

Melton Mowbray Sustainable Urban Extension
Utilities Report

June 2011

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2. Introduction

- 2.1 Melton Borough is an attractive rural area in the north-east part of Leicestershire and at the heart of the East Midlands. The Borough covers 48,138 hectares and has a population of 48,900. The main activities of the Borough are centred on the single market town of Melton Mowbray which has a population of about 26,100. There are some 70 small villages within the surrounding rural area.
- 2.2 The population of the Borough is projected to grow to 52,400 by 2026 with an additional 3,400 new dwellings to be built in the Borough (2006 – 2026). A significant proportion of the new dwellings, around 1,000, are to be provided in a Sustainable Urban Extension (SUE) at Melton Mowbray.
- 2.3 The Melton Local Development Framework Core Strategy will set out the long-term spatial vision for the Borough and the strategic policies required to deliver that vision; including broad locations for the housing and other strategic development needs. The SUE to Melton Mowbray will form an important component in delivering the strategic development identified in the Core Strategy and as such an initial process of masterplanning for this development has commenced. We intend for this to culminate in the publication of an Area Action Plan (AAP) for the SUE and have commenced stakeholder engagement with a date for the publication of this document scheduled for April 2012, submission following in June of that year.
- 2.4 As part of this process the utility suppliers were contacted to ensure that the impact on physical infrastructure supplies will be acceptable and the requirements of the proposed SUE development can be met. This report intends to summarise the responses received from electricity, gas and water suppliers and identify any potential problems which may arise in relation to these services.
- 2.5 The utility suppliers were provided with a site plan and background note prepared by Melton Borough Council which summarised the proposal to consist of around 1,000 homes, a two-form entry (210 place) primary school, a local retail/commercial centre and some community facilities. Estimates of the non-residential floorspace were given as approx 4,000sqm in retail/service or office use; 1,750sqm for the school; and, 500sqm for community space (See Appendix 1).
- 2.6 With regard to the housing numbers, whilst the Plan currently allows for around 1,000 homes, it was considered useful to identify any major infrastructure thresholds beyond that (e.g. would 1,250 or 1,500 homes trigger a need for a replacement sub-station?)
- 2.7 Advice was requested on:-
- The capacity of the network to serve the proposed development
 - Any reinforcing works that might be required
 - Confirmation of any assets owned by the company within the site boundary

3. Electricity

- 3.1 Central Networks were contacted as the company in the area who are paid by electricity supply companies to deliver electricity to dwellings through their network of overhead and underground cables. Following discussions these were summarised in a note which has been confirmed as an accurate record. An account of discussions can be found at Appendix 2 – Electricity.
- 3.2 In summary it has been confirmed that there is sufficient electricity supply capacity to serve the development from the primary substation in Melton Town Centre or from a substation at Asfordby on the former mine site. The layout and phasing plan of the development would determine the choice of substation from which the development is supplied.
- 3.3 It can be assumed that as the development will occur in phases over a relatively long period it will be served by the town centre substation. There may be a requirement for some limited reinforcement of the supply network for the final phases of the development. However, increases in energy efficiency, such as the Code for Sustainable Homes, may lead to a drop in loads for future housing and make this localised reinforcement work unnecessary.
- 3.4 Further information, including guidance on a local distribution network and a budget estimate for these works can be provided by Central Networks once a phasing and broad layout plans have been established.
- 3.5 As regards assets in the area, Central Networks have identified a number of overhead cables serving farms which could be decommissioned as development progresses, the farms being served from the new local distribution network as required.

4. Gas

- 4.1 National Grid deal with the national gas distribution assets and the local gas distribution network in the area. A meeting was held with representatives of National Grid to discuss the SUE and future capacity requirements along with any infrastructure in the vicinity. Following from this meeting the details of the conversation were summarised and confirmed. An account of discussions can be found at Appendix 3 – Gas.
- 4.2 It was confirmed that there would be sufficient capacity within the distribution network to serve the proposed SUE though some local reinforcement would be required, and this would possibly be located in the Scaford Road area. However, it was noted that this represents the current situation and is subject to change as the providers operate on a first come first served basis in terms of capacity.
- 4.3 In terms of phasing of the development it was considered that development on the site from west to east would be preferable as things stand presently. However, it was again noted that this situation may have changed by the time development commenced and advice should be sought through the development process.
- 4.4 It was advised that there was a high pressure transmission line running from east to west to the north of the SUE. In regard to safeguarding distances for development in the vicinity of this asset and other constraints it may present information should be obtained from the Health and Safety Executive who will coordinate with National Grid if required.
- 4.5 No other major assets appear in the vicinity though a local network follows the street pattern and serves existing properties.

5. Water and Sewerage

- 5.1 Severn Trent Water will provide a potable water supply to the SUE site and provide sewerage. A meeting was held with representatives of Severn Trent Water and a detailed assessment of water supply and sewerage capacity is included at Appendix 4 – Water and Sewerage.
- 5.2 In summary, at this stage there appears to be adequate capacity in Severn Trent Water's distribution network to supply the site with potable water. Further detailed assessment will be required when detailed development layout plans are available.
- 5.3 A high level assessment of sewerage capacity indicates that there is generally sufficient capacity within the town's sewer network to deal with forecast flows of foul water. Subject to future hydrological modelling, it is anticipated that some localised improvements may be required at points where new development connects to the existing network however it is not expected there will be any significant capacity constraints.
- 5.4 Whilst the exact connection points are reliant on layout and topography it is likely that the development would drain to multiple foul sewer connection points. An assessment of these connection points shows the overall potential impact to be low.
- 5.4 The town is served by the Lake Terrace Terminal Pumping Station and the Melton Mowbray Waste Water Treatment works. There appears to be sufficient capacity at both facilities to accommodate the proposed development.
- 5.5 In terms of surface water all new development is to be managed through the use of sustainable drainage systems. It is not expected that surface water will enter the foul or combined sewerage system and the removal of surface water already connected to the system is supported where this is practical.
- 5.6 There are limited surface water sewers in Melton Mowbray and where possible surface water should be managed on site, offsite disposal would be to local water features.

7. Appendix 1 – Background Information Supplied

Melton Mowbray Sustainable Urban Extension – Headline Details

Background

In January 2008, Melton Borough Council published the Melton Local Development Framework (MLDF) Core Strategy (Preferred Options). The Core Strategy document sets out the vision, objectives and strategic policies for the Borough to 2026. Taking into account the houses built since 2006, existing proposals to build houses and the opportunities to re-use previously developed land, we still need to find land for about 1,000 more houses in order to meet our housing requirement. To meet this requirement the Core Strategy presented 4 housing growth options for the development of land on the edge of Melton Mowbray.

