

OPDC
OLD OAK AND
PARK ROYAL
DEVELOPMENT
CORPORATION

Infrastructure Delivery Plan (IDP)

LOCAL PLAN SUPPORTING STUDY

2017



MAYOR OF LONDON

26. Infrastructure Delivery Plan (IDP)

Document Title	Infrastructure Delivery Plan (IDP)
Lead Author	Aecom/OPDC
Purpose of the Study	To identify the infrastructure required to support the regeneration of the area, including social, transport, utility and green infrastructure.
Key outputs	<ul style="list-style-type: none"> • Identifies the piece of infrastructure that is needed, where it is needed and when it is needed. • Provides details on the specification for the infrastructure. • Provides details of the key delivery body for the infrastructure • Identifies the cost of the infrastructure, where known and sources of funding.
Key recommendations	<ul style="list-style-type: none"> • Identifies a significant number of infrastructure requirements to support the regeneration of the area. • The majority of infrastructure identified relates to the core development area in Old Oak, but the IDP also identifies important infrastructure requirements for Park Royal • The study identifies those pieces of infrastructure which OPDC would look to secure through developer contributions (Section 106, Section 278 or Community Infrastructure Levy). • Maps are provided for those pieces of infrastructure that relate to particular locations of the area. • The IDP will be kept as a 'live' document and regularly updated to respond to any changes in infrastructure requirements.
Relations to other studies	Outputs cross-relate to the Integrated Water Management Strategy, Park Royal Transport Strategy, Development Infrastructure Funding Study, Utilities Infrastructure Study, Education and Health Needs Study, North Acton Station Feasibility Study, Willesden Junction Station Feasibility Study, Sports Courts and Swimming Pools Study, A40 Study and Public Realm, Walking and Cycling Strategy.
Relevant Local Plan Policies and Chapters	All the policies and chapters of the Local Plan

Contents

1.0	Introduction	2
2.0	Understanding the Schedule of Projects	4
	Infrastructure Delivery Plan – Schedule of Projects	5
3.0	Transport	
	Rail, Stations and Interchange	5
	Pedestrian and Cycle	7
	Road Network	15
	Bus Network	22
4.0	Utilities	23
	Smart Technology	23
	Decentralised Energy	24
	Energy Network – Electricity and Gas	24
	Potable Water Network	25
	Foul and Surface Water Infrastructure	26
	Flood and Water Management	27
	Waste	27
5.0	Green Infrastructure	28
	Open Space	28
	Play Space	34
	Public Realm	35
6.0	Social Infrastructure	37
	Education	37
	Health	38
	Community, Leisure and Sport	39
	Emergency Services	39
Appendix	Infrastructure Maps	41
Figure 1:	All Spatial infrastructure	42
Figure 2:	Rail, Stations and Interchange Projects	43
Figure 3:	Pedestrian and Cycle Projects	44
Figure 4:	Road Network Projects	45
Figure 5:	Air Quality Sensors	46
Figure 6:	Green Infrastructure Projects	47

1.0 Introduction

- 1.1 The Infrastructure Delivery Plan (IDP) is an important document supporting the Local Plan. The IDP provides a list of infrastructure that Old Oak and Park Royal Development Corporation (OPDC) has identified as being required to support the delivery of policies in the Local Plan. In accordance with Strategic Policy SP10 and Delivery and Implementation Policy DI1, OPDC will work with a variety of stakeholders to deliver the appropriate infrastructure identified in OPDC's Local Plan and this IDP, to support the creation of a high quality new part of London.
- 1.2 Not all the infrastructure identified will be critical to enabling the successful regeneration of the area and OPDC will work with stakeholders to ensure that those pieces that are, are prioritised. It is also likely that items on the list will alter over time as the area becomes developed, infrastructure requirements are clarified, and technology and best practice change. The IDP will therefore be a 'live' document that can be easily updated as and when infrastructure requirements change.
- 1.3 The IDP schedule specifies the infrastructure projects currently identified in the Local Plan and where known, provides an estimate on the timeframe for delivery of a range of physical, social and green infrastructure projects across a number of infrastructure categories which have been divided into sub categories as identified below:

1.3.1 Transport

- Rail, Station and Interchange
- Pedestrian and Cycle
- Road Network
- Bus Network

The transport projects provided in the IDP have been identified to support the level of development density being proposed in the OPDC Local Plan. The projects will also improve the local Public Transport Accessibility Level (PTAL) ratings and the overall connectivity to achieve the integration of the OPDC area into north west London and support the needs of development. The following studies have informed this list of projects: A40 Study; Development Infrastructure Funding Study (DIFS); North Acton Station Feasibility Study; Old Oak Strategic Transport Study; Park Royal Transport Strategy; Public Realm, Walking and Cycling Strategy; Scrubs Lane Development Framework Principles; Victoria Road and Old Oak Lane Development Framework Principles; and Willesden Junction Station Feasibility Study.

1.3.2 Utilities

- Smart Technology
- Decentralised energy
- Energy Network – Electricity
- Energy Network – Gas
- Potable Water Network
- Foul and Surface Water Infrastructure
- Flood and Water Management
- Waste

The list of projects identified in the utilities section are those which will facilitate the development proposed within the OPDC Local Plan ensuring that the area

functions in the long term. The following studies have influenced the utilities projects in the IDP: Air Quality Study; Circular and Sharing Economy Study; Development Infrastructure Funding Study (DIFS); Environmental Standards Study; Integrated Water Management Strategy; Smart Strategy; Waste Management Strategy; and the Utilities Study.

1.3.3 Green Infrastructure

- Open Space
- Canal
- Play Space
- Public Realm

The infrastructure items in the green infrastructure section are those that will provide amenity space for people and nature and improve the 'look and feel' of the area to create the quality of place that the OPDC Local Plan policies are seeking to deliver and additionally ensuring environmental benefit is achieved through the development. The studies that assisted in the identification of these projects are: Cultural Principles; Development Infrastructure Funding Study (DIFS); Environmental Standards Study; Public Realm, Walking and Cycling Strategy; Scrubs Lane Development Framework Principles; Sites of Importance for Nature Conservation Statement; and the Victoria Road and Old Oak Lane Development Framework Principles.

1.3.4 Social Infrastructure

- Nursery
- Schools
- Health Facilities
- Community & Sports Facilities
- Emergency Services

The social infrastructure items focus on infrastructure that will assist in the creation of community and aim to provide the day to day infrastructure that provides for people living in the new neighbourhoods that the OPDC Local Plan aims to deliver. This infrastructure has been identified in partnership with delivery partners to ensure that the OPDC development does not place undue and prolonged strain on existing social infrastructure in the area. The studies that aided in the identification of this section are: Cultural Principles; Development Infrastructure Funding Study (DIFS); Education and Health Needs Study; Retail and Leisure Needs Study; and the Sports Courts and Swimming Pools Study.

1.4 Where possible the projects listed in the schedule have been mapped. Figure 1 in the appendix provides an overall spatial depiction of the infrastructure listed in the schedule. Each infrastructure type also has a separate map to provide a spatial representation of the relevant projects. These can be found in the Appendix. Where the projects are area wide initiatives or there is no agreed site placement for infrastructure, the projects have not been mapped.

1.5 The IDP will be used by the OPDC to assist in the delivery of projects and assist in identifying and negotiating appropriate Section 106 contributions from developers and for the prioritisation of the use of other monies received as developer contributions e.g. Community Infrastructure Levy (CIL) by OPDC. This document may also be utilised as

an evidence base document when applying for funding for infrastructure projects from other sources.

- 1.6 It is envisaged that the IDP (including the maps) will be updated annually and released alongside the Authority Monitoring Report (AMR). This will then enable OPDC to ensure that the timeframes for delivery and estimated costs are as current as possible to assist in the delivery of projects. The costs currently included in the schedule are based on early feasibility work and not detailed design. The cost estimates are also not standardised and do not include any optimism bias. As the detailed design for each of the projects is undertaken and a more accurate estimation of the costs generated these will be provided as part of the updates to the IDP.
- 1.7 Paragraph 162 of the National Planning Policy Framework (NPPF) requires local planning authorities to work with other authorities and providers to assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy, telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands. They should also take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.
- 1.8 The infrastructure requirements set out in this IDP therefore reflect the infrastructure needed to provide for the growth and site allocations set out in the OPDC Local Plan (Regulation 19 version). The OPDC Duty to Cooperate Statement provides information on how the OPDC has met the requirements for the duty to cooperate for Paragraph 162 of the NPPF. This can be found on OPDC's website.

2.0 Understanding the Schedule of Projects

- 2.1 The Local Plan Reference 2017 (LPR) is unique for each project. Where possible and appropriate, the projects are mapped and the LPR correlates to the item on the map. The appropriate map numbers appear in the last column of the schedule.
- 2.2 The Local Plan Reference 2016 refers to the numbers that the projects were referred to in the Regulation 18 OPDC Local Plan which was consulted on in February 2016.
- 2.3 The infrastructure items are listed according to their categories as described above. There is no prioritisation of projects in this version of the IDP. As the probable development pattern becomes better understood, pieces of critical or key infrastructure will be identified and recognised as priorities for delivery, this will be reflected in updates to this document.
- 2.4 The Local Plan policy numbers and Local Plan Places refer to the policy numbers and places in the Regulation 19 version of the OPDC Local Plan (2017). The Local Plan Policies and Local Plan Places and the associated supporting text provide the justification for the projects.
- 2.5 The delivery phasing and costs of the projects set out in this schedule are estimates based on the best available information at the time of production of this document. Where the phasing and/or costs are unknown, NYC (not yet costed) and TBC (to be confirmed) have been utilised respectively. In many cases where the timeframe for delivery is currently unknown this is due to a number of reasons including the delivery

being dependent on the relevant or surrounding sites being brought forward, many of which are not in public ownership. Several of the projects will be delivered beyond the current (draft) plan period i.e. after 2038 so there is a strong possibility that the detail of these projects will change.

OPDC Infrastructure Schedule

3.0 Transport

3.1 As stated in the Local Plan, transport is the catalyst for the comprehensive regeneration of Old Oak and enhancing Park Royal. The number and diversity of the transport projects listed in the Infrastructure Schedule demonstrate the need to create and maintain connections across the area across all transport modes. Only through the successful delivery of these connections will the area be able to be comprehensively redeveloped and communities established. These projects will also assist in the integration of the area into the wider London transportation network and allow the area to thrive economically and socially.

