



ANY EXCEEDANCE FLOWS WHICH COLLECT IN THIS LOW SPOT WILL BE CONTAINED WITHIN THE KERBED PARKING AREA. SHOULD CAPACITY BE EXCEEDED FLOWS WOULD CONTINUE OVERLAND ON NORTHERN BOUNDARY OFF SITE

SURFACE WATER RUN-OFF FOR UP TO THE CRITICAL 1 IN 100 STORM EVENT (PLUS A 30% ALLOWANCE FOR CLIMATE CHANGE) WILL BE CONTAINED IN THE DEVELOPMENT'S NEW DRAINAGE SYSTEM, RESULTING IN NO FLOODING OF NEW OR EXISTING PROPERTIES.

PUMPING STATIONS - NO FLOODING DURING THE CRITICAL 1 IN 100 STORM EVENT (PLUS A 30% ALLOWANCE FOR CLIMATE CHANGE)

THE DISCHARGE RATES FROM THE PROPOSED DEVELOPMENT HAVE BEEN RESTRICTED TO PRE-DEVELOPMENT RATES AND AGREED WITH THE LLFA TO ENSURE THE PROPOSED DEVELOPMENT WILL NOT INCREASE THE RISK OF FLOODING OFFSITE

DOUBLE ROAD GULLY PROVIDED AT THIS LOCATION. PLOT 96-97 AND 96 FINISHED FLOOR LEVEL HIGHER THAN NEXT AVAILABLE GULLY SHOULD BLOCKAGE OCCUR AT THIS LOCATION. SHOULD DRAINAGE SYSTEM BE BLOCKED FLOWS WOULD CONTINUE OVERLAND TO ATTENUATION TANK AREA

FINISHED SITE LEVELS ARE ENGINEERED TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING WHERE POSSIBLE. GRADIENTS OF EXTERNAL AREAS ARE DESIGNED TO FALL AWAY FROM BUILDINGS TO ENSURE THAT ANY OVERLAND FLOW RESULTING FROM EXTREME EVENTS ARE CHANNELLED AWAY FROM BUILDING ENTRANCES.

ALL DWELLINGS AND PROPERTY SURROUNDS SET ABOVE HIGHWAYS, EITHER WITH KERB CHECK OR WHERE THERE IS A RISK/STANDARD DETAIL IN ACCORDANCE WITH KMC STANDARDS VIA S38.

DOUBLE ROAD GULLY PROVIDED AT THIS LOCATION. PLOT 121 FINISHED FLOOR LEVEL SET HIGHER IN A CASE OF A BLOCKAGE AT THIS POINT WHILE ACCESS POINTS ARE UNAFFECTED. IN THE EVENT OF ULTIMATE FAILURE OF DRAINAGE SYSTEM, ANY EXCEEDANCE FLOWS WOULD CONTINUE IN THE NORTHERN DIRECTION TOWARDS SHARED PRIVATE DRIVE WHERE THEY WILL BE CONTAINED. FFL SET HIGHER THAN EXTERNAL GROUND LEVELS ALONG THE ANTICIPATED FLOW ROUTE.

LOW POINT OF HIGHWAY TO CHANNEL WATER TOWARD PUBLIC OPEN SPACE. DROPPED KERBS PROVIDED WHERE APPROPRIATE. MANHOLE IN HIGHWAY SET LOWER THAN PLOT 122 FFL

DRAINAGE GULLIES PROVIDED AT SITE ACCESS TO RETAIN RUNOFF WITHIN SITE

NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SCHEME DRAWINGS AND SPECIFICATIONS.
3. THIS DRAWING IS NOT TO BE PRODUCED IN ANY PART OR FORM WITHOUT CONSENT OF WSP, ALL COPY RIGHT RESERVED.
4. DO NOT SCALE, IF IN DOUBT CONTACT WSP.
5. THE BASE DRAWING (TOPOGRAPHICAL SURVEY) HAS BEEN PROVIDED BY OTHERS, THIS HAS NOT BEEN VALIDATED BY WSP, SURVEY STATION LOCATION AND CO-ORDINATES TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF SETTING OUT.
6. EXISTING ROAD LEVEL AND DRAINAGE INVERT LEVELS SHALL BE CHECKED PRIOR TO CONSTRUCTION COMMENCEMENT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER.
7. NO SERVICE INFORMATION HAS BEEN SHOWN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL RELEVANT SERVICE INFORMATION AND TO VALIDATE THIS ON SITE PRIOR TO COMMENCEMENT. ALL POTENTIAL CLASHES TO BE REPORTED TO THE ENGINEER PRIOR TO COMMENCEMENT.
8. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT AND/OR ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO THE COMMENCEMENT OF WORK.
9. THE PLANNING, DESIGN AND CONSTRUCTION OF SEWERS SHALL BE IN ACCORDANCE WITH DESIGN AND CONSTRUCTION GUIDANCE, THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/ REQUIREMENTS AND KITEMARKED.
10. LOCATIONS AND LEVELS OF EXISTING MANHOLES AND OUTFALLS TO BE VERIFIED ONSITE PRIOR TO COMMENCEMENT OF WORKS.
11. LEVELS OF DRAINS AND SEWER CROSSING LOCATIONS ARE TO BE CHECKED ON SITE BEFORE CONSTRUCTION.
12. MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
13. COVER LEVELS SHOWN ARE APPROXIMATE. COVERS SHALL BE SET TO SUIT THE PROPOSED CARRIAGEWAY LEVELS AND GRADIENT.

KEY

- OVERLAND FLOOD ROUTING
- SITE BOUNDARY
- SITE LOCAL HIGH POINT/ LOW POINT

DOUBLE ROAD GULLY PROVIDED AT THIS LOCATION. PLOT 82 FINISHED FLOOR LEVEL HIGHER THAN NEXT AVAILABLE GULLY SHOULD BLOCKAGE OCCUR AT THIS LOCATION. IN EVENT OF ULTIMATE FAILURE OF DRAINAGE SYSTEM FLOWS WOULD CONTINUE IN NORTHERN DIRECTION AND REJOIN CARRIAGEWAY. FFL SET HIGHER THAN EXTERNAL GROUND LEVELS ALONG THIS ROUTE.

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REV	DATE	BY	DESCRIPTION	CHK	APP
C07	23/08/2024	DP	CONTOURS ADDED AS PER LLFA'S COMMENTS	DP	DP
C06	24/07/2024	DP	PLOT 96 REMOVED FROM THE TECHNICAL LAYOUT	DP	DP
C05	27/03/2023	WW	FOR CONSTRUCTION	DP	NS
C04	28/07/2022	MW	FOR CONSTRUCTION	DP	NS

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PROJECT: **WHITECHAPEL ROAD, CLECKHEATON RESIDENTIAL DEVELOPMENT**

TITLE: **FLOOD ROUTING PLAN**

SCALE @ A1: 1:500

CHECKED: DV

APPROVED: DB

PROJECT NO: 70055404

DESIGNED: MW

DRAWN: MW

DATE: August 24

DRAWING NO: H8040-0504_DETAILS_-_ENGINEERING_AFU...S104_FLOOD_ROUTING_PLAN_C07

REV: C07

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DRAWING STATUS: **A - FIT FOR CONSTRUCTION**