

Kinsale Road LRD, Kinsale Road, Cork

DMURS Compliance Statement

214130-PUNCH-XX-XX-RP-C-008

June 2025

Document Control

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1 Introduction

This DMURS compliance statement was prepared for a proposed Large-scale Residential Development (LRD) at a site located at Kinsale Road, Cork, and provides a review of the proposed development regarding compliance with guidelines in the Design Manual for Urban Roads and Streets (DMURS). The overarching principals of DMURS are addressed initially and followed by compliance with specific DMURS design elements.

The scheme proposals are the outcome of an integrated design approach that seeks to implement a sustainable community connected to well-designed infrastructure which delivers safe, convenient, and attractive streets in addition to promoting a real and viable alternative to single user car-based journeys.

The Design Team considers that the proposed development is consistent with both the principles and guidance outlined within the Design Manual for Urban Roads and Streets (DMURS) 2019.

DMURS sets out design guidance and standards for constructing new and reconfigured existing urban roads and streets. It also sets out practical design measures to encourage more sustainable travel patterns in urban areas.

The primary objectives of DMURS are as follows:

- i. Prioritise pedestrians and cyclists in urban settings without unduly compromising vehicular movement.
- ii. Provide good pedestrian permeability and connectivity in urban environments in order to encourage walking.
- iii. Implement speed reduction measures to provide safe interaction between pedestrians, cyclists and motorists.
- iv. Create attractive streetscapes through the design of roads and footpaths with careful consideration given to landscaping and selection of surface finishes.

The public areas fronting and within the proposed development have been designed by the multidisciplinary design team to accommodate pedestrians and cyclists in accordance with the appropriate principles and guidelines set out in DMURS.

2 Existing Site Usage

The site of the proposed development is a brownfield site which was formerly owned by Vita Cortex and is approximately 1.2 hectares in area. The site has been disused since 2012. Planning permission was granted for the demolition of site structures under application reference no. 2140647, and separate planning permission (Ref. 2442868) was obtained for remediation works on the site. Remediation works involved the excavation and off-site disposal of impacted soils, the pumping and treatment of groundwater, and the importation of stone/soil for backfilling.

The site is bounded by residential and commercial properties to the north and north-east, Kinsale Road to the east, Virgin Media Park and a retail premises to the south and south-east, and Pearse road to the west. The overall topography of the site is relatively flat with a steep embankment located along the western boundary.

The site can currently be accessed via existing entrance off Pearse Road to the west and Kinsale Road to the east. The site location is shown in Figure 2-1 below.

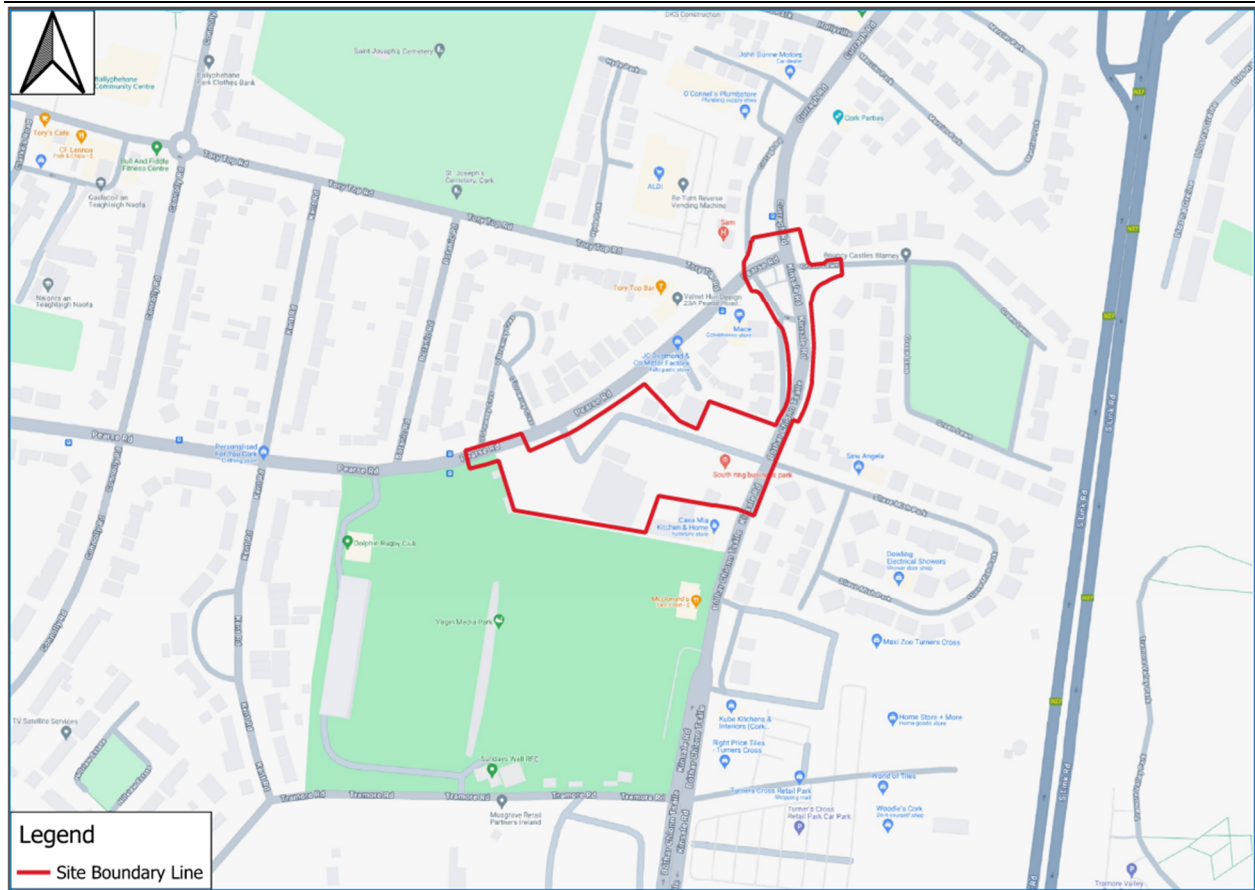


Figure 2-1: Site Location of the Proposed Development

3 Proposed Development

The proposed works are outlined in a series of architectural drawings prepared by BKD Architects and engineering drawings prepared by PUNCH Consulting Engineers and supplied to accompany this report.

The proposed development will consist of a Large-Scale Residential Development (LRD), comprising 170 no. residential units (158 no. apartments and 12 no. townhouse apartments, to include 51 no. 1-bed units, 84 no. 2-bed units, 35 no. 3-bed units) arranged in 4 no. blocks varying in height from four to nine storeys over ground. The proposed development also includes a crèche; café; management office; 4 no. retail units; car parking and cycle parking provided on surface and within an undercroft; the provision of private, communal and public open space and all associated site development, landscaping and drainage works on the site of the Former Vita Cortex Facility, Kinsale Road and Pearse Road, Cork.

Access to the proposed development will be from both Pearse Road and Kinsale Road. Two access points are proposed along Kinsale Road: a vehicular, cyclist and pedestrian entrance to the retail parking area, and a pedestrian and fire tender route that extends centrally through the site. Similarly, two access points are proposed along Pearse Road: one for vehicles and cyclists to access the undercroft parking area, and a dedicated pedestrian access that runs through the centre of the site.

An extract of the proposed development is included in Figure 3-1.

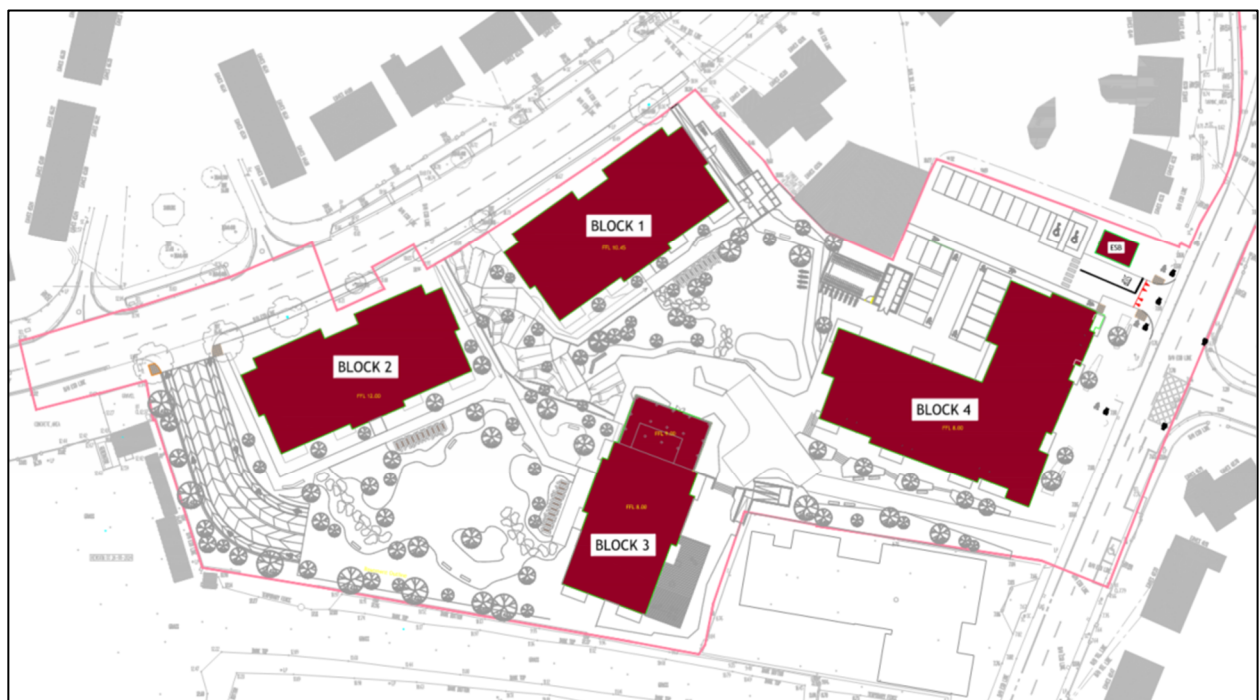


Figure 3-1: Proposed Site Layout

4 DMURS Review

The following table outlines the design features that have been incorporated within the proposed residential scheme with the objective of delivering a design that is in full compliance with the relevant requirements of DMURS.

Design Element	DMURS Guidance
Place Function	DMURS seeks that “the design of residential streets strikes the right balance between the different functions of the street, including a sense of place”. Additionally, the development should incorporate “measures to ensure satisfactory standards of personal safety and traffic safety”. The proposed development incorporates the desires of DMURS in this context, including: • vertical deflections, • narrow carriageways, • minimised signage and road markings, • compliant visibility splays, • tighter corner radii, • and large hard and soft street scape.
Street Layout	DMURS looks to encourage: “layouts that maximise the number of walkable/cyclable routes between destinations”. The proposed development adopts this ethos by the provision of permeable pedestrian routes and cycle route throughout the confines of the development. Pearse Road will allow for vehicle/cyclist access to the basement that would provide access to Block 2 and Block 3. There will be a dedicated pedestrian/cyclist access between Block1 and Block 2 that will allow pedestrians/cyclists to travers from Pearse Road to Kinsale Road. Kinsale road will allow for vehicular access north of Block 4 while also providing pedestrian/cyclist access south of Block 4.
Traffic Congestion	DMURS recommends the use of permeable traffic-calmed networks, as “the most balanced way of addressing traffic congestion”. A traffic calming strategy focused on the prioritisation of pedestrian movement is employed throughout the development. There are designated parking areas conveniently located throughout the site facilitating seamless connectivity with the local road network.
Approach to Speed	DMURS specifies that “where vehicle movement priorities are low, such as on local streets, lower speed limits should be applied (30km/h)”. Vehicle speeds are controlled using short lengths of straight road, tight radii and change of surface materials. The design speed within the proposed development is 30km/h.

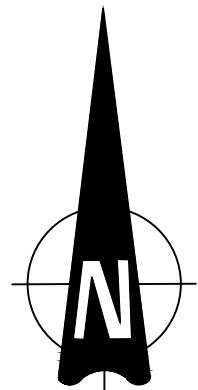
Signage and Line Marking	DMURS notes that minimal signage is required on local streets due to their low speed and low movement function. The development has adopted this approach.
Lighting	The lighting guidelines in DMURS have been superseded owing to the rapid advancements in LED lighting technology. The street lighting within the development will be provided to achieve the standards required by Cork City Council. LED luminaires will be utilised and positioned to ensure a uniform lighting spread is achieved and ensure dark corners are avoided. This will ensure the development is attractive and safe during hour of darkness.
Materials and Finish	DMURS states that designers should use ‘contrasting materials and textures to inform pedestrians of changes to the function of space (i.e., to demarcate verges, footway, strips, cycle paths and driveways) and in particular to guide the visually impaired’. The range of proposed materials for this development is in line with the requirements of DMURS as illustrated on the Architect and Landscape Architects Design’s drawings included in the planning documentation.
Footways	Footways widths are a minimum of 2.0m in compliance with DMURS for the space. High quality and slip resistant materials will be used and gradients are sufficiently shallow to make the development accessible for users of all abilities.
Pedestrian Crossings	DMURS considers pedestrian crossings to be “one of the most important aspects of street design as it is at this location that most interactions between pedestrians, cyclists and motor vehicles occur”. In addition, in accordance with the Cycle Design Manual, pedestrian and cycle crossings have been prioritized by designing them to be safe, convenient, and easily navigable. The focus is on minimizing conflict with vehicles, providing direct routes, and ensuring both groups are given priority in high-traffic areas.
Corner Radii	DMURS states that “where turning movements occur from an Arterial or Link street into a Local street maximum corner radii may be reduced to 4.5m.” Corner radii of the road entrances to the development is shown as 6.0m in compliance with DMURS best practice for “occasional larger vehicle” access.
Shared Surfaces	Shared surface streets and junctions are integrated spaces where pedestrians, cyclists and vehicles share the main carriageway. In the context of the proposed development, DMURS recognises the use of shared surfaces where “movement priorities are low and there is a high place value in promoting more liveable streets such as on local streets within neighbourhood”. The development will have a ramped access to a basement located west of Block 2. Cycle lanes will be delineated by coloured thermoplastic surface dressing. The development will have dedicated pedestrian/cyclist access between Block1 and Block 2 that will allow pedestrians/cyclists to traverse from Pearse Road to Kinsale Road. This thoroughfare would provide a blended streetscape with the

	appropriate visual cues, signage, and wayfinding to promote appropriate shared path etiquette. The design features listed have been incorporated into the proposed development to encourage the sharing of space.
Cycle Facilities	DMURS references the National Cycle Manual (NCM) in terms of the provision of cycling facilities. Dedicated cycle storage facilities are provided in accordance with the Cork City Development Plan 2022-2028.
Carriageway Width	The width of the road carriageway and aisle width is 6m to facilitate two-way vehicular traffic and the relevant design vehicle turning manoeuvres (i.e. fire tender and refuse vehicle).
Carriageway Surface	The surface materials of the shared surface areas should have colour changes where pedestrian activity is dominant as this should assist in achieving low speeds i.e. <30kph. The surface materials of the shared surface areas have colour changes where cyclist/pedestrian activity is dominant.
Junction Design	The junctions to designed with reduced kerb radii. The proposed development will have Priority Junctions along Pearse Road and Kinsale Road to allow for the efficient vehicular traffic movement and safer pedestrian and cyclist crossings.
Forward & Junction Visibility	Clear adequate visibility splays on both the horizontal and vertical planes of all internal and external junctions shall be maintained. Forward and junction visibility is provided in compliance with DMURS.
Traffic Calming	DMURS highlights that traffic calming features should be provided “on longer straights where there is more than 70m between junctions”. No straights of more than 70m are proposed within the development.
On-Street Parking / Loading	No on-street parking is proposed for the development. All parking will be accommodated within the basement and other designated car parking areas. The amount of car parking spaces provided is consistent with Cork City Development Plan 2022-2028.
Multi-disciplinary Design Team	In accordance with the requirement in DMURS, the design of the development has been prepared by a multi-disciplinary design team, including but not limited to architects, landscape architects; civil engineers; and transport planners.
Road Safety Audit	A Road Safety Audit (RSA) will be procured as part of the preliminary design stage of this project.

5 Conclusion

The assessment concludes the proposed development is considered to be in compliance with the Design Manual for Urban Roads and Streets (DMURS) 2019.

Appendix A Planning Drawings



214130-PUNCH-XX-XX-DR-C-0103

LEGEND

- EXISTING SURFACE WATER SEWER --- SW EX --- SW EX --- SW EX
- EXISTING COMBINED SEWER --- CS EX --- CS EX --- CS EX
- PROPOSED SURFACE WATER SEWER --- S1.001 150 →
- PROPOSED SURFACE WATER MANHOLE ● S1-0
- PROPOSED SURFACE WATER RODDING EYE (SLUNG DRAINAGE) ● S8-0 RE
- PROPOSED PETROL INTERCEPTOR
- PROPOSED ACO DRAINAGE CHANNEL --- ACO
- PROPOSED ATTENUATION TANK
- PROPOSED BIO RETENTION AREAS
- PROPOSED BLUE GREEN ROOF
- PROPOSED GREEN ROOF
- PROPOSED PERMEABLE PAVING
- PROPOSED FOUL SEWER --- 225 →
- PROPOSED FOUL MANHOLE ● F1-0
- PROPOSED FOUL RODDING EYE (SLUNG DRAINAGE) ● F1-1 RE
- EXISTING FOUL MANHOLE Ex FWH L.L. 4.30
- EXISTING COMBINED SEWER MANHOLE Ex CSMH L.L. 5.87
- SITE BOUNDARY ---

214130-PUNCH-XX-XX-DR-C-0101

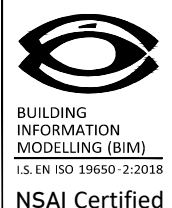
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COLOUR DRAWING



Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING REVIEW	LL	14.04.2025

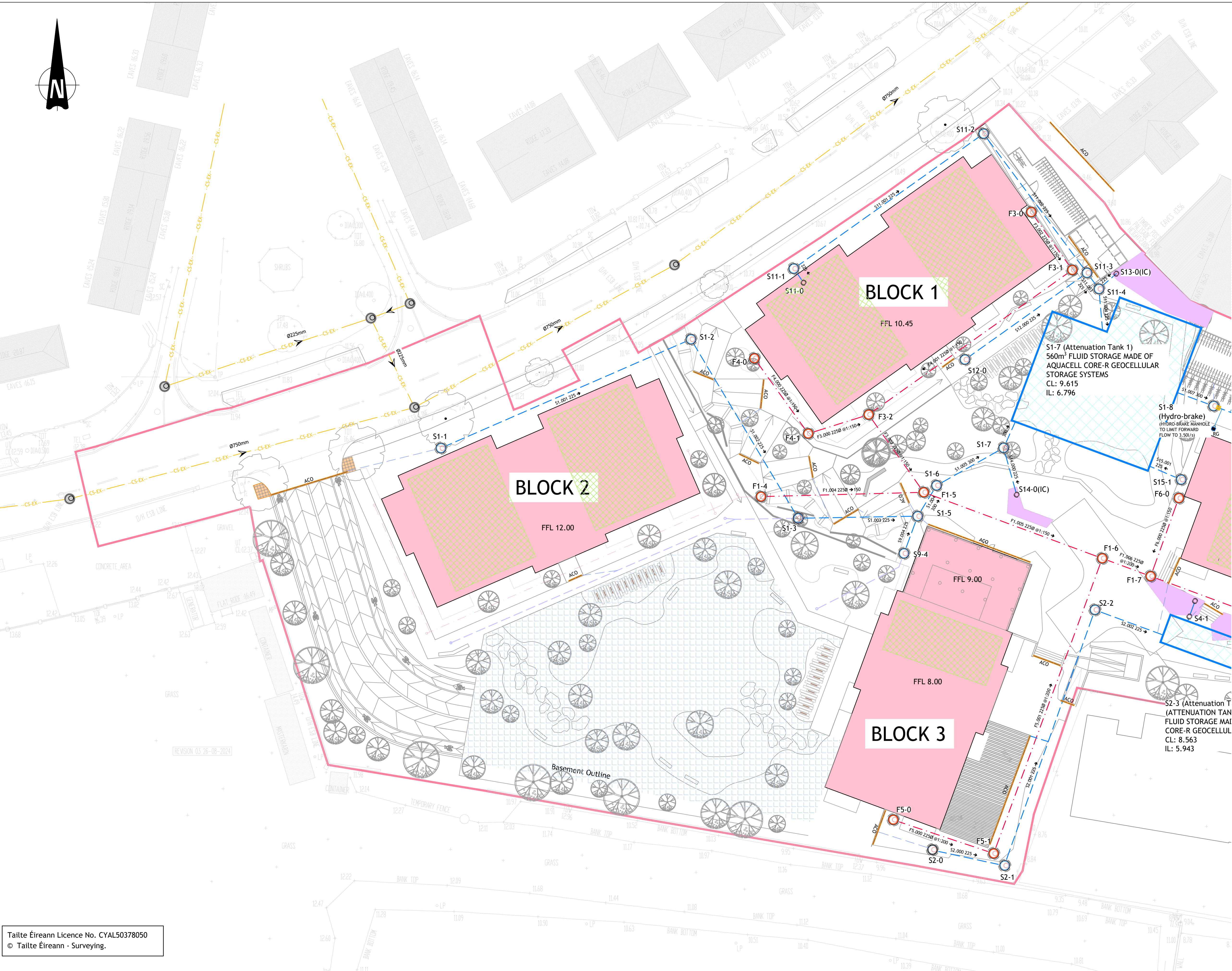
Rev	Amendment	By	Date
C07	ISSUED FOR PLANNING	LL	09.06.2025

Client:
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Project:	KINSALE ROAD LRD, KINSALE ROAD, CORK
Title:	PROPOSED DRAINAGE LAYOUT - GENERAL ARRANGMENT
Drawn:	Liam Loneragan
Project No:	214130
Scale @ A1:	1:500
Date drawn:	10.09.2024
Model Ref:	214130-PUNCH-XX-XX-M2-C-0100-0102
Document No:	214130-PUNCH-XX-XX-DR-C-0100
Technician Check:	Liam Loneragan
Engineer Check:	Simon Solomons
Approved:	Niamh Cronin
Drawing Status:	AO (Planning)
Revision No:	C07



LEGEND

- EXISTING SURFACE WATER SEWER
- EXISTING COMBINED SEWER
- PROPOSED SURFACE WATER SEWER
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED SURFACE WATER RODDING EYE (SLUNG DRAINAGE)
- PROPOSED PETROL INTERCEPTOR
- PROPOSED ACO DRAINAGE CHANNEL
- PROPOSED ATTENUATION TANK
- PROPOSED BIO RETENTION AREAS
- PROPOSED BLUE GREEN ROOF
- PROPOSED GREEN ROOF
- PROPOSED PERMEABLE PAVING
- PROPOSED FOUL SEWER
- PROPOSED FOUL MANHOLE
- PROPOSED FOUL RODDING EYE (SLUNG DRAINAGE)
- EXISTING FOUL MANHOLE
- EXISTING COMBINED SEWER MANHOLE
- SITE BOUNDARY

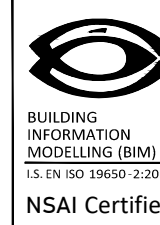
- NOTES:
- FOR BASEMENT DRAINAGE REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0104
 - FOR DRAINAGE SCHEDULES REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0105
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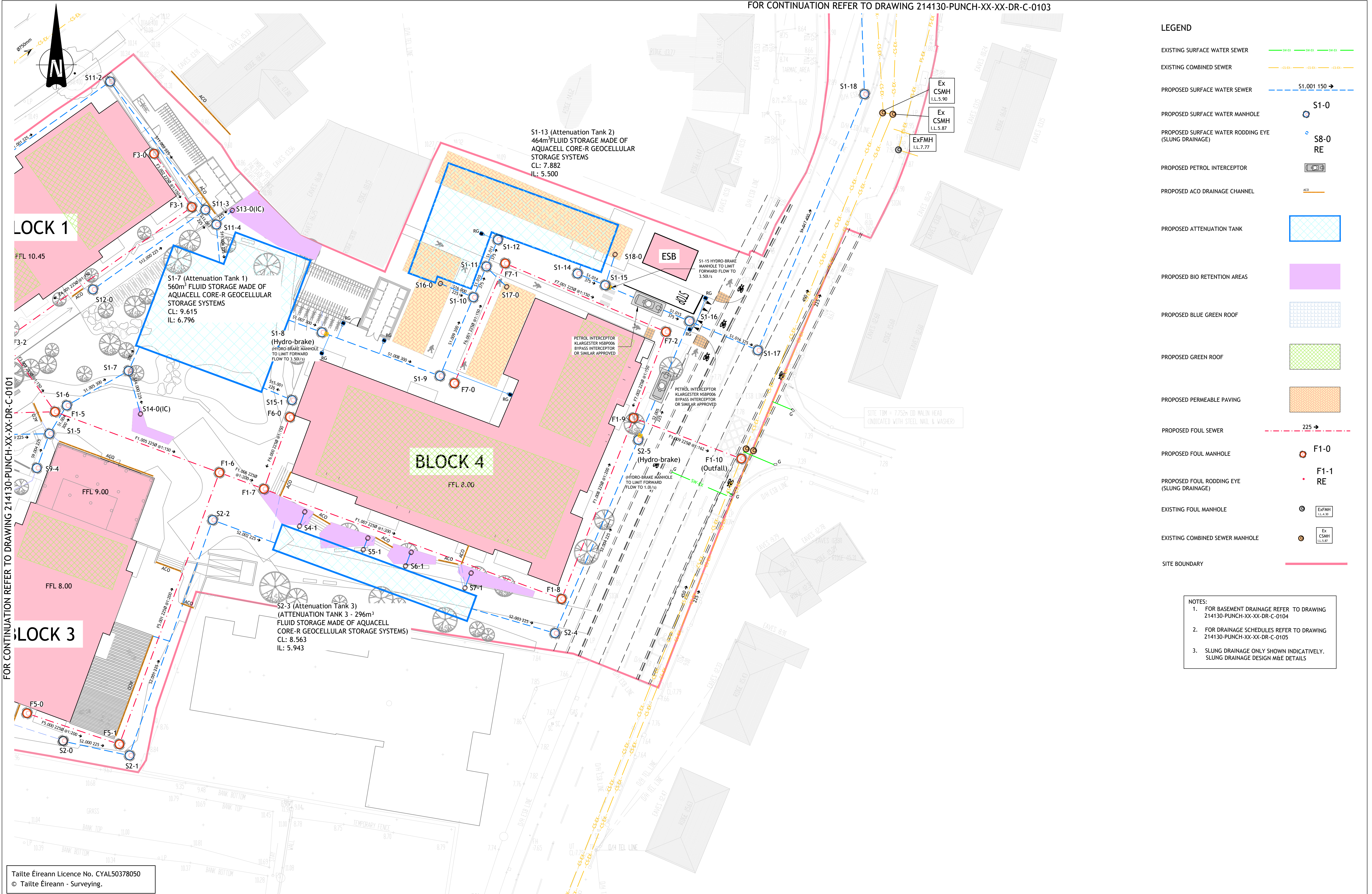
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C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING REVIEW	LL	14.04.2025

Rev	Amendment	By	Date
C07	ISSUED FOR PLANNING	LL	09.06.2025

Client:
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Dublin | Limerick | Cork | Galway | Glasgow

Project:	KINSALE ROAD LRD, KINSALE ROAD, CORK
Title:	PROPOSED DRAINAGE LAYOUT - SHEET 1 OF 3
Drawn:	Liam Lonergan
Date drawn:	10.09.2024
Technical Check:	Liam Lonergan
Engineer Check:	Simeon Solomons
Approved:	Niamh Cronin
Project No:	214130
Model Ref:	214130-PUNCH-XX-XX-M2-C-0100-0102
Document Ref:	214130-PUNCH-XX-XX-DR-C-0101
Scale as SHOWN	AS SHOWN
Drawing Status:	A0 (Planning)
Revision No:	C07



LEGEND

- EXISTING SURFACE WATER SEWER
- EXISTING COMBINED SEWER
- PROPOSED SURFACE WATER SEWER
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED SURFACE WATER RODDING EYE (SLUNG DRAINAGE)
- PROPOSED PETROL INTERCEPTOR
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- PROPOSED FOUL MANHOLE
- PROPOSED FOUL RODDING EYE (SLUNG DRAINAGE)
- EXISTING FOUL MANHOLE
- EXISTING COMBINED SEWER MANHOLE
- SITE BOUNDARY

- NOTES:
- FOR BASEMENT DRAINAGE REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0104
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Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING REVIEW	LL	14.04.2025

Rev	Amendment	By	Date
C07	ISSUED FOR PLANNING	LL	09.06.2025

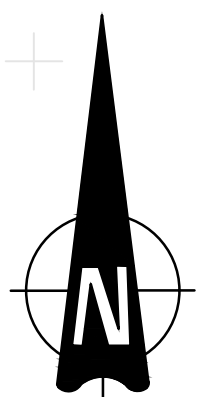
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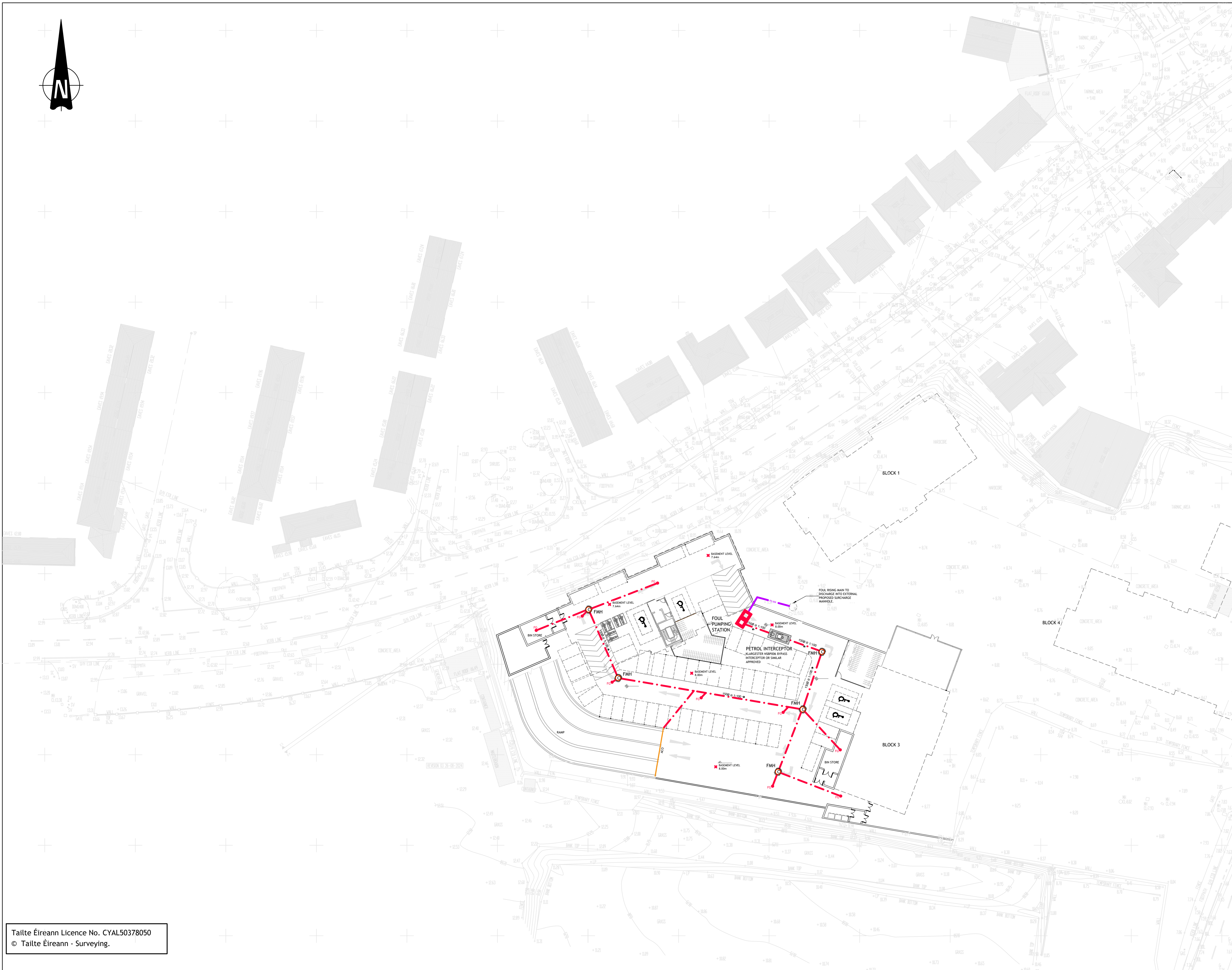
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Drawn:	Liam Lonergan
Date drawn:	10.09.2024
Technician Check:	Liam Lonergan
Engineer Check:	Simeon Solomons
Approved:	Niamh Cronin
Project No:	214130
Model Ref:	214130-PUNCH-XX-XX-M2-C-0100-0102
Document No:	214130-PUNCH-XX-XX-DR-C-0102
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Revised By:	C07





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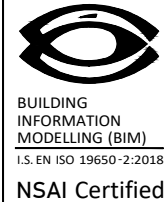
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- PROPOSED PETROL INTERCEPTOR 
- PROPOSED FOUL RISING MAIN 



