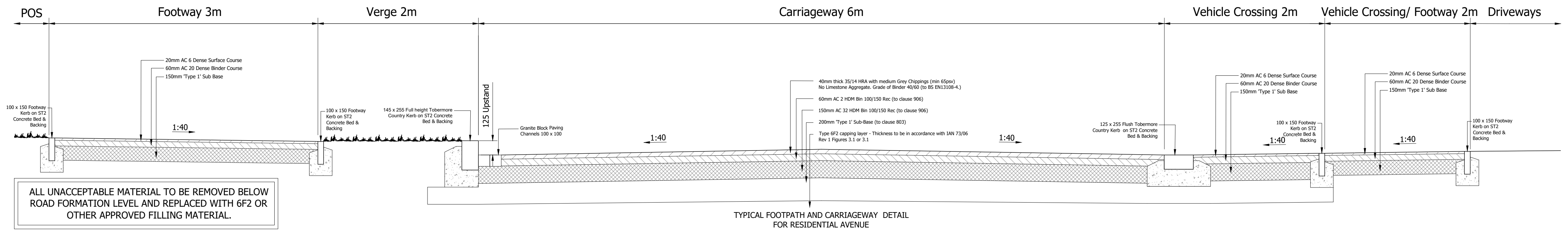
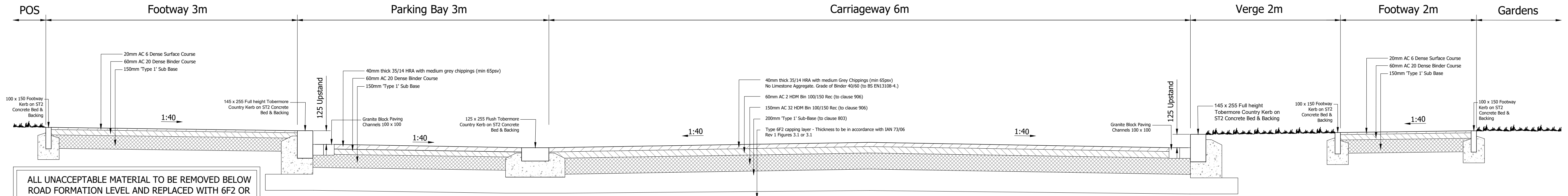
IF IN DOUBT - ASK


POS
Footway 3m
Verge 2m
Carriageway 6m
Vehicle Crossing 2m
Vehicle Crossing/ Footway 2m
Driveways
20mm AC 6 Dense Surface Course
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
125 Upstand
Granite Block Paving Channels 100 x 100
40mm thick 35/14 HRA with medium Grey Chippings (min 65psv) No Limestone Aggregate. Grade of Binder 40/60 (to BS EN13108-4.)
60mm AC 2 HDM Bin 100/150 Rec (to clause 906)
150mm AC 32 HDM Bin 100/150 Rec (to clause 906)
200mm 'Type 1' Sub-Base (to clause 803)
Type 6F2 capping layer - Thickness to be in accordance with IAN 73/06 Rev 1 Figures 3.1 or 3.1
125 x 255 Flush Tobermore Country Kerb on ST2 Concrete Bed & Backing
1:40

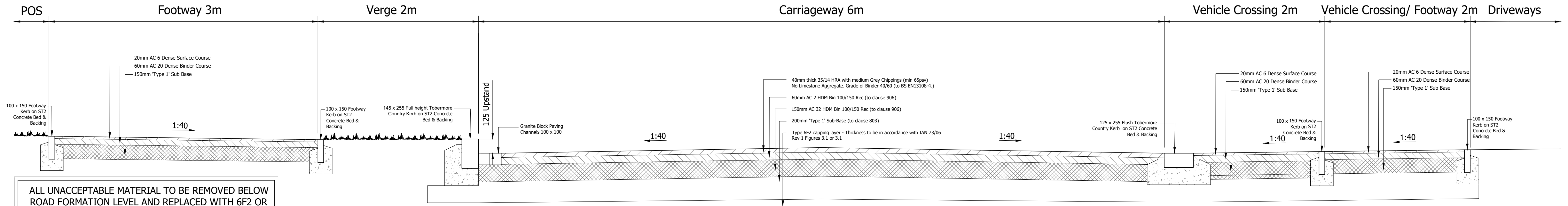
ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.

TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR RESIDENTIAL AVENUE
Not To Scale


POS
Footway 3m
Parking Bay 3m
Carriageway 6m
Verge 2m
Footway 2m
Gardens
20mm AC 6 Dense Surface Course
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
40mm thick 35/14 HRA with medium grey chippings (min 65psv)
60mm AC 20 Dense Binder Course
40mm thick 35/14 HRA with medium Grey Chippings (min 65psv) No Limestone Aggregate. Grade of Binder 40/60 (to BS EN13108-4.)
60mm AC 2 HDM Bin 100/150 Rec (to clause 906)
150mm AC 32 HDM Bin 100/150 Rec (to clause 906)
200mm 'Type 1' Sub-Base (to clause 803)
Type 6F2 capping layer - Thickness to be in accordance with IAN 73/06 Rev 1 Figures 3.1 or 3.1
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
125 x 255 Flush Tobermore Country Kerb on ST2 Concrete Bed & Backing
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
Granite Block Paving Channels 100 x 100
125 Upstand
1:40

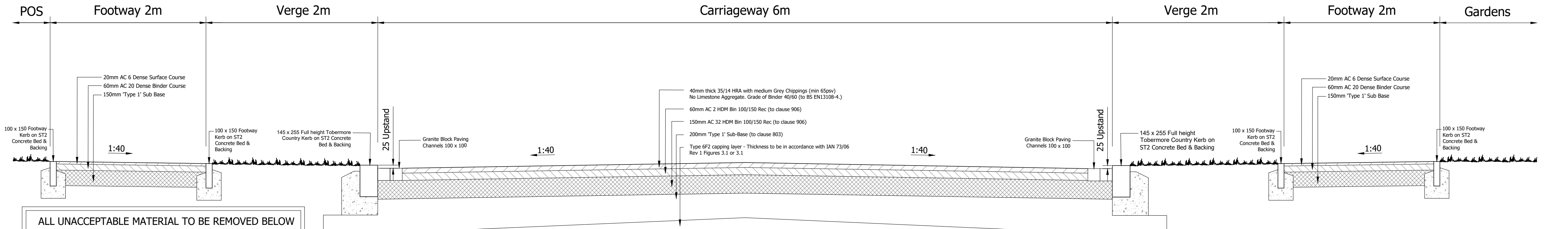
ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.

TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR RESIDENTIAL AVENUE
Not To Scale


POS
Footway 3m
Verge 2m
Carriageway 6m
Vehicle Crossing 2m
Vehicle Crossing/ Footway 2m
Driveways
20mm AC 6 Dense Surface Course
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
125 Upstand
Granite Block Paving Channels 100 x 100
125 x 255 Flush Tobermore Country Kerb on ST2 Concrete Bed & Backing
1:40

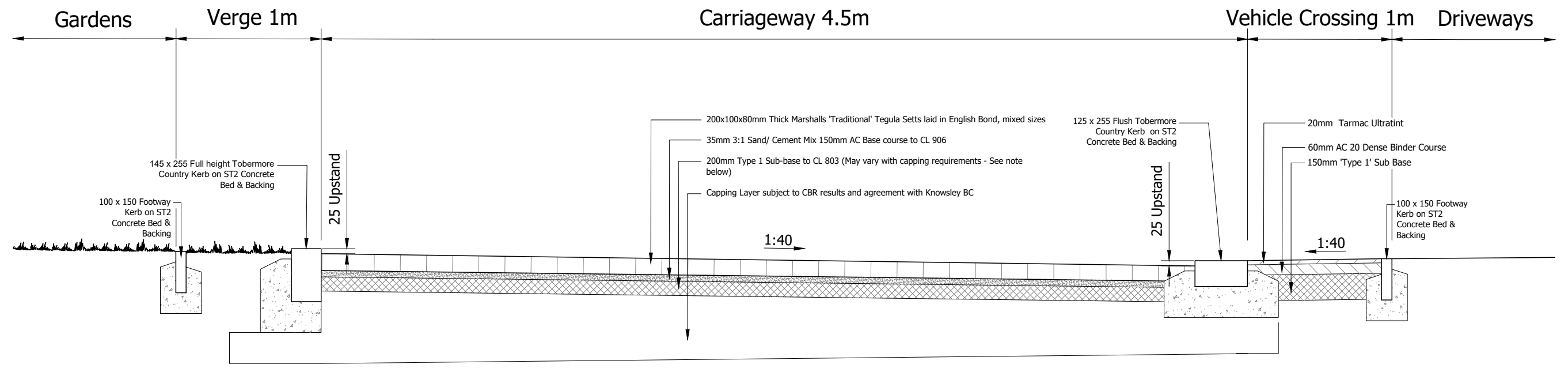
ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.

TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR RESIDENTIAL AVENUE
Not To Scale


POS
Footway 2m
Verge 2m
Carriageway 6m
Verge 2m
Footway 2m
Gardens
20mm AC 6 Dense Surface Course
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
Granite Block Paving Channels 100 x 100
125 Upstand
1:40

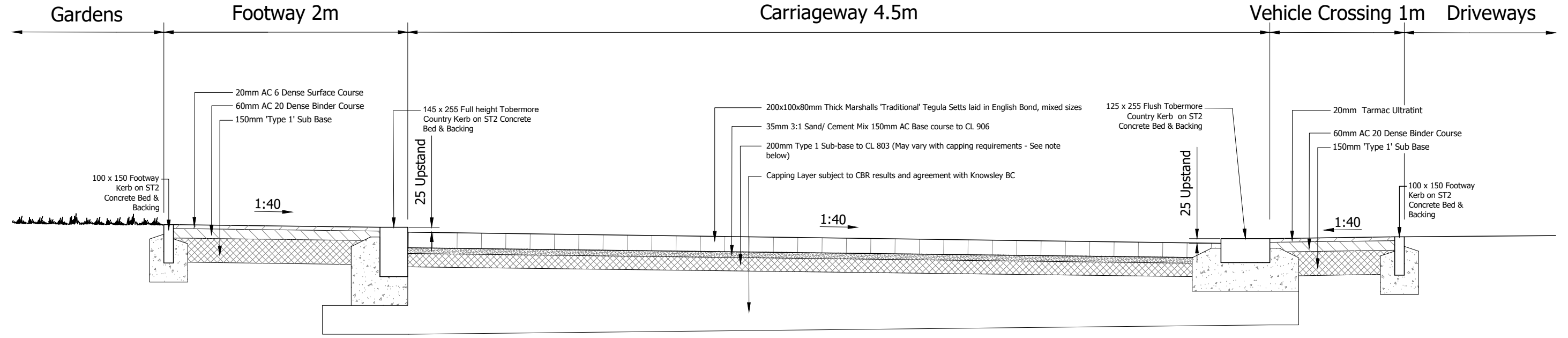
ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.

TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR RESIDENTIAL AVENUE
Not To Scale


Gardens
Verge 1m
Carriageway 4.5m
Vehicle Crossing 1m
Driveways
200x100x80mm Thick Marshalls 'Traditional' Tegula Setts laid in English Bond, mixed sizes
35mm 3:1 Sand/ Cement Mix 150mm AC Base course to CL 906
200mm Type 1 Sub-base to CL 803 (May vary with capping requirements - See note below)
Capping Layer subject to CBR results and agreement with Knowsley BC
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
125 x 255 Flush Tobermore Country Kerb on ST2 Concrete Bed & Backing
20mm Tarmac Ultratint
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
25 Upstand
1:40

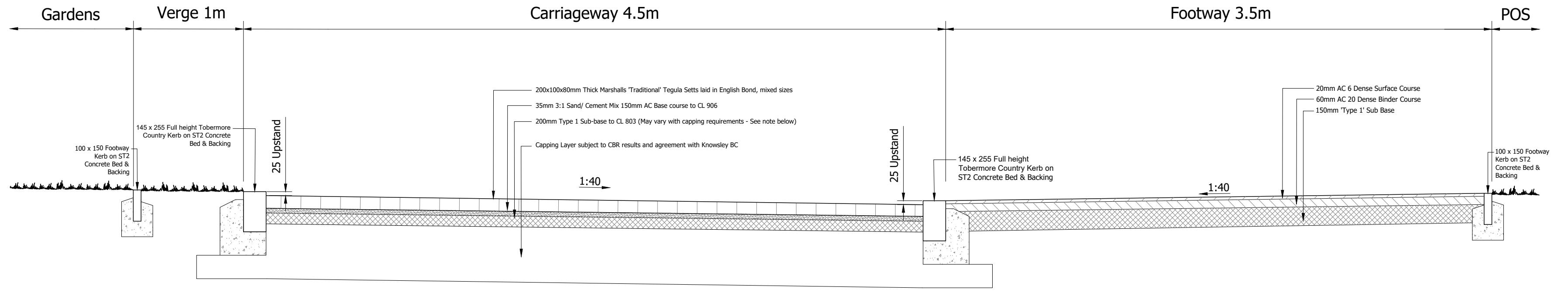
TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR LANES 1, 1A, 2, 3, 4, 5, 6, 7, 8, 9, 9A, 10, 10A, 11, 12A, 14 & 15
Not To Scale

ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.


Gardens
Footway 2m
Carriageway 4.5m
Vehicle Crossing 1m
Driveways
20mm AC 6 Dense Surface Course
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
200x100x80mm Thick Marshalls 'Traditional' Tegula Setts laid in English Bond, mixed sizes
35mm 3:1 Sand/ Cement Mix 150mm AC Base course to CL 906
200mm Type 1 Sub-base to CL 803 (May vary with capping requirements - See note below)
Capping Layer subject to CBR results and agreement with Knowsley BC
125 x 255 Flush Tobermore Country Kerb on ST2 Concrete Bed & Backing
20mm Tarmac Ultratint
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
25 Upstand
1:40

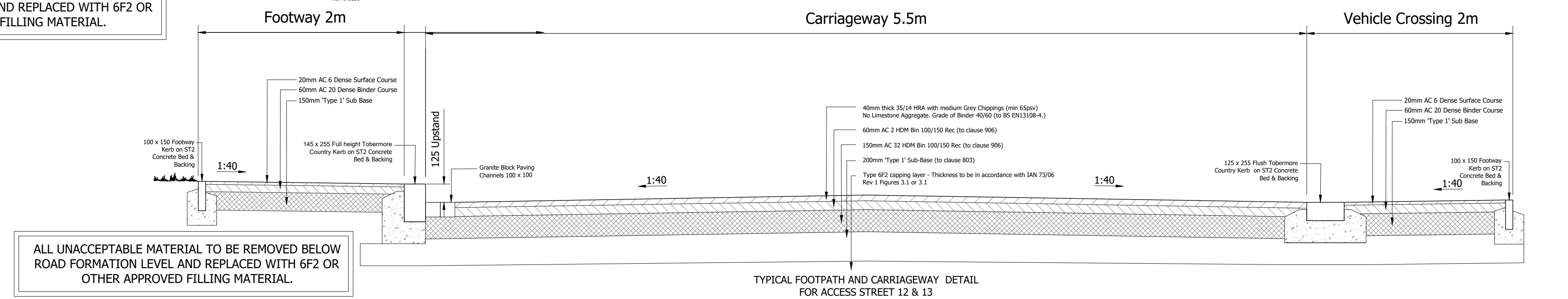
TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR LANE 7 TURNING HEAD
Not To Scale

ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.


