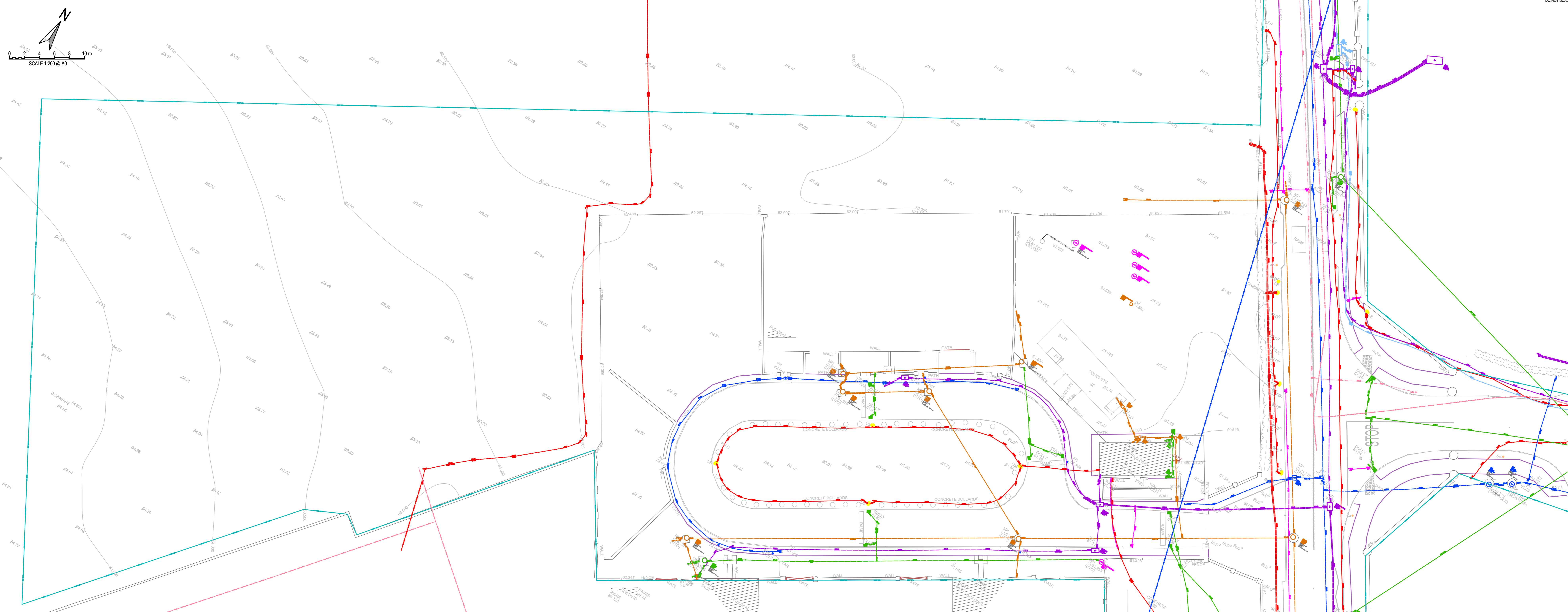


**SURVEY NOTES**

- TOPOGRAPHICAL & GPR SURVEY CARRIED OUT BY 3RD PARTY SPECIALIST CONTRACTOR. DOB & ASSOCIATES TAKES NO RESPONSIBILITY FOR ACCURACY OF SURVEY INFORMATION.
- MAIN CONTRACTOR TO ESTABLISH INDEPENDENTLY ORDNANCE DATUM ON SITE FOR LEVELS TO MALIN HEAD DATUM AND CO-ORDINATES FOR SETTING OUT TO NATIONAL GRID.
- MAIN CONTRACTOR TO VERIFY ALL UNDERGROUND SERVICES ON THE SITE INCLUDING ALL ANOMALIES NOTED ON THE GPR SURVEY AND TO TAKE ALL NECESSARY PRECAUTIONS PRIOR TO ANY EXCAVATIONS ON THE SITE.
- REFER TO MAE ENGINEERS DRAWINGS FOR DIVERSION / DEMOLITION OF ALL UNDERGROUND ELECTRICAL CABLES / DUCTS, TELECOM DUCTS, LIGHTING DUCTS, OIL LINES ETC.



**Legend**

— (red) —	UNDERGROUND ELECTRICITY LINE	— (orange) —	FUUL DRAINAGE
○ (red) □ (red)	ELECTRICAL M/HOLE	○ (green) □ (green)	FUUL MANHOLE
— (red) —	OVERHEAD LINE WITH POLE	— (green) —	STORM DRAINAGE
— (red) —	OVERHEAD ELECTRIC	○ (green) □ (green)	STORM DRAINAGE MANHOLE
— (red) —	UNDERGROUND HV ELECTRICITY LINE	— (green) —	COMBINED DRAINAGE
— (red) —	PUBLIC LIGHTING ELECTRICITY LINE	○ (green) □ (green)	COMBINED DRAINAGE MANHOLE
— (red) —	6M HIGH STREET LIGHT	— (orange) —	PRODUCT DRAINAGE
— (red) —	MINI PILLAR	○ (orange) □ (orange)	PRODUCT DRAINAGE MANHOLE
— (red) —	U/G ELECTRIC TRAFFIC CONTROL	— (purple) —	CHEMICAL LINE
○ (red) □ (red)	TRAFFIC CONTROL M/HOLE	○ (purple) □ (purple)	CHEMICAL MANHOLE
— (purple) —	EIR	— (blue) —	ROAD GULLY
○ (purple) □ (purple)	EIR CHAMBER	— (blue) —	GULLY TRAP
— (purple) —	OVERHEAD LINE WITH POLE	— (blue) —	WATER MAIN
— (purple) —	ENET	— (blue) —	SLUCE VALVE
○ (purple) □ (purple)	ENET CHAMBER	— (blue) —	FIRE HYDRANT
— (yellow) —	COMMS	— (blue) —	WATER METER
○ (yellow) □ (yellow)	COMMS CHAMBER	— (blue) —	SCOUR VALVE
— (blue) —	VIRGIN	— (blue) —	PRESSURE RELEASE VALVE
○ (blue) □ (blue)	VIRGIN CHAMBER	— (blue) —	AIR VALVE
— (black) —	FIBRE	— (blue) —	NON-RETURN VALVE
○ (black) □ (black)	FIBRE CHAMBER	— (blue) —	FUEL LINE/TANK
— (purple) —	AURORA TELECOM	— (red) —	GAS SV
○ (purple) □ (purple)	AURORA TELECOM CHAMBER	— (red) —	GAS LINE
— (red) —	CATV	— (red) —	GAS HIGH PRESSURE LINE
○ (red) □ (red)	CATV CHAMBER	GL 00.00	GROUND LEVEL (METRES - OS DATUM)
— (green) —	BT/ESAT	CL 10.00	COVER LEVEL (METRES - OS DATUM)
○ (green) □ (green)	BT/ESAT CHAMBER	IL 10.00	INVERT LEVEL (METRES - OS DATUM)
— (red) —	SIRO FIBRE	DPL50	DEPTH TO TOP OF SERVICE DUCT OR CABLE
○ (red) □ (red)	SIRO CHAMBER	DP ON MANHOLES = INVERT LEVEL OF CHAMBER	
— (purple) —	UNIDENTIFIED SERVICE	DP ON DRAINAGE = INVERT LEVEL OF PIPE	
○ (purple) □ (purple)	UNIDENTIFIED CHAMBER	UTO	UNABLE TO OPEN
— (green) —	EARTH LINE AND RODS	OSA	OUTSIDE SURVEY AREA
— (blue) —	TRAFFIC SENSORS	UTT	UNABLE TO TRACE
— (green) —	CCTV POLE	(E)	EMPTY DUCT
— (black) —	UTILITIES CABINET	(CD)	CLOSED DUCT

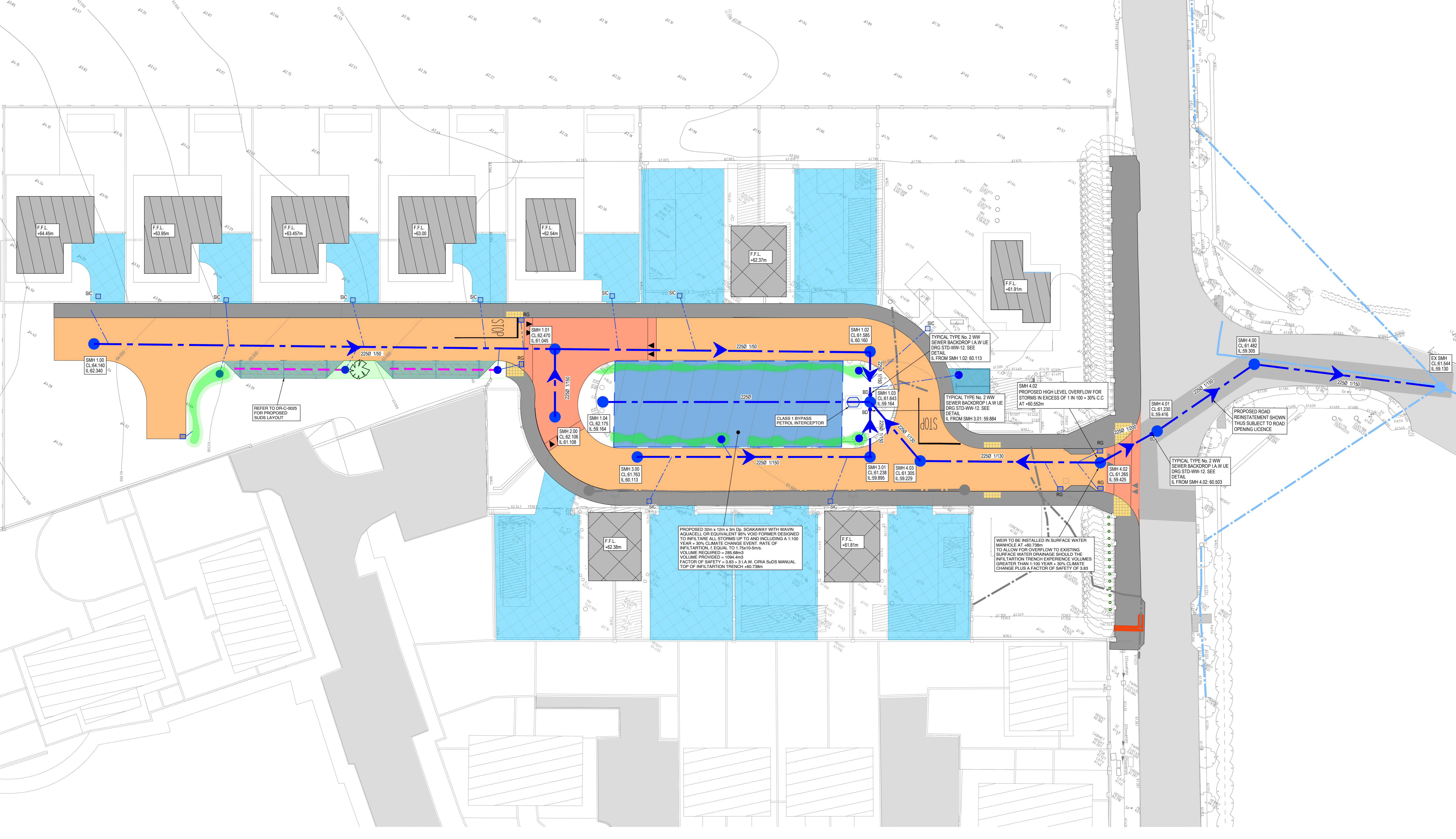
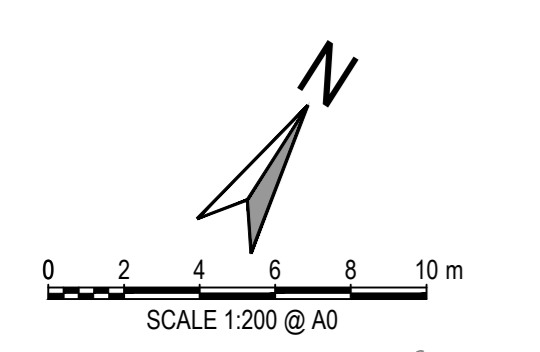
**ISSUED FOR PLANNING**

S2.P02	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check
<b>DONNACHADH O'BRIEN</b> & ASSOCIATES CONSULTING ENGINEERS		UNIT 5C ELM HOUSE MILLENSTUTE PARK NAAS CO. KILDARE	PHONE: +353 45 964 042 INFO@DOBRIENENGINEERS.IE WWW.DOBRIENENGINEERS.IE	
Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES				
Project: ANDREW HALTING SITE, ATHY, CO. KILDARE				
Drawing Title: EX. SITE SERVICES				
Drawn By:	Checked By:	Approved By:	Date:	Scale:
BB	PD	DOB	OCT 2023	1:200
Project Number:	Drawn By:	Checked By:	Date:	Status Code:
DOBA2327	BB	PD	OCT 2023	S2
				P02



**NOTES:**

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-C-0001 & 0002
- REFER TO ARCHITECT'S DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S & ENGINEER'S DRAWINGS AND SPECIFICATIONS
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE RENAISSANCE FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



**SURFACE WATER LEGEND:**

- EX. SURFACE WATER SEWER
- EX. SURFACE WATER MANHOLE
- EX. SURFACE WATER INSPECTION CHAMBER
- EX. SURFACE WATER ACCESS JUNCTION
- EX. WATER COURSE
- EX. COMBINED SEWER
- EX. COMBINED MANHOLE
- PR. SURFACE WATER SEWER
- PR. SURFACE WATER MANHOLE
- PR. SURFACE WATER INSPECTION CHAMBER
- PR. SURFACE WATER ACCESS JUNCTION
- PR. RAINWATER HARVESTING SEWER
- PR. RAINWATER HARVESTING MANHOLE
- PR. RAINWATER HARVESTING INSPECTION CHAMBER
- PR. RAINWATER HARVESTING ACCESS JUNCTION
- PR. ROAD GULLY
- ▨ PR. ATTENTION TANK
- ▨ PR. PERMEABLE PAVING (CAR PARKING)
- ▨ PR. PERMEABLE PAVING
- PR. FILTER DRAIN
- ▨ PR. DRAINAGE CHANNEL
- ▨ PR. BIORETENTION AREA
- ▨ PR. PETROL INTERCEPTOR
- ▨ PR. RAINWATER HARVESTING TANK
- PR. KERB DRAIN
- PR. DROPPED KERB
- ▨ PR. TREE PIT AND SW INSPECTION CHAMBER

- NOTE 1:** MANHOLE COVER LEVELS ARE APPROXIMATE. ACTUAL COVER LEVELS SHOULD MATCH SURROUNDING FINISHED GROUND LEVELS U.N.D.
- NOTE 2:** PIPES WITH LESS COVER THAN
- 600mm FOR GRASSES AREAS
  - 900mm FOR FOOTPATHS
  - 1200mm FOR ROADS
- TO BE SURROUNDED IN 150mm CONCRETE PROTECTION IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-WW-07
- NOTE 3:** ALL MANHOLE COVERS LOCATED IN GRASS AREAS TO BE SURROUNDED (Min. 200mm SURROUND) IN 100mm THK C20/25 CONCRETE APRON

**SURFACE WATER MATERIAL TO BE IN ACCORDANCE WITH GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS**

- UNPLASTICISED P.V.C. PIPES MUST COMPLY WITH THE PROVISIONAL SPECIFICATION FOR SOIL PIPES, DRAINS, SEWERS & FITTINGS MADE OF UNPLASTICISED P.V.C. ISSUED BY THE DEPARTMENT OF THE ENVIRONMENT.
- B.S. 8006: PART 1 - SEWERAGE OR EQUIVALENT.
- B.S. 8006: PART 2 - PIPES ON LAND OR EQUIVALENT: DESIGN, CONSTRUCTION & INSTALLATION.
- B.S. 5955: PART 6 CODE OF PRACTICE FOR THE INSTALLATION OF UNPLASTICISED P.V.C. PIPEWORK FOR GRAVITY DRAINS & SEWERS OR EQUIVALENT
- EN1401 - UNPLASTICISED P.V.C. SEWER PIPE SPECIFICATION
- S-4514 - UNPLASTICISED P.V.C. SOIL PIPE SPECIFICATION
- D&EH.G 'SITE DEVELOPMENT WORKS' & SECTION H OF THE BUILDING REGULATIONS

**ISSUED FOR PLANNING**

S2.P05	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P04	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	15.12.2023	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check

**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**

UNIT 5C  
ELM HOUSE  
MILLENSTOWN PARK  
NAAS  
CO. KILDARE

PHONE: +353 45 964 042  
INFO@DOBRIENENGINEERS.IE  
WWW.DOBRIENENGINEERS.IE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES

Project: ANDREW HALTING SITE, ATHY, CO. KILDARE

Drawing Title: PROPOSED SURFACE WATER DRAINAGE LAYOUT

Drawn By: BB  
Checked By: DD  
Approved By: DD  
Date: OCT 2023  
Scale: 1:200  
Sheet Size: A0  
Project Number: DOBA2327  
Drawing Number: 2327-DOB-ARD-SI-DR-C-0020  
Status Code: S2  
Rev Number: P05

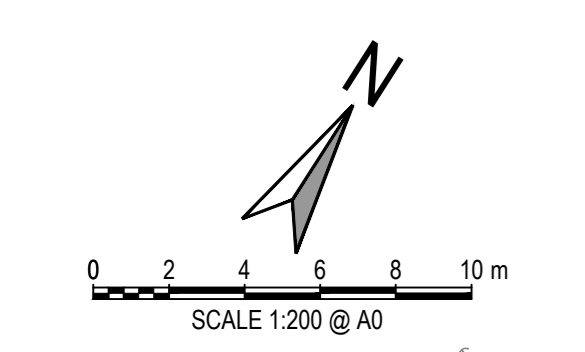
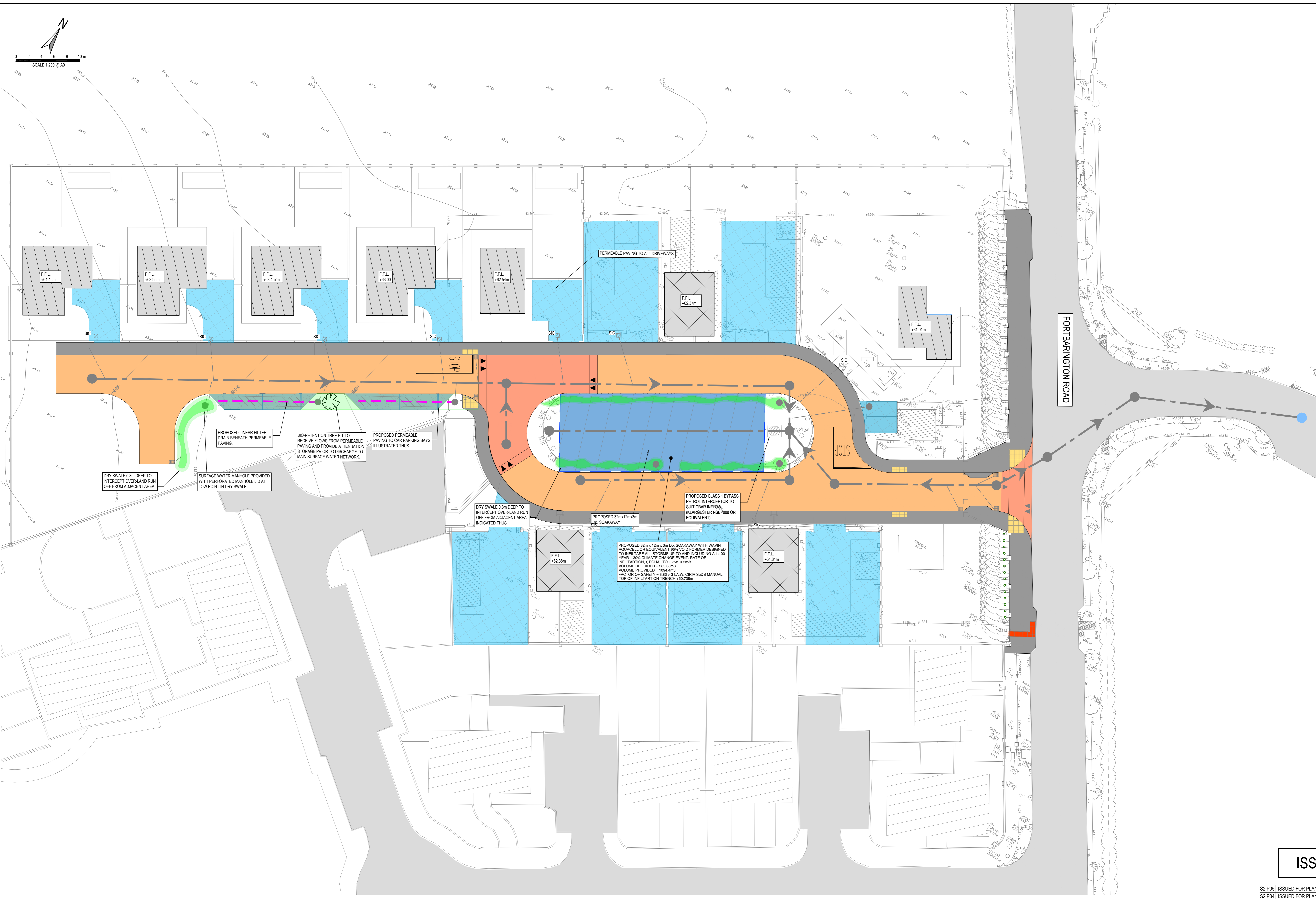


**NOTES:**

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-C-0001 & 0002
- REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEER'S DRAWINGS AND SPECIFICATIONS
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SERVICES TO BE RENAISSANCE FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES

**SuDS LEGEND:**

- NATURE BASED SuDS**
  - PR. BIORETENTION AREA (BIOSWALES)
  - PR. BLUE-GREEN ROOF
  - PR. BIORETENTION TREE PIT
- FILTRATION SYSTEM SuDS**
  - LINEAR FILTER DRAINS
  - LINED PERMEABLE PAVING
  - LINED PERMEABLE PAVING (CAR PARKING)
  - LINED POROUS ASPHALT
  - LINED GRASSCRETE
- DETENTION SYSTEM SuDS**
  - LINED UNDERGROUND ATTENUATION TANK
- OVER-SIZED PIPES**
- PROPRIETARY TREATMENT SYSTEM**
  - PR. PETROL INTERCEPTOR
  - PR. RAINWATER HARVESTING TANK



**ISSUED FOR PLANNING**

Rev.	Note	Date	Drawn	Check
S2.P05	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P04	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	15.12.2023	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD

**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**

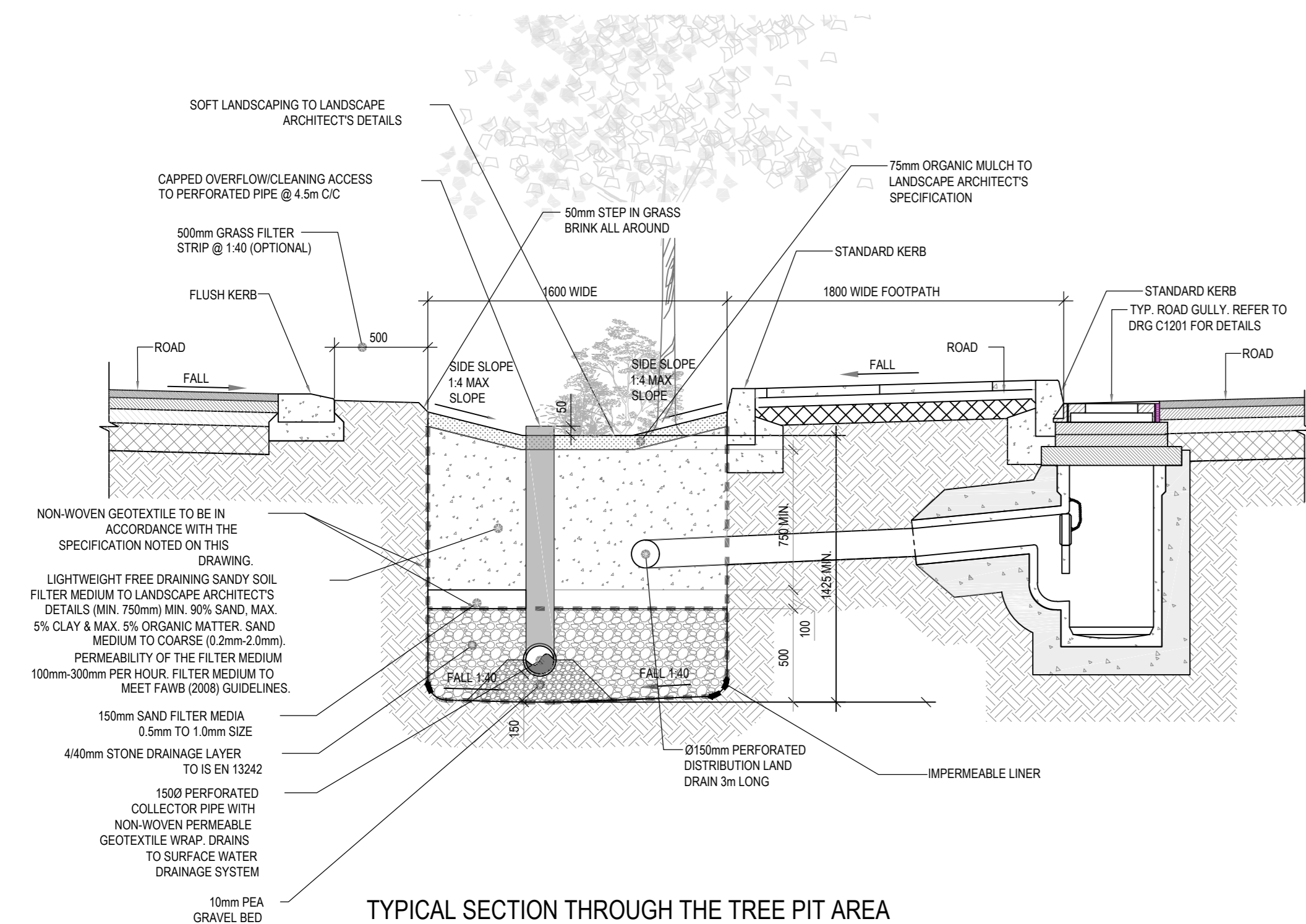
UNIT 5C  
ELM HOUSE  
MILLENSTOWN PARK  
NAAS  
CO. KILDARE

PHONE: +353 45 964 042  
INFO@DOBRIENENGINEERS.IE  
WWW.DOBRIENENGINEERS.IE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES  
Project: ANDREW HALTING SITE, ATHY, CO. KILDARE  
Drawing Title: PROPOSED SuDS LAYOUT

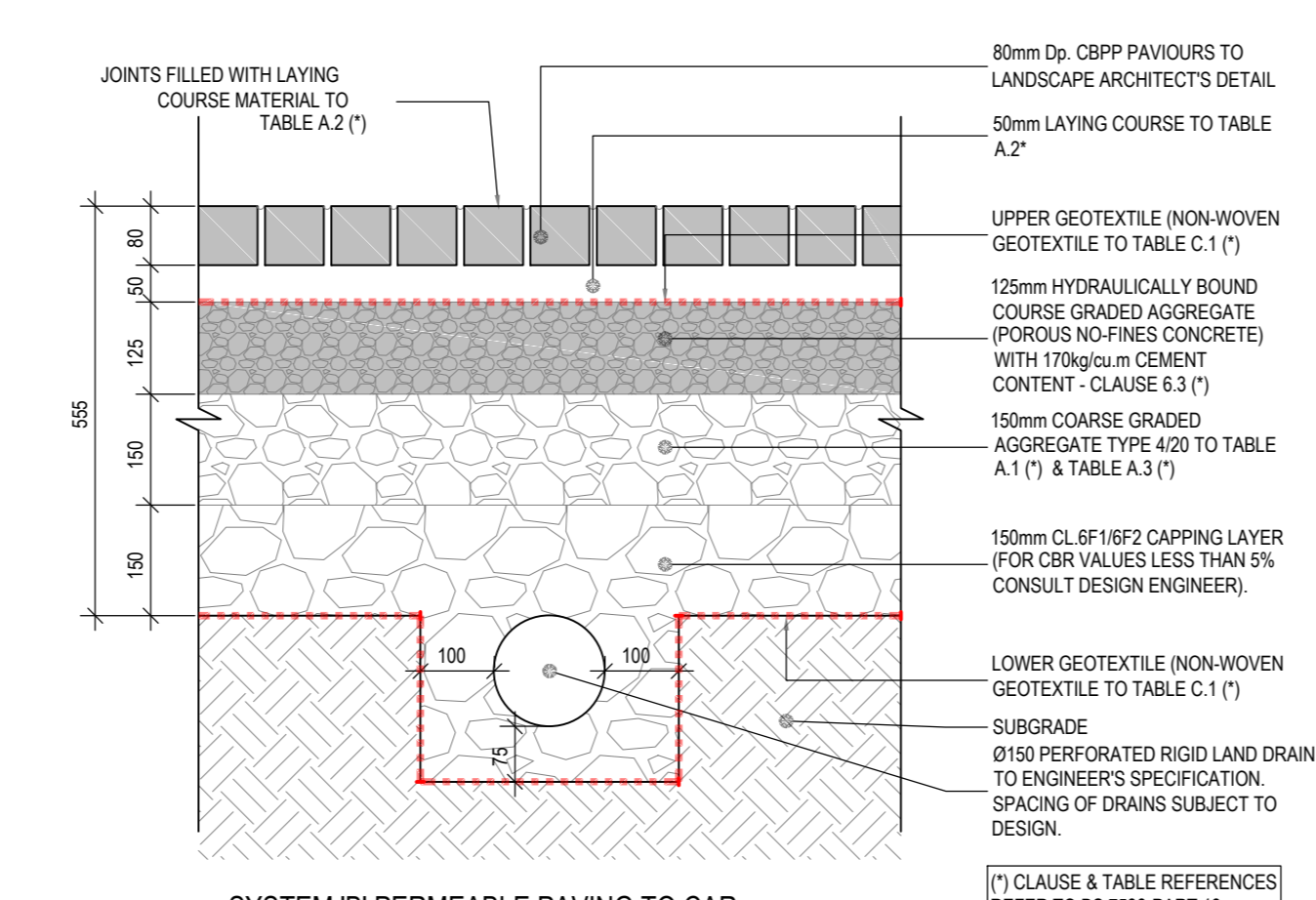
Drawn By: BB  
Checked By: PD  
Approved By: DOB  
Date: OCT 2023  
Scale: 1:200  
Sheet Size: A0  
Project Number: DOBA2327  
Drawing Number: 2327-DOB-ARD-SI-DR-C-0025  
Status Code: S2  
Rev Number: P05





