10<sup>th</sup> October 2011

Royal Haskoning 8<sup>th</sup> Floor Portland Tower Portland Street Manchester M1 3LF

FAO - Allison O'Neill

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SEVERN TRENT WATER

Severn Trent Water Ltd Regis Road

Wolverhampton WV6 8RU

Tel: 01902 793871 Fax: 01902 793971

www.stwater.co.uk net.dev.west@severntrent.co.uk

Contact: Asset Creation

Your ref:

Our ref: ME/WT29447

Dear Allison,

## <u>Proposed Redevelopment at Leadon Way, Ledbury,</u> Herefordshire, HR8 2SS

I refer to your Development Enquiry Request in respect of the above site. Please find enclosed the sewer records that are included in the fee together with the Supplementary Guidance Notes (SGN) referred to below.

## **Protective Strips**

Having viewed the statutory sewer records. I can confirm the Company have a 450mm diameter sewer and a 300mm diameter surface water sewer passing through the southeast if the site. We also have a 975mm diameter surface water sewer, located west of the site. For sewers of this diameter, we have protective strips of 5metres, either side of the pipe, measured from the centreline. Thus, providing a of 10metres protective strip across the diameter of the pipe. You will need to ensure, your proposed development layout accommodate our requirements. You could possibly divert the public sewers under Section 185 of the Water Industry Act 1991. If this is required, you can obtain copies of our current application form and guidance notes from our website (www.stwater.co.uk). Please note, there is not automatic legal right for any sewer diversion to be completed on a self construct basis. If the works are deemed, high risk then STWL will need to complete them on your client's behalf, and it is known to take a considerable amount of time for the Company to deliver a sewer diversion. Therefore, if a sewer diversion is ultimately required, it is advisable to make your application at the earliest opportunity.



## Foul Water Drainage

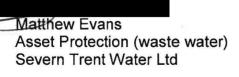
The enclosed sewer record extract shows there is a 450mm diameter public foul sewer passing through the site and a 375mm foul sewer located within Leadon Way. A foul connection to either sewer at a new or existing manhole on the sewer, (unless you utilise an existing connection) would be acceptable to the Company subject to formal S106 approval (see later). To note, there is no reported or predicted flooding on either sewers.

## Surface Water Drainage

The sewer records show a 300mm and 975mm surface water sewer passing through/adjacent the site. Should comprehensive testing demonstrate that soakaways are not feasible to dispose of surface water on the site, evidence should be submitted. If such evidence is received (which would satisfy SGN2), a surface water connection to the aforementioned sewers at a new or existing manhole on the sewer (if it is a new connection) would be permitted with the discharge rate restricted to the proven existing rate (which should be determined by an existing connectivity survey) less 20%, as per SGN3.

For any new connections into the public sewer network or the reuse of existing sewer connections, you will need a Section 106 pack that includes guidance notes and an application form. Our New Connections department handles all new connections enquiries and applications. To contact them for an application pack please call 0800 7076600 (or visit <a href="https://www.stwater.co.uk">www.stwater.co.uk</a>) and quote the reference number above. For the avoidance of doubt, it is suggested that a copy of this letter is submitted with the future Section 106 submission. Applications to make such connections should be made separately from any application for adoption of the related sewers under Section 104 Water Industry Act 1991 as amended by the Water Act 2003.

Please quote WT29447 in any future correspondence (including e-mails) with STW Limited. Please note that Developer Enquiry responses are only valid for 6 months from the date of this letter.



- 1. As you may be aware the Government has issued national advice in the form of "Planning Policy Statement 25: Development and Flood Risk" that seeks to reduce the impact of development on surface water runoff. Annex F of PPS25 is particularly relevant. This advice is generally followed by Local Authorities through both the Building Regulations (Approved Document H) and the imposition of appropriate planning conditions. STWL welcomes this advice and supports such planning conditions that impose flow restrictions. STWL encourages the use of SUDS as an environment-friendly approach to the disposal of surface water runoff from development sites. This is consistent with the weight now given to such principles in the Building Regulations (Approved Document H, April 2002). It is considered that in accordance with current guidance, if disposal of storm runoff from the development is dealt with as follows, relevant planning conditions could be satisfied:
- 2. By soakage into the site's subsoil, subject to suitable ground soakage capacity and any contamination present. As you may know, in addition to traditional soakaways, a popular approach is the use of permeable pavements or storm cells located under parking areas. Soakage capability should be determined in accordance with Section 2 of Approved Document H3 (2002 Edition) of the Building Regulations and so certified by a suitably qualified person. If ground soakage proves inadequate, evidence should be submitted to Severn Trent Water Limited. The evidence should be either percolation test results or a statement from the SI consultant (extract from report or a supplementary letter) stating that soakaways would be ineffective. A connection to public sewerage (existing or adoptable) would then be considered reasonable with flows as:
- 3. Brown field development site: If storm runoff from the existing development is connected to the public sewerage system, then peak storm flows from the proposed development up to that deriving from the previous connected impermeable area may be connected to the public sewerage system subject to both the details of the existing storm connection arrangements and hydraulic calculations, including any attenuation (tank sewers, storage cells etc)/associated control devices (Hydrobrake, orifice plate etc for 30 year design) being submitted to Severn Trent Water Limited (see later). For existing storm connections to the public foul sewerage system, any new storm connection to the public storm sewerage system (if available) should be limited to 5 litres/sec/ha (option A) OR a peak flow to be determined by the Company from its developer-funded hydraulic modelling of the public storm sewerage system (option B). The developer may choose either option. Existing flows should be assessed as the lower of Q=2.78x50xA<sub>imp</sub> I/s (A<sub>imp</sub> ha) and the unsurcharged capacity of the outfall pipe(s). This will be an improvement, as sought by PPS25. In addition to this restriction, for Brownfield developments, the Company would also suggest a reduction in surface water flow to public sewerage systems of 20%. This is in line with Environment Agency policy and current Government guidance. It should be noted that the Company would like to see any flow attenuation based on a 30 year critical duration storm design. This standard differs from that directed by the EA.
- 4. Green field development site: If the site is a green field development ie not involving any demolition of buildings or paved areas connected to the public sewerage system, then the storm runoff from the proposed development may be connected to the public sewerage system subject to peak storm flows (30 year design storm) being limited to a green field runoff of 5 litres/sec/ha (subject to a minimum of 5 litres/sec), applied to the gross area of the site. Hydraulic calculations including any attenuation (tank sewers, storage cells etc)/associated control devices must be submitted to STWL.
- 5. It is recommended that any SI information and hydraulic calculations, all as noted above be submitted to the relevant contact prior to the submission of any Section 106 applications.