3.2 Rail, Stations and Interchanges

The projects listed in this schedule relate to the improvement of access and capacity of the existing stations in the OPDC area especially North Acton and Willesden Junction and the creation of new stations, including the new Old Oak Common (HS2) Station and new Overground stations on both the North and West London Lines. The studies that informed the projects listed in the Infrastructure Schedule are: Development Infrastructure Funding Study (DIFS); Public Realm, Walking and Cycling Study; Willesden Junction Station Feasibility Study; North Acton Station Feasibility Study; Old Oak Strategic Transport Study and the Park Royal Transport Strategy. Refer to Figure 2 in the Appendix for a map of these projects.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IT1	T2	Transport	Station & Interchange	Willesden Junction Station Improvements	NYC	Developer cost/ planning contributions and/or service providers	T5	P11: Willesden Junction	Y	Y			IT1
IT2	T8	Transport	Station & Interchange	Hythe Road Overground station (West London Line)	NYC	Developer cost/ planning contributions and/or service providers	T5	P2: Old Oak North		Y			IT2
IT3	T9	Transport	Station & Interchange	Old Oak Common Lane Overground Station (North London Line)	NYC	Developer cost/ planning contributions and/or service providers	T5	P8: Old Oak Lane & Old Oak Common Lane		Y			IT3
IT4		Transport	Station & Interchange	Old Oak Common Station	NYC	DfT	T5	P1: Old Oak South		Y			IT4
IT5	T16.5A & T16.5B	Transport	Station & Interchange	Improvements to North Acton Station (Phases 1-6)	45.4	Developer cost/ planning contributions and/or service providers	T5	P7: North Acton and Acton Wells	Y	Y			IT5
IT6	T45	Transport	Station & Interchange	Improved railway station facilities (at Harlesden, Stonebridge Park, Hanger Lane and Park Royal)	NYC	Developer cost/ planning contributions and/or service providers	T5	P4: Park Royal West	Y	Y	Y		IT6
IT7	T13.1	Transport	Railway	Spur line at Old Oak Common Crossrail station	25.0	Developer cost/ planning contributions and/or service providers	T5	P8: Old Oak Lane & Old Oak Common Lane		Y			IT7

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IT8	T13.2	Transport	Railway	Connector railway between Crossrail and West Coast Main Lines	225.0	Developer cost/ planning contributions and/or service providers	T5	P8: Old Oak Lane & Old Oak Common Lane			Y		IT8

3.3 Pedestrian and Cycle

The aim of the policies for walking and cycling in the OPDC Local Plan are to improve the permeability of the area and create safe and attractive walking and cycling routes that both enhance the connectivity of the area and offer more sustainable transport options across the site. The projects identified in the schedule therefore create new routes to augment the permeability and improve existing routes to make these safer and more attractive to users in the future. The projects have been identified through the evidence base documents that also support the OPDC Local Plan 2017 (Regulation19 version): Development Infrastructure and Funding Study (DIFS); Public Realm, Walking and Cycling Study; Environmental Standards Study, Old Oak Strategic Transport Study and the Park Royal Transport Strategy. Refer to Figure 3 in the Appendix for a map of these projects.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IT9	T14.1 & T14.2	Transport	Pedestrian & Cycle	Route through Old Oak Common Station to Wormwood Scrubs	134.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South		Y	Y	Underpass or Overbridge (tbc). Cost based on worst case option.	IT9
IT10		Transport	Pedestrian & Cycle	Route to Wormwood Scrubs east of Old Oak Common Station	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South		Y	Y	Underpass or Overbridge (tbc)	IT10
IT11		Transport	Pedestrian & Cycle	Route to Wormwood Scrubs west of Old Oak Common Station	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South		Y	Y	Underpass or Overbridge (tbc)	IT11
IT12		Transport	Pedestrian & Cycle	New pedestrian and cycle link from Old Oak High Street to Scrubs Lane known as 'Ellisland Way'	3.8	Developer cost/ planning contributions and/or service providers	T2 / T3 / PIOC1	P10: Scrubs Lane	Y				IT12
IT13		Transport	Pedestrian & Cycle	Improvements to existing underpass at Willesden Junction for pedestrian and cycle route from Old Oak High Street to Station Approach	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P11: Willesden Junction	Y	Y		Underpass	IT13

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT14	T4	Transport	Pedestrian & Cycle	Northern Bridge between Old Oak North & Scrubs Lane along Laundry Lane	1.0	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane	Y	Y		Bridge	IT14
IT15		Transport	Pedestrian & Cycle	Improvements to make existing underpass on Hythe Road less steep and converting use for cyclists and pedestrians	0.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P2: Old Oak North	Y			Underpass	IT15
IT16	T47.1-T47.3	Transport	Pedestrian & Cycle	Pedestrian Bridge across Grand Union Canal to provide an interchange route between Old Oak Common and Hythe Road Stations.	110.8	Developer cost/ planning contributions and/or service providers	T2 / T3	P2: Old Oak North		Y		Bridge. A range of options have been considered for this bridge and this cost represents the worst case scenario.	IT16
IT17		Transport	Pedestrian & Cycle	Shared pedestrian and cycle path (TfL Quietway) along southern edge of Wormwood Scrubs and new junction on Scrubs Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P12: Wormwood Scrubs	Y				IT17
IT18	T16.1	Transport	Pedestrian & Cycle	Pedestrian / Cycle Access between Western end of Old Oak Common Station and Acton Wells	55.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells		Y		Underpass or Bridge Cost based on the bridge option	IT18
IT19	T16.6	Transport	Pedestrian & Cycle	Pedestrian/cycle route – North Acton Southern Station Square to Wales Farm Rd via Portal Way.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y				IT19
IT20		Transport	Pedestrian & Cycle	Upgrades to existing footbridge over West Coast Main Line tracks	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P2: Old Oak North	Y			Bridge	IT20
IT21	T22	Transport	Pedestrian & Cycle	Abbey Road improvements - upgrade to existing cycle paths	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT21

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT22		Transport	Pedestrian & Cycle	Abbey Road Junction improvements with toucan crossings for cyclists (at junction in between Premier Park Rd/Abbey Rd roundabout and A406)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT22
IT23		Transport	Pedestrian & Cycle	Abbey Road Pedestrian and cycle safety improvements with toucan crossings for cyclists (at Premier Park Rd/Abbey Rd roundabout)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT23
IT24		Transport	Pedestrian & Cycle	Abbey Road Junction improvement with toucan crossings for cyclists, (south of Grand Union Canal at junction of Abbey Rd/Twyford Abbey Rd)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT24
IT25	T23	Transport	Pedestrian & Cycle	Improved pedestrian and cycle access towards Park Royal station from north	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT25
IT26	T27	Transport	Pedestrian & Cycle	New cycle networks across the Old Oak core area.	15.0	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide	Y	Y	Y		N/A
IT27	T28	Transport	Pedestrian & Cycle	High level assumptions for cycle hire	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide	Y	Y	Y		N/A
IT28		Transport	Pedestrian & Cycle	Legible London wayfinding and signage.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide	Y	Y	Y		N/A

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IT29		Transport	Pedestrian & Cycle	Connect cycle paths through the roundabout at the junction of Coronation Road and Rainsford Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT29
IT30		Transport	Pedestrian & Cycle	Connect cycle paths through the roundabout at the junction of Rainsford Road and Cumberland Avenue	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT30
IT31		Transport	Pedestrian & Cycle	Cycle safety improvements on Cumberland Avenue (speed reduction or segregated cycle paths) and safe cycle provision on the roundabout at the junction of Abbey Road and Cumberland Avenue	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT31
IT32		Transport	Pedestrian & Cycle	Enable new cycle link through the rear of Central Middlesex Hospital, across Acton Lane and into the existing Wesley Avenue filtered permeability route (exact route to be determined)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre	Y	Y			IT32
IT33		Transport	Pedestrian & Cycle	New link to canal towpath and Volt Avenue at the rear of North Acton Road park	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT33
IT34		Transport	Pedestrian & Cycle	Improved link to canal towpath at Steele Road (incl. parking restrictions on approach)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT34

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT35		Transport	Pedestrian & Cycle	Completion of cycle path along Rainsford Road to Twyford Abbey Road, and connection to towpath	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT35
IT36		Transport	Pedestrian & Cycle	Improved cycle lanes across Harlesden Bridge	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT36
IT37		Transport	Pedestrian & Cycle	Park Royal Road on- and off-street cycle lane improvements	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre	Y	Y			IT37
IT38		Transport	Pedestrian & Cycle	Cycle link to the rear of the current Asda linking Park Royal Road and Coronation Road	4.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre	Y	Y			IT38
IT39	T39	Transport	Pedestrian & Cycle	Chase Road on-street cycle lanes	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P5: Old Park Royal	Y	Y			IT39
IT40	T41	Transport	Pedestrian & Cycle	Generalised pedestrian safety improvements, Park Royal	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide	Y	Y	Y		N/A
IT41	T42	Transport	Pedestrian & Cycle	Cycle route improvements along Coronation Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT41
IT42	T44	Transport	Pedestrian & Cycle	Cycle route improvements along Acton Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y			IT42

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT43		Transport	Pedestrian & Cycle	New/upgraded walking and cycling routes north-south and east-west through First Central (to/from stations, Twyford Abbey, A406 and through Diageo Lake and Gardens)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y				IT43
IT44		Transport	Pedestrian & Cycle	Pedestrian/ cycle Crossing Link to Wormwood Scrubs (known as Green Bridge)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South		Y	Y		IT44
IT45		Transport	Pedestrian & Cycle	New 2 way cycle lane and footpath improvements on the western side of Scrubs Lane, and footpath improvements on its eastern side	13.2	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane	Y				IT45
IT46		Transport	Pedestrian & Cycle	Creating new pedestrian routes through Park Royal Centre to increase its permeability and legibility	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre	Y	Y			IT46
IT47		Transport	Pedestrian & Cycle	Providing or enhancing pedestrian and cycle access into and through North Acton cemetery	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y				IT47
IT48		Transport	Pedestrian & Cycle	New walking and cycling route along north of the Grand Union Canal.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P3: Grand Union Canal	Y	Y			IT48
IT49		Transport	Pedestrian & Cycle	Improvements to towpath along south of the Grand Union Canal (shared walking and Quiet Way cycling route).	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P3: Grand Union Canal	Y	Y			IT49

