

Sarah DeRenzy-Tomson
Fisher German LLP
St Helens Court
North Street
Ashby De La Zouch
Leicestershire
LE65 1HS

Postal Address: *Planning, Policy & Development Control (Floor 2)*
Staffordshire County Council
Block A, Wedgwood Building
Tipping Street
Stafford
ST16 2DH

P/2015/00084

Received 19 Jan 2015

Telephone: (01785) 277293
Email: Julie.castree-denton@staffordshire.gov.uk
Web site: www.staffordshire.gov.uk/planning

Please ask for: Julie Castree-Denton (Mrs)

Our Ref: [SCE.189/518 W](#)

19 January 2015

Dear Ms DeRenzy-Tomson

**[PROPOSAL [SCE.189/518 W](#)] SCREENING OPINION REQUEST REGARDING PROVIDING
ADDITIONAL CAPACITY FOR THE DEWATERING AND STOCKPILING OF SLUDGE CAKE AT
CLAYMILLS SEWAGE TREATMENT WORKS**

**THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT)
REGULATIONS 2011: REGULATION 5 - SCREENING OPINION**

I refer to your email dated 22 December 2014 in connection with the above proposals and the regulations referred to above.

In accordance with the regulations the County Council is required to adopt a "Screening Opinion" to establish whether the forthcoming application should be accompanied by an Environmental Statement.

The County Council has considered the information you supplied and is of the opinion that the proposed development falls within the description provided within Schedule 2 (categories 11 (c) waste-water treatment plants and 11 (d) sludge-deposition sites) to the above regulations, but in the opinion of the County Council, having taken into account the criteria in Schedule 3 to the above regulations and the '[Planning Practice Guidance – Screening Schedule 2 projects](#)' (version 6/3/14), the proposed development would not be likely to have significant effects on the environment by virtue of factors such as its nature, size or location. Further details are provided in the attached 'Screening Opinion Checklist'.

Under the powers contained in the 'Scheme of Delegation to Officers', this letter therefore confirms that the County Council is of the opinion that the proposed development **is not EIA development** and need not be accompanied by an Environmental Statement.



Yours sincerely

Julie Castree-Denton

Team Leader – Development Control and Waste Policy

Encl – Screening Opinion Checklist dated 16 January 2015





**PROVIDING ADDITIONAL
CAPACITY FOR THE DEWATERING AND
STOCKPILING OF SLUDGE CAKE
Clay Mills Sewage Treatment Works**

Environmental Impact Assessment Screening Opinion Request

December 2014



Fisher German LLP
St Helens Court
North Street
Ashby de la Zouch
Leicestershire
LE65 1HS

Clay Mills Sludge Cake

Environmental Impact Assessment Screening Opinion Request

Executive Summary

This report has been prepared on behalf of Severn Trent Water Limited to formally request a screening opinion for proposed works required in response to providing additional capacity for the dewatering and stockpiling of sludge cake at Clay Mills Sewage Treatment Works, Staffordshire.

The need for the proposed development has arisen as Severn Trent Water intend to cease the unsustainable pumping of sludge from Clay Mills to Etwall treatment works which is between 4 and 5 miles away and increase capacity overall. As a result, the installation of a dewatering facility and providing extra capacity at Clay Mills is the preferred option proposed to be taken forward by Severn Trent.

The proposed works comprise the installation of a new digested sludge dewatering plant (container based centrifuge units); the installation of new open centrate return buffer tank and open sludge buffer tank and installation of a sludge cake pad and 90 day sludge cake storage pad.

A number of reports have been prepared to appraise the environmental impact of the proposed development. These reports are broadly summarised in Section 5 of this document. The reports are also submitted as appendices to this document to aid the determination of this request.

Section 6 of this document demonstrates our view that the proposed development constitutes Schedule 2 development (Town and Country Planning (Environmental Impact Assessment) Regulations) 2011.

Section 7 goes on to set out the proposals' assessment against Schedule 3 of the 2011 EIA Regulations with Section 8 concluding that the proposed development does not constitute EIA development. Having regard to the nature of the proposal and the supporting information it is considered that the environmental impacts identified are not significant by virtue of size, nature or location, and the appropriate mitigation proposed is relatively straightforward.

Fisher German is acting as land and planning consultant to Severn Trent Water Limited, the applicant.

