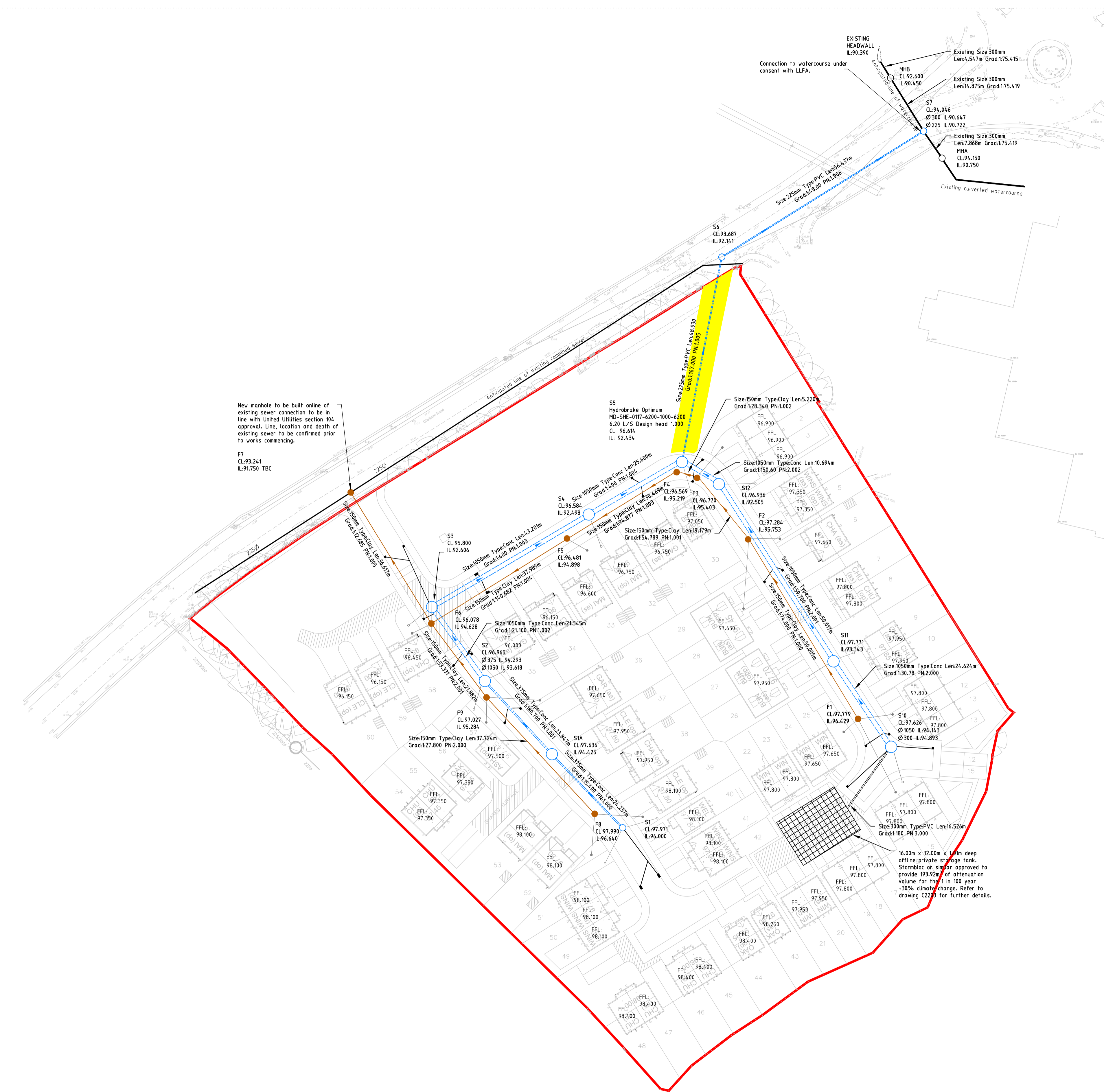


NOTES:

