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## **Application for Permit Variation**

**Permit N° 53997 (New Tip)**

# **Document NTPV 03 (C4)**

Odour Management Plan

# Odour Management Plan – April 2019



**Springside Mills,  
Belmont Road,  
Bolton,  
Manchester.  
BL7 9QU**

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## **1.0 Introduction**

This Odour Management Plan outlines the methods to be employed by Urban Springside Ltd. to systematically assess, reduce and prevent potentially odorous emissions during site operations. The Odour Management Plan is a working document with the aim of ensuring that:

- Odour impact is considered as part of the site inspection regime.
- Odour is primarily controlled at source by considered operational practices which include physical and management control measures.
- All appropriate measures are taken to prevent, or, where not reasonably practicable, reduce, odorous emissions to air.

This Odour Management Plan details the potential impact of odour release and the control measures to be employed to mitigate the risk. This is supported through monitoring procedures and the review of documented complaints.

The methodologies detailed in this Odour Management Plan has been prepared in accordance with Environment Agency Guidance 'H4 Odour Management'.

## **2.0 Site background information**

Urban Springside Ltd. has acquired the Springside Mills property at Belmont, Lancashire. Accessed off Belmont Road (A675) the site is located north of Bolton (see Appendix A); the Mills are a closed, and now derelict site, which has been approved for redevelopment to a residential end land use.

Historically, the site was used to manufacture paper and tissues, ceasing operations in 2006. The operational area of the site occupies approximately 16 acres consisting of predominantly single storey industrial buildings varying in age and construction. 2 no landfills associated with the former works are also present. This operational area is part of a larger holding of circa 129 acres which is predominantly undisturbed fields and woodland located in and around the Three Nooked Shaw Brook valley (see Appendix B).

In order to develop the site miscellaneous demolition and remediation operations are to be carried out. These works include the excavation and treatment of the 'New Tip' contents as well as the restoration / capping of the 'Old Tip'.

### **3.0 Sources, receptors and impacts**

#### **3.1 Sources**

Odour may be released during the following activities:

- Excavation and treatment of waste paper sludge - 'New Tip' (circa 6 weeks)
- Initial re-grade of the waste paper sludge - 'Old Tip' (circa 2 weeks)
- Leachate management/treatment – 'New Tip' (circa 10weeks)
- Gas venting - 'Old Tip' (ongoing post restoration).
- Excavation / remediation of hydrocarbon impacted soils - Site (duration unknown).

#### **3.2 Receptors**

Once released odour pathway will be via air transport (dispersion). Prevailing winds are influenced by the local topography which generally dictate a north / north-easterly heading. The nearest receptors are (see also Appendix C):

- Public footpath adjacent to the 'New Tip' adjacent to the eastern developable boundary.
- Three Nooked Shaw Brook running through site from the west.
- Eagley Brook running through site NNW-SSE, immediately beyond the Public footpath.
- Lower Fold Farm located between 200m-300m to the north-west.
- Springside Cottages located 300m-400m to the south.
- Hampson's Gate House located 500m to the south west.

### 3.3 Impacts

3.31 Disturbance of waste paper sludge - Field trials carried out to replicate the excavation and treatment of waste paper sludge were carried out under the supervision of Smith Grant LLP (environmental consultants). During excavation works an odour was apparent immediately next to the operation, however, at 50m the odour was not discernible as the odour rapidly diminishes as volatile substances disperse. Urban Springside Ltd. were advised that the odours, as classified on the Hedonic Scale, would probably be classed as 'moderately offensive', however, they were of a low emission rate, being rapidly dispersed. Based on this it is not anticipated that they should cause nuisance at the site boundaries.

3.32 Leachate management – currently leachate discharges from the 'New Tip' at a low rate, being discharged into Eagley Brook via the 'Ochre Culvert' (discharge consent NPSWQD006635). There is no discernible leachate odour at this discharge point. During excavation and treatment of waste paper sludge in the 'New Tip' it is anticipated that the leachate levels will increase, however, arrangements are in place to fully contain, sample and treat such leachate prior to discharge (or removal off site by tanker for disposal at a suitable facility if the conditions of the discharge consent can not be achieved). It is not anticipated that the odour of the leachate will increase noticeably.

