



Updated Services Report

DOCUMENT 10

June 2009

**This page has intentionally been left blank.**

# **Outline Planning Application for a New Settlement at Curborough, Staffordshire**

## **Services Report Update**

**(June 2009)**

**on behalf of**

**The Curborough Consortium**

**This page has intentionally been left blank.**

# Curborough New Settlement

## Updated Services Report

**June 2009**

### Notice

This supplementary report was produced by Atkins for Curborough Consortium for the specific purpose of providing additional information on services, fences and services easements supplied by Pinsent Masons for the site and from British Waterways for their infrastructure adjacent to the site. This report also provides initial budget cost estimates to divert a section of Severn Trent Water's sewer and South Staffordshire Water's water main.

This report may not be used by any person other than Curborough Consortium without Curborough Consortium's express permission. In any event, Atkins accepts no liability for any costs, liabilities or losses arising as a result of the use of or reliance upon the contents of this report by any person other than Curborough Consortium.

Atkins Limited

### Document History

JOB NUMBER: 5055875			DOCUMENT REF: Updated Services Report			
0	DRAFT 1	TA	CS	JCD	JD	Sept-08
1	FINAL	TA	CS	JCD	JD	May 09
Revision	Purpose Description	Originated	Checked	Reviewed	Authorised	Date

**This page has intentionally been left blank.**

# Contents

<b>Section</b>	<b>Page</b>
<b>Abbreviations</b>	<b>ix</b>
<b>1. Introduction</b>	<b>2</b>
1.1 Brief	2
1.2 Limitations	3
<b>2. Preliminary Diversionary Costs</b>	<b>4</b>
2.1 Severn Trent Water	4
2.2 Method of Progression	4
2.3 Programme	4
2.4 Terms and Conditions	4
2.5 South Staffordshire Water	5
2.6 Programme	5
2.7 Terms and Conditions	5
<b>3. South Staffordshire Water</b>	<b>6</b>
3.1 Easement	6
<b>4. British Waterways</b>	<b>7</b>
4.1 Services Information	7
4.2 North of the Site	7
4.3 East of Hilliard's Cross	7
4.4 Drainage Rights	8
<b>5. Service/Constraints Plan</b>	<b>9</b>
5.1 Background	9
5.2 Landowners	9
<b>6. Conclusions</b>	<b>15</b>
<b>7. References</b>	<b>17</b>

## List of Figures

Drawing 5055875/001 Rev F Draft Service/Constraints Plan

Drawing 5055875/002 Rev B Extent of Mapping

RPS Drawing 001 Rev H, Draft Concept Masterplan

## Appendices

<b>Appendix A STW Diversionary Cost</b>	<b>19</b>
<b>Appendix B SSW Diversionary Costs</b>	<b>20</b>
<b>Appendix C British Waterways Information</b>	<b>21</b>
<b>Appendix D Pinsent Masons Plans</b>	<b>22</b>

