North Tottenham is Changing

The improvements to White Hart Lane are part of the much bigger plans for major investment and regeneration in the area that includes:

- The High Road West Development - the building of a sustainable neighbourhood to the north and south of White Hart Lane with over 2,000 new homes set around a new square, library and learning centre and existing workspace as part of new ‘leisure hub’.

- White Hart Lane Station - the £16m+ refurbishment will make the station safer and more accessible with a new entrance and improved access to platforms.

- Plans for the regeneration of Northumberland Park and Love Lane Estate combined with the new Tottenham Hotspur Football Club Stadium development will improve the health, wellbeing and prospects for local residents, including providing health centres and schools; create thousands of new jobs; and it will deliver high quality community facilities at the heart of the area.

What we are trying to do

The aim of this project is to make White Hart Lane more attractive and welcoming, to make it a better place to live, to support the existing shops and to encourage more businesses to come to the area.

The illustrations on the following boards show early design principles for altering the junction, widening the pavements and traffic calming, sustainable drainage, greening the street and the proposed materials. Once we have the final survey information and have gathered feedback from you, the community, businesses and other partners we will finalise the design.

Today’s event is one of a number of information sessions held in the area, to ensure that local people are informed about the projects planned for White Hart Lane and to give you the opportunity to comment on the proposal.

The designs and plans presented reflect conversations that have taken place with local residents, community groups, businesses and land owners.

About White Hart Lane

White Hart Lane is a place where people live and work, a place where children grow up. White Hart Lane has a community of independent shop keepers and businesses and has a rich history. There is an invisible river beneath the pavement and there is the potential to be a much greener place.

White Hart Lane is a strategic route; one of the few east west roads that can be used by high sided vehicles because of the low railway bridges on surrounding roads.

However an over emphasis on the use of the road by cars has undermined the environmental quality of the neighbourhood for people walking, using public transport or cycling. In addition the junction with the High Road is an accident spot and the pavements throughout are narrow and are poorly designed for people with mobility issues.
Creighton Road roundabout textured road surface level with pavement to slow vehicles
Rain gardens throughout to filter the pollution washed off the road and stop flooding
Wider pavements, the dashed red line shows the existing width of the pavement
Permeable pavements throughout to let the rain soak through to help prevent flooding
Permeable road surface on Penshurst Road and Love Lane to let the rain soak through to help prevent flooding
Textured road surface raised to pavement level to slow traffic and make places for people to cross and to replace existing crossing
Boundary to Love Lane estate moved south to ensure the existing trees are protected as part of White Hart Lane
Pavement continues over side street junctions to make crossings level with the pavement
Junction at High Road remodelled to reduce accidents and improve crossing for pedestrians
Width of road narrowed to enforce 20mph speed limit and keep traffic moving
White Hart Lane station entrance as part of improvements delivered in a separate scheme
Station forecourt as part of improvements delivered in a separate scheme
Drop off and disabled parking for station
West bound bus stop located further west
East bound bus stop remains in the same location
Extent of White Hart Lane improvements
High Road West masterplan indicative building footprint

Existing shops and businesses
White Hart Lane - Environmental Improvements to Reduce the Impact of Traffic

White Hart Lane now

White Hart Lane is well served by public transport with the overground station and an extensive district network of bus routes that converge in the area. In addition, the Cycle Super Highway 1 is situated 800m south of the station, connected to the site via the local cycle network.

However, although traffic numbers on White Hart Lane are relatively low outside peak hours, the road is a hostile environment for pedestrians, people accessing public transport and cyclists. Traffic regularly exceed the 20mph speed limit and the road is congested due to the complicated interdependent traffic lights at the High Road junction. This results in an increased risk of collisions and high levels of pollution. In a Ward where many people don’t own cars this disproportionately impacts the people who actually live here, as much of the traffic is passing through east to west.

How Can White Hart Lane Become a Better Environment for People?

The key aim is to accommodate the traffic but not to let it dominate. This will be achieved by two principle design moves:

1. Reduction of the width of the carriageway so cars have less room and pedestrians have more room.
2. Inclusion of features which the motorist has to negotiate in stages, so they pay attention to what is immediately in front of them and are less likely to speed.

The carriageway width is reduced from 4800mm to 3400mm, the difference is shown in the drawings below, in addition a central pattern runs along the centre of the road giving the impression the road is narrower than it is.

