

SUPPORT MATERIALS

CIVIL CONSTRUCTION TRAINING PACKAGE BCC98

LEARNING MATERIALS

BCC1014A: CONTROL CONSTRUCTION TRAFFIC

ACKNOWLEDGMENTS:

This project acknowledges the learning resources developed for the National Transition Project '96 – '97 as the source for the development of these learning materials.

COMPILED BY:

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This resource was developed as part of the Support Materials for the Building and Construction National Training Packages.

This project was managed by Construction Training Queensland in partnership with the Construction Curriculum Consortium, TAFE Queensland.

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Published by: Australian Training Products Ltd

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Facsimile: + 61 3 9639 4684

Website: www.atpl.net.au

First Published

STOCKCODE

Printed by

IMPORTANT PLEASE NOTE

These materials have been adapted from learning resources developed for the National Transition Project by the Yeronga Institute of TAFE in Queensland in 1996/97.

Since the National Transition Project materials were produced Construction Training Australia developed a new version of the competency standards to be included in the Training Packages. Therefore, the National Transition Project materials may not fully cover all the elements, performance criteria and range of variables of the current version of the competency standards.

Instructors should use other appropriate learning resources to enable competency standards to be addressed against **ALL** elements and performance criteria within the range of variables specified.

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INTRODUCTION

This learning package is intended for use by those completing the Competency Unit **BCC1014A – Control Construction Traffic** as part of Basic Industry Stream Skills within the *CIVIL CONSTRUCTION SKILL STREAM* of the *National Construction Industry Competency Framework*.

The theoretical and practical components of this package will help you complete the competency unit. All set tasks, including the activities and demonstrations, will show how the theory or content can be applied in on-site or simulated on-site conditions.

The competency unit **Control Construction Traffic** deals with the knowledge and skills required to demonstrate the safe and efficient performance of traffic control applying to co-ordinating traffic and using appropriate methods of communication.

Assessment tasks will be developed to meet the elements of the competency and reflect the theoretical components of the learning package.

This learning package will be developed in sections, each section being closely aligned with the Assessment Tasks.

Your instructor will schedule self-check exercises, practical activities, demonstrations and additional oral and/or written tests, which may be similar to the self-check exercises. These tests will satisfy specific Assessment Criteria in the Assessment Tasks and will apply to your work environment.

When you have achieved all the Assessment Criteria in the Assessment Tasks and your work has been checked and certified by your instructor, you will have successfully completed the elements, which make up the competency.

WHAT IS PROVIDED

You will be provided with the essentials to successfully complete this module, including:

- a learning package;
- sets of relevant plans and specifications;
- materials, tools and equipment;
- access to work sites; and
- appropriate protective equipment.

WHAT YOU PROVIDE?

- appropriate personal protective clothing - to be advised by your instructor.

HOW TO USE THIS PACKAGE

This package has been designed so that you can work and learn at your own pace, incorporating into your own learning program.

- demonstrations of practical skills by your instructor or experienced tradesperson;
- planned and supervised practical application of your knowledge and skills;
- instruction in, and application of, safe working practices; and
- personal progress indicators through self-check exercises and practical activities.

It is suggested that you work through the six sections as they are presented.

By all means, *fast-track* any aspects/areas where you feel confident.

Self-Check Exercises have been included so that you can measure your own progress. These exercises, however, are not part of the formal assessment of competency.

GETTING TO “KNOW THE PACKAGE”

Here is a strategy, which may help you become familiar with the contents of this package.

- **Survey** Scan the whole package

Read the *contents* page and the *introduction*, then flip through the pages - glance at the headings.

Notice that there are set *tasks* to be completed. The *content* relates to these tasks.
- **Ask** Ask about any topics, terms or details that are not clear to you at this stage.
- **Read** Read through the material, but do it *actively*. *Jot* down points, *underline* or *highlight*.

Link the information with what you know already.

Let the *headings* and *sub-headings* help you organise information.

Remember *that you will need the content to complete the tasks*.
- **Review** At various stages, you will be directed to review the main points or complete a *Self-Check Exercise* to indicate how you are progressing.






Make your own *notes* as well.
- **Instructor** Throughout this package, you will be required to attend practical *demonstrations* and receive instruction in the use of materials, tools and equipment.

Ask your instructor if you have any *problems* with:
 - < interpretation of content;
 - < procedures or processes; or
 - < availability of resources

KEY TO SYMBOLS

Symbols are placed in the left-hand margin to draw attention to the type of information commencing at that point.

