ON ORIGINAL

0 5 10 20 30 40 50mm

© COPYRIGHT OF THIS DRAWING IS RESERVED BY DBFL CONSULTING ENGINEERS. NO PART SHALL BE REPRODUCED OR TRANSMITTED WITHOUT THEIR WRITTEN PERMISSION.

NO CHANGES OF WHATSOEVER NATURE ARE TO BE MADE TO ANY DETAILS SET OUT OR CONTAINED IN ANY DBFL SPECIFICATIONS OR DRAWINGS UNLESS THE EXPRESS CONSENT HAS BEEN OBTAINED IN ADVANCE, IN WRITING, FROM DBFL

NOTES

N W E S

S5 CL 18.304 IL 15.120

MATCH LINE

300Ø 1:250

300Ø 1:247

S4 CL 18.328 IL 14.150

S3 CL 17.608 IL 14.009

300Ø 1:250

S2 CL 17.148 IL 13.862

300Ø 1:251

S1 CL 16.665 IL 13.709

300Ø 1:252

S0 CL 15.655 IL 13.369

HEAD OF EXISTING SURFACE WATER DRAIN IN EGLINTON ROAD (IL 16.12)

EXISTING 225 MM DRAIN REPLACED WITH 300 DIAMETER DRAIN RUNNING AT LOWER LEVER / FLATTER GRADIENT

EXISTING 300 DIAMETER SURFACE WATER LINE

SADDLE ON TO EXISTING 600mm COMBINED SEWER

SADDLE DISCHARGE MANHOLE COMBINED SEWER

DISCHARGE MANHOLE

EXISTING 600Ø COMBINED SEWER

GRATED MANHOLE COVER

STORAGE POND STORAGE VOLUME 209.8m³ SIDE SLOPES 1:3, TOP OF BANK 18.40m TOP WATER LEVEL 17.732m INVERT LEVEL 17.07m

FLOW CONTROL MANHOLE HYDROBRAKE OPTIMUM OR SIMILAR IL 16.077m MAXQ 4.5l/s DESIGN HEAD 1.655m

CATCHMENT 2 ATTENUATION TANK (STORMTECH MC3500) TO STORE FLOWS FROM UP TO 1 IN 100 YR REYURN PERIOD EVENT PLUS 20% CLIMATE CHANGE + 10% URBAN CREEP. TOTAL STORAGE VOLUME PROVIDED 214.3m³ NO. OF ROWS 7 NO. OF UNITS / ROW 4 IL 16.443m TWL 18.238m

FLOW CONTROL MANHOLE (HYDROBRAKE OPTIMUM OR SIMILAR) RESTRICTING FLOWS TO IL 16.443m MaxQ 4.7l/s DESIGN HEAD = 1.795m

225 DIA. SURFACE WATER

PROTECTED ORFICE 100mm

PROTECTED ORFICE 100mm

NOTCH WEIR Q=0.2l/s

STORAGE POND STORAGE VOLUME 65.6m³ SIDE SLOPES 1:4, TOP OF BANK 20.96 TOP WATER LEVEL 20.85 INVERT LEVEL 20.034

NON RETURN VALVE

CONNECTIONS TO SLUNG DRAINAGE

225mmØ SURFACE WATER CONNECTION TO SLUNG DRAINAGE

ACO CHANNEL

225 DIA. SURFACE WATER

FLOW CONTROL MANHOLE HYDROBRAKE OPTIMUM OR SIMILAR IL 18.365m MAXQ 6.4 l/s DESIGN HEAD 1.795m

CATCHMENT 1 ATTENUATION TANK (STORMTECH MC3500) TO STORE FLOWS FROM UP TO 1 IN 100 YR RETURN PERIOD EVENT PLUS 20% CLIMATE CHANGE. TOTAL STORAGE VOLUME PROVIDED 261.2m³ NO. OF ROWS 9 NO. OF UNITS / ROW 4 IL 18.365m TWL 20.016m

CATCHMENT 4 ATTENUATION TANK (STORMTECH MC3500) TO STORE FLOWS FROM UP TO 1 IN 100 YR REYURN PERIOD EVENT PLUS 20% CLIMATE CHANGE +10% URBAN CREEP. TOTAL STORAGE VOLUME PROVIDED 295.10m³ NO. OF ROWS 9 NO. OF UNITS / ROW 4 IL 15.616m TWL17.361m