Of the four alternatives for housing growth; three involve the construction of a single extension to the town (South, East or North), each served by a bypass that would also help relieve traffic congestion in the town. The fourth option involves a number of smaller extensions to the built-up area of the town.

In November 2009 the Council resolved that the preferred Housing Growth Option is a Sustainable Urban Extension to the north of Melton Mowbray. This resolution has provided the context for the Council's work to develop the Core Strategy and deliver housing growth at Melton Mowbray.

The LPA expects all technical work for the CS DPD to be concluded by the end of May 2011 in time for a public consultation in September/October 2011. It is anticipated the Core Strategy DPD will be submitted to the Secretary of State later this year with an Examination in Public (EiP) to commence in the February 2012.

An Area Action Plan DPD will also be submitted for examination. It is anticipated these will run concurrently. Therefore substantial progress on the development of the Masterplan and Phasing Plan is required to support both examinations and future planning applications(s).

It is anticipated that an Area Action Plan DPD will be submitted to the Secretary of State in March 2012 (around the time of the Core Strategy EiP) with an Examination in Public following in June/July 2012.

Residential Development

Approximately 1000 dwellings

Trajectory – 100 dwellings per year commencing 2016/17 (from AMR - potentially may commence earlier - 2014/15 with 80 houses pa first 5 years increasing to 100 pa 2019/20)

Phasing – Phasing programme to be developed as part of masterplan process assisting in the planning of infrastructure provision

Local Centre

Primary School/Community Facility

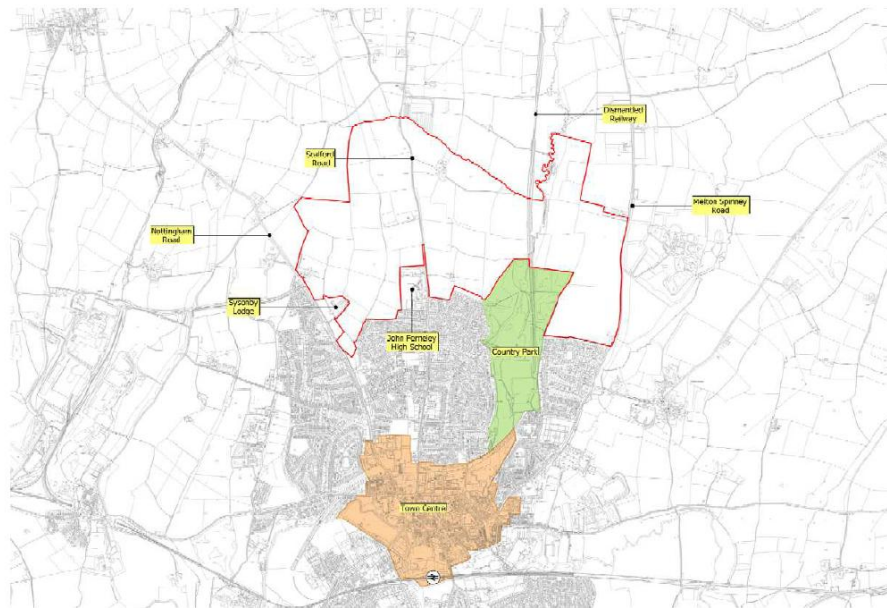
Shop/s

Other Development at Melton Proposed by Core Strategy (2010/11-2025/26)

Residential – 1443 dwellings Borough wide – 1155 at Melton Mowbray (80%)

Employment - Full Council resolved that the preferred Employment Growth Option (30ha)

is to the west of Melton Mowbray.



Appendix 2 - Electricity

From: "Graham, Paul" <Paul.Graham2@Central-Networks.co.uk>

To: "David Beale" <DavidBeale@prospectleicestershire.co.uk>

Subject: RE: Melton Urban Extension

Hi David,

I apologise for the delay in confirming our conversation about your development plans. I can confirm your notes are an accurate record and summary of our discussion.

Clip below shows our network in the area. Please let me know if you would like a different view.

If you could provide a CAD file with your boundary on that would assist.

[cid:image001.png@01CC1AFA.D0C77320]

Kind regards

Paul Graham

Estimating Team Leader

Major Projects

Western Power Distribution (formerly Central Networks)

T: 02476 186 074 (direct)

T: 02476 187 999 (group)

F: 0121 522 5087

M: 07590 483 525

paul.graham2@central-networks.co.uk

Toll End Rd, Tipton

West Midlands, DY4 0HH

www.central-networks.co.uk

From: David Beale

Sent: 05 May 2011 17:03

To: 'paul.graham2@central-networks.co.uk'

Cc: 'Paul Gilding'

Subject: FW: Melton Urban Extension

Paul,

Many thanks for your time earlier this week to discuss the housing proposal to the north of Melton. I wanted to set out my understanding of our conversation and would be grateful if you confirm this is correct:

* There is electricity supply capacity to serve the proposed development. This could be drawn from the primary substation in Melton Town Centre or from a substation at Asfordby associated with the former mine.

* The choice of which substation the development is supplied from will be informed by the layout and phasing plan of the development when available.

* Given the relatively long development period (ten years plus) at this stage it is considered that incremental growth of the development from the Town and served by the town centre substation may be assumed. Some limited local reinforcing of the supply network may be necessary for the last phases of development, however if the continued roll-out of energy efficiency initiatives such as Code for Sustainable Homes progresses leading to a drop in loads for future houses even this localised reinforcement work may not be necessary.

* Central Networks can supply further information on necessary works, including guidance on a local distribution network and a budget estimate for these works once a broad layout plan and phasing plan have been prepared.

* Central Networks have a number of assets in the study area, however these are mostly overhead cables serving farms. As the development is progressed these overhead lines can be decommissioned and the farms served from the new local distribution network. You have offered to supply a plan showing the location and nature of your assets which I would be very grateful to receive.

I should be grateful if you could reply to confirm my understanding is correct or provide any corrections in order for us to complete this aspect of our project.

