**Student / Assessor Guide**

**Unit of study outline**

**AHCPGD404 / AHCPGD402 - Plan a plant**

**establishment program**

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**Reference:**

This Assessment Information was prepared by Australian College of Agriculture and Horticulture (ACAH) for the use of ACAH students only.

**UNIT DESCRIPTOR: AHCPGD404 / AHCPGD402 - Plan a plant establishment program**

This unit of competency describes the skills and knowledge required to plan and document a plant establishment program, including a site plan, work procedures, schedules, and specifications.

The unit applies to individuals who apply specialist skills and knowledge to design plant displays. This includes applying and communicating non routine technical solutions to predictable and unpredictable problems.

All work is carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.

No licensing, legislative or certification requirements apply to this unit at the time of publication

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| **Element of competency as per training package: AHCPGD404 / AHCPGD402 - Plan a plant establishment program**  |
| 1. Carry out preliminary planning activities for plant establishment program  |
| 2. Determine requirements of plant establishment program  |
| 3. Prepare and document plant establishment program and specification  |
|   |

**Foundation Skills**

This section describes those language, literacy, numeracy, and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

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| --- | --- |
| **Skill**  | **Description**  |
| Reading  | ▪ Identify and interpret information regarding requirements for plant establishment program, site plan, work procedures, schedules, and specifications  |
| Oral communication  | ▪ Initiate discussions with client, using clear language to discuss program preferences and requirements, site factors, budget and concept plan, and negotiate program agreement  |
| Numeracy  |  ▪ Calculating quantities, measurements, costs, scaling and scheduling  |

**Context of assessment and Assessment Conditions**

The requirements for assessment of this unit must be conducted in an agricultural or horticultural enterprise. Therefore students will be required to complete the practical activities in the field. See attached schedule for more details about venues.

**ASSESSMENT REQUIREMENTS**

Assessment of the skills in this unit of competency must take place under the following conditions:

physical conditions:

* a workplace setting or an environment that accurately represent workplace conditions resources, equipment and materials:
* industry publications, internet and in house sources of information relevant to planning a plant establishment program

specifications:

* workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures relevant to planning a plant establishment program
* local by-laws and restrictions relevant to planning a plant establishment program relationships: ▪ clients timeframes:
* according to job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

**KNOWLEDGE EVIDENCE**

**Unit Outcome:**

At the end of the unit student should have **knowledge** of:

* principles and practices of plant establishment program planning, including:
* identification and establishment techniques of specific plant species and cultivars
* the advantages and disadvantages of a range of plant establishment procedures
* maintenance requirements and practices for specific plant species and cultivars, prior to and after initial establishment
* processes and techniques for preparing, costing and documenting plans for and scheduling plant establishment activities
* processes and techniques for scheduling plant establishment activities
* local by-laws and restrictions relevant to planning a plant establishment program
* workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures relevant to planning a plant establishment program.

**PERMFORMANCE EVIDENCE**

To achieve competency in the unit you should be able to: There must be evidence that the individual has planned a plant establishment program on at least one occasion and has:

* consulted with clients
* researched plant species and cultivars and local by-laws and restrictions
* complied with local by-laws and restrictions
* applied relevant workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures
* developed a plant establishment program concept plan
* calculated the cost and spatial and logistical requirements of components of the plant establishment program
* documented plant establishment program, site plan, work procedures, schedules, and specifications.

**Mode of Assessment**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment Items**  | **LLN Support / Student support for each assessment**  | **Assessment Description (Mapping)**  | **Due Date**  |
| Assessment Item 1  | Handwriting and typing support Large printed material and electronic media support  | **Written question/ concept plan** **Element** 1 and 2 **Performance criteria** 1.1, 1.2, 1.4, 1.5, 2.1 and 2.2  |  Week 4  |
| Assessment Item 2  | Handwriting and typing support Large printed material and electronic media support  | Written questions **Element** 1 and 2 **Performance criteria** 1.1, 1.3, 2.3- 2.6  | Week 5  |
| Assessment Item 3  | Handwriting and typing support Large printed material and electronic media support  | **Final project** **Element** 2 and 3 **Performance criteria** 2.5, 2.8, 3.1, 3.2 and 3.3  | Week 6  |

Note: All assessment areas must be completed to become competent in this unit.

Lectures and tutorials will be conducted at Melbourne campus or Cairns Campus.