**This page has intentionally been left blank.**

# Abbreviations

Abbreviation	Description
SSW	South Staffordshire Water
STW	Severn Trent Water

**This page has intentionally been left blank.**

# 1. Introduction

## 1.1 Brief

- 1.1.1** This document has been prepared as an update to the original Services Report that was prepared on behalf of the Curborough Consortium, to accompany the planning application 08/00342/OUT (Document 10). This document must be read in conjunction with the original services report. The application was submitted to Lichfield District Council 28 March 2008 for the development of a new settlement at Curborough.
- 1.1.2** Atkins Ltd (Atkins) was originally commissioned by the Curborough Consortium in August 2007 to produce a Services Report (Ref. 1) for the proposed development of Curborough New Settlement, located between Fradley and Lichfield in Staffordshire.
- 1.1.3** The Services Report (Ref. 1) issued in March 2008 comprised responses from the Statutory Authorities regarding their affected plant within the site area. The plans received are presented on the Atkins Composite Service Location Plan Drawing 5055875/001, dated January 2008.
- 1.1.4** The Services Report (Ref. 1) also provided information on the capacity of the available network to supply the new development, a budget estimate for up-grading works, and it identified the location and widths of service wayleaves and easements within the site.
- 1.1.5** It should be noted that many of the Statutory Authorities refused to comment on the cost of upgrading their networks due to the lack of detailed layout plans and loading requirements of the development scheme.
- 1.1.6** Based on the findings of the Services Report (Ref. 1) Atkins has now been commissioned by the Curborough Consortium to contact Severn Trent Water and South Staffordshire Water to obtain budget cost estimates to divert a section of a sewer main and part of a water main, respectively, which are presently located in the footprint of the proposed development.
- 1.1.7** South Staffordshire Water was not able to provide information regarding easements at the time of the original Services Report (Ref. 1). Therefore, for completeness, the findings of this enquiry have been included within this report.
- 1.1.8** Enquiries have also been made to British Waterways with regard to information they may have on their existing infrastructure and their comments with regards to drainage rights to the canal.
- 1.1.9** Additional services information has been provided by Pinsent Masons for the various private landowners within the site and has been utilised to update the Atkins Composite Service Plan and to produce a Services/Constraints Plan. The Services/Constraints Plan provides details of private services, fences and known easements which have been obtained by Pinsent Masons from Conveyance, Title Deeds and other documents. Additional information included in the Services/Constraints Plan may have not been made available to or recorded by the Statutory Authorities or due to the age of some of the documents these services may no longer be operational.
- 1.1.10** The Service/Constraints Plan has been included as Drawing 5055875/001 (Rev. F) and the extent of mapping provided by the Statutory Authorities and information provided by Pinsent Masons have been provided as Drawing 5055875/002 (Rev. B). The Services/Constraints Plan provides an indication of the likely constraints imposed on the development from services, fences and services easements only. The plan does not include information on other constraints which may affect the development or services that have not been recorded, made known or made available to Atkins.
- 1.1.11** It should be noted that three unclassified roads are present within the site. For ease of reference, these have been identified on Drawing 5055875/001(Rev. F) as Road A, Road B and Road C. Road A is located to the south of Wood End Lane and to the east of the Car Sprint Course. It

passes through the approximate centre of the site from Wood End Lane to the railway line in the south. Road B is also located to the south of Wood End Lane, in part of the Business Park to the east of the site. Road C is located to the east of Hilliard's Cross linking Brookhay Lane to Bears Hay Farm.

## **1.2 Limitations**

- 1.2.1** This report has been based on the information and initial budget costs provided by the Statutory Authorities at the time of reporting.
- 1.2.2** Where costs have been provided by the Statutory Authorities, these should be viewed with caution as the figures quoted are based on current (2008) available rates and information. It should be noted that the offer provided by Severn Trent Water expires on the 22<sup>nd</sup> October 2008 and will require additional submission and evaluation after this time. Therefore, the costs provided within this report should be used only as a guide to the current likely budget cost estimates associated diverting the sewer and water mains from their current locations, to one beneath the adjacent highway.
- 1.2.3** The information provided by Pinsent Masons should be used as a guide to the possible services constraints within the site. The location of services, fences and other information has been taken from Title Deeds and Conveyances which are inconsistent in information, provided on poor quality plans and therefore may be inaccurate or incomplete. The inaccuracies within these plans may have been introduced by drawings not being produced to scale, being produced by hand or as a result of repeated reproduction.
- 1.2.4** It should be noted that the presence of buried services have been indicated where known and have been based upon available records which may be incomplete or unrecorded. The locations are therefore indicative and have only been provided for information. It should also be noted that the absence of a service on the drawing does not mean that no such service exists and prior to the commencement of any works, the location of all services should be confirmed and should be checked against the original plans. In addition to this report, reference should also be made to Pinsent Masons plans and the Atkins Service Report, dated March 2008.
- 1.2.5** For these reasons, Atkins can not accept responsibility for any information supplied by third parties.
- 1.2.6** Due to the large amount of information provided by the Statutory Authorities and Pinsent Masons the appendices to this report can be found on the attached CD.

## 2. Preliminary Diversionary Costs

### 2.1 Severn Trent Water

**2.1.1** Based on the findings of the Atkins Services Report (Ref. 1) and current proposals for the site, which are presented on the Draft Concept Masterplan, Drawing Number 001, Revision H, dated 4 March 2008. A budget estimate was obtained from STW for diverting the existing combined pressurised sewer, which runs between the Auction Centre, south of Wood End Lane and the Sewage Treatment works located to the west of the site. It is proposed that the sewer is re-located to beneath the adjacent highway (Wood End Lane) to facilitate the development of the new settlement.

