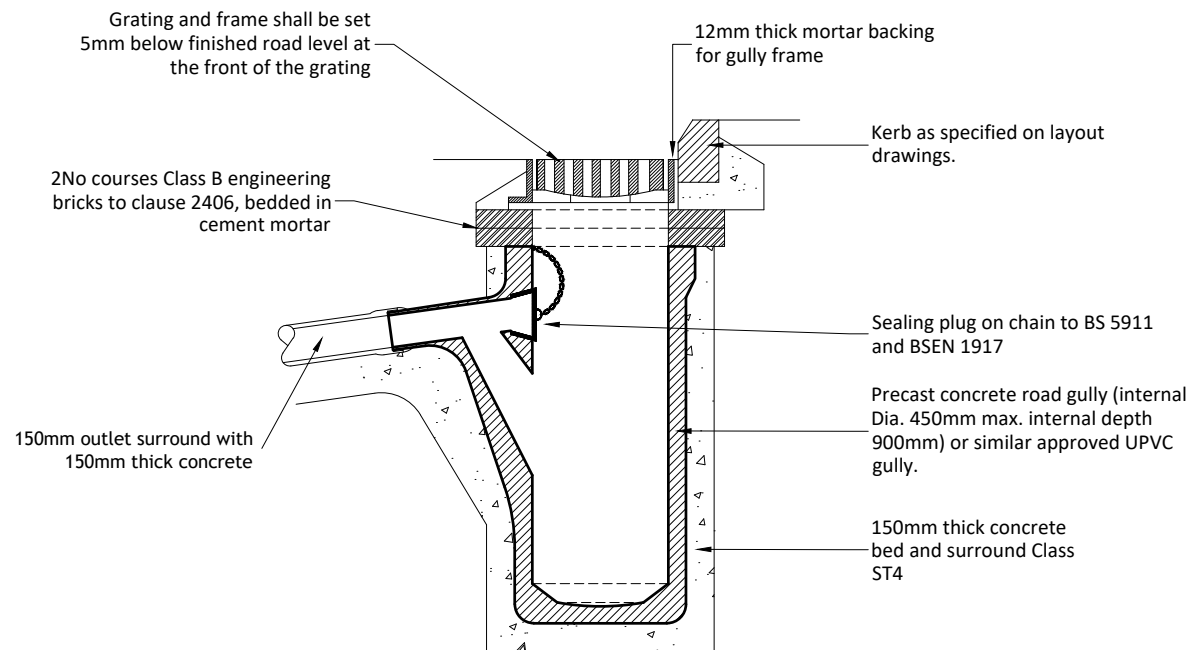


Plan



Section A-A

Notes:

1. All dimensions in millimeters unless stated otherwise.
2. Gully gratings are to have ribless frames and manhole covers webs at least 30mm below the finished cover level, suitable for the abutting of block paving.
3. Gully gratings shall be non-rocking & captive hinged, with hinge located at the on-coming traffic end of grating.
4. Gully pots to be positioned such that the inside edge of the pot lines up with the front of the kerb with a tolerance of +/- 50mm.
5. Pedestrian compliant gully gratings to be used within block paved areas and wherever gullies coincide with dropped kerbs.

I

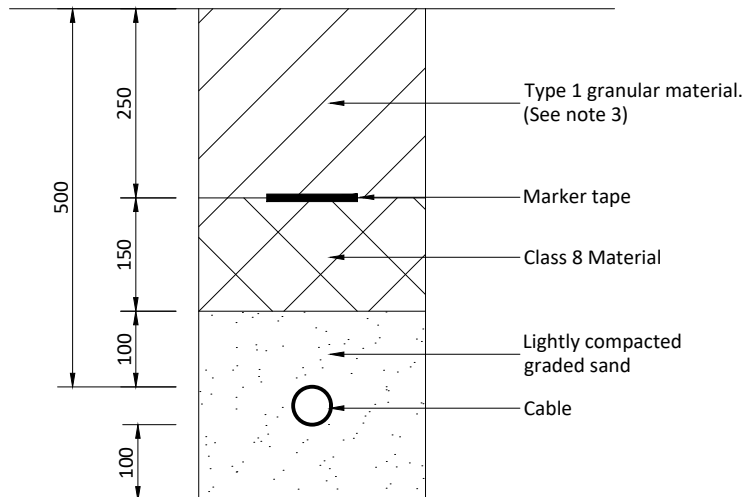
M

A

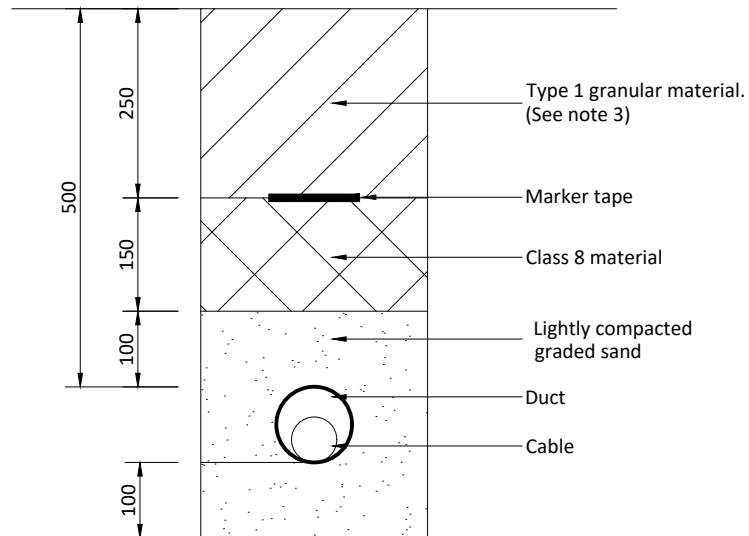
TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:	Frome Town Council	TITLE:	Standard Drainage Details			SCALE: (A4)	CHECKED:	APPROVED:
			Trapped Road Gully			NTS	DS	DS
	PROJECT:					CAD FILE:	DESIGN/DRAWN:	DATE:
	Public Realm Works to Market Place, Frome					STANDARD DETAILS.dwg	PDI	November 2017
						PROJECT No:	DRAWING No:	REV:
						IMA-13-146	IMA/P2/5/001	A



Direct Buried



Buried in Duct

Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. Reinstatement of the footway construction shall be carried out as soon as is practicable after backfilling has been completed.
3. Granular material shall be material complying with clause 803.
4. Existing block or flag paving shall be carefully reinstated to a minimum of 300 either side of the trench edge and bedded as described in drawing IMA/P2/7/001.
5. Under carriageways cables/ducts shall have a minimum cover of 750 or 300 below formation whichever is the greater depth.
6. This drawing shall be read in conjunction with specification clause 1421.
7. For location of cables and ducts see underground services survey drawing.
8. Existing sewers and drains within the bounds of the site, which are to be abandoned and which are less than 1m deep below formation level shall, where practicable, be cut off and removed. The excavation shall be backfilled with type 1 material, and the ends of the remaining pipes sealed with concrete for a length of 0.5m.