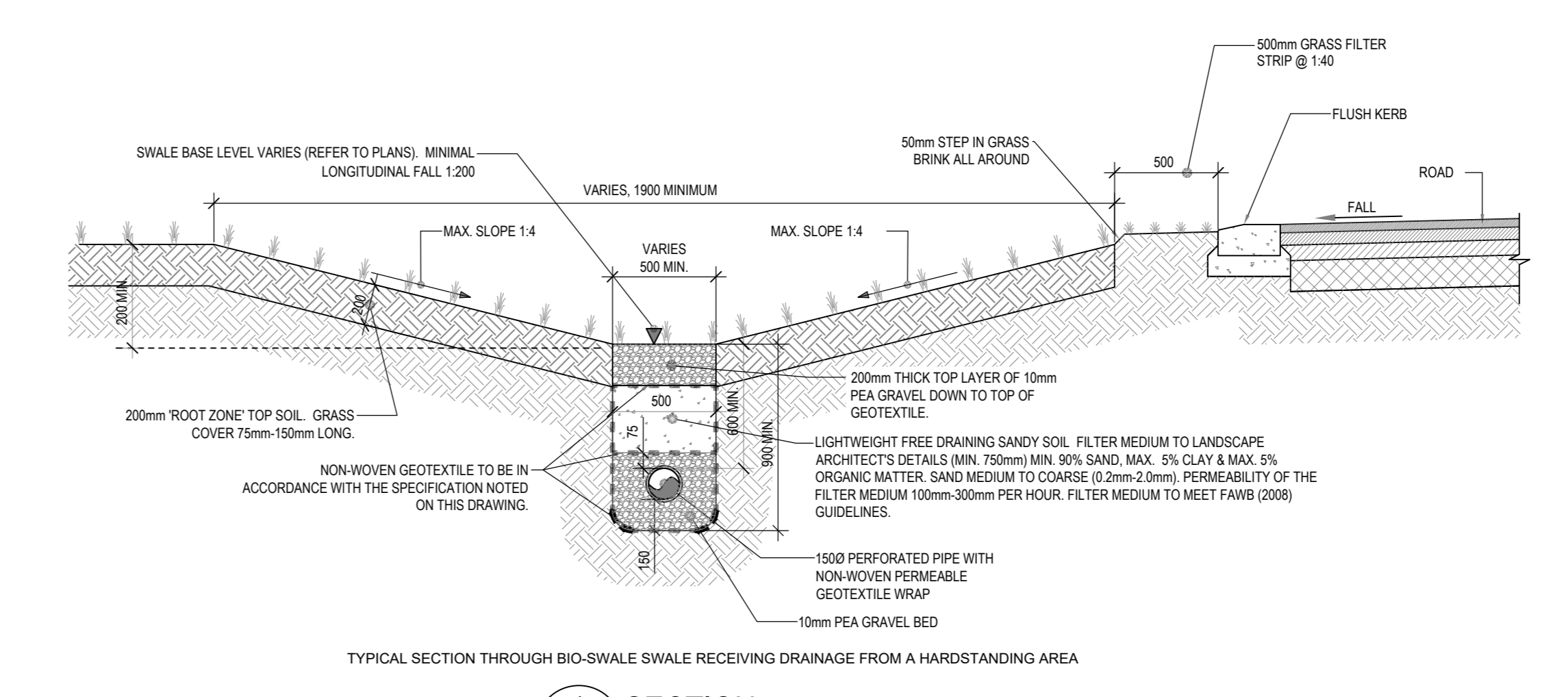
TYPICAL SECTION THROUGH THE TREE PIT AREA TAKING DRAINAGE FROM A HARDSTANDING AREA

TYP. SECTION  
C-255 Scale 1:25



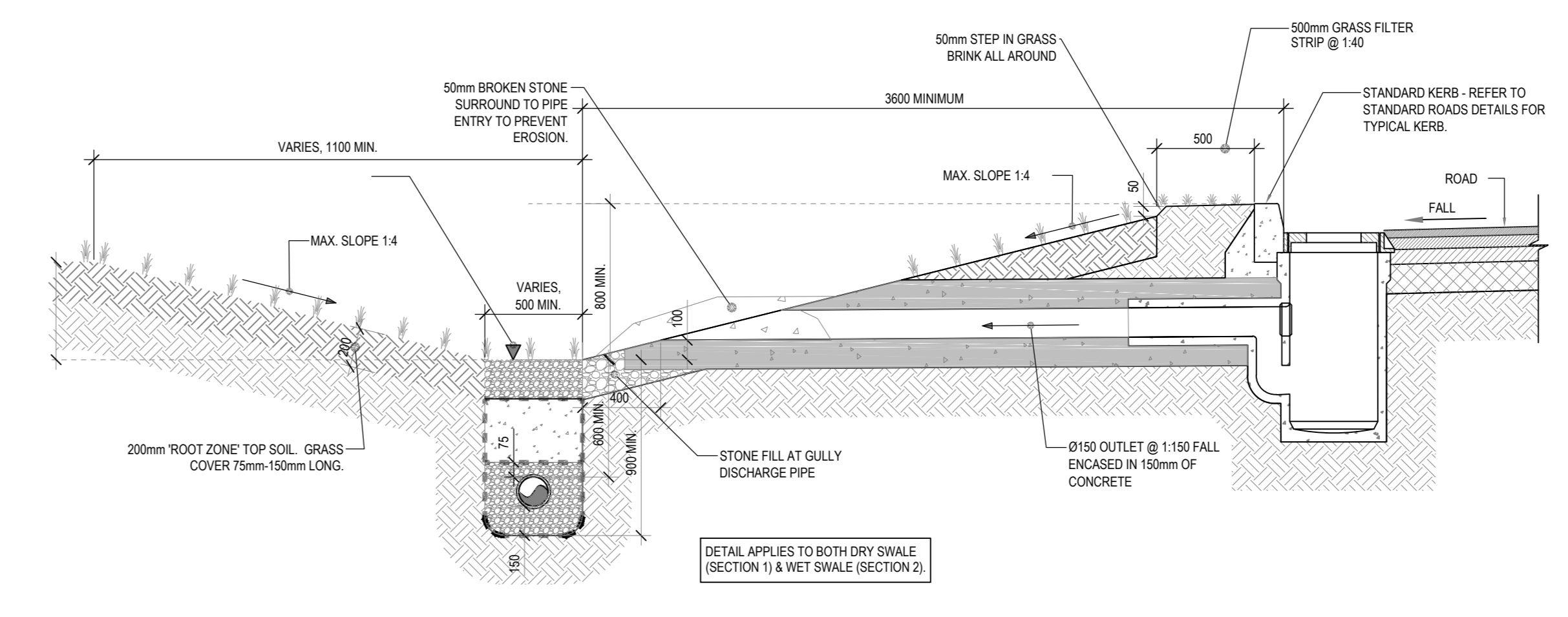
SYSTEM 'B' PERMEABLE PAVING TO CAR PARKING BAYS (PARTIAL INFILTRATION)

NOTE: FOR PAVED AREAS SUBJECT TO OCCASIONAL HGV LOADING THE EDGE OF ROAD PAVING BAYS INCREASE THE HYDRAULICALLY BOUND AGGREGATE LAYER THICKNESS TO 200mm



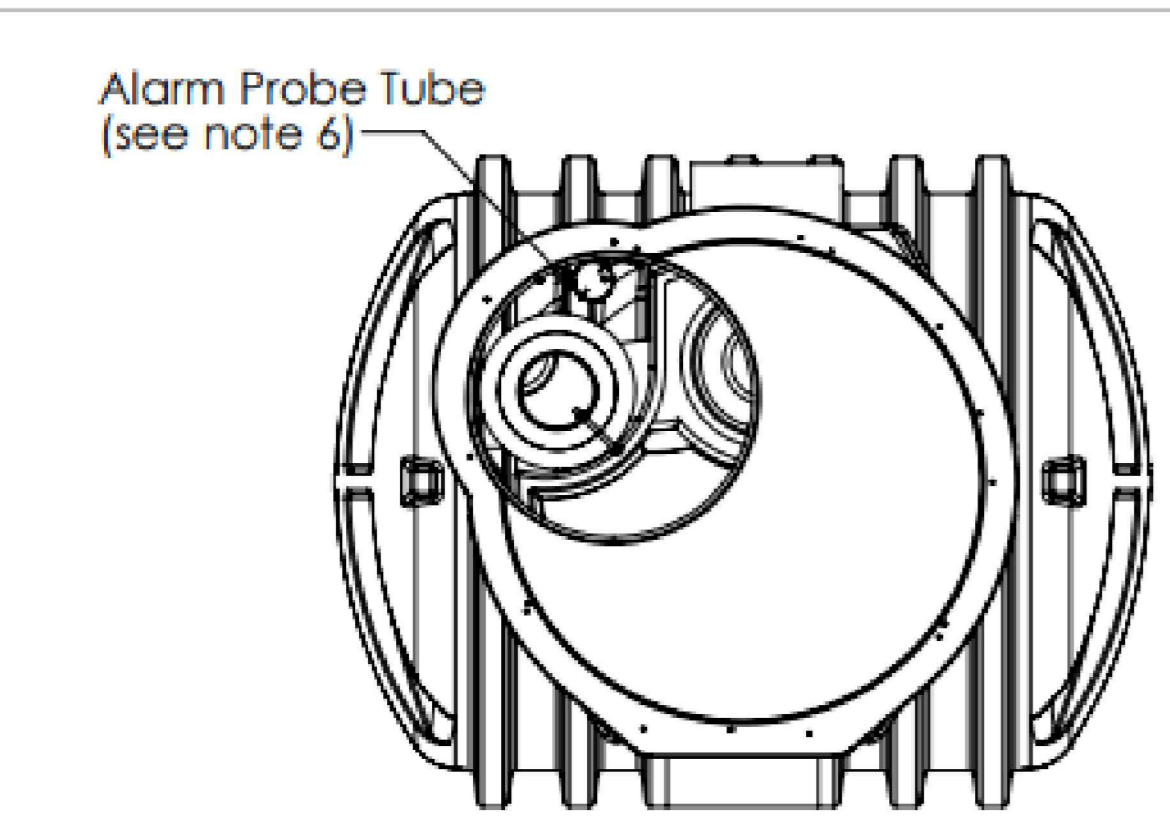
TYPICAL SECTION THROUGH BIO-SWALE RECEIVING DRAINAGE FROM A HARDSTANDING AREA

1 SECTION  
SCALE 1:25



TYPICAL SECTION THROUGH BIO-SWALE TAKING DRAINAGE FROM A ROAD GULLY

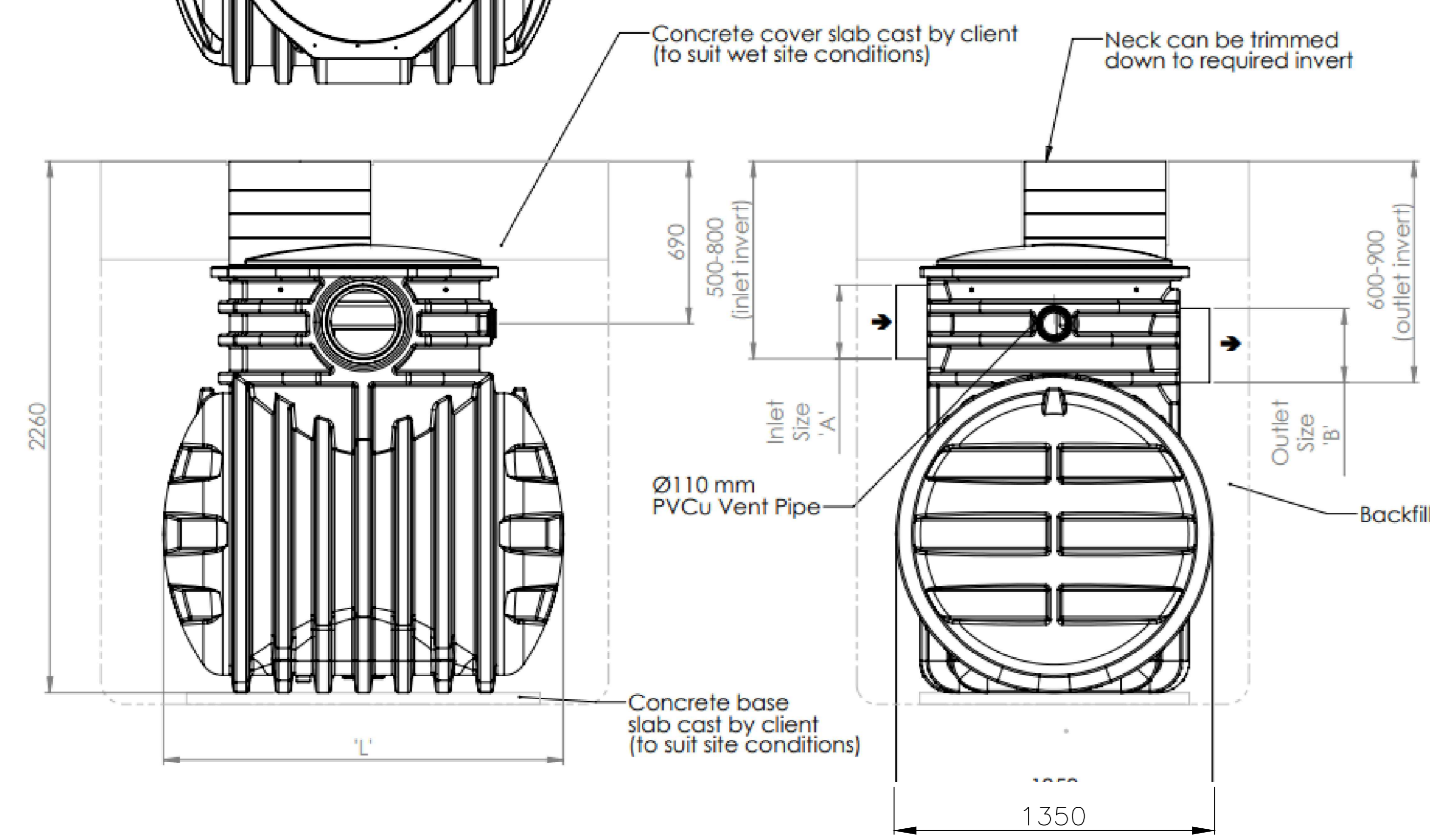
3 SECTION  
SCALE 1:25



Unit Ref No	Nominal Flow	Dim L (mm)	Approx Empty Weight (kgs)	Fall across unit	Inlet Size 'A'	Outlet Size 'B'
NSBP003	3 L/s	1700	180	100	Ø160 mm	Ø160 mm
NSBP004	4 L/s	1700	180	100	Ø160 mm	Ø160 mm
NSBP006	6 L/s	1700	180	100	Ø315 mm	Ø315 mm

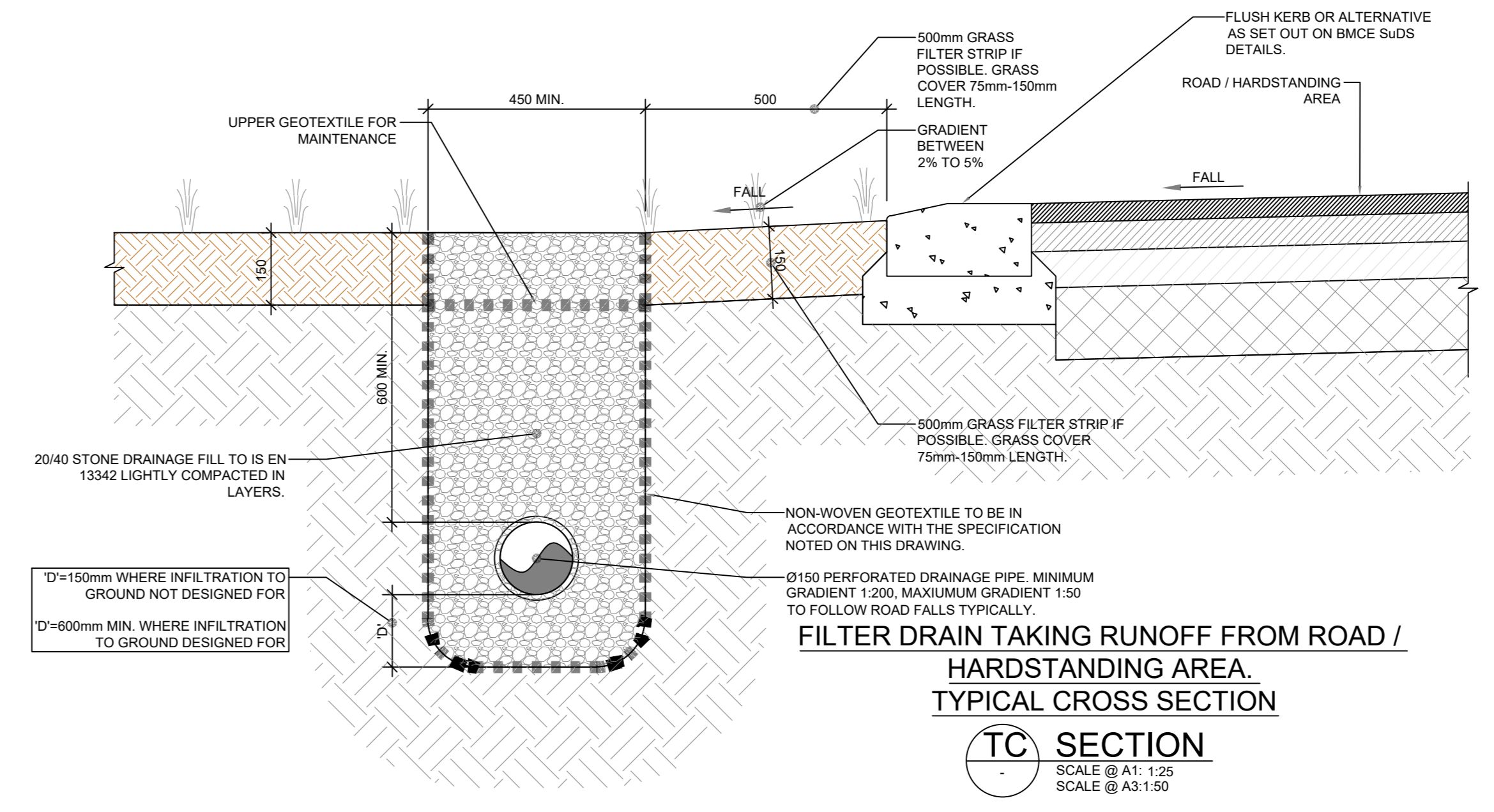
\*\* Inlet/Outlet size A must equal B\*\*

- Notes:-**
- Inlet/Outlet pipes are plain pipe Ø315 mm PVCu. The standard EN 858 states minimum connection sizes, units ordered with different sized connections are not fully compliant with the standard.
  - Extension necks for deeper inverts can be provided. These can be cut in 200 mm sections. Max 2.0m Invert recommended. Please ask our sales department for further details.
  - All units require appropriate cover and frame to suit applied loadings.
  - This drawing should be used for dimensional information only. It is essential that this drawing is read in conjunction with the installation guidelines supplied with the unit. (Copies are available from our sales dept.).
  - This drawing is also available on our website [www.kingspanenv.com](http://www.kingspanenv.com).
  - A Ø76 mm tube (internal) is supplied to house an oil alarm probe.
  - Wet site conditions - Concrete Backfill  
Dry site conditions - Pea Shingle Backfill
- Please refer to installation manual for details of correct backfilling.



TYPICAL SIZE OF KLARGESTER CLASS 1 INTERCEPTOR - NSBP003, NSBP004 & NSBP006

(Subject to planning, unit dimensions & surround provided at detailed design stage).



FILTER DRAIN TAKING RUNOFF FROM ROAD / HARDSTANDING AREA. TYPICAL CROSS SECTION

TC SECTION  
SCALE @ A1: 1:25  
SCALE @ A3: 1:50

ISSUED FOR PLANNING

Rev.	Note	Date	BB	PD
S2.P01	ISSUED FOR PLANNING	25.03.2024	BB	PD

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES  
Project: ANDREW HALTING SITE, ATHY, CO. KILDARE  
Drawing Title: PROPOSED SuDS DETAILS Sheet 1

Drawn By: BB  
Checked By: PD  
Approved By: DOB  
Date: DEC 2023  
Scale: 1:25  
Sheet Size: A0  
Status Code: S2  
Rev Number: P01

Project Number: DOBA2327  
Drawing Number: 2327-DOB-ARD-SI-DR-C-0026

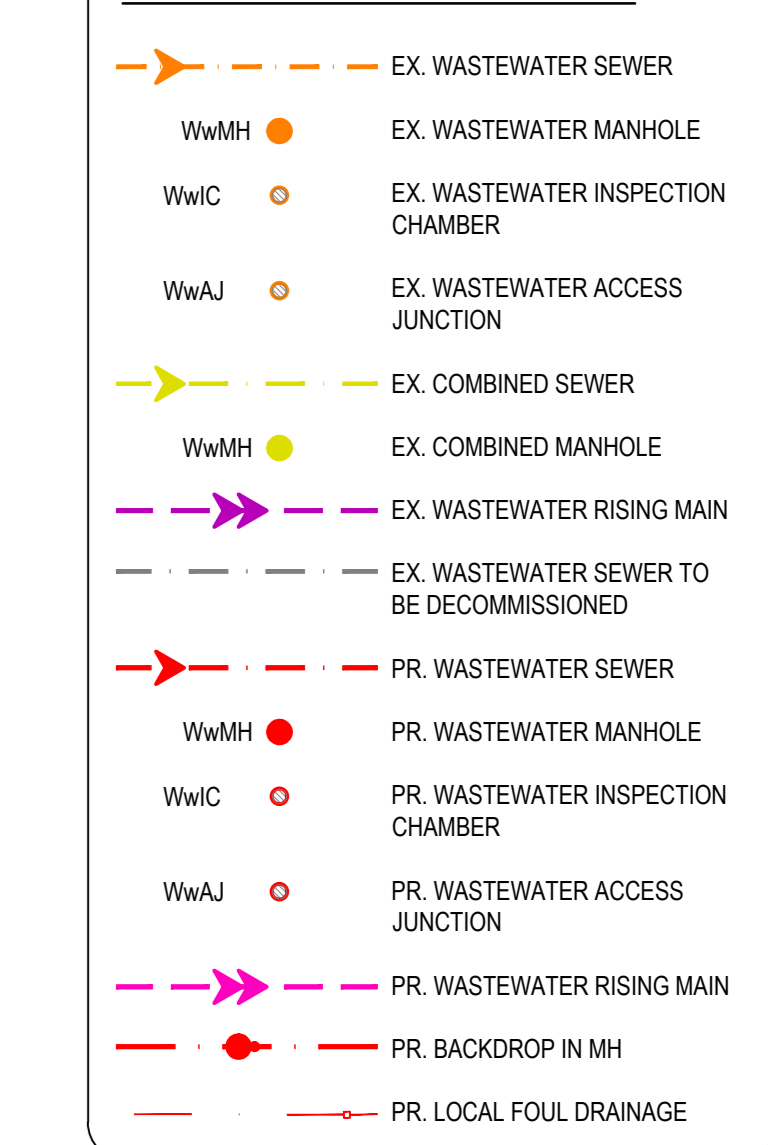
UNTT 5/C  
ELM HOUSE  
MILLENZIUM PARK  
NAAS  
CO. KILDARE  
PHONE: +353 45 964 042  
INFO@DOBRIENENGINEERS.IE  
WWW.DOBRIENENGINEERS.IE



**NOTES:**

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-C-0001 & 0002
- REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEERS DRAWINGS AND SPECIFICATIONS
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE RENOVATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES

