



Surry Hills to Central Station Feeder Upgrade

GENERAL

What is the Power Supply Upgrade Program?

Transport for NSW is upgrading electrical infrastructure as part of the Power Supply Upgrade (PSU) Program, which is designed to meet expected power requirements for Sydney's future rail network and new fleet of air-conditioned trains, including New Intercity Fleet and Sydney Growth Trains.

PSU is a program of work to provide new electrical infrastructure and upgrades to substations, section huts, overhead wiring and electricity feeder cables across the network to provide additional power to operate trains and improve service reliability by reducing the risk of disruption to rail services.

Why do we need to increase the power to our rail network?

Transport for NSW is rolling out world class technology to transform the rail network and provide customers with more reliable services.

The existing power supply network is facing increased demand from future network requirements associated with the Sydney Metro and upgrades supporting the new fleet of trains.

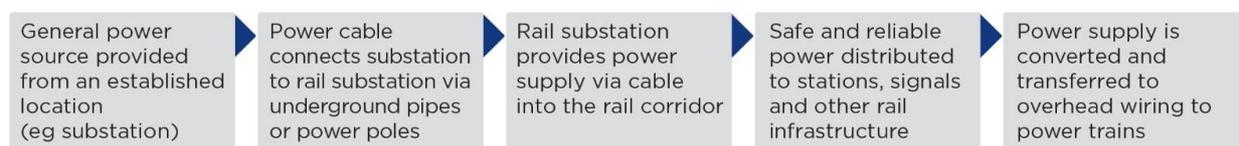
Upgrading power supply also futureproofs the connection to the Sydney Trains network, allowing more trains and more services to be available to customers.

The PSU program has already commissioned the new Lee Street Substation and is completing the finishing touches on the new Chalmers Street Substation to supply power to Central Station.

How do we source power for our trains and rail infrastructure?

The energy network distributes power generated at a power station to local community substations. These substations, which also provide power to local communities, are then connected to substations within the rail corridor. The rail substations convert power for trains and rail infrastructure including stations and signals.

See diagram overleaf.