**2.1.2** The Formal Offer provided by STW is presented in Appendix A of this report. STW Drawing P607400-100 Rev A, dated 11 July 2008, also presented in Appendix A, shows the location of the existing combined pressurised sewer and their proposals for diverting the sewer beneath Wood End Lane. It should be noted that the following proposed works and budget estimate have been based upon the diversion and replacement of existing sewer only and does not include the cost of upgrading any part of the existing network to serve the new development. Additional costs and designs should be obtained from STW following the completion of more detailed design, site layouts and loadings have been established.

**2.1.3** STW have indicated that the works that are likely to be required are:

- 1900m of 200mm diameter combined pressurised sewer,
- 1 no. 1350mm diameter manhole, and
- Upgrading of two pumping stations.

The estimated current (2008) budget costs for undertaking these works are in the region of **£517,000** exclusive of VAT.

It should be noted that STW's proposals for the diversionary works have been based upon preliminary design and will require further detailed design and costs (as detailed below) following the development of detailed site layouts.

### 2.2 Method of Progression

**2.2.1** STW adopts a staged approach for the progression of public sewer diversions, which entails an initial payment of **£31,000** (exclusive of VAT) to fund progression of the works. STW state that this element of the works comprises '*detailed design, detailed estimate and programme by the undertaking of technical feasibility works and includes the carrying out of site investigations, detailed topographical surveys and obtaining of service information as well as detailed design through to receipt of contract prices*'.

**2.2.2** Any significant changes to design or significant increase in estimate or the programme will be highlighted following the completion of STW feasibility stage.

### 2.3 Programme

**2.3.1** STW has indicated that a programme of approximately 61 weeks should be allowed for the completion of the works. This comprises 46 weeks to progress the sewer diversion and a further 15 weeks to complete the construction works.

### 2.4 Terms and Conditions

**2.4.1** The terms and conditions are provided in STW Form SD1 and the STW Formal Offer, which are both provided in Appendix A.

**2.4.2** It should be noted that, if the offer is not accepted within 3 months of the date of the offer (dated 22 July 2008), then the offer is deemed to have lapsed. Further submission and evaluation of the

diversion will be required following this time. The above estimate should therefore, only be used as a guide of the likely costs to divert the sewer and will be subject to change and additional administrative costs after 22 October 2008.

## **2.5 South Staffordshire Water**

**2.5.1** A formal enquiry has been made to South Staffordshire Water (SSW) dated 9<sup>th</sup> April 2008 regarding their cost estimate to divert a section of 12" water main located to the south-east of Wood End Lane.

**2.5.2** SSW has indicated that the works that are likely to be required are:

Relay 860m of 500mm nominal bore ductile iron pipe to the line of the existing road.

900m of 63mm MDPE to supply Curborough Grange.

**2.5.3** The estimated current (2008) budget costs for undertaking these works are in the region of **£729,123** exclusive of VAT.

## **2.6 Programme**

**2.6.1** At present, the delivery lead time for 500mm pipe and fitting is approximately 12 weeks. It is expected that their proposed diversionary works will take approximately 10 weeks.

**2.6.2** It should be noted that SSW's proposals for the diversionary works is for guidance only and will require confirmation upon completion of final design.

## **2.7 Terms and Conditions**

**2.7.1** It should be noted that, the estimate is valid for 6 months and it should be noted that labour prices will rise annually in line with Baxters indices, and at present the costs is increasing at a rate of 15 to 20% annually.

## 3. South Staffordshire Water

### 3.1 Easement

#### 3.1.1 South Staffordshire Water has still not provided information regarding easements, in particular for the water main running through the Winterton / Ridgway land.

An approach was made at the time of the original Services Report (Ref. 1), to SSW and discussions with SSW Developer Services have confirmed wayleaves exist within the site. They are unable to respond to our query as it is understood that a request has been made by other parties regarding the precise location of the water mains running along the south western boundary of the site. The Land Agent working for SSW is in the process of mapping the exact location of this water main and until this information has been provided to SSW, SSW are unwilling to release any information. Atkins are still awaiting this information however, in our experience the protected area is typically 4.5m either side of a standard buried water pipe.