Thanks and regards,

David

David Beale
Prospect Leicestershire Limited
Two Colton Square
Leicester
LE1 1QH
Tel: 0116 2488128
Fax: 0116 2488129
Email:
davidbeale@prospectleicestershire.co.uk<<mailto:davidbeale@prospectleicestershire.co.uk>>
Web: www.prospectleicestershire.co.uk<<http://www.prospectleicestershire.co.uk/>>

From: David Beale
Sent: 21 March 2011 16:41
To: 'paul.graham2@central-networks.co.uk'
Cc: 'Paul Gilding'
Subject: Melton Urban Extension

Paul,

Thanks for your offer of help with this. I attach a site plan and background note prepared by Melton Borough Council.

In summary, the plans propose around 1,000 homes, a two-form entry (210 place) primary school, a local retail/commercial centre and some community facilities.

In terms of the non-residential floorspace I would estimate around 4,000sqm in retail/service or office use; approx 1,750sqm for the school and around 500sqm for community space.

With regard to the housing numbers, the Plan currently allows for a notional 1,000 homes, but it would be very helpful to know if there are any major infrastructure thresholds looming beyond that - e.g, would 1,250 or 1,500 homes trigger a need for say, a replacement sub-station? In the medium term we may also need to look at extending the secondary school (not confirmed at the moment) so an indication of available headroom in the network would be really helpful.

As we discussed, I am looking for your initial advice on:

- * The capacity of the network to serve the proposed development
- * Any reinforcing works that might be required
- * Confirmation of any assets Central Networks own within the site boundary

If you need any further information please let me know, or Paul Gilding who is the contact at Melton Borough Council on this project (cc'd above). As I mentioned, an initial view in the next two weeks would be very helpful.

Thanks and regards,

David

David Beale
Prospect Leicestershire Limited
Two Colton Square
Leicester
LE1 1QH
Tel: 0116 2488128
Fax: 0116 2488129
Email:
davidbeale@prospectleicestershire.co.uk<<mailto:davidbeale@prospectleicestershire.co.uk>>
Web: www.prospectleicestershire.co.uk<<http://www.prospectleicestershire.co.uk>>

Appendix 3 – Gas

From: Cudby, Paul [paul.cudby@uk.ngrid.com]

Sent: 23 March 2011 13:48

To: David Beale

Cc: Paul Gilding

Subject: RE: Melton SUE

Attachments: Melton Mowbray.bmp

David, Paul,

Thanks for coming to Hinckley, hope the meeting was of benefit.

Please see the below my responses next to your points:

- You advised there is a high pressure transmission line running east-west to the north of our proposed area for new housing development; I should be grateful if you could confirm the required safeguarding distances for development in the vicinity of this asset and any other constraints it presents we should be mindful of when masterplanning. I've been advised that we at National Grid have previously informed all councils of proximity distances to specific assets in the ground a number of years ago. The correct process to obtain this information now is to through the HSE in order to get the most up to date information. If the HSE need to contact National Grid, they will do it through John Madden.
- National Grid have no other assets within our proposed development area; you can supply a plan to show the location of your existing assets. Please see the attached drawing as seen Tuesday, this is subject to a confidentiality agreement that this is not to be shared amongst developers and is purely for your information only.
- You confirmed there would be sufficient capacity within your distribution network to serve the proposed development (notionally 1,000 homes but possibly up to 1,500; around 4,000sqm of retail/office space; and, around 2,500sqm of community space including a primary school). Some local reinforcement of the distribution grid would be required, possibly in the vicinity of Salford Road This is correct based on the fact that this is a snap shot in time, and is subject to change as we are driven to operate on a first come first served basis in regards of capacity.
- I should be grateful if you could confirm from National Grid's perspective whether there is a clear benefit to the first phase of development commencing in any particular location(s) Generally developing from west to east would probably be easier based on as things stand today, however this could change and advice should be sought through the connections process if this is still the case when development is likely to commence.

Just for your information when you are at a stage where you require an indication of costs, all the information you require can be found at the following link:

<http://www.nationalgrid.com/uk/Gas/Connections/>

Then please look under Competitive Connections Providers

After reading the information at the above link, if you require a quote from a UIP company please fill out the Competitive Quotation Form at the following link:

<http://www.nationalgrid.com/uk/Gas/Connections/CompetitiveQuotationForm/>

All the above is also detailed on the OFGEM website www.OFGEM.gov.uk who also provide details of other Gas Transporters that you may wish to select.

If you have any further questions or queries, please get in touch.

Thanks

Paul Cudby
Planning Analyst - EoE & NL Performance
Network Planning
Network Strategy
UK Distribution
National Grid
EXT 01455231611
INT 71531611
FAX 01455233973
e-mail: paul.cudby@uk.ngrid.com

All **EoE** enquiries to **.box.networkplanning.eoe**

All **NL** enquiries to **.box.networkplanning.nl**

 please consider the environment - do you really need to print this email?

To celebrate my 30th birthday, on the 22nd January I completed a skydive to raise money for Cardiac Risk in the Young. I know times are tight for everyone, anything you might be able to give would be really appreciated and you can donate through my just giving site below, thank you.

<http://www.justgiving.com/cclfcPaul>

From: David Beale [mailto:DavidBeale@prospectleicestershire.co.uk]
Sent: Tuesday, March 22, 2011 1:02 PM
To: Cudby, Paul
Cc: Paul Gilding
Subject: Melton SUE

Paul,

Thanks very much for your time this morning. As discussed, I write to confirm our understanding of the issues around development of an urban extension to the north of Melton Mowbray (plans and description of development from Paul Gilding's previous email):

- You advised there is a high pressure transmission line running east-west to the north of our proposed area for new housing development; I should be grateful if you could confirm the required safeguarding distances for development in the vicinity of this asset and any other constraints it presents we should be mindful of when masterplanning.
- National Grid have no other assets within our proposed development area; you can supply a plan to show the location of your existing assets

- You confirmed there would be sufficient capacity within your distribution network to serve the proposed development (notionally 1,000 homes but possibly up to 1,500; around 4,000sqm of retail/office space; and, around 2,500sqm of community space including a primary school). Some local reinforcement of the distribution grid would be required, possibly in the vicinity of Scalford Road
- I should be grateful if you could confirm from National Grid's perspective whether there is a clear benefit to the first phase of development commencing in any particular location(s)

Thanks again for your assistance, I look forward to hearing from you.

Kind regards,

David

David Beale
Prospect Leicestershire Limited
Two Colton Square
Leicester
LE1 1QH
Tel: 0116 2488128
Fax: 0116 2488129
Email: davidbeale@prospectleicestershire.co.uk
Web: www.prospectleicestershire.co.uk

Appendix 4 – Water and Sewerage

From: Peter.Davies@severntrent.co.uk [<mailto:Peter.Davies@severntrent.co.uk>]
Sent: 25 March 2011 10:47
To: Paul Gilding
Subject: Fw: Melton Mowbray Sustainable Urban Extension

Paul,



Further to the information previously supplied, attached is a high level assessment of the waste water issues regarding servicing the site. I hope will find the report satisfactory, but should you need to discuss further please do not hesitate to contact me direct.

