



**DRAINAGE LEGEND**

- PROPOSED FOUL DRAINAGE LINE
- PROPOSED FOUL MANHOLE
- PROPOSED SURFACE ARMSTRONG JUNCTION
- EXISTING FOUL DRAINAGE LINE
- EXISTING FOUL MANHOLE
- EXISTING SURFACE ARMSTRONG JUNCTION
- PROPOSED SURFACE DRAINAGE LINE
- PROPOSED SURFACE MANHOLE
- PROPOSED SURFACE ARMSTRONG JUNCTION
- PROPOSED SURFACE ROAD GULLY
- EXISTING SURFACE DRAINAGE LINE
- EXISTING SURFACE MANHOLE
- EXISTING SURFACE ARMSTRONG JUNCTION
- EXISTING SURFACE ROAD GULLY
- PROPOSED TREE PIT
- PERMEABLE PAVING
- SWALE AREA
- GRAVED MANHOLE
- RAIN GARDEN AREA
- PERMEABLE PAVING UNDERDRAIN 150#
- SWALE/ RAIN GARDEN UNDERDRAIN 150#
- THREE TREE UNDERDRAIN 150#
- PERFORATED COLLECTOR PIPE 150#
- DROPPED KERB AT 5m C/C
- INSPECTION CHAMBER

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THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS, SPECIFICATIONS AND THE PRELIMINARY HEALTH AND SAFETY PLAN.

ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE. DO NOT SCALE DIMENSIONS.

THE CONTRACTOR SHALL CHECK ALL DIMENSIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED TO THIS OFFICE IN WRITING.

BY	DRAWING No. & REFERENCE	DATE
DR	SHB5-CGK-DR-MOR-CS-P3-130	15.05.24
DR	SHB5-CGK-DR-MOR-CS-P3-130	28.02.24

- DRAINAGE NOTES**
- ALL FOUL WORKS TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE DOCUMENT W-002-003-03 AND IRISH WATER STANDARD DETAILS W-002-003-01.
  - ALL FOUL WATER DRAINAGE RUNS ARE TO A GRADE OF 1:150 AND PIPE SIZE OF 225# UNLESS OTHERWISE STATED.
  - ALL SURFACE WATER DRAINAGE RUNS ARE TO A GRADE OF 1:200 AND PIPE SIZE OF 225# UNLESS OTHERWISE STATED.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT JUNCTION BOXES, CHAMBERS, MANHOLES, CALLIES TO ENSURE NO CLASHES WITH SERVICE DUCTS AND PIPES.
  - ALL LEVELS ARE IN METRES ABOVE MAIN HEAD DATUM UNLESS OTHERWISE NOTED.
  - ALL COVER LEVELS ARE INDICATIVE ONLY.
  - ALL DRAINAGE WORK TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTE WATER INFRASTRUCTURE AND STANDARD DETAILS.
  - MANHOLES, MANHOLES COVERS AND ROAD GULLY GRATES TO STANDARD SPECIFICATION.
  - ALL PIPE DIAMETERS ARE NOMINAL.
  - THE CONTRACTOR MUST SATISFY HIMSELF IN RESPECT TO THE LOCATION OF ALL EXISTING SERVICES.
  - ALL FOUL PIPEWORK TO BE UPVC IN ACCORDANCE WITH SECTION 3.1.3 AND 3.1.4 OF THE WATER CODE OF PRACTICE FOR WASTE WATER INFRASTRUCTURE.
  - ALL ROAD GULLY DRAINS ARE 150mm #.
  - 300mm MAX LENGTH ROCKER PIPES ARE TO BE PROVIDED ON SENIOR ENGINEERS A MANHOLE OR PUMPING STATION.
    - A PIPE LEAVES A MANHOLE OR PUMPING STATION.
    - A PIPE ENTERS A CONCRETE ENCASUREMENT.
    - A PIPE LEAVES A CONCRETE ENCASUREMENT.
    - ANY OTHER LOCATION AS DIRECTED BY THE ENGINEER.
  - ALL SENIOR ROCKER PIPES ARE TO BE FORMED BY CUTTING AND TRIMMING A LENGTH OF SPIGOT & SOCKET PIPE TO FORM A SPIGOT AT THE CUT END, TUCKING THE FORMING SPACE & SOCKET JOINTS AT BOTH ENDS OF THE ROCKER PIPE.
  - ALL ROCKER PIPES SHALL BE NO MORE THAN 150mm FROM THEIR ASSOCIATED MANHOLE, PUMPING STATION, CONCRETE ENCASED SECTION OR VALVE CHAMBER.
  - ALL MANHOLE COVERS LOCATED IN TRAFFICKED AREA ARE TO BE 04/5 RESISTANT.
  - ALL GULLY GRATES ARE TO BE MIN CLASS D400 TO IS EN 124 AND 10% TO BE LOCKABLE.
  - WHERE COVER TO PIPE IS LESS THAN 300mm UNDER CROSSED AREA OR LESS THAN 1200mm UNDER ROADWAYS THE PIPE SHOULD BE SURROUNDED IN CONCRETE.
  - EXTERNAL FACE OF PROPOSED MANHOLE CHAMBERS LOCATED AT LEAST 0.5m FROM KERB LINES, EXTERNAL FACE OF SEWERS TO THE EXTERIOR OF SEWER BELOW THE FOUNDATION (WHICHEVER IS GREATER).
  - EXTERNAL FACE OF SEWERS TO BE A MINIMUM OF 3m FROM EXTERNAL FACE OF DEVELOPMENT OR EQUIVALENT DISTANCE TO THE EXTERIOR OF SEWER BELOW THE FOUNDATION (WHICHEVER IS GREATER).
  - NOTE: ALL ATTENTION ZONES TO BE SEALED TO AVOID ANY POTENTIAL NEGATIVE EFFECTS ON THE SURROUNDING GROUND WATER.
  - EXTERNAL FACE OF FOUL MANHOLE CHAMBERS TO BE LOCATED AT LEAST 0.5m FROM KERBLINES, EXTERNAL FACE OF FOUL SEWER TO BE LOCATED AT LEAST 1.5m FROM KERBLINES.
  - ALL WASTEWATER INSPECTION CHAMBERS SHOULD BE IN COMPLIANCE WITH THE IR CODE OF PRACTICE AND STD-WW-02 & 03.
  - SEPARATION DISTANCES FROM OTHER SERVICES, BOUNDARY WALLS, TREES, ETC. TO BE IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS STD-WW-02, STD-WW-03, STD-WW-04.
  - ALL MANHOLES IN PEDESTRIAN AREAS TO HAVE NON-SLIP COVERS.
  - ALL EXISTING MANHOLE COVERS IN PEDESTRIAN AREAS TO BE COVERED WITH ANTI-SLIP SURFACING.

