

Typical Cross Section
Footpath, Tarmac Road & Filter Drain Construction Detail
Scale 1:20

CONSTRUCTION CHART 1 – NON PERVIOUS

ROADS UP TO 0.25 msa. – NORMAL FLEXIBLE CONSTRUCTION

SUB-GRADE (Note 1)	SUB-BASE (mm)		SURFACING (mm)		TOTAL THICKNESS REQUIRED (mm)	
Design CBR	Without Geotextile	With Geotextile	Binder Course (Note 4)	Surface Course	Without Geotextile	With Geotextile
Below 1.5% and soft spots	Not suitable	710 (Notes 2 & 3)	130	40	Not suitable	880 (Notes 2, 3 & 4)
1.5%	Not suitable	440	130	40	Not suitable	610 (Note 4)
2%	400	340	130	40	570 (Note 5)	510 (Note 4)
3%	310	300	130	40	480 (Note 5)	470 (Note 4)
4% (Note 6)	300	300 (Note 6)	130	40	470 (Note 5)	470 (Notes 4 & 5)
5% (Note 6)	300	300 (Note 6)	130	40	470 (Note 5)	470 (Notes 4 & 5)
6–15% (Note 6)	300	300 (Note 6)	130	40	470 (Note 5)	470 (Notes 4 & 5)
Above 15% (Note 6)	300	300 (Note 6)	130	40	470 (Note 5)	470 (Notes 4 & 5)

Note 1 – See Clauses 1.1.6, 1.1.7 & 1.1.8.

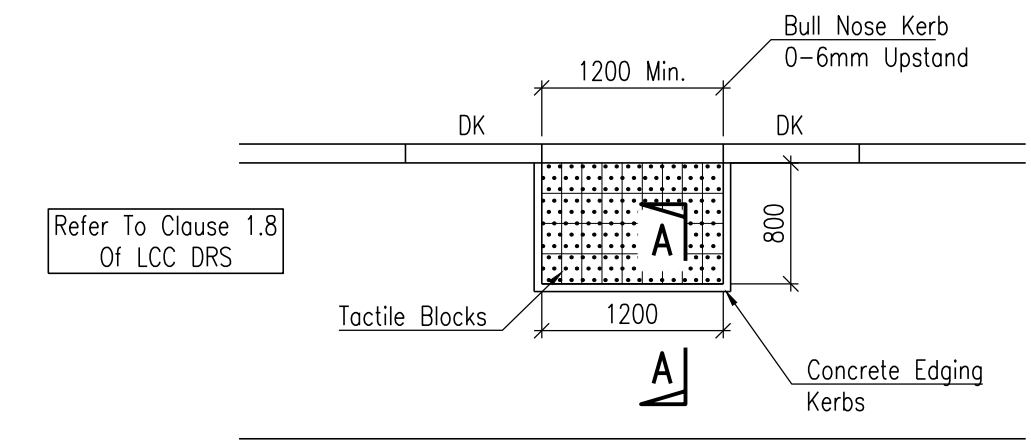
Note 2 – See Clause 1.1.6 – Assumes no improvement is possible using either sub-soil drainage or sub-soil strengthening technique. 710mm is 410mm of 6F5 Capping Layer Granular Fill to clause 6.8 and 300mm of Type 1 sub-base. The thickness of 710mm can be reduced to 620mm if all Type 1 sub-base is used.

Note 3 – For soft spots and sub-grades with a CBR of less than 1.5% the geotextile shall be laid with an approved geogrid or shall be an approved geocomposite. Approved specialist design can be used with the agreement of the Authority.

