DENOTES PROPOSED FOUL SEWER TO BE ADOPTED UNDER S104 AGREEMENT

DENOTES PROPOSED SURFACE WATER SEWER TO BE ADOPTED UNDER S104 AGREEMENT

DENOTES SEWER EASEMENT

FFL 24.20 — DENOTES INDICATIVE FINISHED FLOOR LEVEL

DENOTES PROPOSED CELLULAR STORAGE (TO REMAIN PRIVATE) TO CATER FOR 100 YEAR + 45% CC EVENT

INDICATES DRIVEWAYS / PARKING AREAS TO USE PROPRIETARY PERMEABLE SURFACING MATERIALS WITH STONE SUB BASE AS MANUFACTURERS DETAILS. WHERE POSSIBLE DRIVEWAYS ARE TO BE LAID TO FALL TO SURROUNDING GARDENS AND POS AREAS. WHERE DRIVEWAYS FALL TOWARDS GARAGES ACO DRAIN CONNECTED TO SUB BASE IS TO BE INSTALLED TO REDUCE RISK OF WATER INGRESS IN TO GARAGES

PLEASE NOTE THAT THE FLOOR LEVELS SHOWN ARE FOR APPRAISAL PURPOSES ONLY AND WILL BE SUBJECT TO REVIEW / CHANGE AT DETAILED ROAD AND SEWER DESIGN STAGE

FOUNDATIONS TO BE DESIGNED TO TAKE INTO ACCOUNT ANY ADJACENT DEEP SEWERS

N

SCALE IN METRES
0 5 10 20 50

THE OFF SITE SEWER CONNECTION(S) HAVE BEEN DESIGNED IN ACCORDANCE WITH INFORMATION FROM UNITED UTILITIES RECORDS & SURVEY INFORMATION.

REFA WOULD ADVISE THE CLIENT TO EMPLOY A SUITABLY EXPERIENCED COMPANY TO UNDERTAKE TRIAL HOLES TO ASCERTAIN THE EXACT LOCATION OF EXISTING SERVICES AND THE PROXIMITY OF THE SAME TO THE PROPOSED SEWERS AND THEN TO ADVISE REFA OF ANY POTENTIAL CLASHES TO ENABLE DESIGN CHANGES TO BE MADE WHERE FEASIBLE

DUE TO THE NEED FOR OFF SITE SEWER WORKS IT IS STRONGLY ADVISED THAT THESE INVESTIGATIONS ARE UNDERTAKEN PRIOR TO ANY CONSTRUCTION ON SITE TO ALLOW DESIGN CHANGES TO BE MADE.