3.33 Gas venting – the odour of landfill gases currently being emitted from the 'Old Tip' are not noticeable. A permeable restoration cover system is to be established which will enhance natural methane oxidation within an aerobic soil layer. A vented methane barrier is also to be established to prevent migration of the gases to the proposed residential properties. It is not anticipated that any gas venting odour will be noticeable due to the low volumes being emitted.

3.34 Hydrocarbon impacted soils – several hydrocarbon 'hotspots' have been identified on site which are to be excavated/treated/disposed of during remediation works. Although an odour will be associated with these works is anticipated that it will be transitory at worst being diluted prior to any dispersal beyond the site boundary.



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#### **4.0 Odour control measures**

Management and physical control measures have been prepared to control any potential odour emissions.

##### **4.1 Site Management responsibilities**

The Urban Springside Ltd. Project Manager will have the responsibility for ensuring that nuisances/hazards from odours generated on site are prevented/minimised. Regular 'Progress Meetings' will be carried out to discuss current and proposed site operations. These discussions will include the impact of works with regards to the environment including any odorous emissions.

##### **4.2 Operational control measures**

Odour generation on site is anticipated to be relatively low. However, works will proceed in a manner to minimise any potential nuisance:

- Excavated waste paper sludge has a high-water content. This is to be maintained.
- Excavation operations are to be carried out in a steady controlled manner causing minimal disturbance to the source material.
- The waste paper sludge is to be treated with cement. This will stabilise the source material with regards to water and odour.
- If it becomes evident that odours are excessive; passing beyond the site boundary, works are to cease, and Smith Grant LLP contacted for advice.
- If necessary, an odour atomiser will be obtained to neutralise/break down any odours being generated.



## **5.0 Monitoring**

Prior to any works commencing the Urban Springside Ltd. Project Manager is to check and document the weather conditions on the '*Daily Site Diary*'. This enables potential odour issues to be predicted, with proactive remedial actions implemented prior to any issues arising. The assessing of the weather conditions should be an ongoing process with the information recorded at regular intervals.

The Urban Springside Ltd. Project Manager (or designated person – 'DP') will carry out odour monitoring a minimum of daily, along the site boundary, with all information recorded on the ***Daily Odour Inspection Form*** (See Appendix D). If planned works are being carried out which may generate odour these inspections are to be increased as necessary.

Odour monitoring is to be carried out in the following manner:

- The person carrying out the odour monitoring will walk slowly along the boundary breathing normally. If an odour cannot be detected in this way, the person is to periodically stand still, face upwind and inhale deeply.
- If an odour is identified at site boundary, the source of the odour is to be identified and any corrective/remedial actions carried out to minimise any potential receptor impact.

Wherever possible, odour inspection is to be carried out by a person unlikely to suffer from adaptation of odour. All staff responsible for assessing odour will receive appropriate training from the Urban Springside Ltd. Project Manager. Each person carrying out odour inspections will initially be accompanied by the Urban Springside Ltd. Project Manager to ensure that the nature and offensiveness of any odour detected is being perceived similarly.

People carrying out the odour inspections will be instructed to avoid strong food or drinks for at least 1 hour prior to inspection.

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Personnel who have a cold, sore throat or sinusitis will not be allowed to carry out an odour assessment.

All on site personnel are responsible for reporting any odour issues to the Urban Springside Ltd. Project Manager immediately. This will be instructed during the site-specific site induction. Any odour issues reported to the Urban Springside Ltd. Project Manager are to be investigated immediately with the information recorded on the ***Odour Investigation Form*** (See Appendix E).

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## **6.0 Odour complaints procedure**

Any complaints are to be reported to the Urban Springside Ltd. office immediately.

Any odour complaints are to be entered onto an ***Odour Complaints Form*** (See Appendix F) by the Urban Springside Ltd. Project Manager; being entered into the relevant section of the CPH&SP.