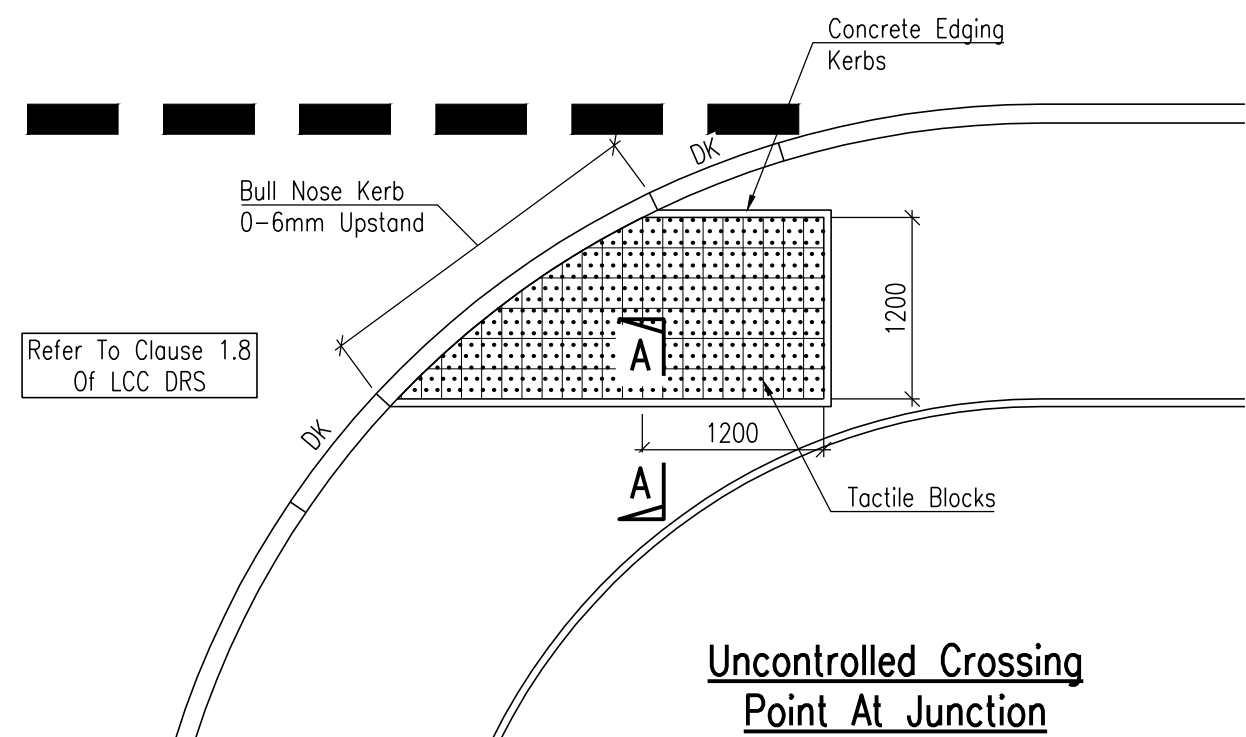
Note 4 – Initial Binder Course layer thickness 70mm if the alternative kerbing installation method (two stage construction – kerbing to be laid at a later stage) is used. Total Binder Course thickness becomes 130mm in these in these circumstances. See Clause 1.1.17.

Note 5 – The use of a geosynthetic with a sub-grade with this bearing capacity offers no advantage or economy.