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C05	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

Client:
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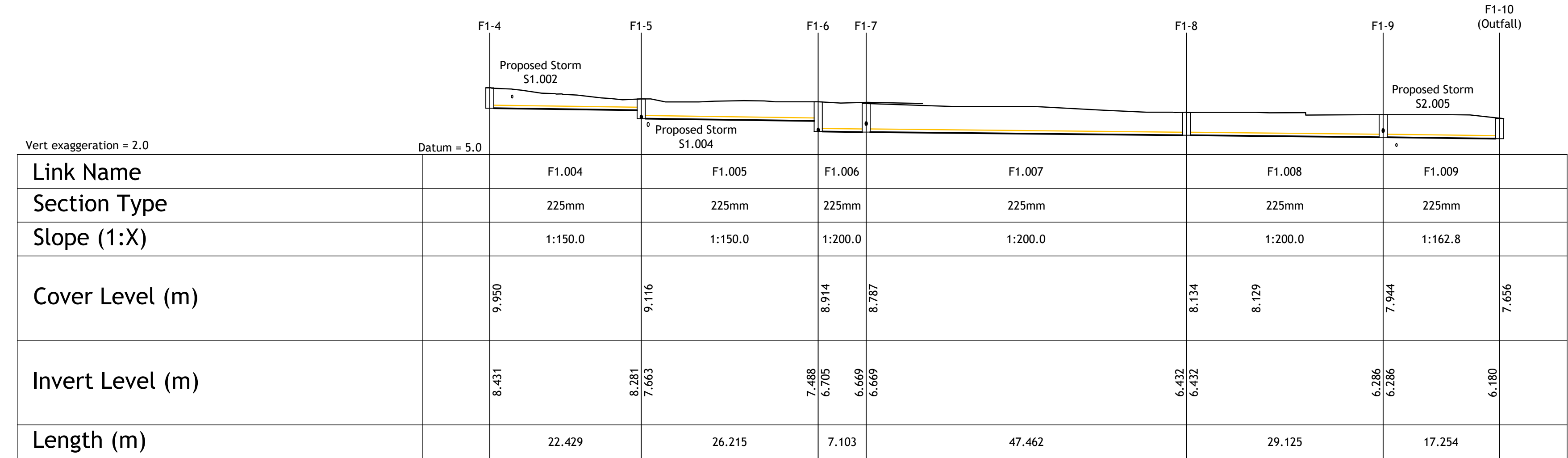
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Title: PROPOSED BASEMENT DRAINAGE LAYOUT				
Drawn: Liam Loneran	Date drawn: 10.09.2024	Technician Check: Liam Loneran	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0104	Drawing Status: AO (Planning)		
Scale @ A1: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0104	Revision No: C05		

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F1-0	11.869	1200	567603.395	570100.374	1.019
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F2-0	12.000	1200	567646.429	570108.337	1.150
F1-2	11.527	1200	567650.244	570099.531	1.091
F1-3	11.846	1200	567653.936	570101.134	3.396
F1-4	9.950	1200	567656.808	570101.210	1.519
F3-0	10.537	1200	567694.028	570140.385	1.537
F3-1	10.323	1200	567699.684	570132.421	1.388
F4-0	10.525	1200	567655.903	570120.243	1.747
F4-1	10.278	1200	567663.320	570109.883	1.585
F3-2	10.232	1200	567671.633	570112.497	2.482
F1-5	9.116	1200	567679.229	570101.802	1.453
F5-0	8.000	1200	567673.850	570057.112	1.000
F5-1	7.942	1200	567688.861	570052.075	1.021
F1-6	8.914	1200	567703.816	570092.708	2.209
F6-0	8.761	1200	567714.372	570101.009	1.511
F1-7	8.787	1200	567710.479	570090.247	2.118
F1-8	8.134	1200	567755.002	570073.804	1.702
F7-0	8.529	1200	567738.968	570106.060	1.479
F7-1	7.986	1200	567746.567	570123.996	1.066
F7-2	7.891	1200	567770.627	570113.762	1.145
F1-9	7.944	1200	567765.762	570100.868	1.658
F1-10 (Outfall)	7.656	1200	567781.906	570094.778	1.476

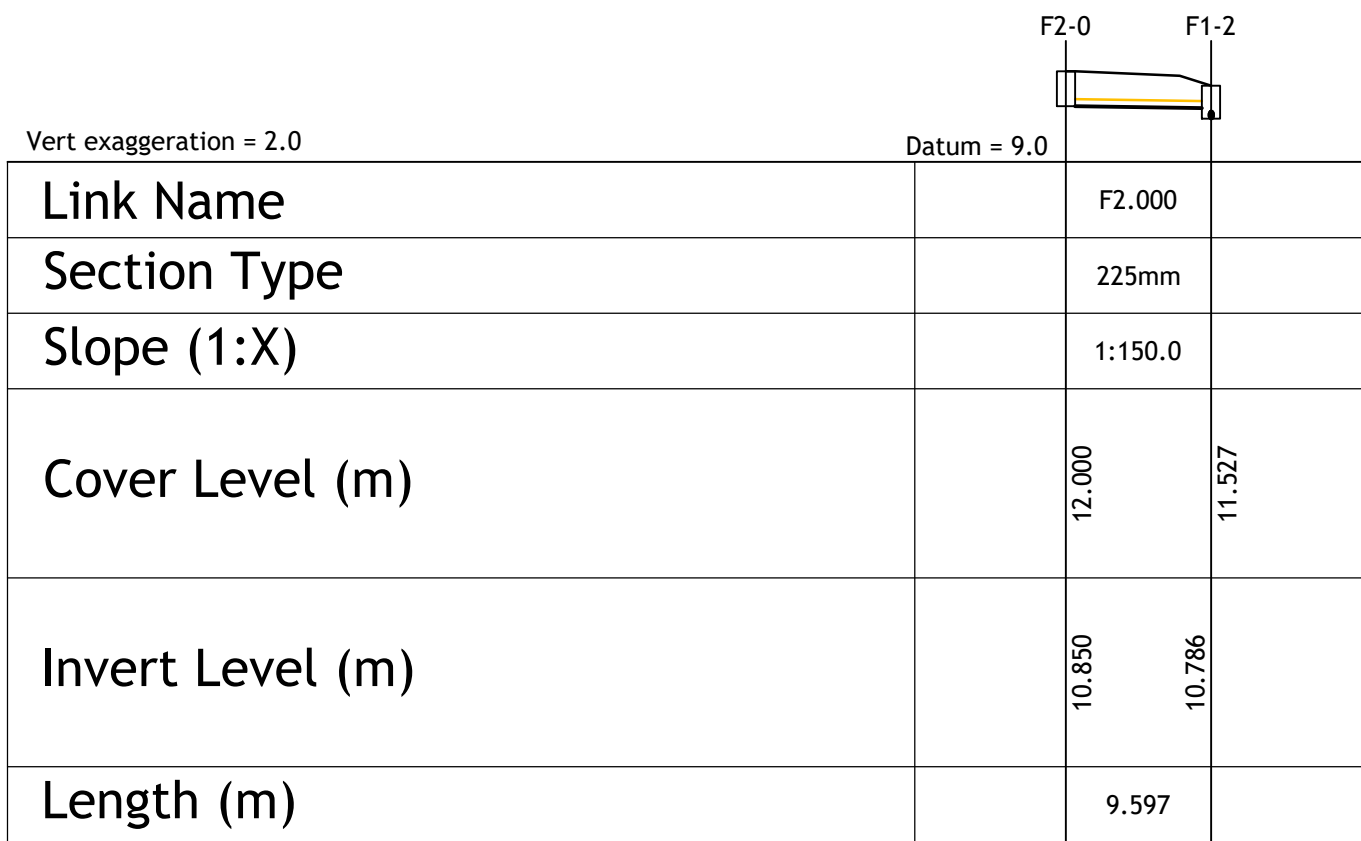
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F1.000	F1-0	11.869	F1-1	19.438	1.500	10.850	10.720	0.130
F1.001	F1-1	12.133	F1-2	42.562	1.500	10.720	10.436	0.284
F2.000	F2-0	12.000	F1-2	9.597	1.500	10.850	10.786	0.064
F1.002	F1-2	11.527	F1-3	4.025	1.500	10.436	10.409	0.027
F1.003	F1-3	11.846	F1-4	2.873	1.500	8.450	8.431	0.019
F1.004	F1-4	9.950	F1-5	22.429	1.500	8.431	8.281	0.150
F3.000	F3-0	10.537	F3-1	9.768	1.500	9.000	8.935	0.065
F3.002	F3-1	10.323	F3-2	34.407	1.500	8.935	8.706	0.229
F4.000	F4-0	10.525	F4-1	12.741	1.500	8.778	8.693	0.085
F4.001	F4-1	10.278	F3-2	8.714	1.500	8.693	8.635	0.058
F3.003	F3-2	10.232	F1-5	13.118	1.500	7.750	7.663	0.087
F1.005	F1-5	9.116	F1-6	26.215	1.500	7.663	7.488	0.175
F5.000	F5-0	8.000	F5-1	15.834	1.500	7.000	6.921	0.079
F5.001	F5-1	7.942	F1-6	43.298	1.500	6.921	6.705	0.216
F1.006	F1-6	8.914	F1-7	7.103	1.500	6.705	6.669	0.036
F6.000	F6-0	8.761	F1-7	11.444	1.500	7.250	7.174	0.076
F1.007	F1-7	8.787	F1-8	47.462	1.500	6.669	6.432	0.237
F1.008	F1-8	8.134	F1-9	29.125	1.500	6.432	6.286	0.146
F7.000	F7-0	8.529	F7-1	19.479	1.500	7.050	6.920	0.130
F7.001	F7-1	7.986	F7-2	26.146	1.500	6.920	6.746	0.174
F7.002	F7-2	7.891	F1-9	13.781	1.500	6.746	6.654	0.092
F1.009	F1-9	7.944	F1-10 (Outfall)	17.254	1.500	6.286	6.180	0.106

PROPOSED STORM MANHOLES				
Name	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)
S1-0 (Green Roof - Block 2)	24.675	1200	567613.534	570106.054
S1-1	11.857	1200	567612.735	570107.887
S1-2	10.980	1200	567647.163	570122.874
S8-0	12.127	1200	567614.099	570081.078
S8-1	11.821	1200	567653.255	570098.084
S1-3	9.680	1200	567661.935	570098.232
S9-0 (Blue Roof - Podium)	11.947	1200	567663.302	570082.862
S9-1	11.888	1200	567664.330	570085.661
S10-0 (Green Roof - Block 3)	37.125	1200	567676.257	570087.187
S10-1	11.670	1200	567675.009	570089.583
S9-3	11.584	1200	567675.807	570091.513
S9-4	9.000	1200	567676.500	570093.389
S1-4	9.006	1200	567678.392	570098.513
S1-5	9.151	1200	567680.984	570102.739
S14-0 (Bioretention Area)	8.995	1200	567692.016	570101.481
S1-6	9.107	1200	567690.224	570107.921
S11-0 (Green Roof - Block 1)	23.475	1200	567662.477	570130.971
S11-1	10.607	1200	567661.318	570132.602
S11-2	10.258	1200	567687.471	570151.182
S12-0	9.939	1200	567684.902	570120.082
S11-3	10.268	1200	567701.707	570132.019
S13-0 (Bioretention Area)	10.241	1200	567705.749	570131.911
S11-4	10.145	1200	567703.352	570129.806
S15-0 (Green Roof - Block 4)	27.525	1200	567720.650	570101.347
S15-1	8.778	1200	567715.313	570103.324
S1-7 (Attenuation Tank 1)	9.615	1200	567704.281	570119.181
S1-8 (Hydro-Brake)	8.837	1200	567719.143	570113.688
S1-9	8.588	1200	567736.806	570107.160
S16-0 (Permeable Paving)	8.422	1200	567738.054	570120.519
S1-10	8.204	1350	567741.809	570118.922
S17-0 (Permeable Paving)	8.012	1200	567747.373	570121.988
S1-11	8.054	1350	567743.766	570123.523
S1-12	8.004	1350	567745.474	570127.539
S1-13 (Attenuation Tank 2)	7.882	1350	567755.322	570126.487
S18-0 (Permeable Paving)	7.927	1200	567762.590	570124.482
S1-14	7.912	1350	567757.389	570122.471
S2-0	7.938	1200	567680.432	570052.587
S2-1	7.821	1200	567691.116	570051.002
S2-2	8.911	1200	567702.805	570085.619
S4-0 (Bioretention Area)	8.708	1200	567716.622	570086.898
S4-1 (Orifice)	8.728	1200	567715.587	570084.096
S7-0 (Bioretention Area)	8.367	1200	567741.407	570077.759
S7-1 (Orifice)	8.299	1350	567740.368	570074.945
S5-0 (Bioretention Area)	8.590	1200	567726.165	570083.388
S5-1 (Orifice)	8.663	1200	567725.126	570080.574
S6-0 (Bioretention Area)	8.590	1200	567732.553	570081.029
S6-1 (Orifice)	8.559	1350	567731.473	570078.230
S2-3 (Attenuation Tank 3)	8.563	1200	567727.952	570076.328
S2-4	7.864	1350	567754.020	570068.681
S2-5 (Hydro-Brake)	7.886	1350	567766.481	570097.599
S1-16	7.821	1350	567774.131	570115.352
S1-17	7.766	1350	567784.367	570110.996
S1-18	7.803	1350	567800.321	570149.307
S1-19	7.613	1350	567797.546	570197.985
S1-20	7.528	1350	567798.177	570210.092
S1-21	7.254	1350	567791.724	570245.717
S1-22 (Outfall)	7.238	1350	567792.767	570247.493
S1-15 (Hydro-Brake)	7.890	1350	567761.532	570120.721

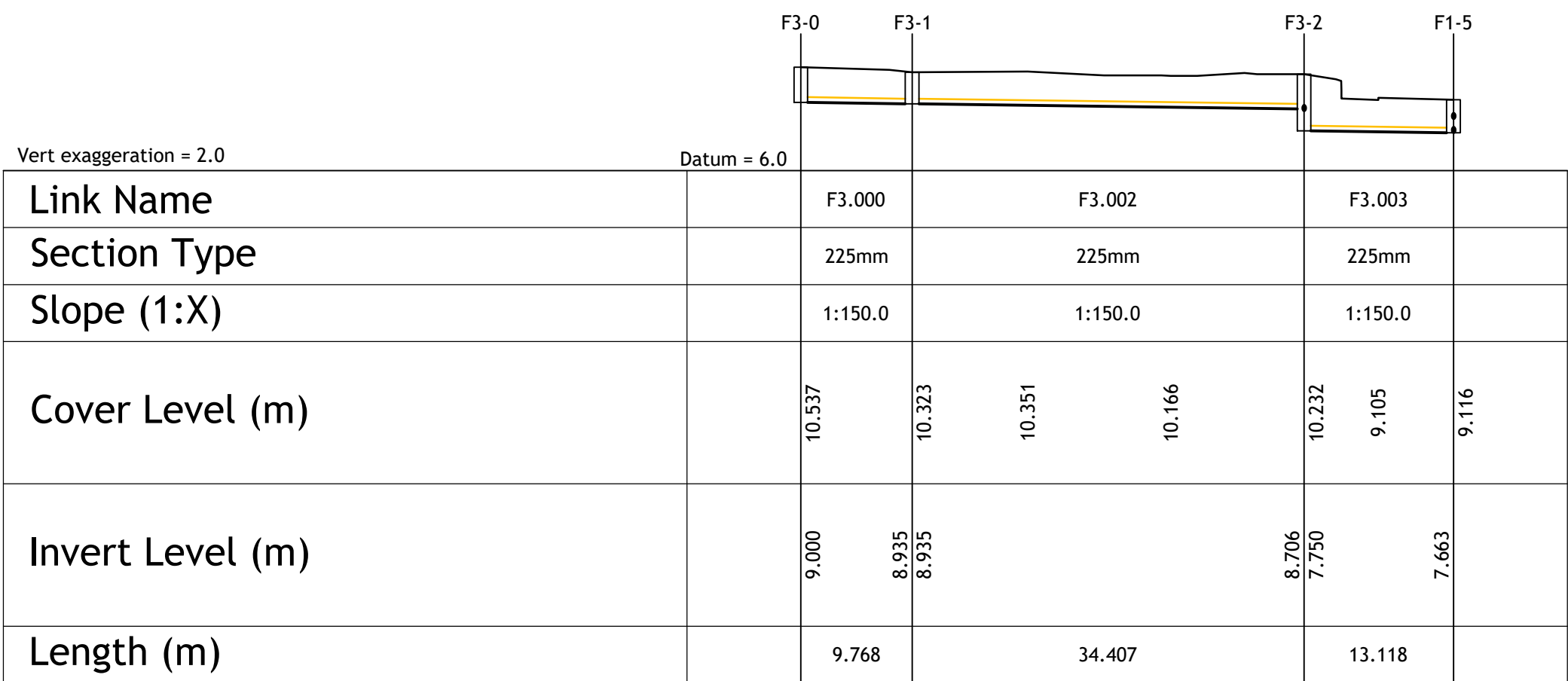
PROPOSED STORM PIPES								
Name	US Node	US Node CL (m)	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)
S1.000	S1-0 (Green Roof - Block 2)	24.675	S1-1	2.000	0.600	24.000	10.600	13.400
S1.001	S1-1	11.857	S1-2	37.549	0.600	10.600	10.350	0.250
S1.002	S1-2	10.980	S1-3	28.730	0.600	9.350	9.158	0.192
S9.000	S8-0	12.127	S8-1	42.690	0.600	10.850	10.565	0.285
S8.001	S8-1	11.821	S1-3	8.681	0.600	10.565	8.381	2.184
S1.003	S1-3	9.680	S1-4	16.459	0.600	7.750	7.640	0.110
S9.000.	S9-0 (Blue Roof - Podium)	11.947	S9-1	2.982	0.600	11.447	11.427	0.020
S9.001	S9-1	11.888	S9-3	12.883	0.600	11.427	11.341	0.086
S10.000	S10-0 (Green Roof - Block 3)	37.125	S10-1	2.702	0.600	36.250	11.100	25.150
S10.001	S10-1	11.670	S9-3	2.088	0.600	11.100	11.086	0.014
S9.003	S9-3	11.584	S9-4	2.000	0.600	11.000	7.500	3.500
S9.004	S9-4	9.000	S1-4	5.462	0.600	7.500	7.464	0.036
S1.004	S1-4	9.006	S1-5	4.958	0.600	7.100	7.067	0.033
S1.005	S1-5	9.151	S1-6	10.594	0.600	7.067	6.996	0.071
S14.000	S14-0 (Bioretention Area)	8.995	S1-6	6.685	0.600	7.795	7.750	0.045
S1.006	S1-6	9.107	S1-7 (Attenuation Tank 1)	18.011	0.600	6.996	6.876	0.120
S11.000	S11-0 (Green Roof - Block 1)	23.475	S11-1	2.001	0.600	23.000	9.500	13.500
S11.001	S11-1	10.607	S11-2	32.081	0.600	9.500	9.286	0.214
S11.002	S11-2	10.258	S11-3	23.872	0.600	9.286	9.127	0.159
S12.000	S12-0	9.939	S11-3	20.613	0.600	8.514	8.308	0.206
S11.003	S11-3	10.268	S11-4	2.757	0.600	8.308	8.290	0.018
S13.000	S13-0 (Bioretention Area)	10.241	S11-4	3.190	0.600	8.816	8.784	0.032
S11.004	S11-4	10.145	S1-7 (Attenuation Tank 1)	10.666	0.600	7.650	7.579	0.071
S15.000	S15-0 (Green Roof - Block 4)	27.525	S15-1	5.691	0.600	27.000	7.000	20.000
S15.001	S15-1	8.778	S1-7 (Attenuation Tank 1)	19.317	0.600	7.000	6.871	0.129
S1.007	S1-7 (Attenuation Tank 1)	9.615	S1-8 (Hydro-Brake)	15.845	0.600	6.796	6.690	0.106
S1.008	S1-8 (Hydro-Brake)	8.837	S1-9	18.831	0.600	6.690	6.564	0.126
S1.009	S1-9	8.588	S1-10	12.782	0.600	6.564	6.479	0.085
S16.000	S16-0 (Permeable Paving)	8.422	S1-10	4.080	0.600	6.997	6.956	0.041
S1.010	S1-10	8.204	S1-11	5.000	0.600	6.404	6.371	0.033
S17.000	S17-0 (Permeable Paving)	8.012	S1-11	3.920	0.600	6.587	6.548	0.039
S1.011	S1-11	8.054	S1-12	4.364	0.600	6.371	6.342	0.029
S1.012	S1-12	8.004	S1-13 (Attenuation Tank 2)	9.904	0.600	5.566	5.500	0.066
S1.013	S1-13 (Attenuation Tank 2)	7.882	S1-14	4.517	0.600	5.500	5.470	0.030
S18.000	S18-0 (Permeable Paving)	7.927	S1-15 (Hydro-Brake)	3.907	0.600	6.500	6.474	0.026
S1.014	S1-14	7.912	S1-15 (Hydro-Brake)	4.497	0.600	5.470	5.440	0.030
S2.000	S2-0	7.938	S2-1	10.801	0.600	6.438	6.366	0.072
S2.001	S2-1	7.821	S2-2	36.537	0.600	6.366	6.122	0.244
S2.002	S2-2	8.911	S2-3 (Attenuation Tank 3)	26.808	0.600	6.122	5.943	0.179
S1.015	S1-15 (Hydro-Brake)	7.890	S1-16	13.695	0.600	5.440	5.349	0.091
S4.000	S4-0 (Bioretention Area)	8.708	S4-1 (Orifice)	2.987	0.600	7.283	7.263	0.020
S4.001	S4-1 (Orifice)	8.728	S2-3 (Attenuation Tank 3)	14.603	0.600	7.263	7.166	0.097
S7.000	S7-0 (Bioretention Area)	8.367	S7-1 (Orifice)	3.000	0.600	6.942	6.922	0.020
S7.001	S7-1 (Orifice)	8.299	S2-3 (Attenuation Tank 3)	12.493	0.600	6.922	6.839	0.083
S5.000	S5-0 (Bioretention Area)	8.590	S5-1 (Orifice)	3.000	0.600	7.165	7.145	0.020
S5.001	S5-1 (Orifice)	8.663	S2-3 (Attenuation Tank 3)	5.100	0.600	7.145	7.111	0.034
S6.000	S6-0 (Bioretention Area)	8.590	S6-1 (Orifice)	3.000	0.600	7.090	7.070	0.020
S6.001	S6-1 (Orifice)	8.559	S2-3 (Attenuation Tank 3)	4.002	0.600	7.070	7.043	0.027
S2.003	S2-3 (Attenuation Tank 3)	8.563	S2-4	27.166	0.600	5.943	5.762	0.181
S2.004	S2-4	7.864	S2-5 (Hydro-Brake)	31.489	0.600	5.762	5.605	0.157
S2.005	S2-5 (Hydro-Brake)	7.886	S1-16	19.331	0.600	5.605	5.508	0.097
S1.016	S1-16	7.821	S1-17	11.124	0.600	5.349	5.275	0.074
S1.017	S1-17	7.766	S1-18	41.500	0.600	5.200	4.923	0.277
S1.018	S1-18	7.803	S1-19	48.757	0.600	4.923	4.598	0.325
S1.019	S1-19	7.613	S1-20	12.123	0.600	4.598	4.517	0.081
S1-20	S1-20	7.528	S1-21	36.205	0.600	4.517	4.276	0.241
S1-21	S1-21	7.254	S1-22 (Outfall)	2.060	0.600	4.276	4.262	0.014



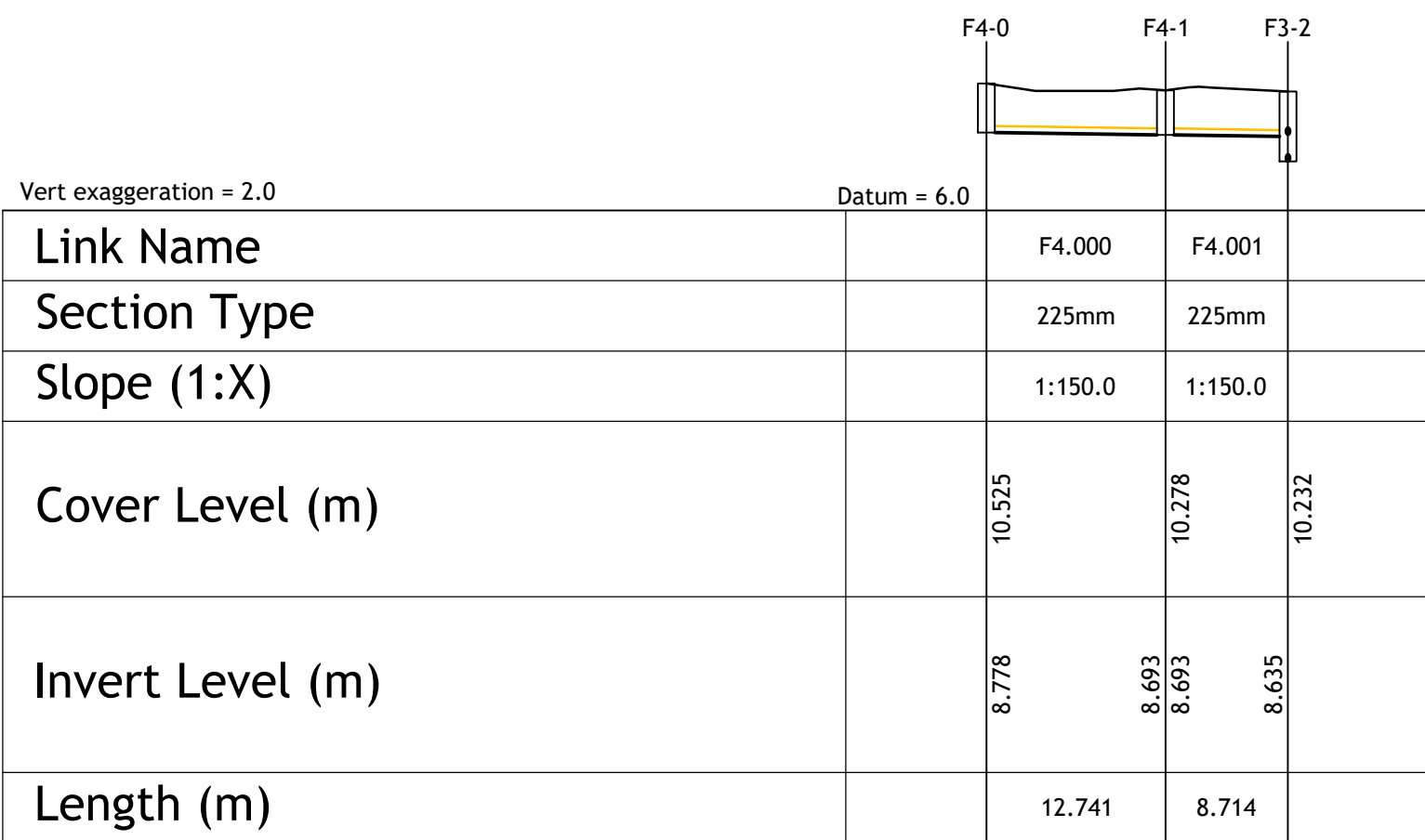
FOUL SEWER LONGITUDINAL SECTION F1-4 TO F1-10 (OUTFALL)
SCALE 1:500(H) 1:100(V)



FOUL SEWER LONGITUDINAL SECTION F2-0 TO F1-2
SCALE 1:500(H) 1:100(V)



FOUL SEWER LONGITUDINAL SECTION F3-0 TO F1-5
SCALE 1:500(H) 1:100(V)



FOUL SEWER LONGITUDINAL SECTION F4-0 TO F3-2
SCALE 1:500(H) 1:100(V)

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Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING	LL	09.06.2025

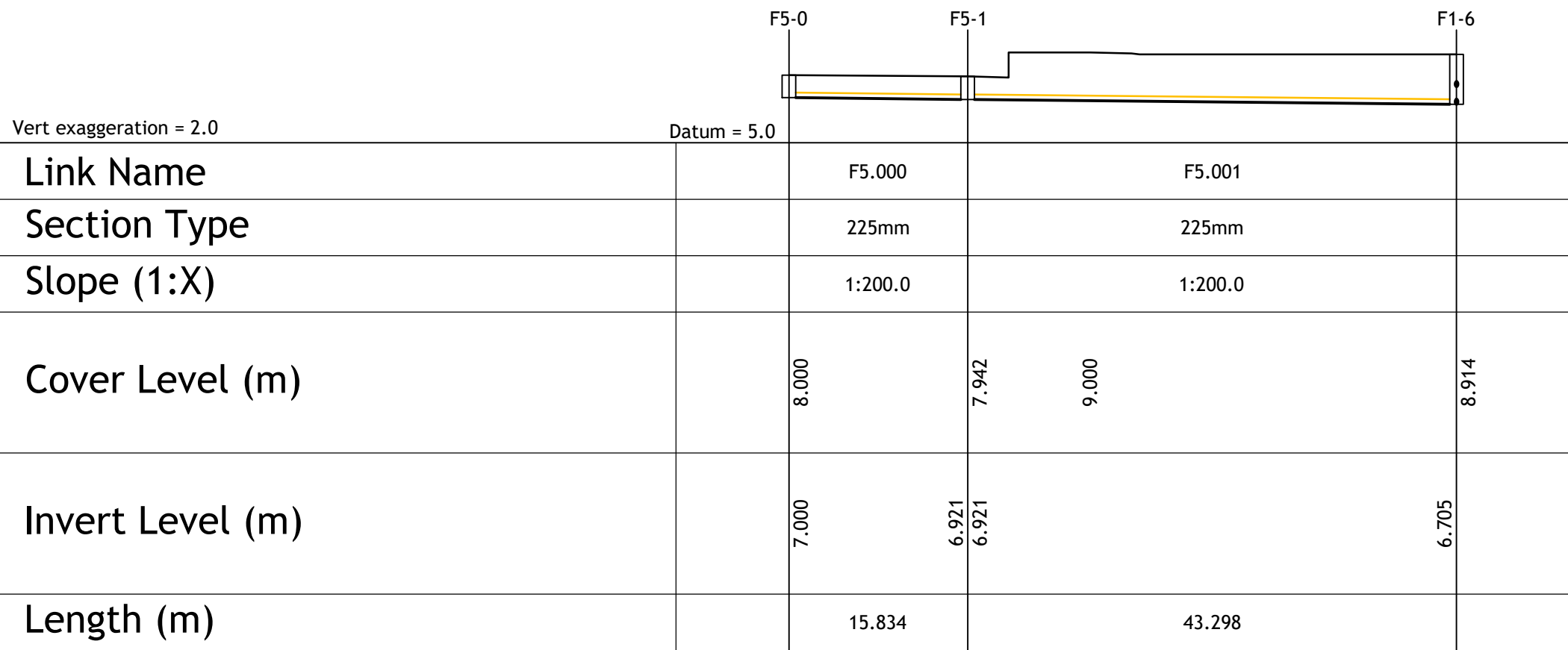
Rev	Amendment	By	Date

Client:
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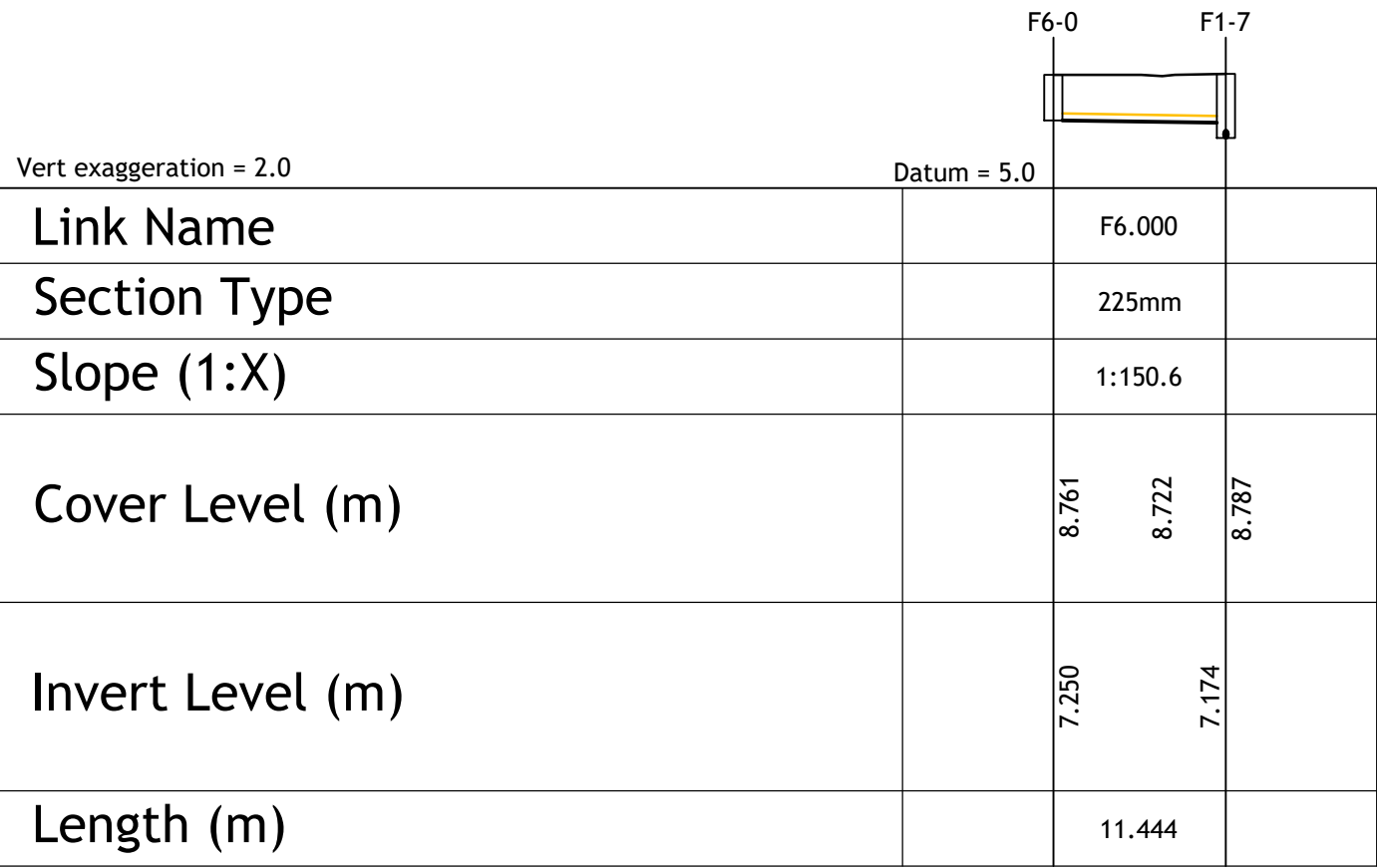