Table of Contents

	Page
1. Proposal	4
2. Site and Surroundings	5
3. Need for the Proposed Improvements	5
4. Options Considered	6
5. Environmental Appraisal	7
5.1 Flood Risk	
5.2 Noise	
5.3 Odour	
5.4 Archaeology	
5.5 Ecology	
5.6 Landscape and Visual Impact	
5.7 Traffic Management	
6 Environmental Impact Assessment Screening Opinion	10
7 Compliance with Schedule 3 of 2011 EIA Regulation	10
7.2 Characteristics of Development	
7.3 Location of Development	
7.4 Characteristics of Potential Impact	
Table 1. Compliance with Schedule 3 of 2011 EIA Regulations	13
8 Overall Conclusions	17
Appendix 1 – Site Location Plan	
Appendix 2 – Site and Elevation Plans	
Appendix 3 – Flood Risk Assessment	
Appendix 4 - Noise Statement	
Appendix 5 – Odour Impact Assessment	
Appendix 6 – Phase 1 Ecology Report	
Appendix 7 – Daytime Bat Survey	

1. Proposal

- 1.1 The proposed development involves the construction of a cake pad and dewatering facilities to increase sludge cake capacity at the Clay Mills sewage treatment works. Once the development is operational the pumping of sludge to Etwall will cease.
- 1.2 Seven Trent Water has considered various solutions and locations through a feasibility and optioneering process. This has resulted in the identification of the proposed scheme, the subject of this Environmental Impact Assessment (EIA) Screening, as the preferred option, and most appropriate solution for the location. A brief description of the consideration of the alternatives is provided in Section 4 alongside an assessment of issues.
- 1.3 Details of the proposal are illustrated on the plan contained in Appendix 1 and 2.
- 1.4 Pre-application discussions relating to the proposal have not been undertaken with Staffordshire County Council.
- 1.5 The key objectives of the sewage treatment process are to remove solid organic matter and to provide treatment to remove any residual contaminants from the wastewater so that it can be returned back to the environment. In order to provide adequate sludge digestion capacity at Clay Mills Sewage Treatment Works, the works are proposed within a discrete area of the Sewage Treatment works towards the north east of the site. The works are concentrated within a 2.6 ha of the north eastern corner of the existing operational site (with the exception of 63/64 which falls within the main site).
- 1.6 The north eastern section of the site currently comprises an area of nitrifying filter beds (these have been redundant following the sludge thickening and dosing works completed under planning approval AS.11/07/518 W and ES.13/09/518 W), all of the eastern lanes of the filter beds will be decommissioned to accommodate the proposed works along with 25% of the beds in the western half. In addition, the existing digested sludge holding tank will be decommissioned.
- 1.7 The proposed works comprise the installation of the following as illustrated in the plans attached at Appendix 1 and Appendix 2:
 - Digested sludge storage tank height 10m (ref: 50);
 - Centrate buffer tank height 6m (ref: 51);
 - Air mixer, compressors and pump slab (ref: 52);
 - Centrate collection tank (ref: 53);
 - Potable water break tank (ref: 54);
 - Potable water booster and poly dosing kiosk (ref: 55);
 - Poly storage silo height 14m (ref: 56);
 - Poly mixing and stock tank (ref: 57);
 - Centrifuge No1 (ref: 58);
 - Centrifuge N02 (ref: 59);
 - FE booster kiosk (ref: 60);
 - FE break tank and boiler filter (ref: 61);
 - MCC kiosk 1 (ref: 62);
 - MCC kiosk 2 (ref: 63);
 - Digested sludge feed pump slab (ref: 64);
 - Cake pad area approximately 105 m by 60 m = 6300 sqm (ref: 65);
 - Internal access roads and hardstanding (falling within the permitted development rights afforded to STWL).

- 1.8 It is noted that planning permission will be required for a number of kiosks associated with the proposed development, and these will be subject to a subsequent planning application.
- 1.9 The proposed development would result in an increase of HGV movements to the Clay Mills site of 4 per day. The increased HGV movements are seasonal and not considered significant in the context of the current tanker movements at Clay Mills.

2. Site and Surroundings

- 2.1 Clay Mills Sewage Treatment Works is located on the north eastern extent of the town of Burton on Trent, Staffordshire. The site is approximately 3.5 km from Burton town centre. The site is bounded by agricultural fields to the north east, east and south east with a railway line forming the western boundary. Access is obtained from the A5121 and Meadow Lane into the site. The site is at the end of Meadow Lane approximately 200m to the east of the Derby Road, a route which links Burton upon Trent to the A38 dual carriageway. The junction of Derby Road and the A38 is approximately 0.5 km to the north of the site. The River Trent is located approximately 400m to the south east of the site and River Dove to the north.
- 2.2 There are a number of residential properties and commercial premises located to the west of the site separated by the railway line. Larger residential areas are located approximately 200m to the south west and 230m to the north west of the works, again separated by the railway line. To the north east of the site, the nearest settlement is Newton Solney. From the north east corner of the Clay Mills site to Newton Solney is approximately 1.3 km, screened by existing vegetation close to Newton Solney and roadside hedgerows.
- 2.3 Clay Mills STW is a large works serving a domestic population of around 100,000 in Burton on Trent. The works also receive a trade load from breweries and industry.

