NOTE

THIS DRAWING HAS BEEN SOURCED FROM HUBB STREET EQUIPMENT, THIS DRAWING IS NOT DRAWN TO CITY OF GOLD COAST STANDARD T.P.R.L GUIDELINES.

<table>
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<tr>
<th>No.</th>
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<th>MATERIAL</th>
<th>DRAWING #</th>
<th>SHEET</th>
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<td>01-01</td>
<td>0304 S.C.</td>
<td>30-246</td>
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<td>01-06</td>
<td>0304 S.C.</td>
<td>30-246</td>
<td>2</td>
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</tbody>
</table>

NOTE:
1. Always provide thru holes before fabricating.
2. Front seat extended.
NOTE:
For Slab Details, Dimensions and Location Refer City Of Gold Coast
Standard Drawings 05-539 & 05-500

TOP VIEW

BOTTOM VIEW

SIDE VIEW

DETAIL A

DETAIL B

NOTE: SLAT ATTACHMENT
Use a 38mm CT2 gate screw to allow correct and even spacing of the slats. Positive slats and pilot (4.5mm) hole before securing with fasteners.

NOTE:
1. Always pre-drill pilot holes before fastening.
2. Mount slats cavity down.
NOTE: SLAT ATTACHMENT
Use a drill or impact to allow correct and even spacing of the slat. Position slat and pilot holes level then secure with fasteners.

NOTE
1. Always predrill Timber Slats before tightening
2. Mount slat centre down

Material: Spotted Gum
Finish: Spa'n'deck Jarrah Colour
NOTE: SLAT ATTACHMENT
Use a pilot drill 15mm in diameter (30mm long) to drill pilot holes before attaching slats. Do not drill holes in the end grain of the slats.

NOTE:
1. Always predrill Timber Slats before attaching.
2. Drill slats centred down.

Material: Spotted Gum
Finish: Spa’ndeck Driftwood
MATERIAL: 316 S/S 8mm PLATE
FINISH: BEAD BLAST ELECTROPOLISHED

NOTE
THIS DRAWING HAS BEEN SOURCED FROM HUBB STREET EQUIPMENT,
THIS DRAWING IS NOT DRAWN TO
CITY OF GOLD COAST STANDARD
T.P.R. GUIDELINES.

TOP VIEW

PICTORAL

FRONT VIEW

SIDE VIEW

BOTTOM VIEW

STANDARD DRAWING

WATERSIDE SUITE - SEAT AND BENCH ARMREST

STANDARD DRAWING NO.
05-537

ISSUE
2015 EDITION

THE DRAWING HAS BEEN SOURCED FROM HUBB STREET EQUIPMENT DRAWING NUMBERS 7462.201 TO 7462.208
ARTWORK TO BE ENGRAVED 0.8mm INTO 2mm STAINLESS STEEL
(all details of Gold Coast Brand logo lettering styles and proportions and approvals
for use to be obtained from City of Gold Coast prior to manufacture)
TYPICAL BIKE RACK THAT WILL COMPLY WITH THE REQUIREMENTS OF AS2890.3

"BS WHEEL RACKS AND STANDS. Racks and stands which allow only one wheel to be locked to the device, or which support the bicycle by one wheel only, do not provide either proper support or security for the bicycle as a whole. They do not meet the requirements of any classes of parking facilities described in this Standard, and should not be used in new installations." AS2890.3, Appendix B.

NOT SUITABLE - SINGLE WHEEL RACKS NOT TO BE USED

SUITABLE - LARGE FRAME THAT SUPPORTS BOTH WHEELS AND IS COMPLIANT WITH AS2890.3

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE

STANDARD DRAWING

05-630

BICYCLE PARKING

2015 EDITION
NOTES
1. A base plate should be fitted for retrofit fitting of parking rails onto existing concrete slabs/footpaths. Refer base plate details City of Gold Coast Std. Dwg. No. 05-634.
2. Clearances to roadways are for speed limits of 60km/h and below, for higher speeds refer AS 2890.3.
3. Stainless steel to be 316 grade class 2B finish in accordance with AS 4673.

CONCRETE SLAB TO EXIST. FOOTPATH (N.E.J.)

BICYCLE PARKING FACILITIES
TRIATHLON BAR STYLE HANGING RAIL
VERGE/PARKS

STANDARD DRAWING
05-631
2015 EDITION
NOTES
1. FOOTING DETAILS FOR ON ROAD OPTION ARE AS SHOWN. FOR RETRO FITTING OF PARKING RAILS ON EXISTING CONCRETE SLABS/FOOTPATHS REFER CITY OF GOLD COAST STD. DWG. No. 05-634
2. CLEARANCES TO ROADWAYS ARE FOR SPEED LIMITS OF 50 km/h AND BELOW. FOR HIGHER SPEEDS REFER AS 2890.3
3. STAINLESS STEEL TO BE 316 GRADE CLASS 2B FINISH IN ACCORDANCE WITH AS 4673
4. ADJUST MOUNTING HEIGHT OF D4-1-2 SIGNAGE ACCORDING TO SIGHTLINES FOR BOTH ROAD AND FACILITY USERS.
5. HANGING RAILS MUST BE FRAGILE.
NOTES
1. CONSTRUCT ALL BICYCLE PARKING FACILITIES IN ACCORDANCE WITH AS 2890.3-1993.
2. INVERTED 'U' STYLE RACKS ARE INTENDED TO BE CONSTRUCTED WITH RACKS MOUNTED IN CONCRETE FROTINGS AS PER CITY OF GOLD COAST STD. DWG. No. 05-631. FOR RETRO FITTING OF THE RACKS ONTO EXISTING CONCRETE SLABS/FOOTPATHS, CORE DRILL/EPoxy IN PLACE. ALTERNATIVELY USE A BASE PLATE CONNECTION AS DETAILED CITY OF GOLD COAST STD. DWG. No. 05-684.
3. CLEARANCES TO ROADWAYS SHOWN ARE FOR SPEED LIMITS OF 60 km/h AND BELOW.
4. ATTACHMENT OF THE 'POLE RING' STYLE RACK TO POWER POLES/LIGHT POLES OR OTHER STREET POLES IS SUBJECT TO APPROVAL FROM ENERGEX OR RELEVANT AUTHORITY. SECURE THE RACK TO POLES IN ACCORDANCE WITH ENERGEX OR THE RELEVANT AUTHORITY SPECIFICATIONS. SHOULD NO ATTACHMENT SPECIFICATIONS EXIST OR THE PROVIDED SPECIFICATION BE UNSUITABLE, LIASE WITH CITY OF GOLD COAST, INFRASTRUCTURE DELIVERY BRANCH FOR ATTACHMENT DESIGN, DOCUMENTATION AND SUBSEQUENT AUTHORITY APPROVAL OF THE ATTACHMENT DESIGN.
5. DO NOT ATTACH THE 'POLE RING' STYLE RACKS TO POLES UNLESS A MINIMUM 1200 mm CLEARANCE TO THE ROADWAY IS AVAILABLE.
6. DETAILS SHOWN ARE TYPICAL AND MODULAR. MULTIPLY THE DIMENSIONS FOR ANY NUMBER OF RACKS.
BASE PLATE NOTES
1. GRIND ALL WELDS SMOOTH, POLISH, PICKLE AND PASSIVATE.
2. UNDERTAKE ALL S/S WORK IN ACCORDANCE WITH THE FABRICATION AND FINISHING REQUIREMENTS OF THE AUSTRALIAN STAINLESS STEEL DEVELOPMENT ASSOCIATION (ASSDA). www.assda.asn.au
3. BASE PLATE - PLATE FLANGE - GRADE 316 L, TYPE - BLIND. SHOWN IS AN OFF-THE-SHELF PRODUCT. INDIVIDUAL FABRICATION OF THE BASE PLATE SHOULD NOT BE REQUIRED.
18 BICYCLE CAPACITY SHELTER
- INVERTED 'U' STYLE RACK

8 BICYCLE CAPACITY SHELTER
- INVERTED 'U' STYLE RACK

NOTE: THESE CONFIGURATIONS OF SHELTER/SLAB/INVERTED 'U' RACKS ARE INTENDED TO BE CONSTRUCTED WITH THE RACKS MOUNTED IN CONCRETE FOOTINGS AS PER CITY OF GOLD COAST STD. DWG. NO. 05-631. FOR RETROFITTING ON EXISTING SLAB, CORE DRILL AND EPOXY IN PLACE OR USE A BASE PLATE CONNECTION AS DETAILED CITY OF GOLD COAST STD. DWG. NO. 05-634.

SLAB DIMENSIONS AND ASSOCIATED RACK SETOUT ARE SPECIFIC TO PROPRIETARY PRODUCTS. ALTERNATIVE SHELTER DIMENSIONS WILL REQUIRE RECONFIGURATION OF THE BIKE RACKS IN ORDER TO COMPLY WITH SPECIFIED CLEARANCES AS PER AS 2890.3
GENERAL NOTES:
01. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN
A STABLE CONDITION AND NO PART SHALL BE OVER STRESSED.
02. PRIOR TO COMMENCEMENT OF WORKS THE BUILDER SHALL
SATISFY THEMSELVES OF THE CORRECT LOCATIONS OF ALL EXISTING
SERVICES WHETHER INDICATED OR NOT ON THE PLANS.
03. LOCATING OF THE STRUCTURE INCLUDING CO-ORDINATES IF
APPLICABLE IS THE RESPONSIBILITY OF THE CLIENT AND/OR THE
CLIENT'S SITE REPRESENTATIVE.
04. STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH
THE FOLLOWING AUSTRALIAN STANDARDS:
05. STRUCTURE IS SUITABLE FOR 60 AREAS AND HAS BEEN DESIGNED
WITH AN AVERAGE OCCURRENCE INTERVAL OF 102 YEARS.
06. SITE COVERAGE IS 15mm (ROOF AREA).
07. THE FOUNDATION HAS BEEN DESIGNED ASSUMING:
- SITE CLASS S OR M.
- ALLOWABLE SOIL BEARING CAPACITY OF 100kPa
- SOIL ADHESION OF 10kPa
(TO BE VERIFIED ON SITE).
08. FOR CLASSES 1 TO 6, ALL STRATA \& STRATA CONTAINING
SOIL OR ORGANIC MATTER ARE TO BE REMOVED AND
REPLACED WITH SELECT COMPACTED FILL.
09. ALL FILL TO BE CLEAN PLACED IN LAYERS NOT EXCEEDING 200mm
AND COMPACTED TO 95% STANDARD COMPACTION.
10. EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH
CRITERIA AND PROCEDURES SET OUT IN AS3799 GUIDELINES ON
EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
11. FUTURE COMPONENTS TO BE AVAILABLE IN HARDWOOD AS AN
OPTION IF REQUIRED BY GOLD COAST CITY COUNCIL.
WHERE THE HARDWOOD OPTION IS TAKEN, ALL SECTIONS SEES TO
REMAIN THE SAME AS PIE COUNTERPART.
12. SHELVES IS TO BE DELIVERED TO SITE IN KIT FORM WITH ALL
COMPONENTS SUPPLIED READY FOR ASSEMBLY.

