

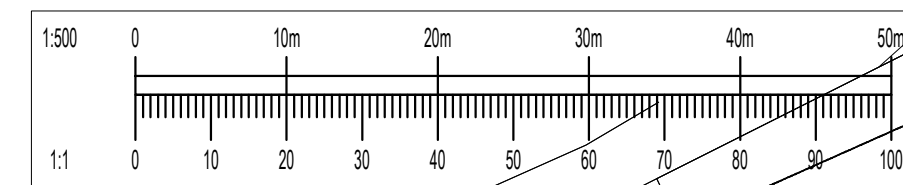
DRAINAGE DESIGN PHILOSOPHY

- SURFACE WATER DESIGN**
- SURFACE WATER INFILTRATION UNVAILABLE DUE TO POOR STRATA
 - EXISTING OUTFALL TO COMBINED UU SEWER UTILISED
 - PREDEVELOPMENT BROWNFIELD QBAR RATE LESS 50% BETTERMENT + CLIMATE CHANGE ALLOWANCE OF 45% HAS BEEN APPLIED TO ESTABLISH A RESTRICTED DISCHARGE RATE OF 19.6l/s FROM THE WHOLE SITE - SUBJECT TO LLFA APPROVAL
 - NB TWO EXISTING DWELLING UNITS OFF POLE LANE HAVE HAD THEIR OUTFALLS DIVERTED FROM WITHIN THE SITE NETWORK DIRECT TO THE SEWER IN POLE LANE - SUBJECT TO S106 APPLICATION
 - FLOW CONTROL BY MEANS OF HYDROBRAKE 19.6l/s (0.865m HEAD)
 - ATTENUATION/STORAGE PROVIDED BY NO FINES/TYPE 3 SUBBASE MATERIAL TO PARKING/MUGA AREAS
 - APPROXIMATE STORAGE REQUIREMENT: 161m³ (TOTAL IN TWO AREAS)
 - LEVELS INDICATE THAT PUMPING IS NOT REQUIRED
 - POLLUTION TREATMENT: PROVIDED BY NO FINES/TYPE 3 SUBBASE
 - SUSTAINABLE DRAINAGE: TANKED PERMEABLE CONSTRUCTION
 - THE DESIGN PROVIDES CAPACITY UP TO THE 100 YEAR + 45% CLIMATE CHANGE EVENT WITH NO EXCEEDANCE.

FOUL WATER DESIGN
FW PEAK FLOW RATE: TBC/L/S
OUTFALL: EXISTING COMBINED SEWER NETWORK

KEY:

- EXISTING COMBINED WATER DRAIN
- EXISTING FOUL WATER DRAIN
- EXISTING SURFACE WATER DRAIN
- EXISTING ABOVE GROUND DRAINAGE/RWP (ASSUMED LOCATIONS)
- EXISTING ABOVE GROUND DRAINAGE/POPIUP (ASSUMED LOCATIONS)
- EXISTING PIPEWORK/ CONNECTION BRANCHES EVIDENT BUT NOT MAPPED
- EXISTING PIPEWORK ABANDONED/ REMOVED/ GROUTED
- PROPOSED FOUL WATER PIPE
- PROPOSED COMBINED WATER PIPE
- PROPOSED SURFACE WATER PIPE
- PROPOSED MUGA/PITCH NO FINES/TYPE 3 ATTENUATION BLANKET
- PROPOSED CAR PARK NO FINES/TYPE 3 ATTENUATION BLANKET
- EXISTING/PROPOSED BUILDING



TOTAL
OFFSITE
148m²

TWO EXISTING PROPERTIES - SURFACE WATER OUTFALL DIVERTED TO A NEW CONNECTION ON TO UU MAIN SEWER. IMPERMEABLE AREA REMOVED FROM ONSITE DRAINAGE SOLUTION. REQUIRES SUBSEQUENT S106 APPLICATION WITH UU.
FOUL WATER FLOWS ALSO DIVERTED. NEW OUTFALL COMBINED CONNECTION REQUIRED.