REFER TO THE LATEST LCCDRS FOR CLAUSES

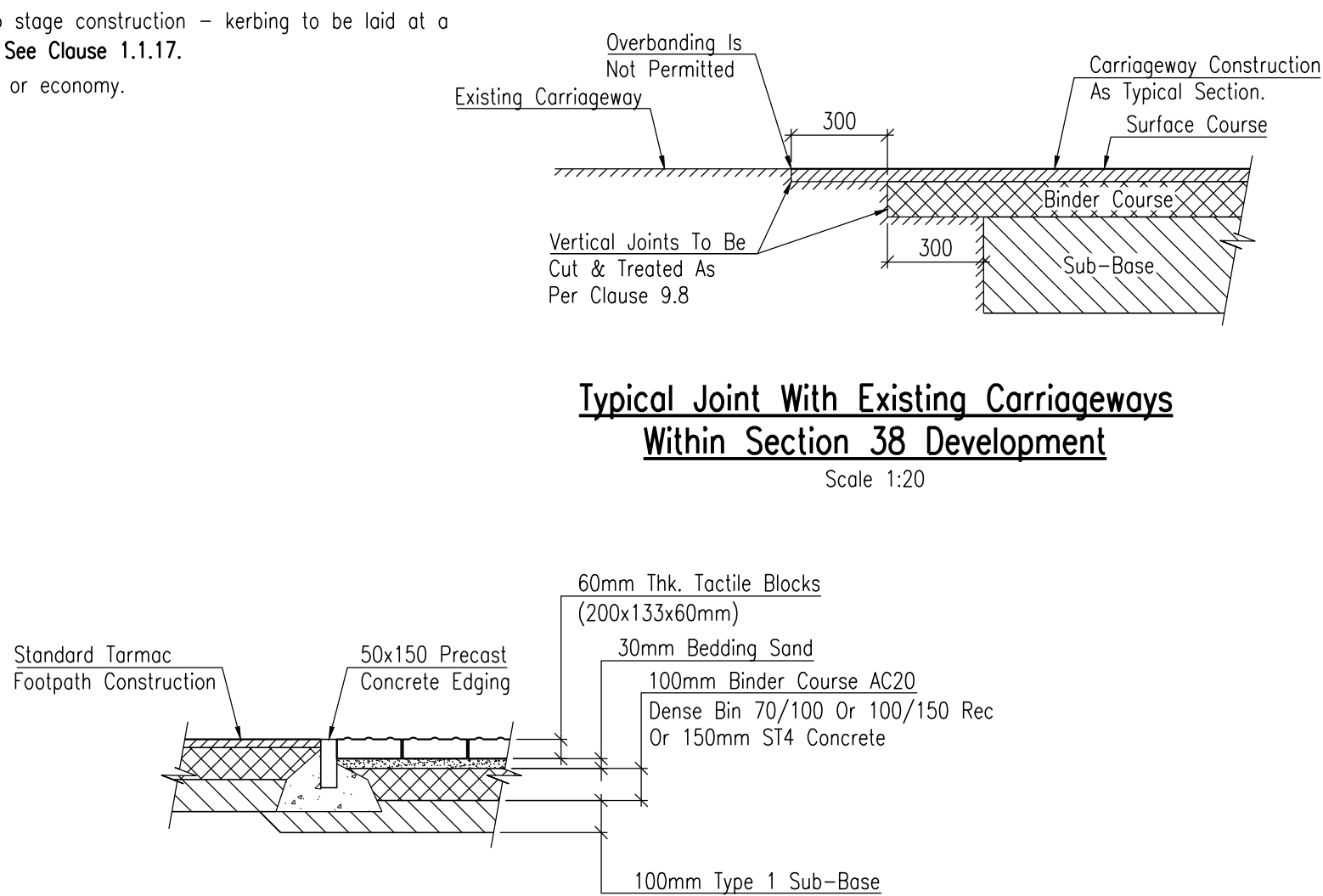


Uncontrolled Crossing Away From Junction

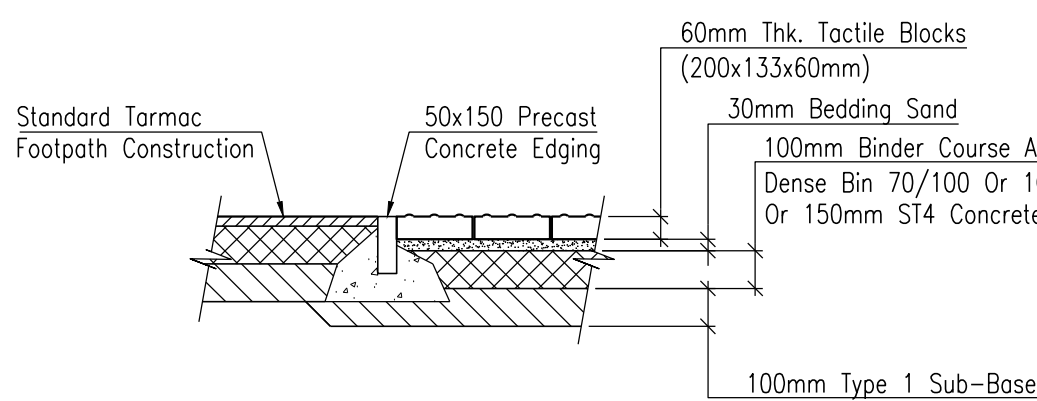


Uncontrolled Crossing