CONCRETE NOTES:
13. CONCRETE STRENGTH TO BE:
- N37 FOR SITES LESS THAN 1km FROM BREAKING SURF
- N52 FOR SITES FURTHER THAN 1km FROM BREAKING SURF.
14. UNLESS NOTED OTHERWISE, ALL FOOTINGS TO BE FOUNDATIONS
200mm
15. INTO NATURAL GROUND OR CERTIFIED FILL.
16. UNLESS NOTED OTHERWISE, CONCRETE REINFORCEMENT TO BE SLICE MESH 40mm TO 60mm CROSSES.
17. CONCRETE COVER TO BE MAINTAINED BY THE USE OF APPROVED
CHAINS AND/OR CONCRETE BLOCKS SPREAD AT APPROXIMATELY
600mm CROSSES CENTRE-TO-CENTRE.
18. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO
THE APPROVAL OF THE ENGINEER.
19. NO HOLES OR CAVITIES OTHER THAN THOSE SHOWN ON THE
STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS
WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
20. ALL CONCRETE SURFACES TO BE CLEANED BY AN APPROVED
METHOD FOR SEVEN DAYS IMMEDIATELY AFTER CONCRETE PLACED.
21. ALL CONCRETE TO BE MECHANICALLY VIBRATED DURING
PLACEMENT.
22. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE
WITH CURRENT RELATIVE CODES IN PARTICULAR
AS3600 CONCRETE STRUCTURES.
23. REINFORCEMENT LAPS TO BE AS FOLLOWS:
- FABRIC 2 CROSS WIRE 25mm
- TRENCH MESH 450mm
- N10 BAR 500mm
- N15 BAR 600mm
- N20 BAR 800mm
- N25 BAR 1000mm

STRUCTURAL NOTES:
51. UNLESS NOTED OTHERWISE, ALL TIMBER IS SPECIFIED AS FOLLOWS:
- ALL PIECE TO BE LUSP TREATED W/NC HOPP HRE.
- ALL HARDWOOD TO BE 400 TREATED W/NC HOPP HRE.
- ALL MACHINED & CUT SURFACES TO BE SUITABLY RETREATED
WITH A LANDMARK PRODUCTS APPROVED COMPOUND.
52. UNLESS NOTED OTHERWISE, ALL STEEL TO BE:
- PLATES: GRADE 250, NOT D/P BALANKED
- SMS/EMS/CHS GRADE 350, NOT D/P BALANKED
- HOT ROLLED SECTIONS: GRADE 350, NOT D/P BALANKED
- FORGINGS: A/S 1577.1 FOR SITES FURTHER THAN 3km FROM BREAKING SURF.
- .3% SS EXCEPT CLASS A ROOF SCREWS FOR SITES LESS THAN 1km FROM BREAKING SURF.
- CONSIDERATION IS REQUIRED FOR SITES BETWEEN 1km & 2km FROM BREAKING SURF
53. UNLESS NOTED OTHERWISE, ALL WELDS TO BE
5mm CONTINUOUS FILLET CATEGORY 5.
5. ALL STEEL TO BE FABRICATED AND ERECTED
WITH GOOD BUILDING PRACTICE AND IN ACCORDANCE
WITH AS4100, AS1684 and AS1684.1.
THIS DRAWING IS TO BE READ
IN CONJUNCTION WITH
NOTES ON SHEET - 05-636

SIGN PANEL SHOWN HERE ON LEFT SIDE OF SHELTER
SEE DWG - 05-639 FOR DETAILS.
COUNCIL TO ADVISE ON WHICH SIDE OF SHELTER
SIGN IS TO BE LOCATED.

ELEVATION
SCALE 1:50

HDG RHS PORTAL BEAM

PINE ROOF FRAME
PINE ROOF FRAME

ELEVATION
SCALE 1:50

HDG RHS PORTAL POST

ELEVATION
SCALE 1:50

HDG RHS PORTAL BEAM
3045 BETWEEN POSTS

3025 SIGN

HDG 50x3 SHS FRAME
WITH M12 SPAN SUPPORT

HDG 40x40x10mm STEEL SPACER

HDG 50x3 SHS SIGN FRAME

3mm ALUMINIUM PANEL

M12 VANDAL RESISTANT BOLTS

SIGN PANEL DETAIL

SCALE 1:10

SECTION H

SCALE 1:5
SLAB & FOOTING PLAN
SCALE (1:50)

SLAB OUTLINE

FOOTING DETAIL
SCALE (1:20)

25mm NON-SHRINK GROUT
4/M16 CHEMSETS 125mm EMBED.

100 THICK REINFORCED CONCRETE SLAB
S/100 MINIMUM FALL

FINAL SLAB AND FOOTING DETAILS
TO BE DETERMINED BY SOIL REPORT
AND SITE CONDITIONS
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH NOTES ON SHEET -05-636

OPTION
COLORBOND HALF ROUND GUTTER & PVC DOWNPIPE  
LIGHTING
WATER TAP
POWER POINT
CONNECTING PATHS
GCCC SIGN TO RIGHT SIDE OF SHELTER
GCCC SIGN TO LEFT SIDE OF SHELTER
PLYWOOD CEILING
ROOF PEAK TO FACE NORTH

7000
940 3120 2000 940

PLAN
SCALE (1:50)

COLORBOND CUSTOM ORB XRW GRADE ROOF SHEETING

SLAB OUTLINE
ROOF PEAK
HOG RNS PORTAL

URBAN SHELTER - DOUBLE PLAN

STANDARD DRAWING

THIS DRAWING IS NOT TO BE AMENDED WITHOUT REFERENCE TO STANDARDS COMMITTEE.
CONTROLLED DOCUMENT
DO NOT SCALE TAKE FIGURED DIMENSIONS ONLY

DRAWN BY
CITY OF GOLD COAST
PARKS - COORDINATOR OPEN SPACE ASSETS
NAME: CARMEN TAYLOR 22/07/16
APPROVED - MANAGER PARKS & RECREATIONAL SERVICES
NAME: EDN JACOBS 22/02/16

CITY OF GOLD COAST

STANDARD DRAWING NO.

URBAN SHELTER - DOUBLE PLAN

05-643

ISSUE

2015 EDITION
This drawing is to be read in conjunction with notes on sheet -05-636.

Sign panel shown here on left side of shelter. See DWG -05-640 for details. Council to advise on which side of shelter sign is to be located.

ELEVATION A
SCALE 1:50

ELEVATION B
SCALE 1:50

HDG RHS PORTAL BEAM

PINE ROOF FRAME

ELEVATION C
SCALE 1:50

HDG RHS PORTAL POST

ELEVATION D
SCALE 1:50

Urban Shelter - Double Elevations

City of Gold Coast

Standard Drawing 05-644

2015 Edition

This drawing is not to be amended without reference to Standards Committee.

Controlled Document

Do not scale

Take figured dimensions only

Drawn by:

City of Gold Coast

Paired - Coordinator Open Space Assets

NAME: Cameron Taylor

APPROVED - Manager Parks & Recreational Services

NAME: Ron Jacobs

AMENDMENT

APPROVED

DATE

ISSUED

No. 22/07/16

22/02/16
SLAB & FOOTING PLAN
SCALE 1:50

FOOTING DETAIL
SCALE 1:20

100 THICK REINFORCED CONCRETE SLAB
1:100 MINIMUM FALL

25mm NON-SHRINK GROUT
4/16 CHEMSETS 125mm EMBED.

FINAL SLAB AND FOOTING DETAILS
TO BE DETERMINED BY SOIL REPORT
AND SITE CONDITIONS
This drawing is to be read in conjunction with notes on sheet -05-636.

Sign panel - see DwG -104 for details. Council to advise on which side of shelter sign is to be located.

Elevation A
Scale 1:50

Elevation B
Scale 1:50

Tops of posts sloped to match roof.

Pine roof frame

Hog shs double post

Pine post

Elevation C
Scale 1:50

Elevation D
Scale 1:50

Waterside Shelter - Single Elevations

Standard Drawing

05-650

2015 Edition
OPTIONAL GUTTER & DP
190x45 PINE PURLIN
70x70x3 ANGLE BRACKET
2/No.14 SCREWS EACH WAY
to PURLIN & FASCIA
190x45 PINE FASCIA
Screw laminated to front purlin
HDG 89x3.5 SHS DOUBLE POST
15PL BASE PLATE
4/M16 CHEMSETS TO FOOTING
2/190x45 PINE POST
4/M12 BOLTS
to POST SUPPORT
PREFABRICATED HDG
180x10PL POST SUPPORT
cast into footing
CONCRETE SLAB & FOOTINGS
SEE DWG. -201 FOR DETAILS

SECTION
SCALE 1:25

1990 GRADE ROOF SHEETING
1/No.14 SCREW TO PURLIN
EVERY 2nd CREST

COLORBOND CUSTOM ORW

STANDARD DRAWING
WATERSIDE SHELTER - SINGLE
SECTION

CITY OF GOLD COAST

2015 EDITION

STANDARD DRAWING NO.
05-651

ISSUE

THIS DRAWING IS TO BE READ
IN CONJUNCTION WITH
NOTES ON SHEET -05-636

DO NOT SCALE
TAKE FIGURED DIMENSIONS ONLY

CONTROLLED DOCUMENT

DRAWN BY
CITY OF GOLD COAST
PASSED - COORDINATOR SPACE ASSETS
NAME: CAMERON TAYLOR
22/02/16
APPROVED - MANAGER PARKS & RECREATIONAL SERVICES
NAME: BEN JACOBS
22/02/16

AMENDMENT
APPROVED
DATE
ISSUED
SLAB & FOOTING PLAN

SCALE (1:50)

SLAB OUTLINE

100 THICK REINFORCED CONCRETE SLAB
1:100 MINIMUM FALL

FOOTING DETAIL - F1
SCALE (1:20)

FOOTING DETAIL - F2
SCALE (1:20)

FINAL SLAB AND FOOTING DETAILS
TO BE DETERMINED BY SOIL REPORT
AND SITE CONDITIONS
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH NOTES ON SHEET -05-636

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<td>COLORBOND HALF ROUND GUTTER &amp; PVC DOWNPIPE</td>
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<td>LIGHTING</td>
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<td>WATER TAP</td>
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<tr>
<td>POWER POINT</td>
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<tr>
<td>CONNECTING PATHS</td>
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<td>BECC SKIN TO RIGHT SIDE OF SHELTER</td>
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<td>BECC SKIN TO LEFT SIDE OF SHELTER</td>
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<td>PLYWOOD CEILING</td>
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<tr>
<td>ROOF PEAK TO FACE NORTH</td>
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SCALE (1:50)

PLAN

COLORBOND CUSTOM ORB
XRW GRADE ROOF SHEETING

SLAB OUTLINE

7000
1200 2800 2000 1000
500 450
4300
HDG 50x3 SHS FRAME
WITH MID-SPAN SUPPORT

HDG 50x3 SHS SIGN FRAME

HDG 50x3 SHS POSTS

PINE POST

3mm ALUMINUM PANEL

M12 BOLTS
SLAB & FOOTING PLAN
SCALE (1:50)

FOOTING DETAIL - F1
SCALE (1:20)

FOOTING DETAIL - F2
SCALE (1:20)

SLAB OUTLINE

100 THICK REINFORCED CONCRETE SLAB
1000 MINIMUM FALL

FINAL SLAB AND FOOTING DETAILS
TO BE DETERMINED BY SOIL REPORT
AND SITE CONDITIONS

STANDARD DRAWING
WATERSIDE SHELTER -
DOUBLE SLAB & FOOTING
DETAILS

2015 EDITION
NOTES:

POST SPECIFICATION:
WARRATAH STAR PICKETS 1800mm LONG.
IN SWAMP AFFECTED AREAS USE RECYCLED PLASTIC POSTS 100mm.

PLAIN WIRE SPECIFICATIONS:
LONG LIFE HIGH TENSILE PLAIN WIRE 2.5mm DIAMETER
MINIMUM BREAKING STRAIN: 5.6kN
RECOMMENDED TENSION: 1.8kN

NOTE: IN AREAS AT RISK OF BUSH FIRE USE LONG LIFE LOW TENSILE PLAIN WIRE 3.55mm DIAMETER
MINIMUM BREAKING STRAIN: 3.8kN
RECOMMENDED TENSION: 1.3kN

WIRE FASTENING SPECIFICATIONS:
POST CLIPS 3.15mm LONG LIFE COATED WIRE

WIRE TENSIONING SPECIFICATIONS:
RATCHET STYLE IN LINE ADJUSTER

WIRE TIE OFF SPECIFICATIONS:
MINIMUM 300mm WIRE TWIST RETURN LENGTH TO POSTS & STRAINERS

STRAINER POST SPECIFICATIONS:
REFER CITY OF GOLD COAST STD DWG No. 05-703

ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS STATED OTHERWISE

ACCESS TO CONSTRUCTION AREA:
ACCESS TO THE SITE MAY REQUIRE 4 WHEEL DRIVE VEHICLES ONLY.
SOME SITES MAY REQUIRE THE NEED TO WALK MATERIALS IN FOR A SHORT DISTANCE.

TERRAIN:
SOME SITES WILL NOT BE ON A FLAT SURFACE. TOPOGRAPHY, TERRAIN AND DIGGING CONDITIONS ARE VARIABLE.

WORKMANSHIP AND MATERIALS TO BE IN ACCORDANCE WITH AS2423, AS1725, AS4100 AND OTHER RELEVANT AUSTRALIAN STANDARDS.
NOTES:
POST SPECIFICATION:
GALVANISED STARPICKET 1650mm LENGTH.
IN SOFT GROUND POSTS SHOULD BE 1800mm LENGTH.
IN SWAMP AFFECTED AREAS USE RECYCLED PLASTIC POSTS 100 DIA.

WIRE FASTENING SPECIFICATIONS:
POST CLIPS 3.15mm LONGLIFE COATED WIRE
RATCHET STYLE IN LINE ADJUSTER

WIRE TENSIONING SPECIFICATIONS:
STRAINER POST SPECIFICATIONS:
REFER CITY OF GOLD COAST STD DWG No. 05-703

WIRE TIE OFF SPECIFICATIONS:
MINIMUM 300mm WIRE TWIST RETURN LENGTH TO POSTS & STRAINERS

BRAIDED WIRE SPECIFICATIONS:
6mm GALVANISED STEEL WIRE ROPE
6 X 19EC CONSTRUCTION
BREAKING STRAIN 1750kg
RECOMMENDED TENSION 2kN

WIRE TO BE ATTACHED TO END POSTS USING DOUBLE LOOP AROUND POST AND FASTENED WITH ALLOY FERRAL. REFER PLAN VIEW OF STRAINER POST BRAIDED WIRE FASTENING.
WIRE TO WIRE JOIN TO BE A 300mm OVERLAP FASTENED WITH ALLOY FERRAL AT EACH END.
SINGLE ALLOY FERRAL TO BE INSTALLED 100mm EITHER SIDE OF GALSTAR POST AT 15 METRE INTERVALS. REFER PLAN VIEW OF IN LINE BRAIDED WIRE FASTENING.

ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS STATED OTHERWISE
ACCESS TO CONSTRUCTION AREA:
ACCESS TO THE SITE MAY REQUIRE 4 WHEEL DRIVE VEHICLES ONLY. SOME SITES MAY REQUIRE THE NEED TO WALK MATERIALS IN FOR A SHORT DISTANCE.

TERRAIN:
SOME SITES WILL NOT BE ON A FLAT SURFACE. TOPOGRAPHY, TERRAIN AND DIGGING CONDITIONS ARE VARIABLE.

WORKMANSHIP AND MATERIALS TO BE IN ACCORDANCE WITH AS4100, AS2423, AS1725, AS4100 AND OTHER RELEVANT AUSTRALIAN STANDARDS.

TYPICAL SECTION

PLAN VIEW OF IN LINE BRAIDED WIRE FASTENING

PLAN VIEW OF STRAINER POST
BRAIDED WIRE FASTENING

STANDARD DRAWING
STAR PICKET & WIRE STRAND
05-702

2015 EDITION
Diese Zeichnung ist nicht zu ändern ohne Referenz zu den Standardskomitees.

**STANDARD DRAWING**

**STRAINER POST & CORNER POST**

**DRAWN BY**
CITY OF GOLD COAST

**DRAWN BY**
CITY OF GOLD COAST

**APPROVED BY**
NAME: RON JACOBS
17/10/13

**STANDARD DRAWING No.**
05-703

**NAME:**
Cameron Taylor
17/10/13

**ISSUED**
2015 EDITION

**NOTES:**
- WORKMANSHIP & MATERIALS TO BE IN ACCORDANCE WITH AS2423, AS1725, AS4100 & OTHER RELEVANT AUSTRALIAN STANDARDS
- THE PIPE STEEL TO BE GRADE 350, ALL OTHER STEEL INCLUDING FLATS & PLATE TO BE AT LEAST GRADE 250
- WELDING & PREPARATION TO BE IN ACCORDANCE WITH AS1554.1 CATEGROY 5P GRADE E46XX & AS4100
- ALL WELDING TO BE 6mm CONTINUUS FILLET WELD
- ALL WELDS TO BE WELL CLEANED & PAINTED IN ACCORDANCE WITH AS2312
- ALL POSTS TO BE SET VERTICALLY & ACCURATELY ALIGNED IN CONCRETE GRADE N25
- ALL GALVANISING TO BE IN ACCORDANCE WITH AS4680
- DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE

**WIRE TO POST CONNECTION DETAIL**

- 9mm GALVANIZED CHAIN LINK WELDED TO POST FOR WIRE CONNECTION

**POST SPECIFICATION:**
- GALVANISED STAR PICKET 1650mm LENGTH
- IN SWAMP AFFECTED AREAS USE RECYCLED PLASTICS POSTS 100 DIA.
NOTES:

• Workmanship & Materials to be in accordance with AS4100 & other relevant Australian Standards.
• The pipe steel to be grade 350, all other steel including flats & plate to be at least grade 250.
• Welding & preparation to be in accordance with AS1554.1 category SP grade E43XX & AS4100.
• All welding to be 6mm continuous fillet weld.
• All welds to be well cleaned & painted in accordance with AS2322.
• All posts to be set vertically & accurately aligned in concrete grade N25.
• All galvanising to be in accordance with AS4680.
• Dimensions are in millimetres unless stated otherwise.

END POST SPECIFICATIONS:

END POSTS FOR CONTINUOUS RAIL FENCING SHOULD BE 114.3mm OD, BUTT WELDED WITH 750mm FOOTING.

WIRE STRAND FENCE ATTACHMENT TO CONTINUOUS RAIL FENCE PANEL:

When attaching wire or braided cable fencing directly to gate, or a gate and one standard fence panel, a stay is required. (see City of Gold Coast Std DWG No. 05-703). For two or more standard fence panels no stay is required.

Straining posts for wire fence joining a continuous rail fence should be 114.3mm OD, BUTT WELDED WITH 750mm FOOTING.

ACCESS TO CONSTRUCTION AREA:

Access to the site may require 4 wheel drive vehicles only. Some sites may require the need to walk materials in for a short distance.

TERRAIN:

Some sites will not be on a flat surface. Topography, terrain and digging conditions are variable.
NOTES:

- Workmanship & Materials to be in accordance with AS4100 & other relevant Australian Standards.
- The pipe steel to be grade 350, all other steel including flats & plate to be at least grade 250.
- Welding & preparation to be in accordance with AS/NZS 4680.
- All welding to be 6mm continuous fillet weld.
- All welds to be well cleaned & painted in accordance with AS2312 Clause 10.5.
- All posts to be set vertically & accurately aligned in concrete grade N25.
- All galvanising to be in accordance with AS/NZS 4680.
- Ensure lock boxes are located on the right hand side of gates when heading downhill; this is required to allow the driver to open the gate without being required to cross in front of the vehicle parked uphill.
- Dimensions are in millimetres unless stated otherwise.
NOTES:

ACCESS TO CONSTRUCTION AREA:
Access to the site may require 4 wheel drive vehicles only. Some sites may require the need to walk materials in for a short distance.

TERRAIN:
Some sites will not be on a flat surface. Topography, terrain and digging conditions are variable.

• Workmanship & materials to be in accordance with AS4100 & other relevant Australian Standards.
• The pipe steel to be grade 350, all other steel including flats & plate to be at least grade 250.
• Welding & preparation to be in accordance with AS1554.1 Category SP Grade E46XX & AS4100.
• All welding to be 6mm continuous fillet weld.
• All welds to be well cleaned & painted in accordance with AS2312 Clause 10.5.
• All posts to be set vertically & accurately aligned in concrete grade N25.
• All Galvanising to be in accordance with AS/NZS 4680.
• Dimensions are in millimetres unless stated otherwise.

WIRE STRAND FENCE ATTACHMENT TO STANDARD FENCE PANEL:
When attaching wire or braided cable fencing directly to gate or a gate and one standard fence panel, a stay is required. (See City of Gold Coast Std Drawing 05-703). For two or more standard fence panels no stay is required.

END POST SPECIFICATIONS:
End posts for continuous rail fencing should be 114.3mm OD, butt welded with 750mm footing. Straining posts for wire fence joining a continuous rail fence should be 114.3mm OD, butt welded with 750mm footing.

TYPICAL SECTION

STANDARD DRAWING

STANDARD FENCE PANEL
(TWO RAIL)

ISSUE
2015 EDITION

DRAWN BY
CITY OF GOLD COAST

APPROVED - MANAGER PARKS & RECREATIONAL SERVICES
NAME: RON JACOBS 17/10/13

AMENDMENT

APPROVED

DATE

ISSUED

NOTES:

- Workmanship & materials to be in accordance with AS4100 & other relevant Australian Standards.
- The pipe steel to be Grade 350, all other steel including flats & plate to be at least Grade 250.
- Welding & preparation to be in accordance with AS5554.1 Category 3P Grade EUXX & AS4100.
- All welding to be 6mm continuous fillet weld.
- All welds to be well cleaned & painted in accordance with AS2322 Clause 10.5.
- All posts to be set vertically & accurately aligned in concrete grade N25.
- All galvanising to be in accordance with AS/NZS 6580.
- Dimensions are in millimetres unless stated otherwise.

Paid for Horse Step Through:

Area under Horse Step Through and the 2 metre approach must be natural ground to ensure a level lateral (cross grade) surface. The longitudinal grade may be sloped if the natural surface is in this existing condition. A council officer will identify the location for the Horse Step Through, whether through drawing, photo, pegs or an on site meeting.

Access to Construction Area:

Access to the site may require 4 wheel drive vehicles only. Some sites may require the need to walk materials in for a short distance.

Terrain:

Some sites will not be on a flat surface, topography, terrain and digging conditions are variable.

---

STANDARD DRAWING

HORSE STEP THROUGH PANEL
TYPE 1

05-707
NOTES:

- Workmanship & Materials to be in accordance with AS4100 & other relevant Australian Standards.
- The pipe steel to be Grade 350, all other steel including flats & plate to be at least Grade 250.
- Welding & Preparation to be in accordance with AS2074, 1 category SP grade A4XX & AS4000.
- All welding to be 5mm continuous fillet weld.
- All welds to be well cleaned & painted in accordance with AS2323 Clause 105.
- All posts to be set vertically & accurately aligned in concrete grade N25.
- All galvanising to be in accordance with AS/NZS 4680.
- Dimensions are in millimetres unless stated otherwise.

**PAD FOR HORSE STEP THROUGH**

Area under horse step through and the 3 metre approach must be natural surface to ensure a level lateral (cross grade) surface. The longitudinal grade may be sloped if the natural surface is in this existing condition. A council officer will identify the location for the horse step through whether through drawing, photo, pegs or an on site meeting.

**ACCESS TO CONSTRUCTION AREA:**

Access to the site may require 4 wheel drive vehicles only. Some sites may require the need to walk materials in for a short distance.

**TERRAIN**

Some sites will not be on a flat surface. Topography, terrain and digging conditions are variable.
PROVIDE 2 No. 15mm CHAMFERS TO REAR CORNERS OF TOP & BASE PLATE FOR DRAINAGE

LOCK BOX TOP VIEW

114.3 O.D. GALV. PIPE
10mm STEEL TOP PLATE WITH 28mm DIA HOLE FOR LOCK PIN
4mm STEEL PLATE HOUSING WELDED TO POST

LOCK PIN REFER DETAIL

400 LONG GALV. CHAIN WELDED TO TOP OF POST
400 LONG GALV. CHAIN WELDED TO TOP OF LOCK PIN

NOTE:
• WORKMANSHIP & MATERIALS TO BE IN ACCORDANCE WITH AS4100 & OTHER RELEVANT AUSTRALIAN STANDARDS.
• THE PIPE STEEL TO BE GRADE 350, ALL OTHER STEEL INCLUDING FLATS & PLATE TO BE AT LEAST GRADE 250.
• WELDING & PREPARATION TO BE IN ACCORDANCE WITH AS1554.1 CATEGORY SP GRADE E48XX & AS4100.
• ALL WELDING TO BE 6mm CONTINUOUS FILLET WELD.
• ALL WELDS TO BE WELL CLEANED & PAINTED IN ACCORDANCE WITH AS2312 CLAUSE 10.5.
• ALL POSTS TO BE SET VERTICALLY & ACCURATELY ALIGNED IN CONCRETE GRADE N25.
• ALL GALVANISING TO BE IN ACCORDANCE WITH AS/NZS 4680.
• DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

TONGUE TOP VIEW

16mm STEEL PLATE WELDED TO GATE

TONGUE SIDE ELEVATION

114.3 O.D. GALV. PIPE
4mm STEEL PLATE HOUSING WELDED TO POST

LOCK BOX SIDE ELEVATION

10mm STEEL BASE PLATE WITH 28mm DIA HOLE FOR LOCK PIN

10mm STEEL TOP PLATE WITH 28mm DIA HOLE FOR LOCK PIN

LOCK PIN REFER DETAIL

12mm HOLE FOR PAD LOCK WITH 20mm DIA. COUNTER SINK

ROUND PIN END WITH 5mm RADIUS

STANDARD DRAWING
NATURAL AREAS TYPE 1 GATE LOCK BOX
05-709
2015 EDITION
NOTES:

• WORKMANSHIP & MATERIALS TO BE IN ACCORDANCE WITH AS4100 & OTHER RELEVANT AUSTRALIAN STANDARDS.
• THE PIPE STEEL TO BE GRADE 350, ALL OTHER STEEL INCLUDING FLATS & PLATE TO BE AT LEAST GRADE 250.
• WELDING & PREPARATION TO BE IN ACCORDANCE WITH AS1554.1 CATEGORY SP GRADE E4BXX & AS4100.
• ALL WELDING TO BE 6mm CONTINUOUS FILLET WELD.
• ALL WELDS TO BE WELL CLEANED & PAINTED IN ACCORDANCE WITH AS2312 CLAUSE 10.5.
• ALL POSTS TO BE SET VERTICALLY & ACCURATELY ALIGNED IN CONCRETE GRADE N25.
• ALL GALVANISING TO BE IN ACCORDANCE WITH AS/NZS 4680.
• DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
• CONCRETE SLAB TO BE 100MM THICK.
NOTES:

- Workmanship & materials to be in accordance with AS4100 & other relevant Australian Standards.
- The pipe steel to be grade 350, all other steel including flats & plates to be at least grade 250.
- Welding & preparation to be in accordance with AS1554.1 category SP grade E43XX & AS4100.
- All welding to be 6mm continuous fillet weld.
- All welds to be well cleaned & painted in accordance with AS2312 clause 10.5.
- All posts to be set vertically & accurately aligned in concrete grade N25.
- All galvanising to be in accordance with AS/NZS 6680.
- Dimensions are in millimetres unless stated otherwise.
- Concrete slab to be 100mm thick.