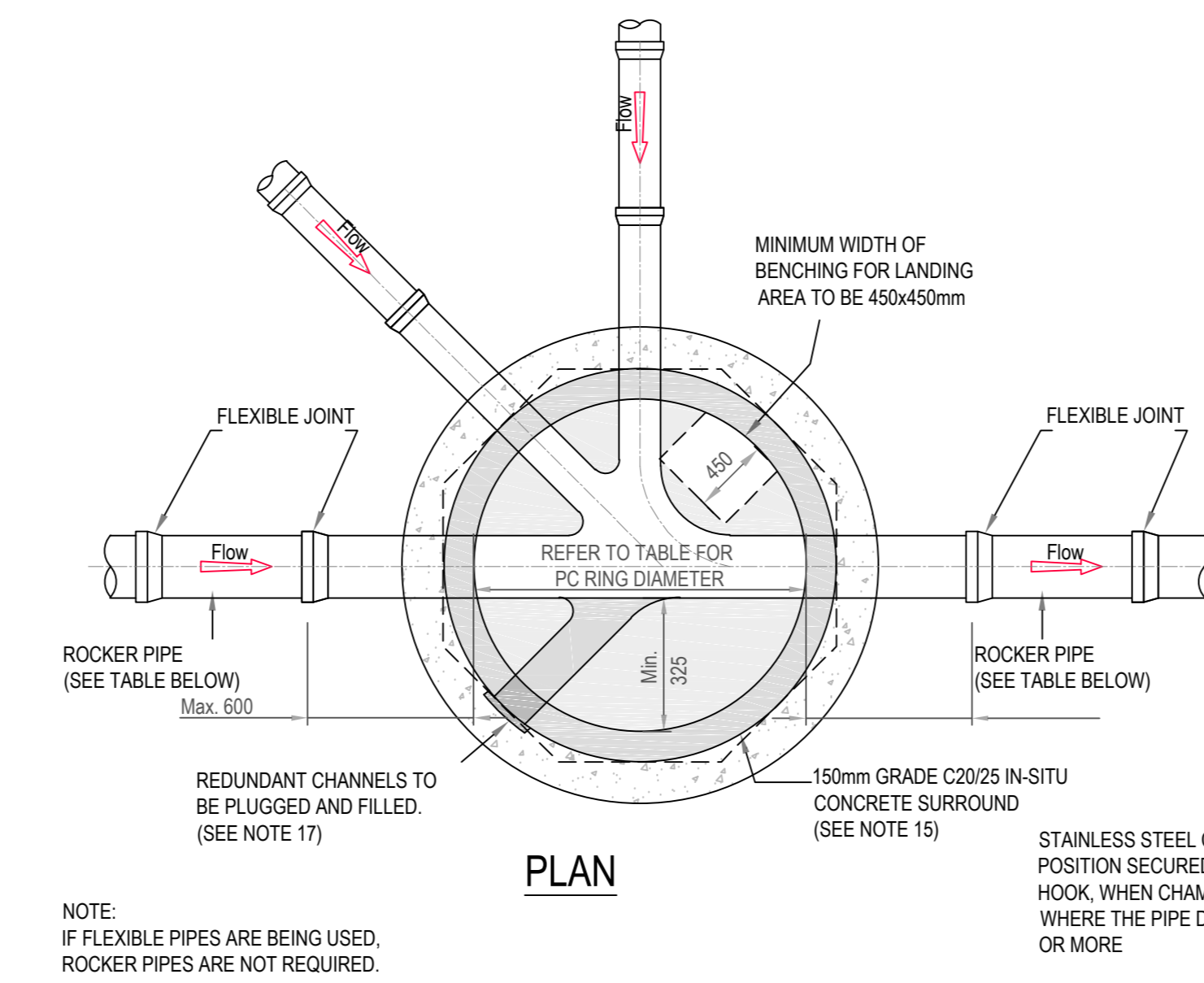
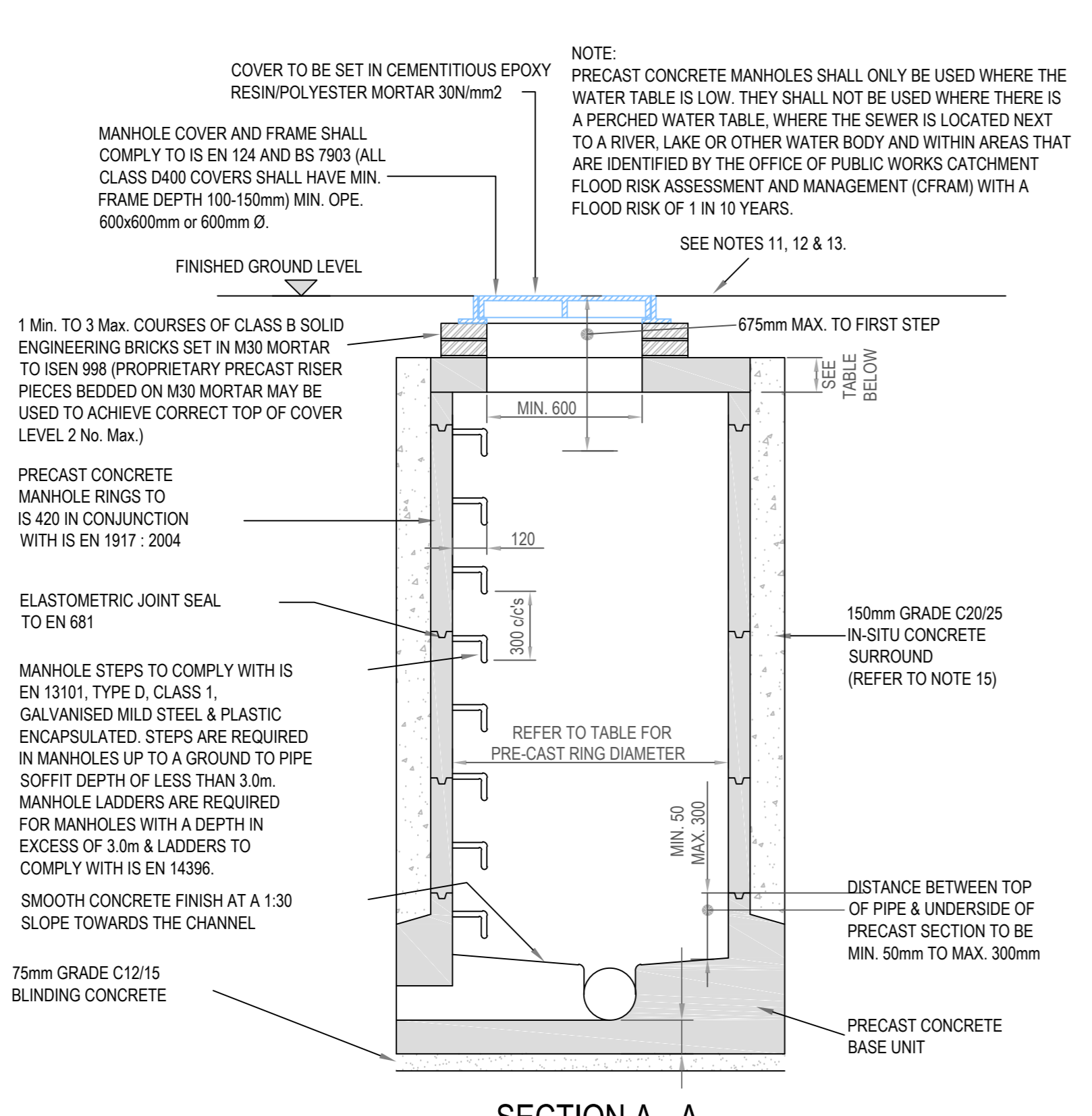
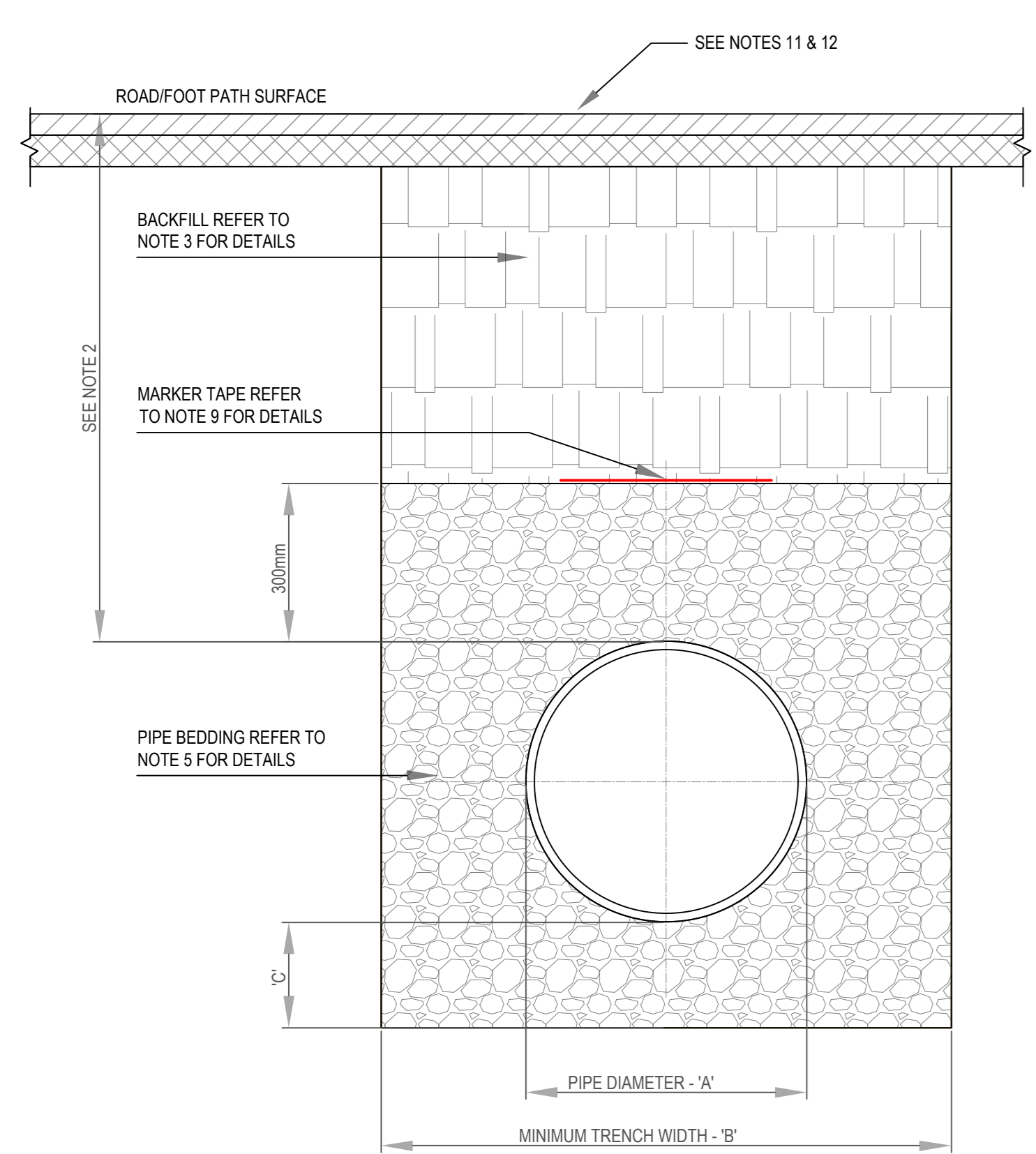
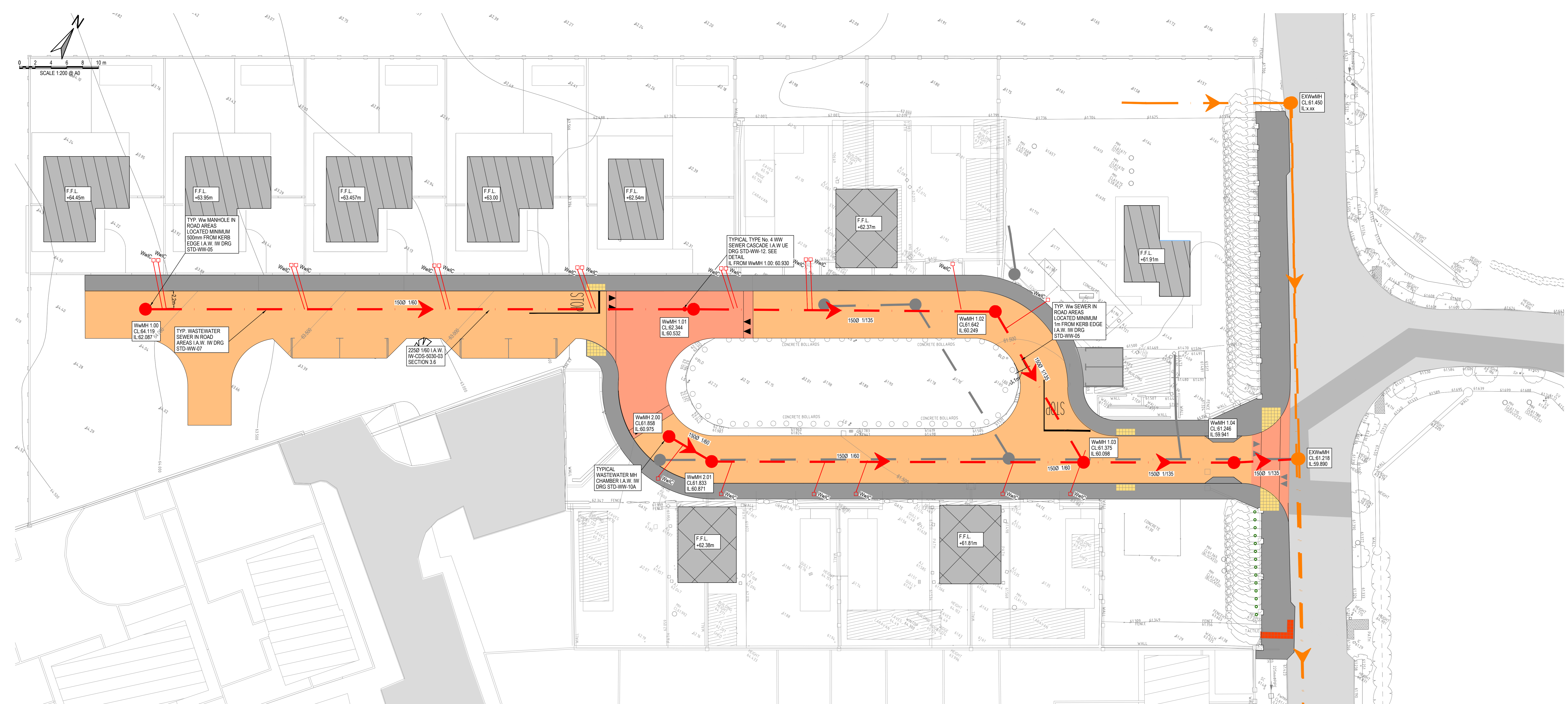
**WASTEWATER LEGEND:**



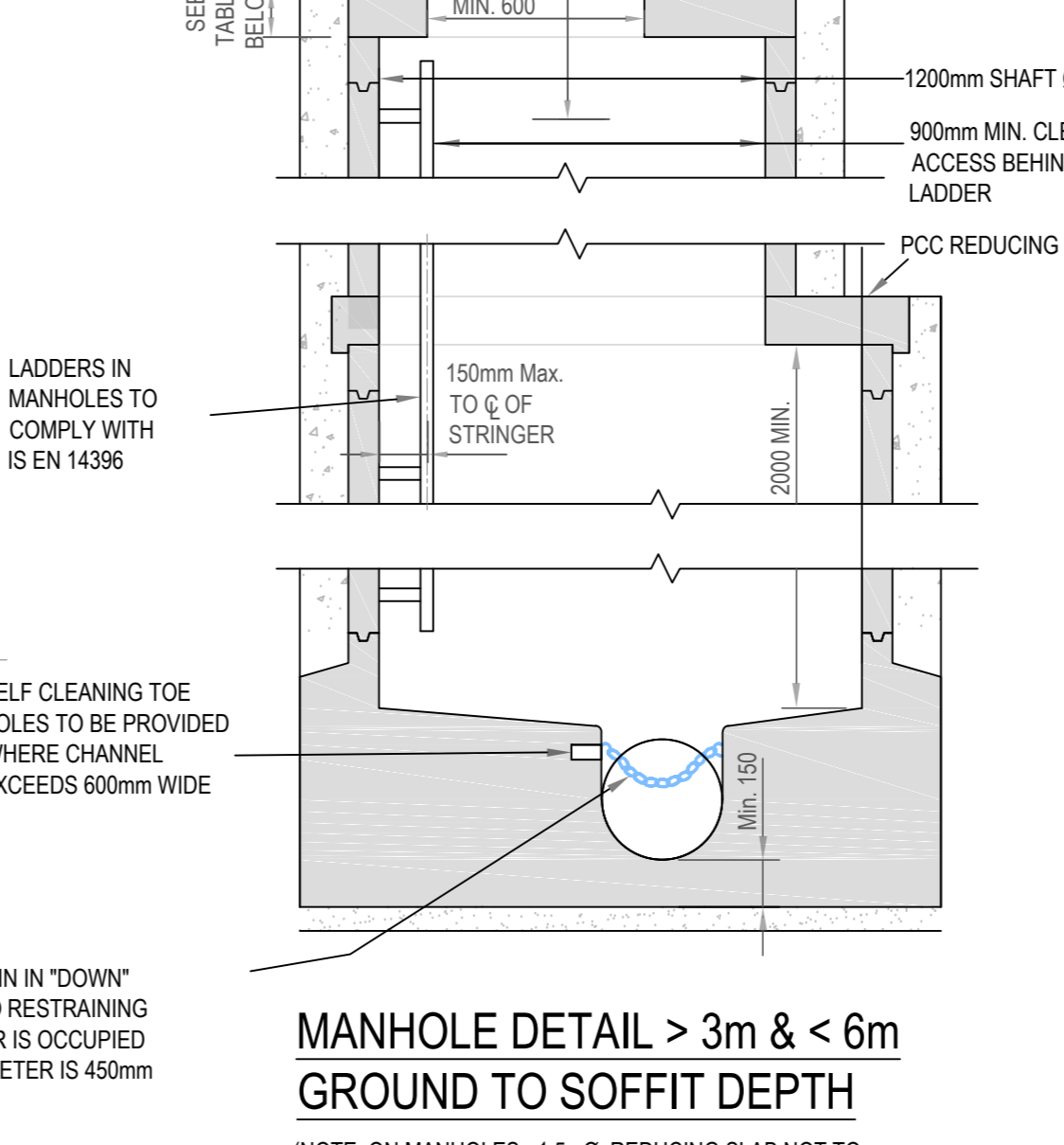
- NOTE 1:** MANHOLE COVER LEVELS ARE APPROXIMATE. ACTUAL COVER LEVELS SHOULD MATCH SURROUNDING FINISHED GROUND LEVELS U.N.O.
- NOTE 2:** ALL WASTEWATER SEWERS TO BE PROVIDED WITH COVER (WITHOUT PROTECTION) IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-WW-07 AND CLAUSE 3.9 OF IW-CDS-5030-03.
- NOTE 3:** FOR WASTEWATER SEWERS REQUIRING PROTECTION, REFER TO IRISH WATER STANDARD DETAIL STD-WW-08 AND CLAUSE 3.9 OF IW-CDS-5030-03.
- NOTE 4:** ALL MANHOLE COVERS LOCATED IN GRASS AREAS TO BE SURROUNDED (Min. 200mm SURROUND) IN 100mm THK C20/25 CONCRETE APRON

**FOUL PIPE MATERIAL TO BE IN ACCORDANCE WITH IW-CDS-5030-03 SECTION 3.13.2**

3.13.2 THERMOPLASTIC STRUCTURAL WALL PIPES, THERMOPLASTIC STRUCTURED WALL PIPES SHALL COMPLY WITH THE PROVISIONS OF IS EN 14396 (2007/09). PIPES TO BE OF STEELNESS CLASS BAWF & TO BE CAPABLE OF DEMONSTRATING A TIGHTNESS RESISTANCE OF 2.600 PSI (180 BAR) WITHOUT DAMAGE WHEN TESTED IN ACCORDANCE WITH SECTION 3.13.2 OF IW-CDS-5030-03 (SEWER DIAMETERS: 150mm UP TO 450mm, SERVICE CONNECTIONS OF 100mm DIAMETER)

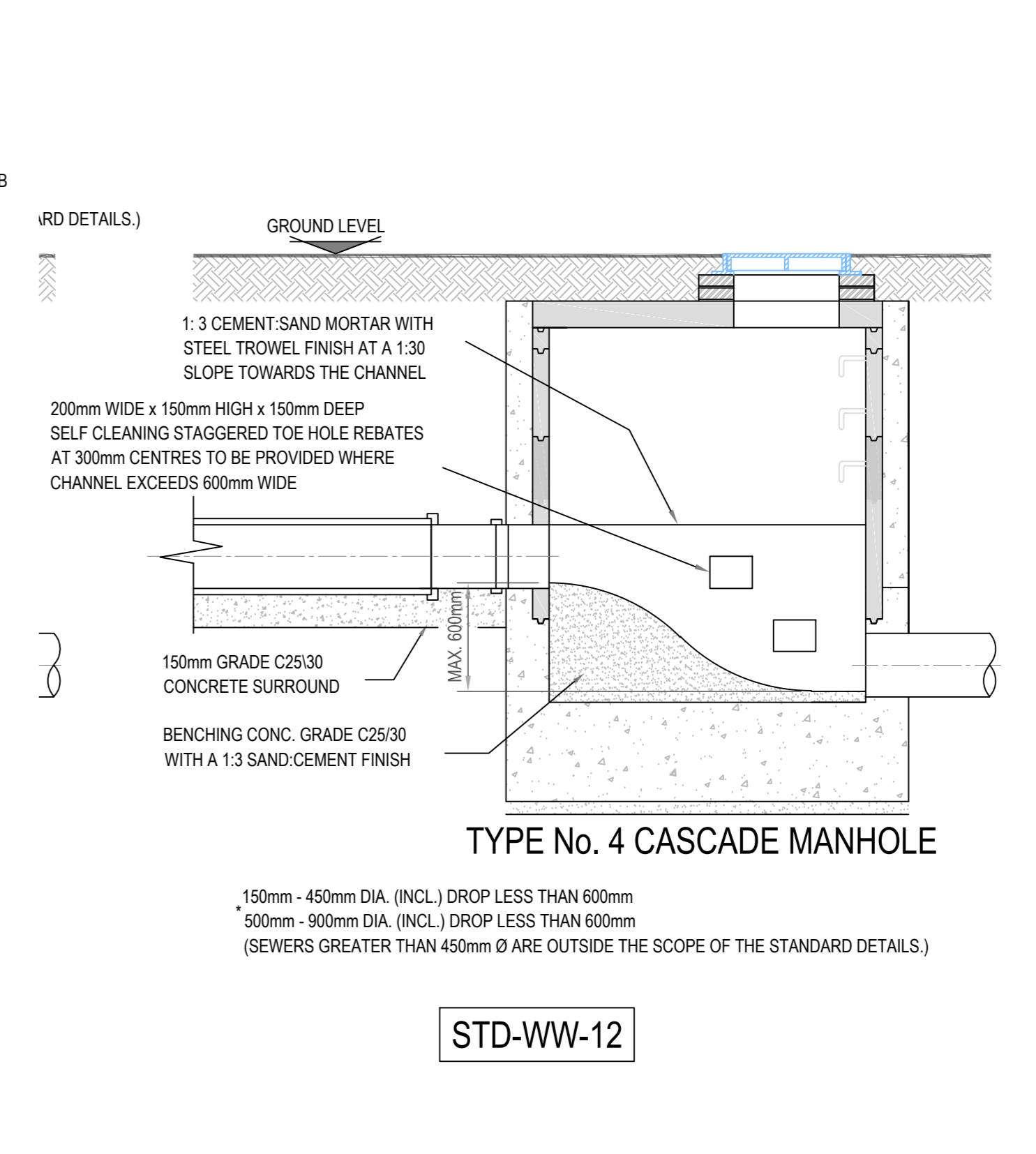


MINIMUM MANHOLE DIAMETERS			
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)	MIN. PRECAST ROOF SLAB EFFECTIVE THICKNESS (mm)	MIN. IN-SITU ROOF SLAB THICKNESS (mm)
LESS THAN 375	1200	160	225
375 TO 450	1350	160	225
500 TO 750	1500	170	225



ROCKER PIPE LENGTH	
PIPE DIAMETER (mm)	ROCKER PIPE LENGTH (mm)
150 TO 600	600
GREATER THAN 600 TO 750	1000
GREATER THAN 750	1250

\* SEWERS GREATER THAN 450mm Ø ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS. MANHOLE SIZE OF THESE CHAMBERS MAY BE REQUIRED DUE TO MULTIPLE PIPES WITHIN MANHOLE.



ISSUED FOR PLANNING

Rev.	Note	Date	Drawn	Check
S2.P04	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES  
 Project: ANDREW HALTING SITE, ATHY, CO. KILDARE  
 Drawing Title: PROPOSED WASTEWATER DRAINAGE LAYOUT

Drawn By: BB	Checked By: PD	Approved By: DOB	Date: OCT 2023	Scale: 1:200	Sheet Size: A0
Project Number: DOBA2327	Drawing Number: 2327-DOB-ARD-SI-DR-C-0030	Status Code: S2	Rev Number: P04		

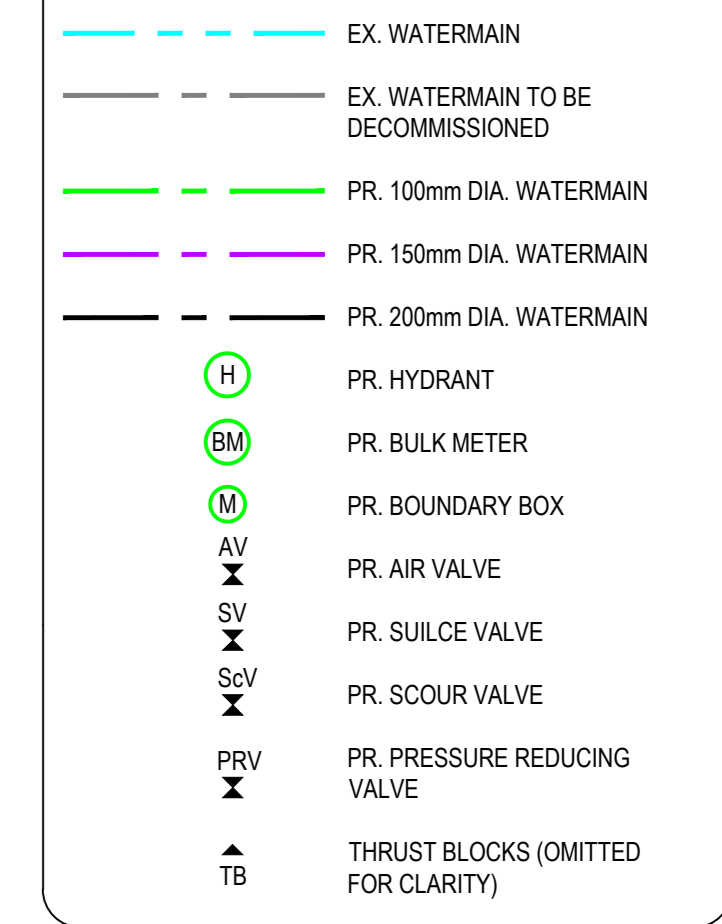
**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**  
 UNIT 5C ELM HOUSE MILLENSTONE PARK NAAS CO. KILDARE  
 PHONE: +353 45 964 042  
 INFO@DOBRIENENGINEERS.IE WWW.DOBRIENENGINEERS.IE



**NOTES:**

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2227-DOB-ARD-SI-DR-C-0002
- REFER TO ARCHITECT'S DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S & ENGINEER'S DRAWINGS AND SPECIFICATIONS.
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE.
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SERVICES TO BE RENAIATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES

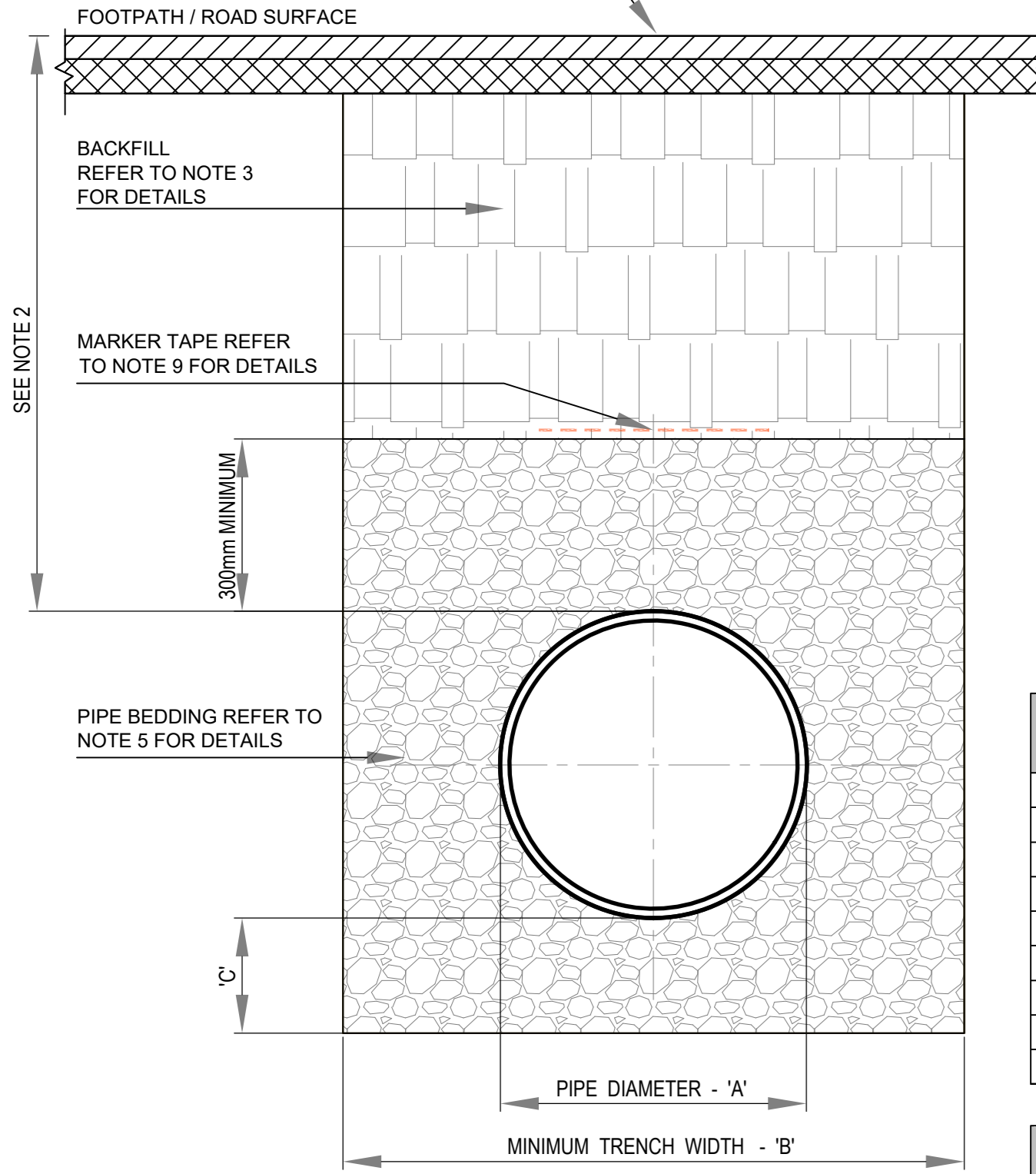
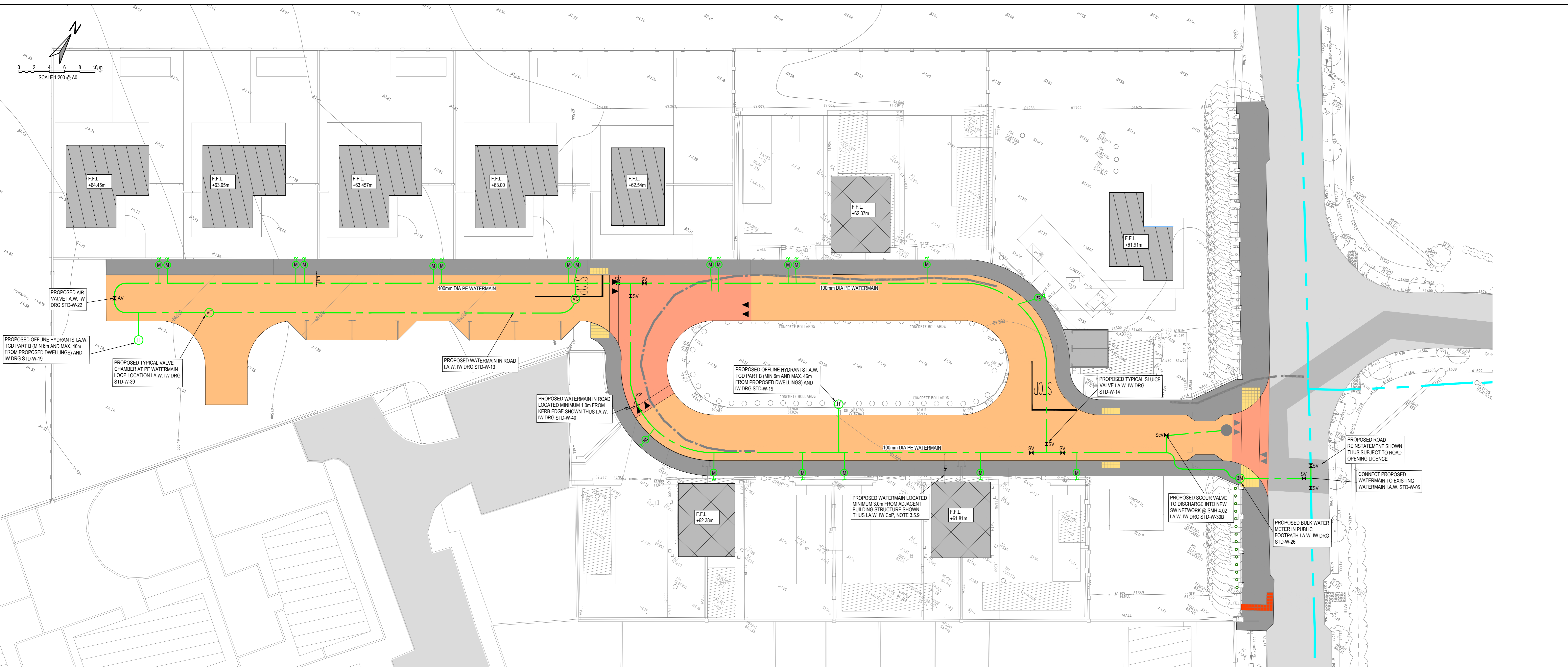
**WATER SUPPLY LEGEND:**