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Underground Cabling Detail

SCALE: (A4)
1:10

CHECKED:
DS

APPROVED:
DS

CAD FILE:
STANDARD DETAILS.dwg

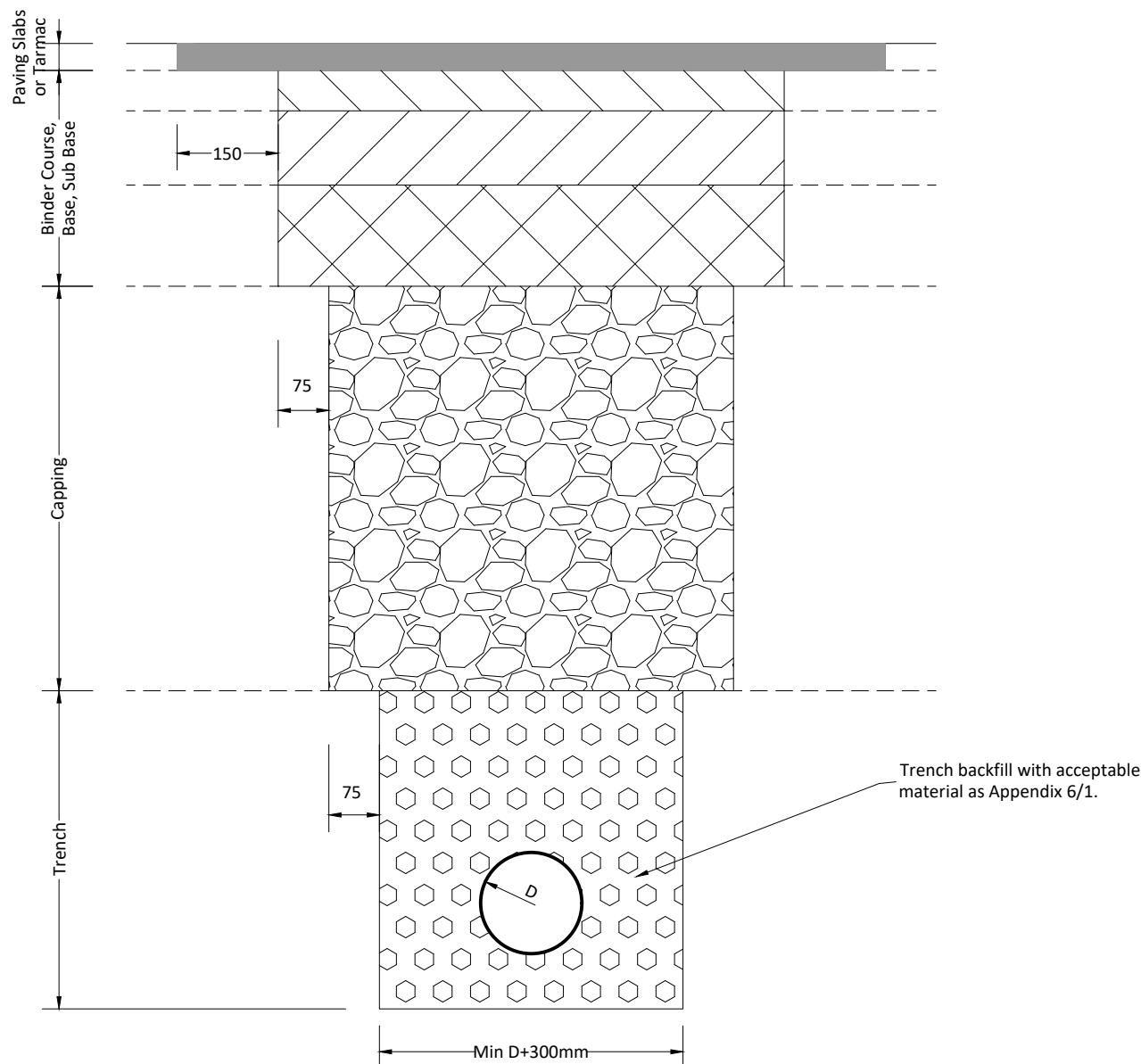
DESIGN/DRAWN:
PDI

DATE:
November 2017

PROJECT No:
IMA-13-146

DRAWING No:
IMA/P2/5/002

REV:
A



Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. Reinstatement of the carriageway construction shall be carried out as soon as is practicable after backfilling has been completed.
3. Where the existing carriageway consists of bituminous materials, edges shall be neatly saw cut. Joints through macadam surfacing shall be saw cut and treated in accordance with clause 903 prior to layer reinstatement.
4. All carriageway construction material to be as specified on detail IMA/P2/7/001.
5. Existing sewers and drains within the bounds of the site, which are to be abandoned and which are less than 1m deep below formation level shall, where practicable, be cut off and removed. The excavation shall be backfilled with type 1 material, and the ends of the remaining pipes sealed with concrete for a length of 0.5m.



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Reinstatement of Drain & Duct Trenches
in Existing Carriageway

SCALE: (A4)

1:10

CHECKED:

DS

APPROVED:

DS

CAD FILE:

STANDARD DETAILS.dwg

DESIGN/DRAWN:

PDI

DATE:

November 2017

PROJECT No:

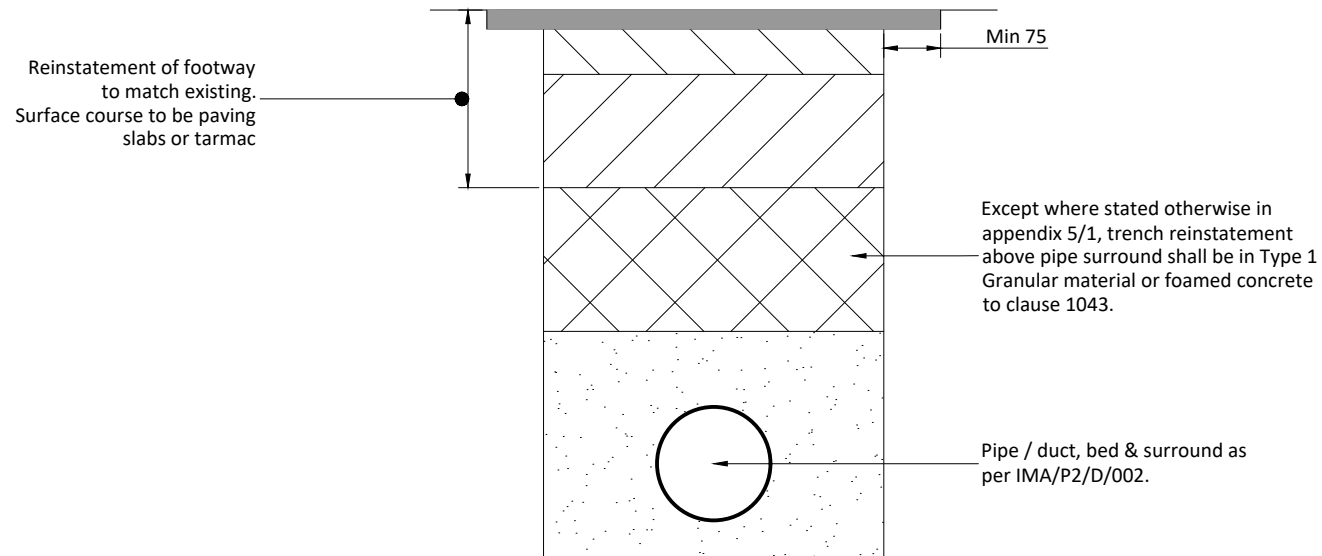
IMA-13-146

DRAWING No:

IMA/P2/5/003

REV:

A



Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. Reinstatement of the footway construction shall be carried out as soon as is practicable after backfilling has been completed.
3. Where the existing footway consists of bitumous materials, edges shall be neatly saw cut and joints treated in accordance with clause 903.
4. Granular material shall be material complying with clause 803.
5. Existing sewers and drains within the bounds of the site, which are to be abandoned and which are less than 1m deep below formation level shall, where practicable, be cut off and removed. The excavation shall be backfilled with type 1 material, and the ends of the remaining pipes sealed with concrete for a length of 0.5m.