This drawing is not to be amended without reference to Standards Committee.

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<td>CAMERON TAYLOR</td>
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<td>RON JACOBS</td>
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NOTES:

1. GATE & END POSTS TO BE 65 x 65 x 2 GALVANISED R.H.S. (REFER AS1163).
2. INTERMEDIATE POSTS TO BE 50 x 50 x 2 GALVANISED R.H.S. (REFER AS1163).
3. PANELS TO BE FIXED TO POSTS IN ACCORDANCE WITH MANUFACTURER’S SPECIFICATION.
4. WELDED MESH PANELS TO BE ARC “ACACIA” OR EQUIVALENT, MANUFACTURED IN ACCORDANCE WITH AS 3992.
5. ALL GALVANISING TO BE IN ACCORDANCE WITH AS/NZS 4680.
6. POSTS TO BE SET VERTICALLY IN CONCRETE GRADE N25.
7. RAKED PANELS ARE AVAILABLE FOR SLOPES UP TO 10° (1 IN 6).
8. NUTS TO BE SPOT WELDED TO BOLTS AND COLD GALVANISED AS AN ANTI-THEFT DETERRENT.
9. THESE FENCES ARE INTENDED AS A PEDESTRIAN BARRIER AND ARE NOT TO BE USED IN SITUATIONS WHERE MOTOR VEHICLES REQUIRE RESTRAINT.
10. TYPE 2 AND 3 DETAILS ARE INDICATIVE ONLY. ENGINEERS DETAILS TO BE SUBMITTED FOR CITY OF GOLD COAST APPROVAL.
11. CONCRETE ANCHORS TO TYPE 2 AND 3 DETAILS SHALL BE 12mm DIA STAINLESS STEEL CHEMICAL ANCHORS.
12. 1270 HIGH x 3000 LONG PANELS MAY BE USED SUBJECT TO CITY OF GOLD COAST APPROVAL.
13. USE PAN-HEAD SECURITY TEK-SCREWS (14-10 x 25G 410 PSECTEK).
14. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
NOTES:
1. GATE POSTS TO BE 65 x 65 x 2 GALVANISED R.H.S. (REFER AS1163).
2. GATES TO BE FIXED TO POSTS IN ACCORDANCE WITH MANUFACTURER’S SPECIFICATION.
3. WELDED MESH PANELS TO BE ARC "ACACIA" OR EQUIVALENT, MANUFACTURED IN ACCORDANCE WITH AS 3902.
4. ALL GALVANISING TO BE IN ACCORDANCE WITH AS/NZS 4680.
5. POSTS TO BE SET VERTICALLY IN CONCRETE GRADE N25.
6. NUTS TO BE SPOT WELDED TO BOLTS AND COLD GALVANISED AS AN ANTI-THEFT DETERRENT.
7. THESE FENCES ARE INTENDED AS A PEDESTRIAN BARRIER AND ARE NOT TO BE USED IN SITUATIONS WHERE MOTOR VEHICLES REQUIRE RESTRAINT.
8. USE PAN-HEAD SECURITY TEK-SCREWS (M10 x 25G 4.10 PSECTEK).
9. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
NOTES:

1. GATE & END POSTS TO BE 65 x 65 x 2 GALVANISED R.H.S. (REFER AS163)
2. INTERMEDIATE POSTS TO BE 50 x 50 x 2 GALVANISED R.H.S. (REFER AS163)
3. PANELS TO BE FIXED TO POSTS IN ACCORDANCE WITH MANUFACTURER’S SPECIFICATION.
4. WELDED MESH PANELS TO BE ARC “WATTLE” OR EQUIVALENT, MANUFACTURED IN ACCORDANCE WITH AS 3902.
5. ALL GALVANISING TO BE IN ACCORDANCE WITH AS/NZS 4680.
6. 1270 HIGH x 3000 LONG PANELS MAY BE USED SUBJECT TO CITY OF GOLD COAST APPROVAL.
7. POSTS TO BE SET VERTICALLY IN CONCRETE GRADE N25.
8. RAKED PANELS ARE AVAILABLE FOR SLOPES UP TO 15° (1 IN 4).
9. NUTS TO BE SPOT WELDED TO BOLTS AND COLD GALVANISED AS AN ANTI-THEFT DETERRENT.
10. THESE FENCES ARE INTENDED AS A PEDESTRIAN BARRIER AND ARE NOT TO BE USED IN SITUATIONS WHERE MOTOR VEHICLES REQUIRE RESTRAINT.
11. USE PAN-HEAD SECURITY TEK-SCREWS (14-10 x 25G 4/10 PSECTEK).
12. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

TYPICAL SECTION

STANDARD DRAWING

PEDESTRIAN BARRIER GALVANISED WELDED POOL FENCING ROLL TOP WIRE

05-714

2015 EDITION
NOTES:

1. GATE POSTS TO BE 65 x 65 x 2 GALVANISED R.H.S. (REFER AS1163).
2. GATES TO BE FIXED TO POSTS IN ACCORDANCE WITH MANUFACTURER’S SPECIFICATION.
3. WELDED MESH PANELS TO BE ARC “WATTLE” OR EQUIVALENT, MANUFACTURED IN ACCORDANCE WITH AS 3902.
4. ALL GALVANISING TO BE IN ACCORDANCE WITH AS/NZS 4680.

5. POSTS TO BE SET VERTICALLY IN CONCRETE GRADE N25.
6. NUTS TO BE SPOT WELDED TO BOLTS AND COLD GALVANISED AS AN ANTI-THEFT DETERRENT.
7. THESE FENCES ARE INTENDED AS A PEDESTRIAN BARRIER AND ARE NOT TO BE USED IN SITUATIONS WHERE MOTOR VEHICLES REQUIRE RESTRAINT.
8. USE PAN-HEAD SECURITY TEK-SCREWS (14–10 x 25G 410 (SECTEK).
9. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
This drawing is not to be amended without reference to Standards Committee. Controlled document. Do not scale. Take figured dimensions only.

Standard Drawing

Bollards - Timber

No. 05-716

City of Gold Coast

Cameron Taylor

Manager Parks & Recreational Services

Ron Jacobs

17/10/13

2015 Edition

Bushland Bollard

Type 1

Pedestrian Bollard

Type 1

Pedestrian Bollard

Type 2

NOTE: TREATED PINE BOLLARD CAN BE REPLACED WITH RECYCLED PLASTIC BOLLARD WHEN SPECIFIED.

NOTE: TREATED PINE BOLLARD CAN BE REPLACED WITH RECYCLED PLASTIC BOLLARD WHEN SPECIFIED.

NOTE: TREATED PINE BOLLARD CAN BE REPLACED WITH RECYCLED PLASTIC BOLLARD WHEN SPECIFIED.
NOTES:

1. BOLLARDS TO BE PAINTED WITH TWO COATS OF TWO PACK 125 MICRON MINIMUM TOTAL THICKNESS (eg WATTYL PARACRYL OR EQUIVALENT PROCESS). COLOUR TO MATCH DULUX "SAFETY YELLOW".

2. BOLLARDS TO BE MINIMUM LENGTH SHOWN WITH 550 IN GROUND.

3. POST HOLES TO BE 350 DIA AND 600 MIN DEPTH.

4. FOOTING - N25 CONCRETE WITH WEATHER OFF TOP.

5. BOLLARDS ARE FOR VISUAL GUIDE POSTING OR FENCING ONLY AND HAVE NOT BEEN DESIGNED FOR VEHICLE IMPACT PROTECTION.

6. VARIATION TO TYPE MUST BE APPROVED BY CITY OF GOLD COAST INFRASTRUCTURE OWNER.

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PEDESTRIAN BOLLARD

**TYPE 3**

- 150 NOM. CHS 3.5 WALLS
- M16 S/S DOME TOP CHEMSET ANCHORS
- 3 THICK TOP PLATE (TYP.)
- CONCRETE SLAB
- SLOPE CONCRETE AWAY FROM POST TO CREATE MOWING STRIP
- 10 THICK M/S BASE PLATE WELDED TO POST (6 C/FW)

PEDESTRIAN BOLLARD

**TYPE 4**

- 165 DIA
- 150 NOM. CHS 3.5 WALLS
- TOP VIEW

---

STANDARD DRAWING

**BOLLARDS - METAL**

STANDARD DRAWING No. 05-717

Issue 2015 Edition
NOTES:
- Workmanship & materials to be in accordance with AS4100 & other relevant Australian standards.
- The pipe steel to be grade 350, all other steel including flats & plate to be at least grade 250.
- Welding & preparation to be in accordance with AS1554.1 Category SP Grade E48XX & AS4100.
- All welding to be 6mm continuous fillet weld.
- All welds to be well cleaned & painted in accordance with AS2312 Clause 10.5.
- All posts to be set vertically & accurately aligned in concrete grade N25.
- All galvanising to be in accordance with AS/NZS 4680.
- Ensure lock boxes are located on the right hand side of gates when heading downhill. This is required to allow the driver to open the gate without being required to cross in front of the vehicle parked uphill.
- Dimensions are in millimetres unless stated otherwise.
NOTES:

1. Gate & End Posts to be 65 x 65 x 2 Galvanised R.H.S. (Refer AS163)
2. Intermediate Posts to be 50 x 50 x 2 Galvanised R.H.S. (Refer AS163)
3. Panels to be fixed to Posts in accordance with manufacturer’s specification.
4. Welded mesh panels to be Arc “Willow” or equivalent, manufactured in accordance with AS3992.
5. All galvanising to be in accordance with AS/NZS 4680.
6. 1270 high x 3000 long panels may be used subject to City of Gold Coast approval.
7. Posts to be set vertically in concrete grade N25.
8. Raked panels are available for slopes up to 15° (1 in 4).
9. Panels attached to posts with a Downee fitting FB38P rail bracket with two fixing holes using tamper proof Tek screws.
10. These fences are intended as a pedestrian barrier and are not to be used in situations where motor vehicles require restraint.
11. Use pan-head security Tek Screws (14-10 x 256 410 Psectek).
12. Dimensions are in millimetres unless shown otherwise.

STANDARD DRAWING

PEDESTRIAN BARRIER
GALVANISED WELDED POOL FENCING
FLAT TOP ROD

CITY OF GOLD COAST

GOLD COAST CITY COUNCIL

2015 EDITION
NOTES:

1. GATE & END POSTS TO BE 65 x 65 x 2 GALVANISED R.H.S. (REFER AS163)
2. INTERMEDIATE POSTS TO BE 50 x 50 x 2 GALVANISED R.H.S. (REFER AS163)
3. PANELS TO BE FIXED TO POSTS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
4. WELDED MESH PANELS TO BE ARC "SUNSHINE" OR EQUIVALENT, MANUFACTURED IN ACCORDANCE WITH AS 3902.
5. ALL GALVANISING TO BE IN ACCORDANCE WITH AS/NZS 4680.
6. 1227 HIGH x 3010 LONG PANELS MAY BE USED SUBJECT TO CITY OF GOLD COAST APPROVAL.
7. POSTS TO BE SET VERTICALLY IN CONCRETE GRADE N25.
8. RANDED PANELS ARE AVAILABLE FOR SLOPES UP TO 15° (1 IN 4).
9. NUTS TO BE SPOT WELDED TO BOLTS USING UCB-10 U CLIP AND GOLD GALVANISED AS AN ANTI THEFT DETERRENT.
10. THESE FENCES ARE INTENDED AS A PEDESTRIAN BARRIER AND ARE NOT TO BE USED IN SITUATIONS WHERE MOTOR VEHICLES REQUIRE RESTRAINT.
11. USE PAN-HEAD SECURITY TEK-SCREWS (14-10 x 25G 4/10 PSECTEK).
12. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
GENERAL NOTES

LOCATE AND PROTECT UNDERGROUND AND ABOVE GROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS.

ALL SITE CLEARING MUST BE LIMITED TO THE ALIGNMENT AND NOMINATED CLEARANCES FOR THE TRAIL. ALL MATERIAL MUST BE MULCHED, FOLLOWING WEED CONTROL, AND REUSED TO PROTECT DOWN SLOPE AREAS AND EXPOSED SOILS.