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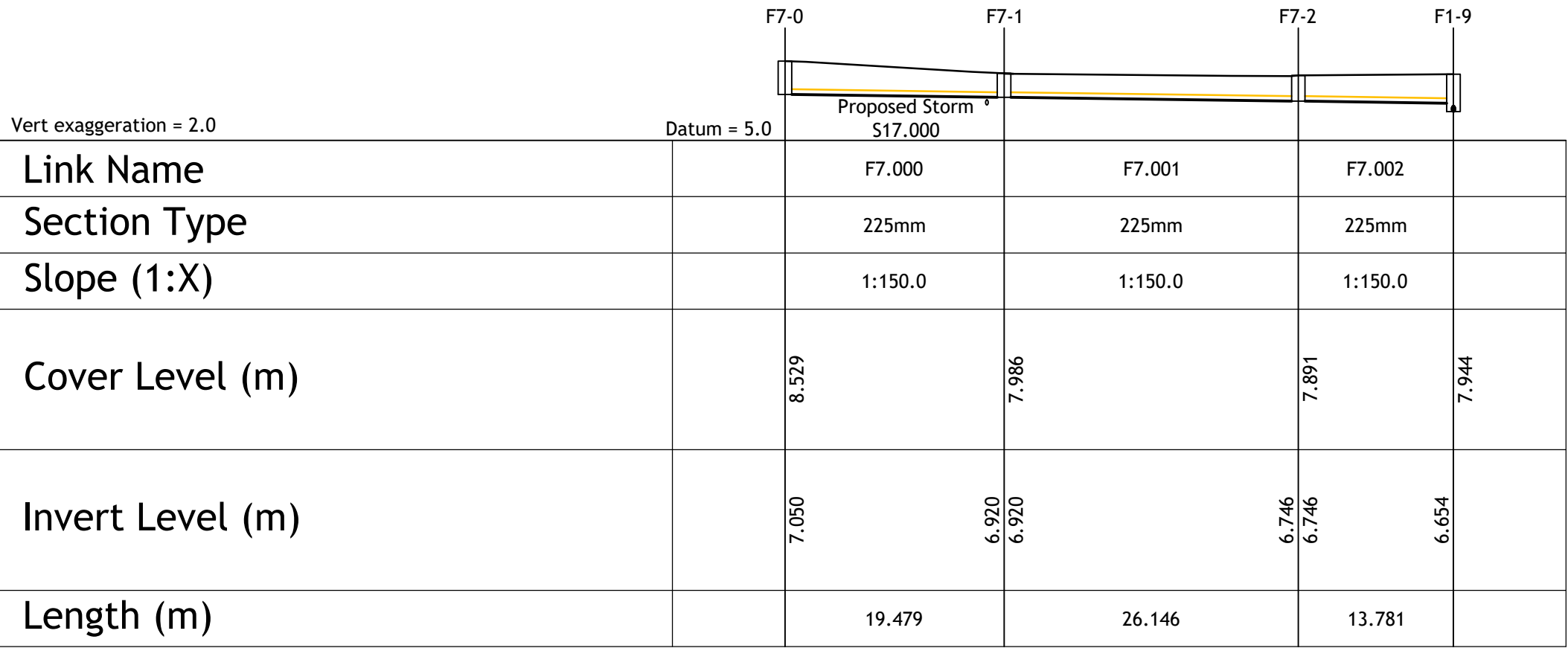
Project:		KINSALE ROAD LRD, KINSALE ROAD , CORK							
Title:		FOUL DRAINAGE LONGITUDINAL SECTIONS SHEET 1							
Drawn:	Liam Lonergan	Date drawn:	10.09.2024	Technician Check:	Liam Lonergan	Engineer Check:	Simeon Solomons	Approved:	Niamh Cronin
Project No:	214130	Model Ref:	214130-PUNCH-XX-XX-M2-C-0175-177	Drawing Status:	AO (For Planning)				
Scale @ A1:	AS SHOWN	Document No:	214130-PUNCH-XX-XX-DR-C-0175	Revision No:	C03				



FOUL SEWER LONGITUDINAL SECTION F5-0 TO F1-6
SCALE 1:500(H) 1:100(V)



FOUL SEWER LONGITUDINAL SECTION F6-0 TO F1-7
SCALE 1:500(H) 1:100(V)



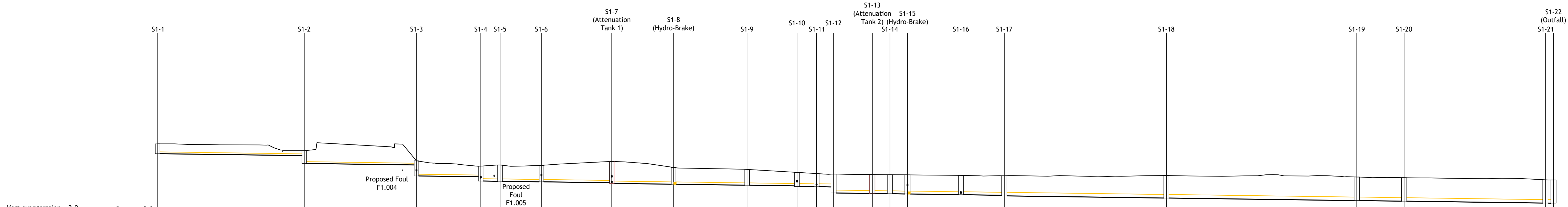
FOUL SEWER LONGITUDINAL SECTION F7-0 TO F1-9
SCALE 1:500(H) 1:100(V)

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

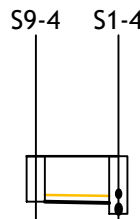
Client:
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Project: KINSALE ROAD LRD, KINSALE ROAD , CORK									
Title: FOUL DRAINAGE LONGITUDINAL SECTIONS SHEET 2									
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan		Engineer Check: Simeon Solomons		Approved: Niamh Cronin			
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0175-177	Drawing Status: AO (For Planning)				Revision No: C03			
Scale @ A1: AS SHOWN		Document No: 214130-PUNCH-XX-XX-DR-C-0176						Revision No: C03	



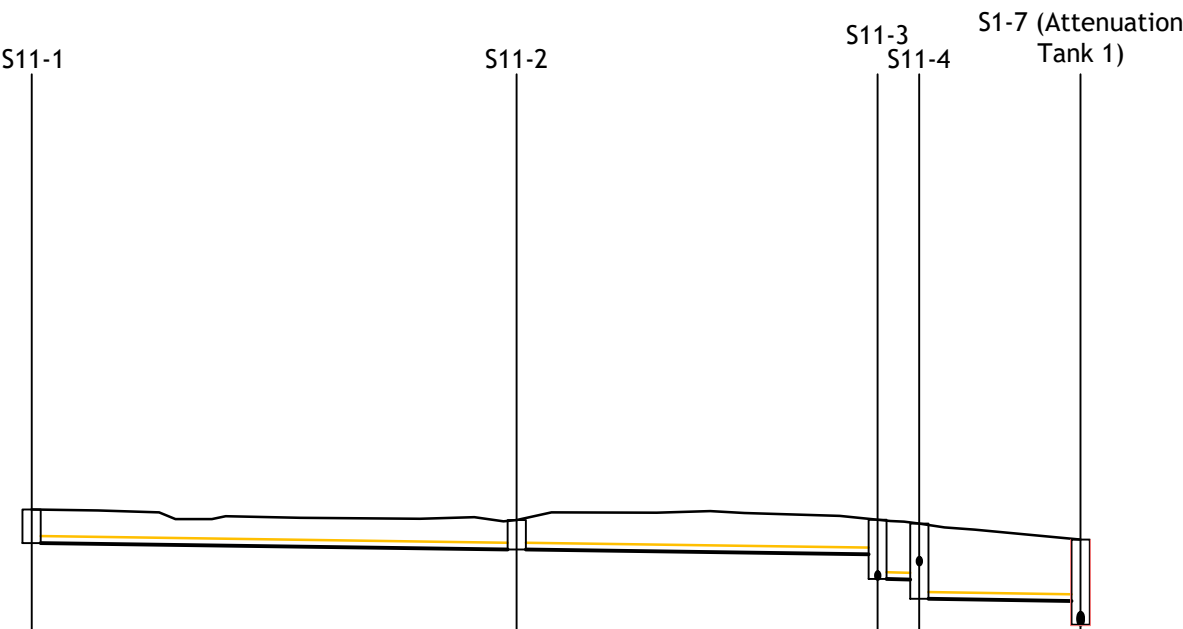
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Link Name		S1.001	S1.002	S1.003	S1.004	S1.005	S1.006	S1.007	S1.008	S1.009	S1.010	S1.011	S1.012	S1.013	S1.014	S1.015	S1.016	S1.017	S1.018	S1.019	S1-20	S1-21			
Section Type		225mm	225mm	225mm	300mm	300mm	300mm	300mm	300mm	300mm	375mm	375mm	375mm	375mm	375mm	375mm	375mm	450mm	450mm	450mm	450mm	450mm			
Slope (1:X)		1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0	1:150.0			
Cover Level (m)	11.857 11.857	10.872	10.980	9.680	9.006	9.151	9.107	9.615	8.837	8.588	8.204	8.054	8.004	7.882	7.912	7.890	7.821	7.736	7.766	7.683	7.603	7.913	7.613 7.523	7.528	7.254 7.238
Invert Level (m)	10.600	10.350 9.350	9.158 7.750	7.640 7.100	7.067 7.067	6.996 6.996	6.876 6.796	6.690 6.690	6.564 6.564	6.479 6.404	6.371 6.371	6.342 5.566	5.500 5.500	5.470 5.470	5.440 5.440	5.349 5.349	5.275 5.200	4.923 4.923	4.598 4.598	4.517 4.517	4.276 4.248	4.248			
Length (m)		37.549	28.730	16.459	4.958	10.594	18.011	15.845	18.831	12.782	5.000	4.364	9.904	4.517	4.497	13.695	11.124	41.500	48.757	12.123	36.205	2.060			

SURFACE WATER SEWER LONGITUDINAL SECTION S1-1 TO S1-22 (Outfall)
SCALE 1:500(H) 1:100(V)



Link Name	S9.004	S1-4
Section Type	225mm	225mm
Slope (1:X)	1:150.0	1:150.0
Cover Level (m)	9.000	9.006
Invert Level (m)	7.500	7.464
Length (m)	5.462	

SURFACE WATER SEWER LONGITUDINAL SECTION S9-4 TO S1-4
SCALE 1:500(H) 1:100(V)



Link Name	S11.001	S11.002	S11.003	S11.004
Section Type	225mm	225mm	225mm	225mm
Slope (1:X)	1:150.0	1:150.0	1:150.0	1:150.0
Cover Level (m)	10.607	10.258	10.268	9.615
Invert Level (m)	9.500	9.286	9.127	7.579
Length (m)	32.081	23.872	2.757	10.666

SURFACE WATER SEWER LONGITUDINAL SECTION S11-1 TO S1-7
SCALE 1:500(H) 1:100(V)

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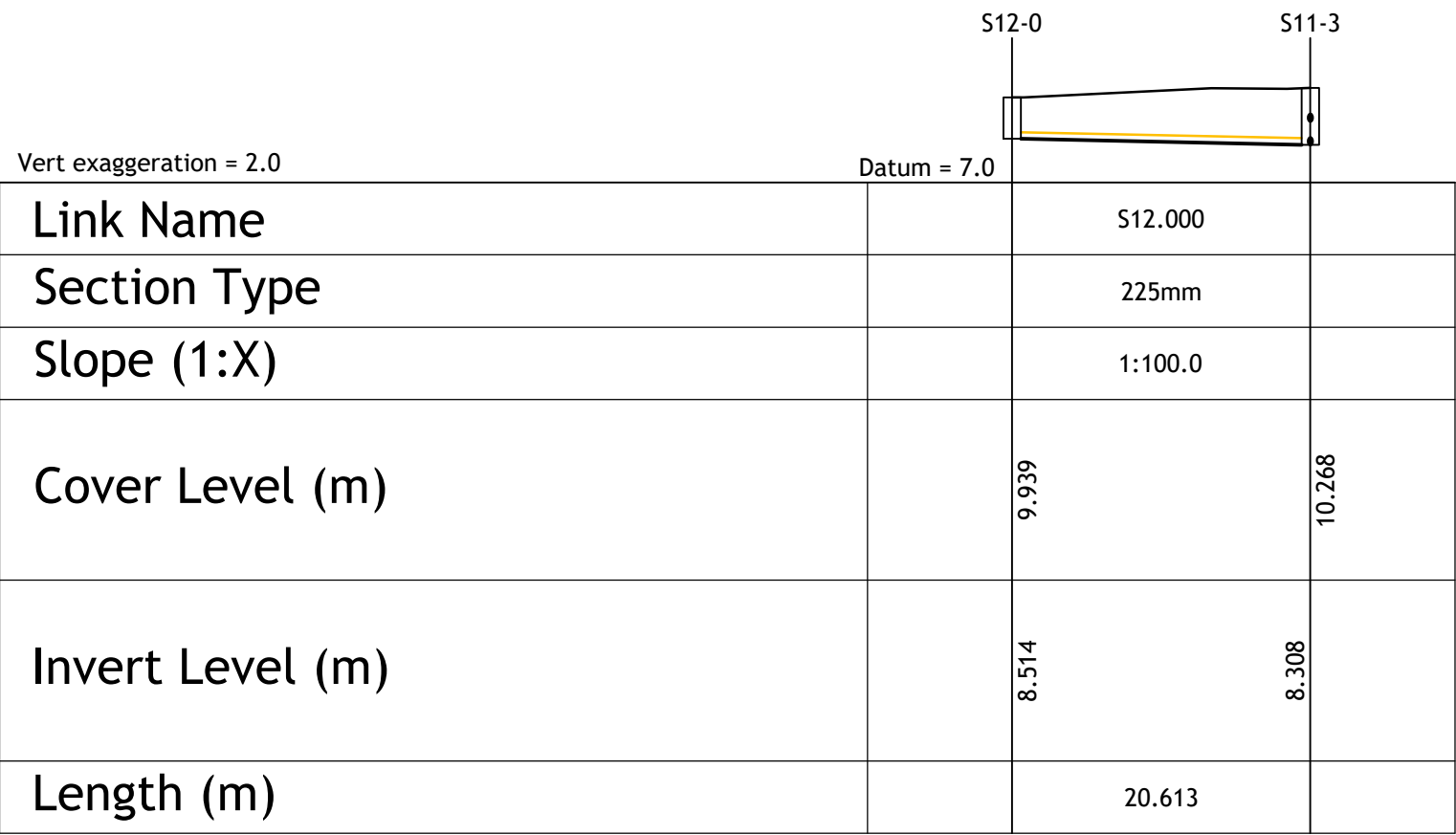
Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

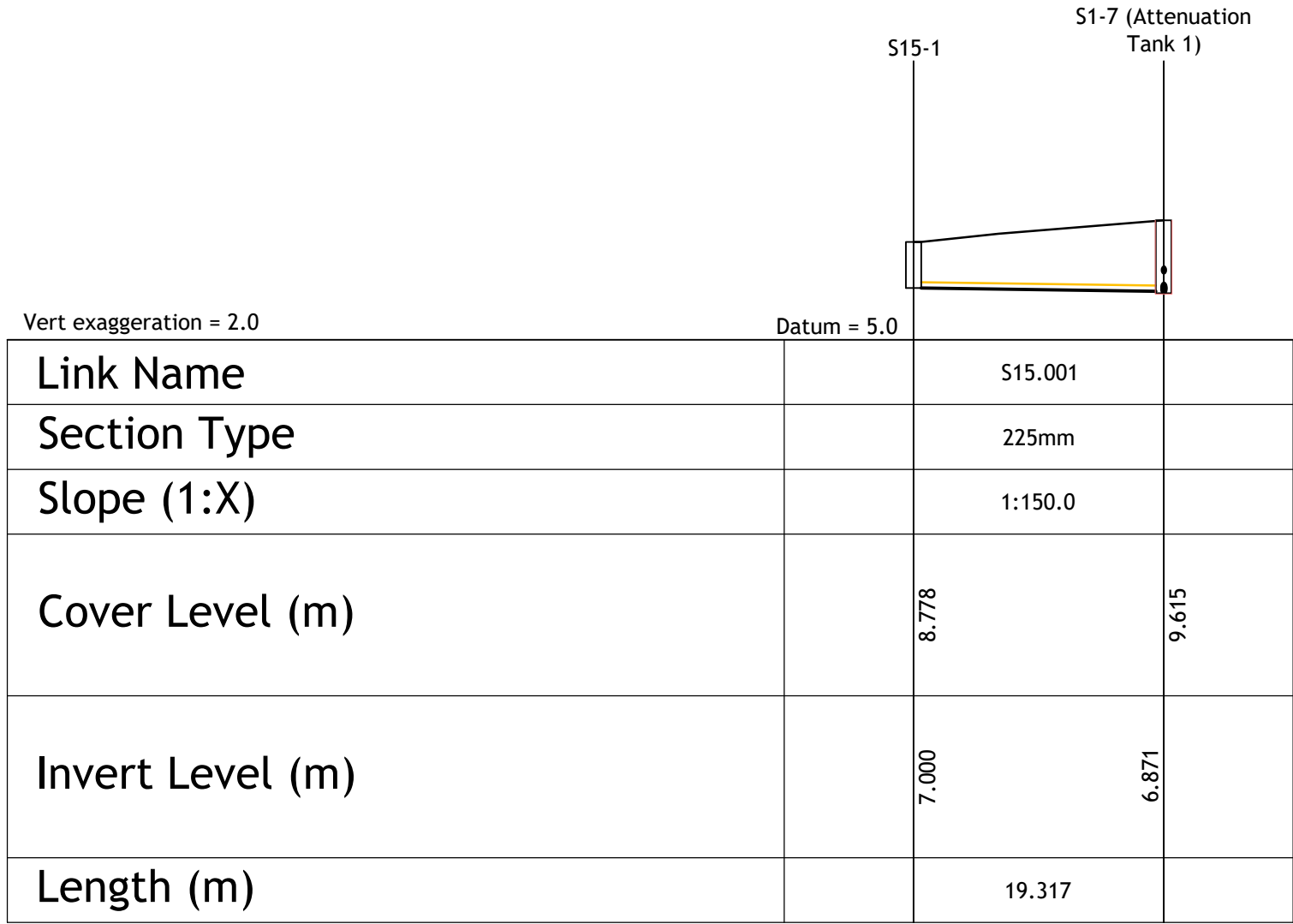
Client:	FRONVILLE LTD
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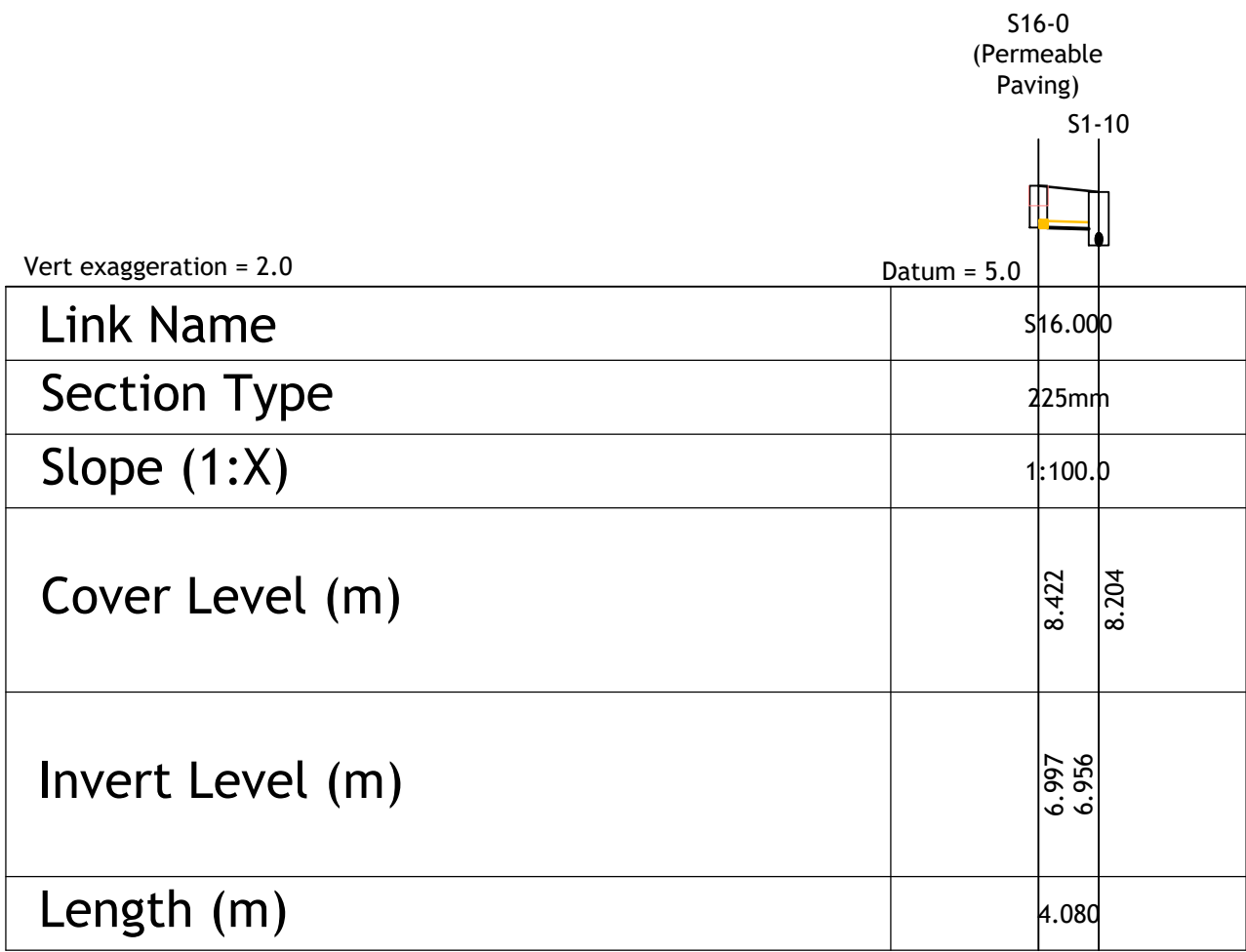
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK									
Title: SURFACE WATER DRAINAGE LONGITUDINAL SECTIONS SHEET 1									
Drawn: Liam Lonergan		Date drawn: 10.09.2024		Technician Check: Liam Lonergan		Engineer Check: Simeon Solomons		Approved: Niamh Cronin	
Project No: 214130		Model Ref: 214130-PUNCH-XX-XX-M2-C-0200-202				Drawing Status: A0 (Planning)			
Scale @ A3: 1:500/1:100		Document No: 214130-PUNCH-XX-XX-DR-C-0200				Revision No: C04			



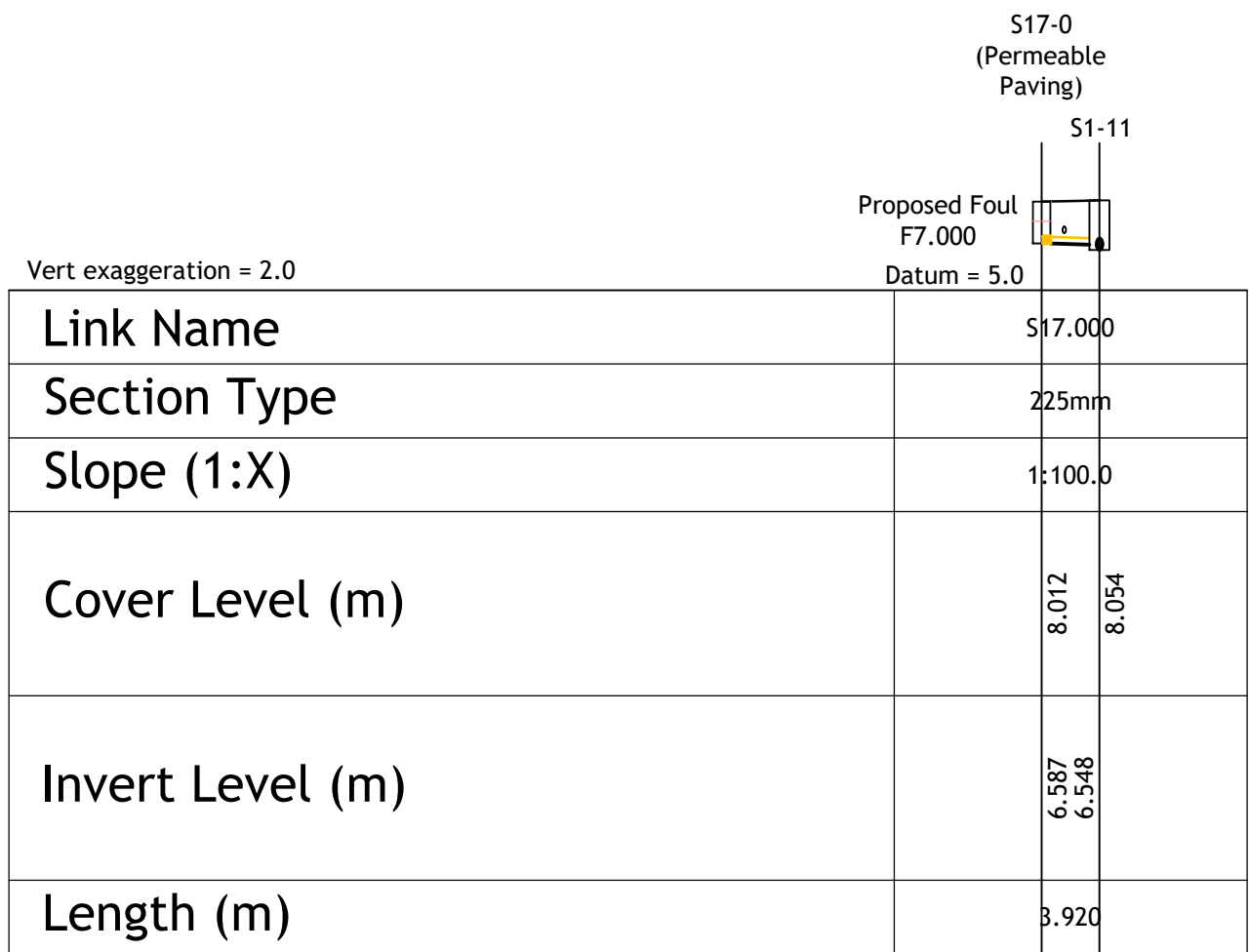
SURFACE WATER SEWER LONGITUDINAL SECTION S12-0 TO S11-3
SCALE 1:500(H) 1:100(V)



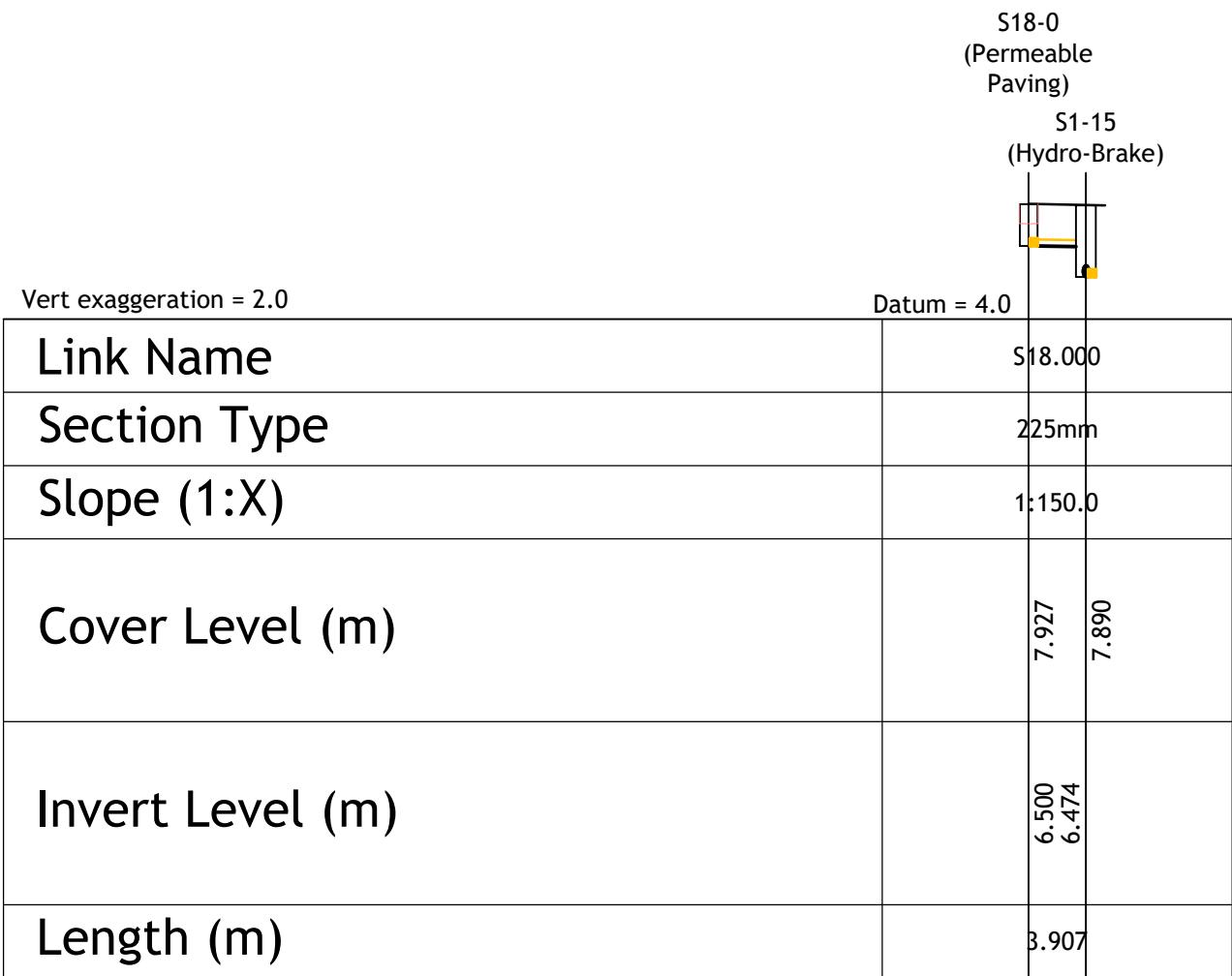
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SCALE 1:500(H) 1:100(V)



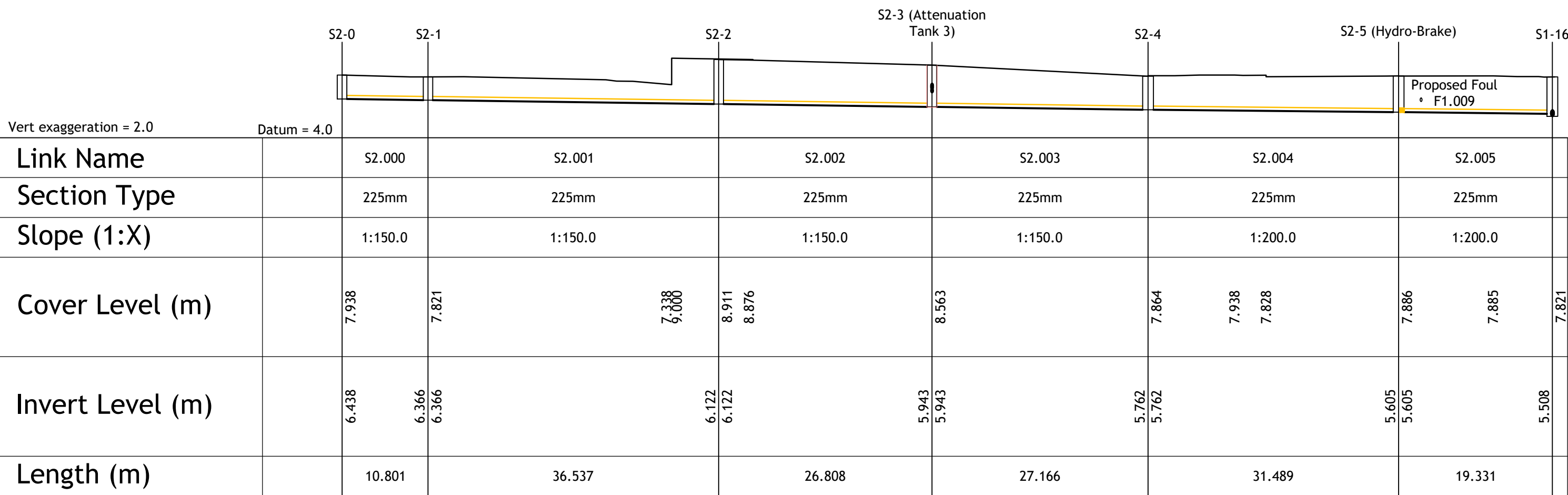
SURFACE WATER SEWER LONGITUDINAL SECTION S16-0 TO S1-10
SCALE 1:500(H) 1:100(V)



