



Southern Multi-Discipline Framework

Thinking differently to deliver better

Shortlands AFA Construction Sequence



Contents

- Scheme Overview
- General Methodology
- High Level Programme



Scheme Overview

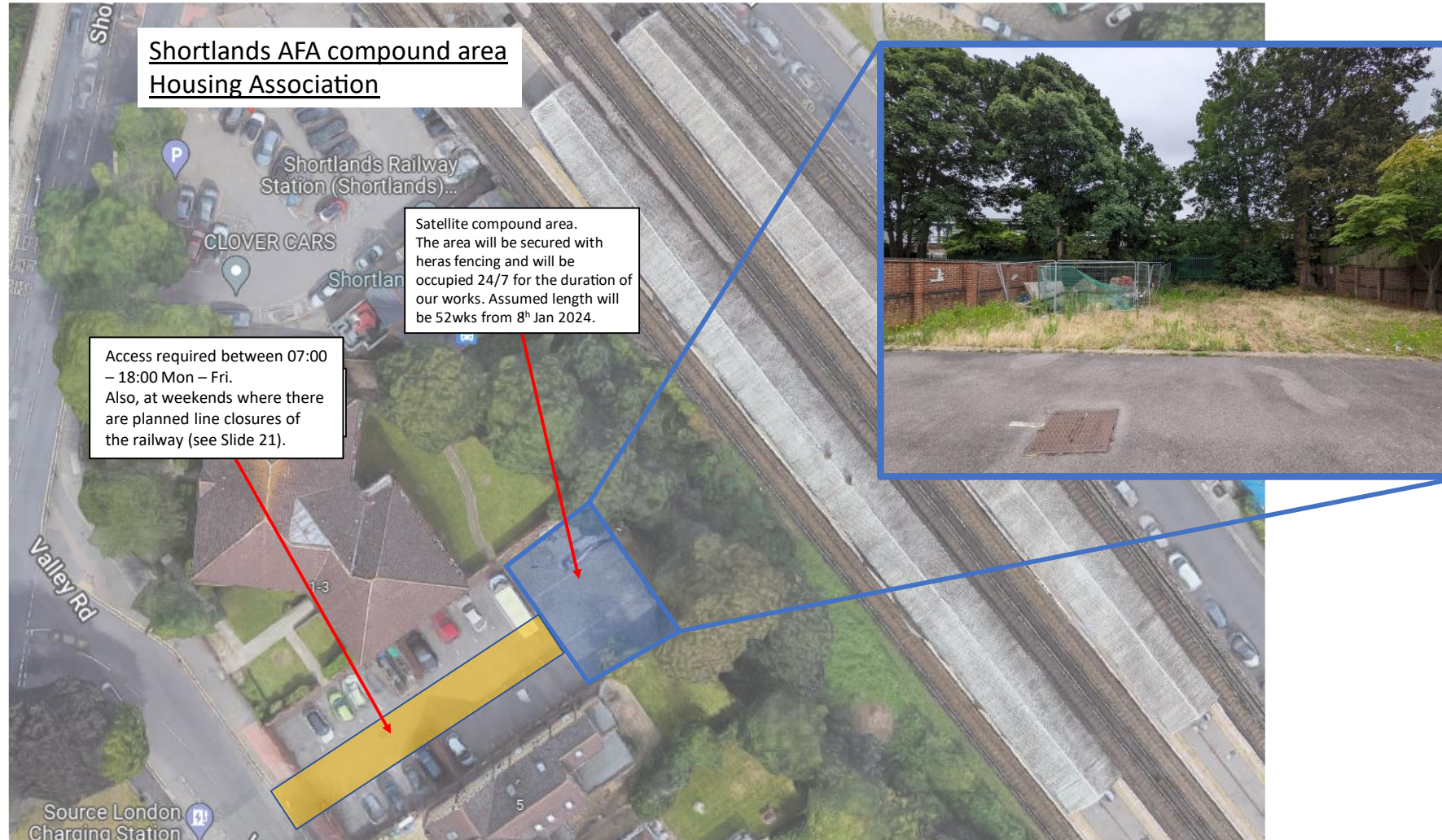


Proposed platform lift shaft to match existing platform buildings



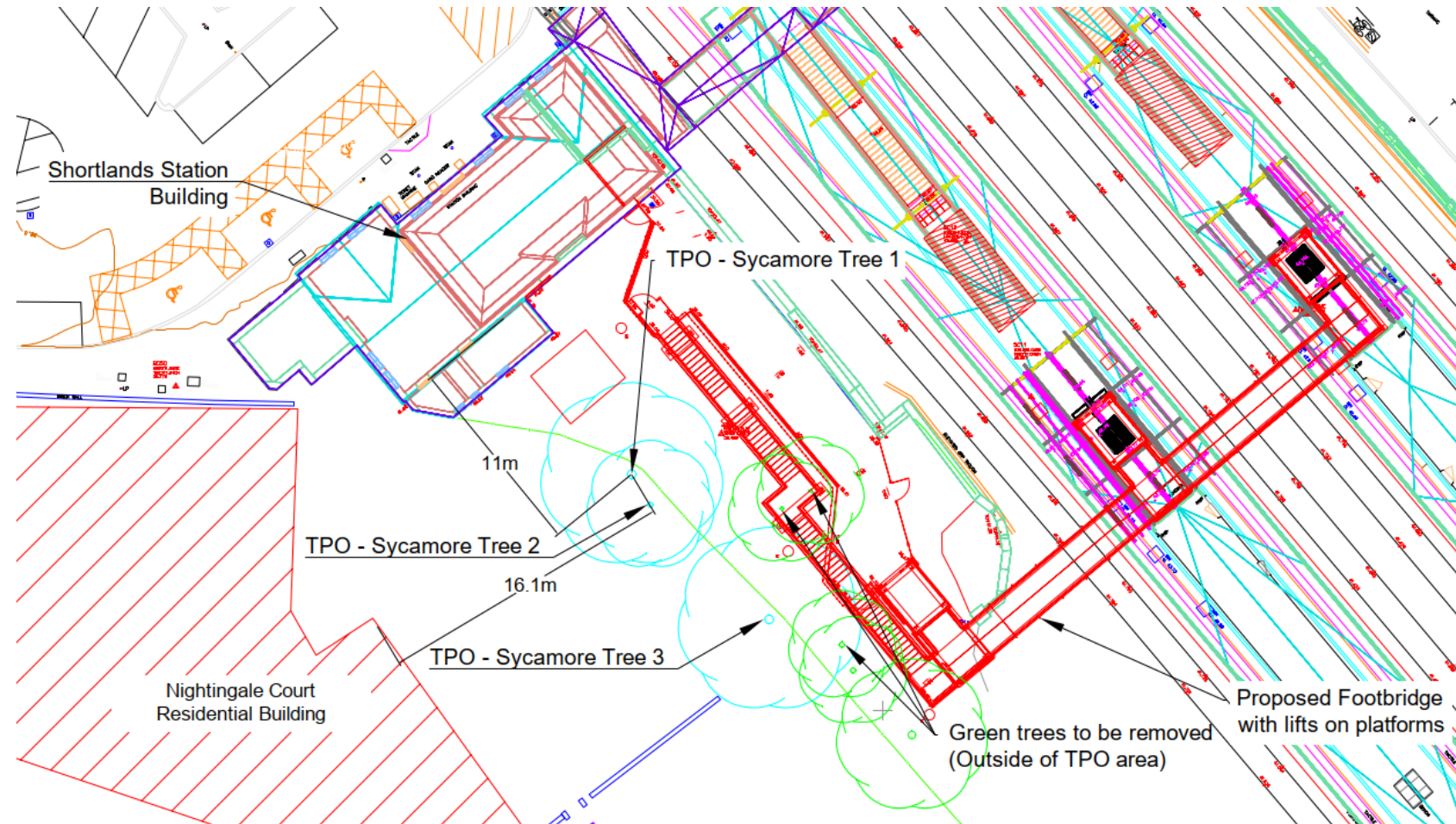