2.5% CROSS FALL TO TRAIL (DOMED LONGITUDINAL CAMBER).

PAVING MATERIAL MUST BE SUITABLE FOR THE PROPOSED USER.
- WALKING AND CYCLING DECOMPOSED GRANITE 100mm DEPTH, STABILISED WITH PORTLAND CEMENT OR SIMILAR BINDING PRODUCT.
- HORSE RIDING SURFACE CAN BE COARSE SAND WITH BINDING AGENT. APPROPRIATE GRADES MUST BE SELECTED AND EROSION CONTROL WORKS MUST BE UNDERTAKEN TO ENSURE STABILITY OF TRAIL SURFACE.

TRAIL SURFACE MUST MAXIMUM OF 25mm ABOVE NATURAL SURFACE.

GEOTEXTILE MUST BE LAYED TO MANUFACTURER'S SPECIFICATIONS.

ALL TREE ROOTS DAMAGED DURING SITE WORKS MUST BE CLEAN CUT AND COVERED WITH CLEAN SOIL AS SOON AS POSSIBLE FOLLOWING INSPECTION BY CITY OF GOLD COAST SUPERVISOR.

ALL SITE CLEARING IS TO BE RESTRICTED TO THE TRAIL ALIGNMENT AND NOMINATED CLEARANCES FOR THE TRAIL.

ENSURE SIDES ARE PROTECTED BY BACKFILLING WITH MATERIAL FROM SITE.

ALL WORK TO COMPLY WITH AS 2156.1 & AS 4970

ALL DIMENSIONS IN MILLimetres (M.M.).
GENERAL NOTES

LOCATE AND PROTECT UNDERGROUND AND ABOVE GROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS.

ALL SITE CLEARING MUST BE LIMITED TO THE ALIGNMENT AND NOMINATED CLEARANCES FOR THE TRAIL. ALL MATERIAL MUST BE MULCHED, FOLLOWING WEED CONTROL, AND REUSED TO PROTECT DOWN SLOPE AREAS AND EXPOSED SOILS.

2.5% CROSS FALL TO TRAIL (DOMED LATERAL CAMBER).

PAVING MATERIAL MUST BE SUITABLE FOR THE PROPOSED USE.
- WALKING AND CYCLING DECOMPOSED GRANITE 100mm DEPTH, STABILISED WITH PORTLAND CEMENT OR SIMILAR BINDING PRODUCT.
- HORSE RIDING SURFACE CAN BE COARSE SAND WITH BINDING AGENT. APPROPRIATE GRADES MUST BE SELECTED AND EROSION CONTROL WORKS MUST BE UNDERTAKEN TO ENSURE STABILITY OF TRAIL SURFACE.

TRAIL SURFACE MUST MAXIMUM OF 25mm ABOVE NATURAL SURFACE.

GEOFABRIC IF ORDERED MUST LAID TO MANUFACTURERS SPECIFICATIONS.

ALL TREE ROOTS DAMAGED DURING SITE WORKS MUST BE CLEAN CUT AND COVERED WITH CLEAN SOIL AS SOON AS POSSIBLE FOLLOWING INSPECTION BY CITY OF GOLD COAST SUPERVISOR.

ALL SITE CLEARING IS TO BE RESTRICTED TO THE TRAIL ALIGNMENT AND NOMINATED CLEARANCES FOR THE TRAIL.

ENSURE SIDES ARE PROTECTED BY BACKFILLING WITH MATERIAL FROM SITE.

ALL WORK TO COMPLY WITH AS.2156.1 & AS.4970

ALL DIMENSIONS IN MILLI METRES (MM).

TYPICAL SECTION

PAVEMENT DETAIL

STANDARD DRAWING

PEDESTRIAN PATHS CLASS 1
EARTHEN

STANDARD DRAWING NO. 05-802

2015 EDITION

CITY OF GOLD COAST

PAVING, COORDINATOR OPEN SPACE ASSETS

NAME: CAMERON TAYLOR 11/10/13

APPROVED - MANAGER PATHS & RECREATIONAL SERVICES

NAME: BON JACOBS 11/10/13

THIS DRAWING IS NOT TO BE AMENDED WITHOUT REFERENCE TO STANDARDS COMMITTEE.

CONTROLLED DOCUMENT

DO NOT SCALE

TAKEN DIRECTIONS ONLY

No. AMENDMENT APPROVED DATE ISSUED

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GENERAL NOTES

WHERE PRACTICAL, EXISTING TRAILS ARE TO BE UPGRADED TO COMPLY WITH THE PERFORMANCE CRITERIA AND SPECIFICATIONS CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES.

ALL TRAIL SURFACES ARE TO BE HARDENED WITH A SUITABLE MATERIAL AS INDICATED IN THE SPECIFICATIONS CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES.

REFER TABLE 2 (P65) CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES, FOR MINIMAL TRAIL WIDTHS.

ALL ENVIRONMENTAL PRACTICES ARE TO CONFORM WITH SECTION 5.2 OF THE RECREATION TRAILS DESIGN GUIDELINES. IN ADDITION:

- Trail design must result in no net loss of significant vegetation within the trails corridor.
- All off-sets from top-of-bank are to be stated and justified.
- Justification must be provided for trails proposed within top-of-bank, together with alternative locations and their relative benefits and constraints.

ALL WATERWAY CROSSINGS ARE TO BE:

- BRIDGED OR
- WHERE SUITABLE INFRASTRUCTURE EXISTS, CERTIFIED TO BE SUITABLE FOR THE PARTICULAR USE OR
- IN-STREAM CAUSEWAYS WHERE SUITABLE HARDENED ACCESS IS AVAILABLE DOWN THE BANK, JUSTIFICATION IS TO BE PROVIDED IF THESE ELEMENTS ARE TO BE USED IN THE TRAIL DESIGN.

ALL SIGNIFICANT TREES EG GREATER THAN 200 DBH (DIA. AT BREAST HEIGHT) ARE TO BE LOCATED AND THE TRAIL IS TO COMPLY WITH SECTION 5.2 OF THE RECREATION TRAILS DESIGN GUIDELINES.

A TRAILS DESIGN PLAN IS TO BE COMPLETED AND SUBMITTED TO THE DELEGATED AUTHORITY FOR ASSESSMENT. THIS PLAN IS TO INCLUDE:

- A SCALED CONTOUR MAP.
- A DETAILED DESCRIPTION OF THE SITE, INCLUDING PROXIMITY TO PRIVATE PROPERTY AND ADJACENT LAND USE.
- LOCATION OF ALL SIGNIFICANT VEGETATION AND HABITATS WITHIN THE PROPOSED TRAILS CORRIDOR EG WITHIN 30 METRES OF THE EDGE OF THE DISTURBANCE LINE FOR THE TRAIL.
- DETAILS OF THE TRAIL HEAD INCLUDING PARKING, ACCESS DESIGN AND DESIGN.
- THE CLASS, USER GROUP AND SETTING OF THE TRAIL.
- THE TRAIL DESIGN SPECIFICATIONS INCLUDING ENGINEERING CERTIFICATION OF ALL TRAIL STRUCTURES EG BRIDGES, BOARDWALKS AND PLATFORMS.
- SUMMARY OF CONSULTATION PROCESS INCLUDING STAKEHOLDERS CONSULTED.
- ENVIRONMENTAL MANAGEMENT PLAN INCLUDING VEGETATION MANAGEMENT, ENVIRONMENTAL WEED MANAGEMENT, FAUNA HABITAT MANAGEMENT (AQUATIC AND TERRESTRIAL), EROSION AND SEDIMENT CONTROL HYDRAULIC MANAGEMENT.
- SOCIAL IMPACT MITIGATION PRACTICES.
- USER IMPACT MANAGEMENT.

GENERAL NOTES (cont.)

A SITE REHABILITATION PLAN IS TO BE PREPARED WITH THE TRAILS DESIGN PLAN TO REHABILITATE THE TRAILS CORRIDOR DURING AND FOLLOWING CONSTRUCTION.

A SIGNAGE PLAN IS TO BE ATTACHED TO THE TRAILS DESIGN PLAN IDENTIFYING TYPE, MATERIALS AND LOCATION:

- Directional signage must conform to Australian Standards for walking tracks (part 1 AS2156.1-2001) and council's design manual and associated standard drawings. The frequency of such signage is set out in the trail classification table (Table 2).
- Interpretive signage should be a feature of all trails, especially those in Class 1 and to a slightly lesser extent Class 2. It should generally be of a vandal-proof form such as anodised aluminium.
- Regulatory signage should be located at the trails heads to inform the trail user of the conditions of use consistent with Namu signage guidelines.

ALL DIMENSIONS IN MILLIMETRES (M.M.).

STANDARD DRAWING

CLASS 2 - BIKE TRACK
GENERAL NOTES
CYCLE & EQUESTRIAN

NOTE:
REFER STANDARD DRAWING No.05-806 FOR GENERAL NOTES.

PEDESTRIAN & CYCLE

CLEARED WIDTH
3000

TRACK WIDTH
2500

500mm MIN PATH VERGE [TYP.]
GENERAL NOTES
WHERE PRACTICABLE, EXISTING TRAILS ARE TO BE USED AND UPGRADED TO COMPLY WITH THE PERFORMANCE CRITERIA AND SPECIFICATIONS CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES.

ALL TRAIL SURFACES ARE HARDENED WITH A SUITABLE MATERIAL AS INDICATED SPECIFICATIONS CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES.

MINIMUM WIDTH FOR TRAILS ARE AS PER STATED IN TABLE 2 (P.57) CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES.

ALL ENVIRONMENTAL PRACTICES ARE TO CONFORM WITH SECTION 5.2 OF THE RECREATION TRAILS DESIGN GUIDELINES. IN ADDITION:

TRAIL DESIGN MUST RESULT IN 5% NET LOSS OF SIGNIFICANT VEGETATION WITHIN THE TRAILS CORRIDOR.

ALL OFF-SETS FROM TOP-OF-BANK ARE TO BE STATED AND JUSTIFIED.

FOR TRAILS PROPOSED WITHIN TOP-OF-BANK JUSTIFICATION MUST BE PROVIDED FOR THE LOCATION WITH ALTERNATIVE SOLUTIONS FOR LOCATION, BENEFITS AND CONSTRAINTS OF THESE ALTERNATIVE TRAIL LOCATION SOLUTIONS.

ALL CROSSINGS ACROSS WATERWAYS ARE TO BE:

BRIDGED OR WHERE SUITABLE INFRASTRUCTURE EXISTS THESE NEED TO BE CERTIFIED SUITABLE FOR THE PARTICULAR USE OR WHERE SUITABLE IN-STREAM CAUSEWAYS MAY BE APPROPRIATE FOR MINOR WATERWAYS WHERE EXISTING HARDENED ACCESS IS AVAILABLE DOWN THE WATERWAY BANK. JUSTIFICATION IS TO BE PROVIDED IF THESE ELEMENTS ARE TO BE USED IN THE TRAIL DESIGN.

ALL SIGNIFICANT TREES EG. GREATER THAN 200 DIAM. ARE TO BE LOCATED AND THE TRAIL IS TO COMPLY WITH SECTION 5.2 OF THE RECREATION TRAILS GUIDELINES.

A TRAILS DESIGN PLAN IS TO BE COMPLETED AND SUBMITTED TO THE DELEGATED AUTHORITY FOR ASSESSMENT. THIS PLAN IS TO INCLUDE:

A SCALED CONTOUR MAP.

A DETAILED DESCRIPTION OF THE SITE INCLUDING PROXIMITY TO PRIVATE PROPERTY AND ADJACENT LAND USE.

LOCATION OF ALL SIGNIFICANT VEGETATION AND HABITATS WITHIN THE PROPOSED TRAILS CORRIDOR EG WITHIN 30 METRES OF THE EDGE OF THE DISTURBANCE LINE FOR THE TRAIL.

DETAILS OF THE TRAIL HEAD INCLUDING PARKING, ACCESS DESIGN AND DESIGN.

THE CLASS, USER GROUP AND SETTING OF THE TRAIL.

THE TRAIL DESIGN SPECIFICATIONS INCLUDING ENGINEERING CERTIFICATION OF ALL TRAIL STRUCTURES EG. BRIDGES, BOARDWALKS AND PLATFORMS.

SUMMARY OF CONSULTATION PROCESS INCLUDING STAKEHOLDERS CONSULTED.

ENVIRONMENTAL MANAGEMENT PLAN INCLUDING VEGETATION MANAGEMENT, ENVIRONMENTAL WEED MANAGEMENT, FAUNA HABITAT MANAGEMENT (AQUATIC AND TERRESTRIAL), EROSION AND SEDIMENT CONTROL, HYDRAULIC MANAGEMENT.

SOCIAL IMPACT MITIGATION PRACTICES.