Point At Junction

Typical Tactile Paving Layouts
Scale 1:50

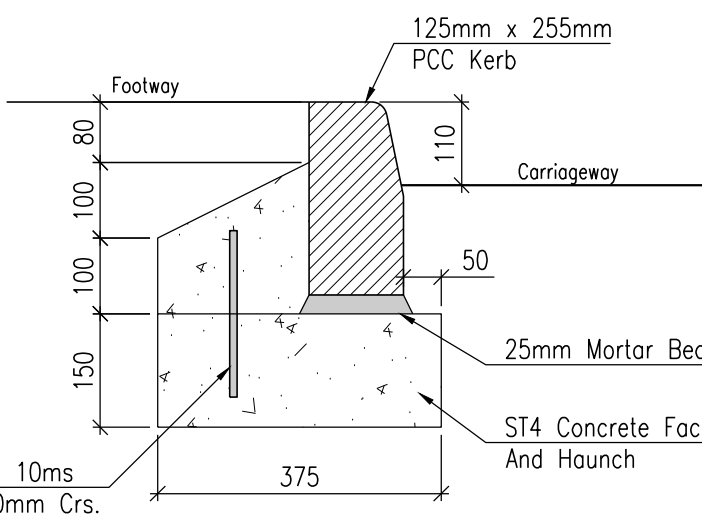


Typical Joint With Existing Carriageways
Within Section 38 Development
Scale 1:20

