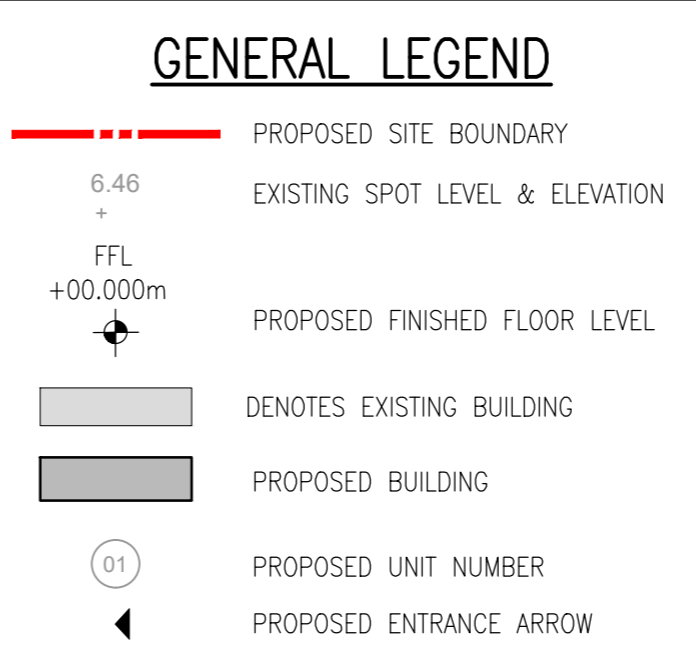




FOUL DRAINAGE TABLE

FD Pipe Section	US MH CL (m)	US MH IL (m)	D/S MH IL (m)	Pipe Diameter (mm)	Notes
* F1.0 to F1.1	78.925	77.795	77.725	150	
* F1.1 to F1.2	78.900	77.725	77.220	150	
* F1.2 to F1.3	78.550	77.220	77.130	150	
* F1.3 to F1.4	78.400	77.130	76.815	150	
* F1.4 to F1.5	78.300	76.815	76.670	150	
* F1.5 to C.MH	77.950	76.670	76.550	225	
* F2.0 to F1.1	78.700	77.990	77.725	150	

NOTES:
 uPVC PIPES ASSUMED AS THE DRAINAGE MATERIAL. PLEASE NOTIFY ENGINEER IF DIFFERENT
 * = CONCRETE PROTECTION WILL BE PROVIDED OVER PIPES
 BD DENOTES BACKDROP / CASCADE MANHOLE