REFA WILL NOT BE HELD RESPONSIBLE FOR ANY ABORTIVE WORKS IF THIS PROCEDURE IS NOT FOLLOWED

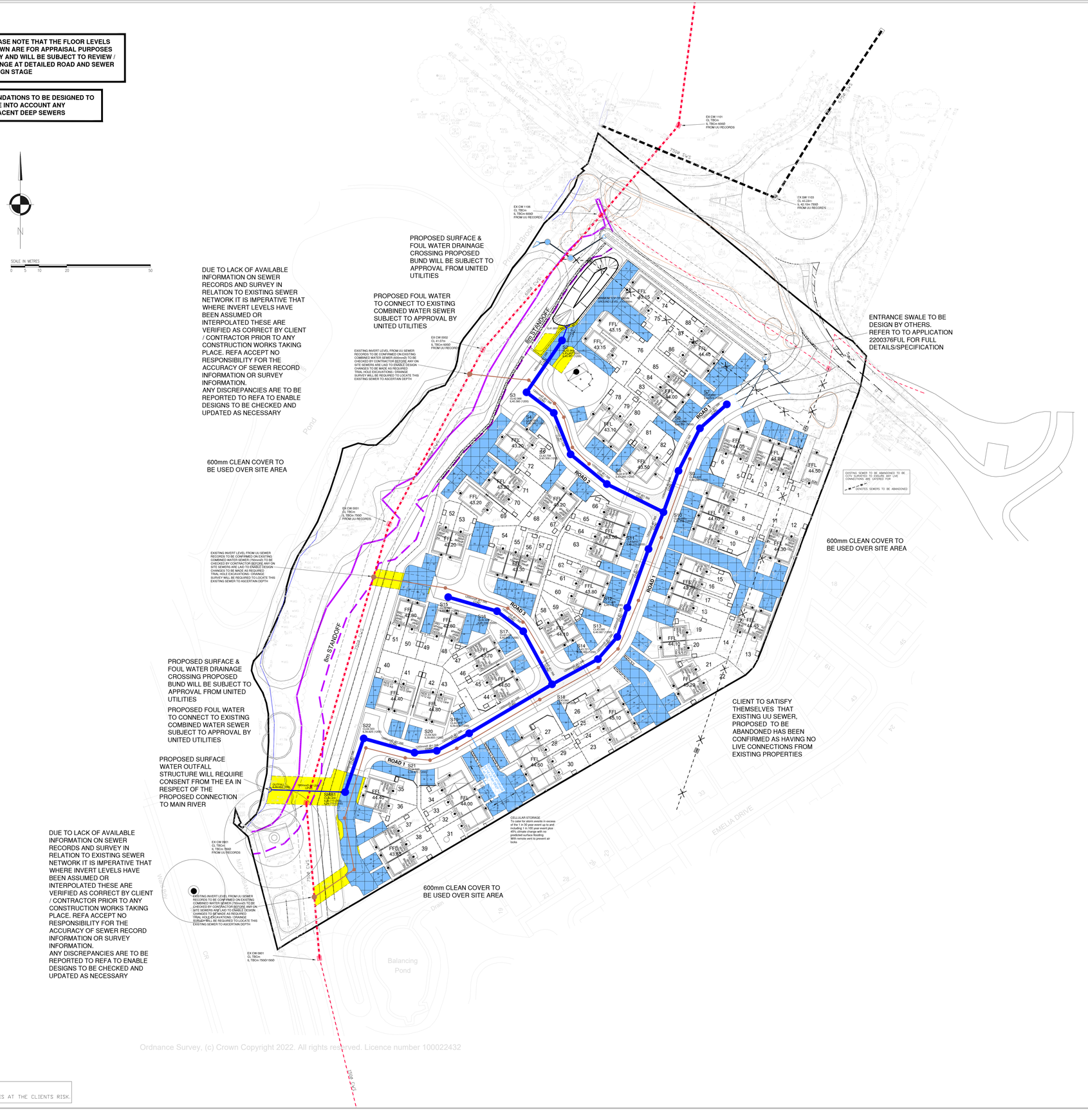
ALL DESIGNS SHOWN ARE FOR APPRAISAL PURPOSES ONLY AND ARE SUBJECT TO DETAILED DESIGN AND APPROVAL BY THE RELEVANT REGULATORY AUTHORITIES AT THE APPROPRIATE TIME
DRAWING IS THUS NOT ISSUED FOR CONSTRUCTION PURPOSES

THE FOUL AND SURFACE WATER DRAINAGE SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH DESIGN & CONSTRUCTION GUIDANCE, SuDS MANUAL CIRIA C753, AND SC030219 AND THE FRA AND ARE SUBJECT TO APPROVAL BY UNITED UTILITIES, LLFA & EA

THE FOUL WATER SYSTEM IT TO CONNECT TO THE EXISTING UU COMBINED SEWER BY WAY OF 3 CONNECTIONS AND WILL BE SUBJECT TO APPROVAL FROM UNITED UTILITIES.
ADDITIONAL LEVEL INFORMATION WILL BE REQUIRED ON THE COMBINED SEWER TO COFIRM DEPTHS AND CONNECTION POINTS.

THE SURFACE WATER SYSTEM HAS BEEN DESIGNED TO CONNECT TO THE EXISTING WATER COURSE AND IS SUBJECT TO APPROVAL BY THE EA.

