## Book 500 - Amendments

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<th>Version</th>
<th>Date</th>
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<td>V1.0</td>
<td>29/06/2018</td>
<td>Book 500 Issued For Use</td>
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<tr>
<td>V1.1</td>
<td>28/11/2018</td>
<td>Book 500 Backdrafted &amp; Re-issued For Use</td>
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<tr>
<td>V1.2</td>
<td>22/01/2019</td>
<td>Book 500 500.01, 507.01, 507.2 Revised, 501.09 &amp; 501.10 Added.</td>
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<td>V2.0</td>
<td>30/01/2019</td>
<td>Book 500 Naming Revised &amp; Re-issued For Use.</td>
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<td>V2.1</td>
<td>30/04/2019</td>
<td>Book 500 505.01 &amp; 505.02 revised. 505.06 Added.</td>
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Foreword

The City of Perth has adopted an approach for street enhancement projects to introduce more resilient granite kerbs to city centre streets; maintaining exposed aggregate concrete footpaths for the majority of situations; and identifying high profile locations for granite footpaths. This approach provides for a staged transition towards full granite footpaths in the future.

The type of furniture to be installed for street enhancement projects varies depending on the level of amenity proposed. The furniture palettes for the different levels of amenity is addressed in Book 300 - Standard Footpath Design and Installation Details.

The various levels of amenity call for curious styles of furniture. This Book covers all standard pieces of furniture and installation details, regardless of the level of amenity adopted for the street enhancement.

All footing & Bolting systems must be approved & signed off by an experienced & NER registered structural engineer.

For further information regarding footpath design and installation details refer:

Book 300 - Standard Footpath Design and Installation Details
Seats should be located to ensure that the fixing down bolts are 50mm minimum from joints in the paving.
Seats should be positioned either parallel or at right angles to the street axis. In addition, seats should be located:
* where they are needed;
* where they do not become obstructive;
* in the shade;
* to create a sense of safety;
* to provide a view towards activities; and
* a minimum of 600mm from the road.
Seats should be located to ensure that the fixing down bolts are 50mm minimum from joints in the paving.

Seats should be positioned either parallel or at right angles to the street axis. In addition, seats should be located:

* where they are needed;
* where they do not become obstructive;
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* where they do not become obstructive;
* in the shade;
* to create a sense of safety;
* to provide a view towards activities; and
* a minimum of 600mm from the road.
ALUMINUM TABLE POWDER COATED IN DULUX SILVER KINETIC PEARL WITH BLACKBUTT TIMBER BATTENS.

ALUMINUM SEAT POWDER COATED IN DULUX SILVER KINETIC PEARL WITH BLACKBUTT TIMBER BATTENS.

CONCRETE FOOTING & ANCHORING SYSTEMS TO BE CONFIRMED BY STRUCTURAL ENGINEER.
ALUMINUM TABLE POWDER COATED IN DULUX SILVER KINETIC PEARL WITH BLACKBUTT TIMBER BATTENS.

ALUMINUM SEAT POWDER COATED IN DULUX SILVER KINETIC PEARL WITH BLACKBUTT TIMBER BATTENS.

CONCRETE FOOTING & ANCHORING SYSTEMS TO BE CONFIRMED BY STRUCTURAL ENGINEER.
Design and Construction Note

502.01
Litter Bins
Litter Bin - Placement

Reviewed: 30/04/2019

KERB

CARRIAGEWAY

600 MIN

KERB SIDE PLACEMENT

PLACEMENT IN PEDESTRIAN MALLS

TREE GRATE

300 MIN

300 MIN

300 MIN

300 MIN

BOOK 500 - Issued For Use
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NOTE:
If the preferred minimum clearance from face of kerb cannot be achieved, contact the Principal Designer, Co-ordination & Design Unit, City of Perth for guidance.

