

# CASE STUDY

# SCHOLEY STREET SHARED PATH

# NEWCASTLE

PLATIPUS MECHANICAL EARTH ANCHORING SYSTEM  
PERMANENT STABILISATION



### The Project

The Soley Street Shared Path is a \$4 million project with construction having commenced in March 2016. This work forms part of the John Holland Rail Country Regional Network (JHRCRN) bridge construction which includes the construction of a new bridge and reinforced earth (RE) wall approaches at the Soley street site. This shared path is the latest addition to the original scope of work.

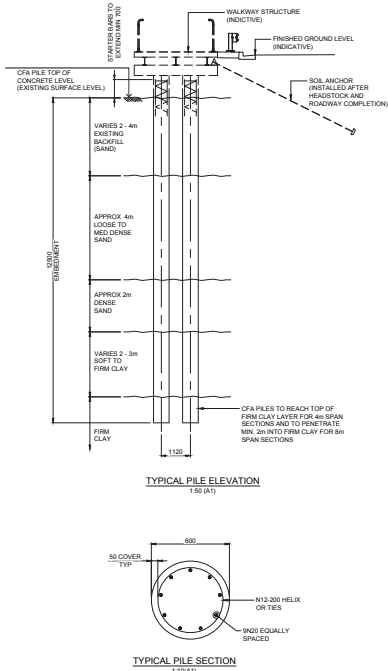
### Ground Anchor Detailing & Design

As part of a foundation system for an elevated shared pathway alongside an RE wall, permanent active ground anchor systems were deployed by Cirtex Australia.

The composite deck bridge structure is resting on a series of CFA piles interconnected by cast in-situ concrete head-stocks. Platipus anchoring systems were detailed and designed to provide lateral restraint to the bridge foundations in order to prevent any eventual overloading of the RE wall built and designed previously by others.

The design life expectancy requirement of the project was 100 years. Platipus S8 aluminium bronze anchor heads with 8mm diameter stainless steel tendons were supplied to meet the design requirements.

Anchors were driven at 30 to 45 degree angles and at a depth of 5m into the RE wall backfill. A pre-tension of 15kN working load was applied on site directly for the purpose built brackets through hydraulic jacks.



The Platipus system provided the following key benefits:

- ‘Buildability’ & ease of installation – effective & efficient installation with all 7 anchor systems being installed and tested in 4 hours
- Loads were immediately verified after installation providing full confidence in all stakeholders
- No messy grouting, load uncertainty or delay in testing
- Total (supply & install) cost savings over traditional solutions



## ADVANCED GEOSYNTHETIC SOLUTIONS™

### CONTRACTOR

Bridge and Civil

### CLIENT

The City of Newcastle

### ENGINEER

Royal Haskoning DHV

### LOCATION

Islington, Newcastle

### SYSTEM USED

Platipus Earth Anchoring System  
Permanent Works