USER IMPACT MANAGEMENT.

GENERAL NOTES (cont.)
A SITE REHABILITATION PLAN IS TO BE PREPARED WITH THE TRAILS DESIGN PLAN TO REHABILITATE THE TRAILS CORRIDOR DURING AND FOLLOWING CONSTRUCTION.

A SIGNAGE PLAN IS TO BE ATTACHED TO THE TRAILS DESIGN PLAN IDENTIFYING TYPE, MATERIALS AND LOCATION:

SIGNAGE MUST CONFORM TO AUSTRALIAN STANDARDS FOR WALKING TRACKS PART 1 (AS2156.1-2001) AND COUNCIL'S DESIGN MANUAL AND ASSOCIATED STANDARD DRAWINGS. THE FREQUENCY OF SUCH SIGNAGE IS SET OUT IN THE TRAIL CLASSIFICATION TABLE (TABLE 2).

INTERPRETIVE SIGNAGE SHOULD BE A FEATURE OF ALL TRAILS, ESPECIALLY THOSE IN CLASS 1 AND A SLIGHTLY LESSER EXTENT CLASS 2. IT SHOULD BE A VANDAL-PROOF FORM SUCH AS ANODISED ALUMINIUM.

REGULATORY SIGNAGE SHOULD BE LOCATED AT THE TRAILS HEADS TO INFORM THE TRAIL USER OF THE CONDITIONS OF USE CONSISTENT WITH NAMU SIGNAGE GUIDELINE.

ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
CLASS 2 - WALKING

Class 2 - Walking

Class 3 - Walking

NOTE:
Refer Standard Drawing No.05-808 for general notes.
GENERAL NOTES

WHERE PRACTICABLE, EXISTING TRAILS ARE TO BE UPGRADED TO COMPLY WITH THE PERFORMANCE CRITERIA AND SPECIFICATIONS CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES.

ALL TRAIL SURFACES ARE TO BE HARDENED WITH A SUITABLE MATERIAL AS INDICATED IN THE SPECIFICATIONS CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES.

REFER TABLE 2 (PB01) CONTAINED IN THE RECREATION TRAILS DESIGN GUIDELINES, FOR MINIMAL TRAIL WIDTHS.

ALL ENVIRONMENTAL PRACTICES ARE TO CONFORM WITH SECTION 5.2 OF THE RECREATION TRAILS DESIGN GUIDELINES. ADDITION:

TRAIL DESIGN MUST RESULT IN 0% NET LOSS OF SIGNIFICANT VEGETATION WITHIN THE TRAILS CORRIDOR.

ALL OFF-SETS FROM TOP-OF-BANK ARE TO BE STATED AND JUSTIFIED.

JUSTIFICATION MUST BE PROVIDED FOR TRAILS PROPOSED WITHIN TOP-OF-BANK, TOGETHER WITH ALTERNATIVE LOCATIONS AND THEIR RELATIVE BENEFITS AND CONSTRAINTS.

ALL WATERWAY CROSSINGS ARE TO BE:

- BRIDGED OR
- WHERE SUITABLE INFRASTRUCTURE EXISTS, CERTIFIED TO BE SUITABLE FOR THE PARTICULAR USE OR
- IN-STREAM CAUSEWAYS WHERE SUITABLE HARDENED ACCESS IS AVAILABLE DOWN THE BANK. JUSTIFICATION IS TO BE PROVIDED IF THESE ELEMENTS ARE TO BE USED IN THE TRAIL DESIGN.

ALL SIGNIFICANT TREES EG GREATER THAN 300 DBH (DIA. AT BREAST HEIGHT) ARE TO BE LOCATED AND THE TRAIL IS TO COMPLY WITH SECTION 5.2 OF THE RECREATION TRAILS DESIGN GUIDELINES.

A TRAILS DESIGN PLAN IS TO BE COMPLETED AND SUBMITTED TO THE DELEGATED AUTHORITY FOR ASSESSMENT. THIS PLAN IS TO INCLUDE:

- A SCALD CONTOUR MAP.
- A DETAILED DESCRIPTION OF THE SITE, INCLUDING PROXIMITY TO PRIVATE PROPERTY AND ADJACENT LAND USE.
- LOCATION OF ALL SIGNIFICANT VEGETATION AND HABITATS WITHIN THE PROPOSED TRAILS CORRIDOR EG WITHIN 30 METRES OF THE EDGE OF THE DISTURBANCE LINES FOR THE TRAIL.
- DETAILS OF THE TRAIL HEAD INCLUDING PARKING, ACCESS DESIGN AND DESIGN.
- THE CLASS, USER GROUP AND SETTING OF THE TRAIL.
- THE TRAIL DESIGN SPECIFICATIONS INCLUDING ENGINEERING CERTIFICATION OF ALL TRAIL STRUCTURES EG BRIDGES, BOARDWALKS AND PLATFORMS.
- SUMMARY OF CONSULTATION PROCESS INCLUDING STAKEHOLDERS CONSULTED.
- ENVIRONMENTAL MANAGEMENT PLAN INCLUDING VEGETATION MANAGEMENT, ENVIRONMENTAL WEED MANAGEMENT, FAUNA HABITAT MANAGEMENT (AQUATIC AND TERRESTRIAL), EROSION AND SEDIMENT CONTROL HYDRAULIC MANAGEMENT.
- SOCIAL IMPACT MITIGATION PRACTICES.
- USER IMPACT MANAGEMENT.

GENERAL NOTES cont.

A SITE REHABILITATION PLAN IS TO BE PREPARED WITH THE TRAILS DESIGN PLAN TO REHABILITATE THE TRAILS CORRIDOR DURING AND FOLLOWING CONSTRUCTION.

A SIGNAGE PLAN IS TO BE ATTACHED TO THE TRAILS DESIGN PLAN IDENTIFYING TYPE, MATERIALS AND LOCATION:

- DIRECTION SIGNAGE MUST CONFORM TO AUSTRALIAN STANDARDS FOR WALKING TRACKS PART 1 (AS2755.1-2001) AND COUNCIL'S DESIGN MANUAL AND ASSOCIATED STANDARD DRAWINGS. THE FREQUENCY OF SUCH SIGNAGE IS SET OUT IN THE TRAIL CLASSIFICATION TABLE (TABLE 2).
- INTERPRETIVE SIGNAGE SHOULD BE A FEATURE OF All TRAILS, ESPECIALLY THOSE IN CLASS 1 (AND TO A SLIGHTLY LESSER EXTENT CLASS 2). IT SHOULD GENERALLY BE OF A VANDAL-PROOF FORM SUCH AS ANODISED ALUMINIUM.
- REGULATORY SIGNAGE SHOULD BE LOCATED AT THE TRAILS HEADS TO INFORM THE TRAIL USER OF THE CONDITIONS OF USE CONSISTENT WITH NAMU SIGNAGE GUIDELINE.

ALL DIMENSIONS IN MILLIMETRES (M.U.O.):
GENERAL NOTES

LOCATE AND PROTECT UNDERGROUND AND ABOVE-GROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS.

ALL SITE CLEARING MUST BE LIMITED TO THE ALIGNMENT AND NOMINATED CLEARANCES FOR THE TRAIL. ALL MATERIAL MUST BE PILED TO THE FOLLOWING NEED CONTROL AND REUSED TO PROTECT DOWN SLOPE AREAS AND EXPOSED SOILS.

2.5% CROSS-FALL TO TRAIL (DOWN LATERAL CAMBER).

PAVING MATERIAL MUST BE SUITABLE FOR THE PROPOSED USE:
- WALKING AND CYCLING DECOMPOSED GRANITE 100Mm DEPTH
- STABILIZED WITH PORTLAND CEMENT OR SIMILAR BINDING PRODUCT
- MISC RIDE SURFACE CAN BE EXPOSED SAND WITH BINDING AGENT.

APPROPRIATE GRADES MUST BE SELECTED AND EROSION CONTROL WORKS MUST BE UNDERTAKEN TO ENSURE STABILITY OF TRAIL SURFACE.

TRAIL SURFACE MUST MAXIMUM OF 25mm ABOVE NATURAL SURFACE.

GEOTEXTILE IF ORDERED MUST LAD TO MANUFACTURER SPECIFICATIONS.

ALL TREE ROOTS DAMAGED DURING SITE WORKS MUST BE CLEANED UP AND COVERED WITH CLEAN SOIL AS SOON AS POSSIBLE FOLLOWING INSPECTION BY CITY OF GOLD COAST SUPERVISOR.

ALL SITE CLEARING IS TO BE RESTRICTED TO THE TRAIL ALIGNMENT AND NOMINATED CLEARANCES FOR THE TRAIL.

ENSURE SITES ARE PROTECTED BY BACKFILLING WITH MATERIAL FROM SITE.

ALL WORK TO COMPLY WITH AS5256.18 AS5178

ALL DIMENSIONS IN MILLIEMETRES (UNLESS)

TRAIL DRAINAGE:
WHERE TRAIL CROSS-FALL CAN NOT BE ACHIEVED OR IS UNDESIRABLE, A TERRACE SWALE ON INSIDE OF TRAIL ALIGNMENT.

INDICATIVE CUT AND FILL

- CONTACT FILL MATERIAL IN LAYERS OF 150mm DEPTH MAX
- TO 50% MOB. PRIOR TO PLACING MORE FILL MATERIAL
- FILL MATERIAL TO MAX SLIDE TO PLACE BOULDERS
- AS REQUIRED TO RETAIN SIGNIFICANT TREES AND COVER WITH 100mm SITE MULCH

STANDARD DRAWING

CLASS 2 & CLASS 3
EARTHEN - INDICATIVE CUT & FILL

STANDARD DRAWING NO:
05-809

2015 EDITION
**TYPE 1 TREADS**

The Type 1 - 600 x 350 x 160 mm concrete treads are supplied in 4 styles/patterns, all are imprinted on the back of the treads. The letters A, B, C or D are also marked on the top of the tread with a moulded imprint (DOT). One DOT represents style A, two DOTS is style B, three DOTS style C, and finally, four DOTS style D. Tread units are formed with an internal cavity having a minimum wall thickness of 30mm (this is not shown here for clarity).

**WIND IN PATH CURVES**

**MAXIMUM WIND**

The treads can also be laid into a curve. The maximum wind across a tread is 55mm. The top tread must lap the bottom tread by at least 20mm therefore reducing the narrowest side of the winding tread by 10mm.

Treads are also designed to be laid side by side to achieve a wider step. For example:

- 2 treads = 1 x 1200mm wide step
- 3 treads = 1 x 1800mm wide step

All the following footing and retaining requirements must be used under all treads no matter the width of track. Treads must be laid as close as possible together to minimize the gap between treads.
UNSTABLE OR SANDY SOILS

In unstable or sandy soils, the first tread of a run of treads must have a slab footing of at least 150mm thick. The slab footing is placed beneath the first tread. The footing must be at least the full length and breadth of the tread. The first tread is then laid on a mortar bed, level and plumb on the footing.

Each individual tread laid after the first will have the back of the lower tread by 150mm and be supported by a concrete slab footing of at least 150mm thick under the back and side walls of the tread. The slab footing's top is a minimum of 100mm wide and 120mm deep and must be poured on solid ground or compacted road base.

The mortar bed is then laid on the footing and along the back of the first tread. The tread is then settled plumb and level. This process continues until the last tread in the run of treads is laid. No run of treads is to exceed fifteen (15) treads.

Temporary edge footing should be used where necessary so the footing remains directly under the tread. This will ensure the footing will not be in the way of the concrete or concrete is used. It must be poured thoroughly as per manufacturer's instructions so as to produce a consistent and strong mix.

STABLE SOILS

In stable soil and shale type materials, treads may be laid on ground or 300mm well compacted, good quality road base plumb and levelled with a mortar bed. If the road base is needed under the tread, it is to be a minimum of 75mm deep and be compacted and contained within an earthen out of retained by the most appropriate retaining wall. The compacted and retained road base must be laid the full width and breadth of the base of the tread. No run of treads is to exceed fifteen (15) treads.

Where the road base cannot be retained or compacted, it must be replaced with a concrete footing. All treads and footings must be retained to 75mm below the footing.

The treads are designed to have a 200mm run with a 120mm rise. The rise includes a 100mm thick mortar bed. A 75mm footing must be poured so the mortar bed is directly adjacent to the footing. This will ensure that any loose material between the mortar and footing is not present. If the alternative method of compacted road base is used, the road base must contain clay pikes and be well compacted.

The mortar bed should be laid deep and wide enough so that it can overhang on the side of the tread for a full circumference of the tread wall. Retaining wall for component of stabilised tread. To ensure the tread movement after the mortar bed is set on the footing, tread movement must also be prevented by retaining wall.
TREAD LAYING SEQUENCE

It is preferable for the treads to be laid in sequence from "A" through to "D" from the bottom of the track to the top. This is to ensure the styles/patterns are not noticeably repeated. For example, A, B, C, D, A. The four tread styles/patterns must be mixed and matched so that repetitive patterns are not formed.

