

37 HAMILTON ROAD, TWICKENHAM
For: Hamilton Lofts Ltd.

Appendix e
Geotechnical Report

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37 HAMILTON ROAD,
TWICKENHAM TW2

Client
Frendcastle Management Ltd

Report No. 2469

30 June 2004

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**37 HAMILTON ROAD,
TWICKENHAM TW2**

DESK STUDY

Synopsis

An investigation has been carried out into the site history at 37 Hamilton Road in Twickenham on the instructions of Frenncastle Management Ltd.

The investigation comprised a walkover survey of the site followed by attendance at the Local Studies section of Richmond Library and the London Metropolitan Archive. In addition, various Environment Agency database searches were carried out. The information obtained from these sources is summarised within.

The available information indicates that there has been light industry and works on the site since the early 1900s, which may have had the potential to cause contamination. The significance of the available information is discussed.

1

Walk over survey

The area under investigation is a approximately rectangular parcel of land 55 meters by 45 meters bounded to the north by the railway line, to the east by housing, to the south by Hamilton Road and housing and to the west by an electricity sub station.

The surrounding area is a mix of residential, commercial and light industrial uses. The site is reasonably flat and level.

It is currently a divided into light industrial workshops, garages and storage. No visual or olfactory evidence of contamination was noted in the walkover survey.

2

Historic Map Records

The history of the site has been gleaned by attendance's at the Local Studies section of Richmond Library and the London Metropolitan Archive, and the map evidence is summarised as follows.

The earliest available map is an Ordnance Survey map dating from 1863, and is reproduced at Figure 1. It shows the site to be undeveloped, with the railway line immediately to the north already constructed. To the west and south west are orchards, while the town of Twickenham is shown developing along the roads to the south and south east.

Figure 2 is the Ordnance Survey of 1915. Since 1863 there had been significant development and urbanisation in the area of the site. Hamilton Road has been constructed and the site is now marked as part of an Electricity Works. There is one large building in the area of the electricity works, part of which occupies an area on the west of our site. There are a number of smaller sheds or outbuildings around the main building. In the north east corner of the site is marked a large tank. To the west of the electricity works is marked a laundry. 75m to the north east is shown a miniature rifle range, while 300m to the north west is a sewage works. Housing now lies to the south and east.

Figure 3 is the Ordnance Survey map dating from 1934. The site is still occupied by large buildings with a chimney now marked on the site, and the number and size of the outbuildings has grown. The tank in the north east corner of the site is still present. There is an inscription in the south of the site 'W.M'; which is thought to mean Water Main. To the immediate north and north east the railway has expanded with the addition of a number of new tracks. In the local area a new area of allotments are shown to the south west and a new laundry is shown further to the south west.

Figure 4 shows the 1960 Ordnance Survey Map, of which the adjoining sheet to the east was not available. It shows the site now marked as a depot, with the building layout as it is today. To the west is marked a well and a two tanks in the nearby laundry, and further to the west is a bakery. To the south west are shown two further tanks and a works.

3

Trade directories

Kelly Directories have been consulted to gain information on the site and its usage history.

The earliest available sources are Kelly's Directory of Twickenham; both the 1910 and 1914 directories list the site as the Twickenham & Teddington Electricity Supply Co. Ltd.

The Kelly's Directories of Twickenham from 1932, 1934 and 1940 lists the site as the T Kinner, Twickenham & District Electricity Supply (London & Home Counties Joint Electricity Authority) (Substation).

4

Database searches

The following information has been gleaned from database searches within a 250m and 500m radius and for the local area of the site.

4.1

Potentially contaminative uses

Analysis of 1:2500 and 1:10 000 scale historical mapping reveals that there are a number of potentially contaminative past land uses within 250m of the site.

At the 1:10 000 scale there is a record of the site being used for 'Electricity production and distribution (inc large transformers)', dated 1920. There is a record of quarrying 53m to the south west and 144m to the west is a record of sewage works dated 1898 to 1949. In the same location is there also a record of Road Haulage, dated 1992. There is a record of Sewage works 173m to the north, dated 1938- to 1949 and 220m to the north west, dated 1920-1949. There are numerous records of railways within 250m of the site.

At the 1:2500 scale the site itself is listed as being a former works, while 46m to the north west, 125m to the north, 144m to the west and 185m to the north west are listed Drainage Works and Warehouses. 243m to the west is listed a motor vehicle works.

The currently active potentially contaminative land uses listed Samsons Transformers (Electrical equipment) and 227m to the south east Juke Box Services (Audio Visual equipment).

4.2

Infilled land, landfill, waste treatment or disposal sites

Historical mapping at 1:10 000 scale reveals 1 record of land filled with unknown material within 250 m of the study site, dated 1992 and located 53m to the south east, on a site where the record showed a quarry from 1898.

There are no non-operational or current waste licenses within 250 m of the site. These are used to licence a range of activities such as landfill sites, waste treatment, transfer or disposal sites.

4.3

Hazardous and regulated installations

No records have been found of Part A (IPC processes) or Part B Licences (LAAPC Process) within 250m of the site.

There are no Radioactive Substance Authorisations, Water Industry Referrals, Red List Discharge Consents or List 1 & 2 Dangerous Substance Inventory sites. The Health and Safety Executive has no records of COMAH or NIHHS sites.

4.4

Subsidence

The British Geological Survey consider the area to have a very low risk of natural subsidence, not related to mining activity.

4.5

Radon

The study site is located in an area where the National Radiological Protection Board surveys suggest that less than 1% of houses exceed the radon action level. The site is not therefore located within a Radon Affected Area.

4.6

Air quality

The following air quality data has been obtained:-

CO rating	High
NO rating	Medium - High
PM10 rating	Medium - High
SO rating	Medium - High
VOC rating	High

4.7

Groundwater vulnerability and soil classification

The site is classified as a major aquifer, and the soil is classified as having a high leaching potential. There are no abstraction licenses within 500m of the site.

4.8

Mining and natural cavities

The site is not thought to be in an area affected by past, present or proposed underground mining. Similarly, it is thought that there is a negligible risk of subsidence relating to shallow mining in the area.

5

Geology

Published records of the British Geological Survey indicate the site to lie on Kempton Park Gravel. Additionally the map identifies an area of worked ground in close proximity to the site, thought to be the quarry identified 53m to the south west of the site.