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT50		Transport	Pedestrian & Cycle	Improved walking and cycling connectivity across the A40 between Portal Way and West Acton.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y	Y	Y		IT50
IT51		Transport	Pedestrian & Cycle	Improved walking access points to St. Mary's Cemetery	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane	Y				IT51
IT52		Transport	Pedestrian & Cycle	New and improved pedestrian and cycle accesses to Wormwood Scrubs from east, west and southern areas.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P12: Wormwood Scrubs	Y	Y	Y		IT52
IT53		Transport	Pedestrian & Cycle	New and improved sensitive walking and cycling routes across Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P12: Wormwood Scrubs		Y	Y		IT53
IT54		Transport	Pedestrian & Cycle	Segregated cycle lane, footpath and public realm improvements along Old Oak Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			IT54
IT55		Transport	Pedestrian & Cycle	Segregated cycle lane, footpath and public realm improvements along Victoria Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y	Y			IT55
IT56		Transport	Pedestrian & Cycle	Segregated cycle lane, footpath and public realm improvements along Old Oak Common Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane		Y			IT56
IT57		Transport	Pedestrian & Cycle	New walking and cycling route from Brunel Road to Long Drive	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			IT57
IT58		Transport	Pedestrian & Cycle	New walking and cycling crossing across Wales Farm Road from Jenner Avenue to Portal Way	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y	Y			IT58

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT59		Transport	Pedestrian & Cycle	Pedestrian/ cycle/ public realm improvements between Victoria Road and the A4000 adjacent to The Costume Store	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y	Y			IT59
IT60		Transport	Pedestrian & Cycle	Pedestrian/ cycle/ public realm improvements along Victoria Road south of North Acton Station	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y	Y			IT60
IT61	T16.4	Transport	Pedestrian & Cycle	Access to North Acton station from Southern Station Square.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y	Y		Relates to IT5	IT61
IT62		Transport	Pedestrian & Cycle	Access to North Acton Station from Northern Station Square.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells		Y		Relates to IT5	IT62
IT63		Transport	Pedestrian & Cycle	Pedestrian/cycle access to Little Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane		Y	Y		IT63
IT64		Transport	Pedestrian & Cycle	Bridge linking Acton Wells East and Jenner Avenue	2.3	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells		Y	Y	Bridge	IT64
IT65	T38	Transport	Pedestrian & Cycle	Pedestrian/ cycle bridge across Central Line to connect Victoria Estate to Old Oak Common Lane	10.8	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane	Y	Y	Y	Bridge	IT65
IT66		Transport	Pedestrian & Cycle	Improvements along Chandos Road towards Park Royal (including improvements to walking, cycling, public realm).	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P5: Old Park Royal	Y	Y			IT66

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT67		Transport	Pedestrian & Cycle	Public realm improvements to footpath connecting North Acton Station to Victoria Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells	Y	Y	Y		IT67

3.4 Road Network

Road network enhancements will assist to deliver a navigable network across the area that improves both the north-south and east-west movement of vehicles including freight vehicles and buses. It is intended that all the road network projects listed below will also provide improvements to the associated pedestrian, cycle and public realm components of the transport network but to avoid duplication have not been repeated in the pedestrian /cycle and public realm sections of this document above. The identification of the projects is supported by the following studies: Development Infrastructure Funding Study (DIFS); Public Realm, Walking and Cycling Study; Environmental Standards Study; Old Oak Strategic Transport Study; and the Park Royal Transport Strategy. Refer to Figure 4 in the Appendix for a map of these projects.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT68	T1	Transport	Road Network	Old Oak High Street bridge over West Coast Mainline tracks	16.2	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Bridge	IT68
IT69	T1.2	Transport	Road Network	Old Oak High Street between bridge over WCML tracks and crossing of west London Overground line	11.0	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways & Junction	IT69
IT70	T1.3	Transport	Road Network	Old Oak High Street crossing of West London Overground line.	25.8	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Underpass	IT70
IT71	T1.4	Transport	Road Network	Old Oak High Street between underpass and bridge over the canal.	1.2	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways & Junction	IT71

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT72	T1.5	Transport	Road Network	Old Oak High Street bridge over Grand Union Canal and pedestrian/cycle connection to southern towpath	17.2	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y	Y		Bridge	IT72
IT73	T1.6	Transport	Road Network	Old Oak High Street from canal crossing to Old Oak Common Station.	27.9	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y	Y		Highways & Junction	IT73
IT74	T6.1	Transport	Road Network	Old Oak High Street from Old Oak Common Lane to Old Oak Common Station	13.4	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y	Y		Highways & Junction	IT74
IT75		Transport	Road Network	Old Oak High Street between Willesden Junction Station and Harrow Road	29.0	Developer cost/ planning contributions and/or service providers	T1	P11: Willesden Junction	Y	Y		Bridge	IT75
IT76	T3	Transport	Road Network	All modes bridge over Grand Union Canal, adjacent to 'Oakland's' House known as Park Road Bridge	11.8	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y	Y		Bridge	IT76
IT77	T5	Transport	Road Network	New underpass - all modes route from Grand Union Street to Scrubs Lane	8.8	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Underpass	IT77
IT78	T6.2-T6.3	Transport	Road Network	Grand Union Street Bridge - all modes that may include pedestrian/ cycle link to towpath.	23.5	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y	Y		Bridge	IT78
IT79		Transport	Road Network	Delivery of new Wormwood Scrubs Street.	NYC	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South			Y	Highways & Junction	IT79
IT80	T10.A	Transport	Road Network	Traffic capacity enhancements on Wales Farm Rd	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells	Y	Y		Highways & Junction	IT80

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT81	T10.2	Transport	Road Network	Atlas Junction (Victoria Rd, Old Oak Common Lane, Old Oak Lane & Atlas Rd) Improvements to increase capacity and safety	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction	IT81
IT82	T10.3A	Transport	Road Network	Traffic capacity enhancements on Old Oak Lane	10.0	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction	IT82
IT83	T10.4	Transport	Road Network	Increase capacity of Old Oak Lane overpass of West Coast mainline	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction	IT83
IT84	T11.1A	Transport	Road Network	Transport capacity enhancements on Old Oak Common Lane: Brunel Rd to Oaklands intersection (including improving safety and capacity of Central Line, Great Western & Chiltern lines underpasses)	5.0	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction	IT84
IT85	T11.2	Transport	Road Network	Junction capacity and safety improvements, Old Oak Common Lane at intersection with Grand Union Street and Park Road	4.5	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction	IT85
IT86	T11.3A	Transport	Road Network	Transport capacity and safety enhancement, Old Oak Common Lane: Oaklands intersection to Atlas Junction	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction	IT86
IT87		Transport	Road Network	Upgrade of Old Oak Common Lane under Great Western & Chiltern lines underpasses	11.6	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Underpass	IT87

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT88	T12.1A	Transport	Road Network	Transport capacity enhancements on Scrubs Lane adjacent to Wormwood Scrubs.	NYC	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane	Y	Y		Highways & Junction	IT88
IT89	T12.3	Transport	Road Network	Modify Mitre Bridge to accommodate pedestrian/cycleway	Costed as part of T51	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane	Y	Y		Bridge	IT89
IT90		Transport	Road Network	Traffic capacity enhancements on Scrubs Lane: Mitre Bridge to Harrow Rd	NYC	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane	Y	Y		Highways & Junction	IT90
IT91		Transport	Road Network	New Junction at Old Oak Common Lane junction to proposed Wormwood Scrubs Street north of Wormwood Scrubs	4.5	Developer cost/ planning contributions and/or service providers	T1	P12: Wormwood Scrubs			Y	Highways & Junction	IT91
IT92	T17	Transport	Road Network	Junction onto Scrubs Lane to access to Mitre Bridge Industrial Estate at North Pole East.	9.9	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane	Y	Y		Highways & Junction	IT92
IT93		Transport	Road Network	Junction between Scrubs Lane and new road to Kensal Canalside Opportunity Area	NYC	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane			Y	Highways & Junction	IT93
IT94		Transport	Road Network	Delivery of Park Road.	8.0	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y			Highways & Junction	IT94
IT95		Transport	Road Network	Delivery of Park Road underpass under West London Line.	2.8	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Underpass	IT95
IT96	T21	Transport	Road Network	Park Royal Road/Coronation Road junction improvements - Asda junction	NYC	Developer cost/ planning contributions and/or service providers	T1	P6: Park Royal Centre	Y	Y	Y	Highways & Junction	IT96

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT97		Transport	Road Network	Victoria Road capacity enhancements including widening to Old Oak Lane and low rail overbridge headroom increased.	50.0	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y			Highways & Junction	IT97
IT98	T24.1	Transport	Road Network	A40 & A406 junction improvements - Hanger Lane gyratory	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West	Y	Y	Y	Highways & Junction	IT98
IT99	T24.2	Transport	Road Network	A40 junction improvements - Gypsy Corner	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells	Y	Y	Y	Highways & Junction	IT99
IT100		Transport	Road Network	Junction enhancements between Old Oak Lane and new Link Road from Channel Gate.	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane			Y	Highways & Junction	IT100
IT101	T26	Transport	Road Network	Junction improvements in surrounding areas (locations not yet identified, asset outside of OPDC boundary)	NYC	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide	Y	Y	Y	Highways & Junction	N/A
IT102	T31.1	Transport	Road Network	Junction improvement of Chase Road and Volt Avenue	4.9	Developer cost/ planning contributions and/or service providers	T1	P5: Old Park Royal	Y	Y		Highways & Junction	IT102
IT103	T31.2	Transport	Road Network	Road and bridge connection Chase Road / Volt Ave over Dudding Hill line	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West		Y	Y	Highways & Junction	IT103
IT104	T31.3	Transport	Road Network	Road bridge over Grand Union Canal and pedestrian/cycle connection to towpath	11.0	Developer cost/ planning contributions and/or service providers	T1	P9: Channel Gate		Y	Y	Bridge	IT104