(See attached file: Melton Mowbray High Level Waste Water Impact Assessment - March 2011.doc)

Regards,

Peter

Peter Davies
Severn Trent Water
Commercial Development Advisor

 Mobile : 07771 938817
 peter.davies@severntrent.co.uk

From: Peter.Davies@severntrent.co.uk [<mailto:Peter.Davies@severntrent.co.uk>]
Sent: 18 March 2011 12:52
To: Paul Gilding
Subject: Re: Melton Mowbray Sustainable Urban Extension

Paul,

Firstly my apologies for the delay in getting the information to you.

I still haven't got the information regarding issues concerning sewerage and sewage treatment, but I have available comments regarding water supply:-

We have modelled the impact of a further 1500 properties in the area and it appears that the distribution network can maintain our levels of service without the need for major off-site reinforcements. We would however need to supply the new development by making sure that connections into the existing network offer the most robust supply network and therefore details of connections and mains into the site would depend on understanding the detailed layout of the development. Costs for on-site mains and mains connections to the network are usually funded by developers' contributions offset by STW from the revenue from future customers. Costs are not

available without detailed work, but it is thought that they are not likely to be exceptional. We are also aware of other development in the town of Melton and the possibility of supplying larger commercial demands at some time in the future and as a consequence reinforcements to the area may be needed at some time, but from the information available there appears to be the capacity available to enable development to take place.

I will forward our comments regarding the sewerage issues as soon as I have them, hopefully next week. Meanwhile attached are plans of the sewerage and water supply networks in the area. It would appear that neither are affected by the development.

(See attached file: water_plot.pdf)(See attached file: sewer_plot.pdf)(See attached file: sewer_plot2.pdf)

Please give me a call if you need to discuss.

Regards,

Peter

Peter Davies
Severn Trent Water
Commercial Development Advisor

☎ Mobile : 07771 938817
✉ peter.davies@severntrent.co.uk

▼ Paul Gilding <PGilding@melton.gov.uk>

Paul Gilding
<PGilding@melton.gov.uk>

16/03/2011 10:26

To "Peter.Davies@severntrent.co.uk"
<Peter.Davies@severntrent.co.uk>

cc

Subject: Melton Mowbray Sustainable Urban Extension

Dear Peter

Following on from our meeting of the 1st March 2011 I am enquiring as to how you are progressing in relation to the information we discussed regarding the confirmation for foul and surface water sewerage and potable water supply in that:-

- STW don't have any infrastructure in the way;
- What the existing capacity in the system is,
 - identifying any likely pinch points,
 - Options and likely costs to service the site

Development parameters are nominally 1,000 units, plus associated uses, but we would be grateful for any advice concerning any infrastructure thresholds beyond this – up to 1,500 units.

Thank you for your assistance in these matters so far and I look forward to receiving the information at your earliest possible convenience.

Regards

Paul Gilding

(Planning) Policy Officer
Melton Borough Council
01664 502361
07500 975642
pgilding@melton.gov.uk



High level assessment of potential sewerage and sewage treatment impacts from development proposals in Melton Mowbray.

Background

This is a high level desktop assessment (supported by notional modelling information where available) looking at waste water capacity impacts from long term development proposed by Melton Borough Council up to 2026.

This assessment considers the potential capacity to accommodate a Sustainable Urban Extension (SUE) to the north of Melton Mowbray for 1000-1500 dwellings plus other developments sites for approximately 1155 dwellings where locations are currently not known.

Surface Water

It is expected that surface water from all new development will be managed sustainably through use of sustainable drainage systems (SuDS). We would not expect surface water to be conveyed to the foul or combined sewerage system and where practicable we support the removal of surface water already connected to foul or combined sewer.

Whilst there are limited surface water sewers available in Melton Mowbray it is expected that where possible surface water would be managed on site and any off site disposal would be to local water features.

Foul Water Capacity Assessments

Northern Extension

A Sustainable Urban Extension site has been identified to the north of Melton for between 1000 to 1500 units for construction between 2014–2026, with an anticipated trajectory of 100 dwellings per year.

The development site is located on the northern extremity of the existing foul sewerage system and is on the opposite side of the catchment in relation to the sewage treatment works to the south west of the town. Consequently flows from this development will need to pass through the town centre sewerage system.

Whilst actual foul sewer connection points will be dependant on the developments layout the topography indicated by ground contours suggests that foul drainage from this site is likely to drain to multiple foul sewer connection points. However all existing foul sewers in the vicinity of the development are small 225mm diameter sewers with anticipated connection points located in:

- a) Nottingham Road (to the west of the site)
- b) Scalford Road (to the south)
- c) Wymondham Way (to the south of the site to the west of Melton Country Park)
- d) Melton Spinney Road (to the east)

An annotated extract from the public sewer records showing the potential connection points is included in Appendix A.

The following assessments are subject to further detailed modelling once development flows are confirmed.

Connection point A (Nottingham Road)

Topography indicates that any development to the west of Scalford Road is likely to drain by gravity to the existing 225mm diameter sewers in Nottingham Road.

There are no known sewer flooding problems reported downstream of the connection point. Historically there have been external flooding affecting properties along Nottingham Road but improvements were undertaken in 2004/05 to provide additional capacity to alleviate this flooding. In addition there is a combined sewer overflow further downstream at the junction of Welby Road/Nottingham Road which would also be affected by increased foul flows.

Whilst further hydraulic modelling will be required once development proposals are refined it is not envisaged that there will be significant capacity constraints although some localised capacity improvements may be required.

Potential impact: Low

Connection points B (Scalford Road) & C (Wymondham Way)

There are known flooding infrequent external flooding reported downstream of connection point B on Scalford Road in the vicinity of Scalford Road/Redwood Avenue. There is also a combined sewer overflow on Scalford Road near to the cattle market.

In December 2010 a hydraulic modelling assessment was undertaken for part of the development site for 300 dwellings to the east of Scalford Road. Topography indicates that any development to the east of Scalford Road would need to be pumped to connect to the existing 225mm diameter sewers in Scalford Road although an alternative gravity option is expected to be viable to a 225mm diameter sewer in Wymondham Way.