6

Risk assessment

This risk classification is designed to consider environmental risk in the context of alternative use strategies where redevelopment or a change of use may be required. This must be set in the context of the following hierarchy of risks as follows:-

High: Significant risk of contamination without remediation. Precludes all but the least sensitive of development e.g. car parking. Significant potential for environmental pollution. Remediation measures expensive. Site investigation required.

Medium: Risk of contamination but allowing non-sensitive development e.g. commercial, for reasonable costs of remediation, although more sensitive development, e.g. housing, may require substantial remedial measures. Potential for environmental pollution. Site investigation required.

Low: Little risk of contamination where all development options are likely to be possible with little or no remediation measures. Little potential for environmental pollution. Confirmatory site investigation required.

The information available in this assessment has revealed that there is a medium to high risk of contamination arising from the previous uses of the site.

Surrounding uses form a medium risk of potential contamination predominantly from the works and electricity substation.

With regard to the risk classification developed by AP Geotechnics and in the context of permitted planning uses, it is considered that the site has a medium to high environmental risk given the information available for this appraisal.

7

Discussion

The findings of this study indicate that there is the potential for contamination to be present in the soil and groundwater. It is therefore recommended that an intrusive ground investigation be carried out to assess the extent of any such contamination.

Consideration of the available information indicates that an initial phase of continuous open drive (window) sampler positions or trial pits should be undertaken. In addition some boreholes fitted with standpipes will be required for

water sampling. The standpipes will also require gas valve attachments to satisfy the NHBC expected requirements for a gas risk assessment, due to the presence of unknown infilled ground within 250m of the site.

In view of the previous use as an electricity substation and the immediately adjacent land use as a laundry selected samples of soil and groundwater should be analysed for the general suite of contaminants listed by the former ICRCCL^[1] with the addition of total petroleum hydrocarbons (TPH) and Polychlorinated Biphenols (PCBs).

The extent of all aspects of the investigation should be reassessed in the light of the conditions revealed in the early stages, and on consideration of the test results. In particular, significant levels of contamination may warrant further investigation to determine its spatial distribution and mobility.

Health and safety precautions pertinent to the past uses of the site should be taken by personnel involved in the investigations and the exploratory points reinstated to safeguard users of the site.

R Harwood
AP GEOTECHNICS LTD.
30 June 2004

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References

- [1] ICRCCL Guidance Note 59/83
Guidance on the assessment and redevelopment of contaminated land
Interdepartmental Committee on the Redevelopment of Contaminated Land
Second Edition, July 1987

- [2] The Contaminated Land Exposure Assessment Model
Department for Environment, Food and Rural Affairs
The Environment Agency
R & D Publications SGV 8 *et al.*, March 2002

APPENDICES

A Figures

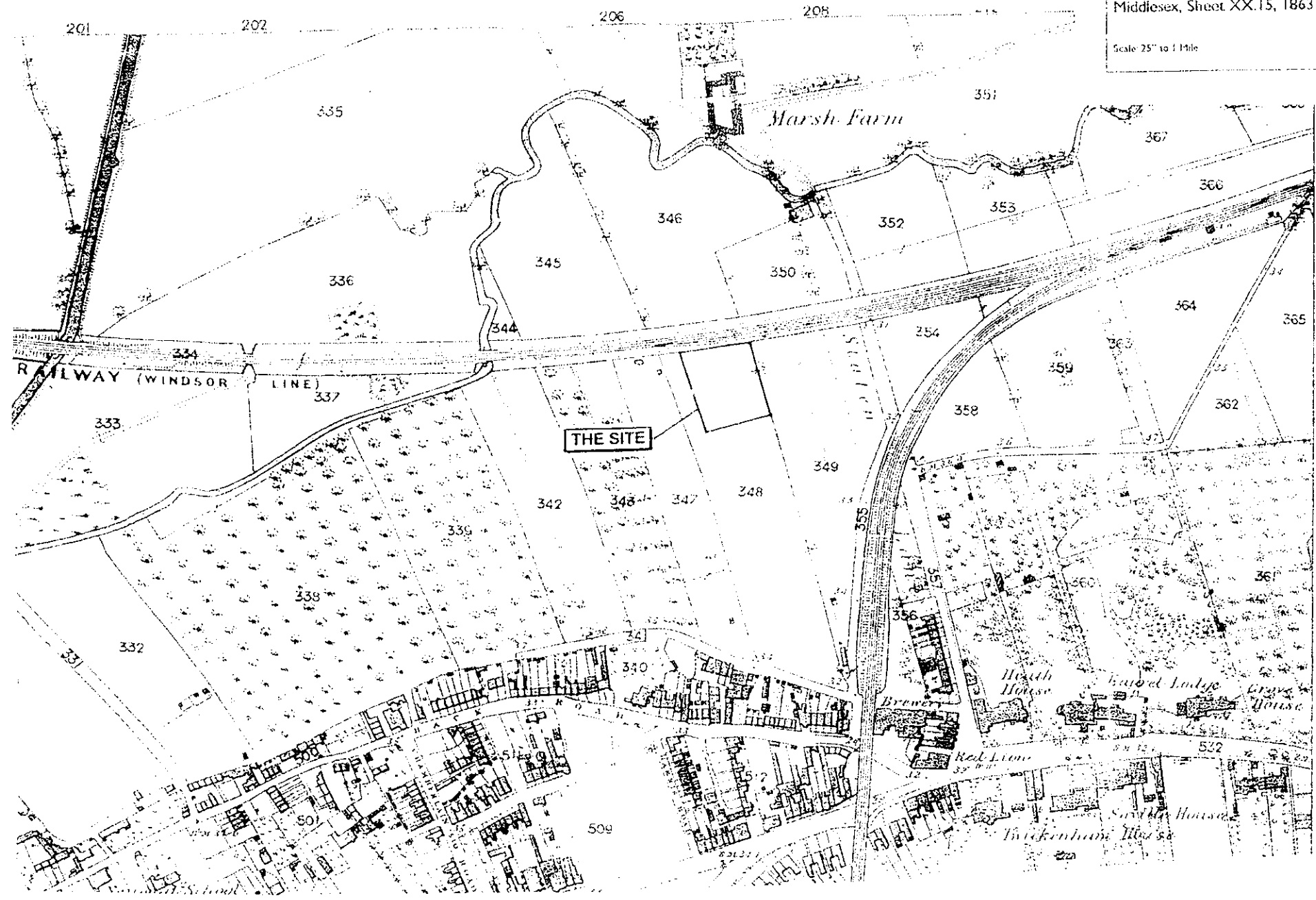
- Figure 1 Extract from the Ordnance Survey of Middlesex,
Sheet XX.15, 1863
- Figure 2 Extract from the Ordnance Survey of Middlesex,
Sheet XX.15, 1915
- Figure 3 Extract from the Ordnance Survey of Middlesex,
Sheet XX.15, 1934
- Figure 4 Extract from the Ordnance Survey Map,
Sheet TQ 1573 SW, 1960

