



- NOTES:**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 - DO NOT SCALE THIS DRAWING. ALL DETAILS AND DIMENSIONS ARE TO BE CHECKED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
 - ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE RELEVANT TO ORDNANCE DATUM (NEWLYN).
 - LOCATION OF EXISTING SEWERS, UTILITIES AND SERVICES TO BE SURVEYED BEFORE COMMENCING WORK ON SITE.
 - ALL ADAPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'SEWERS FOR ADOPTION' 6TH EDITION, THE RELEVANT BRITISH/EUROPEAN AND UNITED UTILITIES'S STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
 - MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
 - FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF UNITED UTILITIES BEFORE ANY SEWER WORKS ARE CARRIED OUT.
 - UNITED UTILITIES IS NOT OBLIGED TO ACCEPT FILTER DRAIN/AND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADAPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN/AND DRAINAGE RUN-OFF.
 - COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY UNITED UTILITIES INSPECTOR. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOADING BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600mm x 600mm FOR THE UNITED UTILITIES SPECIFIED COVER SIZE. PLEASE REFER TO CONCRETE PIPE SYSTEMS ASSOCIATION (CPSA), TECHNICAL BULLETIN ISSUED AUTUMN 2004 FOR KITE MARKED COVER SLAB OPENING SIZES.
 - SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
 - THE ADAPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
 - "SEWERS MUST HAVE 5 METRES CLEARANCE FROM TREES AND HEDGES (PLEASE ALSO REFER TO FIGURE 2.3 ON PAGE 33 IN 'SEWERS FOR ADOPTION' 6TH EDITION FOR RESTRICTIONS ON TREE PLANTING ADJACENT TO SEWERS)".
 - SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND), WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2M IN HIGHWAYS AND VERGES (OR LESS THAN 900MM IN NONE VEHICULAR ACCESS, THEN A CONCRETE SLAB SHOULD BE PROVIDE ABOVE GRANULAR BED AND SURROUND.
 - BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
 - THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
 - UNITED UTILITIES POLICY IS NOT TO ACCEPT TYPE "C" BRICK MANHOLES AND 1050mm DIA MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIA OR 1500mm DIA RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFIT IS 1 - 1.5m.
 - "THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA. 40KN/m, 150mm DIA. 40KN/m, 225mm DIA. 45KN/m and 300mm DIA. 72KN/m. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE TO CLASS 120 TO EN 1916 / BS 5911-1:2002".
 - PRIVATE DRAINAGE SHOWN ON THIS DRAWING FOR INFORMATION. REFER TO APPROPRIATE ELLUC PROJECTS DRAWINGS FOR CURRENT LAYOUTS AND ADDITIONAL INFORMATION.
 - INVERT AND COVER LEVELS OF EXISTING MANHOLE TO BE CONFIRMED PRIOR TO WORKS COMMENCING ON SITE.

F	Flow control amended to orifice plate and drag outs amended	09.10.25	DW	ET
E	Flow control and crate size amended	08.10.25	DW	ET
D	Latest Layout Shown.	24.07.25	JC	DW
C	Latest Layout Shown.	23.07.25	JC	DW
B	Crate position amended.	16.01.25	DW	JC
A	Connection Point Updated	14.01.25	DW	JC
Rev:	Description:	Date:	By:	Chk:

Status: **CONCEPT**

Client: **WATSON HOMES**

Project: **SPURR HOUSE BURY**

Dwg Title: **CONCEPT DRAINAGE LAYOUT**

ELLUC Projects

ELLUC PROJECTS LTD
760 MANDARIN COURT
CENTRE PARK
WARRINGTON
WA1 1GG

TEL: +44 (0)1925 243333
INFO@ELLUCPROJECTS.COM
WWW.ELLUCPROJECTS.COM

Scale:	Size:	First Issue:	Drawn:	Checked:
1:200	A1	NOV 2024	ARA	ARA
Dwg No:	24104-C-1000			Rev: F