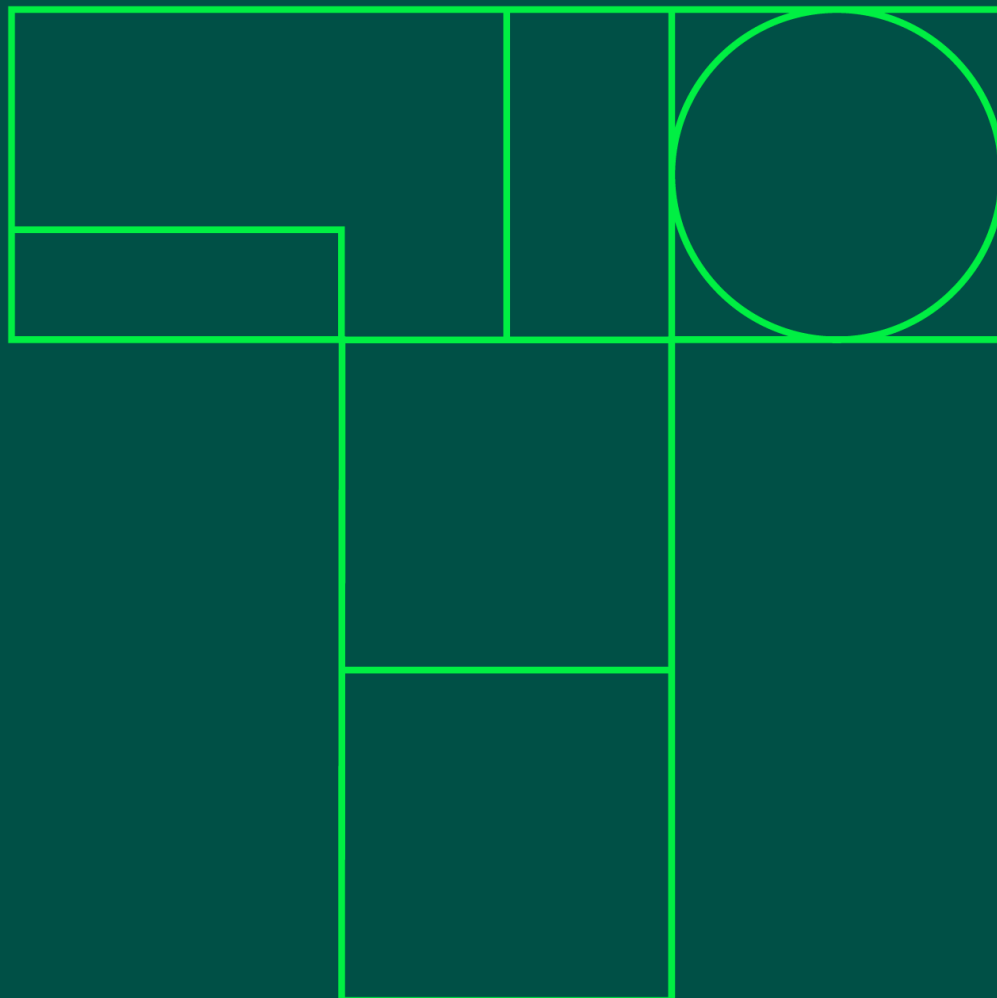


Flood Risk Assessment & Drainage Strategy Report

Cricket Field Care Home, Uxbridge
15695

For the London Borough of Hillingdon



Report for

London Borough of
Hillingdon

Project No: 15695

Cricket Field Care Home, Uxbridge

Issued By

Andrew Picton

Date

16 October 2026

Approved By

Paul Tittle

Flood Risk Assessment & Drainage Strategy Report

15695-TUL-XX-XX-RP-C-91001

Issue	Status	Issued	Approved	Date
01	First Issue	16/10/2026	AJP	PAJT

Tullys

Sheridan House
Forest Row
East Sussex, RH18 5EA

2nd Floor
201 Borough High Street
London, SE1 1JA

tullys.uk

Copyright and Non-Disclosure Notice

The contents and layout of this document are subject to copyright owned by Tully De'Ath (Consultants) Limited (© Tully De'Ath Limited 2009) save to the extent that copyright has been legally assigned by us to another party or is used by Tully De'Ath (Consultants) Limited under license. To the extent that we own the copyright in this document, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this document. The methodology (if any) contained in this document is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of Tully De'Ath (Consultants) Limited. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests. Any third party who obtains access to this document by any means will, in any event, be subject to the Third Party Disclaimer set out below.

Third-Party Disclaimer

Any disclosure of this document to a third-party is subject to this disclaimer. The document was prepared by Tully De'Ath (Consultants) Limited at the instruction of, and for use by, our client named on the front of the document. It does not in any way constitute advice to any third-party who is able to access it by any means. Tully De'Ath (Consultants) Limited excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this document. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.

Contents

1	Introduction.....	4
2	Site Location.....	4
3	Existing Conditions	5
4	Development Proposals.....	6
5	Flooding Assessment	7
6	Other Sources of Flooding.....	8
7	Sustainable Drainage Options	12
8	Surface Water Drainage Proposals	14
9	Foul Water Drainage Proposals.....	17
10	Maintenance	17
11	Summary & Conclusions	21
	Appendix A – Location Plan	
	Appendix B - Topographical Survey	
	Appendix C – Thames Water Sewer Records & Correspondence	
	Appendix D – Development Proposals	
	Appendix E – Flood Risk Maps	
	Appendix F – Drainage Strategy	
	Appendix G – Surface Water Drainage Calculations	
	Appendix H – Exceedance Flow Paths	
	Appendix I - Drainage Assessment Form	

1 Introduction

Tullys has been commissioned by the London Borough of Hillingdon (LBH) to provide a Flood Risk Assessment and Drainage Strategy report for the development of Cricket Field Car Park.

The purpose of the report is to demonstrate to the Local Planning Authority and the Lead Local Flood Authority (London Borough of Hillingdon) that the site can be drained both safely and sustainably for the lifetime of the development.

The report has been prepared in accordance with guidance set out within the following documents:

- National Planning Policy Framework (NPPF) 2025.
- CIRIA C753 SuDS Manual (2015).
- London Borough of Hillingdon Strategic Flood Risk Assessment (2018) part of the West London Strategic Flood Risk Assessment (SFRA).
- London Borough of Hillingdon Local Flood Risk Management Strategy (2016).
- The London Plan Policies SI.12 and SI.13 (2021).
- The National Standards for Sustainable Drainage System (SuDS) (2025)

2 Site Location

The site is currently occupied by the Civic Centre multistorey carpark which is surrounded by soft landscaping. Cricket Field Road and the slip road from the A4020 Hillingdon Road forms the western and the northern boundaries respectively. The eastern boundary is made up by the playing fields of the adjacent St Andrews C of E Primary School, and the southern boundary is made up from a mixture of rear gardens, parking courts and the northern end of Manor Waye.

The middle of the site has a National Grid Reference of 505691, 183699, and has an adjacent postcode of UB8 2NZ.

Refer to Appendix A for Location Plan.

3 Existing Conditions

3.1 Land Use

The site covers an area of 0.695ha and is currently used as a multistorey carpark for the Civic Centre. The carpark is surrounded by soft landscaping, primarily grass, with trees along the boundaries.

3.2 Topography

The topographical survey indicates that levels are generally falling to the north west.

Ground levels in the south western corner of the site is in the order of 37.50m AOD falling to 36.18m AOD in the northwestern corner. Levels in the southeastern and northeastern corners are 38.90m and 39.14m AOD respectively.

The entrance to the ground floor level of the carpark is typically at 37.35m AOD where there is a slight ramp up to the ground floor parking level which varies between 37.43m to 37.94m AOD. The first floor level of the carpark varies between 39.65m and 40.64m AOD, and the second floor is typically at 43.45m AOD.

Refer to Appendix B for Topographical Survey.

3.3 Geology

The geology maps indicated the superficial geology on site is made up of the northern third being the Lynch Hill Gravel Member, with the southern two-thirds being the Langley Silt Member. The Bedrock Geology is noted as the London Clay Formation.

A nearby historic borehole record indicates the superficial deposits to be in the region of 4.3m thick and indicates that groundwater was struck at 12.5m bgl.

The site does not lie within a groundwater Source Protection Zone.

3.4 Impermeable Area

With a site area of 0.695ha, the impermeable surfacing of the carpark and the entrance ramps cover an area of 0.442ha, all of which appears to discharge to gullies.

3.5 Drainage

The Thames Water Utilities sewer records do not identify any adopted sewers within the site or in Cricket Field Road.

Adopted surface water sewers are noted along the northern side of Hillingdon Road, Manor Way to the south, and Whitehall Road to the southwest.