Architect's impression of new lift shafts, footbridge and emergency staircase, looking from ticket office end of platform

Satellite Compound



Vegetation Management

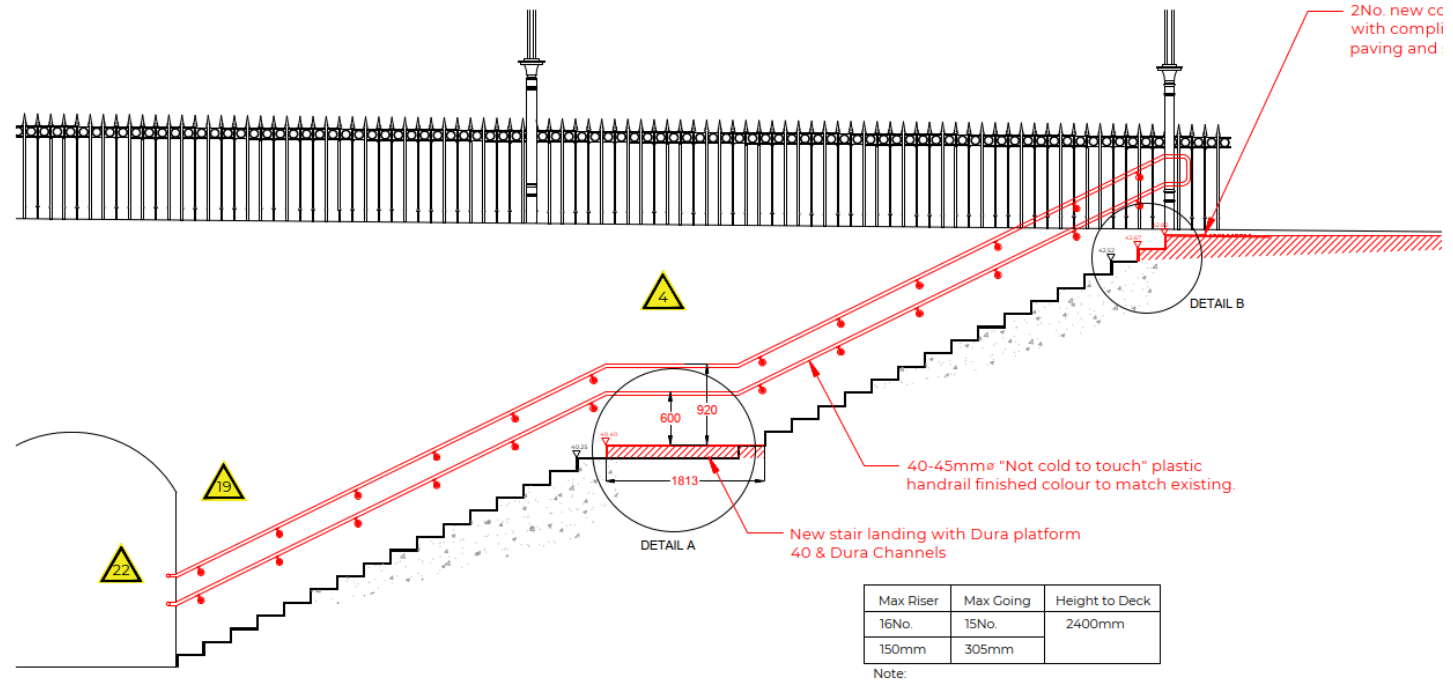
- Works to be carried out in January 2024
- Vegetation clearance within the footprint of the new AfA structure
- Pruning required on the large Sycamore trees adjacent to boundary fence