The hydraulic assessment considered both potential connection points i.e. a) pumped flows to Scalford Road and b) a gravity connection to Wymondham Way. These assessments concluded that connection of flows to Scalford Road will cause a slight deterioration in sewer performance along Scalford Road with a slight increase in spills at Scalford Road overflow and also slightly exacerbate the known external flooding along Scalford Road.

The alternative option of a gravity connect to connection point C in Wymondham Way did not identify any specific hydraulic issues. Whilst further hydraulic modelling will be required once development proposals are refined it is not envisaged that there will be significant capacity constraints for connection to Wymondham Way but that capacity improvements are likely to be required if significant development is connected to Scalford Road.

Potential impact: Low (Wymondham Way)/Medium (Scalford Road)

Connection points D (Melton Spinney Road)

Topography indicates that subject to development drainage layout, parts of this site will require pumping to connect to the existing foul sewer in Melton Spinney Road. Due to the location of existing sewers a gravity alternative may not be practical. Whilst there are no known reported sewer flooding problems downstream of this connection point the catchment hydraulic model for this area indicates potential capacity constraints in the vicinity of Belvoir Street but there are no reports of flooding in this area.

Once development proposals are able to confirm the number of dwellings likely to drain to Melton Spinney Road then further hydraulic modelling will be required to confirm if localised capacity improvements are likely to be required. However at this stage any capacity improvements are not envisaged to be significant.

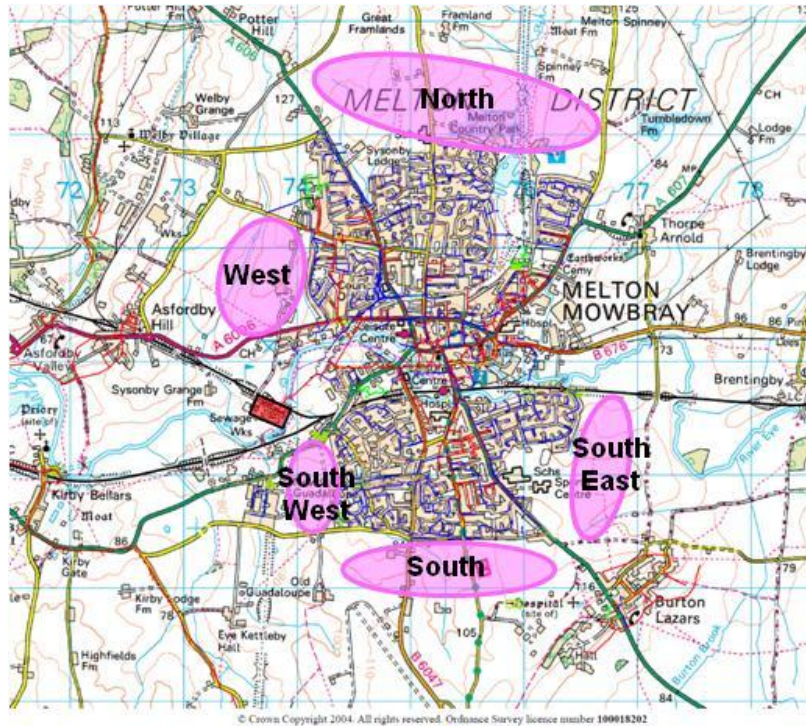
Potential impact: Low

Alternative development locations

Generally the sewerage system in Melton Mowbray performs satisfactorily and apart from large developments, we rarely expect significant problems with accepting additional foul flows from new development provided that storm water is managed in a sustainable manner.

As part of Melton Borough Council's development proposals it is understood that in addition to the Northern Strategic Urban Extension there is a requirement to accommodate approximately 1155 additional dwelling units across Melton by 2026. As the location of these developments are yet to be identified we are unable to provide anything other than general comments but once potential sites have been identified then further comments can be made.

Meanwhile the following assessments have been made based on general development in the following locations:



West - There are no known reported flooding downstream of this area and so subject to hydraulic modelling additional reasonable levels of development in this locality is not envisaged to have significant capacity constraints. Due to topography development in this area may require pumping.

Potential impact: Low

South West - There are no known reported flooding downstream of this area and so subject to hydraulic modelling additional development in this locality is not envisaged to have significant capacity constraints. Due to topography development in this area is likely to require pumping.

Potential impact: Low

South - There are some isolated infrequent external known flooding problems reported downstream of this area. As the current sewerage in this area generally consists of small diameter sewers there will be limited scope to accommodate significant development but further hydraulic modelling would be required should additional development be identified in this locality.

Potential impact: Low/Medium

South East - There are some isolated internal and external known flooding problems reported downstream of this area. Further development in this locality is likely to require capacity improvements although further hydraulic modelling would be required should additional development be identified in this locality.

Potential impact: Medium

Lake Terrace Terminal Pumping Station

Melton Mowbray is served by Melton Mowbray sewage treatment works located to the south west of the town. All flows are pumped to the works via the terminal sewage pumping station off Lake Terrace.

As all new development in Melton Mowbray will need to pass through this pumping station further assessments will be required to confirm availability of pumping capacity. However at this stage no significant capacity issues are envisaged.

Sewage Treatment Capacity

Melton Mowbray sewage treatment works currently serves a population equivalent of around 57,200 and is operating within its 9,273m³/day Dry Weather Flow consent. Comparison of current measured dry weather flow against the consented dry weather flow indicates there is theoretical headroom to be able to accommodate approx 3,300 additional properties within the current DWF consent. The current treatment processes are performing well against its consented quality parameters.

It is therefore envisaged that there will be adequate spare capacity to accommodate the development being proposed across Melton Mowbray.

Should additional treatment capacity be required in order to accommodate further development above the existing capacity then we do not envisage any issues as there are no land or other physical constraints preventing expansion.