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Reinstatement of Drain & Duct Trenches
in Existing Footway

SCALE: (A4)
1:10

CHECKED:
SW

APPROVED:
DS

CAD FILE:
STANDARD DETAILS.dwg

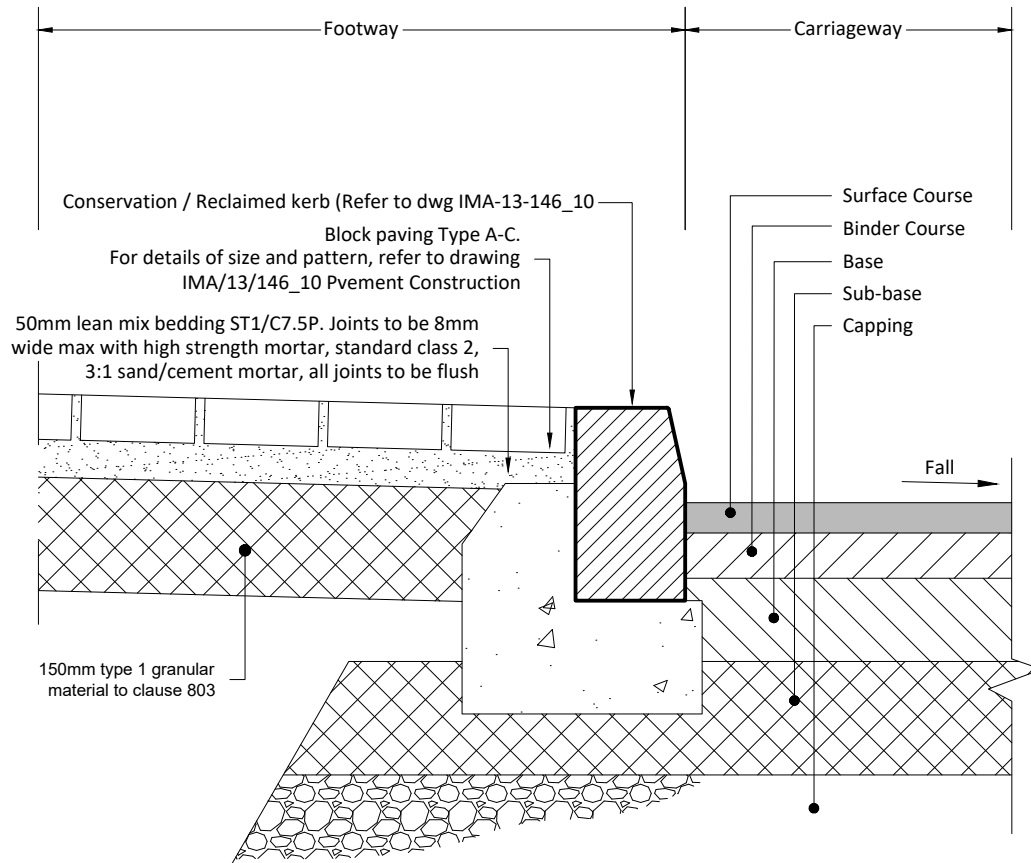
DESIGN/DRAWN:
PDI

DATE:
November 2017

PROJECT No:
IMA-13-146

DRAWING No:
IMA/P2/5/004

REV:
A



Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. This drawing must be read in conjunction with underground services survey. Depth of existing services must be confirmed prior to commencement of excavation.

Type P1 - Full depth carriageway construction (Mastertint)

Surface Course: 50mm thick **Mastertint, 14mm SMA**, min. 57 PSV by Tarmac or similar approved

Binder Course: 60mm, **AC 20 dense bin 40/60**, Specification Clause 929 (min PSV 65 if trafficked)

Base Course: 165mm, **AC 32 dense base 40/60**, Specification Clause 929 (laid in 2 layers)

Sub Base: Type 1 granular material to Specification Clause 803. Thickness dependant on CBR of sub-grade. (See Table below).

Capping: Capping Material to Specification clause 613, Class 6F1 or 6F2. Thickness dependant on equilibrium CBR of sub-grade.

Type P1* - Full depth carriageway construction

Surface Course: 50mm, **HRA 55/14 F surf 100/150 pen**, minimum 65 PSV

Binder Course: 60mm, **AC 20 dense bin 40/60**, Specification Clause 929 (min PSV 65 if trafficked)

Base Course: 165mm, **AC 32 dense base 40/60**, Specification Clause 929 (laid in 2 layers)

Sub Base: Type 1 granular material to Specification Clause 803. Thickness dependant on CBR of sub-grade. (See Table below).

Capping: Capping Material to Specification clause 613, Class 6F1 or 6F2. Thickness dependant on equilibrium CBR of sub-grade.

CBR of Subgrade (%)	<2	2-5	>5
Sub Base (mm)	180	180	225
Capping (mm)	#	320	0

Type P2 - Plane & overlay existing carriageway (Blacktop)

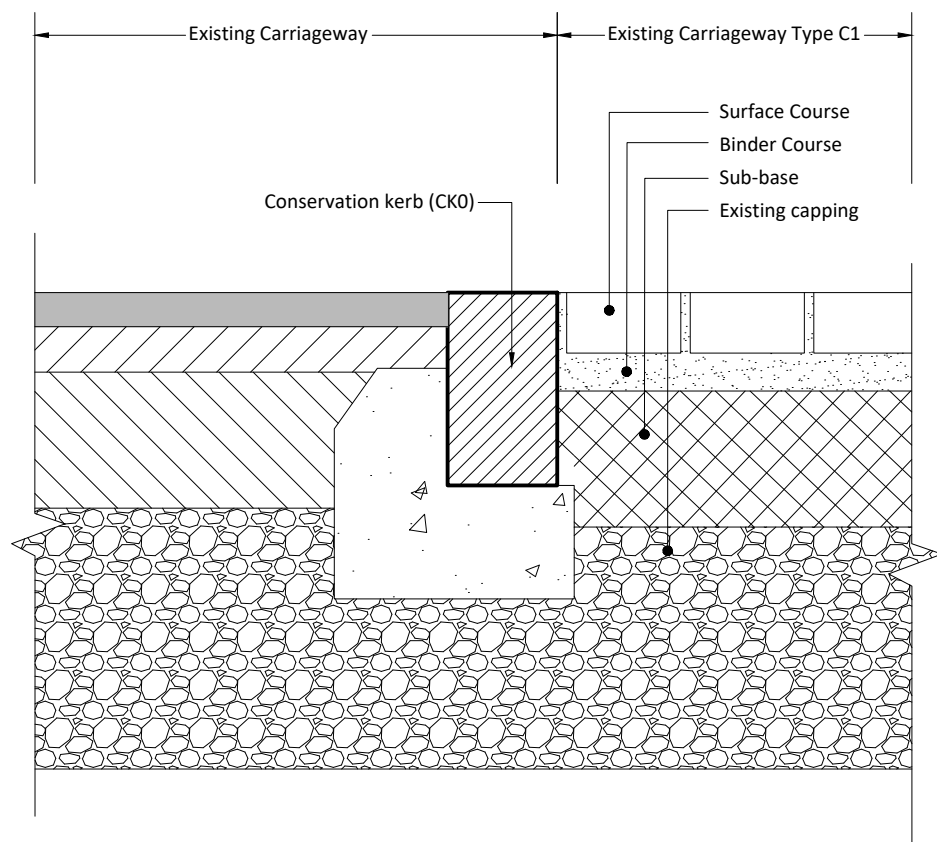
Surface Course: 50mm, **HRA 55/14 F surf 100/150 pen**, minimum 65 PSV

Regulating 60mm, **AC 20 dense bin 40/60**, Specification Clause 929 (min PSV 65 if trafficked)

Type P3 - Plane & overlay carriageway (Mastertint)

Surface Course: 50mm thick **Mastertint, 14mm SMA**, min. 57 PSV by Tarmac or similar approved

