



*Farnborough
North and Hatches
Level Crossing
Project Overview*



Objectives of the scheme

The key risk driver at these locations is safety.

Network Rail has a strict statutory duty to run a *safe* railway network and eliminate risks from it.

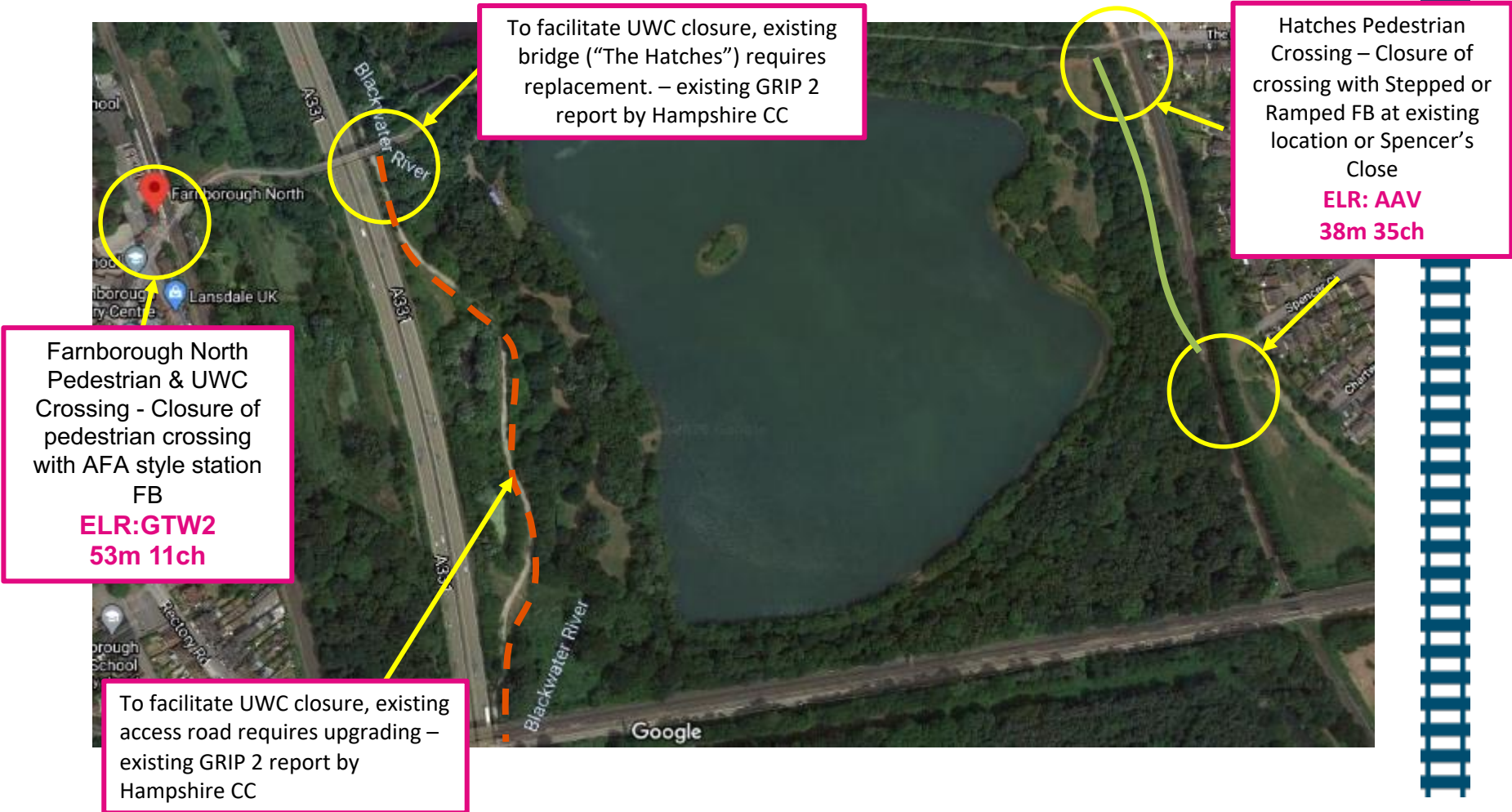
Level crossings are one of the key sources of catastrophic risk, we have a funded strategy to reduce it.

Farnborough North and Hatches are high risk footpath level crossings located in the Surrey Heath and Hampshire districts. Both routes serve as public rights of way routes within our strategy.