BIKE RACKS PERPENDICULAR TO KERB

BIKE RACKS 60° ANGLE TO KERB

BIKE RACKS PARALLEL TO KERB
**Design and Construction Note**

**502.03**

**Litter Bins**

**80 Litre Litter Bin**

**General Waste**

Reviewed: 30/04/2019

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**City of Perth**

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**PLAN**

- Door Open
- Stainless Steel Door

**SIDE ELEVATION**

- 50 Litre Wheeled Bin
- Stainless Steel Bin Surround
- 25MPa Concrete Footing with 4 Off Ø10x80mm Hilti HRD-UGS Anchor

**FRONT ELEVATION**

- Adjustable Thread
- SL72 with 50mm Bottom Cover
**Design and Construction Note**

502.04

Litter Bins

80 Litre Litter Bin

Recycle Waste

Reviewed: 30/04/2019

---

**Side Elevation**

- **STAINLESS STEEL BIN SURROUND**
- **80 LITRE WHEELED BIN**
- **STAINLESS STEEL DOOR**
- **ADJUSTABLE THREAD**
- **SL72 WITH 50mm BOTTOM COVER.**
- **25MPA CONCRETE FOOTING WITH 4 OFF B10x80mm HILTI HRD-UGS ANCHOR**

---

**Front Elevation**

- **STAINLESS STEEL DOOR**
- **DOOR OPEN**

---

**Plan**

- **502.04 Litter Bins**
- **Recycle Waste**

---

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Design and Construction Note
502.05
Litter Bins
120 Litre Litter Bin
General Waste
Reviewed: 30/04/2019

PLAN

DOOR OPEN

STAINLESS STEEL DOOR

SMOKERS BUTT BIN INCORPORATED INTO THE LID WHERE REQUIRED.

120 LITRE WHEELED BIN

STAINLESS STEEL BIN SURROUND

ADJUSTABLE THREAD

25MPA CONCRETE FOOTING WITH 4 OFF Ø10x80mm HILTI HRD-UGS ANCHOR

SL72 WITH 50mm BOTTOM COVER.
120 Litre Litter Bin
Recycle Waste

STAINLESS STEEL BIN SURROUND

25MPA CONCRETE FOOTING WITH 4 OFF Ø10x80mm HILTI HRD-UGS ANCHOR

SL72 WITH 50mm BOTTOM COVER.

DOOR OPEN

DOOR

120 LITRE WHEELED BIN

ADJUSTABLE THREAD
Design and Construction Note

502.07

Litter Bins

240 Litre Litter Bin

General Waste

Reviewed: 30/04/2019

STAINLESS STEEL DOOR

DOOR OPEN

PLAN

STAINLESS STEEL BIN SURROUND

240 LITRE WHEELED BIN

ADJUSTABLE THREAD

25MPA CONCRETE FOOTING WITH 4 OFF Ø10x80mm HILTI HRD-UGS ANCHOR

5L72 WITH 50mm BOTTOM COVER.

GENERAL WASTE

Book 500 - Issued For Use

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240 Litre Litter Bin
Recycle Waste

STAINLESS STEEL BIN SURROUND
240 LITRE WHEELED BIN
25MPA CONCRETE FOOTING WITH 4 Ø10x80mm HILTI HRD-UGS ANCHOR
ADJUSTABLE THREAD
25MPA CONCRETE FOOTING WITH 4 Ø10x80mm HILTI HRD-UGS ANCHOR

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ENWARE TYPE 61
DRINKING FOUNTAIN
TAP/BUBBLER ASSY.
BACKFLOW CHECK VALVE REQUIRED.

GALVANISED RAG BOLTS CONCRETE

CONCRETE DRAIN STORM WATER Ø50

STAINLESS STEEL FABRICATED DRINKING FOUNTAIN

STAINLESS STEEL GRATE

PAVING SAND BED

GATE VALVE PLACED ADJACENT TO DRINK FOUNTAIN FOR SHUTTING OFF WATER SUPPLY WITH 580mm SQ CAST IRON PIT COVER

WATER SUPPLY LINE

STORM WATER Ø50

GALVANISED RAG BOLTS CONCRETE

1.2m LONG 0.8m WIDE & 0.6m DEEP 25MPA CONCRETE FOOTING

CITY OF PERTH PREFERRED FABRICATION
Design and Construction Note

503.02

Drinking Fountains

Standard Drinking Fountain

with Bottle Fill

Reviewed: 30/04/2019

CITY OF PERTH PREFERRED FABRICATION
STAINLESS STEEL TIP
DOG BOWL ASSEMBLY
ENWARE TYPE 61
DRINKING FOUNTAIN
TAP/BUBBLER ASSY.
BACKFLOW CHECK
VALVE REQUIRED.