Binder Course: 60mm, **AC 20 dense bin 40/60**, Specification Clause 929 (min PSV 65 if trafficked)



Type C1 - Plane & overlay existing carriageway with Welsh Pennant Setts

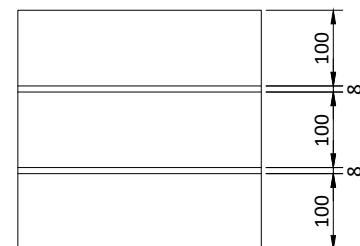
Surface Course: 80mm deep **Welsh Pennant setts** 150-290mm wide x 100mm long, load class 6

Bedding Course: 50mm **lean mix bedding ST1/C7.5P**.
Joints to be 8mm wide max with high strength mortar, standard class 2, 3:1 sand/cement mortar, all joints to be flush

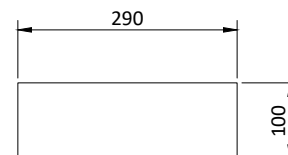
Sub Base: 180mm Type 1 granular material to Specification Clause 803.
Thickness dependant on CBR of sub-grade. (See Table below)

Pennant setts pattern

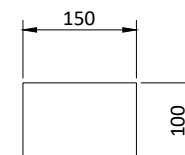
(150-290 random lengths) x 100mm width 80mm thickness
Drawn with 8mm mortar joints



Max. Lengths:



Min. Lengths:



Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. This drawing must be read in conjunction with underground services survey. Depth of existing services must be confirmed prior to commencement of excavation.

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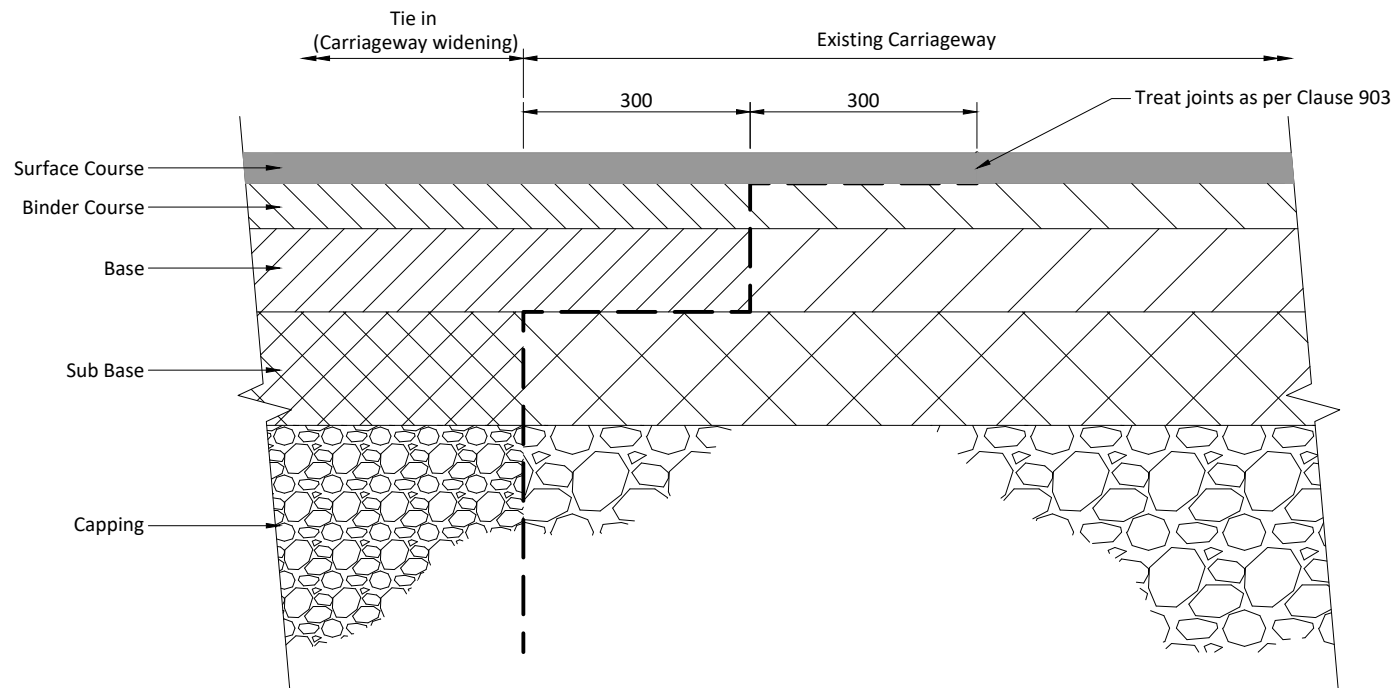
M

A

TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT: Frome Town Council	TITLE: Standard Construction Details Pavement Construction Type C1		SCALE: (A4) N.T.S.	CHECKED: DS	APPROVED: DS
			CAD FILE: STANDARD DETAILS.dwg	DESIGN/DRAWN: PDI	DATE: August 2018
			PROJECT No: IMA-13-146	DRAWING No: IMA/P2/7/002	REV: A
PROJECT: Public Realm Works to Market Place, Frome					



Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. All materials to be as specified on standard detail IMA/P2/7/001



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Carriageway Tie-in Detail

SCALE: (A4)

1:10

CHECKED:

SW

APPROVED:

DS

CAD FILE:

STANDARD DETAILS.dwg

DESIGN/DRAWN:

PDI

DATE:

November 2017

PROJECT No:

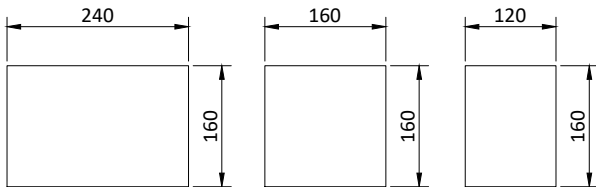
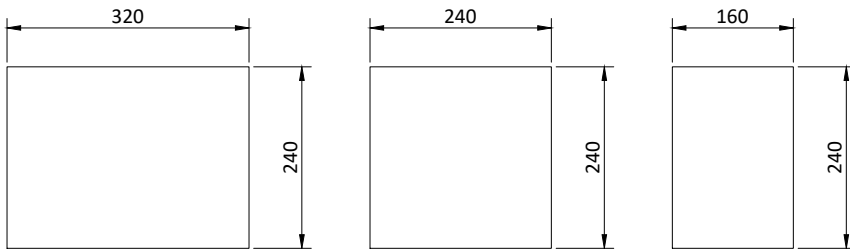
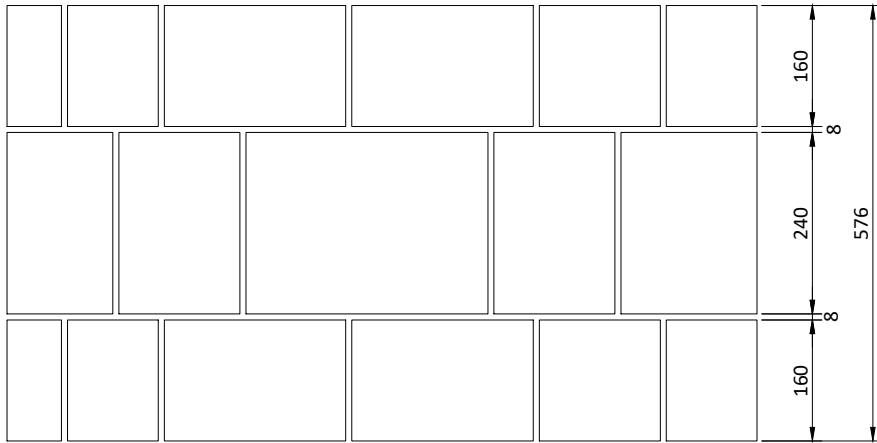
IMA-13-146