3. The Need for the Proposed Improvements

- 3.1 The Clay Mills STW produces sewage sludge which must be treated and disposed of in a safe and effective manner.
- 3.2 The Etwall Farm site is a satellite installation associated with the Clay Mills Sewage Treatment Works. The Etwall Farm site is used for dewatering sludge and cake storage. The site includes two large sludge storage tanks, dewatering facilities within a building and cake storage space. The site is linked to Clay Mills by a 4.6km sludge main that predominantly runs to the west of the A38 trunk road. The sludge is pumped to Etwall Farm where it is dewatered by centrifuge, the cake stored at Etwall Farm and the centrate returned to Clay Mills through another main. A quality project has, and is, being delivered at Clay Mills STW to make operations more efficient and effective.
- 3.3 The quality project has already delivered changes at Clay Mills. The digestion route has been updated to facilitate Acid Phase Digestion (APD) which has changed the characteristics of the digested sludge. The process train has changed from: primary settlement, biological filtration, humus settlement and tertiary polishing (lagoon) to primary settlement, carbonaceous enhanced biological phosphorus removal (EBPR), activated sludge treatment, final settlement, nitrifying biological filtration and humus settlement. Overall the sludge production on site has increased by more than 30% and the sludge is thicker than that previously produced. These factors put additional pressure on the current sludge route which has dewatering facilities off site at Etwall Farm.

3.4 It has been identified that the current operation of transferring sludge via a pipeline from the Clay Mills site to the Etwall site is an unsustainable and inefficient practice. There are concerns regarding the risks to the environment from leaks or bursts on the sludge main, particularly as there is a need to increase capacity. It has been reported that the main feeding main to Etwall Farm regularly blocks. Consequently, there was a need to review options and identify a solution.

4. Options Considered

4.1 In arriving at the preferred option of increasing capacity at Clay Mills, alternatives were considered as summarised below.

4.2 OPTION 1 – ETWALL FARM REFURBISHMENT

- This option is based around refurbishing the existing dewatering facility at Etwall Farm and constructing a new sludge main from Clay Mills STW to Etwall Farm. The works would involve the installation of a new replacement 4.6 km 150mm diameter sludge main from Clay Mills to Etwall Farm; new centrifuge and feed pumps; new polymer system and dosing pumps; new cake pad and new site drainage sewer. This option would require the use of currently undeveloped land to accommodate the new facilities and liaison with third parties regarding the installation of a new sludge main on third party land.

4.3 OPTION 2 – NEW FACILITIES AT CLAY MILLS

- This option is based around the provision of a new dewatering facility at Clay Mills Sewage Treatment Works. The works would involve the installation of new digested sludge dewatering plant; new open centrate return buffer tank and open sludge buffer tank and installation of a sludge storage area and 90 day sludge cake storage pad. Works would involve decommissioning nitrifying beds so that the development could be sited on existing developed land within the operational land boundary.

4.4 The continued pumping of sludge to Etwall Farm (Option 1) has environmental and financial implications which makes it an unviable and undesirable option. The risk of sludge main bursts would remain and the associated inherent environmental risks this would pose. The scheme as currently proposed, the preferred option, relates to Option 2 which accommodates the proposed development within the existing operational boundary of the Clay Mills site, as well as providing adequate consideration to ecological and other environmental constraints. The preferred option is to bring the dewatering facility to Clay Mills and cease the unsustainable pumping of sludge to Etwall, which is some 4.6 km away. The implementation of option 2 would mean the environmental risks associated with sludge main bursts would be removed which would be a substantial benefit to decommissioning this process. It has also been estimated that the saving in carbon cost per year would be substantial.

4.5 This Screening Opinion request considers the preferred solution (2) as identified above and in more detail in Section 1.

5. Environmental Appraisal

5.1 In coming to a decision on the need for EIA, the Council will decide whether the proposed works would result in any significant effects on the environment. A preliminary assessment of the environmental effects has been undertaken and potential effects evaluated in terms of the sensitivity of the local environment and with regard to the criteria set out in Schedule 3 of the 2011 Regulations. The Regulations require that such proposals be assessed against three broad criteria, namely:

- The characteristics of the proposed development e.g. its size, use of natural resources, quantities of pollution and waste generated;
- The sensitivity of the receiving environment; and
- The characteristics and significance of the potential effects (magnitude and duration)

5.2 The following identifies the appraisals and assessments which have been undertaken in respect of the proposed development against key environmental considerations.

