



Maidenhead Bridge

The Maidenhead Bridge over the River Thames at Maidenhead is a Grade II* listed structure. Overhead electrification on top of the structure will be installed. The design is being undertaken with advice from heritage specialists to help ensure that the impact on the structure is acceptable. Once installed, the gantries would be visible on the bridge from viewpoints along the river and nearby.

As an example, electrification for the Heathrow Express involved the provision of overhead electrification over Wharncliffe Viaduct in Ealing.



Wharncliffe Viaduct at present

Example of similar overhead electrification installations.



Maidenhead Bridge at present



Maidenhead

Maidenhead Stabling & Turnback

A stabling facility will be provided for 6 Crossrail trains in the former goods yard west of Maidenhead station, immediately beyond the junction of the Bourne End Branch.

Six tracks will be laid out as single sidings. Between alternate tracks, a platform will be provided to allow access to the trains for drivers and other staff.

The eastbound Relief line track will be realigned northwards (and re-routed through platform 5 at Maidenhead station).

Two reversing sidings will be installed between the existing westbound Relief line and realigned eastbound line tracks.

Staff facilities and car parking will be needed. The road access from Silco Drive will be extended to the staff facilities building and car parking will be modified.

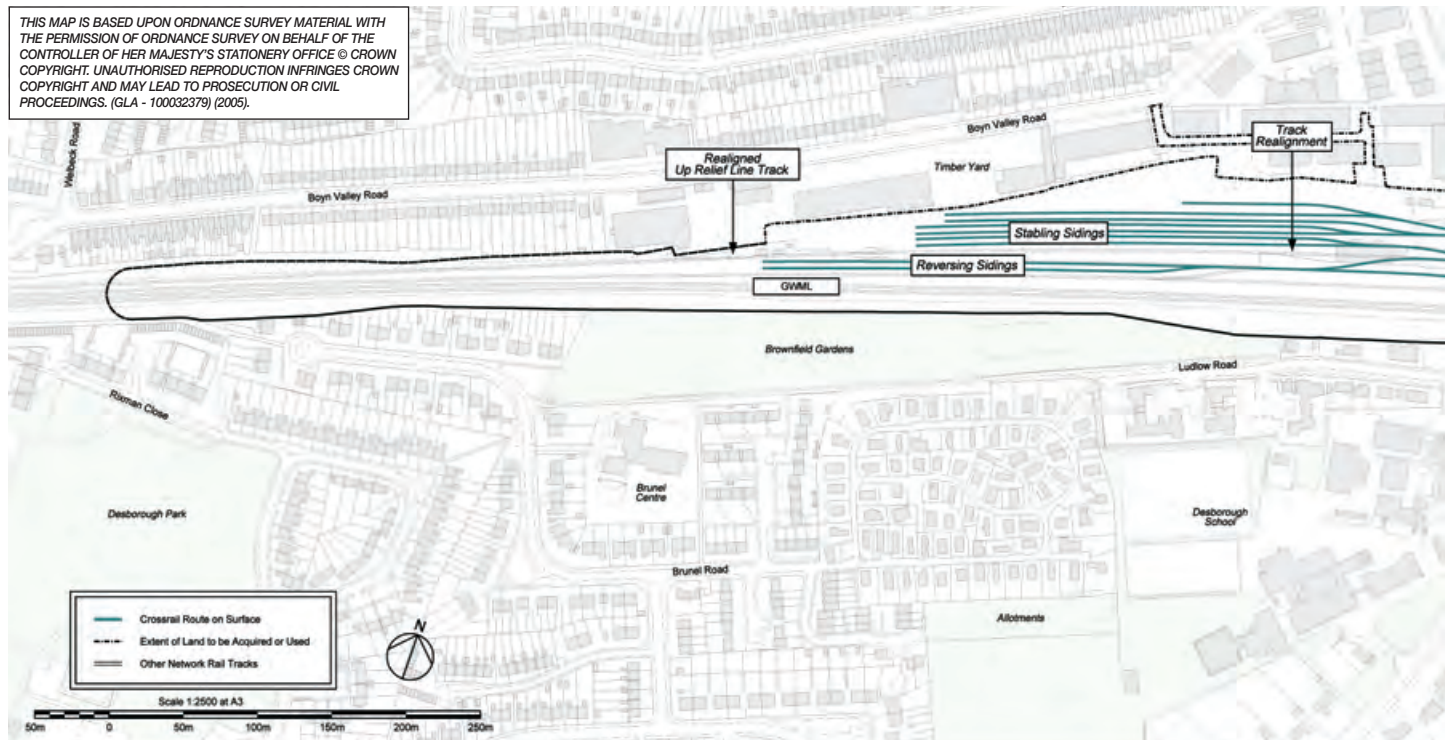
The likely environmental effects of the proposals will be:

- Operational noise from the use of the sidings
- Lighting of the stabling area. (This will be designed to control light pollution into the sky or toward adjacent buildings in accordance with best practice)



Stabling site

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Maidenhead Stabling & Turnback



Maidenhead Station Improvements



Improvements to ensure that efficient station facilities are provided include opportunities to improve the integration of the station with other types of transport and:

- Improve passenger access from Shoppenhanger's Road to the station ticket hall
- Provide a new ticket hall
- Re-arrange forecourt

The existing platforms will be extended to cater for Crossrail 10-car trains. A modified layout has been designed to provide a new terminating platform for Marlow Bourne End services (platform 6).

There are 5 worksites for the works planned for the station and the turnback facilities. These are at:

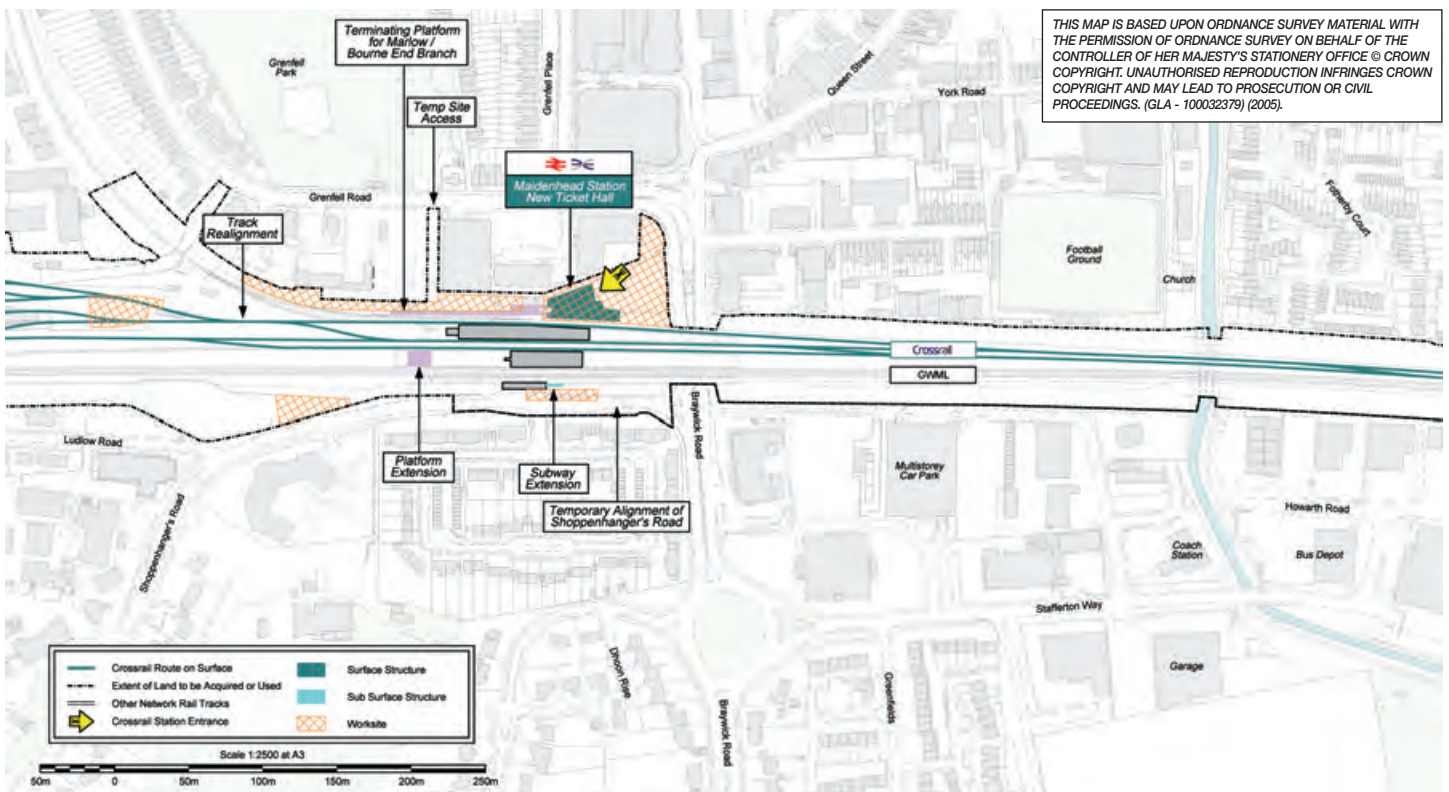
- The northern station car park

- The northern platform
- Silco Drive
- Shoppenhanger's Road
- The southern station car park

Some parking spaces will be temporarily lost during construction. Exact details will be subject to detailed design and discussions with Windsor and Maidenhead Borough Council.

Lorries will route from the M4 and A4 to all five worksites via the A303 Braywick Road/Grenfell Place.

Mitigation measures will be employed to limit construction noise impacts. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Maidenhead Station



Maidenhead

Service Improvements

Train services to and from Maidenhead will be improved by providing some journey time savings and a greater variety of journey opportunities.

Crossrail Maidenhead station will provide:

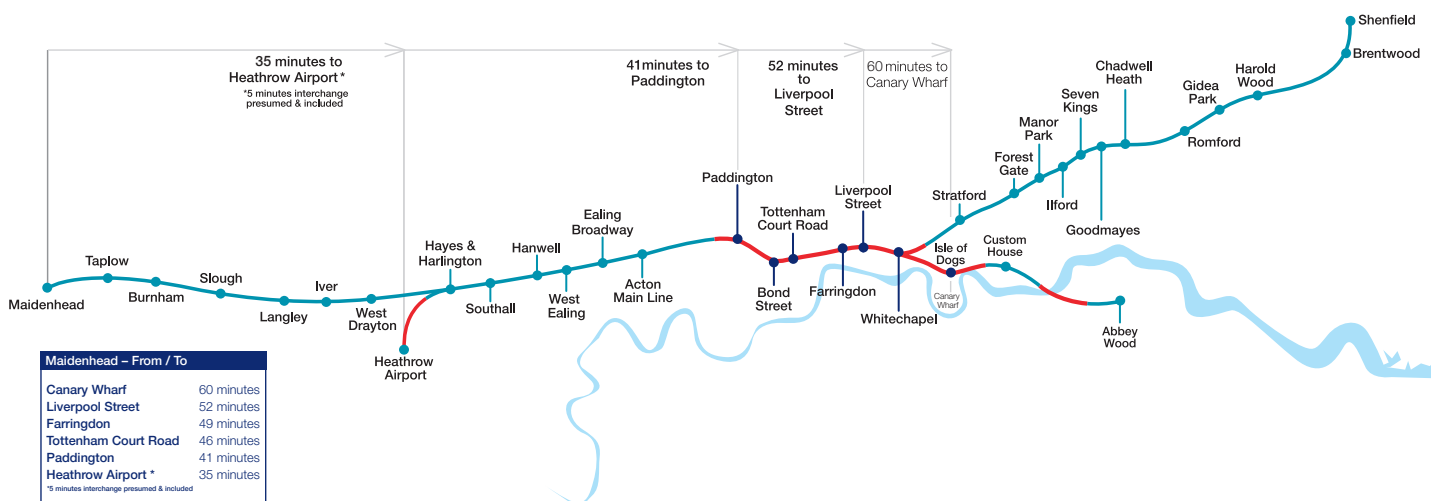
- Direct journey opportunities to central London
- 4 trains per hour during peak periods to central London
- Substantial new passenger capacity and crowding relief into central London

Bourne End/Marlow services will terminate in a new bay platform at Maidenhead. Passengers wishing to travel beyond Maidenhead will need to interchange. One through train from Bourne End to Paddington could be provided in the morning peak.

The diagram below highlights some of the journey times that will be possible by passengers travelling on Crossrail services to and from Maidenhead station.

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.

With Crossrail operational, the total number of seats available on trains to and from Maidenhead will increase, as a result of longer, more frequent trains.



Typical Crossrail journey times from Maidenhead



Taplow

Station Improvements



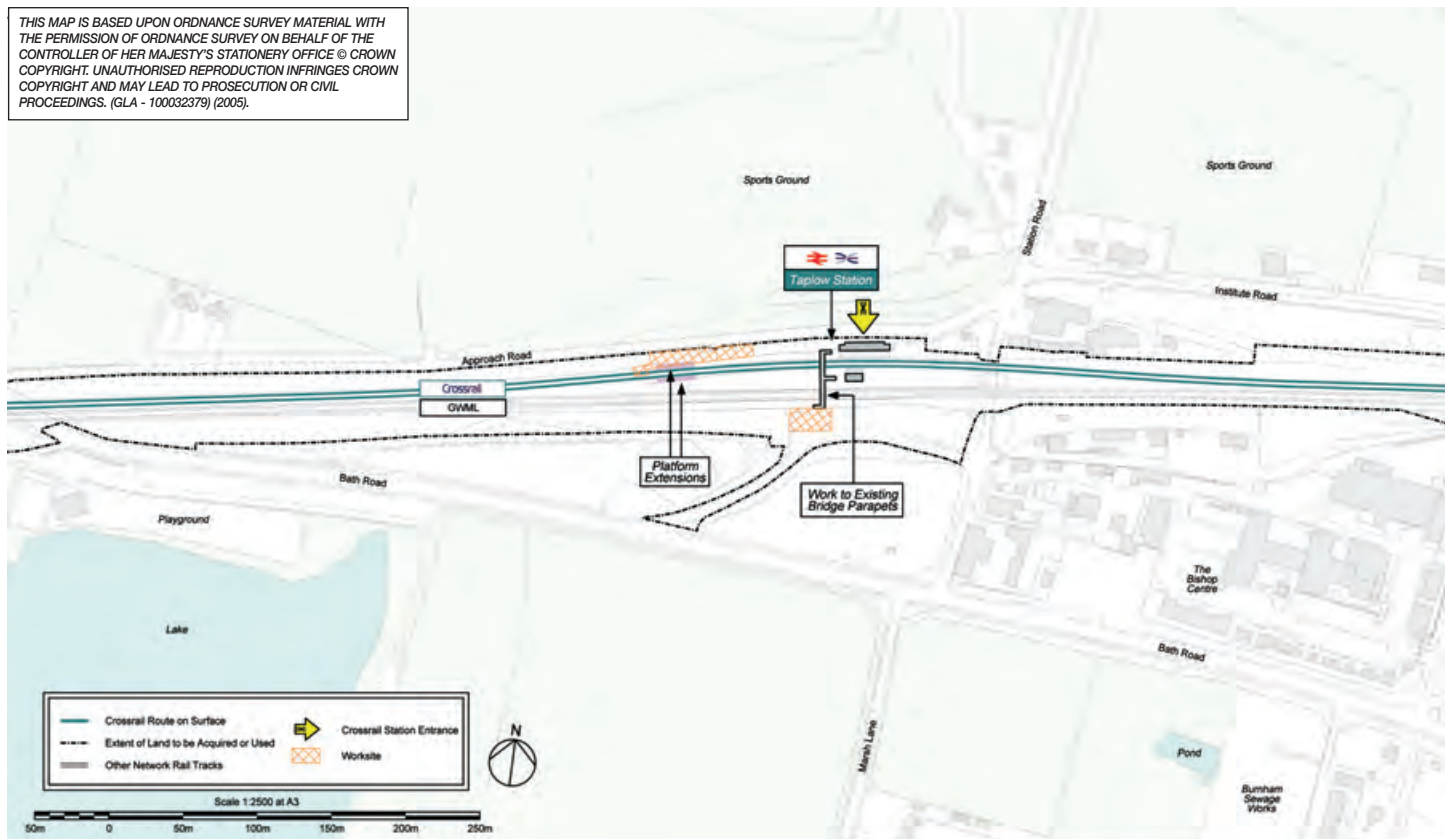
There will be a number of minor improvements at Taplow, including new ticket machines and platform extensions.

There will be extensions to platforms 3 and 4 at the western end to cater for 10-car Crossrail trains.

There will be no major alterations to the station.

Overhead electrification will be installed along the route between Maidenhead and Airport Junction.

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Station improvements at Taplow



Taplow

Service Improvements

Train services to and from Taplow station will be improved by providing direct journey opportunities, substantial new passenger capacity and crowding relief into central London.