At intervals along the road we will raise the road up to the same level as the pavement. In these sections the road is treated with a contrasting material. The combination of the ramp up and down and the visual patterning reduces the tendency to speed and keeps traffic within the 20mph limit.

Central patterned strip to give the impression the road is narrower than it is

Raised table with a ramp up and down and a pattern surface to break of the linearity of the road

Pavement continues over side streets to make level crossings

Narrower carriageway results in wider pavements

The carriageway width is reduced from 4800mm to 3400mm, the difference is shown in the drawings below, in addition a central pattern runs along the centre of the road giving the impression the road is narrower than it is.

At intervals along the road we will raise the road up to the same level as the pavement. In these sections the road is treated with a contrasting material. The combination of the ramp up and down and the visual patterning reduces the tendency to speed and keeps traffic within the 20mph limit.

Central patterned strip to give the impression the road is narrower than it is

Raised table with a ramp up and down and a pattern surface to break of the linearity of the road

Pavement continues over side streets to make level crossings

Narrower carriageway results in wider pavements

The carriageway width is reduced from 4800mm to 3400mm, the difference is shown in the drawings below, in addition a central pattern runs along the centre of the road giving the impression the road is narrower than it is.

At intervals along the road we will raise the road up to the same level as the pavement. In these sections the road is treated with a contrasting material. The combination of the ramp up and down and the visual patterning reduces the tendency to speed and keeps traffic within the 20mph limit.

Central patterned strip to give the impression the road is narrower than it is

Raised table with a ramp up and down and a pattern surface to break of the linearity of the road

Pavement continues over side streets to make level crossings

Narrower carriageway results in wider pavements

The carriageway width is reduced from 4800mm to 3400mm, the difference is shown in the drawings below, in addition a central pattern runs along the centre of the road giving the impression the road is narrower than it is.

At intervals along the road we will raise the road up to the same level as the pavement. In these sections the road is treated with a contrasting material. The combination of the ramp up and down and the visual patterning reduces the tendency to speed and keeps traffic within the 20mph limit.

Central patterned strip to give the impression the road is narrower than it is

Raised table with a ramp up and down and a pattern surface to break of the linearity of the road

Pavement continues over side streets to make level crossings

Narrower carriageway results in wider pavements
Proposed Plan for White Hart Lane and High Road Junction to help reduce the number of accidents.

Removal of the right turn lane from White Hart Lane to the High Road, to make a single wider lane will give more room for turning vehicles so they don’t mount the pavement.

Widening of the pavement on both sides of White Hart Lane at the High Road junction to give more space for pedestrians. The red dashed line shows the width of the existing pavement.

The junction between White Hart Lane and the High Road is the 2nd worst accident spot in the borough. Between 2013 - 2015, eight pedestrians have been injured, two classified as serious, four cyclists have been involved in collisions of which two are classified as serious.

Levels of Nitrogen Dioxide exceed EU levels at 40 µg/m³ (microgrammes per metre cubed) as do levels of mono-nitrogen oxides (NOx).

Pollution Levels

The junction of White Hart Lane and High Road has levels of NOx exceeding the permissible levels.

Particulate Matter PM 10 & PM 2.5 are below the EU permissible levels however any long term exposure to PMs at any level is damaging to health.

EU Limit

POLLUTION

Nitrogen Dioxide Levels on White Hart Lane are at or above the EU permissible level of 40 µg/m³ (microgrammes per metre cubed).

The junction of White Hart Lane and High Road has levels of NOx exceeding the permissible levels.

Particulate Matter PM 10 & PM 2.5 are below the EU permissible levels however any long term exposure to PMs at any level is damaging to health.

EU Limit

POLLUTION

Harringey 2013.xlsx

Car

Pedal cycle

Powered 2 Wheeler

Goods Vehicles

Bus/coach excldng minibus

Taxi

Other

2014

Car

Powered 2 Wheeler

Pedal Cycle

Goods Vehicles

Bus/coach excldng minibus

Taxi

Other

2015

Car

Pedal cycle

Powered 2 Wheeler

Goods Vehicles

Bus/coach excldng minibus

Taxi

Other
Much of the existing greenness of WHL is opportunistic and incidental, including the railway embankment, the yard in front of the Grange and even the greengrocers display above, it is trapped by the tarmac, the proposals is to remove the

The mature trees were planted by the previous generation, they are an important link from the past to the future and are part of the character and heritage of the area.

We plan to increase the amount of planting on White Hart Lane, helping to mark the route of the Moselle. It will also act as an informal green link joining White Hart Lane to the Cemetery and Bruce Castle Park.