5.3 Flood Risk Assessment (FRA)

5.3.1 The site is located within the Environment Agency's Flood Zone 2 and 3. A flood risk statement has been prepared and is attached at Appendix 3. Although the site is located within EA's Flood Zone 2 and 3, the associated hydraulic modelling demonstrates that the site benefits from flood defences. Under the assumption that the defences remain operational the site would be at a medium risk (Flood Zone 2) from fluvial flooding over the lifetime of the development.

5.3.2 Taking into account the sequential test, the flood risk statement concludes that given the nature of the proposed development (the installation of new dewatering facility), this has to go within the existing operational site boundary of the treatment works and cannot be located elsewhere within a lower risk zone. In accordance with the NPPF the proposed development (sewage treatment works) is classed as 'less vulnerable' and considered acceptable in flood zone 2 and 3a. No mitigation is required for the proposed scheme.

5.3.3 The flood risk statement confirms that the site is at an acceptable level of flood risk over the lifetime of the development. The proposed scheme would not cause an increase in flood risk either on site or in surrounding areas.

5.3.4 The flood risk statement concludes that the proposed works are considered acceptable in line with the NPPF and there are no recommendations for the further assessment of flood risk of the proposed scheme.

5.4 Noise

5.4.1 During the construction phase there are likely to be temporary increases in noise levels associated with certain phases of the construction programme.

5.4.2 Following construction, and in terms of the new plant or processes, there is no anticipated increase in noise levels within or adjacent to the operational site. The new dewatering plant is being constructed within the area of redundant nitrifying filter beds to the north east of the site. The western filter beds 1 – 4 remain and will provide a physical barrier between the new dewatering plant and the local residents beyond

the existing railway line to the west. The nearest residential area beyond the north eastern boundary is Newton Solney approximately 1.3km away and well screened by existing vegetation.

- 5.4.3 All plant and equipment will conform to STW specifications. The various pumps are similar to other equipment already in use on the site and do not produce any significant level of noise. The Alfa Laval Centrifuges will be housed in acoustic housings as designed and manufactured by an acoustic specialist.
- 5.4.4 The sludge cake will be moved from the day pad to the 90 day storage area using a loading shovel but this will only operate for approximately 1-2 hours per day. Cake will be removed by HGV to be transported by road to local agricultural land on a seasonal basis mainly in Spring and Autumn.

5.5 Air Quality

- 5.5.1 During the construction programme of works there is a risk of nuisance dust emissions associated with the excavation and handling of materials during construction. It is proposed that dust control measures will be incorporated in to the management plan for the development works. Typical measures could include dampening of soil stockpiles and unpaved roads and the erection of mesh fencing to trap fugitive dust emissions providing appropriate mitigation solutions to air quality impacts.

5.6 Odour

- 5.6.1 A study has been completed to support the proposed development, and the main findings of the study can be summarised as follows.
- 5.6.2 The proposed sludge dewatering scheme involves the commissioning of a range of plant which have the potential to generate odorous emissions. These include:
 - Digested sludge dewatering plant (centrifuges);
 - Centrate return buffer tank and open liquid sludge buffer tank;
 - Sludge cake pad and 90-day pad.
- 5.6.3 As part of the proposed scheme, the existing digested sludge holding tank will be decommissioned, along with the eastern half of the nitrifying filter beds and 25% of the western half. In addition, odour control measures will be applied to the existing sludge consolidation tanks which are currently used to store trade waste.
- 5.6.4 Under the proposed scheme the estimated total odour emissions from the works is predicted to decrease by approximately 13% in comparison to the current operations. This decrease is due to the implementation of odour control to the sludge consolidation tanks and decommissioning of the nitrifying filter beds and the sludge holding tank. These reductions in emissions more than offset the additional emissions associated with the commissioning of the new sludge buffer tanks and the handling and storage of dewatered sludge cake.
- 5.6.5 Under the proposed scheme the odour exposure levels and risk of odour impact predicted to occur at all offsite locations surrounding the works is predicted to decrease in comparison to the baseline situation. The full report prepared by 'Odournet' is attached at Appendix 5.

5.7 Archaeology

- 5.7.1 A preliminary desktop assessment which included a review of the historical Ordnance Survey maps and a search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website (<http://www.magic.gov.uk>) indicates that there are no monuments or sites of archaeological interest or any sites of archaeological significance relating to the site working areas, further reduced by the previously developed nature of the site comprising above and below ground infrastructure.