SURFACE WATER SEWER LONGITUDINAL SECTION S17-0 TO S1-11
SCALE 1:500(H) 1:100(V)



SURFACE WATER SEWER LONGITUDINAL SECTION S18-0 TO S1-15
SCALE 1:500(H) 1:100(V)



SURFACE WATER SEWER LONGITUDINAL SECTION S2-0 TO S1-16
SCALE 1:500(H) 1:100(V)

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

Client:
FRONVILLE LTD

Project:	KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title:	SURFACE WATER DRAINAGE LONGITUDINAL SECTIONS SHEET 2				
Drawn:	Date drawn:	Technician Check:	Engineer Check:	Approved:	
Liam Lonergan	10.09.2024	Liam Lonergan	Simeon Solomons	Niamh Cronin	
Project No:	Model Ref:	Drawing Status:		A0 (Planning)	
214130	214130-PUNCH-XX-XX-M2-C-0200-202				
Scale @ A3:	Document No:	Revision No:		C04	
1:500/1:100	214130-PUNCH-XX-XX-DR-C-0201				



WATERMAIN LEGEND

- EXISTING WATERMAIN
- EXISTING WATERMAIN TO BE ABANDONED, DEMOLISHED & REMOVED
- PROPOSED WATERMAIN (160 OD PE80 SDR11 PIPE) MATERIALS MUST BE IN ACCORDANCE WITH UISCE EIREANN STANDARDS
- PROPOSED WATERMAIN (110 OD PE80 SDR11 PIPE) MATERIALS MUST BE IN ACCORDANCE WITH UISCE EIREANN STANDARDS
- PROPOSED FIRE HYDRANT TO BE PROVIDED IN ACCORDANCE WITH UISCE EIREANN STANDARD DETAIL STD-W-16.
- PROPOSED SLUICE VALVE TO BE PROVIDED IN ACCORDANCE WITH UISCE EIREANN STANDARD DETAIL STD-W-15
- PROPOSED MECHANICAL WATERMETER & CHAMBER TO IRISH WATER DETAIL STD-W-26A. KIOSK REQUIRED TO IW DETAIL STD-W-36. KIOSK LOCATION TO BE AGREED WITH ARCHITECT
- PROPOSED BLANK FLANGE

GENERAL NOTES:

- DO NOT SCALE. ALL DIMENSIONS ON DRAWINGS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE. USE FIGURED DIMENSIONS ONLY.
- THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE EXISTING PUMPHOUSE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. BEFORE RELATED WORK COMMENCES THE CONTRACTOR SHALL SUBMIT A METHOD STATEMENT AND SEQUENCE OF WORK TO THE ENGINEER FOR APPROVAL.
- WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM. OTHER STANDARDS MAY ONLY BE CONSIDERED FOLLOWING PRIOR APPROVAL BY THE ENGINEER.
- THE CONTRACTOR IS TO ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SUBCONTRACTORS DRAWINGS PRIOR TO CONSTRUCTION.
- OPTIONS WHERE INDICATED ARE FOR CONTRACTORS CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY IF HE CHOOSES AN OPTION AND HE SHALL COORDINATE ALL DETAILS.
- ALL LEVELS ARE RELATED TO THE ORDANCE DATUM (O.D.) - MALIN HEAD UNLESS NOTED OTHERWISE
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL GROUND AND SURFACE WATER WITHIN THE SITE DURING THE CONSTRUCTION WORKS. AT NO POINT SHOULD ANY CONTAMINATED WATER FROM THE SITE BE DISCHARGED TO AN EXISTING DRAIN OR SEWER.
- ANY PROPRIETARY PRODUCTS REFERENCED ON THE DRAWINGS CAN BE SUBSTITUTED WITH EQUIVALENT ALTERNATIVES, FOLLOWING APPROVAL BY EITHER THE ENGINEER.
- PROPRIETARY PRODUCT NAMES, MANUFACTURER'S NAMES, SUPPLIERS NAMES, NATIONAL STANDARDS. WHERE A SPECIFICATION OR A DESCRIPTION OF A PRODUCT OR ELEMENT OF WORK INCLUDES A SPECIFIC MAKE OR SOURCE SUCH AS A PRODUCT NAME OR MANUFACTURER'S NAME OR A SUPPLIER'S NAME, OR A NATIONAL STANDARD, THE SPECIFICATION OR DESCRIPTION SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS "OR EQUIVALENT" NOTWITHSTANDING THAT THOSE EXACT WORDS MAY NOT IN FACT ACCOMPANY THE NAME OR STANDARD. THIS ALSO APPLIES WHERE THE NAME OR STANDARD IS ACCOMPANIED BY OTHER WORDS SUCH AS "OR EQUAL APPROVED" OR SUCHLIKE PHRASES.

WATERMAIN:

- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS & MANUFACTURERS DRAWINGS & SPECIFICATIONS.
- ALL PIPE DIAMETERS ARE NOMINAL.
- WHERE CONNECTION IS REQUIRED TO AN EXISTING PUBLIC WATERMAIN, THE CONTRACTOR MUST ISSUE DETAILED DOCUMENTATION FOR APPROVAL TO THE RELEVANT LOCAL AUTHORITY AND UISCE EIREANN. THIS DOCUMENTATION MUST BE ISSUED AT LEAST 40 WORKING DAYS IN ADVANCE OF THE PLANNED WORKS OR AS AGREED WITH THE LOCAL AUTHORITY AND UISCE EIREANN.
- ALL THRUST BLOCKS MUST BE CAST AGAINST UNDISTURBED GROUND. FLEXIBLE PIPES SHOULD BE WRAPPED IN ONE LAYER OF 1000 GAUGE POLYTHENE TO AVOID DIRECT CONTACT WITH THE CONCRETE. MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES, METERS AND HYDRANTS. CHLORINATION AND BACTERIOLOGICAL TESTS TO BE UNDERTAKEN BY EXTERNAL TESTER AND TEST CERTIFICATION TO BE SUBMITTED TO ENGINEER.
- MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES.
- IN ADVANCE OF TESTING OF THE WATERMAINS, THE CONTRACTOR MUST PRESENT TO THE ENGINEER A CALIBRATION CERTIFICATE FOR THE APPARATUS TO BE USED IN THE TEST.
- ALL EXISTING WATERMAINS TO BE ADEQUATELY PROTECTED. ANY WATERMAINS DAMAGED DURING THE COURSE OF CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT THEIR COST.
- ALL ROCKER PIPES SHALL BE NO MORE THAN 150mm FROM THEIR ASSOCIATED CHAMBER.
- PROVIDE ANCHOR/THRUST BLOCKS ON ALL BENDS EQUAL TO OR IN EXCESS OF 22.5°, DEAD ENDS AND TEES ON ALL PIPES.
- TRENCHES IN EXISTING SURFACES TO BE SAW CUT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT WATERMAINS & SLUICE VALVES TO ENSURE NO CLASHES WITH SERVICE DUCTS OR PIPES.

NOTES FOR CONNECTION TO UISCE EIREANN SERVICES

- CONTRACTOR TO LIAISE WITH UISCE EIREANN PRIOR TO MOBILISATION ON SITE TO DETERMINE THE DURATION OF THE APPROVAL PROCESS AND WHAT DOCUMENTATION AND FEES ARE REQUIRED BY UISCE EIREANN AND THE LOCAL AUTHORITY AND PROGRAM THIS INTO THE CONSTRUCTION PROGRAM. CONTRACTOR TO CONFIRM EXTENT OF NOTICE REQUIRED BY UISCE EIREANN TO INSPECT WORKS AND ALSO PROGRAM INTO THE CONSTRUCTION PROGRAM.
- UISCE EIREANN TO BE CONTACTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WATERMAIN WORKS. ALL DETAILS TO BE AGREED WITH UISCE EIREANN. UISCE EIREANN TO BE GIVEN 40 WORKING DAYS NOTICE FOR ALL FOUL SEWER AND WATERMAIN CONNECTION WORKS.
- EXACT LOCATION AND DEPTH OF THE EXISTING WATERMAINS SHOULD BE ESTABLISHED BY THE CONTRACTOR IN ADVANCE OF THE MAIN EXCAVATION FOR THE WORKS SO AS TO AVOID THE POSSIBILITY OF DAMAGE TO THE EXISTING WATERMAIN DURING CONSTRUCTION WORKS. 3 NO. SLIT TRENCHES TO BE UNDERTAKEN TO VERIFY LOCATION.
- THE CONTRACTOR SHALL APPLY FOR A ROAD OPENING LICENSE AND PAY THE REQUIRED ROAD OPENING LICENSE FEE FOR WORKS THAT ARE REQUIRED ON THE PUBLIC ROAD. THIS FEE IS A NON-NEGOTIABLE AND NON-REFUNDABLE FIGURE. THE CONTRACTOR SHALL BE DEEMED TO HAVE INCLUDED IN HIS TENDER PRICE FOR ALL REQUIREMENTS SUCH AS CONTRIBUTION FOR CONNECTIONS TO PUBLIC INFRASTRUCTURE, LICENSE APPLICATION, PAYMENT OF FEES, STATUTORY TIME PERIODS, TRAFFIC MANAGEMENT PLANS AND APPLICATION, REINSTATEMENT, ETC.

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	23.10.2024				
C03	ISSUED FOR PLANNING	LL	04.02.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

Rev	Amendment	By	Date

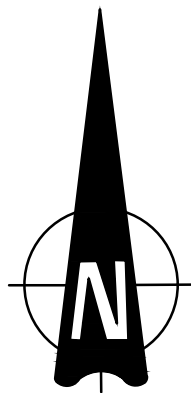
Client:

FRONVILLE LTD



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t+353 21 462 4000 | w.punchconsulting.com

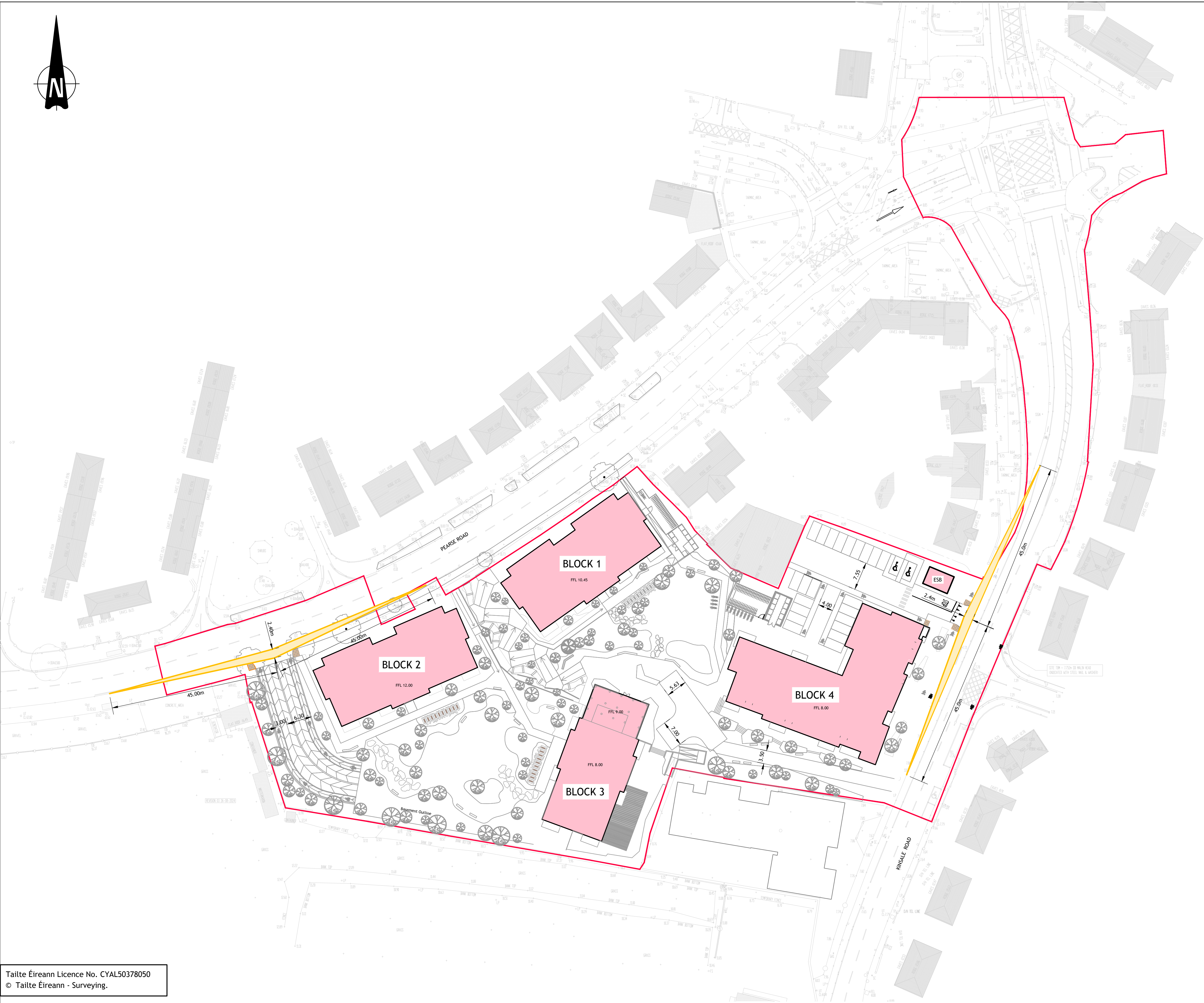
Project:	KINSALE ROAD LRD, KINSALE ROAD, CORK
Title:	PROPOSED WATERMAIN LAYOUT
Drawn by:	Liam Loneragan
Checked by:	Liam Loneragan
Engineer checked by:	Siimeon Solomons
Approved by:	Niamh Cronin
Project No.:	214130
Model Ref.:	214130-PUNCH-XX-XX-M2-C-0300
Drawing Status:	A0 (Planning)
Scale:	1:500
Document No.:	214130-PUNCH-XX-XX-DR-C-0300
Revision:	C06



SIGHT VISIBILITY LEGEND:

SIGHT VISIBILITY SPLAY

SIGHT VISIBILITY CRITERIA USED (DMURS)	
DESIGN SPEED (km/hr)	SSD STANDARD (metres)
50	45



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COLOUR DRAWING



Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

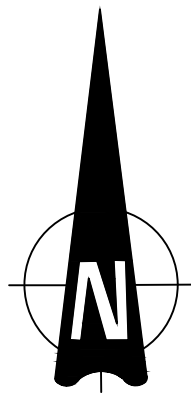
Client:

FRONVILLE LTD



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t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK			
Title: PROPOSED ROADS LAYOUT			
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons
Project no: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0400	Drawing Status: A0 (Planning)	Approved: Niamh Cronin
Scale @ A1: 1:500	Document No: 214130-PUNCH-XX-XX-DR-C-0400	Revision No: C06	



- LEGEND:
- FINISHED FLOOR LEVEL FFL:12.000
- PROPOSED SLOPE 1:100
- PROPOSED ROAD / PATH LEVEL x10.000
- EXISTING LEVEL x10.000



214130-PUNCH-XX-XX-DR-C-0421

214130-PUNCH-XX-XX-DR-C-0422

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COLOUR DRAWING



Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C06	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

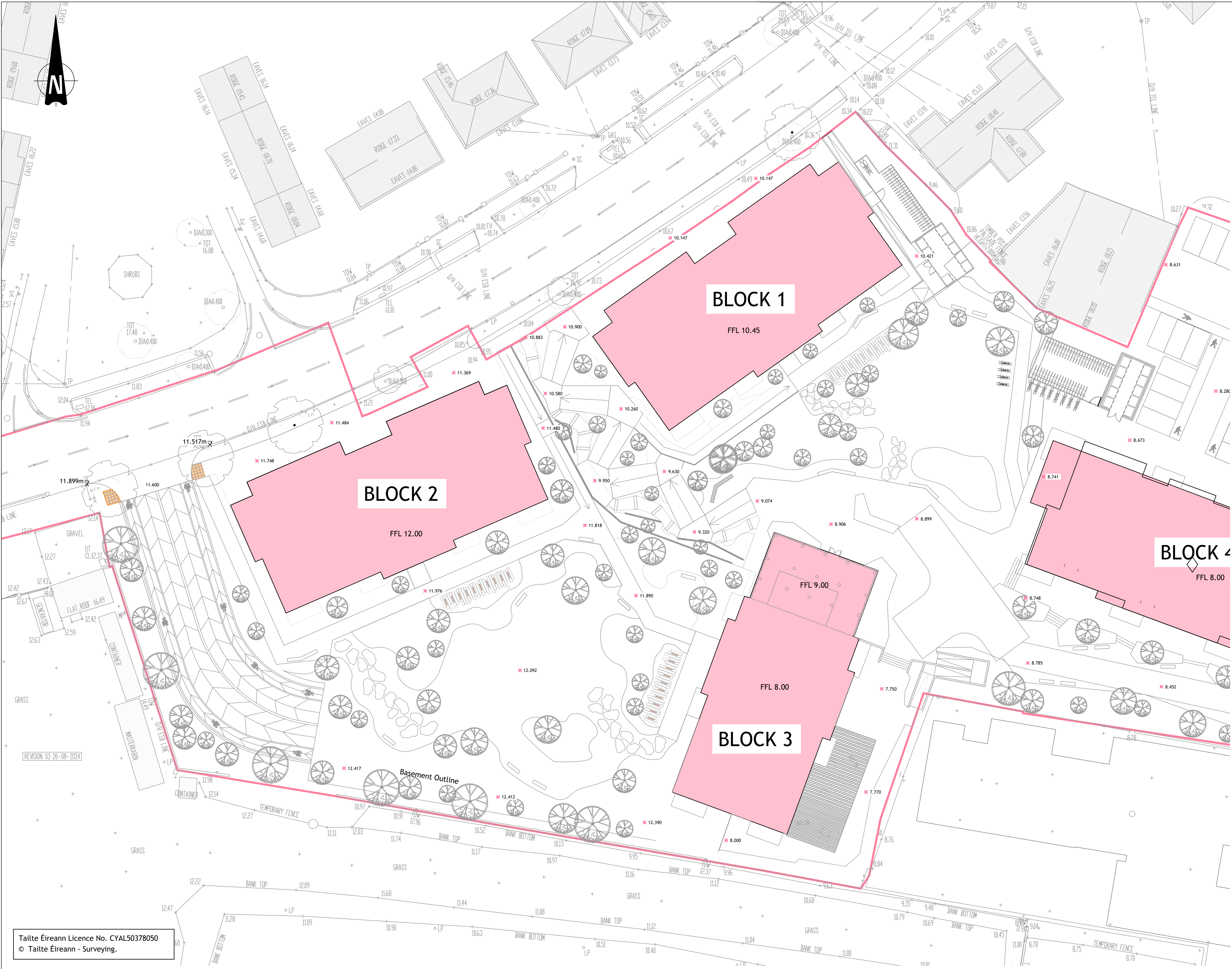
Client:

FRONTVILLE LTD



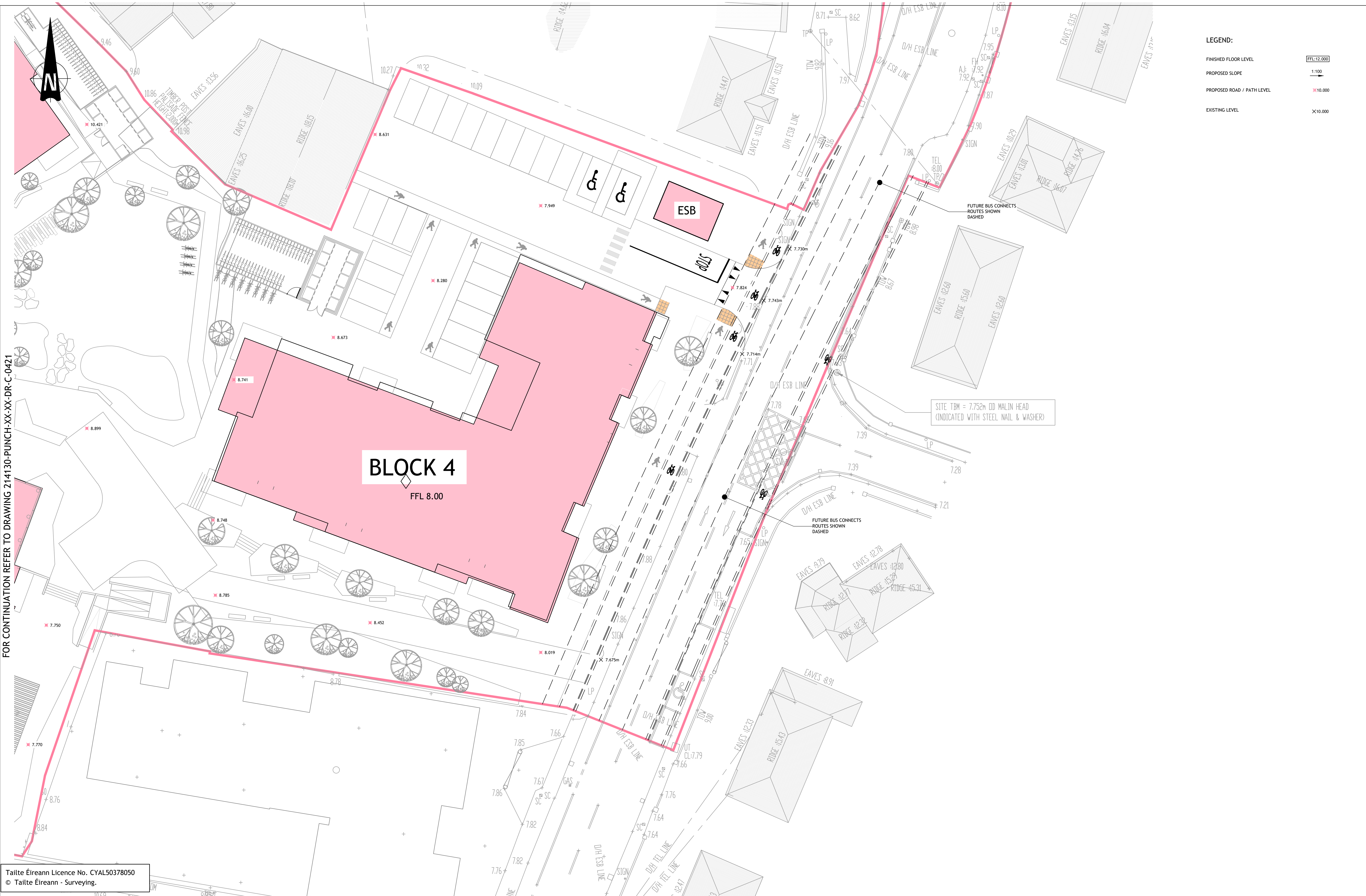
Elm Court, Boreenmann Road, Cork, T12 HHW2
t +353 21 462 4000 | w punchconsulting.com

Project:	KINSALE ROAD LRD, KINSALE ROAD, CORK
Title:	SITE LEVELS LAYOUT - GENERAL ARRANGMENT
Drawn:	Liam Loneragan
Date drawn:	10.09.2024
Model Ref:	214130-PUNCH-XX-XX-M2-C-0420-422
Scale @ A1:	1:500
Document Ref:	214130-PUNCH-XX-XX-DR-C-0420
Engineer Check:	Liam Loneragan
Engineer Check:	Simeon Solomons
Approved:	Niamh Cronin
Drawing Status:	A0 (Planning)
Revision No:	C06



FOR CONTINUATION REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0422

FOR CONTINUATION REFER TO DRAWING 214130-PUNCH-XX-XX-DR-C-0421



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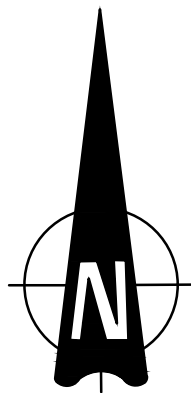


	Amendment	By	Date	Rev	Amendment	By	Date	Client:
C01	ISSUED FOR PLANNING	LL	03.10.2024					FRONTVILLE LTD
C02	ISSUED FOR PLANNING	LL	23.10.2024					
C03	ISSUED FOR PLANNING	LL	04.03.2025					
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025					
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025					
C06	ISSUED FOR PLANNING	LL	09.06.2025					

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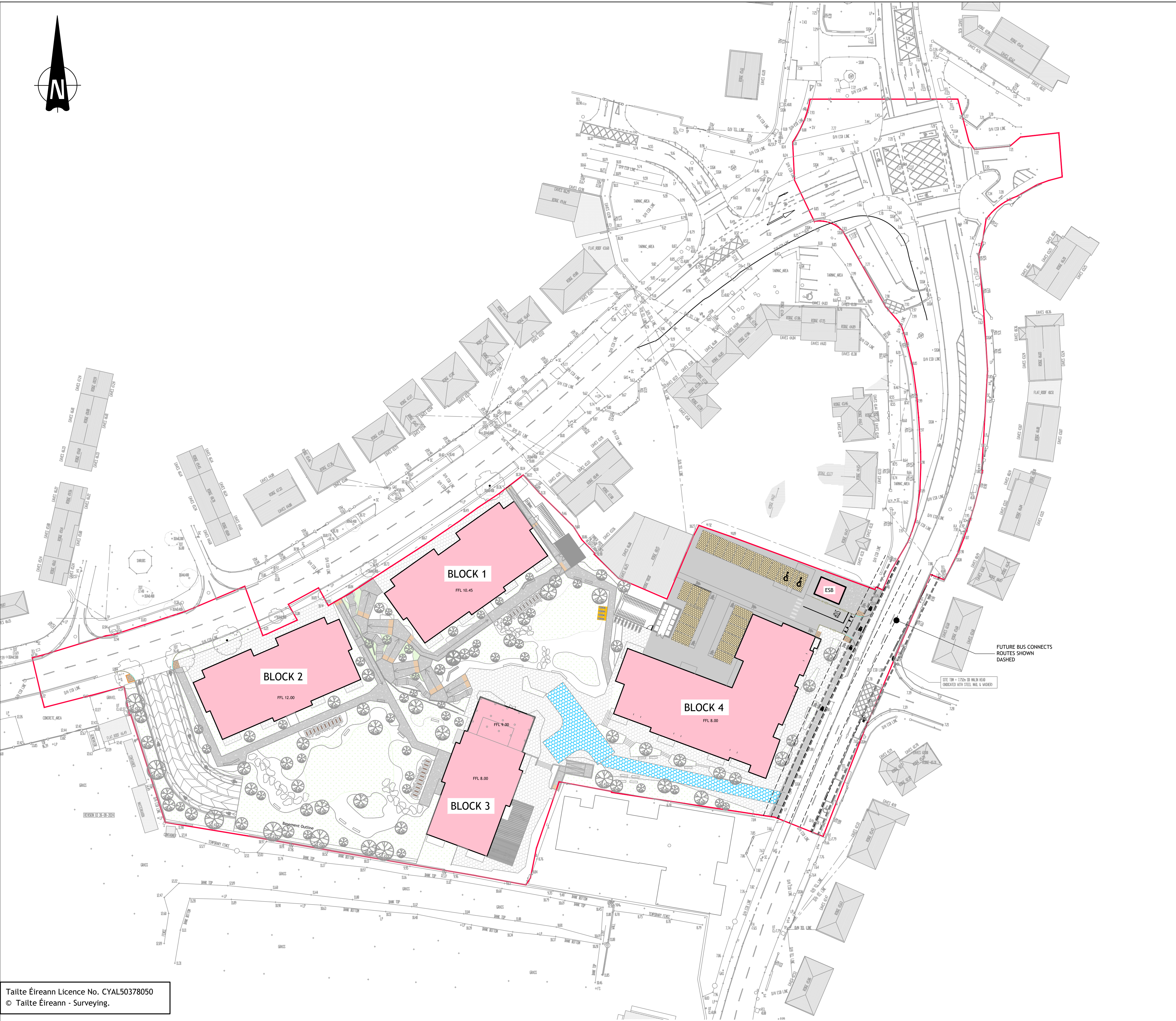
Elm Court, Boreenmanna Road, Cork, T12 HH
+353 21 462 4000 | www.punchconsulting.co.uk

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK			
Title: SITE LEVELS LAYOUT - SHEET 2 OF 2			
Drawn by: Liam Lonergan	Date drawn: 10.09.2014	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons
Approved: Niamh Cronin			
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0420-422	Drawing Status: A0 (Planning)	
Scale as A1: 1:250	Revision: 214130-PUNCH-XX-XX-DR-C-0422	Revision: C06	



LEGEND:

- PROPOSED BUILDING
- PROPOSED ASPHALT ROAD
- PROPOSED CONCRETE FOOTPATH
- PROPOSED NON-TRAFFICKED PAVING TO ARCHITECT'S SPECIFICATION
- PROPOSED TRAFFICKED PAVING TO ARCHITECT'S SPECIFICATION
- PROPOSED PERMEABLE PAVING
- PROPOSED CONCRETE PLINTH
- PROPOSED TACTILE PAVING (BUFF COLOUR)
- PROPOSED CORDURY PAVING
- 6mm HIGH KERB
- 125mm HIGH KERB



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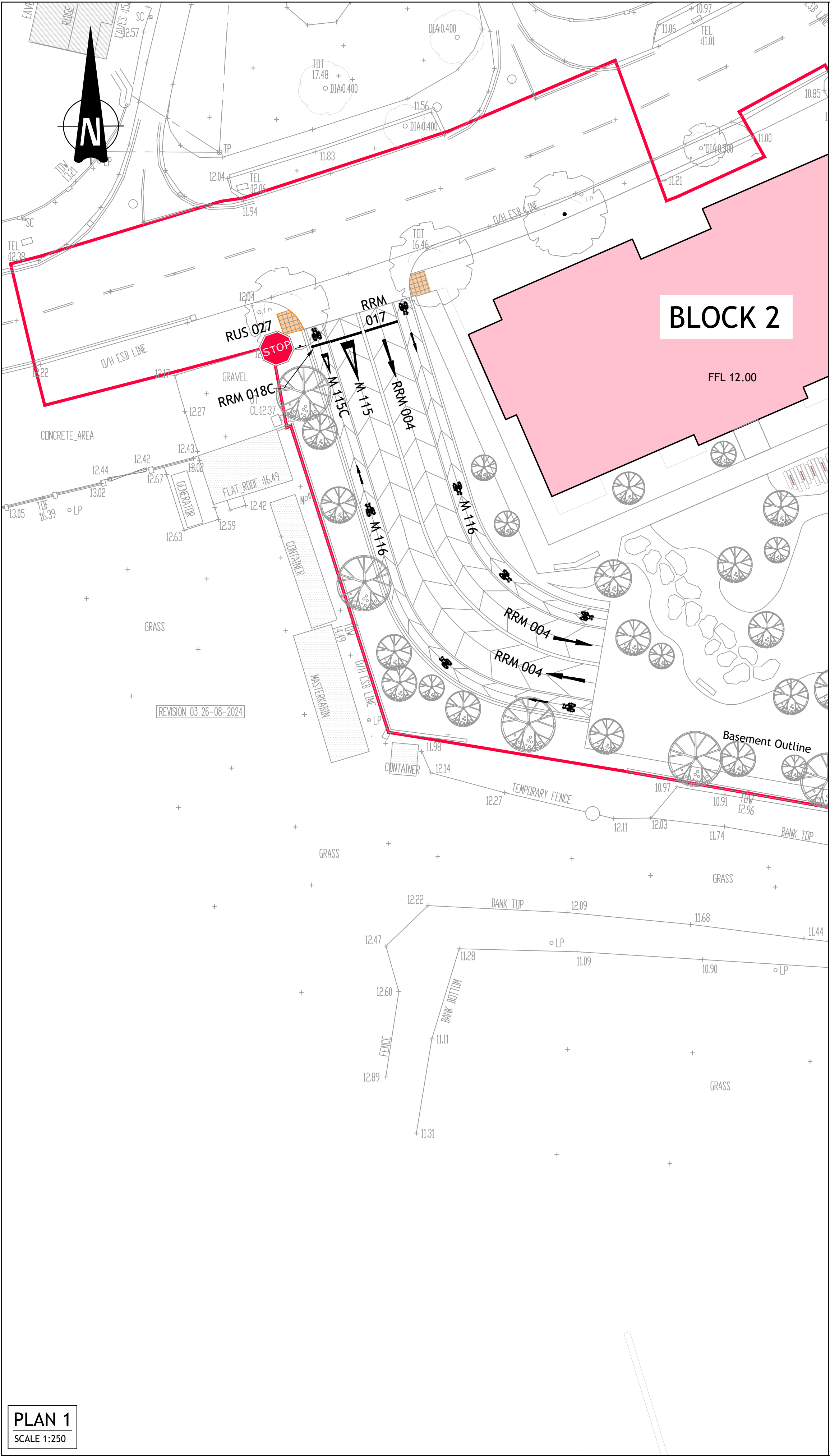
Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING	LL	21.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C06	ISSUED FOR PLANNING REVIEW	LL	08.04.2025