APPENDIX A

FIGURES



37 Hamilton Road, Twickenham TW2
Extract from the Ordnance Survey of
Middlesex, Sheet XX.15, 1863
Scale 25" to 1 Mile



103

Figure 1



37 Hamilton Road, Twickenham TW2

Extract from the Ordnance Survey of
Middlesex, Sheet XX.15, 1915

Scale: 25" to 1 Mile

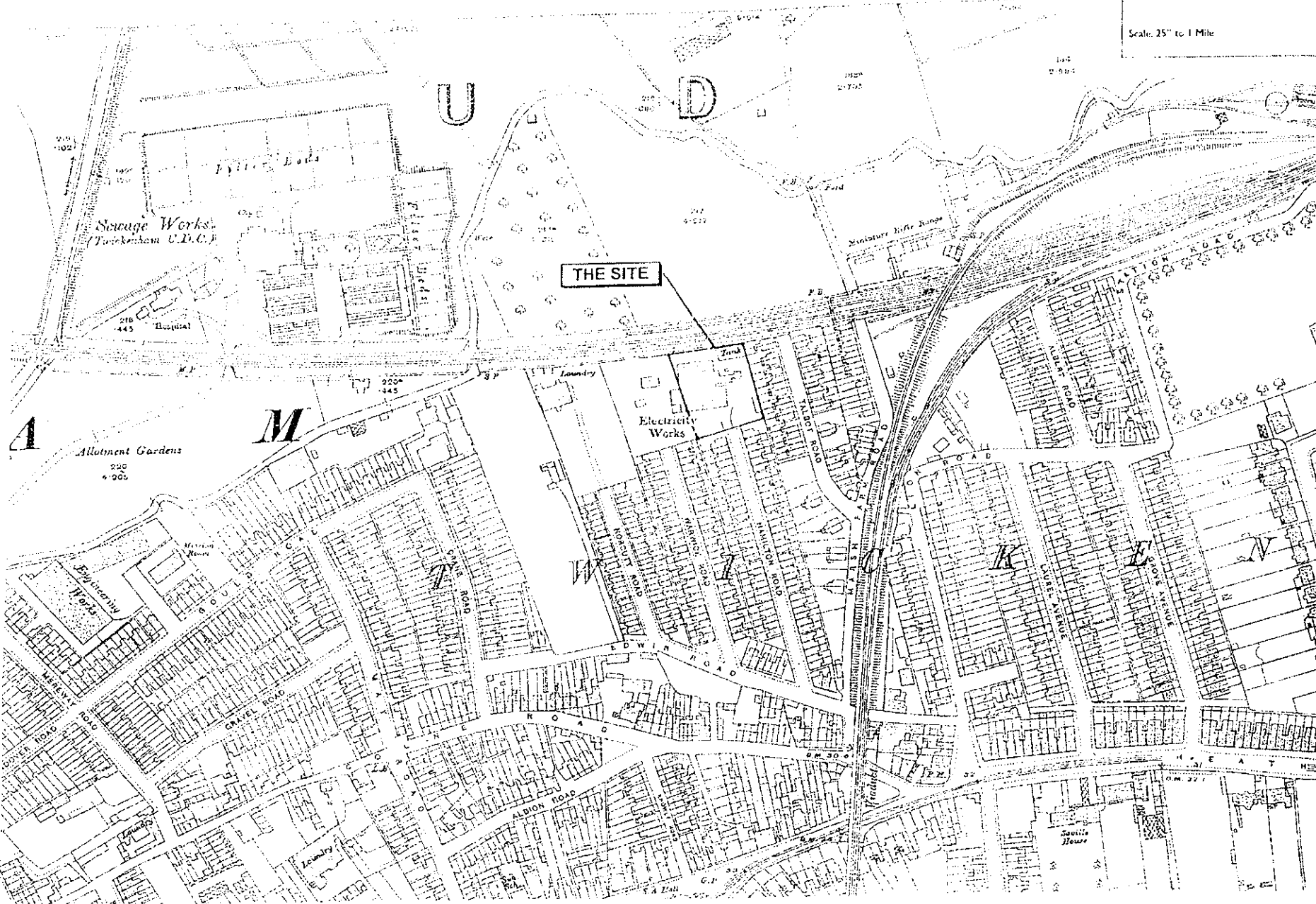


Figure 2



37 Hamilton Road, Twickenham TW2

Extract from the Ordnance Survey of
Middlesex, Sheet XX.15, 1934

Scale: 25" to 1 Mile

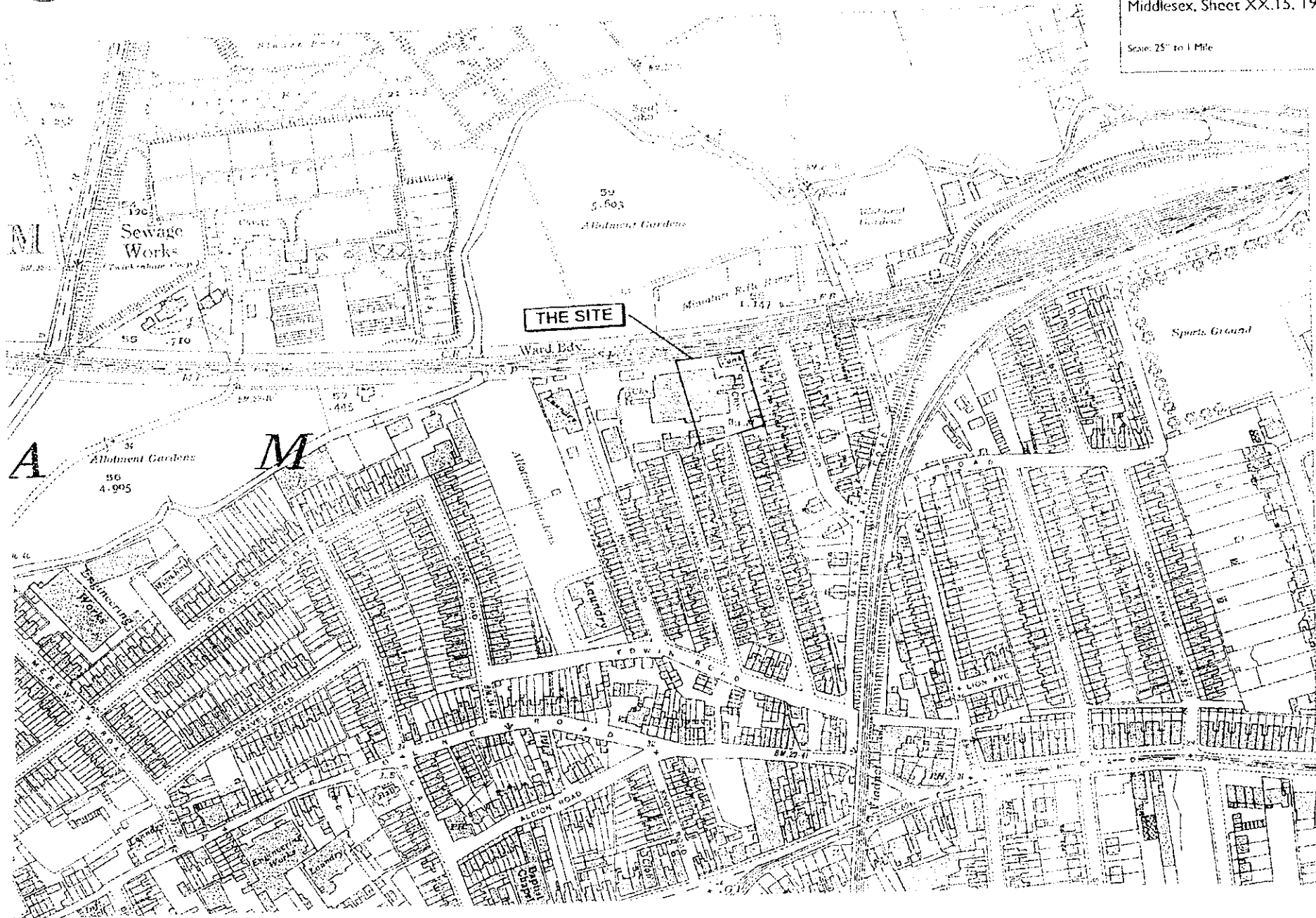


Figure 3



ADS Sewer Map Key

If you have any queries about the symbols on this key call the relevant number below:

Asset Location Team: 0118 923 6664

Commercial Drainage & Water Team: 0118 923 6652

Common public sewers

- Foul:**
A sewer designed to convey waste water from domestic and industrial sources to a treatment works.
- Surface Water:**
A sewer used to convey surface water (eg: rain water from roofs, yards and car parks) to watercourses or rivers.
- Combined:**
Both surface water and foul sewage flow in the same pipe.

Other public sewers

- Joint
- Drain Test
- Foul/Surface Water
- Foul/Combined
- Abandonment
- Storm Relief
- Box Sockets (Shocks)
- Vent Pipe
- Trade Effluent
- Proposed
- Culverted Watercourse
- Gully
- Foul Rising Main
- Surface Water Rising Main
- Combined Rising Main
- Sludge Rising Main
- Other

Sewer Fittings

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

- AV Air Valve
- BS Blind Shaft
- CP Catch Pit
- CHM Chemical Hazard Manhole
- DC Dam Chase
- DF Double Flushing Tank / Chamber
- SF Single Flushing Tank / Chamber
- GP Gauging Point
- GQ Gully
- HB Hatch Box
- LH Lamp Hole
- LS Lifting Shaft
- M Meter
- PHM Physical Hazard Manhole
- RE Rodding Eye
- TP Test Point
- VC Vent Column
- VI Veist
- AX Other (specified on plan)

Operational Controls

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

- BB Baffle Board
- BM Backdrop Manhole
- BV Butterfly Valve
- CB Clough
- DB Dam Board
- DP Drop Pipe
- DS Drop Shaft
- F Flume
- FV Flap Valve
- HV Headwall
- HY Hydrobrake
- PI Petrol Interceptor
- PS Penstock
- RV Reflex Valve
- SV Sluice Valve
- TA Tank
- WB Weir Board
- WW Weir
- XX Other (specified on map)

NOTES:

- All levels associated with digital plans are to Ordnance Datum Newlyn
- All measurements on digital maps are metric.
