

Barlestone Road (B582), Newbold Verdon, Leicestershire
LLFA Response
February 2024
Our Ref: 24832-FLD-0102

MEC Consulting Group Ltd (MEC), has been commissioned by David Wilson Homes East Midlands (hereafter referred to as 'the Client') to undertake flood risk and drainage work to support an outline planning application (ref 24/01061/OUT) for a proposed development on Barlestone Road, Newbold Verdon, Leicestershire (hereafter referred to as 'the Site').

To support the planning application MEC prepared a Flood Risk Assessment and Drainage Strategy (ref. 24832-FLD-0101 Rev D).

This technical note responds to comments received from Leicestershire County Council as the Lead Local Flood Authority in December 2024. A copy of these comments is enclosed in **Appendix A**.

The LLFA comments are provided in red with the MEC response below.

...checks of the levels between the site's attenuation and the proposed discharge point for both the north-eastern catchment and south-eastern catchment cause concern as the necessary fall to provide a gravity connection is not immediately clearly shown. As such, the applicant should provide an invert level of the point of discharge to alleviate this.

Additional on-site investigations have been undertaken which includes expanding the topographical survey to obtain all relevant levels for the existing ditch and sewer networks. An updated topographical survey (drawing 24832_06_270_01 Rev A) is enclosed in **Appendix B** and a revised drainage strategy (drawing 24832_01_230_01 Rev G) outlining all applicable invert levels has been prepared and is enclosed in **Appendix C**.

In the northeast of the site is an area labelled on the topographic survey as 'flooded area'. It is assumed that this is an existing pond or spring. This should be clarified and details of what is proposed with it. If this is fed by a spring, suitable considerations of this feature within the proposals must be made.

On-site investigations have determined that the 'flooded area' is a purpose built area to contain water for horse jumps as part of the existing equestrian uses on site. The bottom of this area has been concreted to maintain the water. There was no evidence of any springs or connections into the standing water. Photographs showing this area are enclosed in **Appendix D**.

The applicant has indicated source control SuDS are considered in the form of permeable paving in private areas. The applicant should provide the location of these if possible.

Permeable paving locations will be added to drawing 24832_01_230_01 Rev G in Appendix C. It should however be noted the layout is illustrative and permeable paving will be refined at the detailed design stage.

REGISTRATION OF AMENDMENTS

Date	Rev	Comment	Prepared By	Checked By	Approved By
February 2025	-	First issue	Ben Oyston MSc, BSc (Hons) Graduate Flood Risk Engineer	Ryan Chafer BSc (Hons) Senior Flood Risk Engineer	Alexander Bennett BSc (Hons), MCIHT, MTPS Managing Director

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Appendices

- A. LLFA Response
- B. Topographic Survey – Drawing 24832_06_270_01 Rev A
- C. Drainage Strategy – Drawing 24832_01_230_01 Rev G
- D. Photographs

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APPENDICES



APPENDIX A

Application address Land North of Barlestone Road, Newbold Verdon		Planning ref.	24/01061/OUT
		Our ref.	2024/1061/04/F
Description Outline planning application (all matters reserved except vehicular access) for the erection of up to 240 residential dwellings (Use Class C3), retention of the existing accesses off Barlestone Road and the creation of new accesses off Barlestone Road, land safeguarded for a cemetery and a health centre (Use Class E(e)), public open space and associated infrastructure		Consultation date	26/11/2024
		Response date	03/12/2024
Planning officer	Emma Baumber	Reviewing officer	Jack Harriman
Application type	Outline	Extension requested	☐
Refer to standing advice ☐	Conditions ☐	Further consultation required ☒	Concerns ☐

Consultation checklist

No.	Description	Check
1	Location plan	☒
2	Proposed layout plan	☒
3	Evidence that the site can be drained	☐
4	Topographic and ground investigation details	☒
5	The total impermeable area pre and post development	☒
6	All potential flood risk sources have been identified and assessed	☒
7	Existing and proposed peak discharge rates	☒
8	Consideration of sustainable drainage systems	☒
9	Attenuation volume calculations	☒
10	Consideration of the maintenance and management of all drainage elements	☒

LLFA Key Observations and Advice

Leicestershire County Council as Lead Local Flood Authority (LLFA) notes that the 13.8 ha greenfield site is located within Flood Zone 1 being at low risk of fluvial flooding and a low to medium risk of surface water flooding.

