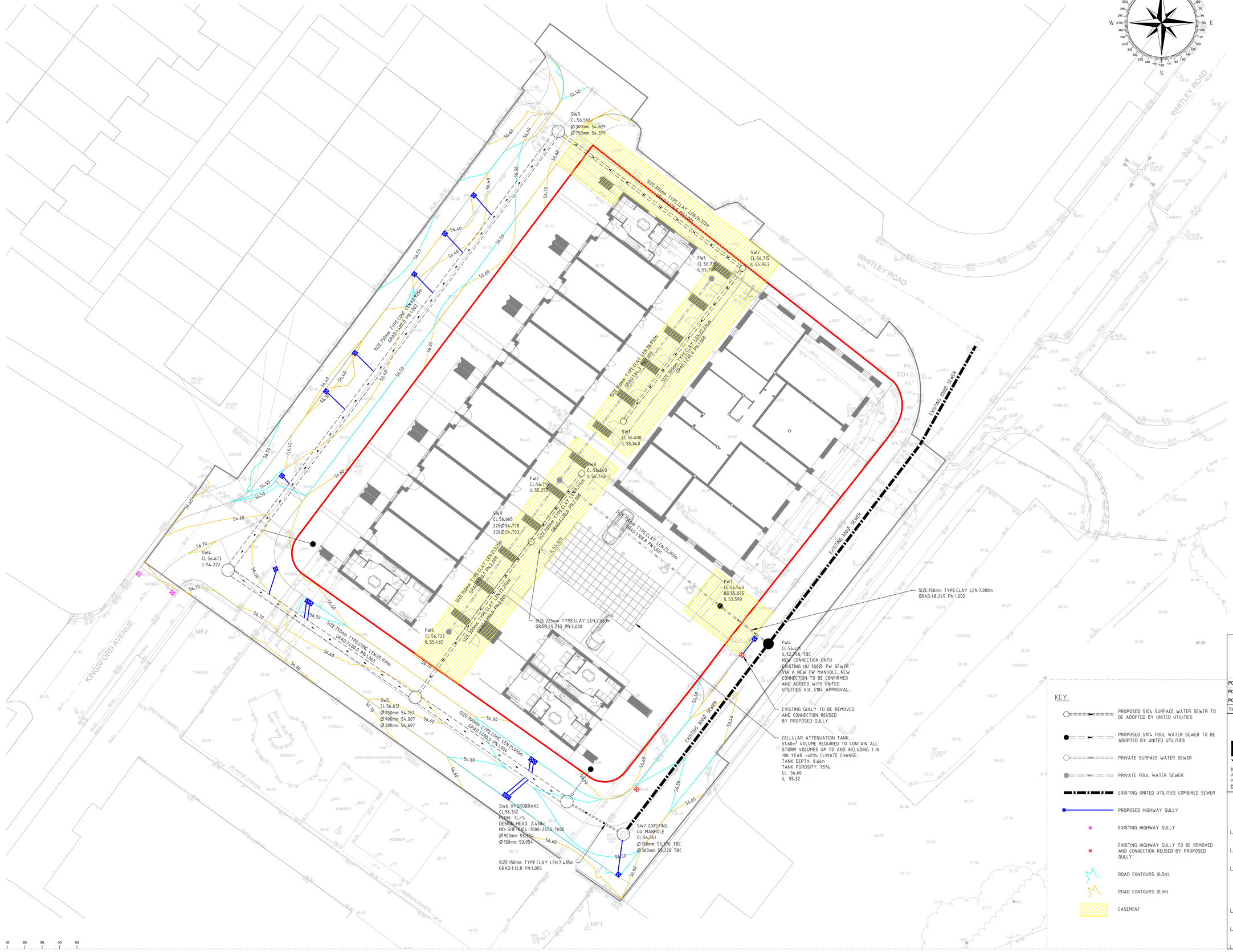


NOTES:

1. ALL SEWERS ARE DESIGNED IN ACCORDANCE WITH **DESIGN AND CONSTRUCTION GUIDANCE FOR FOUL AND SURFACE WATER SEWERS OFFERED FOR ADOPTION 2.1 VERSION AND UNITED UTILITIES GUIDELINES AND STANDARD DETAILS.**
2. NEW SURFACE WATER AND FOUL WATER SEWERS ON WINSCOMBE ROAD AND KINGSFOLD AVENUE ARE TO BE ADOPTED BY UNITED UTILITIES UNDER A S104 AGREEMENT. MCC TO ADOPT NEW HIGHWAY GULLIES AND CONNECTIONS TO S104 SEWER VIA S38 AGREEMENT. CONSTRUCTION WORKS UNDERTAKEN PRIOR TO TECHNICAL APPROVAL ARE AT THE DEVELOPERS RISK.
3. ALL CO-ORDINATES AND LEVELS SHOWN ARE RELATIVE TO THE TOPOGRAPHIC SURVEY **210156/001** BY **SURVEY OPERATIONS.**
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INVESTIGATING AND VERIFYING ALL THE EXISTING DRAINAGE CRITICAL TO THE PROPOSED SCHEME PRIOR TO COMMENCING ANY WORK AS FOLLOWS:
   - ★ MANHOLE OUTFALL LOCATIONS
   - ★ OUTFALL INVERT LEVELS
   - ★ OUTFALL PIPE DIAMETERS
   - ★ INTER-CONNECTION OF SEWERS

