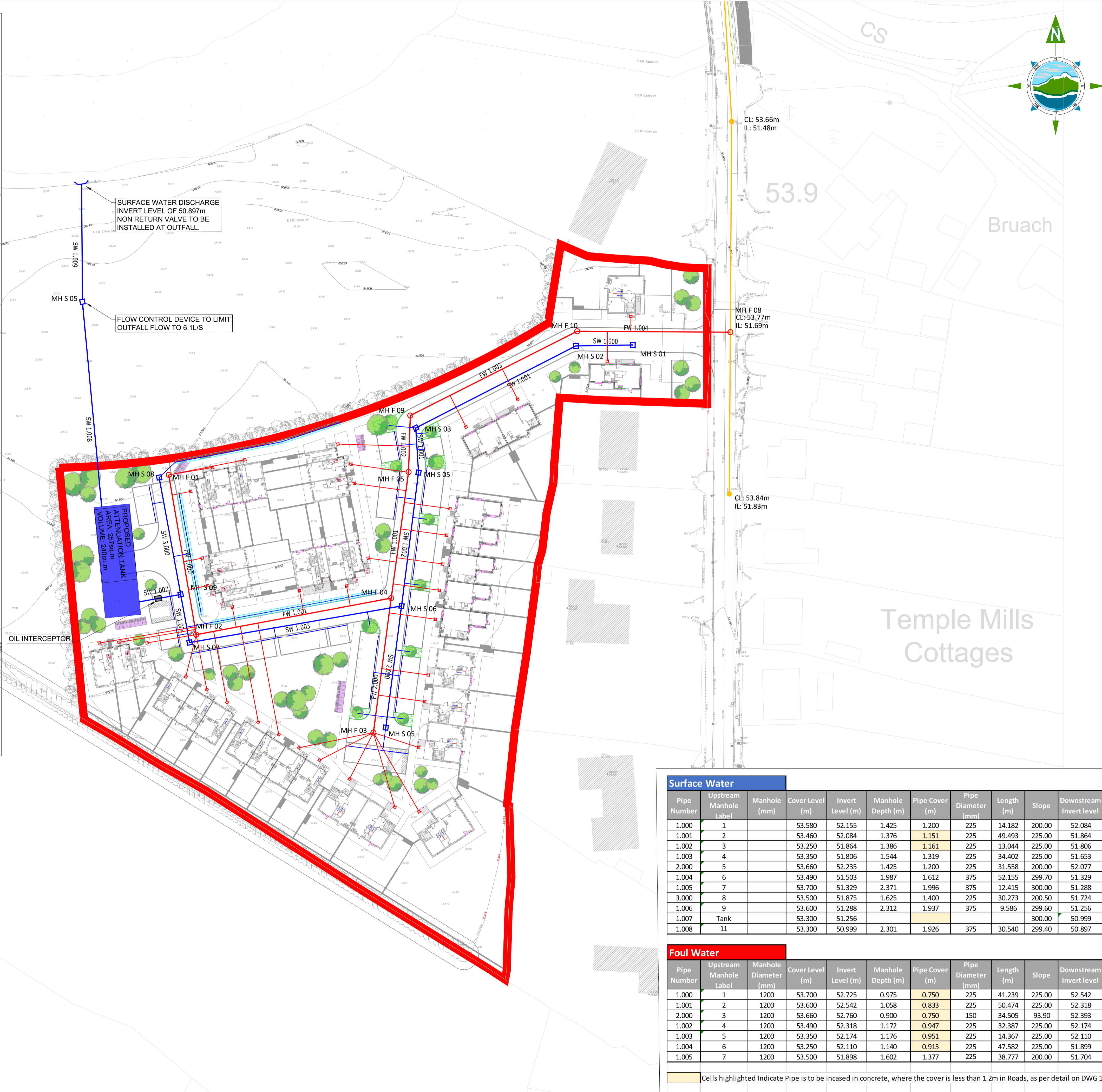


- GENERAL DRAINAGE SERVICE CONNECTION NOTES:**
- ALL FOUL DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS TECHNICAL GUIDANCE DOCUMENT PART H.
 - DRAINS SHOULD BE LAID TO EVEN GRADIENTS AND ANY CHANGE OF GRADIENT SHOULD BE COMBINED WITH AN ACCESS POINT. CONNECTIONS OF DRAINS TO OTHER DRAINS SHOULD BE MADE OBLIQUELY AND IN THE DIRECTION OF FLOW.
 - ACCESS POINTS SHOULD BE PROVIDED ONLY IF BLOCKAGES CANNOT BE CLEARED WITHOUT THEM.
 - PIPES SHOULD BE LAID IN STRAIGHT LINES WHERE PRACTICABLE. ANY BENDS SHOULD BE LIMITED TO POSITIONS IN OR CLOSE TO INSPECTION CHAMBERS OR MANHOLES AND TO THE FOOT OF DISCHARGE AND VENTILATION STACKS. BENDS SHOULD HAVE A LARGE RADIUS AS PRACTICABLE.
 - ALL MANHOLE COVERS TO BE IN ACCORDANCE WITH BS EN 124. MANHOLE COVERS IN FOOTWAYS ARE TO BE PROVIDED WITH NON-SLIP COVERS AND THOSE WITHIN TACTILE PAVING & OTHER PAVED AREAS ARE TO BE PROVIDED WITH RECESSED COVERS FOR PAVING.
 - ALL DRAINAGE PIPE MATERIALS, COVER AND BEDDING ARE TO COMPLY WITH BUILDING REGULATIONS TECHNICAL GUIDANCE DOCUMENT PART H:
 - PIPE MATERIALS SHALL BE AS DEFINED IN TABLE 7.
 - BEDDING FOR RIGID PIPES SHALL BE AS PER DIAGRAM 8 AND BEDDING FOR FLEXIBLE PIPES SHALL BE AS PER DIAGRAM 9.
 - GRANULAR BEDDING MATERIAL FOR PIPES TO CONFORM TO IS EN 1610 ANNEX B TABLE 15. MATERIAL TO BE SINGLE SIZED OR GRADED FROM 5-10mm FOR 100mm PIPES, 5-14mm FOR 150mm PIPES AND 5-20mm FOR 150-600mm PIPES.