- Arrows (on gravity fed sewers) or checks (on rising mains) indicate direction of flow.
- For symbols referred to as 'Other' on this key, please see digital plan for further information.
- Most private pipe work is not shown on our maps, as in the past, this information has not been recorded.
- 9999.00 or 0 on manhole level indicates that data is unavailable.

End Items

An end symbol is what happens 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, and Outfall on a surface water sewer indicates that pipe empties into a stream or river.

- STW Effluent Discharge
- Soakaway
- Outfall
- Undefined End
- Inlet

Other Symbols

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

- Sewage Treatment Works
- Pumping Station
- Invert Level
- Summit
- Change of characteristic indicator (C.O.C.I.)

Areas

Lines denoting areas of underground surveys, etc.

- Building over Case (BOC No.) or Low Lying Land (LL No.)
- Drawing Area
- Sewage Treatment Works or Pumping Station
- Retention tank area
- Licence Area
- Survey Area
- Area under Adoption
- Other Area (Specified on plan)

Private Sewer Types

- Foul
- Surface Water
- Combined
- Highway Drain
- Culvert

- The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. When cover and invert levels appear on a plan they are clearly prefixed by 'C' and 'I'. If you are unsure about any text on the plan, please contact the relevant team on the number at the top of this key.
- Physical or Chemical Hazard Manholes are sealed and should not be opened by non-Thames Water personnel as they may contain waste that is physically or chemically hazardous.

**37 HAMILTON ROAD,
TWICKENHAM**

**Preliminary
Environmental Assessment**

Synopsis

An investigation has been carried out at 37 Hamilton Road, Twickenham on the instructions of Frenncastle Management Ltd.

The purpose of the investigation was to determine the ground conditions and to provide preliminary recommendations in respect of environmental matters.

Five continuous open drive (window) sampler boreholes were carried out, supported by a programme of in situ and laboratory testing.

The results indicate that some remediation of the site is expected to be required.

A desk study⁽¹⁾ have previously been carried out by APgeotechnics and should be read in conjunction with the recommendations given herein.