Enabling Works

Platform alterations:

- Works to be carried out in WK46 possession to both platform staircases:
 - Locally removal of existing steel handrails at platform level to provide more space to passengers.
 - Increase stairs risers at platform level and adjust the half landing.
 - Upper landing to be lifted and levelled with platform to increase platform circulation area





Platform Hoarding

- Work to be carried out in midweek nights:
 - Scaffold framed timber hoarding on platforms. Temporary lighting installed to comply with requirements.
 - Min hoarding distance of 1.8m to platform edge (as per Figure 1 & Figure 2).
 - Mass barriers to be used in other areas (as per Figure 3).

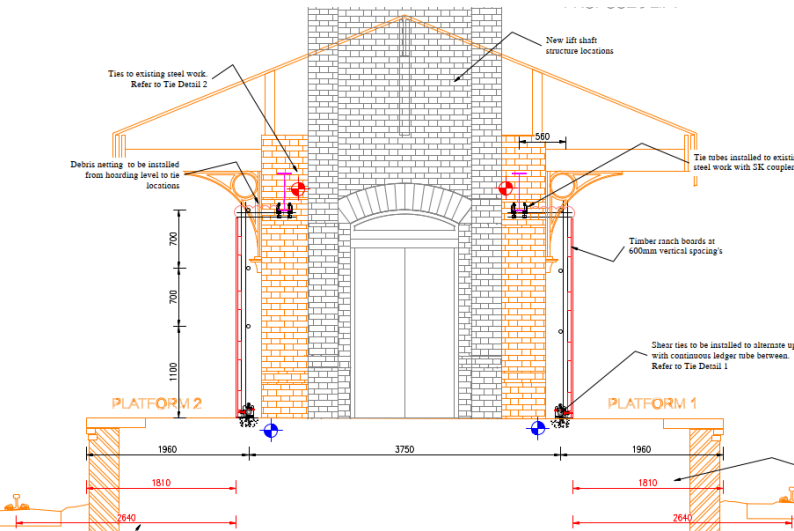


Figure 1



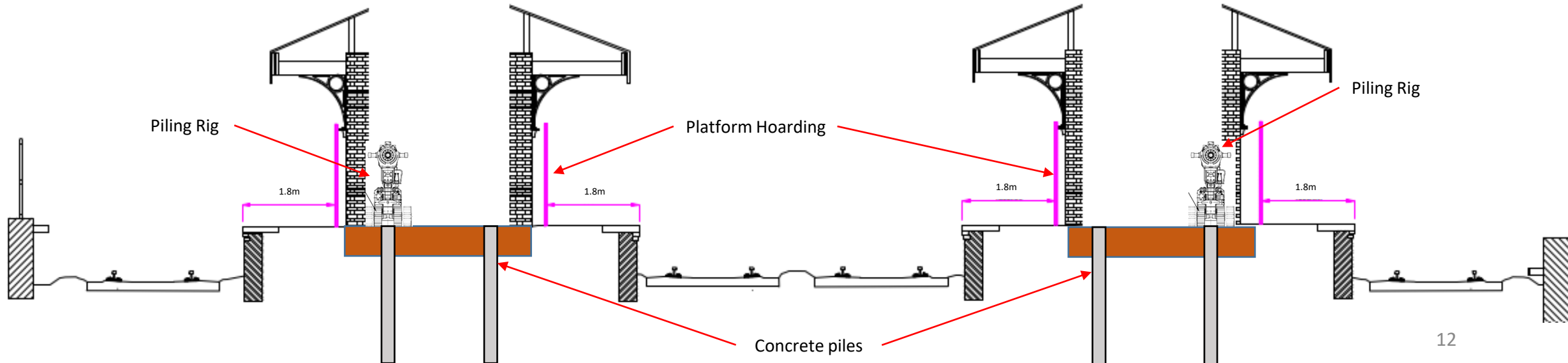
Figure 2



Figure 3

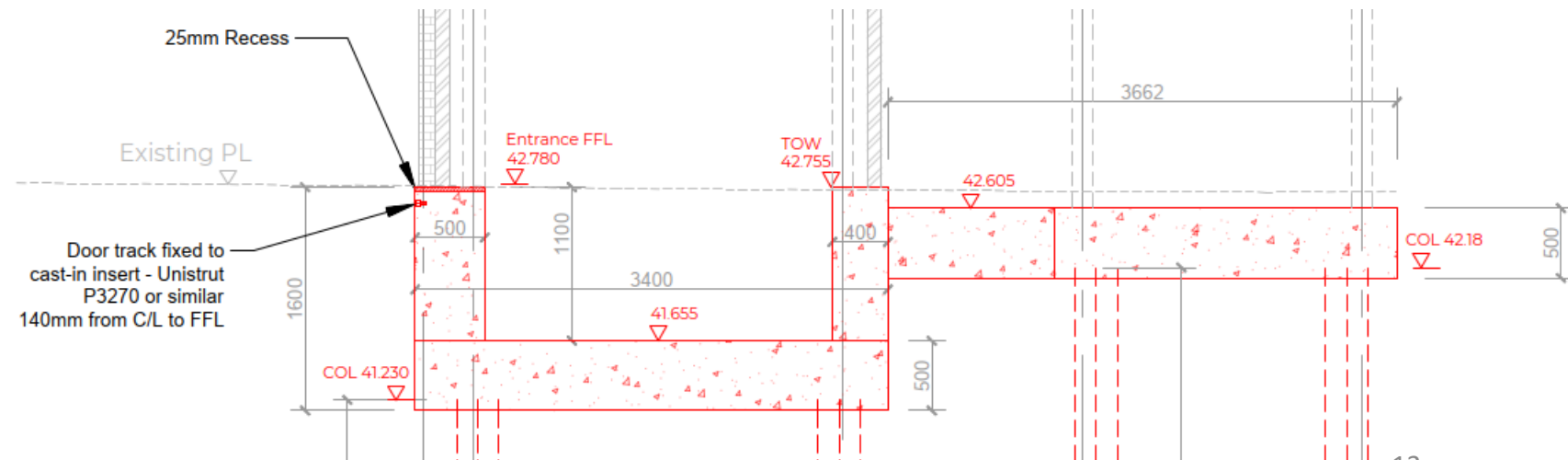
Foundations

- ▶ Piled foundations are required to support the new buildings. These are essentially reinforced concrete columns in the ground.