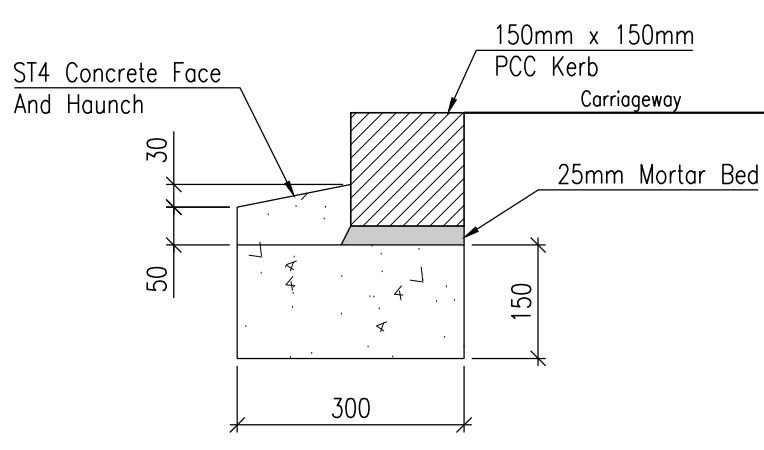


Section A-A
Scale 1:20

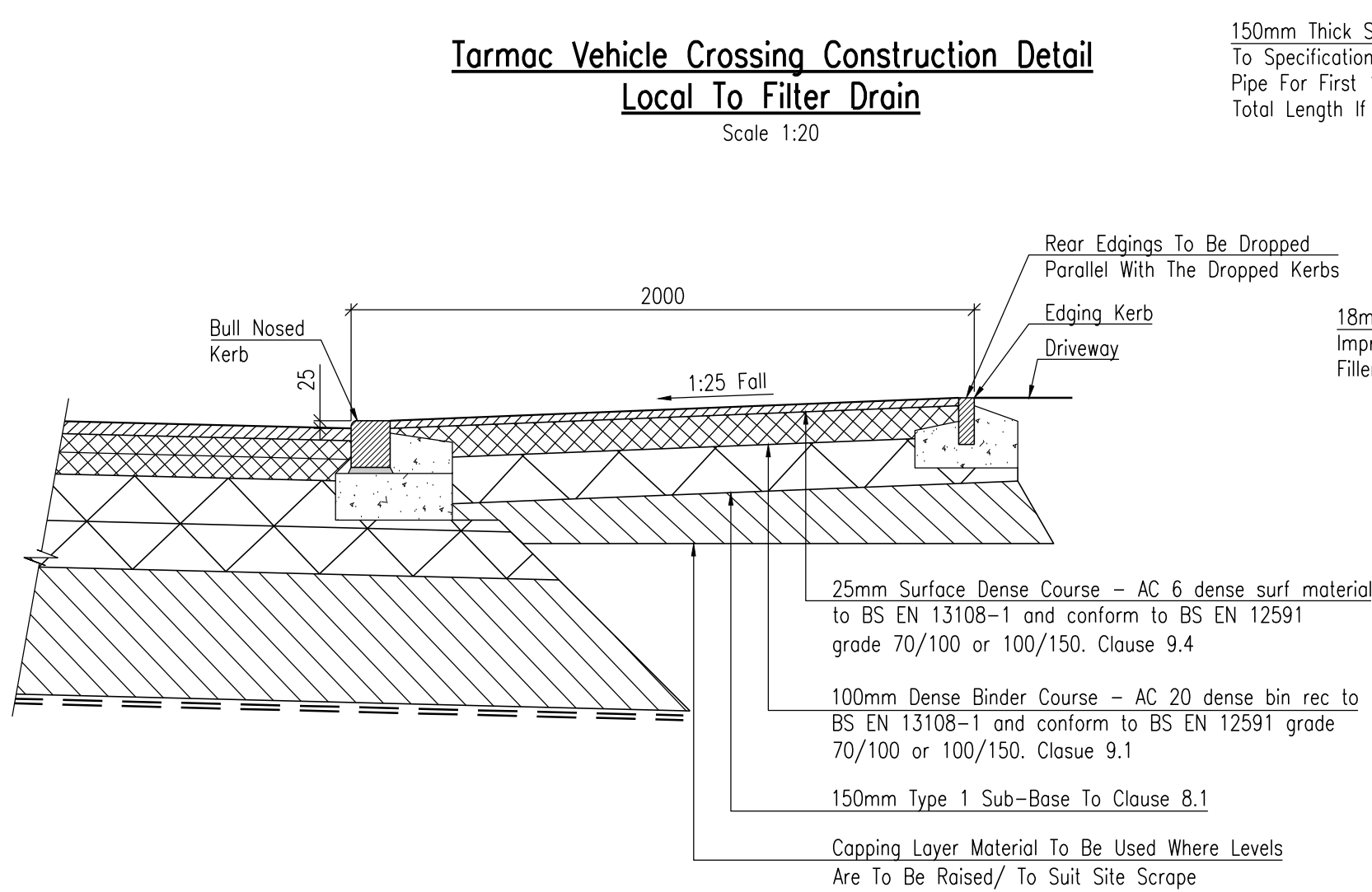
Typical Edging Kerb Detail
(EF 50x150mm)
Scale 1:10