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1

Site description

The site consists of the light industrial units, garages and storage with hardstanding in between. The archive study⁽¹⁾ contains a detailed description of the site to which the reader is referred. In addition, the topographical survey drawing is reproduced at Appendix C herein and serves to illustrate the general layout of the site.

4

Field work

The extent of the field work was agreed with the client and comprised five boreholes advanced by continuous open drive sampling techniques to a maximum of 4.5m depth. (WSI could not be undertaken due to suspected services in the vicinity.)

Representative soil samples were recovered for subsequent laboratory examination and testing. Details of the strata encountered are provided on the Borehole Records at Appendix A; together with particulars of the samples recovered and groundwater observations.

5

Laboratory testing

Chemical analyses was undertaken to detect the presence of contaminants indicated by the desk study, viz:-

Common contaminants listed by the ICRCCL ⁽²⁾:-

Total arsenic, cadmium, chromium, lead, mercury, selenium, copper, nickel, zinc, monohydric phenol, polycyclic aromatic hydrocarbons and cyanide. Water soluble boron and sulphate. Sulphide, elemental sulphur and pH value.

Speciated total petroleum hydrocarbons (TPH)

Speciated Polyaromatic hydrocarbons (PAH)

Polychlorinated Byphenols (PCB)

The analysis was undertaken on soil samples and the results are presented at Appendix B.

6

Ground conditions

6.1

Stratigraphy

The stratigraphy of the site as revealed by boreholes is given in detail at Appendix A and is described in general terms hereafter.

6.1.1

Fill material

Underlying the hardstanding was a sand with brick fragments and other man made detritus, sometime black in colour and having a hydrocarbon odour. Underlying this in WS2, 4 & 5 and replacing it in WS6 was a brown sandy clay with gravel and brick fragments. Fill material was proved to a maximum depth of 1.6m.

6.1.2

Langley Silt

An layer of orange brown or grey brown sandy clay with some gravel was proved beneath the fill in all holes. A hydrocarbon odour was noted in WS 4, whilst this material is considered to represent Langley Silt.

6.1.3

Kempton Park Gravel

Kempton Park Gravel was proved in all exploratory holes. It was generally found to be a brown and orange brown sandy gravel sometimes clayey at the top and with occasional clay layers within. The majority of the window sampler holes were terminated in this material, although WS4 proved it to 4.2m depth. A hydrocarbon odour was noted in WS4 from 3 to 4.2m depth.

6.1.3

London Clay

London Clay was proved in WS4 only and continued to the full depth of investigation. It comprised a fissured dark grey silty clay, consistent with the unweathered part of the formation.

The clay was visually assessed to be in a generally stiff condition.

6.2

Groundwater

Groundwater was encountered WS4 & 6 at 3 and 3.5m depth rising some ½m in the subsequent observation period. Full details are provided on the appropriate borehole record at Appendix A.

7

Discussion

7.1

General

Based on the information given by the desk study, it was concluded that samples should be analysed for contaminants listed by the ICRCCL together with TPH and PAH.

7.2

Contamination

This preliminary investigation has highlighted contamination predominantly by hydrocarbons in all exploratory position apart from WS6. It is our experience that a level of 350mg/kg is generally acceptable to the Local Environmental Health Officer and the Environment Agency for TPH although it is expected that a full site specific risk assessment will be required to confirm a level once the development layout is known. On the above basis significant hydrocarbon contamination has been found at the following locations:-

WS2 @ 0.3m

WS4 @ 1.3m

WS4 @ 3.3m

WS5 @ 0.3m

The sample from WS2 also showed significant level of PAH contamination.

All PCB results were below detection limits.

Based on the laboratory testing so far carried out, significant hydrocarbon contamination has been found in a number of locations (one of which is below groundwater). Additional investigation and sampling will be required to determine the lateral and vertical extent of the contamination. Also confirmation that the groundwater has / has not been impacted should be made. After this has been completed a site specific risk assessment should be undertaken.

Although, once this has been completed it is expected that some remediation will be required. Insitu bioremediation is proven technology to achieve this and is expected to be the most appropriate remediation solution..

A M Smith
AP GEOTECHNICS LTD.
22 July 2004

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For: Hamilton Lofts Ltd.

Appendix f
Transport Assessment

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Hamilton Lofts Ltd, 20 Mortlake High Street, London SW14 8JN. 020 8392 6600. Contact: Bill Bailey.



TRANSPORT ASSESSMENT

1 INTRODUCTION

- 1.1 Transport and Traffic Consultancy have been engaged by Frenncastle Management Ltd to prepare a transport impact report in support of the current planning application.

- 1.2 This report should be read in conjunction with the scheme drawings and planning application statement prepared by Acanthus LW Architects.

2 THE SITE, SURROUNDINGS AND ACCESS

Road Access and Parking

- 2.1 The site location is shown in Figure 1, and the site and its surroundings in more detail in Figure 2. The site lies in the western part of Twickenham, Hamilton Road being one of a number of cul de sac streets north of Edwin Road. These form part of a largely self-contained residential and industrial enclave in the angle between between the two railway lines west of Twickenham - the Thames Valley line and the Kingston loop line.
- 2.2 Residential land use, mainly in the form of late 19th and early 20th century terraced housing, predominates in the area. Hamilton Road and neighbouring local roads are of typical basic late Victorian back street width, with carriageways approximately 7 - 8 metres wide and footways approximately 2 metres wide in the vicinity of the site, and are not suitable for commercial goods vehicle traffic generated by the current authorised industrial use of the site. In common with other cul de sacs in this locality, Hamilton Road has no turning head for vehicles.
- 2.3 Access to/ from the site for all travel modes is via Hamilton Road and Edwin Road. Edwin Road is a local road which forms a loop off Colne Road via short connecting local roads Marsh Farm Road and Crane Road at each end. Coine Road is also a local road which itself similarly forms a loop off the A305 Heath Road/ The Green/ Staines Road, the main road running west from Twickenham town centre. The A311 The Green/ Hampton Road, diverges southwestwards from the A311 at a traffic signal junction a short distance west of the Coine Road/ Heath Road junction.
- 2.4 Local shopping and other businesses in parades on the Heath Road east of the railway extend into Twickenham town centre and provide a range of shopping and other services, and possible employment opportunities, well within convenient walk distance of the site.
- 2.5 Hamilton Road, Edwin Road and the surrounding area lie just outside the Central Twickenham controlled parking zone (CPZ), otherwise known as Zone D, the western limit of this CPZ coinciding with the Kingston loop railway. There are no formal parking restrictions in Hamilton Road or other neighbouring roads apart from 'Any time' double yellow line waiting restrictions in the short length of marsh farm Road linking Edwin Road with Crane Road. There are indicative white hatched carriageway markings on the corners at the Hamilton Road/ Edwin Road junction to discourage obstructive parking at the corners.