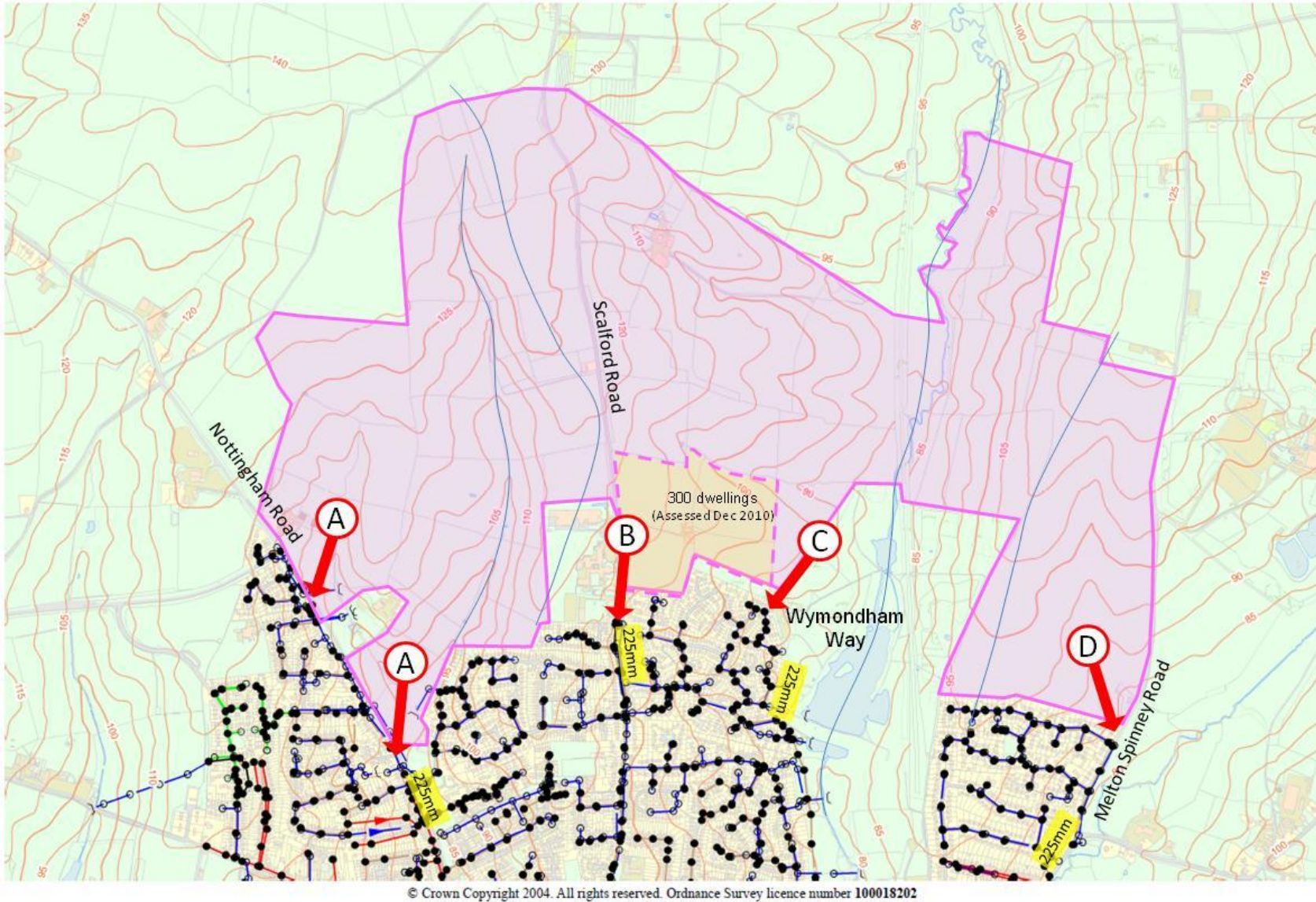
Current consent details are summarised below:

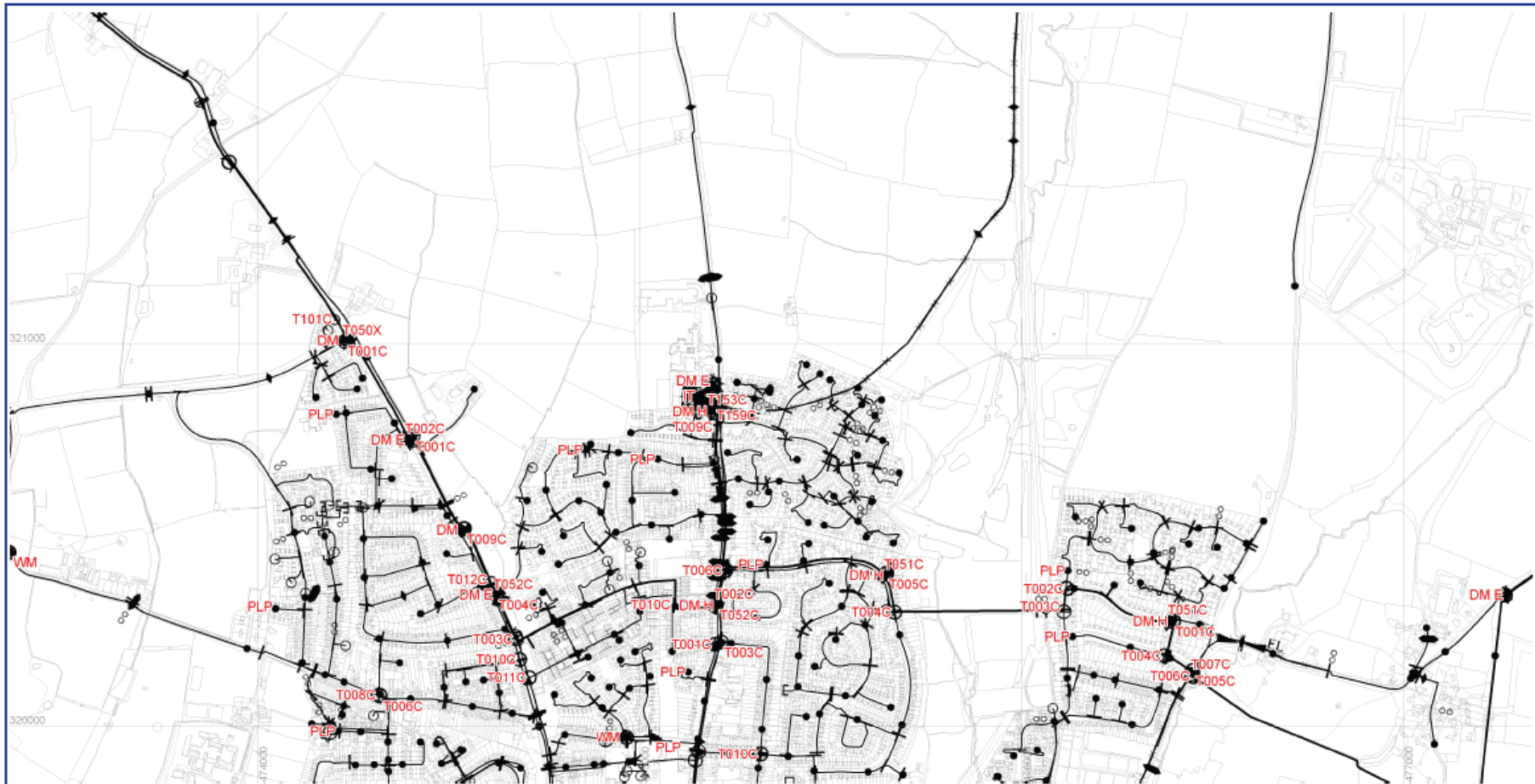
Receiving Watercourse	Current Consent Information							
	Consent Reference	FFT	DWF (m ³ /d)	Amm (Summer)	Amm (Winter)	BOD (mg/l)	SS (mg/l)	P
River Wreake	T/55/45835/R	24,278	9,273	5	10	20	45	2

No major investment/improvements are currently planned at Melton Mowbray sewage treatment works.