DRAWING No:

IMA/P2/7/003

REV:

-



Tegula paving laying pattern
 160-240 (l) x 240mm (w), 60/80mm (d)
 240-320 (l) x 240mm (w), 60/80mm (d)
 drawn with 8mm mortar joints

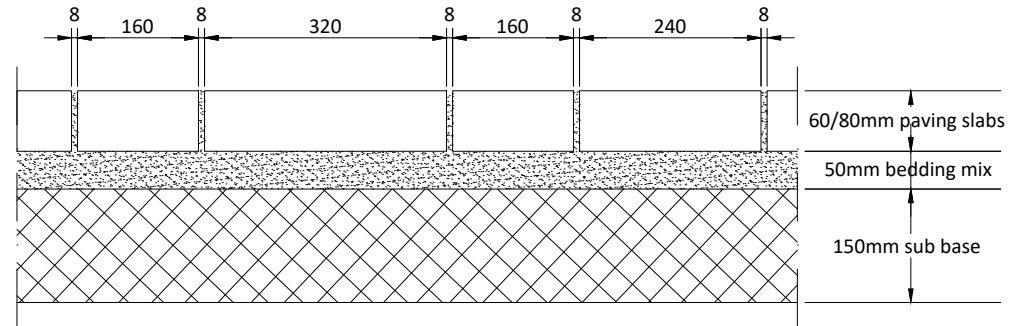
Type D1 Plane & overlay existing footway

Surface Course: 25m AC6 dense surf, 100/150, PSV 45 (6mm nom. size aggregate) spec.cl.912

Regulating material (as required) AC 20 dense bin 40/60 (20mm nom. size aggregate; pen50)

Notes:

- All dimensions are in millimeters unless stated otherwise.
- This drawing must be read in conjunction with underground services survey. Depth of existing services must be confirmed prior to commencement of excavation.
- This drawing must be read in conjunction with pavement construction drawing.



Type A1

Remove & relay existing paving slabs matching existing pattern

Surface Course: 80mm existing paving slabs. Pattern to match existing

Bedding Course: 50mm lean mix bedding ST1/C7.5P. Joints to be 8mm wide max with high strength mortar, standard class 2, 3:1 sand/cement mortar, all joints to be flush

Sub Base: 150mm Type 1 granular material to Specification Clause 803

Type A2

Remove & relay existing paving slabs matching existing pattern

Surface Course: 60mm deep existing paving slabs. Pattern to match existing

Bedding Course: 50mm lean mix bedding ST1/C7.5P. Joints to be 8mm wide max with high strength mortar, standard class 2, 3:1 sand/cement mortar, all joints to be flush

Sub Base: 150mm Type 1 granular material to Specification Clause 803

Type B1

Full depth footway with Tegula Pennant Grey

Surface Course: 60mm deep Tegula paving or similar approved

Bedding Course: 50mm lean mix bedding ST1/C7.5P. Joints to be 8mm wide max with high strength mortar, standard class 2, 3:1 sand/cement mortar, all joints to be flush

Sub Base: 150mm Type 1 granular material to Specification Clause 803

Type B2

Remove existing slabs and lay Tegula Pennant Grey

Surface Course: 60mm deep Tegula paving or similar approved

Bedding Course: 50mm lean mix bedding ST1/C7.5P. Joints to be 8mm wide max with high strength mortar, standard class 2, 3:1 sand/cement mortar, all joints to be flush



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
 BATH BA1 2AB
 T: 01225 444 011
 F: 01225 444 055
 e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
 to Market Place, Frome

TITLE:

Standard Construction Details
 Pavement Construction
 Type A1, A2, B1, B2 and D1

SCALE: (A4)
 1:10

CHECKED:
 DS

APPROVED:
 DS

CAD FILE:
 STANDARD DETAILS.dwg

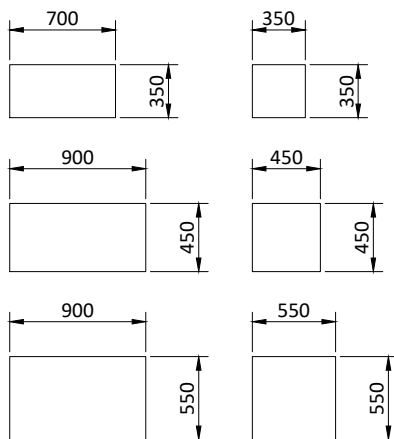
DESIGN/DRAWN:
 PDI

DATE:
 November 2018

PROJECT No:
 IMA-13-146

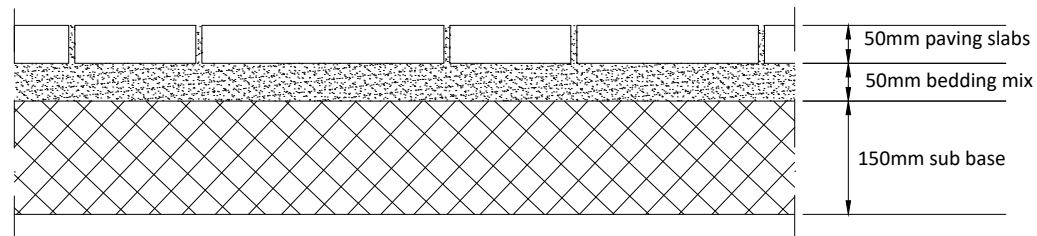
DRAWING No:
 IMA/P2/11/001

REV:
 A



Welsh Pennant laying pattern

350-700mm (l) x 350mm (w), 50mm (d)
 450-900mm (l) x 450mm (w), 50mm (d)
 550-900mm (l) x 550mm (w), 50mm (d)
 drawn with 8mm mortar joints



Type B3 Full depth footway with Welsh Pennant paving

Surface Course: 50mm deep Welsh Pennant slabs

Bedding Course: 50mm lean mix bedding ST1/C7.5P. Joints to be 8mm wide max with high strength mortar, standard class 2, 3:1 sand/cement mortar, all joints to be flush

Sub Base: 150mm Type 1 granular material to Specification Clause 803

Type B4 Remove existing slabs and lay Welsh Pennant

Surface Course: 50mm deep Welsh Pennant slabs

Bedding Course: 50mm lean mix bedding ST1/C7.5P. Joints to be 8mm wide max with high strength mortar, standard class 2, 3:1 sand/cement mortar, all joints to be flush

Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. This drawing must be read in conjunction with underground services survey. Depth of existing services must be confirmed prior to commencement of excavation.
3. This drawing must be read in conjunction with pavement construction drawing.