Gardens
Verge 1m
Carriageway 4.5m
Footway 3.5m
POS
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
200x100x80mm Thick Marshalls 'Traditional' Tegula Setts laid in English Bond, mixed sizes
35mm 3:1 Sand/ Cement Mix 150mm AC Base course to CL 906
200mm Type 1 Sub-base to CL 803 (May vary with capping requirements - See note below)
Capping Layer subject to CBR results and agreement with Knowsley BC
20mm AC 6 Dense Surface Course
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
25 Upstand
1:40

TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR LANE 7 TURNING HEAD
Not To Scale

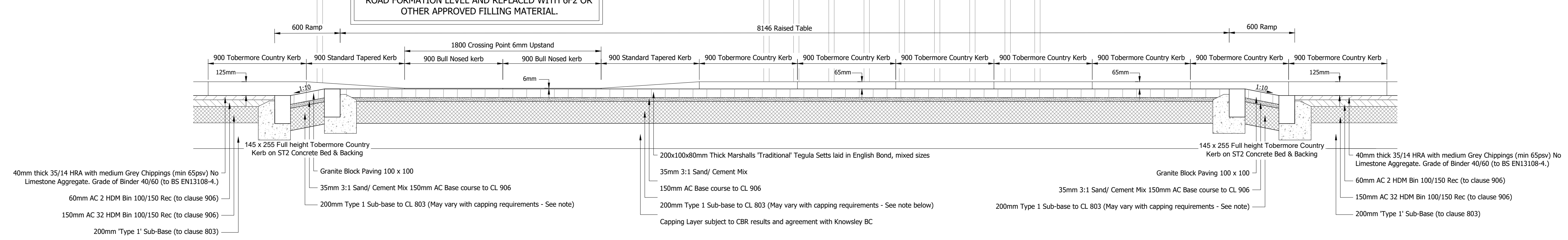
ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.


Footway 2m
Carriageway 5.5m
Vehicle Crossing 2m
20mm AC 6 Dense Surface Course
60mm AC 20 Dense Binder Course
150mm 'Type 1' Sub Base
100 x 150 Footway Kerb on ST2 Concrete Bed & Backing
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
125 Upstand
Granite Block Paving Channels 100 x 100
40mm thick 35/14 HRA with medium Grey Chippings (min 65psv) No Limestone Aggregate. Grade of Binder 40/60 (to BS EN13108-4.)
60mm AC 2 HDM Bin 100/150 Rec (to clause 906)
150mm AC 32 HDM Bin 100/150 Rec (to clause 906)
200mm 'Type 1' Sub-Base (to clause 803)
Type 6F2 capping layer - Thickness to be in accordance with IAN 73/06 Rev 1 Figures 3.1 or 3.1
125 x 255 Flush Tobermore Country Kerb on ST2 Concrete Bed & Backing
1:40

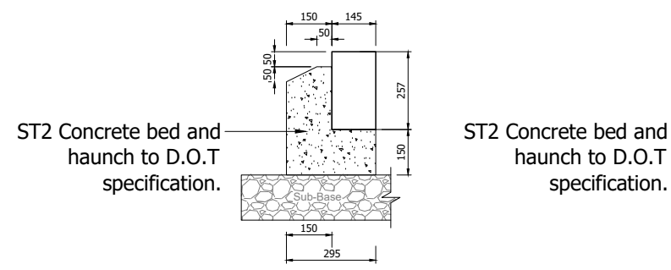
ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.

TYPICAL FOOTPATH AND CARRIAGEWAY DETAIL
FOR ACCESS STREET 12 & 13
Not To Scale

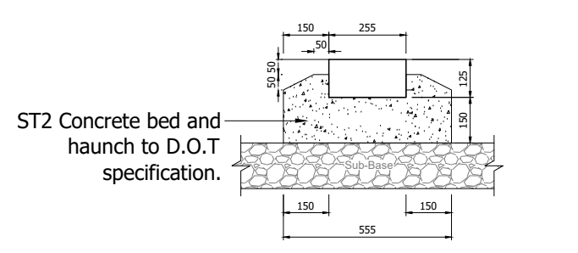
ALL UNACCEPTABLE MATERIAL TO BE REMOVED BELOW ROAD FORMATION LEVEL AND REPLACED WITH 6F2 OR OTHER APPROVED FILLING MATERIAL.


Railings as per suppliers details
600 Ramp
8146 Raised Table
600 Ramp
1800 Crossing Point 6mm Upstand
900 Tobermore Country Kerb
900 Standard Tapered Kerb
900 Bull Nosed kerb
900 Bull Nosed kerb
900 Standard Tapered Kerb
900 Tobermore Country Kerb
125mm
6mm
65mm
1:10
145 x 255 Full height Tobermore Country Kerb on ST2 Concrete Bed & Backing
40mm thick 35/14 HRA with medium Grey Chippings (min 65psv) No Limestone Aggregate. Grade of Binder 40/60 (to BS EN13108-4.)
60mm AC 2 HDM Bin 100/150 Rec (to clause 906)
150mm AC 32 HDM Bin 100/150 Rec (to clause 906)
200mm 'Type 1' Sub-Base (to clause 803)
Granite Block Paving 100 x 100
35mm 3:1 Sand/ Cement Mix 150mm AC Base course to CL 906
200mm Type 1 Sub-base to CL 803 (May vary with capping requirements - See note)
200x100x80mm Thick Marshalls 'Traditional' Tegula Setts laid in English Bond, mixed sizes
35mm 3:1 Sand/ Cement Mix
150mm AC Base course to CL 906
200mm Type 1 Sub-base to CL 803 (May vary with capping requirements - See note below)
Capping Layer subject to CBR results and agreement with Knowsley BC