- NOTE 1:** MANHOLE COVER LEVELS ARE APPROXIMATE. ACTUAL COVER LEVELS SHOULD MATCH SURROUNDING FINISHED GROUND LEVELS I.U.O.
- NOTE 2:** ALL WATERMANS TO BE PROVIDED WITH COVER IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-W-13 AND CLAUSE 3.11 OF IW-CDS-5020-03.
- NOTE 3:** ALL MANHOLE COVERS LOCATED IN GRASS AREAS TO BE SURROUNDED (MIN 200mm SURROUND) IN 100mm THK C20/25 CONCRETE APRON

**WATERMAIN MATERIAL TO BE IN ACCORDANCE WITH IW-CDS-5020-03 SECTION 3.9.2**

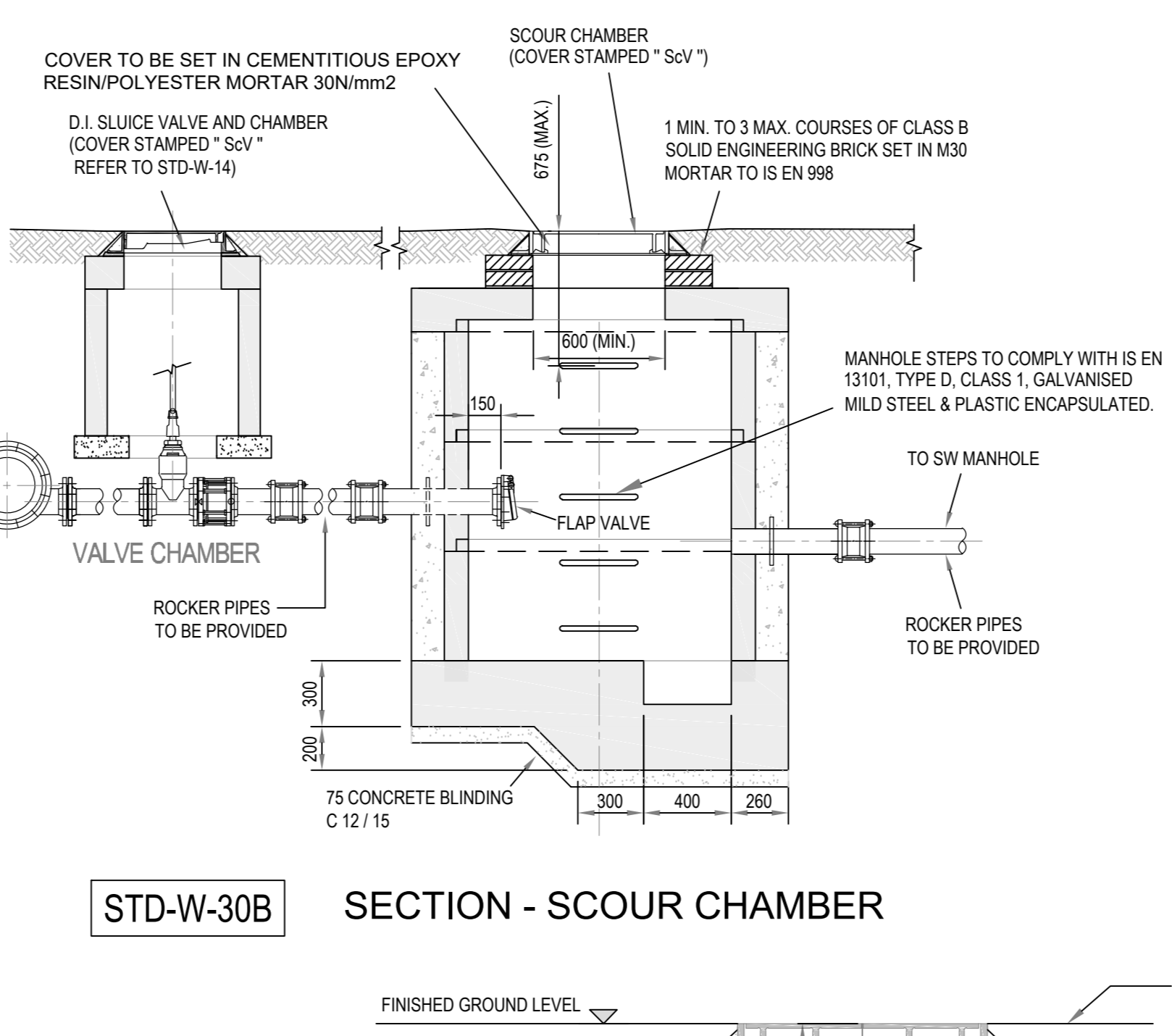
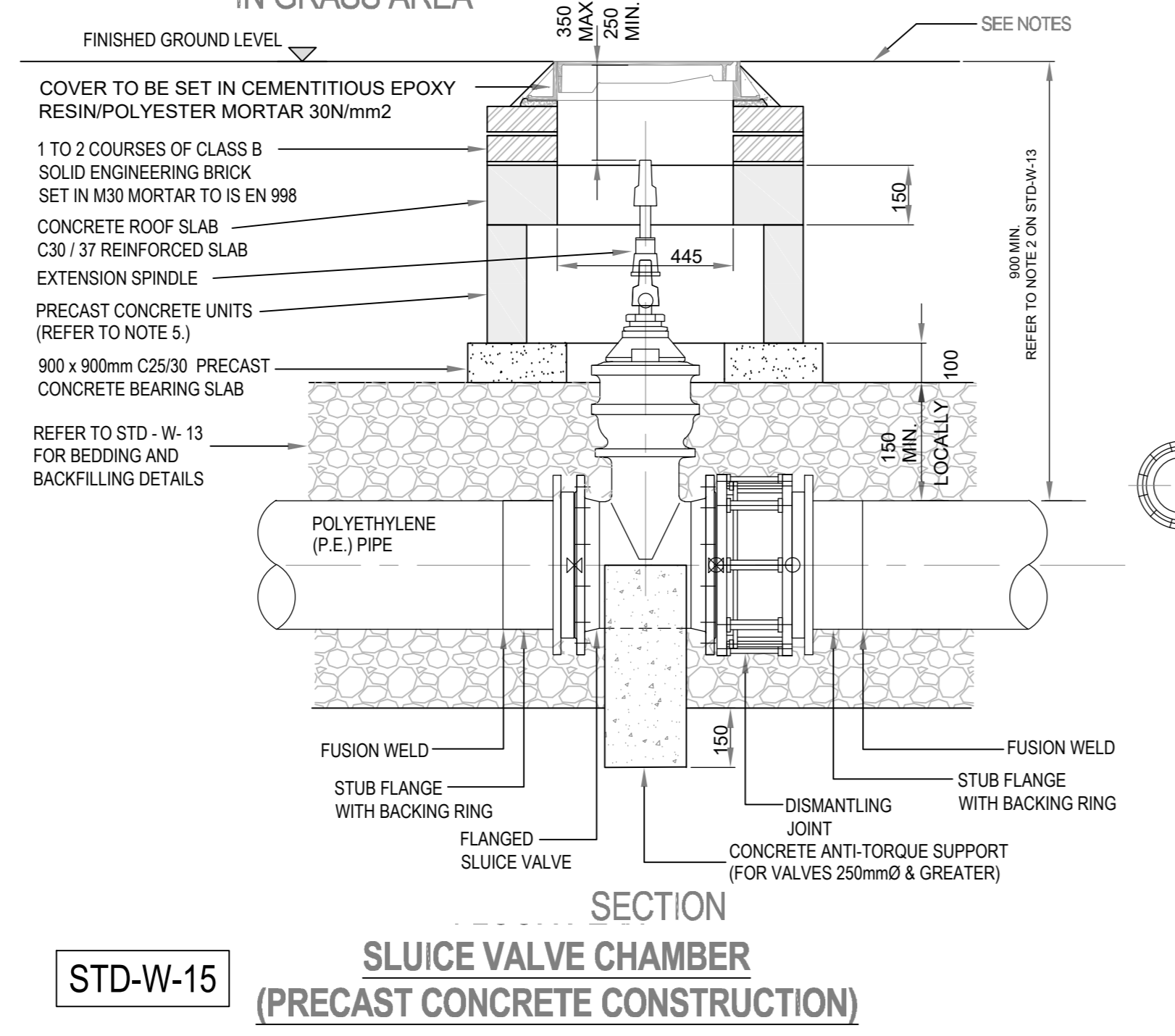
3.9.2 MDPE & HDPE PIPES SHALL BE OF A TYPE PE-80 & HAVE AN SDR-11 OR SDR-17 RATING. THEY SHALL CONFORM TO IS EN 12201 PART 1 & PART 2 (PLASTIC SYSTEMS FOR WATER SUPPLY, DRAINAGE & SEWERAGE UNDER PRESSURE - PART 1, GENERAL & PART 2, PIPES) & IS EN 12201-3 (PLASTIC SYSTEMS FOR WATER SUPPLY, DRAINAGE & SEWERAGE UNDER PRESSURE - PART 3, FITTINGS).



PIPE DIAMETER 'A' (mm)	TRENCH WIDTH 'B' (mm)
≤ 80	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)
≤ 200	150
≥ 250	200

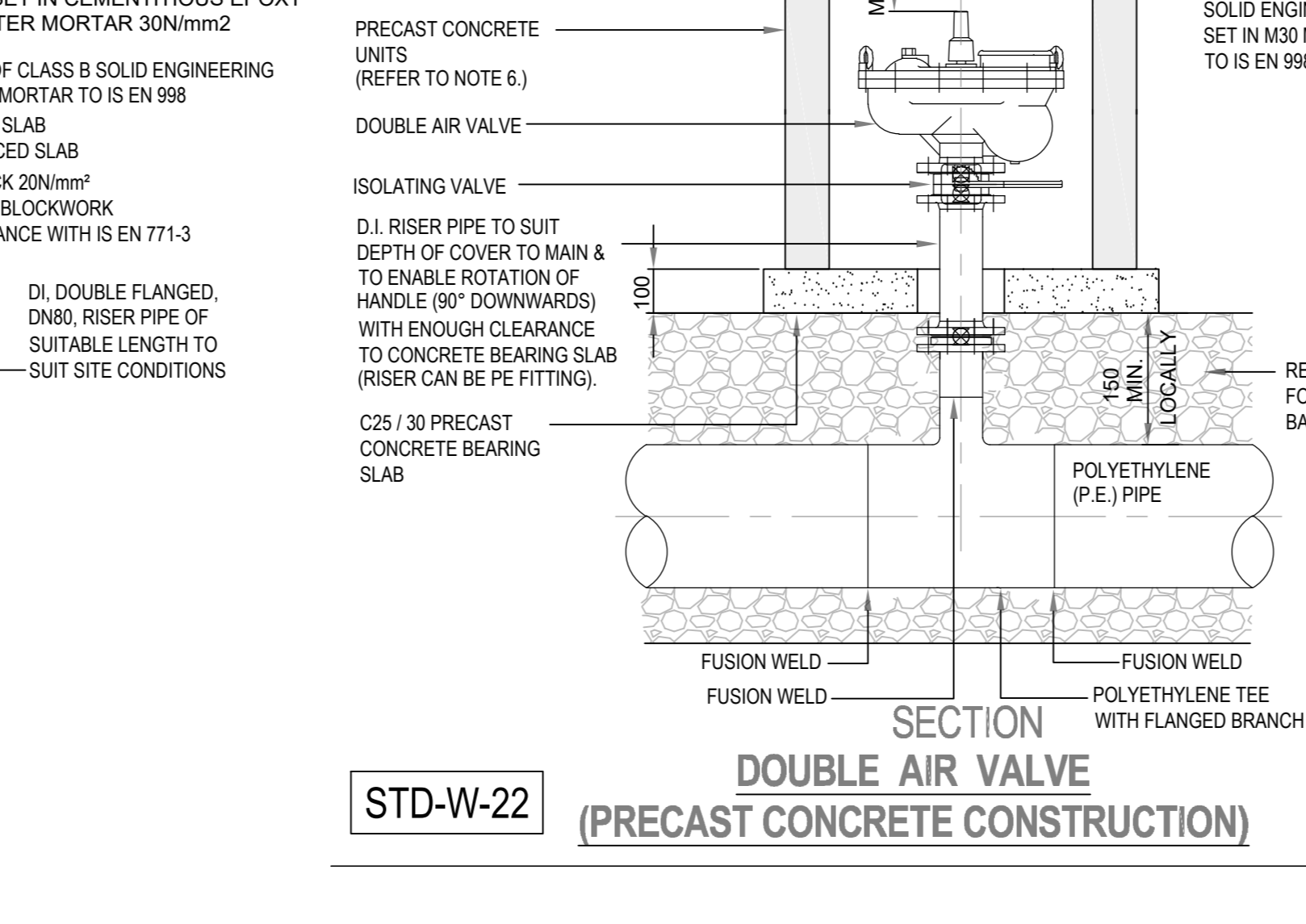
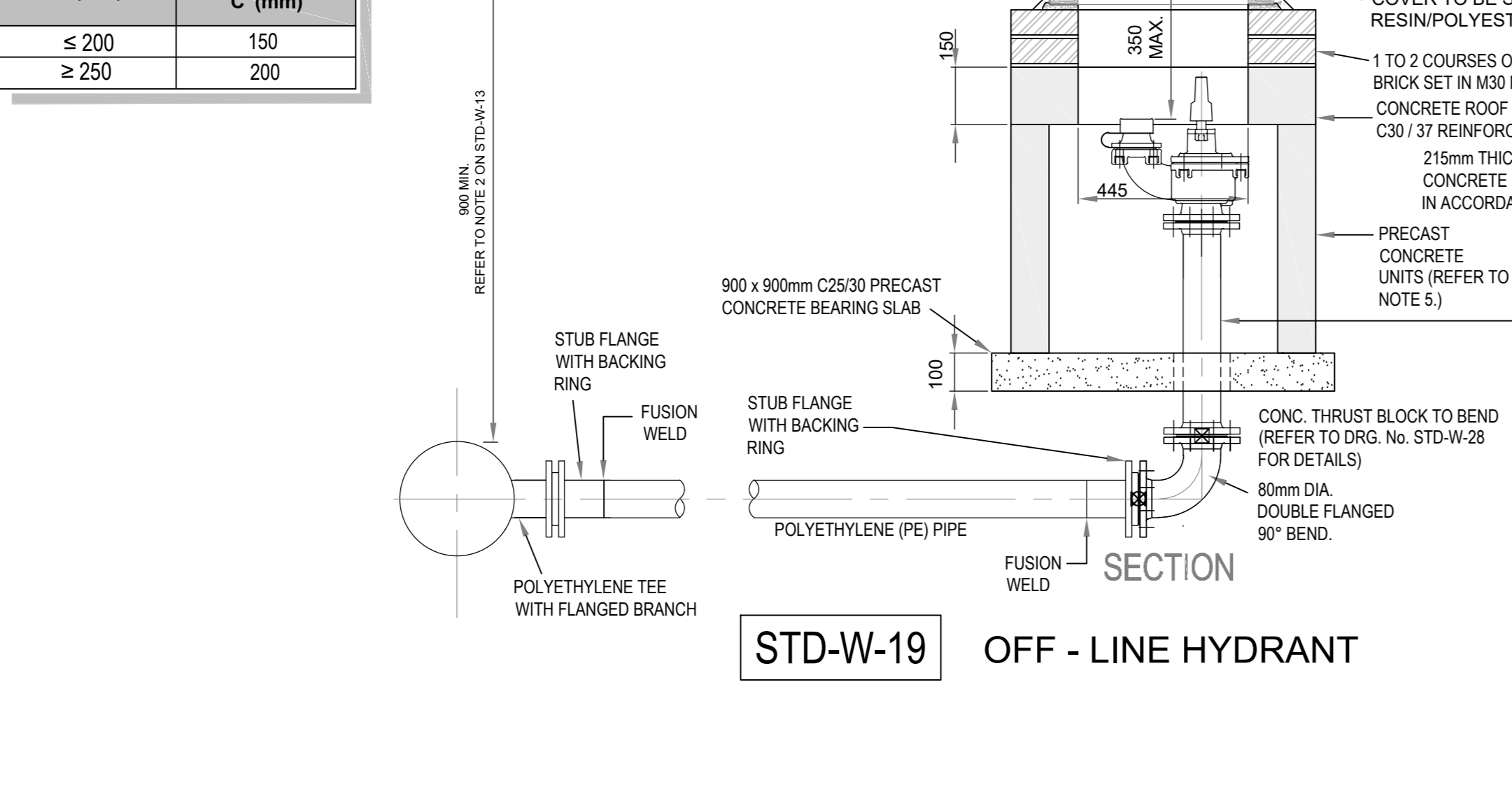
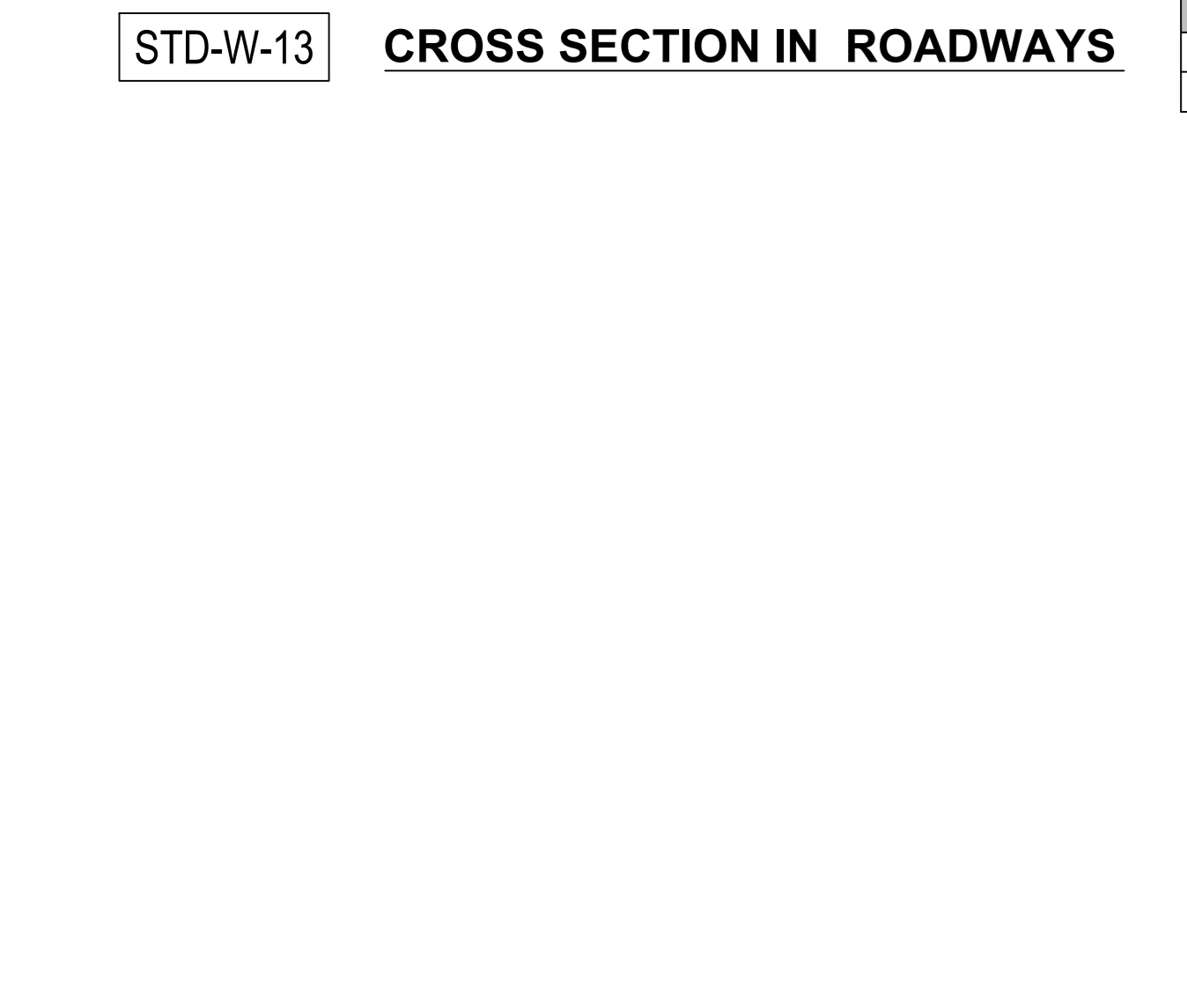
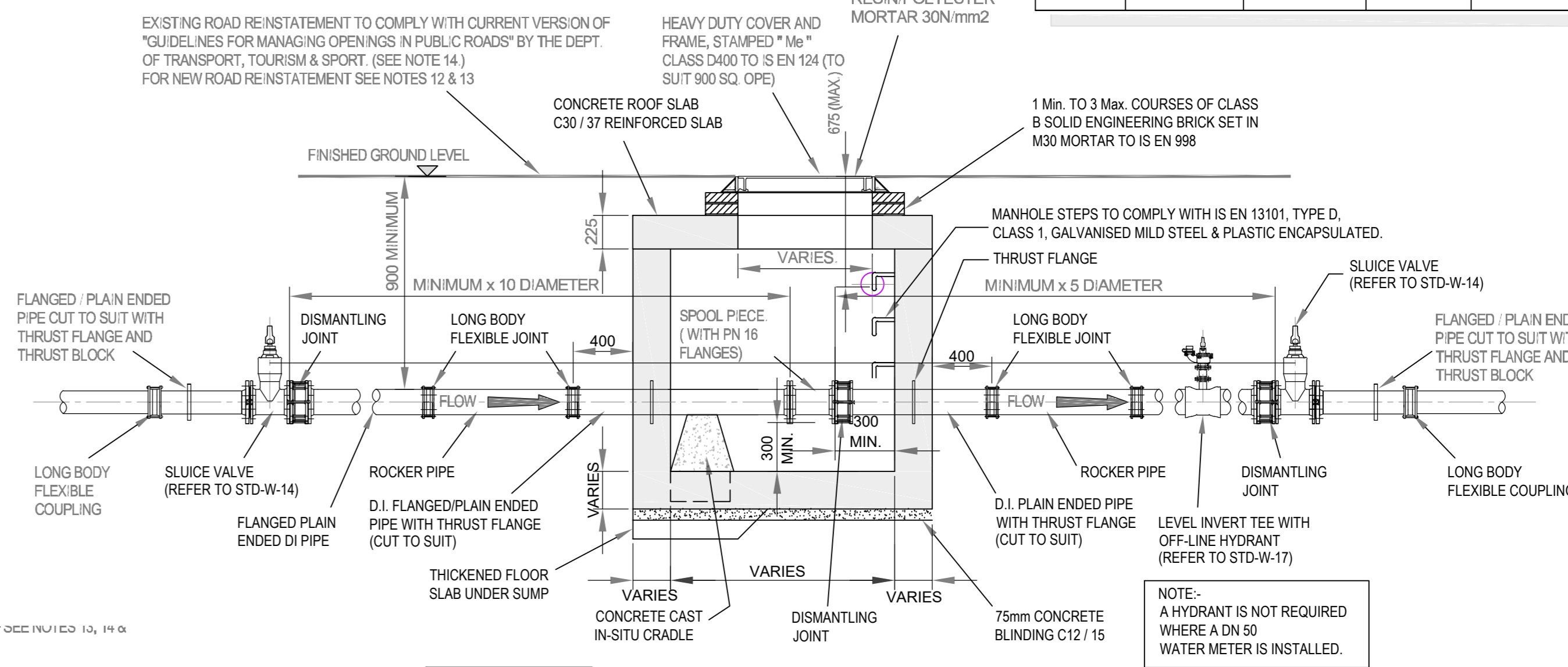


**ELECTROMAGNETIC WATER METER SPOOL PIECE LENGTHS**

Ø mm	DN50	DN80	DN100	DN125	DN150	DN200	DN250
Length mm	200	250	300	350	450		

**METER DIAMETER 'A' (mm)**

INTERNAL CHAMBER DIMENSIONS	COVER DIMENSIONS	FLOOR SLAB DEPTH	WALL THICKNESS
50 - 100	1200 x 1200	750 x 750	200mm
101 - 250	1500 x 1500	900 x 900	250mm



**ISSUED FOR PLANNING**

Rev.	Note	Date	Drawn	Check
S2.P04	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD

**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**

UNIT 5C  
ELM HOUSE  
MELLENSTOWN PARK  
NAAS  
CO. KILDARE

PHONE: +353 45 964 042  
INFO@DOBENENGINEERS.IE  
WWW.DOBENENGINEERS.IE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES

Project: ANDREW HALTING SITE, ATHY, CO. KILDARE

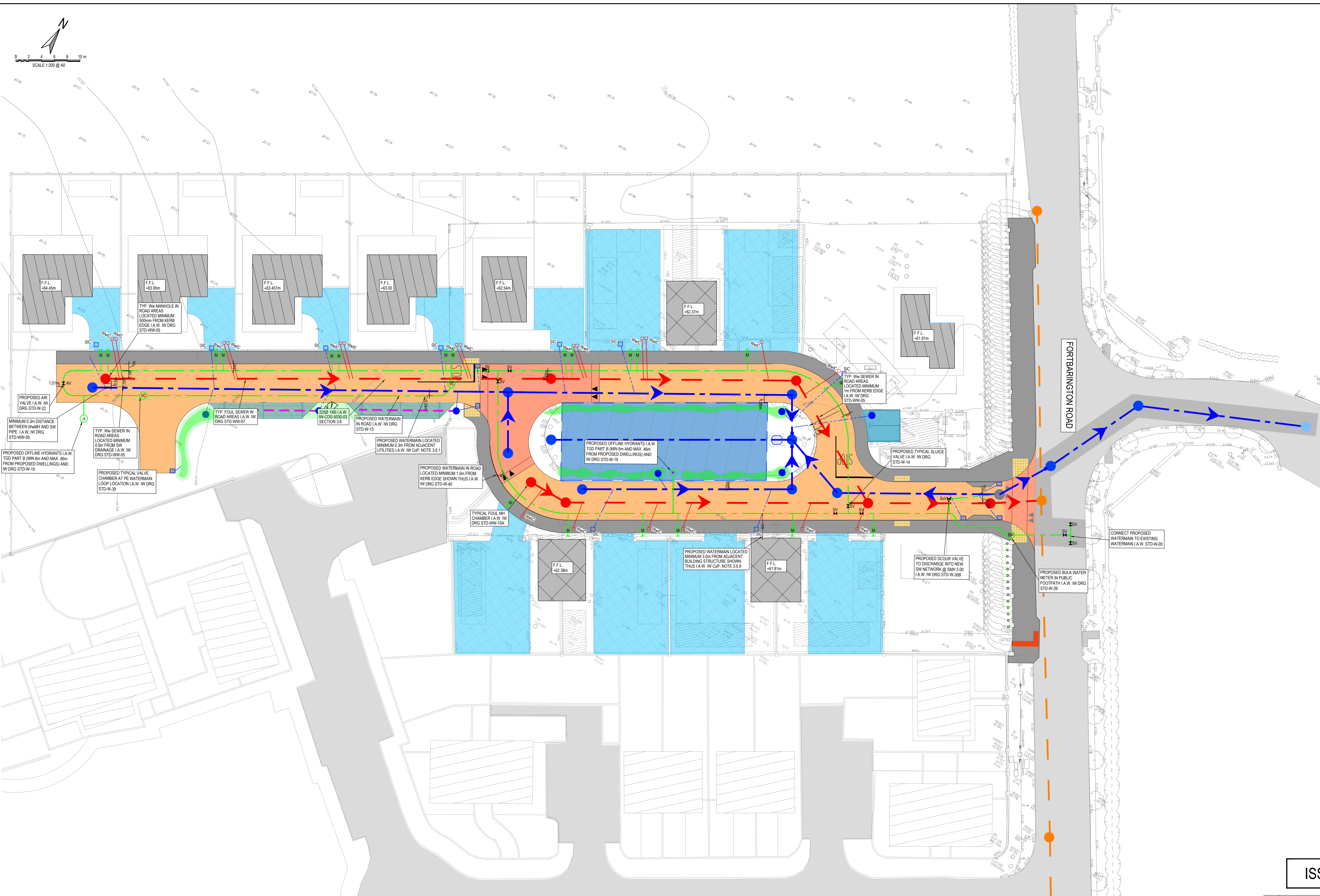
Drawing Title: PROPOSED WATER SUPPLY LAYOUT