 - THE MINIMUM DEPTH OF COVER TO CROWN LEVEL OF FLEXIBLE PIPES SHALL BE 200mm UNDER ROADS, 900mm UNDER DRIVEWAYS/PARKING AREAS AND 400mm IN GARDENS. FOR FLEXIBLE PIPES WHERE IT IS NOT POSSIBLE TO ACHIEVE 600mm MINIMUM COVER DEPTH UNDER GARDENS, CONCRETE PAVING SLABS SHALL BE LAID AS BRIDGING OVER THE PIPE WITH AT LEAST 75mm OF GRANULAR MATERIAL BETWEEN THE CROWN OF THE PIPE AND THE UNDERSIDE OF THE PAVING SLABS.
 - FOR FLEXIBLE PIPES WHERE IT IS NOT POSSIBLE TO ACHIEVE 1200mm MINIMUM COVER DEPTH UNDER A ROAD OR 900mm UNDER A DRIVEWAY/PARKING AREA, REINFORCED CONCRETE BRIDGING OR REINFORCED CONCRETE SURROUND SHOULD BE USED INSTEAD OF PAVING SLABS.
 - FOR RIGID PIPES WHERE IT IS NOT POSSIBLE TO MINIMUM COVER AS OUTLINED IN TABLE 8 OF BUILDING REGULATIONS TECHNICAL GUIDANCE DOCUMENT PART H, THE PIPES SHOULD BE PROTECTED BY CONCRETE ENCASEMENT NOT LESS THAN 100mm THICK AND HAVING MOVEMENT JOINTS FORMED WITH COMPRESSIBLE MATERIAL AT EACH SOCKET OR JOINT FACE.
 - A DRAIN MAY RUN UNDER A BUILDING WHERE A MINIMUM OF 100mm OF GRANULAR MATERIAL OR OTHER FLEXIBLE FILLING IS PROVIDED AROUND THE PIPE.
 - 100mm Ø FOUL DRAINS SHOULD BE LAID AT A MINIMUM OF 1:40 WHERE NO WC IS CONNECTED AND AT 1:60 WHERE AT LEAST 1 WC IS CONNECTED, AS PER IRISH WATER CODE OF PRACTICE - WASTEWATER - IW-CDS-5030-03.
 - 75mm Ø AND 100mm Ø SURFACE WATER DRAINS SHOULD BE LAID AT NOT LESS THAN 1:80 GRADIENT.
 - WHERE THE CROWN OF A DRAIN PIPE IS WITHIN 300mm OF THE UNDERSIDE OF A SLAB OR SUSPENDED SLAB, CONCRETE ENCASEMENT SHOULD BE USED INTEGRAL TO THE SLAB.
 - THE PROPOSED FOUL SEWER NETWORK FOR THE SITE SHALL BE PROVIDED AS INDICATED ON THIS DRAWING. ALL PROPOSED FOUL SEWERS SHALL BE LAID AND PROTECTED IN TRENCHES AS SET OUT IN IW STANDARD DETAIL STD - WW-07.