## 4. British Waterways

### 4.1 Services Information

- 4.1.1** Due to the close proximity of the Coventry Canal, which passes through the eastern section of the site and borders the northern boundary, and the Trent and Mersey Canal which is present along the north-western boundary, enquiries were made to British Waterways regarding information on their infrastructure.
- 4.1.2** The information provided by British Waterways has been presented on seven drawings and included in Appendix C of this report.
- 4.1.3** The first two drawings show the location of British Waterways infrastructure identified as bridges, locks, culverts, milestones and aqueducts and have been summarised in the following sections (Section 4.1.1 and 4.1.2), with British Waterway's references for each structure given:

### 4.2 North of the Site

Aqueduct 19 is indicated to the west of the site (TM-109-005)

Sluice 17 is shown to the west of the site (TM-109-006)

Shadehouse Lock is located between Shade House and Middle Lock and has listed status (TM-110-004 Lock 19)

Bridge 52 located in the vicinity of Shade House has listed status (TM-110-005)

Middle Lock is located north of Shade House and has listed status (TM-110-006 Lock 18)

### 4.3 East of Hilliard's Cross

A culvert is indicated on the south-eastern side of the A38 between Streethay Bridge and Bearshay Bridge (CC-057-002)

Bearshay Bridge is shown to the north of Bears Hay Farm (CC-57-003 Bridge 87)

A milestone located 100m east of Bearshay Bridge has listed status (CC-057-007)

A British Waterways culvert is indicated to the south of Brookhay Bridge (CC-057-004)

Flood Weir 8 is shown immediately to the south of Brookhay Bridge (CC-057-005)

Brookhay Bridge is located over the canal along Brookhay Lane (CC-57-002 Bridge 88)

Pipe Bridge in the north passes over the canal along the A38 (CC-57-006 Bridge 88A)

Bell Bridge in the north passes over the canal along the A38 (CC-57-002 Bridge 89)

A culvert (dry dock outlet) is indicated to the south of Fradley Junction (TM-110-007 Culvert 88)

A swing bridge is shown to the east of Fradley Junction (TM-110-008)

Bridge 91 passes over the canal along Gorse Lane in the north-east of the site (CC-061-001)

- 4.3.1** The four remaining drawings provided by British Waterways show, in greater detail, the location of their infrastructure, as listed above, and the location of pedestrian access points and towpaths.
- 4.3.2** British Waterways has confirmed that all works which are carried out on, over and close to British Waterways Property will need to be carried out in accordance with the 'Code of Practice for Works Affecting British Waterways Property', which is included in Appendix C.

**4.3.3** It is therefore recommended that prior to the commencement of any works and during the detailed design stage, contact should be made with British Waterways for their comments and the Code of Practice should be consulted and adhered to during the design process.

#### **4.4 Drainage Rights**

**4.4.1** British Waterways are not a drainage authority and as such are not obliged to receive surface water drainage. The canals were originally built for the carriage of freight and so were designed to manage water levels for operational purposes in connection with this function.

**4.4.2** It is understood that in certain circumstances, British Waterways will consider applications to discharge clean surface water provided there is sufficient capacity and weirage available to manage the additional flows safely. However, this would only be considered if there was no practical or cost effective solution (see correspondence in Appendix C). It should be noted that costs, which are likely to be substantial would be incurred to receive any drainage to the canals.

## 5. Service/Constraints Plan

### 5.1 Background

- 5.1.1** Additional information has been provided by Pinsent Masons LLP (Pinsent Masons), which has allowed the original Composite Service Plan to be updated to produce a Service/Constraints Plan (Drawing 5055875/001 Rev F). This section details the information received since the production of the original Services Report (Ref. 1).
- 5.1.2** The Services/Constraints Plan provides an indication of the likely constraints imposed on the development from services, fences, easements and other protected land only. The plan does not include information on other constraints which may affect the development or any services that have not been recorded or made available.
- 5.1.3** Conveyances, Title Deeds and other documents for the various land owners within the site have been reviewed by Pinsent Masons. A total of twenty one plans were subsequently reproduced and pertinent information, which includes the location of services, fences and services easement agreements, have been identified by Pinsent Masons and forwarded to Atkins. It should be noted that some of the plans include services previously identified by the Statutory Authorities and reported in the original Services Report (Ref. 1). There is however, a lack of consistency in some of the information provided within the plans and this is discussed in Section 5.2 below for the various landowners.
- 5.1.4** It should be noted that due to the poor quality, age of some of the documents, lack of scales and potential errors associated with the reproduction of the plans and the hand drawn nature, Atkins cannot confirm or accept any responsibility for the origins or accuracy of the information provided by Pinsent Masons. The plans supplied to Atkins have been included in Appendix D of this report.
- 5.1.5** This additional information has been transferred onto the Service/Constraints Plan (Drawing 5055875/001 Rev F) and summarised below. The extent of mapping has been provided on Drawing 5055875/002 Rev B.
- 5.1.6** A plan showing the various land owners within the site has been produced by RPS and included within Appendix D of this report.