The Flood Risk Assessment identifies three sub-catchments for the site each discharging to a separate location with their own attenuation. The northern half of the proposals seek to discharge at a total 12.9 l/s via swales and attenuation basins to the on-site watercourses. There are no existing flood risk concerns within the immediate downstream catchment.

The smaller portion of the site at the south-eastern boundary seek to discharge at a 5 l/s via an attenuation basin to an existing surface water sewer. Correspondence from the statutory sewer provider has been submitted to demonstrate acceptance in principle to connect to their asset at the agreed discharge rate.

However, checks of the levels between the site's attenuation and the proposed discharge point for both the north-eastern catchment and south-eastern catchment cause concern as the necessary fall to provide a gravity connection is not immediately clearly shown. As such, the applicant should provide an invert level of the point of discharge to alleviate this.

In the northeast of the site is an area labelled on the topographic survey as 'flooded area'. It is assumed that this is an existing pond or spring. This should be clarified and details of what is proposed with it. If this is fed by a spring, suitable consideration of this feature within the proposals must be made.

The applicant has indicated source control SuDS are considered in the form of permeable paving in private areas. The applicant should provide the location of these if possible.

Leicestershire County Council as Lead Local Flood Authority (LLFA) advises the Local Planning Authority (LPA) that the application documents as submitted are insufficient for the LLFA to provide a substantive response at this stage. In order to provide a substantive response, the following information is required:

- Inclusion of the level of the points of discharge in the site drainage strategy to confirm a gravity connection.
- Consideration of permeable paving in the drainage strategy.
- Clarification of the nature of the 'flooded area' as discussed above.

Advice to the Local Planning Authority

1. Standing Advice – National Planning Policy Framework

When determining planning applications, the local planning authority should ensure flood risk is not increased elsewhere and only consider development appropriate in areas at risk of flooding where informed by a site-specific Flood Risk Assessment (FRA) confirming it will not put the users of the development at risk. Where an FRA is applicable this should be undertaken in accordance with the requirements of the National Planning Policy Framework and accompanying Planning Practice Guidance.

2. Standing Advice – Consent

Where there are any works proposed as part of an application which are likely to affect flows in an ordinary watercourse or ditch, the applicant will require consent under Section 23 of the Land Drainage Act 1991. This is in addition to any planning permission that may be granted. Guidance on this process and a sample application form can be found via the following website: <http://www.leicestershire.gov.uk/flood-risk-management>

Applicants are advised to refer to Leicestershire County Council's culverting policy contained within the Local Flood Risk Management Strategy Appendix document, available at the above link. No development should take place within 5 metres of any watercourse or ditch without first contacting the County Council for advice.

This consent does not consider local watercourse bylaws. It is the responsibility of the applicant to check if the local borough or district council has their own bylaws which the proposals will also need to consider.

3. Standing Advice – Maintenance

Note that it is the responsibility of the Local Planning Authority under the DEFRA/DCLG legislation (April 2015) to ensure that a system to facilitate the future maintenance of SuDS features can be managed and maintained in perpetuity before commencement of the works.

4. Standing Advice – Ditches

Where a drainage ditch adjoins or flows through a development, provision should be made such that the ditch can be made throughout the life of the development. The ownership and responsibility for maintenance of the ditch should also be clearly identified and conveyed to the relevant parties.

5. Standing Advice – External surfaces

To prevent an increase in the discharge rate or volume due to development of external surfaces, permeable surface material should be utilised where possible, without an impermeable lining unless required to prevent mobilisation of contaminants or groundwater flooding.

Additional information and guidance is available here:

<https://www.leicestershire.gov.uk/environment-and-planning/flooding-and-drainage/>

Note: Response provided by the Lead Local Flood Authority under the delegated authority of the Director of Environment and Transport.