5.8 Ecology

- 5.8.1 A Phase 1 Ecological Report has been prepared on behalf of Severn Trent Water by Middlemarch Environmental (August 2014).
- 5.8.2 The Preliminary Ecological Appraisal confirms that the proposed works are located within the existing operational site and that no statutory or non-statutory designated nature conservation sites are affected by the proposal.
- 5.8.3 The key ecological features on site in relation to works proposed are the buildings with potential to support roosting bats and the plantation woodland which provides suitable habitat for nesting birds and other wildlife. The survey recommended bat surveys should be undertaken at the winch house to determine the presence or absence of roosting bats within these structures.
- 5.8.4 Where feasible biodiversity enhancement will be incorporated into the landscaping scheme and reinstate habitats appropriately upon completion of works.
- 5.8.5 Any excavations left overnight should be covered or fitted with mammal ramps and open pipework over a diameter 150 mm will be blanked off at the end of each work day to prevent badgers entering.
- 5.8.6 Building demolition and vegetation clearance should be undertaken outside the nesting bird season.
- 5.8.7 Following the recommendations contained within the report In September 2014 Middlemarch Environmental were commissioned to undertake daytime bat surveys of the four small two storey winch buildings. These buildings are not proposed for demolition but decommissioning works and minor structural alterations. The buildings are located on the south west side of the existing nitrifying bacterial beds.
- 5.8.8 Following inspection of the buildings and features revealed no confirmed evidence of bat presence or usage within the surveyed buildings. The buildings were considered sub-optimal for use by roosting bats. The survey results are considered valid for 12 months and works proposed to be undertaken after this date may require further survey work.

5.9 Landscape and Visual Impact

- 5.9.1 The landscape and visual impact of the proposed development is anticipated to be minimal and limited in the most part to the construction phase of the development. The proposed development falls wholly within the existing operational site on previously developed land and should be viewed in the context of the existing operation of the site. The height of the tallest building (the poly storage silo) proposed is approximately 14m, the majority are between 4–10m high. The proposed development is located towards the north east of the site and is located some distance from existing residential properties around Derby Road beyond the

boundary to the west. Properties at Newton Solney are around 1.3 km from the north eastern corner of the site and are naturally screened by existing vegetation and hedgerows. The proposed buildings cluster towards the central part of the operational site to minimise external visual impact.

5.10 Traffic Management

5.10.1 The construction of the proposed development will necessitate additional vehicle movements during the construction phase. Designated HGV routes in addition to agreed hours of operation will all be implemented through the completion of a Traffic Management Plan to be agreed with Staffordshire Highways.

5.10.2 The preferred option would lead to an increase in HGV movements to the Clay Mills site of 4 per day which is not considered to be material, given the high level of movements as existing. The movements are seasonal.

6. Environmental Impact Assessment Screening Opinion

6.1 The development of infrastructure projects, specifically Waste Water Treatment Works and Sludge Deposition Sites are activities specified within Paragraph 11c and 11d of Schedule 2 of the Town and County Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011, for which EIA is required only if the particular project in question is judged likely to give rise to significant environmental effects. Schedule 2 also contains applicable thresholds and criteria that indicate where a development requires a screening opinion on the need for EIA, in this case where the working area is over 1000m² (one hectare) and 0.5 hectares respectively.

6.2 The site is not identified as being within a sensitive location and it is considered that the environmental impacts of the proposed development would not be significant and will be mitigated through careful design and implementing the various recommendations highlighted in this report.

6.3 The accompanying technical reports demonstrate that the proposed development will not have a significant impact on the environment in relation to these criteria and consequently we are of the view that an EIA is not necessary for this project.

7. Compliance with Schedule 3 of 2011 EIA Regulation

7.1 Fisher German has assessed the proposal against the various criteria set out in schedule 3 of the 2011 EIA Regulations and having further consideration to Circular 2/99. In this regard, the regulations suggest proposals are considered against the following measures:

- The characteristics of the development
- The location of the development
- The characteristics of the potential impact

These are discussed broadly below and a more detailed analysis follows in the subsequent tables.

7.2 Characteristics of the Development

7.2.1 As set out in Section 1, the proposed development comprises (see proposed site elevations attached at Appendix 1:

- Digested sludge storage tank height 10m (ref: 50);
- Centrate buffer tank height 6m (ref: 51);

- Air mixer, compressors and pump slab (ref: 52);
- Centrate collection tank (ref: 53);
- Potable water break tank (ref: 54);
- Potable water booster and poly dosing kiosk (ref: 55);
- Poly storage silo height 14m (ref: 56);
- Poly mixing and stock tank (ref: 57);
- Centrifuge No1 (ref: 58);
- Centrifuge N02 (ref: 59);
- FE booster kiosk (ref: 60);
- FE break tank and boiler filter (ref: 61);
- MCC kiosk 1 (ref: 62);
- MCC kiosk 2 (ref: 63);
- Digested sludge feed pump slab (ref: 64);
- Cake pad area approximately 105 m by 60 m = 6300 sqm (ref: 65).
- Internal access roads and hardstanding (falling within the permitted development rights afforded to STWL)

7.2.2 The development, as proposed, has been designed to ensure that the anticipated growth in sludge production can be accommodated at the Clay Mills works and remove the need to transfer sludge via pipelines to Etwall Farm.

