

This drawing should not be scaled. Dimensions to be verified on site.
 Any discrepancies should be referred to the Engineer prior to work being put in hand.
 This drawing is the property of Waterman Moylan Consulting Engineers Limited and is issued on the condition that it is not copied, reproduced, retained or disclosed to any unauthorized person, either wholly or in part without the consent in writing of Waterman Moylan Consulting Engineers Limited.
 Block S East Point Business Park Dublin D03 H3F4 Ireland t +353 1 664 8900

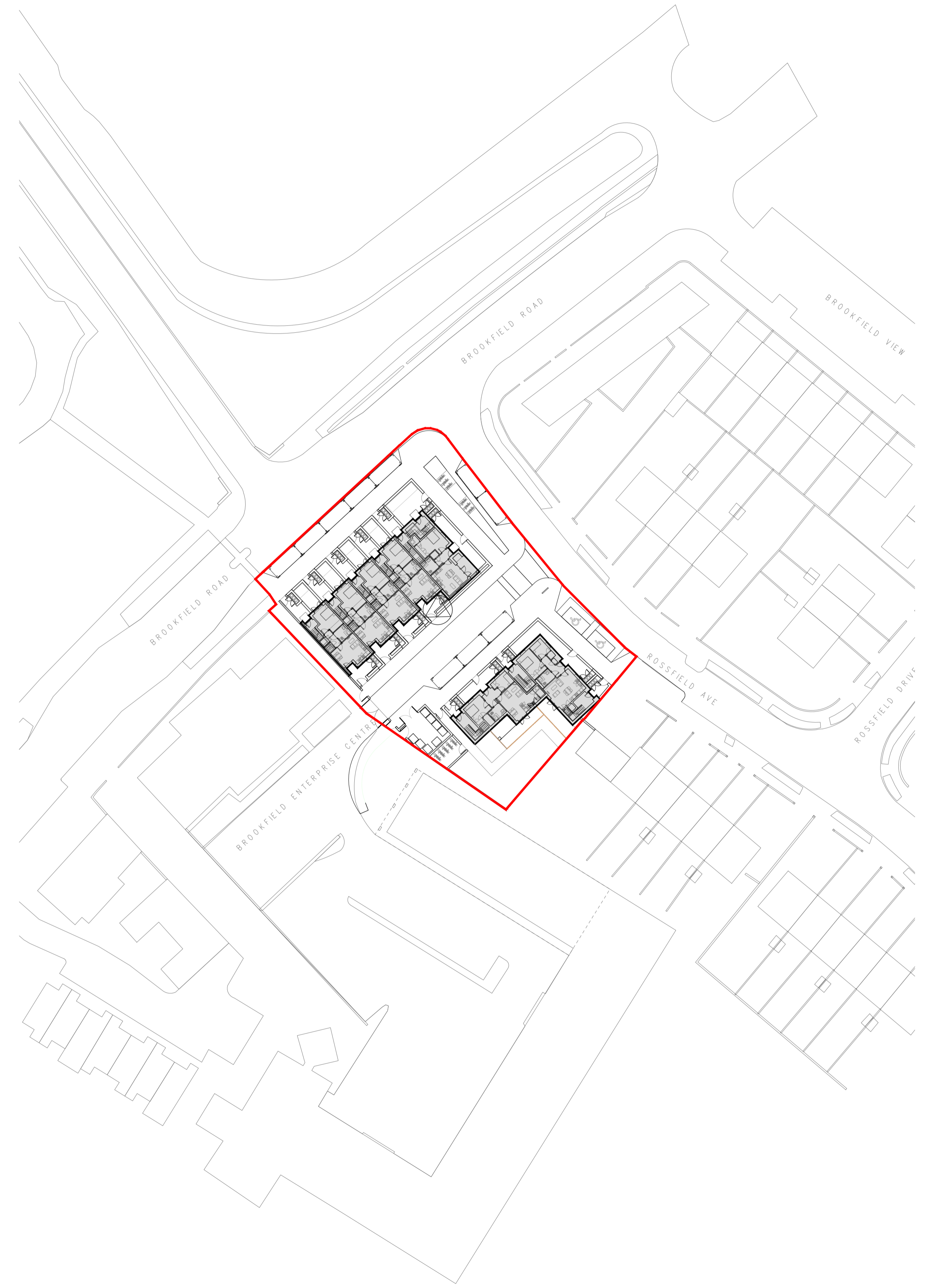
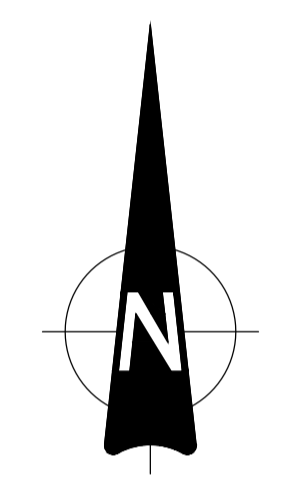
- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

SITE LAYOUT TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS

— Site Boundary

ITM Centre Point Co-ordinate:
 X,Y = 706425, 727665

OSI Licence No:
 3389-14



PROPOSED SITE LOCATION MAP
 SCALE 1:500



PROPOSED SITE LOCATION AREAL MAP
 SCALE 1:1000

PI1	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK

Amendments	
Project	SOCIAL HOUSING AT ROSSFIELD, TALLAGHT
Title	PROPOSED SITE LOCATION MAP
Client	SOUTH DUBLIN CITY COUNCIL



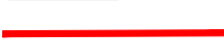
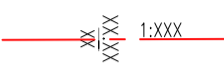


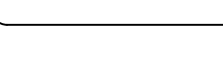
BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD,
 DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900
 Email: info@waterman-moylan.ie www.waterman-moylan.ie

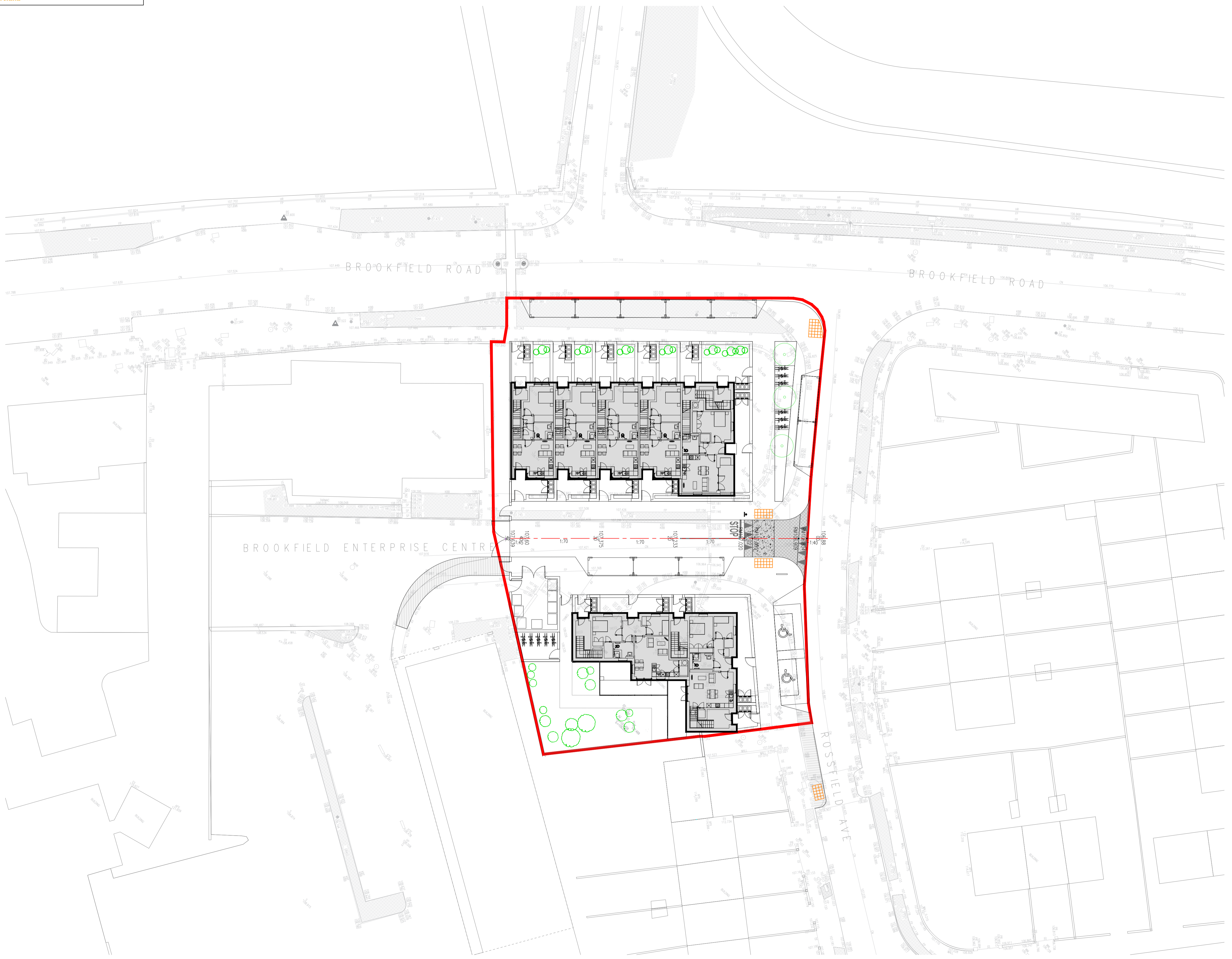
Status			
PLANNING			
Designed By	Approved	Waterman Ref	23-044
Drawn By	Date	Scales @ A1	AS SHOWN
MS	DEC. 2023		
Project	Originator	Volume	Level
BRFD - WMC - ZZ - 00 - GA - P - 0010			
		Role	Number
			Revision
			P01

Drawing Location: M:\Projects\32023-04 - Brookfield - Road Drawings\Waterman Moylan\Civil\Planning\Autocad Drawings\BRFD - WMC - ZZ - 00 - GA - P - 0010 - Proposed Site Location Map.dwg
 Date: Dec 11, 2023 11:10 AM

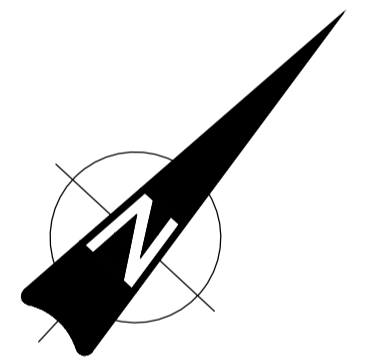
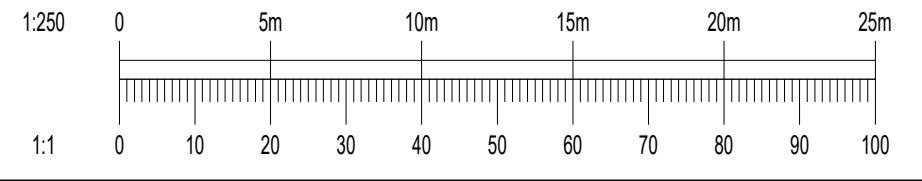
- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

LEGEND

-  PROPOSED SITE BOUNDARY
-  PROPOSED ROAD LEVELS, GRADIENT AND CHAINAGE
-  PROPOSED SIGNAGE POLE
-  PROPOSED TACTILE PAVING
-  PROPOSED RAMP, WITH ASPHALT/ CONCRETE SURFACE FINISHES

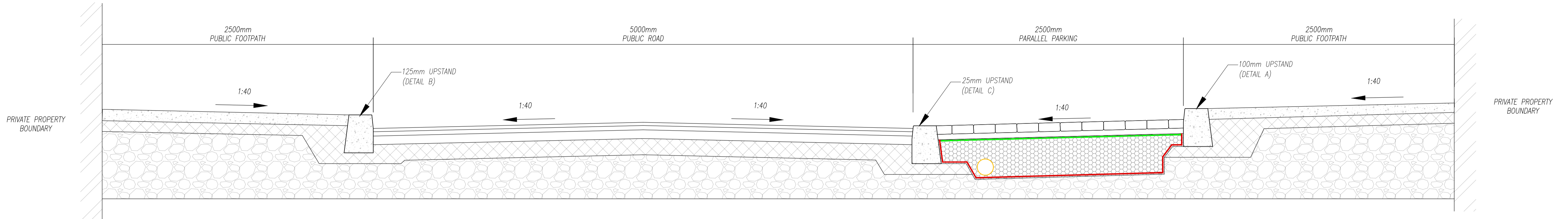


PROPOSED GENERAL ARRANGEMENT
 SCALE 1:250

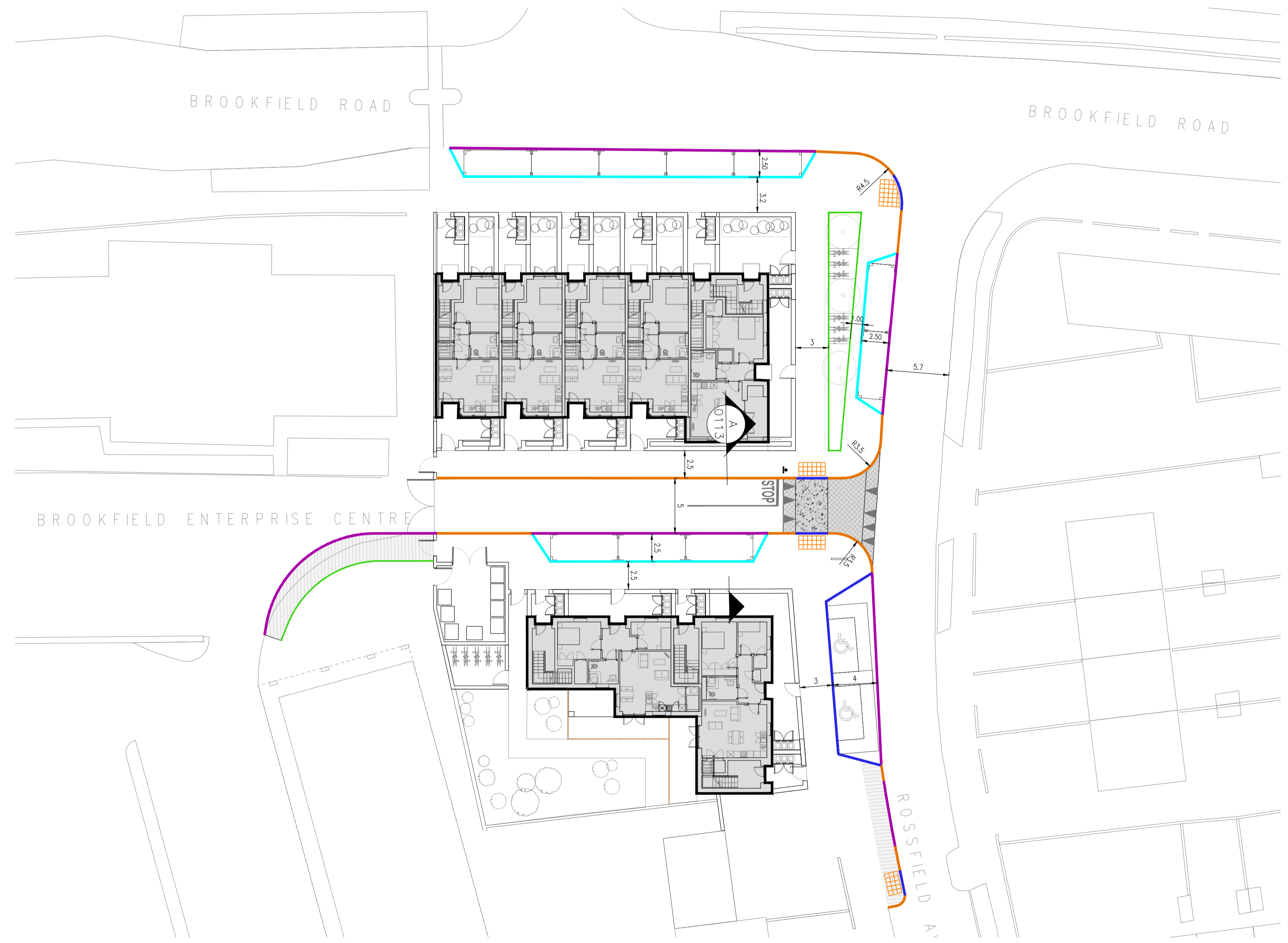


Rev	Date	Description	By	CHK
01	17/11/23	ISSUED FOR PLANNING	IW	IW
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED GENERAL ARRANGEMENT AND LEVELS LAYOUT				
Client				
SOUTH DUBLIN CITY COUNCIL				
				
BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
				23-044
Drawn By	MS	Date	DEC. 2023	Scales @ A1
				1:250
Project - Originator - Volume - Level - Type - Role - Number				Revision
BRFD - WMC - ZZ - 00 - GA - P - 0100				P01

- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.



A-A SECTION THROUGH MAIN ACCESS STREET
 SCALE 1:20



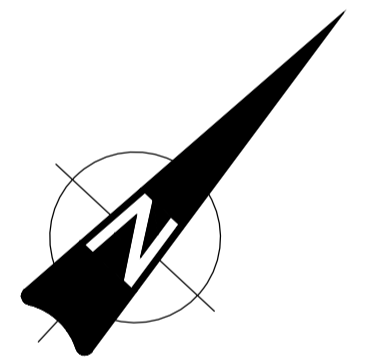
PROPOSED GENERAL ARRANGEMENT
 SCALE 1:250

LEGEND:

EXTENTS OF WORK

FOR KERBS DETAILS, REFER TO DRAWING
 BFRD-WMC-ZZ-00-GA-P-0102 - PROPOSED TYPICAL ROAD CONSTRUCTION DETAILS

- PROPOSED 125mm KERB LINE (DETAIL B)
- PROPOSED 100mm KERB LINE (DETAIL A)
- PROPOSED 25mm KERB LINE (DETAIL C)
- PROPOSED DROP KERB LINE (DETAIL D)
- PROPOSED EDGE OF CONCRETE FOOTPATH (DETAIL E)



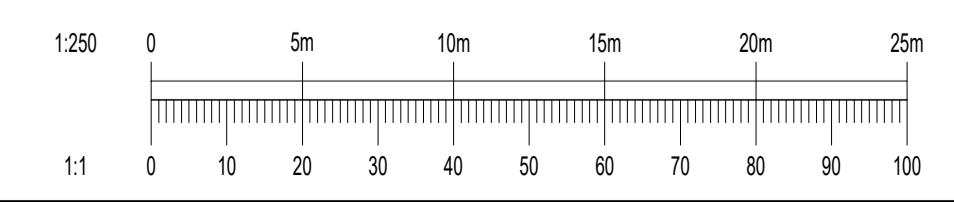
PI1	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK

Amendments	
Project	SOCIAL HOUSING AT ROSSFIELD, TALLAGHT
Title	PROPOSED KERBING LAYOUT AND CROSS SECTION
Client	SOUTH DUBLIN CITY COUNCIL

waterman moylan

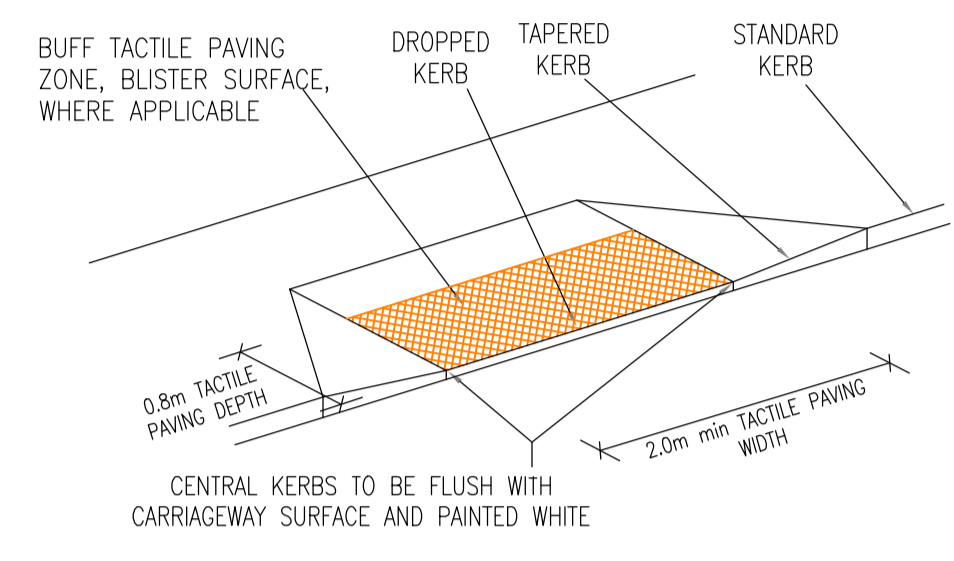
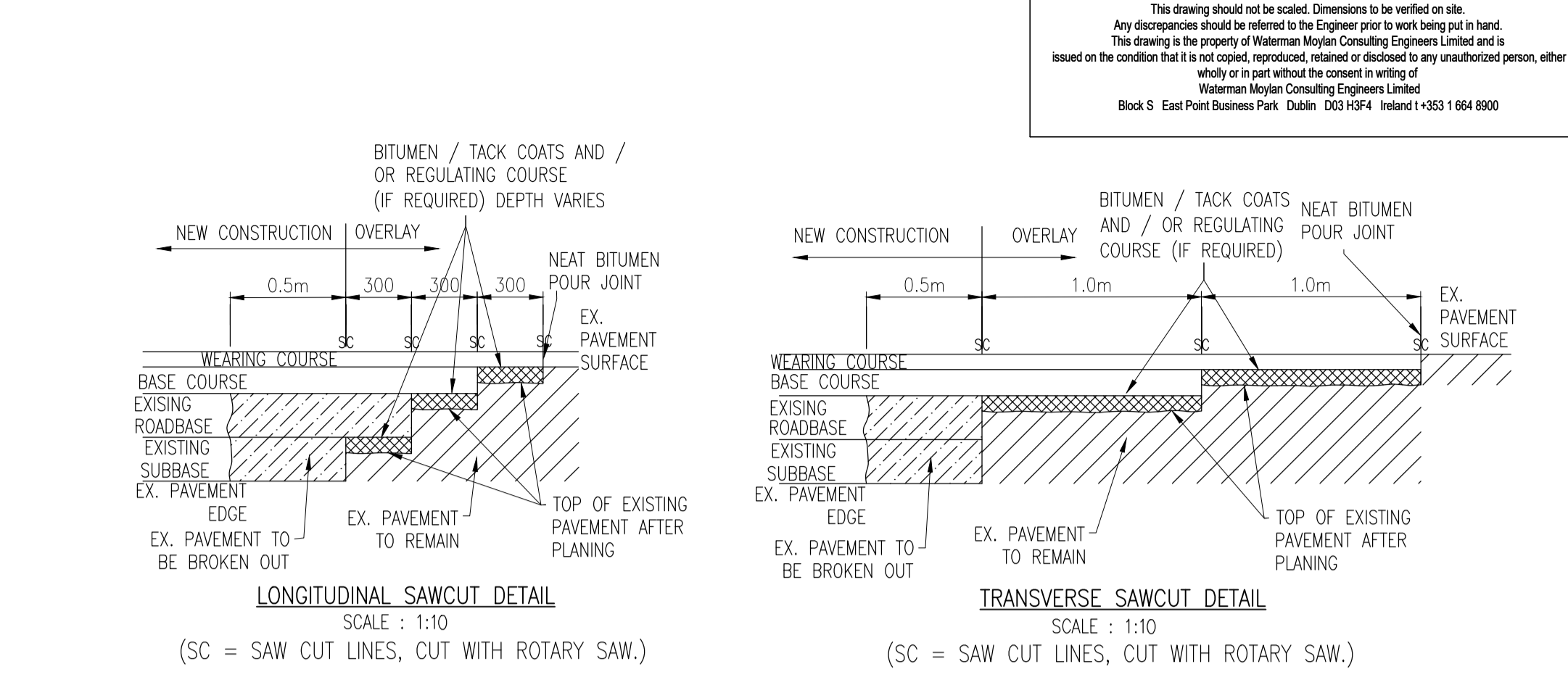
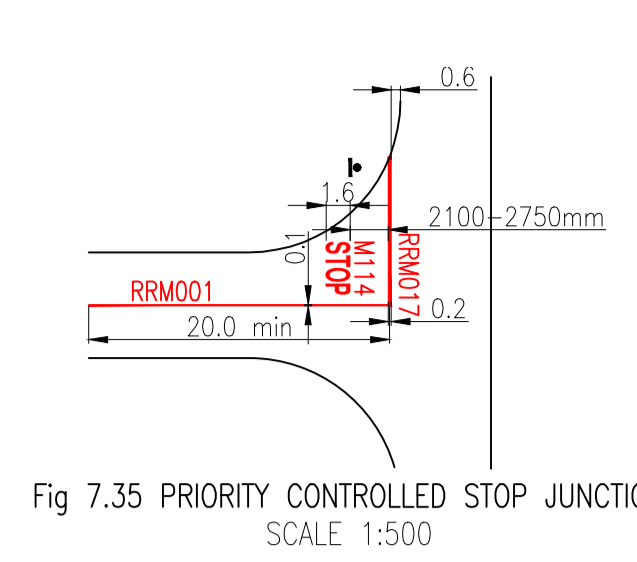
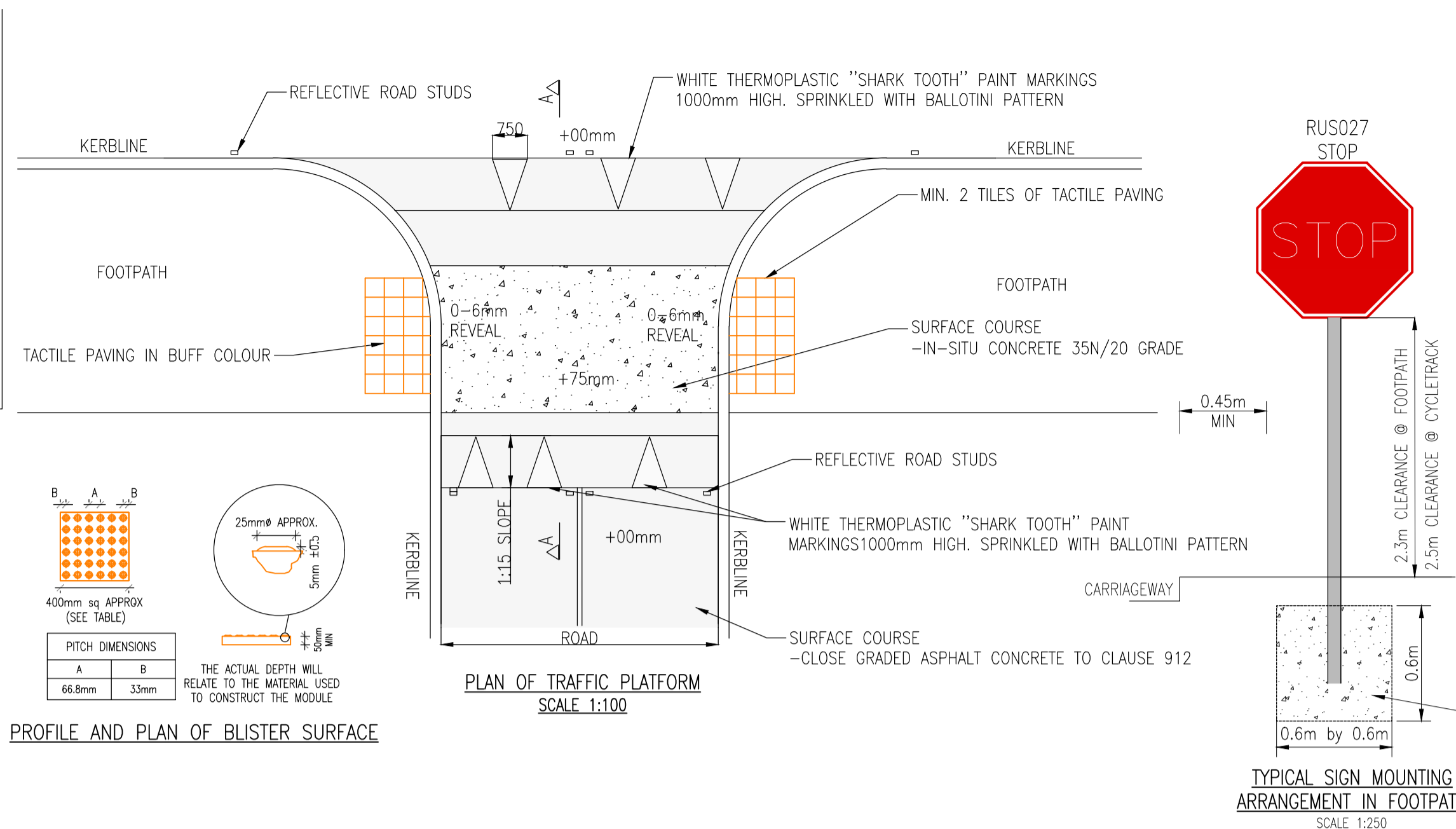
BLOCK 5, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD,
 DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900
 Email: info@waterman-moylan.ie www.waterman-moylan.ie

PLANNING			
Designed By	Approved	Waterman Ref	23-044
Drawn By	Date	Scales @ A1	1:250
Project	Originator	Volume	Level
BRFD - WMC - ZZ - 00 - GA - P - 0101			
		Role	Number
		Revision	
		P01	



NOTE :

- FOR AREAS WHERE CBR VALUES ARE BELOW 2%, CARRY OUT THE FOLLOWING:
 - THE SOFT AREA IS TO BE EXCAVATED OUT FULLY AND REPLACED WITH A GENERAL FILL MATERIAL (CLASS 1A/1B) TO N.R.A. SPECIFICATION TO THE UNDERSIDE OF AN 'ENKAGRID' LAYER (ENKAGRID TRC 40 OR SIMILAR 40kN/m). SEPARATION GEOTEXTILE TO BE PLACED BETWEEN THE SUBGRADE AND CAPPING.
- FOR AREAS WHERE CBR VALUES ARE BETWEEN 2% AND 5%, CARRY OUT THE FOLLOWING:
 - THE SOIL IS TO BE EXCAVATED OUT FULLY AND REPLACED WITH A CAPPING MATERIAL TYPE 6F1/6F2 TO N.R.A. SPECIFICATION. DEPTHS OF CAPPING MATERIAL AS PER TABLE 1 BELOW. SEPARATION GEOTEXTILE TO BE PLACED BETWEEN THE SUBGRADE AND CAPPING.



NOTE:

- ALL DIMENSIONS IN METERS UNLESS STATED OTHERWISE.
- ALL POSTS TO BE GALVANIZED MILD STEEL TO B.S. 729.
- ENSURE THAT TOP OF POLE DOES NOT EXTEND ABOVE TOP OF SIGN.
- CHECK THE UNDERGROUND SERVICES AT AN EARLY STAGE (AND ACCORDATE AS MAY BE NECESSARY).