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
 BATH BA1 2AB
 T: 01225 444 011
 F: 01225 444 055
 e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
 to Market Place, Frome

TITLE:

Standard Construction Details
 Pavement Construction
 Type B3 and B4

SCALE: (A4)
 1:10

CHECKED:
 DS

APPROVED:
 DS

CAD FILE:
 STANDARD DETAILS.dwg

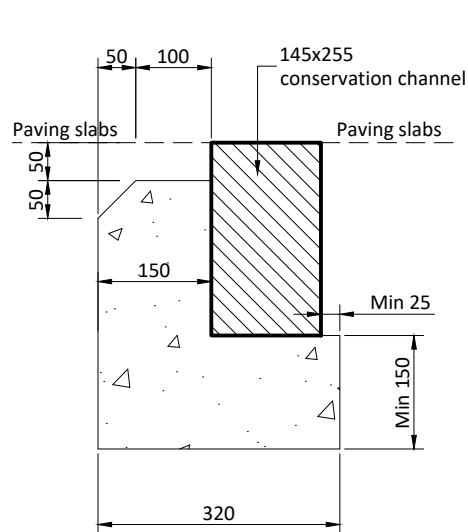
DESIGN/DRAWN:
 PDI

DATE:
 November 2018

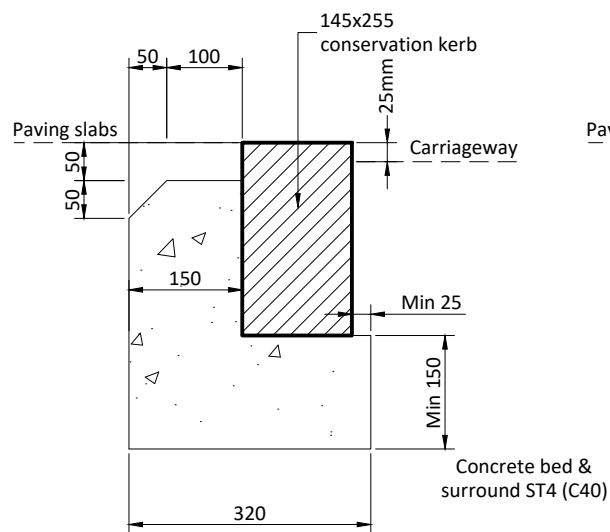
PROJECT No:
 IMA-13-146

DRAWING No:
 IMA/P2/11/002

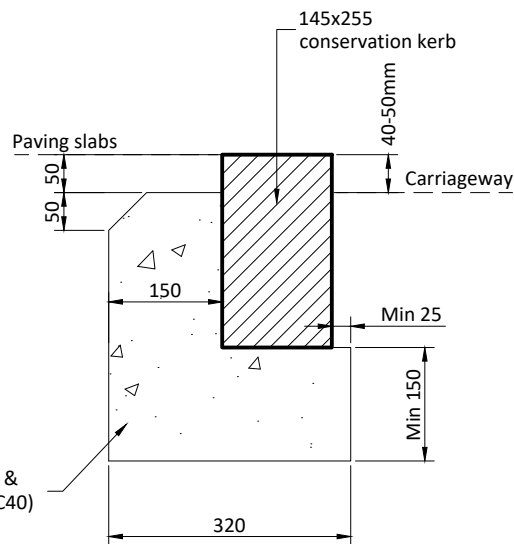
REV:
 A



Conservation kerb (Ck0)
laid flush with paving slabs



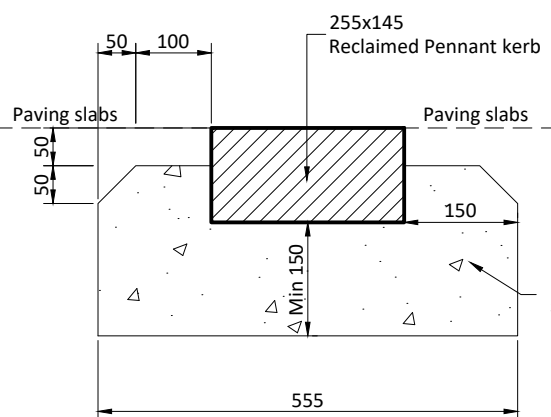
Conservation Kerb (Ck25)



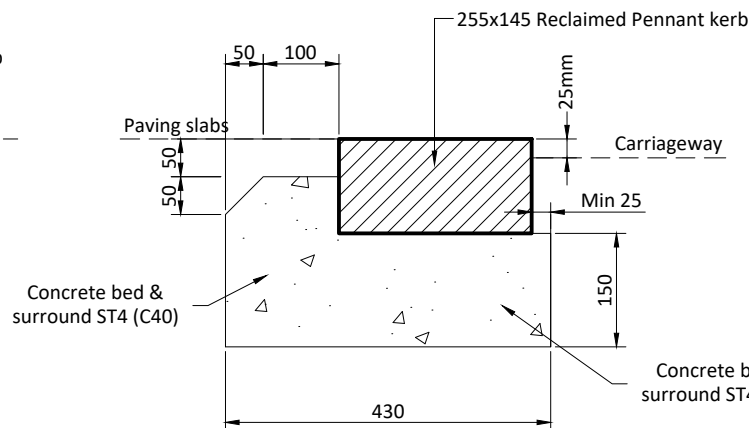
Conservation Kerb (Ck40)

Notes:

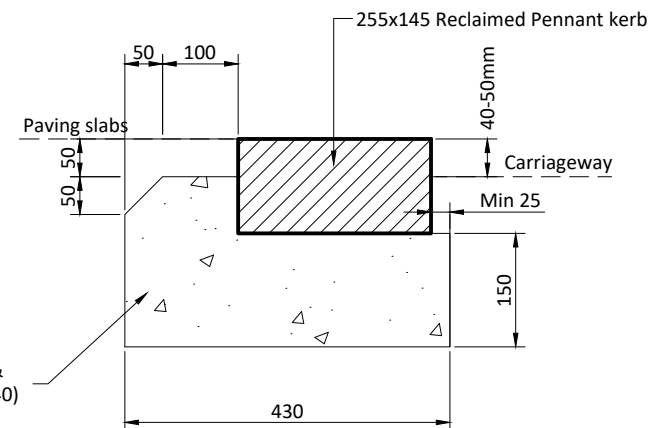
1. All dimensions are in millimeters unless stated otherwise.
2. Kerb upstands shall be as below unless specified otherwise on the drawings:
Driveway / disable bay: 25mm
Loading bay / Paved areas: 0-40mm
3. Full length kerbs shall be used. Cut kerbs shall be at least 500mm long and cut with a saw or disc cutter.
4. Straight kerbs may be used to form Radii greater than 12m. For radii less than 12m, the appropriate radius kerb shall be used.
5. All concrete bed and surround to kerbs shall be ST4.
6. Existing in store Pennant kerbs from Phase 1 Boyle's Cross works to be re-used where suitable i.e. Stony Street, Cork Street.
7. Existing Phase 2 granite kerbs removed as part of works to be re-used where possible.



Reclaimed Pennant kerb (Pk0)
laid flush with paving slabs



Reclaimed Pennant kerb (Pk25)



Reclaimed Pennant kerb (Pk40)



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Conservation and Reclaimed Pennant Kerbs

SCALE: (A4)
1:10

CHECKED:
DS

APPROVED:
DS

CAD FILE:
STANDARD DETAILS.dwg

DESIGN/DRAWN:
PDI

DATE:
November 2017

PROJECT No:
IMA-13-146

DRAWING No:
IMA/P2/11/003

REV:
A

Notes:

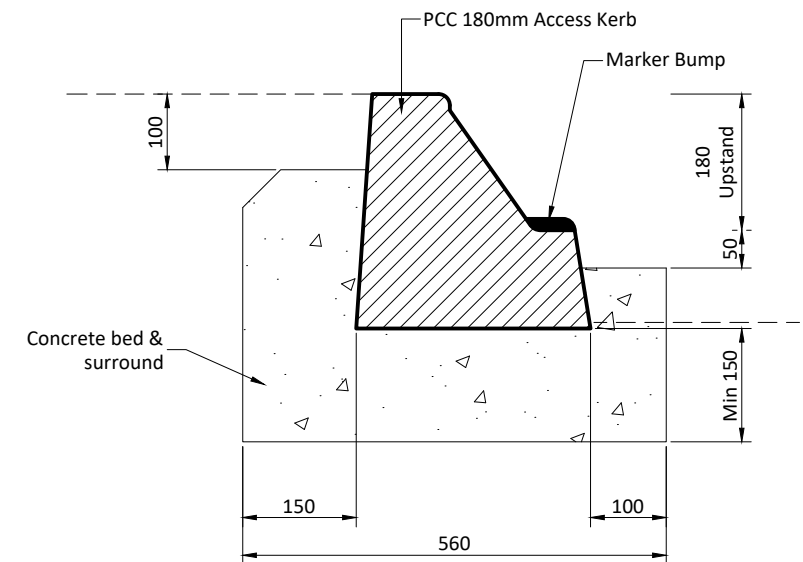
1. All dimensions are in millimeters unless stated otherwise.
2. All concrete bed and surround to kerbs shall be ST1.
3. Access Kerbs shall be 180mm Charcon Access kerb or similar approved.
4. All access kerbs shall be supplied with marker bump.
5. The full length of Access Kerb to be installed shall be as shown on the kerbing layout drawing.