In reviewing the topographical survey, the carpark appears to be positively drained. It is suspected that the existing carpark connects to the existing highway sewers in Cricket Field Road, although a drainage survey will be required to confirm this.

Historic mapping indicates that the carpark was constructed by 1978 and as a consequence it is unlikely that any flow control or surface water attenuation is provided.

The nearest adopted foul sewers are located at the eastern end of Myddleton Road to the west, Mannor Way to the south, and opposite Boundary House in Cricket Field Road to the north.

It is not anticipated that there will be any onsite foul drainage associated with the existing carpark building.

Refer to Appendix C for Thames Water Sewer Records.

3.6 Water Courses / Rivers

The nearest watercourses to the site are the Fray's River located 325m to the west and the River Pinn 645m to the east.

4 Development Proposals

Demolition of the existing multi-storey Civic Centre car park (sui generis) and erection of a three to five storey residential care home (use class C2), comprising 160 en-suite bedrooms, communal and care facilities, and ancillary facilities at basement level. The proposal includes 34 car parking spaces, including four accessible bays, a separate ambulance bay and loading bay, 17 cycle parking spaces and secure dementia-friendly gardens.

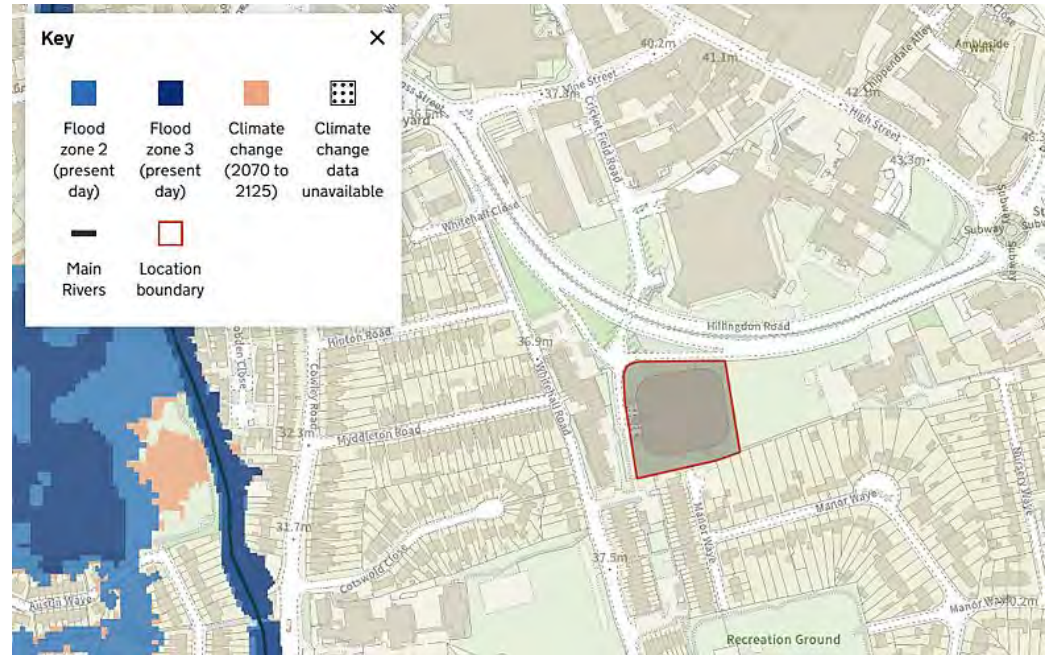
The Proposed Site Layout is provided in Appendix D.

5 Flooding Assessment

With reference to the GOV.UK flood maps the site is located within a Flood Zone 1 (low risk) area which is classed as having less than a 1 in 1000 chance of river flooding within any one year (annual chance of flooding of less than 0.1%).

The proposed development is defined within NPPF as more vulnerable for the residential units, and less vulnerable for the commercial, both of which are deemed appropriate for a Flood Zone 1 area.

Refer to Appendix E for the GOV.UK and SFRA fluvial flood risk maps.



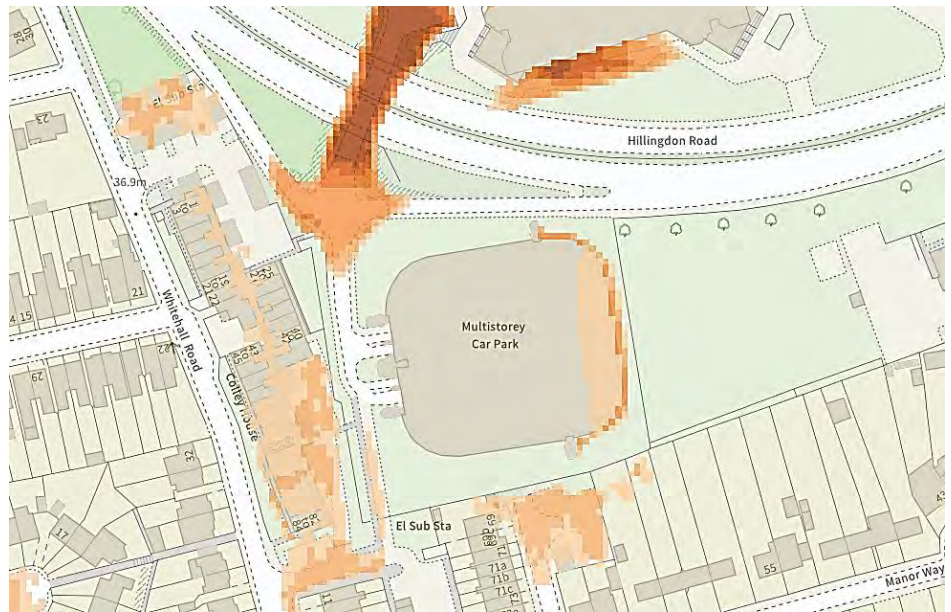
GOV.UK River Flooding map with climate change.

6 Other Sources of Flooding

6.1 Surface Water / Overland Flows

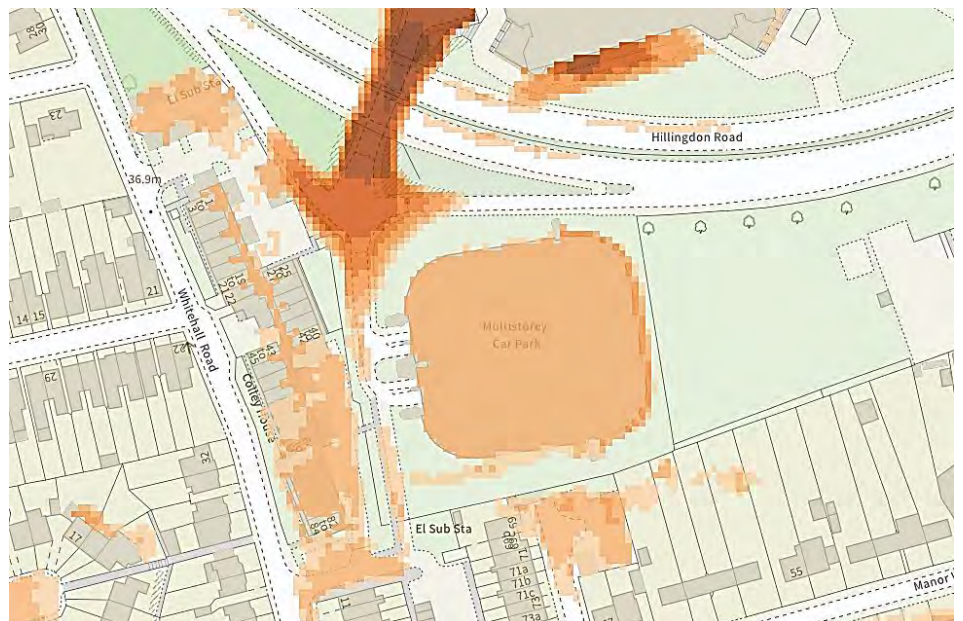
The GOV.UK surface water flood risk maps for planning indicate that during a 30 year event there are only small areas of flooding noted along the eastern elevation of the carpark. In reviewing the topographical survey, it is noted that the ground levels along eastern boundary falls towards the carpark.

When the current 100yr storm event is considered, there is flooding with a depth of <150mm noted within the footprint of the building, adjacent to the eastern elevation. Flooding is also noted in the north western corner of the site which relates to the underpass where Cricket Field Road drops under Hillingdon Road.



GOV.UK – Current 100yr surface water flood extents.

When climate change is included for the 100yr event, the whole of the carpark footprint is noted to flood with a depth of between 150-300mm. There is also some additional low-level flooding noted adjacent to the southern elevation. The extents of flooding in the northwestern corner of the site has also increased which extends along Cricket Field Road.