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT105	T32	Transport	Road Network	Enhancements to existing access road from Old Oak Lane (Channel Gate Road)	4.9	Developer cost/ planning contributions and/or service providers	T1	P9: Channel Gate			Y	Highways & Junction	IT105
IT106	T33	Transport	Road Network	New access point from Old Oak lane (near Crewe PI)	10.8	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane		Y	Y	Highways & Junction	IT106
IT107	T36	Transport	Road Network	Upgrade of Willesden Junction Station approach.	16.1	Developer cost/ planning contributions and/or service providers	T1	P11: Willesden Junction	Y	Y		Highways & Junction	IT107
IT108		Transport	Road Network	Traffic calming measures in Bashley Road. Chandos Road and Chase Road	NYC	Developer cost/ planning contributions and/or service providers	T1	P5: Old Park Royal	Y	Y		Highways & Junction	IT108
IT109	T40	Transport	Road Network	Safety and traffic calming scheme at Chase Road mini roundabouts	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West	Y	Y		Highways & Junction	IT109
IT110		Transport	Road Network	Enhancements to North Acton Lane/ Barretts Green Road	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West	Y	Y		Highways & Junction	IT110
IT111		Transport	Road Network	Enhancements to Abbey Road/ A406 slip	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West	Y	Y		Highways & Junction	IT111
IT112		Transport	Road Network	Altering carriageway widths to allow for more generous pavement widths	NYC	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide	Y	Y	Y	Highways & Junction	N/A
IT113		Transport	Road Network	Other junction improvements in Old Oak and Park Royal	NYC	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide	Y	Y	Y	Highways & Junction	N/A

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
IT114		Transport	Road Network	Enhancements to the Old Oak Lane bridge over the canal	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y	Y	Bridge	IT114
IT115	T16.2	Transport	Road Network	Junction off of Old Oak High St and connection through to Victoria Rd	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane		Y			IT115
IT116		Transport	Road Network	Continuation of Old Oak High St through Old Oak Common Lane Station and connecting to Victoria Rd	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells		Y		Underpass or Bridge connection through Old Oak Common Lane Station	IT116
IT117		Transport	Road Network	New all modes route from Victoria Road to Victoria Industrial Estate	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells	Y	Y			IT117
IT118		Transport	Road Network	Delivery of Grand Union St	NYC	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y			IT118

3.5 Bus network

Improvements to the bus network in the area will be designed to improve accessibility as well as permeability through the OPDC area. Providing a safe and frequent bus service will encourage the increase of use of the public transport system to and from the area; thereby lessening the need to use private vehicles. The studies used to inform the bus projects identified in the Infrastructure Schedule are: Bus Strategy, Development Infrastructure Funding Study (DIFS); Public Realm, Walking and Cycling Study; Park Royal Transport Strategy; and the Old Oak Strategic Transport Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IT119	T29	Transport	Bus Network	Bus operating revenue support for new services and compensation during construction	26.65	Developer cost/ planning contributions and/or service providers	T6	Non-specific and/or Area-wide	Y	Y	Y		N/A
IT120	T30	Transport	Bus Network	New bus routes and bus infrastructure including bus stops, bus stands, welfare and maintenance facilities, bus gates, bus priority measures and bus-only routes	26.65	Developer cost/ planning contributions and/or service providers	T6	Non-specific and/or Area-wide	Y	Y	Y		N/A

4.0 Utilities

4.1 Due to the current densities and uses in the area and the projected development, there is a need to upgrade and extend of much of the essential utilities infrastructure that underlies the everyday functioning of an urbanised area.

4.2 Smart Technology

The ability of the OPDC area to be an innovative and technologically adaptable part of London is reliant on the delivery of smart city technology, the detail of this is set out in policies EU4 and EU11 of the regulation 19 OPDC Local Plan 2017. The projects identified in the Infrastructure Schedule encourage the developers and the service providers to ensure that high quality and high speed telecommunications infrastructure and the provision of Air Quality Monitoring systems. The identification of these projects is supported by the following studies Air Quality Study; Development Infrastructure Funding Study (DIFS); Environmental Standards Study; Utilities Study; Public Realm, Walking and Cycling Strategy. Refer to Figure 5 in the Appendix for a map depicting where it is planned for the air quality sensors to be placed within the OPDC area.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU1		Utilities	Smart Technology	Provide high quality/high speed wireless, broadband and other telecommunications infrastructure that can be easily accessed and upgraded over time (phased to match development timing).	NYC	Developer cost/ planning contributions and/or service providers	EU11	Non-specific and/or Area-wide	Y	Y	Y		N/A
IU2		Utilities	Smart Technology	Air Quality Monitoring Stations and diffusion tubes across area	NYC	Developer cost/ planning contributions and/or service providers	EU4	Non-specific and/or Area-wide	Y	Y	Y		Figure 5

4.3 Decentralised Energy

The reduction of carbon emissions is an important policy requirement of the London Plan and is recognised in the regulation 19 OPDC Local Plan Policies EU9 and EU10 and as a result both site specific and strategic delivery of decentralised energy are identified in the Infrastructure Schedule. These requirements were identified from the Development Infrastructure Funding Study (DIFS); Environmental Standards Study and the Utilities Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU3		Utilities	Decentralised Energy	Site Specific Decentralised Energy Delivery	NYC	Dependent on land ownership and delivery model but could include, developer or third party ESCO	EU10	Phased with development phasing 2017 for North Acton/Scrubs Lane/Genesis. Car Giant requires heat from 2023.	Y	Y	Y	Energy network - Heat Subsidiary policy approach	N/A
IU4		Utilities	Decentralised Energy	Strategic Area-wide District Heat Network	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO or public sector (OPDC/GLA)	EU10	Phased in line with development, buildings can operate on temporary gas boilers. North Acton requires heat from 2017, Car Giant Requires heat by 2023	Y	Y	Y	Energy network - Heat Preferred Policy Approach	N/A

4.4 Energy Network – Electricity and Gas

There is a need to ensure the supply of gas and electricity to the area and ensure that the improvements to supply occur as and when necessary to ensure the continuity and surety of supply to meet the requirements of development. This is supported by regulation 19 OPDC Local Plan Policy EU10 and identified in the Infrastructure Schedule which in turn is supported by the findings of the Development Infrastructure and Funding Study (DIFS); and the Utilities Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU5		Utilities	Energy Network - Electricity	Maintenance, renewal and replacement of electricity supply infrastructure	NYC		EU10	Non-specific and/or Area-wide	Y	Y	Y		N/A

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU6		Utilities	Energy network - Electricity	New substations either situated at the centre or on the periphery of the area. Number and size of substations yet to be determined.	NYC	Developer cost/ planning contributions and/or service providers	EU10	Non-specific and/or Area-wide	Y	Y	Y		N/A
IU7		Utilities	Energy network - Gas	Maintenance, renewal and replacement of gas supply infrastructure	NYC	Developer cost/ planning contributions and/or service providers	EU10	Non-specific and/or Area-wide	Y	Y	Y		N/A

4.5 Potable water network

While it is recognised that all development should minimise the potable water demand created in the area it is inevitable that there will be an increase in demand for potable water in the OPDC area. As such the regulation 19 OPDC Local Plan Policy EU3 and the Infrastructure Schedule encourage the reinforcement of potable water supply. This is supported by the Development Infrastructure Funding Study (DIFS); Environmental Standards Study; Integrated Water Management Strategy and Utilities Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU8		Utilities	Potable water network	Water supply and reinforcement of strategic supplies and continuous renewal	NYC		EU3	Non-specific and/or Area-wide	Y	Y	Y		N/A
IU9		Utilities	Potable water network	Combined rainwater harvesting and greywater recycling systems provided within commercial developments	NYC	Developer cost	EU3	Non-specific and/or Area-wide	Y	Y	Y		N/A

4.6 Foul and Surface Water Infrastructure

There are indications that the current infrastructure will struggle to accommodate the additional flows of foul and surface water projected to be generated by the proposed OPDC development. As a result the Infrastructure Schedule identifies a range of interventions to assist in the management of flow as well as the provision of new sewerage infrastructure. These proposed interventions are supported by regulation 19 OPDC Local Plan Policy EU3 and the following studies: the Development Infrastructure Funding Study (DIFS); the Integrated Water Management Strategy; and the Utilities Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU10		Utilities	Foul and Surface Water Infrastructure	Maintenance/ renewal of sewerage infrastructure and new sewerage infrastructure to support growth	NYC		EU3	Non-specific and/or Area-wide	Y	Y	Y		N/A
IU11		Utilities	Foul and Surface Water Infrastructure	On plot Sustainable Drainage Systems to restrict discharge to greenfield runoff rates	NYC	Developer cost	EU3	Non-specific and/or Area-wide	Y	Y	Y	Subsidiary Policy Approach	N/A
IU12		Utilities	Foul and Surface Water Infrastructure	Strategic sustainable urban drainage systems within areas of Public Open Space to attenuate runoff from adopted roads	NYC	Developer cost/ planning contributions and/or service providers	EU3	Non-specific and/or Area-wide	Y	Y	Y	Preferred Policy Approach	N/A
IU13		Utilities	Foul and Surface Water Infrastructure	Sustainable Urban Drainage systems connected to the Grand Union Canal	NYC	Developer cost/ planning contributions and/or service providers	EU3	Non-specific and/or Area-wide	Y	Y	Y		N/A
IU14		Utilities	Foul and Surface Water Infrastructure	New outfalls to the Grand Union Canal and Improvements to the canal to improve conveyance capacity	NYC	Developer cost/ planning contributions and/or service providers	EU3	na	Y	Y	Y		N/A

4.7 Flood and Water Management

While the OPDC are not a Lead Local Flood Authority there remains a responsibility for developers to conform to the requirements of the individual borough Surface Water Management Plans. This is therefore recognised in the Infrastructure Schedule, as are the works for the Tokyngton and Stonebridge Flood Alleviation Scheme. Both of these are supported by Policy EU3 of the regulation 19 OPDC Local Plan 2017 and the following studies: Development Infrastructure Funding Study (DIFS); Integrated Water Management Strategy; Environmental Standards Study; and the Utilities Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU15		Utilities	Flood and Water Management	Tokyngton and Stonebridge Flood Alleviation Scheme	0.1	Developer cost/ planning contributions and/or service providers	EU3	na	Y	Y			N/A
IU16		Utilities	Flood and Water Management	Works associated with Flood Risk Management especially those associated with development	NYC	Developer cost	EU3	Non-specific and/or Area-wide	Y	Y	Y		N/A

4.8 Waste

The management of waste will be a challenge for the OPDC area and as such there are matters listed on the Infrastructure Schedule to assist in the management of waste that is generated across the OPDC area. These projects are supported by Policy EU6 of the regulation 19 OPDC Local Plan 2017 and the following studies; Development Infrastructure Funding Study (DIFS); Waste Apportionment Study; Waste Management Strategy; Waste Technical Paper; and the Environmental Standards Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
IU17		Utilities	Waste	Onsite waste infrastructure to segregate/ store/ compact/ process waste generated from within sites.	NYC	Developer cost	EU6	Non-specific and/or Area-wide	Y	Y	Y		N/A
IU18		Utilities	Waste	Strategic waste collection / recycling and processing system (vacuum or underground) including onsite connections to facility.	NYC	Developer cost/ planning contributions and/or service providers	EU6	Non-specific and/or Area-wide	Y	Y	Y		N/A

5.0 Green Infrastructure

5.1 To deliver a successful comprehensive development, OPDC recognises the necessity in investing in natural capital. This therefore requires the delivery of a high quality and robust integrated network of parks, green, civic, and other open spaces. This network of green infrastructure will assist in the mitigation of a range of environmental impacts such as flood risk and the urban heat island effect. It will also provide places for the community to meet, play, exercise and relax. Refer to Figure 6 in the Appendix for a map of the green infrastructure projects.