PIPE BEDDING NOTE:
 ALL PROPOSED DRAINAGE TO BE PROVIDED WITH ADDITIONAL PIPE BEDDING AS PER HHP DWG NO. C-059

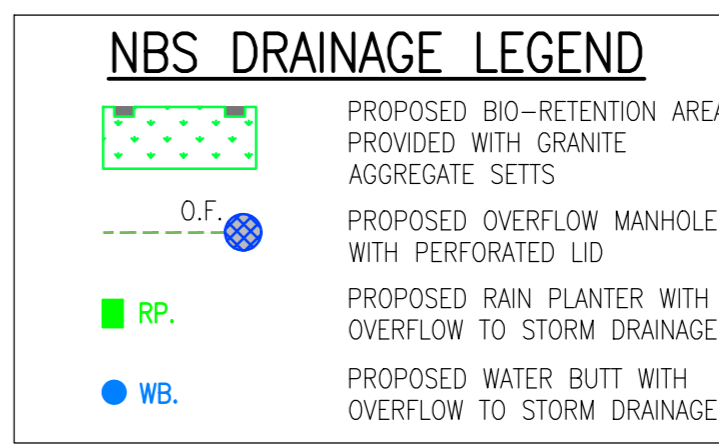
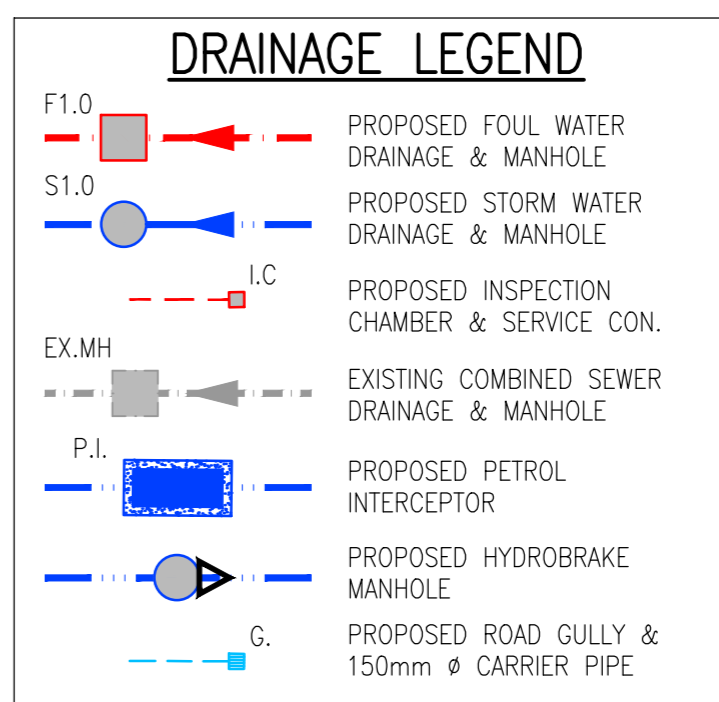
- ### GENERAL DRAINAGE NOTES:
- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED.
 - ALL LEVELS ARE IN METRES ABOVE DATUM UNLESS OTHERWISE NOTED.
 - ALL PIPE DIAMETERS ARE NORMAL.
 - THE CONTRACTOR MUST CONTACT THE RELEVANT AUTHORITIES PRIOR TO CONSTRUCTION WORK, & SATISFY HIMSELF IN RESPECT TO THE LOCATION OF ALL EXISTING SERVICES.
 - ALL SEWER & DRAIN PIPES ARE CLASS 'C' uPVC UNLESS OTHERWISE STATED.
 - ALL BEDDING TO SEWERS IS CLASS 'B' UNLESS OTHERWISE NOTED.
 - ALL MANHOLES CAN BE EITHER PRECAST CONCRETE RING MANHOLES OR BLOCKWORK UNLESS OTHERWISE STATED.
 - 600mm MAX. LENGTH ROCKER PIPES ARE TO BE PROVIDED ON SEWER WHERE:
 - (A) A PIPE ENTERS A MANHOLE OR PUMPING STATION.
 - (B) A PIPE LEAVES A MANHOLE.
 - (C) A PIPE ENTERS CONCRETE ENCASEMENT.
 - (D) A PIPE LEAVES CONCRETE ENCASEMENT.
 - (E) ANY OTHER LOCATION AS DIRECTED BY THE ENGINEER.
 - ALL SEWER ROCKER PIPES ARE TO BE FORMED BY CUTTING & TRIMMING A LENGTH OF SPIGOT & SOCKET PIPE TO FORM A SPIGOT AT THE CUT END, THEREBY FORMING SPIGOT & SOCKET JOINTS AT BOTH ENDS OF THE ROCKER PIPE.
 - WHERE SEWER PIPES OR RISING MAINS CONNECT TO EXISTING MANHOLES, THE CONTRACTOR IS REQUIRED TO:
 - (A) CONTACT THE RELEVANT AUTHORITIES PRIOR TO COMMENCING WORK.
 - (B) MAKE GOOD THE EXISTING ROAD TO ITS ORIGINAL SPECIFICATION AS APPROVED BY THE ENGINEER.
 - WHERE SEWER PIPES, RISING MAINS OR ROAD GULLY DRAINS CROSS EXISTING ROADS, THE CONTRACTOR IS REQUIRED TO:
 - (A) CONTACT THE RELEVANT AUTHORITIES PRIOR TO COMMENCING WORK.
 - (B) MAKE GOOD THE EXISTING ROAD TO ITS ORIGINAL SPECIFICATION AS APPROVED BY THE ENGINEER.
 - MINIMUM FALLS INDICATED ON DRAINAGE PIPES, LEVELS TO BE REVISED IF MANHOLE LOCATIONS ARE MODIFIED BY CONTRACTOR.
 - CONCRETE PROTECTION TO BE PROVIDED AROUND ALL PIPES UNO.
 - ALL BRANCH & PERIMETER DRAINAGE ARE TO BE DETAILED BY ARCHITECT.
 - PROPRIETARY ACCESS JUNCTIONS TO BE USED TO DEPTHS OF 600mm OR LESS.
 - 450x450mm INSPECTION CHAMBERS TO BE USED AT DEPTHS OF 600-1000mm.
 - MANHOLES TO DETAILS TO BE USED AT DEPTHS OVER 1000mm.
 - ROAD GULLIES TO BE PROVIDED SO THAT MAX AREA CONTRIBUTING TO A SINGLE GULLY IS 180m².
 - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH 'RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS', DEPARTMENT OF THE ENVIRONMENT.
 - ALL STORM MANHOLE BASES TO BE PRECAST CONCRETE PRE-BENCHED OFF SITE.

