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PINNACLE CONSULTING ENGINEERS

SIXTH FLOOR PROSPECT HOUSE 100 NEW OXFORD STREET LONDON WC1A 1HB Tel: 0207 0433410

LEGEND

- EXISTING WATERMAIN
- PROPOSED 150MM WATERMAIN
- PROPOSED 400MM EXISTING WATERMAIN
- H PROPOSED HYDRANT
- SLV PROPOSED SLUICE VALVE
- SLV EXISTING SLUICE VALVE
- M PROPOSED WATER METER
- BOUNDARY LINE
- + PROPOSED LEVELS

REV	DATE	DESCRIPTION	CHK	DRW



STATUS CODE DESCRIPTION
PLANNING

CLIENT
BCEI

PROJECT
EDCDUB06

DRAWING
PROPOSED LEVELS & WATER LAYOUT

PROJECT NUMBER
 210401
 DATE
 27.05.2022

SCALE@A1:
 1:500
 DRAWN/CHECKED
 RWJ/JMM

STATUS CODE: **EDCDUB-PIN-06-ZZ-DR-C-200** REVISION: **C01**



SIXTH FLOOR PROSPECT HOUSE 100 NEW OXFORD STREET LONDON WC1A 1HB Tel: 0207 0433410

- WATERMAIN NOTES**
- ALL WATERMANS VALVES AND FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER STANDARD DETAILS AND IRISH WATER CODE OF PRACTICE FOR WATER INFRASTRUCTURE.
 - ALL WATERMANS SHALL BE HDPE, PE100, SDR17 TO IS EN 12201 PART 2:2011 AND IS EN 12201-3:2011.
 - CONNECTION BETWEEN EXISTING AND PROPOSED WATERMANS TO BE CARRIED OUT IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS STD-W-03 TO STD-W-10.
 - ANCHOR BLOCKS TO BE POSITIONED AT DEAD ENDS, TEES, BENDS AND AT EACH SIDE OF HYDRANTS AND VALVES IN ACCORDANCE WITH THE REQUIREMENTS OF IRISH WATER STANDARD DETAIL STD-W-28 (WATER MAIN THRUST AND SUPPORT BLOCKS) DISMANTLING JOINTS TO BE INSTALLED AT EACH SLUICE VALVE AS PER IRISH WATER STANDARD DETAIL STD-W-15.
 - CONNECTION TO INDIVIDUAL HOUSES IN ACCORDANCE WITH IRISH WATER STD-W-03.
 - INSTALLATION OF SLUICE VALVES, AIR VALVES AND HYDRANTS SHALL BE IN ACCORDANCE WITH IRISH WATER'S STANDARD DETAILS STD-W-14 TO STD-W-23. MARKER POSTS AND PLATES ARE TO BE PROVIDED IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-W-27.
 - CONNECTION TO INDIVIDUAL HOUSES IN ACCORDANCE WITH IRISH WATER STD-W-03.
 - CONNECTION TO EXISTING WATERMANS TO BE COORDINATED BY THE CONTRACTOR WITH IRISH WATER AND/OR THE LOCAL AUTHORITY.
 - CONTRACTOR TO LIASE WITH IRISH WATER AND / OR THE LOCAL AUTHORITY AS REQUIRED REGARDING TESTING, CLEANSING AND STERILISATION OF WATERMANS WATERMANS TO BE PRESSURE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF IRISH WATER AND IGN 4-01-03, GUIDE TO TESTING OF PRESSURE PIPES AND FITTINGS FOR USE BY PUBLIC WATER SUPPLIERS, OCTOBER 2015. A FORMAL TEST REPORT SHALL BE SUBMITTED TO THE ENGINEER DETAILING THE TEST CARRIED OUT.

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LEGEND

	PROPOSED PRIVATE SURFACE WATER SEWER
	PROPOSED PRIVATE FOUL SEWER
	EXISTING PRIVATE FOUL WATER SEWER
	EXISTING PRIVATE SURFACE WATER SEWER
	EXISTING PUBLIC FOUL SEWER
	EXISTING PUBLIC SURFACE WATER SEWER
	MANHOLE BACKSTOP
	DRAINAGE CHANNEL
	PROPOSED SW INCEPTOR
	INTERNAL FOUL GULLY PIPE
	ROAD GULLY
	ROODING EYE
	SUMP UNIT WITH ROODABLE AIR TRAP
	SVP
	SS
	AAV
	FIT
	RWP
	SRWP

REV	DATE	DESCRIPTION	CHK	DRN
C02	04/07/2022	ISSUED FOR PLANNING	GOR	FJVR
C01	30/11/2020	60% TENDER ISSUE	GOR	FJVR
A	30/10/2020	ISSUED FOR 60%	GOR	FJVR