**IRISH WATER APPLICABLE DETAILS (NON-EXHAUSTIVE LIST)**

**WASTE WATER DETAILS - TABLE**

STD-WW-01	WASTEWATER SERVICES CONNECTION MAINTENANCE RESPONSIBILITY
STD-WW-03	DRAIN & SERVICE CONNECTION PIPEWORK
STD-WW-04	TYPICAL SENIOR/SERVICE PIPE CONNECTION
STD-WW-05	TYPICAL SERVICE LAYOUT INDICATING SEPARATION DISTANCES
STD-WW-05A	WASTEWATER SERVICE CONNECTION VERTICAL SEPARATION DISTANCES
STD-WW-06	RESTRICTIONS ON WASTEWATER INFRASTRUCTURE WORKS ADJACENT TO TREES
STD-WW-06A	RESTRICTIONS ON NEW TREES / SHRUBS PLANTING ADJACENT TO SEWERS
STD-WW-07	TRENCH BACKFILL AND BEDDING
STD-WW-08	CONCRETE BED, HAUNCH AND SURROUND TO WASTEWATER PIPES
STD-WW-10	PRE-CAST CONCRETE MANHOLE WITH CAST IN-SITU BASE
STD-WW-10A	PRE-CAST CONCRETE MANHOLE WITH PRECAST BASE
STD-WW-12	BACKDROP AND CASCADE MANHOLES
STD-WW-36	MARKER POST/PLATES

5	LANDSCAPE AND ARCHITECT LAYOUTS UPDATED SITE LAYOUT REVISED TO SUIT CHANGES	17.05.24	KA	DW
4	LANDSCAPE ARCHITECT LAYOUT UPDATED SITE LAYOUT REVISED TO SUIT CHANGES	15.03.24	KD	PB
3	ISSUED FOR INFORMATION	28.02.24	KA	PB
2	ISSUED FOR INFORMATION	04.02.24	JC	PB
1	ISSUED FOR INFORMATION	15.12.23	JC	PB
0	ISSUED FOR INFORMATION	29.11.23	JC	PB

REV DESCRIPTION DATE BY CHK

STATUS

**P3 - PLANNING**

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CLIENT: KILDARE COUNTY COUNCIL

JOB NAME: SHB 4&5 - CGK - COOLAGHNOCK GLEBE, KILDARE TOWN

PROJECT NAME: FOUL SEWER AND SURFACE WATER DRAINAGE LAYOUT

JOB NO	SHEET NO	SCALE	DATE	BY	CHK	APP	REV
23006	1	1:500	SEPT2023	KA	KA	PB	5

PROJECT NO: SHB5-CGK-DR-MOR-CS-P3-130



**INFILTRATION BASIN**

TOP OF CEMENTATION = 98.00m  
LEVEL AT BASE OF BASIN = 96.15m  
MAX 1:100M STORM WATER FLOW = 27.64m³  
LOWEST FFL = 98.15m, 50mm PERFORATED  
GULLY ROAD LEVEL = 97.97m, 32mm PERFORATED

**BOTTOM AREA OF INFILTRATION BASIN = 631m²**  
TOP AREA OF INFILTRATION BASIN = 1475.20m²  
1:100M = 205 CC VOLUME = 1407.6m³

REFER TO DRAWING 151 FOR BASIN SECTION AND DETAILS