

NO FLOODING FROM DRAINAGE SYSTEMS FOR ALL RAINFALL EVENTS UP TO AND INCLUDING THE 1 IN 100 YEAR +40% CLIMATE CHANGE EVENT. THEREFORE, EXCEEDANCE FLOW PATHS ONLY USED DURING EXCEPTIONAL CIRCUMSTANCES (RAINFALL EVENTS IN EXCEEDANCE OF THE 1 IN 100 YEAR +40% CLIMATE CHANGE EVENT)

- GENERAL NOTES
- ALL LEVELS ARE IN METRES (U.N.O.) AND ARE RELATIVE TO ORDNANCE DATUM (A.O.D).
 - THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND CIVIL AND STRUCTURAL SPECIFICATION. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - THE CONTRACTOR IS TO TAKE ADEQUATE MEASURES TO PREVENT DAMAGE TO EXISTING FOUNDATIONS AND LIVE SERVICES. ANY REMEDIAL WORK TO EXISTING FOUNDATIONS AND SERVICES DAMAGED BY THE CONTRACTOR IS TO BE UNDERTAKEN TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR TO QUALIFY AND RECORD LOCATION, LEVEL AND SIZE OF EXPOSED SERVICES RELATIVE TO :
 - LEVEL - AN EXISTING DATUM
 - POSITION - RELATIVE TO GRID LINE
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND ACCURACY OF ALL DIMENSIONS AND THE SETTING OUT OF WORK ON SITE.
 - ANY DISCREPANCY IN LEVELS OR DIMENSIONS TO BE REPORTED TO THE DESIGNER IMMEDIATELY.
 - EXCAVATIONS MUST NOT BE LEFT UNCOVERED FOR MORE THAN 24 HOURS.
 - EXCAVATIONS AND SURROUNDING SITE MUST BE KEPT FREE OF WATER AND SHALL BE TRIMMED, LEVELLED AND PROTECTED FROM INCLEMENT WEATHER.
 - ALL PIPES SHALL BE LAID WITH SOFFITS LEVEL UNLESS NOTED OTHERWISE. PIPE GRADIENTS SHOWN ARE APPROXIMATE.
 - THE COVER LEVELS SHOWN SHALL SUIT THE EXACT FINISHED LEVEL AS REQUIRED ON SITE.
 - ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BS EN 752 AND CURRENT BUILDING REGULATIONS.
 - THE MINIMUM GRAVITY PIPE DIAMETER UNDER ADAPTABLE HIGHWAYS SHALL BE 150mm.
 - THE OUTSIDES OF ALL SEWERS SHALL BE A MINIMUM OF 1.0m FROM KERB LINES AND THE OUTSIDE OF MANHOLES SHALL BE A MINIMUM OF 0.5m FROM KERB LINES.
 - 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 TO WITHSTAND A CLASS).
 - DETAILS AND POSITIONS OF ALL EXISTING SERVICES TO BE CONFIRMED PRIOR TO THE COMMENCEMENT OF WORKS ON SITE.
 - ALL PIPES BELOW BUILDING AND EXTERNAL TO THE BUILDING WITH LESS THAN 0.6m COVER TO HAVE 150mm. MINIMUM CONCRETE SURROUND TO BS 8500, CLASS GEN3 (16/20), OR SIMILAR APPROVED. ALL REMAINING UNDERGROUND PIPEWORK TO BE ON CLASS 'S' BEDDING.
 - ALL MANHOLE COVERS AND FRAMES TO BE DOUBLE SEALED AND LOCKABLE TO BS EN 124, WITH SIZES AND GRADES AS INDICATED ON THE MANHOLE SCHEDULE.
 - ALL BRANCH CONNECTIONS TO BE MADE WITH SWEEP BENDS IN THE DIRECTION OF FLOW IN THE MAIN SEWER.
 - ALL INLINE DRAINAGE CHANNEL AND GULLY CONNECTIONS TO BE 150mm Ø, UNLESS NOTED OTHERWISE.
 - ALL RAINWATER DOWN PIPE CONNECTIONS TO BE 110mm. Ø UNLESS NOTED OTHERWISE.
 - INVERT LEVELS, DIMENSIONS AND LOCATIONS OF EXISTING SEWERS AND MANHOLES AFFECTING THE WORKS TO BE VERIFIED AND ASSESSED FOR SUITABILITY PRIOR TO COMMENCEMENT OF WORKS, PARTICULARLY AT POINTS OF CONNECTION.
 - ALL CHANNEL GRATINGS TO BE RATED TO LOAD CLASS D400 IN ACCORDANCE WITH BS EN 1433 UNLESS NOTED OTHERWISE.