STATUS CODE DESCRIPTION
PLANNING

CLIENT
BCEI

PROJECT
EDDCUB06

DRAWING
PROPOSED DRAINAGE LAYOUT

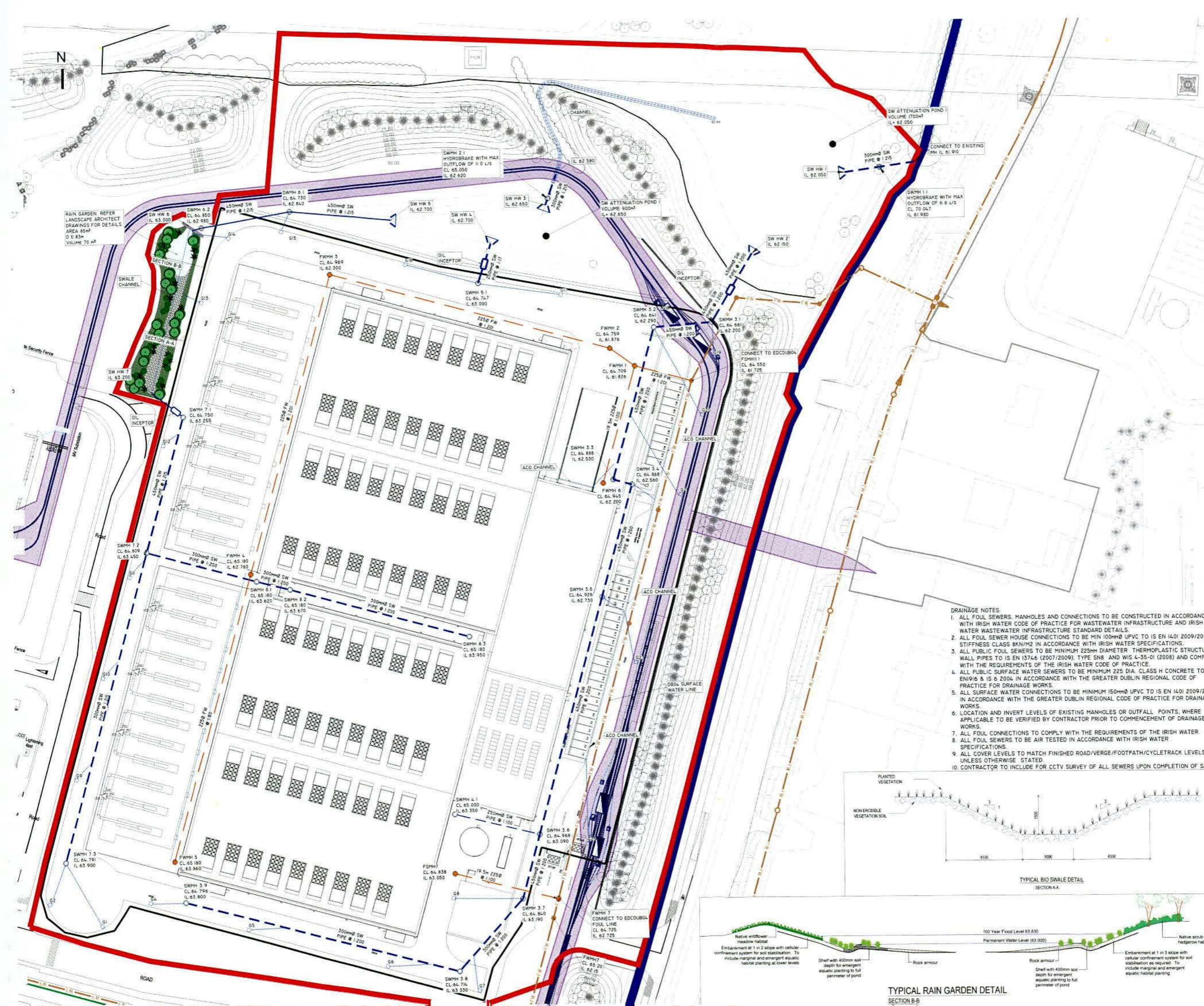
PROJECT NUMBER
220401
DATE
27.05.2022

SCALE @ A1
1:500
DRAWN/CHECKED
RWJ/JM

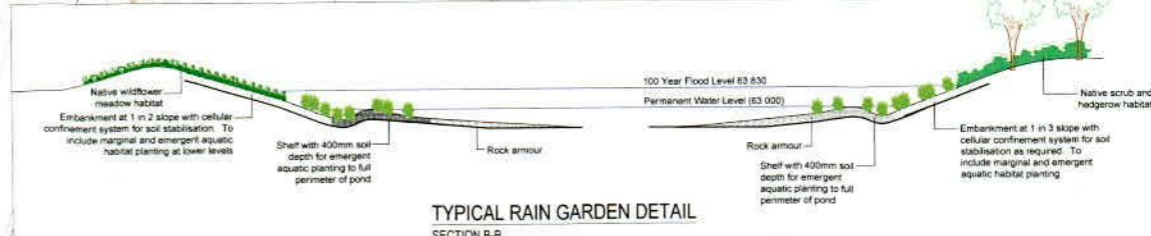
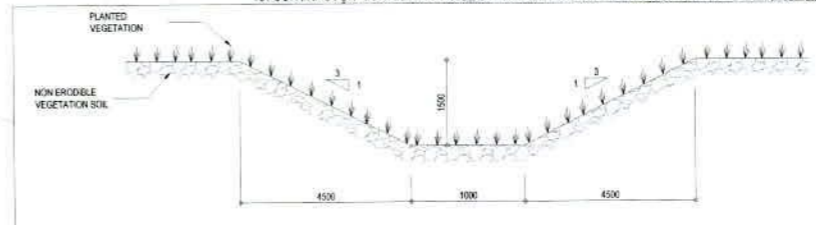
STATUS CODE
A4
DRAWING NUMBER
EDDCUB-PIN-06-ZZ-DR-C-201
REVISION
C02



SIXTH FLOOR PROSPECT HOUSE 100 NEW OXFORD STREET LONDON WC1A 1HB Tel: 0207 0433410



- DRAINAGE NOTES**
- ALL FOUL SEWERS, MANHOLES AND CONNECTIONS TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE AND IRISH WATER WASTEWATER INFRASTRUCTURE STANDARD DETAILS.
 - ALL FOUL SEWER HOUSE CONNECTIONS TO BE MIN 100MM Ø UPVC TO IS EN 1401 2009/2012. STIFFNESS CLASS 8kN/M² IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.
 - ALL PUBLIC FOUL SEWERS TO BE MINIMUM 225MM DIAMETER THERMOPLASTIC STRUCTURED WALL PIPES TO IS EN 13746 (2007/2009), TYPE SN8 AND WIS 4-35-01 (2008) AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE.
 - ALL PUBLIC SURFACE WATER SEWERS TO BE MINIMUM 225 DIA. CLASS H CONCRETE TO EN1916 & IS 6 2004 IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
 - ALL SURFACE WATER CONNECTIONS TO BE MINIMUM 150MM Ø UPVC TO IS EN 1401 2009/2012 IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
 - LOCATION AND INVERT LEVELS OF EXISTING MANHOLES OR OUTFALL POINTS, WHERE APPLICABLE TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF DRAINAGE WORKS.
 - ALL FOUL CONNECTIONS TO COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER SPECIFICATIONS.
 - ALL FOUL SEWERS TO BE AIR TESTED IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.
 - ALL COVER LEVELS TO MATCH FINISHED ROAD/VERGE/FOOTPATH/CYCLETRACK LEVELS UNLESS OTHERWISE STATED.
 - CONTRACTOR TO INCLUDE FOR CCTV SURVEY OF ALL SEWERS UPON COMPLETION OF SAME.