The Urban Springside Ltd. Project Manager is to ensure that:

- The complaint is investigated to identify the cause of the odour.
- Any abnormal on-site activity is to be assessed and if necessary preventative action taken to prevent a reoccurrence of the same problem. Any actions are to be documented.
- The investigation is to be forwarded to the relevant Director for review/comment.
- The Complainant is to be contacted and updated on the investigation and the actions taken.
- The complaint is to be discussed at the following 'Progress Meeting' identifying the cause and the measures implemented to prevent any reoccurrence.
- Any changes to site procedures to prevent reoccurrence are to be documented and conveyed to site personnel in a TBT.
- If the investigation indicates that the complaint has not been justified this will also be recorded on the Odour Complaints Form.

## **7.0 Odour mitigation procedure**

Elevated odour levels may be identified by either:

- On-site reporting of an odour by site personnel.
- Detection of odour at the site boundary as part of the monitoring procedure.
- By receipt of an odour complaint from a third party.

Any elevated odour levels identified are to be mitigated as follows:

- The Urban Springside Ltd. Project Manager will carry out an assessment of the works causing the elevated odour levels to ensure that it is being carried out as detailed in the relevant 'Method Statement'.
- If works are found to be being carried out incorrectly all associated personnel are to be re-briefed on the associated 'Method Statement' to ensure correct procedures are followed.
- If the works are identified as being carried out as detailed in the relevant 'Method Statement', and elevated odour levels are still being generated, works are to be modified to reduce the elevated odours.
- If works cannot be modified sufficiently to reduce elevated odour levels to an acceptable level, works are to cease, and Smith Grant LLP consulted as to how to proceed. Additional measures are to be implemented as directed.
- Any outcome of the mitigation is to be documented and discussed at the following 'Progress Meeting'.
- Operational procedures will be reviewed by the relevant Director to confirm compliance.

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## **8.0 Emergency plan**

An emergency incident may result in the loss of control of odorous substances and could have an unacceptable short-term impact on the local community.

**8.1 Abnormal meteorological conditions** – such as low wind strength, low pressure, high temperatures may promote high levels of odour either on site or at nearby receptors. A wind direction towards receptors may increase odour levels. Conversely, very low wind strength may minimise dispersion and potentially create a build up of odour. High temperatures may also increase emissions.

Mitigation measures for works impacted by abnormal meteorological conditions are the same as those detailed in Section 7.

***It is not anticipated that any site operations have the potential to cause an emergency incident.***

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## **9.0 Compliance and review**

The Odour Management Plan is to be managed in accordance with the Urban Regen Ltd. Environmental Management System accreditation to ISO 14001.

It will be the responsibility of the Urban Springside Ltd. Project Manager to ensure that the Environmental Management System is adhered to.

It will be the responsibility of the relevant Director to carry out monitoring, auditing and evaluation of site performance to ensure compliance with the ISO 14001 standard.