GOV.UK – 100yr + climate change surface water flood extents.

The flood extents for the 1000yr event with climate change are similar.

It is noted that the flood depths within the carpark do not exceed 300mm. Above this depth floodwater flows out of the carpark entrance and into Cricket Field Road, which in turn flows north to the localised low spot where Cricket Field Road drops under Hillingdon Road.

Mitigation

A number of mitigation measures have been introduced into the design to reduce the risk of surface water flooding which include:

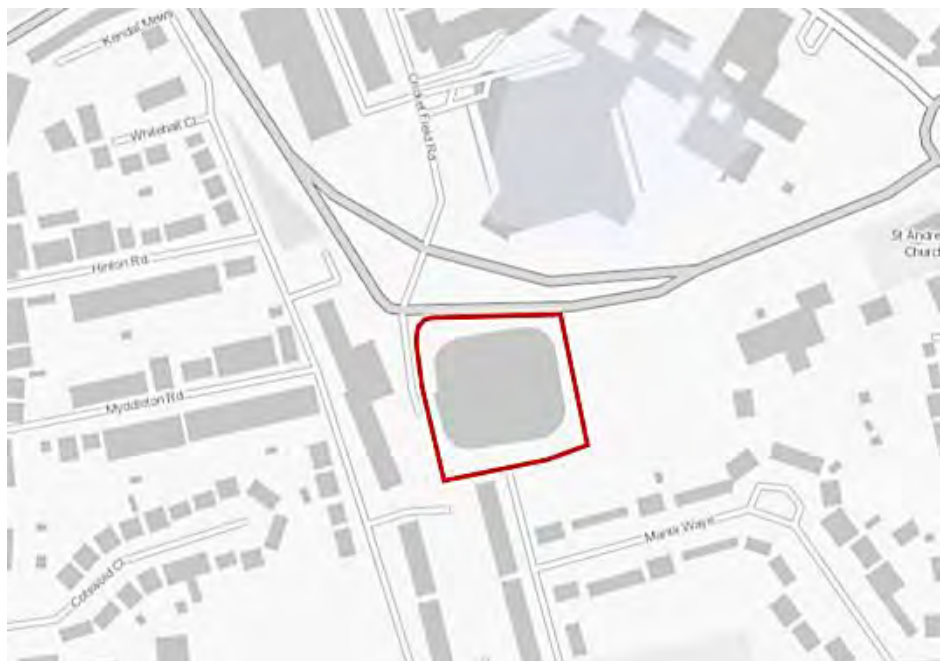
- With reference to Chater 8, the new development will restrict surface water outflows to match greenfield runoff rates and new attenuation will be provided to accommodate a 1 in 100yr event with climate change taken into account. As well as reducing the surface water flood risk onsite, this attenuation will also reduce the amount for floodwater water discharging offsite and onto Cricket Field Road.
- The new build footprint sits outside the flood extents associated with the flooding of the underpass of Cricket Field Road.
- The ground levels along the eastern and southern elevations will be designed so that if there are any overland flows from the east they will be directed away and around the building.
- The new development introduces significant areas of new soft landscaping which results in an overall reduction in impermeable area on the site.
- Ground floor entrances will be locally raised relative to the surrounding ground levels.

The new development will include significant areas of new soft landscaping, and with the introduction of surface water attenuation, the risk of surface water flood is considered to be low.

Refer to Appendix E for the Surface Water Flood Risk maps.

6.2 Sewer

The Thames Water 2017 Sewer Flooding Record maps in the SFRA indicate that the site sits outside the area of any recorded sewer flooding instances.



SFRA Sewer Flooding record map

A new surface water drainage system will be provided which will incorporate significant flow control and surface water attenuation which will reduce the risk of surface water flooding both within and beyond the site.

It is recognised that there will be an increase in foul flows resulting from the development and a Pre-planning application has been made to Thames Water with a view to confirm that there is sufficient capacity within the adjacent sewerage system to accommodate the proposed foul flows. At the time of writing Thames Water have yet to respond.

Refer to Appendix E for the SFRA Thames Water Sewer Flooding Record maps.

6.3 Ground Water

The groundwater vulnerability map within the SRFA indicates that the site is located within an area which has between 50% and 75% susceptibility to groundwater flooding. The northwestern part of the site is also located within an area which has an increased potential for elevated groundwater.



SFRA Groundwater susceptibility map

A basement is proposed as part of the new development however it will be limited to non-residential uses. In addition, the basement will be constructed using waterproofing techniques and service entry points will be detailed to prevent groundwater ingress. Consequently, with the above mitigation measures the risk of groundwater flooding is considered to be low.

Refer to Appendix E for the SFRA Groundwater Flood Maps.

6.4 Reservoirs

The SFRA Flood Maps (Appendix E) indicate that the site is not located within an area which is subject to this type of flooding.



SFRA Reservoir flood map.

6.5 Artificial Sources

There are no artificial water sources within the vicinity of the site.

7 Sustainable Drainage Options

CIRIA C753 SuDS Manual explains that the primary function of SuDS measures is to protect watercourses from any impact due to the new development. However, SuDS can also improve the quality of life in a new development and urban spaces by making them more vibrant, visually attractive, sustainable and more resilient to change. This document explains the wider social context of SuDS and how SuDS can deliver high-quality drainage while supporting urban areas to cope better with severe rainfall both in present and future.

There are four main categories of benefits that can be achieved by SuDS:

- Water Quantity (mitigate flood risk & protect natural water cycle)
- Water Quality (manage the quality of the runoff to prevent pollution)
- Amenity (create and sustain better places for people)
- Biodiversity (create and sustain better places for nature).

There are many site-specific factors which will influence the choice of any SuDS devices used within a development. The primary factors are:

- How the land is to be used – whether domestic, commercial or industrial.
- Soil contamination
- Existing soil conditions i.e. ground permeability, groundwater levels
- Site topography e.g. steeply sloping
- Space availability – urban or non-urban.

Most advice on the use of sustainable drainage techniques recommends the utilisation of ground infiltration, which may take the form of permeable paving, swales, infiltration basins or soakaways. However, these systems are dependent on the sub-soil suitability, unsaturated soil zone to an adequate depth and the absence of leachable contaminants in the sub-soils.

It is essential to design and install a sustainable drainage system that is appropriate for the specific development and location in question.

SuDS measures, as stated in CIRIA C753 SuDS Manual, have been considered and the potential SuDS solutions for inclusion in this development are stated in Table 1 – SuDS Feasibility Matrix.

Table 1: SuDS Feasibility Matrix

Technique	Description	Implementation at the Site
Rainwater Harvesting	Collection of rainwater for re-use externally for irrigation or internally within the building for toilets, washing machine etc.	YES - Water butts and irrigation tanks are to be used to water the soft landscape areas.
Green Roofs	Areas of living vegetation installed on the top of buildings to reduce run-off	YES – Biodiverse roofs are proposed to all the flat roof elements covering an area of 731m ²
Infiltration Systems	Specifically, designed systems designed to promote infiltration of surface water runoff into the ground	NO – Geology and site constraints indicate that infiltration is not appropriate.
Proprietary Treatment Systems	Manufactured products that remove specified pollutants from surface water run off	NO – Permeable paving to the parking bays are proposed.
Filter Strips	Uniformly graded and gently sloping strips of grass or vegetation designed to treat surface water runoff from adjacent impermeable areas.	NO – Not desirable in residential landscaping, other measures are more appropriate.
Filter Drains	Shallow trenches filled with stone/gravel creating temporary storage, conveyance and filtration of surface water run-off.	NO - Not desirable in residential landscaping, other measures are more appropriate.
Swales	Shallow, flat bottomed, vegetated open channels for conveyance and often attenuation	NO – Other methods are more appropriate.
Bioretention Systems	Shallow landscaped depressions that can reduce run off	YES - Tree pits and soft planted areas at ground level are to incorporate rain gardens.
Trees	Protect and enhance the urban environment. Transpiration, Interception, Increased infiltration, Phytoremediation.	YES – significant numbers of new trees are to be planted across the development
Pervious Pavements	Vehicular/pedestrian pavements allowing water to infiltrate through the surface into underlying structural layers	YES – all external parking bays are to be Type C permeable paving, covering an area of approx. 461m ² .
Attenuation Storage Tanks	Below ground void space for the temporary storage of surface water.	YES – 3 linked below ground attenuation tanks are to be provided.
Detention Basins	Landscaped depressions for the temporary storage of surface water.	NO – On a constrained site other methods are more appropriate.
Ponds and Wetlands	Features with permanent water providing attenuation and treatment of surface water.	NO – On a constrained site other methods are more appropriate.

The proposed SuDS features are shown on the Drainage Strategy Drawings in Appendix F.