Crossrail Taplow station will provide:

- Direct journey opportunities to central London
- 4 trains per hour during peak times to central London

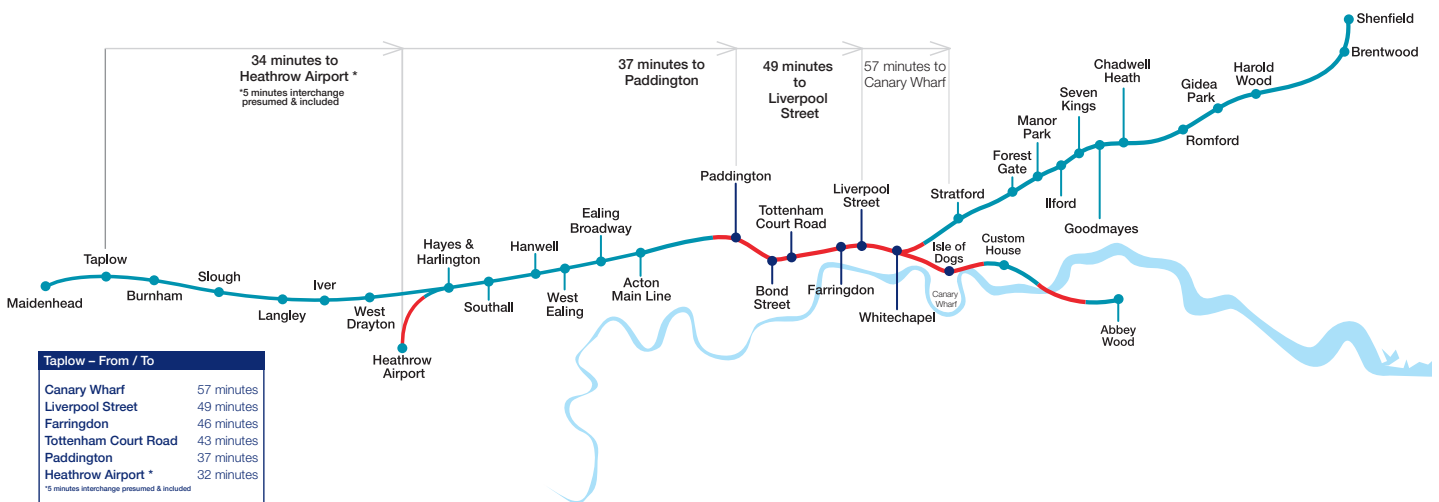
The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Taplow station.

With Crossrail operational, the total number of seats available on trains to and from Taplow will increase as a result of the longer trains.

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Taplow Station at present



Typical Crossrail journey times from Taplow



Burnham

Station Improvements



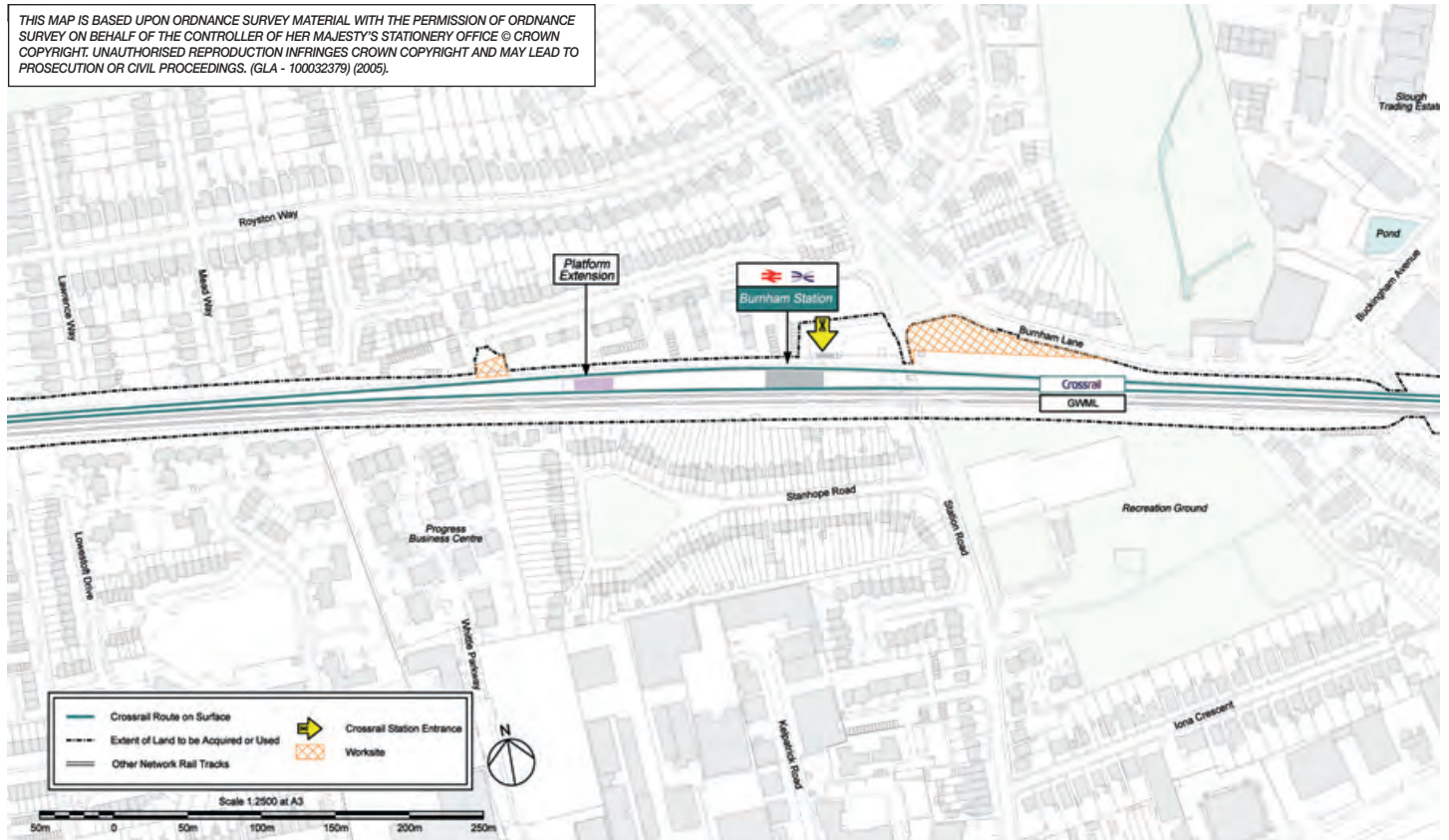
Improvements at Burnham include new ticket machines, customer information facilities and platform extensions.

Burnham station has a single island platform between the Relief lines serving platforms 1 and 2. The station platform at the western end will be extended to take new 10-car Crossrail trains.

A worksite is proposed adjacent to Burnham Lane on the northeast side of the station.

No major alterations to the station are proposed.

Overhead line electrification would be installed along the route between Maidenhead and Airport Junction. These are relatively minor works.



Station improvements at Taplow



Burnham

Service Improvements

Train services to and from Burnham station will be improved by providing new direct journey opportunities to central London and substantial new transport capacity and crowding relief into central London.

Crossrail Burnham station would provide:

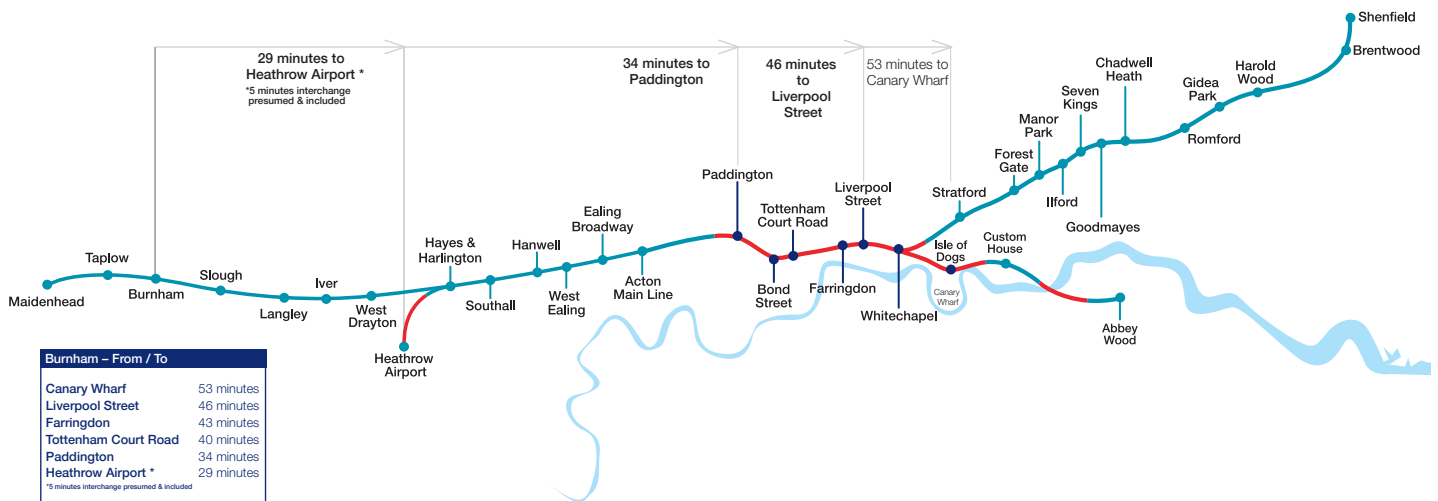
- Direct journey opportunities to central London
- 4 trains per hour during peak times to central London

The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Burnham station.

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Burnham Station at present



Typical Crossrail journey times from Burnham



Burnham to Slough (2)

Stoke Poges Lane Bridge

Stoke Poges Lane Bridge is a narrow road bridge with a separate footbridge. Crossrail propose raising the road bridge to provide the necessary headroom for overhead electrification and raising the parapets to comply with modern safety requirements. The footbridge parapets will be renewed, again to comply with these requirements.



Stoke Poges Lane Bridge

William Street Bridge

No major work to William Street Bridge is anticipated. The parapets would be raised to comply with modern safety requirements. The northern most track will be relaid at a lower level as part of the general trackwork remodelling west of Slough station.



William Street Bridge



Burnham to Slough (1)

Dover Road Bridge

No major work to the bridge will be required. The tracks will be lowered to provide adequate headroom clearance for overhead electrification. The parapets will be raised to comply with modern safety requirements.



Dover Road Bridge

Leigh Road Bridge

Leigh Road is carried over the railway in a southerly direction by means of a rail overbridge accommodating a single lane of traffic controlled by traffic signals. The bridge is made up of two spans of brick arch and brick wall parapets.

Subject to reaching an agreement with Slough Borough Council, Crossrail will reconstruct this bridge as a single span structure formed of steel main girders and composite (steel and concrete) bridge deck.

A temporary bridge is proposed on the eastern side of the existing bridge.

It is not proposed to provide a temporary road bridge as diversions to the east over Farnham Road and to the west over Dover Road could be made.



Leigh Road Bridge

Farnham Road Bridge

No major work to Farnham Road Bridge will be required. The parapets will be raised to comply with modern safety requirements and the tracks will be lowered to provide adequate headroom clearance for overhead electrification. A temporary narrowing of the carriageway and temporary footway will be constructed.



Farnham Road Bridge



Slough (2)

Station Improvements



Improvements to ensure that efficient station facilities are provided at Slough station include:

- Rearranged southern ticket hall with new ticket gates and ticket machines
- Improved northern entry to Platform 5
- Lift access to all platforms
- Improved passenger facilities
- Improved station access

Platforms 2 to 5 will be extended to cater for 10-car Crossrail trains.

The Windsor bay platform will be widened and the track realigned.

A new station footbridge with lifts will be constructed at the western end of the existing platform.

There are four worksites for construction.

- Railway Terrace west
- Slough station north
- Slough station south
- Brunel Way

All materials will be taken to and from the sites by road, with access from William Street.

Some parking spaces will be temporarily lost during construction. Exact details will be subject to detailed design and discussions with Slough Borough Council.



Architect's impression



Slough (2)

Station Improvements



The bay platform and associated tracks on the northern side of the station will be removed to allow widening and extension of platform 5. There will be a new siding will run between the running lines to the west of the station.

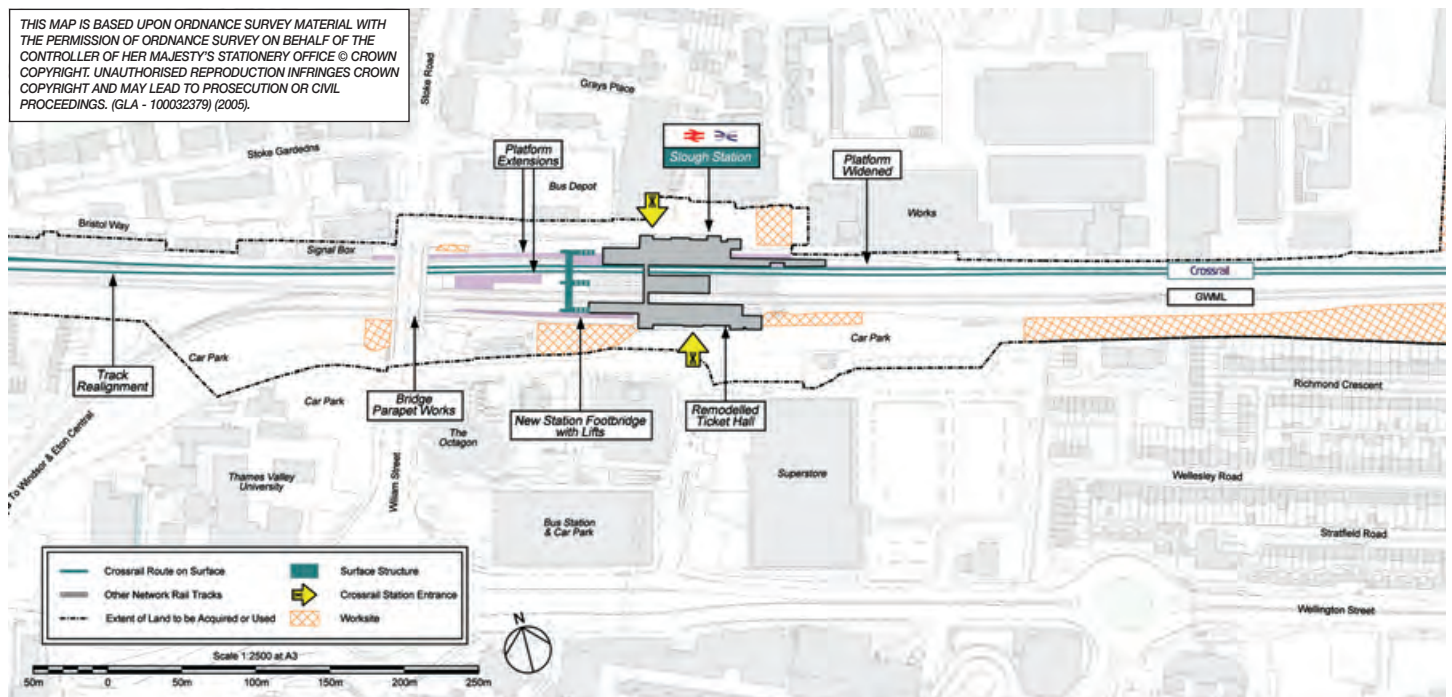
A new bay platform will be constructed where services from Reading will terminate.

Overhead electrification will be installed along the route between Maidenhead and Airport Junction.

The unique character of this Grade II listed station will be recognised as it is upgraded in line with modern safety requirements.

Works to the station canopies to accommodate the overhead electrification could have an impact on the listed structure. The design is being undertaken in conjunction with heritage specialists to manage any impact.

Mitigation measures will be employed to limit construction noise impacts. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Station improvements at Slough



Slough

Service Improvements

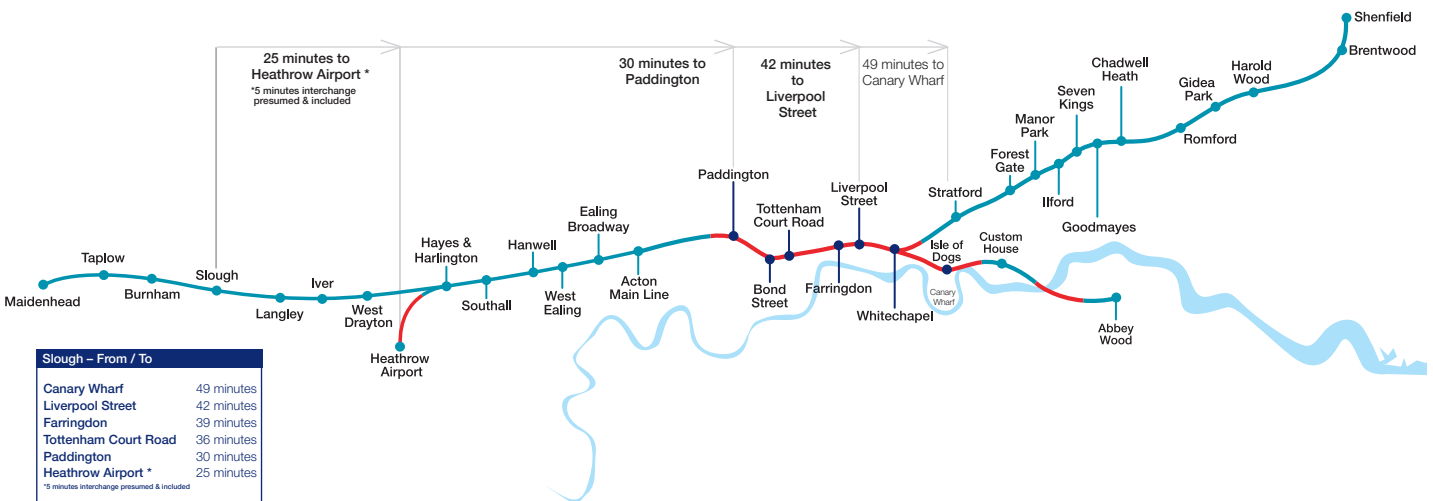
Crossrail Slough station will provide new destinations to central London and other benefits include:

- Direct journey opportunities to central London
- 4 trains per hour during peak periods to central London
- Substantial new passenger capacity and crowding relief into central London
- Access to Heathrow Airport via an interchange at Hayes & Harlington station

The diagram below highlights some of the journey times that will be possible by passengers travelling on Crossrail services to and from Slough station.