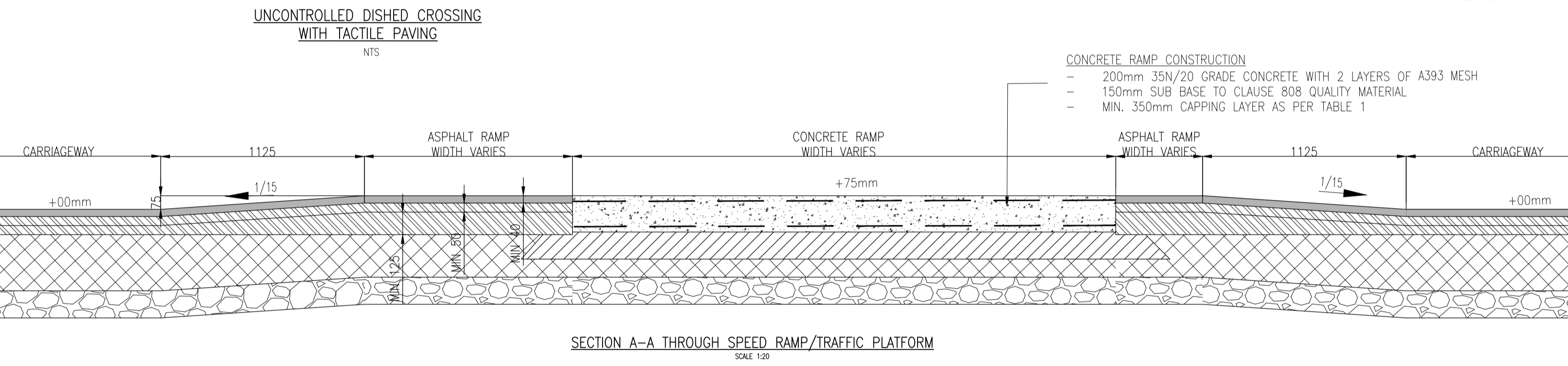
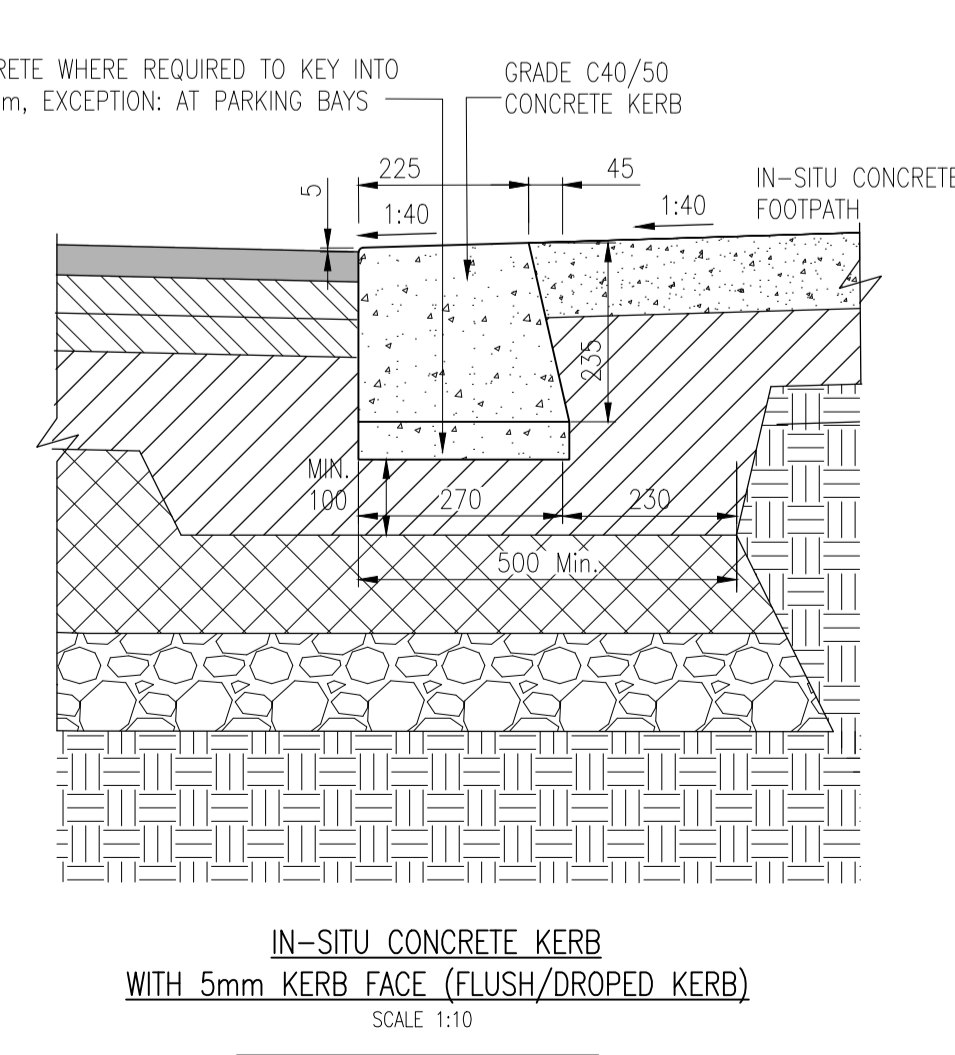
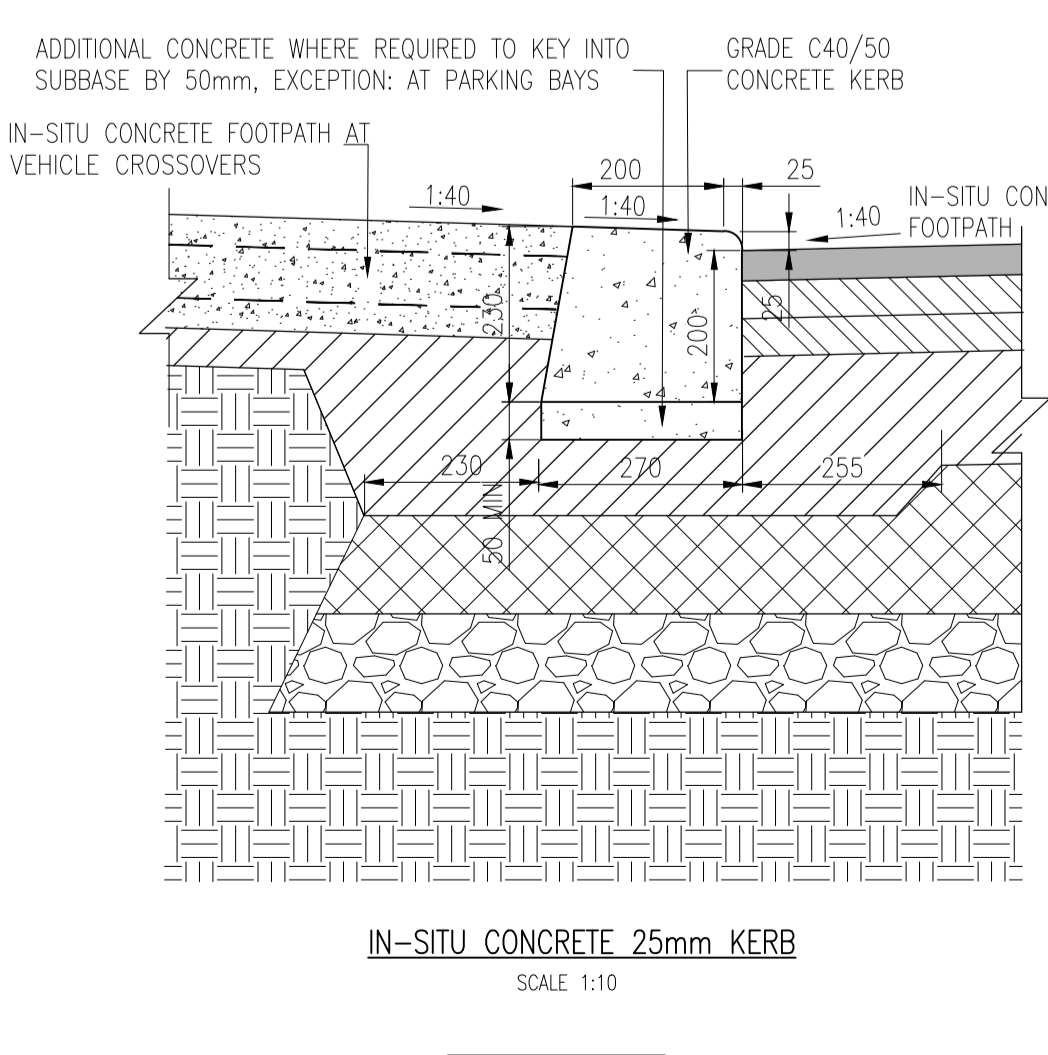
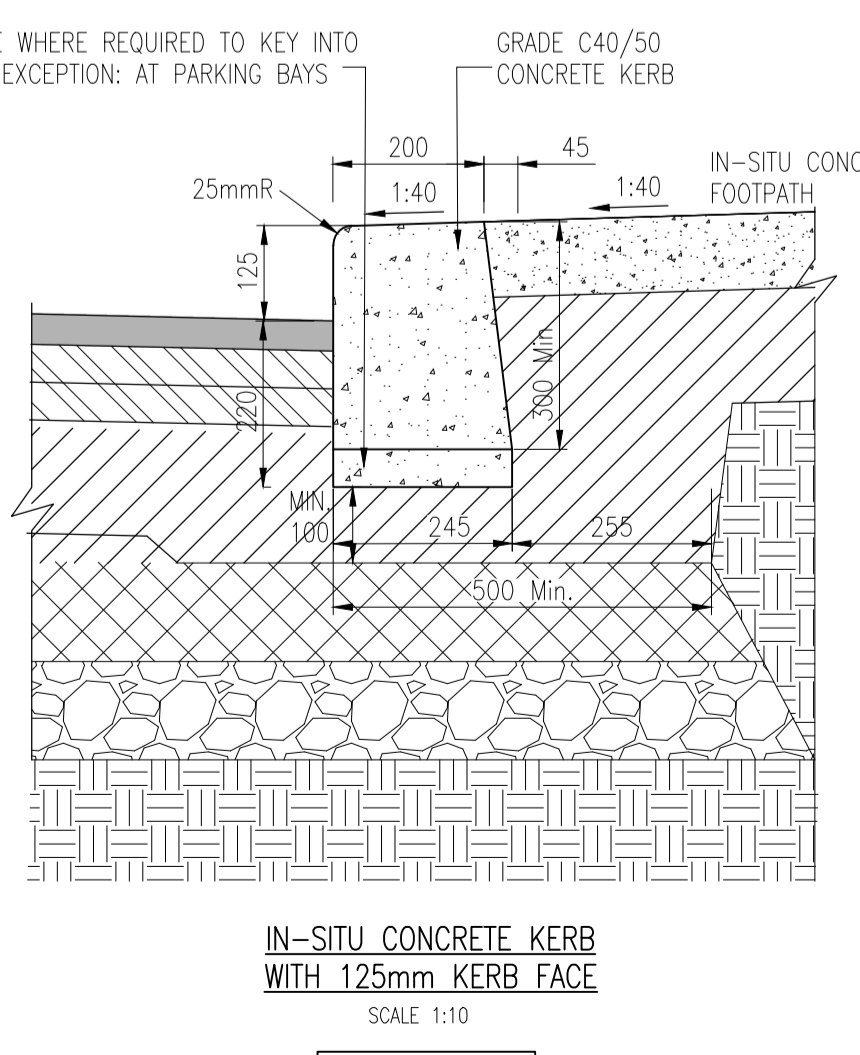
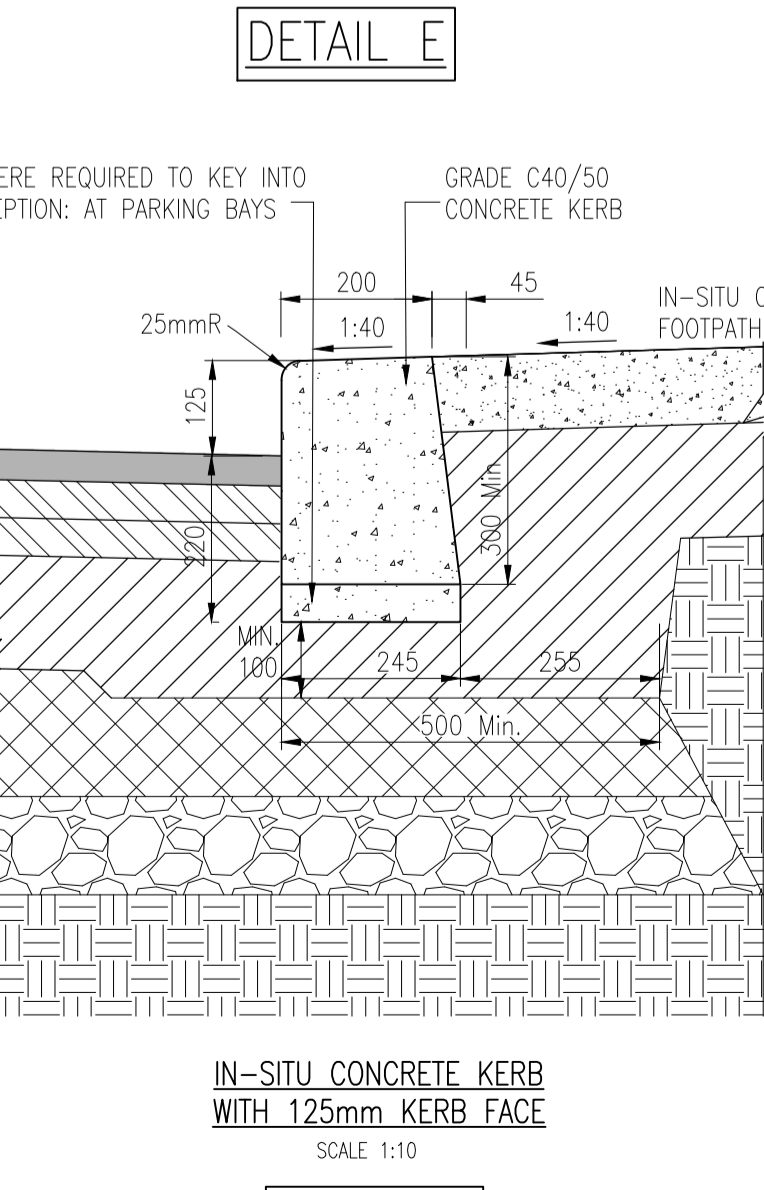
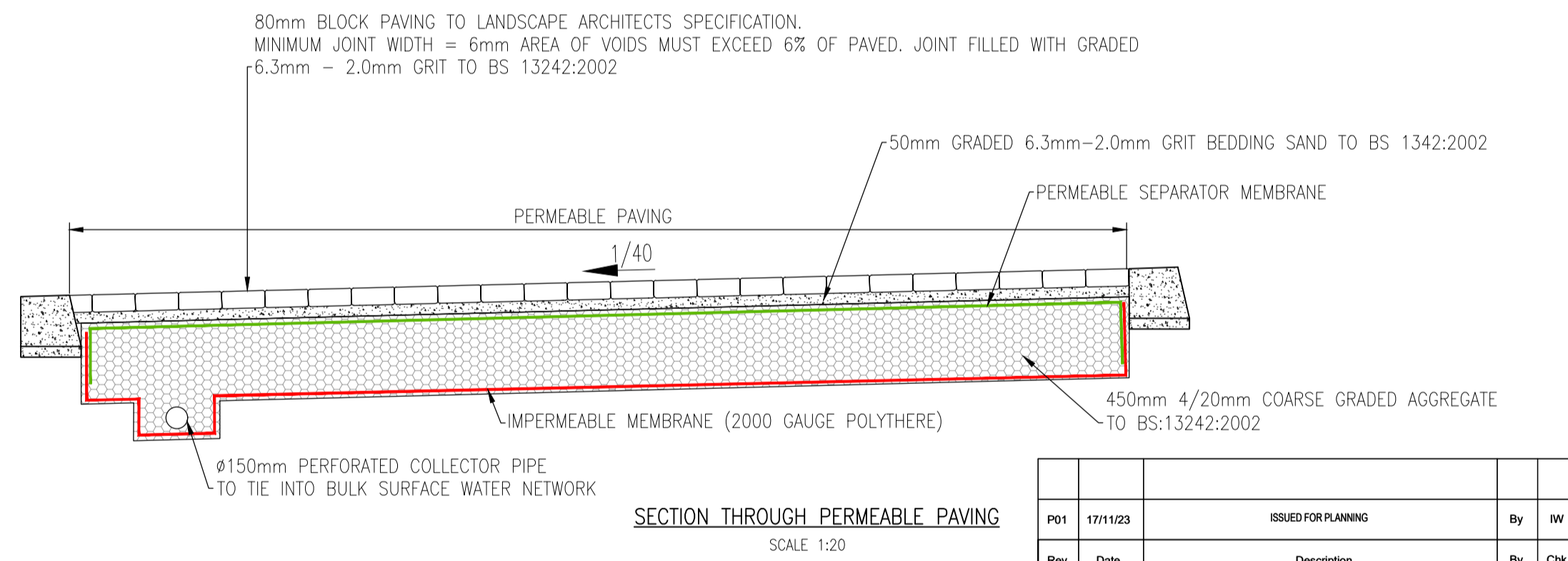
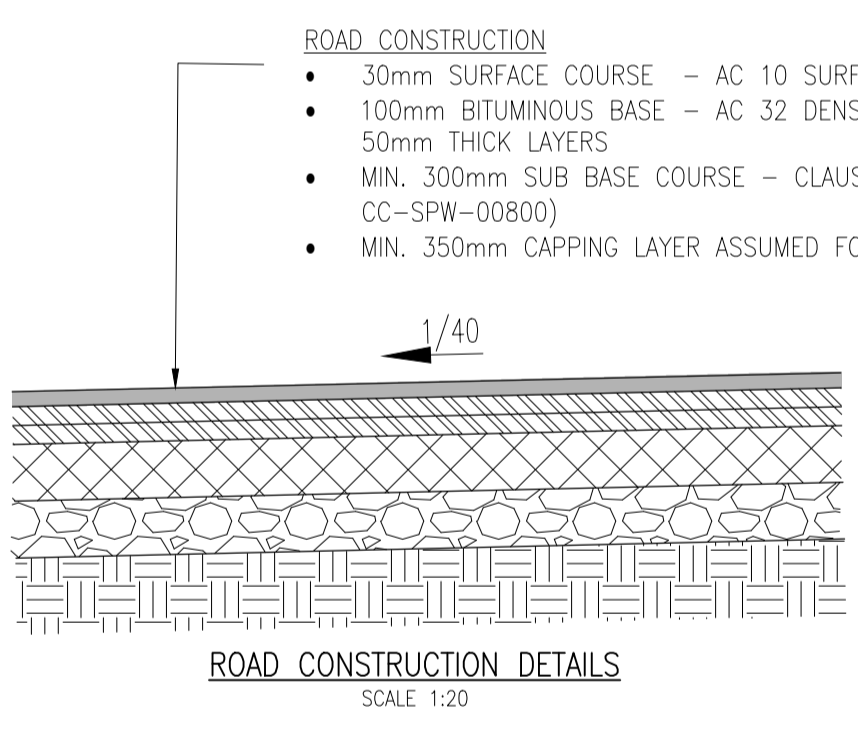
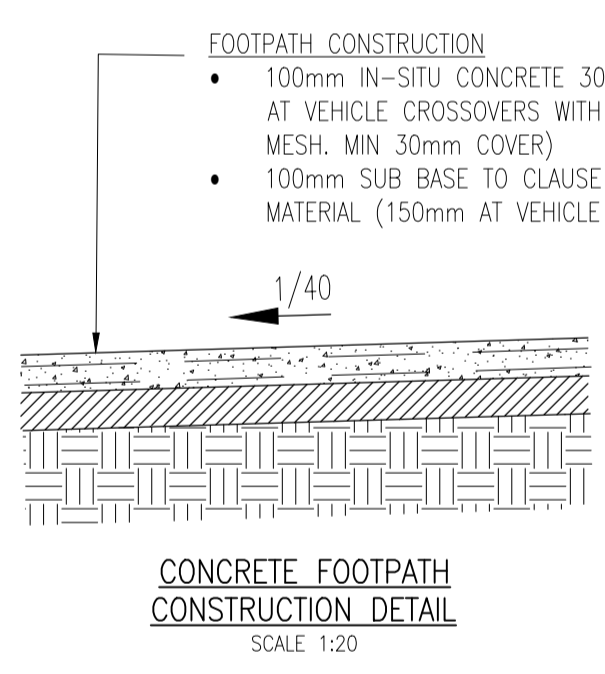
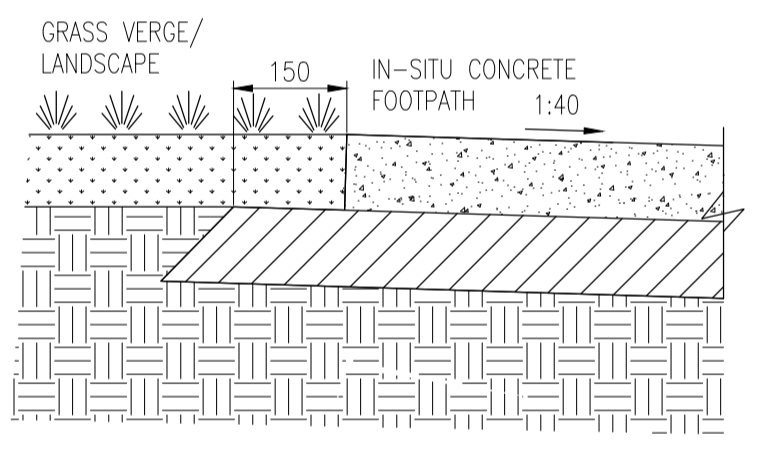
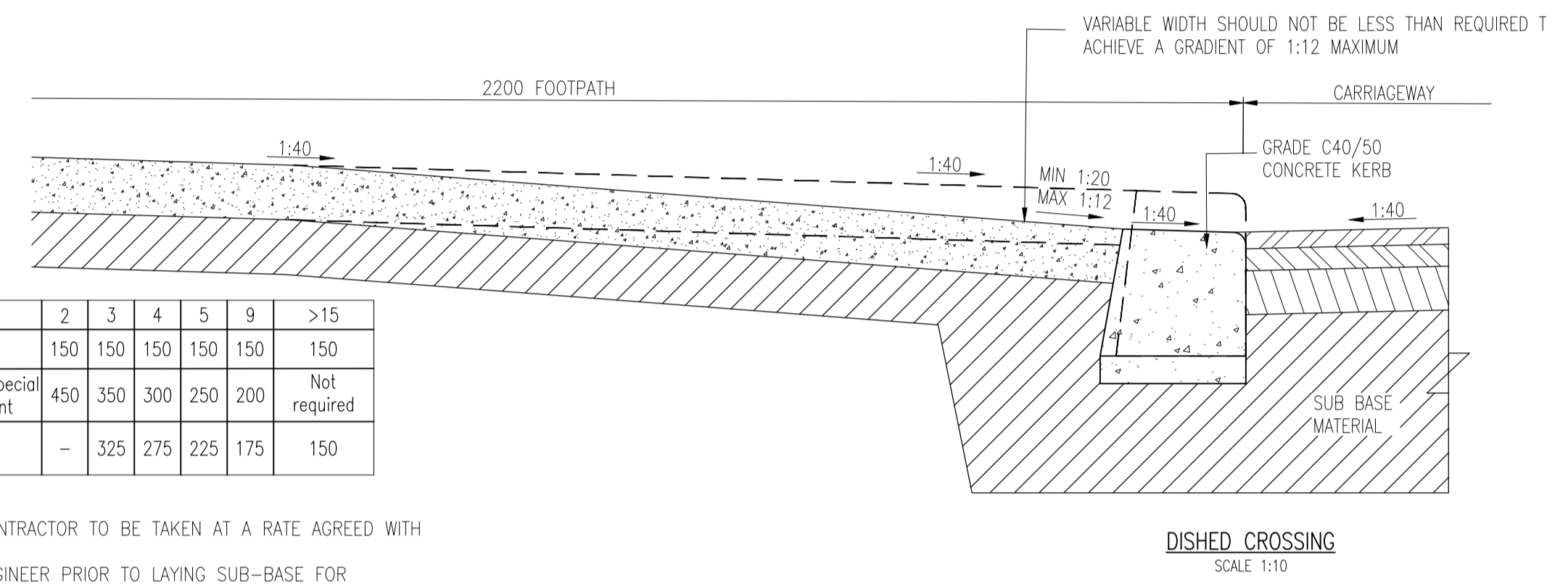


TABLE 1

Existing formation CBR	<2.0	2	3	4	5	9	>15
Standard Construction	Depth of sub-base (mm)	150	150	150	150	150	150
	Depth of capping (mm)	Requires special treatment	450	350	300	250	200
Increase depth of Type 1 sub-base and delete capping		-	-	325	275	225	175

NOTE:- CAPPING LAYER THICKNESS
ADDITIONAL TESTS TO BE CARRIED OUT BY THE CONTRACTOR TO BE TAKEN AT A RATE AGREED WITH THE ENGINEER BUT NOT LESS THAN 1 PER 50m.
ALL C.B.R. RESULTS TO BE SUBMITTED TO THE ENGINEER PRIOR TO LAYING SUB-BASE FOR APPROVAL.
ASSUMED CAPPING LAYER THICKNESS 350mm, SUBJECT TO DETAILED GROUND INVESTIGATION RESULTS.

NOTE:- ROAD SUBBASE THICKNESS
MINIMUM THICKNESS OF NON-FROST SUSCEPTIBLE SUB-GRADE IS SHOWN HEREUNDER. C.B.R. TESTS TO BE TAKEN AT A RATE AGREED WITH THE ENGINEER BUT NOT LESS THAN 1 PER 50m. ALL C.B.R. RESULTS TO BE SUBMITTED TO THE ENGINEER PRIOR TO LAYING SUB-BASE FOR APPROVAL.