GALVANISED RAG
BOLTS CONCRETE
CONCRETE DRAIN
STORM WATER Ø50

700
860

STAINLESS STEEL
FABRICATED DRINKING
FOUNTAIN

SAND BED
PAVING

STAINLESS STEEL GRATE

STAINLESS STEEL DRAIN
SURROUND WELDED TO
FOUNTAIN BODY

CONCRETE DRAIN
STORM WATER Ø50
GALVANISED RAG
BOLTS CONCRETE

1.2m LONG 0.8m
WIDE & 0.6m DEEP
25MPA CONCRETE
FOOTING

GATE VALVE
PLACED ADJACENT
TO DRINK FOUNTAIN
FOR SHUTTING OFF
WATER SUPPLY
WITH 580mm SQ
CAST IRON PIT
COVER

WATER
SUPPLY LINE

CITY OF PERTH PREFERRED FABRICATION
Removable Oval Bollard

8mm CAST ALUMINUM BODY
POWDER COATED IN DULUX
SILVER PEWTER PEARL.

GALVANIZED STEEL
SOCKET

25MPA CONCRETE
FOOTING 1500 DEEP x Ø500 FOR VEHICLE
IMPACT 30KN.
700 DEEP X Ø500 FOR HUMAN IMPACT OF
1.5KN
Design and Construction Note
504.02
Bollards and Barriers
Oval Bollard

Reviewed: 30/04/2019

8mm CAST ALUMINUM BODY
POWDER COATED IN DULUX
SILVER PEWTER PEARL.

25MPA CONCRETE
FOOTING 1500 DEEP x
Ø500 FOR VEHICLE
IMPACT 30KN.
700 DEEP x Ø500 FOR
HUMAN IMPACT OF
1.5KN

8mm CAST ALUMINUM BODY
POWDER COATED IN DULUX
SILVER PEWTER PEARL.

25MPA CONCRETE
FOOTING 1500 DEEP x
Ø500 FOR VEHICLE
IMPACT 30KN.
700 DEEP x Ø500 FOR
HUMAN IMPACT OF
1.5KN

FRONT ELEVATION  
SIDE ELEVATION
8mm CAST ALUMINUM BODY POWDER COATED IN DULUX SILVER PEWTER PEARL.

GALVANIZED STEEL SOCKET

25MPA CONCRETE FOOTING 700 DEEP x Ø400 FOR HUMAN IMPACT OF 1.5KN

FRONT ELEVATION

SIDE ELEVATION
700 Ø400 CONCRETE FOOTING 700 DEEP x Ø400 FOR HUMAN IMPACT OF 1.5KN

Ø8 ALUMINIUM ROD WELDED

8mm CAST ALUMINUM BODY POWDER COATED IN DULUX SILVER PEWTER PEARL.

25MPA CONCRETE FOOTING 700 DEEP x Ø400 FOR HUMAN IMPACT OF 1.5KN

ELEVATION
Standard Bike Rack

Material: 40NB(48.3) x 3.2mm MD pipe
Finish: Stainless steel - 316
Grade 4 polished finish.

Bike racks are provided to:
* maximise security for bicycles in convenient locations;
* minimise nuisance from bicycles left in undesirable locations; and
* encourage people to use bicycles as an alternative mode of transport.

Design and Construction Note
505.01
Bicycle Accessories
Stainless Steel Bicycle Rack

Reviewed: 30/04/2019
NOTE:
If the preferred minimum clearance from face of kerb cannot be achieved, contact the Principal Designer, Co-ordination & Design Unit, City of Perth for guidance.

BIKE RACKS PERPENDICULAR TO KERB

BIKE RACKS 60° ANGLE TO KERB

BIKE RACKS PARALLEL TO KERB
Stainless Steel Bicycle Chicane

Design and Construction Note

505.03
Bicycle Accessories

Reviewed: 30/04/2019

For details of reflective tape see page 2.

40NB (48.3mm) x 3.2mm MD PIPE
FINISH: STAINLESS STEEL - 316 GRADE 4 POLISHED FINISH

100 PCD 3 x Ø12 DYNABOLTS AS SHOWN

400x400x200mm 25MPA CONCRETE FOOTING

BIKE CHICANES ARE PROVIDED TO:
- DECREASE THE SPEED OF CYCLISTS
- SIGNIFY PEDESTRIAN PRIORIT ZONES

TYPICAL CHICANE LAYOUT
Design and Construction Note

505.04
Bicycle Accessories

Stainless Steel Bicycle Chicane

Reflective tape to be as AS 1743 Class 1 (or equivalent) placed centrally.

