Section 5
Hume City
Design Details and Technical Notes for Open Space
Appendices

October 2003
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INTRODUCTION

These appendices form the second part of the Hume City Council Design Details and Technical Notes for Open Space document.
# APPENDICES

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1 PLANT INSTALLATION
1.1 Detail of tubestock planting in jutemat (continuous or squares)

- **Tubestock**: 20-25mm Ø tubestock to be healthy, disease-free specimens.

- **Planting**:
  - Water tubestock the day of planting, remove plant from tubestock at time of planting.
  - Protect tubestock with 3No. 750x18x225mm H.W. stakes driven 150mm into ground and 450 X 350 X 1 mm extruded polyethylene tree guard (where necessary) installed at ground level and sleeves taught between stakes.
  - Over-excavate hole by at least two times pot volume. Ensure sides of hole are roughened.
  - Backfill with site soil. Water after planting and during establishment period.

- **Jutemat Roll Dimensions**:
  - Length: 30m
  - Widths available: 370mm, 600mm, 1830mm, and 3660mm.
  - Mass: Thick - 750-800gms/m²
  - Density: Thick - 125-130kg/m³

- **Jutemat Roll**:
  - Steel pinned or pegged at A rate of 2-3 pins/pegs per m².
  - Overlap at joints by 300mm.
  - Place 600mm sq. jute mat fibre squares and secure by digging outer 100mm edges firmly into ground and steel pegged at corners.

- **Existing Site Soil (Uncultivated)**:
  - Note: In some circumstances site soil will require cultivation.
1.2 Detail of evergreen tree planting over 2m tall

- Proposed evergreen tree to be healthy, disease-free specimens.
- Water trees in their pots the day of planting and remove from pots at time of planting.
- Trees staked & tied to 3.1m with 1800x25x25mm H.W. stakes with flexible rubber or canvas in figure 'B' configuration.
- Saucer-shaped bowl formed to hold at least 4 litres of water.
- 100gm of Osmocote slow release fertiliser or similar. Add water storing granules according to manufacturer's instructions.
- 75mm layer of shredded pine wood mulch to 1m diameter.
- Proposed evergreen tree to be healthy, disease-free specimens.
- Water trees in their pots the day of planting and remove from pots at time of planting.
- Over-excavate hole by at least three times pot width. Ensure sides of hole are roughened. Backfill with imported weedfree topsoil, if required. Water immediately after planting and regularly during establishment period.
- Over-excavate hole by at least three times pot width. Ensure sides of hole are roughened. Backfill with imported weedfree topsoil, if required. Water immediately after planting and regularly during establishment period.
- Place 65/90mm diameter AG-pipe into plant hole prior to planting to extend 25mm only above finished mulch level.

Amendments

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Standard Landscape Drawings
1.3 Detail of tree guard

- Detail of tree guard
- Galvanised steel solid rod rings
- Galvanised steel plate ring
- Powder coated - colour to council's approval
- Fix tree grate to ground as per manufacturer's directions
- Ground line

Plan view

Amendments

- Rev. A
- Detail: Update for PDF
- Initial: DK
- Date: 07/07/05
- PLANTING DETAILS
- LD003
- Scale: NTS
- Sept 2002
1.4 Detail of evergreen tree planting under 2m tall

PROPOSED EVERGREEN TREE TO BE HEALTHY, DISEASE-FREE SPECIMENS. WATER TREES IN THEIR POTS THE DAY OF PLANTING AND REMOVE FROM POTS AT TIME OF PLANTING.

TREES STAKED & TIED TO 2 NO. 1500x25x25mm H.W.STAKES WITH FLEXIBLE RUBBER OR CANVAS IN FIGURE '8' CONFIGURATION

SAUCER-SHAPED BOWL FORMED TO HOLD AT LEAST 4 LITRES OF WATER

100gm OF OSMOCOTE SLOW RELEASE FERTILISER OR SIMILAR. ADD WATER STORING GRANULES ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

PLACE 65/90mm DIAMETER AG-PIPE INTO PLANT HOLE PRIOR TO PLANTING TO EXTEND 25mm ONLY ABOVE FINISHED MULCH LEVEL.