Charcon 'Access Kerb' or similar approved. A minimum of 3 No full height kerbs will be required for all low level bus boarders, however additional kerbs maybe required to provide a sufficient platform for access to the buses. Number and extents of kerbing is to be agreed with the Engineer prior to construction.

180mm to 125mm transition unit, 1000 long

PCC HB2 kerb, 125mm upstand, as standard detail

180mm to 125mm transition unit, 1000 long



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Bus Stop Kerbs

SCALE: (A4)

1:10

CHECKED:

DS

APPROVED:

DS

CAD FILE:

STANDARD DETAILS.dwg

DESIGN/DRAWN:

PDI

DATE:

November 2017

PROJECT No:

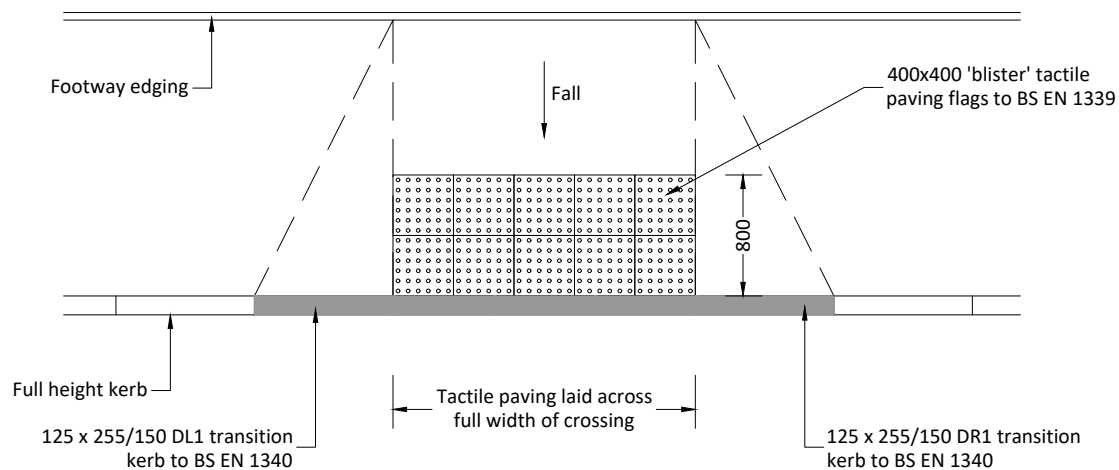
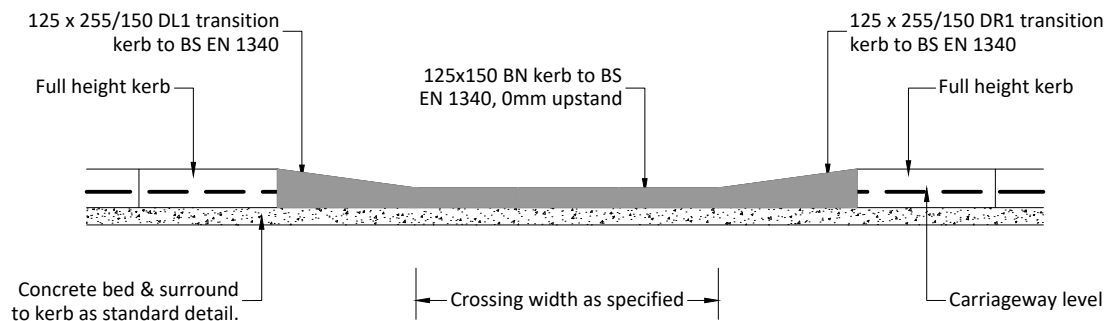
IMA-13-146

DRAWING No:

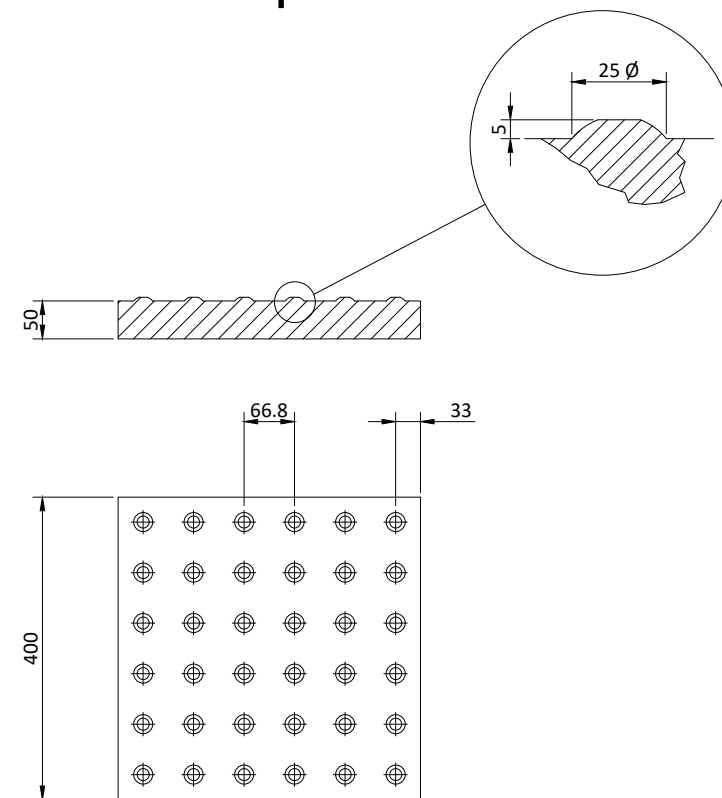
IMA/P2/11/004

REV:

-



Typical Drop Kerb - Plan
Scale 1:50



Blister Tactile Paving Flag
Scale 1:10

Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. Tactile paving to be bedded on 35mm class (iii) mortar to clause 2404.
3. Unless stated otherwise, all blister paving shall be Charcoal grey colour.



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Dropped Pedestrian Crossing - Uncontrolled

SCALE: (A4)
As Shown

CHECKED:
DS

APPROVED:
DS

CAD FILE:
STANDARD DETAILS.dwg

DESIGN/DRAWN:
PDI

DATE:
November 2017

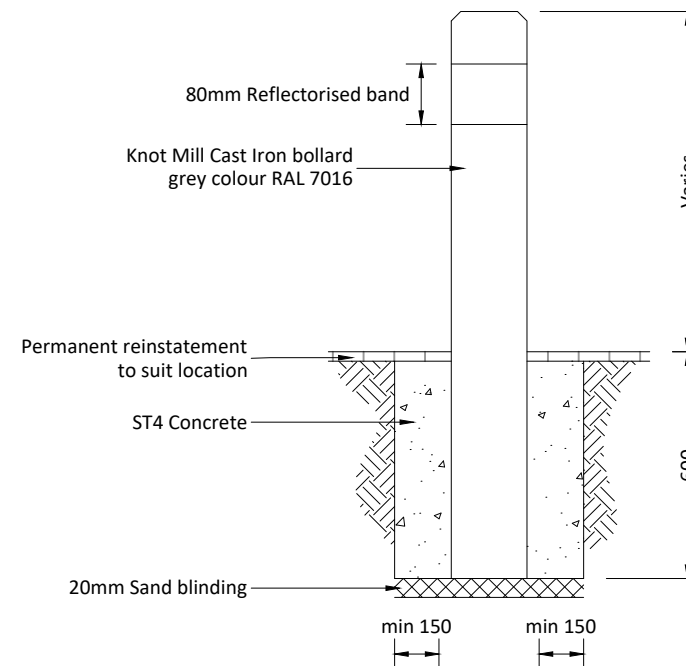
PROJECT No:
IMA-13-146

DRAWING No:
IMA/P2/11/005

REV:
-

Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. Refer to drawing to identify location of Anti-Ram bollards.