7.2.3 The proposed development is to be located on previously developed land within the operational site boundary. It is therefore considered that the proposed development will have no significant visual effects.

7.3 Location of Development

7.3.1 The proposed works, are located at the furthest possible distance from residential properties located around Derby Road to the west and over 1 km away from properties at Newton Solney.

7.3.4 Clay Mills STW is the most appropriate location to increase the capacity for sludge treatment within this area utilising existing onsite infrastructure and access arrangements, the option of expansion at Etwall Farm was considered but discounted for environmental, efficiency, land and planning reasons.

7.4 Characteristics of the potential impact

7.4.1 The potential impact of the proposed development is considered to be low.

7.4.2 The proposed works is within Flood Zone 2 and 3 (as per assessment of Environment Agency flood data). However, the site benefits from flood defences and the proposed development is located within the flood defences in the operational site boundary. The flood risk statement concludes that the site is at an acceptable level of flood risk over the lifetime of the development.

7.4.3 It is considered that the nature of the proposed works will not increase odour or noise levels above existing baseline conditions. This assessment is based upon Severn Trent Water's own objective of not increasing odour from their works over existing baseline levels and that the scheme incorporates odour management measures which are identified to reduce against current levels.

7.4.4 With regard to ecological impact, the majority of the proposed development will take place on decommissioned nitrifying beds (previously used land). Completed reports do not identify any areas of significant ecological potential which will be impacted by the proposed works, or cannot be addressed by appropriate mitigation.

- 7.4.5 Potential habitats for bats have been identified, and further surveys were commissioned with confirmed their absence. General mitigation to ensure the protection of badgers, reptiles and breeding birds is already identified. As such impact to these species as a result of the proposed development is considered unlikely.
- 7.4.6 As set out previously, there will be no significant effects of the proposed development upon the visual amenity for receptors within the locality.
- 7.4.7 No significant geo-environmental risks have been identified in respect of the proposed works.

Table 1. Compliance with Schedule 3 of 2011 EIA Regulations

Characteristics of Development	
1. The characteristics of development must be considered having regard, in particular, to:	
a. Size of Development	<p>In terms of the size, all of the proposed works are to take place within the existing operational site.</p> <p>The area of focus for development is 2.65 ha of the north eastern section of the site wholly within the operational site boundary.</p>
b. The cumulative effect with other development	The proposal does not impact with other development, and therefore is not considered to have a further cumulative effect.
c. The use of natural resources	Spoil from excavations will be used on backfilling of excavations during construction on site. This will also minimise the environmental impact of HGV movements which would be required for disposal.
d. The production of waste	<p>No waste products are identified as part of the proposed development.</p> <p>It must however be noted that sludge (cake) will be produced, and this will be dried on site and then utilised as natural fertiliser on local agricultural land.</p>
e. Pollution and nuisances	The issue of nuisances has been discussed above, however, to reiterate, it is highly unlikely that the proposals would result in any greater impact on amenities than the existing baseline once construction has been completed.
f. The risk of accidents, having regard in particular to substances or technologies used	<p>The proposals would not be likely to result in any greater risk of accidents. The operator, Severn Trent Water applies rigorous safety measures and there is no admittance onto the site unless appropriate safety training has been undertaken and essential personal protective equipment is worn.</p> <p>Severn Trent Water will prepare a project management plan to ensure the highest standards of safety in the construction and commissioning phases.</p> <p>The works will be undertaken by a very experienced contractor that works very regularly within this specialist environment.</p>

Location of Development

2. The environmental sensitivity of geographical areas likely to be affected by development must be considered, having regard, in particular, to:

a. The existing land use	The works are proposed entirely within the existing operational site boundary at Clay Mills STW.	
b. The relative abundance, quality and regenerative capacity of natural resources in the area.	The relative abundance, quality and regenerative capacity of natural resources in the area is moderate.	
c. The absorption capacity of the natural environment , paying particular attention to the following areas:	(i) Wetlands	No formal wetlands exist close to the site.
	(ii) Coastal Zones	The site is not near the coast.
	(iii) Mountain and Forest Areas	There are neither mountains, nor forest areas in proximity to the site.
	(iv) Nature reserves and parks	There are no nationally designated nature reserves or parks within 1km of the site.
	(v) Areas classified or protected under Member states' legislation; areas designated by Member states pursuant to Council Directive 79/409/EEC on the conservation of wild birds and Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna	No such areas.
	(vi) Areas in which the environmental quality standards laid down in Community legislation have already been exceeded;	No such areas.
	(vii) Densely populated areas;	The settlement of Burton upon Trent is located approximately 3.5 km to the southwest of the operational site. Impacts are likely to be in relation to traffic flows in the locality during the period of construction. There are no anticipated impacts on residential or visual amenities of

	local residents in terms of noise or odour.
	(viii) Landscapes of historical, cultural or archaeological significance. The proposals will not affect any areas of known archaeological importance or landscapes of historical or cultural significance.