8 Surface Water Drainage Proposals

8.1 Impermeable Areas

The impermeable area of the current carpark site is 4424m².

The proposed development will result in a reduction in hard paving, with an impermeable area of 3886m², which includes 730m² of green roof.

8.2 Equivalent Greenfield

The greenfield run-off rates for the site have been calculated using the IH124 Method for sites <50 hectares (in accordance with the Interim Code of Practice for SuDS):

Impermeable Area (m ²)	Flow Rate (l/s) for Storm Return Period			
	Qbar	1 in 2	1 in 30	1 in 100
6950	1.3	1.1	2.9	4.1

Refer to Appendix G for Surface Water Calculations.

8.3 Proposed Drainage Strategy

The London Plan requires that new developments should utilise sustainable drainage systems (SuDS) unless there are practical reasons for not doing so, and should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible in line with the following drainage hierarchy:

1. Store rainwater for later use
2. Use infiltration techniques, such as porous surfaces in non-clay areas
3. Attenuate rainwater in ponds or open water features for gradual release
4. Attenuate rainwater by storing in tanks or sealed water features for gradual release
5. Discharge rainwater direct to a watercourse
6. Discharge rainwater to a surface water sewer/drain
7. Discharge rainwater to the combined sewer.

In terms of rainwater re-use, water butts will be used to water the external soft planting areas.

There is an aspiration within the new National Standards for SuDS to retain the first 5mm of rainfall on site. With the flat areas of roof incorporating green roofs, permeable paving in the parking areas, and directing runoff from hard paved areas onto the adjacent soft landscaping/permeable surfaces, it is anticipated that approximately 39% of the impermeable surfacing on the site will retain the first 5mm of rainfall.

The geology maps indicate that potentially only the northern section of the site may be appropriate for shallow infiltration. However, when the flood extents of Cricket Field Road are taken into account, the proximity constraints imposed by Building Regulations, and the existing trees are considered, there is insufficient space available to accommodate any

soakaways in this part of the site. Consequently, it is proposed to connect the new surface water system to the 900mm dia. adopted surface water sewer, located to the northwest of the site.

The proposed sewer connections will be subject to Thames Water approval via a Section 104 and 106 Agreement under the terms of the Water Industry Act 1991.

Refer to Appendix F for Drainage Strategy.

8.4 Discharge Rates

It is believed that surface water from the carpark currently discharges unrestricted into the sewers in Cricket Field Road.

An estimation of the existing unrestricted surface water run-off rates has been calculated using the Modified Rational Method with rainfall intensity from Microdrainage Windes for a storm of 30 minutes' duration:

$$Q = 2.78 \times C_V \times C_R \times A \times i$$

Where;

Q = Flow (l/s)

C_R = Routing coefficient = 1.3

C_V = Coefficient of run-off = 0.95

A = Area drained (hectares)

i = Rainfall intensity (mm/hr) (determined from Infodrainage)

Impermeable Area (m ²)	Flow Rate (l/s) for Storm Return Period		
	1 in 2	1 in 30	1 in 100
4424	38	91	122

To restrict flows to the 1 year greenfield rate it would generate an unacceptably small orifice size. Consequently, a proposed discharge rate of 1.5 l/s has been chosen which results in an orifice size of 50mm.

With a new impermeable area of 3886m² there is 86m² in the north eastern corner of the site which will have free discharge into Cricket Field Road, as this area is at risk from offsite flooding.

With an impermeable area of 3800m² the proposed runoff rate will be restricted to 1.5 l/s for all events up to the 1 in 100 year event with an additional 40% allowance for climate change.

A comparison of pre and post development peak flow discharge rates is provided below:

Return Period (years)	Proposed Run off Rate (l/s)	Existing Run-off rate (l/s)
1	1.5	38
30	1.5	91

100	1.5	122
100+40%CC	1.5	n/a

Refer to Appendix F for the Proposed Drainage Layout and Appendix G for the Surface Water Drainage Calculations.

8.5 Attenuation

Based upon the controlled discharge rates mentioned above, the required volumes of attenuation will be provided in three linked below ground attenuation tanks.

Tank A = 91m³

Tank B = 106m³

Tank C = 194m³

A total of 391m³ of surface water attenuation is provided.

It should be possible to utilise sub-base storage within the 461m² of permeable paving, which could reduce the volume of below ground tanks, however a detailed levels review and an assessment of the routing of the services will need to be undertaken to confirm how much volume could be provided.

Refer to Appendix F for Drainage Strategy.

8.6 Exceedance

An attenuation system has been provided to accommodate a 1 in 100 rainfall event with an additional 40% allowance for climate change. However, ground levels will be designed to fall away from the proposed buildings as far as reasonably practicable. During an exceedance event, overland surface water flows will be directed away from the buildings and into the adjacent landscaped areas, which will be set lower than the building thresholds.

The proposed external levels will follow the natural ground levels which will direct the majority of exceedance flows to the west and ultimately into Crick Field Road.

An exceedance flow route plan is provided within Appendix H.

8.7 Surface Water Treatment

Although surface water runoff will ultimately discharge to a sewer, all surface water will receive some form of treatment. The majority of the roof is green however those areas which are not will drain via tapped gullies. In addition, catchpits will be provided both up and downstream of the attenuation tanks.

All parking bays will be formed in permeable paving (Type C) and where levels permit runoff from the access road will be designed to fall to the permeable paving. Similarly, areas of hard paving will be designed to direct surface water runoff into the adjacent soft landscaped areas.

8.8 Drainage Assessment Forms

The London Borough of Hillingdon's Sustainable Drainage Proforma has been completed using the information provided within this report and is located in Appendix I.

9 Foul Water Drainage Proposals

It is believed that the existing carpark does not have any foul drainage. Consequently, a new foul connection to the adopted drainage system will be required.

In reviewing the sewer records there are no adopted sewers in the immediate vicinity of the site and as a result it is anticipated that the new onsite foul drainage system will need to be pumped in order to connect to the existing adopted sewers. Discussions are ongoing with Thames to ascertain the most appropriate connection point; however, two potential locations have been identified:

- The adopted manhole 6508 located to the south of the site, within Manor Way.
- Alternatively, and subject to a detailed drainage survey, connect to the adjacent private foul drainage system within Colley House, which is also owned by the Applicant.

Whilst all the residential accommodation is provided at ground level and above, the basement includes the kitchen and laundry. Consequently, two foul pump stations have been detailed where the basement area will discharge to its own pump station within the basement, and foul drainage from the ground floor levels and above connect to a separate external pump station. The basement pump station will in turn connect to the external pump via a rising main.

The new pump stations will be private but will be designed to accommodate emergency storage in accordance with the requirements of Building Regulations.

Refer to Appendix F for the Drainage Strategy.

The proposed sewer connection will be subject to Thames Water approval via a Section 106 and 104 Agreements under the terms of the Water Industry Act 1991.

10 Maintenance

Maintenance of any drainage scheme is essential to ensure that it continues to perform as designed. Within the site's, Health & Safety File a Maintenance Strategy will be developed which will give details of routine maintenance inspections for each element of the drainage system, together with details of how they should be undertaken and at what intervals or events. It should also include, where relevant, the installed manufacturer's details and maintenance recommendations.

The surface water drainage systems require regular inspection/clearing to prevent blockages due to the accumulation of silt. The table below sets out the maintenance requirement for each SuDS element proposed for the development, based on CIRIA C753 SuDS Manual.

Adopted elements of the drainage system will be the responsibility of Thames Water, who will be liable for the on-going inspection and maintenance.

The maintenance of the private drainage system will be managed by LBH. With the provision of the above measures, the drainage system for all areas of the site will be managed and maintained for the lifetime of the development.

All maintenance must be carried out by suitably trained persons.