With Crossrail operational, the total number of seats available on trains to and from Slough will increase as a result of the longer trains.

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Typical Crossrail journey times from Slough



Slough to Langley (2)

Bridge Works

St Mary's Road Bridge

St Mary's Road Bridge will be partially reconstructed. A temporary highway bridge controlled by temporary traffic lights will be provided during the works. The plans will take account of the traffic assessment studies carried out as part of the overall Environmental Impact Assessment and will also take account of advice from relevant highway authorities.

There will be a worksite to the south west of the bridge.



St Mary's Road Bridge

Trenches Bridge

Trenches Bridge will be reconstructed as a combined footbridge/cycleway. The bridge will be closed temporarily during the construction period. The plans will take account of the traffic assessment studies carried out as part of the overall Environmental Impact Assessment and advice from relevant highway authorities.

A worksite will be located north east of the bridge. Access to the worksite will be from the east through an industrial site, via Waterside Drive.



Trenches Bridge



Slough to Langley (1)

Bridge Works

Wexham Road Bridge

Wexham Road Bridge will require reconstruction of the southern arch to provide clearance for overhead electrification. A temporary road bridge will be constructed on the west side of the existing bridge, to maintain traffic flows during construction. Two worksites will be created at the north west and south west of the bridge.



Wexham Road Bridge

Uxbridge Road Bridge

No significant works to Uxbridge Road Bridge will be required. The parapets will be replaced to comply with modern safety requirements during this work. There will be temporary closure of the footways with pedestrians diverted to the opposite side.



Uxbridge Road Bridge

Middlegreen Road Bridge

Middlegreen Road Bridge will be reconstructed to provide clearance for overhead electrification. Both brick arches will be removed to give the required clearance. The existing brick arches will be replaced with pre-cast concrete arches. The parapets will be upgraded to comply with modern safety requirements. The areas northwest and southwest of the bridge will be used for working and storage areas. There will be a worksite on the north side of the bridge.



Middlegreen Road Bridge



Langley

Station Improvements



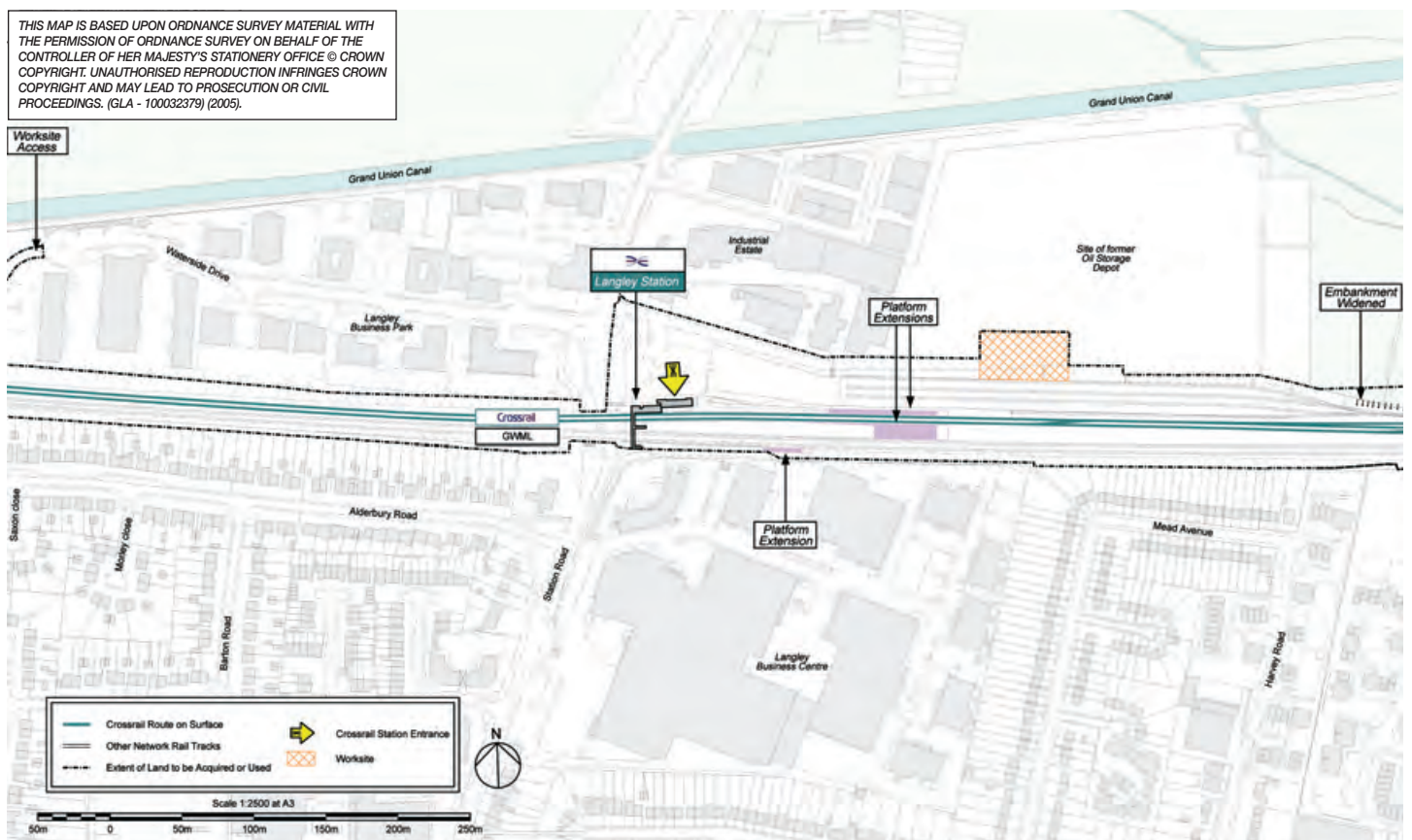
There will be a number of minor improvements including:

- New ticket machines
- Improved customer information facilities

Platform 1 will be extended at the eastern end to cater for a 5-car Crossrail train, and platforms 2 to 4 at the eastern end to cater for the 10-car Crossrail trains.

A worksite will be constructed within the vacant oil terminal land on the northern side of the station. Access will be off Station Road.

Overhead line electrification will be installed along the route between Maidenhead and Airport Junction.



Station improvements at Langley



Langley

Service Improvements

Train services to and from Langley station will be improved by providing journey time savings and a greater variety of new destinations.

The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Langley station.

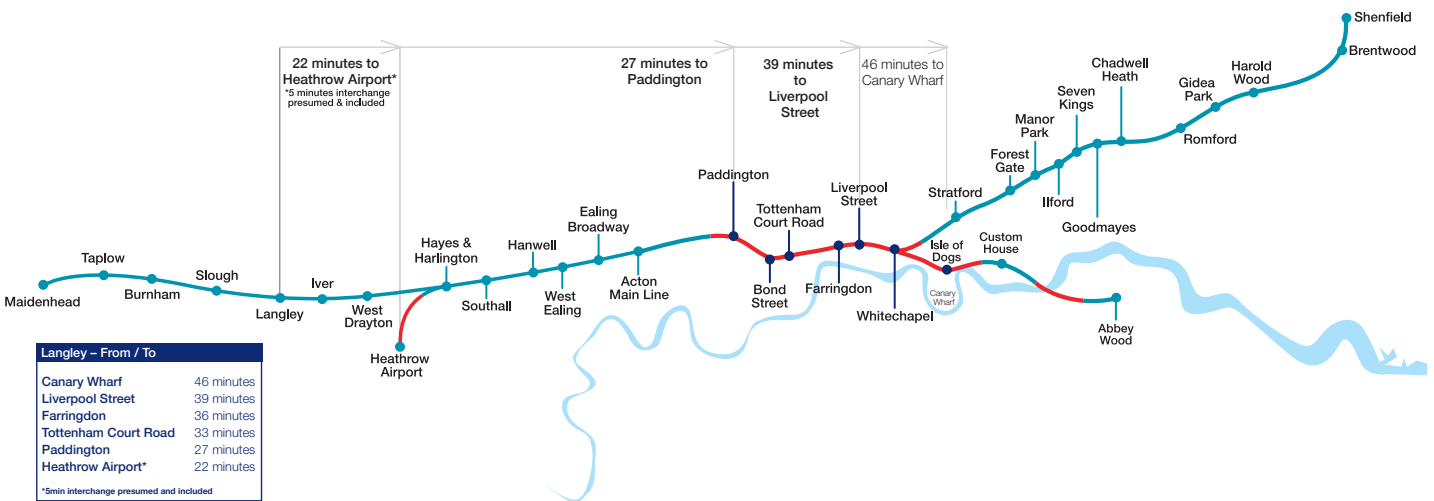
Crossrail Langley station will provide:

- Direct journey opportunities to central London
- 4 trains per hour during peak periods to central London
- Substantial new passenger capacity and crowding relief into central London

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Langley station at present



Typical Crossrail journey times from Langley



Langley to Iver

Bridge Works

A new underbridge will be constructed on the north side of the existing Chequer Bridge to take an additional track. The embankment between Chequer Bridge and Dog Kennel Bridge will be widened, requiring permanent acquisition of a narrow strip of adjacent open land. Temporary road closures will be needed during the night and occasionally on a Sunday.

Phasing of construction works at this location will require integration with work on adjacent bridges to limit disruption to the local road network. A worksite will be constructed to the north of the existing bridge.

Chequer Bridge



Chequer Bridge

To accommodate overhead electrification, Dog Kennel Bridge will be demolished. The path running southward from the Grand Union Canal to the railway is a public footpath, but the bridge is not. The demolition of the Dog Kennel Bridge will remove the link between public footpaths north and south of the railway.

The materials generated from the demolition of the brick arches will be taken away by road. Vehicle access to the worksite will be from North Park and from Market Lane.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.

Dog Kennel Bridge



Dog Kennel Bridge



Iver

Station Improvements



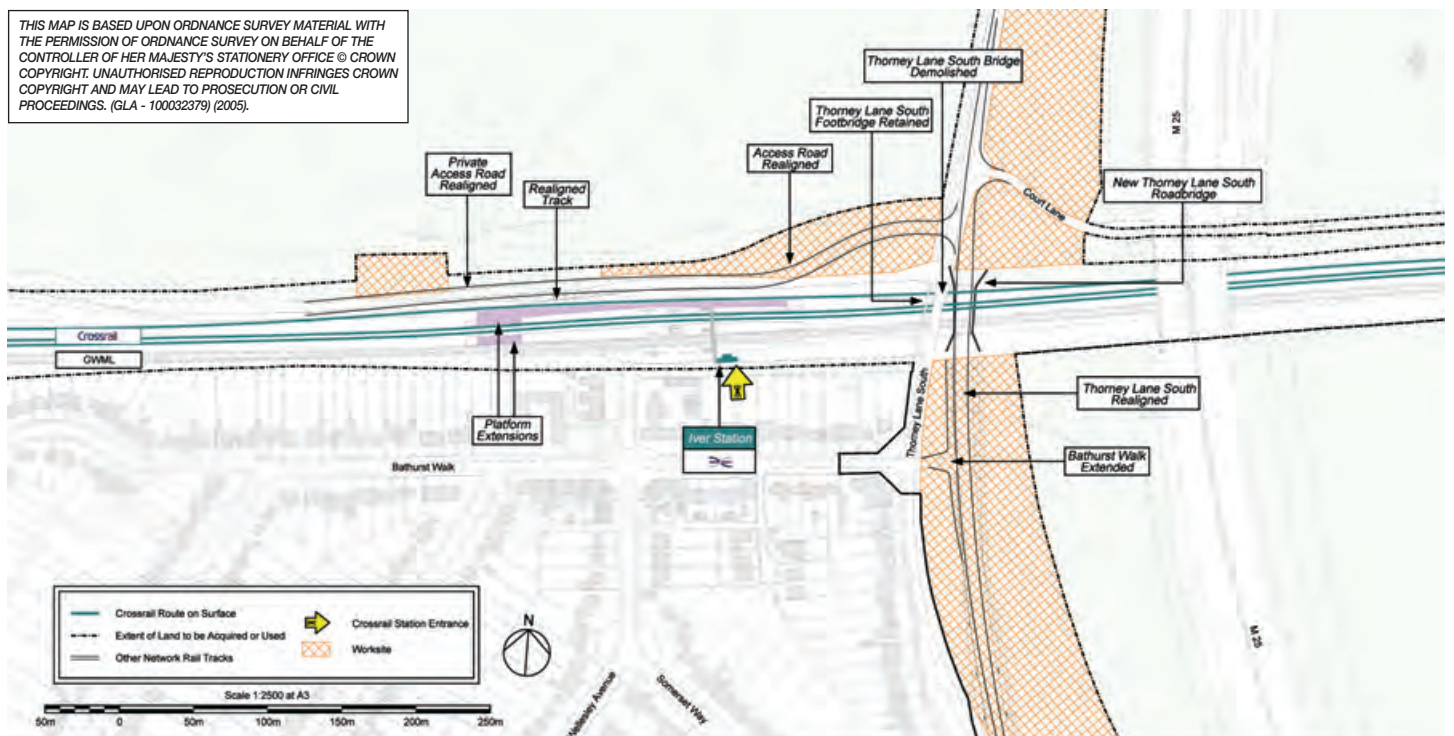
There will be a number of improvements including a new ticket office and passenger facilities.

The station platforms at the western end of Iver station will be extended. Platforms 3 and 4 will be extended to provide for new 10-car Crossrail trains. A new platform (platform 5) will be built.

Work on the station platforms will be co-ordinated from a temporary worksite on the north side of the tracks.

Overhead line electrification will be installed along the route between Maidenhead and Airport Junction and Maidenhead.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Station improvements at Iver



Iver

Service Improvements

Train services to and from Iver station will be improved by providing a greater variety of new destinations into central London and substantial new passenger capacity and crowding relief into central London.

Crossrail Iver station will provide:

- Direct journey opportunities to central London
- 4 trains per hour during peak times to central London

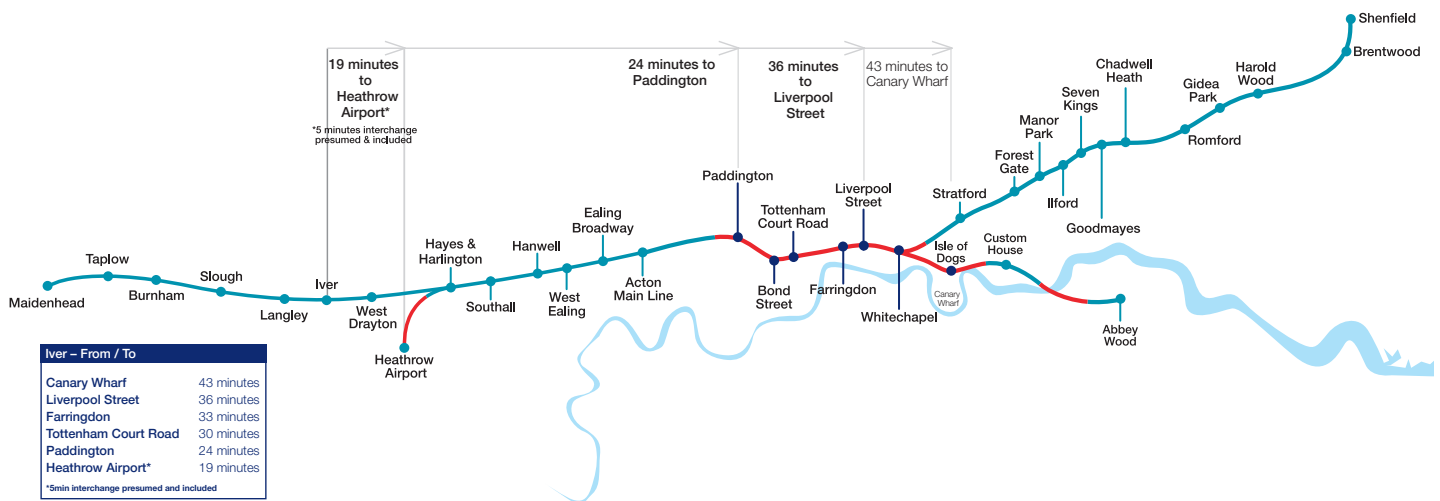
The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Iver station.

With Crossrail operational, the total number of seats available on trains to and from Iver will increase as a result of the longer trains.

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail.



Iver station at present



Typical Crossrail journey times from Iver



West Drayton Stabling

West Drayton Yard was a coal depot and currently has a single freight sidings. Train stabling will be developed within the yard to accommodate up to 22 (10-car) trains during off-peak hours and overnight.

To accommodate the proposed layout the access road into the depot will need to be realigned. This will require a new bridge over Fray's river and a new and upgraded level crossing over Colnbrook branch.

The Yard will be a worksite for electrification works.

The existing bridge over Fray's river will be used to carry some of the new railway tracks.

The likely environmental effects of the proposals are:

- Operational noise from the use of the sidings. The new sidings will be distanced from most buildings on the north side (Tavistock Road) and those located to the south
- The lighting of the stabling area. (This will be designed to control light pollution into the sky or upon buildings in accordance with best practice).