The symbols used in this package are:

	Read	<i>This is the essential information for the module.</i>
	Instructor Demonstration	<i>At times, your instructor will give practical advice and demonstrate the use of tool/equipment.</i>
	Self-Check Exercise	<i>These are your progress indicators. Typical answers are also included.</i>
	Practical Activity	<i>The six activities allow for the application of the theory components.</i>
	Site Visit	<i>Your instructor will schedule visits to appropriate sites, when appropriate.</i>

SUMMARY OF TRAINING SPECIFICATIONS

Unit Number and Title	BCC1014A – Control Construction Traffic
Pre-requisites	<p>Concurrent assessment and pre-requisite relationship.</p> <p>Basic Industry and Basic Stream Skills unit of competency appropriate to the work orientation.</p>
Elements of Competency	<ul style="list-style-type: none"> • Plan and Prepare Work • Co-ordinate Site Traffic • Operate Radio • Clean Up
Delivery	<p>Delivery methods must provide for the demonstration of competence in skills specified in all learning outcomes, either in on-site or simulated on-site conditions.</p>
Resource Implications	<ul style="list-style-type: none"> • Materials plant and equipment appropriate to the Civil Construction process • Suitable workplace location/simulated workplace environment • Relevant site traffic plan <p>Desired training qualifications and training required for those involved in the instructional process are:</p> <ol style="list-style-type: none"> a. Possess competency and knowledge relevant to the competency standard at a level equivalent to or higher than the competency under assessment; b. Possess a level of specific and relevant quality industry experience in order relate competency to current industry practice; c. Provide evidence of having successfully completed or being assessed competent in a relevant course of instructional skills; or d. Provide formal evidence of successfully completing the requirements of an established process for Recognition of Prior Learning (RPL) or Recognition or Current Competencies (RCC) equivalent to the required competencies and knowledge of instructional skills.

TRAINING SPECIFICATIONS

Unit Number and Title	BCC1014A – Control Construction Traffic
Element of Competency Plan and Prepare Work	Performance Criteria OH&S requirements adhered to; Quality Assurance requirements recognised and adhered to; Personal protective equipment selected, correctly fitted and used; Equipment selected and used in accordance with requirements of job; Identify traffic plan requirements.
Co-ordinate Site Traffic	Traffic directed to site traffic plan and away from services or areas of potential damage or danger; Vehicles and pedestrian traffic within site monitored to ensure safety of workers and through traffic; Traffic monitored, adjustments made for changing conditions, waiting vehicles positioned to allow traffic flow; Temporary traffic signs and barriers positioned in accordance with state regulations; Hand held signs (paddles) positioned in accordance with state regulations and maximum visibility; Hand signals used in accordance with state regulations or standard practice.
Operate Radio	Radio controls adjusted for optimum reception/transmission results; Messages transmitted concisely and in accordance with operating procedures where they exist; Radio power supply maintained as per makers recommendation; Radio contact checked after stated period of non contact and in accordance with procedures.
Clean Up	Equipment cleaned, maintained and stored.
Key Competencies	Level

Collecting, analysing and organising ideas & information	1
Communicating ideas and information	1
Planning and organising activities	1
Working with others and in teams	1
Solving problems	1
Using mathematical ideas and techniques	1
Using technology	1

ASSESSMENT SPECIFICATIONS

Unit Number and Title	BCC1014A – Control Construction Traffic
Guidelines for the Assessor	<p>This is a supervised assessment requiring observation of the process with individual final assessment tasks.</p> <p>Forms of assessment to be considered by the assessor are as follows:</p> <ul style="list-style-type: none"> • Written/oral tests; • Observation; • Demonstrations; • Practical tasks and/or projects. <p>Assessment may also be demonstrated through other forms of assessment not included in the above methodology including:</p> <ul style="list-style-type: none"> • Simulation of real-life work activity; • Individual projects; • Portfolio; • Recognition of Prior Learning/Recognition of Current Competencies
Method and Context of Assessment	<p>Competence should be assessed under guidance checking at various stages of the process and at the completion of task/activity against the elements and performance criteria specified in the standard. Competency may be assessed in the workplace or simulated workplace setting.</p>
Human Resource Implications	<ol style="list-style-type: none"> i. Desired assessor qualifications and training required to assess would be as follows: <ol style="list-style-type: none"> a) Possess competency and knowledge relevant to the competency standard at a level equivalent to or higher than the competency under assessment; b) Having completed a course in instruction for registration as an assessor with CTA or be accredited as a Registered Training Organisation (RTO) for assessor services; c) Possess a level of specific and relevant quantity industry experience in order to relate competency to current industry practice. ii. Training qualifications required: <ol style="list-style-type: none"> a) Possess competency and knowledge relevant to the competency standard at a level equivalent to or higher than the competency to be achieved. b) Having completed a course or being assessed competent in a course of instructional/assessment skills.

- c) Possess a level of specific and relevant quality industry experience in order to relate competency to current industry practice.

Physical Resource Implications

The following resources should be made available:

- General construction materials relative to the appropriate construction activity
- Plant and equipment appropriate to the civil construction activity
- Suitable work area appropriate to the civil construction activity
- Relevant site traffic plans.

Range of Variables

Traffic control applies to:

- During worksite preparation
- Site construction traffic
- Supporting the machine operator
- Identifying and protecting services
- Co-ordinating site traffic

Communications methods may include:

- Hand signals
- Verbal
- Two way radio
- Hand held signs
- Operate a radio, single operator in visual contact, two operators in radio contact
- Applies to civil construction work day or night operation

Evidence Guide

Competency is to be demonstrated by the safe and efficient performance of traffic control using processes listed within the range statement.