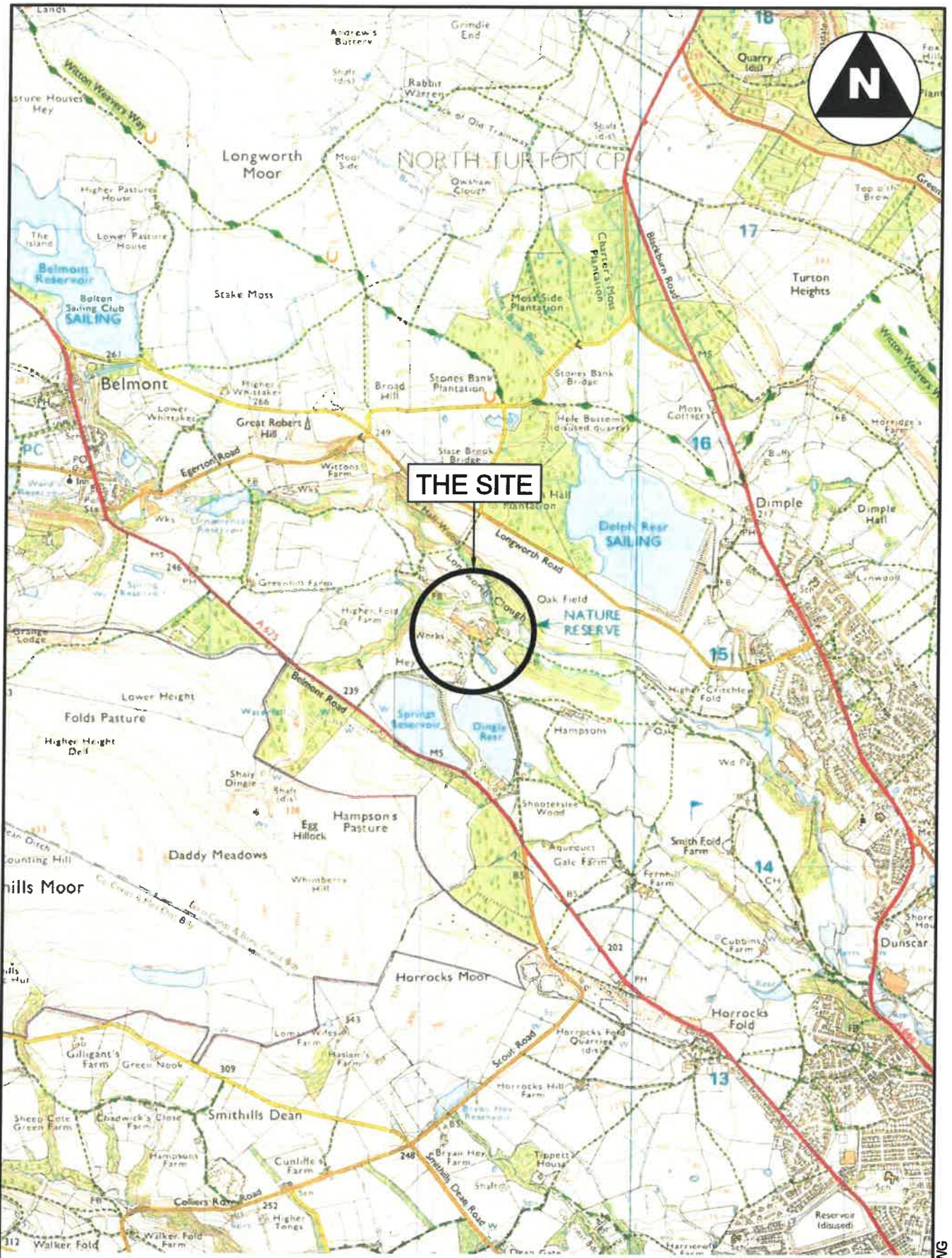
Odour control methods will be reviewed through internal audits as part of the Environmental Management System.

External audits will be carried out to that ensure that the ISO 14001 standard is retained.

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## Appendix A Site location plan





Reproduced from the 2000 1:25 000 Explorer 287 map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright. EDGE Consultants UK Ltd, Atlas House, Simonsway, Manchester, M22 5PP. AL51156A.