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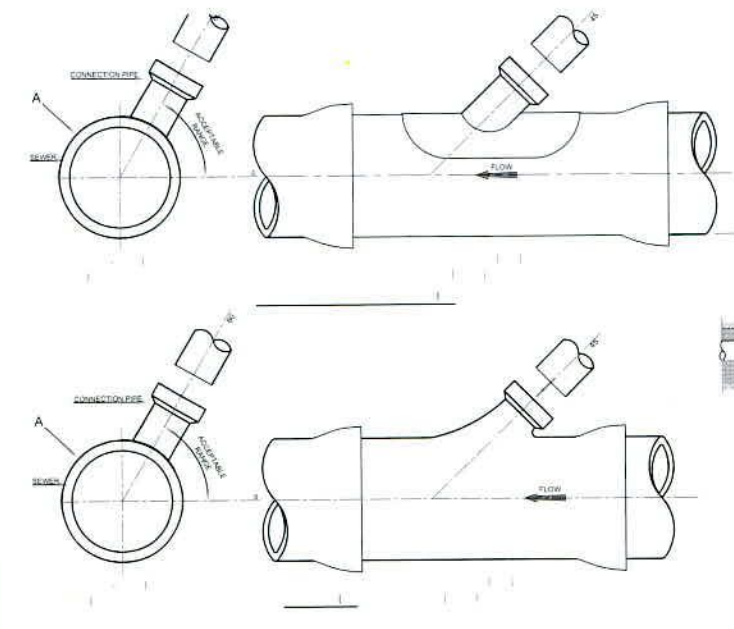
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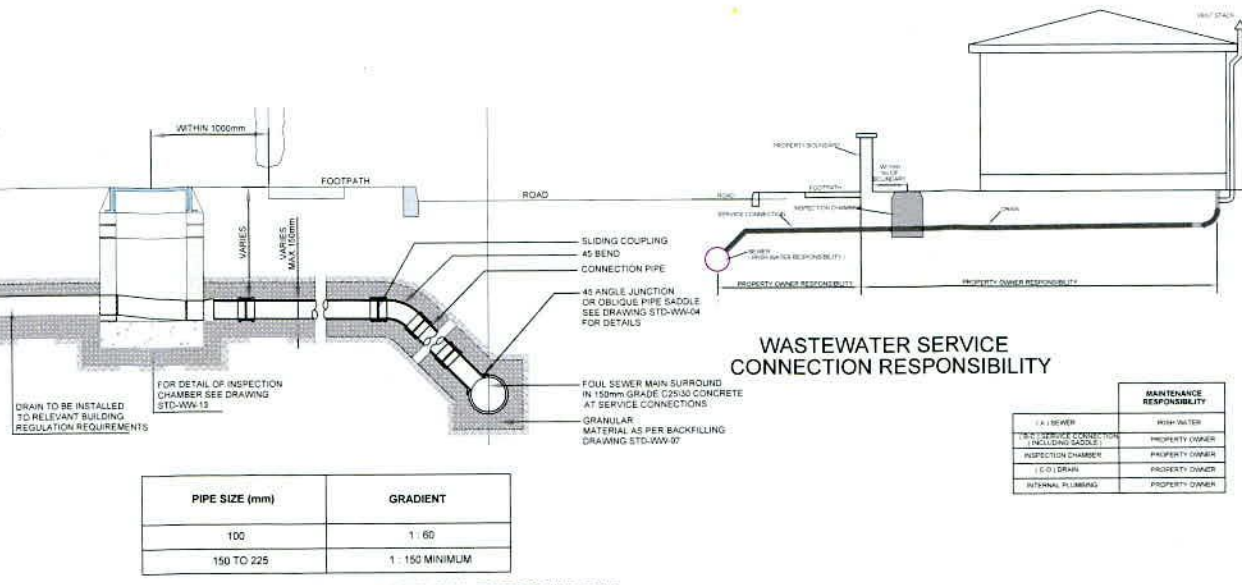
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SIXTH FLOOR PROSPECT HOUSE 100 NEW OXFORD
STREET LONDON WC1A 1HB Tel: 0207 0433410



TYPICAL LAYOUT FOR SEWER
WITHIN NEW DEVELOPMENTS
DRAWING No.
STD-WW-02

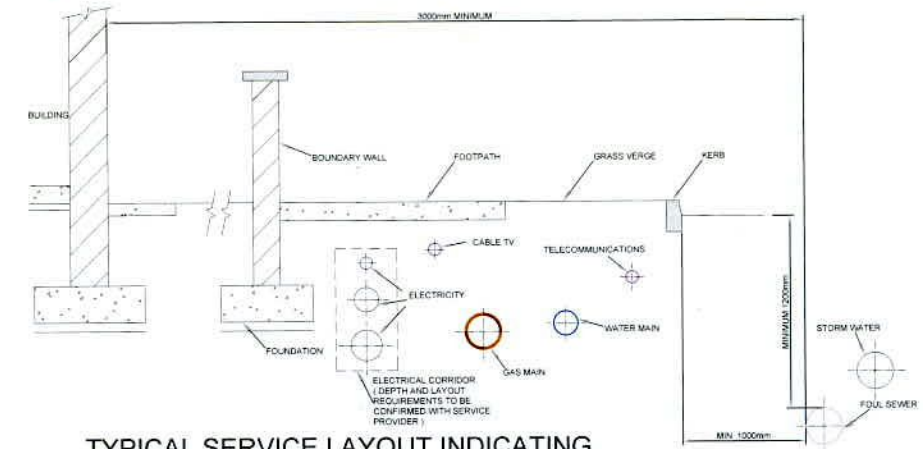


TYPICAL SEWER / SERVICE PIPE
CONNECTION
DRAWING No.
STD-WW-04

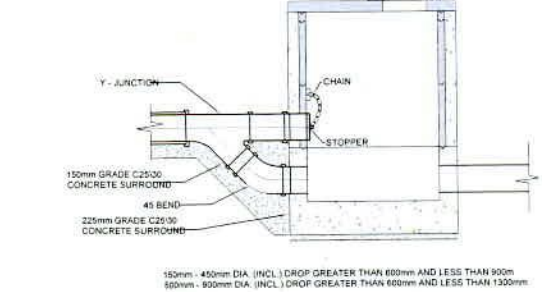
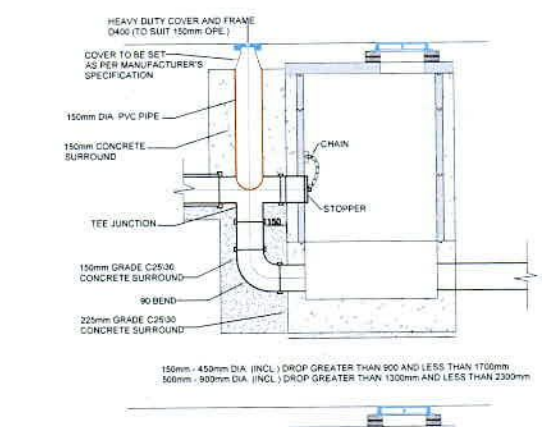
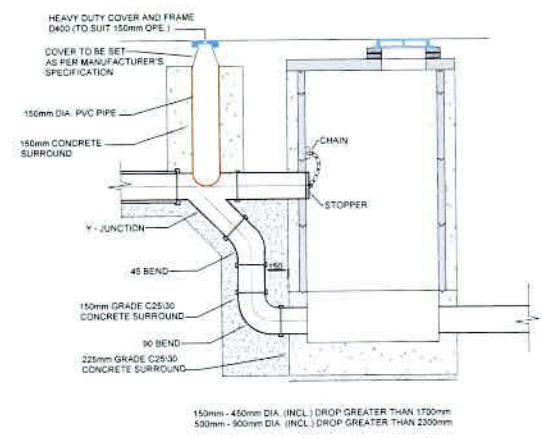