SURRY HILLS TO CENTRAL STATION FEEDER UPGRADE

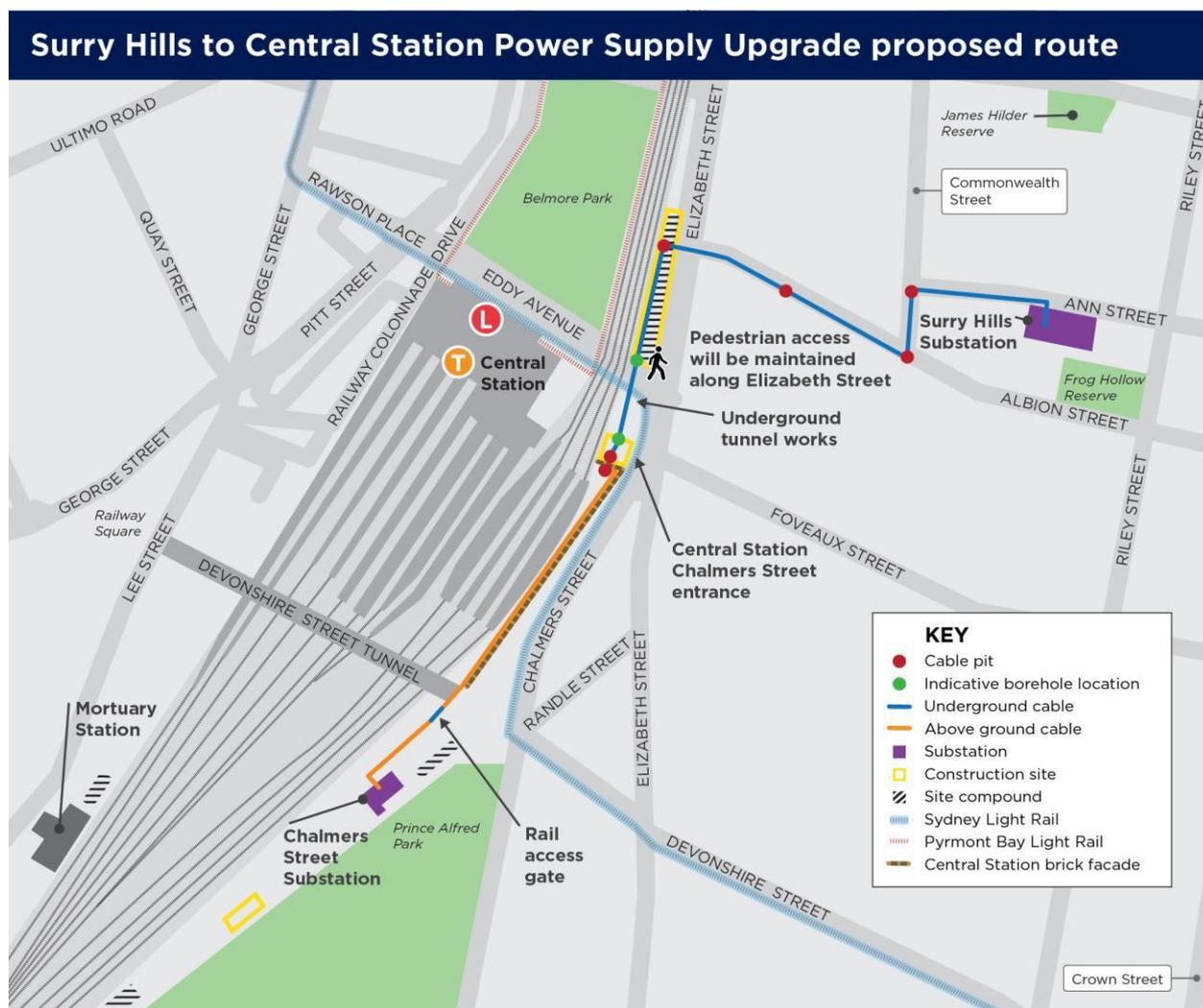
What is the Surry Hills to Central Station Feeder Upgrade Project?

A new power supply cable (33 kilovolt Feeder 7U5) is to be constructed between the Ausgrid substation on Ann Street at Surry Hills and the new Chalmers Street Substation at Central Station to supply power to the growing rail network.

What is the chosen cable route?

The cable route is approximately 1.2 km in length, starting at Surry Hills Substation on Ann Street, travelling south along Commonwealth Street, west along Albion Street, south along Elizabeth Street and into the rail corridor at the corner of Elizabeth Street and Eddy Avenue.

The work will involve building a new underground cable route from the Ausgrid substation at Surry Hills, entering the rail corridor where it will be connected to the wall alongside the Airport Line (Platform 23) at Central Station, and then connecting to the Chalmers Street Substation.



How was the route chosen?

The preferred option was selected as it would meet Sydney's future rail network demands by:

- reducing the risk of clashing with unknown underground services, reducing tree impacts, and shortening project timelines by bringing a reasonable portion of the route through the rail corridor
- minimising disruptions to traffic by undertaking works in streets with lower traffic volumes
- reduced road closures by having a portion of the route inside the rail corridor
- reduced engineering constraints by avoiding other services including Sydney Light Rail, water and other electricity cables.

Works in and around Central Station

We recognise there is already work underway in the Central Station and Surry Hills area as a result of major projects such as Sydney Light Rail and the Sydney Metro.

The new power supply works are being coordinated with these two projects to minimise disruption to motorists, local residents, visitors and businesses in the Central precinct and surrounding streets, including Surry Hills.

Transport for NSW is committed to minimising noise impacts on the community. We switch off equipment when it is not being used, place equipment as far away from properties as possible and monitor our work activities to make sure noise levels are being managed effectively.

Standard construction hours are between 7am to 6pm Monday to Friday and 8am to 1pm on Saturday. On busier roads and within the rail corridor some night works will be required to reduce traffic and customer impacts. We will keep the community informed prior to any night works occurring.