Signage panel (not shown)

Reflective white tape to be painted black.

Typical 'top' tab detail:
- 8mm DIA hole
- 25mm of tab to be painted black

Typical 'side' tab detail:
- 8mm DIA hole
- 20mm of tab to be painted black

Note: Tabs are to be 3mm thick stainless steel fully welded to racks.

Reviewed: 30/04/2019

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NOTES:

· SIGN PLATE TO BE LASER-CUT 1MM STAINLESS STEEL PLATE WITH GRAPHIC STICKER INSTALLED ON BOTH SIDES.
· A SCHEDULE AND DWG / PDF FILE (SCALE 1:1) OF EACH GRAPHIC IS TO BE SUPPLIED BY THE CITY OF PERTH UPON COMMISSIONING OF THE WORK. THIS WILL INCLUDE THE SETOUT OF INDIVIDUAL STICKERS TO ENSURE THEY ARE POSITIONED INSIDE THE CIRCLE CORRECTLY.
· TABS MAY REQUIRE TO BE VISIBLE ON A SPECIFIC SIDE OF THE SIGNAGE PANEL TO BE INSTRUCTED BY THE CITY OF PERTH PROJECT MANAGER.

SIGNAGE REFLECTIVE COLOURS:

- **ALL WHITE AREAS (TEXT ETC):**
  AS 1743 CLASS 1 OR EQUIVALENT REFLECTIVE WHITE STICKER

- **ALL BLACK AREAS (SYMBOLS ETC):**
  ELECTROCUT FILM
  BLACK OPAQUE STICKER

- **RED AREA (LOVE HEART):**
  ELECTROCUT FILM
  RED OPAQUE STICKER

STICKER NOTE:

- SIGNAGE GRAPHIC STICKERS TO BE DONE IN SEVERAL LAYERS (BOTTOM LAYER TO BE WHITE, SECOND LAYER IS TO BE LASER CUT BLACK SO THAT VOIDS SHOW TEXT IN WHITE, BLACK SYMBOLS AND RED HEART TO BE INSTALLED ON TOP OF WHITE LAYER.)
Standard Bike Rack

Material: 40NB(48.3) x 3.2mm MD pipe
Finish: Stainless steel - 316
Grade 4 polished finish.

Bike racks are provided to:
* maximise security for bicycles in convenient locations;
* minimise nuisance from bicycles left in undesirable locations; and
* encourage people to use bicycles as an alternative mode of transport.

Design and Construction Note
505.06
Bicycle Accessories
Stainless Steel Bicycle Rack
in Granite Paving
Reviewed: 30/04/2019
**GENERAL SPECIFICATIONS**

1. **BODY FACE**
   2.5mm STAINLESS STEEL.
   GRADE: 316 / 2B FINISH.
   PRIME SURFACE BY SAND BLASTING AND FINISH SURFACE WITH 20.40 GARNET ELECTRO-POLISH.

2. **TRAY SUPPORT**
   50x5mm STAINLESS STEEL. GRADE: 316
   FINISH: SAND BLASTED
   4x LENGTHS OF 564.5mm

3. **INTERNAL LIFTING POINTS**
   LIFTING POINTS 6.3mm STAINLESS STEEL RODS.
   GRADE: 316. 20.40 GARNET ELECTRO-POLISHED FINISH

4. **FEET PLATES**
   75x75x5mm STAINLESS STEEL. GRADE: 316
   20.40 GARNET ELECTRO-POLISHED FINISH
   13mm THREADED STAINLESS STEEL NUT
   12mm THREADED STAINLESS STEEL GLIDE
   8mm HOLE FOR DYNA-BOLT