SCALE 1 : 25 000 - AT A4



TITLE  
**SITE LOCATION PLAN**

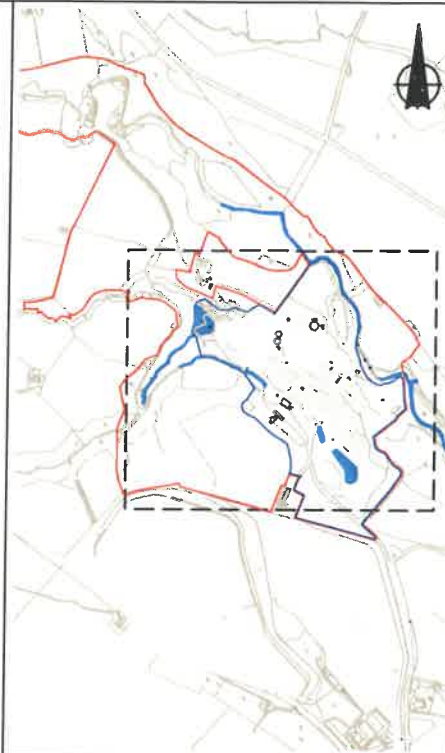
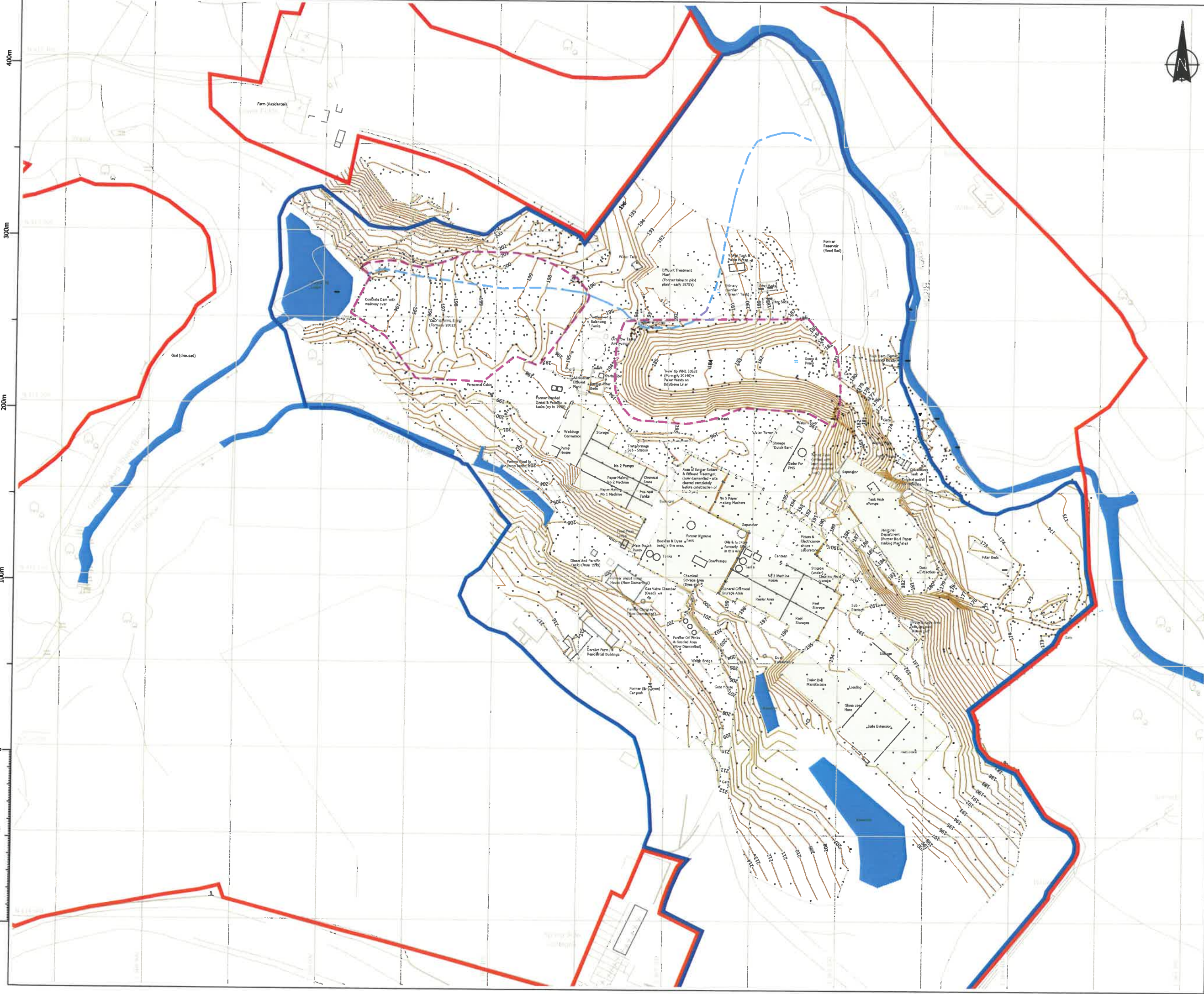
FIG. 1A