Trees will be planted in the rain gardens and we aim to plant the most mature and therefore largest trees possible that the project budget will allow. While younger trees have a lower cost, it takes longer for them to deliver the benefits of more mature trees.

Creating Rain Gardens

The rain gardens will be planted with low-maintenance ornamental grasses and flowering perennial plants as well as shrubs and trees. The plants will be chosen to naturally thrive in conditions where they will be occasionally flooded and can withstand pollution.

Tree species can include Birch, Cherry and Rowans. Ornamental grasses will cover the ground and deter weeds. There will also be seasonal plants such as Dog Roses, Dogwood, Phlomis, Crocosmia and Lobelia.

Preserving and Planting Trees

We will protect and improve conditions for the existing trees, for example by removing tarmac from around the base of the trunks. Our ambition is to plant more trees, but this may be limited by the pipes under the pavement.

Many of the existing mature trees on White Hart Lane and the Love Lane Estate and some smaller, younger trees by the station. In areas with heavy traffic trees help reduce noise and the amount of dust and airborne girt pollution by between 7-24%. Trees also have a cooling effect of up to 2°C (3.6°F), help slow stop storm water runoff and absorb carbon.

This is the existing state of the mature tree shown in the Illustration above. It is trapped by the tarmac, the proposal is to remove the surrounding hard surface and give the tree root room to breathe and access to water.

Under the pavement.

We will protect and improve conditions for the existing trees, for example by removing tarmac from around the base of the trunks. Our ambition is to plant more trees, but this may be limited by the pipes under the pavement.

Trees will be planted in the rain gardens and we aim to plant the most mature and therefore largest trees possible that the project budget will allow. While younger trees have a lower cost, it takes longer for them to deliver the benefits of more mature trees.

Creating Rain Gardens

The rain gardens will be planted with low-maintenance ornamental grasses and flowering perennial plants as well as shrubs and trees. The plants will be chosen to naturally thrive in conditions where they will be occasionally flooded and can withstand pollution.

Tree species can include Birch, Cherry and Rowans. Ornamental grasses will cover the ground and deter weeds. There will also be seasonal plants such as Dog Roses, Dogwood, Phlomis, Crocosmia and Lobelia.

Preserving and Planting Trees

We will protect and improve conditions for the existing trees, for example by removing tarmac from around the base of the trunks. Our ambition is to plant more trees, but this may be limited by the pipes under the pavement.

Trees will be planted in the rain gardens and we aim to plant the most mature and therefore largest trees possible that the project budget will allow. While younger trees have a lower cost, it takes longer for them to deliver the benefits of more mature trees.

Creating Rain Gardens

The rain gardens will be planted with low-maintenance ornamental grasses and flowering perennial plants as well as shrubs and trees. The plants will be chosen to naturally thrive in conditions where they will be occasionally flooded and can withstand pollution.

Tree species can include Birch, Cherry and Rowans. Ornamental grasses will cover the ground and deter weeds. There will also be seasonal plants such as Dog Roses, Dogwood, Phlomis, Crocosmia and Lobelia.
White Hart Lane - Environmental Improvements Sustainable Urban Drainage

Sustainable Urban Drainage Strategy
What is Sustainable Urban Drainage (SuDS)?
SuDS is the practice of managing surface water by designing ground conditions to act like a sponge, holding water, filtering it and releasing slowly to rivers or the sewer to protect them from pollution and flooding.

Why should we have SuDS?
Since Victorian times rain has been seen as a problem rather than a vital resource that supports our city’s green spaces and wildlife. Normally rainfall is directed as quickly as possible to drains. As we build more and more hard surfaces, during heavy or long storms the rain runoff to drains can overwhelm both the sewer system and rivers and cause flooding.

What happens if we don’t have SuDS?
Directing rainwater to drains does not just cause flooding. Rain runoff from roads, pavements and roofs discharged into rivers causes environmental damage in two ways. Firstly, runoff from urban areas contains petrochemical and heavy metal pollutants that harm or destroy wildlife in rivers. Secondly, in warm weather, our roads and pavements absorb heat from the sun and if rain falls, the rainwater is heated up. The warm water that flows into rivers holds less oxygen which suffocates life in the river.

Another cause of environmental damage is through domestic pipe misconnections. Because our rainwater is hidden in pipes that disappear underground, people frequently connect foul water pipes ( toilets, sinks, dishwashers, etc) into the rainwater pipes. This means that instead of sewage flowing to a treatment plant it discharges directly into our rivers killing wildlife.

