



## **Appendix D Proposed Zoning Plan**

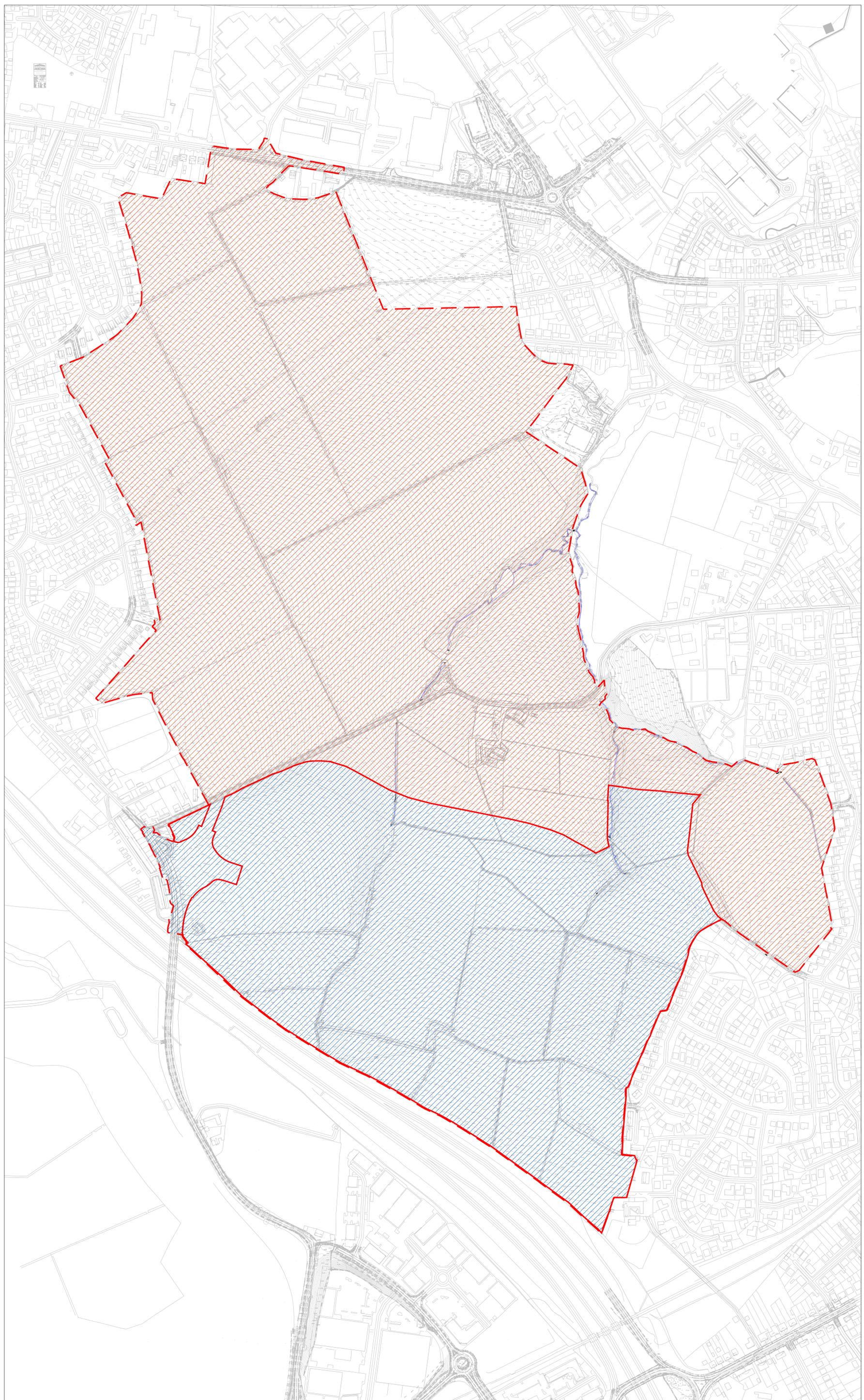
**DO NOT SCALE (A0)**

**NOTES**

- GENERAL NOTES**
1. ALL MATERIALS AND WORKMANSHIP IS TO COMPLY WITH JPC CONSULTANTS STANDARD SPECIFICATION & ALL RELEVANT BRITISH & EUROPEAN STANDARDS.
  2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT, M&E CONSULTANTS AND JPC CONSULTANTS DRAWINGS.
  3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO COMMENCEMENT OF WORKS.

**LEGEND**

-  COMMERCIAL BOUNDARY
-  RESIDENTIAL BOUNDARY



REV	DESCRIPTION	DATE	CHK	BY
P02	REDLINE BOUNDARY UPDATED	10/10/23	JDM	LSG
P01	FIRST ISSUE	30/03/23	JDM	EBH

Project  
BARNSELEY WEST

Drawing Title  
SITE ZONING PLAN

**INFORMATION**



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## **Appendix E LLFA Responses and Plans**