5.2 Open Space

In the creation of this new part of London the provision of open space and the ability of the population to access open space will be extremely important and contribute to the success of the area in a number of ways including social cohesion, health and wellbeing, as well as general environmental and biodiversity benefits. There are a range of open space projects identified in the Infrastructure Schedule. There are those that identify existing open space that would benefit from enhancement and the creation of new open spaces. Some spaces will be designed to perform more of a civic function while others are intended for green space. The general intent of the delivery of open space is supported by Policies EU1 and EU2 of the regulation 19 OPDC Local Plan and the individual projects are identified in the relevant Place Policies in Chapter 4 of the Plan. The following studies also support the delivery of these projects: Development Infrastructure Funding Study (DIFS); Environmental Standards Study, Public Realm; Walking and Cycling Strategy; SINC Statement; Scrubs Lane Development Framework Principles, Victoria Road and Old Oak Lane Development Framework Principles; and the Precedents Study

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
G11		Green Infrastructure	Open Space	A Local Park along the Grand Union Canal provided between Old Oak North and Old Oak South of a minimum 2 hectares in size, including the Birchwood Nature Reserve.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P1: Old Oak South	Y	Y			G11
G12		Green Infrastructure	Open Space	Enhancements to Mary Seacole Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y				G12
G13		Green Infrastructure	Open Space	Enhancements to Old Oak Community Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			G13
G14		Green Infrastructure	Open Space	Enhancements to Cerebos Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			G14
G15		Green Infrastructure	Open Space	Enhancements to Midland Terrace Play Space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			G15

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
GI6		Green Infrastructure	Open Space	Enhancements to North Acton Cemetery	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y	Y			GI6
GI7		Green Infrastructure	Open Space	Enhancements to existing open space (Diageo Lake & Gardens, Lakeside Drive and other green spaces)	NYC	Developer cost/ planning contributions and/or service providers	EU1	P4: Park Royal West	Y				GI7
GI8		Green Infrastructure	Open Space	Enhancements to Wesley Estate Public Open Space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P4: Park Royal West	Y	Y			GI8
GI9	OS4	Green Infrastructure	Open Space	Sensitive enhancements to Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	EU1	P12: Wormwood Scrubs	Y	Y	Y		GI9
GI10		Green Infrastructure	Open Space	Biodiversity improvements on railway sidings and embankments	NYC	Developer cost/ planning contributions and/or service providers	EU2	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI11		Green Infrastructure	Open Space	A Local Park of a minimum 2 hectares in size across Old Oak Gardens and Stamford Gardens including a high quality green link.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P2: Old Oak North	Y	Y			GI11
GI12		Green Infrastructure	Open Space	Rolls Royce Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P2: Old Oak North	Y	Y			GI12

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
GI13		Green Infrastructure	Open Space	A Local Park of a minimum 2 hectares in size (comprising spaces across the Crossrail depot and areas surrounding the Old Oak Common station including interchange squares (east and west) and destination squares (north and south))	NYC	Developer cost/ planning contributions and/or service providers	EU1	P1: Old Oak South		Y			GI13
GI14		Green Infrastructure	Open Space	Harrow Road cluster open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y				GI14
GI15		Green Infrastructure	Open Space	Laundry Lane cluster open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y				GI15
GI16		Green Infrastructure	Open Space	Hythe Road cluster open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y				GI16
GI17		Green Infrastructure	Open Space	Mitre Yard open space integrated with Mary Seacole Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y				GI17
GI18		Green Infrastructure	Open Space	Mitre Wharf canal side open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y				GI18
GI19		Green Infrastructure	Open Space	Open space adjacent to Little Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y	Y	Y		GI19
GI20		Green Infrastructure	Open Space	Creation of Brunel Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane	Y				GI20

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
GI21		Green Infrastructure	Open Space	Acton Wells Square	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells		Y			GI21
GI22		Green Infrastructure	Open Space	Victoria Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y	Y			GI22
GI23		Green Infrastructure	Open Space	Portal Way Squares	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y	Y			GI23
GI24		Green Infrastructure	Open Space	North Acton Station Square South	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y				GI24
GI25		Green Infrastructure	Open Space	North Acton Station Square North	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells		Y			GI25
GI26		Green Infrastructure	Open Space	School Road Square and Public Realm	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y	Y			GI26
GI27		Green Infrastructure	Open Space	Willesden Junction Square	NYC	Developer cost/ planning contributions and/or service providers	EU1	P11: Willesden Junction	Y	Y			GI27
GI28		Green Infrastructure	Open Space	Park Royal Centre Public Open Space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P6: Park Royal Centre	Y				GI28
GI29	OS5	Green Infrastructure	Open Space	Grand Union Canal pocket parks.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P3: Grand Union Canal	Y	Y			GI29

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
GI30		Green Infrastructure	Open Space	Linear Spaces along Secondary and Primary Routes	NYC	Developer cost/ planning contributions and/or service providers	EU1	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI31		Green Infrastructure	Open Space	Securing contributions towards and/or provision of public art.	NYC	Developer cost/ planning contributions and/or service providers	TCC5	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI32		Green Infrastructure	Open Space	Contributions towards and/or delivery of new publicly accessible open space and/or enhancements of existing public open spaces not included above to address policy requirements.	NYC	Developer cost/ planning contributions and/or service providers	EU1/D9	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI33		Green Infrastructure	Open Space	Contributions towards and/or the delivery of new biodiversity and/or enhancements towards existing biodiversity assets.	NYC	Developer cost/ planning contributions and/or service providers	EU2	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI34		Green Infrastructure	Open Space	Contributions towards and/or the delivery of urban greening along streets and public realm. Including the integrations of SuDs / rain gardens/ and other linear planting along all green streets.	NYC	Developer cost/ planning contributions and/or service providers	EU2/ EU3/D4	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI35		Green Infrastructure	Open Space	Contributions towards Grand Union Square and integrating green spaces and other green infrastructure along Old Oak High Street (north) and other streets	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2/D2	P2: Old Oak North	Y	Y	Y		GI35

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
GI36		Green Infrastructure	Open Space	Integrating green spaces and other green infrastructure along Old Oak High Street (south) and other streets	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2/D2	P1: Old Oak South	Y	Y	Y		GI36
GI37		Green Infrastructure	Open Space	New multi-functional canal basins and waterspace	NYC	Developer cost	EU1/EU2	P2: Old Oak North	Y	Y	Y		GI37
GI38		Green Infrastructure	Open Space	Linear open spaces along Victoria Road, Wales Farm Road, Chase Road, Old Oak High Street and new streets	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y	Y	Y		GI38
GI39		Green Infrastructure	Open Space	New and improved spaces within Atlas Junction neighbourhood centre	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			GI39
GI40		Green Infrastructure	Open Space	Canalside space on the Willesden Junction Maintenance Depot	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			GI40
GI41		Green Infrastructure	Open Space	Linear spaces along Old Oak Lane, Old Oak Common Lane, Victoria Road and new walking and cycling focused streets across the area	NYC	Developer cost/ planning contributions and/or service providers	EU1/T2/T3	P8: Old Oak Lane & Old Oak Common Lane	Y	Y	Y		GI41
GI42		Green Infrastructure	Open Space	New Public Open Space (First Central, Lakeside Drive/Coronation Road)	NYC	Developer cost/ planning contributions and/or service providers	EU1	P4: Park Royal West	Y				GI42
GI43		Green Infrastructure	Open Space	Southern Station Square	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2	P1: Old Oak South			Y		GI43

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
GI44		Green Infrastructure	Canal	New and improved wharves, docking, mooring and ancillary facilities at appropriate locations along Grand Union Canal.	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2	P3: Grand Union Canal	Y	Y	Y		GI44

5.3 Play Space

Studies have continually shown the importance of play for physical, mental and emotional wellbeing across all age groups. The importance of this form of Green Infrastructure is acknowledged in the regulation 19 OPDC Local Plan 2017 with Policy D9: Play Space dedicated to its provision for all ages. This requirement is therefore reflected in the IDP Schedule with 4 different projects which overall ensure delivery of play space for all age groups. The following studies support Policy D9 and the inclusion of the projects on the Infrastructure Schedule; Development Infrastructure Funding Study (DIFS); the Environmental Standards Study, and the Precedents Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
GI45		Green Infrastructure	Play Space	Contributions towards and/or delivery of play space for children under 5.	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI46		Green Infrastructure	Play Space	Contributions towards and/or delivery of play space for children of 5 - 11 years old.	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI47		Green Infrastructure	Play Space	Contributions towards and/or delivery of play space for young people (12+).	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide	Y	Y	Y		N/A
GI48		Green Infrastructure	Play Space	Contributions towards and/or delivery of play space for people all ages.	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide	Y	Y	Y		N/A

