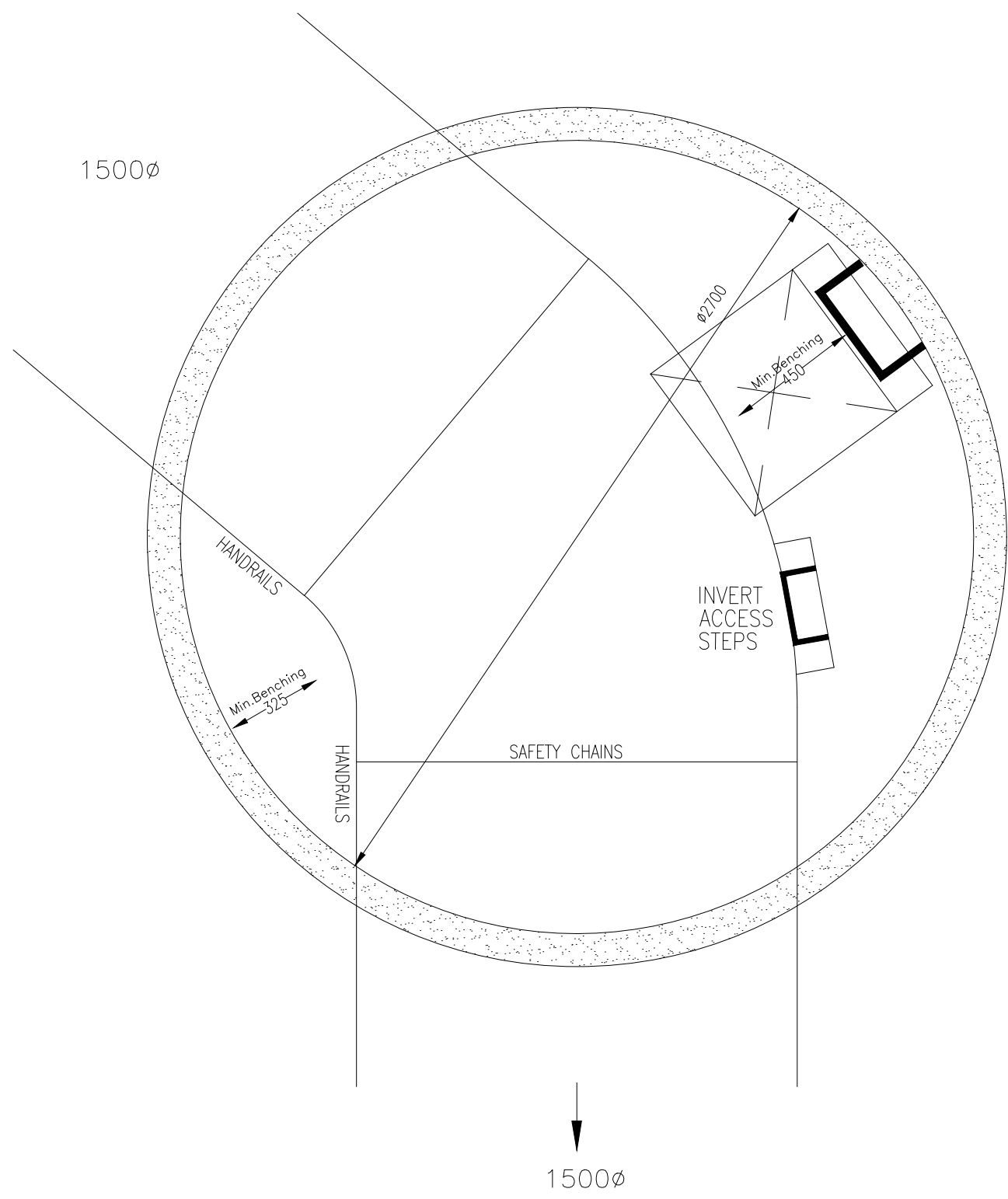


PLEASE NOTE THAT THIS DRAWING IS ISSUED FOR INFORMATION/TENDER PURPOSES ONLY UNTIL TECHNICAL APPROVAL HAS BEEN GRANTED.
ANY WORK UNDERTAKEN PRIOR TO TECHNICAL APPROVAL BEING GRANTED IS AT THE CLIENTS RISK