SuDS Maintenance Schedule

Item	Task	Frequency	Location	Access	Comments
Main Drainage Network					
Rainwater downpipes	Clean out at roof level & ground level	Twice yearly for the first 2 years of operation then annually	Roof level, around building perimeter & internal system suspended beneath first floor slab & ground floor slab	High level access required to roof outlets. Communal carpark & hard/soft landscaping	Works undertaken by appropriately qualified person(s). For RWP outlets at roof level follow health & safety regulations dealing with working at height
Chambers, silt-traps & catchpits	Clean out chamber/sump		Across the site	Communal carpark & hard/soft landscaping	
Pipe network & drainage channels	Pipes to be inspected & condition assessed. Pipes/channels to be cleaned (jetted) as necessary				
Flow Control Devices					
Hydrobrake chambers	Clean out chamber/sump	Monthly for first 3 months then twice yearly	Carpark	Communal hard landscaped areas	Works undertaken by appropriately qualified person(s)
	Inspect flow control unit & remove debris				
Permeable Pavement					
Pavement structure	Remove organic matter. Brush & vacuum (standard cosmetic sweep over entire surface).	Monthly for first 3 months then twice yearly (in spring & autumn)	Parking bays	New access road	Provide adequate working space & safety zone at work location. Provide clear warning of obstructions, minimise potential conflict between road users & road works. Works undertaken by appropriately qualified person(s)
	Replace broken slabs/blocks	As required			
	Replace jointing material				
	Remedial sweeping to rehabilitate surface & upper substructure	Every 10 to 15 years (or as required if significant siltation is apparent)			

Item	Task	Frequency	Location	Access	Comments
Geocellular Attenuation Tanks					
Upstream & downstream catchpit chambers	Clean out chamber/sump	Twice yearly for the first 2 years of operation then annually	Beneath carpark	Communal landscaped areas	Works undertaken by appropriately qualified person(s)
Inlets, outlets, vents & overflows	Inspect/check to ensure in good condition & correct operation	Annually & after large storms			
Tanks (geocellular)	CCTV inspection. Clean (jet) if required	5 Years or if excessive silt/debris observed in upstream & downstream catchpit chambers			
Tank (cast insitu reinforced concrete)					
Green Roofs					
Generally	Inspect all components including soil substrate, inlet/outlets, fire breaks, underside of roof for structural integrity and signs of leakage. Remove litter/debris.	Monthly for first 12 months then annually or after severe storms	All flat roofs	High level access to roof	Works undertaken by appropriately qualified person(s) following health & safety regulations dealing with working at height
Biodiverse areas/planting/shrubs /trees	Pruning, remove cuttings/debris/fallen leaves, weeding, remove invasive species, replace dead plants	Monthly for first 12 months every 6 months or as required			
Grassed areas	Mowing, remove debris/cuttings	Fortnightly or monthly as appropriate during growing season.			
Hard landscaped areas (permeable)	Remove organic matter from surface (with brush and suction cleaner)	Monthly for first 3 months then twice yearly (in spring and autumn)			
Roof outlets	Clean out, inspect, remove plant growth	Monthly for first 12 months every 6 months or as required and always after severe storms			

SuDS Maintenance Schedule continued

Item	Task	Frequency	Location	Access	Comments
Rain Gardens					
Surface	Inspect. Remove litter/debris/leaves.	Quarterly	External landscaped areas	Communal landscaped areas	Works undertaken by appropriately qualified person(s)
	Add vegetation to maintain planting density. Remove silt. Scarify.	As required			
	Replace all vegetation (together with replacement of filter medium)	As required but likely to be >20 years			
Filter medium	Infill holes or scour damage. Improve erosion protection if required.	As required			
	Replace all filter medium (together with replacement of vegetation)	As required but likely to be >20 years			
Inlets and outlets	Check for blockages	Quarterly			

11 Summary & Conclusions

Flood mapping shows that the site is located in a Flood Zone 1 area which is classified as having a less than 1 in 1000 chance of flooding within any one year.

The GOV.UK surface water flood risk maps for planning indicate that during the current 100yr storm event there is some limited flooding with a depth of <150mm noted within the footprint of the carpark. Flooding is also noted in the north western corner of the site which appears to relate to a low spot where Cricket Field Road drops under Hillingdon Road.

When climate change is included for the 100yr event the whole of the carpark footprint is noted to flood with a flood depth of between 150-300mm. There is also some additional low level flooding noted adjacent to the southern elevation. The extents of flooding in the northwestern corner of the site has also increased and extend along Cricket Field Road.

The flood depths within the carpark do not exceed 300mm, as beyond this depth floodwater flows out of the carpark entrance and into Cricket Field Road, which in turn flows north to the localised low spot where Cricket Field Road drops under Hillingdon Road.

A number of mitigation measures have been introduced into the design to reduce the risk of surface water flooding which include restricting surface water outflows to match greenfield runoff rates and new surface water attenuation provided. The ground levels along the eastern and southern elevations will also be designed so that if there are any overland flows from the east they will be directed away and around the building. The new build footprint will sit outside the flood extents associated with the flooding of the underpass of Cricket Field Road and ground floor entrances will be locally raised relative to the surrounding ground levels.

With the above mitigation measure the risk of surface water flooding is considered to be low.

Other sources of flooding have been reviewed and are considered to be low or negligible.

The geology maps indicate that potentially only the northern section of the site may be appropriate for shallow infiltration. However, when the flood extents of Cricket Field Road are taken into account, the proximity constraints imposed by Building Regulations, and the existing trees are considered, there is insufficient space available to accommodate any soakaways in this part of the site. Consequently, it is proposed to connect the new surface water system to the adopted surface water sewer, located to the northwest of the site.

To restrict flows to the 1 year greenfield rate it would generate an unacceptably small orifice size. Consequently, a proposed discharge rate of 1.5 l/s has been chosen which results in an orifice size of 50mm. The runoff rate will be restricted to 1.5 l/s for all events up to the 1 in 100 year event with an additional 40% allowance for climate change.

Based upon the controlled discharge rates mentioned above, 391m³ of attenuation will be provided in three linked below ground attenuation tanks.

A variety of SuDS features will be used across the development which include significant areas of new soft planting, green roofs and permeable paving.

Ground levels will be designed to fall away from the proposed buildings as far as reasonably practicable. During an exceedance event, overland surface water flows will be directed away from the buildings and into the adjacent landscaped areas.

In reviewing the sewer records there are no adopted sewers in the immediate vicinity of the site. As a result, it is anticipated that the new foul drainage will need to be pumped to connect to the existing adopted system. Discussions are ongoing with Thames to ascertain the most appropriate connection point; however two potential locations have been identified.

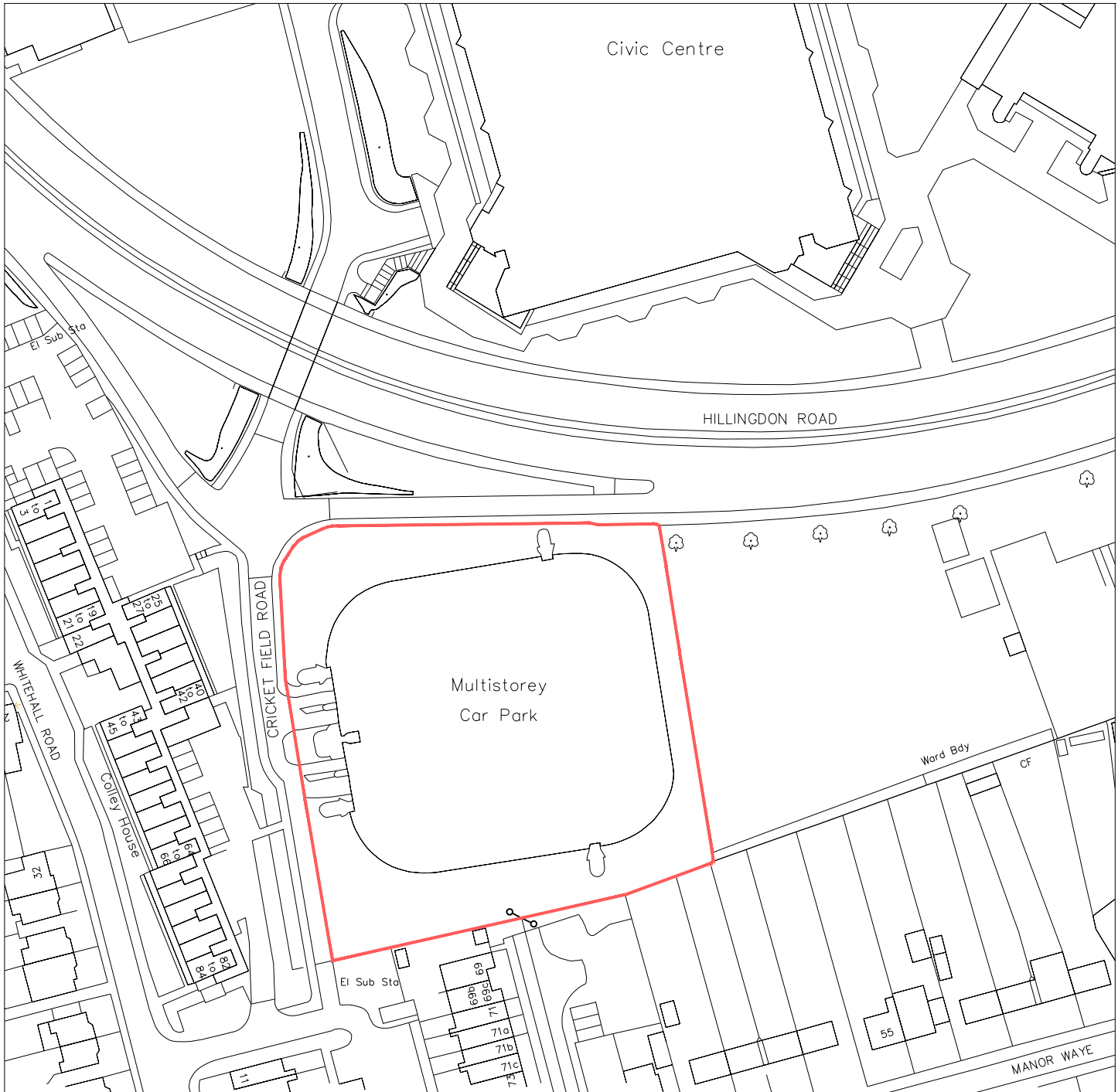
Two foul pump stations are proposed. The basement area will discharge to its own pump station within the basement, and foul drainage from the ground floor levels and above will connect to a separate external pump station. The basement pump station will then connect to the external pump via a rising main.