# 4848 – Barnsley West Drainage Strategy Meeting with LLFA

## Meeting Agenda

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**Date:** 11.01.2021

**Time:** 13.00 – 15.00

**Location:** Teams

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### Attendees

Wayne Atkins – BMBC – LLFA

Jonathan Millar – JPG – Infrastructure Associate

### Points of Discussion - Notes from Meeting in Red

1. Discuss and agree discharge rates and/or method of calculation. Assumed greenfield run off rates preliminary calculation provided for information. **Greenfield run off from the plots can be calculated using a recognised method i.e., ICPSUDs or IH124 for example.**
2. BMBC historic information on the existing drainage network i.e., issues with flooding and operational problem downstream off the site etc. We have walked the open section as far as the weirs near Redbrook Road. However downstream of this it is unclear where the network then goes to get into the river. We are assuming that it is culverted for some or most of the route. **BMBC confirmed that there are capacity and structural issues with the culvert downstream of Redbrook Road and where the culvert runs beneath Zenith Park Industrial Estate. BMBC confirmed that there is major flooding here and as such direct connection into the on-site water courses for the development runoff even at greenfield rates would not be acceptable. This was communicated to Strata in a pass a planning strategy meeting. As such the restricted discharge from the site would need to connect into the open ditch section to the north east of Zenith Park Industrial Estate. BMBC accept that the section from the new roundabout on BGR to the open ditch section would need to be culverted/piped.**
3. Can you provide details of any highway drainage infrastructure in the public highway road network within and around the site and advise on outfall locations, capacities, and any issues? **There is a known highway drain in Baugh Green Road located in the northern footway. This has limited capacity. The proposed roundabout is to connect into this as per previous discussion with BMBC. This ultimately discharges into the water course to the west of Aldi and then running approximately north and is culverted beyond Aldi. Here there is also major flooding beyond Aldi. As agreed, as part of the previous submission by JPG that drainage from the new roundabout on Higham Common Road to connect into the existing highway drain in this location.**



4. Discuss and agree principles and points of discharge? High level strategy drawing provided detailing proposed location for attenuation basins and anticipated flows. **Points of discharge refer to item 2 comments. The principle of attenuation basins for the storage of surface water is acceptable to BMBC. However, they have concerns over the siting of Basin F been next to and higher than the existing housing. They have requested for the developer to look at relocating this basin further away from the boundary or relocating this somewhere else. Relocation of the basin to the northern end of the site may address this but you would then be adjacent to the new housing proposed adjacent to BGR. Design team to review.**
5. Discuss the proposed location of attenuation basins and exceedance design criteria. What designing criteria should we be working to in terms of volumes and exceedance events? **BMBC confirmed there have no knowledge of any official guidance national or local that we would be expected to adhere too. However, principle discussed for an exceedance event would be that the basins would be required to retain the 1 in 100 YSE plus 40% CC and a minimum free board of 0.500m would be required above this level. Water level above this would be allowed to discharge back into the existing water course system in a controlled manor. JPG to provide calculation to confirm what storm event could be held in the basin up to the top of free board. Some form of control to allow water to spill above this level would be required. Maybe short section of weir to limit run off. Discharge back into the existing water courses would be to avoid scour of the existing watercourse.**
6. Discuss and agree how exceedance flows would be dealt with from the development. **See comment in item 6 above.**
7. Discuss and agree requirements for attenuation basins and other SuDs features if not to SuDs manual criteria? **Any SuDs features should be design as a minimum to SuDs manual criteria and requirements.**
8. Discuss options for adoption/maintenance of the basins and other SuDs features. Infiltration is not going to be feasible. Potential issues with YW taking these as the design criteria is onerous and as such developer would like to try and avoid this route if possible. Would the likes of BMBC, or private management company or some other body like a wildlife trust for example be acceptable to be responsible for these subject to negotiations? Incorporation of SuDs should be first option, but issue as always is who will maintain these. **BMBC confirmed that they would not take on the operation and maintenance of the basins. There acknowledged the issues we would likely have with YW and this was also discussed in the planning strategy meeting which YW attended who were non-committal on the adoption of SuDs in general even though this is now part of the CODES guidance document. BMBC do not like private management companies due to past issues on other schemes. But is there was no other option then this route would be acceptable. However, they would need to see from the developer how this would work, how this would monitor and that maintenance etc was been carried out and who would ultimately be liable if the management company went bust for example. BMBC are very nerves because of the location of basin F and adjoining existing houses. If the pond overtopped and the cause was due to lack of maintenance where would everyone stand in terms of liability?**



9. Discuss and agree principles for dealing with the runoff from existing land drainage, we know there are some springs on the site and others may be located during the earthworks (discharge rates and methodology for dealing with these etc.). **BMBC confirmed that the principle of redirecting any existing land drainage what needed to be dealt with after the earthworks and connecting this back into the existing watercourse was acceptable. Run off from this would unrestricted via suitable SuDs features i.e., ditches and filter drains etc. However, to minimise scour the existing land drainage run off should be discharged where possible evenly into the water course. A large outfall collecting big areas would not be acceptable.**
10. Discuss and agree principles for dealing with the runoff from the landscaped areas and large embankments which will be created as part of the earthworks exercise (discharge rates and methodology for dealing with this). **BMBC confirmed that the principle of redirecting any runoff generated from the proposed banks and connecting this back into the existing watercourse was acceptable. Run off from this would be restricted to greenfield run off or equivalent run off from embankments. BMBC said that they recall they used to be a calculation in DMRB to work out run off from slopes and embankments. JPG to review this and advise. It is likely that item 9 and 10 would be a combined system in some of all the locations.**
11. Discuss and agree principles for dealing with temporary drainage once the development platforms have been formed and prior to any houses or commercial buildings been constructed. **BMBC agreed that control of run off from the development platforms prior to construction of the dwellings and commercial units needed to be considered. Whether it was possible to produce a design to cover the entire site at this stage was debatable, and it was likely this would be a moving target. However, principles could be agreed on methodology what could be implemented by the contractor and to suit their phasing and programme. Things like mounds, ditches, filter drains to direct and collect run off and stilling/silt basins, silt fencing around stockpiles to control silt and bunding to fuel storage areas etc could be incorporated up stream of any discharge into the basins to control run off. The two main objectives would be to minimise silt getting into the attenuation basins and controlling the runoff as best possible.**
12. Any other information that we need to consider and not mentioned in the above points.  
**Non discussed.**
13. AOB. **Non.**