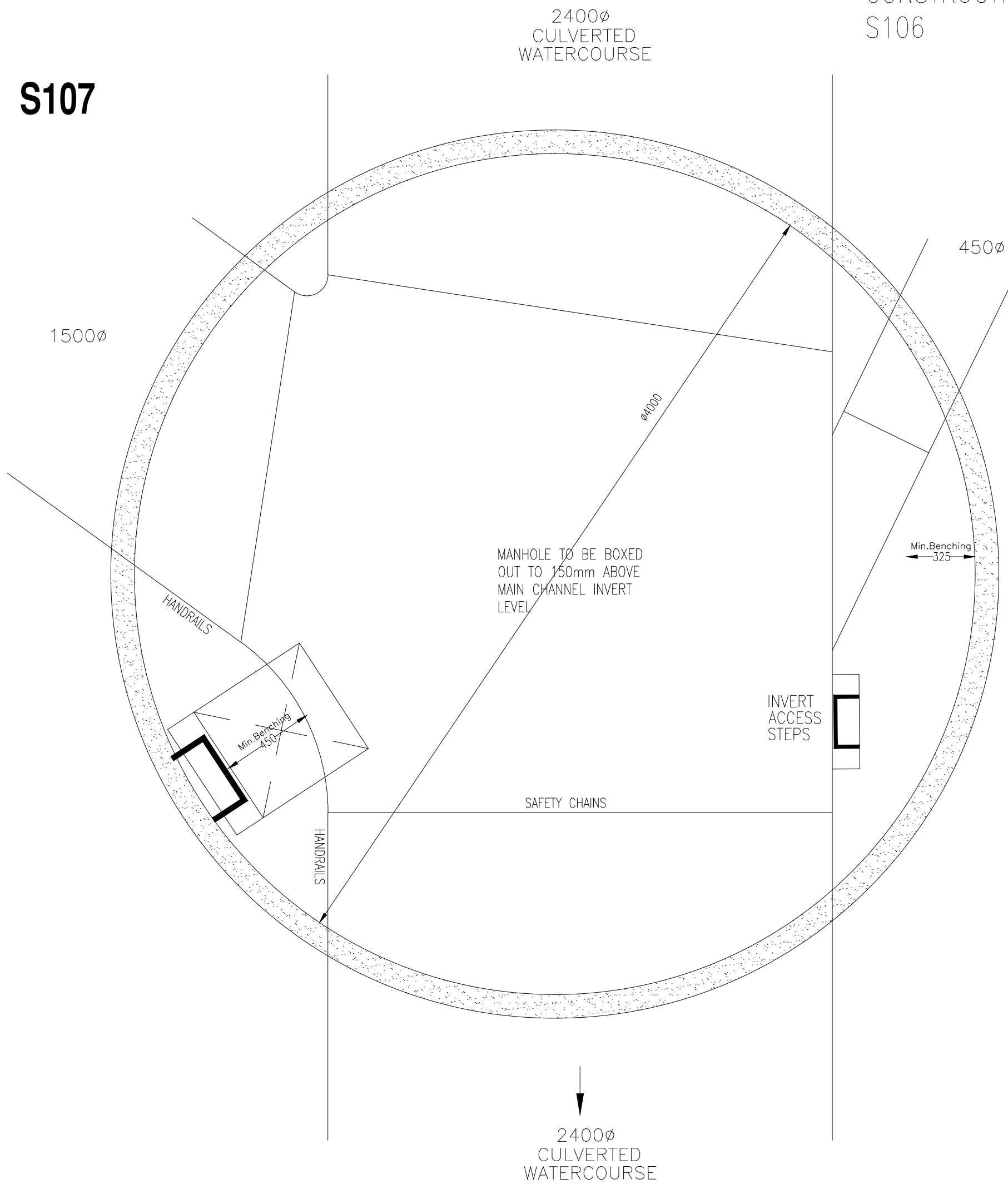
S106



PROPOSED SURFACE WATER TO
CONNECT TO EXISTING SURFACE
WATER CULVERT SUBJECT TO
APPROVAL BY LLFA

PLEASE NOTE: EXTRA CARE TO
BE TAKEN AROUND EXISTING
BRICK CULVERT WHEN
CONSTRUCTING NEW MANHOLE
S106

S107



ROCKER PIPES WILL BE USED IN LINE WITH DESIGN
AND CONSTRUCTION GUIDANCE
FOR PIPES 225-600 DIA - ROCKER PIPE EFFECTIVE
LENGTH:600

FOR PIPES 825 DIA AND ABOVE - ROCKER PIPE
EFFECTIVE LENGTH SHALL BE 1250, ROCKER PIPES
TO BE USED UNTIL THE PIPE OUTSIDE DIAMETER
EXCEEDS THE EFFECTIVE LENGTH OF THE ROCKER
PIPE

NOTE ALL CONNECTIONS TO BE MADE SOFFIT
LEVEL UNLESS INDICATED OTHERWISE

MANHOLES TO BE CONSTRUCTED IN ACCORDANCE
WITH THE DESIGN AND CONSTRUCTION GUIDANCE
- MAY 2021

MANHOLE LADDER TO BE CONSTRUCTED IN LINE
WITH DESIGN AND CONSTRUCTION GUIDE CLAUSE
DCG CLAUSE E2.37

Manhole Number	Cover Level		Pipe				Manhole Size	Types		Other Detail					
Coordinates	Depth To Soffit			Code	Inverts	Diams		Manhole	Cover	Depth & Size (mm)	Means of Access	Safety Chains	Handrails	Invert Access Steps	
S106	45.791		1	1.005	41.565	1500	2700	TYPE B FIGURE B10	D400	150 600 x 600	Ladder	Yes	Yes	Yes	
E= 386145.828 N= 397026.137	2.726														750 x 600 COVER SLAB OPENING
			0	1.006	41.565	1500									
S107	45.630		1 EX 3	1.006	42.490 40.540 41.441	450 2400 1500	4000	SHALLOW ACCESS MH	D400	150 600 x 600	Ladder	Yes	Yes	Yes	
E= 386129.207 N= 397012.677	2.690														750 x 600 COVER SLAB OPENING
			EX		40.540	2400									

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 conform 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 HRA.
All levels are based on topographical survey information provided by HRA.
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. must 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 all times to any queries or questions 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 / edges of excavations to prevent people, materials and vehicles falling into excavation.
 3. Guarding of excavations outside working hours to prevent unauthorised access.
 4. Underpinning 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.

[illegible]

C	TO LATEST DESIGN	AS	06.02.2
B	REVISED TO LATEST DESIGN	AS	22.02.2
A	MH CO ORDS ADDED	AS	23.01.2

rev	Revision details	Rev.By	Date
   			

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

Client

KELLEN HOMES

Job title

**BENNETT STREET
MANCHESTER**

Drawing title

SW MANHOLE

SCHEMATICS DRG 4

REFA

45 Bridgeman Terrace
Wigan, Lancs
WN1 1TT
Tel: (01942) 826020
Fax: (01942) 230816

CONSULTING ENGINEERS

CIVIL • STRUCTURAL

GEOTECHNICAL • ENVIRONMENTAL

Date 18.11.22	Scale 1:20	Drawn AS
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DRAWING No	22122/104/6	Rev C
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