**Practicals may be scheduled for Melbourne Students.**

At the ACAH Demonstration Farm, 25 Whites Rd, Werribee South, VIC 3030

**Practicals may be scheduled for Cairns Students.**

ACAH Demonstration Farm in Waugh Pocket, Waugh Pocket, QLD

**Recommended / References reading**

* <https://plantstress.com/>Plant stress, accessed 28 Feb 2022
* [https://weeds.org.au/,](https://weeds.org.au/) Weed Australia, accessed 28 Feb 2022
* [https://www.delwp.vic.gov.au/,](https://www.delwp.vic.gov.au/) Department of Environment, Land, Water and Planning, accessed 28 Feb 2022
* [https://www.bioresources.com.au/,](https://www.bioresources.com.au/)Biological control of insect pests in horticulture, accessed 28 Feb 2022
* [https://www.awe.gov.au/abares/research-topics/agricultural-outlook/australian-crop-report,](https://www.awe.gov.au/abares/research-topics/agricultural-outlook/australian-crop-report) accessed 19 March 2022
* [https://agriculture.vic.gov.au/crops-and-horticulture/grains-pulses-and-cereals/crop-production,](https://agriculture.vic.gov.au/crops-and-horticulture/grains-pulses-and-cereals/crop-production) accessed 19 March 2022
* [https://grdc.com.au/,](https://grdc.com.au/) accessed 19 March 2022
* [https://www.dpi.nsw.gov.au/agriculture/pastures-and-rangelands/establishmentmgmt/establishment/eight-steps,](https://www.dpi.nsw.gov.au/agriculture/pastures-and-rangelands/establishment-mgmt/establishment/eight-steps) DPI NSW, accessed 19 March 2022
* [https://www.fao.org/3/y4360e/y4360e0a.htm,](https://www.fao.org/3/y4360e/y4360e0a.htm) FAO, accessed 19 March 2022

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**Additional list of references will be provided in your power point notes.**

**Assessment guidelines**

This unit is being delivered and assessed through any combination of lectures, tutorials or practical sessions. All sessions are compulsory!

All assessments are to be completed during class time and submitted in the assessment booklet provided. Your paperwork has to be initialled by the tutor prior to the finish of the class. It is the student responsibility to keep a copy of their assessment prior to submission.

On completion of ALL of your assessments for this unit of competency, you will be deemed either competent (C) or not yet competent (NYC), as follows:

To achieve competency (C) in the above unit you must complete all the required tutorials activities, assignments, practical assessments and examinations to the competency level appropriate to your enrolment (e.g. Certificate III, Certificate IV, Diploma, Advanced Diploma etc).

You will receive a not yet competent (NYC):

* failure to complete assessment items in tutorials or practical session, unless you have a valid reason (e.g. medical certificate) and therefore not being able to complete and submit your assessments

* for demonstrating insufficient level of acquired knowledge and skills according to performance criteria

If you receive a NYC result, you are allowed a second assessment and/or alternative assessment to complete gap identified. To be eligible for a second (supplementary) assessment you must attend ALL tutorials and you must complete and submit ALL assignments and examinations.

Supplementary exam is scheduled in the first week of the term break (please see notice board for time).

*Please note that there is no supplementary assessment for practical. If you choose not to attend you will be required to repeat it in full.*

If you cannot obtain a C in the supplementary, you will have to repeat the unit and then will have the opportunity to demonstrate competency in the unit through the first and supplementary assessment process. Additional tuition fees apply if you repeat a unit.

**Lecture and tutorial attendance and workload:**

Experience shows that students place themselves at risk if more than two classes are missed. Please talk to the lecturer if you are having attendance problems or if you have issues with the workload. All assessment must be appropriately referenced.

**Plagiarism:**

Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge.

At ACAH plagiarism is viewed as a serious breach of academic discipline and penalties apply for those found at fault. All students are strongly advised to talk to their lead trainer or academic coordinator for further clarification. Information about plagiarism is also available on My ACAH- [http://acah.edu.au](http://acah.edu.au/) and in the student handbook.

**How to submit your Assessment:**

Your assessment must be submitted electronically via ACAH LMS, that is by email to your trainer / assessor, before midnight on the due date specified in this document.

