

Topic Skills Practice Cover Sheet

Unit Name:	UEEEL0012 Install low voltage wiring, appliances, switchgear and associated accessories
Topic Title:	Underground Cabling

Skill Practice Number:	7.1
Skill Practice Name:	Identify Underground Services

Student Name:	
Student ID:	
College/Campus:	
Group:	

Results	
Planning:	
Carryout:	
Completion:	
Overall Results:	
Comments:	

Topic Skills Practice 7.1

UEEEL0012 Install low voltage wiring, appliances, switchgear and associated accessories

Topic 7. Underground Cabling

Skills Practice 7.1: Identify Underground Services

Task:

To obtain information relating to the presence of existing underground services at a given location, and interpret plans to determine the suitability of proposed underground wiring.

Objectives:

At the completion of this skills practice, you should be able to:

- Obtain plans of existing underground services.
- Interpret plans to identify the locations of existing underground services.
- Determine the suitability of underground cable routes.

Topic Skills Practice 7.1

1. Planning the Skills Practice

1.1 Standards and Equipment

1.1.1 To complete this skills practice, your teacher/trainer will provide a proposed underground cable route at your location. You will need to obtain the following resources and equipment:

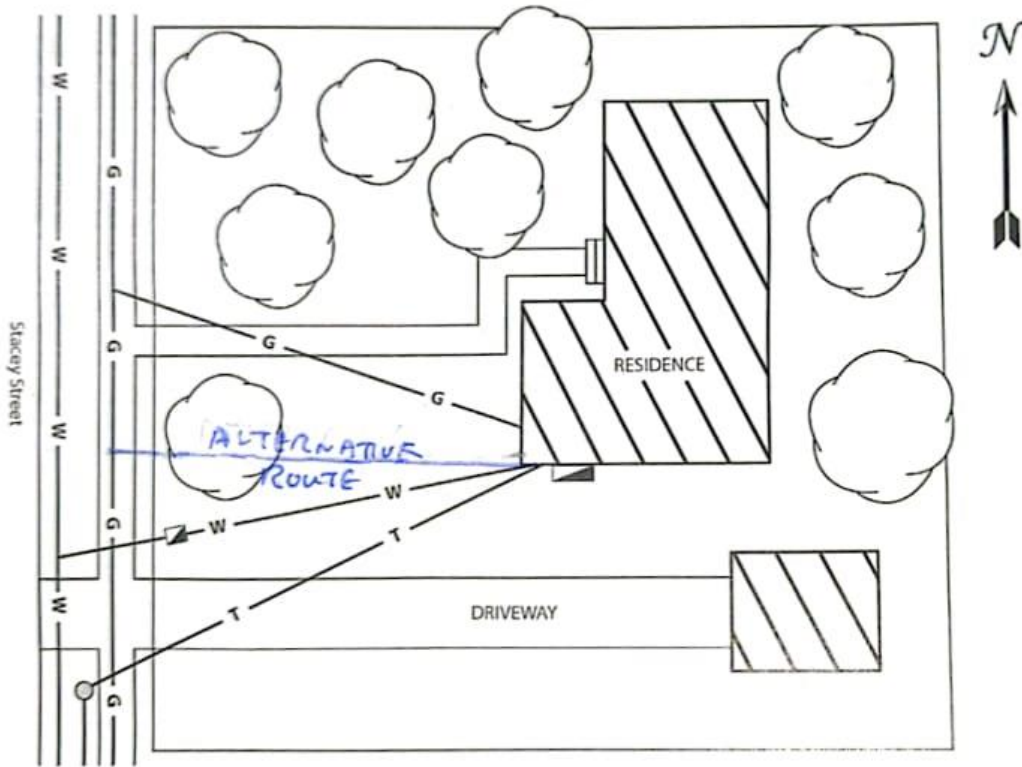
- Plans of existing underground infrastructure at your location
- AS/NZS 3000:2018 Wiring Rules
- Pens/pencils

2. Carrying Out the Skills Practice

2.1 Identify Existing Underground Services

2.1.1 On the diagram below, identify the existing underground services and the minimum clearances required to a proposed LV underground (UG) service. Then determine a suitable UG cable route from the point of supply (POS) at the top of the service pole, to the main switchboard (MSB). Indicate the cable route on the diagram and record details of the wiring system in the table provided at the top of the following page.