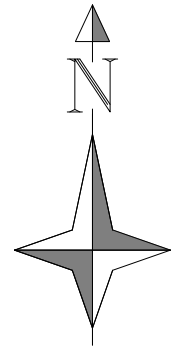
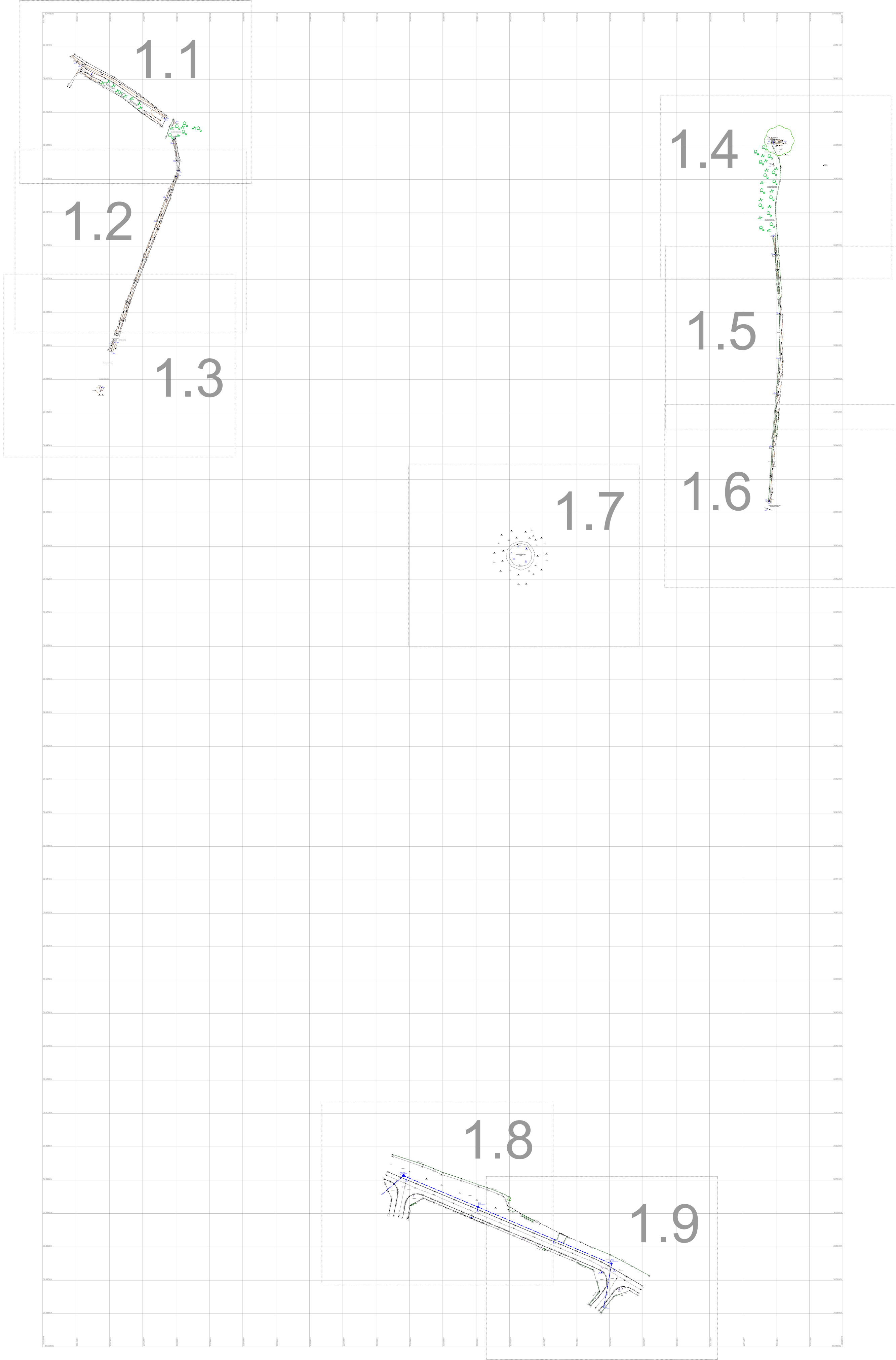
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APPENDICES