- ▶ Piling rigs for platform foundations will be lifted into the island platforms with the aid of a crane during midweek nighttime closures of the railway. Crane to be positioned within the station car park.
- ▶ Main piling works carried out during normal daytime working hours.
- ▶ Spoil material to be removed from platform during midweek night shifts.
- ▶ Once piles are cast and cured the piles will be broken down to their cut off level.



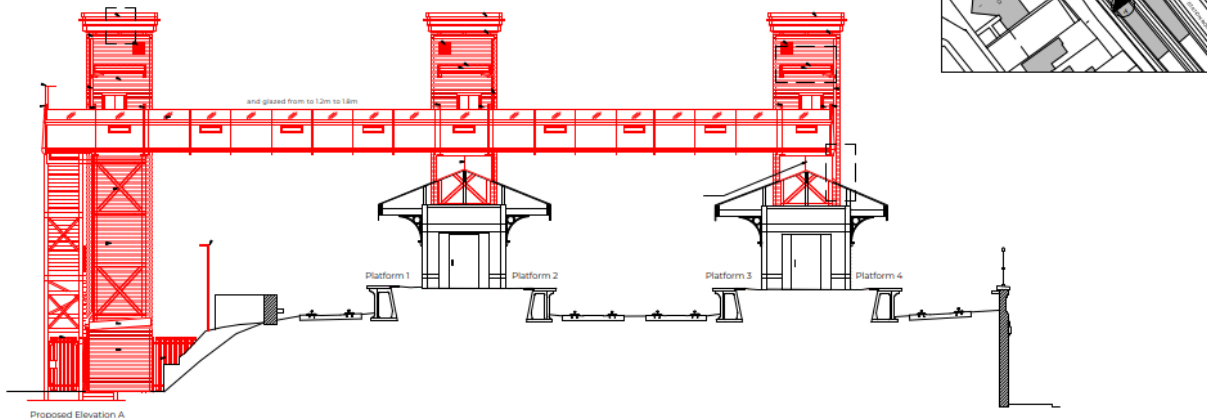
Reinforce Concrete Works

- Works carried out behind platform hoarding
- Install temporary works to support sides of excavation
- Excavate and pile break down
- Construct lift pit, base for machine room and footbridge supports with reinforced concrete
- Spoil material from excavation to be relocated during nights through the subway. Platforms will be swept/ cleaned at the end of each shift prior to opening to passengers.