- ### TESTING OF SEWERS:
- FOUL & SURFACE WATER SEWERS TO BE TESTED EITHER BY WATER OR AIR TEST. IF THE AIR TEST IS CARRIED OUT & THE RESULTS SHOW A FAILURE THEN A WATER TEST SHALL BE SUBSEQUENTLY CARRIED OUT TO DETERMINE ACCEPTANCE OR REJECTION.
 - WATER TESTS CARRIED OUT SHALL BE TESTED IN UNDER A HEAD OF WATER IN ACCORDANCE WITH BS 8301 1995, & CARRIED OUT FOR A MINIMUM OF 30 MINUTES.
 - THE CONTRACTOR IS TO ENGAGE AN ENGINEER WITH PROFESSIONAL INDEMNITY INSURANCE TO SUPERVISE ALL AIR/WATER TESTS ON MAINS BEFORE BACKFILLING.
 - ON COMPLETION OF ALL SEWERS DRAINS & GULLIES, ALL SEWERS SHALL BE FLUSHED OUT & LEFT FREE FROM DEFECT & OBSTRUCTION & SUBSEQUENTLY A CCTV SURVEY SHALL BE CARRIED OUT BY AN INDEPENDENT CONTRACTOR OF THE AS BUILT DRAINAGE. THE CCTV SURVEY SHALL INCLUDE A REPORT & DVD & SHALL BE SUBMITTED TO THE ENGINEER & ARCHITECT PRIOR TO PRACTICAL COMPLETION.
 - ON COMPLETION OF ALL SEWERS, DRAINS & GULLIES AN AS-BUILT SURVEY MUST BE SUBMITTED INCLUDING LOCATION OF MANHOLES RELATIVE TO THE BUILDING OUTLINE, COVER, INVERT LEVELS & PIPE DIAMETERS TO THE ENGINEER & ARCHITECT FOR THEIR REVIEW PRIOR TO PRACTICAL COMPLETION.

STORM DRAINAGE TABLE

SD Pipe Section	US MH CL [mod]	US MH IL [mod]	D/S MH IL [mod]	Pipe Diameter [mm]	Notes:
* S1.0 to S1.1	78.250	77.300	77.200	225	
* S1.1 to P.I.	78.370	77.200	77.170	225	
* P.I. to S1.2	78.500	77.070	77.040	225	SUMP
* S1.2 to Att.	78.400	77.040	77.020	225	
* Att. to S1.3	78.300	77.000	76.980	225	
* S1.3 to S1.4	78.200	76.980	76.930	225	
* S1.4 to S1.5	78.500	76.930	76.850	225	
* S1.5 to S1.6	78.375	76.850	76.810	225	
* S1.6 to S1.7	78.250	76.810	76.750	225	
* S1.7 to S1.8	78.100	76.750	76.665	225	
* S1.8 to C.MH	77.925	76.665	76.615	225	SUMP
* S2.0 to S2.1	78.725	77.635	77.560	225	
* S2.1 to S2.2	78.900	77.560	77.420	225	
* S2.2 to S2.3	78.565	77.420	77.360	225	
* S2.3 to S1.1	78.400	77.360	77.200	225	

NOTES: uPVC PIPES ASSUMED AS THE DRAINAGE MATERIAL, PLEASE NOTIFY ENGINEER IF DIFFERENT
 * = CONCRETE PROTECTION WILL BE PROVIDED OVER PIPES
 BD = DENOTES BACKDROP MANHOLE
 Sump = DENOTES 0.5m DEEP SUMP BELOW PIPE INVERT



NOTES:

- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, SERVICE ENGINEERS DRAWINGS & SPECIFICATIONS.
- ALL LEVELS ARE STRUCTURAL UNLESS NOTED OTHERWISE.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT BUILDING REGULATIONS.
- DO NOT SCALE - WORK TO FIGURE DIMENSIONS ONLY.

Rev.	Date	Description	Desn.	Chkd.	Apprv.
01	23.04.24	DESIGN INTENT ISSUE	GG	TD	NP

DESIGN INTENT

PROPOSED DRAINAGE LAYOUT

Date: 29.11.23 Scale: 1:250 @ A1 / 1:500 @ A3
 Drawn By: G.GOODSON Checked By: T.DELANEY Approved By: N.PATTERSON

Client: KILKENNY COUNTY COUNCIL
 Job Description: PROPOSED HOUSING DEVELOPMENT FRESHFORD, CO.KILKENNY
 Project No: 23KK009 Drawing Ref: C-015 Rev: DI

PROPOSED DRAINAGE LAYOUT
 SCALE 1:250 @ A1 / 1:500 @ A3