5. **GALVANISED TRAY**
   0.9mm GALVANISED COAT STEEL GRADE: C250

---

**ADJUSTABLE FOOTING ATTACHMENT**

3. **INTERNAL LIFTING POINTS TO ALL FOUR CORNERS**.
   LIFTING POINTS TO BE CONSTRUCTED FROM 6.3mmØ S/S ROD

5. **GALVANISED TRAY TO FIT INSIDE INTERNAL DIMENSIONS OF TOP OF THE PLANTERBOX - FOR REMOVAL IF NECESSARY**

2. **TRAY SUPPORT 50x5mm S/S WELDED TO CORNER ANGLE TO SUPPORT TRAY**

40x3mm S/S ANGLE TO SECURE TRAY SUPPORTS

5mm S/S 316 PLATE WELDED TO TOP OF LEG

15mm S/S NUT WELDED TO 5mm S/S PLATE

5mm S/S 316 PLATE WELDED TO LEG WITH DRILLED HOLE FOR ATTACHMENT OF ADJUSTABLE FOOT

---

**LEG DETAIL**

5mm S/S 316 PLATE WELDED TO TOP OF LEG - SEE LEG DETAIL

ADJUSTABLE SCREW ON PADDED RUBBER FOOT 10mm THICK

8mm HOLE FOR DYNA-BOLT

LEG: 75x75x5 S/S ANGLE WELDED TO FLAT ANGLE

AT BASE OF PLANTERBOX

S/S NUT WELDED TO S/S PLATE OVER 13mm HOLE FOR ADJUSTABLE FOOT

---

**GENERAL SPECIFICATIONS CONT'D**

4. **FEET PLATES**
   5mm S/S 316 PLATE WELDED TO LEG AND TOP OF ANGLE WITH 13mm HOLES DRILLED FOR ATTACHMENT OF ADJUSTABLE FOOT

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**INDEX**

1. **BODY FACE**
   PERFORATED FINISH AS PER GENERAL SPECIFICATIONS. SEE PAGE 2 FOR PERFORATION PATTERN.
**Design and Construction Note**

**506.02**

**Planter Boxes**

**Stainless Steel Rectangular Planter**

Reviewed: 30/04/2019

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**PATTERN DIMENSIONS**

**PERFORATED BODY**

1. **BODY FACE**
   - 2.5mm STAINLESS STEEL.
   - GRADE: 316 / 2B FINISH.
   - PRIME SURFACE BY SAND BLASTING AND FINISH SURFACE WITH 20.40 GARNET ELECTRO-POLISH.

**PLANTER BOX**

**SIDE ELEVATION**

7x26mm VERTICAL PERFORATIONS

PATTERN SETOUT TO CENTRE-LINES

**FRONT ELEVATION**

7x26mm VERTICAL PERFORATIONS

PATTERN SETOUT TO CENTRE-LINES

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Parking Signs
The objective of this design is to reduce the visual clutter of Parking Signs.

This should be achieved by:
* rationalising the location and types of parking to minimise the number of signs required;
* utilising existing sign poles to fix parking signs to;
* utilising existing structures to fix parking signs to, i.e. bollards, verandah posts, buildings etc;
* minimising size of signs.

All proposed parking designs should be developed in liaison with the City of Perth’s Parking Department and Australian Standard AS 1742.11-1989.
Design and Construction Note
507.02
Parking Devices
Standard Parking Sign and Pole

Reviewed: 30/04/2019

- 10mm HOLE (TYPICAL)
- ENSURE POLE IS VERTICAL TO ± 10mm AT TOP
- STANDARD FINISH: UNPAINTED GALVANISED OR UNLESS OTHERWISE DIRECTED.
- 50 NOM. BORE x 2.3mm THICK
- IN-SITU CONCRETE TO MATCH EXISTING PAVERS
- EXISTING PAVERS
- CONCRETE 25 MPa @ 28 DAYS 14mm AGGREGATE
- 400² x 500D

This document has been prepared by The City of Perth and is subject to change. It is the responsibility of the user to ensure that this Design and Construction Note has no further revisions by checking at https://www.perth.wa.gov.au
Installation and orientation:
Ticket Machines must be installed in accordance with manufacturer’s specifications. The supplied mounting frames should be set into concrete to obtain a structurally safe footing. A minimum of 25MPA fast curing concrete with no reinforcement is preferred. See attachments for foundation details.

Depending on the required shape of the foundation, the concrete mass dimensions should follow the manufacturer’s specifications.

Experienced professional staff shall carry out the concrete foundation works.

CPP Technical Services staff to mark location and orientation of the On Street Ticket Machine in accordance with the agreed placement strategy.

CPP Technical Services assign the machine ID and position on all info to Assett Management & Map Info.