Drawn By: BB  
Checked By: PD  
Approved By: DOB  
Date: OCT 2023  
Scale: 1:200  
Sheet Size: A0  
Status Code: S2  
Rev Number: P04



**NOTES:**

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-0001 & 0002
- REFER TO ARCHITECT'S DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S & ENGINEER'S DRAWINGS AND SPECIFICATIONS
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE RENOVATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



ISSUED FOR PLANNING

S2.P04	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check

**DONNACHADH O'BRIEN**  
 & ASSOCIATES CONSULTING ENGINEERS

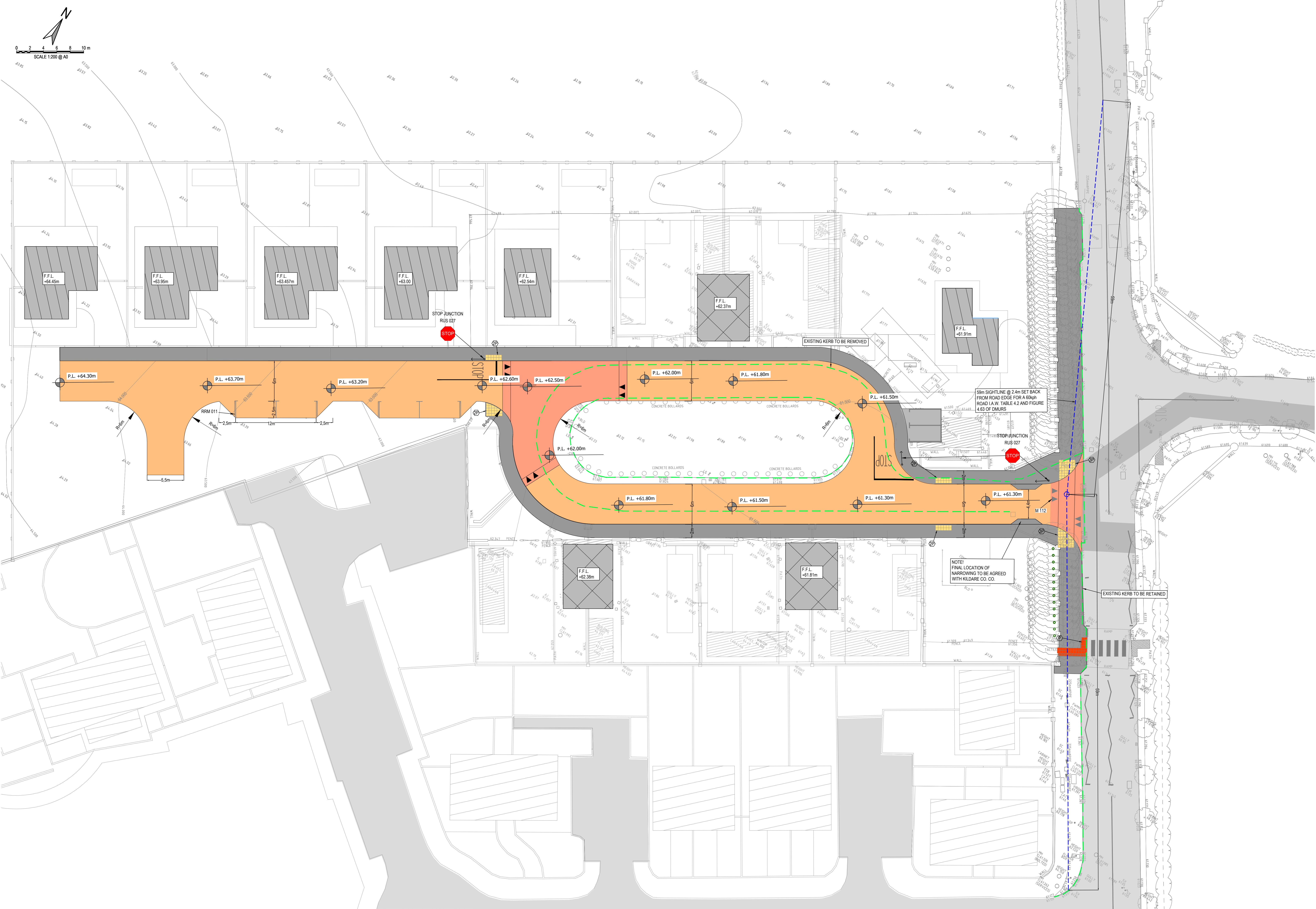
UNIT 5C  
 ELM HOUSE  
 MILLENNIUM PARK  
 NAAS  
 CO. KILDARE

PHONE:  
 +353 45 964 042  
 INFO@DOBRIENENGINEERS.IE  
 WWW.DOBRIENENGINEERS.IE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES  
 Project: ANDREW HALTING SITE, ATHY, CO. KILDARE  
 Drawing Title: PROPOSED COMBINED SERVICES LAYOUT  
 Drawn By: BB  
 Checked By: PD  
 Approved By: DOB  
 Date: OCT 2023  
 Scale: 1:200  
 Sheet Size: A0  
 Project Number: DOBA2327  
 Drawing Number: 2327-DOB-ARD-SI-DR-C-0045  
 Status Code: S2  
 Rev Number: P04

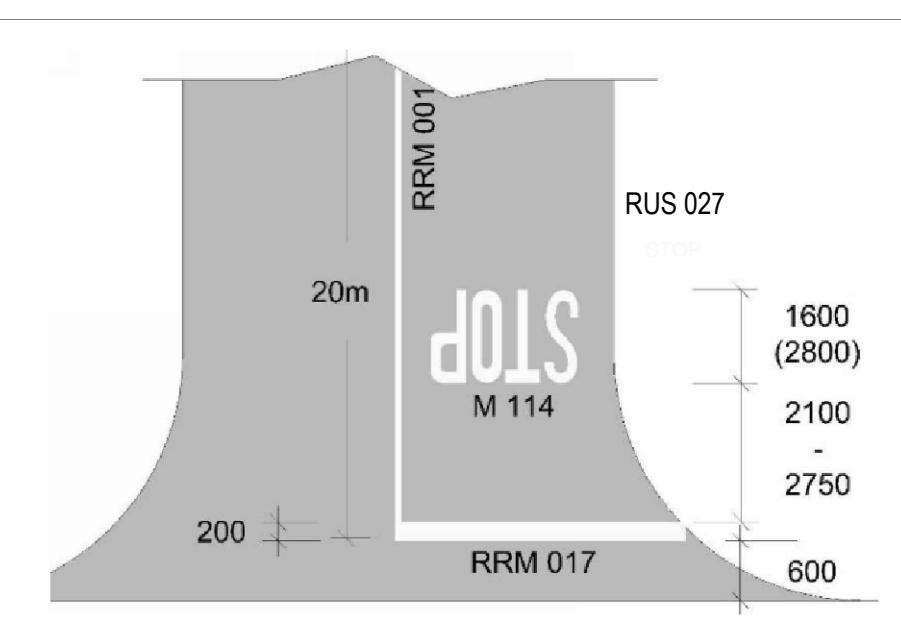


- NOTES:**
- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-C-0001 & 0002
  - REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEER'S DRAWINGS AND SPECIFICATIONS
  - USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
  - REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
  - ALL EXISTING SURFACES TO BE RENOVATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
  - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
  - CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
  - TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



**GENERAL LEGEND:**

- EX. BUILDING
- EX. ROAD
- PR. SPOT LEVELS
- PR. FALLS
- PR. BUILDING
- PR. FOOTPATH
- PR. TYP. CAR PARKING BAY
- PR. TYP. EV CAR CHARGING BAY
- PR. TYP. ACCESSIBLE PARKING BAY
- PR. BICYCLE PARKING
- PR. TRAFFICKED PERMEABLE PAVING
- PR. POROUS ASPHALT
- PR. TRAFFICKED ROADWAY
- PR. TRAFFICKED PAVING
- PR. GRASSCRETE
- PR. TABLETOP PEDESTRIAN CROSSING
- PR. SOFT LANDSCAPING / SUDS
- PR. IN-LINE TACTILE PAVING (@ UNCONTROLLED CROSSING)
- PROPOSED PERPENDICULAR TACTILE PAVING (@ UNCONTROLLED CROSSING)
- PROPOSED CORRIDORY TACTILE PAVING SURFACING (TRAILLINE OR TRAILLINE FOR PEDESTRIAN ENTERING A SHARED SURFACE)
- PROPOSED TACTILE PAVING SURFACING (@ CONTROLLED)
- PR. RETAINING WALL
- PR. BOUNDARY WALL
- PR. CAGON WALL
- PROPOSED ROADWAY COLOURED SURFACING (HOME ZONE)
- PROPOSED RAISED CYCLE TRACK
- PROPOSED ON-ROAD CYCLE TRACK
- PROPOSED ROAD CONTOURS
- EX. SPOT LEVELS
- EXISTING ROAD EDGE (KERB)



**Figure 7.35: Example of Priority-Controlled Stop Junction**  
Note: See Paragraph 7.11.2

**TYPICAL JUNCTION DETAILS**  
SCALE (NTS)

**ISSUED FOR PLANNING**

Rev.	Note	Date	Drawn	Check
S2.P06	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P05	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P04	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	15.12.2023	BB	PD
S2.P02	REVISIONS CLOUDED	30.11.2023	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD

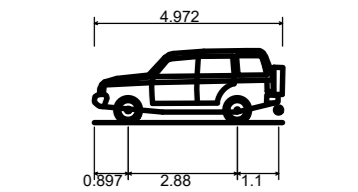
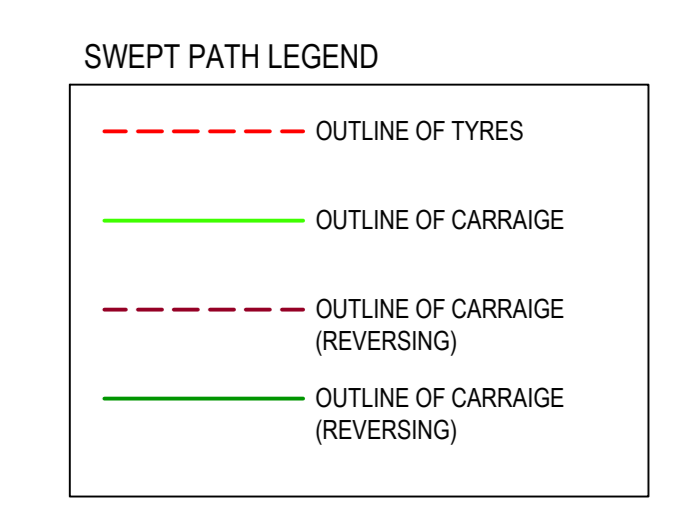
**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**  
UNIT 5/C ELM HOUSE MILLENNIUM PARK NAAS CO. KILDARE  
PHONE: +353 45 964 042  
INFO@DOBRIENENGINEERS.IE WWW.DOBRIENENGINEERS.IE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES  
Project: ANDREW HALTING SITE, ATHY, CO. KILDARE  
Drawing Title: PROPOSED SITE LAYOUT, ROAD MARKINGS, SIGNAGE & SIGHTLINES  
Drawn By: BB Checked By: PD Approved By: DOJ Date: OCT 2023 Scale: 1:200 Sheet Size: A0  
Project Number: DOBA2327 Drawing Number: 2327-DOB-ARD-SI-DR-C-0050 Status Code: S2 Rev Number: P06



**NOTES:**

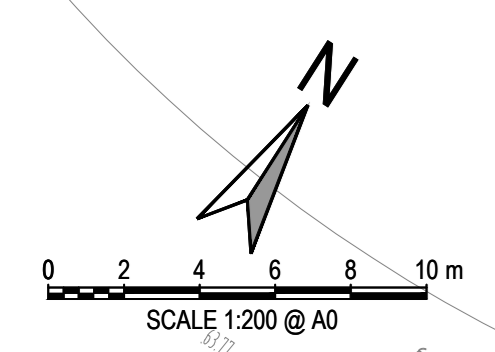
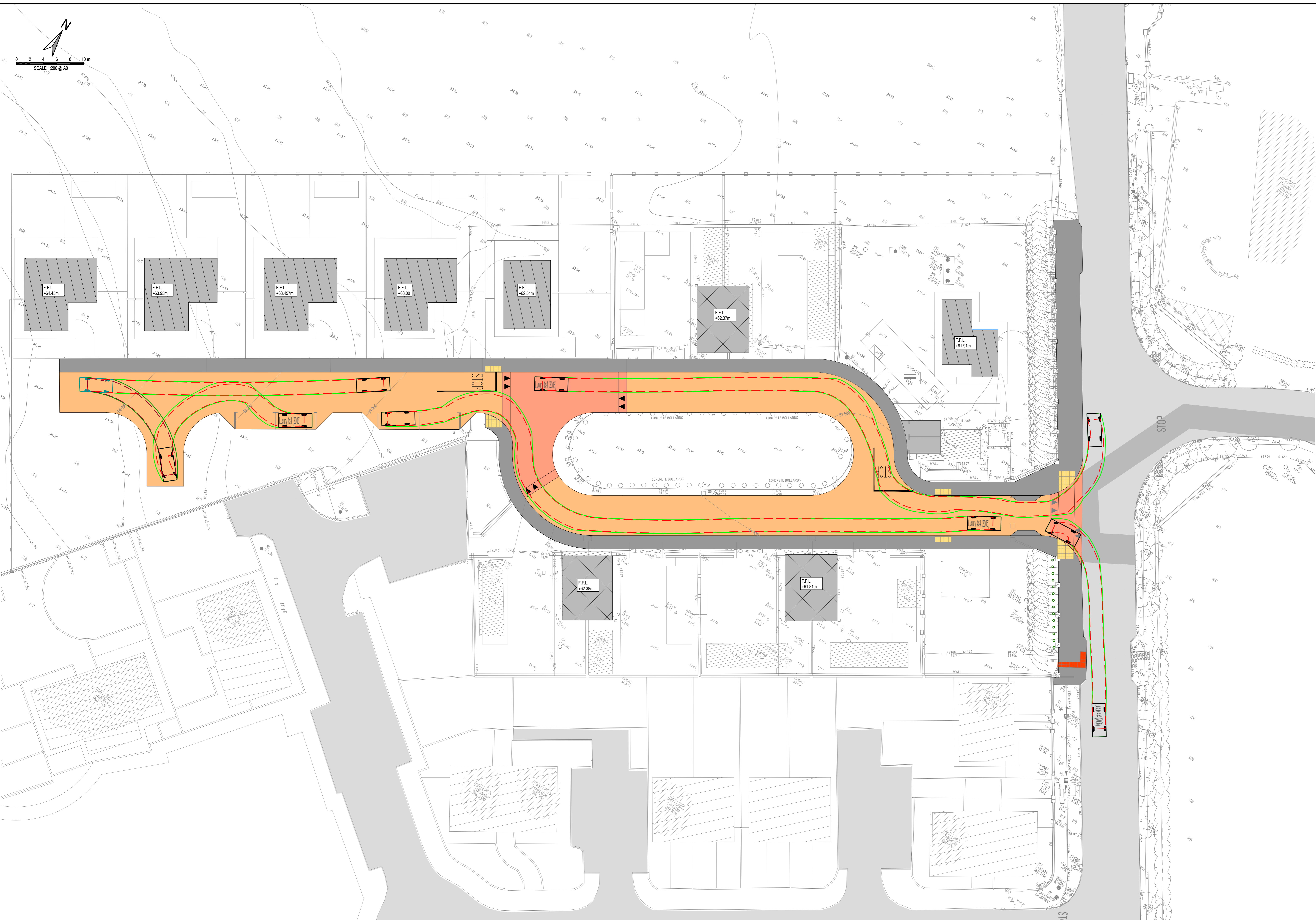
- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-0-0001 & 0-0002
- REFER TO ARCHITECT'S DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S DRAWINGS AND SPECIFICATIONS
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE RENAISTATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



**Luxury 4x4 (2006)**

Overall Length	4.972m
Overall Width	2.034m
Overall Body Height	1.995m
Min Body Ground Clearance	0.278m
Max Track Width	1.884m
Lock-to-lock time	4.09s
Curb to Curb Turning Radius	5.800m

**VEHICLE DETAILS**



**LUXURY 4X4 SWEPT PATH ANALYSIS**  
SCALE 1:200

**ISSUED FOR PLANNING**

S2.P04	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check

**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**

UNIT 5C  
ELM HOUSE  
MILLENSTUTE PARK  
NAAS  
CO. KILDARE

PHONE:  
+353 45 964 042  
INFO@DOBRIENENGINEERS.IE  
WWW.DOBRIENENGINEERS.IE

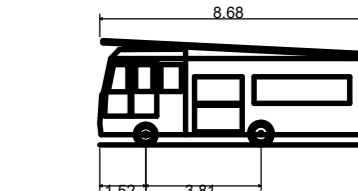
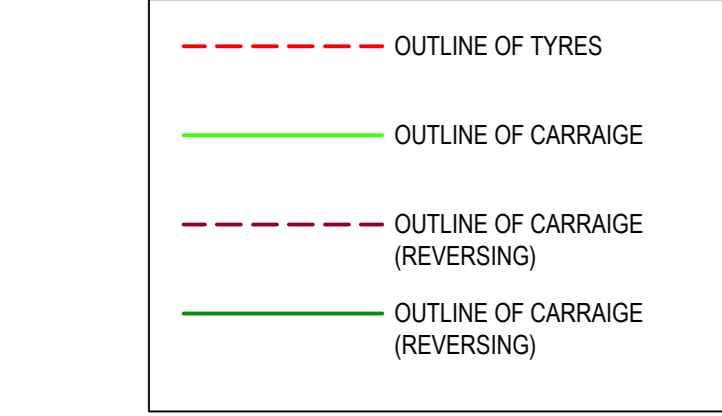
Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES  
Project: ANDREW HALTING SITE, ATHY, CO. KILDARE  
Drawing Title: PROPOSED VEHICLE AUTOTRACKS - 4X4 PASSENGER VEHICLE  
Drawn By: BB  
Checked By: PD  
Approved By: DOB  
Date: SEPT 2023  
Scale: 1:200  
Sheet Size: A0  
Project Number: DOBA2327  
Drawing Number: 2327-DOB-ARD-SI-DR-C-0070  
Status Code: S2  
Rev Number: P04



**NOTES:**

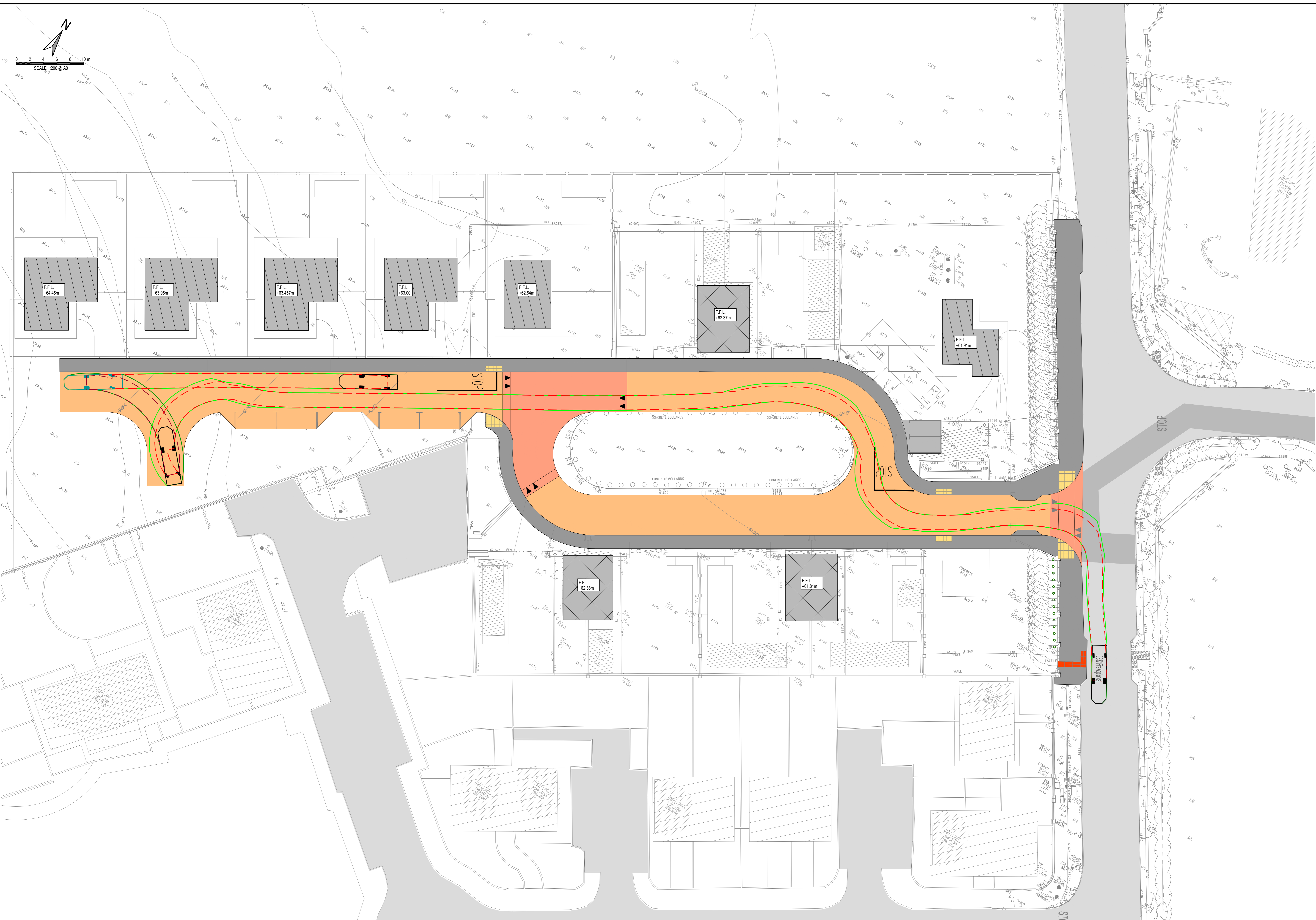
- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-C-001 & C-002
- REFER TO ARCHITECT'S DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S & ENGINEER'S DRAWINGS AND SPECIFICATIONS
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE RENAIATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES

**SWEPT PATH LEGEND**



DB32 Fire Appliance  
 Overall Length 8.680m  
 Overall Width 2.190m  
 Overall Body Height 3.450m  
 Min Body Ground Clearance 0.337m  
 Max Track Width 2.121m  
 Lock-to-lock time 6.00s  
 Curb to Curb Turning Radius 7.910m

**VEHICLE DETAILS**



**FIRE TENDER SWEPT PATH ANALYSIS**  
 SCALE 1:200

**ISSUED FOR PLANNING**

S2.P04	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check

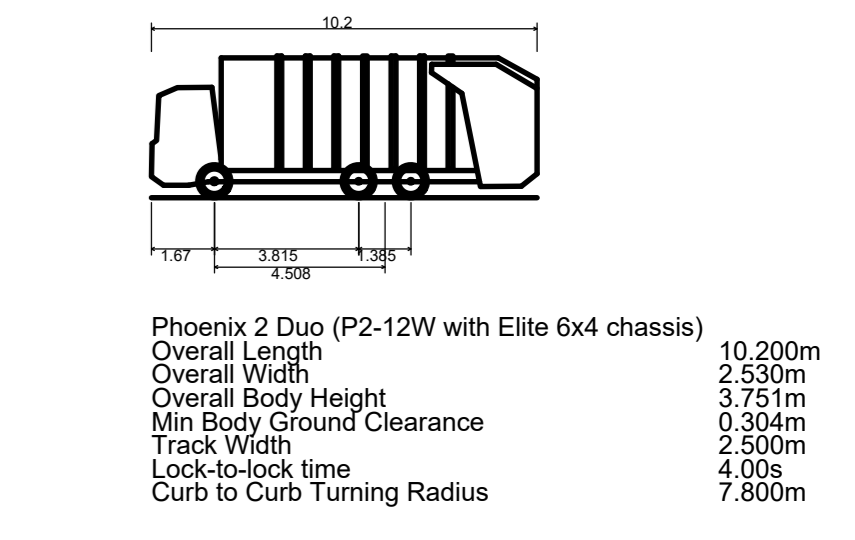
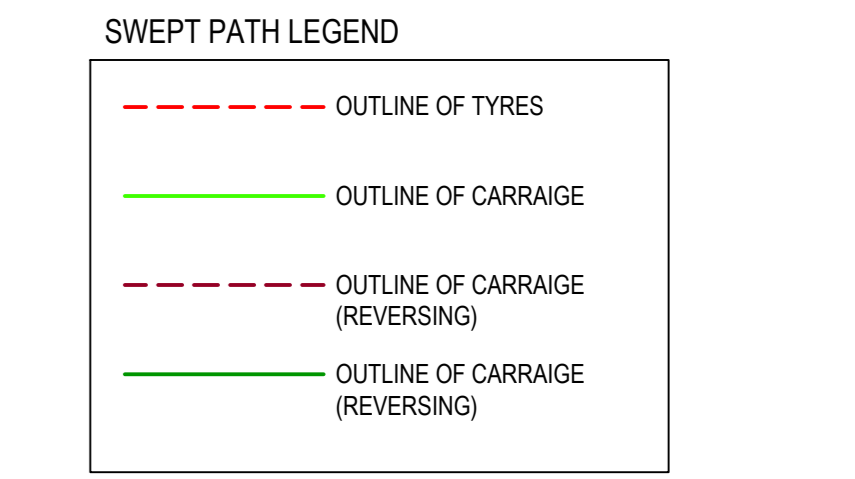
**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**  
 UNIT 5/C ELM HOUSE MILLENNIUM PARK NAAS CO. KILDARE  
 PHONE: +353 45 964 042  
 INFO@DOBRIENENGINEERS.IE WWW.DOBRIENENGINEERS.IE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES  
 Project: ANDREW HALTING SITE, ATHY, CO. KILDARE  
 Drawing Title: PROPOSED VEHICLE AUTOTRACKS - FIRE TENDER

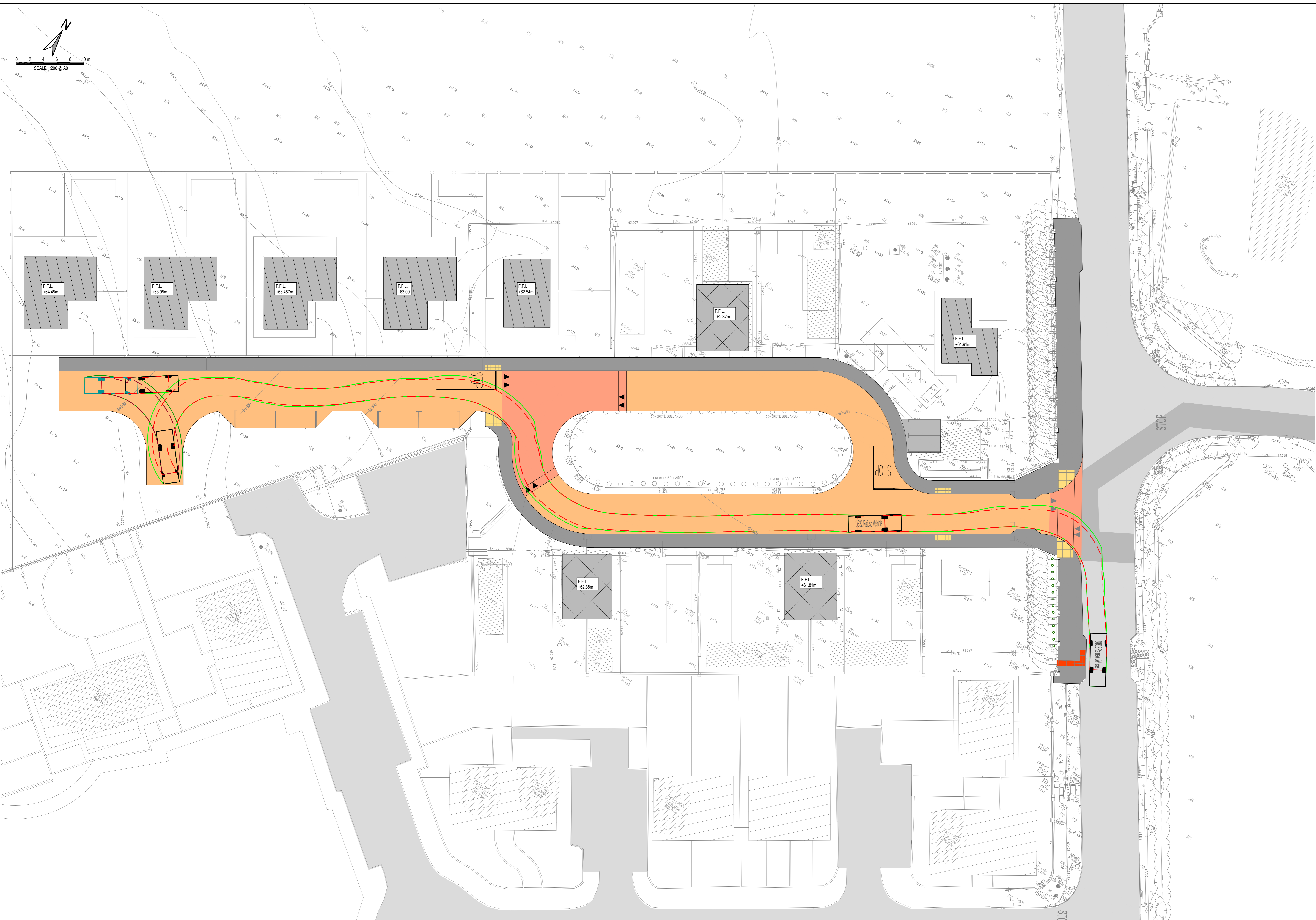
Drawn By: BB	Checked By: PD	Approved By: DOB	Date: SEPT 2023	Scale: 1:200	Sheet Size: A0
Project Number: DOBA2327	Drawing Number: 2327-DOB-ARD-SI-DR-C-0071	Status Code: S2	Rev Number: P04		