5.4 Public Realm

Public realm plays an important role in the accessibility and permeability of the area. It provides for legibility of space as well as an intermediary space between various other functions such as roads and built form. Public realm itself has a multi-use functionality where the space can provide for a combination of the following: recreation, social interaction, nature, safe non-motorised movement, climate change mitigation, and utilities. It also has the potential to ensure the success of the area in regards to 'making a place' and providing identity through innovative design and the provision of public art. The following studies support Policy D2 of the OPDC Local Plan 2017 (Regulation19 version) and the projects identified in the Infrastructure Schedule; Development Infrastructure Funding Study (DIFS); Environmental Standards Study, Public Realm; Walking and Cycling Strategy; and the Precedents Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
GI49	T10B	Green Infrastructure	Public Realm	Public realm/ green infrastructure enhancements on Victoria Road/Wales Farm Rd gyratory system.	NYC	Developer cost/ planning contributions and/or service providers	D2	P7: North Acton and Acton Wells	Y	Y			GI49
GI50		Green Infrastructure	Public Realm	Public realm / green infrastructure enhancements on Victoria Road, Wales Farm Rd to Old Oak Common Lane	NYC	Developer cost/ planning contributions and/or service providers	D2	P7: North Acton and Acton Wells	Y	Y			GI50
GI51		Green Infrastructure	Public Realm	Public realm/ green infrastructure enhancements on Old Oak Lane	NYC	Developer cost/ planning contributions and/or service providers	D2	P8: Old Oak Lane & Old Oak Common Lane	Y	Y			GI51
GI52	T11.1B	Green Infrastructure	Public Realm	Public realm/ green infrastructure enhancements on Old Oak Common Lane: Brunel Rd to Oaklands intersection	5.0	Developer cost/ planning contributions and/or service providers	D2	P8: Old Oak Lane & Old Oak Common Lane	Y	Y	Y		GI52
GI53	T11.3B	Green Infrastructure	Public Realm	Public realm /green infrastructure enhancements, Old Oak Common Lane: Oaklands intersection to Atlas Junction	NYC	Developer cost/ planning contributions and/or service providers	D2	P8: Old Oak Lane & Old Oak Common Lane		Y			GI53
GI54	T12.1B	Green Infrastructure	Public Realm	Public realm/ green infrastructure enhancements on Scrubs Lane adjacent to Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	D2	P10: Scrubs Lane	Y	Y			GI54
GI55		Green Infrastructure	Public Realm	Public realm/ green infrastructure enhancements on Scrubs Lane: Mitre Bridge to Harrow Rd	NYC	Developer cost/ planning contributions and/or service providers	D2	P10: Scrubs Lane	Y	Y			GI55

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 -20 years	Phasing 20 years +	Comments	Map Reference
GI56		Green Infrastructure	Public Realm	Contributing towards and / or delivering public realm / green infrastructure particularly along primary routes around Park Royal, Stonebridge and Harlesden stations	NYC	Developer cost/ planning contributions and/or service providers	D2	P4: Park Royal West	Y	Y			GI56
GI57		Green Infrastructure	Public Realm	Old Oak Common Lane Station Square	NYC	Developer cost/ planning contributions and/or service providers	EU1/D2	P7: North Acton and Acton Wells		Y	Y		GI57

6.0 Social Infrastructure

6.1 Social infrastructure provides for the long term wellbeing of a community. It encompasses education, health, community space, leisure and sports facilities as well as facilities for emergency services. Together these infrastructure items will provide the physical spaces that will allow for the development and maintenance of community cohesiveness by encouraging social interaction, promoting learning and health, as well as the provision of other supporting facilities for those living, working and visiting the area. While the social infrastructure items are listed separately in the Infrastructure Schedule, there is recognition that the most feasible delivery model may be to co-locate the facilities, i.e. a leisure centre, community centre and a library may all be located within the same building; or a school may share sports facilities with the wider community. Policy TCC4 of the OPDC Local Plan 2017 (regulation19 version) and the following studies support the inclusion of these projects in the Infrastructure Schedule: Development Infrastructure Funding Study (DIFS); Education and Health Needs Study; Precedents Study and the Sports Courts and Swimming Pools Study.

6.2 Education

The projects in the Infrastructure Schedule for education cover early years, primary and secondary (including sixth form) provision. The OPDC's Health and Education Needs Study calculated the level of required provision that has been translated into the projects identified in the Schedule which includes the potential for the expansion of existing schools outside the OPDC area. These projects are supported by Policy TCC4 of the regulation 19 OPDC Local Plan 2017 and the following studies; Development Infrastructure Funding Study (DIFS); Health and Education Needs Study and the Precedents Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
SI1		Social Infrastructure	Nursery	Early Years Provision 1	1.6	Developer/ Service Provider	TCC4	na	Y				N/A
SI2		Social Infrastructure	Nursery	Early Years Provision 2	1.6	Developer/ Service Provider	TCC4	na	Y				N/A
SI3		Social Infrastructure	Nursery	Early Years Provision 3	1.6	Developer/ Service Provider	TCC4	na	Y				N/A
SI4		Social Infrastructure	Nursery	Early Years Provision 4	1.6	Developer/ Service Provider	TCC4	na		Y			N/A
SI5		Social Infrastructure	Nursery	Early Years Provision 5	1.6	Developer/ Service Provider	TCC4	na		Y			N/A
SI6		Social Infrastructure	Schools	Expansion of off-site existing primary school 1 (2FE)	9.0	Planning Contributions / Service Provider	TCC4	na	Y				N/A
SI7	SS1	Social Infrastructure	Schools	Expansion of off-site existing primary school 2 (1FE)	4.5	Planning Contributions / Service Provider	TCC4	na	Y				N/A
SI8		Social Infrastructure	Schools	Expansion of off-site existing primary school 3 (1FE)	4.5	Planning Contributions / Service Provider	TCC4	na	Y				N/A
SI9	SS3	Social Infrastructure	Schools	On-site Primary School 1 (Cargiant site)	8.3	Planning Contributions / Service Provider	TCC4	P2: Old Oak North	Y			Includes early years provision	N/A
SI10	SS4	Social Infrastructure	Schools	On-site Primary School 2 (Old Oak South)	8.3	Planning Contributions / Service Provider	TCC4	P1: Old Oak South		Y		Includes early years provision	N/A
SI11	SS2	Social Infrastructure	Schools	Expansion of off-site existing	8.0	Planning Contributions /	TCC4		Y				N/A

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
				secondary school 1 (2FE)		Service Provider							
SI12		Social Infrastructure	Schools	Expansion of off-site existing secondary school 2	4.5	Planning Contributions / Service Provider	TCC4		Y				N/A
SI13		Social Infrastructure	Schools	On-site Secondary School 1 (Acton Wells)	25.0	Planning Contributions / Service Provider	TCC4	P7: North Acton and Acton Wells		Y		Includes sixth form provision	N/A
SI14	SS6	Social Infrastructure	Schools	On-site All-Through school for ages 3-19	16.0	Planning Contributions / Service Provider	TCC4				Y	Includes early years and sixth form provision	N/A

6.3 Health

The items identified in the Infrastructure Schedule for health focus on primary health provision. Other types of health provision may be required as development proposals come forward and the OPDC gains a better understanding of the future population. Currently the proposals focus on the expansion of two existing primary care facilities and the delivery of a new facility within the OPDC area. These projects are supported by Policy TCC4 of the regulation 19 OPDC Local Plan 2017 and the following studies; Development Infrastructure Funding Study (DIFS); Health and Education Needs Study and the Precedents Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
SI15		Social Infrastructure	Health facilities	Expansion of Central Middlesex Hospital Primary Care Facility	NYC	Planning Contributions	TCC4		Y				N/A
SI16		Social Infrastructure	Health facilities	Expansion of Hammersmith Centre for Health Primary Care Facility	NYC	Planning Contributions	TCC4		Y				N/A
SI17	SH1	Social Infrastructure	Health facilities	On-site Health Facility (Cargiant site)	11.4	Planning Contributions	TCC4	P2: Old Oak North	Y	Y			N/A

6.4 Community, Leisure and Sport

The provision of the Community Hubs that are intended to provide a range of community services are listed in the Infrastructure Schedule. These may change in location as the development proposals come forward and OPDC gains a better understanding of delivery timescales and geographical requirement for these facilities within the OPDC area. These projects are supported by Policies TCC4 and TCC6 of the regulation 19 OPDC Local Plan 2017 and the following studies; Development Infrastructure Funding Study (DIFS); Precedents Study and the Sports Courts and Swimming Pools Study.

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
SI18		Social Infrastructure	Community & Sports facilities	Leisure/ Sports Centre 1			TCC4 /TCC6	P1: Old Oak South		Y		Could alternatively be provided in one facility	N/A
SI19		Social Infrastructure	Community & Sports facilities	Leisure/ Sports Centre 2			TCC4/ TCC6	P2: Old Oak North	Y	Y			N/A
SI20	SC1	Social Infrastructure	Community & Sports facilities	On-site Community hub 1	7.2	Planning Contributions	TCC4	P2: Old Oak North	Y	Y			N/A
SI21	SC2	Social Infrastructure	Community & Sports facilities	On-site Community hub 2	7.2	Planning Contributions	TCC4	P1: Old Oak South		Y			N/A
SI22		Social Infrastructure	Community & Sports facilities	Contributing towards and/or delivery of public concessions access to sports and leisure facilities	NYC	Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide	Y	Y	Y		N/A

6.5 Emergency Services

The provision of emergency services in the area will be dependent on the requirements of the Ambulance, Fire and Police Services. The projects listed in the Infrastructure Schedule are OPDC's current understanding of their needs. However the provision of space for these services may alter over time as their delivery models change. The OPDC will remain flexible in the delivery of infrastructure for the emergency services to ensure that they are able to meet the requirements of the growing population in a manner that best suits the services involved. These projects are supported by Policy TCC4 of the regulation 19 OPDC Local Plan 2017 and the Development Infrastructure Funding Study (DIFS).

