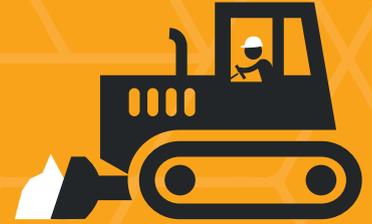


Career Profile: Plant Operator



Plant operators work with heavy machinery used on construction sites and roadworks. The machinery includes 360-degree excavators, bulldozers and front-end loaders for moving earth; static tower cranes, mobile and rough terrain cranes for lifting and moving materials; compactors such as rollers used for flattening out work areas and forklifts to move or load building materials. Operators also change buckets and other attachments, maintain equipment and carry out daily safety checks. A dogger may work with the operator at ground level, checking the position and depth of an excavation, or directing the operator by signals or radio when visibility is restricted.

Major employers in the construction industry include earthmoving and civil construction contractors, private developers, and government authorities. Work projects vary in size and location with sites located in the city, suburbs, country and sometimes in remote areas. You can be employed on large construction projects and/or complete some short courses to add to your licenses; the more licenses you have to operate specific machinery the more variety you will have.

Qualification

Certificate III in Civil Construction

Types of plant operators

- ▶ Backhoe Operator
- ▶ Bulldozer Operator
- ▶ Crane Operator
- ▶ Excavator Operator
- ▶ Forklift Operator
- ▶ Grader Operator
- ▶ Earthworks Supervisor

Skills and personal qualities

- ▶ Enjoy physical work and being outdoors
- ▶ Enjoy practical and manual activities with good hand eye coordination
- ▶ Can work independently and as part of a team
- ▶ Have good concentration skills and be able to follow verbal instructions accurately
- ▶ Excellent awareness of risk and safety issues
- ▶ Enjoy working with machinery and an aptitude for mechanics

How to get started

To work with plant machinery in Western Australia, you will need to be issued with a construction white card. If you are over the age of 18 years of age you will also need to undergo safety induction training and obtain a High-Risk Work Licence from Work Safe. If you're still at school, you can enrol in a Certificate II Civil Construction qualification as part of your WACE. Alternatively, you can complete the following qualifications through a Registered Training Organisation (RTO), which can take 24- 36 months to complete and includes on the job training with an employer.

- ▶ **Certificate III:** Civil Construction Plant Operations / Civil Construction
- ▶ **Certificate IV:** Civil Construction Supervision / Civil Construction Operations
- ▶ **Diploma:** Civil Construction Management

Future pathways and opportunities:

- ▶ Site Supervisor
- ▶ Civil Construction Manager
- ▶ Leading Hand

Types of plant operators

▶ Backhoe Operator

Backhoe Operators operate machinery and large vehicles to level, excavate, load, break, drill, compact and move earth, rock and other materials from site. This machine looks like an overgrown tractor, but the real skill is in the precision of using the front and rear buckets. They help to install and repair buildings, landscaping, water/gas lines, street paving and sewers as well as digging trenches on civil infrastructure or largescale commercial projects.

To become a Backhoe Operator you will need to have completed all necessary safety training and earn your backhoe ticket through an RTO by completing the **Conduct backhoe/loader operations** unit which is a nationally recognised unit of competency and will give you the skills to operate a backhoe on a construction or building site. This will qualify you for jobs in transport, mining, and agriculture. Alternatively, you can complete a **Certificate III in Civil Construction Plant Operations** apprenticeship.

▶ Bulldozer Operator

Bulldozer operators work with the big machines which prepare sites for the construction process from destruction work to the movement of materials such as large quantities of soil. Operators are responsible for ensuring the safe and effective use of the dozer onsite as well as avoiding risks and hazards. As a bulldozer operator you will drive and manoeuvre bulldozers to clear land, debris, rubble, and other objects on construction sites.

To become a bulldozer operator you can enrol in a **Certificate II in Civil Construction** or a **Certificate III in Civil Construction Plant Operations** through an RTO, as well as all necessary safety induction training.