Your assessment must be “typed in ARIAL font 10 – text”, and if you have tables these must be in “ARIAL font 9”. All your work if ideas are sources from either lecturer notes or reading materials must be referenced with an accompanying bibliography at the end of the report / answer sheet.

 **Lecture and practical sessions Schedule:**

|  |  |
| --- | --- |
|   | Topic  |
| **WEEK 1****-****2** |  **Lecture 1** **Carry out preliminary planning activities for plant establishment program:**  1.1 Consult with client to establish preferences and requirements for plant establishment program 1.2 Research plant species and cultivars, local by-laws and restrictions that may affect the plant establishment program 1.3 Identify environmental implications of planned program and, if necessary, report to relevant personnel for further research 1.4 Develop a concept plan that reflects client preferences and requirements and takes into account site factors and identified requirements 1.5 Present concept plan to client for discussion and approval    |
| **Lecture 2** **Determine requirements of plant establishment program:** 2.1 Identify plant species and cultivars appropriate to site and consistent with agreed concept plan 2.2 Calculate and cost required quantity and confirm availability with suppliers 2.3 Determine plant establishment procedures that suit the characteristics of available plant materials, resources and equipment available and environmental factors that would affect the success of the plant establishment program 2.4 Identify post-planting care requirements 2.5 Identify and cost resources, tools, equipment and machinery required for planting and post-planting care and confirm availability with suppliers, contractors and appropriate personnel 2.6 Identify hazards and assess risks in workplace, and implement control measures to manage risks according to workplace health and safety procedures, estimate costs and document in plan 2.7 Outline staged implementation and development, where appropriate, and provide access for future works provided 2.8 Determine timelines for preparations, planting and post-planting care, taking into account needs of plant species and cultivars, site conditions, and any other planning requirements   |
| **WEEK** **3** | **Lecture 3** **Prepare and document plant establishment program and specification:** 3.1 Produce a scaled site plan which can be readily interpreted and understood by on-site personnel 3.2 Develop and document detailed on-site procedures and schedules required for planting of site and post-planting care of plants 3.3 Prepare detailed plan, specifications and quotation based on requirements of the program, and present to client for acceptance   |
|     |
|     |

***Please Note: The topics as shown in this outline of the unit should be seen as an indication of classes. Some topics may change though you will be notified in advance.***

**Tutorial schedule:**

|  |  |  |
| --- | --- | --- |
|   | Topic  | Assessment and target completion dates LLN Support to be provided must be detailed.  |
| **WEEK 1****-****3** | Tutorial class 1: **Carry out preliminary planning activities for plant establishment program**:  1.1 Consult with client to establish preferences and requirements for plant establishment program 1.2 Research plant species and cultivars, local bylaws and restrictions that may affect the plant establishment program 1.3 Identify environmental implications of planned program and, if necessary, report to relevant personnel for further research 1.4 Develop a concept plan that reflects client preferences and requirements and takes into account site factors and identified requirements 1.5 Present concept plan to client for discussion and approval     |  Submission of Assessment 1 **Written question/ concept plan** **Element** 1 and 2 **Performance criteria:** 1.1, 1.2, 1.4, 1.5, 2.1 and 2.2  Due date week 4   |
| Tutorial class 2: **Determine requirements of plant establishment program:** 2.1 Identify plant species and cultivars appropriate to site and consistent with agreed concept plan 2.2 Calculate and cost required quantity and confirm availability with suppliers 2.3 Determine plant establishment procedures that suit the characteristics of available plant materials, resources and equipment available and environmental factors that would affect the success of the plant establishment program 2.4 Identify post-planting care requirements 2.5 Identify and cost resources, tools, equipment and machinery required for planting and postplanting care and confirm availability with suppliers, contractors and appropriate personnel 2.6 Identify hazards and assess risks in workplace, and implement control measures to manage risks according to workplace health and safety procedures, estimate costs and document in plan 2.7 Outline staged implementation and development, where appropriate, and provide access for future works provided 2.8 Determine timelines for preparations, planting and post-planting care, taking into account needs of plant species and cultivars, site conditions, and any other planning requirements   |  Written questions  **Element** 1 and 2  **Performance criteria** 1.1, 1.3, 2.3- 2.6    Due date week 5   |
|  | Tutorial class 3 **Prepare and document plant establishment program and specification:**  3.1 Produce a scaled site plan which can be readily interpreted and understood by on-site personnel 3.2 Develop and document detailed on-site procedures and schedules required for planting of site and post-planting care of plants 3.3 Prepare detailed plan, specifications and quotation based on requirements of the program, and present to client for acceptance   | **Final project** **Element** 2 and 3 **Performance criteria** 2.5, 2.8, 3.1, 3.2 and 3.3  Due date week 6   |
|    |   |
|    |   |