APPENDIX B

Level Datum:	O.S (G.P.S. Verified)			
Grid Orientation:	O.S (G.P.S. Verified)			
Station Information:				
Station	Easting (m)	Northing (m)	Level (m)	Description
PEG1	445165.443	304574.915	117.023	Peg
PEG2	445188.452	304568.362	116.534	Peg



- SURVEY NOTES**
- THIS PLAN SHOULD BE USED FOR ITS ORIGINAL PURPOSE ONLY. MEC CONSULTING GROUP ACCEPTS NO RESPONSIBILITY FOR ITS DRAWINGS IF THEY ARE SUPPLIED TO ANY OTHER PARTY OTHER THAN THE ORIGINAL CLIENT.
 - THE INFORMATION SHOWN HAS BEEN SURVEYED IN ACCORDANCE TO THE ACCURACY OUTLINED WITHIN THE ORIGINAL FEE QUOTATION.
 - BOUNDARIES SHOWN ARE PHYSICAL SITE FEATURES AND MAY NOT REPRESENT LEGALLY CONVEYED OWNERSHIP.
 - ALL FEATURES SHOWN WERE CURRENT AT THE TIME OF SURVEY. SOME FEATURES MAY HAVE BEEN MISSED OR OMITTED DUE TO ACCESS, PARKED VEHICLES, TEMPORARY STRUCTURES OR DENSE VEGETATION.
 - ALL GLOBAL NAVIGATION AND SATELLITE SYSTEM (GNSS) DETAIL AND REFERENCE STATIONS HAVE BEEN CAPTURED AND TRANSFORMED ONTO ORDNANCE SURVEY NATIONAL GRID AND DATUM OSG83S USING THE O.S. ACTIVE NETWORK (OS NET) TRANSFORMATION AND GEOID MODEL OSTN15 & OSGM15.
 - NO SCALE FACTOR HAS BEEN APPLIED TO THE SURVEY CONTROL STATIONS AND RELATED DETAIL. THEREFORE ALL THE APPLICABLE COORDINATES SHOWN ARE NOT ON TRUE OSG83(15), AND HAVE BEEN GEOREFERENCED USING A PSEUDO-OSGB36(15) COORDINATE PEG1, AND ROTATED ON A BEARING USING A GNSS REFERENCE STATION AT SURVEY CONTROL STATION PEG2.
 - THE LEVELS SHOWN ARE RELATIVE TO THE MEAN AVERAGE GNSS REFERENCE STATION LEVELS CAPTURED AT ALL SURVEY CONTROL STATIONS.
 - ALL LEVELS ARE REPRESENTATIVE TO METRES ABOVE ORDNANCE DATUM.
 - PLEASE REFER TO THE SURVEY STATION TABLE TO ENABLE ESTABLISHMENT OF THE ON SITE GRID.
 - PLEASE NOTE THAT THE 3D TOPOGRAPHICAL SURVEY CAN BE ACCESSED BY TURNING ON 3D LAYERS VIA THE LAYER FILTER IN THE LAYER MANAGER.
 - REFERENCE GRID IS 20m X 20m.
 - ALL UNITS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
 - SURVEY SHOWN UNDERTAKEN BY MEC CONSULTING GROUP IN JANUARY 2025.
 - NOT ALL LEGEND DETAIL MAY BE APPLICABLE IN THIS DRAWING. IF ANY CLARIFICATION IS REQUIRED, PLEASE INFORM MEC CONSULTING GROUP.