535.2-060914-D1.3-SITE.DWG

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## **Appendix B**    Topographical landform plan





**Location Plan** Scale NTS

- Notes:**
- Ownership boundary —
  - Developable boundary —
  - Major contour —
  - Spot level •
  - Buildings (within developable boundary) □
  - Water bodies ■
  - Culverted watercourse - - -
  - Approximate tip boundaries (see note 6) - - -

- Notes**
1. This plan is to be read in conjunction with all relevant drawings and specifications associated with the Former Kruger Mills works.
  2. All topographic survey data detailed on this plan was extracted from drawing 'RP001/100 dated Nov 2008' provided by RIP Surveying Consultants.
  3. The contours detailed on this drawing are the interpretation of Urban Regen Ltd. using the topographic survey information detailed on drawing 'RP001/100'.
  4. The contours detailed below building footprints represent the slab levels of the associated building.
  5. Trees / vegetation have been omitted for clarity.
  6. The tip boundaries as detailed are approximates only. No definitive drawings have been found detailing the actual boundaries.

**Survey Information:**

Coord System:	Coord Type:	Primary Survey Control:	Secondary Survey Control:
Local	Grid	Site	OSBM

**Urban Regen Ltd.**  
 23 Springside,  
 Edworth,  
 Bolton,  
 BL7 9ES  
 Tel: 07526 595 933  
 Email: info@urbanregen.co.uk  
 Web: www.urbanregen.co.uk

Client:  
**Urban Springside Ltd**

Project:  
**Former Kruger Tissues**

Title:  
**Topographic landform**

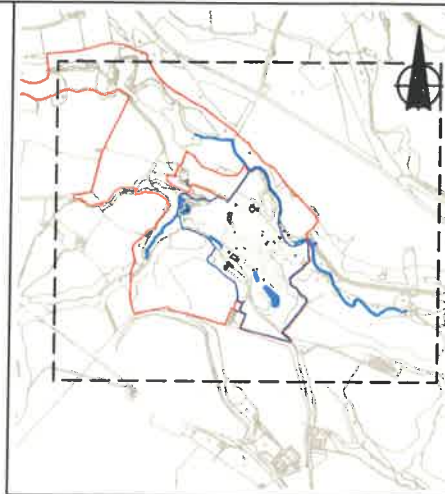
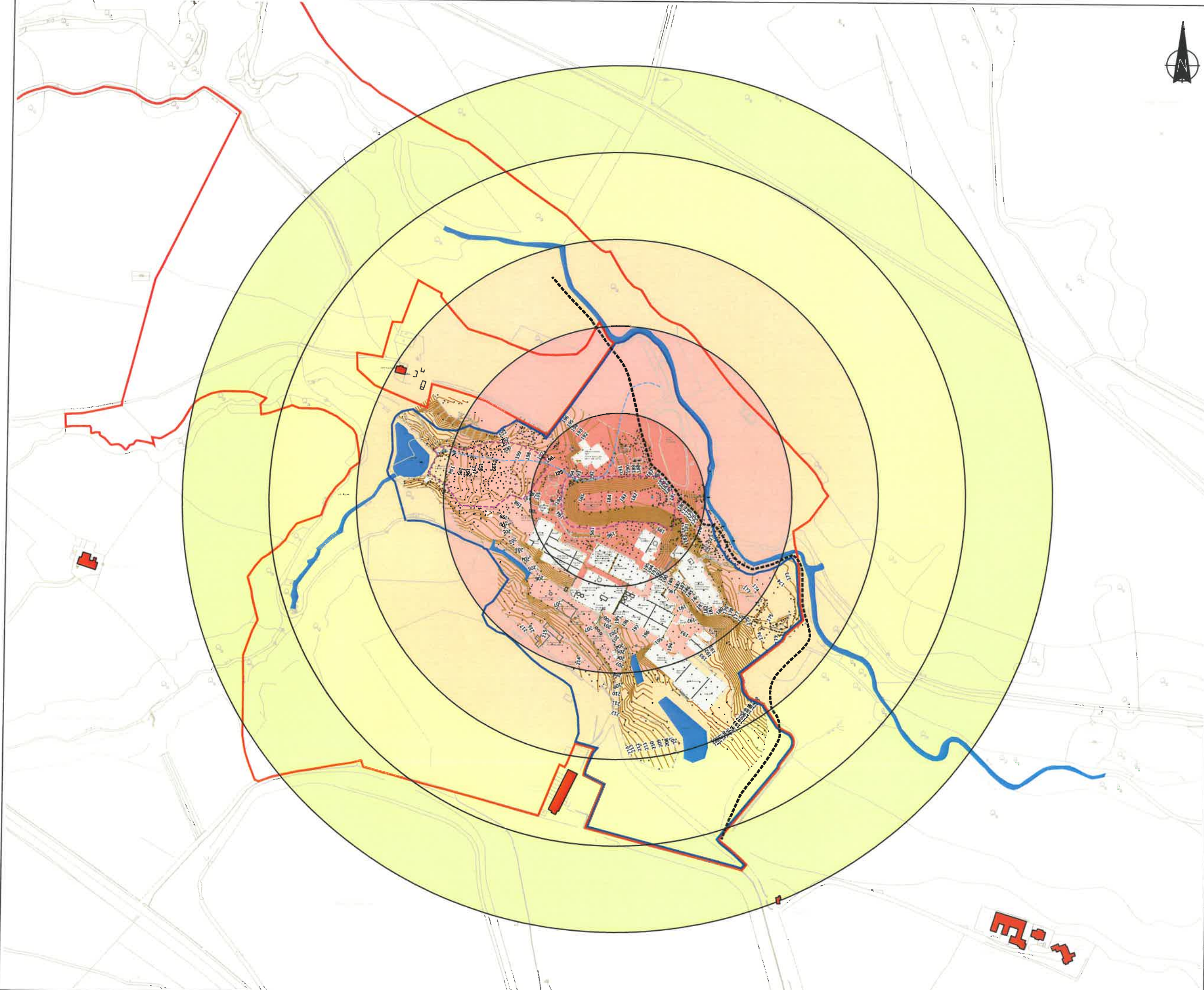
Scale:	First Issue:	Drawn:	Checked:
1:2000 @ A3	14th Sept 2018	D.J.Woodrow	D.J.Woodrow

