



## GOLDEN GROVE PARK 'N' RIDE

# PILING FACT SHEET

The new Golden Grove Park 'n' Ride car park will provide 450 car parking spaces, across three levels (ground floor plus two upper levels) when completed. It will include ten *Disability Discrimination Act 1992*, compliant car parks and provision for secure bicycle storage. The aim of the project is to meet demand for Park 'n' Ride commuters and to increase public transport usage.

The Golden Grove Park 'n' Ride project undertook piling works to support the building structure, staircases and retaining walls.

### What is piling?

Piling is the construction of columns in the ground that provide vertical support to a structure, by transferring structural loads into stable soil or rock. Piles are installed vertically into the ground and for this project are made from concrete with steel reinforcement.

A pile is formed by drilling a shaft into the ground with an auger (a drill resembling a large corkscrew) that is attached to a piling rig.



The auger that is used to drill the shaft

Once the pile has been bored, a large steel reinforcement cage is placed into the pile.



The steel reinforced cage that is placed into the pile

Following this, concrete is poured into the pile.



Concrete being poured into the pile



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Once the concrete is set, pile cropping is then undertaken by breaking away the top section of concrete down to the desired level. This leaves the reinforced steel cages embedded in the pile exposed to make an effective bond for the pile cap, which is a mass concrete footing that sits on top of the pile and transfers loads from the structural elements above to the piles.



Pile ready for cropping

#### Piling for the Golden Grove Park 'n' Ride Project

A total of 117 piles have been installed across the project with piles varying between three and eight metres deep. The piles were installed in two different diameters, with the majority of the piles being 1200mm in diameter and the remaining piles 900mm in diameter.



Piling rig on site, June 2021

#### **More information**

If you have any questions or would like to speak to a member of the project team, please call 1300 705 992 or email: goldengroveparknride@ptpa.com.au