DRAIN AND SERVICE CONNECTION PIPEWORK

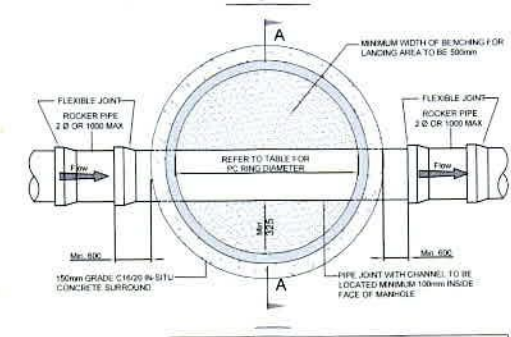
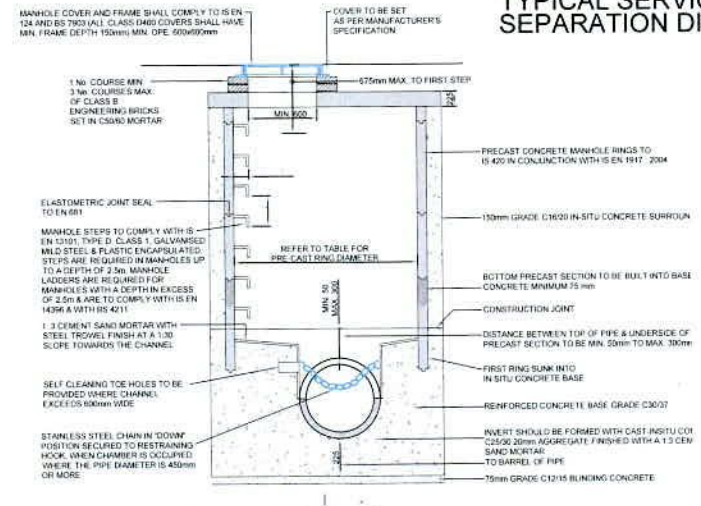
PIPE SIZE (mm)	GRADIENT
100	1 : 60
150 TO 225	1 : 150 MINIMUM



TYPICAL SERVICE LAYOUT INDICATING
SEPARATION DISTANCES

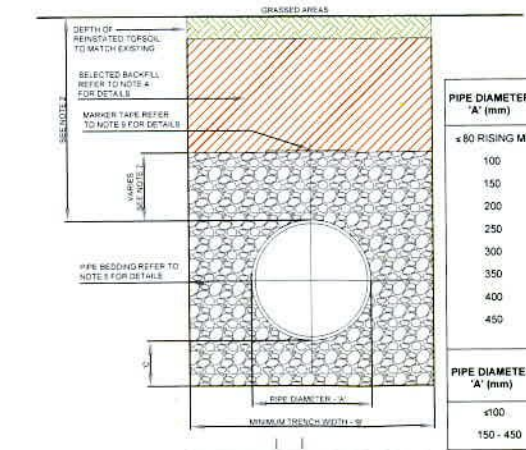
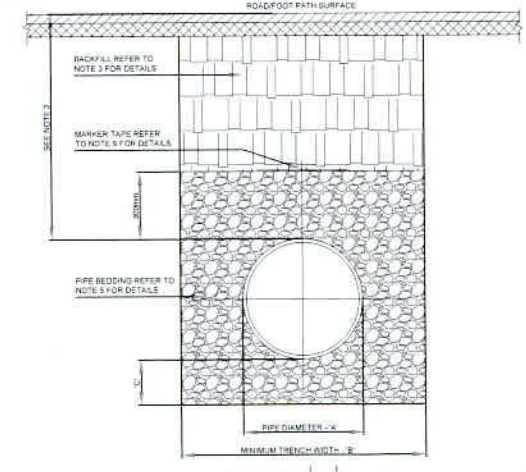


BACKDROP MANHOLES



MINIMUM MANHOLE DIAMETERS	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 TO 450	1350
450 TO 750	1500

PRE-CAST CONCRETE MANHOLE



PIPE DIAMETER 'A' (mm)	TRENCH WIDTH 'B' (mm)
< 60 RISING MAIN	SEE NOTE 10
100	500
150	600
200	600
250	750
300	750
350	750
400	900
450	900