1. ALL SEWERS ARE DESIGNED IN ACCORDANCE WITH SEWERS FOR ADOPTION 6TH EDITION AND UNITED UTILITIES GUIDELINES AND STANDARD DETAILS.
2. ALL CO-ORDINATES AND LEVELS SHOWN ARE RELATIVE TO THE TOPOGRAPHIC SURVEY.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ANY EXISTING GROUND AND INVERT LEVELS SHOWN ON THE DRAWING ARE CORRECT PRIOR TO THE COMMENCEMENT OF ANY WORKS. ANY DISCREPANCIES MUST BE REPORTED IMMEDIATELY.
4. PRIOR TO THE COMMENCEMENT OF ANY ON SITE WORKS THE CONTRACTOR MUST CONTACT THE STATUTORY UNDERTAKER AND BE IN POSSESSION OF THE LATEST DRAWINGS SHOWING THEIR APPARATUS.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ALLOW FOR THE SUPERVISION OF THE CONSTRUCTION WORKS BY UNITED UTILITIES AND/OR LANCASHIRE COUNTY COUNCIL. THE CONTRACTOR WILL NOTIFY THE SUPERVISING OFFICER GIVING NOTICE WHICH WILL BE IN ACCORDANCE WITH THE AUTHORITIES REQUIREMENTS.
6. THE PROPOSED SEWERS WILL BE CLAY PIPE WORK AND SHALL BE EXTRA STRENGTH TO BS EN 295:1991 PART 1.
7. ANY PCC PIPE WORK WILL BE IN ACCORDANCE WITH BS EN 1916:2002.
8. ALL MANHOLES AND CHAMBERS SHALL BE IN ACCORDANCE WITH BS EN 1917:2002.
9. SEWERS WITH COVER TO SOFFIT GREATER THAN 1.2m IN ROADS AND 0.9m IN FIELDS SHALL HAVE BED AND SURROUND AS FOLLOWS: RIGID PIPE EMBEDMENT SHALL BE CLASS A, B, D, F OR S. SEMI RIGID PIPE EMBEDMENT SHALL BE CLASS S1, S2, S3, S4, S5 OR CLASS B1 AND B2 ALL IN ACCORDANCE WITH UNITED UTILITIES STANDARD DETAIL STD/05/001.
10. PRIVATE DRAINAGE CONNECTIONS TO THE SEWER WILL BE 150MM DIAMETER AND LAID TO THE SPECIFIED INVERT.
11. THE INVERT LEVELS SPECIFIED AT THE DRAG OUT CHAMBER ARE INCOMING LEVELS.
12. WHEREVER POSSIBLE PRIVATE DRAINAGE RUNS WILL REMAIN WITHIN THE CURBLINE OF THE DWELLING FOR WHICH THEY SERVE.
13. THE CONNECTION TO THE ADAPTABLE SEWER SHALL BE MANUFACTURED JOINT PIPES A SADDLE CONNECTION IS NOT PERMITTED UNLESS IT IS CLEARLY SPECIFIED.
14. ANY SEWER FOR ADOPTION WITH A COVER OF LESS THAN 1.2M TO PIPE SOFFIT IN ROADS OR 0.9m TO PIPE SOFFIT IN FIELDS WILL HAVE A MINIMUM 150mm GEN 3 CONCRETE BED AND SURROUND WITH FLEXIBILITY MAINTAINED WITH FLEXCELL EXPANSION JOINT FILLER OR SIMILAR APPROVED AT EACH PIPE JOINT.
15. ALL MATERIALS SHALL COMPLY WITH THE NBS SPECIFICATION.
16. ALL BENCHING TO BE AS CLAUSE R12, MINIMUM THICKNESS TO BE 20mm. MN SLOPE 1 IN 30.
17. BRICK TO BE ENGINEERING CLASS 'B' AS CLAUSE R12.
18. CEMENT MORTAR TO BE GROUP 1 AS CLAUSE R12.
19. CONCRETE MIX FOR DRAINAGE BEDS TO BE GEN1.
20. CONCRETE MIX FOR MANHOLE SURROUNDS TO BE GEN3.
21. INSTALL GULLIES, MANHOLES, GRATES, COVERS AND ALL ANCILLARY ITEMS TO MANUFACTURERS SPECIFICATION.
22. ALL MANHOLES INCLUDING 150MM DIAMETER TO BE KITEMARKED AND COMPLY TO BS EN 1917:2002.
23. ALL MANHOLES TO BE INSTALLED IN ACCORDANCE WITH SEWERS FOR ADOPTION MANHOLE DETAILS AND HYDRO INTERNATIONAL SPECIFICATION.
24. CONNECTIONS TO THE EXISTING SEWER WILL BE IN ACCORDANCE WITH SECTION 104 APPROVAL GRANTED BY UNITED UTILITIES.