Topic Skills Practice 7.1



- | | | | |
|----------------|---------------------|--------------------|--------|
| Other Service: | Water | Minimum Clearance: | 100 mm |
| Other Service: | Telecommunication | Minimum Clearance: | 100 mm |
| Other Service: | Original Power Line | Minimum Clearance: | 100 mm |

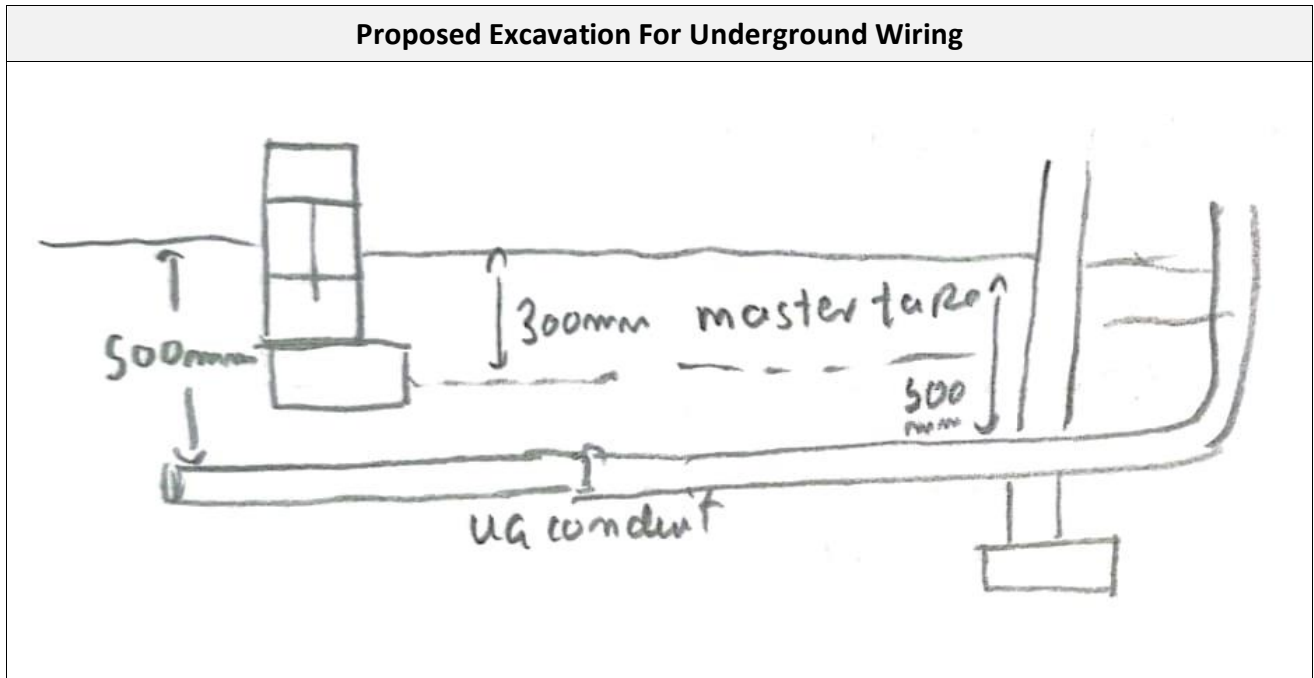
Underground Wiring System	
Description:	3.11.3.1 Category A wiring system (a) A system where cables are enclosed in heavy duty insulating conduit without further mechanical protection
Applicable Requirements/Rules	
Wiring System Category:	A
Depth of Cover:	500 mm (No surface covering)
AS/NZS 3000 Clause(s):	3.11.4.4 Table 3.6
Local Service Rules Clause(s):	2.4.1.1

Topic Skills Practice 7.1

	 <p>Have your teacher/trainer check your answers</p> <p><i>Feedback</i></p>	Teacher/Trainer Initials and Date	




2.2 Obtain Information on Underground Services

2.2.1 Your teacher/trainer will provide you with a proposed underground cable route at your location. In the space provided below, draw a neat sketch to show a bird's eye view of the proposed installation:



2.2.2 As directed by your teacher/trainer, obtain plans of existing underground services for the proposed excavation area.

2.2.3 Use the plans of the area to identify any existing services that are located in the vicinity of the proposed excavation area, and indicate them on your sketch on the previous page.

	 Feedback	Have your teacher/trainer check your work	Teacher/Trainer Initials and Date	

3. Completing the Skills Practice

3.1 Skills Practice Review Questions

3.1.1 Complete the following questions after you have successfully completed section 2 of the skills practice.



1. What types of existing services are located in the proposed area?

Water

Telecommunication

1. Did the locations of underground services in your area affect the initial planned excavation works? If so, explain how.

The planned excavation needs to pass through the walk way into residence. The walk way will need to be rebuilt after laying of the conduit to carry the electrical UG wire (or) It should be done at alternative route.

	 Feedback	Have your teacher/trainer check your answers	Teacher/Trainer Initials and Date	