Both crossings have significant and irremovable safety issues e.g. restricted sighting of trains at Hatches currently mitigated by trains sounding their horns.

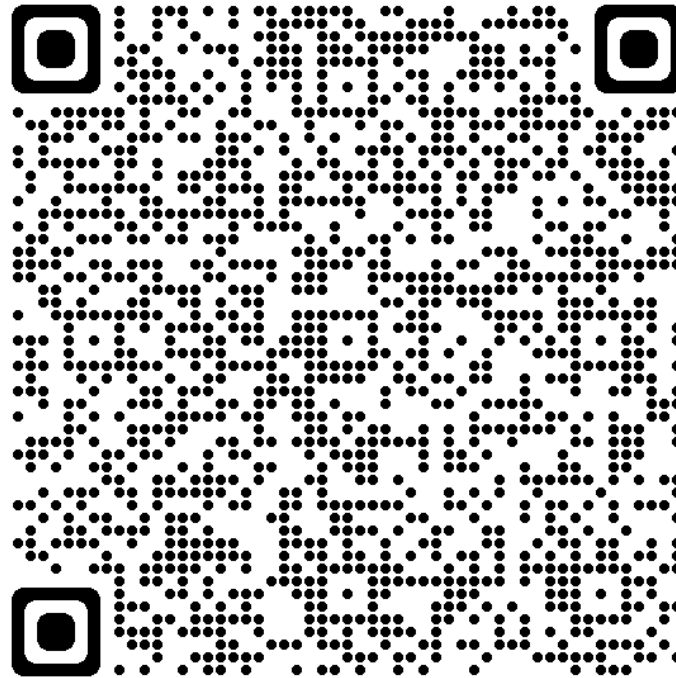


Introduction to Farnborough North



Visualisation: Farnborough North and Hatches

Web page link -



Proposed diversion route



- This image shows the new diversion route. A new footpath will be created to the east of the fisheries to connect up to the existing footpath at Hatches.

Farnborough North LX

- Farnborough North LC is located to South of Farnborough North station.
- The Level Crossing is pedestrian & user worked with a site keeper in place.
- Existing pedestrian crossing has an MSL warning system in place with lockable wicket gates.
- Crossing links residential areas of Frimley Green & Farnborough North.





Public right of way

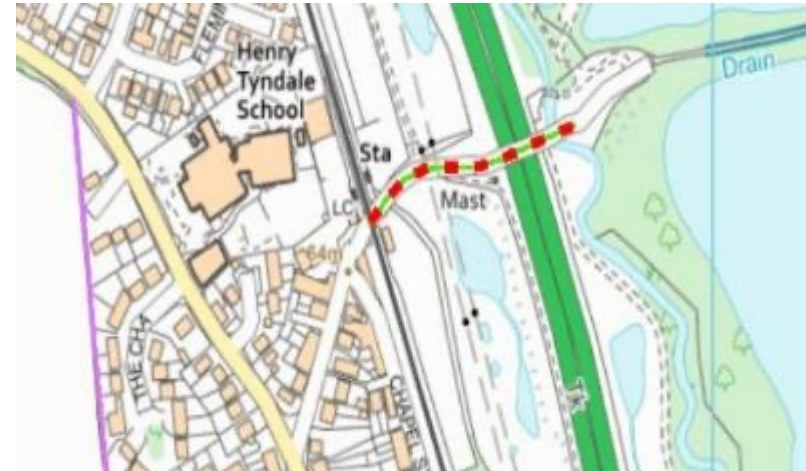
Farnborough North

Farnborough North level crossing carries bridleyway 24. This scheme includes downgrading of it where it crosses the railway, to a footpath status and diversion onto a new footbridge.

Bridleway 24 is subject to a Traffic Regulation Order (TRO) which limits the use to footpath status only.

The new bridge at Farnborough North will include cycle gutters making it accessible for cyclists.

A lift would also be available for those with enhanced characteristics, baggage, buggies, etc.