PI1	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED TYPICAL ROAD CONSTRUCTION DETAILS				
Client				
SOUTH DUBLIN CITY COUNCIL				
BLOCK 5, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 864 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
Status				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
Drawn By	MS	Date	DEC. 2023	23-044
Project - Originator - Volume - Level - Type - Role - Number				Revision
BRFD - WMC - ZZ - 00 - GA - P - 0102				P01

- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

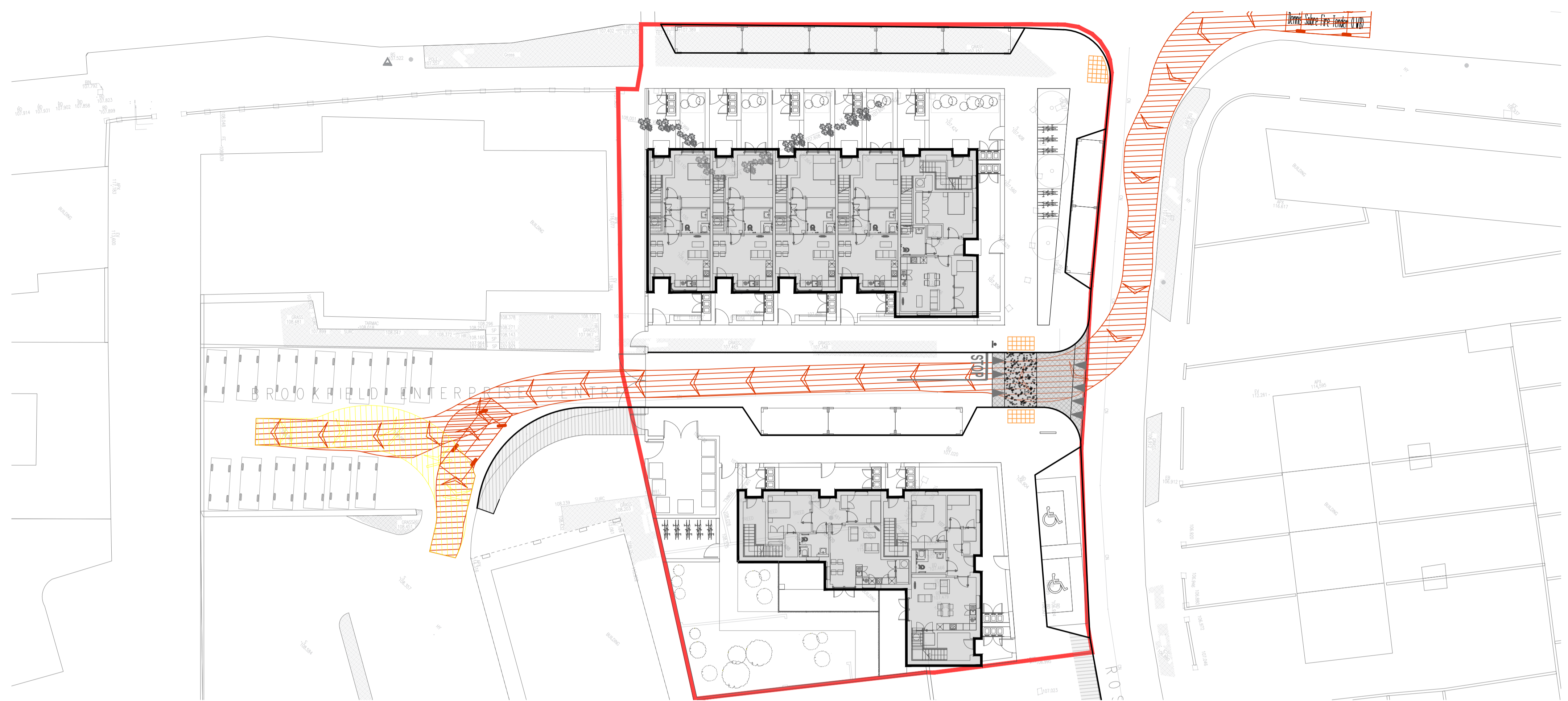
Dennis Sabre Fire Tender (LWB)

Overall Length 7.700m
 Overall Width 2.430m
 Overall Body Height 3.520m
 Min Body Ground Clearance 0.950m
 Track Width 2.550m
 Lock-to-lock time 2.00s
 Curb to Curb Turning Radius 7.400m

LEGEND:

REVERSING MOVEMENTS

FORWARD MOVEMENTS



PROPOSED FIRE TENDER AUTOTRACK ANALYSIS
 SCALE 1:250

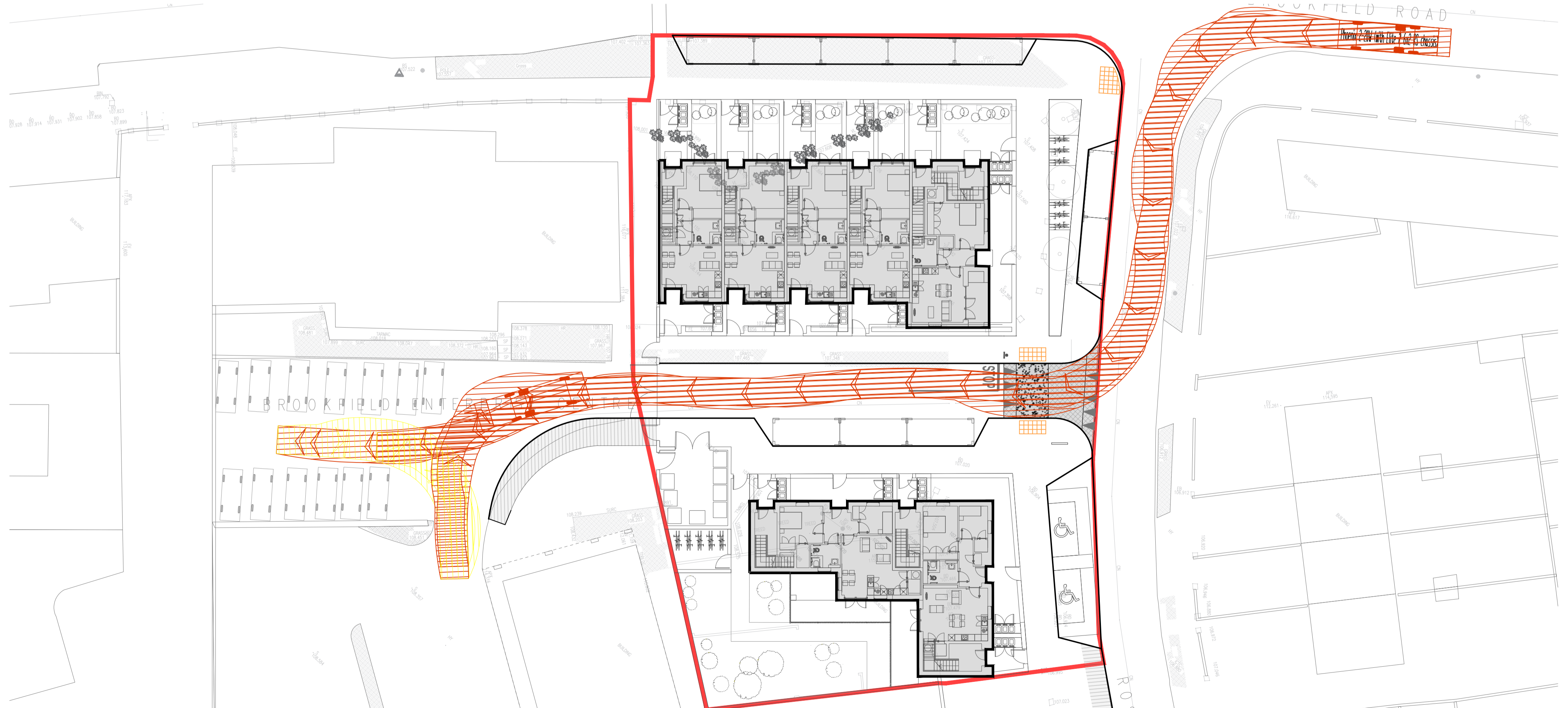
Phoenix 2-20V (with Elite 2 6x2 RS chassis)

Overall Length 10.500m
 Overall Width 2.550m
 Overall Body Height 3.520m
 Min Body Ground Clearance 0.950m
 Track Width 2.550m
 Lock-to-lock time 2.00s
 Curb to Curb Turning Radius 6.800m

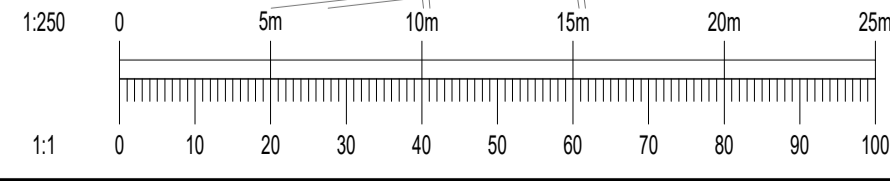
LEGEND:

REVERSING MOVEMENTS

FORWARD MOVEMENTS



PROPOSED REFUSE VEHICLE AUTOTRACK ANALYSIS
 SCALE 1:250



Proj	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED FIRE TENDER AND REFUSE VEHICLE AUTOTRACK ANALYSIS				
Client				
SOUTH DUBLIN CITY COUNCIL				
BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
Status				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
Drawn By	MS	Date	DEC. 2023	23-044
Scales @ A1				1:250
Project	Originator	Volume	Level	Type
BRFD - WMC - ZZ - 00 - GA - P - 0104				
Revision				
P01				

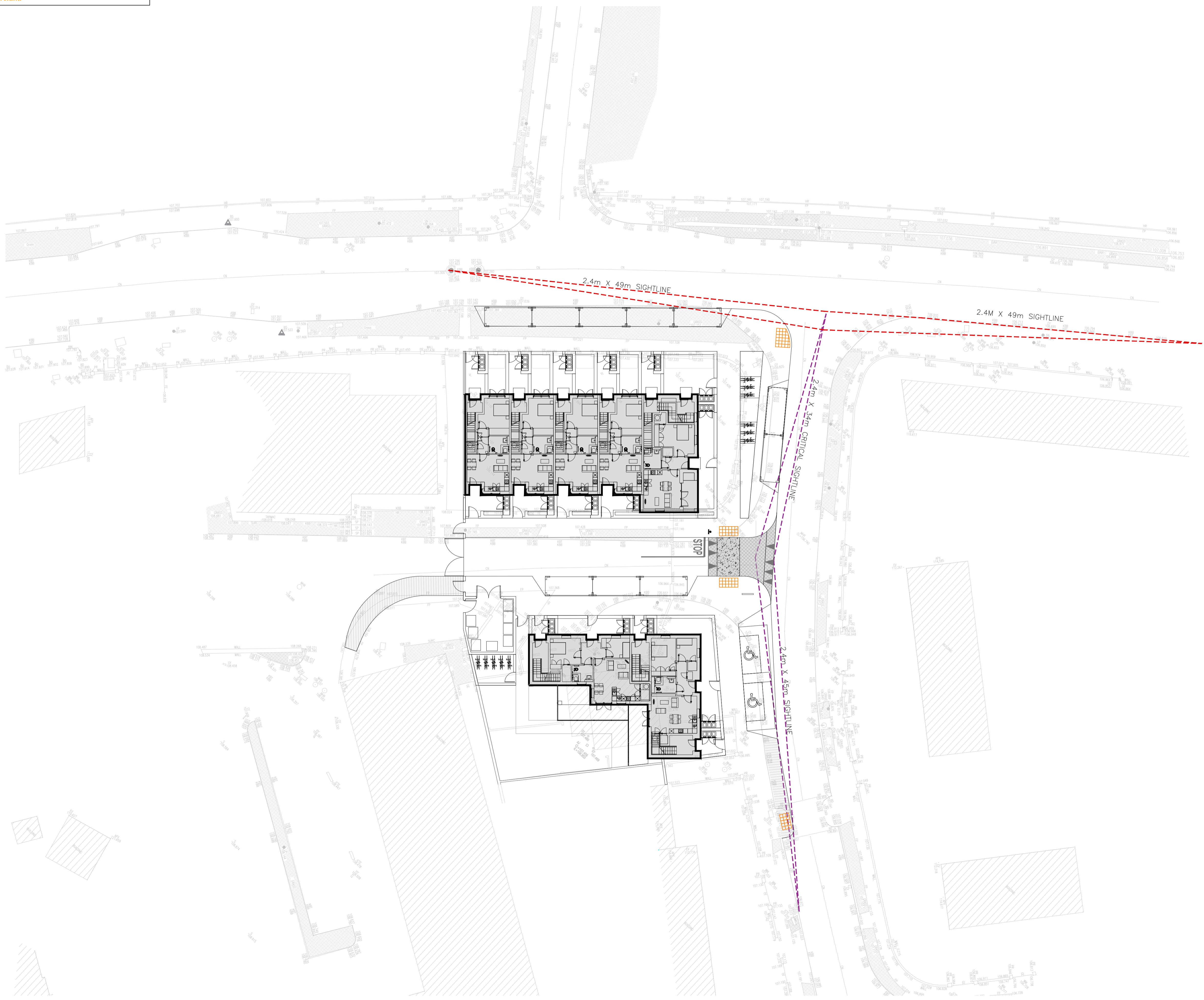
- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

LEGEND

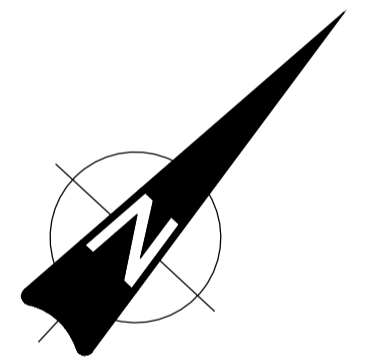
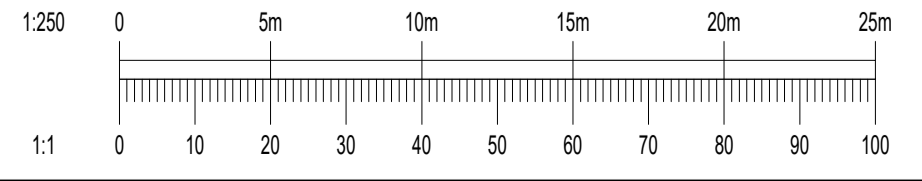
- - - - - 2.4m x 45m SIGHTLINE
 - - - - - 2.4m x 49m SIGHTLINE


DESIGN SPEED (km/h)	SSD STANDARD (m)
10	8
20	15
30	24
40	36
50	45 / 49 BUS
60	65

DESIGN MANUAL FOR URBAN ROADS AND STREETS - TABLE 4.2

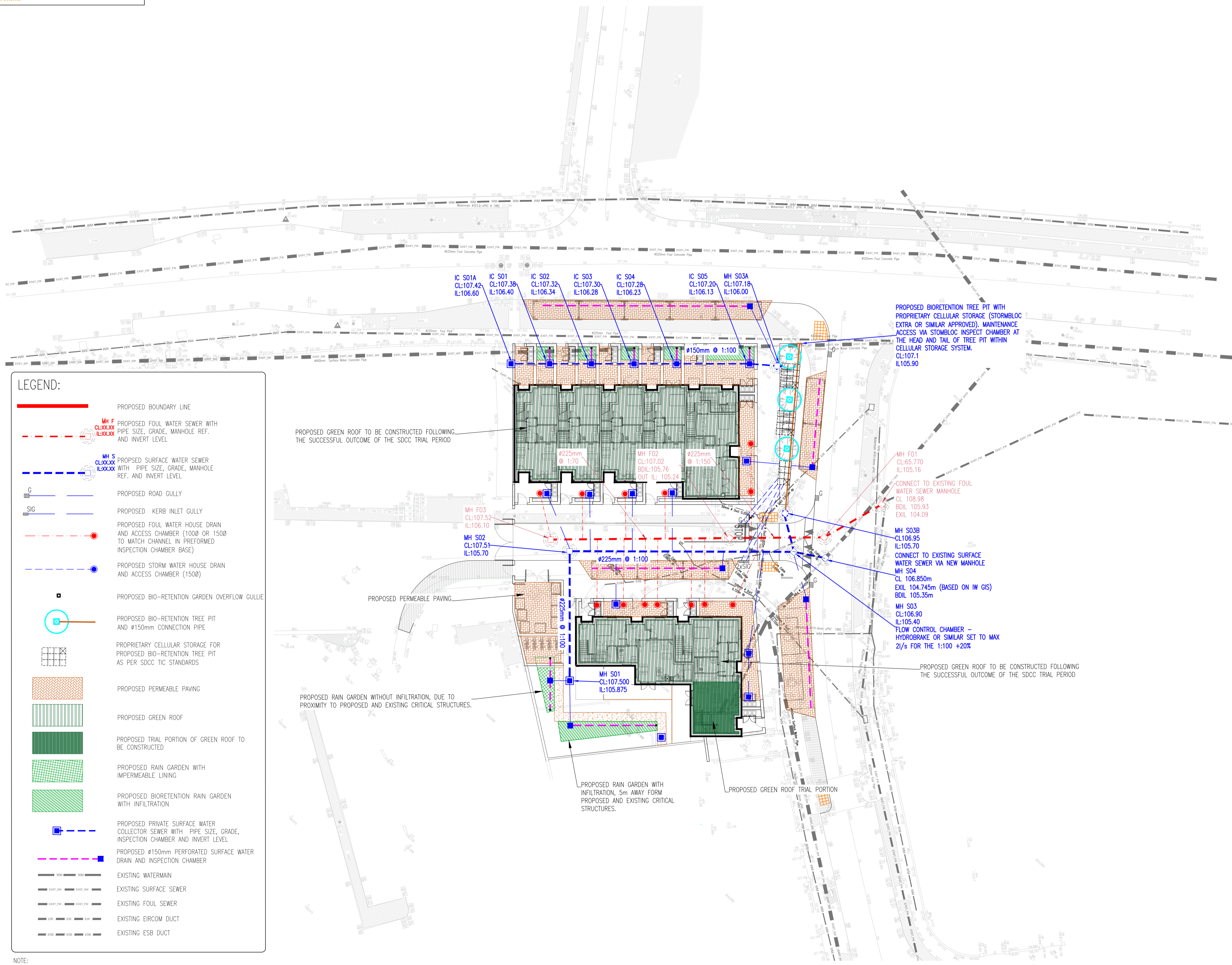


PROPOSED GENERAL ARRANGEMENT
SCALE 1:250



Proj	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED VISIBILITY SPLAYS				
Client				
SOUTH DUBLIN CITY COUNCIL				
				
BLOCK 5, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
				23-044
Drawn By	MS	Date	DEC. 2023	Scales @ A1
				1:250
Project - Originator - Volume - Level - Type - Role - Number				Revision
BRFD - WMC - ZZ - 00 - GA - P - 0113				P01

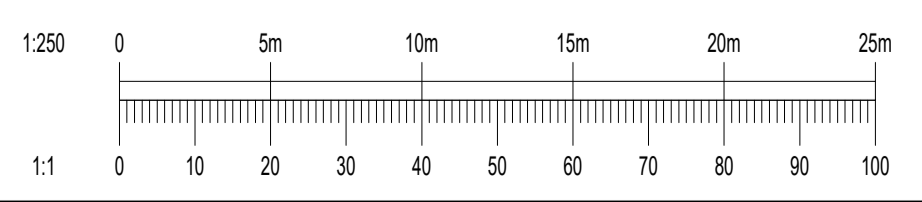
- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS. THE CODE OF PRACTICE AND STANDARD DETAILS ARE AVAILABLE TO DOWNLOAD FROM THE IRISH WATER WEB SITE AT WWW.WATER.IE/CONNECTIONS/DEVELOPER-SERVICES/ WHERE THE DETAILS CONTAINED ON THIS DRAWING DIFFER FROM THE IRISH WATER CODE OF PRACTICE OR STANDARD DETAILS THIS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IRISH WATER STANDARDS WILL TAKE PRECEDENCE.
 - THE LOCATION AND LEVEL OF EXISTING SERVICES AT CONNECTION POINTS ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS. ANY DISCREPANCY WITH GIVEN SURVEY LEVELS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - IN AREAS WHERE EXISTING SERVICES ARE PRESENT, THE CONTRACTOR TO ENSURE THAT ALL RELEVANT EXISTING SERVICES ARE IDENTIFIED AND SHOWN ON DRAWINGS.
 - ANY UNSUITABLE MATERIAL EXPOSED DURING EXCAVATION IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - SURFACE WATER DRAINAGE WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH SDDC REQUIREMENTS FOR TAKING IN CHARGE AND THE GENERAL DUBLIN CODE OF PRACTICE FOR DRAINAGE WORKS.
 - ALL TRENCHES WHERE THERE IS EXPOSED ROCK ARE TO BE LINED WITH LIQUID BITUMEN SPRAY IMMEDIATELY AFTER EXPOSURE.
 - SEWERS ARE TO BE CONSTRUCTED WITH CONCRETE SURROUND IN ACCORDANCE WITH IRISH WATER STD-WW-08 WHERE THE VERTICAL CLEARANCE FROM THE SURFACE WATER IS LESS THAN 300mm AND WHERE DRAINAGE LINES HAVE A DEPTH OF COVER LESS THAN 1.2m WITHIN ROADWAYS.
 - ALL GRAVITY SEWER PIPE MATERIALS SHALL COMPLY WITH SECTION 3.13 OF THE IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE.