Drawing No: **USL-18-001**



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## Appendix C Environmental receptor plan



Location Plan Scale NTS

**Notes:**

- Ownership boundary —
- Developable boundary —
- Major contour —
- Spot level location x
- Existing buildings (within developable boundary) ■
- Immediate water bodies ■
- Culverted watercourse - - -
- Approximate tip boundaries (see note 6) - - -
- Approximate alignment of public footpath - - - -
- Immediate residential receptors ■
- Distance of receptors from works (see note 7)
  - 0 - 100m ■
  - 100m - 200m ■
  - 200m - 300m ■
  - 300m - 400m ■
  - 400m - 500m ■

- Notes**
1. This plan is to be read in conjunction with all relevant drawings and specifications associated with the Former Kruger Mills works.
  2. All topographic survey data detailed on this plan was extracted from drawing 'RP001/100 dated Nov 2008' provided by RJP Surveying Consultants.
  3. The contours detailed on this drawing are the interpretation of Urban Regen Ltd. using the topographic survey information detailed on drawing 'RP001/100'.
  4. The contours detailed below building footprints represent the slab levels of the associated building.
  5. Trees / vegetation have been omitted for clarity.
  6. The tip boundaries as detailed are approximates only. No definitive drawings have been found detailing the actual boundaries.
  7. The distances associated with the receptors are centred on the 'New Tip' where the majority of the earthworks are to be carried out.