EXISTING SOIL PROFILE

OVER-EXCAVATE HOLE BY AT LEAST THREE TIMES POT WIDTH. ENSURE SIDES OF HOLE ARE ROUGHENED. BACKFILL WITH IMPORTED WEEDFREE TOPSOIL, IF REQUIRED. WATER TREES IMMEDIATELY AFTER PLANTING AND REGULARLY DURING ESTABLISHMENT PERIOD.

100gm OF OSMOCOTE SLOW RELEASE FERTILISER OR SIMILAR. ADD WATER STORING GRANULES ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

EXISTING SUBGRADE

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Amendments | PLANTING DETAILS
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LD004

SCALE: NTs

SEPT 2002
1.5 Detail of shrub planting

- 150-300mm diameter pots. Water plants in their pots the day of planting and remove plant from pot.
- 75mm layer of imported good quality, free-draining topsoil.
- 150mm layer of imported good quality, free-draining topsoil.
- 150mm layer of cultivated site soil.
- Spread Osmocote slow release fertiliser or similar @ 35g/150mm pot, 50g/300mm pot.

Shrubs to be healthy-disease free specimens. Typical shrub from 150-300mm diameter pots. Water plants in their pots the day of planting and remove plant from pot.

Over-excavate hole by at least three times pot width. Ensure sides of hole are roughened. Backfill with imported topsoil. Water each plant immediately after planting and regularly during establishment period.

Root ball

Existing subgrade

Shrub planting in garden bed

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Sept 2002
1.6 Detail of Indicative roundabout planting

**NOTE:**

PREPARE AREAS TO BE PLANTED BY SPRAYING WITH 2 APPLICATIONS OF ROUND-UP, FOLLOWED BY AN APPLICATION OF GYPSUM AT A RATE OF 1kg/metre sq. AND THEN BY CULTIVATING TO A DEPTH OF 200mm. SUPPLY AND SPREAD IMPROVED TOPSOIL TO 75mm BELOW TOP OF KERBS. LIGHTLY COMPACT TOPSOIL DEPTH OF SOIL WILL VARY. SUPPLY AND SPREAD 75mm DEPTH OF FINE BARK MULCH OVER GARDEN BED AREAS. SUPPLY AND PLANT ALL TREES, SHRUBS AND GROUND COVERS ACCORDING TO RELEVANT DETAILS. WATER EACH PLANT THOROUGHLY AFTER PLANTING.

**INDICATIVE TUFTING PLANTS (150mm POTS)**

- **Dietes bicolor** - 3
- **Kniphofia cultivars** - 3
- **Phormium cultivars** - 4
- **Lomandra longifolia** - 4

**INDICATIVE SHRUBS AND GROUND COVER RATES OF PLANTING PER METRE SQ:**

- **Carpet Rose cultivars** - 3
- **Cistus salviifolius** - 2
- **Osteospermum cultivars** - 3

**PLANTING SET BACK 3m FROM EDGE OF ROAD INFILLED WITH PAVING**

**INDICATIVE ROUNDABOUT PLANTING**

Standard Landscape Drawings

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**Scale:** NTS

**Date:** SEP 2002

**OCTOBER 2003**
1.7 Detail of indicative tree planting in roundabout

**NOTE:**
Prepare areas to be planted by spraying with 2 applications of Round-up, followed by an application of gypsum at a rate of 3kg/metre sq, and then by cultivating to a depth of 200mm. Supply and spread topsoil to 75mm below top of kerbs. Lightly compact topsoil. Depth of soil will vary. Supply and spread 75mm depth of fine bark mulch over garden bed areas. Supply and plant all trees, shrubs and groundcovers according to relevant details. Water each plant thoroughly after planting.