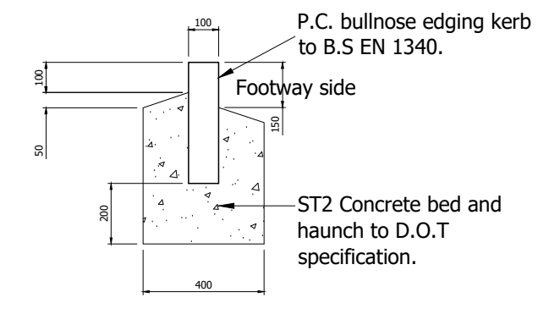
RESIDENTIAL AVENUE CROSSING POINT
TO LRT PATH LINK SECTION A-A



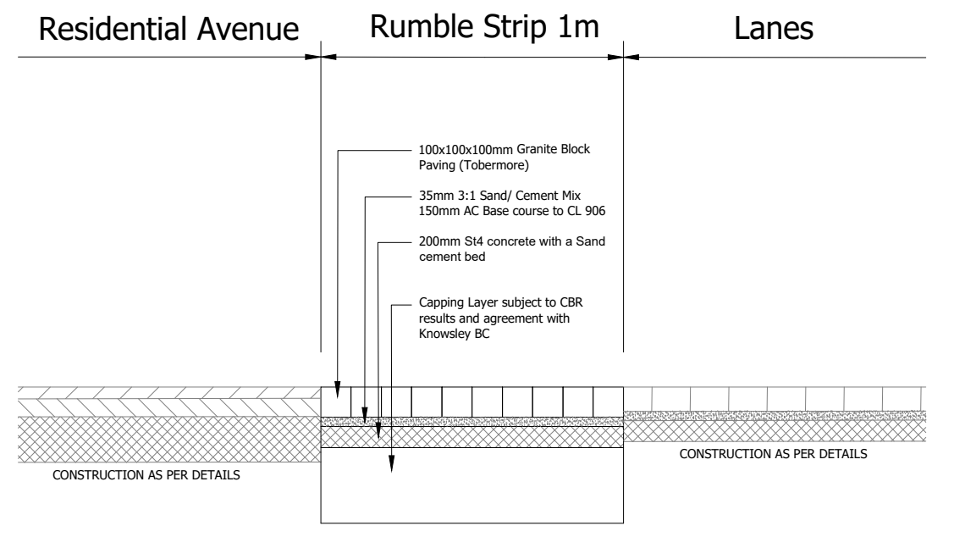
FULL HEIGHT TOBERMORE COUNTRY KERB



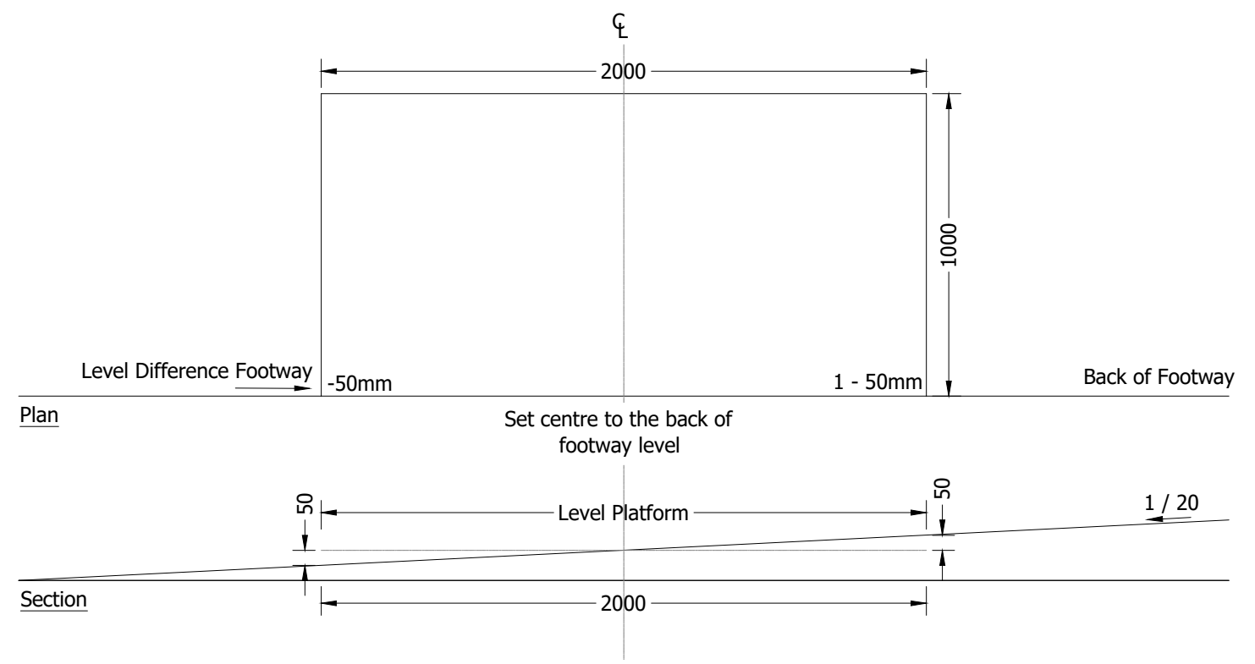
FLUSH TOBERMORE COUNTRY KERB


100
P.C. bullnose edging kerb to B.S EN 1340.
Footway side
ST2 Concrete bed and haunch to D.O.T specification.
150
200
400

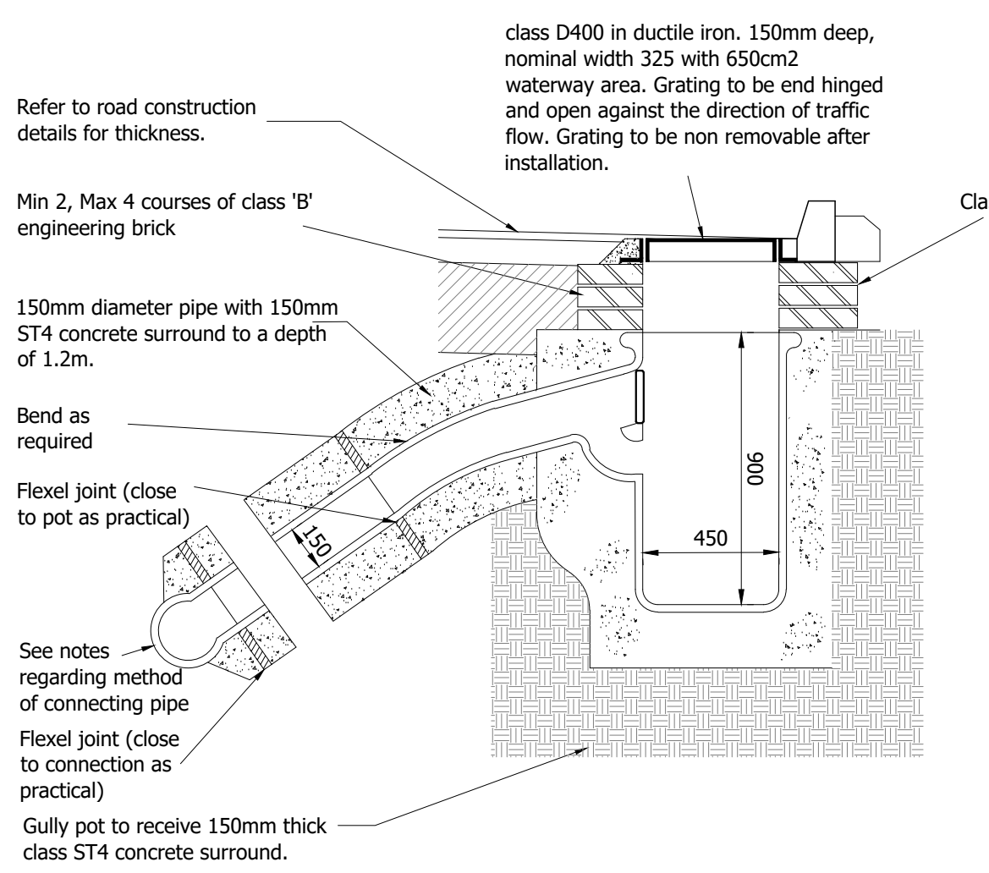
FOOTWAY KERB DETAIL


Residential Avenue
Rumble Strip 1m
Lanes
100x100x100mm Granite Block Paving (Tobermore)
35mm 3:1 Sand/ Cement Mix 150mm AC Base course to CL 906
200mm St4 concrete with a Sand cement bed
Capping Layer subject to CBR results and agreement with Knowsley BC
CONSTRUCTION AS PER DETAILS
CONSTRUCTION AS PER DETAILS