Critical Aspects and Evidence

It is essential that competence is observed in the following aspects:

- Compliance with Occupational Health and Safety regulations and State legislation applicable to work place operations.
- Compliance with organisational policies and procedures including Quality Assurance requirements.
- Correct procedures carried out prior to and during the application of civil construction processes.
- Effective communication to ensure construction traffic is controlled safely and efficiently.

Pre-requisite Relationship of Units

Nil

Underpinning Knowledge and Skills

Knowledge

A knowledge of:

- Workplace and equipment safety requirements and relevant OH&S Legislation
- Measurement and calculations
- Verbal and non verbal communication techniques
- Two way radio operating procedures

Skills

The ability to:

- Work safely to instructions
- Select signage, barricades, traffic cones
- Measure
- Use two-way communication systems
- Apply Quality Assurance
- Communicate effectively

INTEGRATED PROJECT-BASED TRAINING

It should be noted that all training in this program is project-based.

The training must integrate all competencies including the use of tools and equipment.

The knowledge and skills you gained in this program regarding good communication, quality concepts and OH&S must be practiced again in all competencies.

CHECK LIST FOR ASSESSMENT RESOURCES

Title	Identifies the title of the learning resource that related to the standard being assessed.
Unit (s) of Competence	Identifies conditions under which assessment can be conducted based on information from ‘range of variables statements’ and ‘evidence guides’ in competency standards.
Instructions for Assessors	Informs the assessor about the scope of the assessment resource ie. the assessment methods to be used and the conditions of assessment as well as the procedure to follow in preparing, conducting and reviewing the assessment.
Direct Observation Checklist	Checklist for outcomes of observations of performance and other forms of evidence eg. Responses to questions, related directly to ‘performance criteria’ and ‘evidence guides’ in competency standards. (Refer assessment specification in Learning Materials for each competency standard.)
Other Evidence Gathering Methods	<p>Instructions for assessors on methods of gathering indirect and supplementary forms of evidence. This may include assessor guidelines and/or outlines of assessment tasks for:</p> <ul style="list-style-type: none"> • Products or services produced by assessee; • Third party reports; • Individual/group projects; • Written tests; • Portfolios; • Structured oral questioning; and • Test banks.
Record of Assessment Outcomes	Identifies way in which outcomes of different evidence gathering techniques, incorporated in assessment resource, are recorded.
Reference Documentation	<p>Identifies reference material required to support specific evidence gathering techniques. This may include:</p> <ul style="list-style-type: none"> • Organisational policies and procedures; • Manufacturer’s instructions; • Safety regulations; • Product information; and • Legislation.
Assessor Note:	Assessors may find it useful in creating a checklist to refer t the non-endorsable learning resource materials access list for the appropriate learning resource packages.

CONCLUSION

This learning package has combined the theoretical and practical components required for the competency unit **BCC1014A – Control Construction Traffic**.

Having successfully completed the requirements of this competency unit you now understand the procedures for demonstrating the safe and efficient performance of traffic control. In addition, you have applied the knowledge and skills in a number of real life situations.

You can expect to apply your knowledge and skills again and again on a range of construction sites.

The developers of this package hope that you have found its style and presentation easy to use.

RECORD OF COMPETENCY

Competency BCC1014A – Prepare Construction Traffic

TRAINEE DETAILS

TRAINEE NAME:

ADDRESS:

..... **POSTCODE:**

DATE COMMENCED: **REGISTRATION NO:**

EMPLOYER:

ADDRESS:

..... **POSTCODE:**

TRAINEE SIGNATURE:

DATE:

ON THE JOB ASSESSMENT SHEETS

Instructions for Completing Assessment Sheets

These *Assessment Sheets* help the assessment of competence against the nationally endorsed construction industry standards.

The *Assessment Conditions* explain the level of skill and responsibility required in performance and also the range of work to be included in the task being assessed.

The level of skill and responsibility of performance includes:

Work undertaken in a team situation:

Application of knowledge in the performance of this task, while working under routine supervision assisting team members.

Work undertaken with limited supervision only:

Application of in-depth knowledge in the performance of this task, while working under limited supervision.

The *Performance Criteria* will help you make a valid, fair and reliable assessment of competency on-the-job.

The Assessment Sheets should be completed in consultation with employers and other staff involved in this training. Assessments should be done on a progressive basis.

As you make your self assessments the following questions apply:

1. Have the necessary technical knowledge and skills for the task being assessed;
2. Perform the related tasks in accordance with the Assessment Conditions and the Performance Criteria; and
3. Apply their knowledge and skills for this competency **in a number of different job situations.**

Unit of Competency

Unit BCC1014A – Control Construction Traffic

The trainee consistently performs as follows:

- Plan and Prepare Work
- Co-ordinate Site Traffic
- Operate Radio
- Clean Up

CERTIFICATION – BCC1014A – Control Construction Traffic

The Trainee has achieved competence in BCC1014A.

R.T.O:

Signature: **Date:**