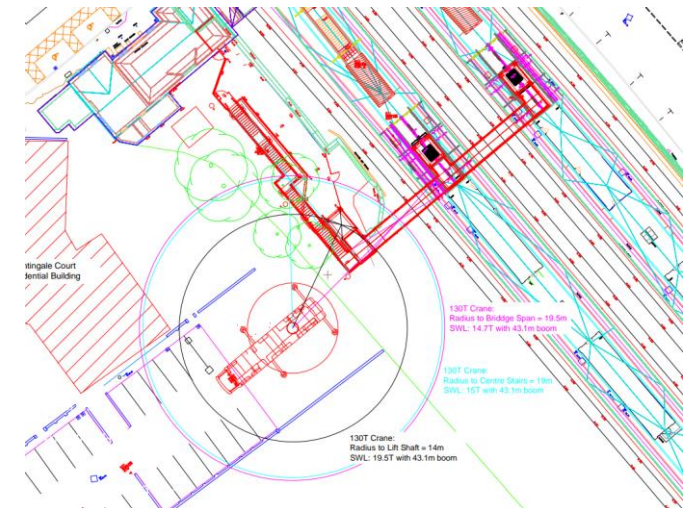


Lifting in Steelwork

- ✦ Closures of the railway required for the steelwork installation due to the proximity of cranes
- ✦ Platform canopy roofs will be locally opened in locations where the steelwork will be installed
- ✦ Crane to lift in steelwork to lift shaft, bridge span and stairs
- ✦ Temporary road closure of Station Road planned for platform steelwork installation on Sunday 12 May 2024
- ✦ Remaining steelwork installations will be carried out during night shifts with minimal disruption to road network



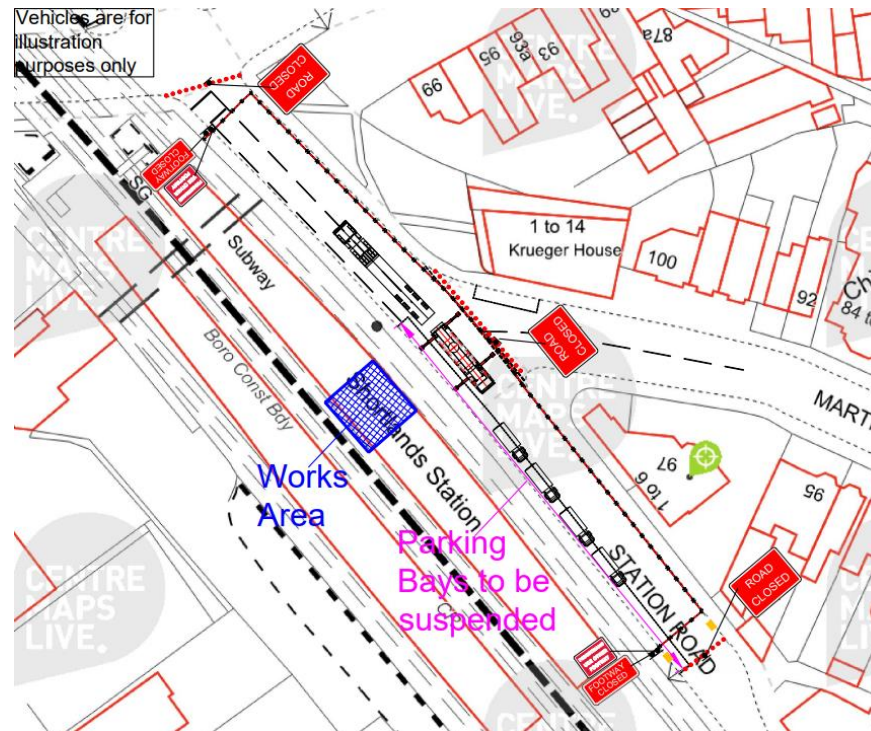
Crane positioned on Station Road for platform steelwork installation



Crane positioned in nightingale Court car park for garden area steelwork installation

Traffic Management

- Road closures required to accommodate the crane set up and installation of steelwork.
- Diversion route will be in place during the closures.
- Station car park will be closed on weekends when station is closed (see Slide 21 for dates)



Road closure of Station Road

Brickwork Installation

- Scaffolding will be installed to facilitate bricklaying.
- Feature bands will be included to match existing architecture.