### 5.2 Landowners

#### *Williams*

- 5.2.1** Land under the current ownership of Williams is located to the north and south of Wood End Lane. On the RPS Plan (Appendix D), the Williams land refers to the area occupied by 'Lady Rougier' (shaded in blue), 'Pickering' (shaded in dark blue) and 'Rert Asset Management' (shaded in fuschia). A parcel of land is also shown on the Pinsent Masons plans located south of Wood End Lane, between the Auction House and Wellington Crescent, however no land owners have been identified on the RPS Plan (Appendix D).
- 5.2.2** Two plans have been supplied by Pinsent Masons and the following information has been plotted on to the Service/Constraints Plan (Drawing 5055875/001 Rev F).

#### *Underground Services*

- 5.2.3** The combined use sewer, previously identified in the Atkins Service Report (Ref. 1), has also been identified on plans supplied by Pinsent Masons for land owned by Williams and Greaves (Section 5.2.3). As previously discussed, the sewer crosses Wood End Lane in the area of the Auction Centre and heads in a south-westerly direction where it becomes a combined gravity sewer at Road B. The combined gravity sewer continues in a south-westerly direction entering the sewage treatment works located adjacent to the western boundary of the site on Watery Lane.

**5.2.4** Storm water drains have also been identified at the following locations:

Running in a northerly direction (parallel to Gorse Lane) from the three hangar buildings before discharging into a ditch south of the Coventry Canal,

Running in a northerly direction (parallel to Gorse Lane) from the two hangar buildings towards the Coventry Canal,

Running in a westerly direction (parallel to Wood End Lane) from the three hangar buildings towards the Trent and Mersey Canal,

Off-site - Crossing fields (south of the Auction House) in a south-westerly direction to the eastern boundary of the site,

Off-site - Crossing fields, from a point south of Wellington Crescent towards the pumping station in the vicinity of the Auction House. It should be noted a 250mm diameter foul use pressurised sewer was also plotted on the original Services Composite Plan (Drawing 5055875/001, dated March 2008) and on the Proposed Sewer Diversion Plans produced by STW dated July 2008 (STW Drawing P607400-100, Appendix A) following a similar route. It is therefore likely that both the STW sewer and Pinsent Mason sewer refer to the same pipe but this can not be confirmed at this stage. Therefore, for the purposes of this current undertaking both have been identified as separate sewers.

A pumping station and a proposed 225mm diameter emergency overflow pipe are shown south of the Auction House and the overflow pipe is identified as discharging into the nearby Curborough Brook. An 18" diameter water main, BT underground cable, existing 450mm surface water sewer and an 11kV overhead electricity cable are also shown running north to south (perpendicular) along the route of sewer described above (spanning the area south of Wellington Crescent and the pumping station). There is also a 6m easement associated with the section of the sewer as indicated on the plan, relating to the sewer and ancillary apparatus which includes electricity, telecommunications, water and fencing.

Two culverts are shown. Mare Brook is culverted below the A38 via a 30" concrete culvert and below the railway line via a 30" brick culvert.

*Fencing*

**5.2.5** The supplied plans show that fencing should be erected and maintained in an area surrounding the three hangar buildings, north of Wood End Lane.

*Rymond*

**5.2.6** Land currently owned by Rymond is located in the north of the site and specifically relates to the area north of Gorse Farm and is shaded in brown on the RPS Plan (Appendix D).

**5.2.7** One plan has been made available and the following information has been plotted onto the Service/Constraints Plan (Drawing 5055875/001 Rev F).