The new pump stations will be private but will be designed to accommodate emergency storage in accordance with the requirements of Building Regulations.

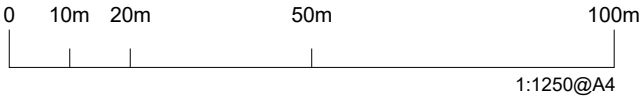
The private drainage system will fall under the management of LBH. With the provision of the above measures, the drainage system for all areas of the site will be managed and maintained for the lifetime of the development. Maintenance to be in accordance with a site-specific maintenance strategy.

With the implementation of the mitigation measures discussed above, the proposed development is subject to an acceptable level of flood risk and should not increase the likelihood of flooding elsewhere. The site can also be drained both safely and sustainably for the lifetime of the development.

Appendix A – Location Plan



SITE LOCATION PLAN
1:1250@A4



project name:	CRICKET FIELD ROAD CAR PARK, UXBRIDGE, UB8		
drawing reference:	SITE LOCATION PLAN	date:	SEPTEMBER 2026
		sheet:	1 of 1
		drawn:	AOR
		scale:	1:1250@A4
checked:	JW		
job number:	drawing number:	revision:	
M10960	APL001	A	
status:	PLANNING		
cad ref:	M10960_APL001_Site Location Plan_Cricketfield Rd_1-1250@A4.dwg		

Use figured dimensions only. All levels and dimensions to be checked on site. This drawing is to be read in conjunction with all other relevant drawings and specifications. Hunters is a trading name of Hunter & Partners Limited. © Hunter & Partners Limited. All rights reserved.

hunters

Space One Beadon Road
London W6 0EA
T 020 8237 8200
F 020 8741 2814
mail@hunters.co.uk
www.hunters.co.uk

Appendix B - Topographical Survey



TRAINING NOTES

Topographic Survey

These are the notes for the survey course, construction type including heights should be used as a guide only.

All building names, descriptions, number of storeys, construction type including height and materials should be recorded from ground level.

All below ground details including drainage, voids and services have been identified from inside ground and therefore all details relating to these features are included in the survey. All underground services are shown. All critical dimensions and connections should be checked and verified prior to starting the survey.

Detail, services and features may not have been surveyed if obstructed or not reasonably visible at the time of the survey.

Survey physical features may not necessarily represent the legal boundary

Measured Building Surveys

Measurements to internal walls have taken to the wall finishes at approx 1m above the floor level and the wall assumed to be vertical.

General

The contractor must check and verify all site and building dimensions, levels, heights and drainage details and connections prior to commencing work. Any errors or discrepancies must be notified to Survey Solutions immediately.

The accuracy of the digital data is the same as the plotting service implies. All dimensions are given in metres unless otherwise stated.

The survey control level is only to be used for topographic purposes only. It is not a datum. All control must be checked and verified prior to use.

© Land Survey Solutions Limited holds the copyright to all the information contained within this document and the survey course must not be modified before copying or using the data for any other purpose. It was originally prepared for the construction industry.

This drawing should only be scaled using digital methods.

REV	DESCRIPTION	DRAWN	APPR	DATE
-----	-------------	-------	------	------



SURVEY
SOLUTIONS

[illegible]

Trees are drawn to scale showing the average canopy spread. Descriptions and heights should be used as a guide only.

All building names, descriptions, number of storeys, construction type including roof line details are indicative only and taken externally from ground level.

All below ground details including drainage, voids and services have been identified from above ground and therefore all details relating to these features including; sizes, depth, description etc will be approximate only. All critical dimensions and connections should be checked and verified prior to starting work.

Detail, services and features may not have been surveyed if obstructed or not reasonably visible at the time of the survey.

Surveyed physical features may not necessarily represent the legal boundary line.

Measurements to internal walls are taken to the wall finishes at approx. 1m above the floor level and the wall assumed to be vertical.

General

utilities and drainage details and connections prior to commencing work. Any errors or discrepancies must be notified to Survey Solutions immediately.

The accuracy of the digital data is the same as the plotting scale implies. All dimensions are in metres unless otherwise stated.

© Land Survey Solutions Limited holds the copyright to all the information

© Land Survey Solutions Limited holds the copyright to all the information contained within this document and their written consent must be obtained before copying or using the data other than for the purpose it was originally supplied.

This drawing should only be scaled using digital methods.

The coordinate system established for this survey is related to Ordnance Survey (OS) National Grid at multiple points using GNSS with a scale factor of 1,000.

The level datum established for this survey is related to Ordnance Survey (OS) using GPS Smartnet.

To avoid discrepancies within the survey, adding to the survey or setting out points from the survey, any coordinated data must be directly derived from the original survey control. Survey Solutions are not responsible for any third-party adding

survey data to the existing information.

SURVEY



IPSWICH / BEDFORD / BIRMINGHAM / COVENTRY / CRAWLEY / GLASGOW / LEEDS / LONDON-CENTRAL /
LONDON-EAST / MANCHESTER / NEWCASTLE / NORWICH / NOTTINGHAM / THAMES VALLEY

PROJECT TITLE

CIVIC CENTRE, UXBRIDGE,
GREATER LONDON, UB8 1UW

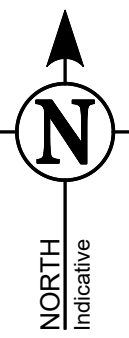
DRAWING DETAIL
MEASURED BUILDING SURVEY
FLOOR PLANS, Sheet 2 of 2

CLIENT	SCALE
URBAN VISION REAL ESTATE LTD	1:100

SURVEYOR MS	SURVEY DATE 15/09/2025	CHECKED BY GB	APPROVED BY HG	DWG STATUS FINAL
----------------	---------------------------	------------------	-------------------	---------------------

DRAWING NUMBER	REVISION	ISSUE DATE
80535BWS-02		26/09/2025



 Insertion Point[illegible]

Topographical Surveys

Trees are drawn to scale showing the average canopy spread. Descriptions and heights should be used as a guide only.

All building names, descriptions, number of storeys, construction type including roof line details are indicative only and taken externally from ground level.

All below ground details including drainage, voids and services have been identified from above ground and therefore all details relating to these features including: sizes, depth, description etc will be approximate only. All critical dimensions and connections should be checked and verified prior to starting

Detail, services and features may not have been surveyed if obstructed or not reasonably visible at the time of the survey.

Surveyed physical features may not necessarily represent the legal boundary line.

Measurements to internal walls are taken to the wall finishes at approx 1m above the floor level and the wall assumed to be vertical.

General

The contractor must check and verify all site and building dimensions, levels, utilities and drainage details and connections prior to commencing work. Any errors or discrepancies must be notified to Survey Solutions immediately.

The accuracy of the digital data is the same as the plotting scale implies. All dimensions are in metres unless otherwise stated.

© Land Survey Solutions Limited holds the copyright to all the information contained within this document and their written consent must be obtained before copying or using the data other than for the purpose it was originally supplied.

This drawing should only be scaled using digital methods.

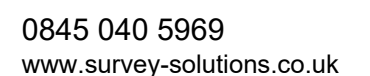
SURVEY CONTROL CO-ORDINATES				
STATIONS	EASTINGS	NORTHINGS	LEVEL	DESCRIPTION

The level datum established for this survey is related to Ordnance Survey (OS) National Grid at multiple points using GNSS with a scale factor of 1.000.

The level datum established for this survey is related to Ordnance Survey (OS) using GPS Smartnet.

To avoid discrepancies within the survey, adding to the survey or setting out points from the survey, any coordinated data must be directly derived from the original survey control. Survey Solutions are not responsible for any third-party adding survey data to the existing information.