TYPICAL SECTION THROUGH RUMBLE STRIPS

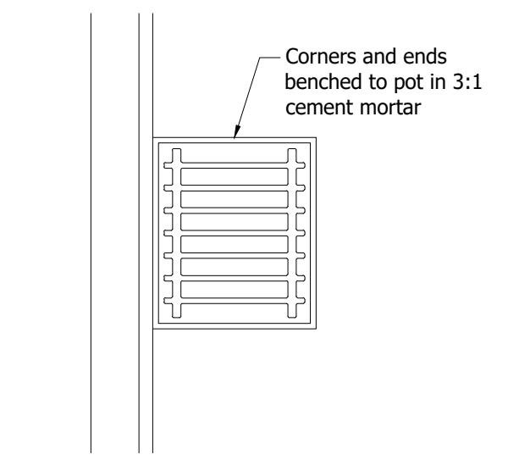


LEVEL PLATFORM DETAILS
(1:20)

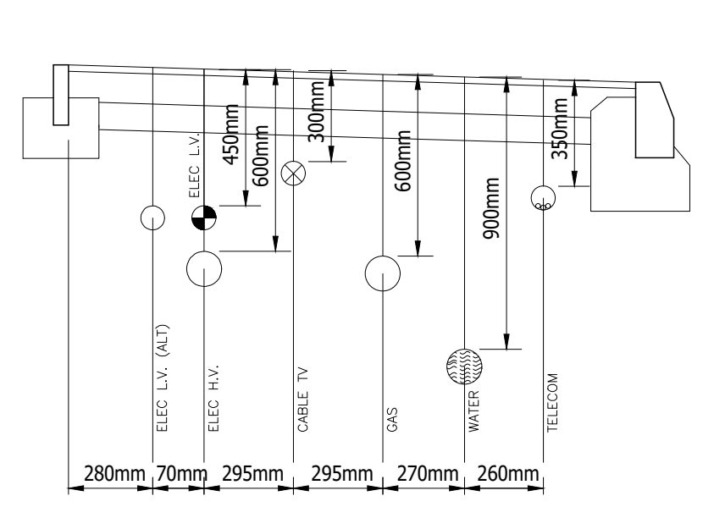

Refer to road construction details for thickness.
class D400 in ductile iron. 150mm deep, nominal width 325 with 650cm2 waterway area. Grating to be end hinged and open against the direction of traffic flow. Grating to be non removable after installation.
Class M1 mortar bed and haunch
Min 2, Max 4 courses of class 'B' engineering brick
150mm diameter pipe with 150mm ST4 concrete surround to a depth of 1.2m.
Bend as required
Flexel joint (close to pot as practical)
150
900
450
See notes regarding method of connecting pipe
Flexel joint (close to connection as practical)
Gully pot to receive 150mm thick class ST4 concrete surround.

Type G1 Gully
(NTS)

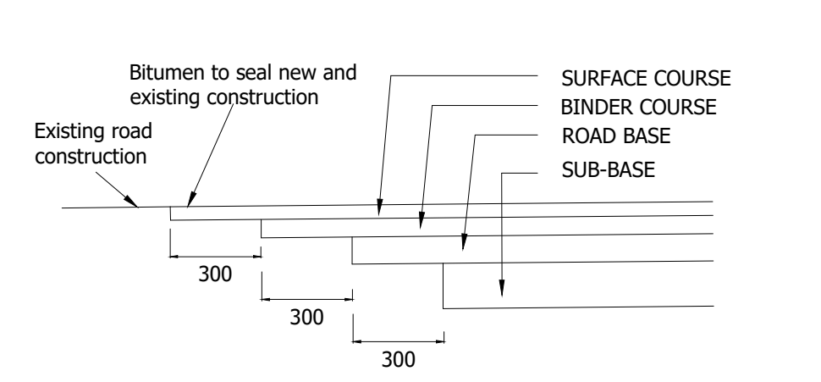
IMPORTANT NOTE:
Hinges to be on the incoming traffic side of the gully to facilitate future maintenance



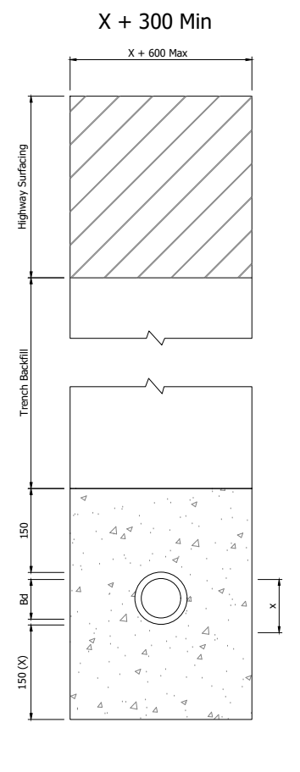
PLAN
(NTS)



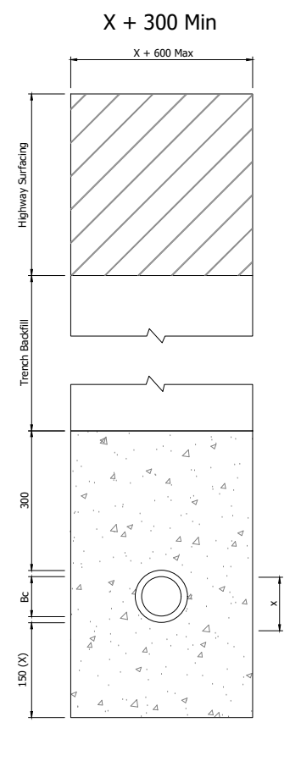
TYPICAL SERVICE POSITIONS
(NTS)


Bitumen to seal new and existing construction
Existing road construction
SURFACE COURSE
BINDER COURSE
ROAD BASE
SUB-BASE
300
300
300

ROAD TIE-IN DETAIL
(NTS)



Type Z



Type S

Nominal Internal pipe Diameter (mm) Bc	Compressible Filler Thickness (mm)
150/225/300/375/450	18
450 and above	36