Orientation of the Ticket Machines should follow the following principles:
- if placed on a footpath or walkway, the Ticket machine must be placed with a minimum of 600mm from the kerbing edge.
- must not be placed close to trees, street lights poles, street furniture and other obstructions.
- Ticket Machine should be placed with machine front facing on coming traffic, the footpath or walkway if the footpath width is more than 2 meter wide.
- should have the most favourable exposure to the average all season sun orientation for optimal performance of the solar panel.
- should not be placed near garden beds where exposure to reticulation overspray is expected.

Ticket Machine to be equipped with a two sided, white on blue 'Ticket' pole sign. Ticket signage to face pedestrian traffic directions on both sides.
1. Installations
All of the installation varieties are approved, but case 1 is preferred, as being the cheapest and most time effective.

<table>
<thead>
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<th>Footing Type</th>
<th>Anchor Type</th>
</tr>
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<tbody>
<tr>
<td>Case 1 (Preferred)</td>
<td>600mm diam x 600 deep unreinforced concrete pad footing</td>
</tr>
<tr>
<td></td>
<td>Hilti HIT-HY 150 M16 Epoxy sleeve anchor - Stainless steel</td>
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<tr>
<td>Case 2</td>
<td>600mm diam x 600 deep unreinforced concrete pad footing</td>
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<td></td>
<td>B30-0000-0169 Mounting frame PND</td>
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<td>Case 3</td>
<td>600mm diam x 600 deep unreinforced concrete pad footing</td>
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<td></td>
<td>Hilti HIT-HY 150 M16 Epoxy sleeve anchor - Stainless steel</td>
</tr>
<tr>
<td>Case 4</td>
<td>600mm diam x 600 deep unreinforced concrete pad footing</td>
</tr>
<tr>
<td></td>
<td>B30-0000-0169 Mounting frame PND</td>
</tr>
<tr>
<td>Case 5 (See section 5)</td>
<td>1.2m x 1.2m 75mm thick pavement slab (existing pavement)</td>
</tr>
<tr>
<td></td>
<td>Hilti HIT-HY 150 M16 Epoxy sleeve anchor - Stainless steel</td>
</tr>
</tbody>
</table>

Materials:
- Concrete: minimum 25MPa unreinforced, fast curing (1-2 hours) preferred.
- 830-0000-0169 Mounting frame PND:
- Hilti HIT-HY 150 M16 (5.8” x 6”) Epoxy sleeve anchor - Stainless steel

1. Preparation
Mark and cut the desired shape in the pavement, at the location of the meter. (Round diam 600mm or square 600mm x 600mm). It is not advised to cut any closer than 100mm from the kerb.
The depth of the hole for the concrete should be 600mm.

In rare cases, where circumstance does not allow a depth of 400mm (e.g. because of drains or cables), depth can be reduced to 400mm, providing the widths are increased to 800mm)
Bus shelters should be located where there is a need for shelter from sun, rain and/or wind, for passengers waiting for or alighting from buses. They should be positioned:

* a minimum of 600mm from overhang to the road edge;
* to avoid damage to existing services and/or tree roots;
* to avoid affecting ‘line of sight’ for vehicles entering traffic from adjacent cross-overs (where applicable);

The standard City of Perth Bus Shelter is the ‘Colonial’ designed and supplied by: Adshel Street Furniture
ste 7, 1050 Hay Street
West Perth, WA 6005
PH: (08) 9237 4444

Copyright of this design is the property of Adshel and shall not be reproduced in any form without prior written consent.
Bus shelters should be located where there is a need for shelter from sun, rain and/or wind, for passengers waiting for or alighting from buses. They should be positioned:

* a minimum of 600mm from overhang to the road edge;
* to avoid damage to existing services and/or tree roots;
* to avoid affecting 'line of sight' for vehicles entering traffic from adjacent cross-overs (where applicable);
* street furniture should be placed no closer than 1600mm from the shelter structure and the bus information board;
* refer to City of Perth Design and Construction Notes Book 100 drawing 101.04, for preferred kerb height detail.