LEGEND:

- PROPOSED BOUNDARY LINE
- PROPOSED FOUL WATER SEWER WITH PIPE SIZE, GRADE, MANHOLE REF. AND INVERT LEVEL
- PROPOSED SURFACE WATER SEWER WITH PIPE SIZE, GRADE, MANHOLE REF. AND INVERT LEVEL
- PROPOSED ROAD GULLY
- PROPOSED KERB INLET GULLY
- PROPOSED FOUL WATER HOUSE DRAIN AND ACCESS CHAMBER (1000 OR 1500 TO MATCH CHANNEL IN PREFORMED INSPECTION CHAMBER BASE)
- PROPOSED STORM WATER HOUSE DRAIN AND ACCESS CHAMBER (1500)
- PROPOSED BIO-RETENTION GARDEN OVERFLOW GULLY
- PROPOSED BIO-RETENTION TREE PIT AND Ø150mm CONNECTION PIPE
- PROPRIETARY CELLULAR STORAGE FOR PROPOSED BIO-RETENTION TREE PIT AS PER SDDC TIC STANDARDS
- PROPOSED PERMEABLE PAVING
- PROPOSED GREEN ROOF
- PROPOSED TRIAL PORTION OF GREEN ROOF TO BE CONSTRUCTED
- PROPOSED RAIN GARDEN WITH IMPERMEABLE LINING
- PROPOSED BIORETENTION RAIN GARDEN WITH INFILTRATION
- PROPOSED PRIVATE SURFACE WATER COLLECTOR SEWER WITH PIPE SIZE, GRADE, INSPECTION CHAMBER AND INVERT LEVEL
- PROPOSED Ø150mm PERFORATED SURFACE WATER DRAIN AND INSPECTION CHAMBER
- EXISTING WATERMAIN
- EXISTING SURFACE SEWER
- EXISTING FOUL SEWER
- EXISTING EIRCOM DUCT
- EXISTING ESB DUCT

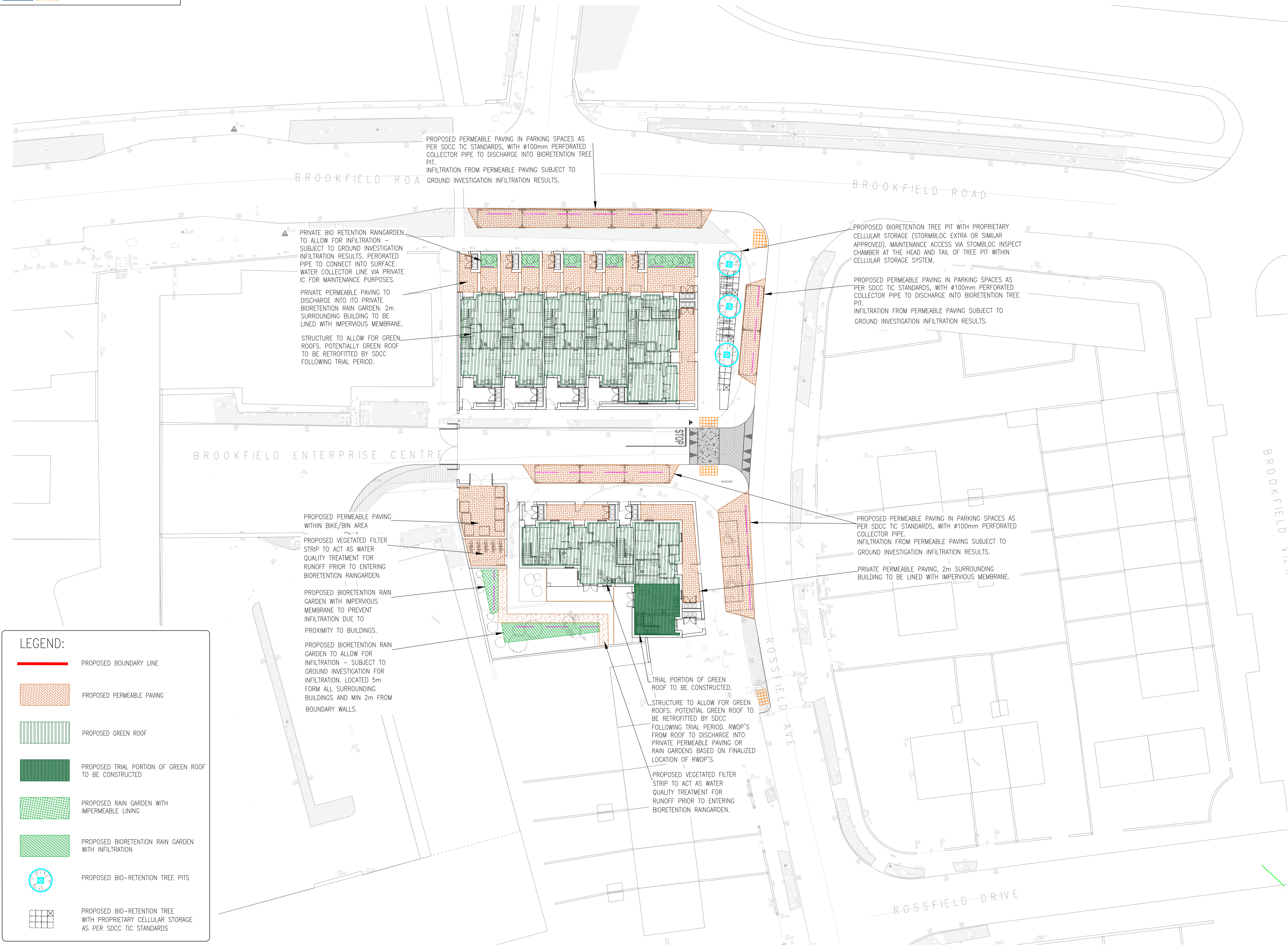
PROPOSED GENERAL ARRANGEMENT
SCALE 1:250



Proj	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED DRAINAGE LAYOUT				
Client				
SOUTH DUBLIN CITY COUNCIL				
BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
Status				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
				23-044
Drawn By	MS	Date	DEC. 2023	Scales @ A1
				1:250
Project - Originator - Volume - Level - Type - Role - Number				Revision
BRFD - WMC - ZZ - 00 - GA - P - 0200				P01

NOTE:
THE PERMISSIBILITY OF INFILTRATION TECHNIQUES INCORPORATED INTO SUDS FEATURES IS SUBJECT TO A DETAILS SITE SPECIFIC GROUND INVESTIGATE AND IDENTIFICATION OF ANY POTENTIAL WATER TABLE IN THE AREA.

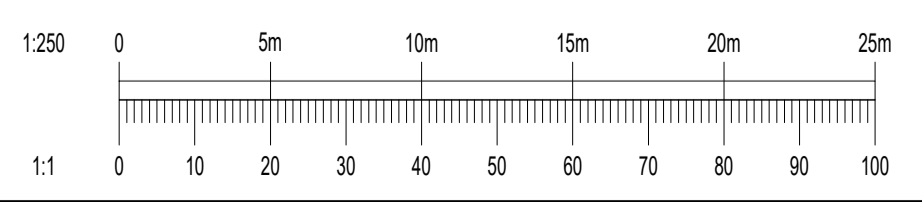
- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.



LEGEND:

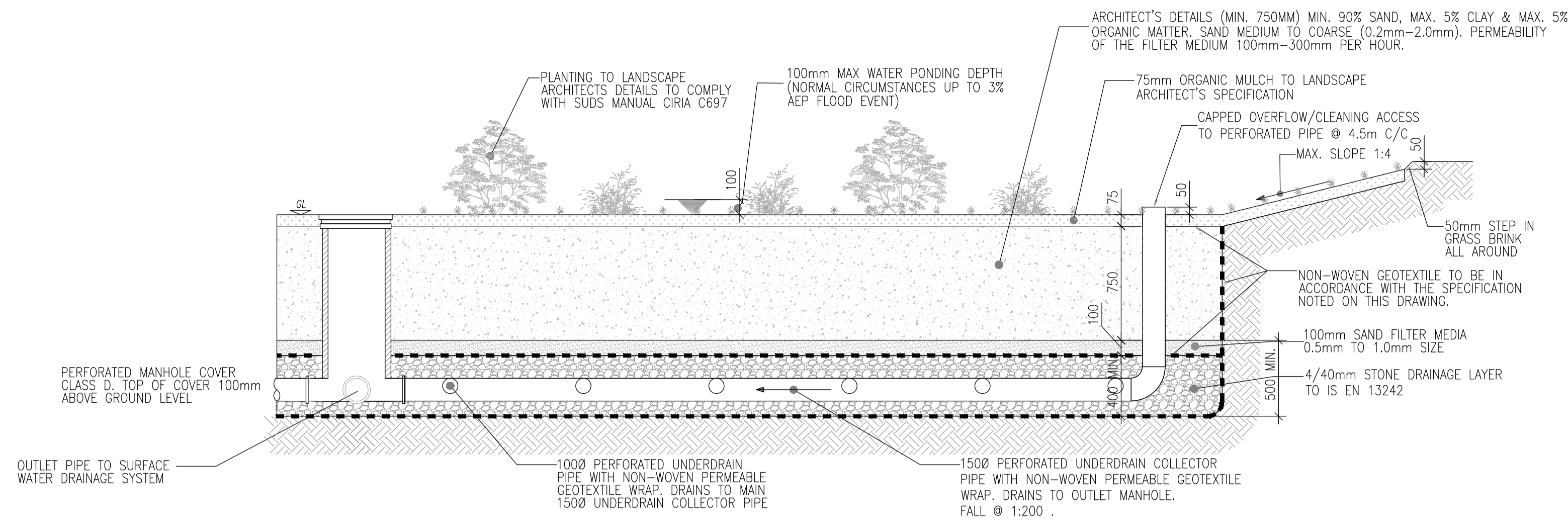
- PROPOSED BOUNDARY LINE
- PROPOSED PERMEABLE PAVING
- PROPOSED GREEN ROOF
- PROPOSED TRIAL PORTION OF GREEN ROOF TO BE CONSTRUCTED
- PROPOSED RAIN GARDEN WITH IMPERMEABLE LINING
- PROPOSED BIORETENTION RAIN GARDEN WITH INFILTRATION
- PROPOSED BIO-RETENTION TREE PITS
- PROPOSED BIO-RETENTION TREE WITH PROPRIETARY CELLULAR STORAGE AS PER SDCC TIC STANDARDS

PROPOSED GENERAL ARRANGEMENT
SCALE 1:250



PO1	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED SuDS LAYOUT				
Client				
SOUTH DUBLIN CITY COUNCIL				
BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
				23-044
Drawn By	MS	Date	DEC. 2023	Scales @ A1
				1:250
Project	Originator	Volume	Level	Type
BRFD - WMC - ZZ - 00 - GA - P - 0201				
				Revision
				P01

NOTES:
 1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.



TYPICAL STANDARD DETAIL OF BIO-RETENTION AREA FOR SURFACE WATER
 SCALE: 1:20

MAINTENANCE REQUIREMENTS FOR BIORETENTION SYSTEMS & TREE PITS

REGULAR INSPECTIONS
 INSPECT INFILTRATION SURFACES FOR SILTING AND PONDING, RECORD DE-WATERING TIME OF THE FACILITY AND ASSESS STANDING WATER LEVELS IN UNDERDRAIN (IF APPROPRIATE) TO DETERMINE IF MAINTENANCE IS NECESSARY. FREQUENCY - QUARTERLY
 CHECK OPERATION OF UNDERDRAINS BY INSPECTION OF FLOWS AFTER RAIN. FREQUENCY - ANNUALLY
 ASSESS PLANTS FOR DISEASE INFECTION, POOR GROWTH, INVASIVE SPECIES ETC AND REPLACE AS NECESSARY. FREQUENCY - QUARTERLY
 INSPECT INLETS AND OUTLETS FOR BLOCKAGE. FREQUENCY - QUARTERLY

REGULAR MAINTENANCE
 REMOVE LITTER AND SURFACE DEBRIS AND WEEDS. FREQUENCY - AS REQUIRED
 REPLACE ANY PLANTS, TO MAINTAIN PLANTING DENSITY. FREQUENCY - AS REQUIRED
 REMOVE SEDIMENT, LITTER AND DEBRIS BUILD-UP FROM AROUND INLETS OR FROM FOREBAYS. FREQUENCY - QUARTERLY TO BIANNUALLY
 INFILL ANY HOLES OR SCOUR IN THE FILTER MEDIUM, IMPROVE EROSION PROTECTION IF REQUIRED. FREQUENCY - AS REQUIRED
 REPAIR MINOR ACCUMULATIONS OF SILT BY RAKING AWAY SURFACE MULCH, SCARIFYING SURFACE OF MEDIUM AND REPLACING MULCH. FREQUENCY - AS REQUIRED

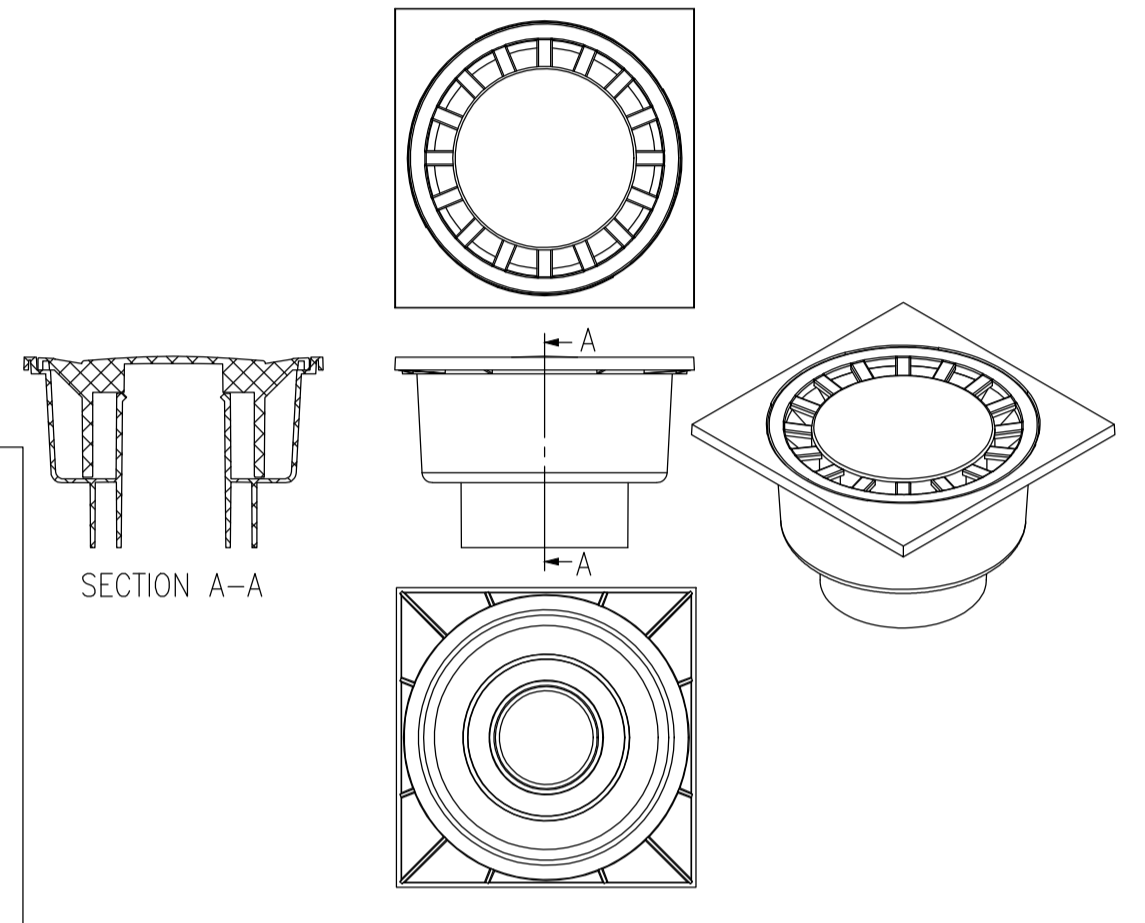
REMEDIAL ACTIONS
 REMOVE AND REPLACE FILTER MEDIUM AND VEGETATION ABOVE. FREQUENCY - AS REQUIRED BUT LIKELY TO BE > 20 YEARS

ROOTSPACE SUPPORT STRUCTURE UNDER COVERED / GRILLED TREE PITS.

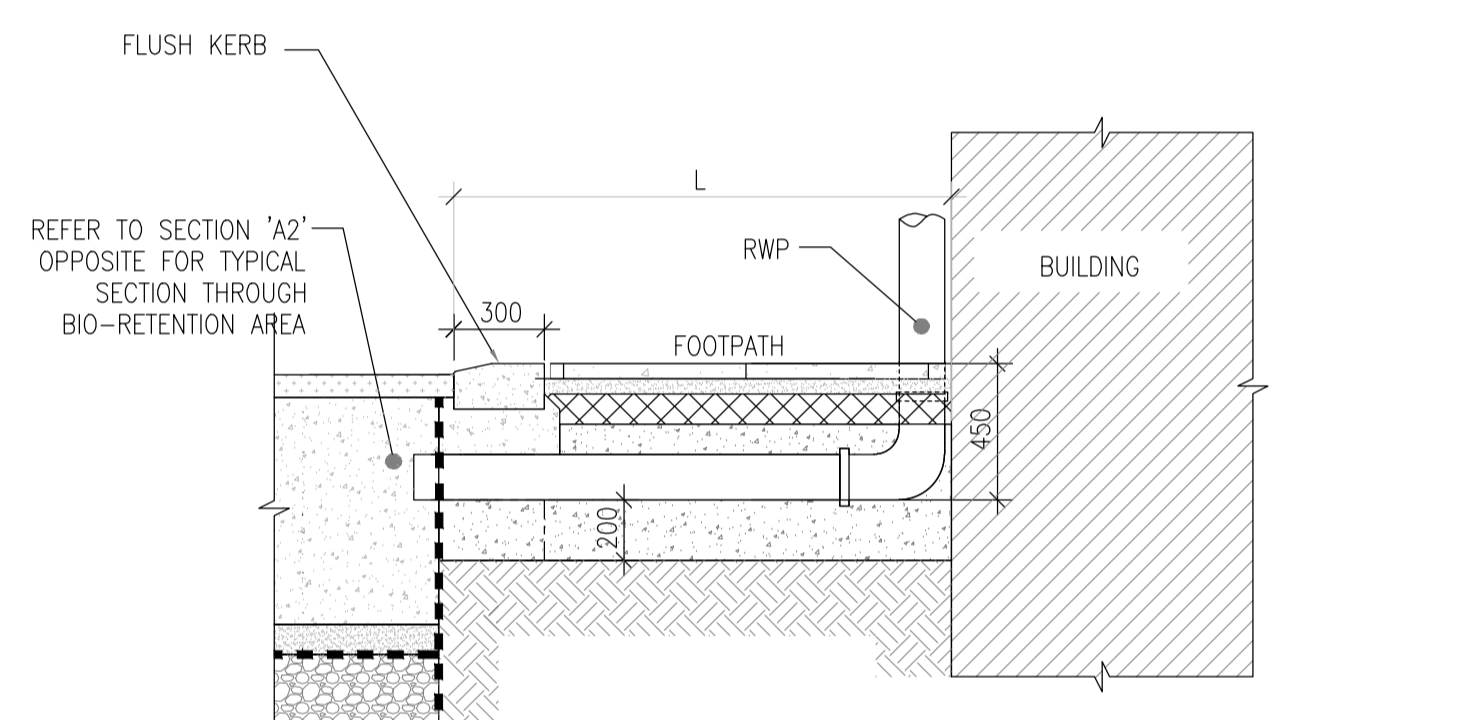
IN ALL COVERED COVERED / GRILLED TREE PITS AND IN ALL INSTANCES WHERE THE TREE PIT SOIL EXTENDS BENEATH THE FOOTPATH / PAVEMENT, A PROPRIETARY ROOTSPACE PAVEMENT SUPPORT SYSTEM BY GREENLEAF IRELAND, OR EQUAL APPROVED, SHALL BE INTEGRATED ACROSS THE FULL EXTENT OF THE TREE PIT. REFER TO LANDSCAPE ARCHITECTS DRAWING FOR TREE PIT SOIL EXTENTS.