TOPOGRAPHICAL LEGEND

ABBREVIATIONS	
BUILDING HEIGHTS:	UTILITIES:
E: EAVES LEVEL	AV: AIR VALVE
F: FLAT ROOF LEVEL	BO: BOLLARD
R: RIDGE LEVEL	BT: BRITISH TELECOM
	BUS: BUS STOP
FENCE TYPES:	CCTV: CLOSED CIRCUIT CAMERA
BWF: BARBED WIRE	CTV: CABLE TELEVISION
CLF: CHAIN LINK	DP: DOWN PIPE
CPF: CONCRETE PANEL	ER: EARTH ROD
IRF: IRON RAILING	EP: ELECTRIC POST
MF: METAL FENCE	FH: FIRE HYDRANT
PIF: POST & IRON RAIL	FL: FLOODLIGHT
PRF: POST AND RAIL	GMK: GAS MARKER POST
PWF: POST & WIRE	IB: ILLUMINATED BOLLARD
SPF: STEEL PALISADE	JB: JUNCTION BOX
WMF: WIRE MESH FENCE	LP: LAMP POST
WPF: WOOD PANEL FENCE	MR: MARKER POST
	MKR: MARKER POST
TREE/VEGETATION:	MW: MONITORING WELL
G: TREE GIRTH (METRES)	PV: PARKING METER
MG: MULTI GIRTH TREE	RE: RODDING EYE
TC: AVG TREE CANOPY	ST: STOP TAP
TCL: TREE CANOPY LEVEL	SV: SLUICE VALVE
VL: AVG VEG LEVEL	TL: TRAFFIC LIGHT
	TP: TELEGRAPH POST
OTHER:	VP: VENT PIPE
CRW: CONCRETE RETAINING WALL	WM: WATER METER
FFL: FINISHED FLOOR LVL	WO: WASH OUT
GW: GABION WALL	WSG: WATER SERVICE COVER
LBOX: LETTER BOX	
RW: RETAINING WALL	WATERCOURSE:
SP: SIGN POST	B: BED LEVEL
SRW: STONE RETAINING WALL	WL: WATER LEVEL
STL: STILE	
THL: THRESHOLD LEVEL	FEATURE LINES
TRW: TIMBER RETAINING WALL	----- BOTTOM OF BANK
TW: TOP OF WALL LEVEL	----- BUILDING
	----- CANOPY
DRAINAGE	----- CHANNEL
2500: PIPE DIAMETER (mm)	----- DROP KERB
BO: BACK GULLY	----- EDGE OF TREES
CL: COVER LEVEL	----- EDGE OF VEG
DP: DOWN PIPE	----- FENCE
GY: GULLY	----- GATE
IC: INSPECTION CHAMBER	----- LINE MARKING
IL: INVERT LEVEL	----- OVERHEAD LINES
MH: MANHOLE	----- PIPELINE
SO: SOFFIT LEVEL	----- RIVER EMBANKMENT
	----- ROOTLINE
SYMBOLS	----- STEPS
□: SERVICE COVER	----- TOP OF BANK
○: GATE	----- TOP OF KERB
⊙: TREE/BUSH/SAPLING	----- TRACK
⊕: BOREHOLE	----- VERGE
⊕: TRIAL HOLE	----- WALL
⊕: STAKEDOUT	----- WATER LINE
⊕: P1	
⊕: WOODLAND	STATIONS
⊕: VEGETATION	100.000m: STATION LEVEL
⊕: PLANTED FOREST	MEC1: STATION AND NAME
	SURFACE KEY
	BP: BLOCK PAVING
	CPS: CONCRETE PAVING SLABS
	TT: TACTILE PAVING

A	ADDED ADDITIONAL SURVEY AREAS	SJ	JD	RC	30.01.25
	FIRST ISSUE	SJ	DG	JD	23.01.25
REV:	AMENDMENTS:	DRN:	CHK:	APP:	DATE:

PROJECT: BARLESTONE ROAD, NEWBOLD VERDON, LEICESTERSHIRE

DRAWING TITLE: TOPOGRAPHICAL SURVEY OVERVIEW

CLIENT: DAVID WILSON HOMES EAST MIDLANDS

DRAWING NUMBER: 24832_06_170_01

REVISION: A SHEET SIZE: A1 SCALE: NTS

STATUS: FOR INFORMATION



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APPENDIX C



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APPENDIX D

Barlestone Road, Newbold Verdon On-site Photos

Below are the photos taken of the area labelled as flooded on the original topography. The photos were taken on 05/02/2025. The photos show that the area is pooled water created by a concreted bottom to be used for a horse jump for the current site use.









CIVIL ENGINEERING



TRANSPORT



FLOOD RISK & DRAINAGE



STRUCTURES



GEO-ENVIRONMENTAL



ACOUSTIC AIR



UTILITIES



GEOMATICS



LIGHTING



EXPERT WITNESS



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E: group@m-ec.co.uk
W: www.m-ec.co.uk