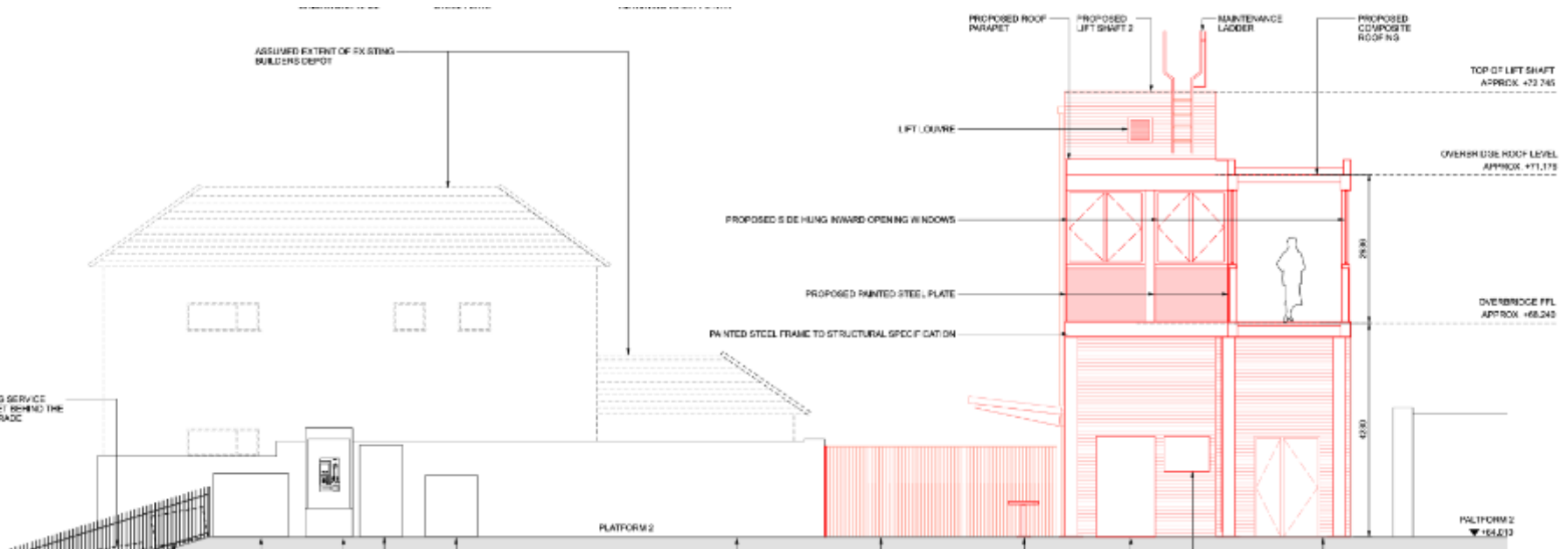
Farnborough North Selected Option



Farnborough North Level Crossing



Farnborough Selected Option



The height from the top of the lift shaft to the platform is 8.73m.

The height from the top of footbridge roof to the platform is 7.16m.

Options at Farnborough North level crossing

Option	Viable?	Why/why not
Close the crossing with no alternative route	No	Essential pedestrian link. No platform to platform access
Close crossing and provide ramped bridge	No	Scale, incongruity and impact on surrounds. Cost
Close crossing and provide an underpass	No	Lack of space and flooding potential. Propensity for anti-social behaviour
Retain the attendants, i.e. leave as it is now	No	Obsolete measure deployed by exception. Not a long term viable option due to safety and cost
Reduce attendant hours	No	Exposes the public to risk when they are not present
Close crossing and provide stepped bridge with lifts	Yes	Provision of accessible solution necessary