PIPE DIAMETER 'A' (mm)	DEPTH OF BEDDING 'C' (mm)
< 100	100
150 - 450	200

TRENCH BACKFILL AND BEDDING

REV	DATE	DESCRIPTION	CHK	DRN



STATUS CODE DESCRIPTION
PLANNING

CLIENT
BCEI

PROJECT
EDDCUB06

DRAWING
STANDARD WASTE WATER
INFRASTRUCTURE DETAILS

PROJECT NUMBER
220401
DATE
27.05.2022
SCALE @ A1
AS SHOWN
DRAWN/CHECKED:
RJK/JRM

STATUS CODE: DRAWING NUMBER: REVISION:
EDDCUB-PIN-06-ZZ-DR-C-205 C01

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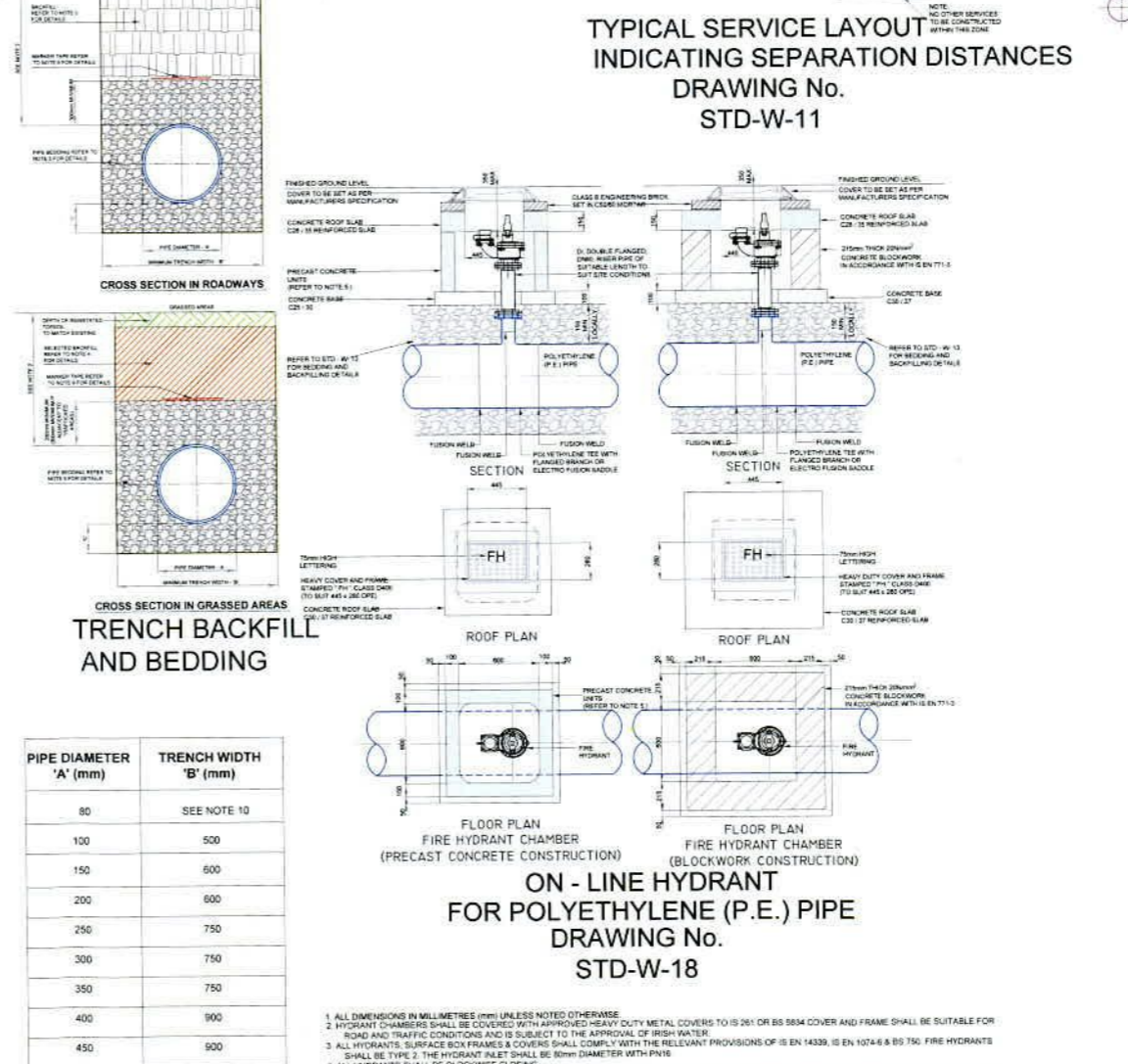
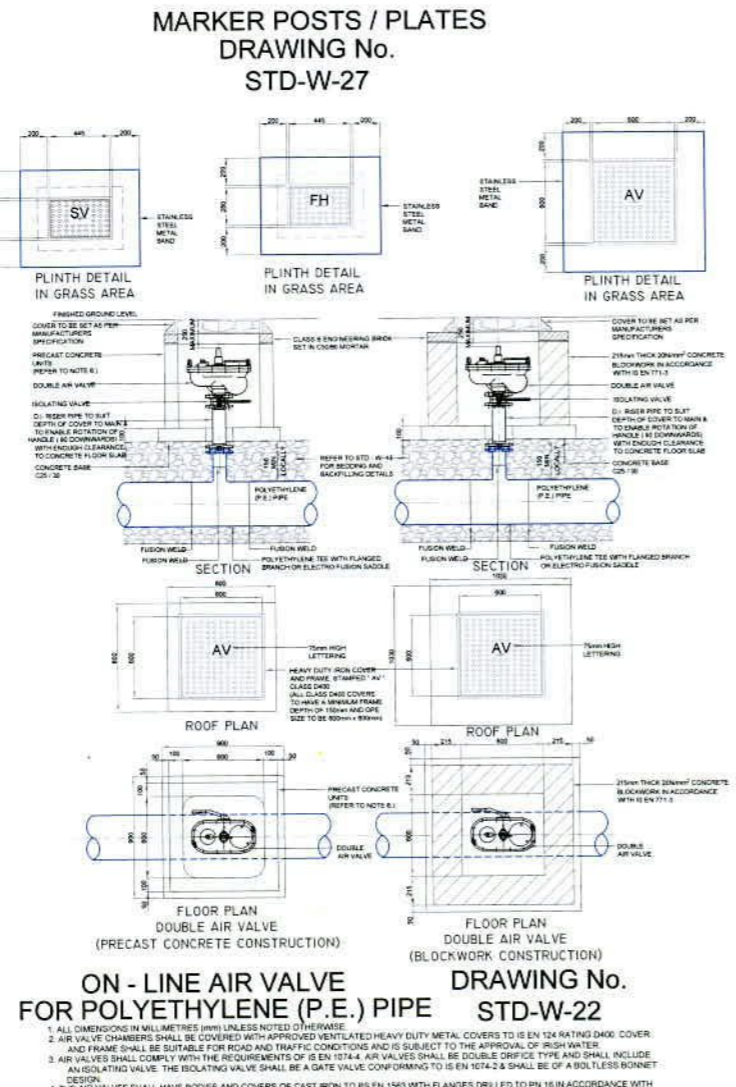
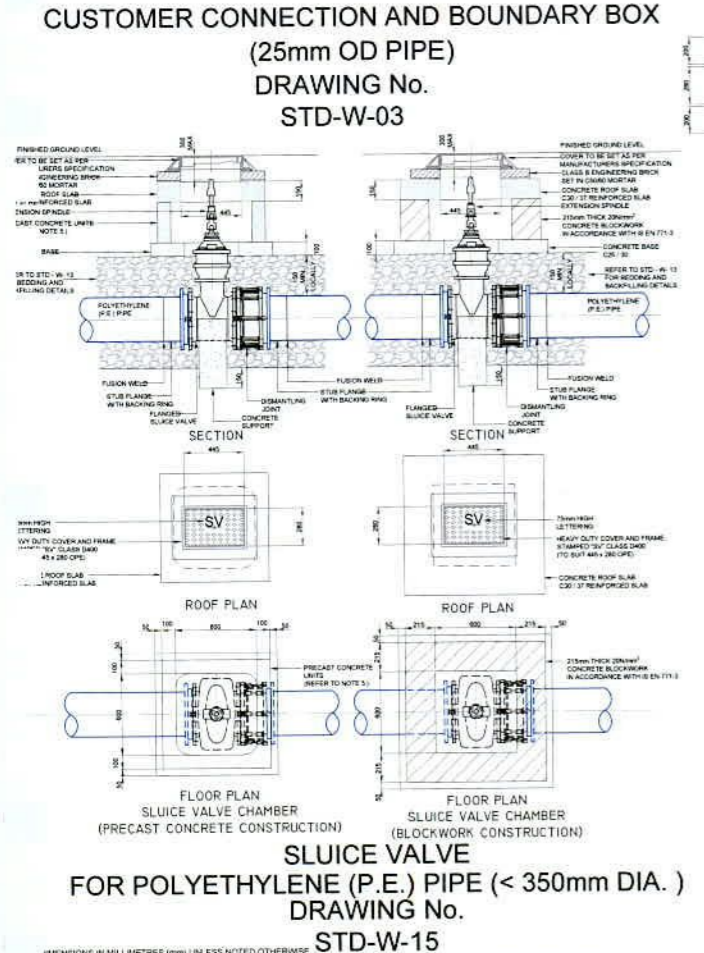
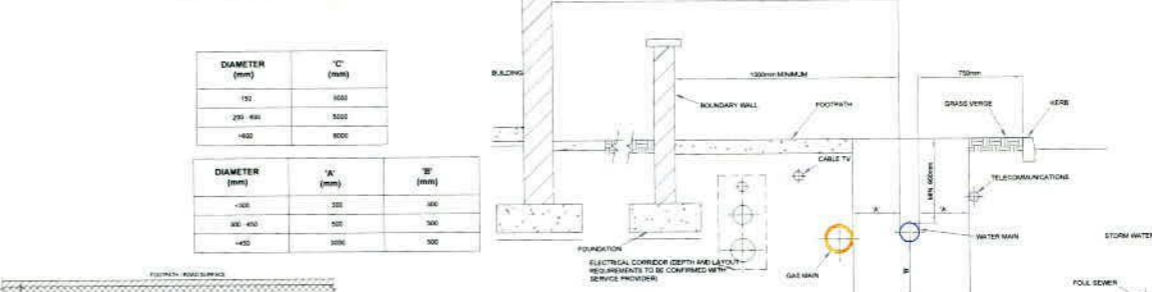
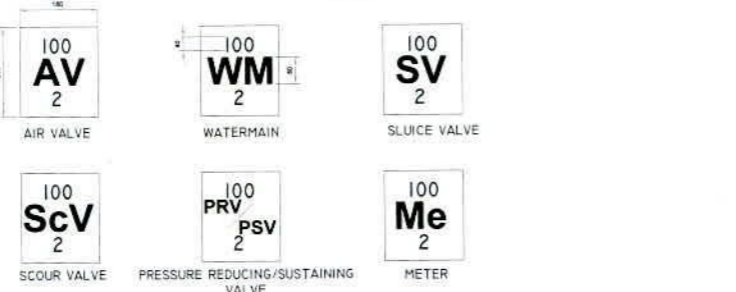
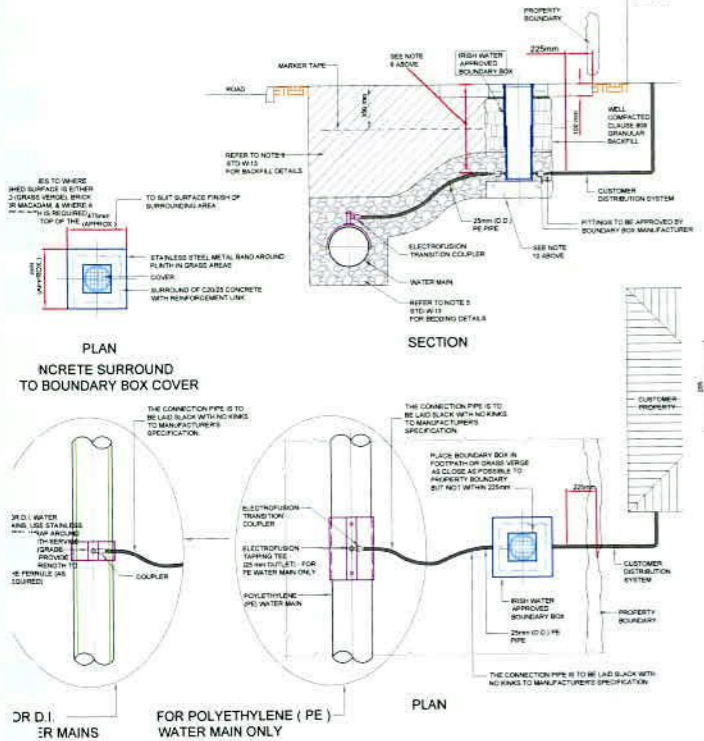
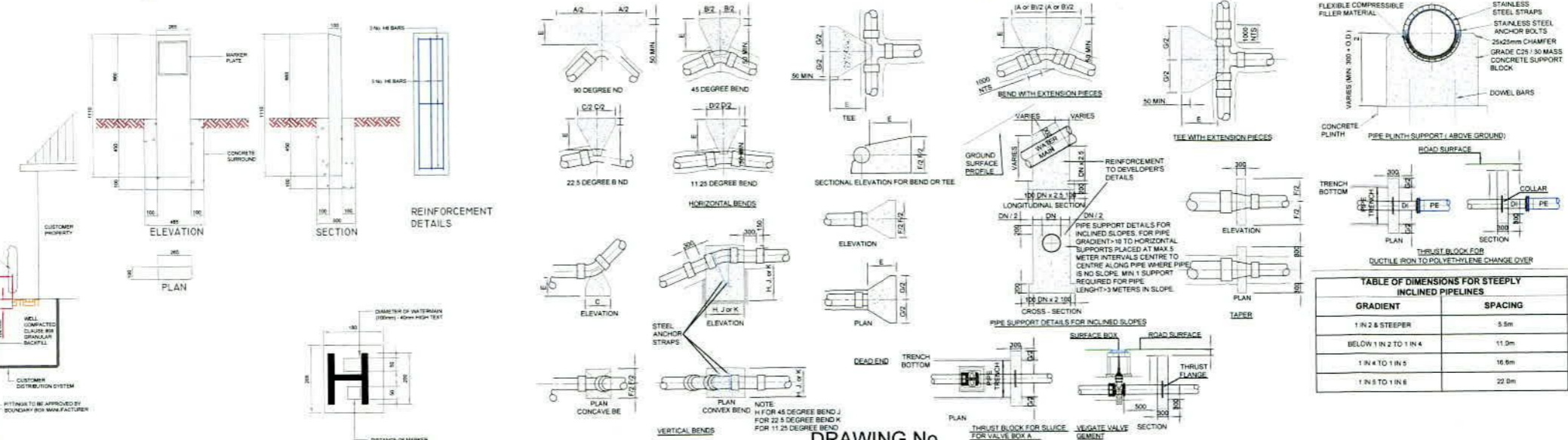
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SIXTH FLOOR PROSPECT HOUSE 100 NEW OXFORD STREET LONDON WC1A 1HB Tel: 0207 0433410

