

EXISTING GULLYS TO BE RECONSTRUCTED AND DIVERTED TO NEW DRAINAGE

SURVEY AREA

EXISTING STORM DRAINAGE FROM THE NORTH TO TIE IN WITH PROPOSED DIVERSION

EXISTING Ø300mm STORM DRAINAGE LINE TO BE GRUBBED UP AND REMOVED. A NEW Ø300mm STORM DRAINAGE DIVERSION TO BE CONSTRUCTED TO OMIT PIPEWORK UNDER FUTURE LANDS OF SCHOOL OWNERSHIP

CONNECT TO EXISTING 300mm STORM DRAINAGE LINE HERE WITH NEWLY CONSTRUCTED BACKDROP MANHOLE
CL: 90.570
IL: 88.020

HYDROBRAKE MANHOLE TO LIMIT FLOW TO 2L/S

ATTENUATION AREA

PROPOSED INFILTRATION CHAMBER DESIGNED TO CATER FOR 100 YEAR STORM EVENT + 20% FOR CLIMATE CHANGE TO BE CONSTRUCTED WITH 55% VOIDS RATIO USING MICROSTRAIN MC-4500 CHAMBERS SURROUNDED IN 20-50mm CRUSHED ANGULAR STONE OR EQUIVALENT APPROVED WITH Min. STORAGE VOLUME REQUIRED = 415m³ (10m X 20m X 2.055Dp.) PERVIOUS GEO-MEMBRANE TO BE PROVIDED AROUND INFILTRATION CHAMBER

G.L. 92.000 (LOWEST GL)
C.L. 91.860 (TOP OF ATT.)
I.L. 89.800 (BASE OF ATT.)

SURVEY AREA

PROPOSED STORM DRAINAGE LAYOUT

SCALE A1 1:250, A3 1:500

STORM DRAINAGE LEGEND:

	Denotes Proposed Storm Drainage & Manhole
	Denotes Proposed Armstrong Junction
	Denotes Existing Storm Drainage
	Denotes Proposed Storm Diversion

SD Pipe Section	US MH CL	US MH IL	DS MH IL	Pipe Diameter
	[m]	[m]	[m]	[mm]
S1.0 to S1.1	93.400	92.200	92.000	300
S1.1 to S1.2	93.200	92.000	91.900	300
S1.2 to S1.3	93.200	91.900	91.500	300
S1.3 to S1.4	93.000	91.500	90.500	300
S1.4 to S1.5	92.300	90.500	90.100	300
S1.5 to Attn	92.000	90.000	89.800	300
Attn to S1.6	91.625	89.800	89.600	300
S1.6 to S1.7	92.000	89.600	88.500	300
S1.7 to S1.8	91.000	88.500	88.200	300
S1.8 to Existing	90.500	88.200	88.020	300

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

NEW STORM MANHOLE TO BE CONSTRUCTED HERE ON EXISTING STORM DRAINAGE FOR DIVERSION

NEW STORM DRAIN DIVERSION

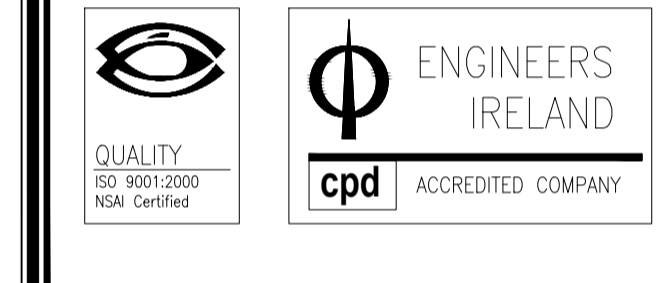
GENERAL DRAINAGE NOTES:

- 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 ENCASUREMENT.
 - (D) A PIPE LEAVES CONCRETE ENCASUREMENT.
 - (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 CHAMBER WALL AT THE PROPOSED POINT OF PENETRATION & ADJUST THE EXISTING BENCHING TO THE SATISFACTION OF 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 & CULLIES, 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 & CULLIES 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.

NOTES:

GENERAL 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.



Referenced drawings

Dwg No.	Dwg Title

Issue register

Rev.	Date	Description	Drawn	Checked	Approved
PL1	28.04.20	PLANNING ISSUE	TD	NP	NP
PL2	25.05.20	PLANNING ISSUE	TD	NP	NP
PL3	17.06.20	PLANNING ISSUE	TD	NP	NP

Client: **TIPPERARY COUNTY COUNCIL**

Job Description: **18 No. UNITS AT BALLYCLERIHAN & DONOHILL**

Status: **PLANNING ISSUE**

Drawing Title: **PROPOSED STORM DRAINAGE LAYOUT**

Project No: 19KK029 Lot 1	Drawing Ref: C-020	Rev: PL3
Date: 07.02.19	Scale: A1 - 1/250; A3 - 1/500	
Drawn By: T.DALESSANDRO	Checked By: N.PATTERSON	Approved By: N.PATTERSON

Hayes Higgins Partnership
 Gas House Lane, Kilkenny.
 056 776470 056 772323 info@hayeshiggins.com
 58 Fitzsimon Square, Dublin 2. (01) 4612321 (01) 4612504 admin@hayeshiggins.com