Rev	Amendment	By	Date
C07	ISSUED FOR PLANNING	LL	09.06.2025

Client:	FRONVILLE LTD
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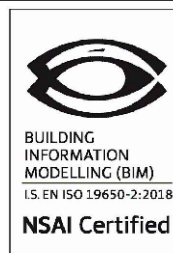
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t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK					
Title: PAVEMENT FINISHES LAYOUT					
Drawn: Liam Loneragan	Date drawn: 10.09.2024	Technician Check: Liam Loneragan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin	
Project no: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0440-0442			Drawing Status: A0(Planning)	
Scale @ A1: 1:500	Document no: 214130-PUNCH-XX-XX-DR-C-0440			Revision No: C07	

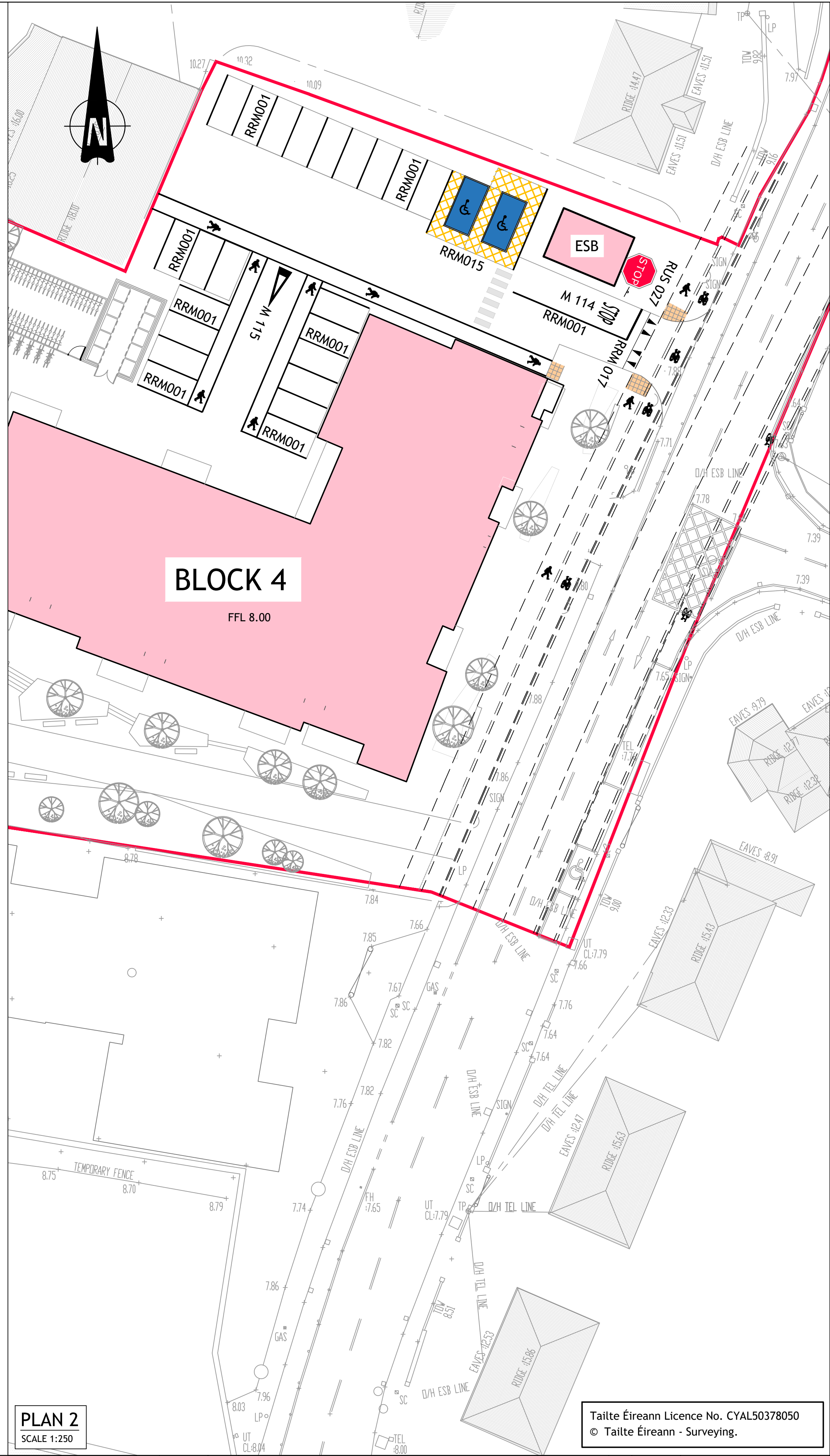


PLAN 1
SCALE 1:250

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024				
C02	ISSUED FOR PLANNING	LL	03.03.2025				
C03	ISSUED FOR PLANNING	LL	19.03.2025				
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025				
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025				
C06	ISSUED FOR PLANNING	LL	09.06.2025				

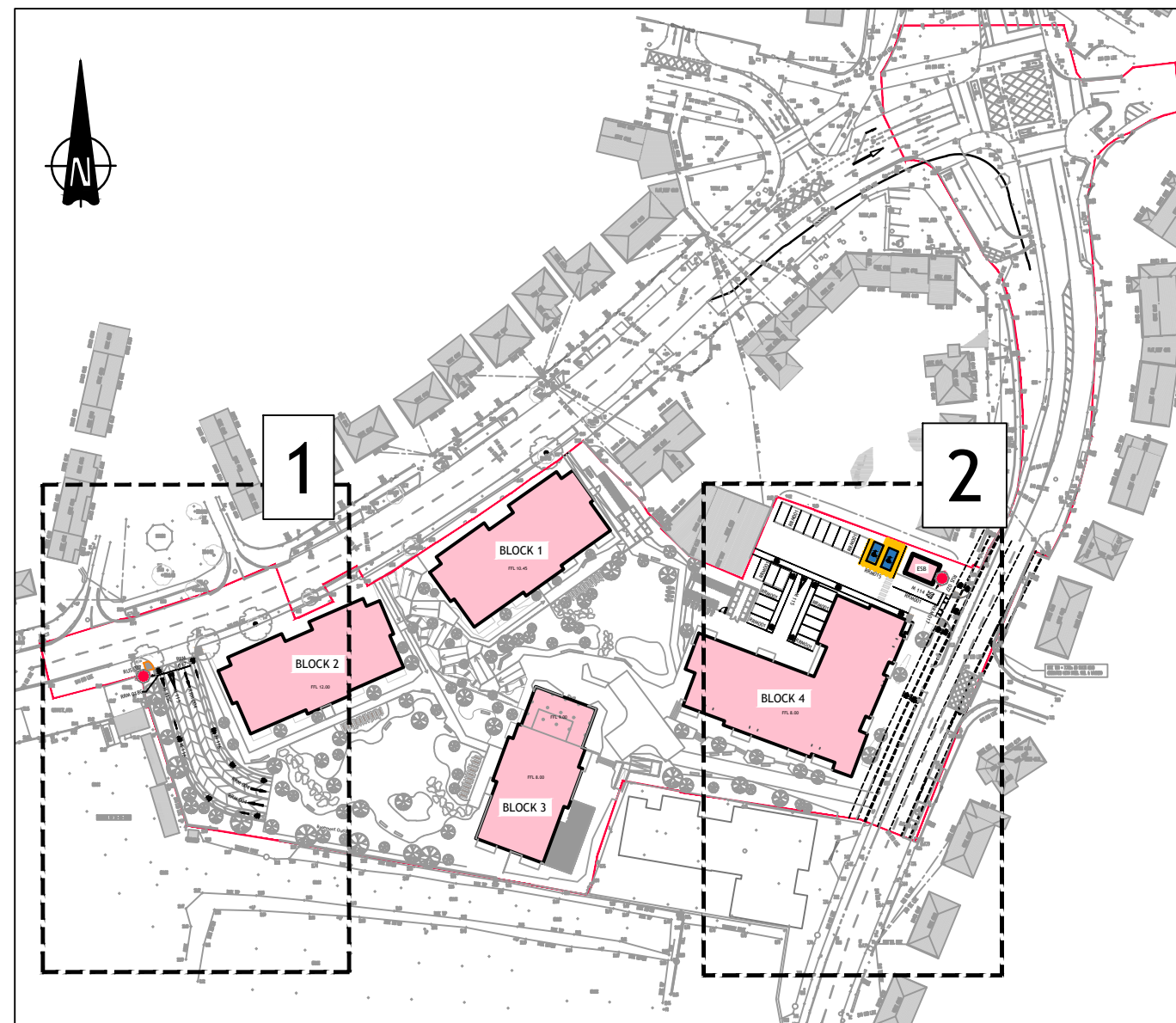


PLAN 2
SCALE 1:250

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ROAD MARKING AND SIGNAGE LEGEND	
DESCRIPTION	*DTTSM REF
100mm WIDE CONTINUOUS WHITE LINE	RRM 001
100mm WIDE WHITE EDGE LINE	RRM 022
200mm WIDE STOP LINE	RRM 017
STOP ROAD MARKING	M 114
150mm WIDE BROKEN YIELD LINE	RRM 018
YIELD ROAD MARKING	M 115
CYCLE TRACK YIELD LINE	RRM 018C
CYCLE TRACK YIELD ROAD MARKING	M 115C
CYCLE SYMBOL	M 116
100mm WIDE CONTINUOUS WHITE CYCLE TRACK EDGE LINE	RRM 022
100mm WIDE BROKEN WHITE CYCLE TRACK EDGE LINE	RRM 023
RUS 027 - STOP SIGN	RUS 027
*DTTSM: DEPARTMENT OF TRANSPORT TRAFFIC SIGNS MANUAL	

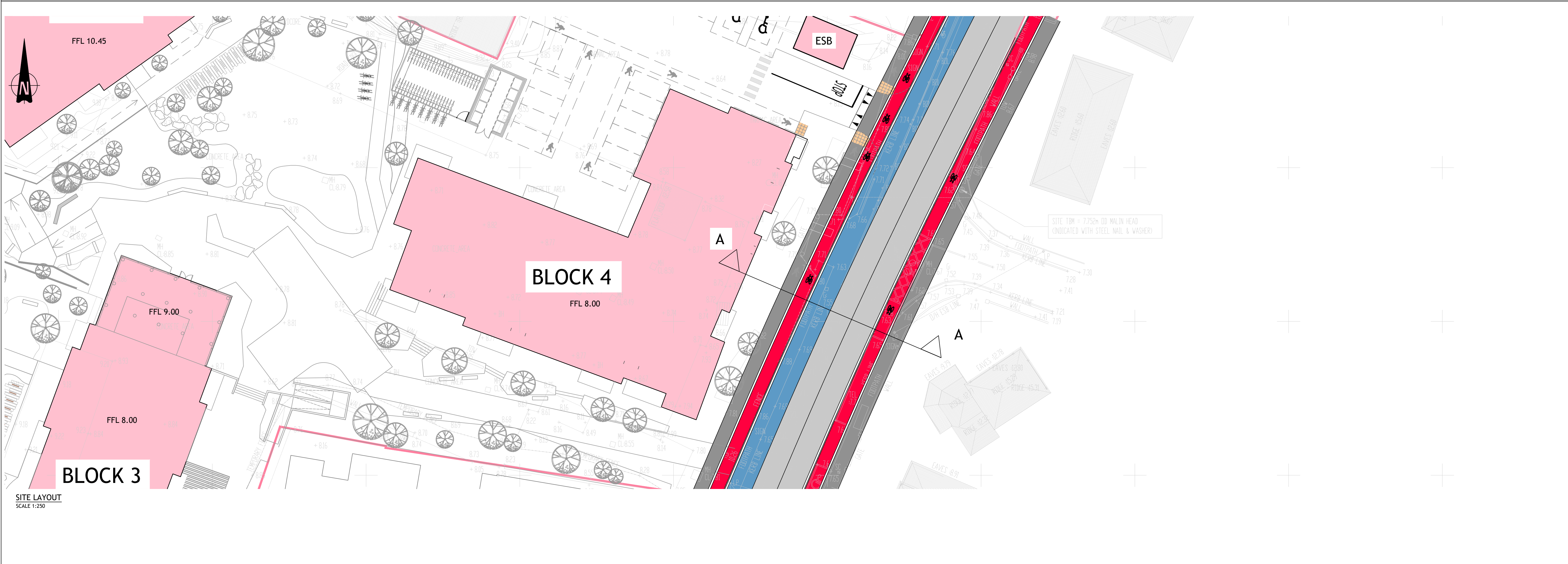
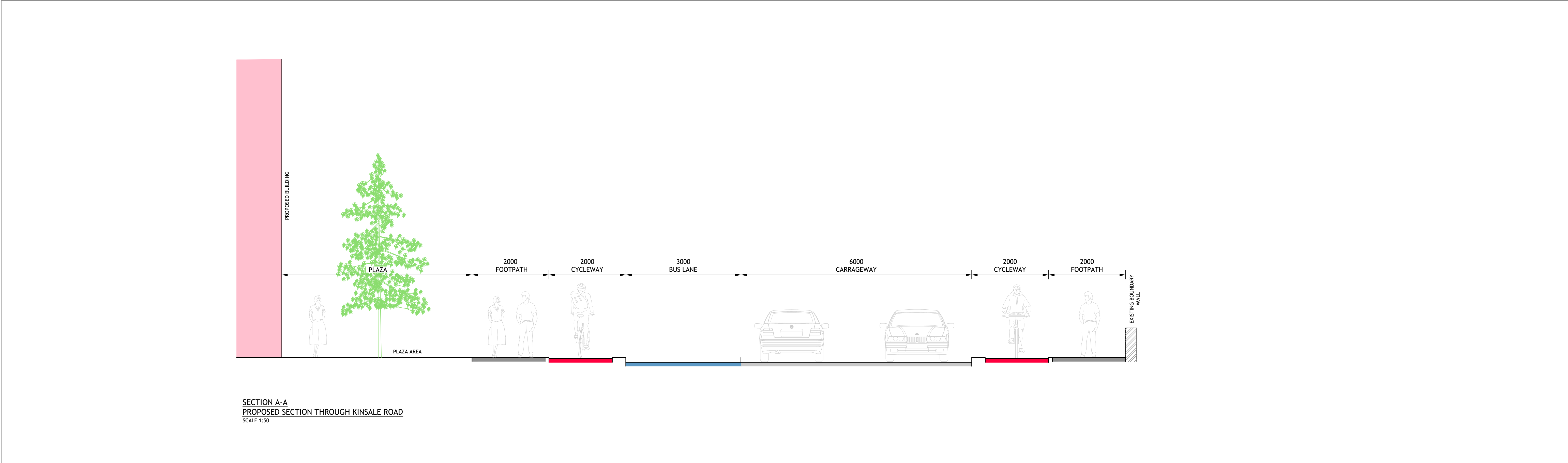


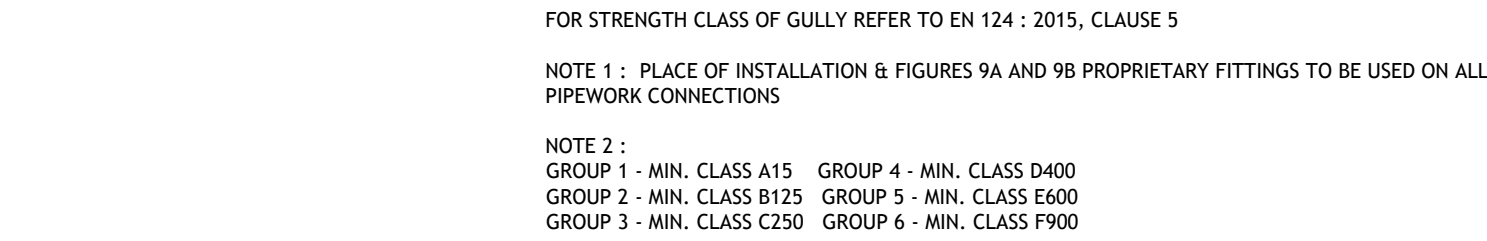
KEY PLAN
NOT TO SCALE



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Project: KINSALE ROAD LRD, KINSALE ROAD, CORK	
Title: ROAD MARKINGS AND SIGNAGE	
Drawn: Liam Lonergan	Date drawn: September 2024
Project No: 214130	Technician Check: Liam Lonergan
Scale @ A1: AS SHOWN	Engineer Check: Simeon Solomons
	Approved: Niamh Cronin
	Drawing Status: A0 (Planning)
	Revision No: C06





SCALE 1:20



INSPECTION CHAMBER UP TO 1.0m DEEP
SCALE 1:20



1. MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm DIA. SHOULD BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
2. FOR DEPTHS TO INVERT $> 2.70\text{m}$ AN ACCESS SHAFT OF MIN. 900mm DIAMETER AND REDUCING SLAB MAY BE USED.
3. WHERE THE DEPTH TO INVERT IS 1.00m OR LESS A 450mm $\times$ 450mm (or 450mm DIA.) INSPECTION CHAMBER WITH MINIMUM COVER SIZE OF 450mm DIA. MAY BE USED SUBJECT TO ACCOMMODATION OF CONNECTIONS AND APPROVAL OF THE LOCAL AUTHORITY.
4. ON COMPLETION OF CONSTRUCTION INTERNAL SURFACES OF MANHOLE & SEWERS TO THOROUGHLY CLEANSED TO REMOVE ALL DELETERIOUS MATERIAL, WITHOUT SUCH MATERIAL BEING PASSED FORWARD INTO PUBLIC SEWERS OR WATERCOURSES
5. FIRST MANHOLE UPSTREAM FROM CONNECTION TO THE (EXISTING) PUBLIC SEWER TO BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE PUBLIC SEWER. A 450mm NOT TO BE REMOVED IMMEDIATELY PRIOR TO OCCUPATION OF PREMISES TO BE SERVED BY SEWER.



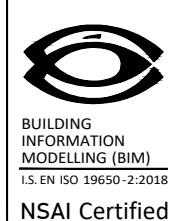
PRECAST MANHOLE DETAIL

TABLE M1 - INTERNAL DIAMETER OF MANHOLES	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800
> 900	CONSULT LOCAL AUTHORITY

NOTE :

USE 1050 DIAMETER RINGS FOR PIPES LESS THAN 375mm DIAMETER WHERE DEPTH TO SOFFIT IS 1.35 - 1.5m

TABLE M2 - ROCKER PIPE LENGTH	
NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH (M)
150 to 600	0.6
675 to 750	1.0
Over 750	1.2



Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
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[illegible]

Client:

FRONVILLE LTD



Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 1				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0500	Drawing Status: A0 (For Planning)		
Scale: AS SHOWN	Doc No: 214130-PUNCH-XX-XX-DR-C-0500	Revision No: C04		

UISCE EIREANN - WASTEWATER STANDARD DETAILS	
Detail No.	Detail Title
STD-WW-03	Drain & service connection pipework
STD-WW-04	Typical sewer / service pipe connection
STD-WW-05	Typical service layout indicating separation distances
STD-WW-05A	Wastewater service connection vertical separation distances
STD-WW-06	Restrictions on wastewater infrastructure works adjacent to trees
STD-WW-06A	Restrictions on new trees/shrubs planting adjacent to sewers
STD-WW-07	Trench backfill & bedding
STD-WW-08	Concrete protection slab, bed, haunch & surround to wastewater pipes
STD-WW-09	Blockwork manhole (<450mm dia.)
STD-WW-10	Pre-cast concrete manhole with cast in-situ base
STD-WW-10A	Pre-cast concrete manhole with pre-cast base
STD-WW-11	In-situ concrete manhole
STD-WW-12	Backdrop and cascade manholes
STD-WW-13	Private side inspection chamber
STD-WW-19	Duct chamber
STD-WW-28	Cast in-situ Indicative submersible pumping station
STD-WW-34	Vent stack

	UISCE EIREANN - WATER STANDARD DETAILS
Detail No.	Detail Title
STD-W-01	Water service connection responsibility
STD-W-02	Typical layout for watermains within developments
STD-W-03	Customer connection and boundary box (25mm OD pipe)
STD-W-04	General pipe connections (Sheet 1 of 7)
STD-W-05	General pipe connections (Sheet 2 of 7)
STD-W-06	General pipe connections (Sheet 3 of 7)
STD-W-07	General pipe connections (Sheet 4 of 7)
STD-W-08	General pipe connections (Sheet 5 of 7)
STD-W-09	General pipe connections (Sheet 6 of 7)
STD-W-10	General pipe connections (Sheet 7 of 7)
STD-W-11	Typical service layout indicating separation distances
STD-W-12	Restrictions on Water Infrastructure works adjacent to existing trees
STD-W-12A	Restrictions on new trees / shrubs planting adjacent to Water mains
STD-W-13	Trench Backfill / bedding & reduced cover protection slab detail
STD-W-14	Sluice valve for ductile iron (D.I.) pipe (<350mm dia.) (Sheet 1 of 2)
STD-W-15	Sluice valve for polyethylene (P.E.) pipe (<350mm dia.) (Sheet 2 of 2)
STD-W-16	On-line hydrant for ductile iron (D.I.) pipe (Sheet 1 of 4)
STD-W-17	Off-line hydrant for ductile iron (D.I.) pipe (Sheet 2 of 4)
STD-W-18	On-line hydrant for polyethylene (P.E.) pipe (Sheet 3 of 4)
STD-W-19	Off-line hydrant for polyethylene (P.E.) pipe (Sheet 4 of 4)
STD-W-20	On-line air valve for ductile iron (D.I.) pipe (Sheet 1 of 4)
STD-W-21	Off-line air valve for ductile iron (D.I.) pipe (Sheet 2 of 4)
STD-W-15	Sluice valve for polyethylene (P.E.) pipe (<350mm dia.) (Sheet 2 of 2)
STD-W-23	Off-line air valve for polyethylene (P.E.) pipe (Sheet 4 of 4)
STD-W-26	Electromagnetic meter chamber (dn80 - dn250mm Dia.)
STD-W-26A	Chamber for flanged mech. meter without strainer (dn40 - dn250mm Dia.)
STD-W-26G	Flow meter chamber (25-32mm O.D. Dia.)
STD-W-27	Marker posts / plates
STD-W-28	Water main thrust and support blocks
STD-W-29	Duct chamber
STD-W-30A	Washout hydrant
STD-W-30B	Scour chamber to storm sewer arrangements
STD-W-36	Flow meter kiosk
STD-W-38	Watermain loop detail ductile iron option
STD-W-39	Watermain loop detail polyethylene option

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COLOUR DRAWING



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C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

Client:
FRONTVILLE LTD

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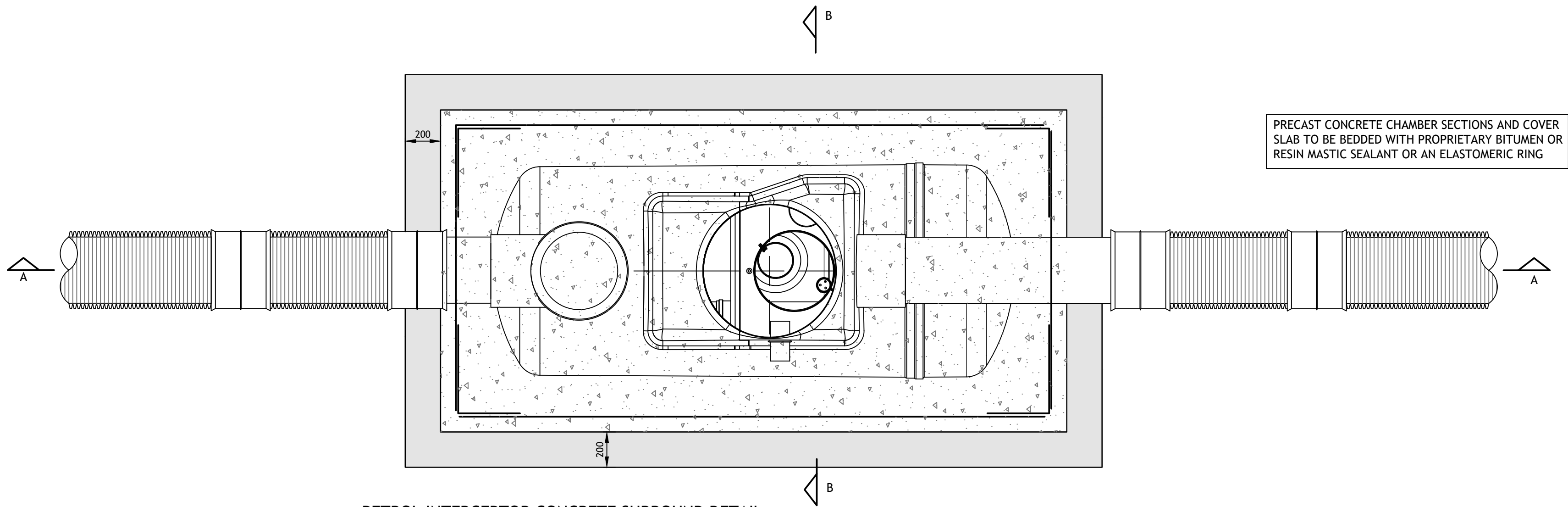
Dublin | Limerick | **Cork** | Galway | Glasgow

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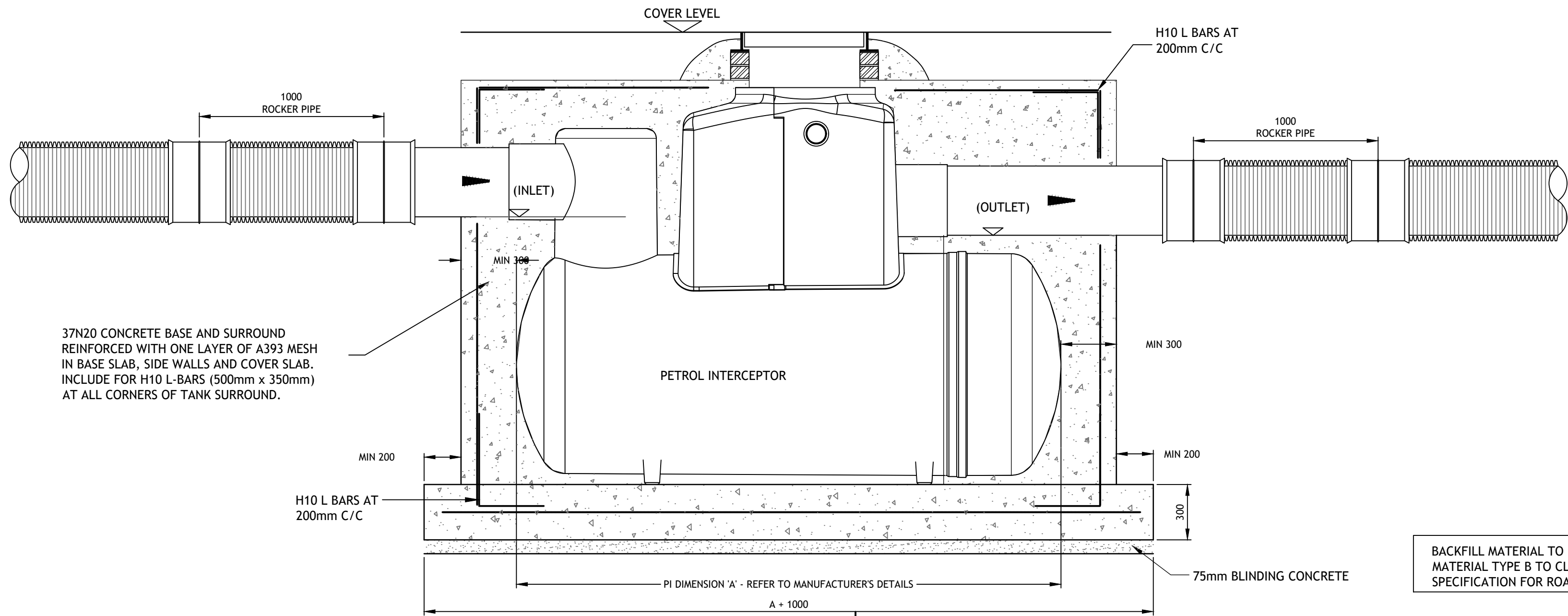
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: CONSTRUCTION DETAILS - UISCE EIREANN				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
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Scale @ A1: NTS	Document No: 214130-PUNCH-XX-XX-DR-C-0501	Revision No: C04		

GENERAL NOTES

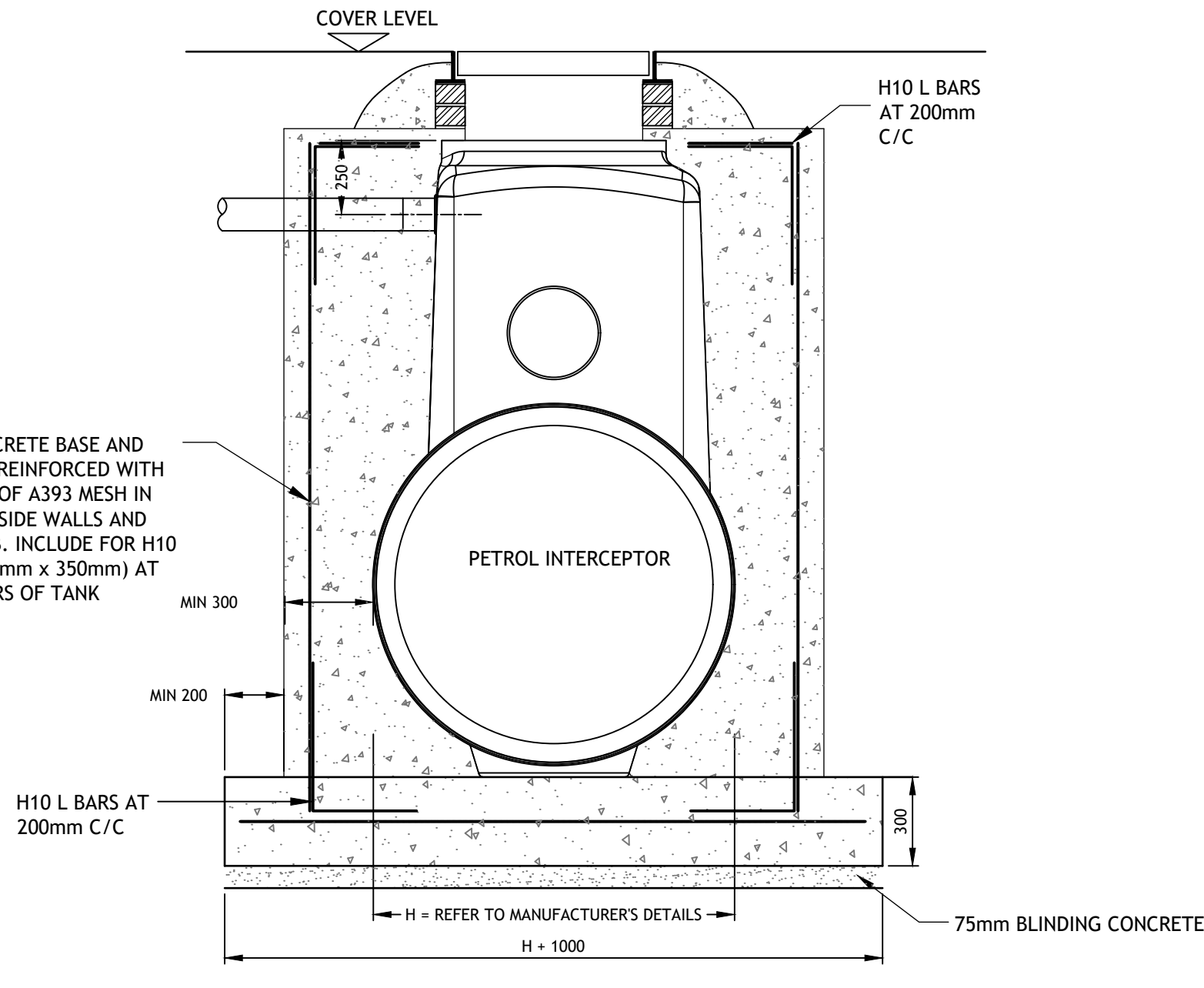
- DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS. DO NOT SCALE USE FIGURED DIMENSIONS ONLY.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY OR DETERMINE ALL DIMENSIONS AND LEVELS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION OR PRODUCTION OF FABRICATION DRAWINGS.
- FOR DETAILS OF SETTING OUT OF RWP, SVP, WVP AND ALL OPENINGS SEE THE RELEVANT ARCHITECTS DRAWINGS.
- FOR INSULATION DETAILS REFER TO ARCHITECTS DRAWINGS.
- TO BE READ IN CONJUNCTION WITH IRISH WATER DETAILS.