NOTE:
THIS DRAWING TO BE READ IN CONJUNCTION WITH IRISH WATER INFRASTRUCTURE STANDARD DETAILS, DOCUMENT NUMBER: IW-CDS-5020-01, AUGUST 2016. THIS INCLUDES FOR ALL RELEVANT NOTES PERTAINING TO EACH OF THE DETAILS AS INCLUDED.



REV	DATE	DESCRIPTION	CHK	DRN

STATUS CODE DESCRIPTION
PLANNING

CLIENT
BCEI

PROJECT
EDCUB06

DRAWING
STANDARD WATER INFRASTRUCTURE DETAILS

PROJECT NUMBER: 220401
DATE: 27.05.2022

SCALE@ A1: AS SHOWN
DRAWN/CHECKED: RCV/JKM

STATUS CODE: DRAWING NUMBER: EDCUB-PIN-06-ZR-DR-C-206
REVISION: C01



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 STREET LONDON WC1A 1HB Tel: 0207 0433410

KEY

DESCRIPTION	AREA (m ²)	CO-EFFICIENT
PERMEABLE PAVING	555	0.6
ROOF	15,578	1.0
CONCRETE ROADS, GENERATOR YARDS, EXTERNALS AND SLABS	8,122	0.8
ASPHALT ROAD	6,000	0.8
WALKWAYS (CONCRETE)	388	0.8
ATTENUATION PONDS AND SWALES	3,906	0.0
LANDSCAPING	16,851	0.0
TOTAL AREA	51,400	