TREADS & PLATFORMS

RETENTION ROCK
**TRACK GRADING AND DRAINAGE**

Surface water drainage and grading is an integral part of walking track construction. It will be necessary to insert drainage into the walking track at every possible opportunity. In most cases, the track gradient will decide the type of drainage necessary.

The grade along any section of track should not exceed 1 in 7.5 (14%). The grade of 1 in 7.5 (14%) should only be used where absolutely necessary and should only be used after consultation with the project manager. The use of this grade will increase the frequency of cross drains needed in the walking track.

All crossings across waterways are to be:
- **Bridges**: Where suitable infrastructure exists, these need to be certified suitable for the particular use. Where suitable in-stream causeways may be appropriate for minor waterways, where existing hardened access is available down the waterway bank, justification is to be provided if these elements are to be used in the trail design.

All significant trees (e.g., greater than 200 dbh) are to be located and the trail is to comply with Section 5.2 of the Recreation Trails Guidelines.

A trails design plan is to be completed and submitted to the delegated authority for assessment. This plan is to include:
- A clear depiction of site location & extent of works.
- A scaled contour map.
- A detailed description of the site, including proximity to private property and adjacent land use.
- Location of all significant vegetation and habitats within the proposed trails corridor as within 30 metres of the edge of the disturbance line for the trail.
- Details of the trail head including any parking, access design and design.
- The class, user group and setting of the trail.
- The trail design specifications including engineering certification of all trail structures (e.g., bridges, boardwalks and platforms).
- Summary of consultation process including stakeholders consulted.
- Environmental Management Plan including vegetation management, declared & environmental weed management; fauna habitat management (aquatic and terrestrial); erosion and sediment control; hydraulic management.
- Social impact mitigation practices.
- User impact management.

A site rehabilitation plan must be prepared with the trails design plan to rehabilitate the trails corridor during and following construction.

A signage plan is to be attached to the trails design plan identifying type, materials and location of any proposed signage.
- Direction signage must conform to Australian standards for walking tracks Part 1 (AS2256-2:2001) and Council's design manual and associated standard drawings. The frequency of such signage is set out in the trail classification table (Table 2).
- Interpretive signage should be a feature of all trails, especially those in class 1 (and to a slightly lesser extent class 2). It should generally be of a vandal-proof form such as anodised aluminium.
- Regulatory signage should be located at the trails heads to inform the trail user of the conditions of use consistent with namu signage guidelines.

All dimensions in millimetres (mm).
BIKE TRACK - DUAL USE AS FOOTPATH

SWALE ON BOTH SIDES

NOTE:
REFER STANDARD DRAWING No.05-815 FOR GENERAL NOTES.

500mm MIN PATH VERGE (TYP.)

CLEARED WIDTH
3200

TRACK WIDTH
2500

BIKE TRACK - TWO WAY

SWALE ON BOTH SIDES

500mm MIN PATH VERGE (TYP.)

CLEARED WIDTH
3200

TRACK WIDTH
2500

STANDARD DRAWING

This drawing is not to be amended without reference to standards committee.

Controlled Document: Do not scale. Take figured dimensions only.

City of Gold Coast

Bike Track
DUAL USE AS FOOTPATH

2015 Edition

No. Amendment Approved Date Issued

Standard Drawing No. 05-814

Issued by:

City of Gold Coast

Drew by: Cameron Taylor

Approve by: Manager Parks & Recreational Services

Edon Jacobs 11/18/13
GENERAL NOTES
WHERE PRACTICALLY, EXISTING TRAILS ARE TO BE USED AND UPGRADED TO COMPLY WITH THE RECENTLY CRITICALLY SPECIFICATIONS, ITEMS CONTAINED WITHIN THE RECREATION TRAILS DESIGN GUIDELINES.
ALL TRAIL SURFACES ARE HARDENED WITH A SUITABLE MATERIAL AS INDICATED SPECIFICATIONS CONTAINED WITHIN THE RECREATION TRAILS DESIGN GUIDELINES.
MINIMUM WIDTH FOR TRAILS ARE AS PER STATED IN TABLE 2 (F05) CONTAINED WITHIN THE RECREATION TRAILS DESIGN GUIDELINES.
ALL ENTRANCE PAVEMENTS ARE TO CONFORM WITH SECTION 5.2 OF THE RECREATION TRAILS DESIGN GUIDELINES. IN ADDITION:
- TRAIL DESIGN MUST RESULT IN NO NET LOSS OF SIGNIFICANT VEGETATION WITHIN THE TRAIL CORRIDOR.
- ALL ON-SITES FROM TURF-IN-CARD ARE TO BE RATED AND JUSTIFIED.
- FOR TRAILS Mond or WITHIN TURF-IN-CARD, JUSTIFICATION MUST BE PROVIDED FOR THE LOCATION WITH ALTERNATIVE SOLUTIONS FOR LOCATION, BENEFITS AND CONSTRAINTS OF THESE ALTERNATIVE TRAIL LOCATION SOLUTIONS.

ALL CROSSINGS ACROSS WATERSWAYS ARE TO BE:
- BRIDGED OR WHERE SUITABLE INFRASTRUCTURE EXISTS THESE NEED TO BE CERTIFIED SUITABLE FOR THE PARTICULAR USE OF WATERSWAY.
- WHERE SUITABLE INSTREAM CAUSEWAYS MAY BE APPROPRIATE FOR MAJOR WATERSWAYS WHERE EXISTING HARDENED ACCESS IS AVAILABLE DOWN THE WATERSWAY BANK JUSTIFICATION IS TO BE PROVIDED IF THESE ELEMENTS ARE TO BE USED IN THE TRAIL DESIGN.

ALL SIGNIFICANT TREES EXSUITABLE THAN 300 BOM ARE TO BE LOCATED AND THE TRAIL IS TO COMPLY WITH SECTION 5.2 OF THE RECREATION TRAILS DESIGN GUIDELINES.
A TRAILS DESIGN PLAN IS TO BE COMPLETED AND SUBMITTED TO THE DELEGATED AUTHORITY FOR ASSESSMENT. THIS PLAN IS TO INCLUDE:
- A CLEAR DEPICTION OF SITE LOCATION & EXTENT OF WORKS.
- A SCALED CONTOUR MAP.
- A DETAILED DESCRIPTION OF THE SITE INCLUDING PROPERTY TO PRIVATIZE PROPERTY AND ADJACENT LAND USE.
- DESCRIPTION OF ALL RELEVANT VEGETATION AND HABITATS WITHIN THE PROPOSED TRAILS CORRIDOR E.G. WITHIN 30 METRES OF THE EDGE OF THE DISTURBANCE LINE FOR THE TRAIL.
- DETAILS OF THE TRAIL HEAD INCLUDING ANY PARKING ACCESS DESIGN AND DESIGN.
- THE CLASS, USER GROUP AND SETTING OF THE TRAIL.
- THE TRAIL DESIGN SPECIFICATIONS INCLUDING ENGINEERING CERTIFICATION OF ALL STRUCTURES E.G. BRIDGES, BORDERS AND FENCES.
- SUMMARY OF CONSULTATION PROCESS INCLUDING STAKEHOLDERS CONSULTED.
- ENVIRONMENTAL MANAGEMENT PLAN INCLUDING VEGETATION MANAGEMENT, DECLARED ENVIRONMENTAL WEED MANAGEMENT, FAUNA HABITAT MANAGEMENT, DOMESTIC AND TERRESTRIAL, EROSION AND SEDIMENT CONTROL, HYDRAULIC MANAGEMENT.
- SOCIAL IMPACT MITIGATION PRACTICES.
- USER IMPACT MANAGEMENT.

GENERAL NOTES (cont.)
A SITE REVITALIZATION PLAN IS TO BE PREPARED WITH THE TRAIL DESIGN PLAN TO REVITALIZE THE TRAIL'S CORRIDOR STATUS AND FOLLOWING CONSTRUCTION.
A VISUAL PLAN IS TO BE ATTACHED TO THE TRAIL'S DESIGN PLAN SHOWING TYPE, MATERIALS AND LOCATION OF ANY PROPOSED SIGNAGE:
- DIRECTORIAL SIGNAGE MUST CONFORM TO AUSTRALIAN STANDARDS FOR WALKING TRACKS (PART 14) AND CODES SIGNAGE MASTER PLAN & NATURAL RESOURCES MANAGEMENT UNIT SIGNAGE GUIDELINES. THE FREQUENCY OF SUCH SIGNAGE IS SET OUT IN THE TRAIL CLASSIFICATION TABLE (WET).
- INTERPRETIVE SIGNAGE SHOULD BE A FEATURE OF ALL TRAILS, ESPECIALLY THOSE IN CLASS 1 AND TO A Slightly LESSER EXTENT CLASS 2.
- REGULATORY SIGNAGE SHOULD BE LOCATED AT THE TRAIL HEAD TO INFORM THE TRAIL USER OF THE CONDITIONS OF USE CONSISTENT WITH NRM SIGNAGE GUIDELINE.

ALL DIMENSIONS IN MILLIMETRES (MM).
GENERAL NOTES

LOCATE AND PROTECT UNDERGROUND AND ABOVE GROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS.

ALL SITE CLEARING IS TO BE LIMITED TO THE ALIGNMENT AND NOMINATED CLEARANCES FOR THE TRAIL. ALL MATERIAL IS TO BE MILLED AND REUSED TO PROTECT DOWN SLOPE AREAS AND EXPOSED SOILS.

2% CROSS FALL TO TRAIL

EXCAVATE 300mm SOIL FOR ROAD BASE (SAND BED). COMPACTED ROAD BASE FOUNDATION IS TO BE PROVIDED WHERE DIRECTED BY CITY OF GOLD COAST SUPERINTENDENT IN LOW LYING, POORLY DRAINED OR LOW BEARING CAPACITY SOILS.

ALL TREE WORKS IN ACCORDANCE WITH AS970. CLEARED WIDTHS IS TO BE MINIMISED IN ORDER TO PROTECT NATIVE VEGETATION.

ENSURE SITES ARE PROTECTED BY BACKFILLING WITH MATERIAL FROM SITE.

ALL DIMENSIONS IN METREDEMS (m).

CONCRETE NOTES

AT A MINIMUM ALL CONCRETE TO BE GRADE NZ2 BROOM FINISHED 12mm MIN. THICKNESS. ALL CONCRETE WORKS TO BE REINFORCED WITH STEEL REINFORCEMENT PER CODE.

ALL PATHWAYS/PAVEMENT AREAS TO HAVE 1.50 MINIMUM CROSS-FALL.

CONTRACTION JOINTS (WHERE REQUIRED) AS 15mm CCJ JOINT TO BE FULL SEAL. 10mm CORED CONTRACTED CELL CROSS-LINKED POLYETHYLENE FOAM (80-180g/m²).

SEAL SURFACE OF JOINT WITH 10mm DEEP POLYETHYLENE SEALANT (SIMPLEX 14 SILICON OR EQUIVALENT). PAVEMENT AREAS BEYOND THIS DETAIL TO BE REVIEWED BY ENGINEER.

PATHWAYS & PAVEMENTS TO COMPLY WITH AUSTRALIAN STANDARDS AS4284.2005 AND CITY OF GOLD COAST REQUIREMENTS FOR ACCESS & MOBILITY.

NOTE

THE DRAINAGE DETAIL AS SHOWN TO ONLY BE USED FOR CONCRETE AND BITUMEN TRACKS. IT IS TO BE NOTED THAT THIS DRAINAGE WOULD NOT BE SUITABLE FOR EARTHEN TRACK SURFACES.
INCORRECT FITTING OF TOE STONES restricts surface water freely crossing toe stones.

INCORRECT PLACEMENT OF TOE STONES

TYPE 1 CAST TOE STONES

Type 1 toe stones (120mm x 175mm) come in 16 varying patterns. The primary purpose of these toe stones is to retain the outside edge of walking tracks.

CORRECT PLACEMENT OF TOE STONES

TOE STONE NOT ALIGNED WITH TRACK SURFACE - SHOULD BE FLUSH & PARALLEL TO SURFACE.

TOE STONE ALIGNED WITH TRACK SURFACE - FLUSH & PARALLEL TO SURFACE.
GENERAL NOTES

SURFACE WATER DRAINAGE AND GRADING IS AN INTEGRAL PART OF THE WALKING TRACK CONSTRUCTION. IT WILL BE NECESSARY TO INSERT DRAINAGE INTO THE WALKING TRACK AT EVERY POSSIBLE OPPORTUNITY. IN MOST CASES THE TRACK GRADE WILL DECIDE THE TYPE OF DRAINAGE NECESSARY. THE REQUIRED TYPES OF DRAINAGE ARE DISCUSSED BELOW.

