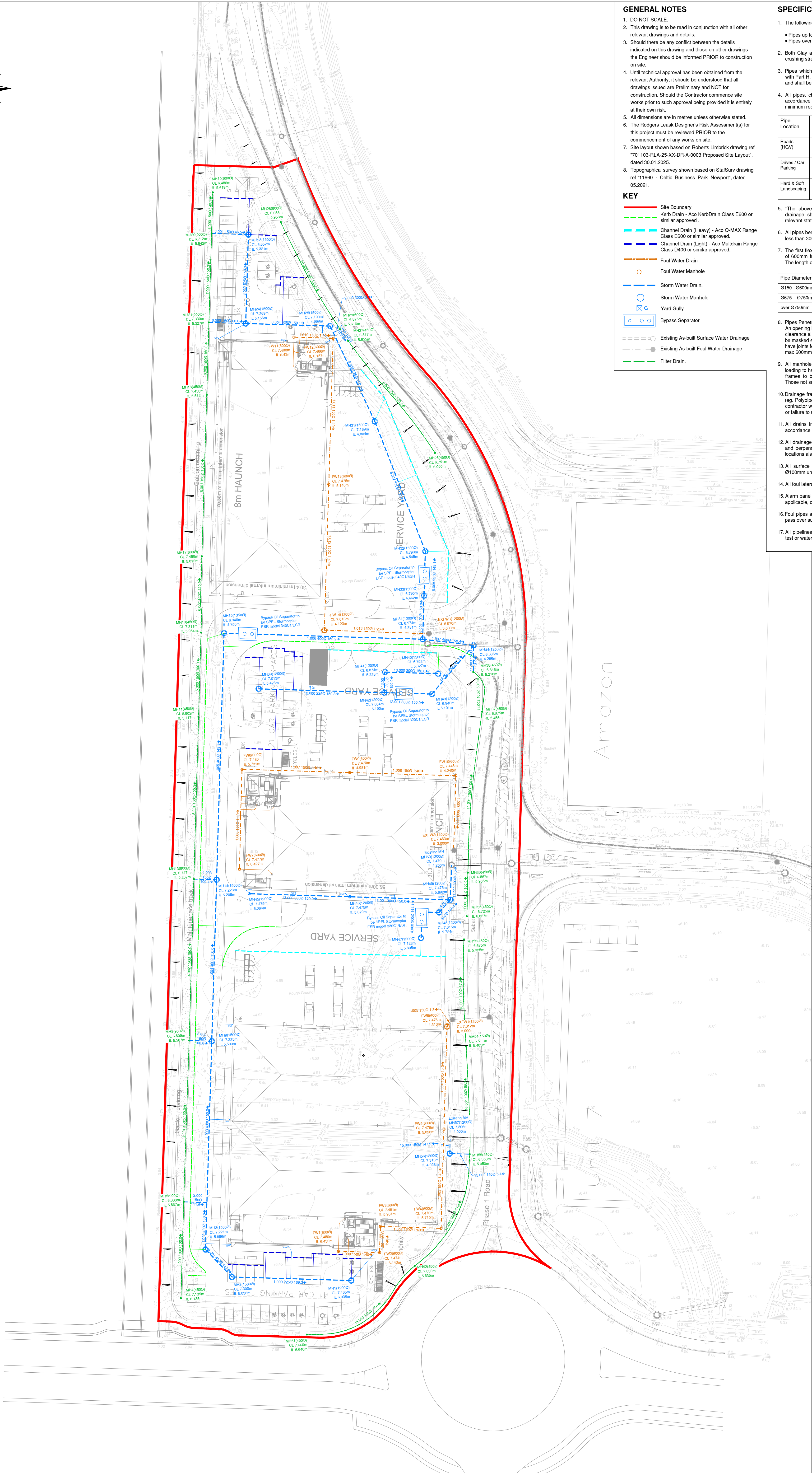




1. DO NOT SCALE.
2. This drawing is to be read in conjunction with all other relevant drawings and details.
3. Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.
4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site works prior to such approval being provided it is entirely at their own risk.
5. All dimensions are in metres unless otherwise stated.
6. The Rogers Leaks Designer's Risk Assessment(s) for this project must be reviewed PRIOR to the commencement of any works on site.
7. Site layout shown based on Roberts Limerick drawing ref 7010100-01-055-XD-RA-0003 Proposed Site Layout' dated 30.01.2020.
8. Topographical survey shown based on StatuSurvey drawing ref '11660 - Celtic Business Park Newport', dated 05.2021.

- Site Boundary
- Kerb Drain - Aco KerbDrain Class E600 or similar approved.
- Channel Drain (Heavy) - Aco Q-MAX Ran Class E600 or similar approved.
- Channel Drain (Light) - Aco Multidrain Ran Class D400 or similar approved.
- Foul Water Drain
- Foul Water Manhole
- Storm Water Drain.
- Storm Water Manhole
- Yard Gully
- Bypass Separator
- Existing As-built Surface Water Drainage
- Existing As-built Foul Water Drainage
- Filter Drain.