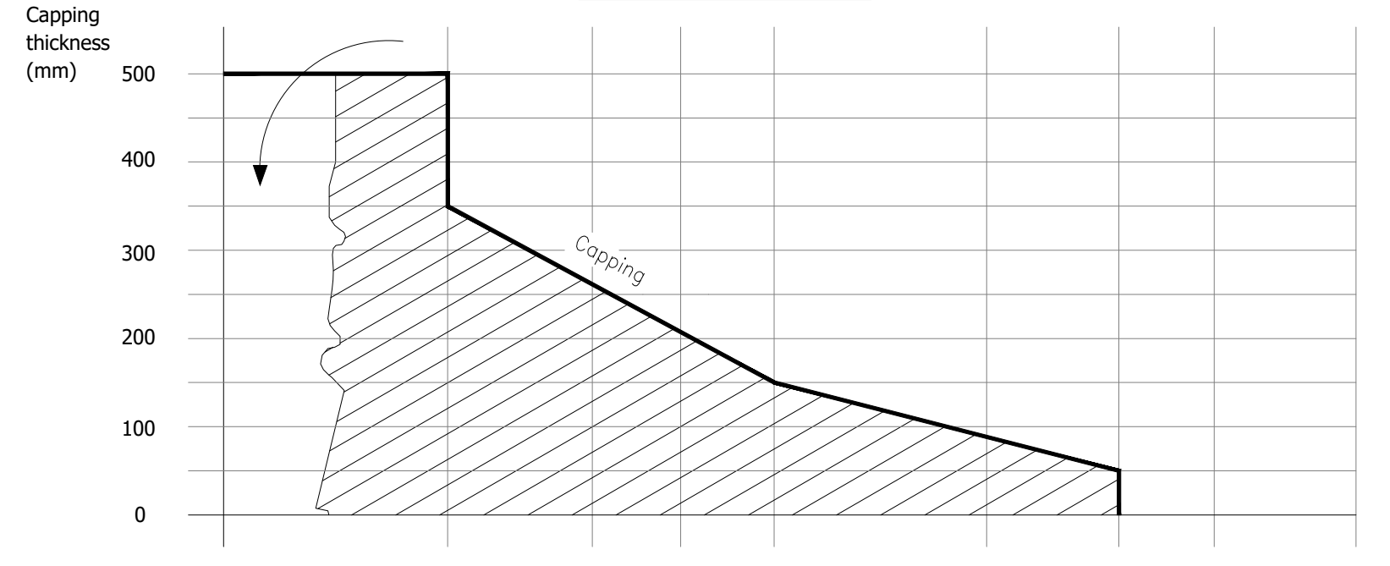
Nominal Internal pipe Diameter (mm) Bc	Granular Bedding Type
150	10 or 14mm nominal single sized or 14mm to 5mm graded
225/300	10,14 or 20mm nominal single sized or 14mm to 5mm graded or 20mm to 5mm graded
375/400/450/500/525	14mm or 20mm nominal single sized or 14mm to 5mm graded or 20mm to 5mm graded.
over 525	14, 20mm or 40mm nominal single sized or 14mm to 5mm graded or 20mm to 5mm graded or 40mm to 5mm graded.

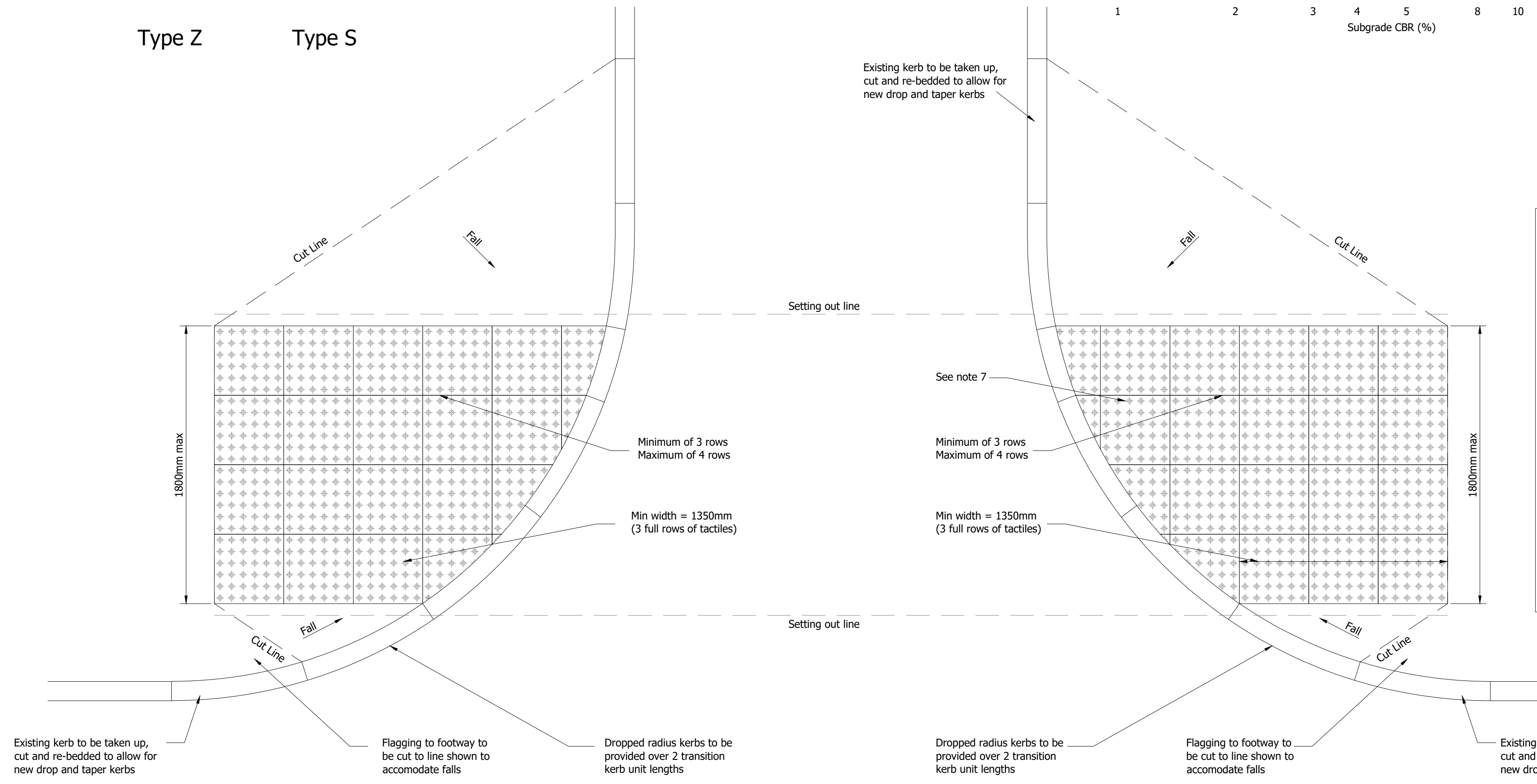
Bedding notes:

1. All dimensions are in millimetres.
2. The minimum or maximum trench width applies on or below 300mm above the crown of pipe.
3. Trench backfill above the bedding to be class 6F2. As dug material shall not be used unless agreed
4. Max permitted tench width equals 'overall width' the actual trench width (bd) should be less than the max permitted trench width at the level 300mm above the crown of pipes.
5. Limestone pipe bedding will not be permitted in acidic ground water conditions. refer to contract specifications for specific details.
6. Rigid pipe materials are defined as clayware, concrete and reinforced concrete.
7. Granular bedding and surround shall be BS EN 13242
8. Dimension X mm shall be increased to 200mm for trenches in rock.
9. Concrete surround to pipes with class Z bedding shall be ST4 sulphate resisting.
10. Where concrete surround to pipework is required it shall be continuous from manhole/ rodding eye to manhole, irrespective of depth.

CAPPING CBR TABLE

NOTE: This table for guidance only, all actual thickness to be confirmed with regional engineer.