   ANY INACCURACIES OR INCONSISTENCIES ON THE DRAWING RESULTING FROM THE FINDINGS SHALL BE REPORTED TO THE ENGINEER.
5. 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.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ALLOW FOR THE SUPERVISION OF THE CONSTRUCTION WORKS BY **UNITED UTILITIES.** THE CONTRACTOR WILL NOTIFY THE SUPERVISING OFFICER GIVING NOTICE WHICH WILL BE IN ACCORDANCE WITH THE AUTHORITIES REQUIREMENTS.
7. THE PROPOSED SEWERS WILL BE CLAY PIPE WORK AND SHALL BE EXTRA STRENGTH TO BS EN 295:1991 PART 1.
8. ANY PCC PIPE WORK WILL BE IN ACCORDANCE WITH BS EN 1916:2002.
9. THE CONTRACTOR MAY ELECT TO USE REINFORCED PVC PIPES COVERED BY BS EN 13476-2, B.S 4660:200 & B.S EN 1401-1. STRUCTURED WALL UPVC PIPES TO COMPLY WITH WIS 4-35-01 UP TO AND INCLUDING 300MM. MAX PIPE LENGTH TO BE 3.0M.
10. ALL MANHOLES AND CHAMBERS SHALL BE IN ACCORDANCE WITH BS EN 1917:2002
11. ADOPTABLE SEWERS WITH COVER TO SOFFIT GREATER THAN 1.2m IN ROADS AND 0.9m IN FIELDS SHALL HAVE CLASS S GRANULAR BED AND SURROUND
12. 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.**
13. ALL PIPES BUILT INTO THE MANHOLE INVERTS SHALL BE INSTALLED WITH SOFFITS LEVEL. UNLESS SHOWN OTHERWISE.
14. THE CONNECTION TO THE ADOPTABLE SEWER SHALL BE MANUFACTURED JUNCTION PIPES. A SADDLE CONNECTION IS NOT PERMITTED UNLESS IT IS CLEARLY SPECIFIED.
15. CONNECTIONS TO THE EXISTING PUBLIC SEWER WILL BE IN ACCORDANCE WITH APPROVAL GRANTED BY THE STATUTORY UNDERTAKER.
16. PRIVATE DRAINAGE CONNECTIONS TO THE SEWER WILL BE 150MM DIAMETER AND LAID TO THE SPECIFIED INVERT.
17. THE INVERT LEVELS SPECIFIED AT THE DRAG OUT CHAMBER ARE INCOMING LEVELS.
18. A PROTECTIVE GEOTEXTILE/PLASTIC MEMBRANE IS TO BE APPLIED TO ALL FOUL SEWERS LAID ABOVE STORM SEWERS WITH LESS THAN 500MM OF COVER
19. CENTRE OF MANHOLES MAY NOT BE AT THE SAME LOCATION AS PIPE INTERSECTION OR AS SHOWN IN THE LAYOUT. THE MANHOLE RINGS SHALL BE ADJUSTED OVER THE MANHOLE BASE TO SATISFY THE FOLLOWING REQUIREMENTS:
   - ★ CLEARANCE FROM THE ADJACENT PIPE WORK
   - ★ CLEARANCE FROM THE KERB LINE (THE BISCUIT OF THE MANHOLE SHALL NOT PROJECT UNDER THE ROAD CHANNEL LINE).
   - ★ TO PROVIDE THE MINIMUM STANDING SPACE ON THE BENCHING AND THEREBY LOCATE THE MANHOLE COVER AND ENTRY ACCESS.
   - ★ TO PROVIDE THE MINIMUM 250MM OF BEARING FOR THE MANHOLE RING OVER THE CAST IN STUB PIPES.
20. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LIAISE WITH THE HIGHWAY AND SEWERAGE AUTHORITIES FOR APPROVALS, INTERIM INSPECTION, SNAGGING AND FINAL INSPECTIONS OF THEIR WORK TO ADOPTABLE STANDARDS.
21. AT THE CONCLUSION OF THE WORKS THE CONTRACTOR SHALL PROVIDE A MARKED UP DRAWING TO RECORD ANY AS BUILT VARIATIONS NOT SHOWN ON THE DRAWINGS.

KEY:

- PROPOSED S104 SURFACE WATER SEWER TO BE ADOPTED BY UNITED UTILITIES
- PROPOSED S104 FOUL WATER SEWER TO BE ADOPTED BY UNITED UTILITIES
- PRIVATE SURFACE WATER SEWER
- PRIVATE FOUL WATER SEWER
- EXISTING UNITED UTILITIES COMBINED SEWER
- PROPOSED HIGHWAY GULLY
- EXISTING HIGHWAY GULLY
- EXISTING HIGHWAY GULLY TO BE REMOVED AND CONNECTION REUSED BY PROPOSED GULLY
- ROAD CONTOURS (0.5m)
- ROAD CONTOURS (0.1m)
- EASEMENT

Rev	Date	Description	By	Chk
P03	11.06.24	4th Technical Review Comments	A.R.	R.A.
P02	15.04.24	3rd Technical Review Comments	A.R.	R.A.
P01	28.02.24	PRELIMINARY - Issued for Information	A.R.	R.A.

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DO NOT SCALE DRAWINGS. IF IN DOUBT, ASK!

Project Name
COLLYHURST VILLAGE

Client
DEX CONSTRUCTION

Designed	Drawn	Checked	Scale @ A1
A.R.	A.R.	R.A.	1:200

Drawing Title
HIGHWAY DRAINAGE

Project No.
221625

PRELIMINARY
NOT FOR CONSTRUCTION

Drawing No.
221625-EDGE-STH-XX-DR-C-3017

Revision
P03

FILENAME
PLOT DATE

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