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**INDICATIVE TREE IN ROUNDABOUT PLANTING**

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HUME CITY DESIGN DETAILS AND TECHNICAL NOTES FOR OPEN SPACE

OCTOBER 2003

PAGE 13
1.8 Detail of grade requirements for planting and access

GRADE REQUIREMENTS FOR PLANTING AND ACCESS

Note:
Where unavoidable, slope may be benched. Benches are to be no more than 1.2m high and at least 2m wide, with a top set back of at least 3m.
2  IRRIGATION DETAILS
2.1 Detail of oval irrigation

As shown on the design plan, spare wires are to be taped and looped in a valve box.

Valves

Isolating brass gate valves and double check risers must be checked to ensure that there are no leaks and all are installed to suit the level of the ground.

Standards

All materials and workmanship shall be of best quality as indicated by the best available standards:

- A.S. 1477 Parts 1-6 U.P.V.C. pipes and fittings for pressure applications.
- A.S. 3147 Writing.
- A.S. 3167 Fitting.
- A.S. 1462 Methods for testing un-plasticised polyvinyl chloride (P.V.C.) pipe systems without digging. Place valve boxes on a brick base.
- A.S. 3147 Writing.

Water Supply

Ensure water supply pressure and flow rates prior to undergrounding.

Protection of Work and Safety

Prevention of soil upheaval

During laying, protection against upheaval is essential. Excavation shall be carried out with a minimum of 350 mm cover over main lines and laterals.

Contactors

Various contractors from all participate in all aspects of laying and excavation. Measurement of the work done will be reported to the Engineer and recorded in the as-laid drawings.

Valve Wiring

All valves are to be wired per Solenoid Wiring Diagram LD202. A pipeline shall be installed between each valve and all electrical connections in the same trench under the pipe. A loop of 3.6mm P.V.C. pipe will be looped to allow for future maintenance.

Valve Box Lid

Valve box lids shall be flush with the finished surface.

Protecting Works

Protect works by the erection of all necessary barriers and safety signs to make trench work safe.

Sprinklers

Poly-articulated riser to provide an easy means of height adjustment. Schedule 80 15mm P.V.C. pipe will be used for main line and lateral lines. Class 12 rigid U.P.V.C. solvent welded pipe work shall be kept free from dirt or debris. Open ends of pipes shall be sealed with compatible sealant to prevent any entry of dirt, debris or moisture. It is extremely important that a qualified person is available to install flexible tubing and any type of sprinkler head.
2.2 Detail of automatic pop-up sprayhead, sprinkler connection.

POP-UP SPRINKLER TORO 600s AND 590P, FALCON 7005s AND 8005s OR SIMILAR HUNTER OR RAINBIRD HEADS

ARTICULATED RISERS FOR BOTH 600s AND 570P SERIES TORO SPRINKLER HEADS

P.V.C. TEE OR ELBOW

CLASS 12 U.P.V.C. LATERAL
2.3 Detail of Section of valves and valve box

**Diagram Description**

- **Plastic Lid**
- **Ground Level**
- **Common Wire Taped at 3M Cts.**
- **Main Line Supply**
- **Control Wire Taped at 3M Cts.**
- **Carbon 1419B (or similar) Valve Box**
- **Gate Valve**
- **Existing Site Soil**
- **Brick Shoring**

**Irrigation Details**

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**Note:**
- Standard Landscape Drawings
- Scale: NTS
- Sept 2002
2.4 Irrigated kickabout area construction detail

Hydroseeded lawn or instant turf being a mix of:
- 70% fine turf type rye varieties x3
- 20% creeping redfescue
- 10% couch

150mm layered lightly rolled imported topsoil. Mix of black sandy loam and medium textured grey-brown loam.

(Please provide soil test for council approval)

Nominal depth of selected quality fill material:
- 150mm or as required to achieve final level relative to existing level. Supply sample of imported topsoil and proposed fill material and soil test results for council approval prior to ordering. Where possible salvage existing site top soil by stripping and stockpiling prior to development works.