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
SI23	SE1	Social Infrastructure	Emergency Services	Extension to existing police facility 1	2.0	Developer cost/ planning contributions and/or service providers	TCC4	na	Y	Y	Y	Work with emergency services to determine delivery triggers	N/A
SI24	SE2	Social Infrastructure	Emergency Services	Extension to existing police facility 2	2.0	Developer cost/ planning contributions and/or service providers	TCC4	na		Y	Y	Work with emergency services to determine delivery triggers	N/A
SI25	SE3	Social Infrastructure	Emergency Services	Intensification of existing Fire Station	2.0	Developer cost/ planning contributions and/or service providers	TCC4	na	Y	Y	Y	Work with emergency services to determine delivery triggers	N/A

Local Plan Reference 2017	Local Plan Reference 2016	Infrastructure Category	Infrastructure Sub-Category	Item Description (Asset Database)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing 0-10 years	Phasing 10 - 20 years	Phasing 20 years +	Comments	Map Reference
SI26	SE4	Social Infrastructure	Emergency Services	Additional capacity at existing ambulance stations	2.2	Developer cost/ planning contributions and/or service providers	TCC4	na	Y	Y	Y	Work with emergency services to determine delivery triggers	N/A
SI27	SE5	Social Infrastructure	Emergency Services	On-site contact point/police shop	NYC	Developer cost/ planning contributions and/or service providers	TCC4	na	Y	Y	Y	Work with emergency services to determine delivery triggers	N/A
SI28	SE6	Social Infrastructure	Emergency Services	On-site CCTV monitoring suite.	0.1	Developer cost/ planning contributions and/or service providers	TCC4	na	Y	Y	Y	Work with emergency services to determine delivery triggers	N/A