The following types of pipe may be used unless noted or agreed otherwise:

- Pipes up to 300mm to be super strength Vitrified Clay Pipe to BS 295.
- Pipes over 300mm diameter to be Concrete to BS 5911.

2. Both Clay and Concrete pipes shall be strength class 120 (100/150mm min crushing strength 28kN/m).

3. Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25. Diagrams 7 and 8 are of particular relevance and shall be complied with.

4. All pipes, chambers and fittings shall be installed, bedded and backfilled in accordance with the manufacturer's instructions subject to the following minimum requirements;

Pipe Location	Cover to Crown*	Clay / Concrete Pipe Bedding	Plastic Pipe Bedding	Backfill
Roads (HGV)	> 1.2m ~1.2m	Class S Class A' (Concrete)	Class S (S1 or S2) Class A' (Concrete)	Type 1 Granular
Drives / Car Parking	> 0.9m ~0.9m	Class S Class A' (Concrete)	Class S (S1 or S2) Class A' (Concrete)	Type 1 Granular
Hard & Soft Landscaping	> 0.6m ~0.6m	Class S Class A' (Concrete)	Class S (S1 or S2) Class A' (Concrete)	Suitable as dug material

* The above depths are based on a private drainage network. Adoptable drainage should be installed in accordance with the requirements of the relevant statutory sewerage undertaker.

6. All pipes beneath buildings to have concrete bed and surround. Where cover is less than 300mm the concrete is to be cast integrally with the floor slab.

7. The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be as follows;

Pipe Diameter	Length of Rocker Pipe
Ø150 - Ø600mm	600mm
Ø675 - Ø750mm	1,000mm
over Ø750mm	1,250mm

8. Pipes Penetrating Walls:

An opening is to be formed through walls to give pipes at least 50mm clearance all round. Brickwork over shall be supported by a lintel. Opening to be masked each side with rigid sheet material. Pipes embedded in walls shall have joints formed within 150mm of either wall face. Adjacent rocker pipes of max 600mm length with flexible joints shall continue the pipework.

9. All manholes and inspection chambers situated in areas subject to vehicular loading to have class D400 covers and frames to BS EN1241, 6500 covers and frames to be provided within service yard areas subject to forklift loading. Those not subject to vehicular loading to have class B125 covers and frames.

10. Drainage frames must be tied to manhole risers by use of manufacturer's tie (eg. Polytype reel FRK500 fixing kit and FRK501 black ties). The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturer's fixing equipment.

11. All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.

12. All drainage MH covers and frames to be orientated so that they are square and perpendicular to the block paving patterns where applicable. MH cover locations also to avoid building door opening locations where possible.

13. All surface water connections to be Ø150mm and flow connections to be Ø100mm unless noted otherwise.

14. All foul laterals to be min 1:80 gradient; surface water laterals to be min 1:100.

15. Alarm panels for oil separators are to be installed within the gatehouse, where applicable, or in the building reception.

16. Foul pipes are to be wrapped in a suitable impermeable geotextile where they pass over surface water pipes in order to prevent any cross contamination.

17. All pipelines shall be tested both before and after backfilling, using either air test or water test, in accordance with BS EN 1610.

Pipe Location	Cover to Crown*	Clay / Concrete Pipe Bedding	Plastic Pipe Bedding	Backfill
Roads (HGV)	> 1.2m < 1.2m	Class S Class 'A' (Concrete)	Class S (S1 or S2) Class 'A' (Concrete)	Type 1 Granular
Drives / Car Parking	> 0.9m < 0.9m	Class S Class 'A' (Concrete)	Class S (S1 or S2) Class 'A' (Concrete)	Type 1 Granular
Hard & Soft Landscaping	> 0.6m < 0.6m	Class S Class 'A' (Concrete)	Class S (S1 or S2) Class 'A' (Concrete)	Suitable as dug material

Pipe Diameter	Length of Rocker Pipe
Ø150 - Ø600mm	600mm
Ø675 - Ø750mm	1,000mm
over Ø750mm	1,250mm

Health and safety symbols refer to reference numbers indicated on Designers Risk Assessment number:
25105-RLL-25-XX-HS-C-0001

	Used to provide design specific safety information that may not be obvious to a competent contractor but may be useful
	Used to restrict/prevent a possible action, e.g. stop construction traffic from entering an area
	Used to warn of significant design hazards, adding recommendations
	Used to encourage a positive action, e.g. use of robust protection for inspection chambers

P01	03.03.25	FIRST ISSUE.	CJ	WN
Rev	Date	Amendments	By	Chk



Client _____

INDURENT

Project
INDURENT PARK, NEWPORT -
UNITS 19 - 21

Drawing Title

**PROPOSED DRAINAGE
STRATEGY PLAN**

Status

FOR PLANNING

Scale	Drawn	Checked	Date
As Shown @ A1	CJ	WN	03.03.25

Drawing Number	Revision
25105-RLL-25-XX-DR-C-2004	P01

BIM Drawing Reference