Public Transport Access

- 2.6 The public transport network is shown in Figure 3. The A305 and A111 are well served bus corridors. London local bus routes 110, 267, 281, 290, 490, H22 and R70 call at stops in each direction on Heath Road near Laurel Avenue/ Saville Road, within a few minutes walk of the site, at reasonably high frequency throughout the day every day of the week. These bus routes provide a high frequency link to Twickenham town centre and railway station as well as transport to other areas such as Hounslow, Richmond, Teddington and Kingston. Night bus service N22 also serves these stops. Both stops have passenger shelters and perch seating.
- 2.7 Twickenham railway station, served by a good range and frequency of Southwest Trains services including to/ from London Waterloo, may be considered beyond acceptable walk distance from the site for many people, being approximately 1.2 km (nearly 0.75 mile) from the site, but there are good bus service links as outlined in para 2.6 above. Strawberry Hill station on the Kingston loop line is a similar walk distance away to the south but is not on the bus network.
- 2.8 A public transport accessibility level (PTAL) assessment using the widely accepted 'Hammersmith' method has been carried out for the site. The results of the assessment are

summarised at Appendix A of this report and confirm that the site has a PTAL of 2 or 3, depending on whether:-

- The common practice is adopted of taking account of services in one direction only regardless of whether or not they terminate in the locality or (as in this case) provide a through service to a second set of destinations, or
- Due account is taken of the greater contribution of a through service to the accessibility of a location.

2.9 The PTAL analyses are presented at Appendix A. PTAL 3 is a medium level of accessibility, but the crudity and defects of this assessment method, including that it takes no account of the range of destinations the transport services provide access to, must be acknowledged. In this instance the local bus routes run in a number of directions and provide direct access to a wide range of key travel objectives including major town centres and railheads.

2.10 In reality therefore, this site has a greater level of public transport accessibility than strict application of the PTAL methodology would indicate, and this would be perceived by potential occupants of the proposed development.

Cycle Access

2.11 The London Cycle network in the area is shown in Figure 4. Edwin Road is on the designated London Cycle Network (LCN) Route 37. This is part of a fairly dense network of LCN routes avoiding main roads and centred on Twickenham railway station, where there are large secure sheltered cycle parking facilities. Route 37 is largely a signed on-road route in the site locality, there being no special cycle facilities other than use of the wide pedestrian/ cycle link referred to in para 2.19 below.

2.12 The with-flow bus lane on Heath Road is available for use by eastbound cyclists and is a benefit on this direct route to Twickenham town centre.

Pedestrian access

2.13 Pedestrian access in this locality is largely confined to the on-street footways, together with a wide pedestrian/ cycle link under the Kingston loop railway linking the two halves of Edwin Road, and a footbridge from Marsh Farm Road over the Thames Valley railway which is the most direct link with the area north of the site.

2.14 There are no formal pedestrian crossing facilities on the local road network, but there are crossing facilities across the A306 and A311 including a pelican crossing west of Laurel Avenue/ Saville Road which is a particular benefit in providing safe access to the nearest westbound bus stop to the site.

3 PROPOSED DEVELOPMENT

- 3.1 The existing industrial buildings will mostly be demolished and replaced by the proposed new purpose-built development, consisting of a residential block at the north and west sides of the site with a basement car park underneath. The latter would accommodate most of the car parking spaces, but a few would be at surface level near the site entrance from Hamilton Road. One of the existing buildings in the centre of the site will be retained and refurbished to provide residential accommodation, and a separate building containing the proposed live/ work units will be constructed at the east side of the site.
- 3.2 The access and circulation area at the south side of the site adjacent to the entrance from Hamilton Road will be of a size and shape to comfortably accommodate vehicle turning manoeuvres, including by dustcarts and other large servicing vehicles. This turning area will also be available for use by existing Hamilton Road residents and other members of the public.

4 TRANSPORT IMPACT

Traffic Movement

- 4.1 Traffic movement in Hamilton Road is currently negligible at all times, with no more than about 20 vehicle movements per hour even at peak times. This is, however, currently influenced by the minimal activity on the site. Full utilisation of the site for the current authorised industrial land use could generate significant traffic including heavy goods vehicles.
- 4.2 Traffic movement on Edwin Road is also minimal, with about 40 peak hour vehicle movements east of Hamilton Road and 25 west thereof. Observations confirm that a significant element of this traffic is by non-resident commuters working in local shops and other businesses, who park in this locality as it is just outside the boundary of the Central Twickenham CPZ. Most of these motorists stop briefly opposite Hamilton Road but then proceed further up Edwin Road to find parking space.
- 4.3 Even if all the proposed flats were occupied by residents who chose to drive to work, which we consider unlikely, an additional 34 car movements would still result in very low traffic movement in Hamilton Road and Edwin Road, and the traffic impact on the road network would be insignificant.
- 4.4 The proposed turning head facility will also be helpful to existing users of Hamilton Road, some of whom can be observed to reverse out of the road when leaving, rather than trying to turn round within the limited carriageway width available.

Parking

- 4.5 Although Hamilton Road is generally fairly heavily parked there is always some spare space available, typically about 15 - 20% vacancy out of the total kerbside capacity of about 68 cars, against the existing total 64 houses in this road. Hardly any of the incoming commuters referred to in para 4.2 park in Hamilton Road because it generally appears to be full at a quick glance from the end of the street.
- 4.6 The proposed parking provision of one space per dwelling complies with the Council's parking standards, and would be expected to cater for the likely demand. There should therefore be no parking impact on Hamilton Road or other local roads.