FLOW CONTROL MANHOLE HYDROBRAKE OPTIMUM OR SIMILAR IL 15.616m MAXQ 9.1 l/s DESIGN HEAD 1.745m

KLARGESTER FULL RETENTION SEPARATOR MODEL NSFA010

EXISTING 375Ø COMBINED SEWER

BLOCK A1 BLOCK A2 BLOCK B BLOCK C BLOCK D BLOCK F TABOR HOUSE CHAPEL

FFL 18.60 FFL 20.10 FFL 20.40 FFL 20.80 FFL 20.90 FFL 21.90 FFL 19.70 FFL 20.35 FFL 20.975 FFL 21.20 FFL 19.10 FFL 21.80

ROOF A1 Volume: 33.75m³ ROOF A2 Volume: 98.49m³ ROOF A3 Volume: 13.11m³ ROOF A4 Volume: 14.47m³ ROOF A5 Volume: 22.60m³ ROOF A6 Volume: 15.52m³ ROOF A7 Volume: 24.05m³ ROOF B1 Volume: 17.32m³ ROOF B2 Volume: 14.93m³ ROOF B3 Volume: 32.01m³ ROOF B4 Volume: 43.20m³ ROOF C1 Volume: 46.05m³ ROOF C2 Volume: 48.79m³ ROOF C3 Volume: 26.67m³ ROOF C4 Volume: 11.17m³ ROOF C5 Volume: 33.4m³ ROOF C6 ROOF C7 Volume: 9.00m³ ROOF D1 Volume: 23.47m³ ROOF D2 Volume: 15.27m³ ROOF F1 Volume: 29.19m³ ROOF F2 Volume: 42.18m³ PODIUM A Volume: 194.77m³ PODIUM B Volume: 214.17m³ PODIUM C Volume: 21.63m³

LEGEND

- SITE BOUNDARY
- BASEMENT OUTLINE
- PROPOSED SURFACE WATER SEWER
- SURFACE WATER CATCHPIT CHAMBER WITH GRATED COVER
- PROPOSED 150mm FILTER DRAIN
- PROPOSED INLET KEB
- ROAD GULLY AND 150Ø COLLECTOR PIPE
- GULLY WITH 150mm LEAD PIPE (DRAINING VIA TREEPIT)
- PROPOSED TREE PIT
- PROPOSED ACO CHANNEL
- PROPOSED SURFACE WATER COLLECTOR
- PROPOSED ACCESS JUNCTION
- EXISTING SURFACE WATER SEWER
- EXISTING SURFACE WATER SEWER FROM IRISH WATER RECORDS
- PROPOSED BIORETENTION AREA
- PROPOSED FOUL WATER SEWER
- PROPOSED FOUL COLLECTOR
- EXISTING FOUL WATER SEWER
- EXISTING LEVEL
- PROPOSED LEVEL
- FINISHED FLOOR LEVEL
- PERMEABLE PARKING
- PROPOSED ATTENUATION BASIN

LIST OF IRISH WATER WASTEWATER STANDARD DETAILS BROUGHT INTO THE CONTRACT

STD-WW-02	TYPICAL LAYOUT FOR SEWER WITHIN NEW DEVELOPMENT
STD-WW-03	DRAIN AND SERVICE CONNECTION PIPEWORK
STD-WW-04	TYPICAL SEWER/SERVICE PIPE CONNECTION
STD-WW-05	TYPICAL SERVICE LAYOUT INDICATING SEPARATION DISTANCES
STD-WW-06	RESTRICTIONS ON TREES/SHRUBS PLANTING ADJACENT TO SEWERS
STD-WW-07	TRENCH BACKFILL & BEDDING
STD-WW-08	CONCRETE BED, HAUNCH & SURROUND TO WASTEWATER PIPES
STD-WW-09	BLOCKWORK MANHOLE (<450mmØ)
STD-WW-10	PRE-CAST CONCRETE MANHOLE
STD-WW-11	IN-SITU CONCRETE MANHOLE
STD-WW-12	BACKDROP MANHOLES
STD-WW-13	PRIVATE SIDE INSPECTION CHAMBER
STD-WW-14	THRUST BLOCKS FOR RISING MAINS
STD-WW-15	SCOUR VALVE CHAMBER (FOUL RISING MAIN <200mmØ)
STD-WW-16	SLUICE VALVE DETAILS FOR RISING MAINS DUCTILE IRON (D.I) PIPE (<200mmØ)(SHEET 1 OF 2)
STD-WW-17	SLUICE VALVE DETAILS FOR RISING MAIN POLYETHYLENE (P.E) PIPE (<200mmØ)(SHEET 2 OF 2)
STD-WW-18	AIR VALVE CHAMBER (FOUL RISING MAIN <200mmØ)
STD-WW-19	DUCT CHAMBER
STD-WW-20	EMERGENCY OVERFLOW STRUCTURE
STD-WW-21	TYPICAL DITCH/STREAM CROSSING FOR GRAVITY MAIN (SHEET 1 OF 2)
STD-WW-22	TYPICAL DITCH/STREAM CROSSING FOR RISING MAIN (SHEET 2 OF 2)
STD-WW-23	TYPICAL BRIDGE CROSSING FOR RISING MAIN (SHEET 1 OF 2)
STD-WW-24	TYPICAL BRIDGE CROSSING FOR RISING MAIN (SHEET 2 OF 2)
STD-WW-25	SECURITY GATE & FENCING
STD-WW-26	INDICATIVE PUMPING STATION LAYOUT
STD-WW-27	FLOW METER CHAMBER (FOUL RISING MAIN <200mmØ)
STD-WW-28	INDICATIVE SUBMERSIBLE PUMPING STATION
STD-WW-28A	INDICATIVE PRE-CAST CONCRETE SUBMERSIBLE PUMPING STATION
STD-WW-29	RISING MAIN DISCHARGE MANHOLE
STD-WW-30	KIOSK TYPE 1 PUMPING STATION & WET KIOSK (SHEET 1 OF 2)
STD-WW-31	KIOSK TYPE 2 + 3 PUMPING STATION & WET KIOSK (SHEET 2 OF 2)
STD-WW-32	HARDSTANDING AREA PUMPING STATION (PERMEABLE & IMPERMEABLE)
STD-WW-33	LAMP BOLLARD & LAMP STANDARD
STD-WW-34	VENT STACK