PETROL INTERCEPTOR CONCRETE SURROUND DETAIL
PLAN
SCALE 1:20



SECTION A-A
SCALE 1:20



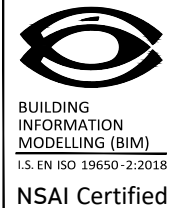
SECTION B-B
SCALE 1:20 @ A1

SIZING FOR KLARGESTER CLASS 1 BYPASS PETROL INTERCEPTOR TO BE AS PER TABLE BELOW.EQUIVALENT PETROL INTERCEPTOR PROPOSED BY THE CONTRACTOR TO CATER FOR DRAINAGE AREA BEING SERVED BY THE PETROL INTERCEPTOR ENSURING PETROL INTERCEPTOR CAN ACCOMODATE PEAK FLOW RATE.

Product code	Flow (l/s)	Peak Flow Rate (l/s)	Drainage area (m ²)	Storage Capacity (Ltrs)	Storage Capacity (Ltrs)	Length (mm)	Diameter (mm)	Access Shaft Diameter (mm)	Base Inlet Invert (mm)	Base to Outlet Invert (mm)	Standard Fall Across (mm)	Min Inlet Invert (mm)	Standard Pipework Diameter (mm)
-	-	-	-	Silt	Oil	-	-	-	-	-	-	-	-
NSBP003	3	30	1670	300	45	1700	1350	600	1760	1660	100	500	315
NSBP004	4.5	45	2500	450	60	1700	1350	600	1760	1660	100	500	315
NSBP006	6	60	3335	600	90	1700	1350	600	1760	1660	100	500	315
NSBE010	10	100	5560	1000	150	2072	1220	750	1450	1350	100	700	315
NSBE015	15	150	8335	1500	225	2950	1220	750	1450	1350	100	700	315
NSBE020	20	200	11111	2000	300	3896	1220	750	1450	1350	100	700	375
NSBE025	25	250	13890	2500	375	3576	1420	750	1680	1580	100	700	375
NSBE030	30	300	16670	3000	450	4266	1420	750	1680	1580	100	700	450
NSBE040	40	400	22222	4000	600	3230	1920	600	2185	2035	150	1000	500
NSBE050	50	500	27778	5000	750	3960	1920	600	2185	2035	150	1000	600
NSBE075	75	750	41667	7500	1125	5841	1920	600	2235	2035	200	950	675
NSBE100	100	1000	55556	10000	1500	7661	1920	600	2235	2035	200	950	750
NSBE125	125	1250	69444	12500	1875	9548	1920	600	2235	2035	200	950	750

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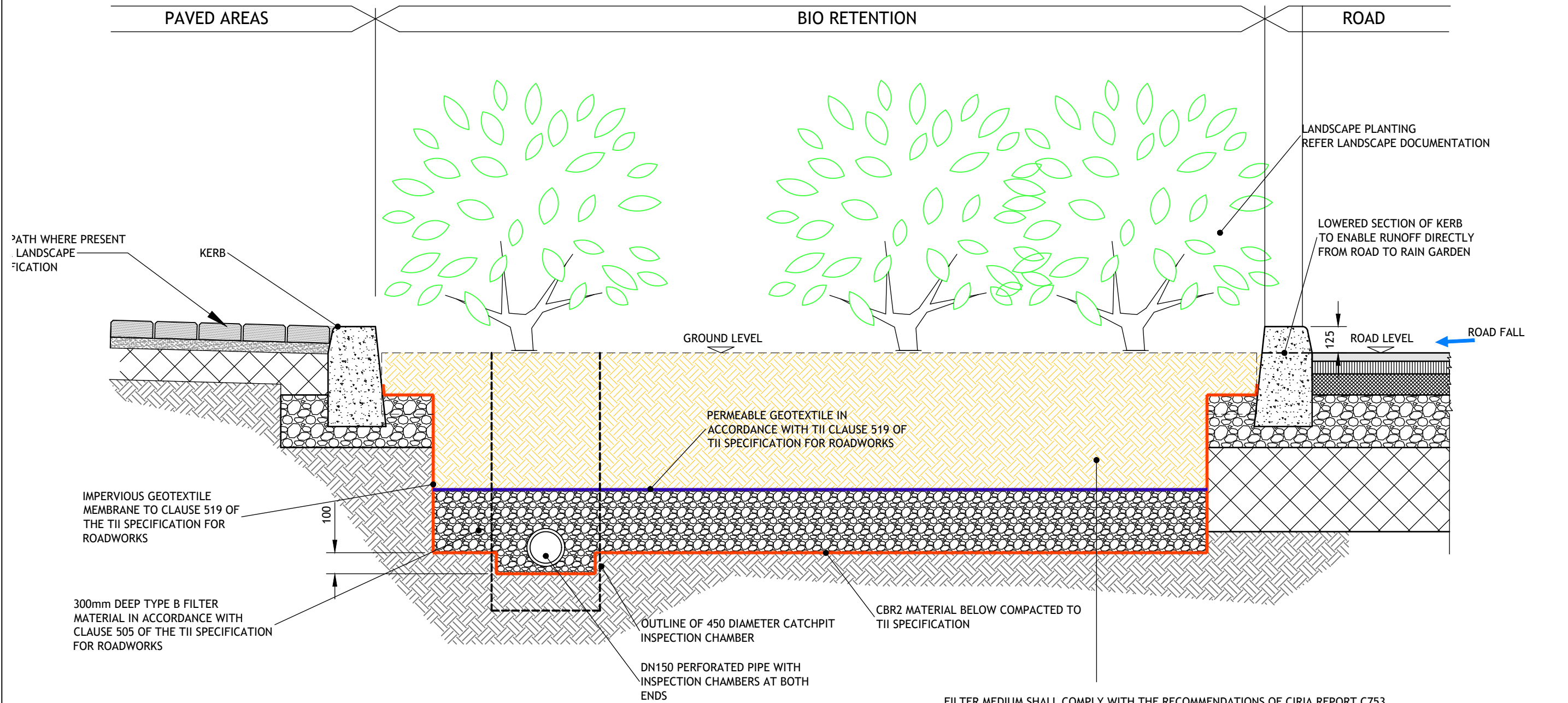
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Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technical Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
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Scale: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0502	Revision No: C04		



BIO RETENTION - TYPICAL SECTION

SCALE 1:20

FILTER MEDIUM SHALL COMPLY WITH THE RECOMMENDATIONS OF CIRIA REPORT C753. THE BASIC REQUIREMENTS OF THE MATERIAL SHALL BE:

SATURATED HYDRAULIC CONDUCTIVITY TO BE BETWEEN 100mm/h - 300mm/h - TESTED IN-SITU USING THE SINGLE RING INFILTRATION TEST - EN ISO 22282-5:2012

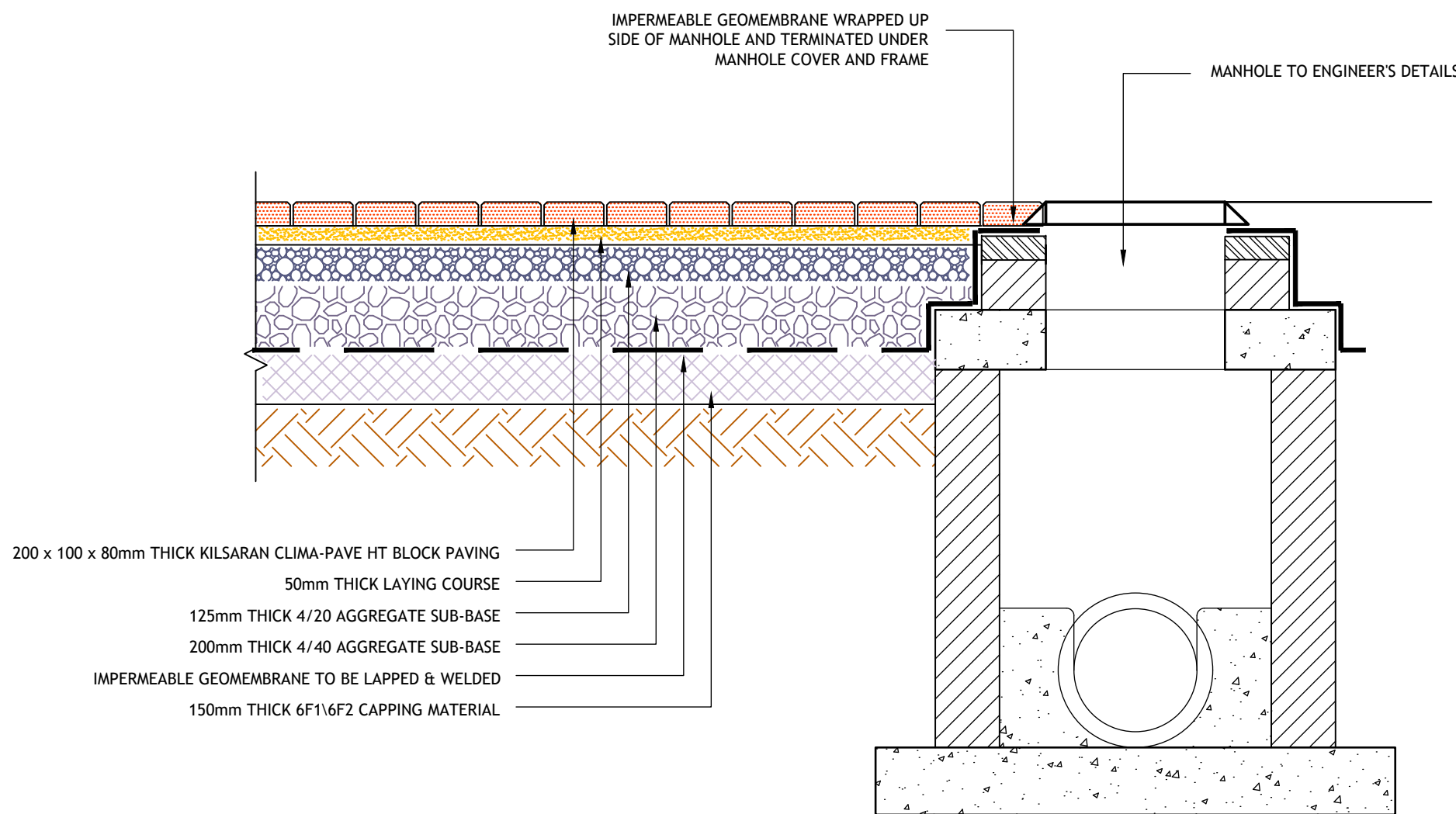
POROSITY > 30% (WHEN TESTED IN ACCORDANCE WITH BS 1377-2:1990)

PARTICLE SIZE DISTRIBUTION

6mm	100% PASSING
2mm	90-100% PASSING
0.6mm	40-70% PASSING
0.2mm	5-20% PASSING
0.063mm	<5% PASSING

ORGANIC MATER CONTENT - 3-5% (w/w)

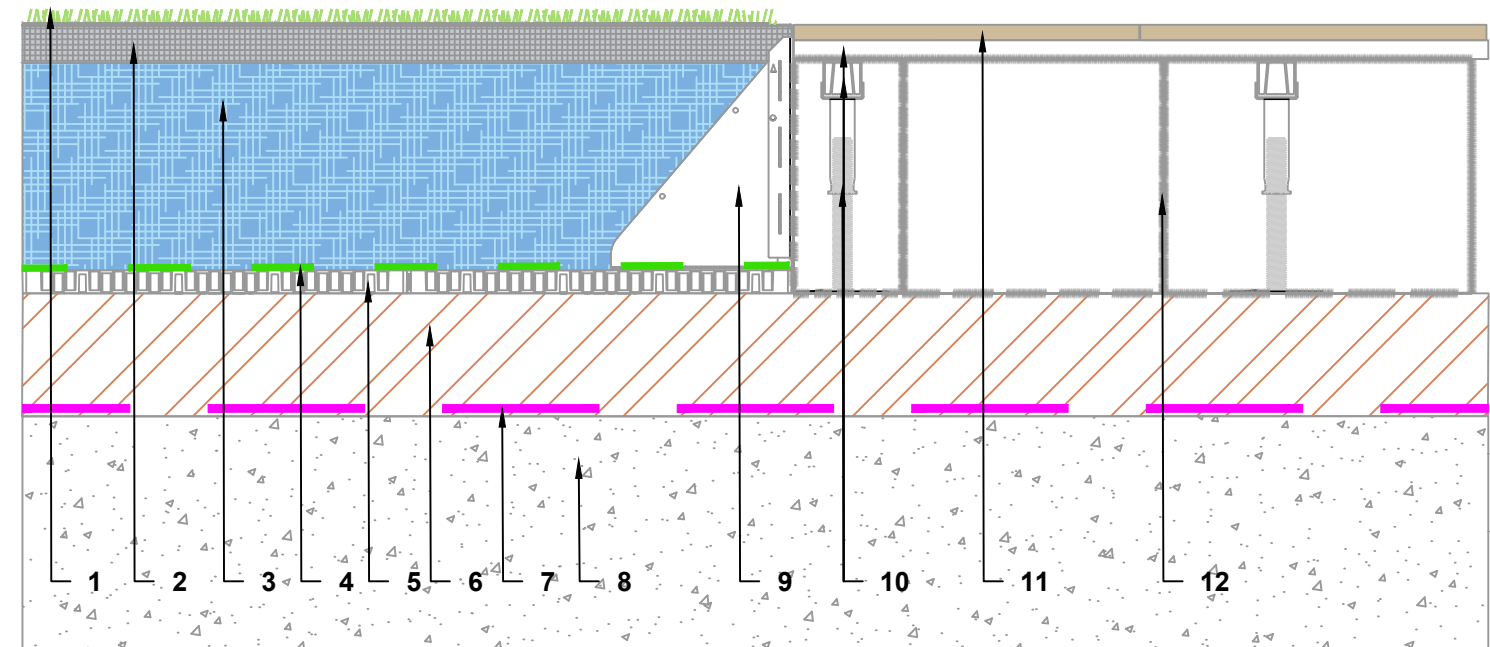
SOILS SHALL BE ASSESSED BY HORTICULTURIST TO ENSURE THAT IT WILL SUPPORT HEALTHY VEGETATION COMMUNITY. ANY COMPONENT FOUND TO CONTAIN HIGH LEVELS OF SALT, CLAY OR SILT PARTICLES OR OTHER EXTREMES WHICH MAY BE CONSIDERED RETARDANT TO PLANT GROWTH SHALL BE REJECTED. THE FILTER MEDIUM LAYER MATERIAL SHALL NOT BE COMPACTED WHEN PLACED. DEPTH TO LANDSCAPE SPECIFICATION, MAXIMUM 1.2M DEEP



PERMEABLE PAVING/MANHOLE JUNCTION DETAIL - TYPICAL SECTION

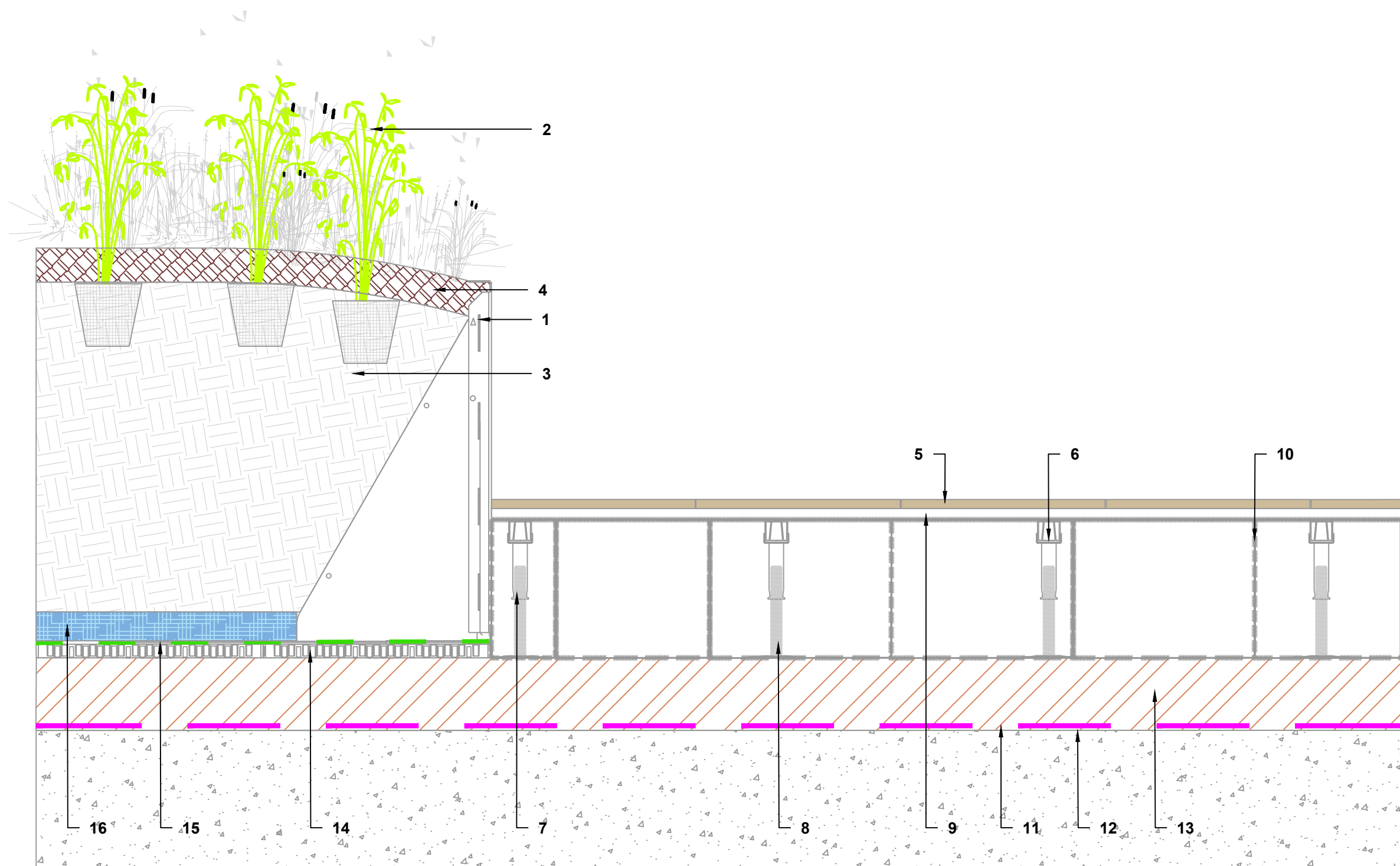
SCALE 1:20

- 20mm FIRE-R ARTIFICIAL GRASS, COLOUR: GREEN.
- SHOCKPAD, AS PER PLAY SPECIALIST SPECIFICATION.
- VOID FORMER BLOCK
- GEOTEXTILE
- DRAINAGE SYSTEM.
- INSULATION (AS PER APPOINTED ARCHITECT'S SPECIFICATIONS).
- WATER PROOFING MEMBRANE AND PROTECTION BOARD LAYER (AS PER ARCHITECT'S SPECIFICATIONS)
- PODIUM SLAB
- RETAINING WALL. VISIBLE FACES FINISH TO BE POLYESTER POWDER COATED, COLOUR: TBC.
- CLASS A FIRE-RATED NON-COMBUSTIBLE PAVING SUPPORT RAIL SYSTEM: ALUMINIUM TOP RAIL, ALUMINIUM LOWER JOIST AND WITH ADJUSTABLE HEIGHT SUPPORT PEDESTALS, PROVIDED WITH T-SHAPED PAVING SPACERS AND PAVING STOPS. WORKS TO BE CARRIED OUT WITH PAVERAIL NON-COMBUSTIBLE PAVING SYSTEM, AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED. ADJUSTABLE NON-COMBUSTIBLE SUPPORT PEDESTAL - AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED. ALUMINIUM LOWER JOIST - AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED, SECURELY BOLTED TO SUPPORT PEDESTAL. ALUMINIUM TOP RAIL - AS SUPPLIED BY STONEPAVE OR SIMILAR AND APPROVED, SECURELY BOLTED TO ALUMINIUM LOWER JOIST.
- PORCELAIN FLAGS, DIM. 900X 450X20MM, COLOUR: GREY AND DARK GREY, LAYING PATTERN: 90° STRETCHER BOND PATTERN.
- ACOUSTIC FELT, 2MM THICK, ON TOP OF QUINN LITE CONCRETE BLOCK. 400X215MM. TO APPROVED DETAIL.



ARTIFICIAL GRASS OVER BLUE ROOF TYPICAL SECTION

SCALE 1:10



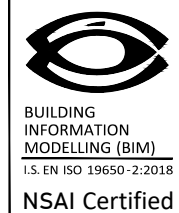
EXTENSIVE GREEN ROOF TYPICAL SECTION

SCALE 1:10

- RETAINING WALL MODULE. VISIBLE FACES FINISH TO BE POLYESTER POWDER COATED, COLOUR: TBC.
- SHRUB PLANTING
- LIGHTWEIGHT GROWING MEDIUM TO BS 3882
- BARK MULCH TO 75MM DEPTH.
- PORCELAIN FLAGS, DIM. 900X 450X20MM, COLOUR: GREY AND DARK GREY, LAYING PATTERN: 90° STRETCHER BOND PATTERN.
- CLASS A FIRE-RATED NON-COMBUSTIBLE PAVING SUPPORT RAIL SYSTEM: ALUMINIUM TOP RAIL, ALUMINIUM LOWER JOIST AND WITH ADJUSTABLE HEIGHT SUPPORT PEDESTALS, PROVIDED WITH T-SHAPED PAVING SPACERS AND PAVING STOPS. WORKS TO BE CARRIED OUT WITH PAVERAIL NON-COMBUSTIBLE PAVING SYSTEM.
- ADJUSTABLE NON-COMBUSTIBLE SUPPORT PEDESTAL.
- ALUMINIUM LOWER JOIST, SECURELY BOLTED TO SUPPORT PEDESTAL.
- ALUMINIUM TOP RAIL, SECURELY BOLTED TO ALUMINIUM LOWER JOIST.
- ACOUSTIC FELT, 2MM THICK, ON TOP OF QUINN LITE CONCRETE BLOCK. 400X215MM.
- WATER PROOFING MEMBRANE AND PROTECTION BOARD LAYER (AS PER ARCHITECT'S SPECIFICATIONS.)
- PODIUM SLAB.
- INSULATION (AS PER APPOINTED ARCHITECT'S SPECIFICATIONS).
- DRAINAGE SYSTEM.
- GEOTEXTILE
- VOID FORMER BLOCK

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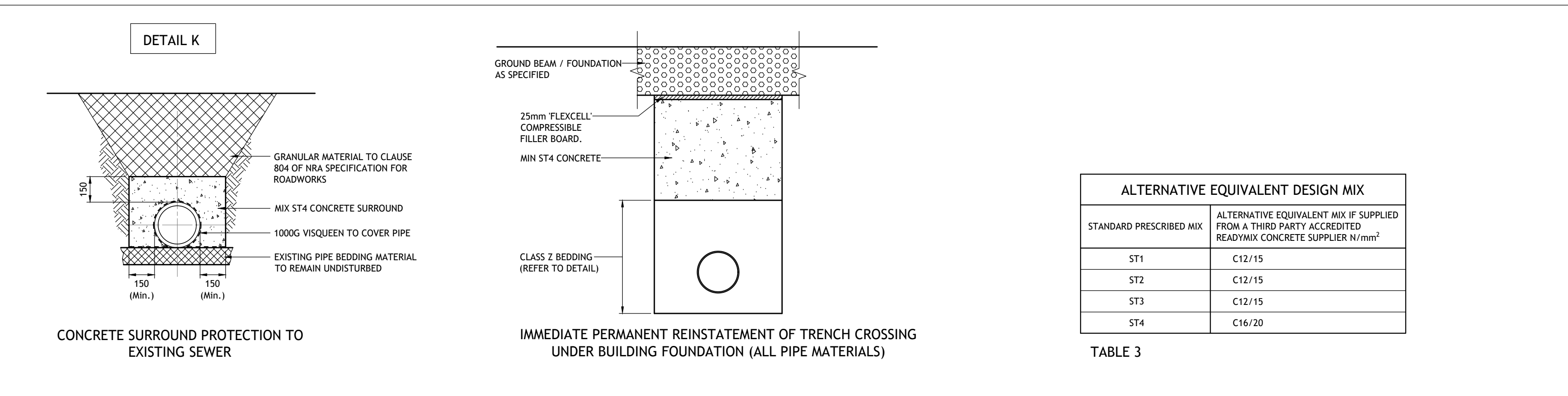
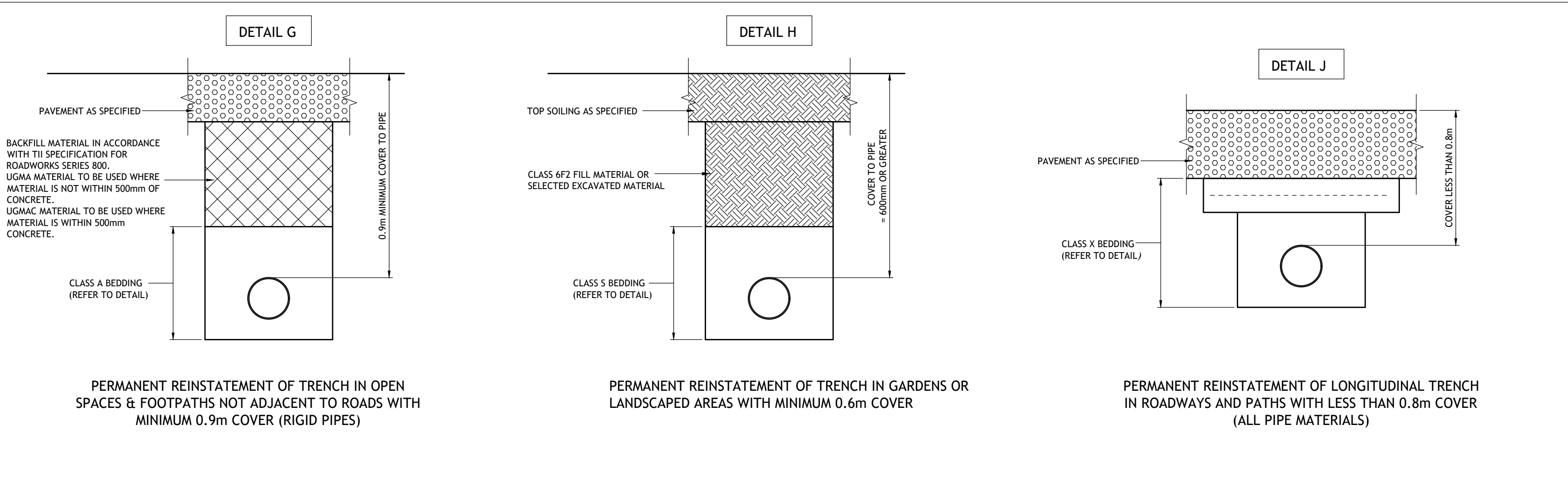
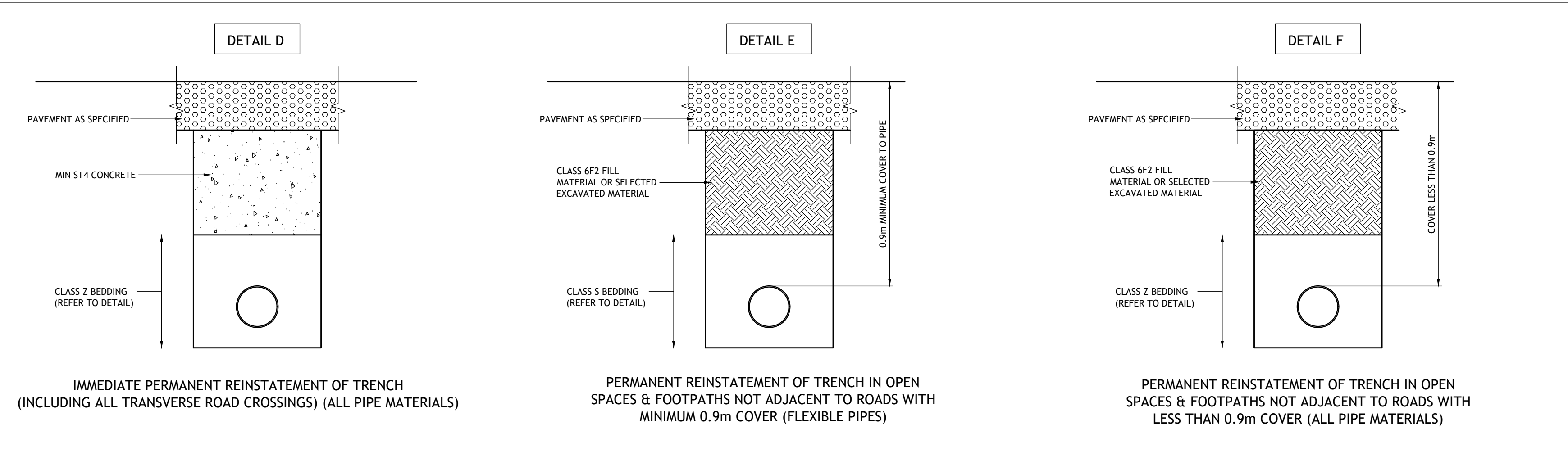
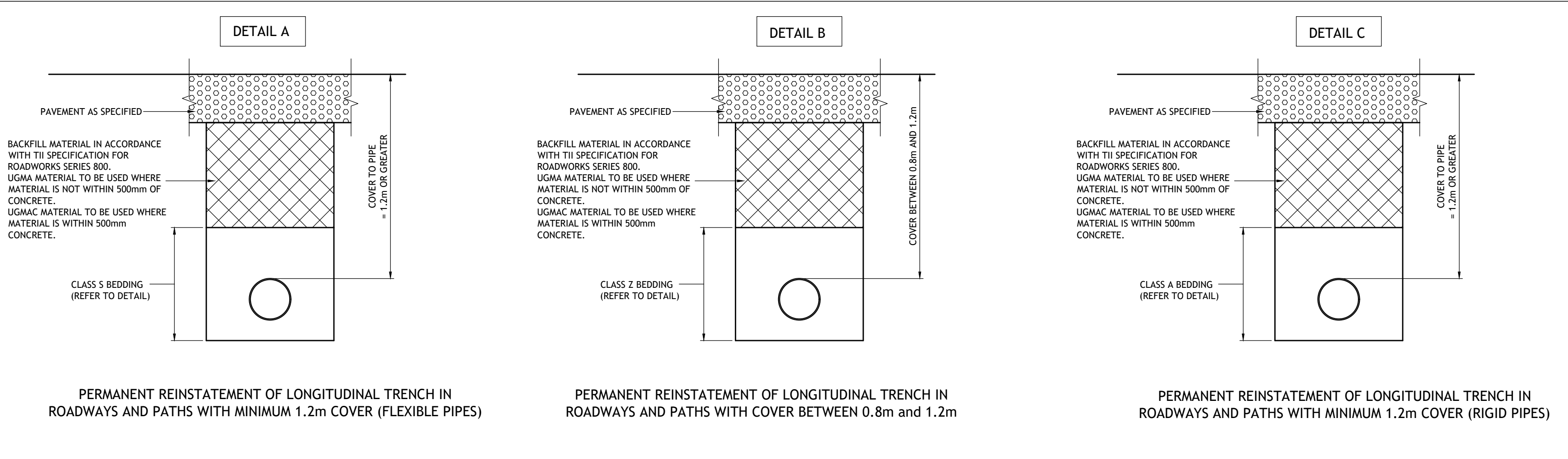
Rev	Amendment	By	Date