Paul Hurcombe
 Severn Trent Water - Infrastructure Strategy
 March 2011

Appendix A – Extract from sewer records showing potential foul sewer connection points.





<p>— Distribution Main</p> <p>— Trunk Main (local/primary)</p> <p>— Strategic Main</p> <p>— Fire Supply Main</p> <p>— Fire Main</p> <p>— Non-Domestic Customer Service Pipe</p> <p>— Domestic Customer Service Pipe</p> <p>— Abandoned Main</p> <p>— Elevated Main</p> <p>— Aqueduct</p> <p>— Duct</p> <p>— Cable, Earthing</p> <p>— Cable, Optical Fibre/Instrumentation</p> <p>— Cable, Low Voltage</p> <p>— Cable, High Voltage</p> <p>— Cable, Other</p>	<p>▲ Pumping Facility</p> <p>▲ Booster Facility</p> <p>■ Potable Water Storage</p> <p>● Water Tower</p> <p>◇ Well / Borehole</p> <p>□ Water Treatment Works / Chamber</p> <p>◆ Draw-off Tower</p> <p>○ Bower Point</p> <p>⊗ Water Facility Connection</p> <p>⊕ Quality Sample Point</p> <p>⊖ Water Isolation Valve (Closed)</p> <p>⊕ Water Isolation Valve (Open)</p> <p>⊖ Water Isolation Valve (Partially Open)</p> <p>⊕ Water Air Valve</p> <p>⊖ Pressure Reducing Valve</p> <p>⊕ Pressure Sustaining Valve</p> <p>⊖ Non-Return Valve</p> <p>⊕ Float Valve</p> <p>⊖ Hydrant (Single/Double)</p> <p>⊕ Washout (Single/Double)</p> <p>⊖ Bulk Meter</p> <p>⊕ Water Hatch Box</p> <p>⊖ Pressure Tapping</p> <p>⊕ Insertion Flow Meter Point</p> <p>⊖ Water Chemical Injection Point</p> <p>⊕ Motive Water Point</p>	<p>Change in Characteristic</p> <p>○ Marker Post</p> <p>○ Cable Junction</p> <p>○ Anode</p> <p>□ Boundary Box</p> <p>○ Stop tap</p> <p>○ Cross Piece</p> <p>○ Strainer</p> <p>○ Lifting Post</p> <p>○ Reservoir Meter</p> <p>○ Housing, Building</p> <p>○ Housing, Kiosk</p> <p>○ Housing, Other</p> <p>○ Pipe Support Structure</p> <p>○ Open Pipe</p> <p>○ Discharge</p> <p>○ End Cap</p> <p>○ SSSI Area</p> <p>○ Access Right</p> <p>○ Pre-1937 Properties</p>	<p>MATERIALS</p> <p>AC - ASBESTOS CEMENT</p> <p>ALK - ALKATHINE</p> <p>C - CONCRETE</p> <p>CI - CAST IRON</p> <p>CU - COPPER</p> <p>DI - DUCTILE IRON</p> <p>GP - GLASS FIBRE</p> <p>GRC - GLASS REINFORCED CONCRETE</p> <p>GRP - GLASS REINFORCED PLASTIC</p> <p>HPPH - HIGH PERFORMANCE POLYMER</p> <p>HDPE - HIGH DENSITY POLYETHYLENE</p> <p>LEAD - LEAD</p> <p>MDPE - MEDIUM DENSITY POLYETHYLENE</p> <p>PC - POLYESTER CONCRETE</p> <p>PF - PITCH FIBRE</p> <p>PP - POLYPROPYLENE</p> <p>PCC - POLYESTER CONCRETE</p> <p>PVC - POLYVINYL CHLORIDE</p> <p>RPP - REINFORCED PLASTIC MATRIX</p> <p>SI - SPUN IRON</p> <p>ST - STAINLESS STEEL</p> <p>UPVC - UNPLASTICISED PVC</p>	<p>LINING</p> <p>SI - BITUMEN</p> <p>CL - CLAY</p> <p>PL - PLASTIC</p> <p>RL - RESIN</p> <p>O - OTHER</p>
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Severn Trent Water Limited
Asset Data Management
PO Box 5344
Oswestry
CV13 9PT
Telephone: 0845 601 9516