***Please Note: The topics as shown in this outline of the unit should be seen as an indication of classes. Some topics may change though you will be notified in advance.***

**ASSESSMENT ITEMS**

**Instruction to students:**

Please note that this unit contains **three (3)** tasks

You need to answer all questions completely and correctly to achieve competency in this assignment. You can use lecture notes, available books in the library, industry publications and internet as your reference to complete this assignment. Please don’t forget to mention the reference that you used at the end of each part.

**Describe the assessment conditions**.

**Due date** for Task 1: **Week 4**

**Due date** for Task 2: **Week 5**

**Due date** for Task 3: **Week 6**

**This assignment will address:**

**Elements / Performance criteria:**

* Carry out preliminary planning activities for plant establishment program
* Determine requirements of plant establishment program
* Prepare and document plant establishment program and specification

**The following is expected to be achieved: (insert marking guide or what is sort after in completing this assessment):**

* consulted with clients
* researched plant species and cultivars and local by-laws and restrictions
* complied with local by-laws and restrictions
* applied relevant workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures
* developed a plant establishment program concept plan
* calculated the cost and spatial and logistical requirements of components of the plant establishment program
* documented plant establishment program, site plan, work procedures, schedules, and specifications.

**Refer to page No.2 for more information about the outcome of this unit**

**Assignments should be legible, in your own handwriting or typed and submitted on the due dates.**

**Please note:**

Any copied work or late submission will not be accepted with student facing disciplinary action.

**Assessment 1. Developing a concept plan for Broadacre / agricultural cropping**

**Instructions to students:**

This Assessment concentrates on the process to develop a conceptual plan for the plant establishment program for a Broadacre / agricultural cropping

To complete this assessment, you are required to record the site dimension for developing conceptual plan for the selected site/location **ACAH Demonstration Farm** or a **site of your own choice.** During our visit you will need to evaluate the site/location, environmental and physical characteristics and use the information to prepare conceptual plan for the establishment plan.

Due to site nature, students should wear proper clothing and footwear.

**Element:**

* Carry out preliminary planning activities for plant establishment program
* Determine requirements of plant establishment program

**Performance criteria:**

* 1. Consult with client to establish preferences and requirements for plant establishment program
	2. Research plant species and cultivars, local by-laws and restrictions that may affect the plant establishment program
	3. Develop a concept plan that reflects client preferences and requirements and takes into account site factors and identified requirements
	4. Present concept plan to client for discussion and approval
	5. Identify plant species and cultivars appropriate to site and consistent with agreed concept plan
	6. Calculate and cost required quantity and confirm availability with suppliers

**The following is expected to be achieved: (insert marking guide or what is sort after in completing this assessment):**

* Consulted with clients
* Researched plant species and cultivars and local by-laws and restrictions
* Complied with local by-laws and restrictions
* Developed a plant establishment program concept plan
* Calculating quantities, measurements, costs, scaling and scheduling ▪ Oral communication

**Assignments should be legible, in your own handwriting or typed and submitted on the due dates.**

**Please note:**

Any copied work or late submission will not be accepted with student facing disciplinary action.

**Assessment 1 Project 1. Developing a concept plan for Broadacre / agricultural cropping**

**You are required to develop a conceptual plan for a broadacre / agricultural cropping at 25 Whites Road, Werribee South or at a site of your choice.**

**Instructions to students**

**A detail brief is provided to develop a plan.**

To complete this assessment project, you are required to submit a comprehensive final project. It should contain the following:

1. Brief
2. Project Plan
3. Budget parameters including material & labor budget, etc.
4. Site evaluation/analysis
5. Site measurement and preparing Base plan
6. Plant species and cultivars selection
7. Development of conceptual plan, client agreement and final plan

1. **Brief**

Develop a plant establishment plan for a Broadacre cropping

Site should be measured and develop a base plan and a title sheet showing all information according to the plan. Concept drawings can be on a A3 paper.

