signature Darshika

Date 01/04/2021

Assessor name Myles Walder

Assessor signature 

Date [Click here to enter a date.](#)

Task	Task outcome (Tick)	
	Satisfactory	Not Yet Satisfactory
Task 1 (Occasion 1)	☐	☐
Task 1 (Occasion 2)	☐	☐

ASSESSOR COMMENTS

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PREPARE AND EVALUATE TENDER DOCUMENTATION

Practical Task 1 (2X)		
Description of task: On two (2) occasions, a suitable observer is to verify the participant's ability to prepare and evaluation tender documentation, including calculation of labour and material requirements using costing software programs. 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. Evidence to be submitted may include: Any tender documents you have submitted to client and correspondence (redact any sensitive info) The assessor is to verify the observer's comments and provide the outcome for the practical task on the front cover of the Practical Assessment.		
Resources required: Computer.		
Assessment of task		
Name of participant:	UAA Darshika	
Name of observer:		
Role of observer (Confirm suitability to sign)		
Email address of observer		
Signature of observer:		
Date:	Click here to enter a date.	
When completing the task, did the participant:	Tick if satisfactorily completed. Provide comments if left unticked.	
	1 st Occasion	2 nd Occasion
1.A. Evaluate contract risk by: - Selecting contracts according to company policy - Evaluating tender documents, identifying risks for tender preparation	☐	☐
1.B. Prepare tender and supporting documentation by: - Identifying and obtaining necessary information (including vital information, drawings, specification) - Calculating material quantities and costs - Calculating labour hours and costs, considering types, scope and usage of labour through employee and subcontractor systems - Using appropriate costing software programs - Following company procedures and instructions	☐	☐
1.C. Consult with industry professionals, ensuring clear and direct verbal and non-verbal communication appropriate to cultural differences.	☐	☐
1.D. Conduct a preliminary evaluation of completed tender documentation, ensuring conformity with legislation, and company financial and administrative guidelines.	☐	☐
1.E. Provide tender documentation to appropriate staff member for approval or endorsement.	☐	☐
1.F. Prepare final documents (including amendments) for submission to the client.	☐	☐
The Participant's performance was: ☐ Satisfactory ☐ Not Satisfactory		

OBSERVER COMMENTS