073204T4PLM
PLUMBING LEVEL 4
CON/OS/PL/CR/03/4/A
Install Drainage System
Nov/Dec 2024



## TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)

## PRACTICAL ASSESSMENT

## **OBSERVATION CHECKLIST**

Candidate's Name & Registration Code				
Assessors Name & Registration Code				
Venue of Assessment				
Date of Assessment				
Items to be Evaluated: Please award marks as	Marks	Marks	Comments	
appropriate. Give a brief comment on your observation.	Available	Obtained		
TASK 1:				
Adhered to prescribed safety as per work place				
procedure and OSHA. student worn full PPE.	1			
<ul> <li>safety boots</li> </ul>				
• helmet				
• apron				

	(Award one mark for full PPE donned as per		
	workplace procedures or zero)		
2.	Identified reference points on the ground based on	2	
	the site drawing.		
	(Award 2 marks or zero)		
3.	Differentiated working drawing based on technical	3	
	drawings standards.		
	(Award 3 marks or zero)		
4.	Identified reference points on the ground based on	2	
	the site drawing.		
	(Award 2 marks or zero)		
5.	Identified tool, equipment, required during the	2	
	construction		
	Mason trowels		
	<ul> <li>Mason square</li> <li>Spirit level</li> <li>Boning rod</li> </ul>		
	Spirit level		
	Boning rod		
	• Float		
	• Mallet		
	Ball hammer		
	Masonry chisel		
	<ul> <li>Plumb bob</li> </ul>		
	Tape measure		
	(Award 2 mark for any 4 assembled tools or zero)		
6.	Identified appropriate drainage materials and	2	
	supplies based on the drawings.		
	• Sand		
	• Ballast		
	• Lime		
	• Concrete blocks		

Award 2 mark for any assembled materials)		
7. Transferred measurements to the ground based on	2	
working drawing		
• 900 mm length.		
• 750 mm width		
(Award 1 mark for each or zero)		
8. Laid above ground drainage components based on	3	
the levels		
Concrete base		
Manhole wall		
Benching		
(Award 3 marks each or zero)		
9. Stabilized drainage pipeline base, based on	1	
drawings.		
(Award 1 marks or zero)		
10. Laid above ground drainage pipes based on the	2	
levels		
• 75mm difference in levels.		
• 1,200 mm drainage pipe		
(Award 2 marks each or zero)		
11. Conducted functionality tests based on best	2	
practices		
(Award 2 mark or zero)		
12. Corrected faults in drainage system based on best	1	
practice.		
(Award 1 marks or zero)		
13. Tools and equipment are cleaned and stored as per	1	
manufacturers' instructions.		
(Award 1 for cleaned and stored tools)		

14. Segregated and disposed of waste in line with	1	
	1	
environment protection guidelines.		
(Award 1 marks for cleaned area)		
Sub-Total 1	25	
PRODUCT CHEC	CKLIST	
15. Constructed a functional drainage system based on		
working drawing.		
Dimensions		
<ul> <li>1,200 mm between MH1 and MH2,</li> </ul>	1	
<ul> <li>Internal MH height 550 mm,</li> </ul>	1	
<ul> <li>Internal MH length 600mm,</li> </ul>	1	
<ul> <li>Internal MH width 450.</li> </ul>	1	
• 900x600x75 mm concrete base.	1	
Blinding later 20 mm.	1	
• Smooth benching	1	
<ul> <li>Provision for inlet and outlet pipes</li> </ul>	1	
(Award a mark for each correct dimension)		
16. Correct gradient achieved between MH1 and MH2	3	
(Award 3 marks or zero)		
17. Concrete blinding well done,	3	
(Award 3 marks for proper concrete blinding and		
3marks for aligning the concrete cover)		
18. Haunching	2	
(Award 2 marks for proper finishing or zero)		
19. Correct Gradient	3	
(Award 3 marks for proper finishing or zero)		
20. Plumbeness, levelness and squareness of the	3	
manhole		

			1	
(Award 1 mark each or zero)				
21. Completion of the task.				
(Award 3 marks for 100% completion, 2 mark for	3			
75% completion or zero)	3			
Sub-Total 2	25			
GRAND TOTAL	50			
ASSESSMENT OU'	ГСОМЕ			
The candidate was found to be:				
The candidate was round to be.				
Competent Not yet Competent				
(Please tick as appropriate)				
(The candidate is competent if the candidate obtains at	least 50%)			
Feedback from the Candidate:				
<b>∞</b> ∞				
Feedback to the Candidate:				
Candidate Signature	Date:			
Assessor's Signature	Date			
Assessor s signature				_