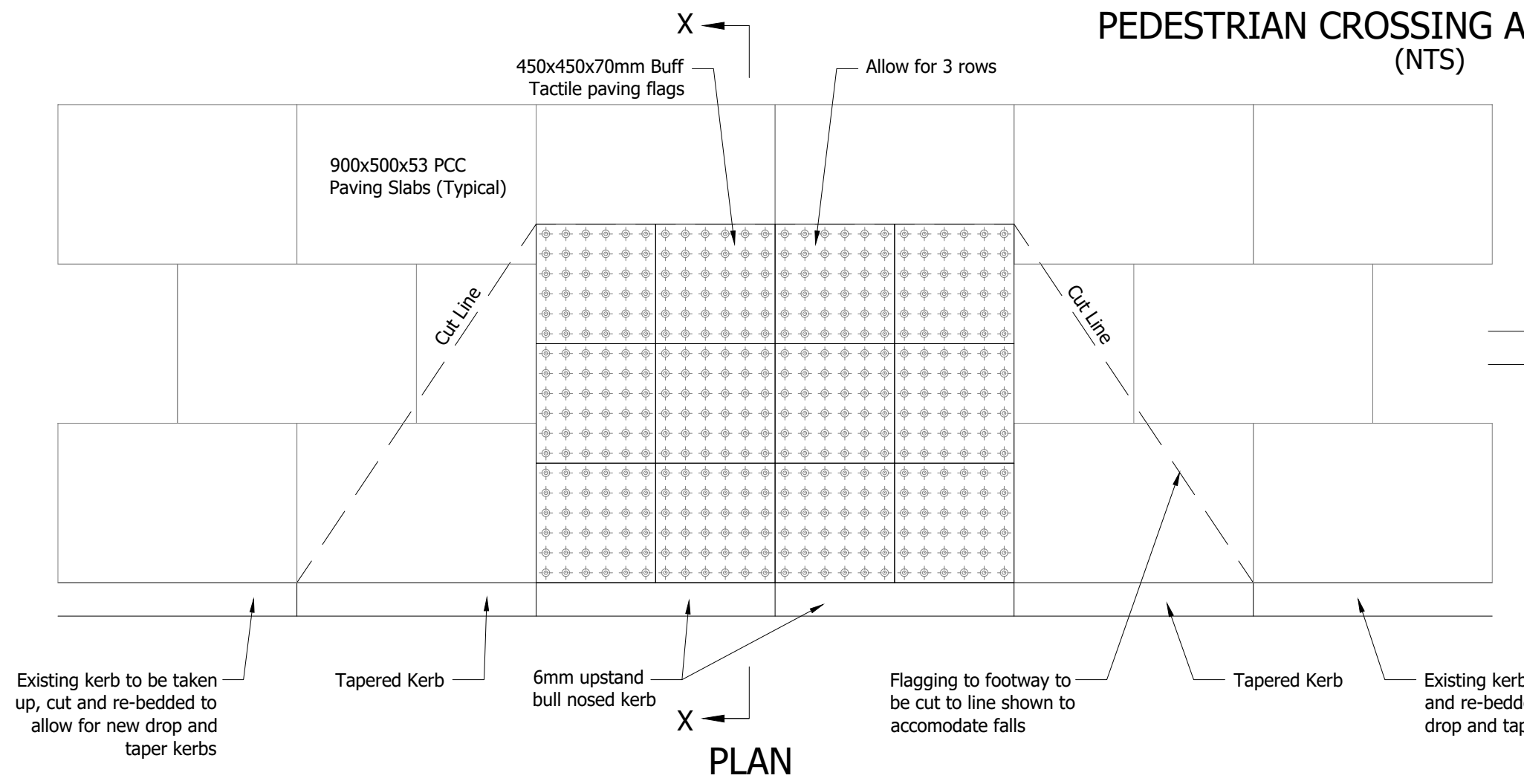



Existing kerb to be taken up, cut and re-bedded to allow for new drop and taper kerbs
Cut Line
Fall
Setting out line
See note 7
Minimum of 3 rows Maximum of 4 rows
Min width = 1350mm (3 full rows of tactiles)
1800mm max
Dropped radius kerbs to be provided over 2 transition kerb unit lengths
Flagging to footway to be cut to line shown to accomodate falls

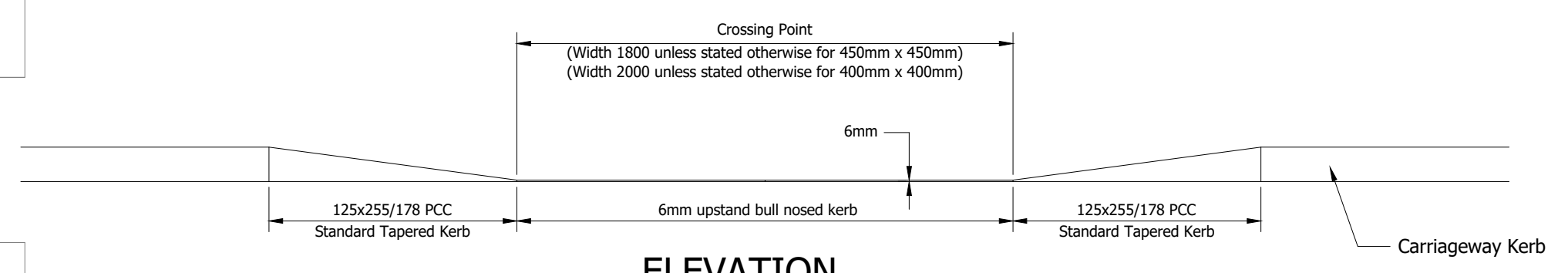
PEDESTRIAN CROSSING ARRANGEMENT
(NTS)

TACTILE NOTES:

1. All dimensions are in millimeters.
2. For flexible footway construction kerbing arrangement and footway falls to be shown as on these details together with edging strip extending around perimeter of tactile paving.
3. Tactile paving flags to be laid in accordance with DETR publication 'Guidance on the use of Tactile Paving Surfaces'.
4. Any made up paving construction footways to be in cut flags saved from existing footway.
5. Drop kerbs on crossings to align with crossing on opposite side of the road. Blisters on tactiles must align with blisters on pavoirs on opposite side of road.
6. For kerbs adjacent water carrying channels, upstand should be 6mm. Kerbs to be 6mm bull nosed kerbs.
7. All kerbs to be transported & positioned by mechanical means.
8. Drainage provision to be considered separately.