NOTES:

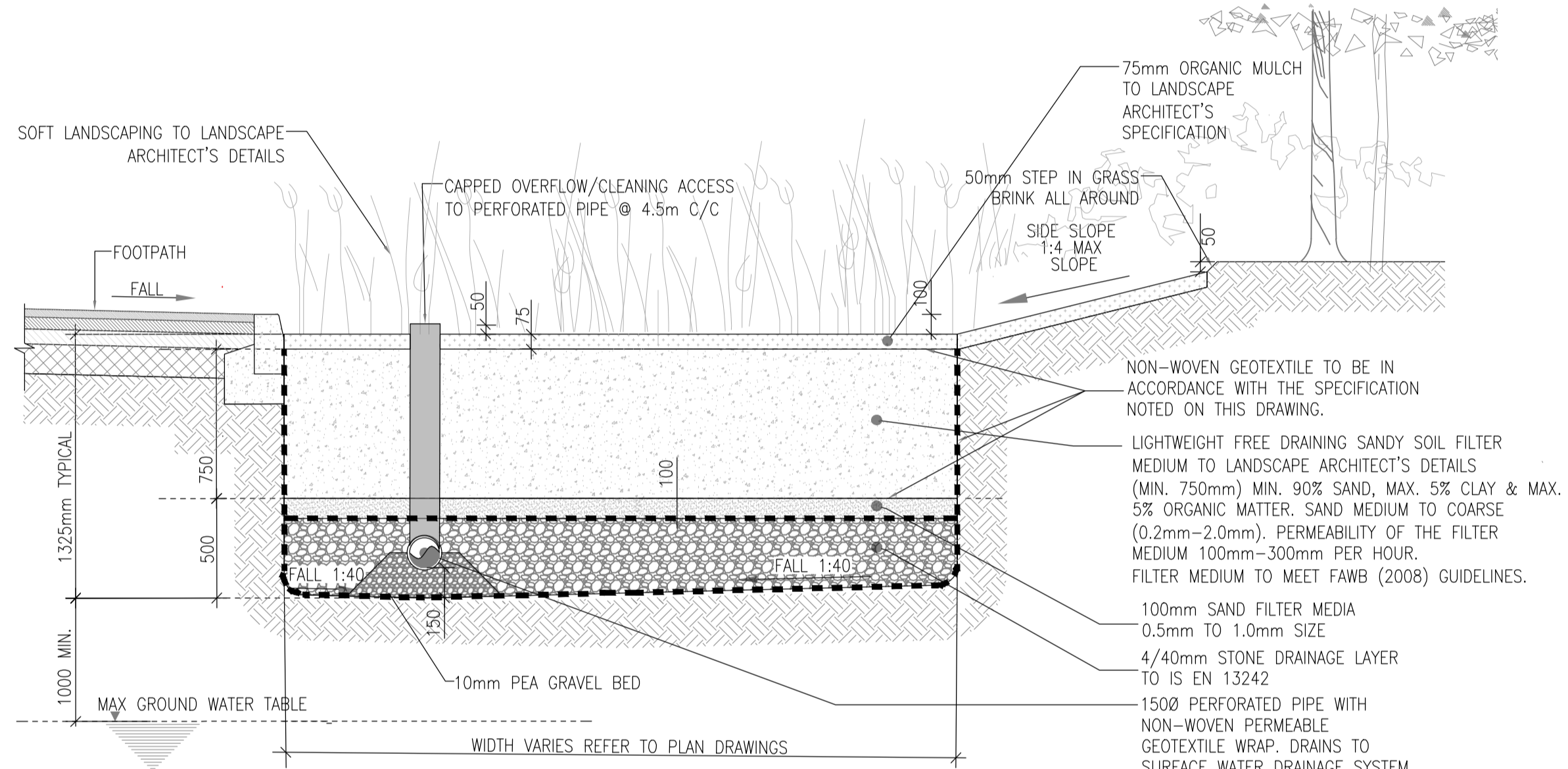
- NON-WOVEN GEOTEXTILE SPECIFICATION. THE GEOTEXTILE SHALL:
 - SUSTAIN A TENSILE LOAD OF NOT LESS THAN 5.0kN/m AT BREAK AND HAVE A MINIMUM FAILURE STRAIN OF 10%
 - WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 10319;
 - HAVE A MINIMUM PUNCTURE RESISTANCE OF 1200 N WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12236;
 - HAVE A SIZE DISTRIBUTION OF PORE OPENINGS SUCH THAT THE APPARENT OPENING SIZE Ø90 WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12956, OR OTHER APPROPRIATE TEST, IS LESS THAN 300 MICRONS
 - ALLOW WATER TO FLOW THROUGH IT, IN EITHER DIRECTION, NORMAL TO ITS PRINCIPAL PLANE AT A RATE OF NOT LESS THAN 1 l/m²/s, UNDER A CONSTANT HEAD OF WATER OF 100mm AND A MAXIMUM BREAKTHROUGH HEAD OF 50mm WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12958.
- PLAN AREA OF THE BIO-RETENTION AREA SHOULD BE 2-4% OF THE OVERALL AREA DRAINED. MAXIMUM WIDTH 10m UNLESS NOTED OTHERWISE.



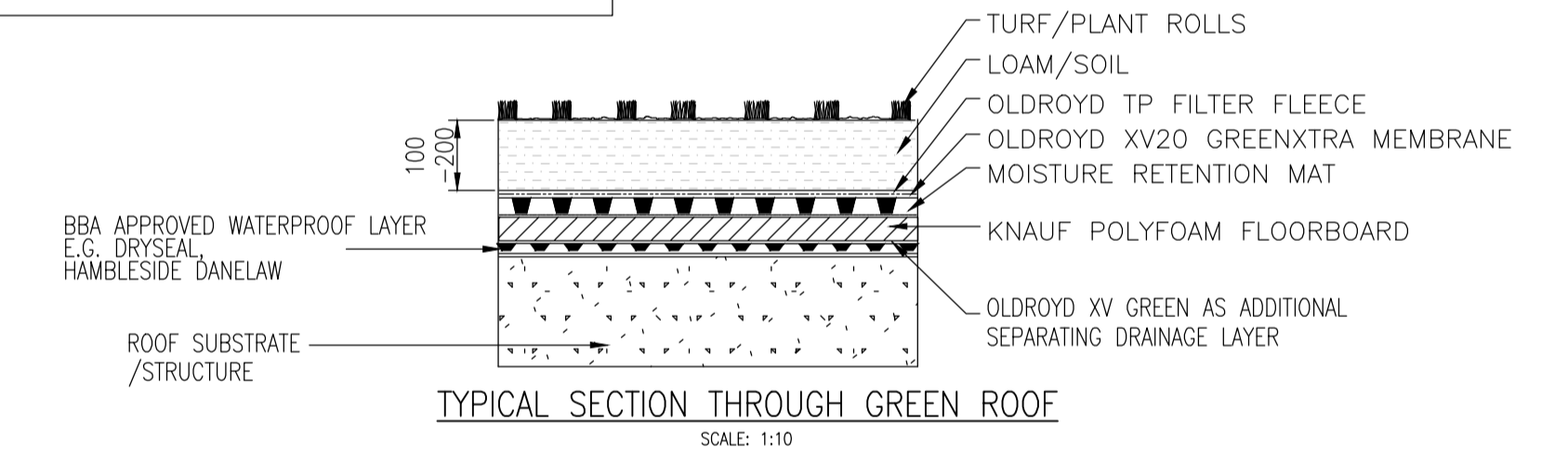
SuDS OVERFLOW GULLY
 BLACK ABS PLASTIC



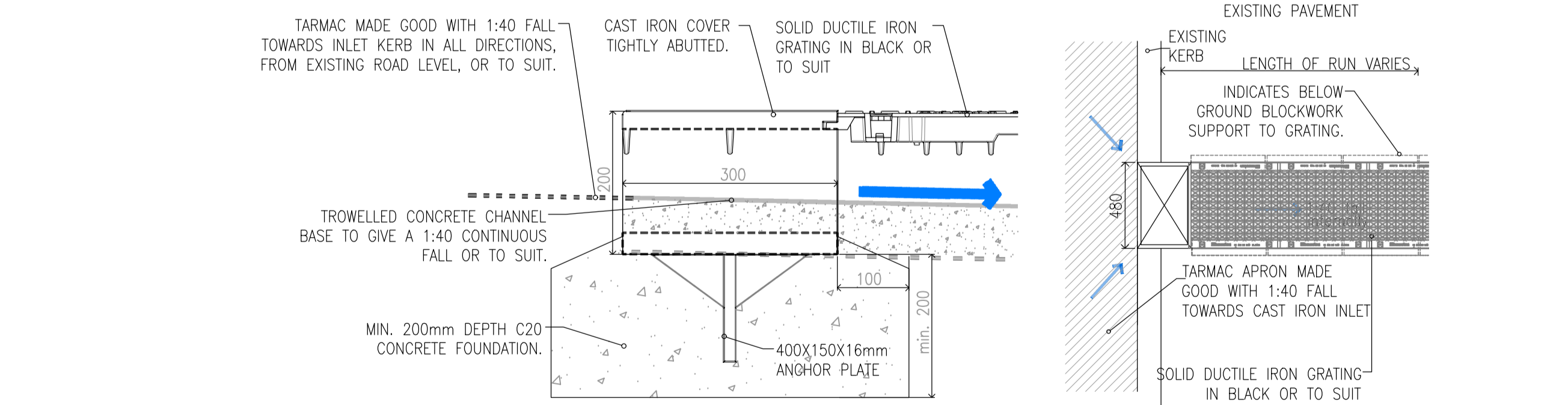
TYPICAL SECTION THROUGH BIORETENTION AREA TAKING DRAINAGE FROM A BUILDING RAINWATER DOWNPIPE
 SCALE: 1:20