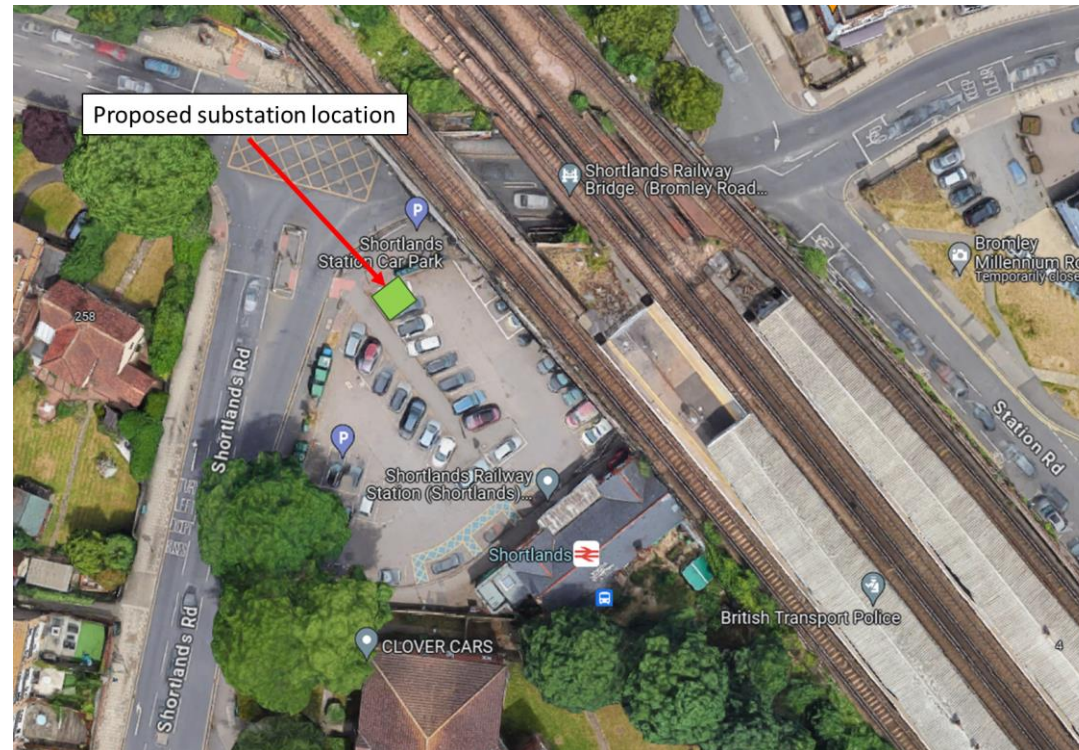
Scaffolding to lift shaft at Petts Wood station



Architects' impression of Platforms 3&4 lift shaft

New Substation

- New substation required for station power upgrade, which is required for lift equipment and new lighting
- Substation location to be within the station car park (large grey cabinet)
- New feeder pillar for station supply will also be installed in station car park (smaller green cabinet)



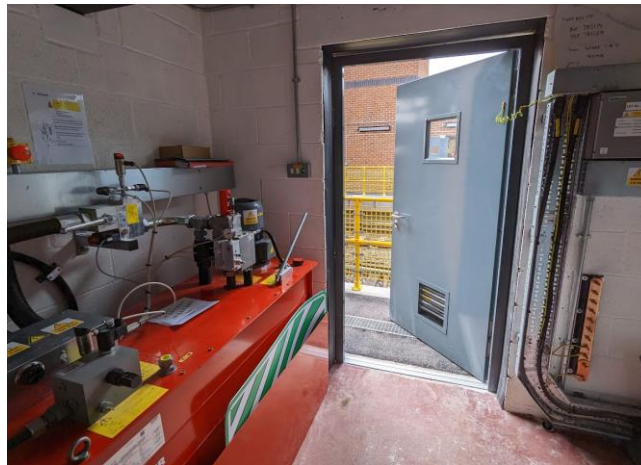
Proposed substation location

New Electrical and Lift Installation

- New power cabling will be distributed to the new lift shafts via cables routed in a network of buried ducts in the garden area and cable trays on the new footbridge structure.
- The lift fit out can then commence.
- M&E and lift works carried out during the normal working hours.
- Commence lift installation from August.
- New CCTV cameras will be installed to cover all new installations.



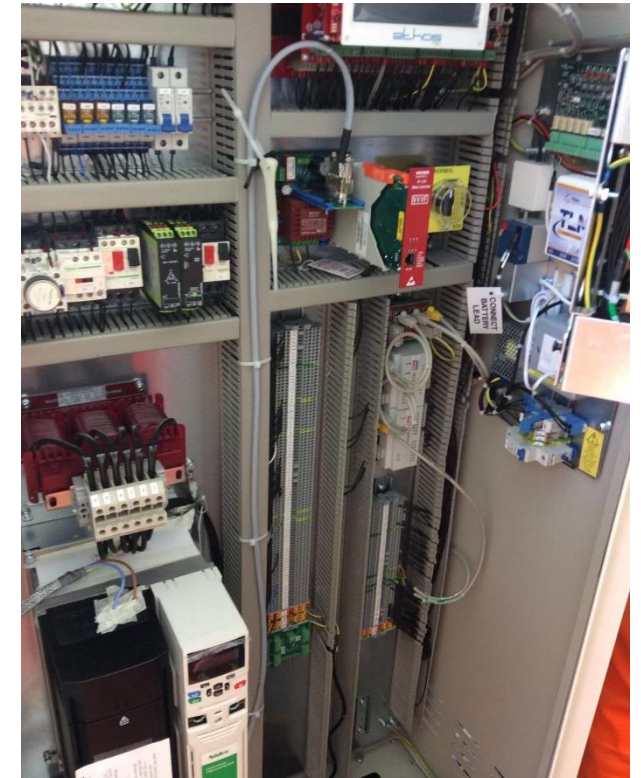
Completed lift shaft at Canterbury East AFA



