Proposed Surface Water Drainage Key

- Proposed Surface Water Drainage
- RWP — Rain Water Pipe
- Surface Water Flow Control Chamber
- Cellular Attenuation Tank
- Proposed Foul Sewer Drainage
- Foul Pop Up
- Existing Foul Sewer Drainage
- Existing Surface Water Drainage

Existing manholes identified onsite during topographical survey work. Currently anticipated that the existing sites foul and surface water drain via these manholes prior to discharging to public United Utilities combined sewer with Park Pl. Proposal to re-use these connections subject to CCTV confirmation of current use and condition. Flow rate offsite subject to approval, current surface water proposal of existing + 30% betterment and unrestricted foul water discharge.

Flow control
flow rate: 10.2l/s
Design head: 1.3m
SWMH04
CL 43.450m
IL 41.050m

Attenuation Tank
Designed to store 28m³ volume.
Indicative size shown as 1.2m x 2.5m x 9m
CL 43.300m
IL 41.100m

SWMH03
CL 43.400m
IL 41.743m

SWMH02
CL 43.500m
IL 41.856m

SWMH01
CL 43.250m
IL 42.000m

FWMH06
CL 43.400m
IL 41.838m

FWMH05
CL 43.300m
IL 41.918m

FWMH04
CL 43.300m
IL 42.012m

FWMH03
CL 43.300m
IL 42.076m

FWMH02
CL 43.300m
IL 42.142m

FWMH01
CL 43.300m
IL 42.200m

1:100 150mm>>>
1:150 225mm >>>
<<< 1:100 150mm
RWP
FG
EXISTING BUILDING
Smoke
IDNO Elec Riser Life Safety
smoke
Mech
Life Safety

DO NOT SCALE

General:

1. Do not scale from the drawings. All dimensions must be checked / verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant Architects, Engineers and specialists drawings and specifications.
3. Refer to Landscape Architect plans for :
   - additional paving / kerbing requirements
   - boundary treatments (planting and fencing)
   - setting out information
4. Refer to Architect plans for :
   - internal building layouts
   - coordinated stacks and pop-up locations
   - specification of of channels to proposed door thresholds, windows and garage threshold
5. Refer to MEP Engineer detailed design for :
   - utilities provisions
   - ducting layouts and routing
   - above ground drainage design
6. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
7. Levels shown are approximate and are subject to site adjustment to suit final external works levels.
8. Any discrepancies noted on site are to be reported to the Engineer immediately.
9. The Contractor shall allow for the protection, temporary and permanent support and diversion works as necessary, to all existing services to the satisfaction of the public utilities.
10. Construction details for proprietary products are shown indicatively and for Pricing Purposes only. All proprietary products shall be installed in strict accordance with the manufacturers' specific requirements and specifications.
11. Utilities locations / routes not shown. Refer to constraints plan / utilities survey information for more detail
12. This drawing is for planning purposes only. Drainage design is subject to change through detailed design.
13. Foul pop-ups & RWP's shown are indicative. Awaiting confirmation of finalised locations.
14. Awaiting confirmation of existing combined public sewer levels, drainage tie-in levels will be assessed following confirmation of existing invert levels.

Important CDM / H&S note

The Designers would draw the readers attention to the key residual health and safety risks that have not been eliminated from the designs shown on this drawing by the design process. These key residual risks are identified below:

- Existing Drainage and Service Infrastructure not to be compromised.
- Care to be taken around deep excavations. Plant to be kept at safe distance.
- Moving plant. Care to be taken around site.
- Care to be taken in vicinity of existing high voltage below and above ground electric cables. REFER TO UTILITIES SURVEYS FOR DETAILS.
- Care to be taken when working in the vicinity of existing and proposed watercourses and existing ponds.

Any construction personnel including operatives intending to construct the designs shown on this drawing should ensure that they have been regularly and thoroughly briefed by the principal Contractor on all health and safety matters and have had sight of:

1 - The full Designers and Contractors risk assessments and risk registers.
2 - The developed construction health and safety plan.
3 - The Contractors construction method statements.

Hazards that are obvious to a competent Contractor are not shown, as are every day and low risk hazards.

REV	DATE	BY	DESCRIPTION	CHK	APP
P02	21.09.23	JT	UPDATED TO SUIT LATEST LAYOUT	JT	AW
P01	08.09.23	JT	ISSUED FOR PLANNING	JT	AW

DRAWING STATUS: FOR PLANNING

Roscoe
CIVIL & STRUCTURAL ENGINEERS
INSPIRING BUILT ENVIRONMENTS

CLIENT: BENJAMIN PROPERTY LTD

ARCHITECT: HODDERS + PARTNERS

PROJECT: ONE PARK PLACE MANCHESTER

TITLE: PROPOSED DRAINAGE LAYOUT

SCALE @ A1:	CHECKED:		APPROVED:
1:100	JT		AW
PROJECT NUMBER:	DESIGNED:	DRAWN:	DATE:
23321	JT	JT	SEP 2023

DRAWING No: 23321-ROS-00-00-DR-C-09000 REV: P02