5 CONCLUSIONS

- 5.1 The proposed residential development is situated in a largely residential area within easy reach of the local and strategic road and public transport networks, but away from heavily trafficked through routes. It would replace an existing industrial development which has the potential for much greater traffic and related environmental impact on the locality, including significant large goods vehicle traffic for which the local roads are manifestly unsuitable.
- 5.2 The site is only a short walk away from a wide range of shops and other services which could also provide employment opportunities. Numerous frequent local bus services call at stops within easy walk of the site, and the London Cycle network includes a designated route close to the site. All these facilities would encourage residents to walk or cycle rather than use cars for many journey purposes.
- 5.3 Traffic on Hamilton Road and other local roads is minimal, and the road network would be able to accommodate any traffic which could conceivably be generated by the proposed residential development, with no significant adverse impact on traffic capacity and movement.
- 5.4 The proposed parking provision within the development complies with the current UDP standard, and would be expected to accommodate the likely residential car ownership. In the event of more cars being owned than provided for on site (which we consider unlikely), however, those residents unable to park on site could readily find parking space in surrounding streets despite current parking pressure in some sections of street.
- 5.5 The development would generate considerably lower traffic flows, and in particular lower goods servicing vehicle movements, than those which can potentially be generated by the currently authorised industrial use of the site.
- 5.6 The development would also make available vehicle turning facilities to the general public, currently conspicuously lacking on Hamilton Road.
- 5.7 There is therefore no transport-related reason why the proposed development should not be permitted.