PROPOSED DRAINAGE
IMPERMEABLE AREAS
SCALE 1:500

GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- THIS DRAWING IS BASED ON THE DRAINAGE REPORT, PREPARED BY AHR (REF: 3233 - AHR - Spurr House, Bury - CCTV Survey Report : 30/04/22)
- THIS DRAWING IS BASED ON THE FOLLOWING:
ARCHITECTS LAYOUT
 - AHR 'SH-AHR-SK-32 - Proposed Ground Floor With Levels' DATED 2023-01-19

DRAINAGE NOTES

- ALL DRAINAGE WORK TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS, BS EN 752 & TO THE SATISFACTION OF THE BUILDING INSPECTOR.
- IN ADDITION, ALL SEWERS INDICATED FOR ADOPTION TO BE BUILT IN ACCORDANCE WITH SEWERS FOR ADOPTION PUBLISHED BY THE WATER SERVICES ASSOCIATION. SEE SEPARATE NOTES.
- ALL PROPRIETARY ITEMS ARE TO BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURERS DETAILS, INSTRUCTIONS & SPECIFICATIONS.
- ALL EXISTING DRAINS & SERVICES LINE & LEVELS TO BE CHECKED BY THE CONTRACTOR ON SITE PRIOR TO FINALISING NEW DRAINAGE LINES & LEVELS.
- ALL COVER LEVELS ARE APPROXIMATE. EXACT LEVELS TO BE DETERMINED FROM THE EXTERNAL WORKS LAYOUT.
- INVERT LEVELS QUOTED AT MANHOLES & INSPECTION CHAMBERS ARE THOSE OF THE LARGEST CONNECTED PIPE DIAMETER. PIPES AT CHAMBERS TO BE LAID WITH SOFFITS LEVEL UNLESS NOTED OTHERWISE.
- PIPE GRADIENTS WHERE STATED ARE APPROXIMATE.
- REFER TO ARCHITECT'S DRAWINGS FOR PRECISE LOCATION OF ALL RAINWATER PIPES, INTERNAL CONNECTIONS ETC.
- ALL INTERNAL CONNECTIONS ARE TO HAVE AN ABOVE-FLOOR ACCESS POINT TO ENABLE FUTURE ACCESS FOR MAINTENANCE.
- PIPES & FITTINGS TO BE:
 - PERFORATED VITRIFIED CLAY PIPES FOR LAND DRAINAGE TO BS 1196.
 - CONCRETE PIPES & ANCILLARY PRODUCTS TO BS 5911-1:2002+AR:2010 & BS EN 1916:2002.
 - VITRIFIED CLAY PIPES & FITTINGS TO BS EN 295:2013 (ALL PARTS).
 - DUCTILE IRON TO BS EN 598:2007 & BS ISO 4179:2005.
 - PLASTIC PIPES FOR LAND DRAINAGE TO BS 4962:1982.
 - PLASTIC PIPING SYSTEMS FOR NON-PRESSURE UNDERGROUND DRAINAGE & SEWAGE TO BS EN 401 & BS 4680 - SOLID WALL ONLY. STRUCTURED WALL PIPES ARE NOT ACCEPTABLE FOR USE IN DRAINAGE SYSTEMS UNLESS AGREED.
 - PRECAST CONCRETE MANHOLE UNITS TO BS EN 1917:2002.
 - PLASTIC INSPECTION CHAMBERS FOR DRAINS & SEWERS TO BS EN 13558-1:2010.
 - GULLY & MANHOLE TOPS FOR VEHICULAR & PEDESTRIAN AREAS TO BS EN 124:1994.
 - DRAINAGE CHANNELS FOR VEHICULAR & PEDESTRIAN AREAS TO BS EN 1433:2002.
- ALL MANHOLE COVERS, ROAD GULLY COVERS & FRAMES TO COMPLY WITH BS EN124 NON ROCKING TYPE.
- UNLESS NOTED OTHERWISE USE:
 - FOR USE IN PEDESTRIAN AREAS WHERE VEHICLES HAVE NO ACCESS. CLASS A15