Lift equipment inside Lift Motor Room



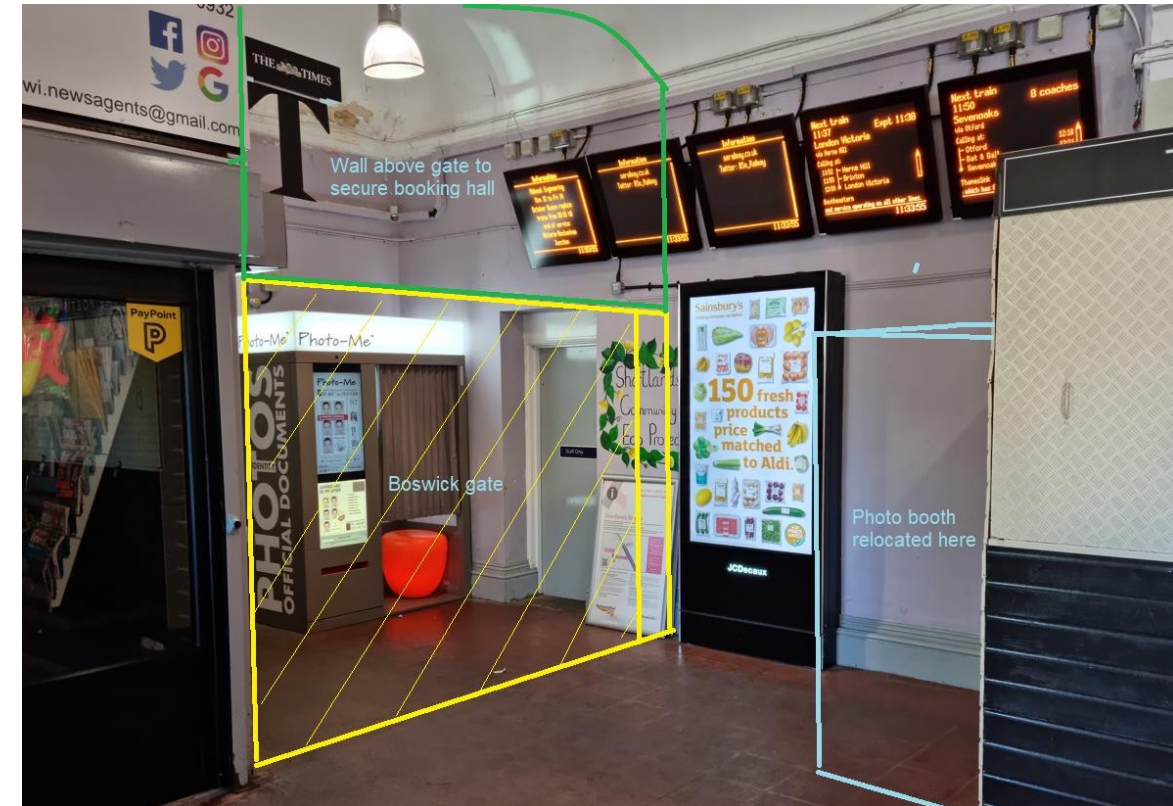
Electrical connections inside LMR



Lift circuitry

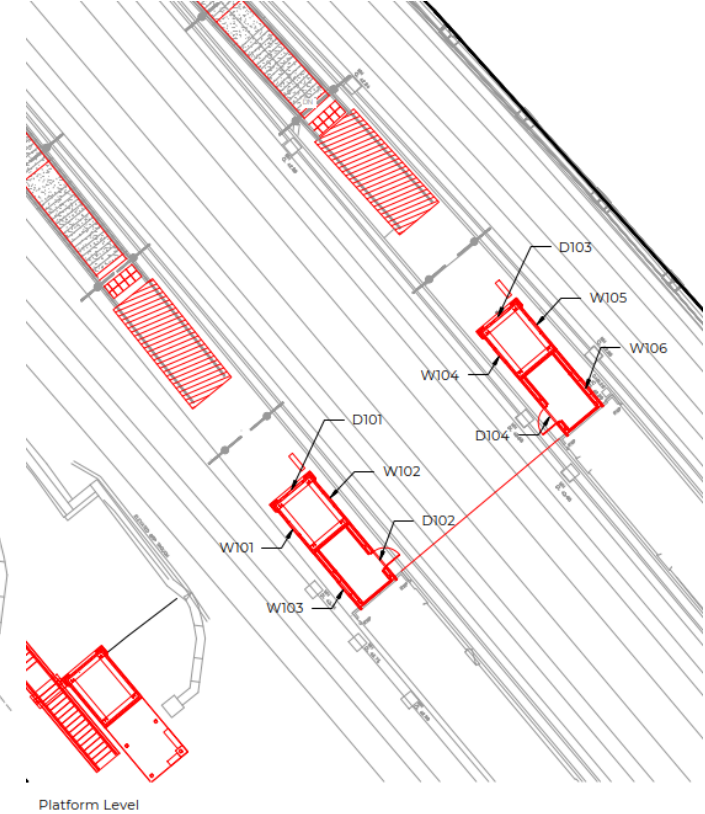
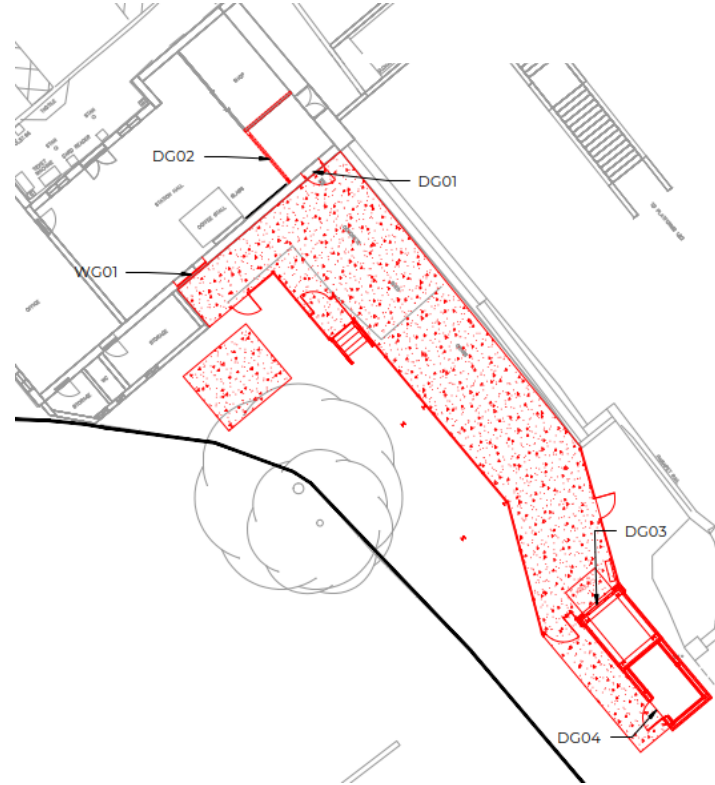
Ticket Hall Alterations

- New boswick gate and partitions above gate and shop to form secure night entry - works by BAM
- Photo booth to be relocated next to the coffee shop or completely removed – by Southeastern
- JCDecaux advert board is not affected by the works and can remain in place
- New screen to be installed with CCTV images of rear garden



Finishing Works/ Surfacing

- ▀ Works carried out during normal working hours.
- ▀ New double handrails to staircases
- ▀ Palisade fencing below staircase and garden area
- ▀ Fencing reinstatement at road level
- ▀ Enhancing the garden area, including the widening of the door to this area from ticket hall
- ▀ New drainage at platform level and garden area
- ▀ New perch seats
- ▀ Tarmac surfacing to the garden area
- ▀ Tarmac surfacing to the platform areas. Works carried out in a possession or mid-week nights.



Line Closures of the Railway - Weekends

Start Time	Start Date	End Time	Day	Planned Activity
01:15	11 February 2024	23:59	Sunday	Platform Alterations / Installation of scaffold access bridge
01:15	12 May 2024	23:59	Sunday	Installation of steelwork
01:15	20 October 2024	23:59	Sunday	Removal of platform hoarding and platform surfacing
01:15	09 February 2025	23:59	Sunday	Removal of scaffold access / contingency for completion works

Line Closures of the Railway – Midweek Nights

Start Time	Start Date	End Time	End Date	Planned Activity