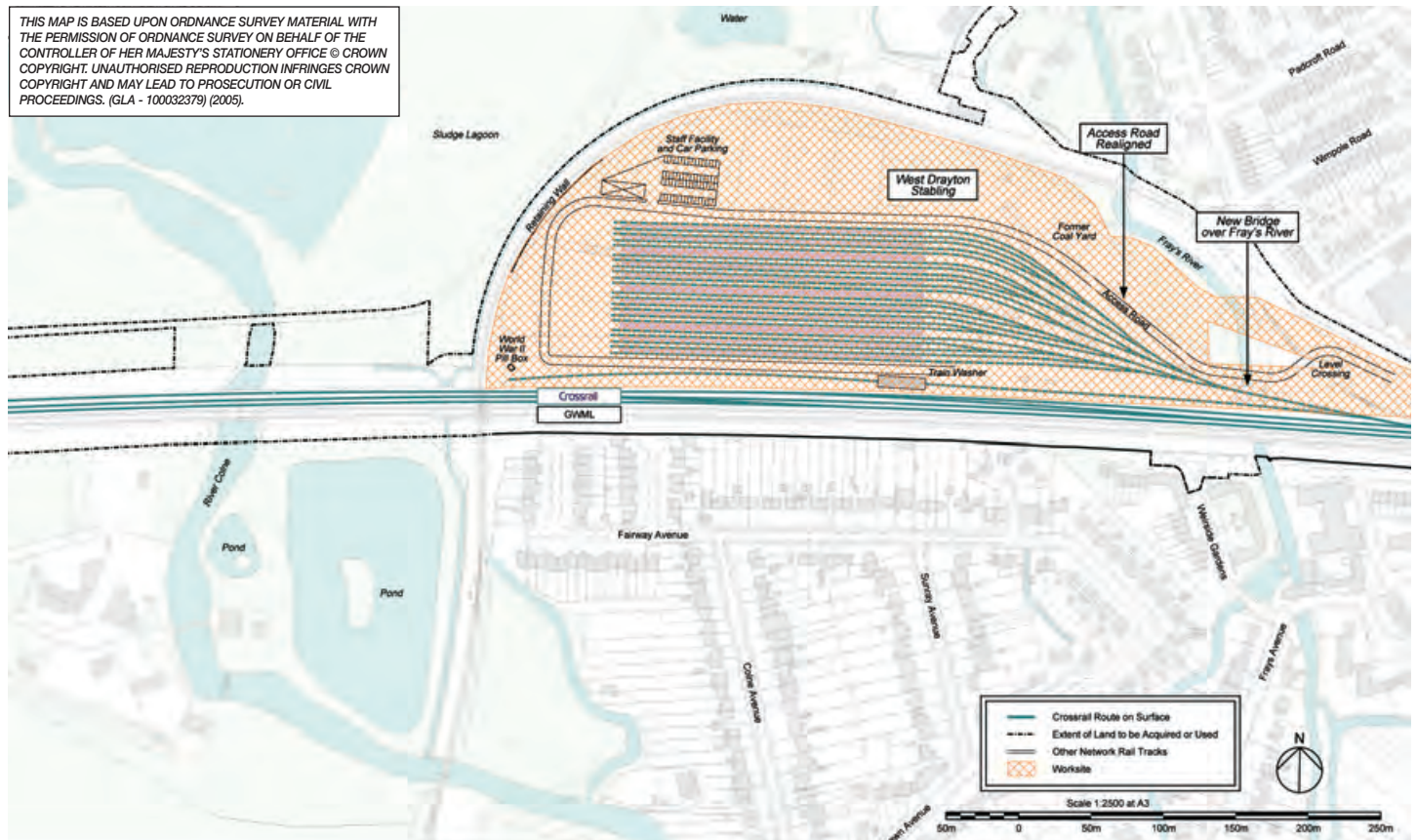
Langley to West Drayton Loop

Currently along the Great Western Main line there are Main and Relief lines. Freight trains can use additional sections of track between Langley and West Drayton (Langley and West Drayton Loop lines). The track is in two parts, the first section is between Langley and Chequer Bridge and the second section is between Dog Kennel Bridge and West Drayton station.

To construct the new overtaking track a new bridge span is required at Chequers Lane Bridge on the north side of the railway. With the provision of the new track, the formation as an extension to the existing embankment both west and east of the bridge is required. This will involve the acquisition of some nearby land.

The new track will link the existing goods loop east of Langley station with the loop commencing immediately east of Dog Kennel Bridge.

At West Drayton station the northern platform will be remodelled and extended to accommodate the new track realignment.



West Drayton Train Depot



West Drayton to Iver

Bridge Works

To provide the necessary clearance for overhead electrification, Thorney Lane Bridge will be reconstructed on a new road alignment to the east of the existing bridge. The new single span bridge will accommodate a 7.3m wide carriage way.

The existing footbridge on the west side of the existing bridge will remain. The parapets will be renewed to comply with modern safety requirements.

This is covered by the 'Thorney Park Golf Course' display panel.



Thorney Lane Bridge at present



West Drayton

Station Improvements



A range of improvements will help to ensure that efficient station facilities are provided.

These include improvements to integrate the station with other types of transport.

Improvements include:

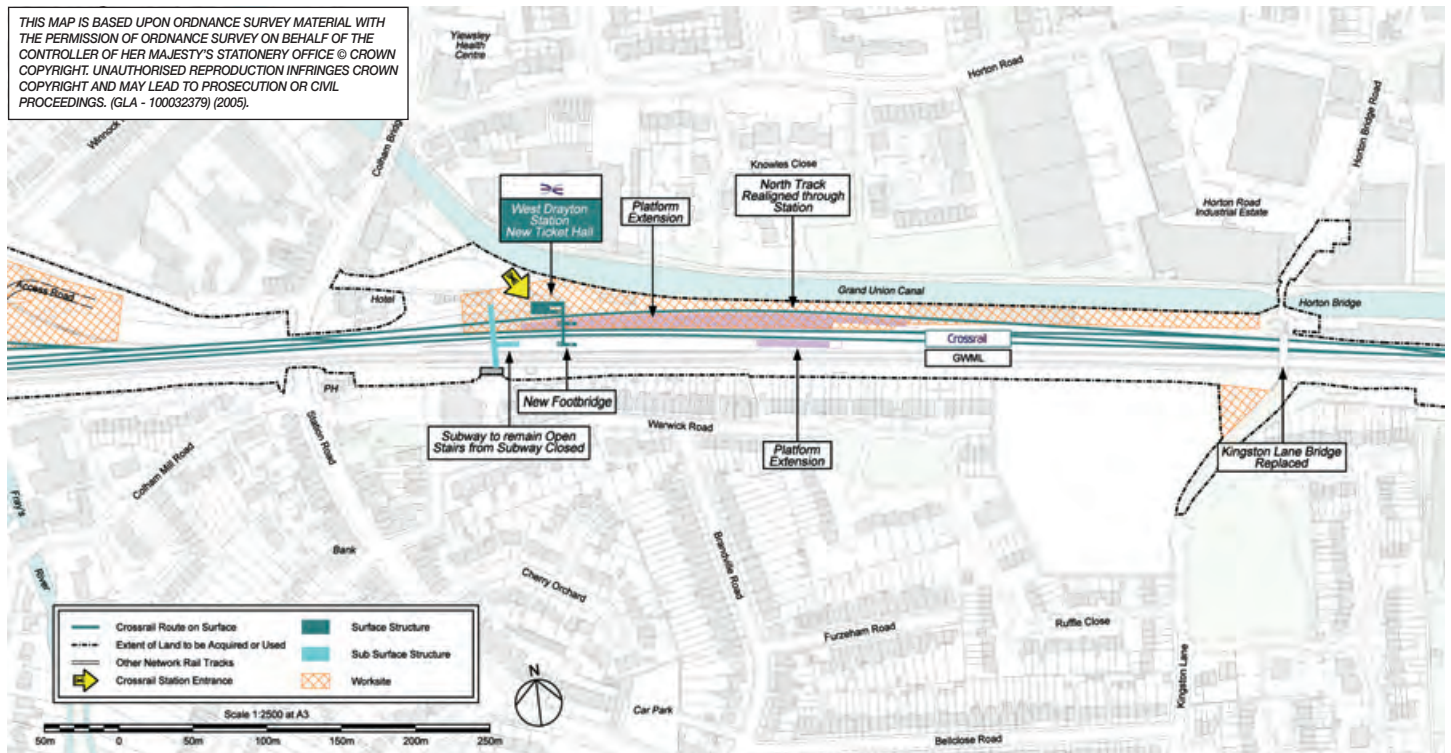
- New ticket hall
- New ticket gates and ticket machines
- Lift access to all platforms
- Passenger facilities including disabled parking and toilets
- Staff facilities
- Reconstruction and extension of platforms 4 and 5
- Extension of platform 3

Overhead line electrification will be installed along the route between Maidenhead and Airport Junction.

A worksite will be constructed between the railway line and the Grand Union Canal with access off Station Approach and the High Street.

Access to the station worksite, between the railway and the Grand Union Canal to the north of the railway, will be from the High Street via Station Approach. The Stabling Yard worksite will be reached from the High Street using the existing access off Tavistock Road. Lorries for both worksites will be routed from the A408 Stockley Road, via Horton Road and the High Street.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Station improvements at Taplow



West Drayton Service Improvements

Crossrail will improve train services to and from West Drayton by providing journey time savings and a greater variety of new destinations.

Crossrail will provide:

- Direct journey opportunities to central London
- 6 trains per hour during peak times to central London
- Substantial new passenger capacity and crowding relief into central London

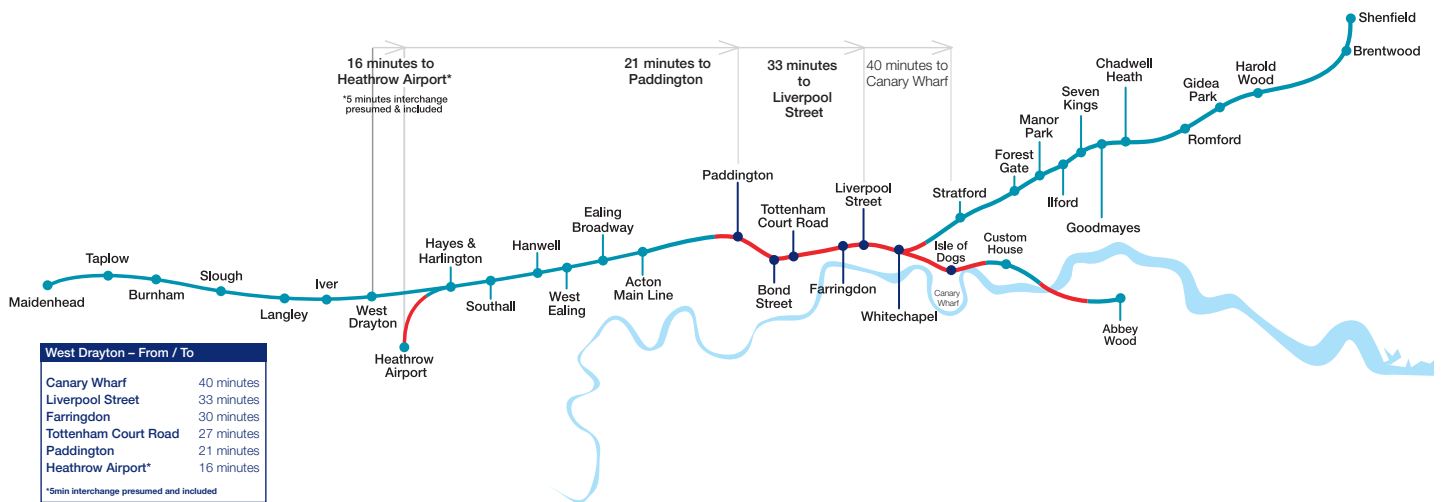
The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from West Drayton station.

With Crossrail operational, the total number of seats available on trains to and from West Drayton will increase as a result of longer, more frequent trains.

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



West Drayton station at present



Typical Crossrail journey times from West Drayton



West Drayton to Stockley Flyover

Bridge Works

Kingston Lane Bridge

Horton Road/Kingston Lane Bridge is a foot and cycle bridge that will be reconstructed to provide adequate headroom for overhead electrification. The new bridge will be constructed immediately to the west of the existing bridge, and will be completed prior to demolition of the existing bridge.



Kingston Lane Bridge

Old Stockley Road Bridge

Old Stockley Road Bridge is located to the west of Stockley Road Bridge. The bridge will be demolished and all vehicular traffic diverted to Stockley Road Bridge permanently. A pedestrian/cycle path bridge will replace the existing bridge.



Old Stockley Road Bridge

Stockley Road Bridge

No major work will be required to Stockley Road Bridge, but the parapets will need to be raised to comply with modern safety requirements.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Stockley Road Bridge



Heathrow Airport Access (1)

Service Improvements

The existing flyover (Stockley Flyover) currently carries Heathrow Express trains heading to Paddington from the Heathrow tunnel over the two Main line tracks.

This structure will be used to carry Crossrail trains from London to the Airport, running on the Relief lines, up the ramp and over the two Main line tracks: the two existing Airport line tracks would merge together just before entering the Heathrow tunnel portal.

Immediately after leaving the tunnel mouth, all trains from Heathrow Airport (both Heathrow Express and Crossrail) will use a new single track viaduct built on the western side of the existing Airport line tracks.

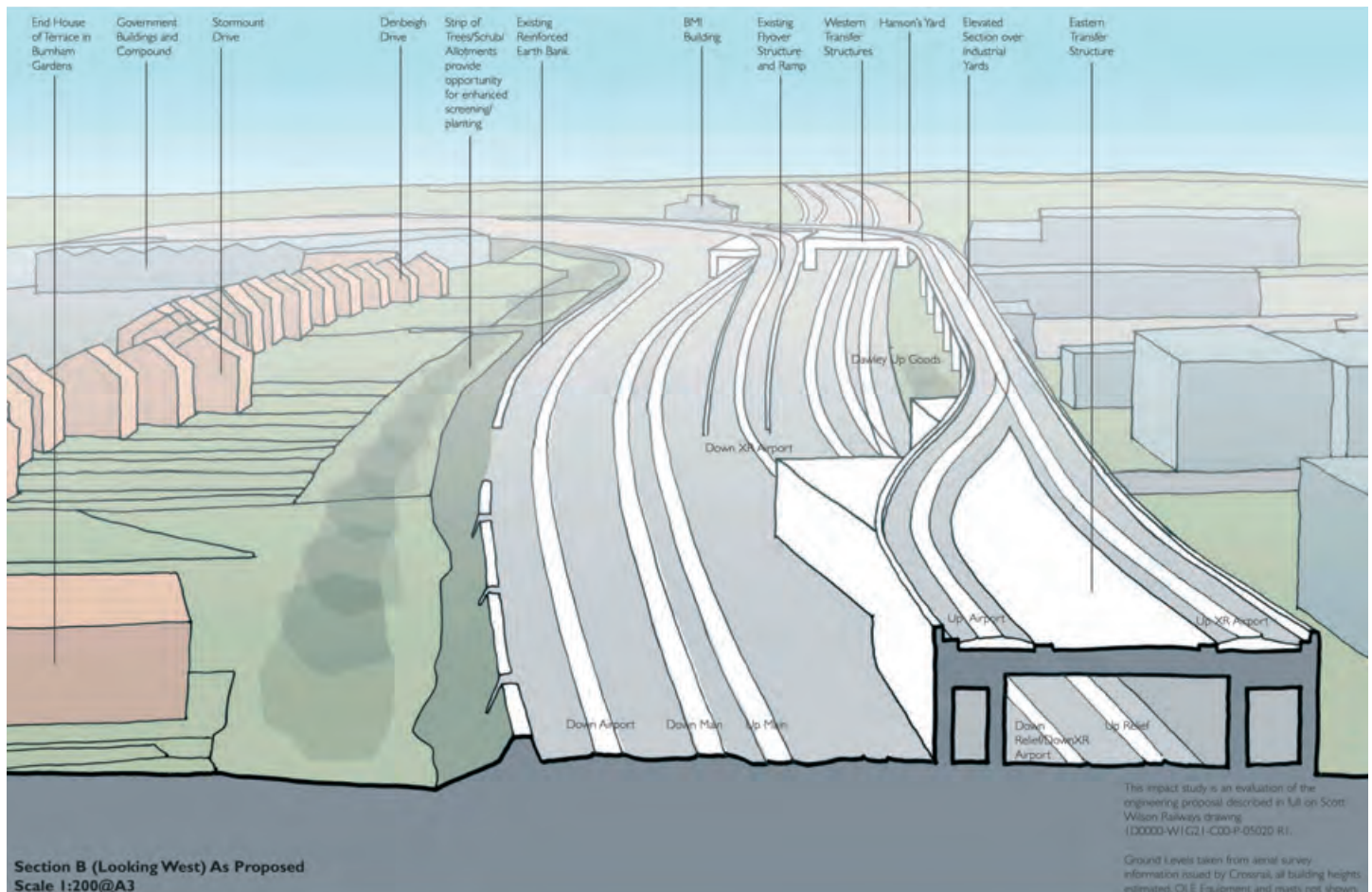
The viaduct will be as close to the existing embankment as possible to mitigate the effect on Stockley Ponds. This new track will cross over all five railway tracks (the Main lines, the Relief lines and the Goods line) on a new flyover. A further viaduct approximately 400 metres long will carry the new track alongside the Goods line.

A second flyover will be built across the three northern tracks (Goods line and two Relief line tracks) and will support a new junction. One branch of the junction will carry Heathrow Express trains on this structure back over these three tracks before descending on a new ramp to be built between the Main lines and Relief lines: this track will merge with the current Up Airport line at Dawley Road bridge.