REV	DESCRIPTION	DRAWN	APPR	DATE
-----	-------------	-------	------	------



IPSWICH / BEDFORD / BIRMINGHAM / COVENTRY / CRAWLEY / GLASGOW / LEEDS / LONDON-CENTRAL /
LONDON-EAST / MANCHESTER / NEWCASTLE / NORWICH / NOTTINGHAM / THAMES VALLEY

PROJECT TITLE	CIVIC CENTRE, UXBRIDGE, GREATER LONDON, UB8 1UW
---------------	--

DRAWING DETAIL
MEASURED BUILDING SURVEY
FLOOR PLANS, Sheet 3 of 3

CLIENT URBAN VISION REAL ESTATE LTD				SCALE 1:100
SURVEYOR MS	SURVEY DATE 15/09/2025	CHECKED BY GB	APPROVED BY HG	DWG STATUS FINAL
DRAWING NUMBER 80535BWLS-03			REVISION	ISSUE DATE 26/09/2025



Appendix C – Thames Water Sewer Records & Correspondence

CommercialDW Drainage and Water Enquiry Sewer Map- CDWS/CDWS Standard/2022 4766992



The width of the displayed area is 500m

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map (2020) with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available.

Manhole Reference	Manhole Cover Level	Manhole Invert Level
851F	n/a	n/a
8501	39.69	38.68
991F	n/a	n/a
851E	n/a	n/a
651B	n/a	n/a
651D	n/a	n/a
651A	n/a	n/a
651H	n/a	n/a
651E	n/a	n/a
6508	n/a	n/a
651G	n/a	n/a
6506	n/a	n/a
6505	n/a	n/a
851K	n/a	n/a
7503	n/a	n/a
7501	n/a	n/a
7502	38.18	36.65
861D	n/a	n/a
7603	38.61	37.51
7601	38.35	37.21
7602	38.66	36.97
5601	n/a	n/a
5702	36.86	35.07
561D	n/a	n/a
5704	n/a	n/a
561C	n/a	n/a
6908	38.76	37.35
6922	n/a	n/a
6923	38.66	36.99
6901	n/a	n/a
6902	38.51	35.93
791F	n/a	n/a
791E	n/a	n/a
7904	41.6	40.23
791A	n/a	n/a
7902	n/a	n/a
891G	n/a	n/a
891J	n/a	n/a
891I	n/a	n/a
891D	n/a	n/a
891B	n/a	n/a
5909	37.85	36.5
5904	37.23	34.93
5905	37.69	35.84
891E	n/a	n/a
891F	n/a	n/a
8904	n/a	n/a
891A	n/a	n/a
9805	n/a	n/a
981A	n/a	n/a
991B	n/a	n/a
991A	n/a	n/a
9804	n/a	n/a
971A	n/a	n/a
6604	n/a	n/a
861B	n/a	n/a
8604	39.53	38.4
861A	n/a	n/a
6603	n/a	n/a
8602	39.63	37.88
8603	39.35	38.17
6602	n/a	n/a
6601	n/a	n/a
8601	39.35	37.7
6605	n/a	n/a
5703	36.89	35.78
571E	n/a	n/a
571D	n/a	n/a
7701	n/a	n/a
6701	n/a	n/a
8701	n/a	n/a
5701	n/a	n/a
6801	n/a	n/a
6910	38.2	36.23
8902	42.3	40.3
6921	38.31	37.07
6909	38.34	36.14
8903	42.11	40.7
8901	42	39.89
8905	42.1	40.63
891K	42.27	40.12

Manhole Reference	Manhole Cover Level	Manhole Invert Level
891C 891H	n/a n/a	n/a n/a
The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.		



Con29DW Commercial Drainage and Water Search - Sewer Key

Public Sewer Types (Operated and maintained by Thames Water)

	Foul Sewer: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.
	Surface Water Sewer: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.
	Combined Sewer: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.
	Storm Sewer
	Sludge Sewer
	Foul Trunk Sewer
	Surface Trunk Sewer
	Combined Trunk Sewer
	Foul Rising Main
	Surface Water Rising Main
	Combined Rising Main
	Vacuum
	Thames Water Proposed
	Vent Pipe
	Gallery

Other Sewer Types (Not operated and maintained by Thames Water)

	Sewer
	Culverted Watercourse
	Proposed
	Decommissioned Sewer
	Content of this drainage network is currently unknown
	Ownership of this drainage network is currently unknown

Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plan are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate the direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

	Air Valve
	Meter
	Dam Chase
	Vent
	Fitting

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

	Ancillary
	Drop Pipe
	Control Valve
	Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol. Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

	Inlet
	Outfall
	Undefined End

Other Symbols

Symbols used on maps which do not fall under other general categories:

	Change of Characteristic Indicator
	Public / Private Pumping Station
	Invert Level
	Summit

Areas

Lines denoting areas of underground surveys, etc.

	Agreement
	Chamber
	Operational Site

Ducts or Crossings

	Casement
	Conduit Bridge
	Subway
	Tunnel

Ducts may contain high voltage cables. Please check with Thames Water.

5) 'na' or 'D' on a manhole indicates that data is unavailable.

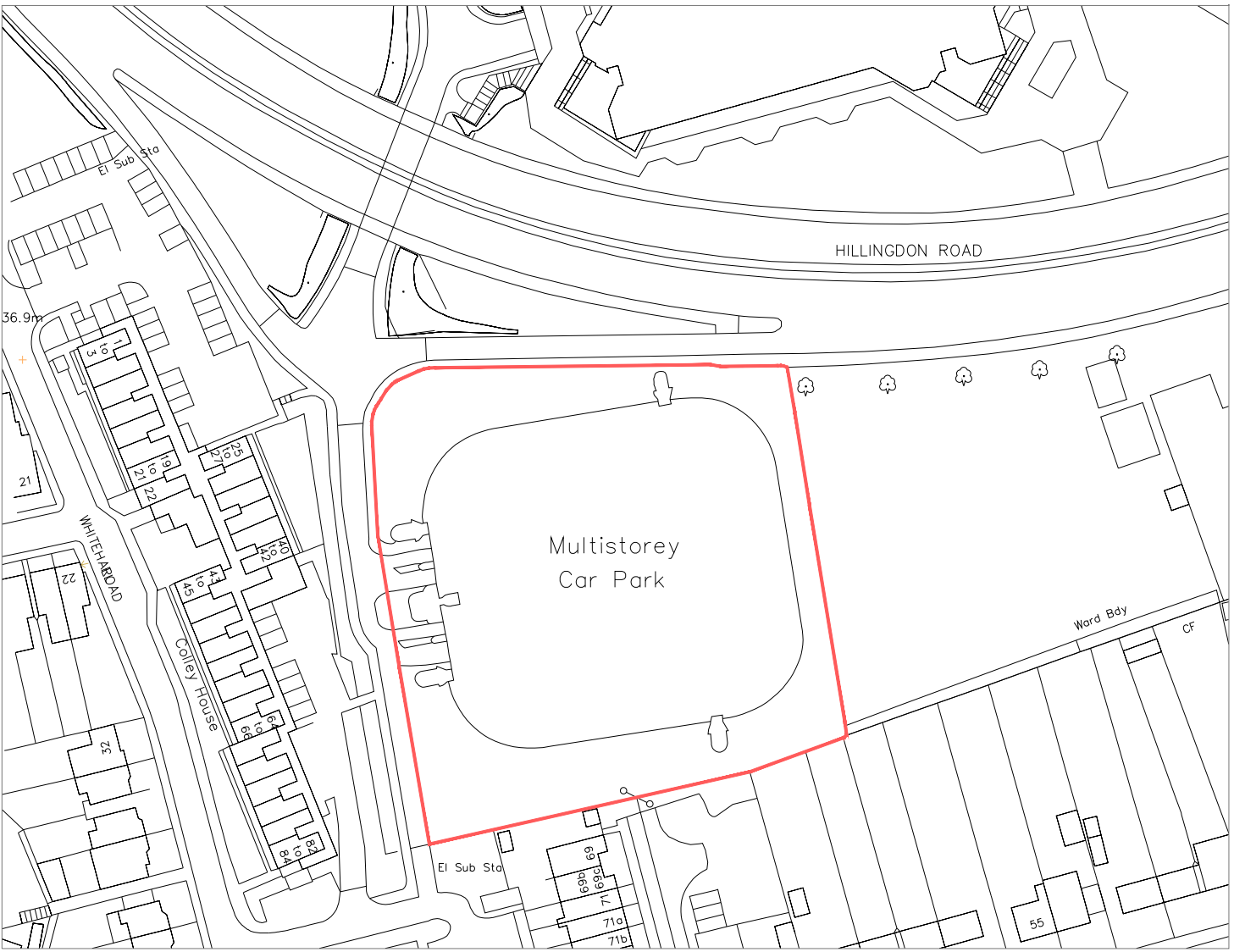
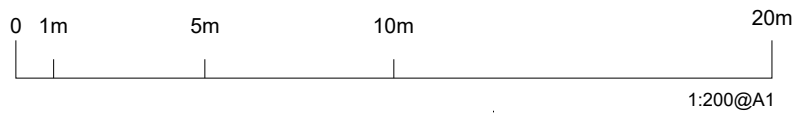
6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimeters. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology, please contact Property Searches on 0800 009 4540.