*Water Mains*

**5.2.8** The water main, previously identified in the Atkins service report supplying the three hangar buildings, is also presented on plans supplied by Pinsent Masons. As previously discussed, it runs westerly from Gorse Lane before turning southwards to supply the northernmost hangar building.

*Greaves*

**5.2.9** Land to the south of Wood End Lane, between the western boundary of the site and the Auction Centre, is currently under the ownership of Greaves. The Greaves land is shaded in green on the RPS Plan (Appendix D).

**5.2.10** A total of eight plans have been supplied and the following information has been plotted onto the Service/Constraints Plan (Drawing 5055875/001 Rev F).

### **Electricity**

- 5.2.11** An overhead cable, previously identified in the Atkins Service Report (Ref. 1), is shown running in an easterly direction from Gorse Farm, towards the northernmost hangar building.
- 5.2.12** The plans show the location of overhead and underground electricity cables. The overhead cables extend from cables previously identified by E-On (from the south-east) and run northwards parallel to Road A, where it briefly becomes an underground cable at the northern extent. No further information has been supplied. It should be noted that on the original documents, these locations appear to have been crossed out and Pinsent Masons cannot confirm the accuracy of the plan without further investigation.
- 5.2.13** Overhead cables are shown running in a north-westerly direction in the area of Curborough Farm; this becomes an underground cable at an access road south of Curborough Farm and Curborough Grange.

### **Underground Sewers**

- 5.2.14** The combined use sewer, previously identified in the Atkins Service Report is also presented on plans supplied by Pinsent Masons for land owned by Greaves and Williams (Section 5.2.1).
- 5.2.15** An unidentified sewer is also shown crossing fields, in a south-westerly direction in the vicinity of the Auction Centre, before turning and running westerly near Road A to the Sewage Treatment Works. The plans also show that there is a 12m wide sterilised strip or easement associated with the sewer.

### **Water Mains**

- 5.2.16** The plans provided by Pinsent Masons show a water main running in a northerly direction from Curborough Farm to Wood End Lane. This water main has not previously been identified by South Staffordshire Water and has therefore not been included in the Atkins Service Report. Recent enquiries made to South Staffordshire Water Underground Assets and subsequent internal enquiries made to South Staffordshire Water Estates, have confirmed that no records of such apparatus exist.
- 5.2.17** It should be noted a 63mm diameter medium density polyethylene water pipe was plotted on the original Services Composite Plan (Drawing 5055875/001, dated March 2008) following a similar route, along Road A. Whilst the exact location of the Pinsent Masons water pipe cannot be confirmed due to the hand drawn nature of the plan, it is possible that both the SSW water pipe and Pinsent Masons water pipe refer to the same service but this can not be confirmed at this stage. Therefore, for the purposes of this report, both pipes have been included within the Services/Constraints Plan, marked as 'unconfirmed' but should be assumed as being present at this stage.

### **Easements**

- 5.2.18** A small parcel of land to the north of Wood End Lane and a larger area to the south of Wood End Lane (both edged in pink) are subject to an easement for the following apparatus:

- Underground electricity cables
- Pumping main with ancillary equipment
- Rights of way
- Water
- Lights
- Drainage
- And other easements.

### **Fencing**

- 5.2.19** The yellow line marked on the Services/Constraints plan, located on the western boundary of the site adjacent to the Sewage Treatment works, shows the location of fencing which is to be erected and maintained.

#### *Hollinshead III*

- 5.2.20** Land currently under the ownership of Hollinshead III relates to an area just south of Wood End Lane, west of the Auction House. The area owned by Hollinshead III is shaded in green with dark green diagonal stripes on the RPS Plan (Appendix D) and is identified as 'Hollinshead'.
- 5.2.21** One plan has been made available and the following information has been plotted onto the Service/ Constraints Plan (Drawing 5055875/001 Rev F).

### **Underground Sewer**

- 5.2.22** The plans show the route of a 7" diameter foul sewer. This appears to correspond to the northern section of the combined use sewer previously discussed in Sections 5.2.1 (Williams) and 5.2.3 (Greaves) and in the Atkins Service Report (Ref. 1).