The other branch of the junction will carry Crossrail trains on a second new ramp built on the north side of the Relief lines. Crossrail trains will then use the current Goods line track from Dawley Road bridge towards Hayes & Harlington station.

It will be necessary to move the Relief line tracks northwards to create sufficient space for the new ramp structures. The form of this second box structure and the ramps to the east will provide effective screening of the Relief lines tracks from the residential property on the south side of the railway.

The new viaduct will require the permanent acquisition of land from a number of the premises that abut the northern railway boundary.



Work at Stockley Flyover



Heathrow Airport Service Improvements

The Crossrail service from Heathrow Airport will replace the Heathrow Connect service to Paddington, with a more frequent service that stops at Hayes and Harlington, Southall, West Ealing, Ealing Broadway, Acton Main Line, Paddington and continues into central London.

Crossrail will run beyond Paddington to directly serve the West End, City and Canary Wharf. This will substantially reduce journey times for many existing Heathrow passengers.

The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Heathrow Airport.

The Crossrail timetable and service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.

The Crossrail service to Heathrow is subject to agreement with British Airports Authority plc (BAA).

Crossrail will fit in with the existing rail network enabling commuters and tourists to benefit from fast and efficient travel into and across London.

Current services to Heathrow Airport – BAA plc Heathrow Express

- Heathrow Expressfast – a non-stop 4 train per hour service in each direction between Paddington and Heathrow Airport. Heathrow Connect provides 2 trains per hour connecting Paddington to Heathrow Airport via local stations including Ealing Broadway, Southall and Hayes & Harlington

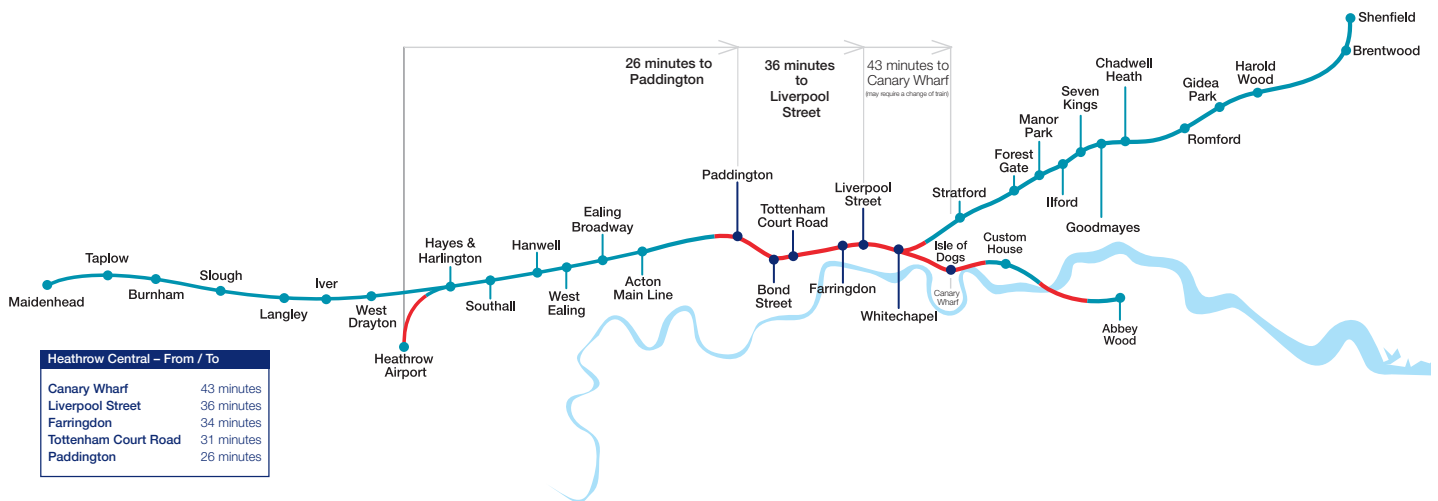
Crossrail services to Heathrow Airport

- 4 trains per hour in each direction between Paddington and Heathrow Airport replacing the 2 trains per hour Heathrow Connect. Crossrail services to and from Heathrow Airport will call at local stations into central London. The 4 trains per hour Heathrow Express fast service will remain

This corridor will provide significant journey time savings to the West End, City and Canary Wharf. Crossrail services to Heathrow Airport will increase service frequencies and attract passengers from Underground services, thereby providing crowding relief.



Xrail train



Typical Crossrail journey times from Heathrow Airport



Hayes & Harlington

Station Improvements

Improvements will help ensure that efficient station facilities are provided. These will include the integration of the station with other types of transport. Redevelopment of the station is planned.

This will include:

- Creation of an important interchange for services to Heathrow Airport
- New ticket hall, footbridge, stairs and lifts to platforms
- Station canopies

A new platform will be constructed on the north side of the station, with the existing buildings demolished.

The proposals include the creation of a new track north of the existing London bound platform. The existing bay platform will be removed to make way for the new alignment. The new track will travel under Station Road through a new span opening.

A temporary bridge to the west side of Station Road bridge will be provided whilst the new span is constructed.

To construct the new opening, a temporary bridge will be constructed to the west of Station Road. Traffic and pedestrians will use the temporary bridge during construction. Where necessary temporary station facilities will be provided during reconstruction.

A new ticket hall and fully accessible footbridge with lifts will be provided to all platforms.

All existing platforms will be extended eastwards to provide for 10-car Crossrail trains. Platform canopies and additional shelters will be provided.

West of Hayes and Harlington station, Crossrail trains to Heathrow will connect into the existing westbound Airport track to Heathrow Airport.

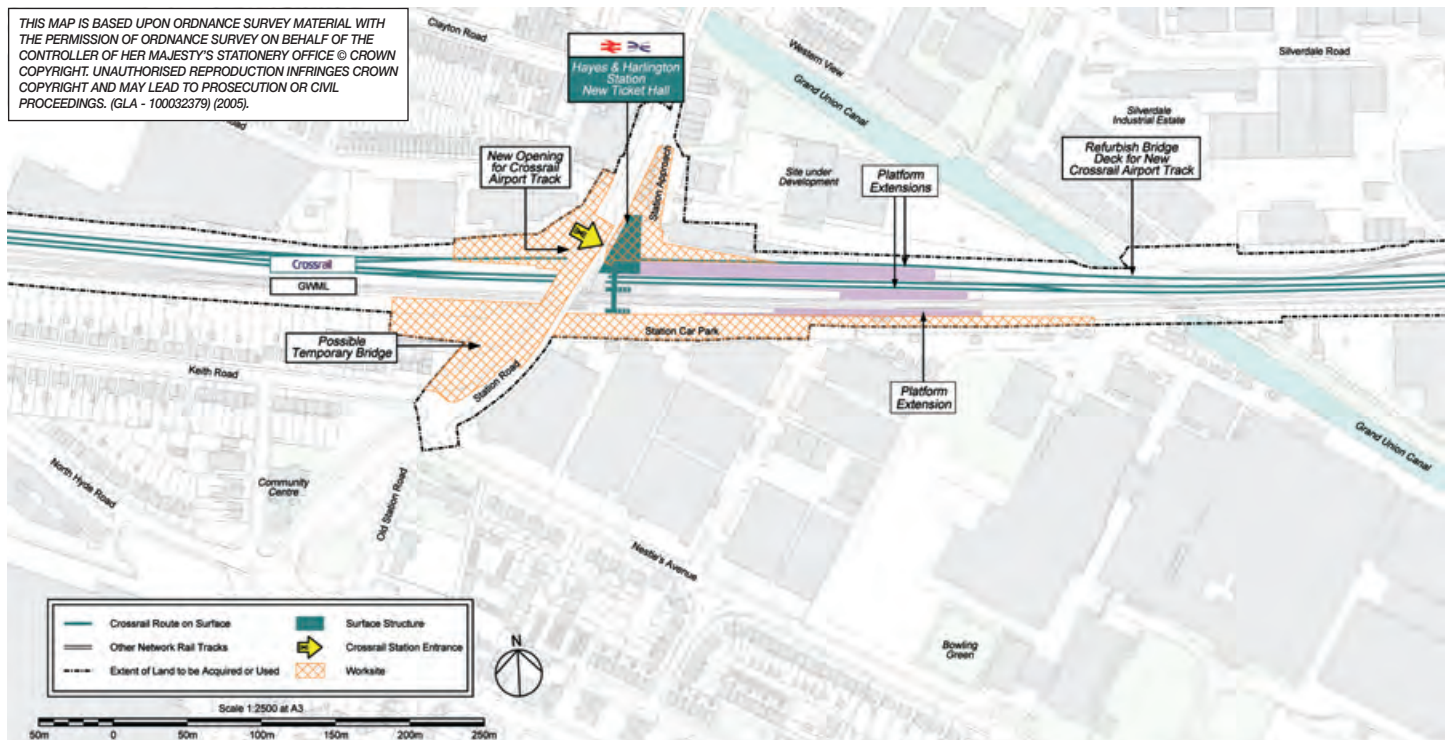
Works will be undertaken from three worksites. One is at the west end of the Station Road Bridge on the south side of the railway. The other two will be east of Station Road.

All materials will be taken to and from the sites by road. Access will be via either Station Road Bridge or Station Approach.

Some parking spaces will be temporarily lost during construction. Exact details will be subject to detailed design and discussions with the London Borough of Hillingdon.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.

The scheme for Hayes & Harlington station may be adjusted to incorporate proposals from the local authority, Transport for London (TfL) and British Airways Authority (BAA).



Station improvements at Hayes & Harlington



Hayes & Harlington

Service Improvements

Train services will be improved to and from Hayes & Harlington Station by providing journey time savings and a greater variety of new destinations.

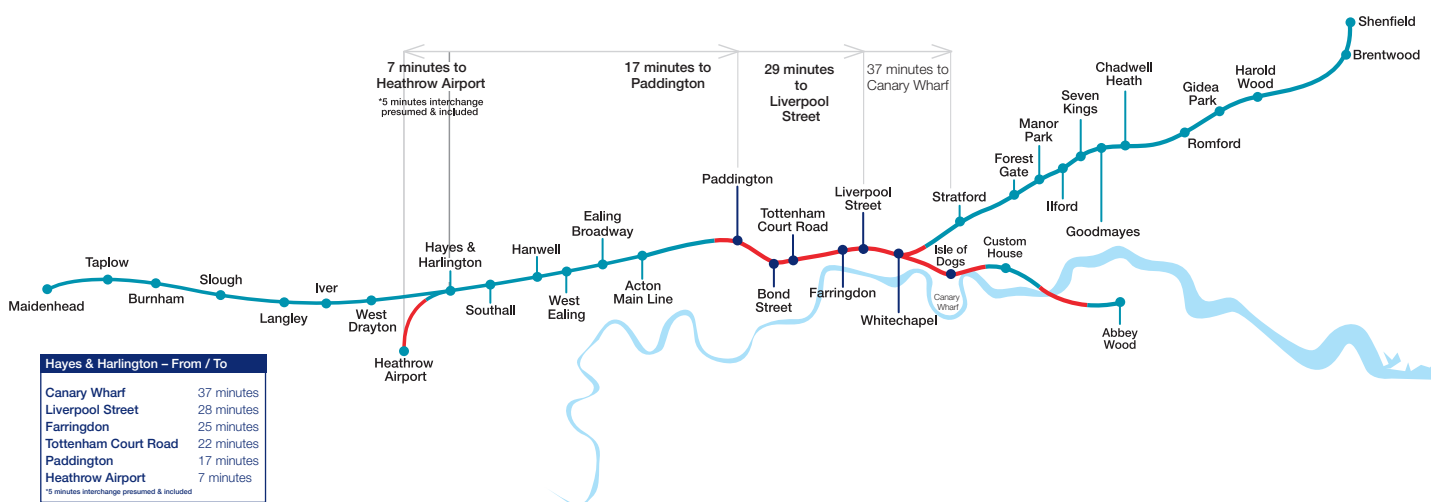
Crossrail Hayes & Harlington station will provide:

- Direct journey opportunities to central London and Heathrow Airport
- 10 trains per hour during peak times to central London
- Substantial new passenger capacity and crowding relief into central London

The diagram below highlights some of the journey times that will be possible travelling on Crossrail services to and from Hayes and Harlington station.

With Crossrail operational, the total number of seats available on trains to central London from Hayes & Harlington will increase as a result of longer, more frequent trains.

The service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Typical Crossrail journey times from Hayes & Harlington



Southall

Station Improvements



Improvements will ensure that appropriate station facilities are provided. These include improving the integration of the station with other types of transport. The station will also be redeveloped.

This includes:

- Ticket hall located north of platform 4 with access from South Road
- Island platform 2 & 3 widened
- Platform shelters
- Lift access to all Crossrail platforms
- Refurbishment of staff facilities
- Extension of all the platforms to provide for 10-car Crossrail trains
- Full mobility impaired access from street to platforms
- A new footbridge with stairs and lifts to all platforms
- The existing island platform 2/3 widened to provide space for a new footbridge
- Platforms 3 and 4 lengthened to accommodate the 10-car Crossrail trains, with additional platform shelters

The existing ticket hall will remain operational during the alterations.

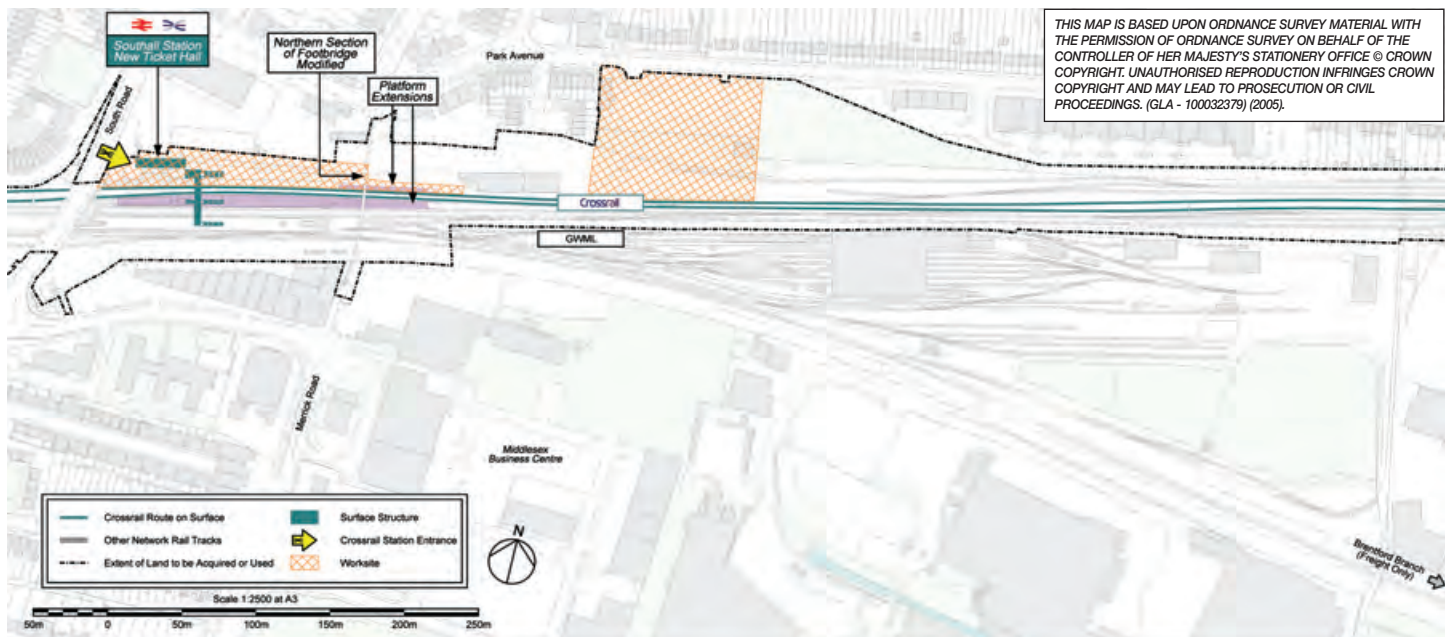
There will be temporary worksites on both sides of the tracks at the station. The present island platform 3/4 will be widened to allow the new footbridge and lift to be installed. The Crossrail trains travelling to Maidenhead and Heathrow will continue on the Relief lines, stopping at the existing westbound and eastbound platforms.

Works at the station will be undertaken from the Southall station worksite.

The worksite is bounded by Merrick Road footbridge to the east, by Station Road to the west and by the railway to the south.

All materials will be taken to and from the site by road. Access to the worksite will be from Avenue Road and Park Avenue. Lorries will access the worksite from the A4020 Uxbridge Road via Station Road and Merrick Road. It will be necessary to close the junction of Merrick Road – Park Avenue for short periods during the work.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Southall Station



Southall

Service Improvements

Train services to and from Southall station will be improved by providing journey time savings and a greater variety of new destinations.

The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Southall station.