**Survey Information:**

Co-ord System:		Co-ord Type:		Primary Survey Control:		Secondary Survey Control:	
Local	Grid	Site	OSBM				

Urban Regen Ltd.  
23 Springside,  
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BL7 7PS  
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Email: info@urbanregen.co.uk  
Web: www.urbanregen.co.uk

Client: **Urban Springside Ltd**

Project: **Former Kruger Tissues**

Title: **Environmental receptor plan**

Scale: 1:4000 @ A3	First Issue: 5th April 2019	Drawn: D.J.Woodrow	Checked: D.J.Woodrow
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Drawing No: **USL-18-006**

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## Appendix D Daily Odour Inspection Form



Daily Odour Inspection Form					Date
<b>Time of test</b>					
<b>Location of test</b> <small>e.g. street name etc.</small>					
<b>Weather conditions</b> <small>(dry/rain/fog/snow etc.)</small>					
<b>Temperature</b> <small>(warm/cold etc. or degrees if known)</small>					
<b>Wind strength</b> <small>(none/light/steady/strong/gusty etc.)</small>					
<b>Wind direction</b> <small>(N/NE/E/SE/S/SW/W/NW)</small>					
<b>Odour intensity</b> <small>(see table below)</small>					
<b>Odour duration</b> <small>(during the test)</small>					
<b>Smell</b> <small>(what does the odour smell like?)</small>					
<b>Nearest receptor sensitivity</b> <small>(see table below)</small>					
<b>Source</b> <small>(Where is the odour coming from)</small>					
<b>Comments/observations</b>					
<b>Sketch of test locations</b>					
<p><b>Intensity</b>                      0 – No odour 1 – Very faint odour 2 – Faint odour 3 – Distinct odour 4 – Strong odour 5 – Very strong odour 6 – Extremely strong odour</p>					
<p><b>Receptor sensitivity</b>                      Low (e.g. Footpath, road etc.) Medium (e.g. industrial or commercial workplaces etc.) High (e.g. housing, pub/hotel etc.)</p>					



# Appendix E Odour Investigation Form

<b>Odour Investigation Form</b>	
<b>Date</b>	
<b>Time</b>	
<b>Location</b>	
<b>Reported by</b>	
<b>Weather conditions</b> <small>(dry/rain/fog/snow etc.)</small>	
<b>Temperature</b> <small>(warm/cold etc. or degrees if known)</small>	
<b>Wind strength</b> <small>(none/light/steady/strong/gusty etc.)</small>	
<b>Wind direction</b> <small>(N/NE/E/SE/S/SW/W/NW)</small>	
<b>Odour intensity</b> <small>(see table below)</small>	
<b>How long did the odour last?</b>	
<b>What do you think the source/cause was?</b>	
<b>What actions were taken?</b>	
<b>Comments/observations</b>	
<b>Intensity</b> 0 – No odour 1 – Very faint odour 2 – Faint odour 3 – Distinct odour 4 – Strong odour 5 – Very strong odour 6 – Extremely strong odour	

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# Appendix F Odour Complaints Form

<b>Odour Complaint Form</b>		
<b>Date of complaint</b>		
<b>Time of complaint</b>		
<b>Name of complainant</b>		
<b>Address of complainant</b>		
<b>Tel no. of complainant</b>		
<b>Date of odour</b>		
<b>Time of odour</b>		
<b>Location of odour</b> (if not at the above address)		
<b>Weather conditions</b> (dry/rain/fog/snow etc.)		
<b>Temperature</b> (warm/cold etc. or degrees if known)		
<b>Wind strength</b> (none/light/steady/strong/gusty etc.)		
<b>Wind direction</b> (N/NE/E/SE/S/SW/W/NW)		
<b>Complainant's description of the odour</b>		
<ul style="list-style-type: none"> <li>• What did it smell like?</li> <li>• Intensity (see table below)</li> <li>• Duration</li> <li>• Constant or intermittent?</li> <li>• Any other comments</li> </ul>		
<b>Are there any other complaints relating to the site/location either previously or relating to the same exposure?</b>		
<b>Any other relevant information</b>		
<b>What operations were being carried out at the time?</b>		
<b>Actions taken</b>		
<b>Form completed by</b>	<b>Signature</b>	<b>Date</b>
<b>Intensity</b> 0 – No odour 1 – Very faint odour 2 – Faint odour 3 – Distinct odour 4 – Strong odour 5 – Very strong odour 6 – Extremely strong odour		