1. **Project Plan**

Develop a project plan where you should mention:

* Project summary.
* Client details.
* Project goals, objectives
* Team members and contact information.
* Project concerns and issues.
* Action required,
* Plant species and cultivars / hybrid / breed selection
* Input
* Project timeline and deadlines, • Maintenance requirements, and
* Access availability.

1. **Budget Parameter.**

Site clearing, plant material, mulch products, irrigation, fertilizers and other soil ameliorants.

Labor budget to establish the plants is 5 days



1. **Site evaluation/analysis**

* + Draw rough sketches at the site and record the physical aspects of the site. This can be done in note form
	+ Accurately measure the site and record them on the base plan

|  |  |  |  |
| --- | --- | --- | --- |
| **Site Assessment**  |  |  |  |
| **Site Details** **Address**      |  |  |  | **Client Details**  |
| **Reason for Establishing** **the Site**  |     |  |  |
| **Function of Site to be** **Established**  | Current Function  |  |  |  |
| Proposed function  |  |  |  |
| **Size of planted area m2**  |  |  | **Time of Year for Establishment**  |    |
| **Soil**  |  |  |  |
|   | **Soil** **Characteristics** **(pH, Texture)**  |     |  |
|   |  | **Recommended** **Corrective Action**  |     |
| **Drainage Issues**  | **Yes**  **No**  | **Recommended** **Corrective Action**  |     |

|  |  |  |
| --- | --- | --- |
| **Site Assessment (cont.)**  |  |  |
| **Existing Vegetation**  | **Yes**  **No**  | **Vegetation Description**  |  |       |
|  | **Corrective** **Remedial** **Action**  | **/**  |       |
|   |  |  |
| **Weed Problems**  | **Yes**  **No**  | **Corrective** **Remedial** **Action**  | **/**  |       |
| **Pest and Disease Problems**  | **Yes**  **No**  | **Corrective** **Remedial** **Action**  | **/**  |        |
| **Public access**  | **Yes**  **No**  | **Corrective** **Remedial** **Action**  | **/**  |         |

1. **Site measurement and preparing Base plan**

During our visit to the site, you will need to record the dimensions and location of physical objects on the site such as tree, paths, watering points etc. The information collected is what will form the Base Plan and later Conceptual Plan.

1. **Plant species and cultivars selection**

Select at least Five (5) agricultural crops to be used for your plant establishment site as per the client preferences**.**

1. **Development of conceptual plan, client agreement and final plan**

The last phase of the project is to develop concept plan for the nominated site. Plant species should be included in your concept plan along with selected plants. Once you present your conceptual plan to the client you need to draft an agreement for final plan and documentation.

**(i) Prepare a short brief discussion with your client about the concept plan, site factors and budget. A recording / recorded submission is sufficient**

**Assessment Item 2: Written questions**

**Instructions to students:**

This assessment item defines the procedure for maintenance requirements and practices commonly involve in establishing plants of specific plant species and cultivars, prior to and establishment.

Students are required to read the questions and answer them correctly.

**Element:**

* + Carry out preliminary planning activities for plant establishment program
	+ Determine requirements of plant establishment program

**Performance criteria:**

1.2 Research plant species and cultivars, local by-laws and restrictions that may affect the plant establishment program

 1.3 Identify environmental implications of planned program and, if necessary, report to relevant personnel for further research

 2.3 Determine plant establishment procedures that suit the characteristics of available plant materials, resources and equipment available and environmental factors that would affect the success of the plant establishment program

 2.4 Identify post-planting care requirement

 2.5 Identify and cost resources, tools, equipment and machinery required for planting and post-planting care and confirm availability with suppliers, contractors and appropriate personnel

 2.6 Identify hazards and assess risks in workplace, and implement control measures to manage risks according to workplace health and safety procedures, estimate costs and document in plan

**The following is expected to be achieved: (insert marking guide or what is sort after in completing this assessment):**

* + Researched plant species and cultivars and local by-laws and restrictions
	+ Complied with local by-laws and restrictions
	+ Applied relevant workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures
	+ Calculated the cost and spatial and logistical requirements of components of the plant establishment program

**Assignments should be legible, in your own handwriting or typed and submitted on the due dates.**

**Please note:**

Any copied work or late submission will not be accepted with student facing disciplinary action.

 **Assessment Task 2– Short Answer Questions**

* 1. What quality standards may apply to the selection of plants and materials when planning a plant establishment program and explain how would you inspect the plant material for required quality before planting?