#### *Hollinshead II*

- 5.2.23** Land currently owned by Hollinshead II is located south-west of both Wellington Crescent and Road B. The area owned by Hollinshead III is shaded in green with dark green diagonal stripes on the RPS Plan (Appendix D) and is identified as 'Hollinshead'.
- 5.2.24** One plan has been made available and the following information has been plotted onto the Service/ Constraints Plan (Drawing 5055875/001 Rev F).

### **Fences**

- 5.2.25** The plan shows the position of a fence which is to be erected and maintained. It has been depicted on the Service/ Constraints Plan (Drawing 5055875/001 Rev F) by the symbol 'T'.

#### *Middleton*

- 5.2.26** Land under the current ownership of Middleton is located in the east of the site. The area owned by Middleton is shaded in yellow and is identified on the RPS Plan (Appendix D) as 'Middleton'.
- 5.2.27** Two plans have been supplied to Atkins and the following information has been plotted onto the Service/ Constraints Plan (Drawing 5055875/001 Rev F).

### **Water**

- 5.2.28** The plans provided show the location of a proposed 80mm water main. The water main is identified in the vicinity of The Bungalow (east of Hilliard's Cross) and runs northwards along the western side of the narrow lane before crossing over at Bearshay Cottages and continuing northwards to Brookhay Lane.
- 5.2.29** The plan also shows a 3.0m permanent easement associated with the water main which allows the right to lay, use and repair water mains and enter onto the land and fix concrete marker posts.

### **Fences**

- 5.2.30** The plan also shows that fencing should be erected and maintained around a parcel of land located between the railway line and Brookhay Lane in the east.

#### *Winterton and Ridgeway*

- 5.2.31** Land currently under the ownership of Winterton and Ridgeway relates to a parcel of land in the southern most part of the site, just north of the Trent Valley Road. The area owned by Winterton and Ridgeway is shaded in purple and is identified on the RPS Plan (Appendix D) as 'Winterton'.

**5.2.32** One plan has been made available and the following information has been plotted onto the Service/ Constraints Plan (Drawing 5055875/001 Rev F).

**Sewer**

**5.2.33** The plan shows the location of two drains. A Local Authority 12" diameter surface/storm drain and a 15" proposed surface/storm drain are shown running in a north-westerly direction from the Trent Valley Road to a point just beyond the adjacent warehouses.

*Robinsons*

**5.2.34** One plan has been made available and the following information has been plotted onto the Service/Constraints Plan (Drawing 5055875/001 Rev F).

**5.2.35** It should be noted that the precise location of plan could not be determined due to the lack of surrounding site features and poor quality of the plan. It is understood that further enquiries were made by Pinsent Masons to the Land Registry, however, the exact location could still not be confirmed. Therefore for the purposes of this undertaking, the water main and electricity cable which have been plotted on the Service/Constraints Plan (Drawing 5055875/001 Rev F) and detailed below, remain unconfirmed at this stage.

**5.2.36** Land owned by Robinsons lies within the south of the site and is shaded in red on the RPS Plan (Appendix D). The small parcel of land indicated on the plan provided by Pinsent Masons, appears to correspond to land located in the vicinity of Brownsfield Cottage in the south of the site along Road A. A water pipe and connection point are shown running from the south-east and an overhead electricity supply position running from the south-west of the site.

*Lees*

**5.2.37** Land currently owned by Lees refers to a small parcel of land located within the west of the site in the vicinity of Curborough Farm Hall, Corporation Farm and the Sewage Treatment Works. The area owned by Lees is shaded in pink and is identified on the RPS plan (Appendix D) as 'Lees'.

**5.2.38** Two plans have been supplied and the following information has been plotted onto the Service/Constraints Plan (Drawing 5055875/001 Rev F).

**Electricity**

**5.2.39** Just beyond the western boundary of the site, an overhead cable is shown between two cables previously identified within the Atkins Service Report (Ref. 1).

**Sewer**

**5.2.40** A public foul sewer is shown to the south of Corporation Farm running north-easterly towards Watery Lane.

**Water**

**5.2.41** The plan shows the route of a water main running through Corporation Farm before discharging or connecting into a main sewer east of Watery Lane. It should be noted that, the quality of the plan is poor and the information provided within the Transfer documents are not clear. Therefore the purposes of this exercise, this has been included but remains unconfirmed.