01:00	04 March 2024	04:30	04 March 2024	Lift piling rig to platforms 1 & 2
01:00	19 March 2024	04:30	19 March 2024	Lift piling rig to platforms 3 & 4
01:00	03 April 2024	04:30	03 April 2024	Remove piling rigs from
01:00	14 May 2024	04:30	17 May 2024	Installation of steelwork
01:00	28 May 2024	04:30	31 May 2024	Installation of steelwork

N.B.:

- Further midweek night works will be required whilst the lines are open, to carry out essential works that cannot safely be completed around passengers in the daytime
- Midweek night access dates may be subject to change due to railway access planning changes & planned train movements

High Level Programme

- | | |
|----------|---|
| Jan 2024 | Start on site, vegetation clearance, enabling works |
| Feb 2024 | Enabling works, platform alterations |
| Mar 2024 | Piling, groundworks |
| Apr 2024 | Piling, groundworks |
| May 2024 | Steelwork installation, scaffolding, brickwork |
| Jun 2024 | Steelwork installation, scaffolding, brickwork |
| Jul 2024 | Steelwork installation, brickwork, mechanical & electrical work |
| Aug 2024 | Scaffolding, brickwork, cladding, roofing, mechanical & electrical work, CCTV |
| Sep 2024 | Mechanical & electrical work, CCTV, lift installation, landscaping, drainage |
| Oct 2024 | Lift installation, landscaping, drainage, surfacing |
| Nov 2024 | Lift installation, testing & commissioning |
| Dec 2024 | Testing & commissioning, demobilisation |
| Jan 2025 | Demobilisation |
| Feb 2025 | Contingency access in planned engineering hours (if required) |



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Thank you