 - ALL MANHOLE COVERS TO BE IN ACCORDANCE WITH BS EN 124. MANHOLE COVERS IN FOOTWAYS ARE TO BE PROVIDED WITH NON-SLIP COVERS AND THOSE WITHIN TACTILE PAVING AREAS ARE TO BE PROVIDED WITH RECESSED COVERS FOR PAVING.
 - PIPE MATERIALS SHALL COMPLY WITH SECTION 3.13 OF THE CODE OF PRACTICE.
 - PIPE MATERIALS WILL BE THERMOPLASTIC STRUCTURED WALL PIPES FOR THE MAIN SEWERS AS PER SECTION 3.13.2 OF THE CODE OF PRACTICE AND UNPLASTICISED PVC FOR THE CONNECTIONS AS PER SECTION 3.13.3 OF THE CODE OF PRACTICE.
 - FOUL MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD MANHOLE DETAILS PROVIDED WITH THIS PACKAGE SEPARATION DISTANCES FROM FOUL SEWERS TO STRUCTURES AND OTHER UTILITIES WILL COMPLY WITH SECTION 3.5 OF THE CODE OF PRACTICE.
 - ALL BELOW SLAB DRAINAGE TO BE 100mm UPVC LAID AT GRADIENTS OF 1:60 TO 1:100 WITHIN T2 LAYER.
 - SVP, RWGT AND BIGT DESIGN BY ARCHITECT/M&E DESIGNER. REFER TO ARCHITECT/M&E DRAWINGS FOR DETAILS.
 - FOR DRAINS EXITING THROUGH RISING WALLS OR FOUNDATIONS REFER TO SECTION 1.7 AND DIAGRAM 12 OF THE BUILDING REGULATIONS TECHNICAL GUIDANCE DOCUMENT PART H:
 - 50mm CLEARANCE SHALL BE FORMED AROUND THE CIRCUMFERENCE OF THE PIPE SHOULD BE PROVIDED. THE VOID SHOULD BE FILLED WITH COMPRESSIBLE SEALANT TO PREVENT THE INGRESS OF GAS AND THE OPENING SHOULD BE MASKED WITH RIGID SHEET MATERIAL TO PREVENT THE INGRESS OF VERMIN OR FILL OR.
 - A LENGTH OF PIPE SHOULD BE BUILT IN WITH ITS JOINTS AS CLOSE AS POSSIBLE TO THE WALL FACES (WITHIN 150mm) AND CONNECTED ON EACH SIDE TO ROCKER PIPES WITH A LENGTH OF AT MOST 600mm AND FLEXIBLE JOINTS.