**Rights of Support and Protection**

**5.2.42** A title deed for Woodend Barn shows a small section of land between an existing barn benefits from a right of support and protection contained in Transfer Papers. However, due to the poor quality of the plan neither Atkins nor Pinsent Masons were able to locate the precise position of Woodend Barn and therefore it has not been included within the Service/Constraints Plan (Drawing 5055875/001 Rev F).

**5.2.43** An area to the west of the Sewage Treatment Plan benefits from right and support of protection. However, Pinsent Masons have confirmed this is not relevant to the current undertaking and

therefore has not been included within the Service/Constraints Plan (Drawing 5055875/001 Rev F).

## 6. Conclusions

- 6.1.1** Preliminary estimates provided by Severn Trent Water (STW) indicate that the budget cost estimate to divert a section of the existing sewer from below the proposed development area to beneath the adjacent highway is likely to be in the region of £517,000 (exclusive of VAT). However, this estimate is only valid for a period of three months, until 22 October 2008, after which the time a further submission and evaluation will be required. The budget costs to divert the sewer provided should therefore only be used as a guide using current known rates and will be subject to change and additional administrative costs following 22 October 2008.
- 6.1.2** South Staffordshire Water (SSW) has provided an indicative budget cost estimate to relay 860m of 500mm nominal bore ductile iron pipe to the line of the existing road and 900m of 63mm MDPE supplying Curborough Grange for the sum of £729,123 (exclusive of VAT). This estimate is valid for a period of six months until 30 March 2009, however as proposals for the diversionary works are preliminary this figure is for guidance only and will require confirmation upon completion of final design.
- 6.1.3** At the time of reporting, Atkins was still waiting for information from SSW regarding the location of the water main which is present in south of the site associated with the Winterton/Ridgeway Land.
- 6.1.4** British Waterways infrastructure is discussed in Section 4 and presented in Appendix C of this report, which identifies British Waterways owned land, bridges, locks, culverts, milestones and aqueducts.
- 6.1.5** All works carried out on or adjacent to British Waterways land must be carried out in accordance with the British Waterways 'Code of Practice for Works Affecting British Waterways Property' which has been included as Appendix C. It is recommended that the document is consulted during the detailed design stage and prior to the commencement of any works.
- 6.1.6** British Waterways are not obliged to receive surface water drainage into their canals.
- 6.1.7** Twenty one plans have been provided by Pinsent Masons for the purposes of updating the original Composite Service Location Plan. Where possible, the information provided to Atkins has been used to produce a Services/Constraints Plan (Drawing 5055875/001 Rev F, dated August 2008) and provides an indication of the likely constraints imposed on the development from services, fences and services easements. The Services/Constraints Plan does not include information on any other constraints which may affect the development or any services that have not been recorded or made available to Atkins.
- 6.1.8** Some of the services information has previously been indicated by the Statutory Authorities and has been reported in the Atkins Service Report, dated March 2008 (Ref. 1) and original Composite Service Location Plan. The additional information provided by Pinsent Masons may be due to information not previously recorded by the Statutory Authorities or it is possible that due to the age of some of the documents, the services information provided within the Pinsent Masons Plans may refer to defunct services.
- 6.1.9** The Services/Constraints Plan should not be acted upon without reference to this report, the individual Statutory Authorities services plans (Ref. 1), Pinsent Masons Plans (Appendix D) and the Atkins Service Report, dated March 2008 (Ref. 1).

**This page has intentionally been left blank.**

## 7. References

Ref. 1 Curborough New Settlement, Services Report, Atkins, March 2008 (Document 10 of the planning application submission ref 08/00342/OUT).

# Drawings

5055875/001 Rev F – Curborough New Settlement Draft Services  
Constraint Plan

5055875/002 Rev B – Mapping Information

Curborough New Settlement Illustrative Masterplan

# Appendix A STW Diversionary Cost

STW Formal Letter

STW Formal Offer Drawing

Sewer Diversion Application Form

Sewer Diversion Guidance Notes

# Appendix B SSW Diversionary Costs

SSW Response

SSW Water Main

# Appendix C British Waterways Information

Cover Letter

Area B – Park and Ride

North Section

North Section – Towpath and Access Points

Email – Code of Practice for Works affecting British Waterways

# Appendix D Pinsent Masons Plans

Plans

Curborough Land Ownership