**Note**
Note

* Street furniture should be placed no closer than 1200mm from the bus information board.
* Refer to City of Perth Design and Construction Notes Book 100 drawing 101.04, for preferred kerb height detail.
NOTE
All footings to be designed & signed off by Structural engineer.
AGGREGATE MIX:
- 40kg 7mm BLUE METAL
- 10KG BRICKLAYER'S SAND
- 20KG GREY CEMENT

MAKES UP 0.1 CUBIC METRES

MIX NEEDS TO BE WASHED TO PRODUCE EXPOSED AGGREGATE FINISH
Design and Construction Note
509.02
Wayfinding Devices
Small Sign in Park or Verge

Reviewed: 30/04/2019

AGGREGATE MIX:
40kg 7mm BLUE METAL
10KG BRICKLAYERS SAND
20KG GREY CEMENT

MIX NEEDS TO BE WASHED TO
PRODUCE EXPOSED AGGREGATE FINISH

AGGREGATE MIX:
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MIX NEEDS TO BE WASHED TO
PRODUCE EXPOSED AGGREGATE FINISH
Design and Construction Note

Small Sign in Park or Verge

Plan

- Footpath: 1450mm wide
- Footing: 550mm x 650mm deep
- Aggregate Mix:
  - 40kg 7mm Blue Metal
  - 10kg Bricklayers Sand
  - 20kg Grey Cement

Elevation

- 30mm Exposed Aggregate
- 25MPA Concrete Footing: 560sq x 650 deep

MIX NEEDS TO BE WASHED TO PRODUCE EXPOSED AGGREGATE FINISH

Reviewed: 30/04/2019

This document has been prepared by The City of Perth and is subject to change. It is the responsibility of the user to ensure that this Design and Construction Note has no further revisions by checking at https://www.perth.wa.gov.au
Design and Construction Note
509.04
Wayfinding Devices
Large Cube Sign in Footpath

NOTE:
The location & information on the wayfinding sign will be stipulated by the City of Perth Co-ordination & Design Unit.

PLAN

ELEVATION

SUB-FRAME DETAILS TO BE DISCUSSED WITH CO-ORDINATION AND DESIGN UNIT AT CITY OF PERTH.

4 OFF x 3mm thick aluminium plate with 12 x Ø6mm holes. Decals will vary refer to job specification.

Ø32 conduit required if powered.

2 x M16 x 1m hot dip galvanised threaded rod bars @ 190 CRS with extrusion flush with existing top of paving.

25MPa concrete footing 550SQ x 650 deep

Aggregate mix:
40kg 7mm blue metal
10kg bricklayers sand
20kg grey cement

Mix needs to be washed to produce exposed aggregate finish.

NOTE:
The location & information on the wayfinding sign will be stipulated by the City of Perth Co-ordination & Design Unit.

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**Back of Header Course**

- **Back of Header Course**: 600
- **Kerb**: 550
- **Carrigeway**: 550
- **Footing**: 650 SQ x 650 DEEP

**Large Cube Solar Sign in Footpath**

- **3mm Thick Aluminium Plate**: 303 x 400
- **3mm Thick Aluminium Plate Typ**: 303 x 400
- **3mm Thick Aluminium Plate**: 303 x 400
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**Wayfinding Devices**

- **Large Cube Solar Sign in Footpath**

**Design and Construction Note**

**509.05**

**Reviewed: 30/04/2019**

**Design and Construction Note**

**509.05**

**Wayfinding Devices**

**Large Cube Solar Sign in Footpath**

**PLAN**

- **400**: 400
- **630**: 630

**ELEVATION**

- **400**: 400
- **370**: 370

**PANELLING**

- **400**: 400
- **370**: 370
- **630**: 630
- **400**: 400

**AGGREGATE MIX**:

- 40kg 7mm Blue Metal
- 10kg Bricklayers Sand
- 20kg Grey Cement

**Makes up 0.1 Cubic Metres**

**Mix needs to be washed to produce exposed aggregate finish**

**2 x M16 x 1m HOT DIP GALVANISED THREADED ROD BARS @ 190 CRS WITH EXTRUSION FLUSH WITH EXISTING TOP OF PAVING.**

**4 OFF x 3mm THICK ALUMINIUM PLATE WITH 12 x Ø6mm HOLES. DECALS WILL VARY REFER TO JOB SPECIFICATION.**
TABLE TOP GALVANIZED & PAINTED WITH DULUX ACROTHANE IF

WHITE LINES TAPPED & SPRAYED

NOTE:
- TABLE WEIGHT IN EXCESS OF 915KG.
- COLOUR SELECTION FROM AS 2700.