Crossrail Southall station will provide:

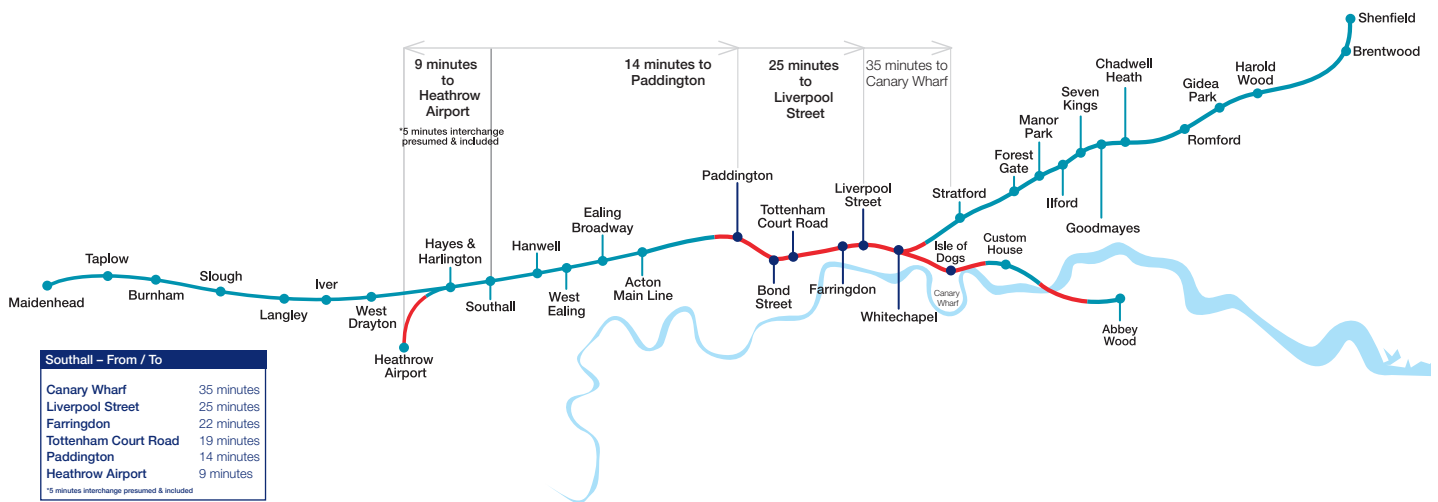
- Direct journey opportunities to central London, Heathrow Airport and the west
- 8 Crossrail trains per hour during peak times to central London
- Substantial passenger capacity and crowding relief into central London

With Crossrail operational, the total number of seats available on trains to and from Southall will increase as a result of longer, more frequent trains.

The Crossrail service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Southall station at present



Typical Crossrail journey times from Southall



Hanwell

Station Improvements



There will be passenger facility, safety and security improvements.

The station platforms will be extended at the western end. The extensions will be on piled foundations. Crossrail will take into account likely environmental impact and local concerns during construction.

The unique character of this Grade II listed station is recognised and efforts will be made to preserve it, in line with modern safety requirements.

Space will be required for a work and storage area during construction of the platform extensions.

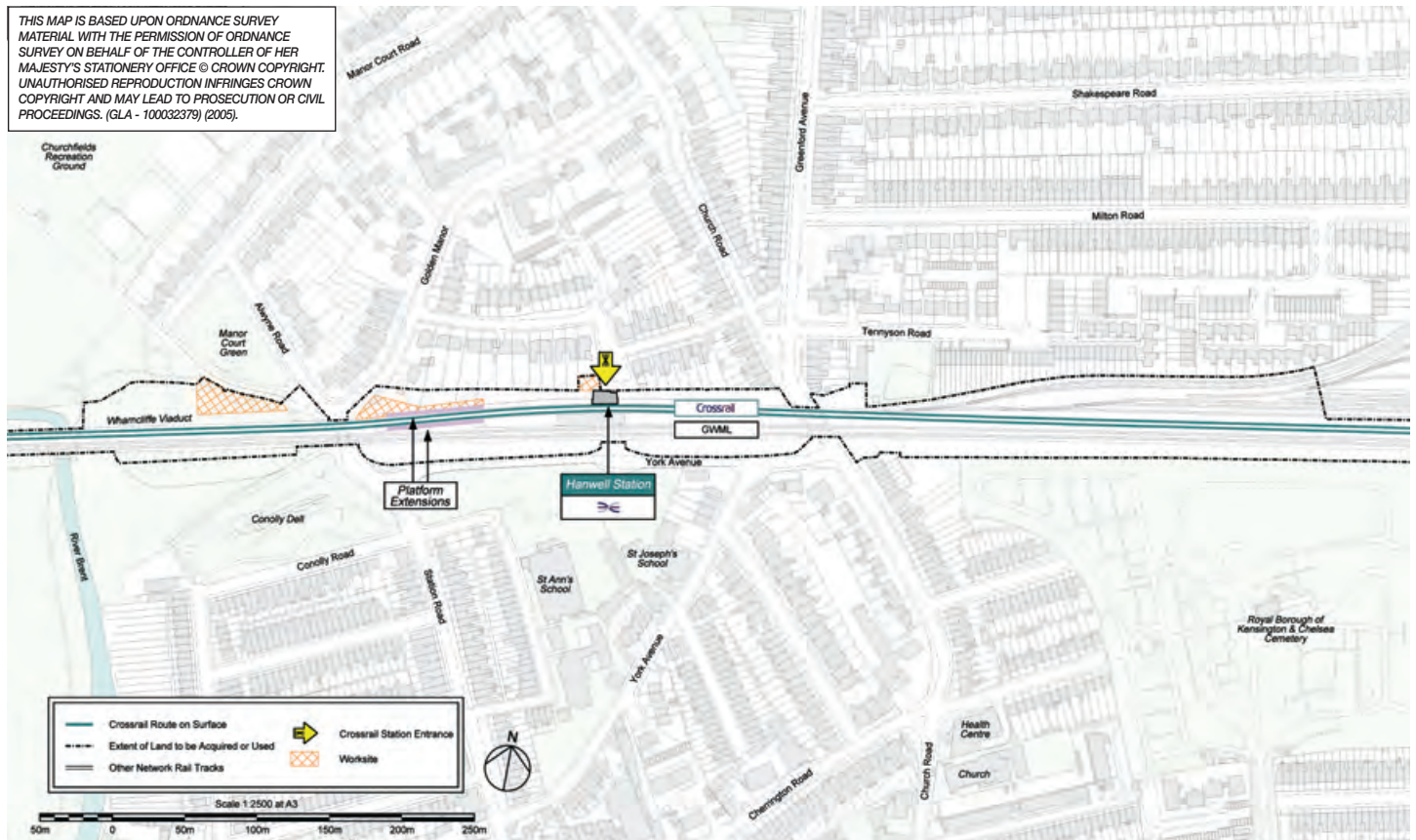
Works will be undertaken from 3 worksites:

- Churchfields Gardens
- East of Golden Manor
- Hanwell Station forecourt

Material will be taken to and from sites by road, with access along Golden Manor, Aldwyne Road and Campbell Road.

Mitigation measures will manage construction noise.

These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Station improvements at Hanwell



Hanwell

Service Improvements

Train services will be improved to and from Hanwell station by providing journey time savings and a greater variety of new destinations.

Crossrail Hanwell station will provide:

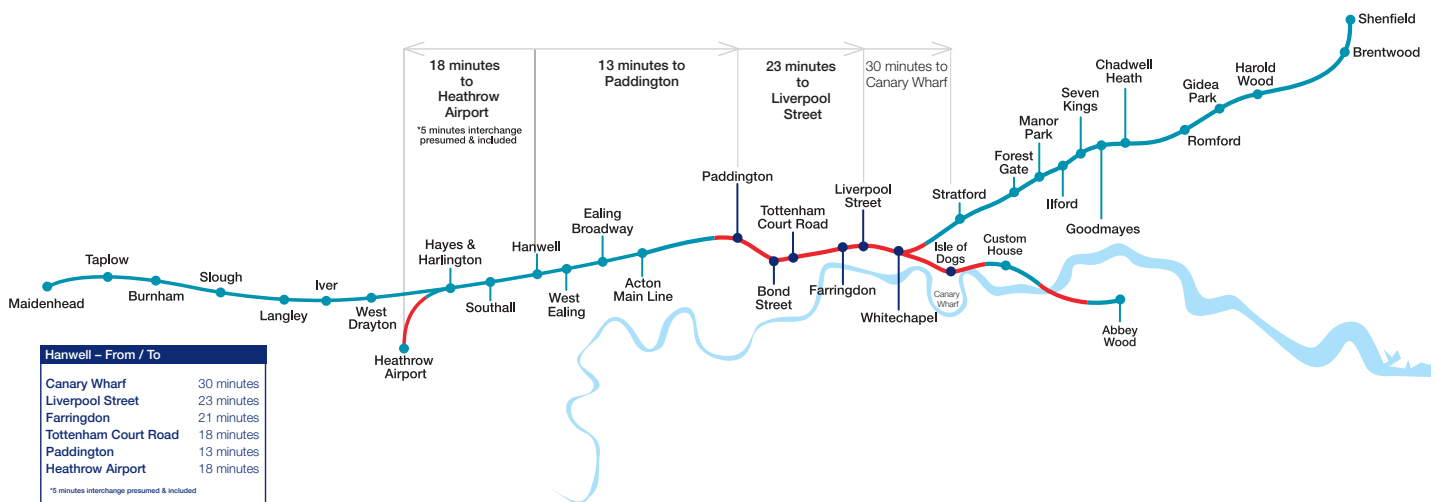
- The journey to Heathrow requires a change of train at Hayes & Harlington. The Heathrow Airport service improvements display panel indicates that the Crossrail service to Heathrow does not call at Hanwell
- 2 trains per hour during peak times to central London
- Substantial new passenger capacity and crowding relief into and out of central London

The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Hanwell station.

The service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Hanwell station at present



Typical Crossrail journey times from Hanwell



West Ealing

Station Improvements



Improvements will help ensure that efficient station facilities are provided. These will include opportunities to improving the integration of the station with other types of transport.

Changes include:

- Ticket hall relocated with access from Manor Road
- Provision of a terminus platform for the Greenford service
- Construction of an overbridge with stairs and lift
- Platforms 3 and 4 extended to the west to take Crossrail 10-car trains
- Remodelling of Greenford Branch Junction
- Additional platform canopies and shelters

To provide train paths for Crossrail services on the Relief lines, the existing Greenford to Paddington services will terminate at West Ealing station. A shuttle service will run between

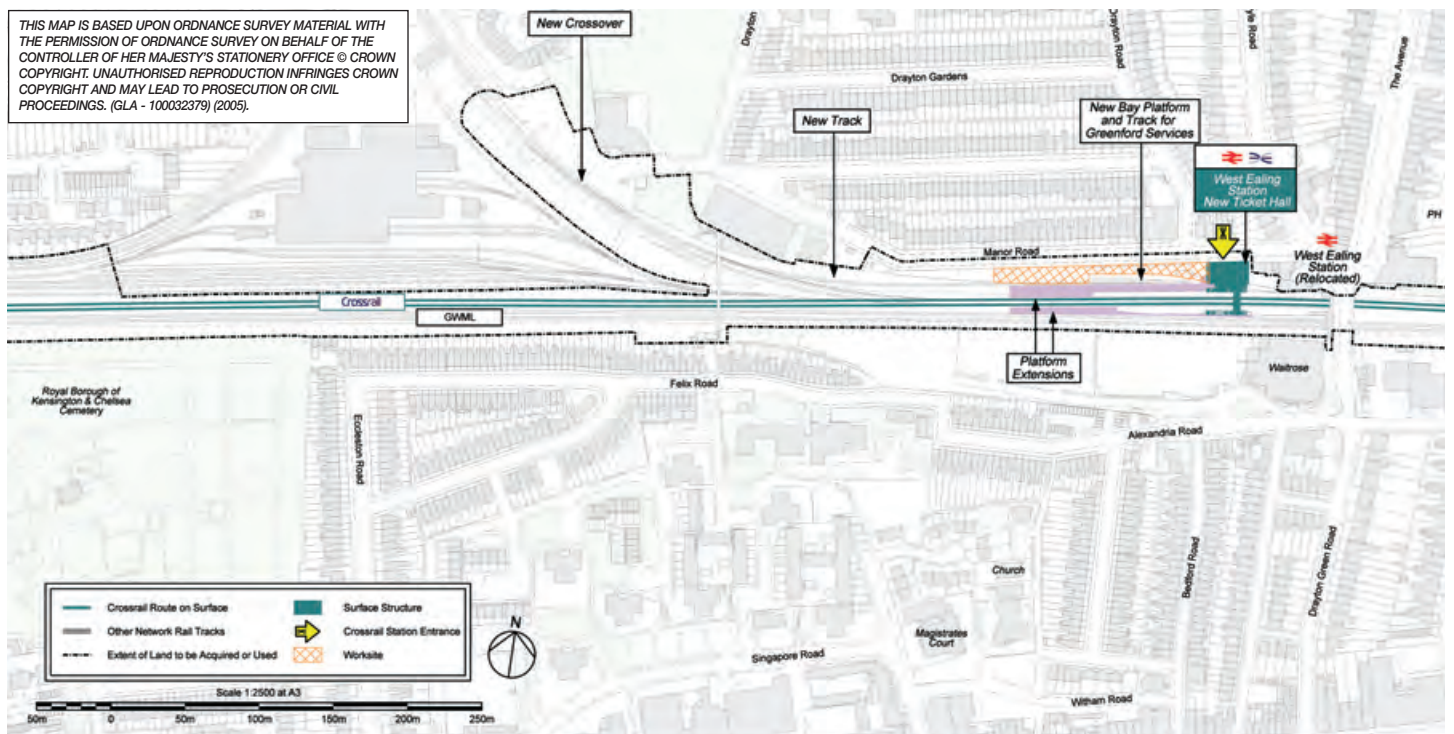
Greenford and West Ealing at a frequency of up to 4 trains per hour. Passengers will need to change trains at West Ealing for Crossrail services to central London and eastern destinations.

Terminating the Greenford to Paddington services will require platform and track work and a worksite will extend northwards along the railway towards Drayton Green.

Works will be coordinated from a disused area of railway land between the railway and Manor Road.

Access will be from Manor Road and construction traffic will be routed from Uxbridge Road via Drayton Green Road.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Station improvements at West Ealing



West Ealing

Service Improvements

Train services will be improved to and from West Ealing by providing journey time savings and a greater variety of new destinations.

The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from West Ealing station.

Crossrail West Ealing station will provide:

- Direct journey opportunities to central London, Heathrow Airport and the west
- 4 trains per hour during peak times to central London
- Substantial new passenger capacity and crowding relief into central London

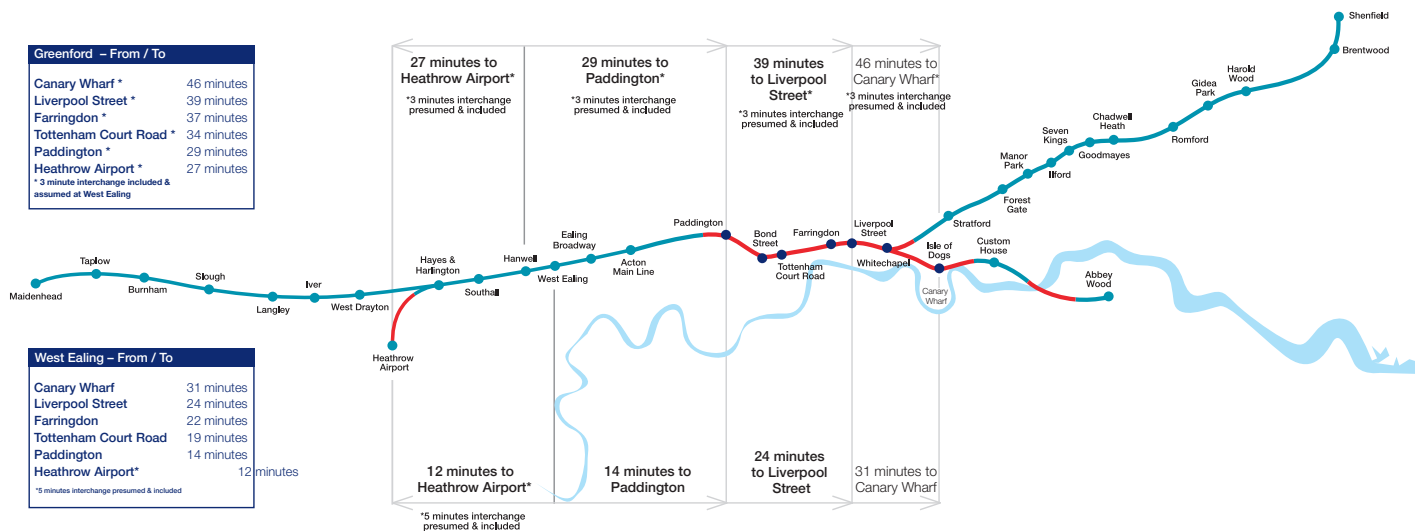
With Crossrail operational, the total number of seats available on trains to and from West Ealing will increase as a result of longer trains.

The service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.

To provide train paths for Crossrail services on the Relief lines, the Greenford to Paddington services will stop at West Ealing station. A shuttle service will run between Greenford and West Ealing at a frequency of up to 4 trains per hour. Passengers will need to change trains at West Ealing for Crossrail services to central London and eastern destinations.



West Ealing station at present



Typical Crossrail journey times from West Ealing & Greenford



Ealing Broadway (1)

Station Improvements



Ealing Broadway station will be redeveloped to provide a new high quality interchange between Crossrail, First Great Western Link and London Underground services. This will include:

- New ticket hall south of the existing tower block
- Upgrade of the existing station forecourt
- Deck structure providing access to platforms 1 to 4 and links to the Central and District lines
- Lifts to create step free access from the street to platforms
- Extension of platforms 1 to 4 at their eastern end to provide for 10-car Crossrail trains

The existing ticket hall and passenger routes will stay open during the construction of the new station. The construction works will obstruct the station forecourt and require temporary walkways for pedestrians and station users.