SURFACE WATER PIPE MATERIALS

GRAVITY PIPEWORK

SURFACE WATER DRAINAGE

3000 AND LESS TO BE THERMOPLASTIC STRUCTURED WALL PIPES (AS POLYPIPE 'POLYSEWER' OR SIMILAR APPROVED) TO WIS4-35-01.

3750 AND ABOVE TO BE PRECAST, REINFORCED CONCRETE PIPES, CLASS 'M', WITH FLEXIBLE JOINTS TO BS 5811 OR THERMOPLASTIC STRUCTURED WALL PIPES (AS POLYPIPE 'RIDGISEWER' OR SIMILAR APPROVED) TO WIS4-35-01.

FOUL WATER DRAINAGE

FOUL WATER DRAIN 100/150mm Ø POLYPIPE 'POLYSEWER' OR SIMILAR APPROVED, U.N.O.)

LEGEND

- PROPOSED SURFACE WATER MANHOLE
- PROPOSED FOUL WATER MANHOLE
- PROPOSED BASEMENT (LEVEL -1) SURFACE WATER MANHOLE
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED BASEMENT (LEVEL -1) SURFACE WATER DRAINAGE
- PROPOSED FOUL WATER DRAINAGE
- PROPOSED MOPE RISING MAIN (DETAILS TBC BY OTHERS)
- PROPOSED AREAS OF POROUS PAVING (GRASSCRETE)
- PROPOSED PERFORATED UNDERDRAIN (BELOW AREAS OF POROUS PAVING (GRASSCRETE))
- PROPOSED LINEAR DRAINAGE CHANNEL
- PROPOSED RAINWATER DOWNPIPE
- PROPOSED FOUL STUB STACK
- PROPOSED RODDING EYE
- PROPOSED GULLY - CONCRETE
- EXISTING PRIVATE SURFACE WATER SEWER TO REMAIN
- EXISTING PRIVATE FOUL WATER SEWER TO REMAIN
- EXISTING PRIVATE DRAINAGE TO BE ABANDONED AND GRUBBED UP
- POLYPROPYLENE INSPECTION CHAMBER
- POP-UP BRANCH THROUGH RETAINING WALL
- POP-UP BRANCH ABOVE GRID BEAM
- POP-UP BRANCH DIRECT CONNECTION TO UNDER GROUND DRAINAGE (NO GRID BEAM IN THIS SECTION)

REV	DATE	DESCRIPTION	BY	CHK	APP
C11	14.03.2022	UPDATED TO SUIT AS BUILT INFORMATION	JRS	JRS	PL
C10	10.02.2022	SW1 SW16 FOUL DRAINAGE AND ACCOLLIES AROUND SW16 REMOVED	JRS	JRS	PL
C09	26.01.2022	SW1 SW16 & FOUL DRAINAGE AMENDED	JRS	JRS	PL
C08	17.01.2022	UPDATED TO SUIT LATEST EXTERNAL WORKS COMMENTS	JRS	JRS	PL
C07	19.11.2021	FINAL ISSUE CONSTRUCTION INTENT	JRS	JRS	PL
C06	15.11.2021	UPDATED TO SUIT LATEST SITE PLAN	JRS	JRS	PL
C05	22.10.2021	UPDATED TO SUIT LATEST PROVISIONS	JRS	JRS	PL
C04	14.10.2021	UPDATED TO SUIT REVISD EXTERNAL LEVELS AND ADDITIONAL ROPS	JRS	JRS	PL
C03	09.07.2021	UPDATE LAND DRAINAGE NETWORK	MH	PL	PL
C02	22.06.2021	ADDED LAND DRAINAGE	MH	PL	PL
C01	10.06.2021	FOR CONSTRUCTION	MH	PL	PL
P01	25.05.2021	MANHOLE & POP-UP BRANCH DETAIL	MH	PL	PL

CONSTRUCTION RECORD									
CLIENT:									
THE CHRISTIE NHS FOUNDATION TRUST									
ARCHITECT:									
IBI GROUP									
PROJECT:									
THE CHRISTIE P22 TIERED CAR PARK									
TITLE:									
BELOW GROUND DRAINAGE MANHOLE & POP-UP BRANCH DETAIL									
STATUS	PROJECT No.	PROJECT	ORIGINATOR	VOLU	LEVEL	TYPE	ROLE	DRAWING No.	REV
S2	218-310	TCP - AJP - XX - XX - DR - C-900106	C11						
SCALE	BY	DESIGNED	BY	DRAWN	CHECKED	PL	APPROVED	DATE	
1:250	MH	MH						NOV 2021	
AJP consulting engineers									
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ALL FOUL WATER POP UP AND RAINWATER DOWNPIPE LOCATIONS AS PRE ARCHITECT LAYOUT.

NOTES
CONSTRUCTION OF THE PARKING BUILDING AND EXTERNAL HARDSTANDING BEFORE THE FULL CONSTRUCTION OF THE SURFACE WATER DRAINAGE SYSTEM COULD RESULT IN FLOODING. CONTRACTOR TO REVIEW CONSTRUCTION PROGRAMME TO ENSURE SURFACE WATER CONNECTION IS COMPLETE OR TO PROVIDE SUITABLE TEMPORARY DRAINAGE INFRASTRUCTURE