SuDS and the Moselle
The Moselle river is the watery heart of the proposed development area and gives White Hart Lane its distinctive curves. The river now flows beneath the south side of the road but is visible just to the west as it flows through the cemetery and is obviously polluted with domestic effluent; detergents from dishwashers, washing machines and sewage from toilets.

We want the sustainable drainage used in the project to be a benchmark in best practice for all future development. This project will also help raise awareness of the impact of misconnected pipes and start the process to fix this problem.

How are SuDS part of the WHL design?
We want to manage rainwater as close as possible to where it falls and help the rainwater soak through to the layers below. Paving slabs will be laid with small gaps between them. The gaps are filled with pollution-cleaning grit through which the water drains to the layers below which act as a ‘sponge’ slowing the flow of the water into the Moselle. This helps improve the quality of the water that will eventually flow into the Moselle River.

SuDS and Rain Gardens
Although it is possible to have permeable roads using a special surface, it is very expensive. The proposed solution is to drain the rainwater running-off the road surface into road side ‘bioretention’ rain gardens. The water runs into the rain gardens where it soaks through special soil, grit and gravel filtration layers to remove pollutants and is stored in these layers before being released slowly to the Moselle. In smaller storms most water will be soaked up by the soil, soak into the ground below or be used by the plants in the rain gardens. Rain gardens are planted with plants and trees that tolerate getting soaked from time to time so rain gardens also make the streets look greener.

Rain garden layout on the south east side of White Hart Lane

Rain garden to catch the water flowing off the road and act as a sponge to slow, cool and filter out the pollution before letting the run off into the Moselle culvert

Natural rock along the edge of the rain garden marking the route of the Moselle River

Permeable grit jointed paving, rain can pass through to soak into the layers of ground beneath.

Will the SuDS on WHL entirely prevent flooding and pollution and why doesn’t everywhere have SuDS?
New planning laws require that all new developments have SuDS. What is more difficult is fitting SuDS into roads that already exist. Rain gardens and permeable drainage need space underground for layers of grit to act as the ‘sponge’. This underground space is often full of pipes carrying water, gas, electricity and internet cables. These pipes have to be protected from the rainwater and from the roots of trees, so a rain garden cannot be directly above where pipes are running under the pavement. WHL has many, many pipes running along the street and the SuDS has to work around these. We are using a radar survey to locate all the pipes to enable as much permeable surface as possible.

A section through the pavement showing the pipes underground.
Example of a blended crossing where a side street meets the main road, the crossing is raised to remain at the same level as the pavement and is paved in a similar material.

Conventional road markings used in an unconventional way. A similar approach is proposed to visually break up the linear dominance of the road and to slow the traffic, especially on the crossings.

1. Permeable, grit jointed, artificial stone flag stone paving
2. Permeable, grit jointed, artificial stone block paving where cars overrun junctions
3. Granite kerbs to pavement and rain gardens
4. Natural stone on edges of rain gardens to mark the route of the Moselle River
5. White road markings or imprinted asphalt on the raised tables and centre line
6. Asphalt

White Hart Lane - The Materials

The proposed materials for White Hart Lane are durable and easy to replace. The street furniture and lighting design will be part of the next stage of design.
White Hart Lane - Environmental Improvements - What do you think?

Would wider footpaths encourage you to walk more?

Would increasing the number of crossings make it safer for you to cross the road?

Would you feel comfortable crossing at a courtesy crossing, this is where the road is at level with the pavement and cars go up a ramp, like a speed bump, to slow them down?

Would replacing the existing zebra crossing with more courtesy crossings be better or worse?

Would a narrower road with slower moving traffic encourage you to cycle?

What's your favourite idea of all the ideas we've suggested?

Do you feel that greenery, like that proposed, is important in a street?

Would you like to see more schemes like this?

What else should the designers be thinking about?

What else are you thinking about in terms of the future of the street and the area?

Please leave your comments on Post It Notes on this or other boards and/or talk to a member of the design team.

Next Steps
The illustrations on these boards show early stage design principles for altering the junction, widening the pavements and traffic calming, sustainable drainage and greening the street and the material palette. Once we have more survey information about the location of underground pipes and have completed the engagement including your feedback we can finalise the design. Please leave your comments or talk to the project team members at the consultation or call or email Lauren Schnieder 07773 958564 or lauren.schnieder@haringey.gov.uk with any questions or comments.