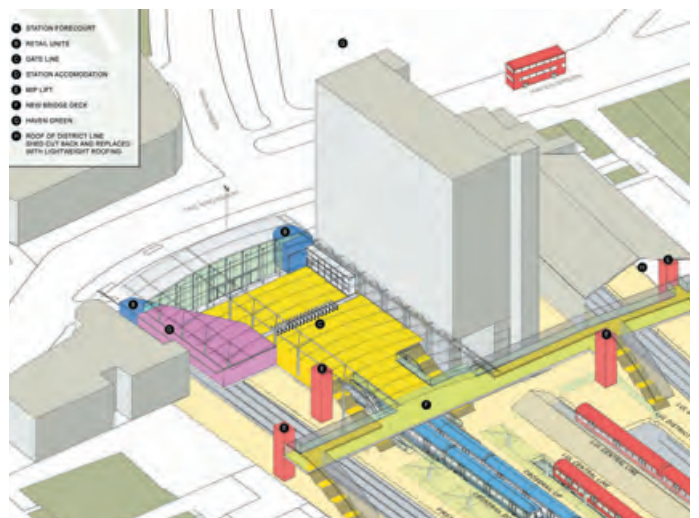
The platform level kiosks will have to be repositioned to allow the construction of the overbridge and to provide vertical circulation.

Current proposals are to retain Villiers House and demolish the shop units to the south of the tower block.

Design of Ealing Broadway station will allow for any future proposals by Transport for London (TfL) for new bus facilities.



Station redevelopment



Station redevelopment



Ealing Broadway (2)

Station Improvements



Works will be coordinated from three sites:

- Haven Green
- Ealing Broadway station forecourt
- South of Ealing Broadway station

All materials will be taken to and from sites by road.

The Haven Green worksite will require the relocation of an existing bus layover space. The lorry route for this site will be from A4020 Uxbridge Road and a one-way route northbound on Spring Bridge Road, and then clockwise around Haven Green.

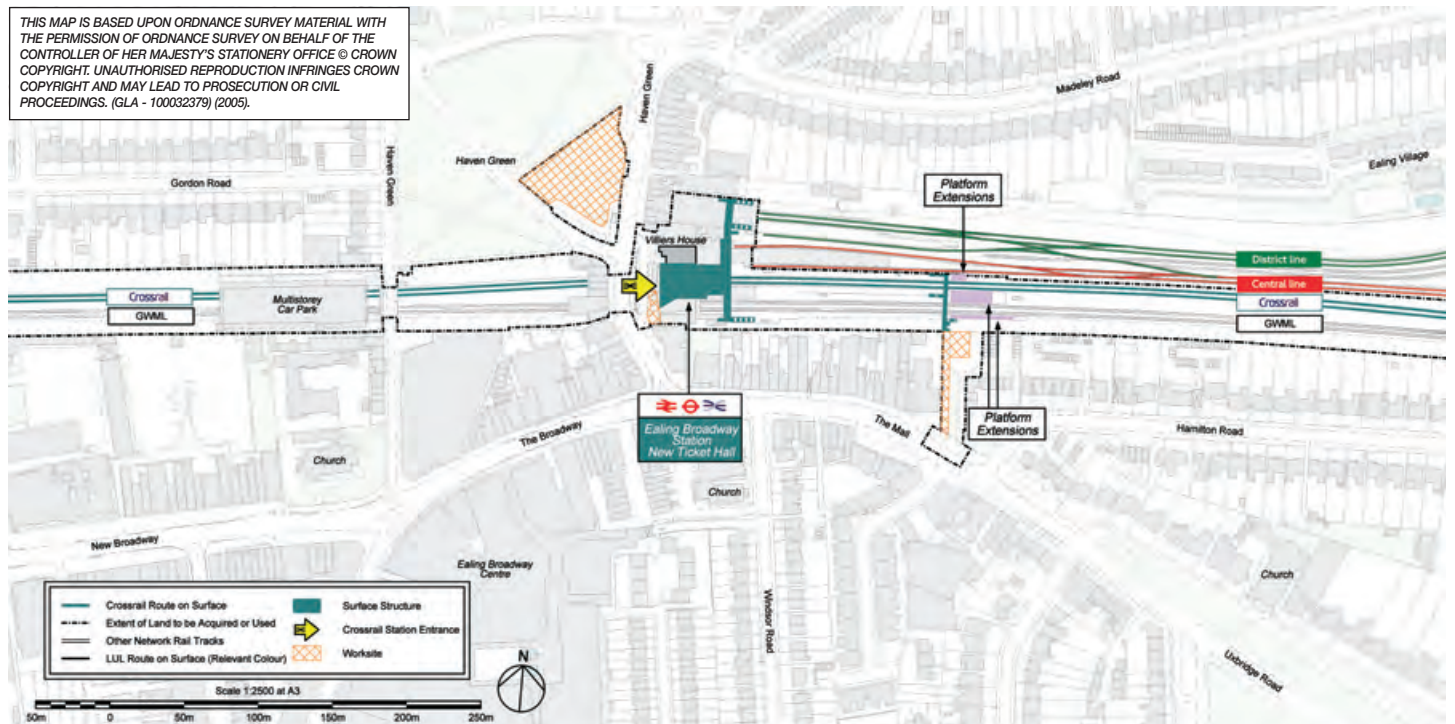
The Ealing Broadway station worksite will occupy private parking spaces in College Court. This worksite will be accessed from Uxbridge Road, immediately to the west of its junction with Hamilton Road.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.

The likely environmental effect of the proposals will be:

- Noise impact on nearby buildings due to construction. This will be mitigated using best practicable means to control noise at source. These means will be incorporated within the Crossrail Construction Code.
- There are a number of high quality mature trees surrounding the proposed Haven Green temporary worksite. As part of the current proposals, the trees will be kept

There will be consultation with local authorities to help ensure that suitable traffic management is introduced to manage impact during construction. Consideration will be given to local authority policies and the road network in the area to reach an acceptable solution.



Station improvements at Ealing Broadway



Ealing Broadway

Service Improvements

The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Ealing Broadway station.

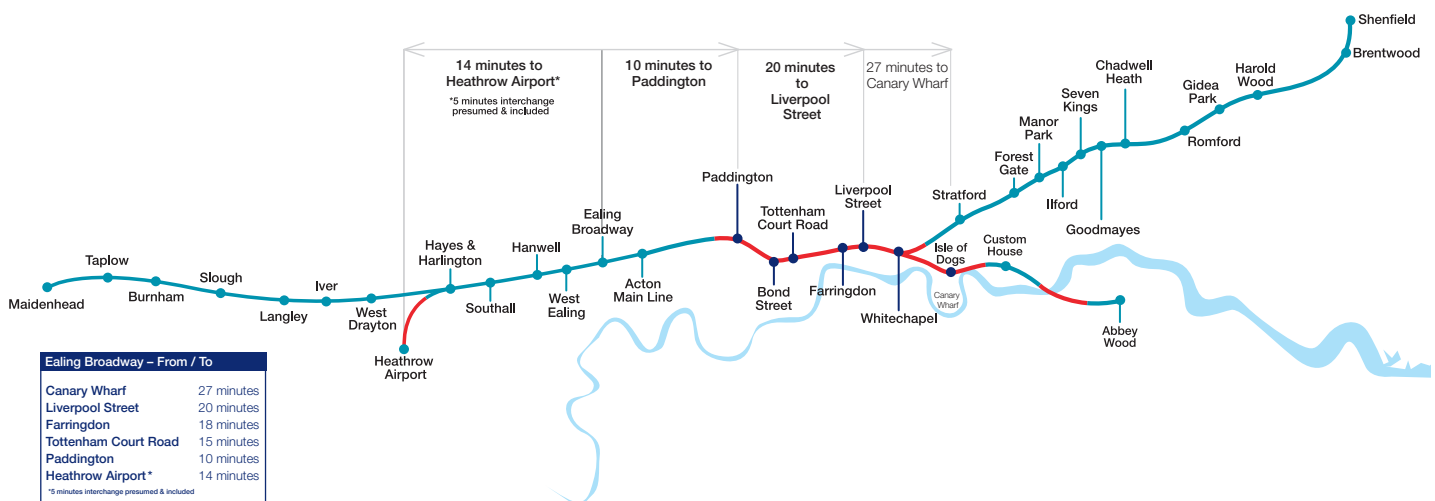
Train services will be improved to and from Ealing Broadway Station by providing journey time savings and a greater variety of new destinations.

There will be:

- Direct journey opportunities to central London, Heathrow Airport and the west
- 10 trains per hour during peak times to central London
- Substantial new passenger capacity and crowding relief into central London

With Crossrail operational, the total number of seats available on trains to and from Ealing Broadway will increase as a result of longer, more frequent trains.

The service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Typical Crossrail journey times from Ealing Broadway



Acton Dive Under & Freight Yard

To achieve the planned Crossrail service, the freight movements to and from the existing Acton Yard will be made via a junction segregating the Crossrail trains, avoiding conflicting train movements (known as a grade separated junction). The junction will require the realignment of the eastbound Relief line track northwards into a newly constructed cut-and-cover tunnel (dive-under) allowing the lines going into the yard to cross over the top.

The dive-under will be located between Acton Main Line station and the eastern end of Hanger Lane.

Most construction traffic access will be from Horn Lane, opposite York Road.

Noel Road Bridge

Some temporary closures of Noel Road bridge will be necessary in order to temporarily divert utilities as part of the construction works for the dive-under.

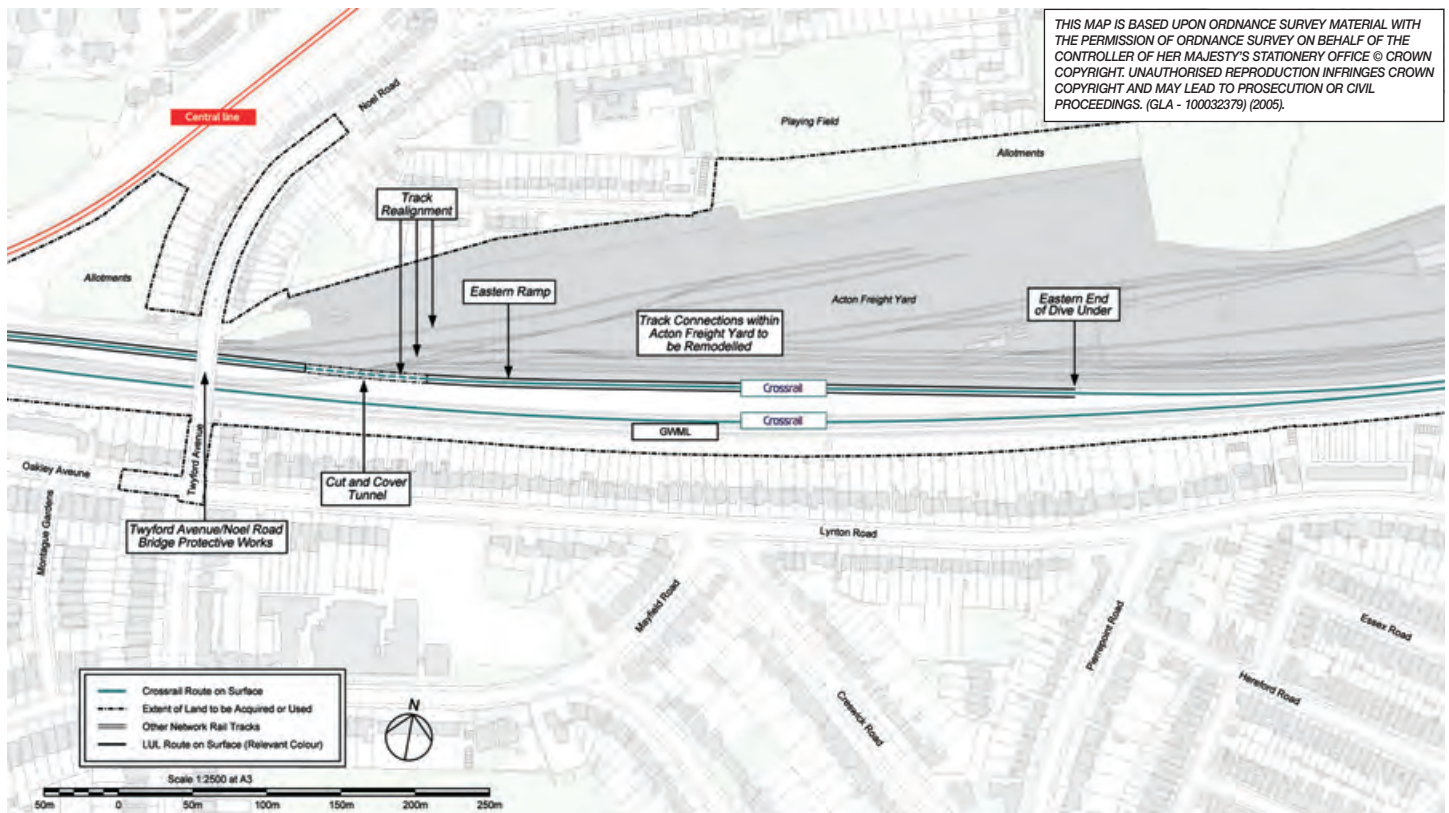
Various parts of Acton Yard will be used as worksites at different stages for the construction of the dive-under and associated work. Structural, civil and excavated materials will be moved by road.

Access will be from Horn Lane to the North of the station. A secondary access will be provided from Noel Road close to the bridge over the Great Western Main Line. Material for track work will largely be transported to the Yard by rail.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Acton Yard at present



Work at Acton Dive Under & Freight Yard



Acton Main Line

Station Improvements



More passengers are expected to use Acton Main Line station. Improvements will ensure that suitable station facilities are provided.

These include:

- A new ticket hall on the south side of the railway
- Platform canopies
- A mobility fully accessible accessible footbridge
- Extended platforms at the western end of the station to take Crossrail 10- car trains

The likely environmental effect is:

- Noise impact on nearby buildings due to construction. This would be mitigated using best practical means. These means would be incorporated within the Crossrail construction code

There are two worksites for this station.

They are:

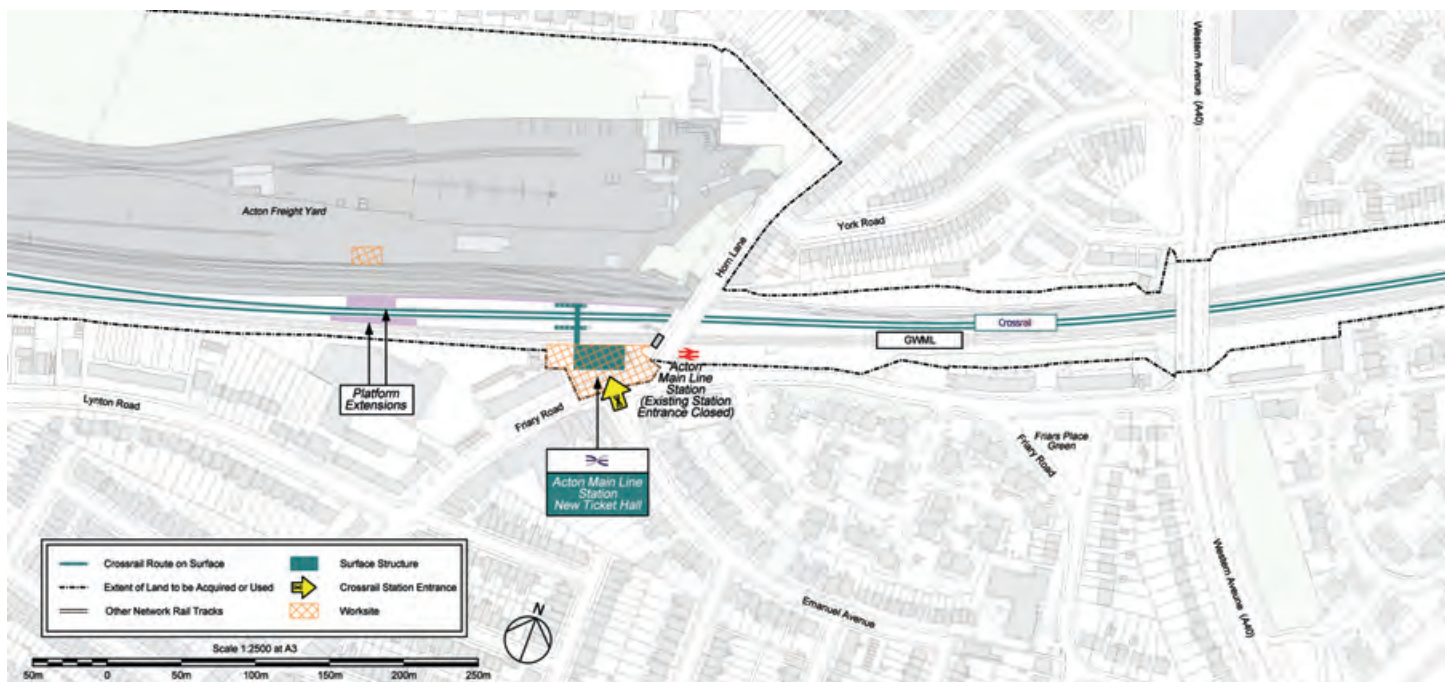
- South of the existing station, adjacent to the railway & bounded to the south by Horn Lane
- West of the station on the north side of the railway, bounded to the north by Acton Yard

The western worksite is within the freight yard and will be accessed from Horn Lane. The main worksite will be to the south of the railway between the station and Horn Lane. All materials will be taken to and from the sites by road.