What condition will the streets be in once the work is completed?

We will work with the City of Sydney to return the streets to their existing condition and coordinate works with their program.

PROVIDING FEEDBACK

How can I provide my feedback?

The community consultation period for this project is now closed. Although we are no longer accepting submissions for this project, you may contact the team at any time by calling **1800 684 490** or emailing **projects@transport.nsw.gov.au**.

What will happen with my feedback?

Feedback received during the public display period has assisted Transport for NSW in preparing plans for managing any impacts during the construction phase of the project.

All feedback received by Transport for NSW has been considered and responded to in the Determination Report. This report is now available on the Transport for NSW Surry Hills to Central Station Feeder Upgrade project page.

Please note Transport for NSW will ensure all private information received from the community remains confidential.

CONSTRUCTION

What are the hours of construction?

Where possible, work will occur during the standard construction hours to minimise impacts. These are:

- **7am to 6pm Monday to Friday, and 8am to 1pm Saturday**

For the safety of our workers and to reduce community impacts, including traffic and disruption to businesses, some works will be scheduled at night or on weekends.

We will notify the community of any planned work outside normal hours.

What is the timeframe for starting and completing this project?

Early works are due to commence in May 2019 with construction on the roads in Surry Hills completed by early 2020. The overall project, including works in the rail corridor is due for completion in late 2020.

The project will be delivered in stages to reduce the amount of time spent in one location, coordinate delivery with Sydney Metro works and reduce community impacts.

How will the cable be installed?

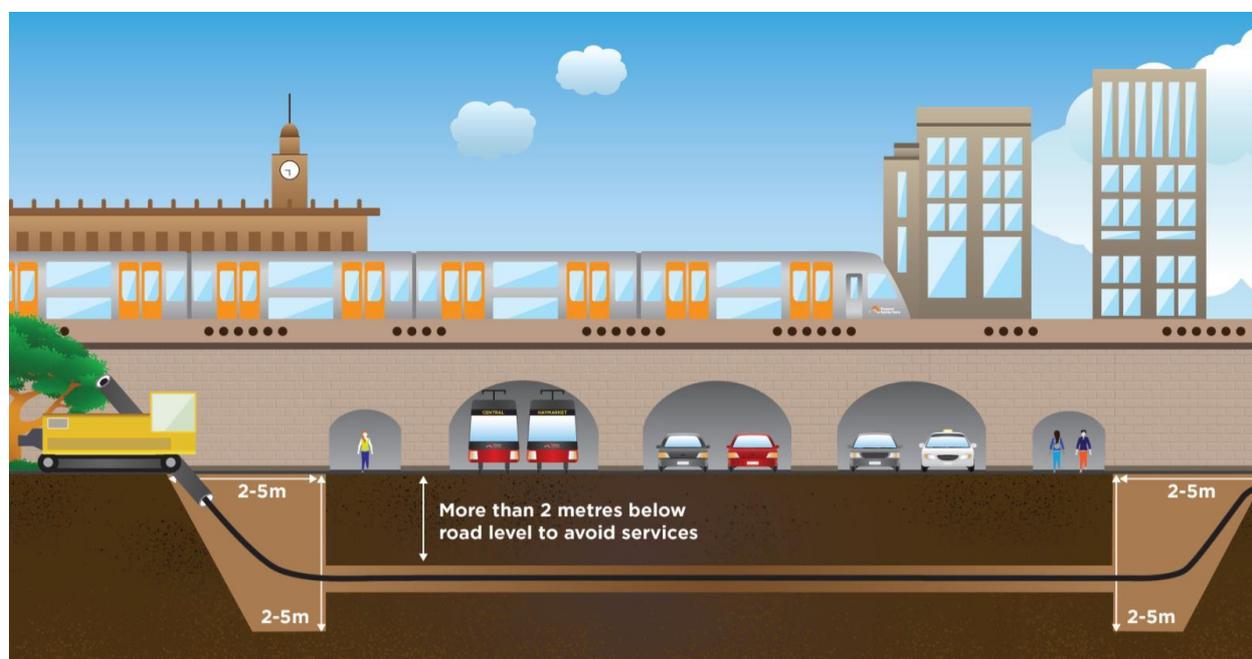
The installation of the new cable involves trenching within the road corridor of Ann Street, Commonwealth Street, Albion Street, Elizabeth Street roads and the Elizabeth Street footpath. A typical trench is One metre wide and 1.5 m deep, however in some cases it will be up to 1.2 m wide and 3 m deep depending on existing buried services.