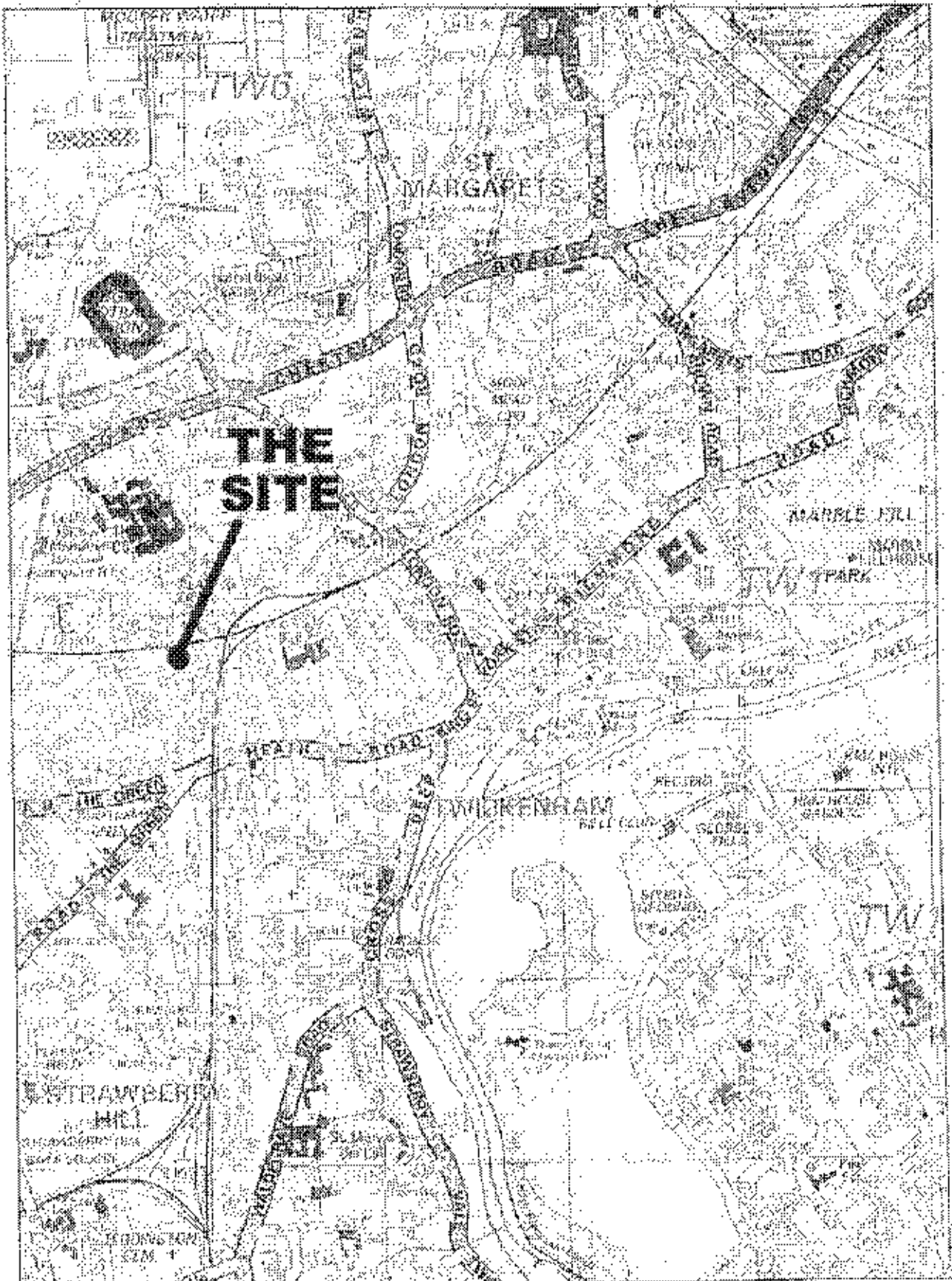


FIGURE 1 - SITE LOCATION

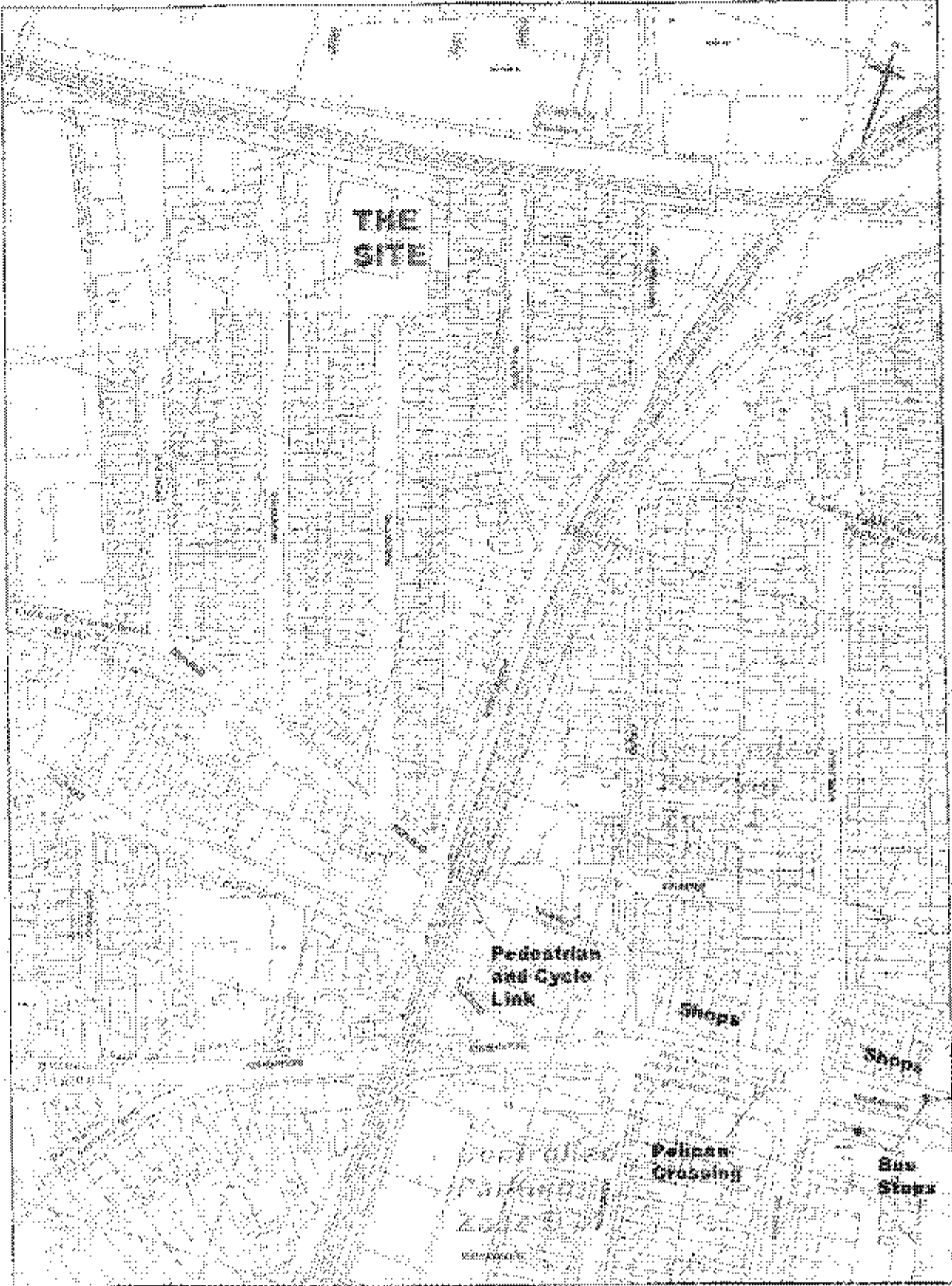


FIGURE 2 - SITE AND SURROUNDING AREA.

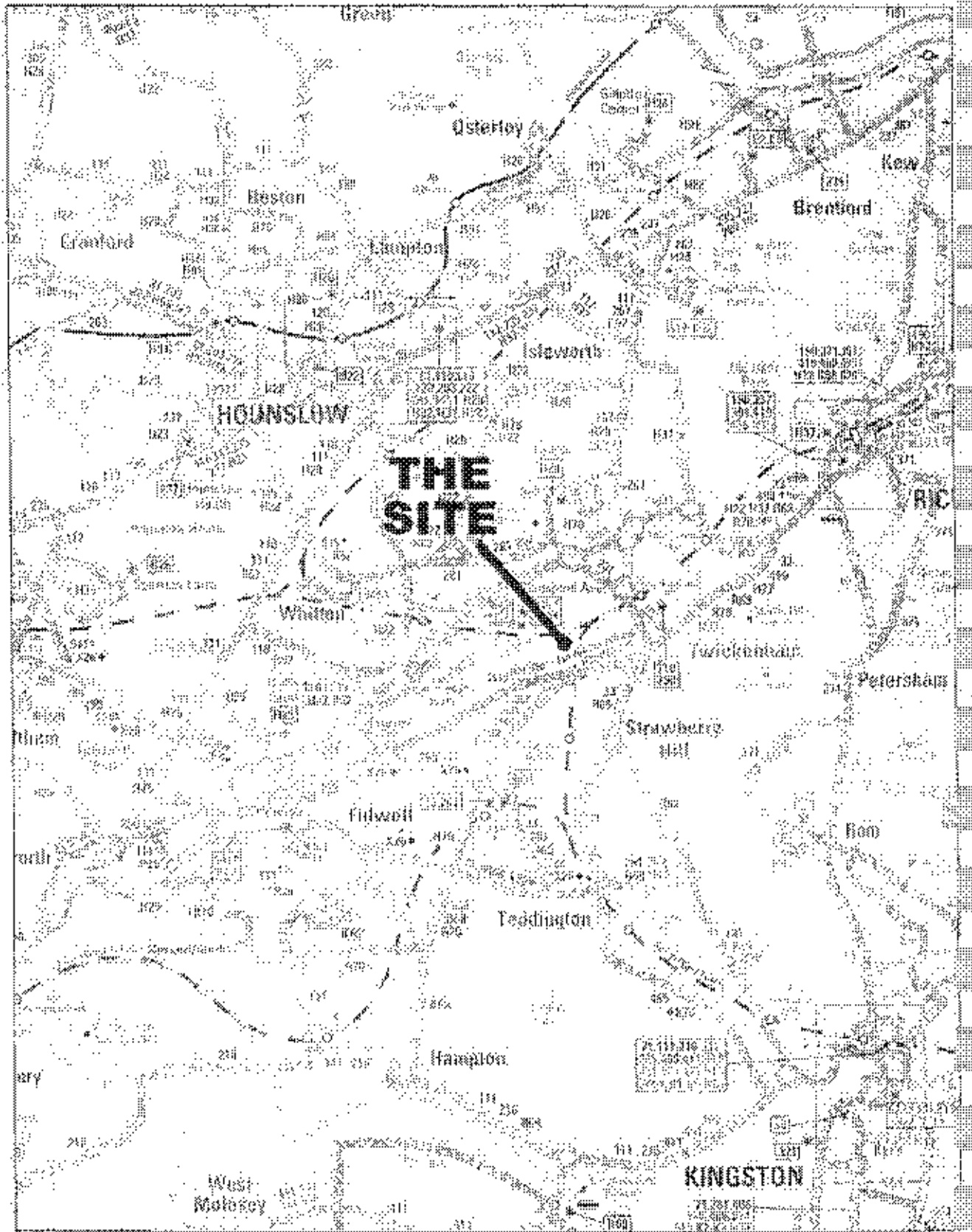


FIGURE 3 - SITE AND PUBLIC TRANSPORT