GENERAL NOTES:

1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS.
2. ALL DIMENSIONS IN METRES UNLESS SPECIFIED OTHERWISE.
3. ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR.
4. ALL LEVELS ARE TO ORDNANCE DATUM (MALIN HEAD).
5. ALL TEMPORARY TRAFFIC & OPERATIONS MANAGEMENT SHALL COMPLY FULLY WITH THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS
6. THE CONTRACTOR MUST LIAISE DIRECTLY WITH LOCAL AUTHORITY DEPARTMENTS AS DIRECTED IN THE CIVIL ENGINEERING SPECIFICATION AND STANDARD CONSTRUCTION DETAILS.
7. ALL VEHICULAR & PEDESTRIAN, CYCLE & PRIVATE ACCESS ROUTES WITHIN AND SURROUNDING THE WORKS EXTENTS MUST BE MAINTAINED THROUGHOUT THE WORKS IN ACCORDANCE WITH THE CONTRACTORS APPROVED TEMPORARY TRAFFIC MANAGEMENT PLAN & CONSTRUCTION MANAGEMENT PLAN.

DRAWING SPECIFIC NOTES

1. ALL DRAWINGS TO BE CHECKED BY CONTRACTOR ON SITE AND ENGINEER INFORMED OF DISCREPANCIES BEFORE WORK COMMENCES.
2. CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF EXISTING DRAINAGE LEVELS & THE LOCATION OF EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS ON SITE
3. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE NRA SPECIFICATION FOR ROAD WORKS UNLESS NOTED OTHERWISE
4. MANHOLE COVER LEVELS ARE TO CONFORM WITH FINISHED ROAD AND PATH LEVELS
5. ALL SURFACE WATER DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY'S CODE OF PRACTICE FOR DRAINAGE AND THE GDSDS
6. ALL FOUL DRAINAGE WORKS TO BE IN ACCORDANCE WITH IRISH WATERS' CODE OF PRACTICE FOR WASTEWATER SUPPLY AND WASTEWATER INFRASTRUCTURE STANDARD DETAILS.
7. FOUL SEWERS TO BE CONCRETE PIPES (SPIGOT AND SOCKET JOINTS AND RUBBER RING FITTINGS COMPLYING WITH IS EN 1916) OR THERMOPLASTIC STRUCTURED WALL PIPES (COMPLYING WITH THE PROVISION OF IS EN 13476 AND WIS 4-35-01 2000) AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE
8. ALL SURFACE WATER SEWERS TO BE CLASS H CONCRETE TO EN1916 & IS 6 2004.
9. SURFACE WATER COLLECTOR DRAINS 150mm DIA.
10. FOUL HOUSE CONNECTIONS TO BE 100mm DIA.
11. CONTRACTOR SHALL INSPECT THE ROUTE & CONFIRM LOCATIONS OF ALL TREES, FEATURES, ENTRANCES & ASPECTS IMPACTING CONSTRUCTION OF THE WORKS
12. NOTE THAT THE CONTRACTOR AND/OR ARCHITECT ARE RESPONSIBLE FOR CONNECTIONS INTO THE BUILDING
13. THIS DRAWING IS BASED ON TOPO SURVEY BY DAVIDSON HICKEY IN OCT 2019 AND APEX SURVEYS IN JAN 2020

rev	date	description	by	chkd.
4	11-12-25	DRAINAGE, LEVELS UPDATED	PGC	EJD
3	07-11-25	SODA APPLICATION	HvH	SM
2	03-07-25	GENERAL UPDATED	GDN	EJD
1	01-07-25	UPDATED LAYOUT	GDN	EJD
0	26-06-25	LRD APPLICATION	PGC	ED

STATUS CODES

purpose	acceptance
P3 - PLANNING PERMISSION	S - ISSUED

DBFL CONSULTING ENGINEERS

T: + 353 1 400 4000 | E: info@dbfl.ie | W: www.dbfl.ie

DUBLIN | CORK | GALWAY | WATERFORD

project ref.

SANDFORD ROAD, MILLTOWN

drawing title

SITE SERVICES LAYOUT

client

SANDFORD LIVING LIMITED

designed by	author	scale	sheet size
BK	OWF	1:500	A1P

drawing no. 190226-X-05-Z00-DTM-DR-DBFL-CE-1301 revision 4

ORDNANCE SURVEY IRELAND LICENCE No EN 0017925
© ORDNANCE SURVEY IRELAND
GOVERNMENT OF IRELAND