GRADE ALONG ANY SECTION OF TRACK SHOULD NOT EXCEED 1 IN 3. THE GRADE OF 1 IN 7.5 (%) SHOULD ONLY BE USED WHERE ABSOLUTELY NECESSARY AND SHOULD ONLY BE USED AFTER CONSULTATION WITH THE PROJECT MANAGER / CITY OF GOLD COAST SUPERVISOR.

THE USE OF THE GRADE WILL INCREASE THE FREQUENCY OF CROSS DRAINS NEEDED IN THE WALKING TRACK. THE GRADED TRACK OR PLATFORM BETWEEN RUNS OF TREADS THAT ARE CLOSER THAN 2 METRES MUST NOT EXCEED 1 IN 20 OTHER THAN DURING THE FORMING OF A SPOON DRAIN AT THE TOP OF EVERY RUN OF TREADS. IT WILL ALSO BE NECESSARY TO INSERT DRAINAGE AT THE TOP OF EVERY RUN OF TREADS. FOR EVERY RUN OF TREADS, A SPOON DRAIN MUST BE CREATED BY LOWERING THE TURF STONES, OR RETAINING ROCK TO CREATE A BANE DRAINAGE ALONG THE TOP TREAD. THIS WILL REMOVE SURFACE WATER FROM THE TRACK SO IT DOES NOT BUILD UP BEHIND THE TOP TREAD. THE DRAINAGE MUST BE A MINIMUM OF 300 mm WIDE AND 65 mm DEEP. THE WATER SHOULD BE SHED WITH A CROSS FALL OF NO LESS THAN 1 IN 10.

AS STATED ABOVE, DRAINAGE MUST BE ENTERED INTO THE WALKING TRACK AT EVERY POSSIBLE OPPORTUNITY. THIS MUST INCLUDE A CROSS FALL. THE CROSS FALL SHOULD BE A MINIMUM OF 1 IN 20 (0.5 %) TO A MAXIMUM OF 1 IN 10 (10 %). THE CROSS FALL WILL EXTEND FOR THE ENTIRE LENGTH OF ANY GRADED EARTHEN SURFACED TRACK.
GENERAL NOTES

The use of both Type 1 & Type 2 pre-cast stone for retaining wall construction of no more than 800mm high.

These stones are also useful to mix and match with the Type 1 toe stones, where a deeper toe stone is necessary to retain the track surface. Battered retaining walls can be constructed quickly and effectively using Type 2 stones for capping and stabilising, in combination with Type 1 stones. Rock walls are to be battered back at 20 degrees minimum off the vertical. Walls must not be constructed any higher than 800mm without engineering approval.

Any water shed to be directed down slope, not to inside of track unless a continual or permanent water flow exists.

GRAVEL DRAINAGE, BACKFILL & SUBSURFACE DRAIN

FOUNDATION STONE

EXISTING GROUND PROFILE

TYPE 1 STONE USED AS INTERMEDIATE STONE

TYPE 2 STONE USED AS CAPping STONE

Drainage to go under the path and discharge on the side

Compact fill material in layers of 150mm depth max to 95% MDD. Prior to placing more fill material.

Fill material to max slope 1:2. Place boulders as required to retain significant trees and cover with 100mm site mulch.

APPROPRIATELY DESIGNED DRAINAGE OUTLET

STANDARD DRAWING

Type 1 & Type 2 pre-cast stone retaining wall

City of Gold Coast

PARKS, COORDINATOR OPEN SPACE ASSETS

NAME: Cameron Taylor

11/10/13

APPROVED: MANAGER PARKS & RECREATIONAL SERVICES

NAME: Ron Jacobs

11/10/13

THIS DRAWING IS NOT TO BE AMENDED WITHOUT REFERENCE TO STANDARDS COMMITTEE

CONTROLLED DOCUMENT

DO NOT SCALE

TAKE FIGURED DIMENSIONS ONLY

2015 EDITION

STANDARD DRAWING NO. 05-819

ISSUE
NOTES

WATER-BARS, SPANK DRAINS AND WHOA BOYS
The mouth of all drains must be retained with the stones (Type 1 or 2) of suitable rock to avoid erosion of the track edge. Water must be able to flow freely across these retaining stones. In walking track that rise less than 1 in 20 (5%), a span drain must be entered into the track at no more than 10° intervals. Spunk drains are to be used at every change in direction or sudden height gain along any given length of walking track (Figure 4). When constructing spunk drains it is desirable that the fall of grade within the spunk drain has a cross fall of 1 in 10, to ensure self-draining and water flow.

On sections of walking track that rise between 1 in 20 (5%) and 1 in 10 (10%), a cross drain in the form of a water-bar or whoa boy must be entered into the track. This is to be at no more than 7.5° intervals. These drains are to be entered across the track at 45°. Grades that exceed 1 in 10 (10%) and a maximum grade of 1 in 5 (20%) and a solid cross drain or water-bar must be entered into the track. This is to be at no more than 5° intervals. These drains must be entered across the track at approximately 60°. Whoa boys are not suitable on steeper grades and will only be used where grades of 1 in 10 (10%) or less are implemented.

Common rule of thumb - the steeper the track, the more drains and the shallower the angle of water diversion.

Whoa boys cannot only be used in good footing (very slick, sandy, loamy soils are difficult to compact and will have solid drainage in the form of water-bars constructed using Type 2 pre-cast or suitable natural stone. If natural stone is used, it must be clean import rock or site stone that is capable of being tightly packed into a trench to a depth of 200 mm minimum. Approximately 120 mm of stone is left exposed to direct the water. The rock should have good flat tops to avoid trip hazards and match the local geology. Water-bars and whoa boys must be placed across the track at an angle of no less than 45°. Grades less than 1 in 20.

Where water-bars are constructed, the lower side of the walking track or down hill side will need to be retained. The Type 2 stones, of suitable natural stone should be used to retain the face to the lower side of the water-bar. Grades that exceed 1 in 10 (10%) it may be necessary to increase the water-bar angle to 60° degrees to stop the speed of water flow along the walking track. This angle will depend on soil types, aspect and topography and must be agreed to by the project manager (City of Gold Coast supervising specialist).

DRAINAGE ON CURVED PATH SECTIONS

TYPE 2 CAST STONES
Type 2 cast stones (150 mm x 150 mm) were developed as a deeper rock to be embedded into the walking track for the construction of water bars. These products are designed to have 120 mm exposed above the track surface to divert water from the walking track.
BARRIER TO ENCLOSE PLAYGROUND NOT REQUIRED IF A MINIMUM 40m CLEAR SIGHT LINE TO POTENTIAL HAZARDS IS MAINTAINED.

BARRIER OR FULL FENCE TO ENCLOSE PLAYGROUND IS REQUIRED IF A MINIMUM 40m CLEAR SIGHT LINE TO POTENTIAL HAZARDS CANNOT BE MAINTAINED.

CONDUCT A RISK ASSESSMENT IN ACCORDANCE WITH THE GOLD COAST CITY COUNCIL RISK ASSESSMENT METHODOLOGY COUNCIL PLAYGROUNDS AND ASSOCIATED RISKS. CONTACT CITY OF GOLD COAST PARKS AND OPEN SPACE SERVICES OFFICER FOR A COPY OF THE RISK ASSESSMENT METHODOLOGY.

POTENTIAL HAZARD CAR PARK / INTERNAL ROAD

POTENTIAL HAZARD ROAD OR STREET

POTENTIAL HAZARD WATER FEATURES AND DRAINAGE INFRASTRUCTURE

NO FENCE REQUIRED

CLEAR SIGHT LINES FOR MINIMUM 40m IN ALL DIRECTIONS FROM PLAYGROUND

SIGHT LINES ARE CLEAR

TYPICAL SECTION

STANDARD DRAWING

PLAYGROUNDS

FENCING & SIGHT LINE REQUIREMENTS

STANDARD DRAWING NO: 05-902

2015 EDITION
NOTES

1. Impact safety zone surface material is to be a wet pour rubber system or rubber mat system and be in accordance with AS/NZS 4422:1996.
2. Use exercise equipment manufacturer's data for determining extent of impact safety zone in accordance with AS/NZS 4422:1996, Appendix B.
3. Refer to City of Gold Coast Parks and Open Space Services Offerer for direction on edge type to be installed.
4. All dimensions are in millimeters unless shown otherwise.

EDGE TYPE 1 - IMPACT SAFETY ZONE / EDGE DETAIL

- Minimum 1m clear zone from edge of pathway. The impact safety zone for the exercise equipment must not infringe into this clear zone space.
- Adjacent surfaces flush to top edges of concrete.
- Wet pour rubber or rubber pad soft fall system comply with requirements of AS/NZS 4422:1996.
- 200 x 150 extruded concrete edge. Concrete edge must be outside of play equipment fall zone.
- 5% concrete with 10% or 10% aggregate saw cut control joints at approx. 3m E/C. Concrete to be finished with a steel float.
- Adjacent turfed surface to be graded to fall away from impact safety zone.
A. LOOSE SOFT FALL - CENTRAL DRAINAGE - TYPICAL SECTION

ALL EDGES MUST BE LOCATED OUTSIDE OF PLAY EQUIPMENT FALL ZONE.

LOOSE SOFT FALL SURFACES DEPTH OF LOOSE SOFT FALL IN ACCORDANCE WITH AS/NZS 4422.

B. LOOSE SOFT FALL - PERIMETER DRAINAGE - TYPICAL SECTION

NOTE:
1. THE EXTENT, DEPTH AND TYPE OF SOFT FALL MATERIAL MUST BE IN ACCORDANCE WITH AS/NZS 4422.0:1996.
2. USE PLAY EQUIPMENT MANUFACTURER'S DATA FOR DETERMINING EXTENT OF FALL ZONES IN ACCORDANCE WITH AS/NZS 4422.0:1996, APPENDIX B.
3. ALL IMPACT ZONES (E.G. BASE OF LADDERS AND POLES, BASE OF SWINGS), AND ALL HEAVILY TRAVERSED AREAS MUST HAVE A WET POUR RUBBER SOFT FALL SURFACING OR RUBBER MAT SOFT FALL SURFACING APPLIED.
4. ENSURE DOWN HEIGHT OF GRASS TURF AREAS FINISHES FLUSH WITH TOP OF EDGE.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

C. WET POUR RUBBER / LOOSE SOFT FALL / TURF DETAIL

SURFACES TO FINISH FLUSH WITH EACH OTHER. WET POUR RUBBER OR RUBBER PAD SOFT FALL SYSTEM.

D. WET POUR RUBBER / EDGE DETAIL

CONCRETE EDGE - REFER TO STD. DWG. NO. 05-904 DETAIL B.

SURFACE BASE AT 30 DEGREES.

LOOSE SOFT FALL OR TURF SURFACE.
A. CONCRETE EDGE

- 200 x 150 EXTRUDED CONCRETE EDGE
- CONCRETE EDGE MUST BE OUTSIDE OF PLAY EQUIPMENT FALL ZONE
- 525 CONCRETE WITH 5 OR 10 AGGREGATE
- SAW CUT CONTROL JOINTS AT APPROX. 30m C/C
- CONCRETE TO BE FINISHED WITH A STEEL FLOAT

B. WOOD PLASTIC COMPOSITE (WPC) EDGE

- 200 x 75 WOOD PLASTIC COMPOSITE - COSSET Evertuff WPC OR EQUAL APPROVED
- RECESS ROD 10 BELOW SURFACE AND FILL WITH A SILICON SEALANT COLOURED TO MATCH EDGING

C. TREATED PINE LOG EDGE

- ACO TREATED ROUND LOGS (HS)
- MACHINE PEELED 175 DIAMETER

D. TURF SOFT FALL SURFACE INTERFACE (NO EDGE)

- ALL EDGES MUST BE LOCATED OUTSIDE OF PLAY EQUIPMENT FALL ZONE.

NOTES
2. USE PLAY EQUIPMENT MANUFACTURER'S DATA FOR DETERMINING EXTENT OF FALL ZONES IN ACCORDANCE WITH AS4422:1996, APPENDIX B.
3. ALL IMPACT ZONES (E.G BASE OF LADDERS AND POLES, BASE OF SWINGS), AND ALL HEAVILY TRAKED AREAS MUST HAVE A WET POUR RUBBER SOFT FALL SURFACING OR RUBBER MAT SOFT FALL SURFACING APPLIED.
4. ENSURE MOWN HEIGHT OF GRASS (TURF) AREAS FINISHES FLUSH WITH TOP OF EDGE.
5. ALL DIMENSIONS ARE IN MILLIETERS UNLESS SHOWN OTHERWISE.

STANDARD DRAWING

PLAYGROUNDS
EDGE DETAILS

STANDARD DRAWING No.

205-904

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