Typical Standard Kerb Detail
(HB2 125x255mm)
Scale 1:10



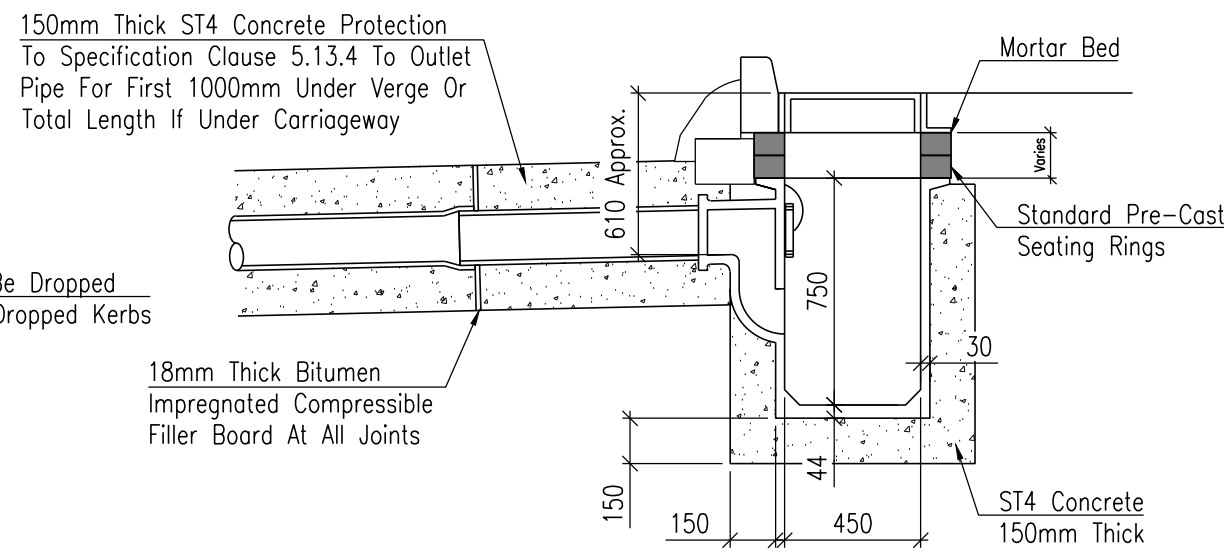
Typical Channel Block Detail
(CB 150x150mm)
Scale 1:10