Permanent Bollard

Scale 1:20



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Bollards foundation and socket details
"Knot Mill Cast Iron" grey colour (RAL 7016)

SCALE: (A4)
NTS

CHECKED:
DS

APPROVED:
DS

CAD FILE:
STANDARD DETAILS.dwg

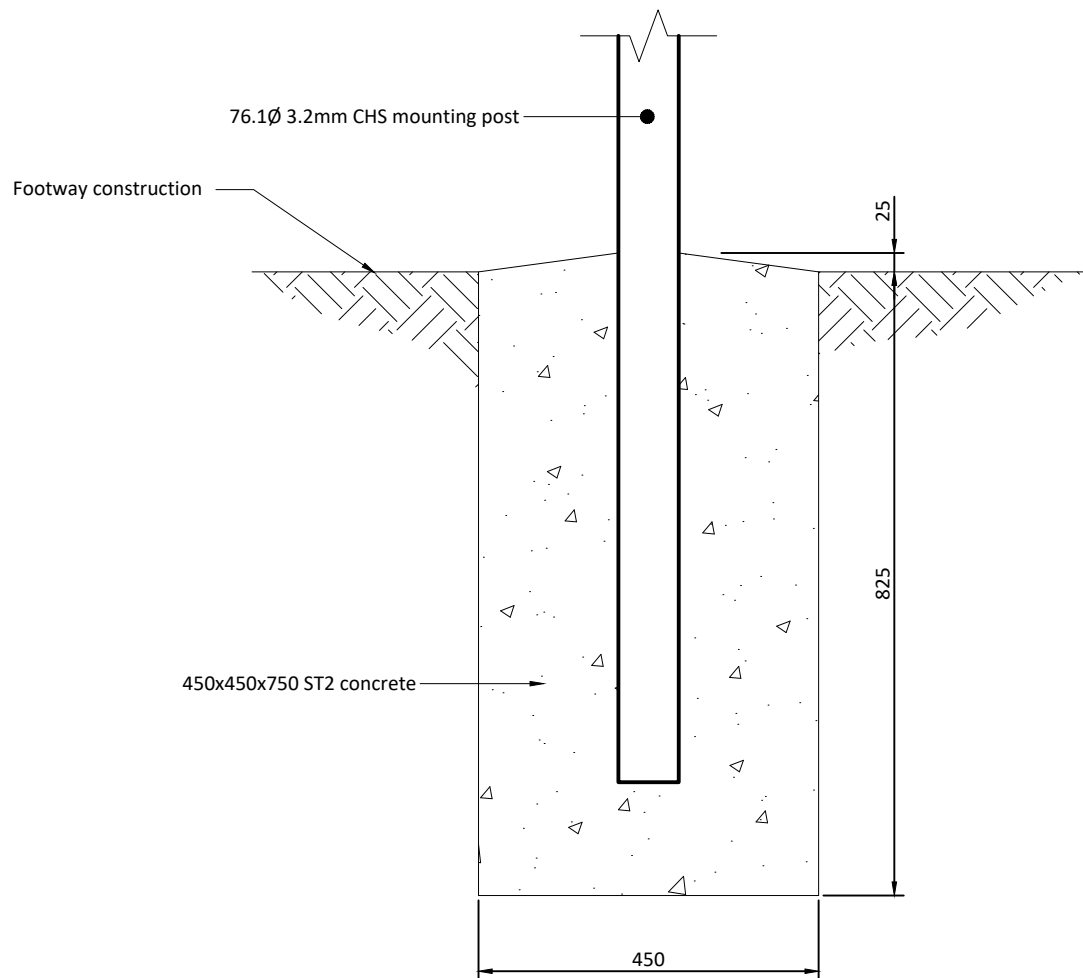
DESIGN/DRAWN:
PDI

DATE:
November 2017

PROJECT No:
IMA-13-146

DRAWING No:
IMA/P2/11/006

REV:
B



Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. To protect the post finish, a nylon sling shall be used to erect the post.



TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
F: 01225 444 055
e: bath@ima-tp.com

CLIENT:

Frome Town Council

PROJECT:

Public Realm Works
to Market Place, Frome

TITLE:

Standard Construction Details
Signage post detail

SCALE: (A4)
NTS

CHECKED:
DS

APPROVED:
DS

CAD FILE:
STANDARD DETAILS.dwg

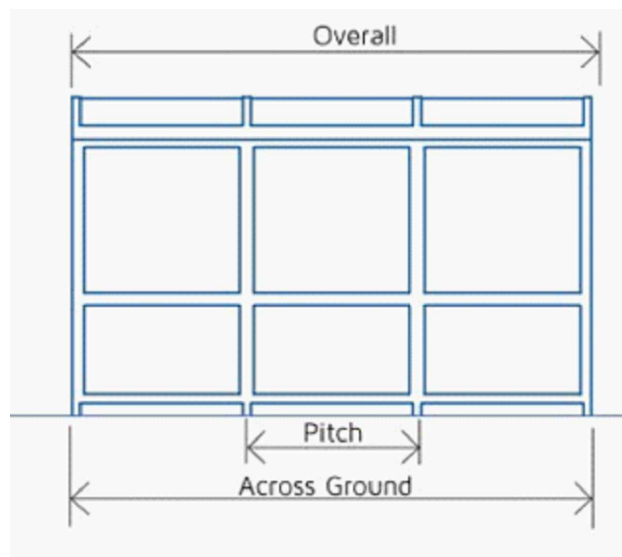
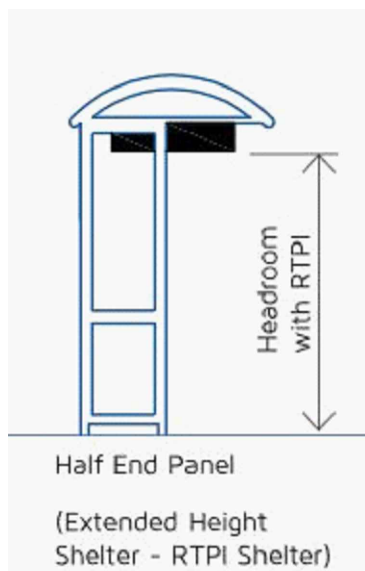
DESIGN/DRAWN:
PDI

DATE:
November 2017

PROJECT No:
IMA-13-146

DRAWING No:
IMA/P2/11/007

REV:
A



Bus Shelter Design

We propose a cantilever format for the new bus shelters at the Market Place and have opted for the Arun Bus Shelter design provided by Queensbury Shelters.

The design includes a barrel vault roof with half end panels, and extra height to accommodate a Real Time Information display.

The bus shelters will be 3 bays wide - 3m x 1.38m (3 bay) - made of 8mm clear toughened glass panels, with 4mm bronze polycarbonate for the barrel vault roof.

The glazing system is constructed using extruded aluminium with a mid-rail, which will be powder coated to match the colour (RAL 7016) of the new bollards on Boyles Cross.

The shelters will include an aluminium perch seat, flag bracket and infopost unit.

Above picture for indicative purpose only