Appendix D – Development Proposals



PROPOSED SITE PLAN 1:200@A1

Revision	17.07.2026 AOR	First Issue
B	28.07.2026 AOR	Rooflights Amended
C	18.08.2026 AM	Context amended to match existing road surface and basement air intake added
D	02.09.2026 AOR	Boundary treatment labels added
E	14.09.2026 AOR	For Client Approval
F	XX.XX.2026 AOR	Planning Submission



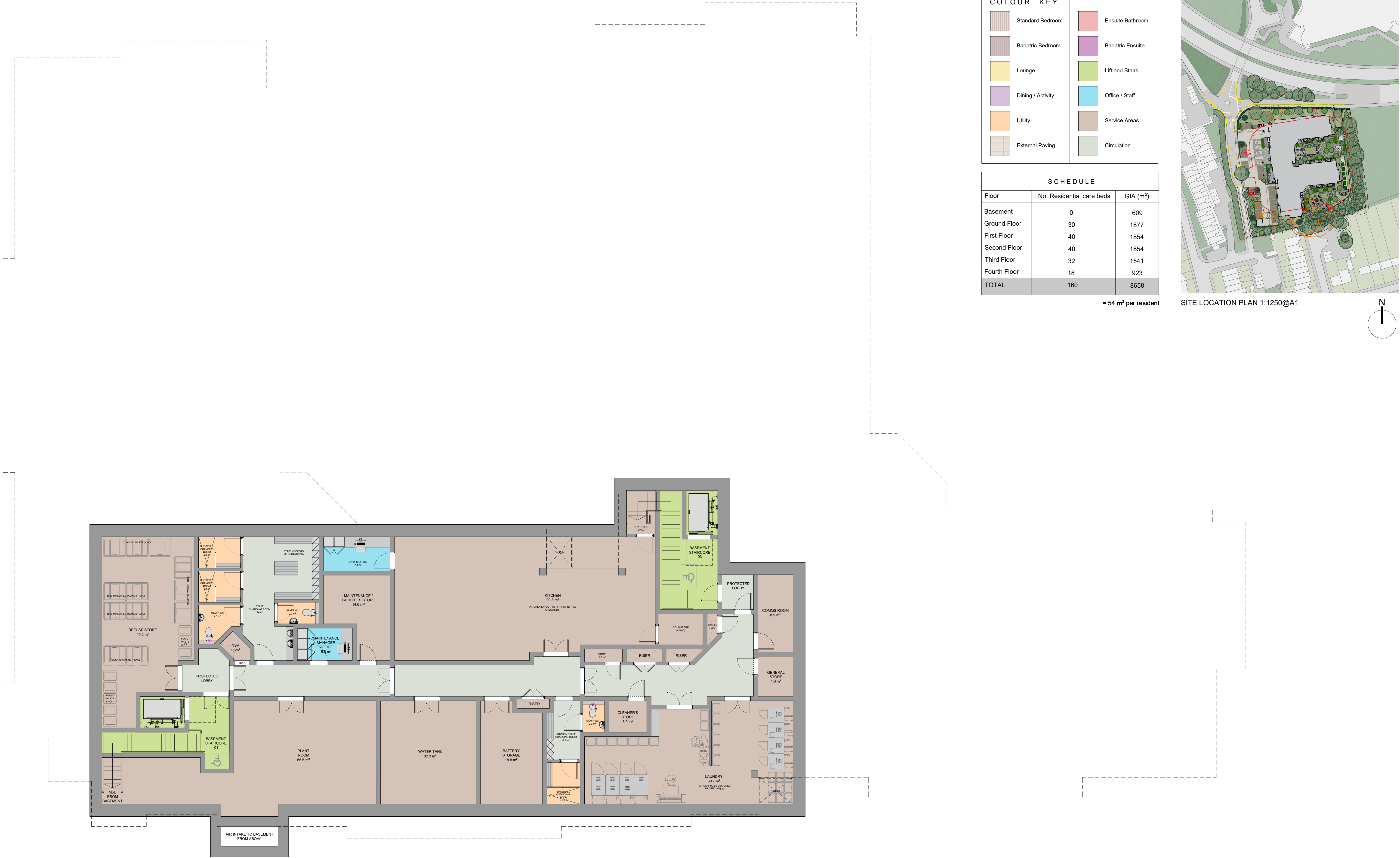
SITE LOCATION PLAN 1:1250@A1

Total site area: 0.70 ha (1.74 acres)
Number of car parking spaces: 34 (including 4 disabled bays)
+ 1 loading bay and 1 emergency vehicle bay
Number of cycle parking spaces: 8 short stay (4 Sheffield stands)
9 long stay (ground floor cycle storage)

Active EV Parking Space (20% of all spaces)
S - Single EV Charger
T - Twin EV Charger

LEGEND

- Site boundary
- Outline of former carpark to be demolished
- Metal railing, 1.5m high
- Close board fence, 3m high
- Iron railings, 1.6-1.8m high
- Wire mesh, 2.5m high
- Proposed Hedge
Refer planting schedule for species and density.
- Proposed Ground Cover Mix
Refer planting schedule for species and density.
- Proposed Shade Tolerant Hedgerow Mix Wildflower
- Proposed Tussocky Grassland Wildflower
- General Purpose Wildflower
- Proposed Ecological Enhancement Mix
Refer planting schedule for species and density.
- Herringbone block paver
100 x 200mm, buff finish
- Natural Stone
450 x 450mm flush paving.
- Pedestrian path:
Macadam smooth, buff surface finish
flush with concrete edging
- Back of house/services path:
Macadam smooth, black surface finish
flush with metal edging
- Road surface:
Macadam smooth, to match existing
- Tactile Blister Paving. Colour: Standard Charcoal
(Abutting Pedestrian Footpath)
- Painted road markings. Colour: White
- Existing CAT B & C trees (as indicated) to be retained with root protection zone (refer to arboriculturist tree survey for more details)
- Existing CAT A, B, C & U trees (as indicated) to be removed
- Proposed New Tree (refer to planting schedule for species)
- Proposed New Mature Tree (refer to planting schedule for species)
- Proposed specimen shrub (1m high on planting)
- Proposed small / fastigate tree
- Proposed fire hydrant
- Timber pergola with integrated curved timber bench and raised planters centered around water feature
- Round wooden gazebo with seating
- Timber pergola with climbing plants
- Raised timber vegetable bed
- Natural play equipment
- Traditional timber bench

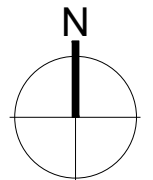


COLOUR KEY			
	- Standard Bedroom		- Ensuite Bathroom
	- Bariatric Bedroom		- Bariatric Ensuite
	- Lounge		- Lift and Stairs
	- Dining / Activity		- Office / Staff
	- Utility		- Service Areas
	- External Paving		- Circulation

SCHEDULE		
Floor	No. Residential care beds	GIA (m²)
Basement	0	609
Ground Floor	30	1877
First Floor	40	1854
Second Floor	40	1854
Third Floor	32	1541
Fourth Floor	18	923
TOTAL	160	8658

= 54 m² per resident

SITE LOCATION PLAN 1:1250@A1



PROPOSED BASEMENT PLAN
1:100@A1

Revision		
B	17.07.2026 AGR	First Issue
C	18.08.2026 AM	Amended following Technical Review
D	14.09.2026 AGR	For Client Approval
E	XX.XX.2026 AGR	Planning Submission

project name:
drawing reference:

job number:
status:
cad ref:

CRICKET FIELD ROAD CAR PARK, UXBRIDGE, UB8
RESIDENTIAL CARE HOME
PROPOSED BASEMENT PLAN

M10960

PLANNING
M10960_APL10_Proposed Basement Plan_Cricketfield Rd_1-100@A1.dwg

date:
sheet:
scale:

1 of 1
1:100@A1

revision:
D

drawn:
checked:

AOR
JW

Use figured dimensions only. All levels and dimensions to be checked on site. This drawing is to be read in conjunction with all other relevant drawings and specifications.
Hunters is a trading name of Hunter & Partners Limited.
© Hunter & Partners Limited. All rights reserved.

0 1m 5m 10m
1:100@A1

Space One Beadon Road
London W6 0EA
T 020 8237 9200
F 020 8741 2814
mail@hunters.co.uk
www.hunters.co.uk