- NOTES:**
- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-0001 & 0002
  - REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEER'S DRAWINGS AND SPECIFICATIONS
  - USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
  - REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
  - ALL EXISTING SURFACES TO BE RENOVATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
  - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
  - CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
  - TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



**VEHICLE DETAILS**



**REFUSE TRUCK SWEPT PATH ANALYSIS**  
SCALE 1:200

**ISSUED FOR PLANNING**

S2.P04	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P03	ISSUED FOR PLANNING	30.09.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check

**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**

UNIT 5C  
ELM HOUSE  
MILLENSTUTE PARK  
NAAS  
CO. KILDARE

PHONE: +353 45 964 042  
INFO@DOBRIENENGINEERS.IE  
WWW.DOBRIENENGINEERS.IE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES

Project: ANDREW HALTING SITE, ATHY, CO. KILDARE

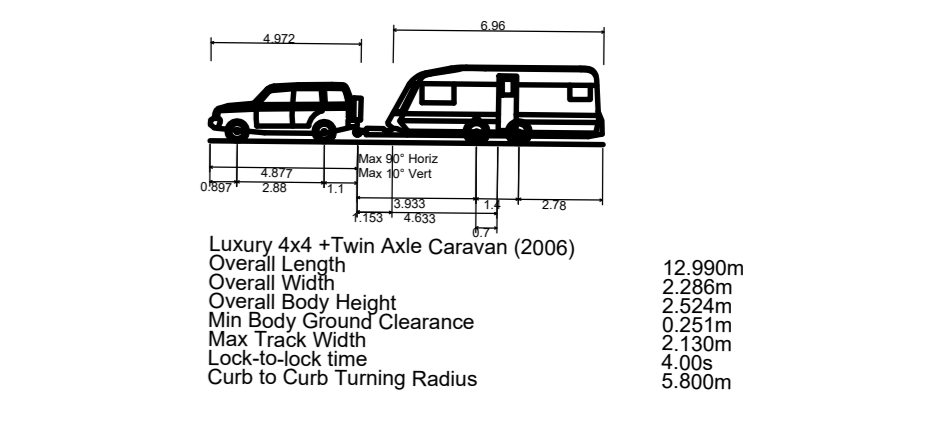
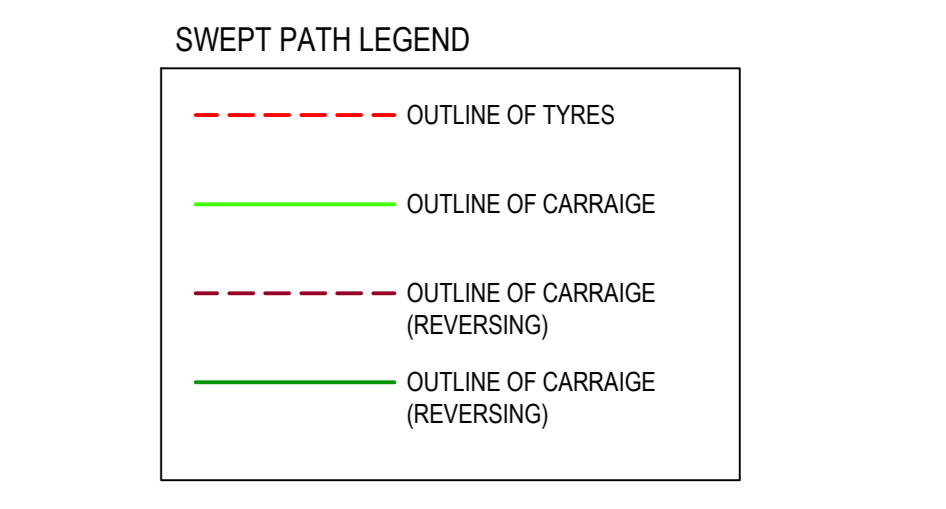
Drawing Title: PROPOSED VEHICLE AUTOTRACKS - REFUSE VEHICLE

Drawn By: BB  
Checked By: PD  
Approved By: DOB  
Date: SEPT 2023  
Scale: 1:200  
Sheet Size: A0  
Project Number: DOBA2327  
Drawing Number: 2327-DOB-ARD-SI-DR-C-0072  
Status Code: S2  
Rev Number: P04

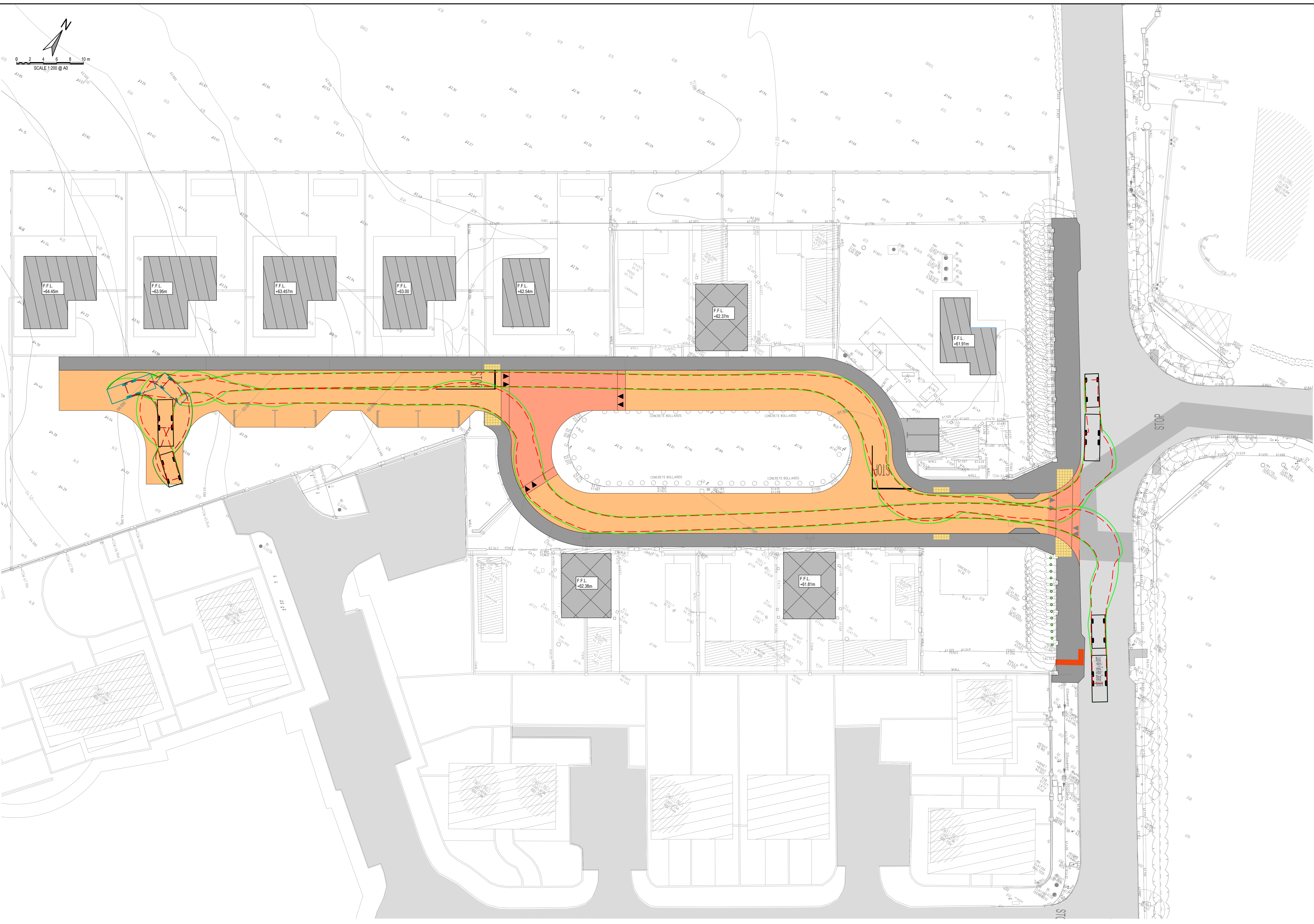


**NOTES:**

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-ARD-SI-DR-C-0001 & 0002
- REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEER'S DRAWINGS AND SPECIFICATIONS
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE RENOVATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAIL DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



**VEHICLE DETAILS**

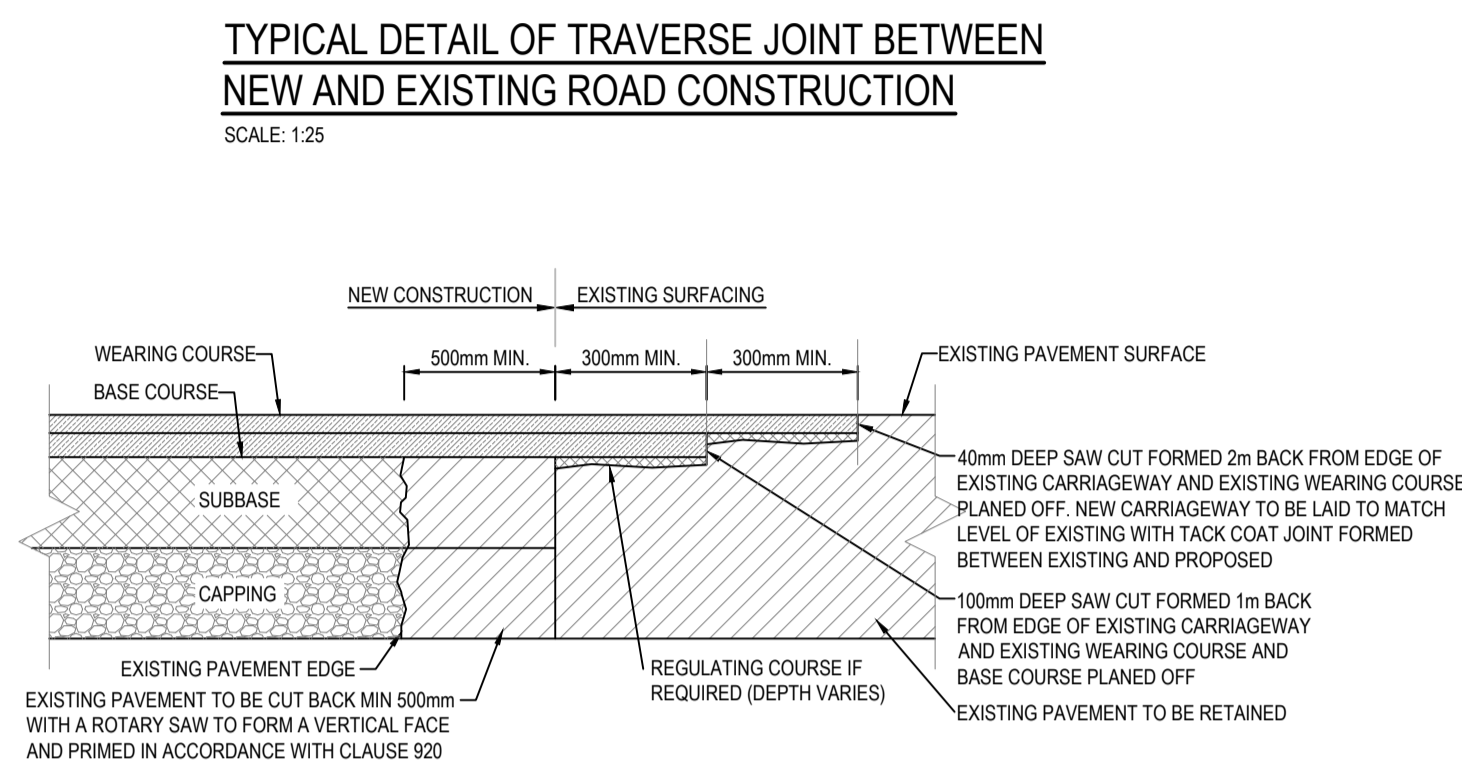
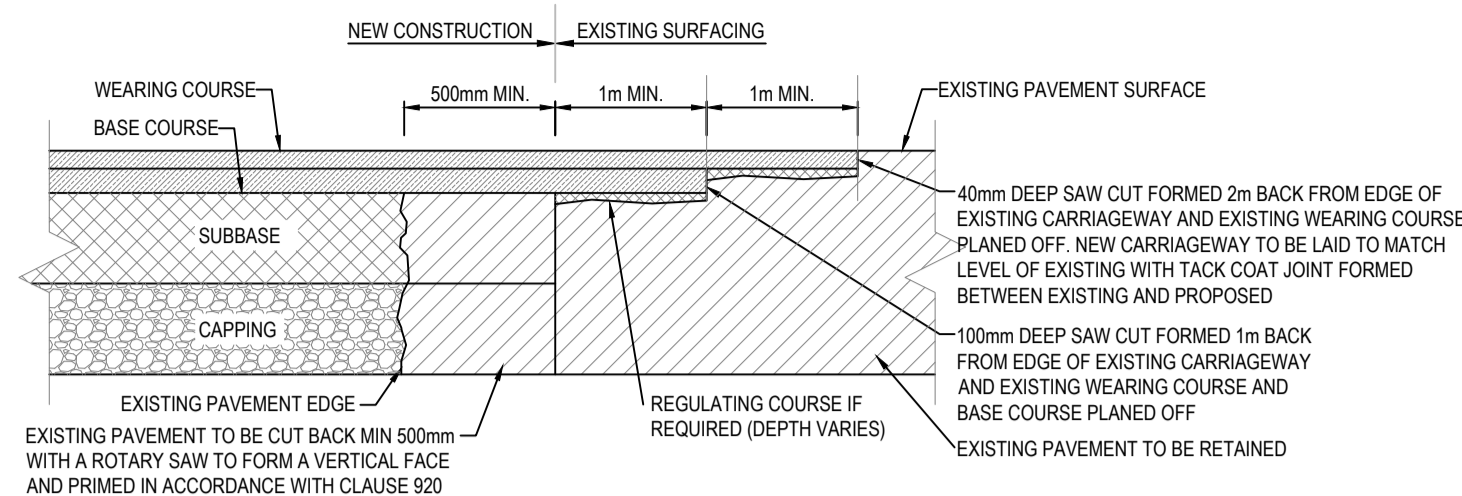


**4x4 W/CARAVAN SWEPT PATH ANALYSIS**  
SCALE 1:200

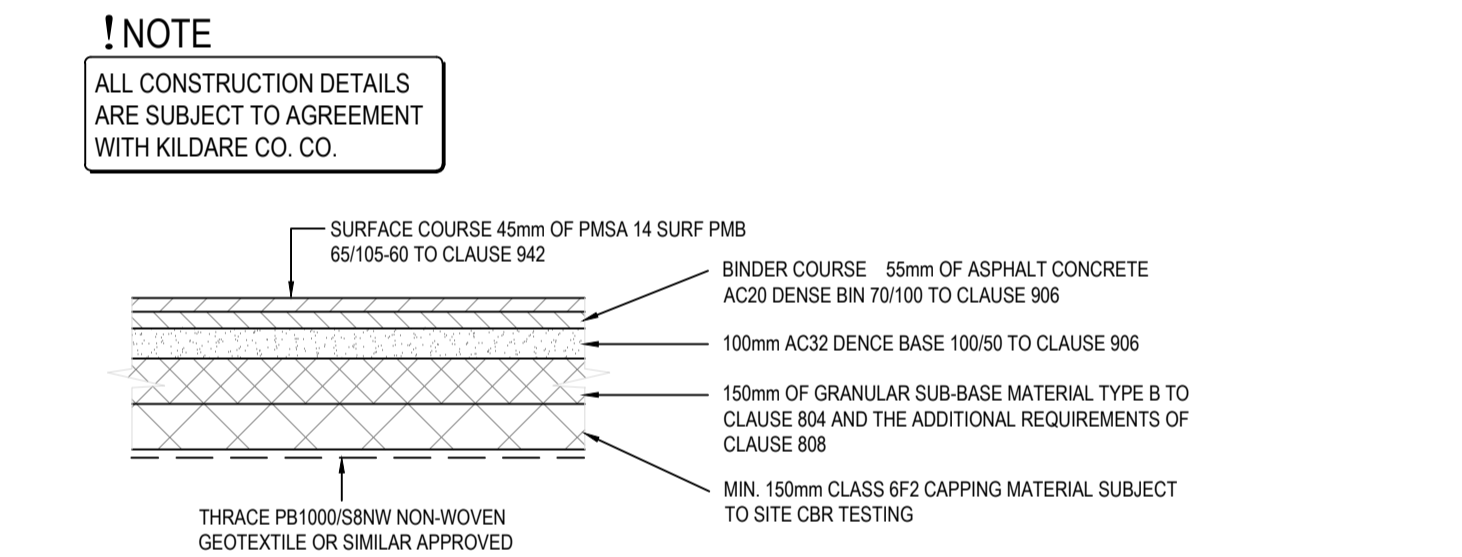
**ISSUED FOR PLANNING**

S2.P02	ISSUED FOR PLANNING	16.10.2024	BB	PD
S2.P01	ISSUED FOR PLANNING	30.09.2024	BB	PD
Rev.	Note	Date	Drawn	Check
<p><b>DONNACHADH O'BRIEN &amp; ASSOCIATES CONSULTING ENGINEERS</b></p> <p>UNIT 5C ELM HOUSE MILLENSTUTE PARK NAAS CO. KILDARE</p> <p>PHONE: +353 45 964 042 INFO@DOBRIENENGINEERS.IE WWW.DOBRIENENGINEERS.IE</p>				
Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES				
Project: ANDREW HALTING SITE, ATHY, CO. KILDARE				
Drawing Title: PROPOSED VEHICLE AUTOTRACKS - CARAVAN				
Drawn By:	Checked By:	Approved By:	Date:	Scale:
BB	PD	DOB	SEPT 2023	1:200
Project Number:	Drawing Number:	Status Code:	Rev Number:	
DOBA2327	2327-DOB-ARD-SI-DR-C-0073	S2	P02	

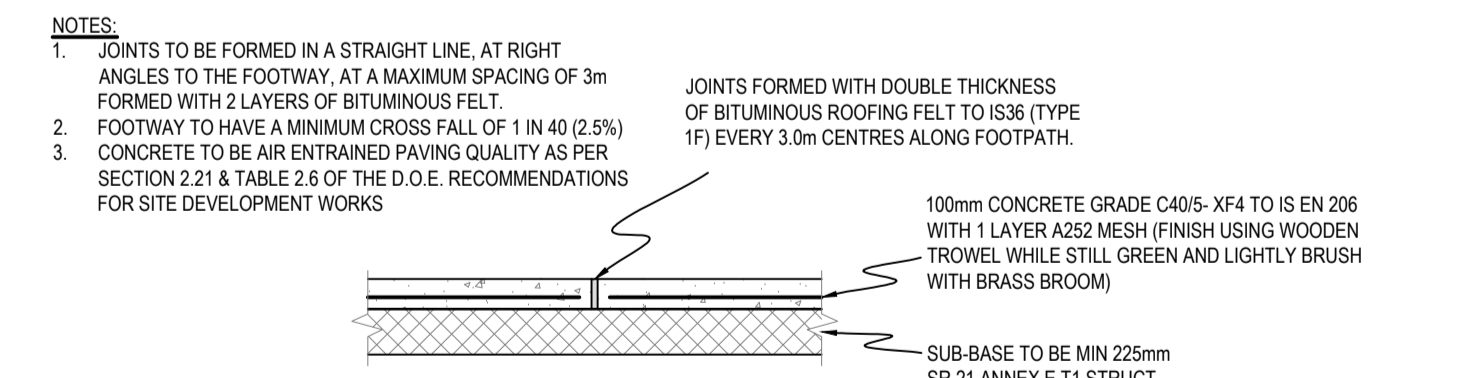




**TYPICAL DETAIL OF LONGITUDINAL JOINT BETWEEN NEW AND EXISTING ROAD CONSTRUCTION**  
SCALE: 1:25



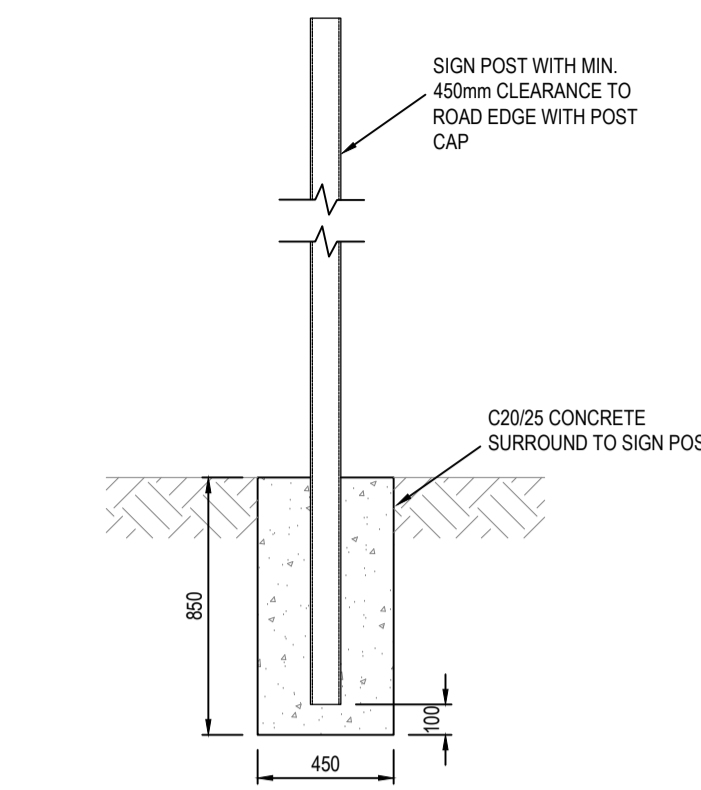
**TYPICAL NEW ROAD DETAIL (TYPE 16.0m)**  
SCALE: 1:25



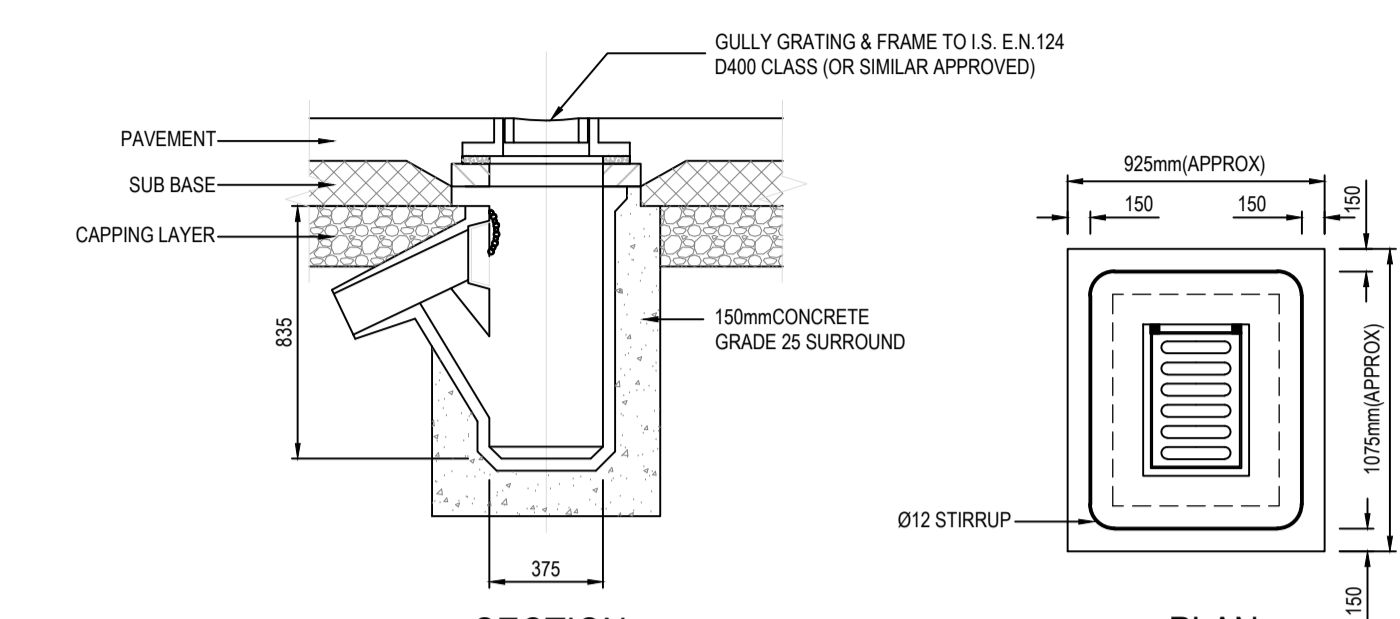
**TYPICAL NEW FOOTPATH**  
SCALE: 1:25

**!NOTE**  
ALL CONSTRUCTION DETAILS ARE SUBJECT TO AGREEMENT WITH KILDARE CO. CO.

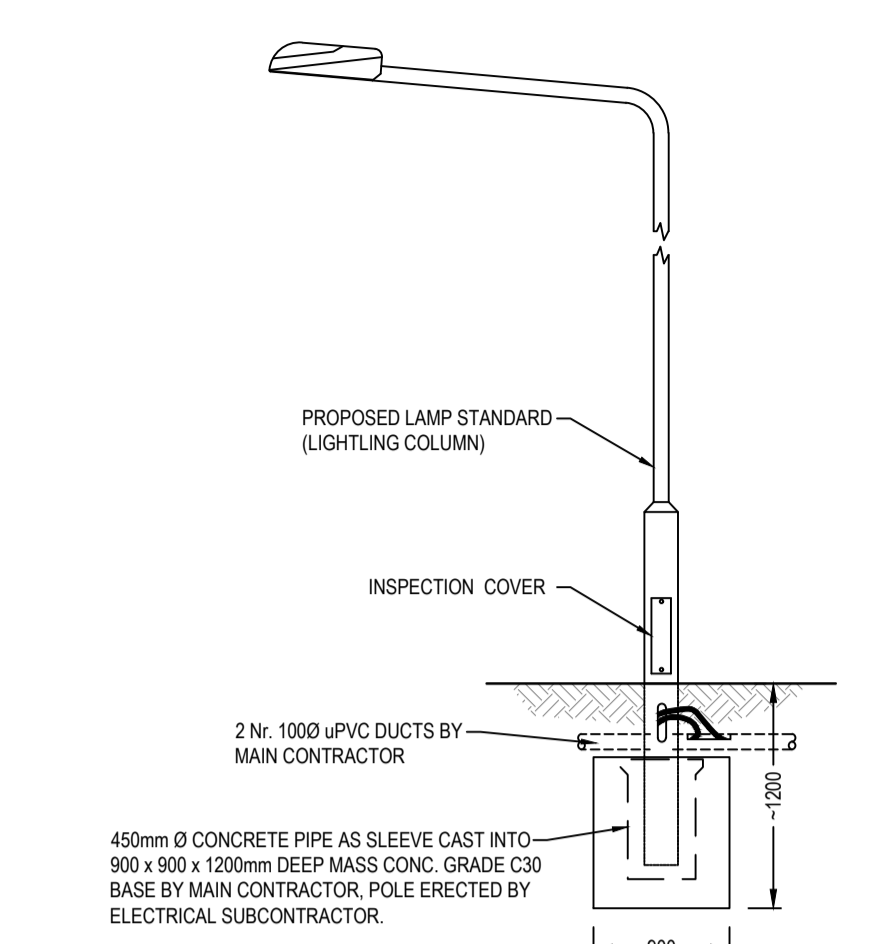
- NOTES:**
- JOINTS TO BE FORMED IN A STRAIGHT LINE, AT RIGHT ANGLES TO THE FOOTWAY, AT A MAXIMUM SPACING OF 3m FORMED WITH 2 LAYERS OF BITUMINOUS FELT.
  - FOOTWAY TO HAVE A MINIMUM CROSS FALL OF 1 IN 40 (2.5%)
  - CONCRETE TO BE AIR ENTRAINMENT PAVING QUALITY AS PER SECTION 2.21 & TABLE 2.6 OF THE D.O.E. RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS



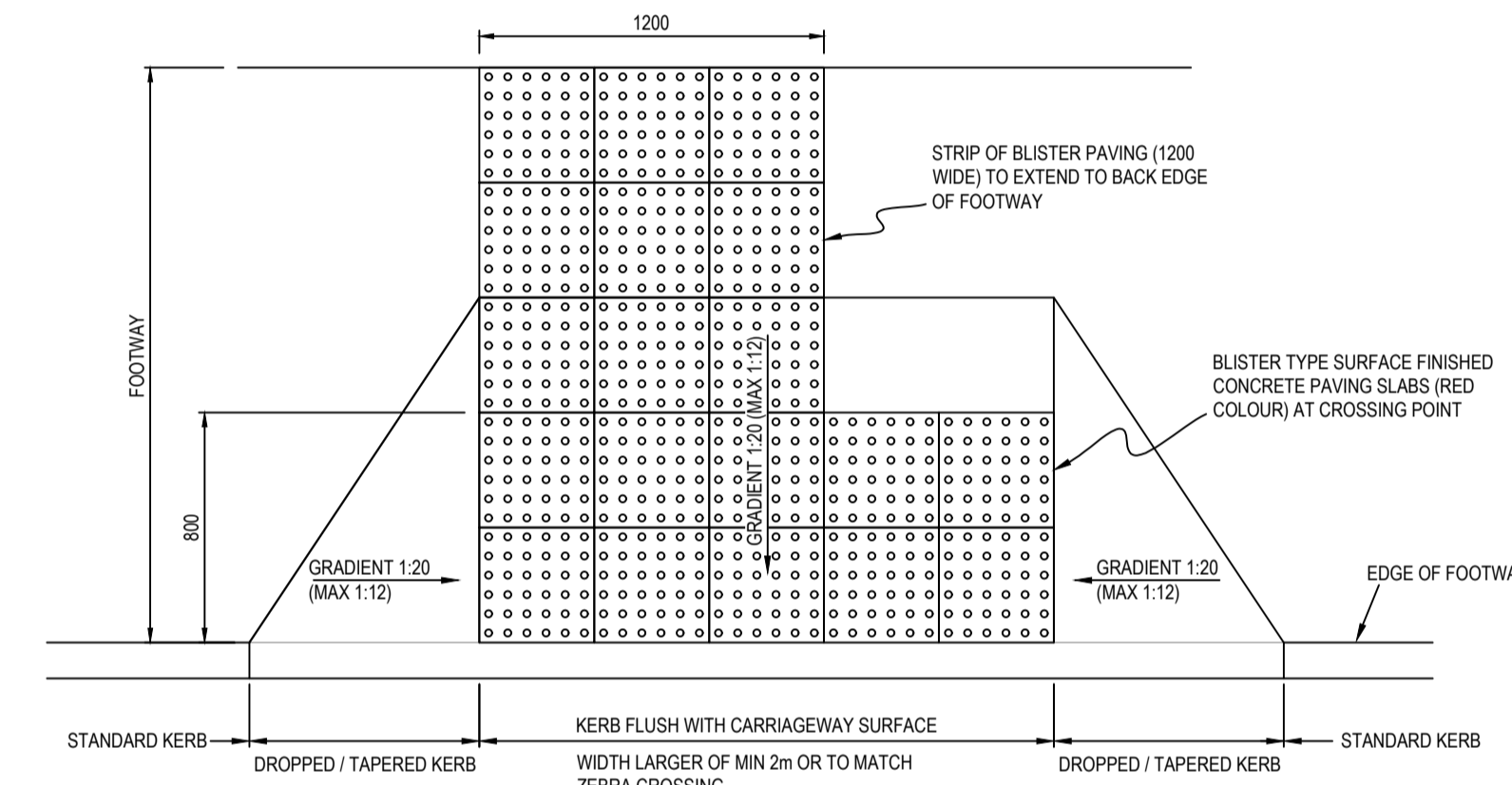
**TYPICAL SIGNPOST FOUNDATION DETAIL**  
SCALE: 1:25



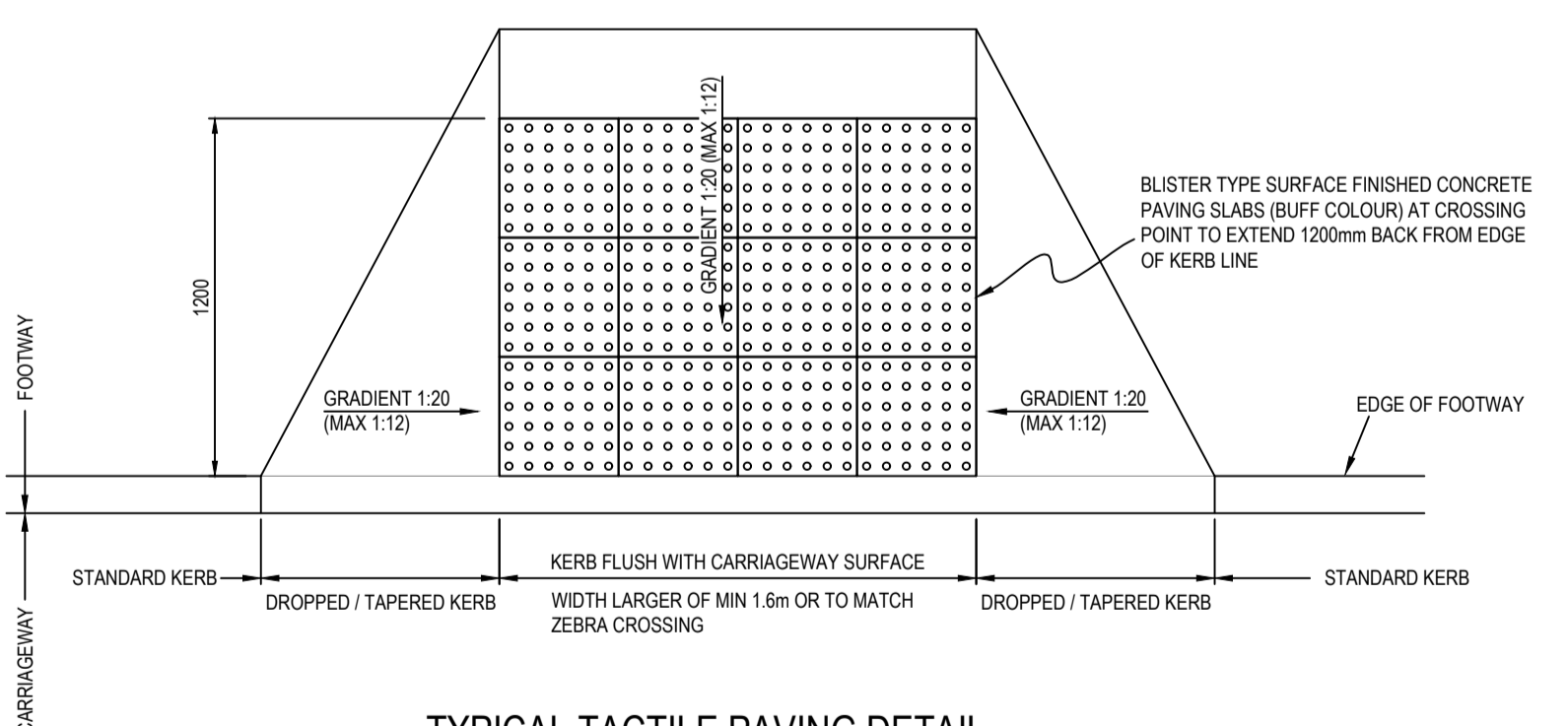
**PRECAST CONCRETE ROAD GULLY**  
SCALE: 1:25



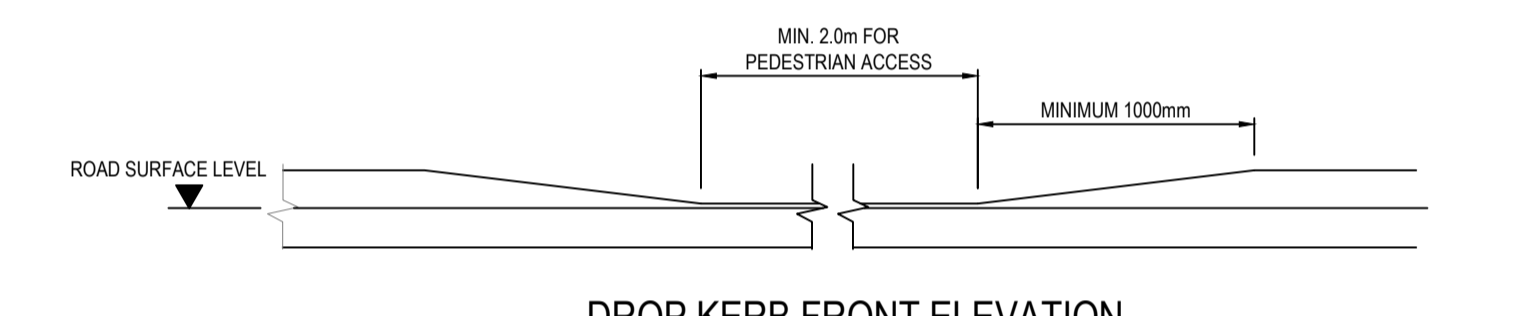
**SECTION THROUGH TYPICAL LAMP STANDARD**  
SCALE: 1:25



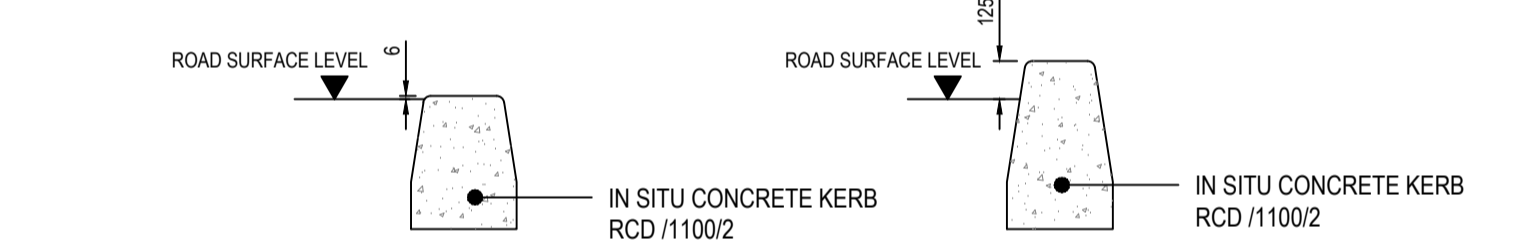
**TYPICAL TACTILE PAVING DETAIL (INSET CONTROLLED CROSSING)**  
SCALE: 1:25



**TYPICAL TACTILE PAVING DETAIL (IN-LINE UNCONTROLLED CROSSING)**  
SCALE: 1:25

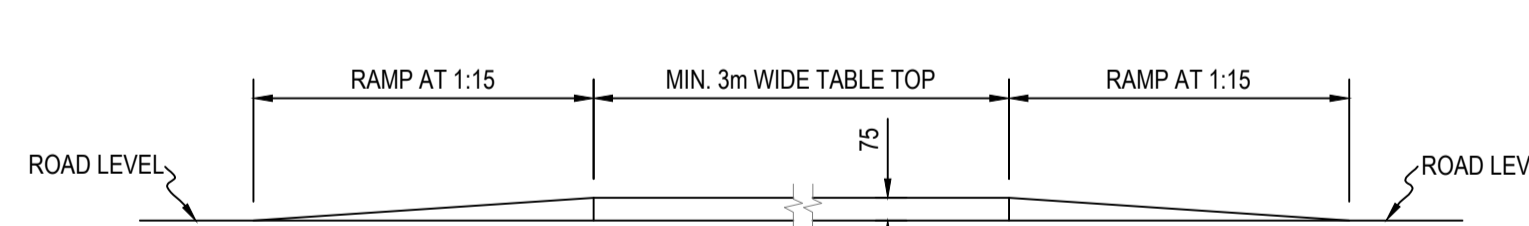


**DROP KERB FRONT ELEVATION**  
SCALE: NTS



**DROP KERB DETAIL**  
SCALE: NTS

**KERB DETAIL**  
SCALE: NTS



**TYPICAL GEOMETRY OF TABLE TOP (FOR USE AT INTERNAL PEDESTRIAN CROSSINGS)**  
SCALE: 1:25

**ISSUED FOR PLANNING**

S2.P01	ISSUED FOR PLANNING	25.03.2024	BB	PD
Rev.	Note	Date	Drawn	Check

**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**

UNIT 3C  
ELM HOUSE  
MILLENNIUM PARK  
NAAS  
CO. KILDARE

P +353 45 984 042  
INFO@DOBAE  
WWW.DOB.AE

Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES

Project: ANDREW HALTING SITE, ATHY, CO. KILDARE

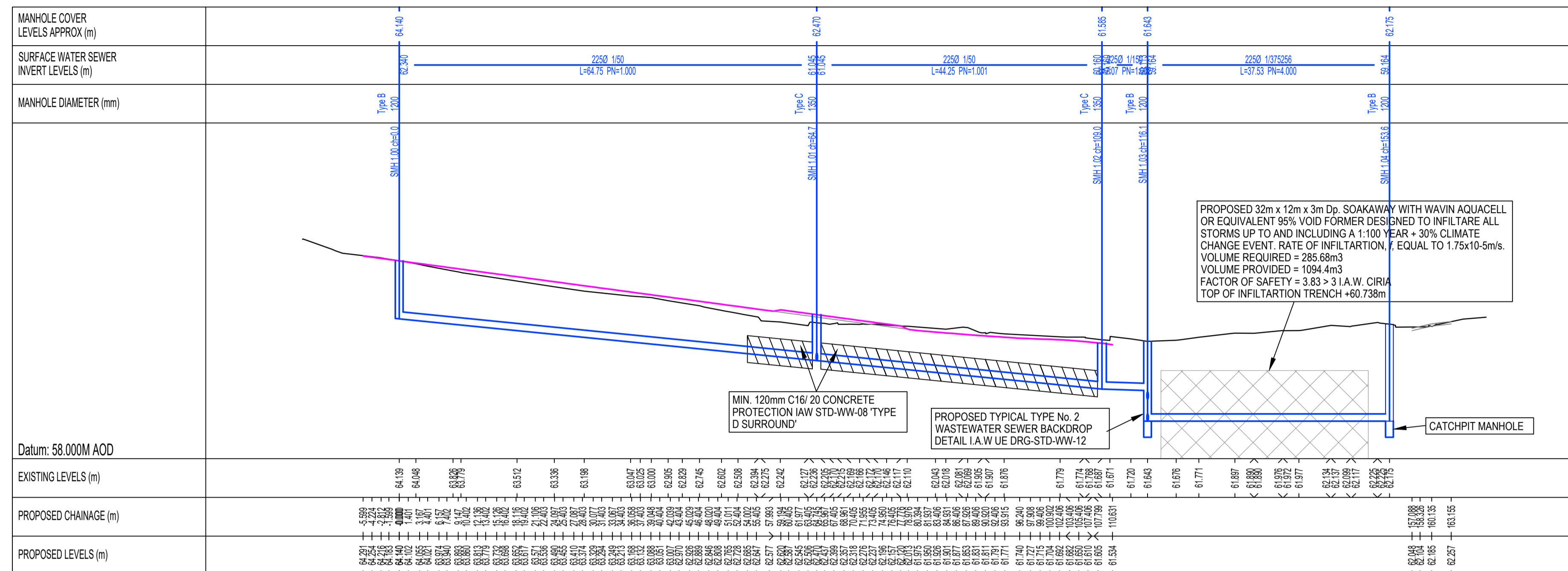
Drawing Title: PROPOSED TYPICAL SITEWORKS DETAILS

Drawn By: BB	Checked By: PD	Approved By: DOB	Date: DEC 2023	Scale: 1:25	Sheet Size: A1
Project Number: DOBA2327	Drawing Number: 2327-DOB-ARD-SI-DR-C-0110	Status Code: S2	Rev Number: P01		

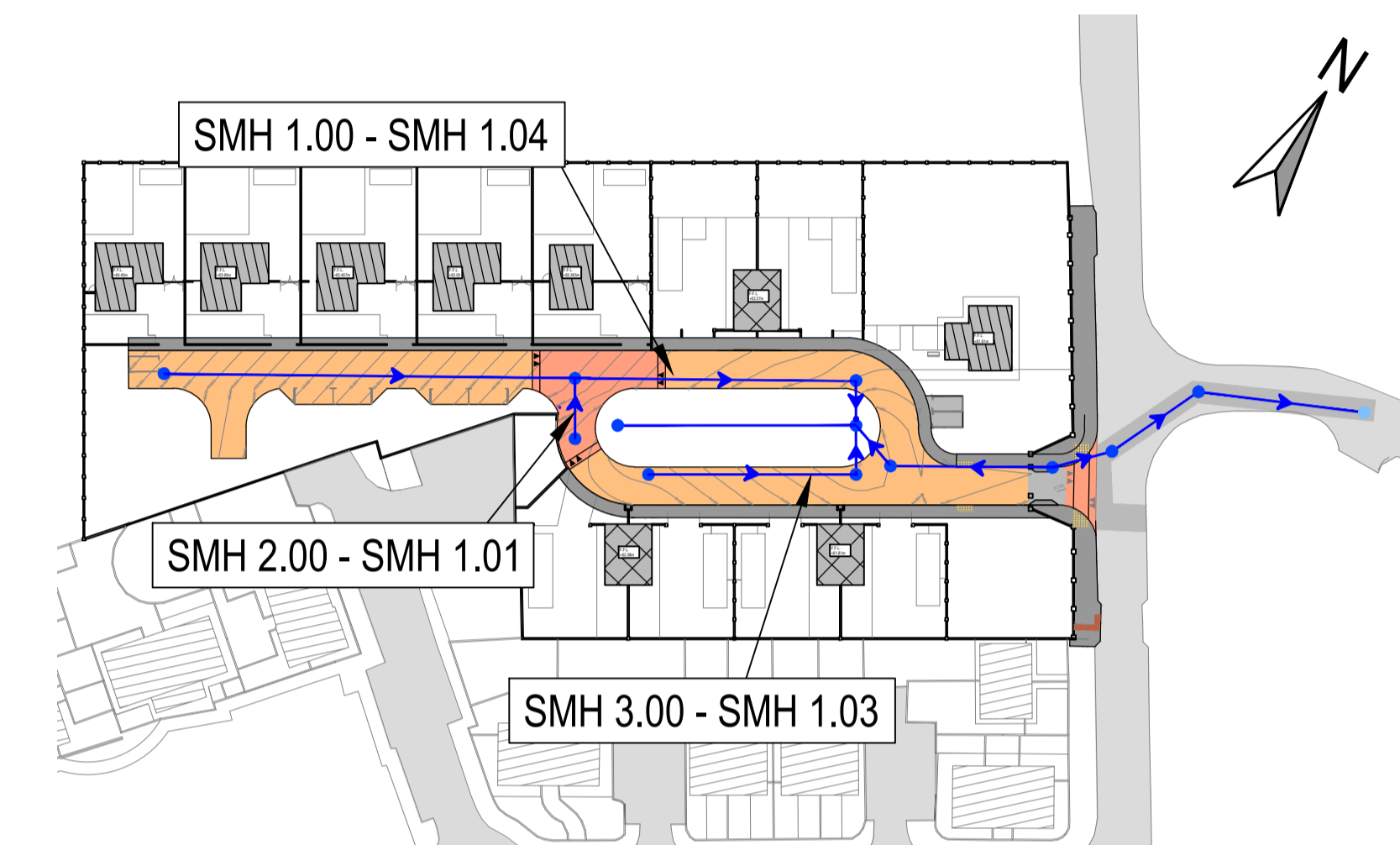


**NOTES:**

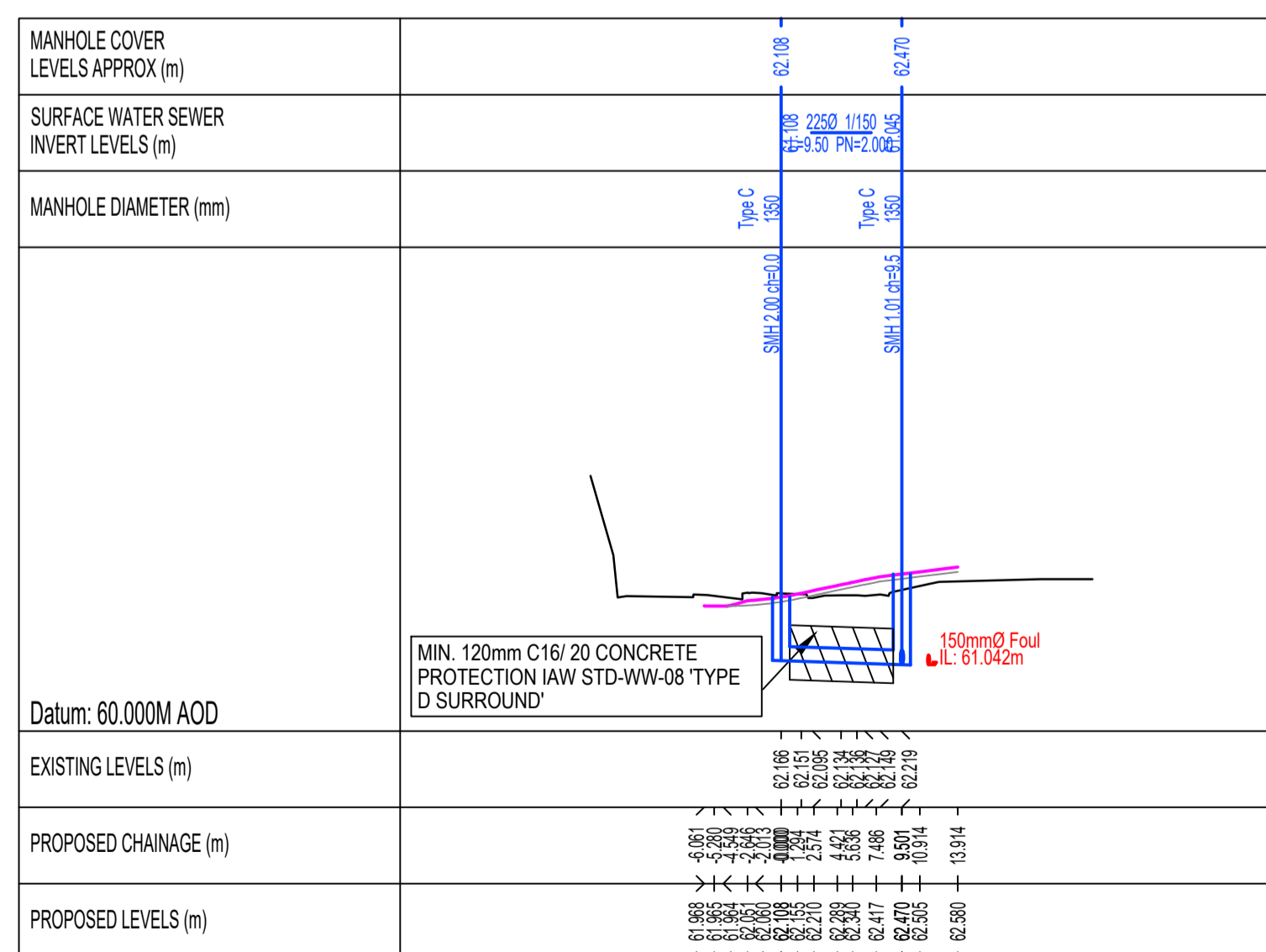
- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-XX-SI-DR-S-001 & S-002
- REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEERS DRAWINGS AND SPECIFICATIONS.
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE REINSTATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



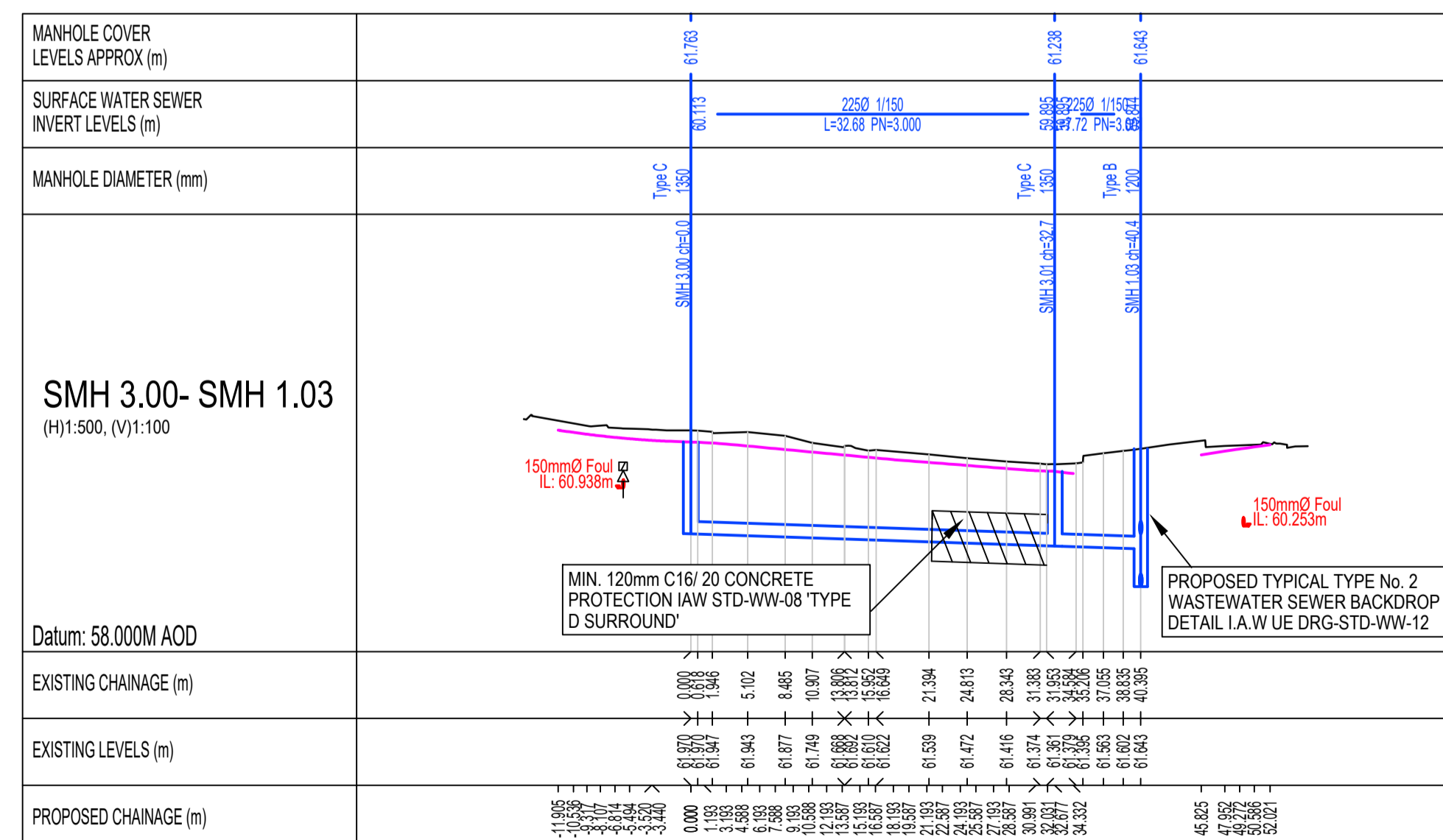
**PROPOSED LONGITUDINAL SECTION SMH 1.00 - SMH 1.04**  
SCALE 1:500



**KEY PLAN**  
SCALE 1:1000



**PROPOSED LONGITUDINAL SECTION SMH 2.00 - SMH 1.01**  
SCALE 1:500



**PROPOSED LONGITUDINAL SECTION SMH 3.00 - SMH 1.03**  
SCALE 1:500

**LEGEND:**

- PROPOSED SURFACE WATER
- PROPOSED GROUND/ROAD LEVEL
- EXISTING GROUND

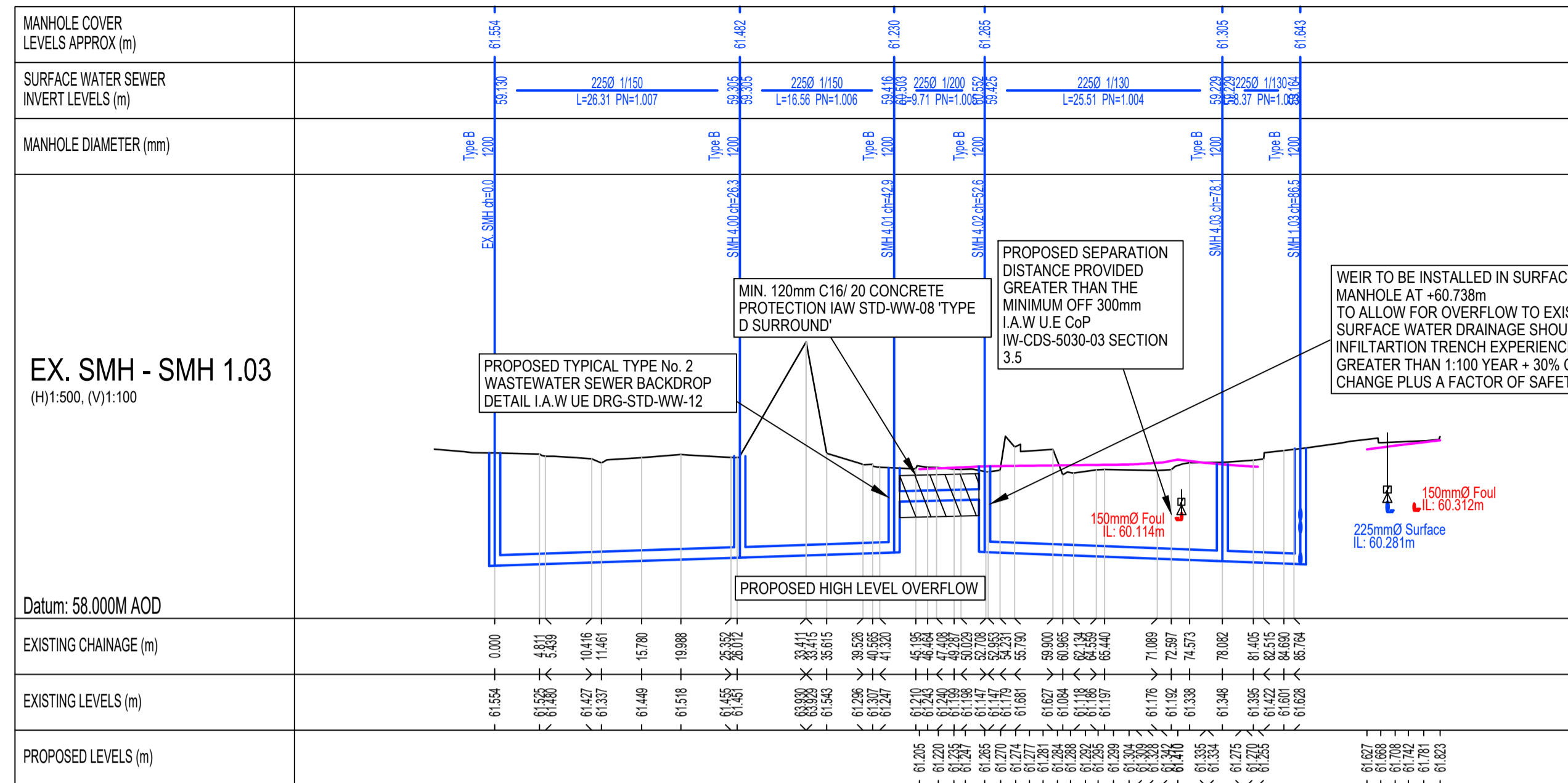
**ISSUED FOR PLANNING**

Rev.	Note	Date	Drawn	Check
S2.P03	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	15.12.2023	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD

**DONNACHADH O'BRIEN & ASSOCIATES CONSULTING ENGINEERS**  
UNIT 5C ELM HOUSE MILLENNIUM PARK NAAS CO. KILDARE  
PHONE: +353 45 984 042  
WWW.DOBRIEN-ENGINEERS.IE

Client:	KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES			
Project:	ARDREW HALTING SITE, ATHY, CO. KILDARE			
Drawing Title:	PROPOSED SW LONGITUDINAL SECTIONS SHEET 1			
Drawn By:	Checked By:	Approved By:	Date:	Scale:
BB	PD	PD	NOV' 23	1:500
Project Number:	DOBA2327	Drawing Number:	2327-DOB-ARD-SI-DR-C-0140	Status Code:
			S2	Rev Number:
				P03

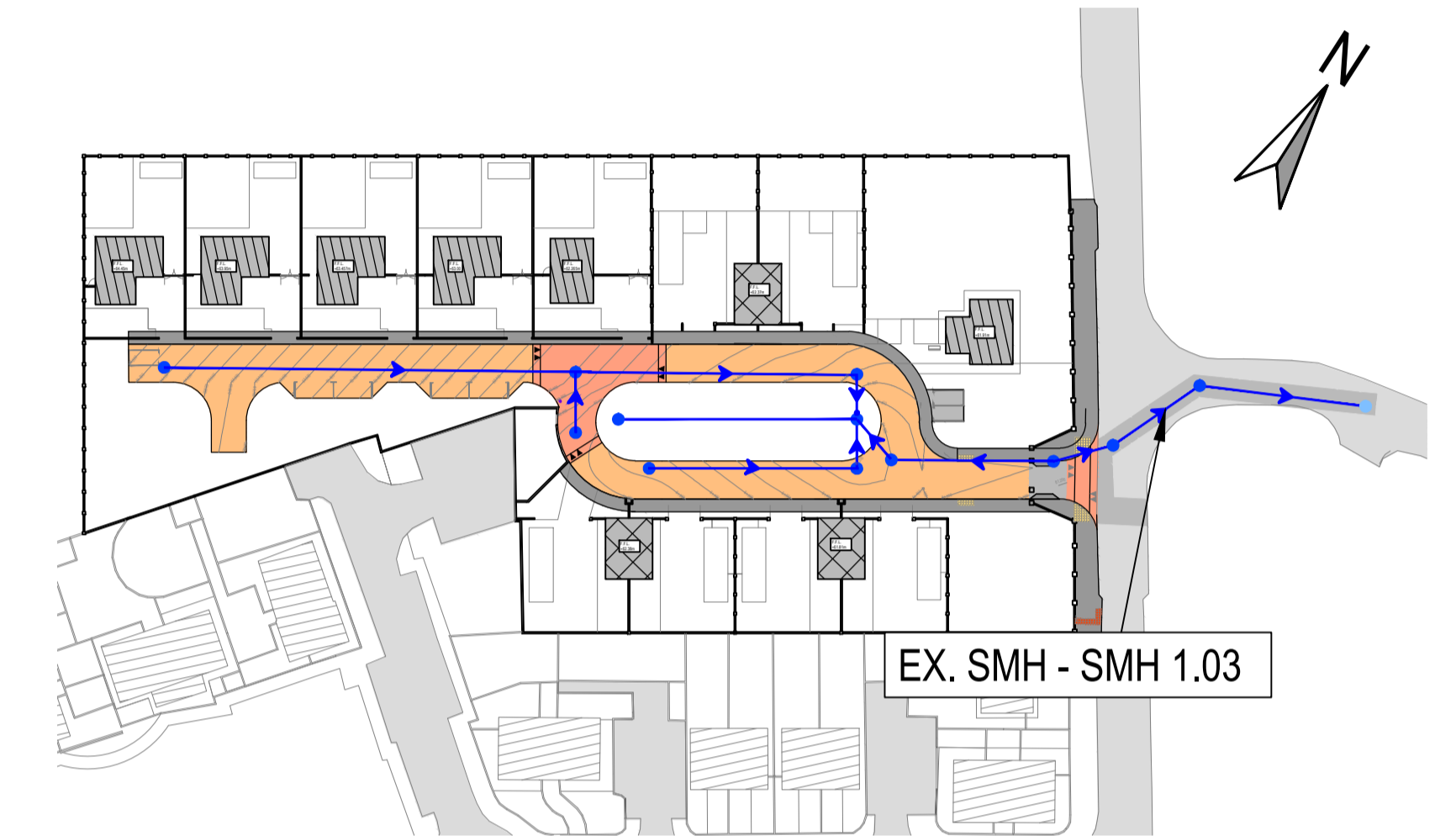




PROPOSED LONGITUDINAL SECTION EX. SMH - SMH 1.03  
SCALE 1:500

**NOTES:**

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2327-DOB-XX-SI-DR-S-0001 & S-0002
- REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEER'S DRAWINGS AND SPECIFICATIONS.
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE REINSTATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES



KEY PLAN  
SCALE 1:1000

**LEGEND:**

- PROPOSED SURFACE WATER
- PROPOSED GROUND/ ROAD LEVEL
- EXISTING GROUND

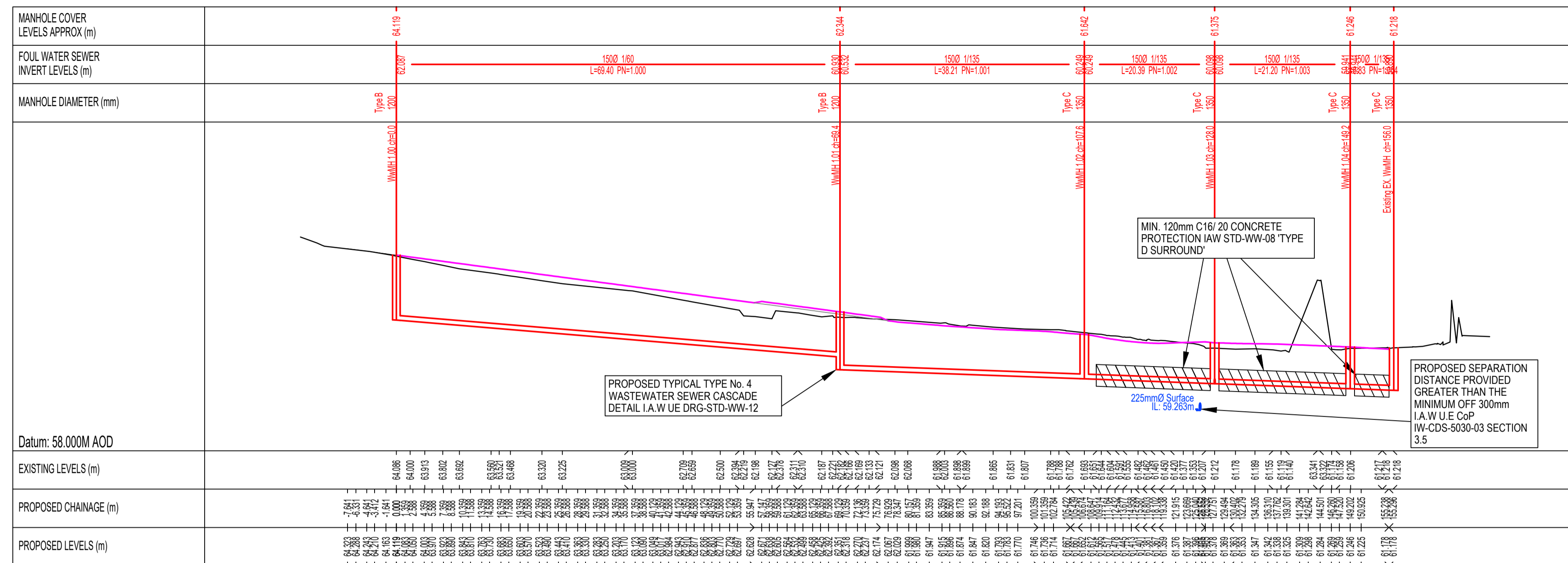
**ISSUED FOR PLANNING**

S2.P03	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	15.12.2023	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check

<b>DONNACHADH O'BRIEN</b> & ASSOCIATES CONSULTING ENGINEERS	UNIT 5C ELM HOUSE MILLENNIUM PARK NAAS CO. KILDARE	PHONE +353 45 984 042 INFO@DOBRIEN-ENGINEERS.IE WWW.DOBRIEN-ENGINEERS.IE
	Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES Project: ANDREW HALTING SITE, ATHY, CO. KILDARE	

Drawn By:	Checked By:	Approved By:	Date:	Scale:	Sheet Size:
BB	PD	PD	NOV 23	1:500	A1
Project Number:	Drawing Number:	Status Code:	Rev Number:		
DOBA2327	2327-DOB-ARD-SI-DR-C-0141	S2	P03		

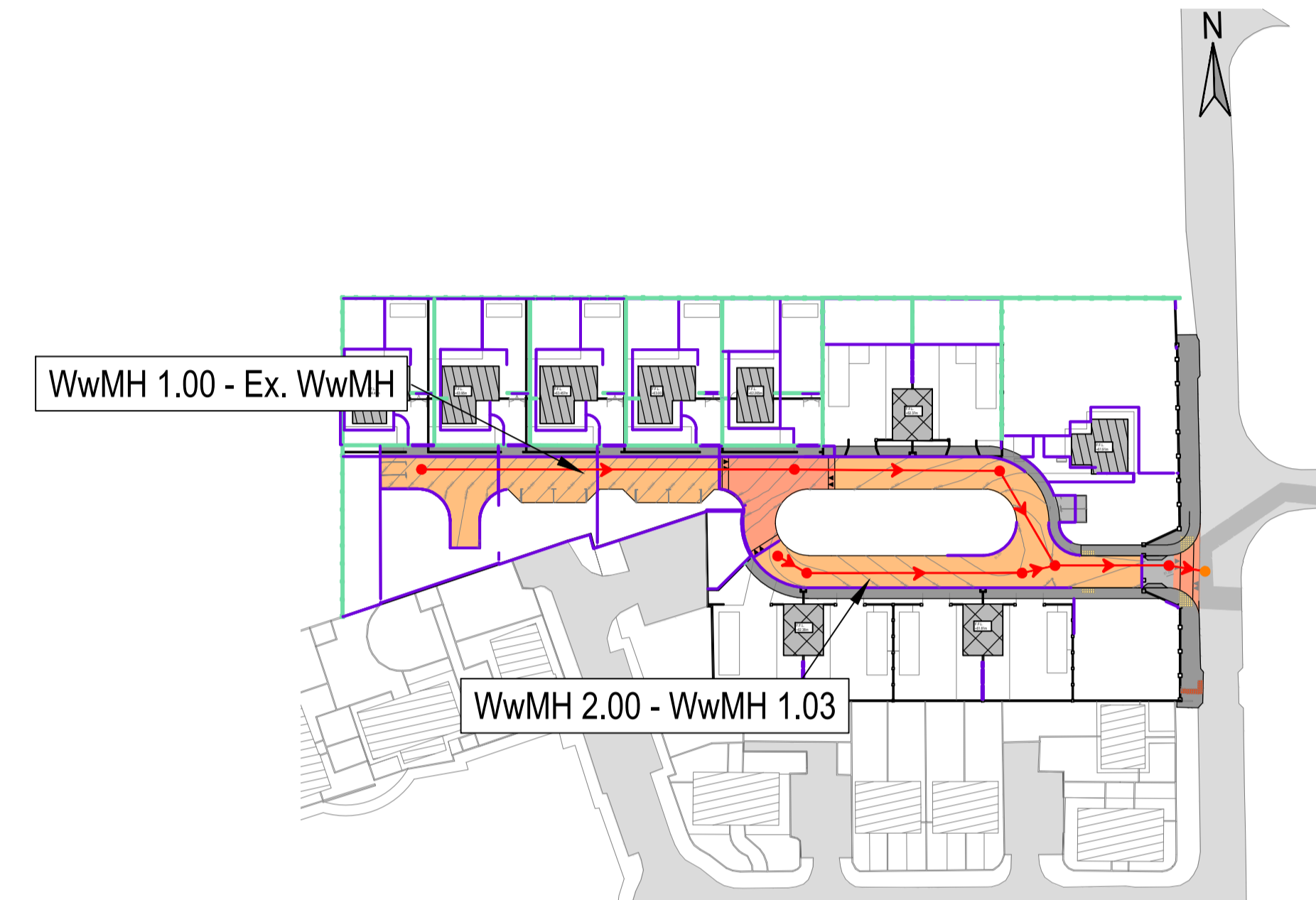




PROPOSED LONGITUDINAL SECTION WwMH 1.00 - Ex. WwMH  
SCALE 1:500

NOTES:

- FOR STANDARD DOBA NOTES REFER TO DRAWING 2326-DOB-XX-SI-DR-S-0001 & S-0002
- REFER TO ARCHITECTS DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEER'S DRAWINGS AND SPECIFICATIONS.
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- REFER TO SURVEY DRAWINGS FOR EXISTING SERVICES LAYOUTS AND MANHOLE INFORMATION
- ALL EXISTING SURFACES TO BE REINSTATED FOLLOWING DIVERSION OF SERVICES/CONSTRUCTION OF NEW SERVICES
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION
- CONTRACTOR TO ENSURE ALL WATER & WASTEWATER RELATED WORKS ARE IN ACCORDANCE WITH THE IRISH WATER WATER INFRASTRUCTURE & WASTEWATER INFRASTRUCTURE CODE OF PRACTICE & STANDARD DETAILS DOCUMENTS
- TESTING OF ALL GRAVITY SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE SECTION 4.10 TESTING OF GRAVITY SEWERS & MANHOLES

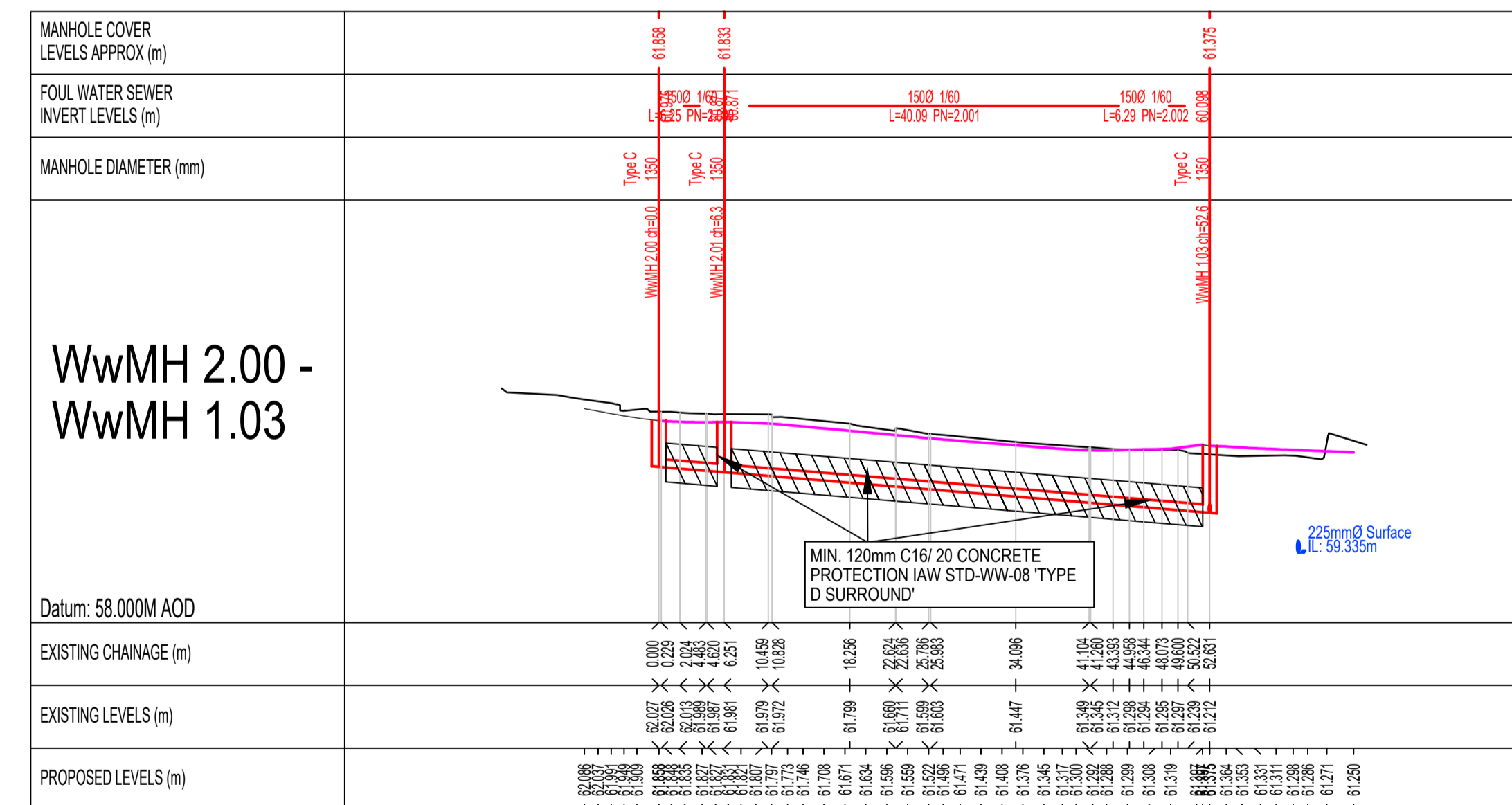


KEY PLAN  
SCALE 1:1000

LEGEND:

- PROPOSED SURFACE WATER
- PROPOSED FOUL WATER
- PROPOSED GROUND/ ROAD LEVEL
- EXISTING GROUND PROFILE

**ISSUED FOR PLANNING**



PROPOSED LONGITUDINAL SECTION WwMH 2.00- 1.07  
SCALE 1:500

S2.P03	ISSUED FOR PLANNING	25.03.2024	BB	PD
S2.P02	ISSUED FOR PLANNING	15.12.2023	BB	PD
S2.P01	ISSUED FOR INFORMATION	22.11.2023	BB	PD
Rev.	Note	Date	Drawn	Check

**DONNACHADH O'BRIEN**  
& ASSOCIATES CONSULTING ENGINEERS

UNIT 5C  
ELM HOUSE  
MILLENNIUM PARK  
NAAS  
CO. KILDARE

PHONE  
+353 45 984 042

INFO@DOBRIEN-ENGINEERS.IE  
WWW.DOBRIEN-ENGINEERS.IE

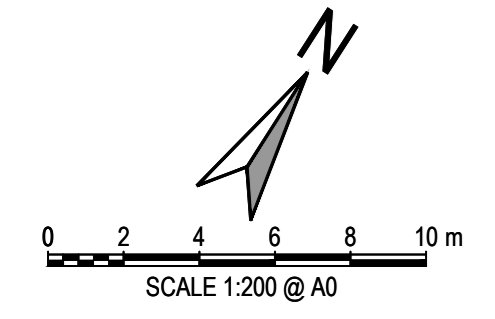
Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES

Project: ARDREW HALTING SITE, ATHY, CO. KILDARE

Drawing Title: PROPOSED WW LONGITUDINAL SECTIONS

Drawn By: BB	Checked By: PD	Approved By: PD	Date: NOV 23	Scale: 1:500	Sheet Size: A1
Project Number: DOBA2327	Drawing Number: 2327-DOB-ARD-SI-DR-C-0145	Status Code: S2	Rev Number: P03		



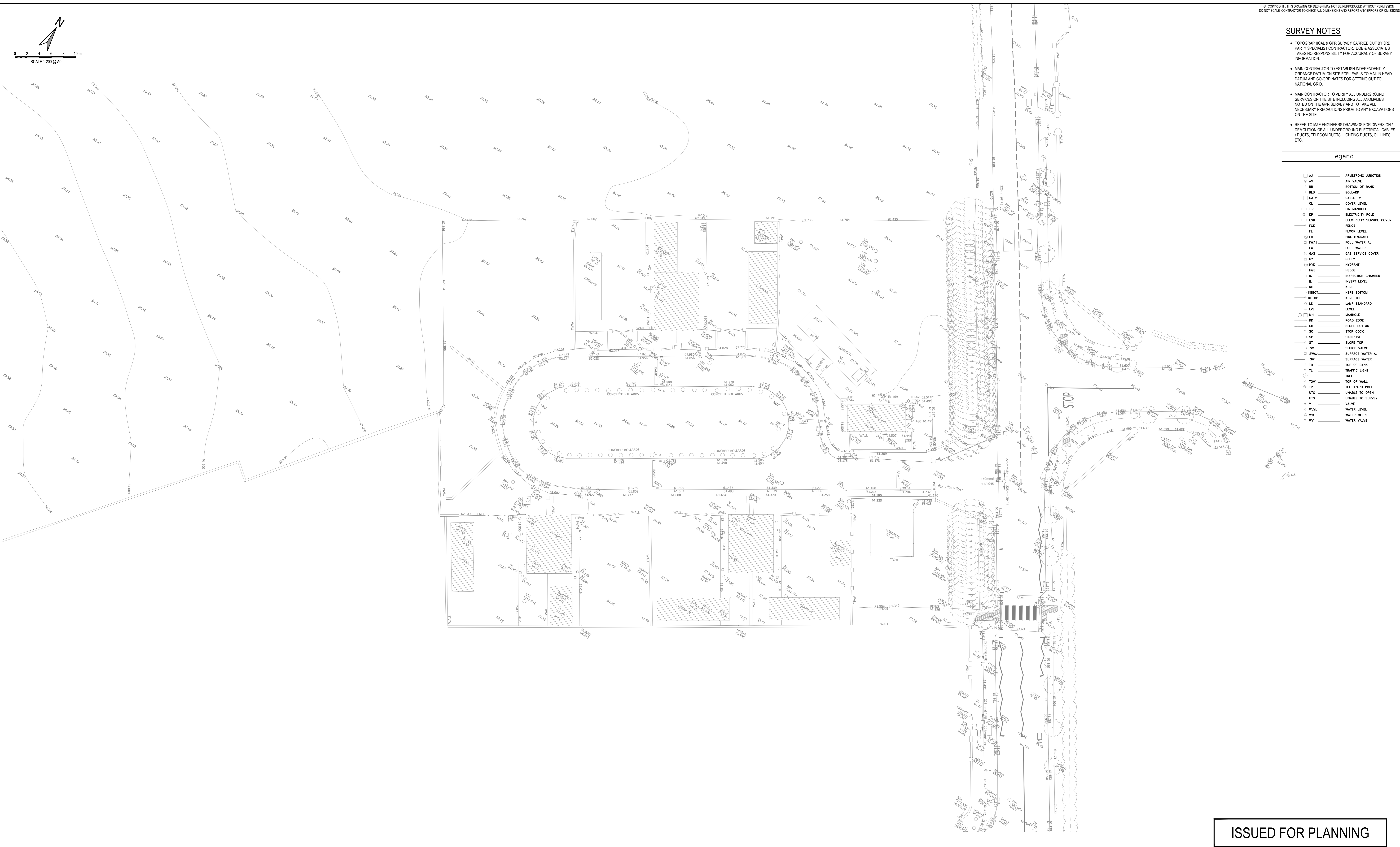


**SURVEY NOTES**

- TOPOGRAPHICAL & GPR SURVEY CARRIED OUT BY 3RD PARTY SPECIALIST CONTRACTOR. DOB & ASSOCIATES TAKES NO RESPONSIBILITY FOR ACCURACY OF SURVEY INFORMATION.
- MAIN CONTRACTOR TO ESTABLISH INDEPENDENTLY ORDNANCE DATUM ON SITE FOR LEVELS TO MALIN HEAD DATUM AND CO-ORDINATES FOR SETTING OUT TO NATIONAL GRID.
- MAIN CONTRACTOR TO VERIFY ALL UNDERGROUND SERVICES ON THE SITE INCLUDING ALL ANOMALIES NOTED ON THE GPR SURVEY AND TO TAKE ALL NECESSARY PRECAUTIONS PRIOR TO ANY EXCAVATIONS ON THE SITE.
- REFER TO M&E ENGINEERS DRAWINGS FOR DIVERSION / DEMOLITION OF ALL UNDERGROUND ELECTRICAL CABLES / DUCTS, TELECOM DUCTS, LIGHTING ELECTRICAL LINES ETC.

**Legend**

- AJ — ARMSTRONG JUNCTION
- AV — AIR VALVE
- ⊖ BB — BOTTOM OF BANK
- BLD — BOLLARD
- CATV — CABLE TV
- CL — COVER LEVEL
- ER — EIR MANHOLE
- ⊙ EP — ELECTRICITY POLE
- ESB — ELECTRICITY SERVICE COVER
- FCE — FENCE
- FL — FLOOR LEVEL
- ⊙ FH — FIRE HYDRANT
- FWAJ — FOUL WATER AJ
- FW — FOUL WATER
- GAS — GAS SERVICE COVER
- ⊙ GY — GULLY
- ⊙ HYD — HYDRANT
- HEC — HEDGE
- IC — INSPECTION CHAMBER
- IL — INVERT LEVEL
- KB — KERB
- KBBOT — KERB BOTTOM
- KBTOP — KERB TOP
- LS — LAMP STANDARD
- LVL — LEVEL
- MH — MANHOLE
- RD — ROAD EDGE
- SB — SLOPE BOTTOM
- SC — STOP COCK
- SP — SIGNPOST
- ST — SURFACE TOP
- SW — SLURGE VALVE
- SWAJ — SURFACE WATER AJ
- SW — SURFACE WATER
- TB — TOP OF BANK
- TL — TRAFFIC LIGHT
- T — TREE
- TOW — TOP OF WALL
- TP — TELEGRAPH POLE
- UTO — UNABLE TO OPEN
- UTS — UNABLE TO SURVEY
- V — VALVE
- VWL — WATER LEVEL
- WM — WATER METRE
- WV — WATER VALVE



**ISSUED FOR PLANNING**

S2.P02 ISSUED FOR PLANNING		25.03.2024	BB	PD
S2.P01 ISSUED FOR INFORMATION		22/11/2023	BB	PD
Rev.	Note	Date	Drawn	Check
<p><b>DONNACHADH O'BRIEN &amp; ASSOCIATES CONSULTING ENGINEERS</b></p> <p>Client: KILDARE COUNTY COUNCIL ARCHITECTURAL SERVICES                  Project: ANDREW HALTING SITE, ATHY, CO. KILDARE                  Drawing Title: EX. SITE LAYOUT</p> <p>Drawn By: BB                  Checked By: PD                  Approved By: DOB                  Date: OCT 2023                  Scale: 1:200                  Sheet Size: A0                  Project Number: 2023-003-ARD-SI-DR-C-001                  Status Code: S2                  Rev Number: P02</p> <p>UNIT 5/C                  ELM HOUSE                  MILLENSTOWN PARK                  NAAS                  CO. KILDARE</p> <p>PHONE:                  +353 45 964 042                  INFO@DOBRIENENGINEERS.IE                  WWW.DOBRIENENGINEERS.IE</p>				