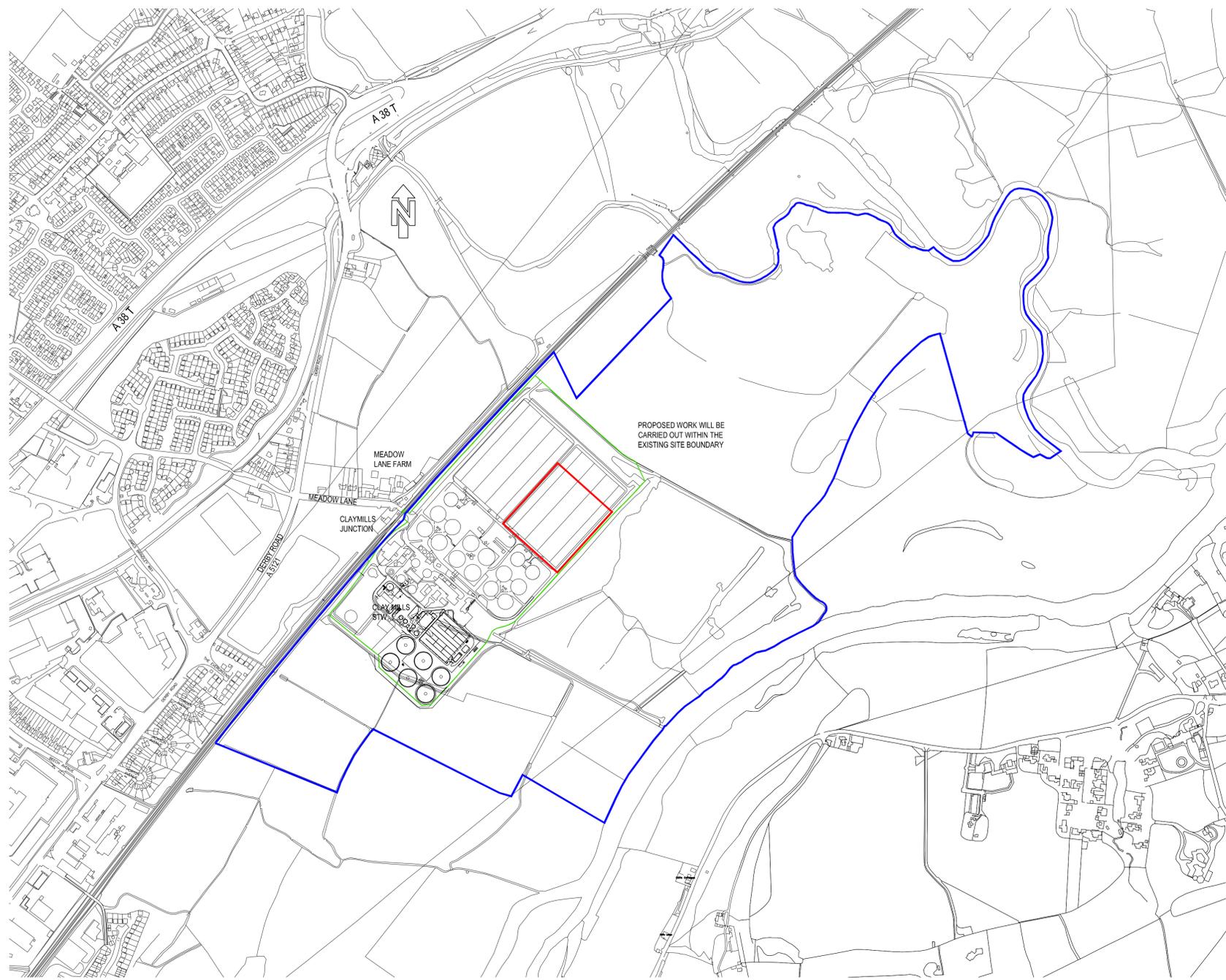
Characteristics of the Proposed Impact

3. The potential significant effects of development must be considered in relation to criteria set out under paragraphs 1 and 2 above, and having regard in particular to:

(a) the extent of the impact (geographical area and size of the affected population);	The geographical area and size of the population affected is low in the long term, there will be greater impacts in terms of highways impact during the construction period. Investigations have found no discernable impact on the nearest residential uses, therefore it is unlikely that there would be impact on more distant properties.
(b) the transfrontier nature of the impact;	There is no transfrontier impact of the proposed development.
(c) the magnitude and complexity of the impact;	The potential impact is low. In terms of impact on amenities, upon completion of the construction of the works the impact would be virtually non-existent.
(d) the probability of the impact;	There is a low probability of environmental impacts, or impacts on residential or visual amenities.
(e) the duration, frequency and reversibility of the impact	Mitigation measures will be in place during the construction phase of the development in order to mitigate against the impacts of this aspect of the development. Mitigation measures are also proposed as part of the proposed works which, once in place, will ensure that the operational phase of the proposed scheme will have no significant impacts.

8. Overall Conclusions

- 8.1 The proposed development has been assessed as having a limited environmental impact.
- 8.2 The proposed development will not impact flood risk, the site benefits from flood defences and a flood risk statement has been prepared.
- 8.3 In respect of impact on ecology, the majority of the proposed development will take place within land of low ecological importance. Where impacts may arise on protected species, further surveys were commissioned and they confirm the absence of bats on the four winch buildings proposed for decommissioning.
- 8.4 In respect of visual effects, the proposed development is located within the operational site and proposed in the north eastern quadrant furthest from the properties around Derby Road and 1.3km from Newton Solney to the east. The proposed buildings cluster towards the central part of the operational site to minimise external visual impact. The tallest structure proposed is the poly storage silo at 14 m. The majority of structures are between 4-10m in height, within the permitted development limits of 15 metres afforded to Severn Trent Water as a statutory undertaker. The development will not therefore have significant effects on visual amenity.
- 8.5 As set out above, there are limited environmental impacts associated with the proposed development. Where possible impacts have been identified, mitigation measures are proposed. It is therefore considered that the **proposals would not constitute EIA development** when considered against the criteria as established in Schedule 3 of the Regulations.



NOTES:
 ALL DIMENSIONS IN MM UNLESS NOTED OTHERWISE.
 ALL LEVELS IN METRES ARE RELATIVE TO ORDNANCE SURVEY UNLESS NOTED OTHERWISE.
 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND DETAILS THAT FORM PART OF THE PLANNING APPLICATION.

SITE ADDRESS:
 CLAYMILLS STW
 BURTON ON TRENT
 STAFFORDSHIRE
 DE13 0DB
 OS GRID REF: SK262 257

LEGEND:-
 [Red line] APPLICATION SITE BOUNDARY
 [Blue line] STW LAND OWNERSHIP BOUNDARY
 [Green line] STW OPERATIONAL SITE BOUNDARY

REFERENCES
 A5S-10014-PA02601 - PLANNING-SITE LOCATION PLAN
 A5S-10014-PA02602 - PLANNING-EXISTING SITE LAYOUT
 A5S-10014-PA02603 - PLANNING-PROPOSED SITE LAYOUT
 A5S-10014-PA02604 - PLANNING-SITE ELEVATIONS SHT 1 OF 2
 A5S-10014-PA02605 - PLANNING-FE BOOSTER KIOSK PLAN & ELEVATIONS
 A5S-10014-PA02606 - PLANNING-POTABLE WATER & POLY DOSING KIOSK PLAN & ELEVATIONS
 A5S-10014-PA02607 - PLANNING-MCC KIOSK No1 PLAN & ELEVATIONS
 A5S-10014-PA02608 - PLANNING-SITE ELEVATIONS SHT 2 OF 2

FOR PLANNING
22/09/2014



REV	DETAILS OF REVISION	DATE	DRAWN	CHECKED	APPROVED
A	FOR PLANNING - SCALE REVISED. BOUNDARY AREAS UPDATED	22/09/2014	KSI	JGB	PB



This drawing is issued by MWH Treatment Ltd. subject to the condition that it is not copied, reproduced or distributed either in whole or in part, or used in any way detrimental to the interests of MWH Treatment Ltd.

EMIS PDF No. 1430325

PLANNING DRAWINGS
 CLAY MILLS STW
 DEWATERING
 SITE LOCATION

STW SITE FLOC ID:11519

SCALE 1:5000

DRG No. A5S-10014_PA02601

B

ORIGINAL SIZE: A1

FILENAME: G:\TURNKEY\STW\B23795 CLAY MILLS STW ASPV13 - DESIGN\01_CIVIL DESIGN IMPLEMENTATION\DRAWINGS\PLANNING\DRG\DE-WATERING\A5S10014_PA0260