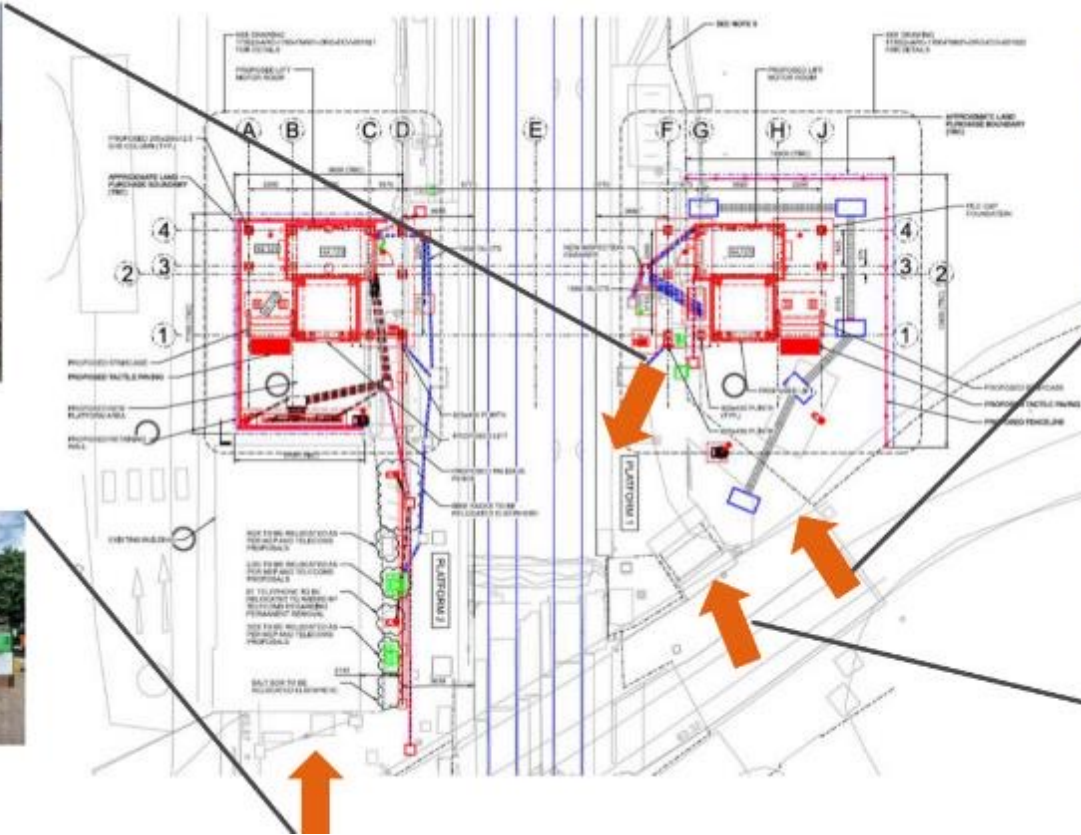


Farnborough other Options Considered



- This option would require working between the Gibbs and Dandy office building and the gas main exclusion zone, West of the railway.
- Construction works taking place nearer the existing level crossing pose risk of injuring members of the public.
- More land take needed from third parties such as Gibbs and Dandy and Sawyer land
- Temporary railway crossing with appropriate access would have to be established.
- The proposed structure is located above the existing level crossing, which would require diversion of a large number of services running below the existing level crossing prior to installing the structural foundations.
- Work taking place adjacent to residential buildings. This option requires a large amount of buried services to be relocated/diverted.

Preferred Option



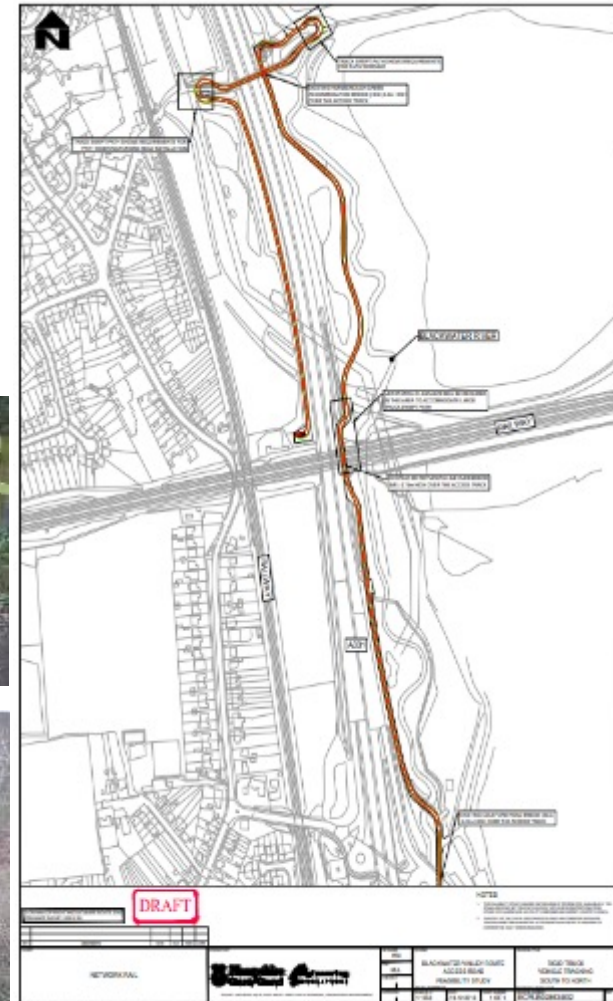
- Bridge conveniently located on the platform
- Clear flow lines
- Fence separating flowing bridge people from those standing on the platform
- Very little access closure time during construction