A number of cable pits are required to pull the feeder along the route. Cable pits would be installed underground, and would require excavation and concreting works. A typical cable pit is 3 m wide by 3 m long and up to 2 m deep.

Underboring works are proposed from the Chalmers Street entrance garden to the start of the Elizabeth Street footpath. Open trenching would then occur along the footpath. Two temporary bore pits are required to start and receive the underbore on each side of Eddy Avenue. These pits would be constructed within the Chalmers Street Entrance garden and within the footpath of Elizabeth Street.

The temporary bore pits would be constructed up to a maximum of 6m wide by 5m long by 5m deep (see image below). The footpath and garden would be reinstated following completion of underboring works. The bore hole itself will be around 850 mm in diameter.

The construction of the route and installation of cable within the rail corridor would occur along the eastern boundary of the rail corridor.



TRAFFIC, PARKING AND PROPERTY ACCESS

Will I be able to access my property and parking spaces in front of my house?

At various times parking spaces will need to be temporarily closed for us to work safely and effectively. The community will be notified in advance of any changes. Access to properties will be maintained at all times.

How will changes to traffic be managed during the construction period?

Sections of road will need to be temporarily closed in stages to allow the excavation to occur and the pipes to be laid within the roadway. To cross Eddy Avenue and the Sydney Light Rail we will bore under the roadway to ensure this area which is congested with underground services is not affected.

Along Elizabeth Street, lane closures will be timed for off-peak periods and access maintained around the works.

On other roads along the route, during construction detours will be in place and where local access may be temporarily restricted we will consult with communities as the plans progress to ensure resident and business access is maintained.

Traffic control and signage will be in place to assist pedestrians and motorists around the work sites.

How will residents and businesses be notified about construction in their area?

Residents and businesses will receive regular notifications outlining upcoming works in their area. Visit the Transport for NSW website

<https://www.transport.nsw.gov.au/projects/current-projects/power-supply-upgrade-program-current-and-upcoming-works> for the latest project information.

You can also call our project info line **1800 684 490** or email us at projects@transport.nsw.gov.au to speak with the project team and join our email distribution list.

ENVIRONMENT

Will trees be affected by construction?

The cable route has been designed to minimise impacts on trees. The majority of the cable route will be constructed in the roadway or under footpaths. Particular care has been taken to avoid the historic Plane trees alongside the rail viaduct on Elizabeth Street.

An assessment was undertaken as part of the REF to identify any impacts on trees along the route.

A total of 63 trees were assessed and amendments to the design and construction process have been made to protect the majority of the trees.

The assessment identified three trees (olive trees) on the corner of Eddy Avenue and Elizabeth Street that will need to be removed as they are in the construction zone. A further three trees located close to this area will also be assessed during construction by an independent arborist. Any trees that are removed will be offset.

Where trees are required to be removed, new trees will be planted in accordance with the TfNSW Vegetation Offset Guideline. Replacement trees would be selected in accordance with City of Sydney Council's Street Tree Master Plan 2011.

How will heritage aspects of these works be addressed?

The Central Station Precinct is on the State Heritage Register and is an important part of our rail and Sydney history. The proposal is subject to a Section 60 approval by the Office of Environment and Heritage.

Contact us

If you would like to speak with the project team please call 1800 684 490 or email us at **projects@transport.nsw.gov.au**.

We will continue to keep the community informed about upcoming activities through regular updates. For more information please visit

<https://www.transport.nsw.gov.au/projects/current-projects/power-supply-upgrade-program-current-and-upcoming-works>