 - FOR USE IN CAR PARKS & PEDESTRIAN AREAS WHERE INFREQUENT LIGHT VEHICLE ACCESS IS LIKELY (INCLUDING DRIVEWAYS). CLASS B125
 - FOR ACCESS COVERS & GULLY GRATINGS IN AREAS OF SLOW MOVING, HEAVY TRAFFIC ALSO FOR GULLY GRATINGS IN CARRIAGEWAY WITHIN 500mm OF KERB & UP TO 200mm INTO THE FOOTWAY. CLASS C250
 - FOR USE IN CARRIAGEWAYS OF ROADS, HARD SHOULDERS AND PARKING AREAS ACCESSED BY ALL TYPES OF VEHICLES. CLASS D400
 - FOR USE IN AREAS WHERE HIGH WHEEL LOADS ARE PRESENT. CLASS F600
 - FOR USE IN AREAS WHERE EXTREMELY HIGH WHEEL LOADS ARE PRESENT SUCH AS AIRCRAFT PAVEMENTS, DOCKS, HEAVY INDUSTRIAL SITES. CLASS F900
- MANHOLES IN INTERNAL AREAS REQUIRE DOUBLE SEALED COVERS WITH LOCKING SCREWS, RECESSED WHERE REQUIRED TO ACCOMMODATE FLOOR FINISHES TO ARCHITECT'S SPECIFICATION.
- PIPE BEDDING
 - USE CLASS S BEDDING UNLESS NOTED OTHERWISE. NB PROTECT AGAINST CONSTRUCTION TRAFFIC AS NECESSARY.
 - USE CLASS Z CONCRETE BED & SURROUND OR CONCRETE SLAB PROTECTION AS FOLLOWS:
 - CLASS 120 CLAYWARE OR CLASS M CONCRETE (100 - 6000 PIPES)
 - LANDSCAPING - LESS THAN 600mm COVER TO CROWN.
 - HARDSTANDING - LESS THAN 1200mm COVER TO CROWN.
 - PLASTIC (100 - 3000 PIPES)
 - LANDSCAPING - LESS THAN 800mm COVER TO CROWN.
 - HARDSTANDING - LESS THAN 900mm COVER TO CROWN.
- PIPES BELOW CONCRETE GROUND FLOOR SLABS
 - WHERE THE CROWN OF THE PIPE IS WITHIN 300mm OF THE UNDERSIDE OF SLAB, SPECIAL PROTECTION TO BE PROVIDED IN ACCORDANCE WITH BUILDING REGULATIONS H1 2.44 OR 150mm GEN CONCRETE BED & SURROUND CAST INTEGRALLY WITH SLAB.
 - OTHERWISE USE CLASS S BEDDING.
- MAIN BACKFILL TO BE WELL COMPACTED IN 150mm LAYERS OF:
 - SELECTED BACKFILL MATERIAL IN ALL SOFT LANDSCAPED AREAS
 - TYPE 1 GRANULAR MATERIAL IN ALL HARDSTANDING AREAS & PUBLIC HIGHWAYS
- BACKFILL TO DRAINS NEAR FOUNDATIONS IS TO BE IN ACCORDANCE WITH BUILDING REGULATIONS H1 DIAGRAMS 8 & 12.

P02	UPDATED TO REFLECT FORMAL ISSUE OF ARCHITECTURAL LEVEL INFORMATION - RIBA 3	31/01/23	GW	AB
P01	INITIAL ISSUE.	04/01/23	GW	AB
Rev.	Description:	Date:	By:	Chkd:



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Status:
SUITABLE FOR INFORMATION **S2**

Client:

GARDINER & THEOBALD

Project:

SPURR HOUSE, BURY

Dwg Title:

PROPOSED DRAINAGE
LAYOUT

Drawn By: GW

Designed By: GW

Checked By: AB

Date: 04/01/2023

Scales @ A1: 1:200

Project No - Originator - Function - Spatial - Form - Discipline - Number: 081241 - CUR - ZZ - ZZ - D - C-92-0002

Revision: P02

PROPOSED DRAINAGE LAYOUT

SCALE 1:200