LEGEND:

- PLANNING BOUNDARY: Red line
- PROPOSED FOUL PIPE: Red line
- PROPOSED PRIVATE CONNECTION: Red line with square
- PROPOSED SURFACE WATER PIPE: Blue line
- PROPOSED SURFACE WATER MANHOLE: Blue square
- PERFORATED PIPE: Blue line with dashes
- PROPOSED DRY SWALE: Blue hatched area
- PROPOSED PERMEABLE SURFACING: Grey hatched area
- PROPOSED TREE PITS: Green hatched area

- NOTES GENERAL:**
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 - ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT DRAWINGS AND SPECIFICATIONS.
 - ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Rev	Date	Description	By	Chkd.
P01	23/03/2022	ISSUED FOR PLANNING	PF	MC

Client:

Project: **Ardclough Road Celbridge**

Title: **PROPOSED DRAINAGE LAYOUT**

Scale @ A1: **1:500**

Prepared by: **P. FANNING** Checked: **M. CASEY** Date: **JULY 2021**

Project Director: **Brian Carroll**

Drawing Status: **PLANNING**

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Drawing No: **11162-2010 P01**

Surface Water											
Pipe Number	Upstream Manhole Label	Manhole (mm)	Cover Level (m)	Invert Level (m)	Manhole Depth (m)	Pipe Cover (m)	Pipe Diameter (mm)	Length (m)	Slope	Downstream Invert level	Downstream Manhole Label
1.000	1	1200	53.580	52.155	1.425	1.200	225	14.182	200.00	52.084	2
1.001	2	1200	53.460	52.084	1.376	1.151	225	49.493	225.00	51.864	3
1.002	3	1200	53.250	51.864	1.386	1.161	225	13.044	225.00	51.806	4
1.003	4	1200	53.350	51.806	1.544	1.319	225	34.402	225.00	51.653	6
2.000	5	1200	53.660	52.235	1.425	1.200	225	31.558	200.00	52.077	6
1.004	6	1200	53.490	51.503	1.987	1.612	375	52.155	299.70	51.329	7
1.005	7	1200	53.700	51.329	2.371	1.996	375	12.415	300.00	51.288	9
3.000	8	1200	53.500	51.875	1.625	1.400	225	30.273	200.50	51.724	9
1.006	9	1200	53.600	51.288	2.312	1.937	375	9.586	299.60	51.256	Tank
1.007	Tank		53.300	51.256					300.00	50.999	11
1.008	11	1200	53.300	50.999	2.301	1.926	375	30.540	299.40	50.897	Outfall

Foul Water											
Pipe Number	Upstream Manhole Label	Manhole Diameter (mm)	Cover Level (m)	Invert Level (m)	Manhole Depth (m)	Pipe Cover (m)	Pipe Diameter (mm)	Length (m)	Slope	Downstream Invert level	Downstream Manhole Label
1.000	1	1200	53.700	52.725	0.975	0.750	225	41.239	225.00	52.542	2
1.001	2	1200	53.600	52.542	1.058	0.833	225	50.474	225.00	52.318	4
2.000	3	1200	53.660	52.760	0.900	0.750	150	34.505	93.90	52.393	4
1.002	4	1200	53.490	52.318	1.172	0.947	225	32.387	225.00	52.174	5
1.003	5	1200	53.350	52.174	1.176	0.951	225	14.367	225.00	52.110	6
1.004	6	1200	53.250	52.110	1.140	0.915	225	47.582	225.00	51.899	7
1.005	7	1200	53.500	51.898	1.602	1.377	225	38.777	200.00	51.704	8

Cells highlighted Indicate Pipe is to be incased in concrete, where the cover is less than 1.2m in Roads, as per detail on DWG 11162-2042