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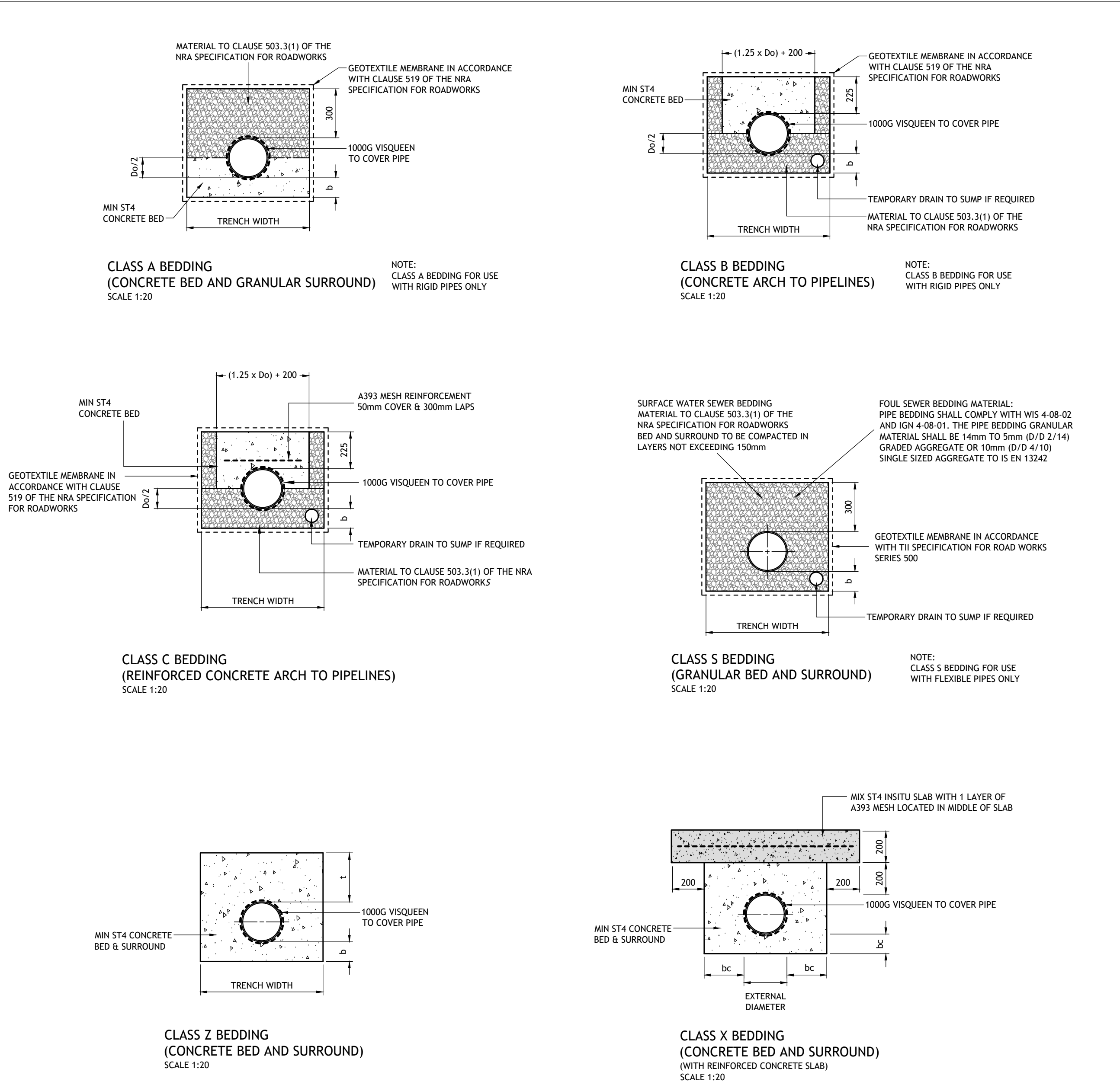
Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 4				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
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ALTERNATIVE EQUIVALENT DESIGN MIX	
STANDARD PRESCRIBED MIX	ALTERNATIVE EQUIVALENT MIX IF SUPPLIED FROM A THIRD PARTY ACCREDITED READYMIX CONCRETE SUPPLIER N/mm ²
ST1	C12/15
ST2	C12/15
ST3	C12/15
ST4	C16/20

TABLE 3



TRENCH WIDTHS AND DIMENSIONS FOR FOUL AND SURFACE WATER DRAINS				
PIPE DIAMETER (mm)	"Do" (mm)	"b" (mm)	"L" (mm)	TRENCH WIDTH (mm)
100	150	150	150	600
150	210	150	150	700
225	300	150	150	750
300	400	150	150	850
375	480	150	150	950
450	560	150	150	1000
525	650	150	150	1100
600	735	150	150	1200
675	850	200	200	1350
750	910	200	200	1450
900	1080	200	200	1650

TABLE 1

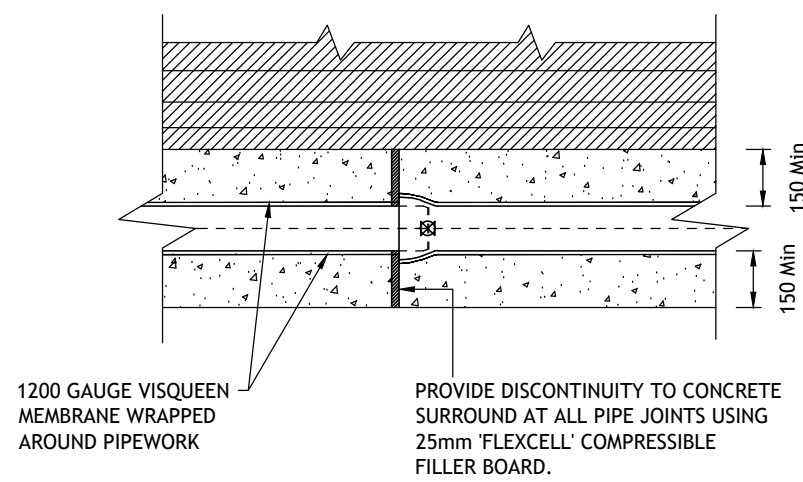
DIMENSION-bc						
NOMINAL PIPE DIAMETER (mm)	100-450 incl.	525-600 incl.	750	900	1050	1200
bc (mm)	100	150	200	225	250	300

TABLE 2

NOTES (PIPE BEDDING)

- CLAY PUDDLE SHALL BE INCORPORATED IN THE PIPE BED & SURROUND AND TRENCH BACKFILL MATERIAL IN ACCORDANCE WITH THE SPECIFICATION AT 50m INTERVALS
- IN ROCK OR MIXED SOILS CONTAINING BOULDERS OR HARD SPOTS INCREASE PIPE BEDDING DEPTH BY 100mm
- THE EMPLOYER'S REPRESENTATIVE MAY INSTRUCT THAT SPECIFIC PROVISION FOR DRAINAGE ALONG THE PIPE TRENCH BE MADE BY MEANS OF CONCRETE OR OTHER LAND DRAINAGE PIPES WHERE THE WATER TABLE LEVEL SO REQUIRES.
- FOR DIMENSIONS "b", "Do/2" AND TRENCH WIDTH REFER TO TABLE 1
- FOR DIMENSIONS "bc" REFER TO TABLE 2
- Do = PIPE OUTER DIAMETER

PIPE BEDDING DETAILS



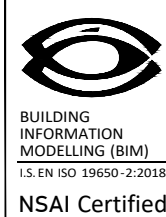
CONCRETE SURROUND TO PIPELINES DETAIL

SCALE 1:20 @ A1

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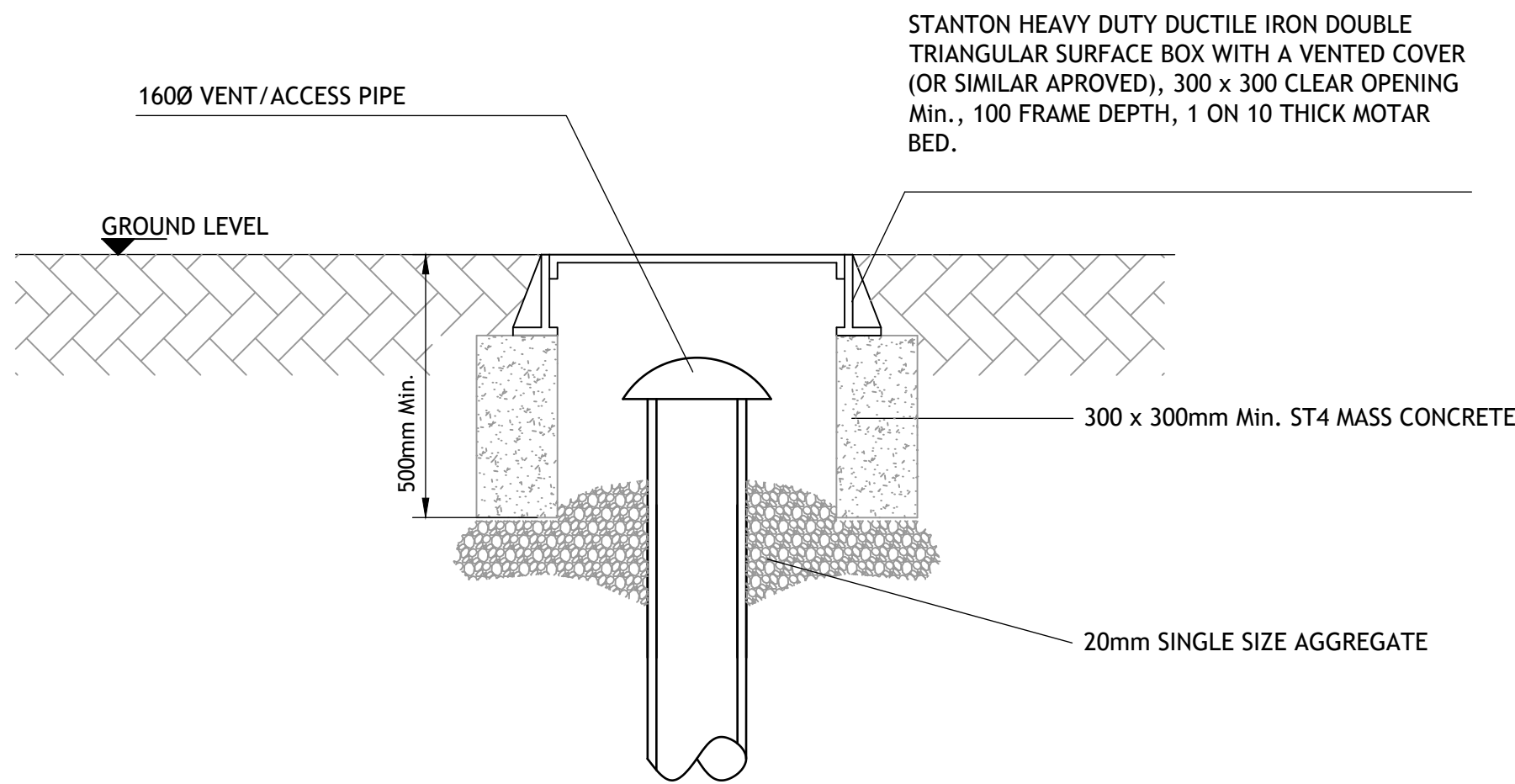
COLOUR DRAWING



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C01	ISSUED FOR PLANNING	LL	03.10.2024					FRONVILLE LTD
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C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025					
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Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 5			
Drawn: Liam Loneragan	Date drawn: 10.09.2024	Technician Check: Liam Loneragan	Engineer Check: Simeon Solomons
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		Revision No: C04	

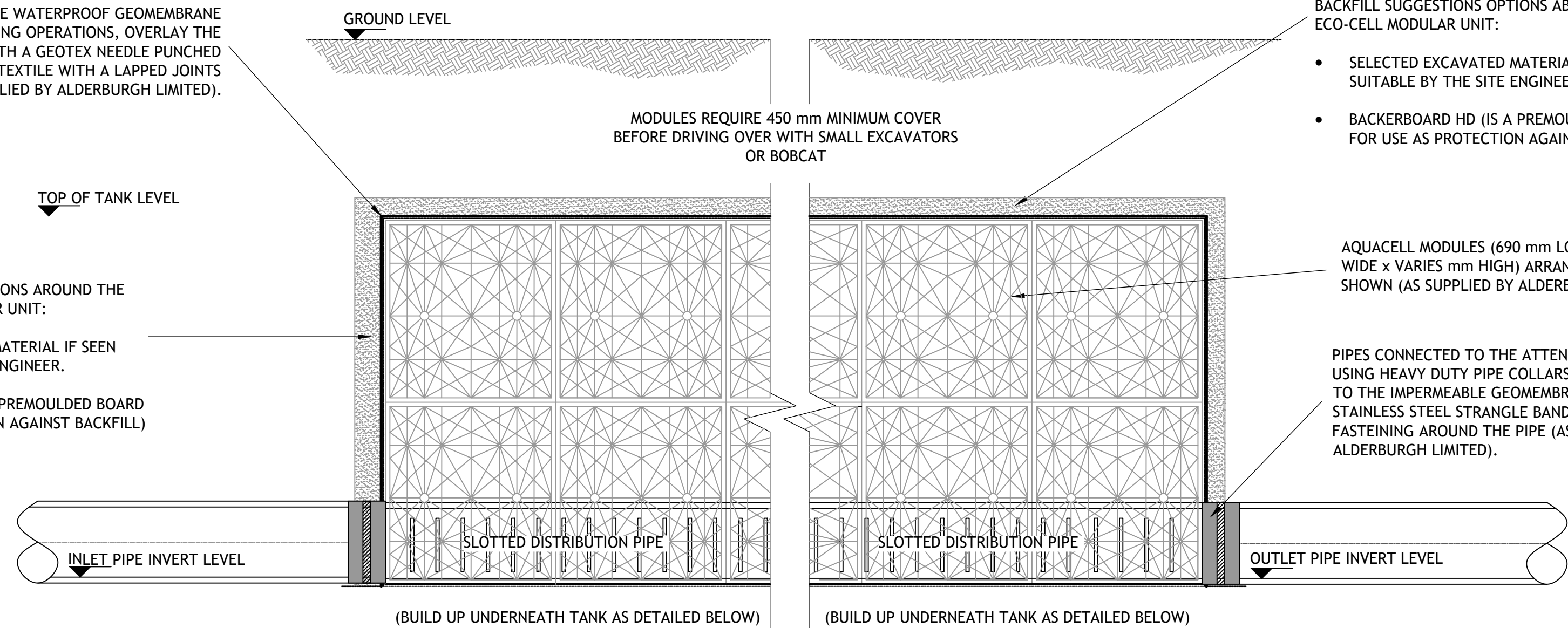


VENTILATION BOX DETAIL

TO PROTECT THE WATERPROOF GEOMEMBRANE DURING BACKFILLING OPERATIONS, OVERLAY THE TOP AND SIDES WITH A GEOTEX NEEDLE PUNCHED NON WOVEN GEOTEXTILE WITH A LAPPED JOINTS (AS SUPPLIED BY ALDERBURGH LIMITED).

- BACKFILL SUGGESTIONS OPTIONS AROUND THE SIDES OF ECO-CELL MODULAR UNIT:
- SELECTED EXCAVATED MATERIAL IF SEEN SUITABLE BY THE SITE ENGINEER.
 - BACKERBOARD HD (IS A PREMOULDED BOARD FOR USE AS PROTECTION AGAINST BACKFILL)

TANK BASE LEVEL



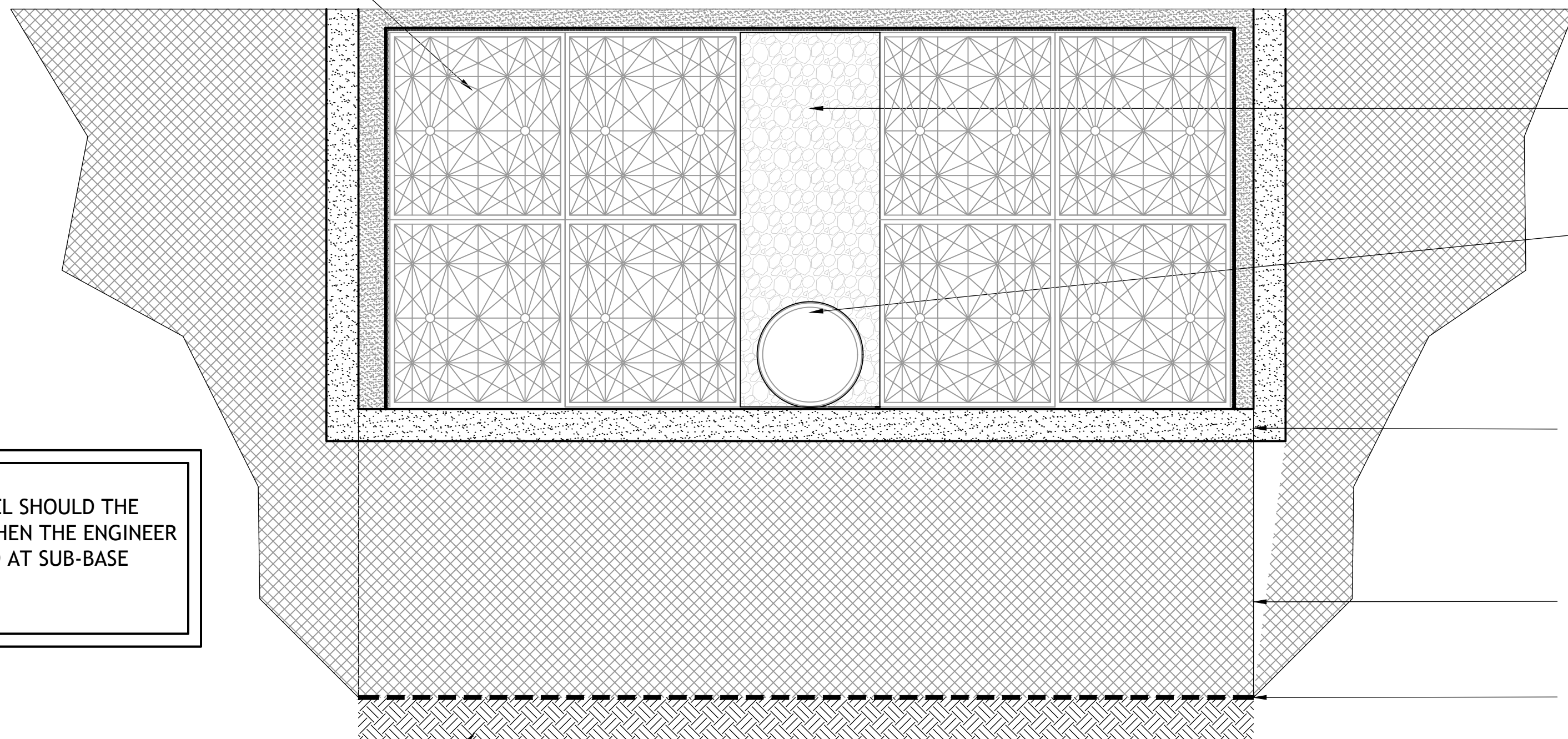
TYPICAL INLET PIPE CONNECTION

TYPICAL OUTLET PIPE CONNECTION

TYPICAL DETAILS OF ATTENUATION TANK USING AQUACELL MODULAR UNITS (SIDE VIEW)

THE CONTRACTOR SHALL PROHIBIT THE MOVEMENT OF CONSTRUCTION PLANT ACROSS THE STORAGE TANK AND WHERE NECESSARY PROVIDE ADDITIONAL SUPPORT AND PROTECTION TO THE STRUCTURE. PARTICULARLY POST CONSTRUCTION. TEMPORARY FENCING CAN BE USED TO PROHIBIT TRADE STOCKS, PILLING MATERIALS, HEAVY PLANTS ETC.,

AQUACELL MODULES + THE STONE TRENCH TO BE WRAPPED WITH AN IMPERMEABLE GEOMEMBRANE WITH A HEAT WELD JOINTS. (AS SUPPLIED BY ALDERBURGH LIMITED).



GRANULAR 15/25mm GRADED FILL FREE FROM FINES TO BE WRAPPED WITH PERMEABLE GEOTEX WITH A LAPPED JOINTS. (AS SUPPLIED BY ALDERBURGH LIMITED)

DISTRBUTER PIPE (APPROX 4% OF SURAFCE AREA SLOTTED) TO BE WRAPPED WITH PERMEABLE GEOTEX WITH A LAPPED JOINTS. (AS SUPPLIED BY ALDERBURGH LIMITED)

75mm LIMESTONE DUST

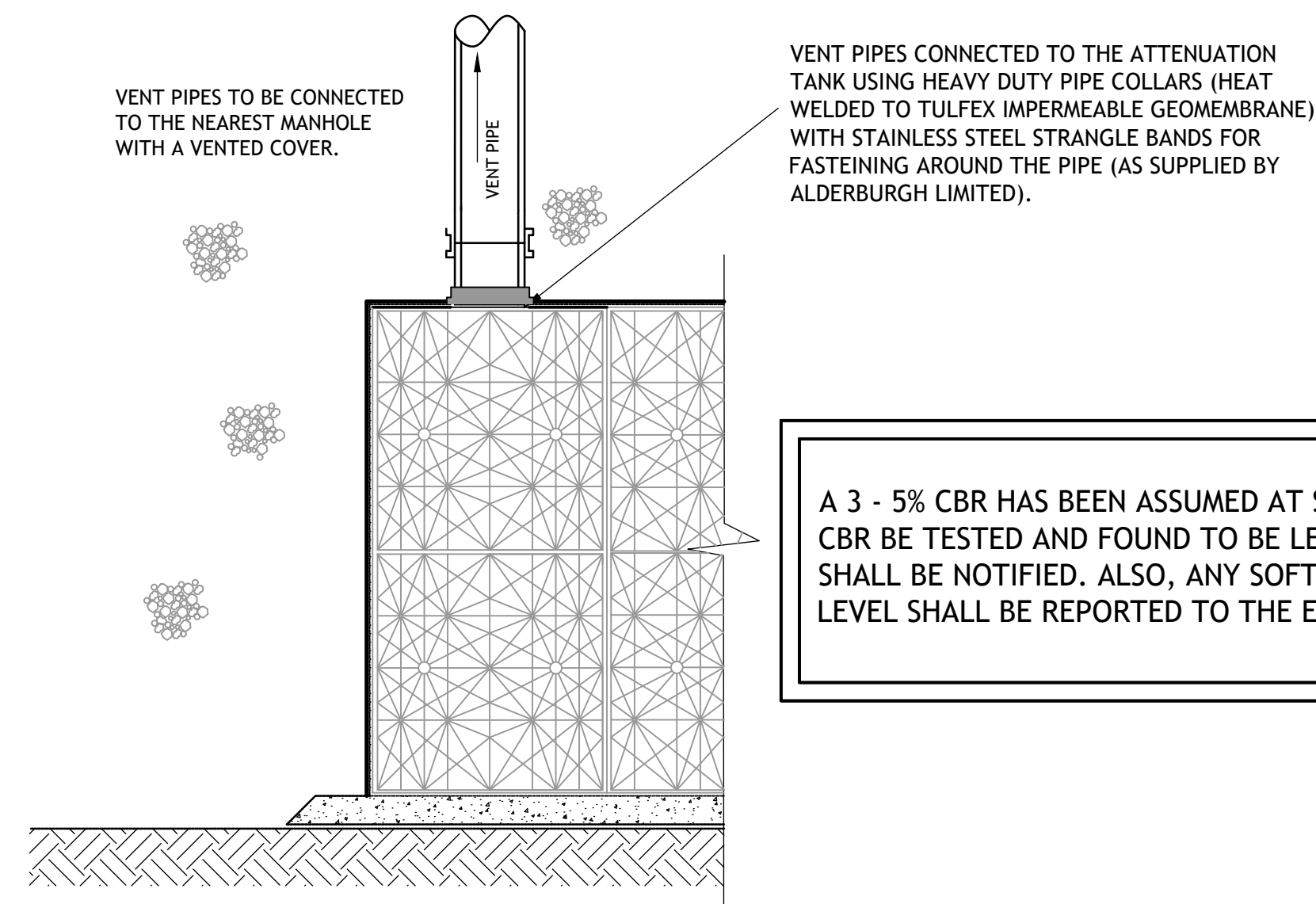
600mm SURROUND GRANULAR MATERIAL TYPE B TO CL 804 OF THE NRA SPECIFICATION FOR ROADWORKS

TENSAR TRIAX 170G COMPOSITE GEOGRID-GEOTEXTILE OR APPROVED EQUIVALENT

FLAT, LEVEL, SMOOTH BASE WITH NO UNDULATIONS AND HAS 3-5% CBR

TYPICAL DETAILS OF ATTENUATION TANK USING AQUACELL MODULAR UNITS (FRONT VIEW)

INLET/OUTLET PIPES MUST BE SUPPORTED WITH CONCRETE TO PROTECT IT DURING BACKFILLING



TYPICAL 1600mm VENT/ACCESS PIPE CONNECTION

VENT PIPES CONNECTED TO THE ATTENUATION TANK USING HEAVY DUTY PIPE COLLARS (HEAT WELDED TO TULFEX IMPERMEABLE GEOMEMBRANE) WITH STAINLESS STEEL STRANGLE BANDS FOR FASTENING AROUND THE PIPE (AS SUPPLIED BY ALDERBURGH LIMITED).

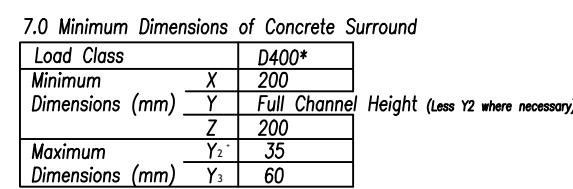
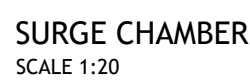
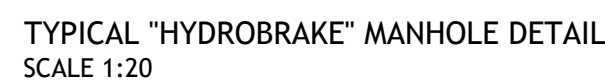
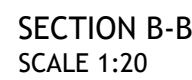
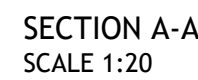
A 3 - 5% CBR HAS BEEN ASSUMED AT SUB-BASE LEVEL SHOULD THE CBR BE TESTED AND FOUND TO BE LESS THAN 3% THEN THE ENGINEER SHALL BE NOTIFIED. ALSO, ANY SOFT SPOTS FOUND AT SUB-BASE LEVEL SHALL BE REPORTED TO THE ENGINEER

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

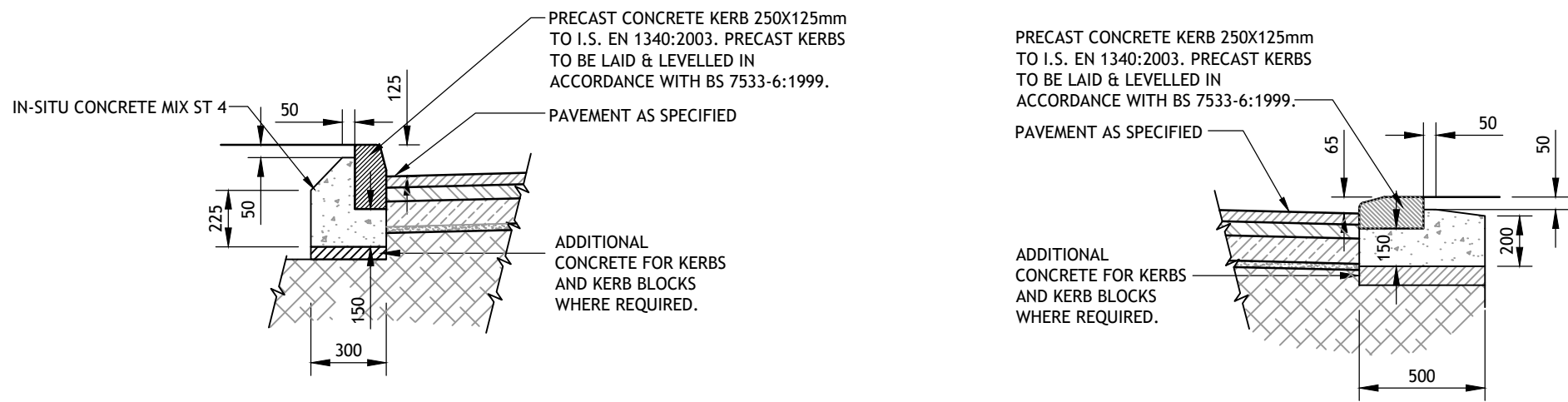
Client:
FRONVILLE LTD

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: DRAINAGE CONSTRUCTION DETAILS - SHEET 6				
Drawn: Liam Loneragan	Date drawn: 10.09.2024	Technical Check: Liam Loneragan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0505	Drawing Status: A0 (Planning)		
Scale: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0505	Revision No: C04		