THE PIPE DIAMETERS AND GRADIENTS SHOWN ARE FOR GUIDANCE ONLY AND MAY BE SUBJECT TO CHANGE AT DETAILED DESIGN STAGE



Ordnance Survey, (c) Crown Copyright 2022. All rights reserved. Licence number 100022432

GENERAL

1. All adoptable sewers and associated works are to comply fully with "Design and Construction Guidance" & Local Practices
2. All highway works to be to adoptable standards and to to comply fully with the Local Authority specification.
3. All private drainage works are to comply fully with part H of the Building Regulations
4. All existing invert levels to be checked by the Contractor at the start of works and any discrepancies notified to REFA.
 All levels are based on topographical survey information provided by others.
5. All materials to bear the relevant B.S.Kitemark and comply fully with the specifications.
 All concrete & concrete products must use Sulphate resistant cement (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur)
6. All opening notices etc. as required under highways acts etc. are to be obtained prior to commencement of works.
 All works are to be inspected by L.A., NHBC or Relevant Water Authority as applicable.

C.D.M. REGULATIONS 2015

In line with the above regulations we are obliged to inform the Client of their responsibilities under section CDM 15/1, and residual risks that may be encountered in the construction of these works.
All design work has been carried out with Health and Safety aspects given full consideration.
Wherever possible risks have been eliminated from the design, however due to the very nature of this type of work it is not possible to remove all the risks from the design.
We would also respectfully remind the Client of his obligations to take all reasonable steps in ensuring that only competent Contractors who have a valid safety policy are employed.
They should also provide satisfactory responses at tender stage as to the manner in which they will deal with the elements of risk involved in this type of work and in particular those highlighted by REFA below:-

1. Support / treatment for ALL excavation work.
2. Guarding to edges of excavations to prevent people,materials and vehicles falling into excavation.
3. Guarding of excavations outside working hours to prevent unauthorised access.
4. Undermining to adjacent roads or structures.
5. Confined space operations.
6. Dealing with existing services.
7. Traffic management on existing highways.
8. Procedure to be followed in event of accident or emergency.
9. Method of working where contaminated ground is present on site.
10. Confirmation will be required that all operatives are adequately trained, copies of relevant training certificates to be supplied.

The above list is by no means exhaustive but it does highlight operations that present a risk to contractors and the general public.
For clarification on any item please contact REFA.

rev	Revision details	Date

Drawing Stage			Drawing Status		
	Draft		Comments	●	Tender
●	Issued		Information		Construction
		●	Approval		As Built

Client
UNITED LIVING

Job title
CARR LANE, PRESCOT

Drawing title
DRAINAGE STRATEGY

REFA
45 Bridgeman Terrace
Wigan, Lancs
WN1 1TT
Tel:-(01942) 826020
Fax:-(01942) 230816
CONSULTING ENGINEERS
CIVIL • STRUCTURAL
GEOTECHNICAL • ENVIRONMENTAL

Date	Scale	Drawn
30.08.23	1/500	AS

DRAWING No 23088/100/1 — Rev

© This drawing is the property of REFA and should not be copied, used or its contents divulged without prior written consent.

THIS DRAWING IS BASED ON PLANNING LAYOUT PROVIDED BY CLIENT
DRAWING NUMBER:- UL/CL/SL/01
REVISION:- D
CLIENT TO ENSURE THE ABOVE LAYOUT IS CURRENT BEFORE USING THIS DRAWING FOR CONSTRUCTION PURPOSES

PLEASE NOTE THAT THIS DRAWING IS ISSUED FOR INFORMATION/TENDER PURPOSES ONLY UNTIL TECHNICAL APPROVAL HAS BEEN GRANTED.
ANY WORK UNDERTAKEN PRIOR TO TECHNICAL APPROVAL BEING GRANTED IS AT THE CLIENTS RISK.

A0 SHEET