UWC Diversion

To provide the UWC vehicular diversion, the project will be;

- Demolishing the existing Hatches No. 1 concrete footbridge over the Blackwater River and constructing a new pre-cast pre-stressed concrete single span road bridge on new concrete abutments with vehicle parapets.
- A new dedicated pedestrian footpath will also be located on the southern side.
- Members of public who has had previous access to this new proposed route, would be reverting back to the original route prior to FB569 closure.



Hatches level crossing

- Hatches is a public footpath crossing located in Frimley Green, Surrey. It lies between Frimley & Ash Vale Stations on the AAV line.
- The crossing is surrounded by a residential estate to the east and private fishing lakes to the west linking to Farnborough North level crossing
- Protection method at the crossing is signage and whistle boards only.
- The crossing is well used by dog walkers, cyclists, commuters and visitors to the fishing lakes.



Safety at the Hatches level crossing

- Network Rail's legal duty to protect the public
 - Risk assessment
 - High risk site
- Hatches level crossing issues:
 - Non-compliant sighting
 - Vulnerable users
 - Near miss events
- We are not meeting our legal duty to bring the risk to its lowest levels



Safety at Hatches level crossing

There is not enough time to cross safely by people spotting approaching trains.
Whistle boards and audible warnings already installed.



Even with these mitigations, the misuse, both deliberate and accidental, has continued resulting in **8 near misses** in the last five years.

A near miss classified by the train driver applying the emergency brakes as so close.