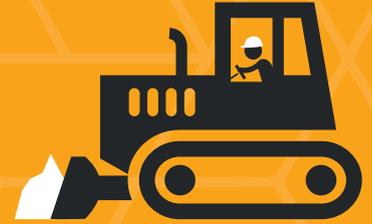
Next Steps

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- ▶ Jobs and Skills WA – www.jobsandskills.wa.gov.au
- ▶ Australian Apprenticeship Pathways – www.aapathways.com.au
- ▶ Australian Apprenticeship Support Network Providers – www.australianapprenticeships.gov.au
- ▶ Job Outlook – www.joboutlook.gov.au



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▶ Crane Operator

Crane operators operate mobile or stationary cranes to lift, move and position machinery, equipment and other large objects at construction sites, mine sites, manufacturing operations, wharves and shipyards. They are also responsible for operating hoists, lifts and winches with hand controls to rotate, move, raise and lower objects. In the construction industry, crane operators may control tower cranes which are erected and dismantled on site and mobile cranes, which are usually truck mounted. Crane operators also work closely with doggers onsite who help direct the safe movement of the load by communicating using hand signals, whistles, or two-way radios. You can be employed on some of the largest construction projects in Western Australia from commercial projects in the city to working on infrastructure projects such as bridges. There are many different types of cranes, therefore you may like to add to your licences so that you can operate more than one type of crane.

To work as a crane operator in Western Australia you will need specialist training and a High Risk Work Licence (issued by WorkSafe) for the specific class of crane you want to operate, as well as a construction white card. Once you have turned 18 you can complete a **Certificate III in Mobile Crane Operations through a Registered Training Provider**.

▶ Excavator Operator

An Excavator is a bit like the Tyrannosaurus Rex of the construction industry, the king of the machinery. An excavator operator skilfully controls and drives these beasts, digging, moving, and loading earth, rock, or other materials to dig trenches and other holes necessary for laying piping and other infrastructure. In this career, you typically work in the civil engineering or commercial construction field. You will also be responsible for the inspection of equipment and performing routine safety checks on the vehicles. Duties may also include operating other heavy equipment as needed on the construction site as well.

To become an excavator operator, you will need to have completed all necessary safety induction training and can enrol in a **Certificate II Civil Construction** or complete a **Certificate III in Civil Construction Plant Operations** through an RTO.

▶ Forklift Operator

Forklift operators are responsible for the safe and efficient use of a forklift to locate, relocate, shift and stack cartons, containers, crates and pallets of goods and materials in factories, construction sites, warehouses, storage yards and other work sites. Brickworks, timber and building supply companies employ forklift operators to safely load trucks and storage areas, on and off-site. You may also find yourself unloading ships, freight train cars and airplane cargo holds. To work with a forklift in Western Australia on a construction site you will need to obtain all necessary permits and undergo safety training depending on which work site and size of forklift you are operating. You will also need to contact an RTO to complete a short course in forklift operations.

▶ Grader Operator

When you play pool, the surface of the table must be flat and true or else you have limited control of where you shoot your target. A grader operator is skilled at operating the heavy machinery that prepares the ground for construction mainly for the construction of roads, airport runways and other structures that require flat, smooth surfaces. For example, graders are used to build and maintain dirt and gravel access roads and prepare surfaces for asphalt. Additional technology, such as lasers, may be used to guide the grader operator in preparing the ground levels and cambers for correct drainage. As a grader operator you may work as part of a small team or with a large crew on civil engineering, mining, and construction projects. You may also want to add to your tickets to operate more than one machine.

You don't need formal qualifications to work as a grader operator in Western Australia, but completion of a **Certificate III in Civil Construction** or **Conduct civil construction grader operations** unit of competency may give you an advantage. For certain job activities and access to working on a construction site, certain tickets and licences may be required (White Card). Medical checks and drug and alcohol screening are often mandatory.

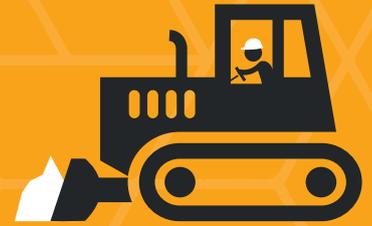
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► Earthworks Supervisor

The earthworks supervisor oversees the entire process and manages the foundations for a range of different projects including residential, commercial developments or large-scale civil infrastructure projects. This role is the first point of contact during the initial preparatory work of a project for all contractors on site. Depending on the size of the project they may oversee the whole project from design through to coordination of all construction activities. The length of time on a project depends on the field you are working on. Some civil projects such as new housing developments can go for several years whereas residential jobs may just be a few days.

Managing an earthworks team requires a strong knowledge of earthworks and plant operations. It is therefore ideal that you have several years' experience in civil construction, preferably earthworks and may hold a vocational qualification. Many earthworks supervisors may start in a trade such as concreting then build up on site experience before moving into a supervisory role. They may also start out as a Civil Construction Worker.

To become a qualified tradesperson, you will need to complete an apprenticeship (Certificate III) in a trades based area through an RTO. Once you have some experience you can then complete a **Certificate IV in Civil Construction** to build your leadership, management and supervision skills.



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