Appendix - Infrastructure Maps

Figure 1: All Spatial infrastructure

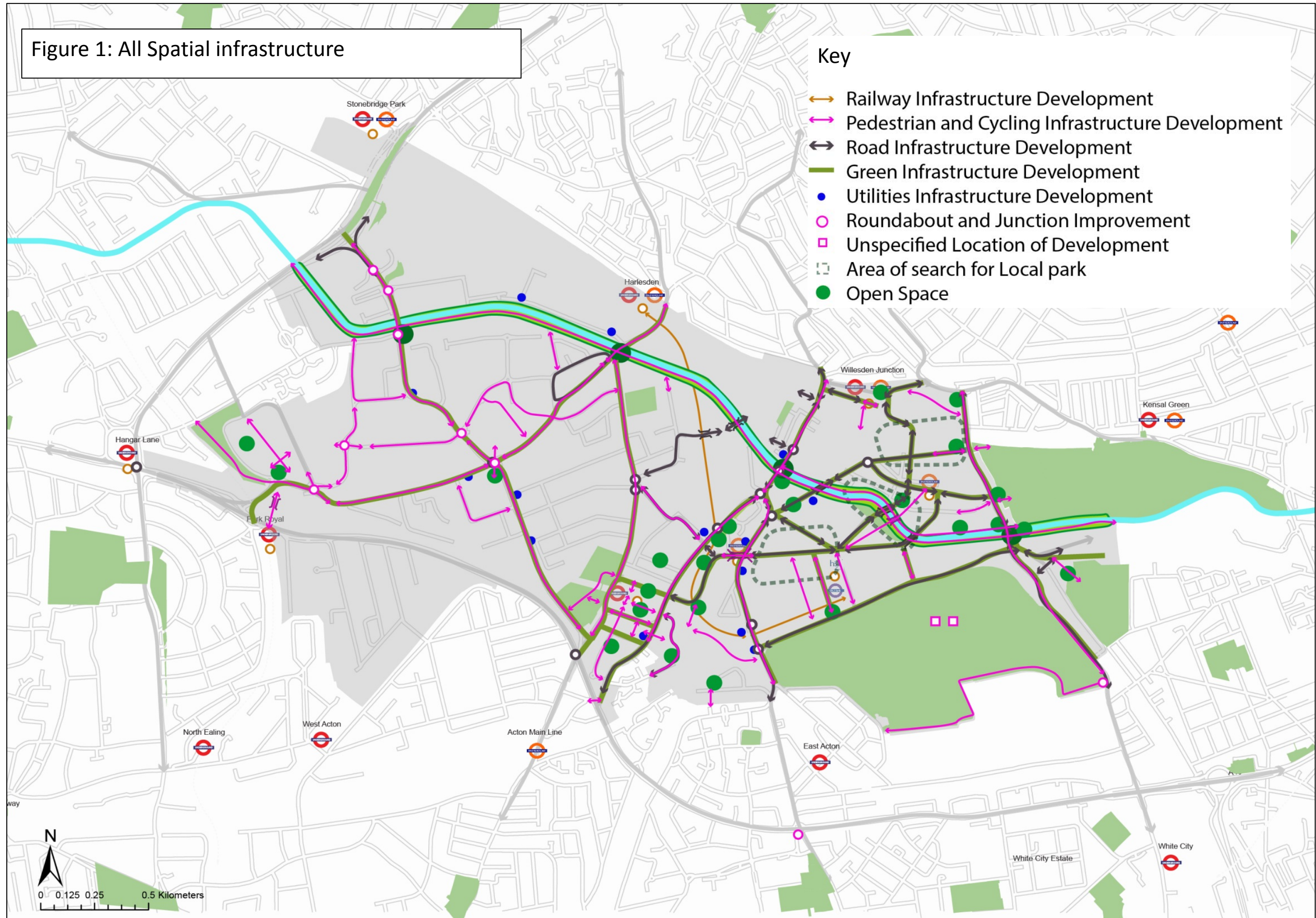


Figure 2: Rail, Stations and Interchange Projects

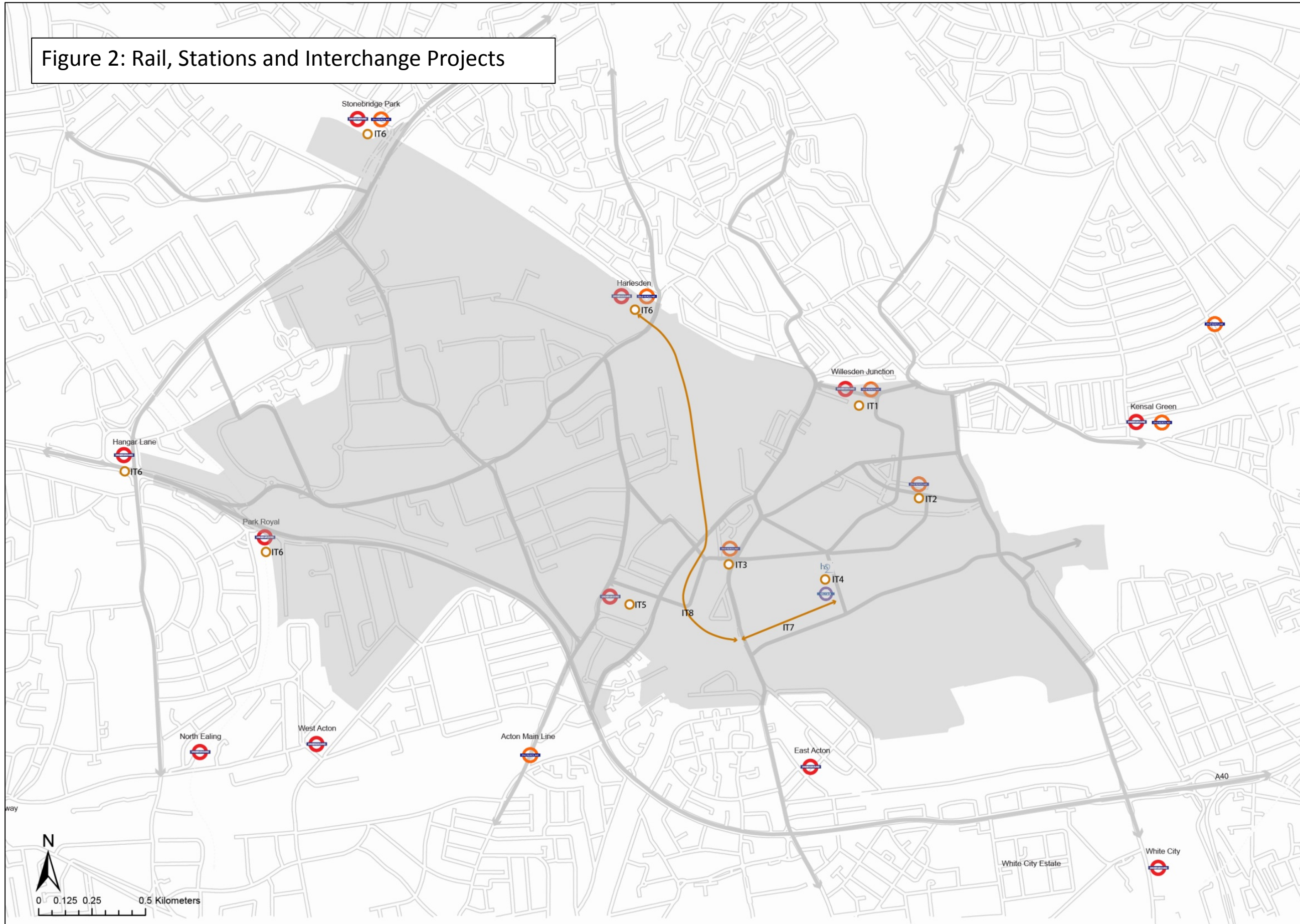


Figure 3: Pedestrian and Cycle Projects

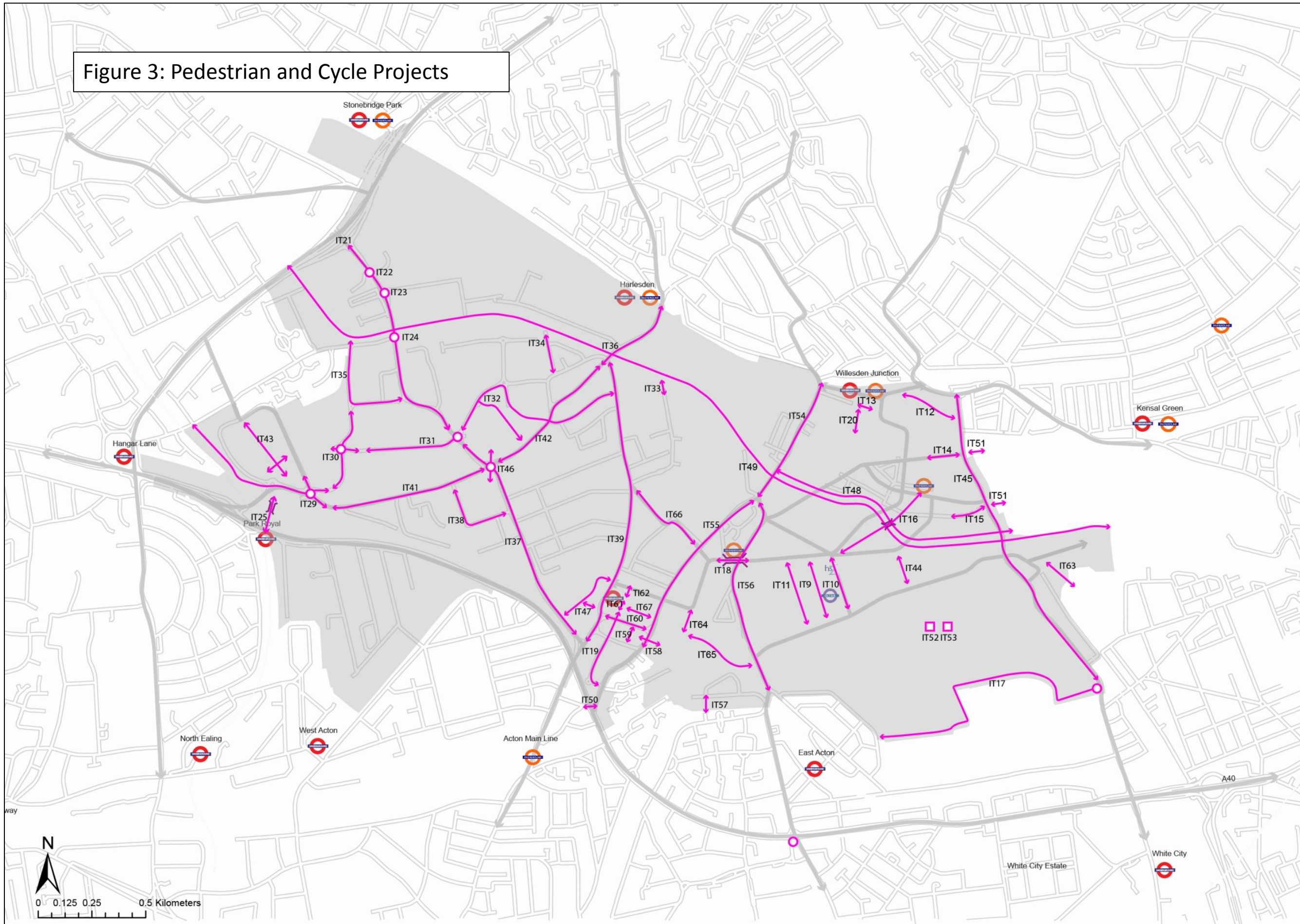


Figure 4: Road Network Projects

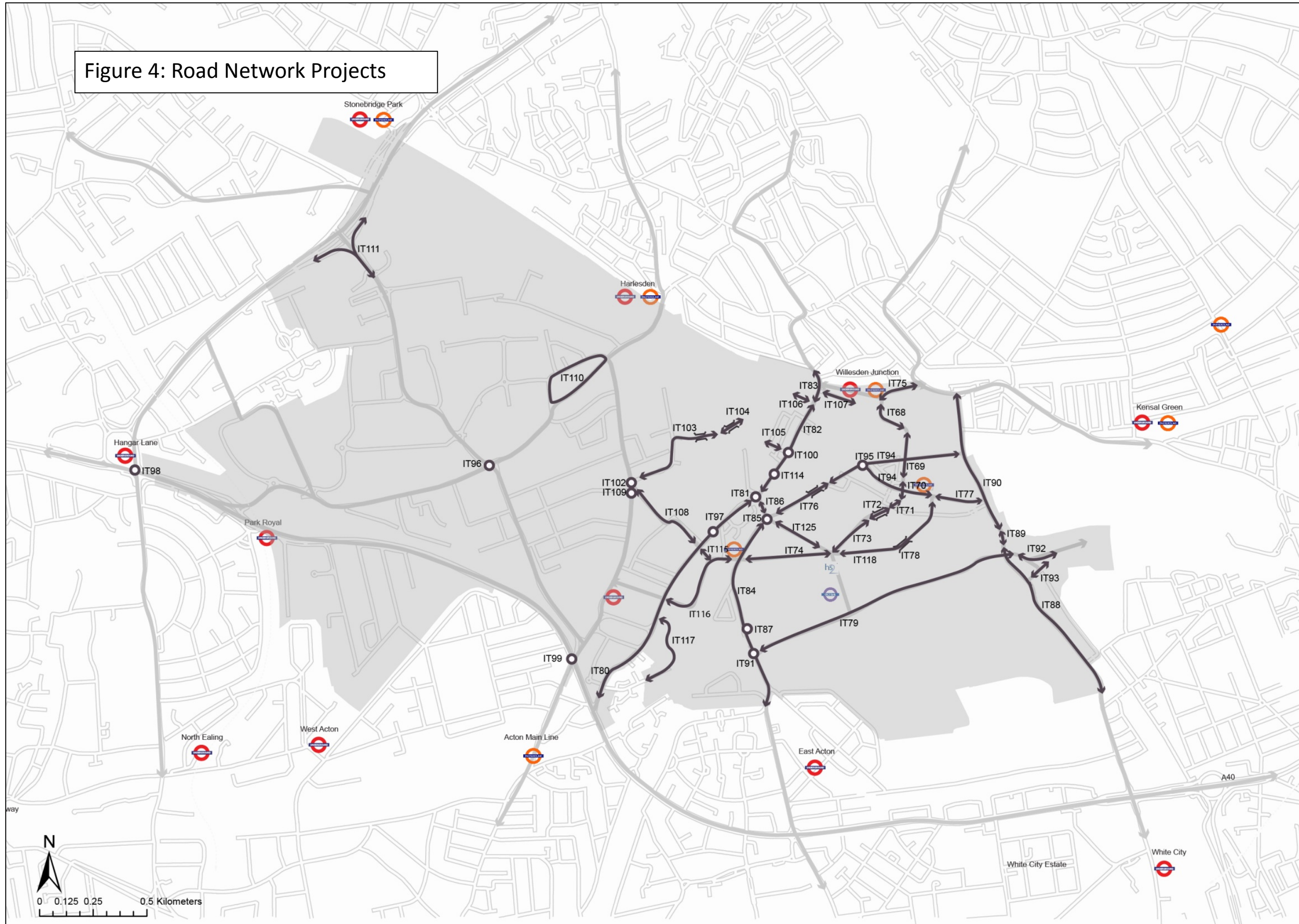


Figure 5: Air Quality Sensors

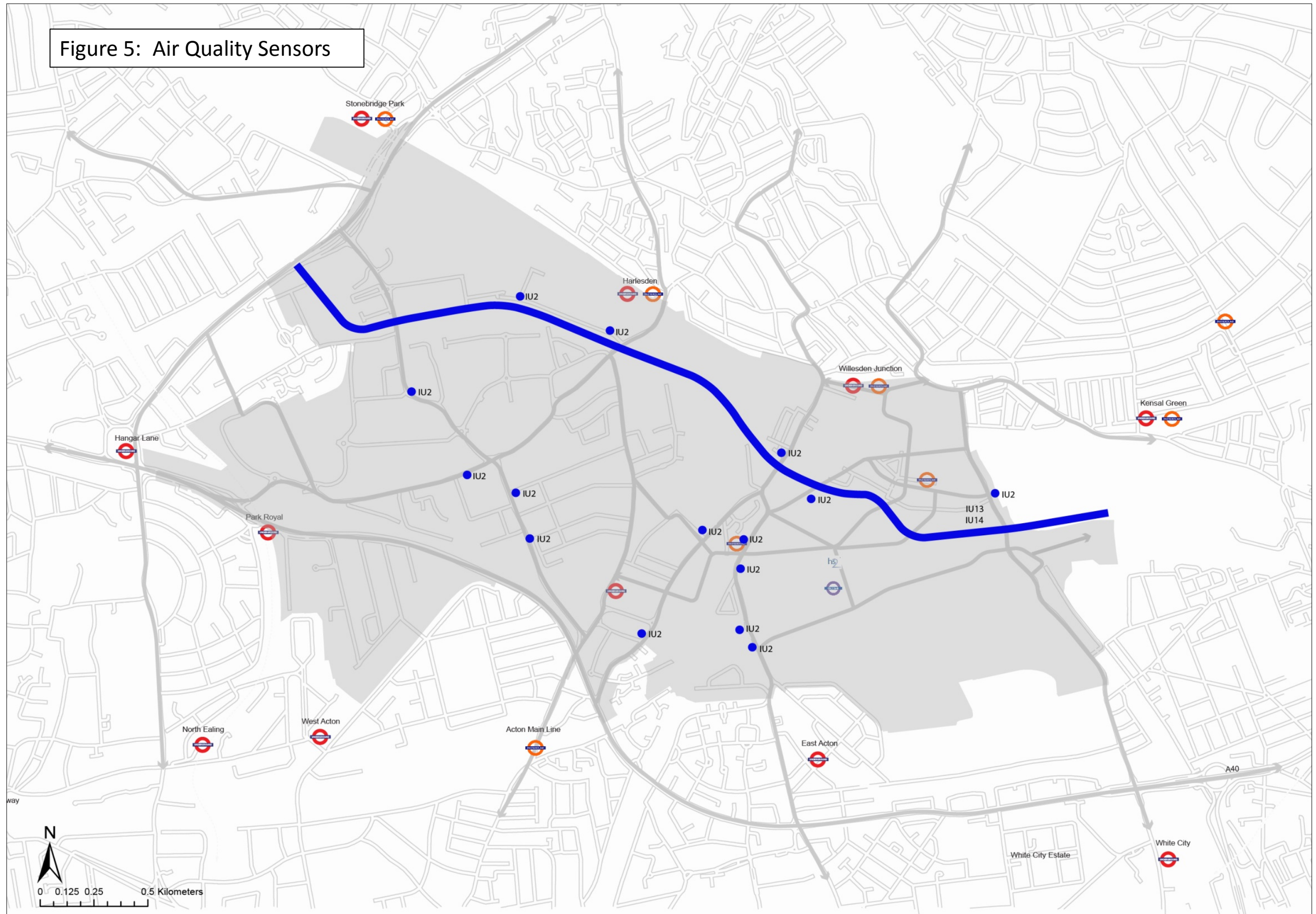


Figure 6: Green Infrastructure Projects