TYPICAL SECTION THROUGH BIORETENTION AREA TAKING DRAINAGE FROM A HARDSTANDING AREA
 SCALE: 1:20

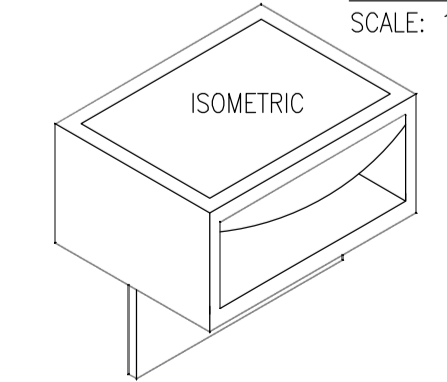


TYPICAL SECTION THROUGH GREEN ROOF
 SCALE: 1:10

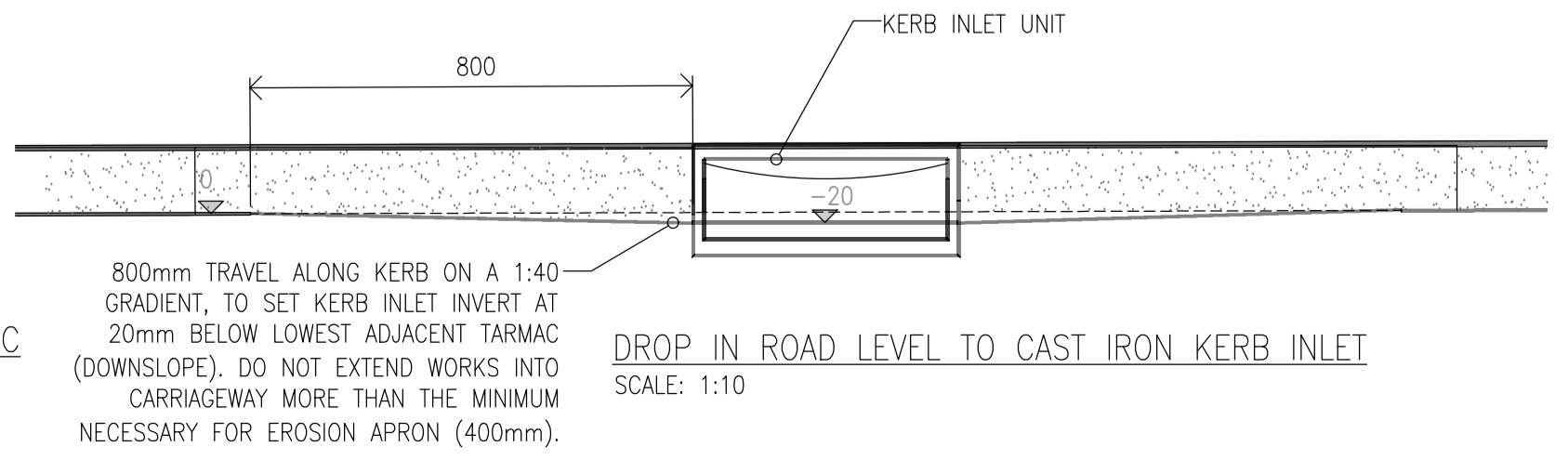


CAST IRON KERB INLET SIDE ELEVATION
 SCALE: 1:5

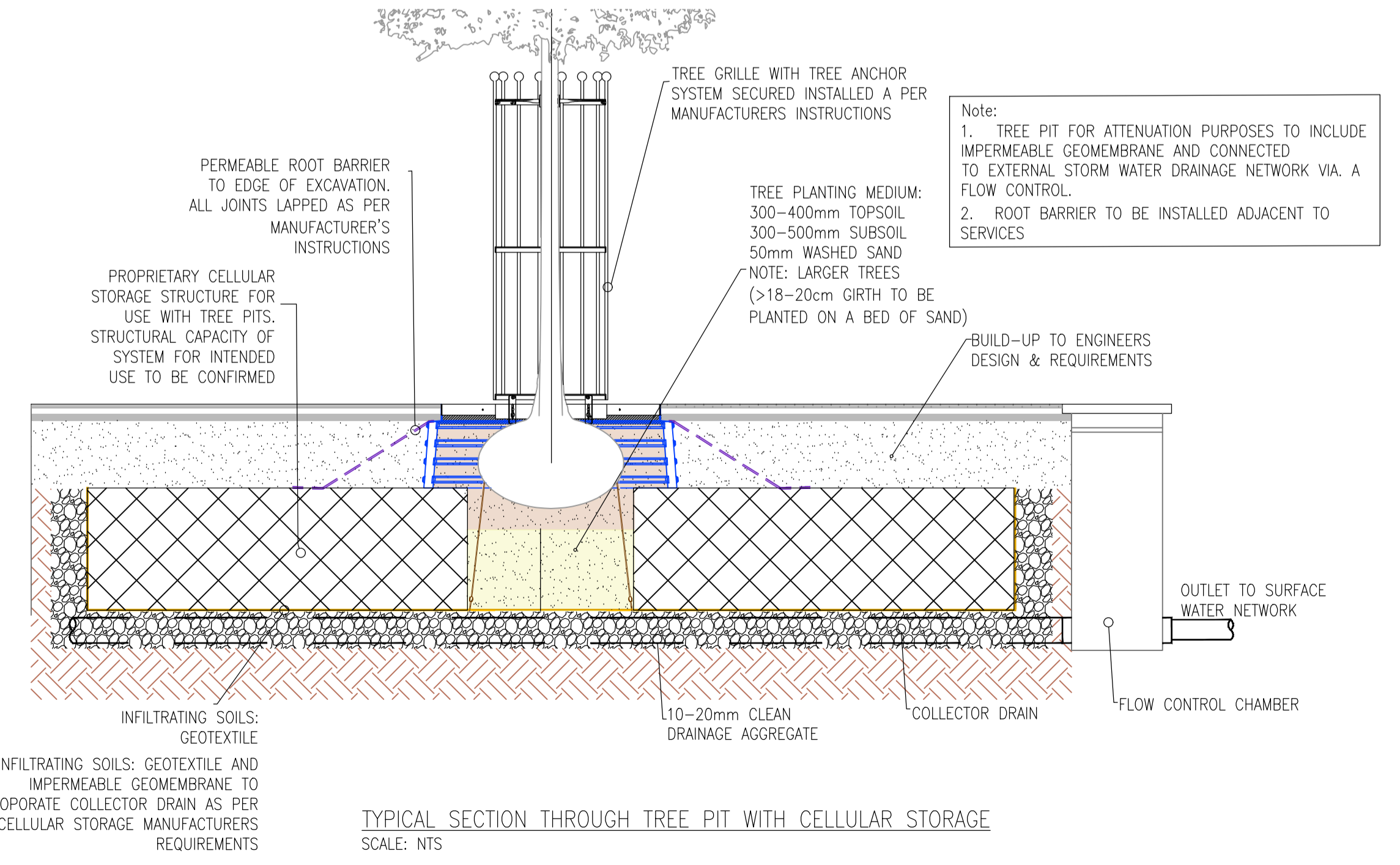
CAST IRON PAVEMENT CHANNEL PLAN VIEW
 SCALE: 1:20



CAST IRON KERB INLET - ISOMETRIC
 SCALE: 1:10



DROP IN ROAD LEVEL TO CAST IRON KERB INLET
 SCALE: 1:10



TYPICAL SECTION THROUGH TREE PIT WITH CELLULAR STORAGE
 SCALE: NTS

PI01	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	Chk

Amendments

SOCIAL HOUSING AT ROSSFIELD, TALLAGHT

PROPOSED SuDS STANDARD DETAILS

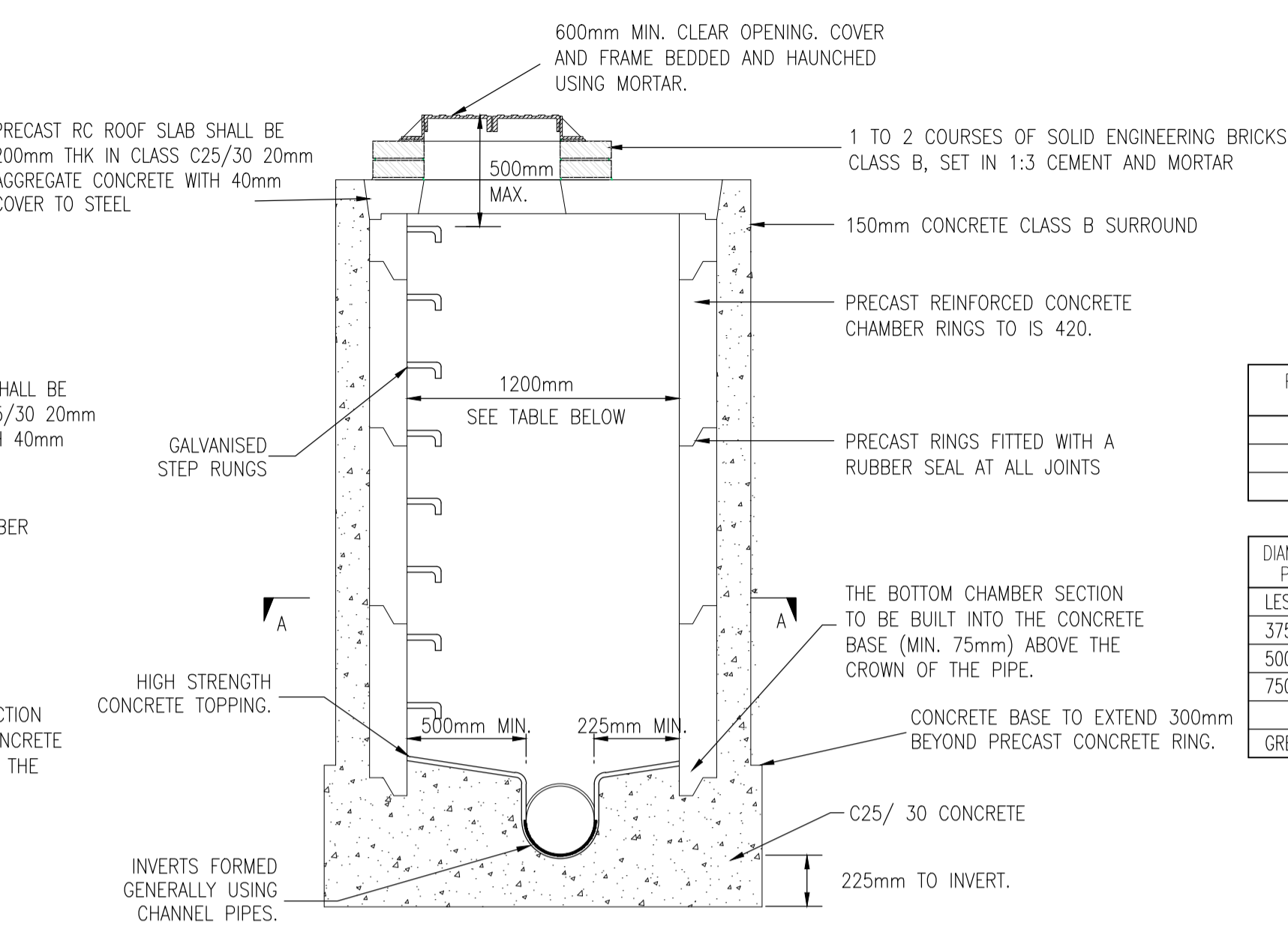
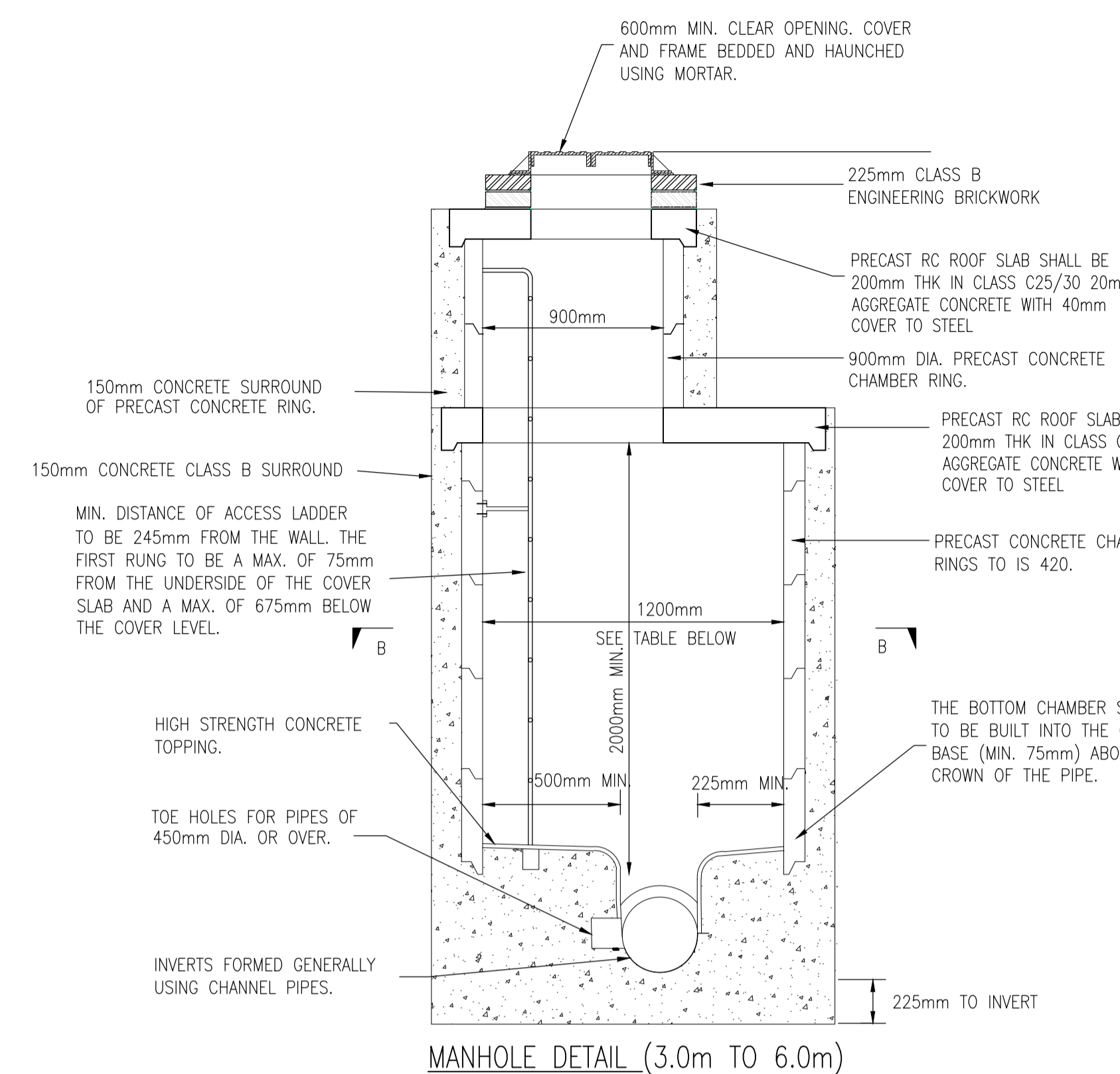
Client: SOUTH DUBLIN CITY COUNCIL

BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900
 Email: info@waterman-moylan.ie www.waterman-moylan.ie

Status			
PLANNING			
Designed By	Approved	Waterman Ref	23-044
JB	IW		
Drawn By	Date	Scales @ A1	AS SHOWN
MS	DEC. 2023		
Project	Originator	Volume	Level
BRFD - WMC - ZZ - 00 - GA - P - 0202			
	Role	Number	Revision
			P01

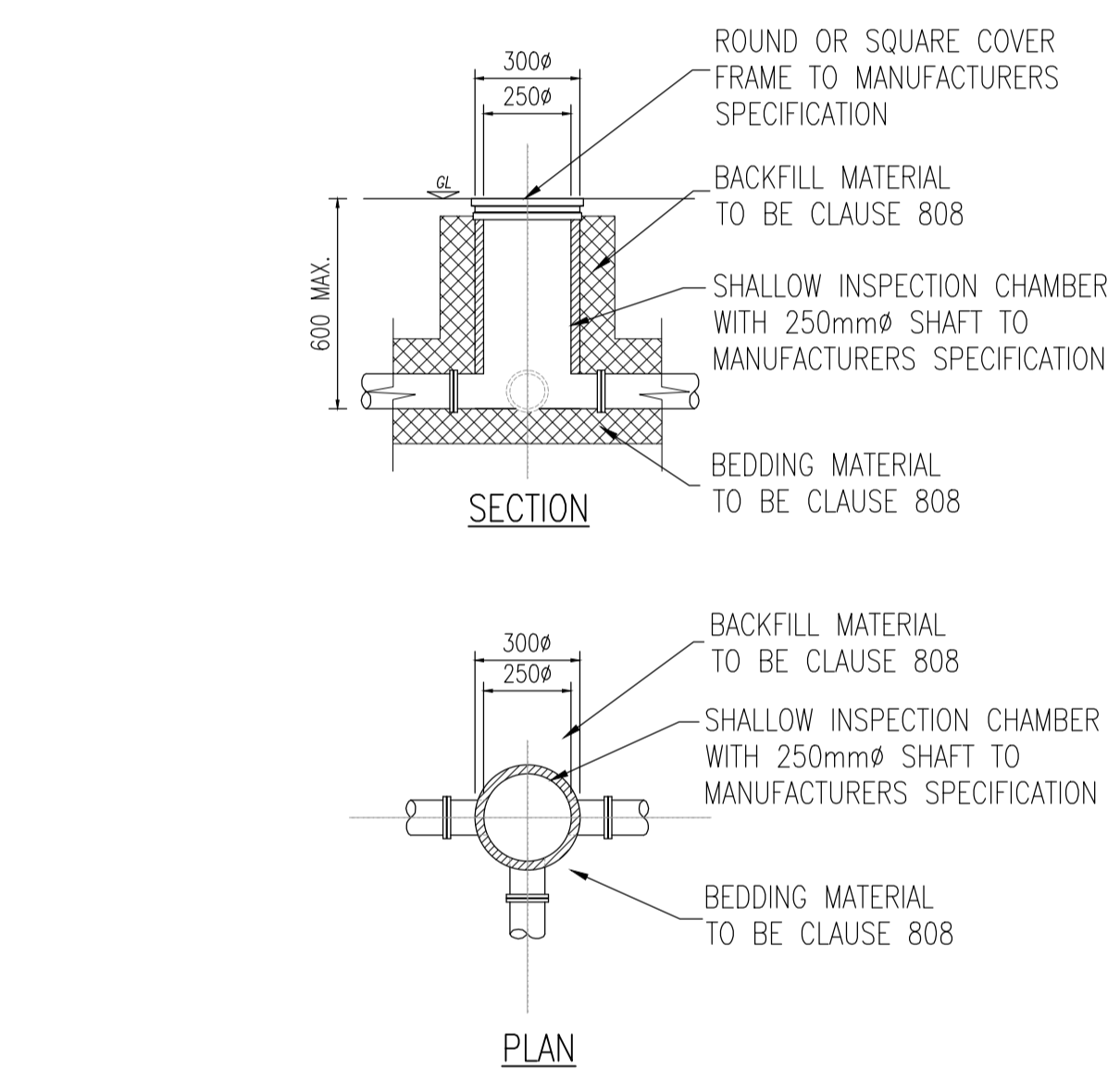
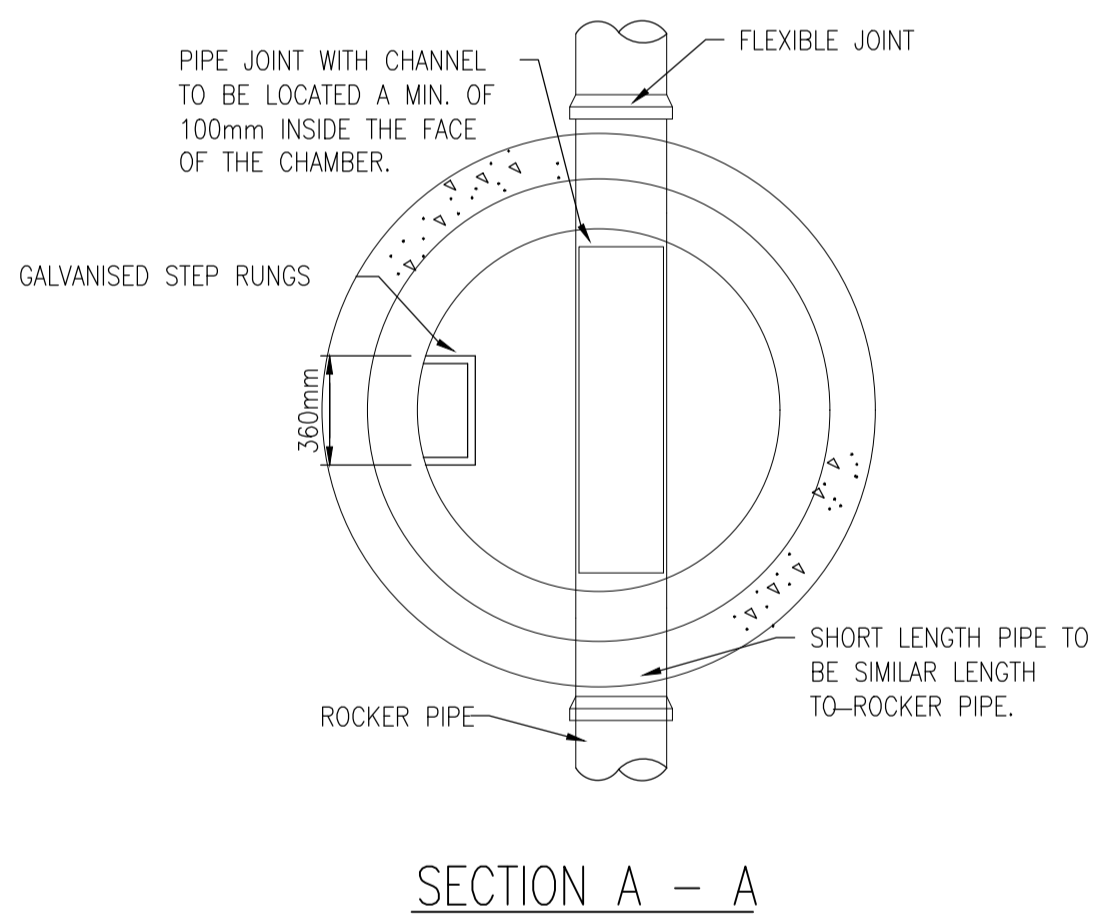
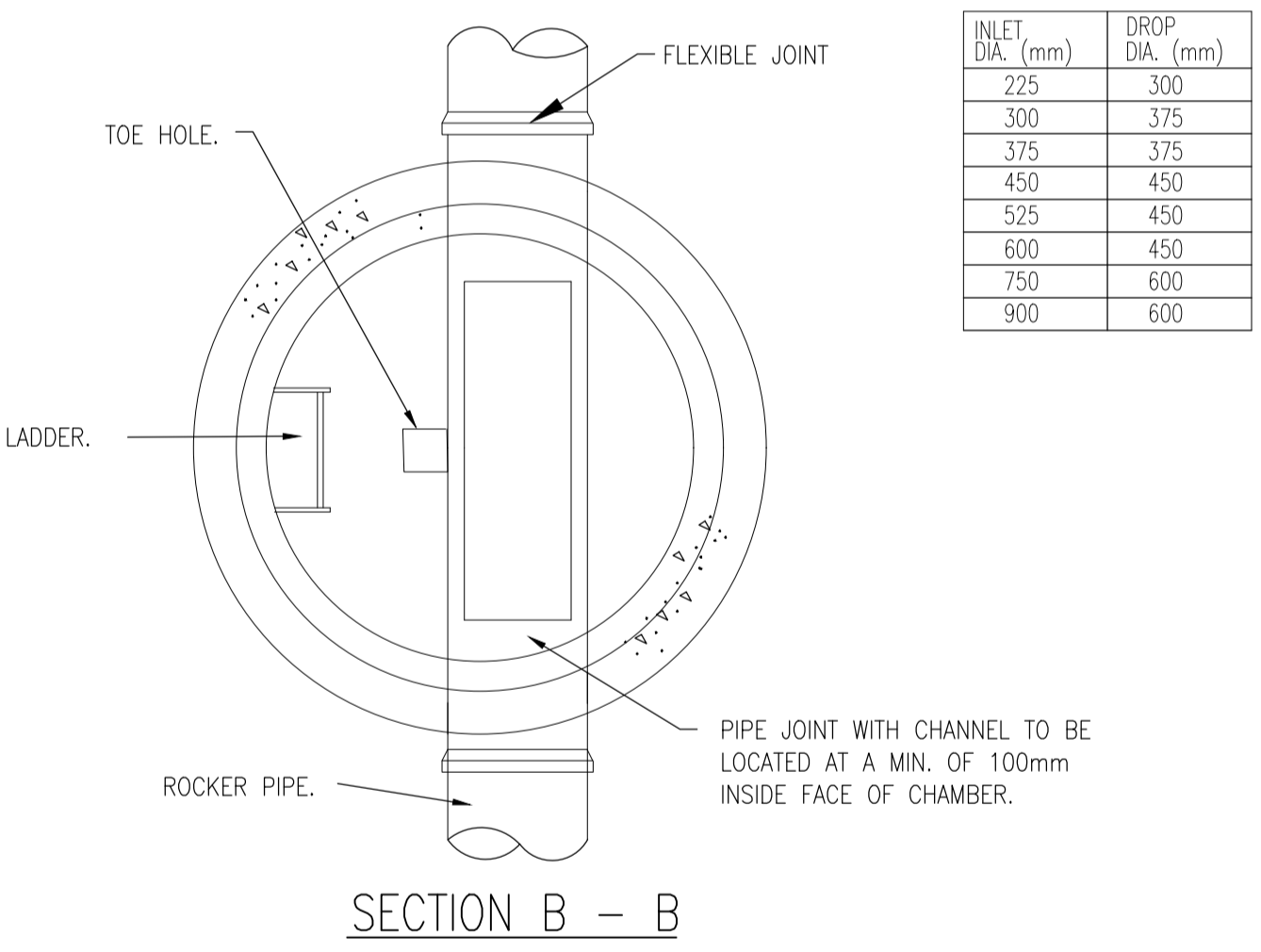
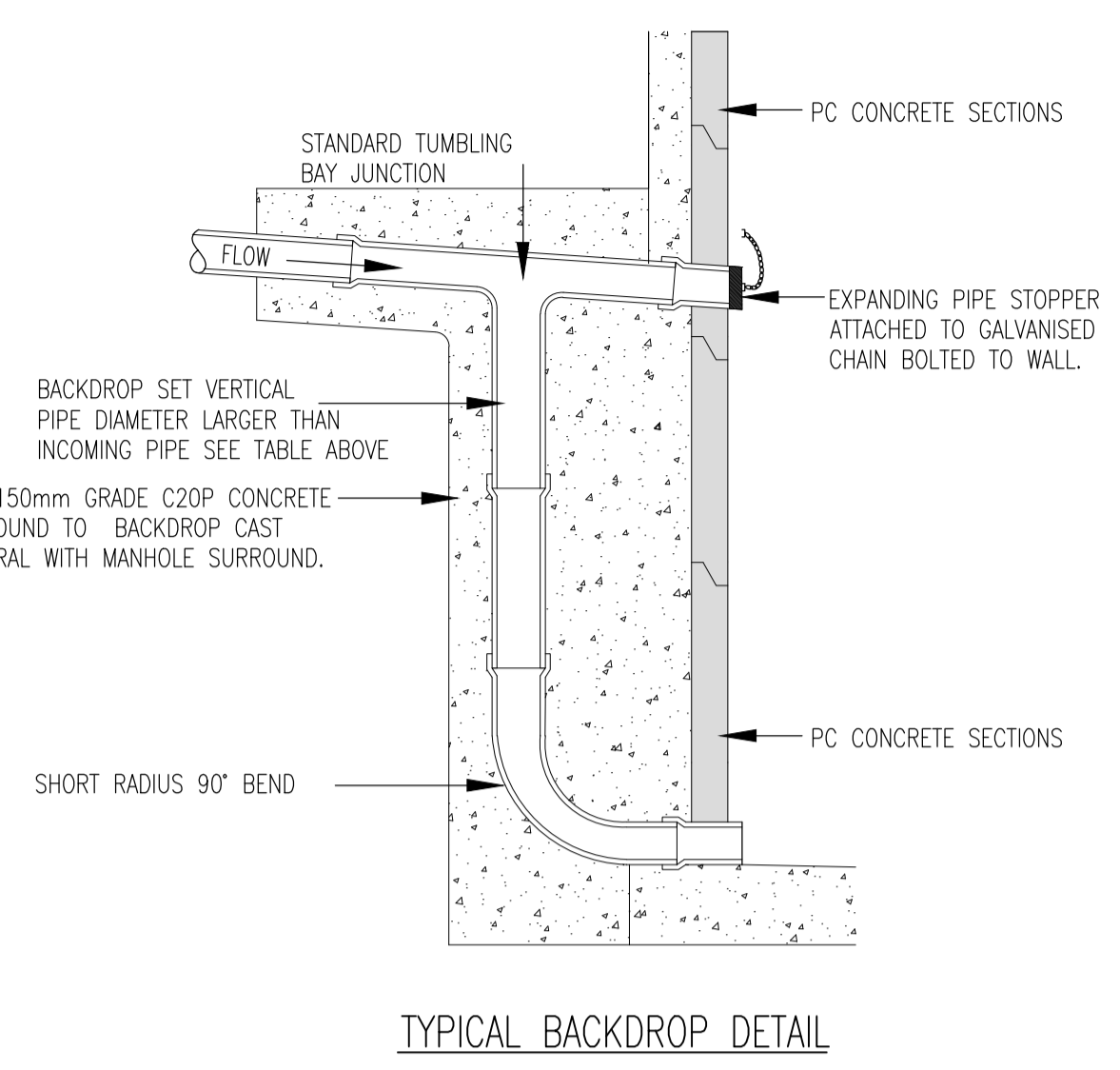
This drawing should not be scaled. Dimensions to be verified on site.
 Any discrepancies should be referred to the Engineer prior to work being put in hand.
 This drawing is the property of Waterman Moylan Consulting Engineers Limited and is issued on the condition that it is not copied, reproduced, retained or disclosed to any unauthorized person, either wholly or in part without the consent in writing of Waterman Moylan Consulting Engineers Limited.
 Block S East Point Business Park Dublin D03 H3F4 Ireland t+353 1 664 8900

- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL, ENGINEERING DRAWINGS AND THE GREATER DUBLIN REGIONAL CODE OF PRACTICE V6.0.
 - TYPE A GRANULAR FILL SHALL CONSIST OF WASHED PEA GRAVEL. ALL MATERIAL SHALL PASS A 19mm B.S. SIEVE TEST AND SHALL BE RETAINED BY A 4.75mm B.S. SIEVE TEST.
 - SELECTED FILL SHALL BE FREE FROM STONES GREATER THAN 25mm IN SIZE, BUILDERS RUBBLE VEGETABLE MATTER AND LUMPS OF CLAY GREATER THAN 75mm IN SIZE AND SHALL BE COMPACTED IN 150mm LAYERS.
 - IN OPEN SPACES BACKFILL SHALL CONSIST OF SUITABLE SELECTED EXCAVATED MATERIAL. UNDER PAVED AREAS BACKFILL SHALL CONSIST OF CLAUSE 808. GENERAL BACKFILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm THICK.
 - CONCRETE BED AND SURROUND SHALL BE USED ON ALL PIPES WHERE COVER TO THE SOFT OF THE PIPE IS LESS THAN 1.2m IN ROADS, FOOTPATHS AND GRASS MARGINS AND 0.9m IN OPEN SPACES AND FIELDS.
 - ALL CONCRETE FOR PIPE BEDDING, HAUNCHING AND SURROUNDS SHALL BE GRADE CL 20N/20mm.
 - ALL MANHOLES SHALL BE WATERTIGHT TO THE SATISFACTION OF THE LOCAL AUTHORITY/COUNCIL.
 - FORMWORK TO REINFORCED CONCRETE AND MASS CONCRETE SHALL BE CLASS F2.
 - CLASS U2 FINISH TO THE TOP OF SLABS. REINFORCEMENT TO SLABS TO ENGINEERS DETAILS.
 - 200mm THICK CL 30N/20mm MASS CONCRETE FOUNDATIONS. 225 THICK PRECAST R.C. ROOF SLAB IN CL 30N/20mm CONCRETE. COVER TO STEEL TO BE 40mm.
 - TOE HOLES OF 230mm MINIMUM DEPTH AND GALVANIZED STEEL SAFETY RAILINGS TO BE PROVIDED IN BENCHING OF SEWERS GREATER THAN 525mm DIAMETER AND DEPTH TO INVERT >3m FOR ACCESS TO INVERT.
 - A SAFETY CHAIN IS TO BE PROVIDED ON SEWER PIPES THAT EXCEED 450mm IN DIAMETER. MILD STEEL SAFETY CHAIN SHALL BE 10mm NOMINAL SIZE GRADE M10 NON CALIBRATED CHAIN, TYPE 1, COMPLYING WITH B.S.4942 PART 2 OR EQUIVALENT.
 - WHEN DEPTH OF MANHOLES TO INVERT IS GREATER THAN 3.0m LADDERS SHALL BE USED INSTEAD OF RUNGS. FIXED LADDERS SHOULD MEET THE DIMENSIONAL REQUIREMENTS OF B.S.4211 OR EQUIVALENT EXCEPT THAT STRINGERS SHOULD NOT BE LESS THAN 65 X 12mm IN SECTION AND RUNGS 25mm IN DIAMETER.
 - LADDER STRINGERS SHOULD BE ADEQUATELY SUPPORTED FROM THE MANHOLE WALL AT INTERVALS OF NOT MORE THAN 2.0m STRINGERS SHOULD BE BOLTED TO CLEATS TO FACILITATE RENEWAL.
 - ALL LADDERS, RUNGS, HANDRAILS, SAFETY CHAIN, ETC. SHALL BE HOT DIPPED GALVANIZED TO B.S.729 OR EQUIVALENT.
 - ALL DRAINAGE WORKS SHALL BE CONSTRUCTED STRICTLY IN ACCORDANCE WITH SOUTH DUBLIN COUNTY COUNCIL REQUIREMENTS FOR TAKING IN CHARGE AND GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
 - PERTAINING TO FOUL WATER DRAINAGE WORKS - IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS. THE CODE OF PRACTICE AND STANDARD DETAILS ARE AVAILABLE TO DOWNLOAD FROM THE IRISH WATER WEB SITE AT WWW.WATER.IE/CONNECTIONS/DEVELOPER-SERVICES/ WHERE THE DETAILS CONTAINED ON THIS DRAWING DIFFER FROM THE IRISH WATER CODE OF PRACTICE OR STANDARD DETAILS THIS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IRISH WATER STANDARDS WILL TAKE PRECEDENCE.



PIPE DIAMETER	ROCKER PIPE LENGTH
150 - 600	0.6
600 - 750	1.0
750 >	SEE GUIDANCE

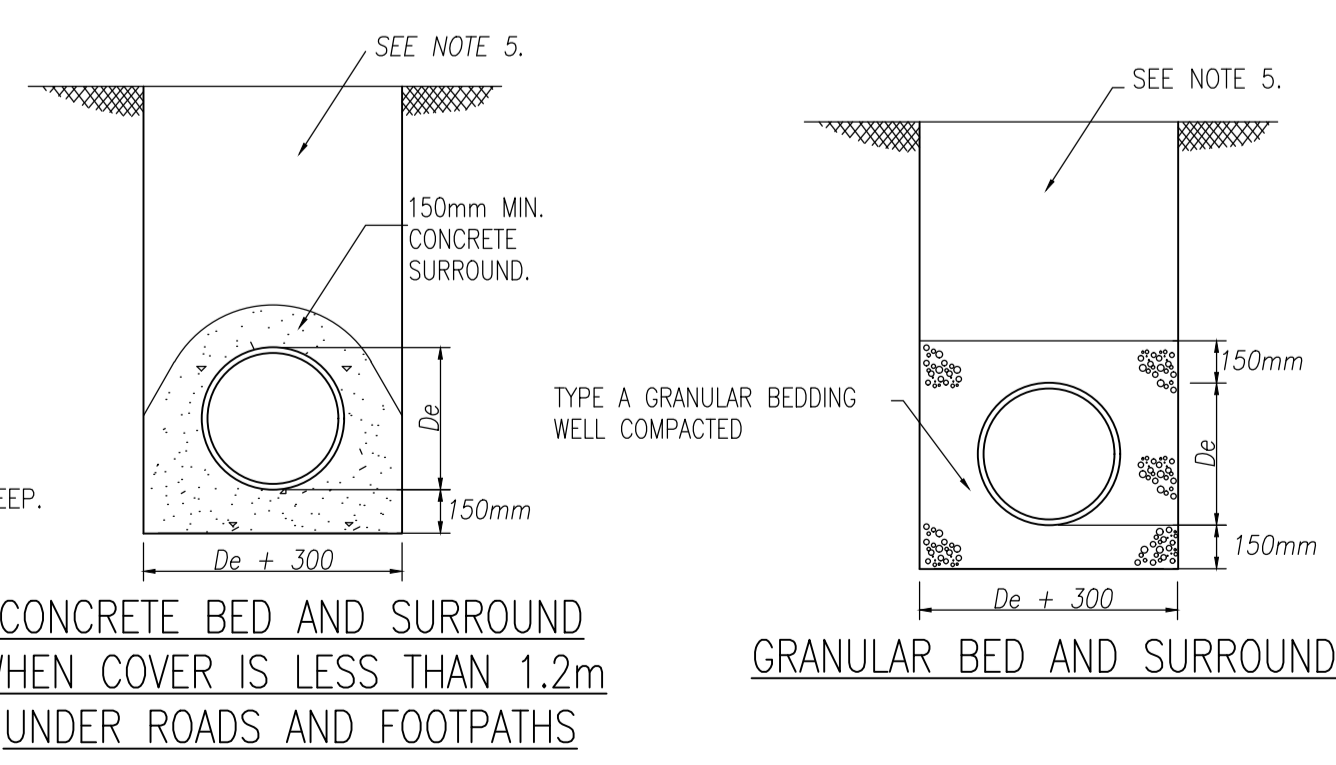
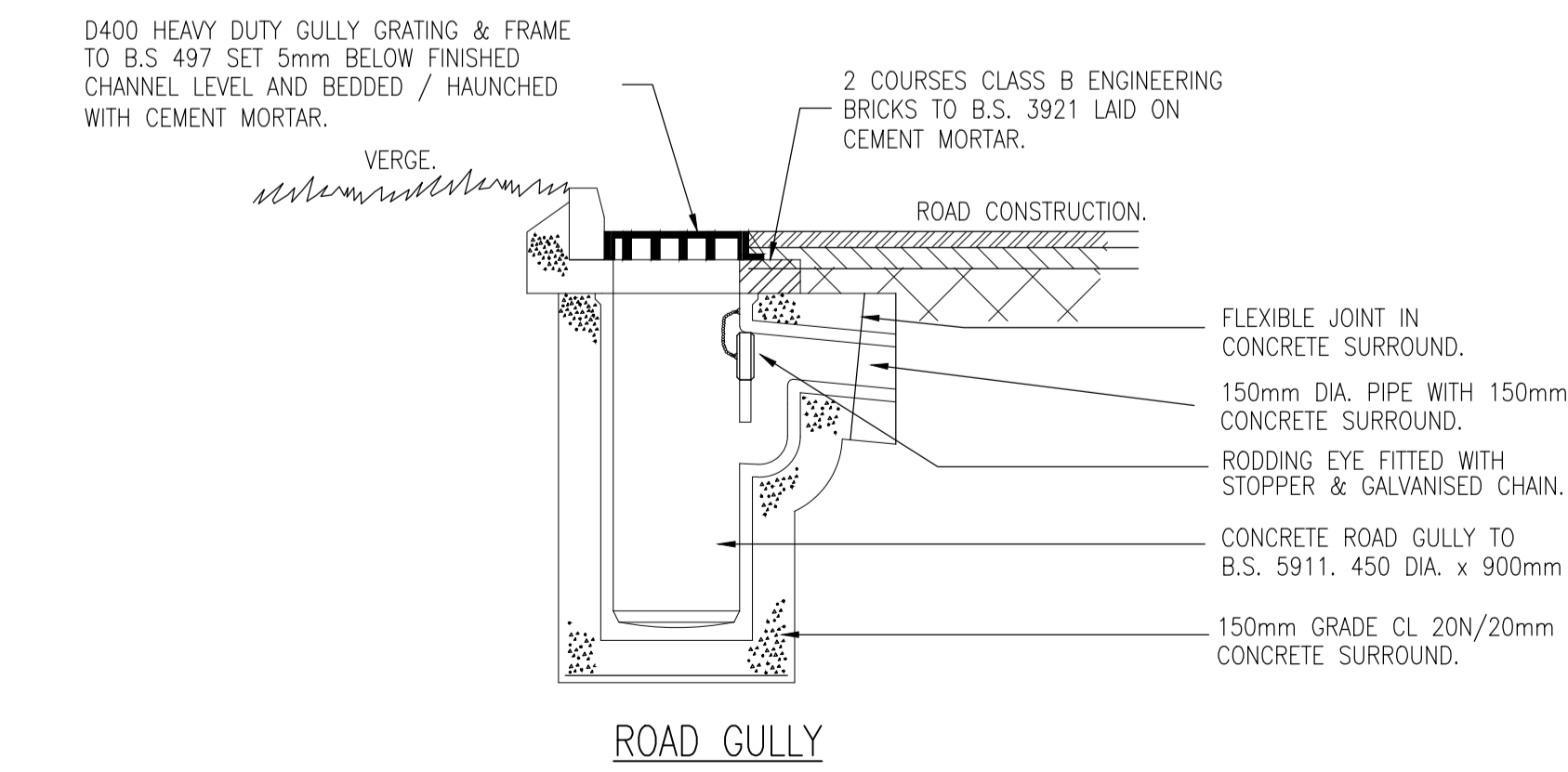
DIAMETER OF LARGEST PIPE IN MANHOLE	PRECAST CONCRETE RING SIZE
LESS THAN 375mm	1200mm DIA
375mm TO 450mm	1350mm DIA
450mm TO 700mm	1500mm DIA
700mm TO 900mm	1800mm DIA
GREATER THAN 900mm	PIPE DIA + 900



CIRCULAR INSPECTION CHAMBER WHERE INVERT IS 0.6m OR LESS BUILDING REGULATIONS TGD SECTION H TABLE 9

Type	Depth to (m)	Internal Sizes		Cover Sizes	
		length x width (mm x mm)	Circular (mm)	length x width (mm x mm)	Circular (mm)
Rodding eye	0.6 or less	150 x 100	150	150 x 100	150
	large	300 x 100	-	300 x 100	-
Access Fitting	0.6 or less	300 x 300	190*	300 x 300	190*
	1.0 or less	450 x 450	450	450 x 450	450**
Manhole	1.5 or less	1200 x 750	1000	600 x 600	600
	over 1.5	1200 x 750	1200	600 x 600	600
	over 2.7	1200 x 840	1200	600 x 600	600
Shaft	over 2.7	900 x 840	900	600 x 600	600

Note:
 * For clayware or plastics may be reduced to 430mm in order to provide support for cover and frame
 ** Drains up to 150mm



PIP1	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED DRAINAGE STANDARD DETAILS				
Client				
SOUTH DUBLIN CITY COUNCIL				
BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
Status				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
Drawn By	MS	Date	DEC. 2023	23-044
Project - Originator - Volume - Level - Type - Role - Number				Revision
BRFD - WMC - ZZ - 00 - GA - P - 0210				P01

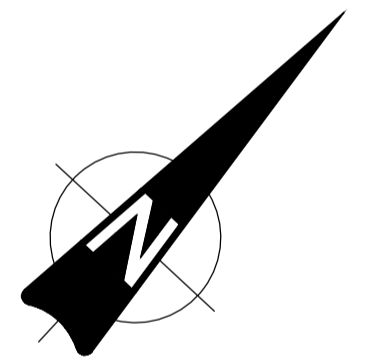
Drawing Location: M:\Projects\3925-04 - Broomfield Road\Drawings\Waterman Moylan\Civil\Planning\Autocad Drawings\Autocad Drawings\Standard Details.dwg Date: Dec 11, 2023 10:58am

- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.
 - IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS. THE CODE OF PRACTICE AND STANDARD DETAILS ARE AVAILABLE TO DOWNLOAD FROM THE IRISH WATER WEB SITE AT WWW.WATER.IE/CONNECTIONS/DEVELOPER-SERVICES/ WHERE THE DETAILS CONTAINED ON THIS DRAWING DIFFER FROM THE IRISH WATER CODE OF PRACTICE OR STANDARD DETAILS THIS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IRISH WATER STANDARDS WILL TAKE PRECEDENCE.
 - THE LOCATION AND LEVEL OF EXISTING SERVICES AT CONNECTION POINTS ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS. ANY DISCREPANCY WITH GIVEN SURVEY LEVELS ARE TO BE BROUGHT TO THE ATTENUATION OF THE ENGINEER.
 - IN AREAS OF KNOWN EXISTING SERVICES, THE EXISTING SERVICES ARE TO BE CHECKED BY THE CONTRACTOR TO ENSURE THAT ALL RELEVANT EXISTING SERVICES ARE IDENTIFIED AND SHOWN ON DRAWINGS.
 - ANY UNSUITABLE MATERIAL EXPOSED DURING EXCAVATION IS TO BE BROUGHT TO THE ATTENUATION OF THE ENGINEER.
 - SURFACE WATER DRAINAGE WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH SDOCC REQUIREMENTS FOR TAKING IN CHARGE AND THE GENERAL DUBLIN CODE OF PRACTICE FOR DRAINAGE WORKS.
 - ALL TRENCHES WHERE THERE IS EXPOSED ROCK ARE TO BE LINED WITH LIQUID BITUMEN SPRAY IMMEDIATELY AFTER EXPOSURE.



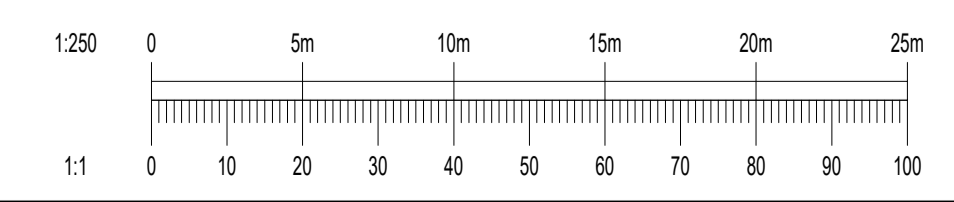
LEGEND

- SITE BOUNDARY
- PROPOSED HDPE WATERMAIN 110mm \varnothing ID (110mm \varnothing OD)
- PROPOSED BOUNDARY BOX AND 20mm ID (25mm OD) CONNECTION PIPE
- PROPOSED SLUICE VALVE
- PROPOSED WASHOUT HYDRANT
- PROPOSED FIRE HYDRANT 46m COVERAGE
- PROPOSED ROAD LEVELS, CHAINAGE AND GRADIENT
- EXISTING HYDRANT
- EXISTING WATERMAIN
- EXISTING SURFACE SEWER
- EXISTING FOUL SEWER
- EXISTING EIRCOM DUCT
- EXISTING ESB DUCT



- NOTE:
WATERMAIN MATERIAL TO BE PE 100 (SDR 11 OR 17) IN COMPLIANCE WITH SECTION 3.9 OF IRISH WATER, "WATER SUPPLY INFRASTRUCTURE CODE OF PRACTICE"
- NOTE:
AIR VALVE AND HYDRANTS COVERS, WHERE LOCATED IN GRASS AREAS, SHALL BE SURROUNDED BY A CONCRETE PLINTH IN COMPLIANCE WITH SECTION 3.18 OF IRISH WATER, "WATER SUPPLY INFRASTRUCTURE CODE OF PRACTICE"
- NOTE:
THRUST BLOCKS TO BE PROVIDED AT EACH BEND ALONG THE COURSE OF THE WATERMAIN IN COMPLIANCE WITH SECTION 4.6 OF IRISH WATER, "WATER SUPPLY INFRASTRUCTURE CODE OF PRACTICE"
- NOTE:
ENSURE DEPTH OF COVER TO WATERMAIN CROWN IS ACHIEVED IN COMPLIANCE WITH SECTION 3.11 OF IRISH WATER, "WATER SUPPLY INFRASTRUCTURE CODE OF PRACTICE"
- NOTE:
METERS FOR APARTMENTS OR SIMILAR PROPERTIES WILL BE INSTALLED INTERNALLY WITHIN THE PREMISES IN ACCORDANCE WITH THE BUILDING CONTROLS AUTHORITY REQUIREMENTS AND SUBJECT TO REVIEW BY IRISH WATER, "WATER SUPPLY INFRASTRUCTURE CODE OF PRACTICE"

PROPOSED GENERAL ARRANGEMENT
SCALE 1:250



PI1	17/11/23	ISSUED FOR PLANNING	By	IW
Rev	Date	Description	By	CHK
Amendments				
Project				
SOCIAL HOUSING AT ROSSFIELD, TALLAGHT				
Title				
PROPOSED WATERMAIN LAYOUT				
Client				
SOUTH DUBLIN CITY COUNCIL				
BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie				
Status				
PLANNING				
Designed By	JB	Approved	IW	Waterman Ref
				23-044
Drawn By	MS	Date	DEC. 2023	Scales @ A1
				1:250
Project - Originator - Volume - Level - Type - Role - Number				Revision
BRFD - WMC - ZZ - 00 - GA - P - 0300				P01