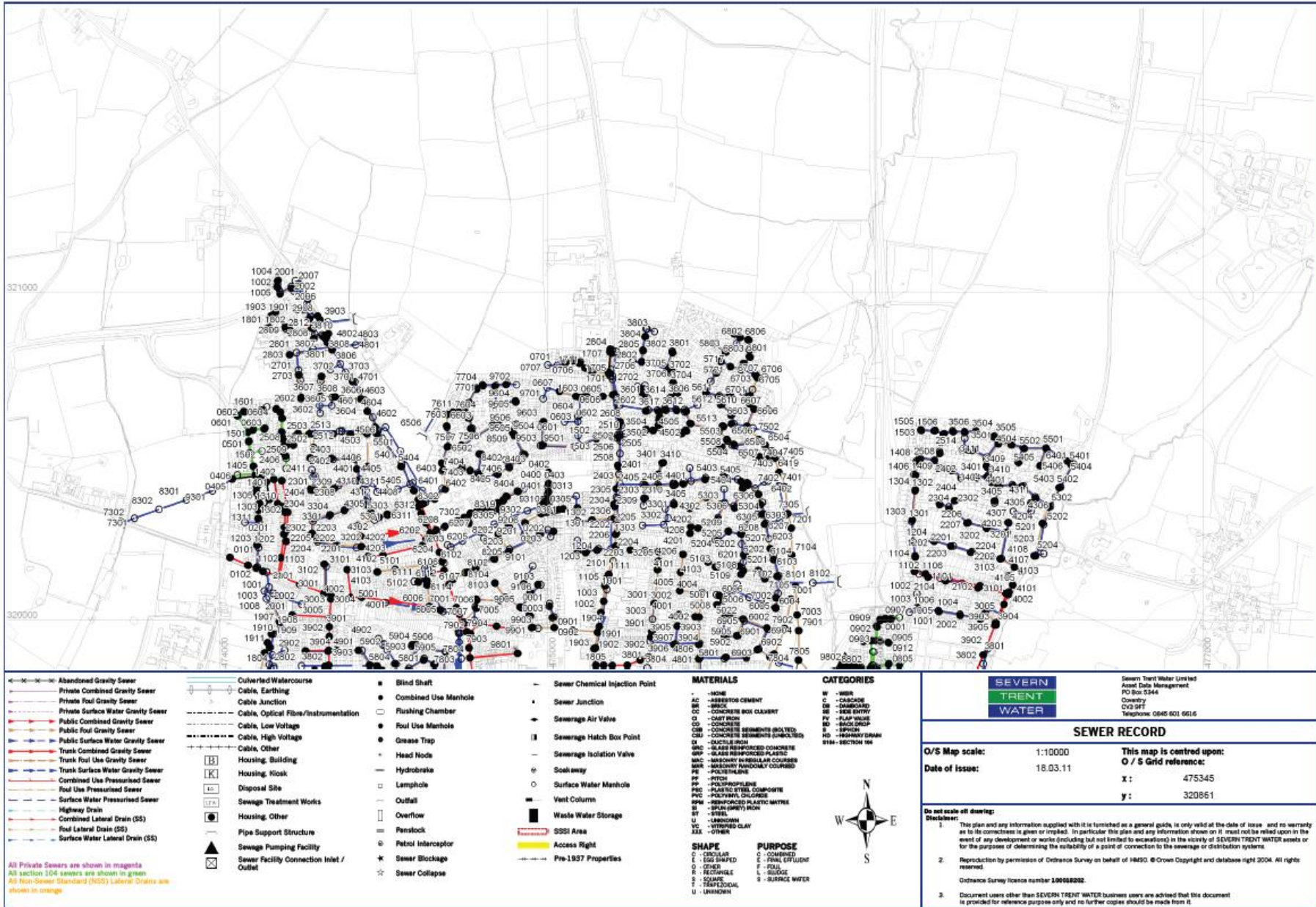
WATER MAINS RECORD

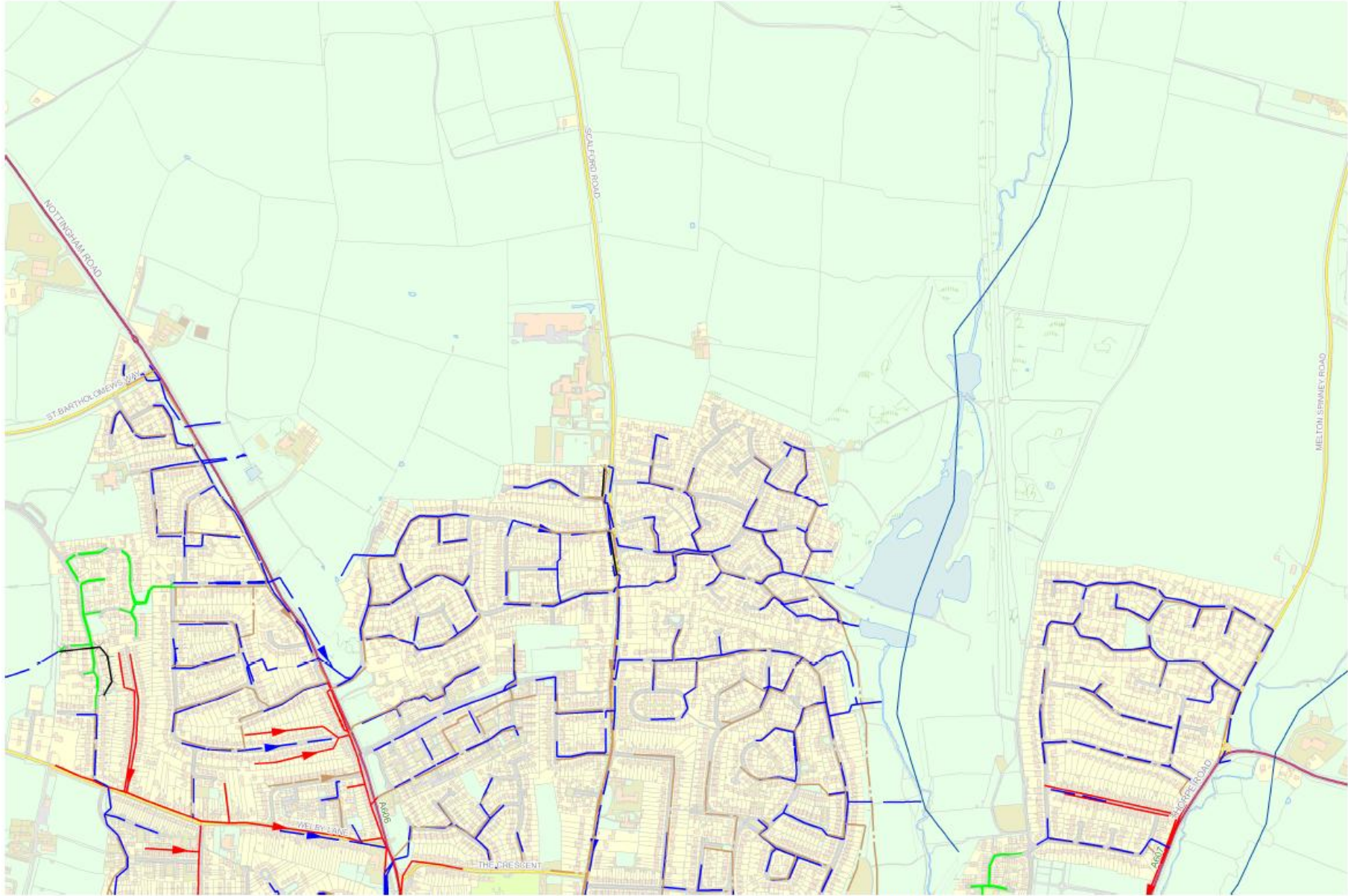
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Do not scale off drawing:
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