 Keep in mind plants have different light and water requirements.

Water Requirements. Some plants require more water than others. ...

Texture. ...

Color. ...

Mature Height. ...

Form.

Seeds should be free of weed/other plant seeds. Seeds should be free of soil or seed borne diseases. Seeds should be free from insect or any other damage. Germination percentage should be 90%

* 1. What factors need to be considered when selecting plants for establishing an agricultural planting site?

Various soil conditions also affect the decision regarding choice of species. Several physical and chemical characteristics of soil such as texture, stoniness, drainage, pan formation, soil depth, aeration, water table, moisture regime, soil pH, soil nutrients etc. are important for selection of species.

* 1. List tools, equipment and machinery required for pre- planting, planting and post-planting care and confirm availability with suppliers, contractors and appropriate personnel

 Mould board plough, disc plough, soil stirring plough, ridger plough, tool frames/carriers with mouldboard plough or tillage sweeps, etc. are improved implements designed for breaking soil. Ploughs are used to break soil and invert furrow slice to control weeds, tractor, etc.

* 1. What historical modifications which may influence the program for plant establishment?

Plant establishment is strongly influenced by the competition for resources, particularly light, water, and nutrients, that occurs between neighboring plants. Correct plant spacing is important to ensure that individual [ornamental plants](https://www.sciencedirect.com/topics/biochemistry-genetics-and-molecular-biology/ornamental-plant) have sufficient space to grow and develop

* 1. List the resources and website details which you used to collect information for planting selection for establishment of the agricultural plant program.

* 1. What propagation and establishment techniques of specific plant species and cultivars would you used?

* 1. What are the environmental implications which may be associated with the establishment of planted area?

* 1. What local by-laws and restrictions may affect the plant establishment programs?

* 1. Identify the WHS hazards associated with the establishment of agricultural planted area? What controls may be introduced to minimise the risk?

* 1. What maintenance requirements and practices for specific plant species and cultivars, prior to and after initial establishment

* 1. Identify disposal / removal of debris or stubble management at the planting site when implementing plant establishment program?

* 1. Identify the legislative and regulatory requirement for agricultural plant establishment program in your region or at ACAH Demonstration Farm(s).

 **Assessment Task 3 – Final Plan for the client / employer.**

**Instructions to students:**

Careful planning is required to ensure that the project meets the expectations of the client for agricultural production and is completed efficiently and cost effectively. Poor planning can lead to major cost overruns and potential financial disaster. There is also the risk that hazards which have been overlooked could lead to serious injury and damaging and expensive litigation.

**Element:**

* + Determine requirements of agricultural plant establishment program
	+ Prepare and document agricultural plant establishment program and specification

**Performance criteria:**

2.5 Identify and cost resources, tools, equipment and machinery required for planting and post-planting care and confirm availability with suppliers, contractors and appropriate personnel

2.8 Determine timelines for preparations, planting and post-planting care, taking into account needs of plant species and cultivars, site conditions, and any other planning requirements

3.1 Produce a scaled site plan which can be readily interpreted and understood by on-site personnel

3.2 Develop and document detailed on-site procedures and schedules required for planting of site and postplanting care of plants

3.3 Prepare detailed plan, specifications and quotation based on requirements of the program, and present to client for acceptance

**The following is expected to achieve when you will complete final project.**

* + - Site factors and any identified environmental requirement is developed and presented to client.
		- Plant species and cultivar that are appropriate to the site and consistent with the agreed concept plan are identified, and the required quantity calculated, costed, and availability confirmed with the supplier.
		- Plant establishment procedures are selected
		- Post-planting care is provided for according to client requirements, enterprise standards and site capabilities.
		- Resources, tools, equipment, and machinery required for planting and post-planting care are identified, costed, and availability confirmed with suppliers, contractors, and appropriate personnel.
		- Staged implementation and development are outlined, where appropriate, with access for future works provided for according to client, enterprise, and site requirements.
		- Timelines for preparations, planting and post-planting care are determined
		- Detailed plan, specifications and quotation are prepared based on the requirements of the plant establishment program
		- Scaled site plan is produced which can be readily interpreted by on-site personnel
		- Detailed on-site procedures and schedules required are developed and documented.

