



NOTES

- DO NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS MUST BE CHECKED & VERIFIED ON SITE. IF IN DOUBT ASK.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS', ENGINEERS' AND OTHER SPECIALISTS' DRAWINGS AND SPECIFICATIONS.
- THE BASE SPECIFICATION FOR DRAINAGE WORKS SHALL BE THE WATER AUTHORITY ASSOCIATION'S 'NEWERS FOR ADOPTION' (LATEST EDITION).
- FOR DETAILS ON EXISTING GROUND CONDITIONS, REFER TO SITE INVESTIGATION REPORT.
- THE FOLLOWING PIPE STRENGTHS SHALL BE ADOPTED (UNLESS NOTED OTHERWISE):
 - PIPES UP TO AND INCLUDING 150mm Ø TO BE PVC-U TO BS EN 1329, OR CLAYWARE TO BS EN 295 CLASS 160.
 - PIPES 150mm Ø UP TO AND INCLUDING 225mm Ø TO BE CLAYWARE TO BS EN 295 CLASS 160.
 - 300mm Ø TO BE CLAY TO BS EN 295 CLASS 160 OR CONC. TO BS 5911 CLASS M.
 - PIPES OVER 300mm Ø TO BE CONCRETE TO BS 5911 CLASS M.
- ALL PIPE RUNS TO BE LAID WITH FLEXIBLE JOINTS.
- ALL PIPES ENTERING AND EXITING MANHOLES ARE TO BE CONNECTED TO PIPE SOFFITS LEVEL UNLESS NOTED OTHERWISE.
- BEDDING AND SURROUND TO BE AS FOLLOWS:

Location:	Cover to Soffit:	Pipe Bedding:
Roads:	>1.2m	>0.9m Class 5
	<1.2m	<0.9m Class 2
Hard and soft landscaping:	>0.6m	Class 5
	<0.6m	Class 2
- THE FOLLOWING CONC. MIXES ARE TO BE USED IN ACCORDANCE WITH BS 8500:

Location:	Mix Reference:
Concrete surround to pipes	ST4
Concrete base and surround to manholes	ST4
- ALL PRECAST CONCRETE PRODUCTS (I.E. PIPES, MANHOLE RINGS, ETC.) SHALL BE OF SUITABLE CONCRETE MIX TO CATER FOR CLASS 2 SULPHATES.
- PRE-FORMED CHANNELS ARE TO BE USED IN MANHOLES WHERE APPLICABLE.
- GRANULITIC CONCRETE BEDDING TO BE STEEL TROWELLED TO A DENSE SMOOTH FACE NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS AND LAID IN ACCORDANCE WITH THE SPECIFICATION.
- ALL CONNECTIONS TO BE TURNED IN DIRECTION OF FLOW USING PIPE BENDS.
- MANHOLE COVERS AND FRAMES TO BE DUCTILE IRON MEDIUM DUTY GRADE B125 RECTANGULAR TO BS EN 124 POSITIONS OUTSIDE VEHICULAR-TRAFFICED AREAS, AND HEAVY DUTY GRADE D200 IN VEHICULAR-TRAFFICED AREAS.
- MANHOLE COVERS AND FRAMES TO BE DUCTILE IRON MEDIUM DUTY GRADE A15 COVERS IN SOFT LANDSCAPING.
- FIRST FLEXIBLE JOINT IN PIPES ADJACENT TO A MANHOLE SHALL BE A MAXIMUM OF 600mm FROM INSIDE FACE OF MANHOLE, CONNECTING TO ROCKER PIPE.
- THE LENGTH OF ROCKER PIPE IS AS FOLLOWS:

Pipe Diameter:	Length of Rocker Pipe:
150mm-300mm	600mm
375mm-500mm	1000mm
625mm & over	1250mm
- MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm Ø SHALL BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
- THE PRINCIPLE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE EXISTING LINE AND INVERT LEVELS OF ANY CONNECTION POINTS FOR BOTH THE FOUL AND SURFACE WATER SYSTEMS, PRIOR TO UNDERTAKING INSTALLATION OF ANY NEW DRAINAGE WORKS. ANY DEVIATION TO THE LEVELS AND POSITIONS INDICATED ON THE DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER.
- FALL INVERT LEVELS SPECIFIED ARE OUTGOING (EXCEPT BACKDROP CONNECTIONS).
- ALL FOUL CONNECTIONS TO BE 150mm Ø LAID AT A MINIMUM GRADIENT OF 1/40 UNLESS NOTED OTHERWISE. SURFACE WATER PIPES AS INDICATED.
- FOUL PIPES TO BE EXTERNALLY VENTED (SVP) AT HEAD OF RUN.
- FOR LOCATION OF INTERNAL SVP, SS, ETC. REFER TO ARCHITECT'S LATEST LAYOUTS.
- THE DRAINAGE INSTALLATION IS TO BE COMPLIANT WITH BUILDING REGS. (PART H).
- INTERNAL FOUL DRAINAGE CONNECTIONS / POSITIONS AND SETTING-OUT INFORMATION TO BE CONFIRMED BY THE M&E CONSULTANT / ARCHITECT.

KEY

- PROPOSED STORM DRAINAGE
- PROPOSED PERFORATED PIPE
- PROPOSED DRAINAGE CHANNEL
- PROPOSED TYPE 3 OPEN GRADED STONE FOR POROUS SURFACING
- PROPOSED CELLULAR TANK
- PROPOSED FILTER TRENCH
- PROPOSED FOUL DRAINAGE
- PROPOSED LAB DRAINAGE

FOR PLANNING

Rev	Date	Description	By	Chkd
A	30/06/2022	ISSUED FOR PLANNING.	JH	GL
xx/xx/xxxx		INTERNAL REVISION ONLY.	JH	GL

Project Title: **BICESTER GATEWAY**

Drawing Title: **PROPOSED DRAINAGE PLAN**

Down by: **JH** Checked by: **JH** Project Engineer: **NSB**

Date	Scale @ A0	Project No.	Drawing No.	Rev
JUNE 2022	1: 250	13329	103	A

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1: 0m 2.5m 5m 7.5m 10m 12.5m 15m 17.5m 20m 22.5m 25m
250
0m 10mm 20mm 30mm 40mm 50mm 60mm 70mm 80mm 90mm 100mm

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