Use and misuse of Hatches crossing



Hooded person with limited vision

Object placed on line



Pram dragged backwards

All three slide photos from a two day sample



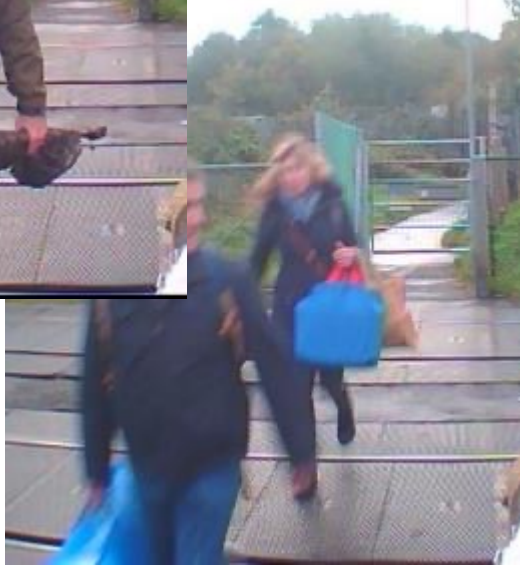
Mounted cyclists



Mobile phone and headphone distraction



Encumbered users



Public right of way

Hatches crossing

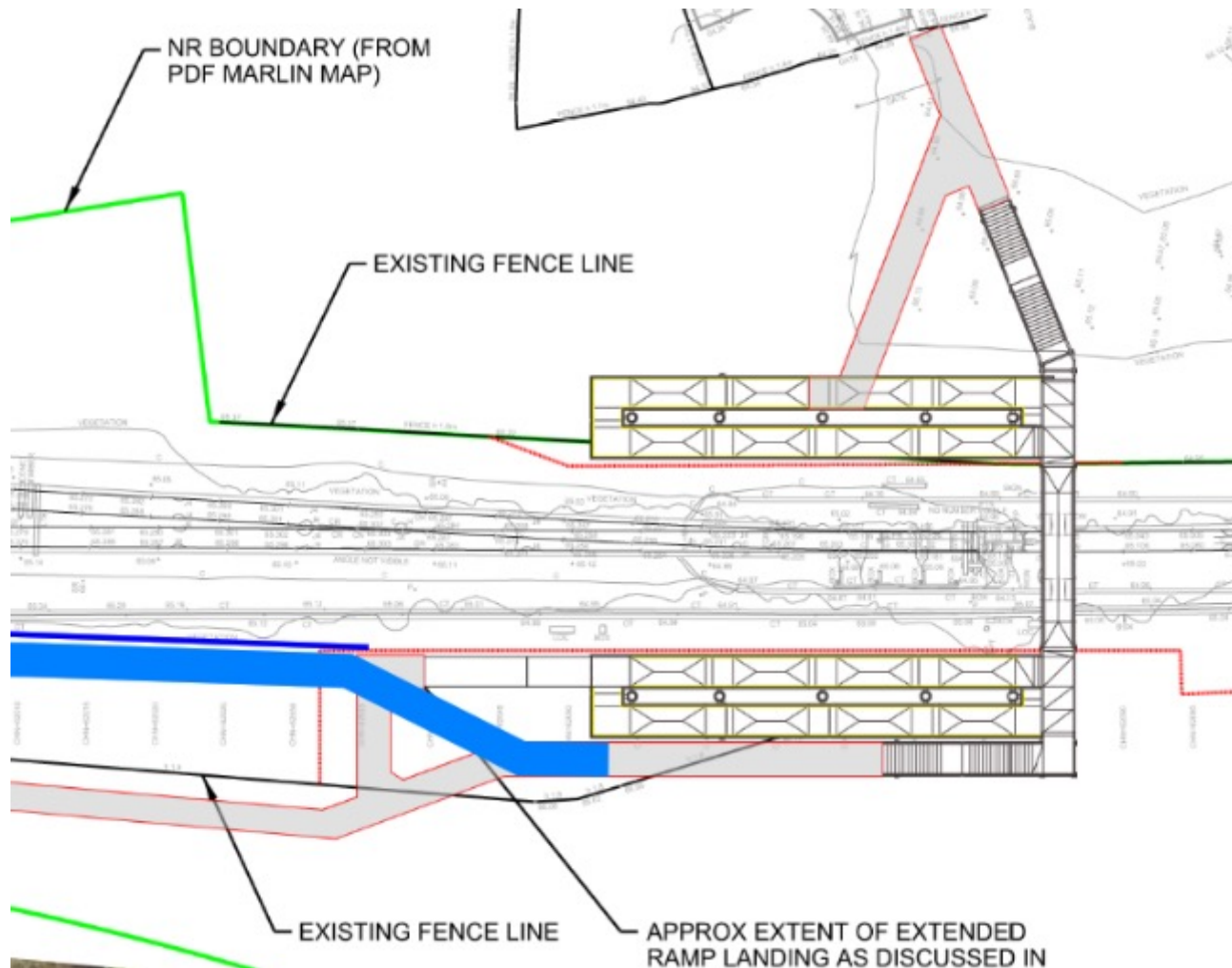
Hatches carries bridleway 19. This will be diverted from the crossing to the new accessible footbridge at Spencers Close.

Bridleway 19 is also subject to a TRO as it crosses the railway.

The section of the diversion route on the proposed bridge will be a public footpath only.