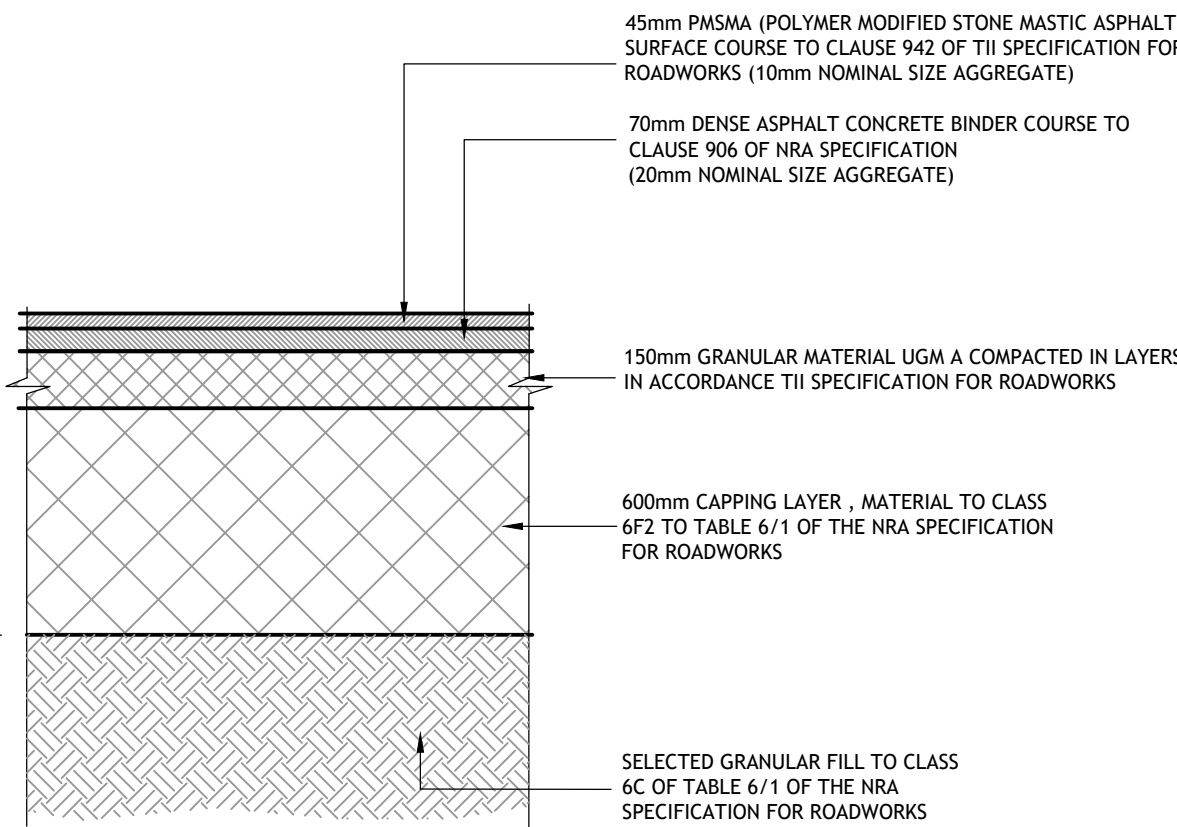


ACO CHANNEL - IN PAVED AREAS
SCALE 1:20

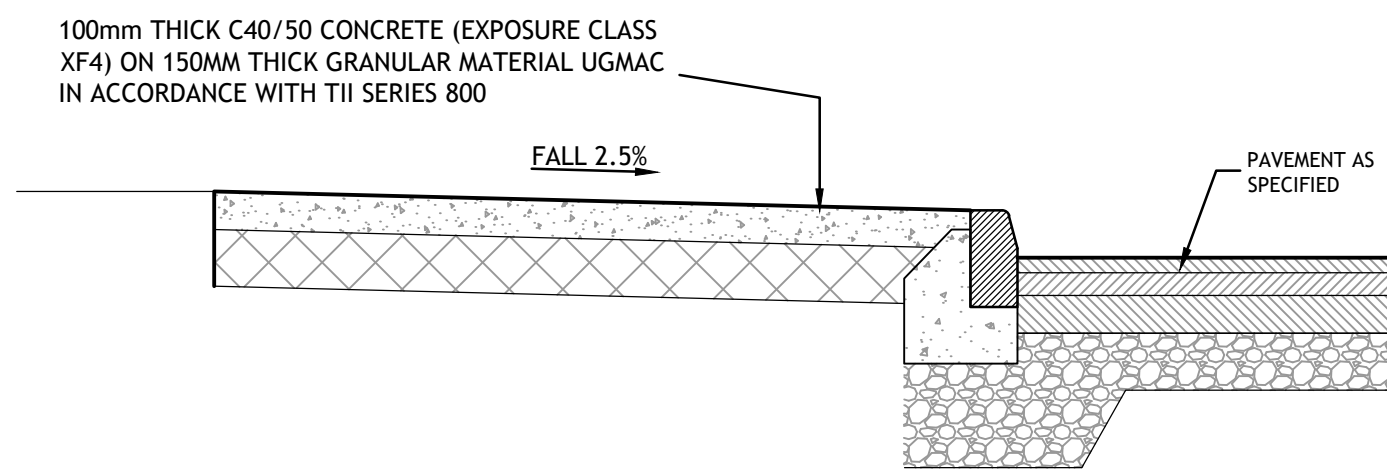
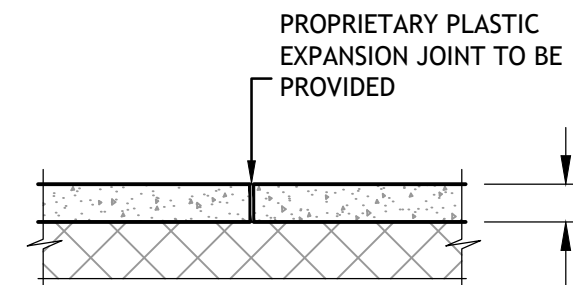
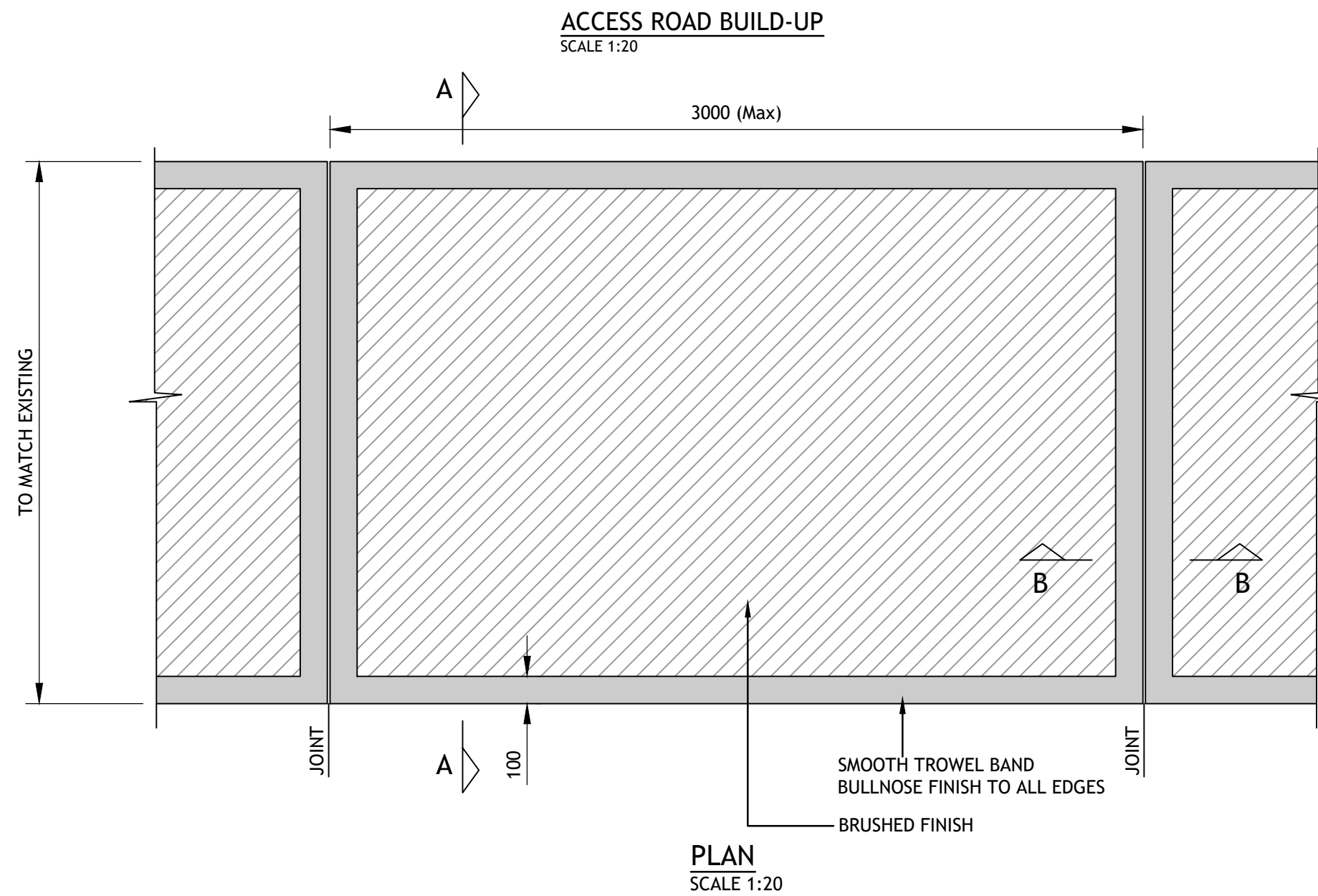
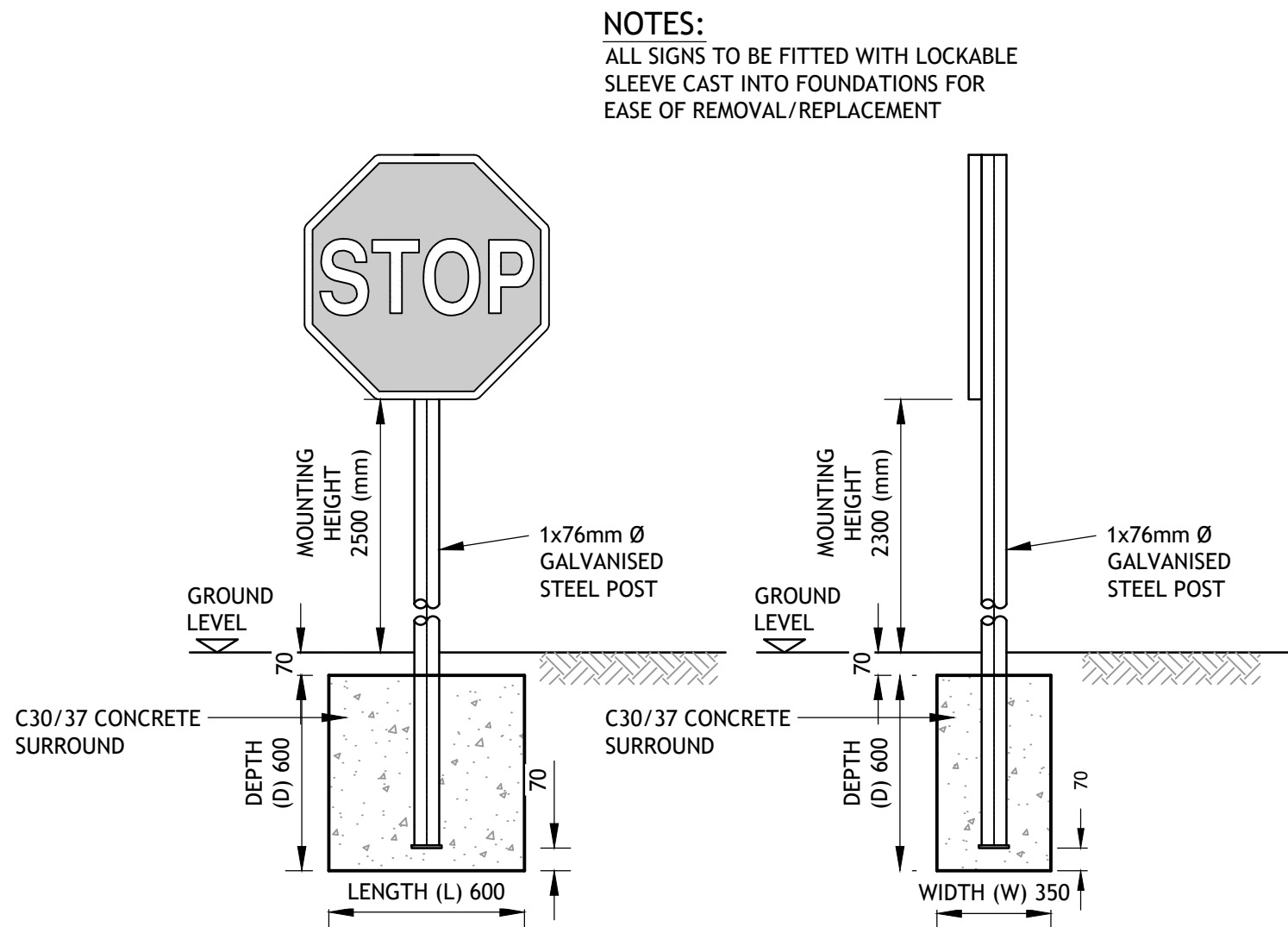
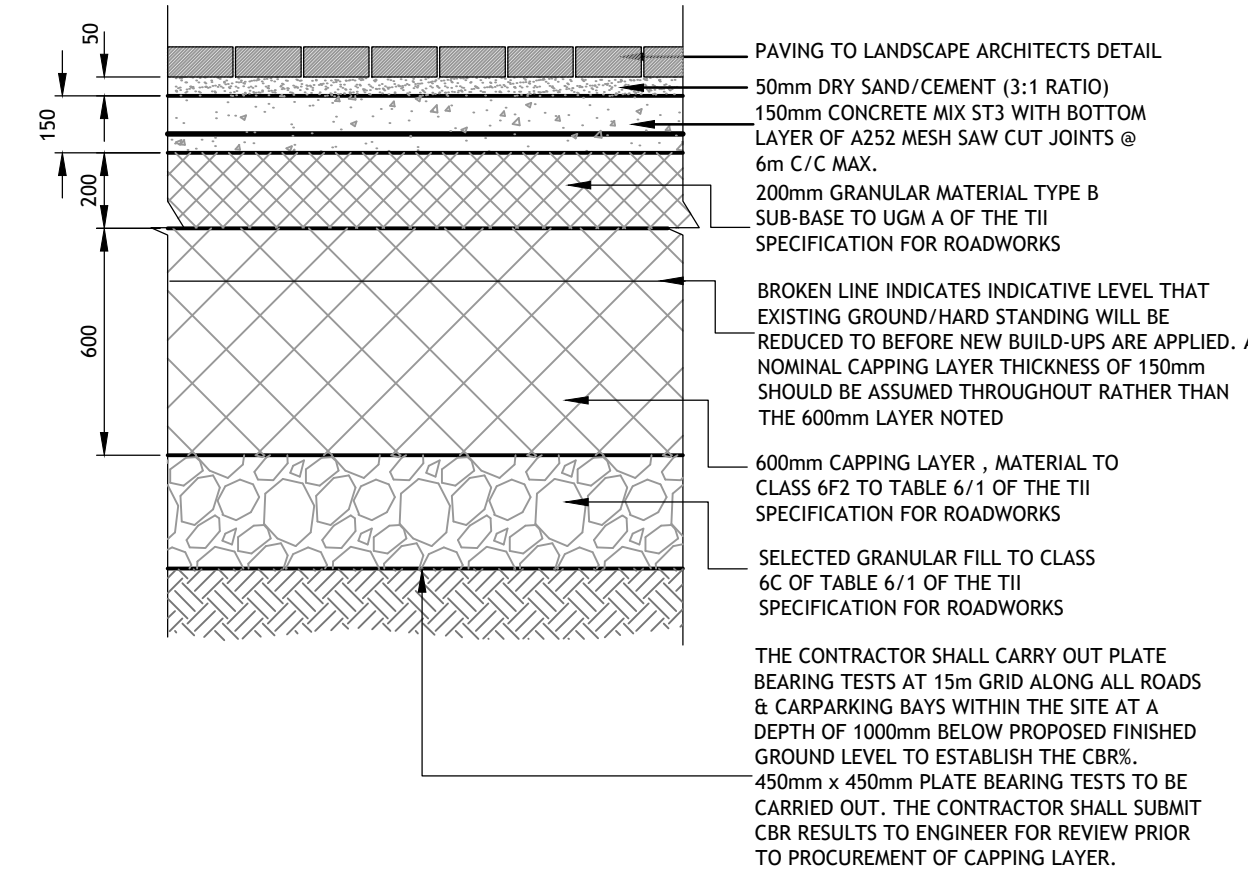
- ## NOTES :
1. THE CHANNEL MUST BE SUPPORTED AND THEREFORE BLOCKS MUST BE RESTRAINED FROM LATEROALLY MOVEMENT BY BEDDING SECURELY. E.G. BY USING AN EMBODY OR POLYMER MODIFIED MORTAR FOR BED AND PERPENDICULAR JOINTS. (FOR EXAMPLE NONSOLUBLE MORTAR MIX OR SIMILAR: FROM NONCRACKLE TELT ENGINEERING ADVICE MAY BE REQUIRED. 01279 638700).
 2. JOINT SEALANT: ACO DRAIN CHANNEL JOINTS AND FITTINGS ARE TO BE SEALED WITH FLEXIBLE SEALANT
 3. SURFACE PROTECTION: IN ASPHALT PAVEMENTS AVOID CONTACT BETWEEN COMPACTION EQUIPMENT AND CHANNEL/GRATING. THIS MAY BE ACHIEVED BY ENSURING THAT THE FINISHED SURFACE LEVEL LIES ABOVE THE GRATING LEVEL (BY AT LEAST 3mm). STONES SHOULD BE REMOVED FROM GRATING PRIOR TO LAYING/ROLLING WEARING COURSE.



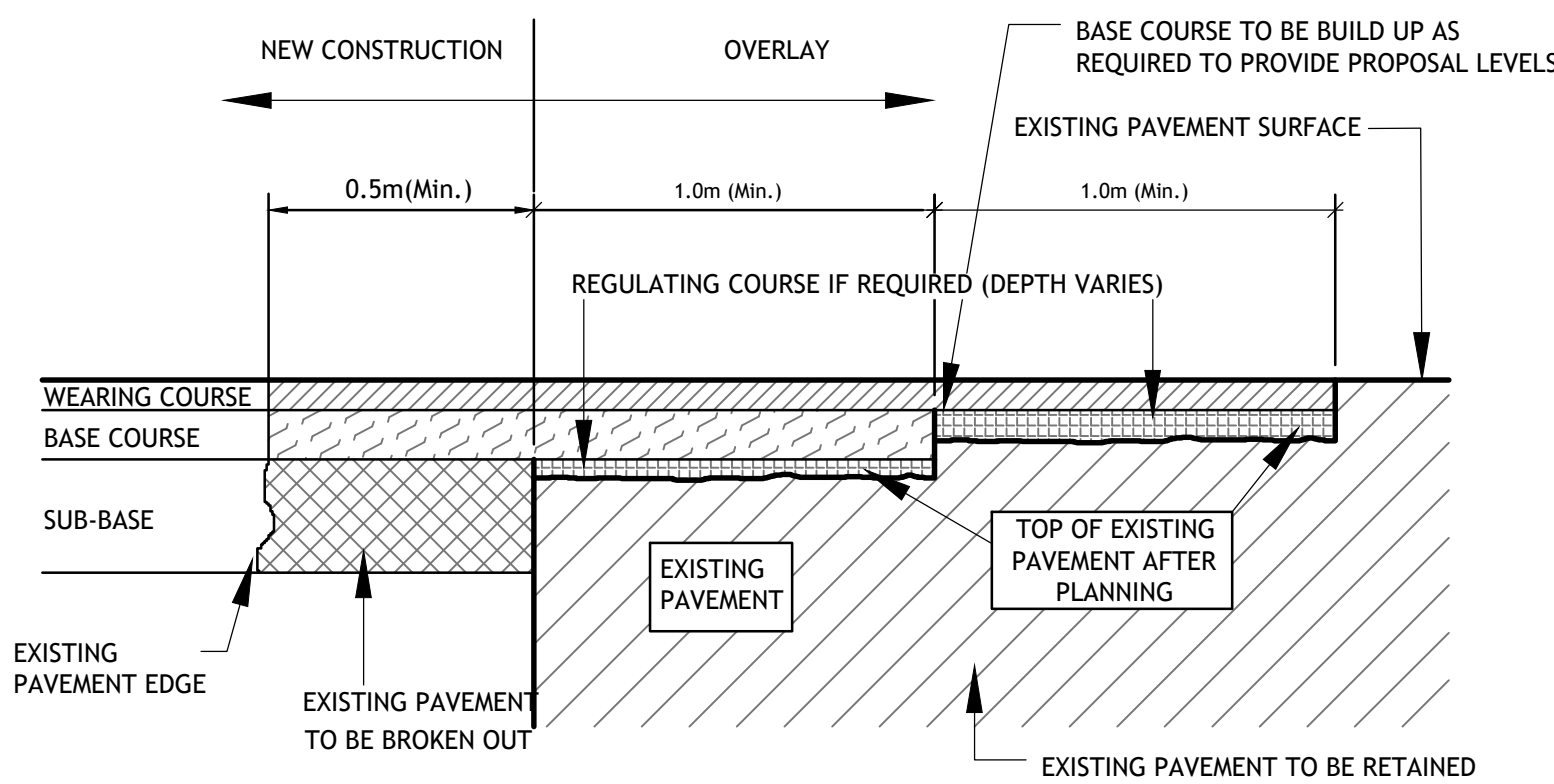
THE CONTRACTOR SHALL CARRY OUT PLATE BEARING TESTS AT 15m GRID ALONG ALL ROADS & CARPARKING BAYS WITHIN THE SITE AT A DEPTH OF 870mm BELOW PROPOSED FINISHED GROUND LEVEL TO ESTABLISH THE CBR%. 450mm x 450mm PLATE BEARING TESTS TO BE CARRIED OUT. THE CONTRACTOR SHALL SUBMIT CBR RESULTS TO ENGINEER FOR REVIEW PRIOR TO PROCUREMENT OF CAPPING LAYER.



NOTE:
BUILD UP DETAILS SUITABLE FOR LOCATIONS WHERE CBR TEST RESULTS = 2% OR GREATER

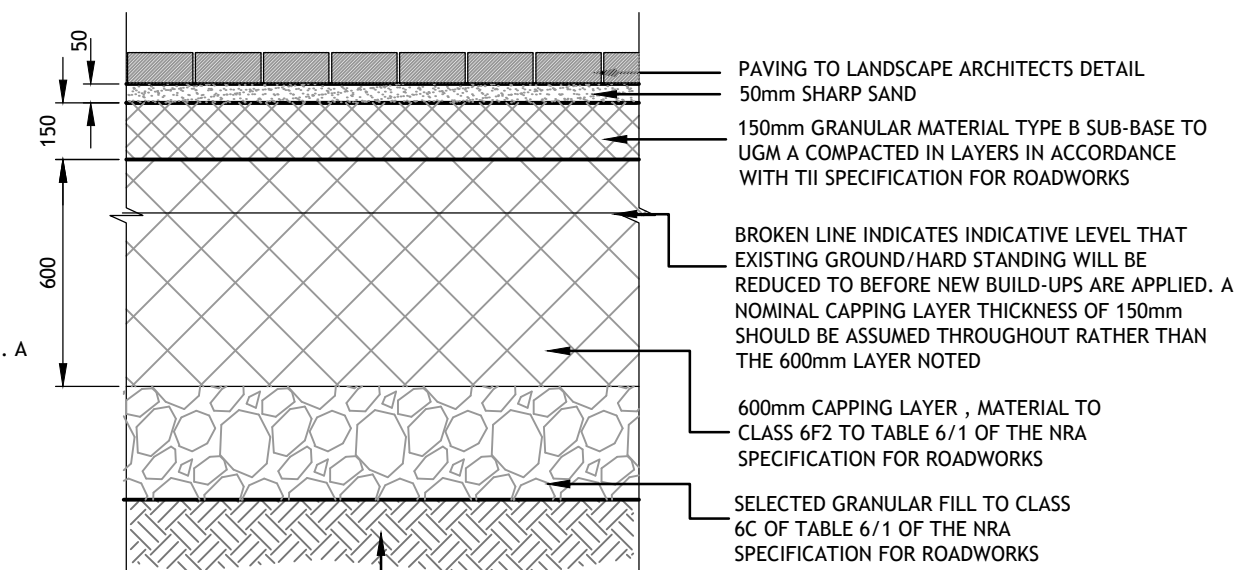


- NOTES :
- AT VEHICULAR ACCESS POINTS CONCRETE SLAB THICKNESS TO BE 150mm REINFORCED WITH A393 MESH TOP & BOTTOM.
 - ALL CONCRETE EDGES AND JOINTS SHALL HAVE BULLNOSED TROWEL FINISH.



AS AN ALTERNATIVE TO DEWATERING DEEP EXCAVATIONS BELOW THE WATER TABLE TII CLASS 6A FILL MATERIAL CAN BE USED AS FILL BELOW STANDING WATER TABLE IN LIEU OF CLASS 6C

BROKEN LINE INDICATES INDICATIVE LEVEL THAT EXISTING GROUND/HARD STANDING WILL BE REDUCED TO BEFORE NEW BUILD-UPS ARE APPLIED. A NOMINAL CAPPING LAYER THICKNESS OF 150mm SHOULD BE ASSUMED THROUGHOUT RATHER THAN THE 600mm LAYER NOTED



THE CONTRACTOR SHALL CARRY OUT PLATE BEARING TESTS AT 15m GRID ALONG ALL ROADS & CARPARKING BAYS WITHIN THE SITE AT A DEPTH OF 870mm BELOW PROPOSED FINISHED GROUND LEVEL TO ESTABLISH THE CBR%. 450mm x 450mm PLATE BEARING TESTS TO BE CARRIED OUT. THE CONTRACTOR SHALL SUBMIT CBR RESULTS TO ENGINEER FOR REVIEW PRIOR TO PROCUREMENT OF CAPPING LAYER.

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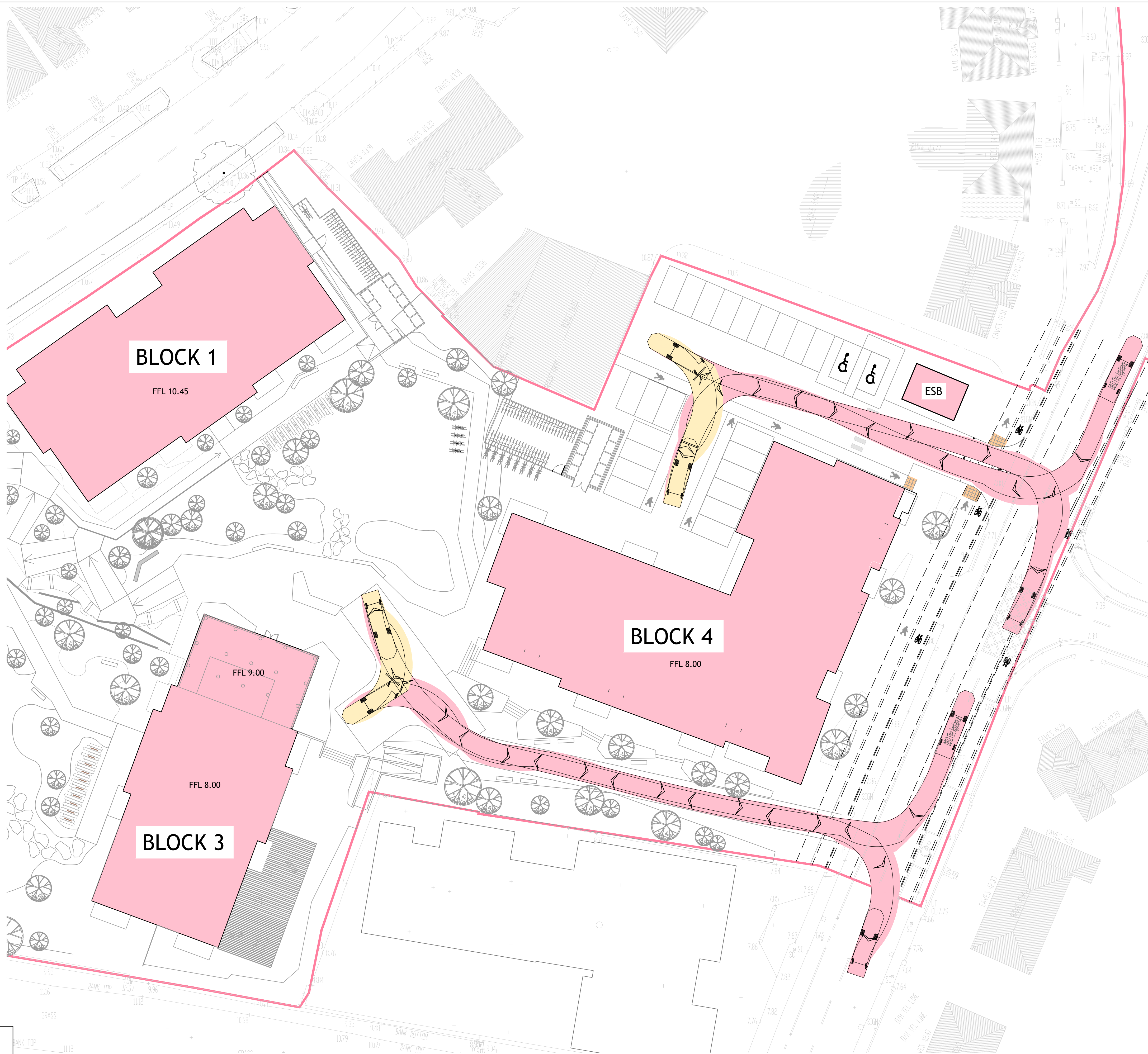
Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	03.10.2024
C02	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C03	ISSUED FOR PLANNING REVIEW	LL	08.04.2025
C04	ISSUED FOR PLANNING	LL	09.06.2025

Rev	Amendment	By	Date

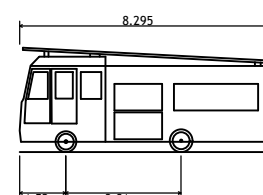
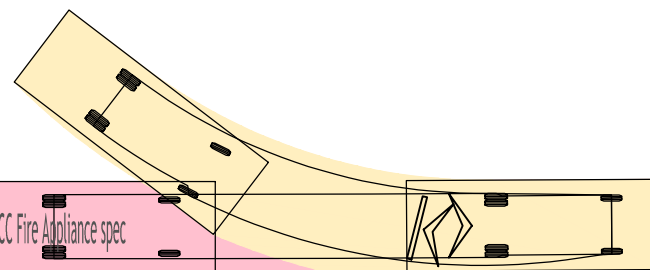
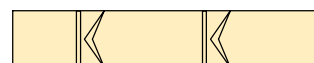
Client:
FRONVILLE LTD

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t +353 21 462 4000 | w punchconsulting.com

Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: CONSTRUCTION DETAILS - SHEET 1				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Simeon Solomons	Engineer Check: Niamh Cronin	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0550	Drawing Status: A0(Planning)		
Scale @ AT: AS SHOWN	Document No: 214130-PUNCH-XX-XX-DR-C-0550	Revision No: C04		

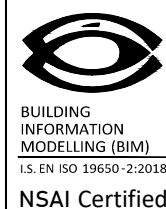


VEHICLE IN REVERSE



DLRCC Fire Appliance spec
Overall Length
Overall Width (Inc. mirrors)
Overall Body Height
Min Body Ground Clearance
Max Track Width
Lock-to-lock time
Curb to Curb Turning Radius

8.295m
2.990m
3.452m
0.337m
2.121m
6.00s
7.910m

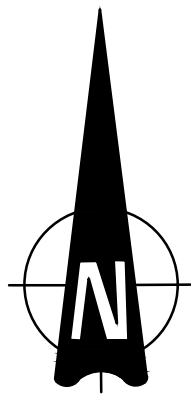


Rev	Amendment	By	Date	Rev	Amendment	By	Date	Client:
C01	ISSUED FOR PLANNING	LL	03.10.2024					FRONVILLE LTD
C02	ISSUED FOR PLANNING	LL	04.03.2025					
C03	ISSUED FOR PLANNING	LL	21.03.2025					
C04	ISSUED FOR PLANNING REVIEW	LL	26.03.2025					
C05	ISSUED FOR PLANNING REVIEW	LL	08.04.2025					
C06	ISSUED FOR PLANNING	LL	09.06.2025					

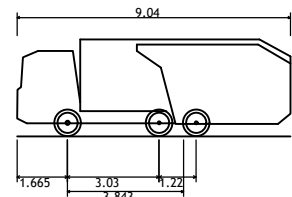
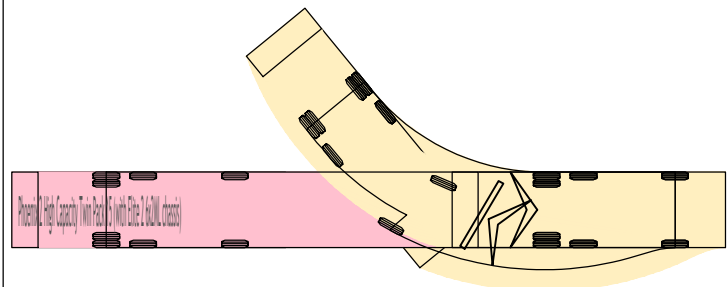
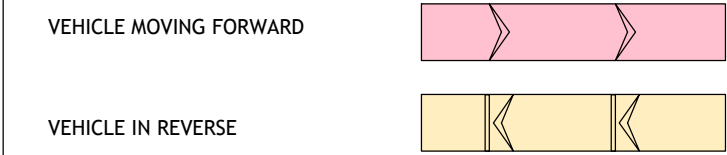
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Project: KINSALE ROAD LRD, KINSALE ROAD, CORK				
Title: AUTOTRACK ANALYSIS - FIRE TENDER				
Drawn: Liam Lonergan	Date drawn: 10.09.2024	Technician Check: Liam Lonergan	Engineer Check: Simeon Solomons	Approved: Niamh Cronin
Project No: 214130	Model Ref: 214130-PUNCH-XX-XX-M2-C-0600	Drawing Status: A0 (Planning)		
Scale @ A1: 1:250	Document No: 214130-PUNCH-XX-XX-DR-C-0600	Revision No: C06		



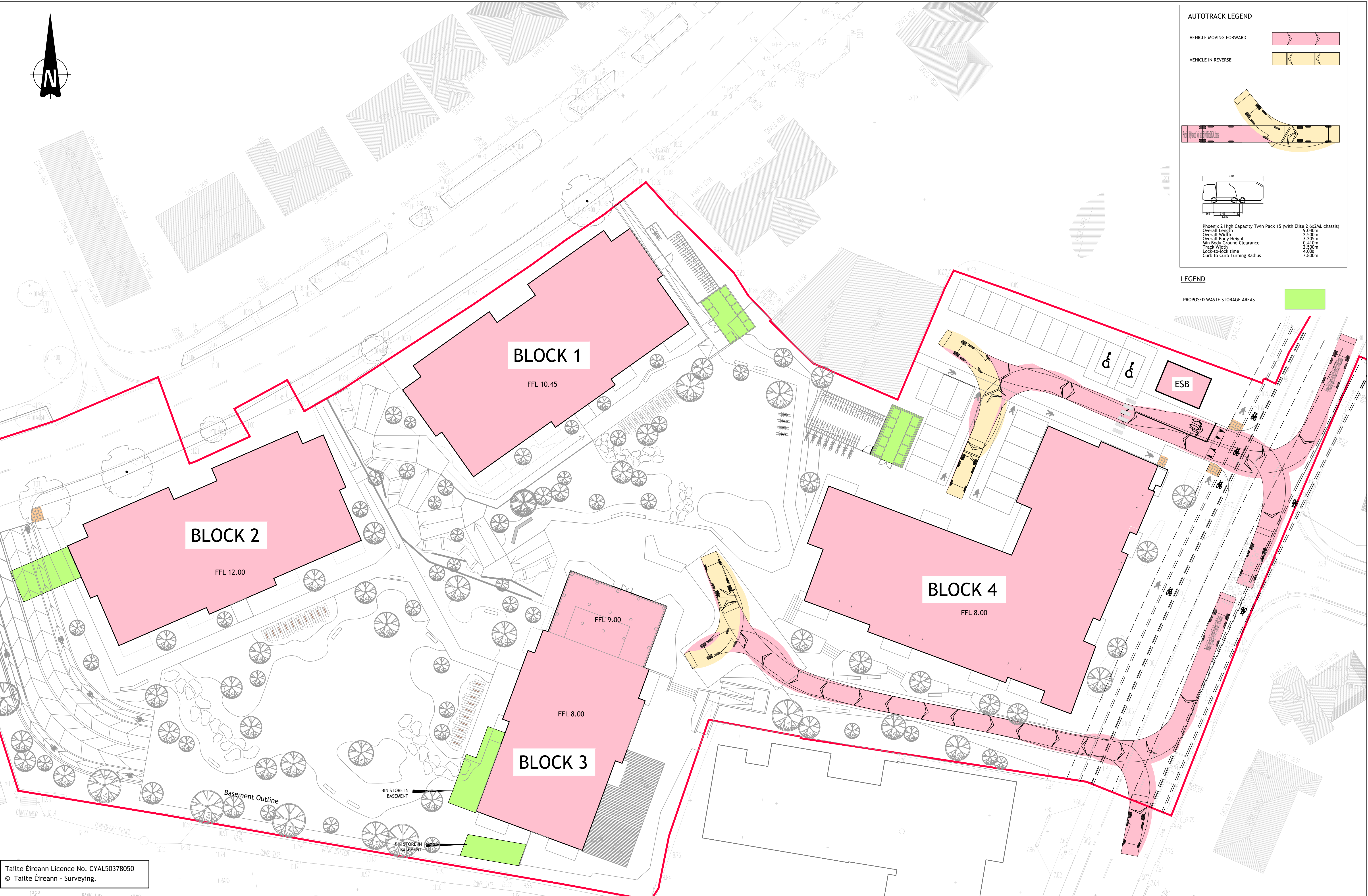
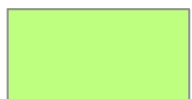
AUTOTRACK LEGEND



Phoenix 2 High Capacity Twin Pack 15 (with Elite 2.6x2ML chassis)
Overall Length 9.040m
Overall Width 2.500m
Overall Body Height 2.200m
Min Body Ground Clearance 0.410m
Track Width 2.500m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7.800m

LEGEND

PROPOSED WASTE STORAGE AREAS



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Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	LL	27.09.2024
C02	ISSUED FOR PLANNING	LL	23.10.2024
C03	ISSUED FOR PLANNING	LL	04.03.2025
C04	ISSUED FOR PLANNING	LL	21.03.2025
C05	ISSUED FOR PLANNING REVIEW	LL	26.03.2025
C06	ISSUED FOR PLANNING REVIEW	LL	08.04.2025

Rev	Amendment	By	Date
C07	ISSUED FOR PLANNING	LL	09.06.2025

Client:	FRONVILLE LTD
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Project:	KINSALE ROAD LRD, KINSALE ROAD, CORK
Title:	AUTOTRACK ANALYSIS - REFUSE TRUCK
Drawn by:	Liam Loneragan
Check by:	Liam Loneragan
Engineer Check:	Simeon Solomons
Approved:	Niamh Cronin
Project No:	214130
Model Ref:	214130-PUNCH-XX-XX-M2-C-0601
Drawing Status:	A0 (Planning)
Scale @ 1:250	214130-PUNCH-XX-XX-DR-C-0601
Revision No:	C07