Typical Tarmac Vehicle Crossing Construction Detail
Scale 1:20

Tarmac Vehicle Crossing Construction Detail Local To Filter Drain

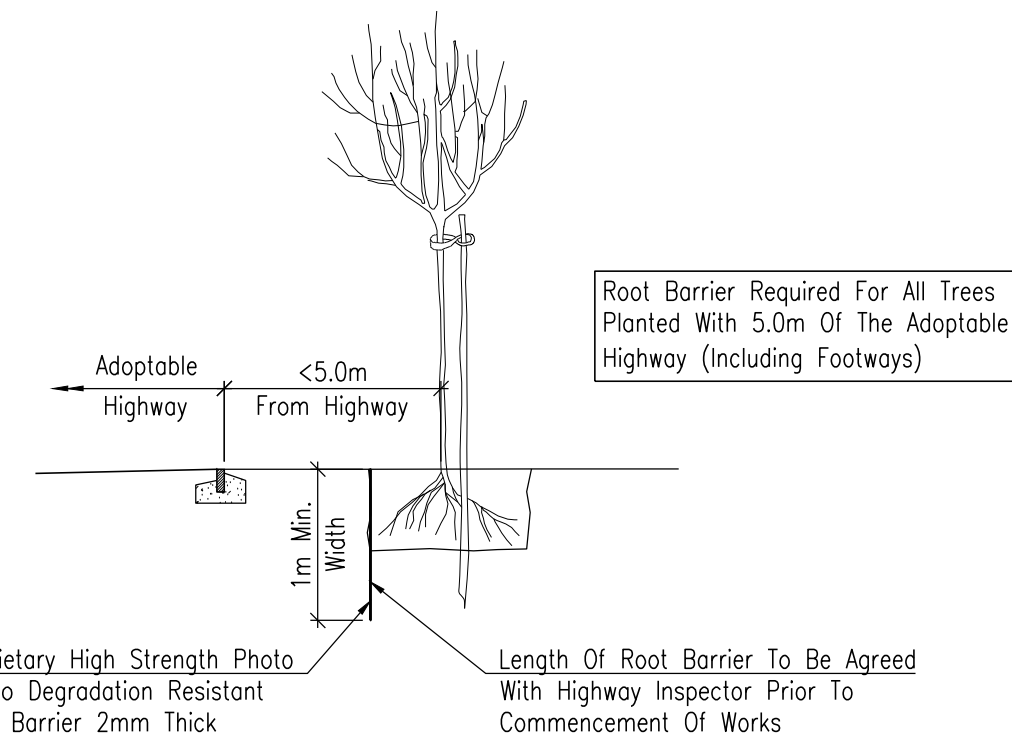
Scale 1:20



Type G5 Trapped
Road Gully Detail
Scale 1:25

- The specification in all respects shall be in accordance with the Lincolnshire County Council Development Road and Sustainable Drainage Specification and Construction.
- Within the catchment of traditional drainage design, the minimum longitudinal fall for highways, without channel blocks shall be 1 in 150, and with channel blocks 1 in 250.
- See Clause 10.1 of the Development Road and Sustainable Drainage Specification and Construction. In addition, ensure that the first section of any side road falls away from the road to which it is connecting. If general topography requires it to rise, this change of direction should take place after the first set of gullies. This is to ensure a false channel with associated drainage problems is not created in the belmouth of junctions.
- General deterioration of the existing highway/footway/verges created through construction of the new Section 38 Development will be reinstated to the current Development Road and Sustainable Drainage Specification and Construction at the developer's own cost of the agreement of the inspecting Development Management Officer.
- No private surface water shall discharge onto the adoptable highway.
- No private, structural features shall overhang the adoptable highway.
- No private retaining walls exceeding 1.37m shall be within 3.66m of the highway boundary.

- CDM (Construction Design and Management Regulations 2015):
- If you do not fully understand the risks involved during the construction of the items indicated on this drawing ask your manager, health & safety advisor or a member of the design team before proceeding.
 - Existing services may exist on-site. The contractor shall liaise with all relevant service companies and arrange for all services to be located, marked and protected.
 - Drainage works may involve deep excavations and/or heavy plant/materials.
 - The contractor shall read and understand the Ground Investigation Report and be aware of and potential variations in soil conditions over the site.
 - The potential for danger to the general public and site personnel exists from works in the public highway. The contractor shall liaise with the highway authority (Lincolnshire County Council) and ensure safe method of working is maintained at all times.
 - Existing drainage pipes may be asbestos cement or fibre reinforced pipes, or concrete pipes containing asbestos fibre. Contractor to ensure competent staff adequately trained are engaged in the works, and disposal of any affected material is undertaken in line with current legislation and good practice guidelines.
 - The contractor is to be aware that overhead cables may cross the site.
 - The contractor is to be aware that works may involve working adjacent to or in existing watercourses.
 - Works may involve working in close proximity to an existing water main. The contractor is to ensure that this is fully located and protected during the works.



Typical Tree Root Barrier Detail
Scale 1:50

Gully Notes

- Cover and frame uncoated iron to Clause 5.11.1.
- Mortar bed & benching to Clause 5.11.8.
- Standard pre-cast seating rings to comply to BS 5911-4:2010.
- All in situ concrete to be ST4 with sulphate resisting cement unless agreed otherwise.
- Position of outlet pipe varies in plan.
- In situ ST4 concrete 150mm thick surround to outlet pipe for first one metre under verge or total length if under carriageway.
- Where grating is to be trafficked or laid against within 24 hours of frame being placed in position, then a suitable ultra rapid hardening mortar and concrete (Monoset 241 or similar) shall be used to bed cover and frame.

B	22.03.22	Drawing Updated To Suit LCC & AWS Comments.
A	11.02.22	Drawing Updated To Suit LCC & AWS Comments.
Rev	Date	Remarks

FOR INFORMATION



Project
Residential Development off South Street, Swineshead, Boston, Lincs. For SL Developments

Title
Section 38 Proposed Road Construction Details

Date	Nov. '21	Scale	As Shown	@A1
Drawn	MP	Checked	SRC	
Design	SRC	File Name	11221-32	

DRG No. 11221/32

Rev
B