**Assignments should be legible, in your own handwriting or typed and submitted on the due dates.**

**Please note:**

Any copied work or late submission will not be accepted with student facing disciplinary action.

**Assessment 3 Final Project. The Plant Establishment Program**

This last activity requires you to develop an Agricultural Plant Establishment Program based on your Conceptual plan from project 1/ assessment 1. Please note that the activity is only concentrating on the establishment of plant material and associated activities.

The following templates have been provided as a guide to completing this part of your assessment. It is expected that you will source information to complete this exercise in your own time or you can seek help from your supervisor.

|  |  |  |  |
| --- | --- | --- | --- |
| **Site Assessment**  |  |  |  |
| **Site Details** **Address**    |  |  |  | **Client Details**  |
| **Reason for** **Establishing the Site**  |     |  |  |
| **Function of Site to be Established**  | Current Function  |  |  |  |
| Proposed function  |  |  |  |
| **Size of planted area m2**  |  |  | **Time of Year for Establishment**  |    |
| **Soil**  |  |  |  |
|   | **Soil** **Characteristics** **(pH, Texture)**  |     |  |
|   |  | **Recommended** **Corrective Action**  |     |
| **Drainage Issues**  | **Yes**  **No**  | **Recommended** **Corrective Action**  |     |

|  |  |
| --- | --- |
| **Site Assessment (cont.)**  |  |
| **Existing Vegetation**  | **Yes**  **No**  | **Vegetation Description**  |      |
|  | **Corrective /** **Remedial Action**  |     |
|   |  |
| **Weed Problems**  | **Yes**  **No**  | **Corrective /** **Remedial Action**  |      |
| **Pest and Disease Problems**  | **Yes**  **No**  | **Corrective /** **Remedial Action**  |     |
| **Public access**  | **Yes**  **No**  | **Corrective /** **Remedial Action**  |   |
| **Material Type and Specification**  |  |  |
|  | **Cost per** **Unit**  | **Quantity** **Required m3**  |  | **Cost** **($)**  | **Justification for Selection / Function**  |
| **Soil and Mulch**  |  |  |
|     |   |   |   |  |   |
|     |   |   |   |  |   |
|     |   |   |   |  |   |
| **TOTAL COST**  | **$**  |  |   |

|  |  |  |
| --- | --- | --- |
| **Plant Material Type and Specification**  |  |  |
| **Plant Material**  | **Size**  | **Unit** **Cost** **($)**  | **Qua Req** | **ntity uired**  | **Total** **Cost** **($)**  | **Comments / Notes**  |
|   |   |    |   |  |   |   |
|   |   |   |   |  |   |   |
|   |   |    |   |  |   |   |
|   |   |    |   |  |   |   |
|   |   |    |   |  |   |   |
|   |   |    |   |  |   |   |
| **TOTAL COST**  **$**  |  |  |
| **Fertiliser and Pest Control**  |  |  |
|  | **Cost per** **Unit** **($)**  | **Quantity Required**  | **Cost** **($)**  |  | **Comments / Notes**  |
| Herbicides  |   |     |   |   |  |
| Pesticides  |   |     |   |   |  |
| Fertilisers  |   |     |   |   |  |
| Ameliorants  |   |     |   |   |  |
| Other (specify)   |   |   |   |   |  |
| Total cost  |   |
| **Machinery and Equipment**  |  |  |  |  |
|   |  | **Cost per** **Unit**  | **Quantity Required**  |  | **Cost** **($)**  | **Comments / Notes**  |
| Machinery  |  |   |   |   |  |     |
| Equipment  |  |   |   |   |  |     |
| Tools (purchase repair)  | and  |   |   |   |  |   |
| Other (specify)     |  |   |   |   |  |   |
|  | **TOTAL COST**  | **$**  |  |     |

|  |  |  |
| --- | --- | --- |
| **Supplier Details for plants and other resources**  |  |  |
|  |  |  |
| **Business Name**  | **Address:**  | **Phone Number:**  | **Products**  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Labour (including overheads)**  |  |  |  |
| **Type / Classification**  | **Cost per** **Hour**  | **Total** **Hours**  | **Total Cost** **($)**  |
|   |   |   |      |
|   |   |   |      |

#  Schedule Establishment Program

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | **DAY** | **S**  |  |
| **TASKS**  | **1**  |  | **2**  |  | **3** |  |  | **4**  |  | **5**  |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |