BURO HAPPOLD

Oriel Centre for Eye Health

Last Half Mile – Green Line Proposals

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Abbreviations

Term	Definition	
LHM	Last Half Mile	
LBC	London Borough of Camden	

1 Purpose of this report

This report has been produced by Buro Happold's inclusive design specialists (BHID), who are engaged by the Oriel partners, (Moorfields Eye Hospital NHS Foundation Trust, Moorfields Eye Charity and UCL Institute of Ophthalmology) for client-side support as their accessibility lead on stakeholder engagement for the "last half mile" project. The "last half mile" initiative refers specifically to the last part of the journey, primarily between public transport links and the proposed location for a new Oriel centre for advancing eye health at St Pancras Hospital site, off St Pancras Way.

Stakeholder engagement by the Oriel team and Buro Happold has focused on the accessibility needs of people with physical, sensory and cognitive impairments, including patients with a range of visual impairments. The objective of the work has been to maximise independence and encourage walking. This is aligned to the active travel objectives for London Borough of Camden and the Mayor of London Transport Strategy target for 80% of all journeys to be on foot, by cycle or public transport by 2041.

There is no single solution that will meet a diverse range of pedestrian needs but Oriel is committed to providing a comprehensive and robust wayfinding strategy which includes the use of traditional methods and evolving technology to help with orientation and navigation.

The current location of Moorfields Eye Hospital is close to Old Street station, and for many years a simple painted "green line" on the pavement has helped patients to navigate the 250m walking distance from the station to the hospital entrance on City Road. This "green line" has been maintained by London Borough of Islington. From the outset of Oriel's stakeholder engagement programme, many patients have requested a similar navigational aid to the new site.

Following consultation with London Borough of Camden on the 21st of January at the prospect of a "green line" navigation aid, this report is provided to detail the format and route, as well as interventions required to make the proposed route suitable for its intended users, in particular safer crossing points and occasional seating.

Since that meeting, the Oriel team have undertaken a travel survey with over 400 patients and staff participating, the results of which have yet to be fully analysed. However, it is clear from the initial results that walking is a viable option for the

majority, reinforcing the need for a primary pedestrian route that is easy for all to navigate.

The following pages set out the background to the proposals, together with a very detailed description of the route.

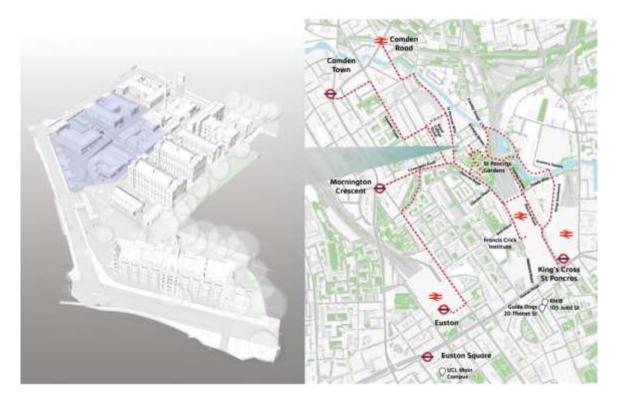
Please note that this report contains images taken in July 2020 and February 2021 which naturally illustrate some seasonal differences in the appearance of the routes. The summer photographs helpfully show the impact of sunlight and shade caused by trees, which are located on the route.

For further information on the wider "last half mile" proposals, please refer to the Appendix 1 of the Transport Assessment (Ref: ORL-INF-XX-XX-RP-PL-350-Transport Assessment) submitted as part of the planning application.

This report is prepared for consideration by London Borough of Camden Planning department and to facilitate later joint discussions with other relevant parties. The proposals have not been discussed with any other stakeholders responsible for parts of the route, including land owners or station managers. In particular, no discussions have taken place with stakeholders for St Pancras concourse which is an integral initial part of the proposed route.

2 Background

The proposed location for the new eye health centre on the St Pancras hospital site offers excellent connectivity with public transport links from many parts of the country, but unfortunately this increased connectivity also provides multiple potential pedestrian routes for the last part of the journey which are mostly much longer than the existing route from Old Street to City Road. Routes from some stations are complex and many are considered too complicated to navigate easily for people with sight conditions or are too long for some people to walk, particularly bearing in mind the older age demographics of many patients.



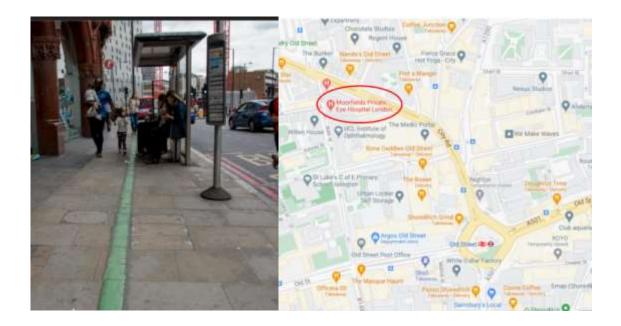
Following comprehensive audits of all potential routes from surrounding stations last year, Buro Happold's inclusive design team (BHID) have identified a primary preferred route with potential as a "green line" route. A presentation of this proposed route to officers at London Borough of Camden on the 21st January resulted in approval of a "green line", subject to further detail being provided.

Since then BHID have consulted with two of the three Oriel Advisory Groups, namely a) the Partners' Advisory Group which consists of representatives from disability and sightloss organisations which was formed in 2020, and b) the longstanding Patients' Advisory Group. The consultations were held virtually but Buro Happold provided details audio description of the suggestions of the proposed route. Following two highly interactive sessions, both groups unanimously agreed that the route was suitable as a primary "green line" route.

It should be noted that whilst patients will be at liberty to use any route to the new centre, and information will be provided on all routes, the "green line" route will be the route recommended for first visits, proposed as the most suitable route for anyone with concerns about finding their way to the site.

3 Format of the Green Line

The "green line" from Old Street to City Road is a line, approximately 100mm wide, which has been painted on the pavement route, starting from the subway exit from Old Street station. It is managed and refreshed by London Borough of Islington. The line stops either side of the two minor crossing points on the route and is therefore not painted on the road surface.



Consideration is being given to the potential use of developing technologies such as smart phone apps but user engagement has confirmed that low tech solutions such as a painted "green line" are robust i.e available at all times to everyone, and they are therefore considered by many to be a critical component of any wayfinding strategy. The "green line" is an example of a feature that does not require access to the internet, the ability to use technology, or the possession of a smart phone. It is easy to understand and low maintenance.

At present, the format of the proposed "green line" will, as a minimum, seek to replicate the qualities of the existing line. Although a yellow line has greater visibility, this is unsuitable due to the presence of yellow lines on road surfaces. A similar green colour to the existing one has been proven to work well. However, a dark green should not be used as this is unlikely to be as visible. Prior to a final decision on the exact colour, light reflectance measures should be compared between the main paving colours and the proposed shade of green.

There are two proposed options for a visual "green line":

- a) A painted "green line" very similar to that provided by Islington Council.
- b) An adhesive weather resistant, durable "line" which can be replaced in short sections when necessary through disruption of wear and tear. This option is potentially the most flexible as it could be trialled and amended, or used as a trial prior to confirming the position and adopting a painted line approach at a later date.

At the most recent engagement session with the Patients' Advisory Group, the possibility of a tactile "green line" was raised. Such an option will require user trials and wider consultation as there is no current format nationally recognised that is suitable for this purpose over such a long route.

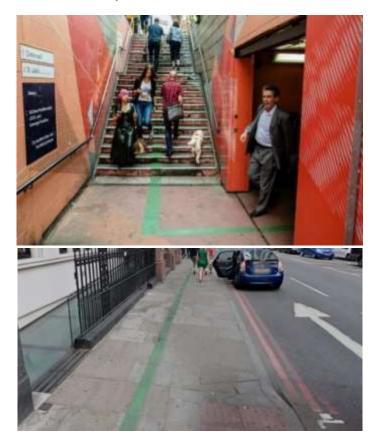
Oriel are open to exploring a tactile format for the "green line". However, BHID have advised that the current national guidance path tactile format is not widely used, and most visually impaired people are unable to detect it successfully. There are other examples of tactile wayfinding guidance surfaces used overseas which could potentially be explored but these have not been adopted in the UK due to lack of research here. Extensive user trials would therefore be needed before proposing a tactile form of "green line" and this has not been possible due to the pandemic and the extra duty of care to the user group. It is hoped that such trials might be developed once planning permission has been awarded and the lock down restrictions are over, allowing people to travel confidently to Moorfields where the trials could be run..

It is acknowledged that the following considerations are needed when developing the final format for the "green line", particularly towards a tactile format, and that there are several stakeholders who need to be consulted for some elements of the journey:

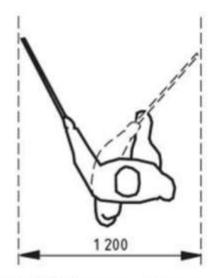
Consultee Types	Surface Finish	Appearance	Safety
Pedestrians with a	Needs to be	Needs to be visible in	Must not increase risk
range of	detectable on all	day and <u>night time</u>	of trips and falls for
abilities/disabilities	surface types, such as	conditions – colour	any users
	tarmacadam, paviors	and reflectance may	
	and close to existing	be helpful.	
	hazard warning		
	surfaces such as		
	crossings.		
Installers /contractors	Durable, easy to	Visual contrast in LRV	Does not create a trip
	maintain	from a variety of	hazard for others?
		different surfaces	
		(external and internal)	
Maintain and cleaning	Easy to clean	Durable design that	Wheel slippage or
– LBC, TfL		maintains its	entrapment
		appearance in all	(wheelchair users,
		weather conditions	cyclists, prams)
		and with wear and tear	
Other – utility	Ease of replacement	Does not cause	Slip resistance when
companies who need	when needed (all or	confusion for other	wet
access to underground	part)	users if applied on the	
services		road surface – eg	
		motorists and cyclists	

4 Position of the Green Line

The position of the line on the route from Old Street commences within the subway at the station and is either central or offset from the inner edge of the available pavement width (ie furthest away from the road).



The proposal is to provide the new "green line" at a consistent distance from the inner pavement edge to allow for someone to walk with the "green line" underfoot or directly in front, this would be helpful for long cane users who swing the cane from side to side to detect the surface finish and any defining edge lines such as buildings. It should, in most cases, also keep people using the "green line" away from lamp posts and other street furniture which is often aligned on the outer edge, as well as a reasonable distance from road traffic and cycle lanes. We believe the best place for the line is approximately 600mm from the inside edge, based on the typical swing of a cane user as illustrated in the extract below from BS8300:2018, as this will allow the line to be viewed straight ahead.



c) Blind or partially sighted person with cane

There appears to be no licensed tables, chairs or stalls on the proposed route. There are antique stalls on a short stretch of the route but we understand that these are rarely open and pavement displays are therefore unlikely, however recognition is given to the fact that some buildings may have a demised line on the pavement and this may need to be taken into account when positioning the "green line".

5 Selection of the Primary Route

In selecting a single primary route, the intention has been to find a safe, understandable pedestrian journey that will be comfortable and safe to use people with a range of sight conditions. Primary considerations have been the avoidance of subways, underpasses and other areas that are not easily supervised or do not afford good sight lines – these aspects contribute to a user's perception of a safe environment.

Routes from the following rail stations were audited:

- 1. Kings Cross/St Pancras
- 2. Euston
- 3. Mornington Crescent
- 4. Camden Town
- 5. Camden Road

Routes from Euston Square Underground station and Caledonian and Barnsbury Overground station were not considered, primarily due to the distances involved.

The audits looked at:

- Step free access within the station
- Clarity of each route
- Suitability of surface finishes -i.e. even paving
- Crossing points
- The absence of shared surfaces
- Positioning and alignment of street furniture
- Seating and rest points
- Existing wayfinding including signage and orientation cues

Mornington Crescent is the closest station but has not been recommended due to the station not being step free along with various existing hazards on the pedestrian route between the station and the Oriel site via Crowndale Road.

The two Camden stations (particularly Camden Road) could be used, although both involve changes in direction and a range of crossing points (although Camden Road is step free).

Due to station constraints and the challenges posed for disabled people, Euston Station itself is not an ideal location to access the Oriel site.

However, anyone who feels confident could use any of the routes from the stations shown. Kings Cross was chosen for the range of factors previously described.

6 The Kings Cross/St Pancras Primary Route

A summary of the primary selected route is described below:

- Exit Kings Cross mainline and underground station to the West on to Battle Bridge Place.
- Cross to St Pancras Station via a controlled crossing point.
- Enter St Pancras Station, moving straight across the concourse to exit onto Midland Road
- Head North on Midland Road, which becomes Pancras Road.
- Continue as the road eventually bends into St Pancras Way and the proposed main entrance to the new Oriel Centre.

At almost 1km, the selected primary route from Kings Cross/St Pancras is not the shortest distance to the proposed Oriel site from the stations available. It has been chosen for the following reasons:

- It is a key transport hub for the majority of patients, with national and international overground services and underground links to most parts of London. Underground lines serviced include the Northern (Bank and Kings Cross Branch), Victoria, Piccadilly, Hammersmith and City, Circle and Metropolitan lines. Potentially this may be a suitable route for anyone using the St Pancras car park.
- It is a relatively straightforward route, is step free throughout and presents the fewest hazards.
- A route between Kings Cross and St Pancras concourse is possible to allow the two arrival points to be linked.
- From the concourse and exit levels, routes are step free.
- Both Kings Cross mainline and St Pancras concourses have toilets (including accessible provision) and a variety of types of refreshments for travellers – important considerations if journeys are delayed.
- These are manned stations with staff on hand to assist with travel enquiries.
- Routes from other stations are not ideal for all patients.
- The selected route from Kings Cross/St Pancras is not the shortest route to the site but it is largely a linear route with minimal turns, making it easier to understand and avoiding underpasses/tunnels and canalside routes for safety reasons, ensuring that the route is suitably safe for visually impaired pedestrians travelling independently.

Subject to discussion with the respective authorised parties for the stations, the intention would be to begin the external "green line" between Kings Cross station and St Pancras Station and then from the two exits from Kings Cross St Pancras station onto Midland Road.

Initial discussions have commenced with Transport for London (TfL) in relation to the signage and wayfinding from both the underground and overground services. The objective is to assist potential visitors wishing to walk to the Oriel Centre to navigate and leave Kings Cross from the correct exit, to the West of the station, facing Battle Bridge Place. It is recognised that there are other stakeholders who have yet to be consulted, such as Network Rail and HS1.

There is a preference for audio announcements to be provided and a meeting point to be identified to assist wayfinding and navigation to the beginning of the green line route.

The proposed route is illustrated below. A detailed explanation of the entire external route with images is provided in Section 7 where the descriptions provided are generally those given to the advisory groups during recent engagement sessions specifically on the "green line". The green arrows illustrate where an internal route through the stations may be agreed with the respective station stakeholders, and is subject to consultation and agreement.



6.1 Crossings

The route has four crossing points, two of which are currently zebra crossings and two have dropped kerbs with tactile warning surfaces but no formal crossing arrangement. Our recommendation is for all four of these crossing points to become a pedestrian controlled crossing. The crossings will be at:

A. Midland Road outside St Pancras



B. Midland Road junction with Brill Place



C. Pancras Road junction with Chenies Place



D. Pancras Road crossing from West to East



6.2 Rest Points

Seating is an important consideration on a route of this length. The audits have identified existing seating and opportunities for additional provision. These are:

Existing:

- Battle Bridge Place within the pedestrianised area
- The St Pancras concourse
- Midland Road, outside Frances Crick Institute
- Pancras Road at the first of the two zebra crossings

Potential additional provision:

- Midland Road with St Pancras to the right, shortly after crossing Brill Place where the pavement widens from the junction
- Midland Road heading towards the underpass with Pancras Road where the pavement widens
- Pancras Road behind the bus stop and cycle lane, from the end of the antiques building
- Pancras Road, somewhere along the route from the steps to St Pancras Gardens to the second zebra crossing point, adjacent to Goldington Crescent gardens
- Where Pancras Road curves into St Pancras Way, approximately 100m from the Oriel Centre

These are detailed further in later sections.

6.3 Signage

Additional directional signage on the route would be helpful in addition to the "green line". This may include Legible London totem signs although at present this form of signage offers little help to visually impaired people. BHID would therefore like to discuss options for additional formats for these totem signs, which may include some tactile elements and possible audio information and such additions would also be preferably to existing Legible London totem signs already in existence in close proximity to the route.

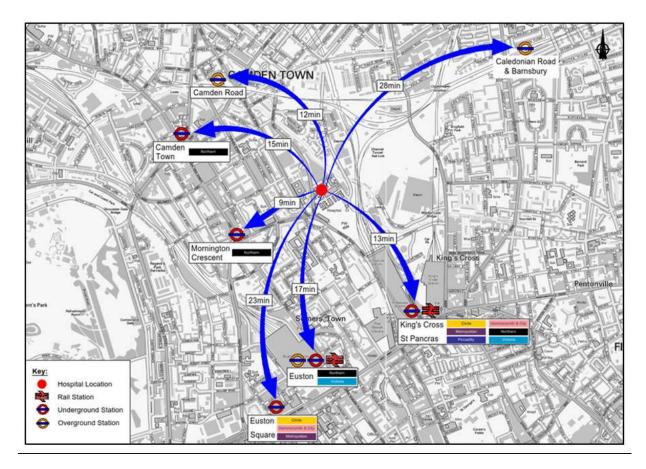
It would also be preferable to have warning signs for cyclists to be aware of visually impaired pedestrians. This would be particularly welcomed at the start of cycle lanes running adjacent to the green line route. (Typically, this is achieved through the customary "elderly people" warning triangle with "Blind people" beneath but supplementary information about the green line would be welcomed).

7 Detailed Description of the Route

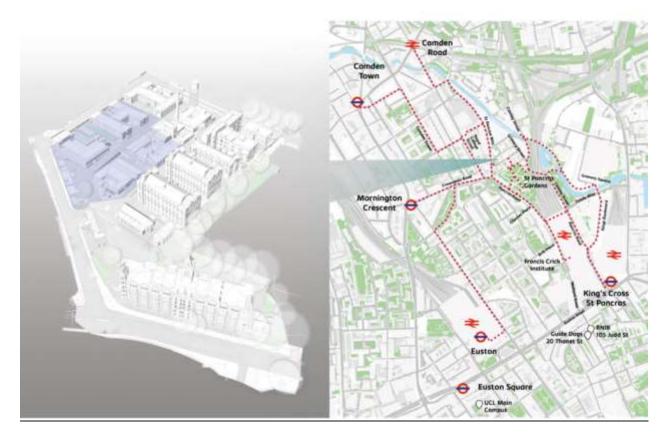
The route identified is not the shortest but does have means to provide a reasonably safe and level pedestrian route from Kings Cross Station. The route, as suggested, should allow for pedestrians to get to the site, and also back to Kings Cross Station.

It is recognised that the pedestrian route is some five times longer (1km) than the current Moorfields hospital site from Old Street station to City Road (250m). To assist with this route, provision for further resting points are proposed, as well as additional Legible London Totem signs.

Please note that this report contains images taken in July 2020 and February 2021. It provides some differences in the routes in the summer and winter. The summer photographs in particular show the impact of sunlight and shade caused by trees, which are located on the route.



The image below shows the routes considered for use. However, the Kings Cross route was selected as it presented the most straightforward route, is step free and is considered to present the least number of hazards, subject to some upgrades, particularly for people with a visual impairment.



The route proposed runs from the West side of Kings Cross Station, through to the main concourse of St Pancras Station and then right (North) onto Midland Way. Once the right-hand turn has been taken out of St Pancras Station, apart from negotiating a range of crossing points, the route is then mostly linear without the need to further change direction.

Kings Cross Station itself is very complicated, but is understood to be step free from all underground stations, including the following lines:

- Northern
- Piccadilly
- Victoria
- Hammersmith and City
- Circle
- Metropolitan

The mainline station serves the East Coast Main Line to North East England and Scotland, creating a very wide catchment area.

The image below shows the West elevation of King's Cross station as viewed from Battle Bridge Place. It shows the start of the journey when departing the King's Cross station at ground level.

From Kings Cross Station (West entrance / exit)



This image shows the two west exit points. To the right are two sets of automated doors which provide the exit route from the overground station. To the left of the image is the exit from the underground station.

The two "green lines" illustrated on the above image are intended to provide assistance for those leaving King's Cross station, with the two lines joining together in the pedestrian plaza area of Battle Bridge Place.

King's Cross station itself has a complicated layout and will require a visual means for people with low vision to navigate through both the underground and overground station to the appropriate exit point will be discussed with them. The aim will be to ensure that the appropriate exit is utilised when commencing the journey to the Oriel Centre.

For the return journey, consideration will be made around how additional information can be provided to differentiate between the line to underground and the line to overground services.

From Kings Cross (looking back towards station)



The above_image is again looking back towards King's Cross station from the crossing point on Battle Bridge Place which provides access to the ongoing route to the East elevation of St Pancras station. This route taken from King's Cross station will pass through Battle Bridge Place's pedestrianised area to the crossing point on Pancras Road, shown at the forefront of this image.

Whilst there are some obstructions on the route including seating and cycle parking, it is anticipated that the "green line" will assist in navigating safely through this environment.

It should be noted that within Battle Bridge Place there is a range of seating which provides an opportunity for resting, albeit the seating is not undercover.



Crossing point between Kings Cross and St Pancras Kings Cross to the left -St Pancras Road to the right The above picture shows the controlled crossing point between King's Cross station and St Pancras station, which crosses over Pancras Road. King's Cross station is on the left with the "green line" (and arrow) showing the direction the individual has come from, and the "green line" on the far right of the image is the direction for the continuing journey to a second crossing point on Pancras Road gain access to St Pancras station.

The current arrangement of tactile surface information does not follow national guidelines as a deviation has been permitted. In particular, there is minimal colour contrast between the tactile surface and adjacent paving surface. Usually, a red blister tactile paving is used at controlled crossings. It is anticipated that the "green line" will assist people with sight impairments in visually identifying the crossing point.

This image below shows the ongoing route to the entrance into St Pancras station after crossing Pancras Road. Once across the road, a right turn is followed before following the path around a curved guarded glazed barrier enabled access to the station entrance. Again the "green line" will assist in guiding people with visual impairments into the entrance to St Pancras station, which is approximately 30m from the crossing point to Pancras Road.

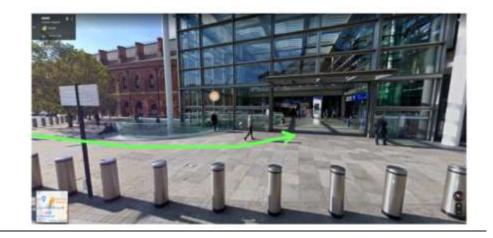
Route to St Pancras after crossing road



At the time of survey, this was a quiet area. However, this was during a period of 'lockdown' due to the Covid-19 pandemic. It is anticipated that the route from King's Cross to St Pancras station will generally be much busier during working days and particularly at peak times. The provision of a "green line" is anticipated to assist in avoiding any disorientation.

The photograph above shows the East elevation of St Pancras station from the crossing point at Pancras Road (to the left of the image) and the entrance of St Pancras station (to the right of the image).

As identified in the previous image and below, after crossing Pancras Road and proceeding around the glazed guarding, St Pancras Station's entrance is to the left. Again the "green line" will assist in navigating towards this entrance.



Entrance to St Pancras concourse (East elevation)

The following image is looking back towards King's Cross station after entering St Pancras station from the East elevation, as described previously.



Entrance to St Pancras (looking back to Kings Cross)

Level entry into St Pancras is shown to the left and the "green line" will continues through to St Pancras' concourse.

To the right of the image is another entry point into St Pancras station. However, due to level differences this is a stepped approach. Therefore, the route proposed on the previous images avoids the stepped access onto the station concourse.

Also shown centrally in this photograph is a set of escalators, and to the left, just out of shot is a lift. Both the lift and the escalators provide access to underground pedestrian route from King's Cross Underground ticket hall. It allows individuals to access St Pancras station without having to negotiate the ground level crossing point across Pancras Road. These would also assist in avoiding any inclement weather. This is an alternative route which would be safe for anyone with good mobility to use. Unfortunately, the route below ground does involve a slope of 1:20 over a length of 30m which may be difficult for ambulant disabled people and some wheelchair users to utilise.

However, it does provide a further route and subject to agreement from the appropriate station stakeholders, this may be an alternative to identify to reduce the interaction with vehicles and the crossing point noted before at ground level across Pancras Road.



Route through St Pancras concourse

The above image shows the St Pancras concourse, which is quite extensive, although it does provide a straight route through to the West elevation and Midland Road. The concourse itself is approximately 200m long and permission from the responsible parties who manage St Pancras station will be required to enable a "green line" to continue through the concourse itself.

As mentioned previously, the survey was undertaken during 'lockdown' so it is anticipated this is typically a much busier environment than shown in the photograph. However, the provision of a suitable "green line" will assist in navigating this busy environment. There is a range of seating along the concourse as well as cafes and takeaway areas.

The route through the concourse leads directly to the Western exit of St Pancras station onto Midland Road, as shown in this next photograph.

Exit point from St Pancras concourse into Midland Rd (to the West)



Two sets of automated doors provide a means to access and egress the station easily, with the "green line" passing through the left-hand set of doors as viewed from inside. This allows an approach to an uncontrolled (zebra) crossing, which is addressed in the next image.

It was noted that due to the nature of the hard floor surface, there was an element of glare from the sunlight externally when this image was taken. This may present some challenges for people with a visual impairment on approach to the exit although utilising the "green line" for assistance in navigation should hopefully overcome this issue.

Upon exiting St Pancras station from the West side of the concourse, the route to the Oriel Centre is effectively a right-hand turn (to face North). Then it is a relatively straightforward - albeit long - continuous walk to the St Pancras hospital site, where the Oriel Centre will be based.

Exit from St Pancras (looking back to station concourse)



After exiting St Pancras station and turning right into Midland Road, pedestrians can walk up the right-hand or left hand side of Midland Road.

Consideration has been given to the safety of both sides of the road for the next part of the pedestrian journey.

The image above shows the zebra crossing, looking back towards the St Pancras station exit on the West side of the concourse. The proposal is to seek this crossing to be upgraded to a controlled crossing to enable the 'green line' route to continue on the opposite side of the road (West), for the majority of the journey site. This crossing point can be a very busy one at peak times so it is critical that a safe crossing is provided at this location.

The image below shows the left-hand (East) side of Midland Road, (if an immediate left is taken when leaving St Pancras station, rather than crossing over. Whilst this route has a pavement with suitable curb arrangement, it is very narrow in places due to structural columns supporting the roof of St Pancras station. It also has a number of other features including cross falls which may be challenging for wheelchair users to utilise.

Midland Road

East side looking north after exiting St Pancras Station concourse



At its narrowest point, the route is one metre wide. This would restrict movement particularly with pedestrians walking in both directions and would be challenging for wheelchair users, anyone with a mobility aid, assistance dog or companion. The primary reason for suggesting the crossing is upgraded is to enable people to safely cross over Midland Road before turning right, heading North towards the Oriel Centre on the left-hand side (West) of Midland Road which is much wider and free of obstructions. The left hand side of the road is also likely to be less exposed to winds and driving rain during inclement weather.

Outside seating is available outside the Francis Crick Institute, which is directly opposite the St Pancras station exit and shortly after the crossing point.

A further photograph below shows the zebra crossing adjoining the exit from St Pancras station. The station is to the right of this photograph and the image is facing North along Midland Road in the direction of travel.

Crossing to Midland Road outside St Pancras and route north up Midland Road (West side)

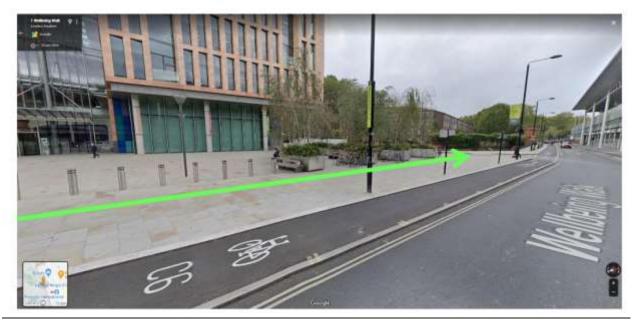


After successfully navigating this crossing point, the "green line" will continue on the left-hand (West) side of the road on a wide and level pavement which in very good condition and level.

The iconic 14 metre high "Paradigm" sculpture (bronze coloured metal twisted column, spanning under one metre at the base and increasing to 5 metres across at its widest point) can be seen to the left of the above image. This as well as the iconic and award winning Frances Crick building should provide a helpful landmark to help pedestrians orientate on leaving the station and on their return journey.

The "green line" will then continue along the left-hand side of the road, on the wide pavement.

Midland Road (seating to the left) outside the Francis Crick Institute



The image above shows the route continuing along the left-hand (West) side of Midland Road. There is a cycle lane running adjacent to the paving.

As previously mentioned, existing seats outside the Frances Crick Institute provide an opportunity to rest.

Francis Crick Institute - seating



The seats pictured above outside the Francis Crick Institute are set back from the main pedestrian pathway.

The route then continues along the left-hand (West) side of Midland Road, heading North towards the Oriel site. The next image is looking up Midland Road with St Pancras station on the right; the Frances Crick Institute just out of view on the left..

Midland Road (uncontrolled crossing / dropped kerb to left)



After passing the Francis Crick Institute, the first of two uncontrolled crossing points is met at the junction of Midland Road and Brill Place (see image above and below). This currently has dropped kerbs and buff coloured tactile blister paving in line with national guidance for an uncontrolled crossing.

Dropped kerb to side road (Midland Road into Brill Place)



It is requested that this crossing point is also upgraded to a formal crossing to improve the safety of pedestrians, ideally to a controlled crossing.

The image above again shows the indicative position of the proposed "green line". The paving here continues to be wide, and in good condition and very level.

The route continues along the left-hand (West) side of Midland Road after crossing Brill Place.

Midland Road (St Pancras Station to the right)



The pavement significantly widens at the corner after this junction, allowing the potential provision of seating.

The "green line" can continue along this route which has a low-level wall to assist in cane detection.

The image below shows the right-hand (East) side of Midland Road where there is a service entry into St Pancras station. This crossing point is avoided by using the left-hand side of Midland Road.

Midland Road (service entry to the right)



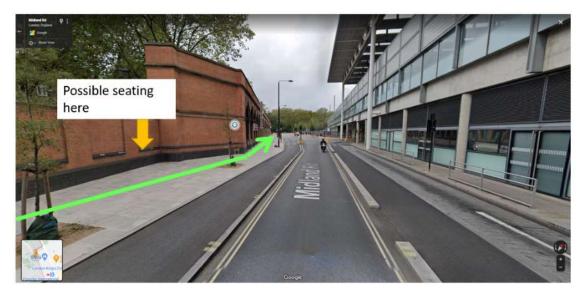
The image below shows the route continuing along the left-hand (West) side of Midland Road. A full height brick wall should assist in navigation and provide some protection in windy conditions.



Continuing along Midland Road towards the junction with Pancras Road, the red brick wall projects into the pavement area and reduces the surface width. This is the start of a row of red brick antique stores.

Midland Road

(heading towards underpass with Pancras Road)



Where the wall projects, there is an opportunity for further seating without any significant obstruction to pedestrians. The "green line" continues along the frontage of the antique shops.

The following image shows the "green line" continuing along the left-hand side of Midland Road, past the junction with the Pancras Road underpass (to the right). At this point, Midland Road merges and becomes Pancras Road, continuing North towards the Oriel Centre.

Junction of Midland Road and Pancras Road (underpass to right)



The junction on the right-hand side of the road is a controlled crossing point but includes a central reservation which would need to be negotiated if continuing along the right-hand side of the Midland Road at its junction with Pancras Road.

To the left of the above photograph is the red brick structure used as individual Antique stores. These premises were closed at the time of survey due to Covid-19 restrictions but we are advised by Pip Jackson (ex LBC and now Access and Inclusion officer at UCL) that these outlets are very rarely open and do not have displays outside. The pavement width in this location is generous, but any form of temporary display of merchandise or A-boards should be avoided to reduce any risk to visually impaired pedestrians, also maximising the visibility of the proposed "green line".

View of controlled crossing at junction of Pancras Road and Midland Road (east side)



The above image shows Pancras Road and the underpass viewed from the left-hand (West) side of Midland Road. As mentioned, Midland Road becomes Pancras Road at this point onwards, but the left hand pavement continues without interruption.

The following image is taken in roughly the same location as the previous two photographs but from the opposite direction, i.e. back towards St Pancras station (with the underpass to Pancras Road and St Pancras Station on the left-hand side, and the antique outlets on the right). The "green line" position can be seen on the right-hand side of this image. (This would be the view on the return journey to St Pancras station from this point.).

View back towards St Pancras Station (Midland Rd)



Returning to the outgoing route from St Pancras station to the Oriel Centre, the next image shows the ongoing proposed "green line" route on the left-hand (West) side of what is now Pancras Road, just past the Antique stores.

Continuing route North on Pancras Road (West side)



Shortly after passing the antique outlets, the "green line" route passes behind a bus stop (see image below). This is highlighted because the cycle lane passes behind the bus stop. There is no clear delineation between the cycle lane and pedestrian route in the form of a curb or tactile delineator, although the cycle lane is in black tarmacadam with the paving slabs being a lighter grey which provides some visual contrast between the two surfaces. The "green line" will need to be positioned appropriately to avoid the risk of collision with cyclists.

Pancras Road – Bus Stop and Cycle Lane



The darker brick coloured wall which steps back from the end of the Antiques building, provides a recess behind the bus stop, providing adequate space for further potential seating.

Shortly after passing behind the bus stop, the pedestrian route approaches another crossing point to a road on the left-hand (West) side of Pancras Road.

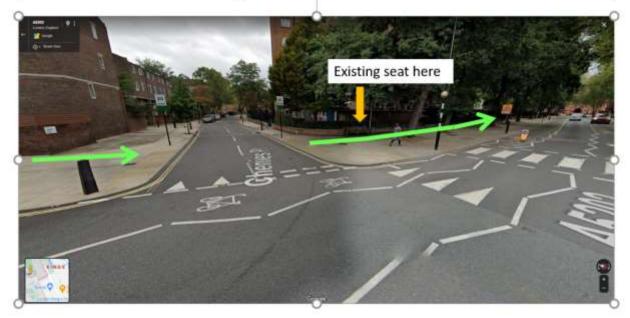
The following image also shows a crossing point to the right-hand (East) side of Pancras Road and in the distance a zebra crossing which may be considered as part of the ongoing journey.

Pancras Road – uncontrolled crossing points



The image below shows the same crossing point at the junction with Chenies Place, looking West. As the previous crossing point, this crossing also has dropped curbs and a buff-coloured tactile blister warning service following national standards for an uncontrolled crossing.

Pancras Road – dropped kerb (uncontrolled at junction with <u>Chenies</u> Place)



Just like the junction with Brill Place, it is recommended that this junction pictured above has a formal controlled crossing to minimise the risks to pedestrians. This will allow the continuation of the journey to the opposite side of Chenies Place

The Oriel centre site is now approximately 400m away.

The next two images invited discussion with the Oriel Advisory Groups as there are two potential crossing point options:

- At this point, there is an option to continue on the left-hand (West) side of Pancras Road or utilise this zebra crossing to the right-hand (East) side of Pancras Road, on the basis the zebra crossing is upgraded to a fully controlled crossing point.
- ii) Alternatively, there is a another zebra crossing approximately 150m further along Pancras Road, which could be upgraded to a controlled crossing point.

In consultation with the user groups, it was felt that the second zebra crossing nearer to the Oriel site was considered a safer place to cross but information is included here for LBC's information, particular as the choice of crossing could change if the steps to the park are reconfigured at a future date

Pancras Road (first of two zebra crossings)



There is an existing wooden seat located to the left-hand side of this crossing, providing another potential resting point.

The option is whether to continue on the left-hand (West) side of Pancras Road, meaning the pedestrian will have to cross to the right hand side at a later point, or crossing to the right hand side (East) at this point. To inform further discussion, the following images illustrate both sides of the road, although at this stage the "green line" has been continued along the left-hand (West) side of Pancras Road to the second of the two zebra crossings.

The two images below show the continuing journey on the left-hand (West) side of Pancras Road.



Pancras Road (West)

The left-hand photograph shows the avenue of trees that impact the width of the pedestrian route a short way beyond the first crossing point option. At its narrowest point the pavement is only 1.2m wide. The right-hand photograph shows the same line of trees and their distance to the kerb side, which does provide some additional width. However, it does take pedestrians away from a low-level wall which would be of assistance for navigation. On the basis the "green line" continues along this route, there would be merit in discussing its precise position.

(Note: This image was taken in February 2021, when the leaves had dropped from the trees).

This next photograph shows both the left-hand (West) side and right-hand (East) side of the road.



Pancras Road (bus stop and cycle lane to East side)

When considering the first zebra crossing, if it was upgraded to a controlled crossing point it would be possible to safely cross over earlier and continue the journey on the right-hand (East) side of Pancras Road avoiding the area of the trees described above. However, on the right hand pavement, pedestrians would need to navigate around a bus stop with a cycle path passing behind it, this restricts the width of the pavement and potentially risks collision with cyclists.

(Note: This image was taken in July 2020, when trees were in full leave and it was sunny).

The image below shows the proposed "green line" continuing along the left-hand side of Pancras Road with St Pancras Gardens to the right and the adjoining cycle path.

Pancras Road –heading North (St Pancras gardens to the right)



A further photograph, below, shows the continuation along the route towards the Oriel Centre with a stepped approach to St Pancras Garden on the right-hand (East) side of Pancras Road. If the "green line" is taken down this right-hand side, consideration will need to be given to the return journey where pedestrians will be approaching the junction of the steps, which could present a tripping hazard. However, the provision of suitable warning tactile paving and an appropriately located "green line" could overcome this – the next image shows the steps when viewed in the opposite direction to illustrate the issue.

Pancras Road (steps to St Pancras Gardens to the East)



As shown in the image above, the current proposal is for the "green line" to continue along the left-hand side of the road towards the second zebra crossing point.

It would be appropriate somewhere along this location to identify and provide suitable seating (ideally covered) for a further resting point before arriving at the second zebra crossing which is adjoining Goldington Crescent Gardens. Seating could be provided between trees on the left-hand side of the road or recessed behind the set of steps on the right-hand side of the road adjoining the entrance to St Pancras Gardens.

Passing the stairs to St Pancras Gardens on the right-hand (East) side of Pancras Road, the image below is taken looking back towards St Pancras Station, demonstrating the potential issue of the stairs up to St Pancras Gardens.

Pancras Road (looking back towards steps)



The pavement becomes quite restricted at the junction of these steps, narrowing the distance to the cycle path. In this location it is assumed that there are varying degrees of kerb height between cycle path and pedestrian route due to achieving sufficient falls on the cycle path for drainage. In places it is at the same level or is very shallow, presenting a risk of collision and trips for pedestrians who may inadvertently move into the cycle path.

However, as discussed previously, there may be a means to identify the steps with use of suitable corduroy tactile paving along with the appropriate location of the "green line", if this side of the road was to be used for the ongoing journey to the Oriel Centre.

In this next image, the perspective is back in the direction of the Oriel Centre along Pancras Road, with the "green line" to the left (West) and with St Pancras Gardens on the right hand side.

Pancras Road continuing North (gardens to the right)



At this point there is approximately 150m further to the Oriel centre site.

Whilst not clear in the image due to pools of dark and light, the varying kerb heights between the cycle path and pedestrian route is still present.

(Note: This image was taken in July 2020, when trees were in full of leaves and it was sunny).

Upon approaching Goldington Crescent Gardens, there is another zebra crossing, pictured below. At this stage, it is proposed that this is upgraded to a controlled crossing and the green line leads pedestrians to cross over to the right-hand side (East) of Pancras Road. This will allow a direct pedestrian route with minimal hazards to complete the journey.

Pancras Road – second zebra crossing to be made into controlled crossing



If the option was to use the first of the two zebra crossings noted previously, then the "green line" would continue on the right-hand (East) side of Pancras Road from that first crossing point.

The journey after the chosen crossing point continues on the right-hand (East) side of Pancras Road, pictured below, which is clear of obstructions and has the benefit of a wall to assist with navigation.

Pancras Road – continuing "Green Line" to the right / East side of Pancras Road



The photograph below shows the closer approach to the junction between Pancras Road, St Pancras Way and Crowndale Road. As the "green line" is now on the right-hand (East) side of Pancras Road, the pavement bends round to the right onto St Pancras Way, without the need to negotiate any crossing points at this difficult junction.

Junction of Pancras Road and St Pancras Way



Crowndale Road, shown to the left of the image above, continues around to Mornington Crescent underground station. Anyone wishing to get to the Oriel Centre from Mornington Crescent would need to negotiate these crossing points to gain access to the site. The safety issues involved was one reason why this underground station was discounted as a safe independent route (although it may be suitable for some and will be given as an option).

The photograph below demonstrates the route and "green line" continuing around into St Pancras Way with the Hospital site now visible to the right. At this location, there is sufficient width on the pavement to consider an additional resting point, although at this location it approximately 100m to the Oriel Centre.

Bearing right into St Pancras Way



The route continues along St Pancras Way, avoiding any crossing points.

St Pancras Way (St Pancras Hospital to the right)



These further photographs (above and below) shows St Pancras Way looking in the direction of the Oriel Centre (North) and continuing on the right-hand (East) side of the road.

It was noted that this stretch of pavement was in poor repair and it is recommended that improvements will be made to the paved areas to reduce the extent of ponding in wet weather and potential trip hazards.



St Pancras Way (St Pancras Hospital to the right)

The penultimate image below shows the approach to the Oriel Centre. There are two trees in the centre of this photograph, which effectively represent the location of the building upon approach, although naturally the building will be significantly larger, allowing for ease of identification.

This area will be completely redeveloped but will allow for pedestrian access off St Pancras Way without the need to negotiate any further traffic. Whilst there will continue to be a vehicular route onto site at this location, this will be managed by giving priority to pedestrians over vehicles.

St Pancras Way (approaching proposed Oriel site)



The final image below shows the existing entrance into the St Pancras Hospital site. Broadly, this will be the same location for the approach to the Oriel Centre and the entrance, which will allow the "green line" to continue through the entry doors and into the building.

St Pancras Way (entrance to site and new building)



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