KEY

- Proposed storm water sewer
- Proposed foul water sewer
- Existing combined sewer
- Proposed highway drain
- Existing watercourse
- Private storm water sewer
- Storm water dropout
- Foul water dropout
- Proposed gully



New manhole to be built online of existing sewer connection to be in line with United Utilities section 104 approval. Line, location and depth of existing sewer to be confirmed prior to works commencing.

F7
CL 93.241
IL 91.750 TBC

EXISTING HEADWALL
IL 90.390

Connection to watercourse under consent with LLFA.

Existing Size 300mm
Len 4.247m Grad 1.75.415

MIB
CL 92.600
IL 90.450

Existing Size 300mm
Len 14.875m Grad 1.75.419

S7
CL 94.046
Ø 300 IL 90.647
Ø 225 IL 90.722

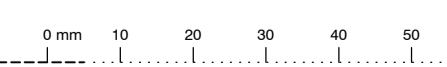
Existing Size 300mm
Len 7.868m Grad 1.75.419

MHA
CL 94.150
IL 90.750

Existing culverted watercourse

16.00m x 12.00m x 1.1m deep of lime private storage tank.
Storm tank as similar approved to provide 193.92m³ of attenuation volume for the 1 in 100 year +30% climate change. Refer to drawing C220 for further details.

FILENAME: J:\11667 - CHATBURN ROAD\CD\DWG\11667_0000_P04.dwg



<p>EDGE CONSULTING ENGINEERS</p> <p>Manchester, UK 3rd Floor, Conovan Court, 12 Blackfriars Street, Manchester, M3 9EQ, United Kingdom</p> <p>T: +44 (0) 161 834 1928 E: manchester@edgece.com</p> <p>www.edgece.com</p>		<p>Project Name CHATBURN ROAD CLITHEROE</p> <p>Client McDERMOTT HOMES</p> <p>Discipline CIVIL</p> <p>Project No. 17067</p>	<p>Drawing Title DRAINAGE LAYOUT</p> <p>Status APPROVAL</p> <p>Drawing No. C2001</p> <p>Revision P04</p>
<p>P04 30.11.17 Updated to new storage tank position MA RA</p> <p>P03 22.11.17 Updated in line with UU comments MA RA</p> <p>P02 16.11.17 Updated in line with LCC comments MA RA</p> <p>P01 02.11.17 Issued for Approval MA RA</p>	<p>Rev Date Description By Ckx</p>	<p>Designed MA</p> <p>Drawn MA</p> <p>Checked RA</p> <p>Scale @ A1 1:500</p>	<p>Scale @ A1 1:500</p>

The concepts + information contained in this document are the copyright of EDGE Consulting Engineers. Use or copying of this document in whole or in part without the written permission of EDGE Consulting Engineers constitutes an infringement of copyright.
DO NOT SCALE DRAWINGS. IF IN DOUBT, ASK!