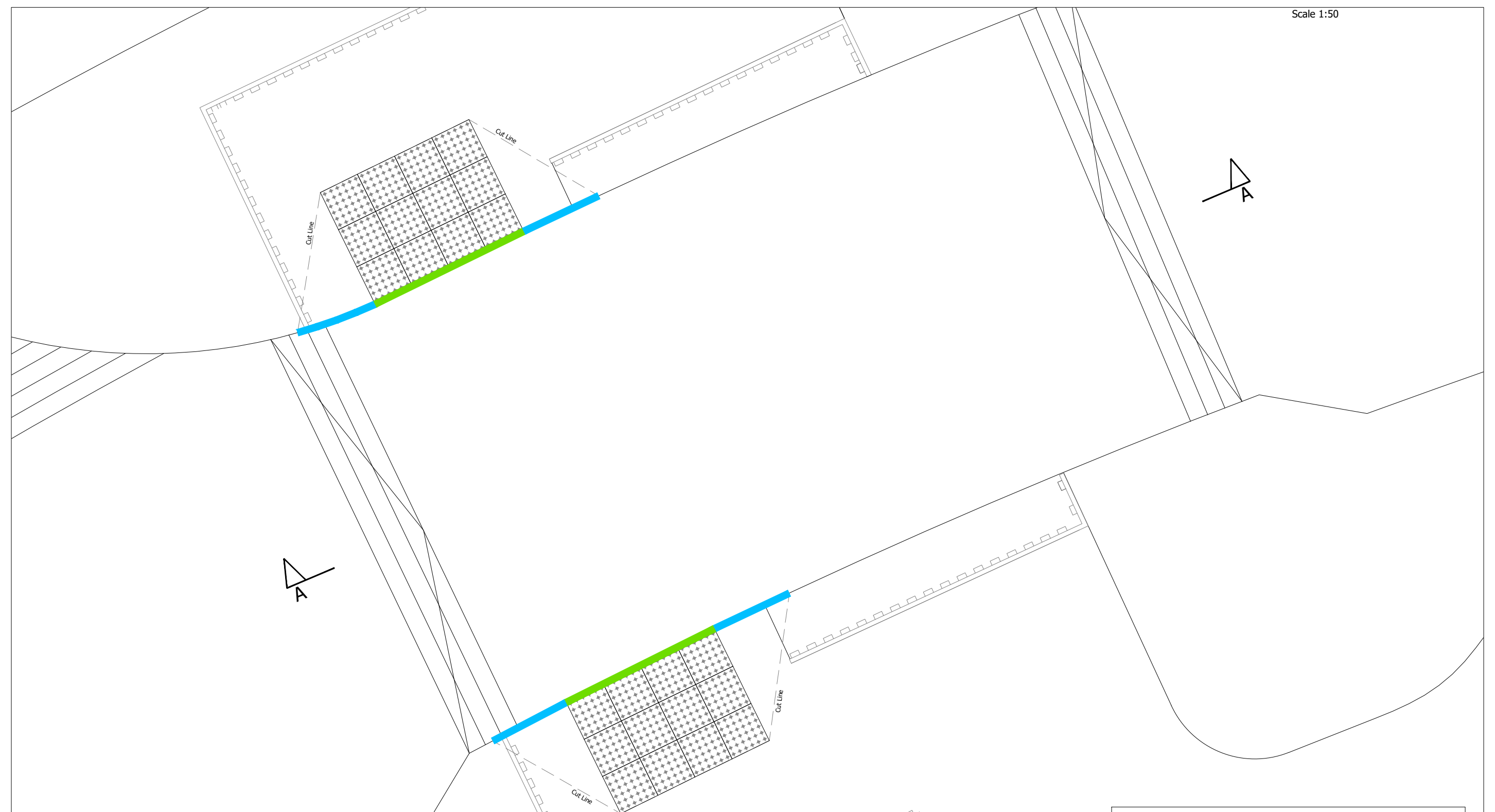

X
450x450x70mm Buff Tactile paving flags
Allow for 3 rows
900x500x53 PCC Paving Slabs (Typical)
Cut Line
Cut Line
Existing kerb to be taken up, cut and re-bedded to allow for new drop and taper kerbs
Tapered Kerb
6mm upstand bull nosed kerb
X
Flagging to footway to be cut to line shown to accomodate falls
Tapered Kerb
Existing kerb to be taken up, cut and re-bedded to allow for new drop and taper kerbs

PLAN
(NTS)


Crossing Point
(Width 1800 unless stated otherwise for 450mm x 450mm)
(Width 2000 unless stated otherwise for 400mm x 400mm)
6mm
125x255/178 PCC Standard Tapered Kerb
6mm upstand bull nosed kerb
125x255/178 PCC Standard Tapered Kerb
Carriageway Kerb

ELEVATION
(NTS)

RESIDENTIAL AVENUE CROSSING POINT
TO LRT PATH LINK PLAN
Scale 1:50



Key:
🟦 900 Standard Tapered Kerb
🟩 900 Bull Nosed kerb

Notes

This drawing is to be read in conjunction with the construction (Design and Management) regulations 2015.

1. This drawing is to be read in conjunction with:-
Lees Roxburgh drawing series 6238, architects and designers drawings and details.

2. Construction details to be in accordance with Knowlsey Council 'design guide

3. The contractor shall comply with the following:-
a. All operations should be carried out in accordance with the general health and safety policy of Bloor Homes Ltd and all relevant health and safety legislation.
b. The local authority and service companies are to be notified prior to commencement of work on site.
c. Prior to construction the actual positions and depths of services likely to be affected by the works should be established by means of hand dig in close liaison with the service companies. the contractor shall immediately advise Lees Roxburgh of any services exposed which may affect the design.
d. The location and depth of any services/apparatus shown is approximate only and has been based on plans received from the statutory undertakers.
e. Lees Roxburgh Ltd do not accept any responsibility for the accuracy of this or any other drawings which indicate the position and/or depth of services/apparatus.
f. The contractor must contact the relevant statutory undertakers and be in possession of the latest available drawings from the statutory undertakers which shows details of their services/apparatus.

4. All sewerage works to be in accordance with the "Sewers for Adoption" 6th edition and United Utilities standard details.

5. Lees Roxburgh's appointment is restricted to the design of the permanent civil/structural works only and have no site role. the contractor is thus entirely responsible for compliance with the health and safety at work act. He shall be specifically responsible for all temporary works and for the stability of the affected land and structures.

6. If CBR value is less than 4% then the Sub-base thickness and capping layer design will be required. Construction thicknesses to be confirmed on site with the "Highways Authority" at time of construction, and to be conjunction with capping CBR table.

7. Subject to local authority approval for low CBR values the depth of capping may be reduced if a geotechnical reinforcement membrane is used.

THE DETAILS PROVIDED ON THIS DRAWING ARE SUBJECT TO COMMENT BY ALL THE RELEVANT APPROVING AUTHORITIES. UNTIL SUCH TIME AS ALL COMMENTS HAVE BEEN RECEIVED AND INCORPORATED ONTO THE DRAWINGS, ALL THE INFORMATION PROVIDED AND ASSOCIATED COSTINGS, ARE USED AT BLOOR HOMES RISK AND NO LIABILITY WILL BE ACCEPTED BY LEES ROXBURGH LTD.

Rev	Revision	By	Date
M	Amended to include phase 2	CB	23.12.22
L	Residential Avenue crossing point to LRT path link section amended & location plan added for crossing point.	NL	28.09.22
K	Amended Rumble strip sub base to st4 concrete with a sand and cement base.	NL	02.08.22
J	Channel blocks added to all 6m roads, rumble strip detail amended, kerb details amended.	NL	26.05.22
H	Level landing detail added	RD	29.03.22
G	Amended to clients comments.	RD	14.03.22
F	Amended to clients comments.	NL	26.07.21
E	Amended the surface course from 30mm to 40mm.The footway kerb detail has now been labelled correctly. The vehicular crossing / footpath & parking bay build-up has now been amended.	NL	16.07.21
D	Details amended to S38 design guide	NL	24.03.21
C	Extra section added for Spine Road	NL	29.01.21
B	Typical details through adoptable block paved carriageway details amended.	NL	26.01.21
A	Spine road ramp and raised carriageway added	CB	10.12.20

BLOOR HOMES

Windy Arbor
Whiston

Road Construction Details

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Scale NTS @ A0
Date April 2018

Drawn By	Designed By	Checked By
DW	DW	CB