— RED BOUNDARY LINE

REV	DATE	DESCRIPTION	CHK	DRN
C01	04/07/2022	ISSUED FOR PLANNING	SOR	FJVR
A	30/10/2020	ISSUED FOR 50%	SOR	FJVR



STATUS CODE DESCRIPTION
PLANNING

CLIENT
BCEI

PROJECT
EDCDUB06

DRAWING
EXTERNAL WORKS DRAWING

PROJECT NUMBER DATE
 220431 27.05.2022

SCALE@ A1: 1:500 DRAWN/CHECKED
 RK/JRM

STATUS CODE	DRAWING NUMBER	REVISION
A4	EDCDUB-PIN-06-ZZ-DR-C-210	C01

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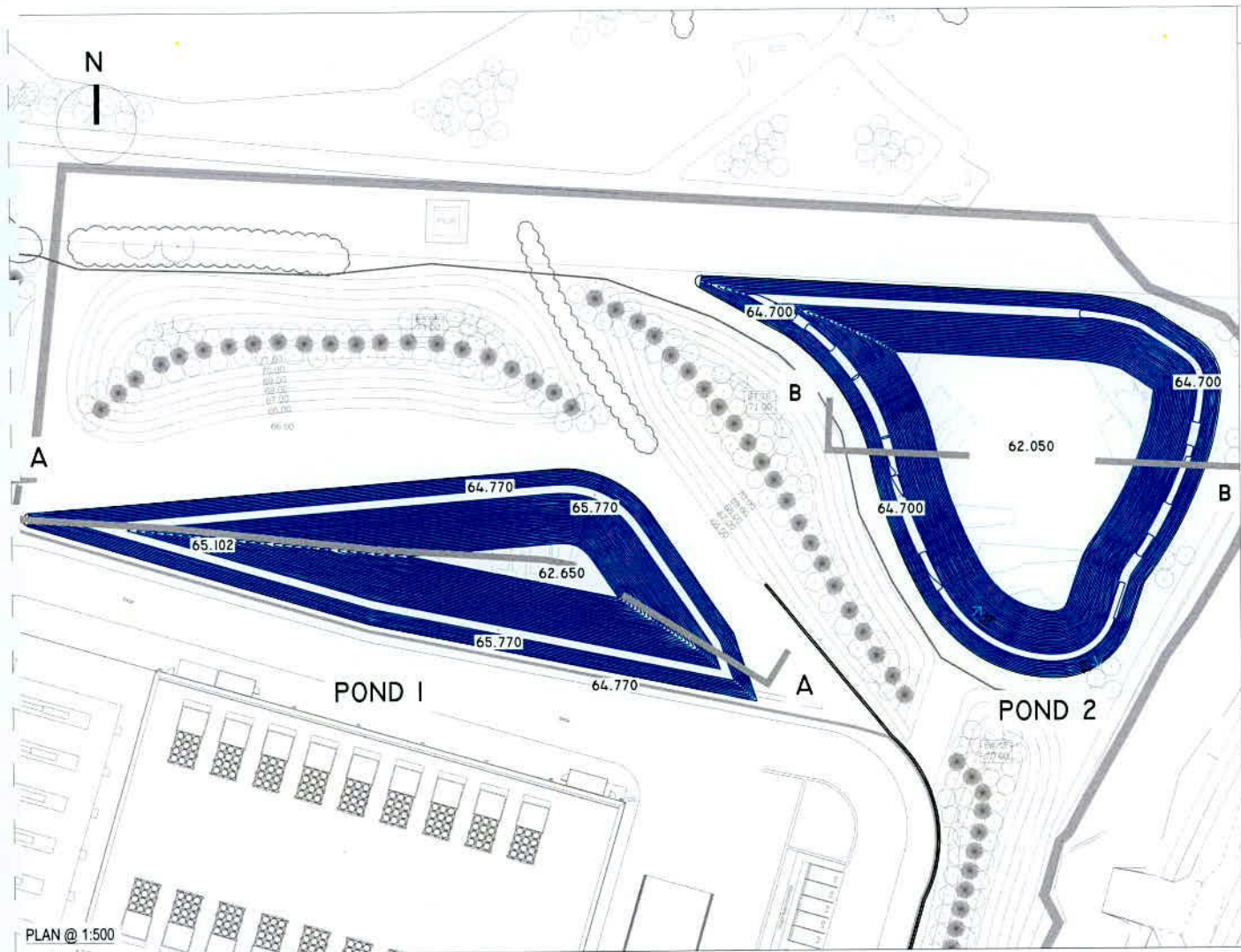
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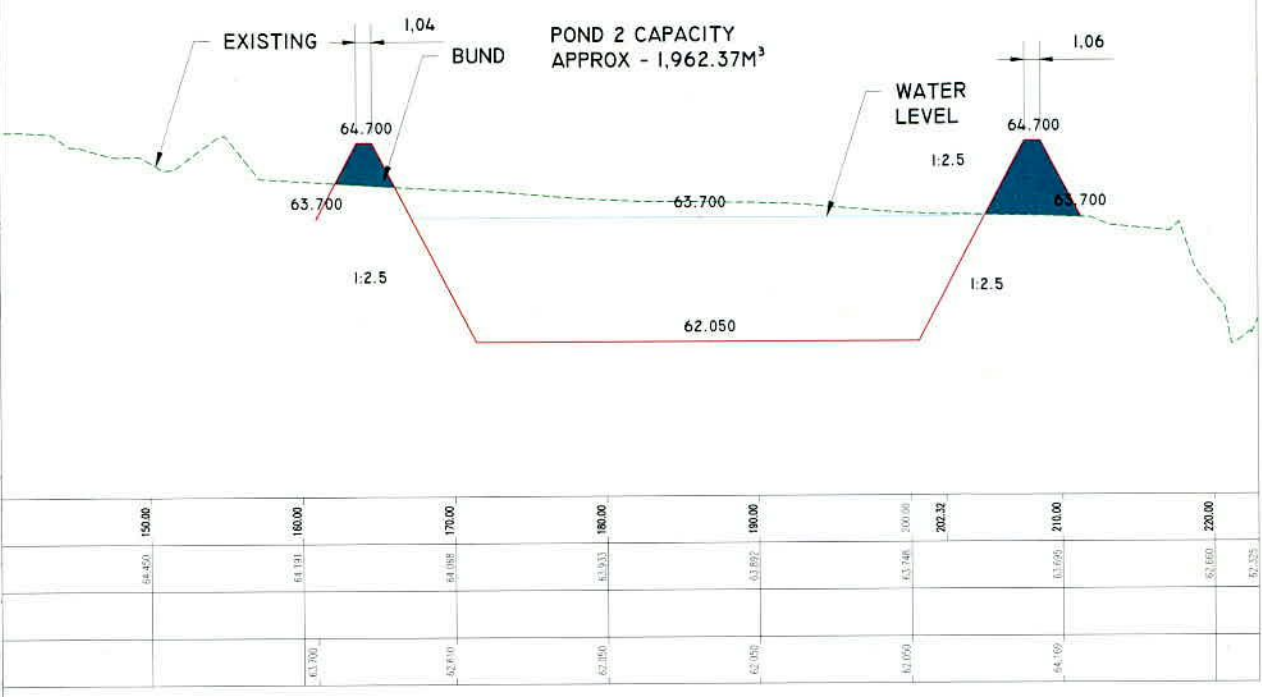
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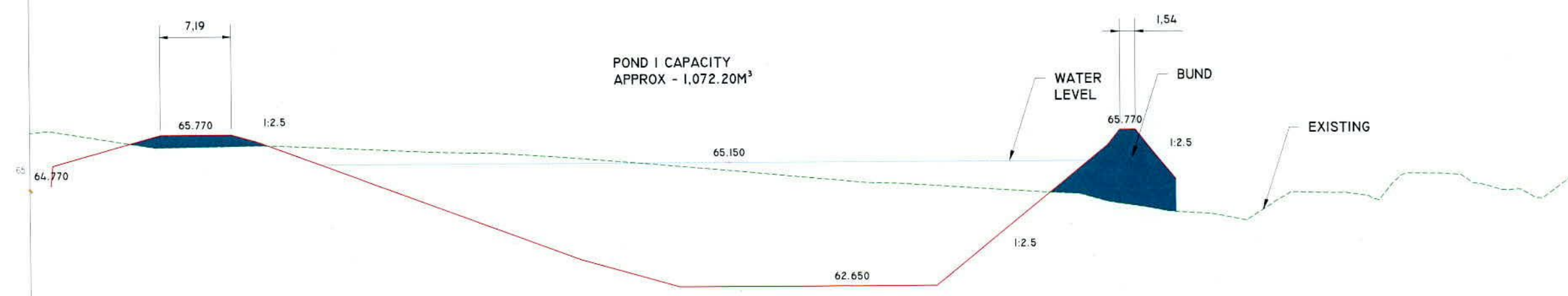


PLAN @ 1:500



SECTION LINE B-B

64.50	150.00	61.13	180.00	61.08	170.00	61.93	180.00	61.89	190.00	63.74	200.00	202.32	63.69	210.00	63.60	220.00	62.32
64.70	150.00	63.70	180.00	62.60	170.00	62.60	180.00	62.60	190.00	62.60	200.00	64.00	210.00	64.00	220.00	62.32	

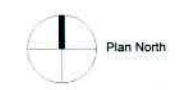


SECTION LINE A-A

Chainage Distance (m)	0.00	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	90.00	100.00	110.00	120.00	130.00	140.00	150.00
Existing Ground Levels	65.95	65.54	65.39	65.11	64.39	63.74	63.84	64.83	64.85	67.65	64.15	64.17	64.07	64.47	64.63	64.01
Pond 1 Levels	65.95	65.54	65.39	65.09	64.39	63.74	63.84	64.83	64.85	67.65	64.15	64.17	64.07	64.47	64.63	64.01
Pond 2 Levels	65.95	65.54	65.39	65.09	64.39	63.74	63.84	64.83	64.85	67.65	64.15	64.17	64.07	64.47	64.63	64.01

LONGSECTION - POND
H-SCALE 1:1000
V-SCALE 1:200

REV	DATE	DESCRIPTION	CHK	DRN



STATUS CODE DESCRIPTION
PLANNING

CLIENT
BCEI

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EDCDUB06

DRAWING
PROPOSED PONDS

PROJECT NUMBER
220401
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27.05.2022

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EDCDUB-PIN-06-ZZ-DR-C-265 C01

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