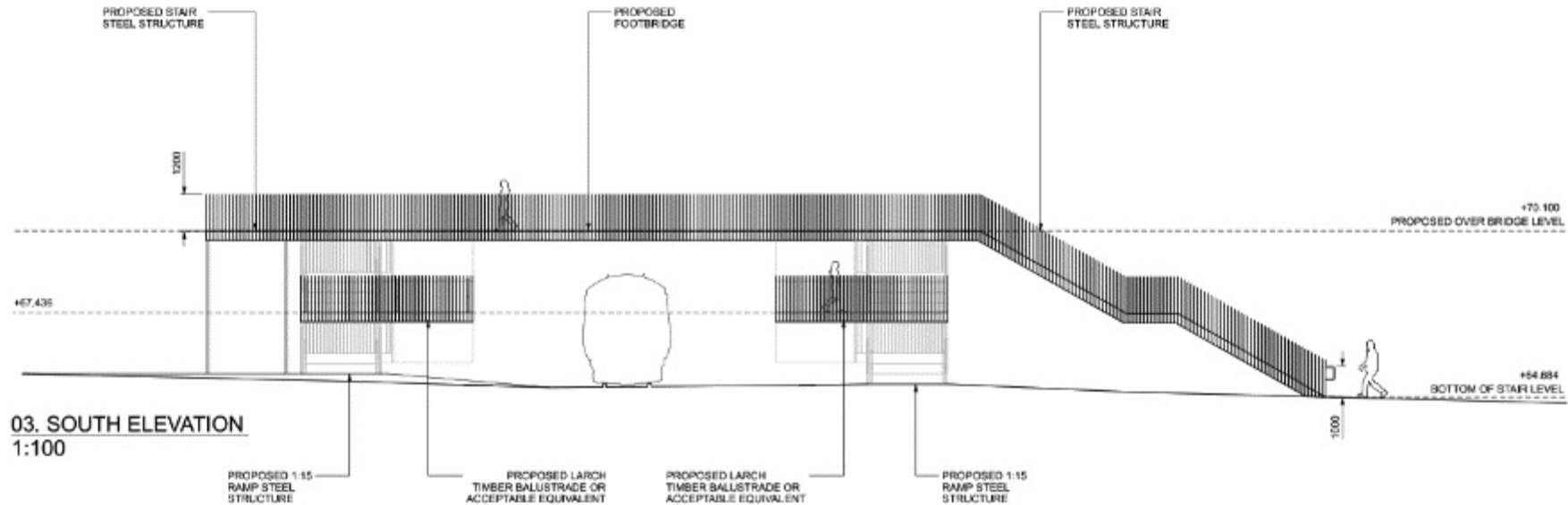


Hatches Selected Option



Option 3b - This option proposes the closure of The Hatches level crossing and installation of a new footbridge with 2No. stacked ramps and 2No. staircases, south of the existing Hatches level crossing at Spencer Close

Hatches Selected Option



This image shows the elevation of the proposed footbridge. The structure varies in height but is roughly 6m at its highest point (main span to floor). Material wise the bridge will be fabricated of steel and painted in a colour of NRs choice.



Hatches selected option



Hatches selected option

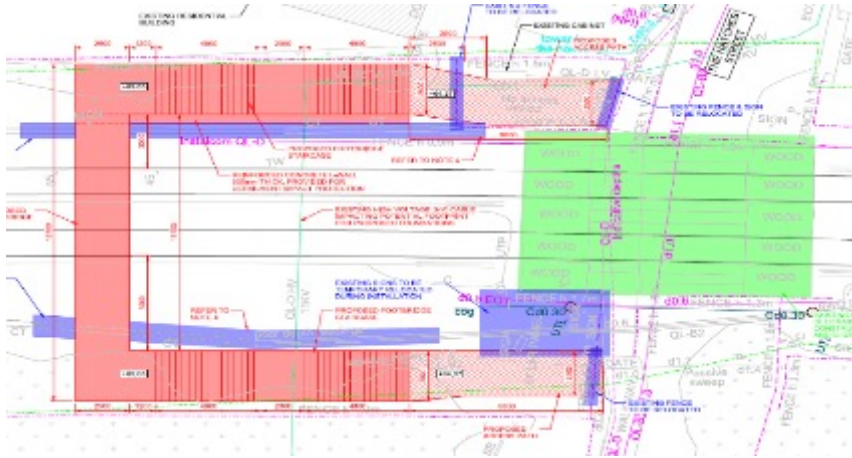


Options at Hatches level crossing

Option	Viable?	Why/why not
Close the crossing with no alternative route	No	Essential pedestrian link between Frimley and Farnborough No suitable alternative nearby
Close crossing and provide stepped bridge	No	Accessible solution required
Close crossing and provide an underpass	No	Spatial constraints at the crossing High likelihood of flooding issues and anti-social behaviour
Install Miniature Stop Lights like Farnborough North	No	Risk is reduced but not to a suitable level. Misuse continues. Disproportionately costly relative to the benefits achieved
Keep as it is	No	Intolerably high risk. NR not fulfilling legal its core obligations
Locked Gates	No	Potential for trapping people can only be overcome by having an attendant
Close crossing and provide ramped bridge	Yes	Costly, but eliminates risk and provides long term solution



Hatches Other Options Considered



- This option is over the current level crossing. No space for a site compound.
- Would require disruption to The Hatches street for material drop off.
- Tree Preservation Order in place to the North-Eastern side.
- Not providing level access would prevent less able pedestrians from crossing the tracks.



- Wide ramps nearby Spencers Close – more land take needed.
- Extensive de-veg required east and west of the tracks.
- Requires the most man hours (increasing overall risk).

Conclusions

Both crossings are unsafe and something needs to change.

We propose to close the level crossings.

Both are being offered alternative methods of crossing the line in a safe manner, with no more waiting to cross.

Any Questions?