It will be necessary to extend the worksite into the nearside of Horn Lane close to its signal – controlled junction with Friary Road for periods during the works.

A preliminary assessment has indicated that the signal phasing can be temporarily modified so that the junction can still operate satisfactorily.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Station redevelopment



Acton Main Line

Service Improvements

Train services will be improved to and from Acton Main Line station by providing journey time savings, a greater variety of new destinations with increased passenger capacity and crowding relief for journeys into central London.

Crossrail Acton Main Line station will provide:

- Direct journey opportunities to central London, Heathrow Airport and the west
- 4 trains per hour during peak periods to central London

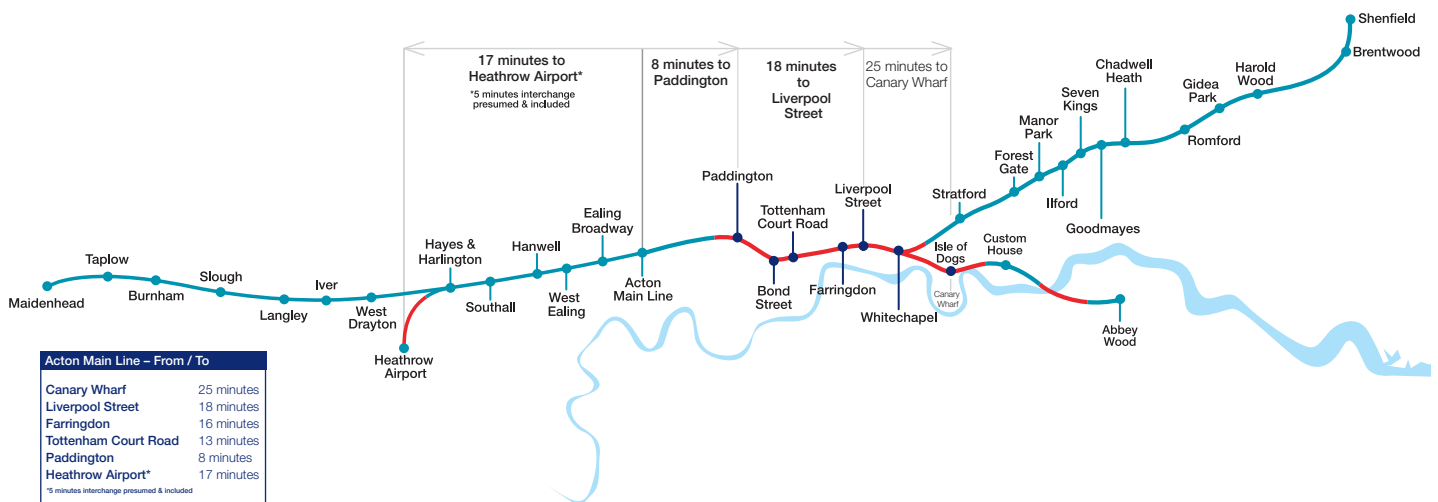
The diagram below highlights some of the journey times that will be possible by travelling on Crossrail services to and from Acton Main Line station.

With Crossrail operational, the total number of seats available on trains to and from Acton Main Line will increase as a result of the longer trains.

The service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating Crossrail services.



Acton Main Line station at present



Typical Crossrail journey times from Acton Main Line



Old Oak Common Depot

Crossrail trains will be stabled within Old Oak Common Depot on new Crossrail sidings. An area for the stabling sidings has been identified to the north of the existing First Great Western depot, to stable up to 13 Crossrail trains during off-peak hours and at night.

A carriage washing facility will be required.

Construction of the sidings will be co-ordinated from a temporary worksite within Old Oak Common Depot.

The site will be cleared, buildings erected, tracks laid and overhead electrification and walkways constructed.

There will be additional track work associated with facilities used by other operators.

Works at Old Oak Common are to be carried out from Coronation Sidings within the depot. Track works material will generally be brought into the site by rail, using appropriate existing track as a railhead.

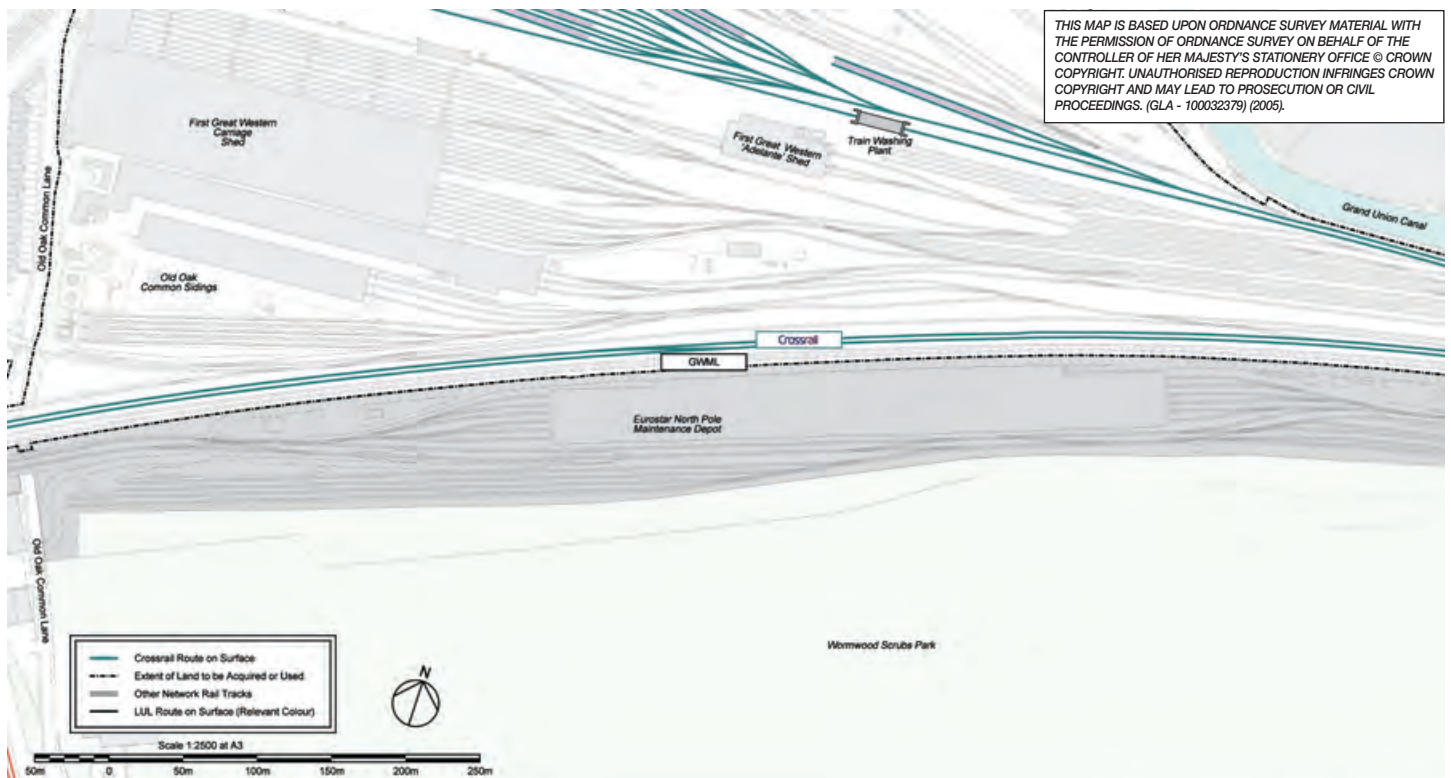
Excavated/demolition material, and civil and structural material (steel and concrete) will be transported in and out of the site by road.

The depot site is bordered to the north by Old Oak Common Lane and the Grand Union Canal. Access to the depot is from Old Oak Common Lane. Most materials will be taken to and from the site by rail. Construction traffic will use the existing access on Old Oak Common Lane.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.



Old Oak Common Depot at present



Work at Old Oak Common Depot



Electrification

Crossrail's trains would be electrically powered. The existing electrification (between Paddington and Airport Junction) will be extended along the Great Western Main Line from Airport Junction to Maidenhead. This will involve the installation of masts and gantries to support the overhead lines and construction of line side sub-stations.

The overhead lines and their supports could be visible from areas adjoining the track, although long sections of the track are well screened by mature trees. The visual effects are not likely to be significant along most of the route.

Electrification could require works to bridges to provide clearance for the overhead lines and to modify parapets to ensure safety. These would range from minor works to the reconstruction of bridges. The works proposed are described on the relevant display panels.

Some of the existing diesel train services will be replaced. The electrically powered Crossrail trains would be quieter than the diesel trains. This would have the effect of improving the overall operational noise levels in the rail corridor.



Xrail train

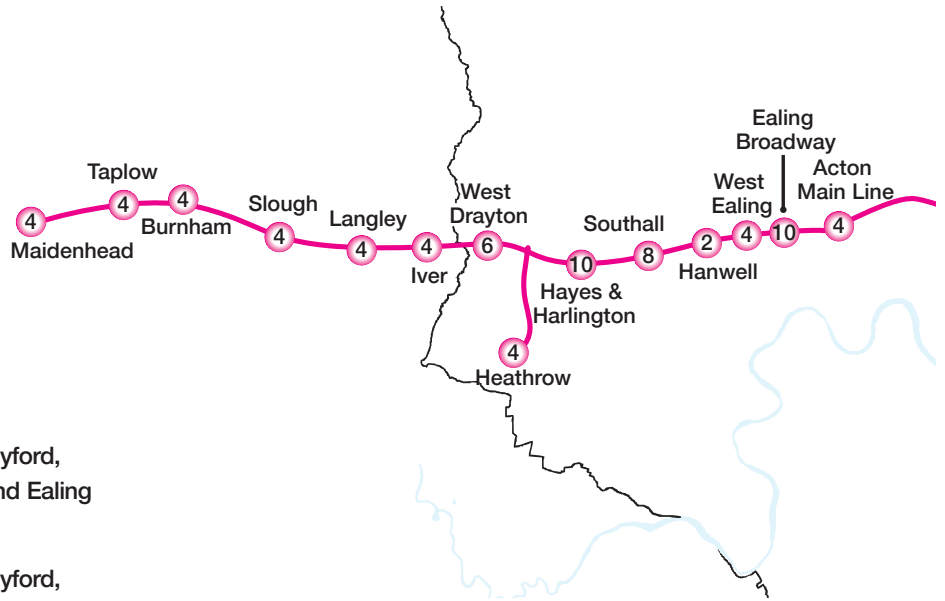


Great Western Corridor

Service Improvements

Crossrail services to Central London

- 4 trains per hour from Heathrow Airport
- 4 trains per hour from Maidenhead
- 2 trains per hour from West Drayton



First Great Western Link services

- 2 trains per hour from Reading calling at Twyford, Maidenhead, Slough, Hayes & Harlington and Ealing Broadway to Paddington
- 2 trains per hour from Reading calling at Twyford, Maidenhead, Taplow, Burnham and terminating at Slough

Summary of indicative services to central London per hour: The Greenford Branch has an increased level of service in the peak hours to compensate for withdrawal of through trains to Paddington.

| Station | Peak | | Off Peak | |
|--------------------|-----------|--------------------|-----------|--------------------|
| | Crossrail | Other Services | Crossrail | Other Services |
| Maidenhead | 4 | 2 | 4 | 2 |
| Taplow | 4 | | 2 | |
| Burnham | 4 | | 2 | |
| Slough | 4 | 2 | 4 | 2 |
| Langley | 4 | | 4 | |
| Iver | 4 | | 4 | |
| West Drayton | 6 | | 4 | |
| Heathrow Airport | 4 | 4 Heathrow Express | 4 | 4 Heathrow Express |
| Hayes & Harlington | 10 | 2 | 8 | 2 |
| Southall | 8 | | 8 | |
| Hanwell | 2 | | 2 | |
| West Ealing | 4 | 4 Greenford | 4 | 2 Greenford |
| Ealing Broadway | 10 | 2 | 8 | 2 |
| Acton Main Line | 4 | | 4 | |

The service pattern will be set by the relevant railway bodies in consultation with the train operating company responsible for operating service Crossrail services.

It is hoped to provide a consistent service with a 7-days a week at all stations Crossrail will serves.

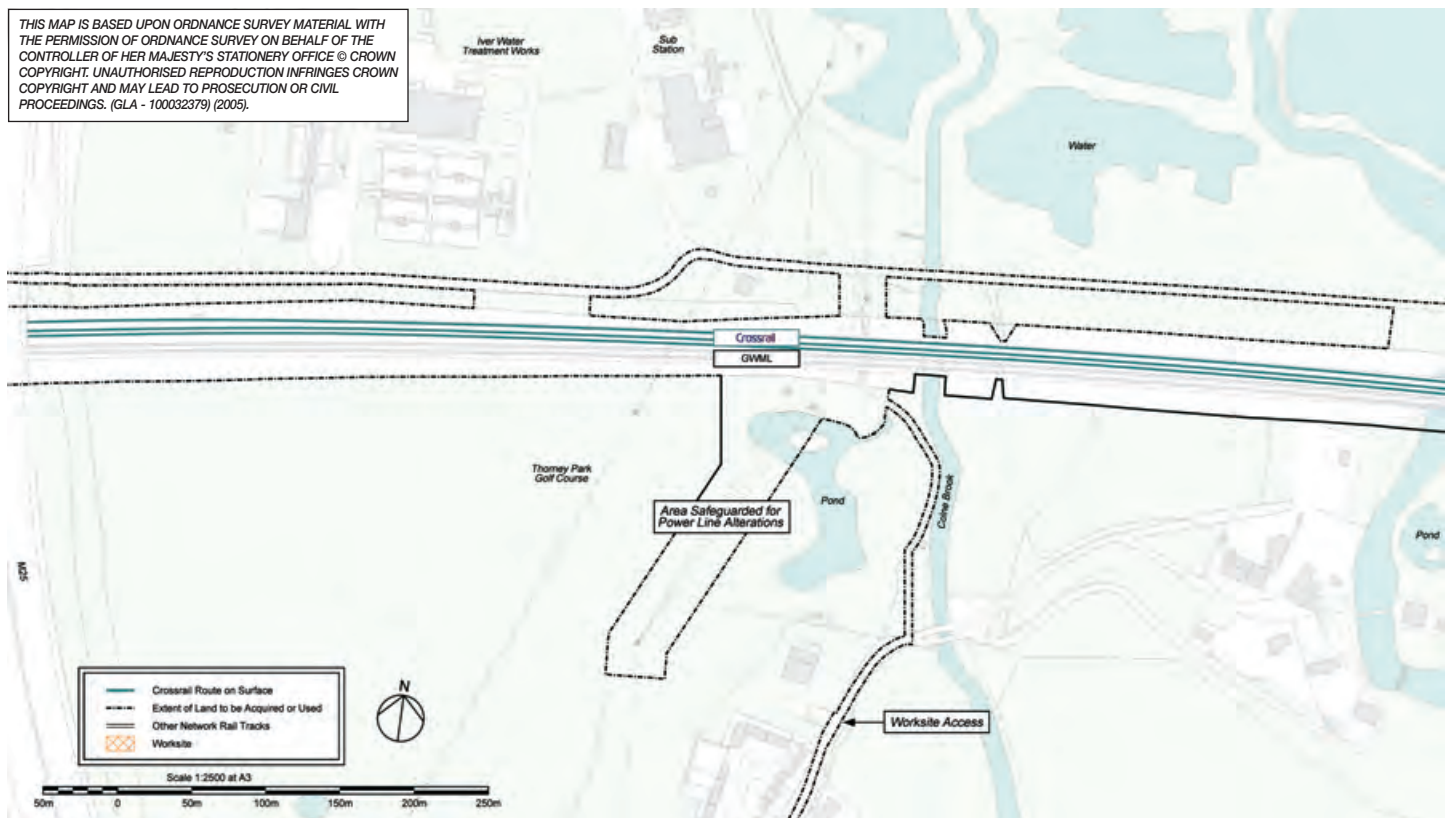


Thorney Park Golf Course

There is an existing Scottish and Southern Power (SSP) 132kV overhead power line that runs in a north south direction across the Great Western Railway and Thorney Park Golf Course.

As part of the works, overhead electrification will be installed on the railway, but there is insufficient clearance between the proposed overhead electrification and existing overhead power lines. Therefore, the existing overhead power lines must be raised.

To raise the power lines two new masts will be installed, either side of the current line in the area immediately south of the railway, and north of the pond. These masts will be approx 20m high and have a base area of 4 x 4 m. The cables will then be restrung between the existing pylons and over the masts, raising the cables to provide the required clearance. The works will have to take place during the summer when electricity usage is lower and the power can be isolated.



Thorney Park Golf Course



Heathrow Airport Access (2)

Service Improvements

Four worksites will be used for the construction of the flyover.

These are at:

- Stockley Close
- H G Timber
- Allpoint Packaging
- Dagenham Motors

Material for the viaducts and transfer structures will be taken to and from the worksites by road. Materials for track works will be partly delivered by rail.

The Stockley Close worksite will be located east of the A408 Stockley Road, with access from Stockley Close.

The HG Timber and Allpoint Packaging worksites will be accessed via Swallowfield Way and Rigby Lane.

The Dagenham Motors worksite will be accessed directly from Dawley Road.

Mitigation measures will manage construction noise. These will include 3.6m high hoardings and the provision of noise insulation if appropriate.