Existing site soil cultivated to a minimum depth of 150mm. Incorporate gypsum at 1.5kg/10m².
3 PLAYSPACE DESIGN CHECKLIST

3.1 Playspace Design Checklist

See separate document: S5 - Playspace Design Checklist
4 PATH CONSTRUCTION DETAILS
4.1 Detail of granitic gravel path.

75mm layer of granitic gravel of clay fines and sand particles to 5mm da. Can be 5% cement stabilised compacted to 95% M.M.D.D. and gently crowned.

Alternatively if adjacent ground profile has crossfall - form path with crossfall to match.

75mm layer of 20mm F.C.R. Class 2 compacted to 98% (can be cement stabilised to 3%)

150 x 32mm C.C.A. re-dried treated pine plinth

300x75x25mm C.C.A. re-dried treated pine chisel point pegs fixed to plinth at 1800mm C/C and at changes of direction.

Fixed with 2 No. twisted shank galvanised nails, 55g x 60mm.

EXISTING SITE SOIL/TURF

SITE SOIL BOXED OUT, TRIMMED AND COMPACTED TO 95% M.M.D.D.
4.2 Detail of asphalt footpath with brick swale.

- 25mm COMPACTED LAYER CLASS L ASPHALT SIZE 7
- 7mm LAYER PRIMER BINDER
- 50mm COMPACTED LAYER CLASS 2F.C.R.
- 3 ROWS 230x114x50mm SELECTED CLAY BRICK PAVERS
  BUTT-JOINTED IN STRETCHER COURSE LAYED ON MORTAR BED
  FORM CHANNEL WITH END COURSES ON SMALL ANGLE.
- 50-75mm 25MPA CONCRETE WITH 45° HAUNCH 30mm HIGH ON END FACE
- BRICK BANDING TO FINISH FLUSH WITH ADJOINING SURFACE
- TRIMMED & COMPACTED SUBGRADE TO 95% M.M.D.D.
- FILL ANY SOFT SPOTS WITH CLASS 2 F.C.R. AS 150mm SEPARATE LAYERS
- 50mm COMPACTED LAYER CLASS 2F.C.R.
- 25mm COMPACTED LAYER CLASS L ASPHALT SIZE 7

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4.3 Detail of coloured concrete paving with tile banding.

- Existing site soil trimmed and compacted to 95% M.M.D.D. Excavate soil/clay to any soft spot and replace with Class 2 F.C.R. as 150mm compacted layers with 3% cement stabilisation to each layer.

- Lay 75mm layer Class 2 F.C.R. compacted to 95% M.M.D.D.

- 150mm thick, 25MPa coloured concrete F72 reinforced with 50mm cover from top of concrete. Colour as required broom finished.

- Concrete to be cured for at least seventy-two (72) hours continuously, following the time of placement.

- Joint spacing requirements:
  - Construction joints - at maximum 15m spacing.
  - Sawcut joints - at maximum 15m spacing.
  - Expansion joints - at J Ountions to buildings and structures.

- 20 – 30 1:3 cement sand mix wet.

- Selected masonry paving tile wet underside of pavers immediately prior to laying.

- Establish positive gradient, wherever possible for drainage.

- Amendements:
  - Rev. A
  - Initials: DK
  - Date: SEPT 2002

- Surface details:
  - Rev: A
  - Detail: Update for PDF
  - Date: 07/07/05
  - DWG: LD104
  - SCALE: NTS
  - SEPT 2002
4.4 Detail of reserve path, shared foot/bicycle path.

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CONCRETE CONSTRUCTION

Subgrade CBR to be a minimum of 3%.

Edge of asphalt to be backed up and disturbed area grass seeded.

NOTES:

1. ALL PATHS TO BE FOUNDED ON IN SITU MATERIAL.
2. PATHS IN FILL BE FOUNDED ON IN SITU MATERIAL.
3. CONCRETE TO BE 25MPa AT 28 DAYS.
4. DRAINAGE MUST BE CONSIDERED AND TABLE DRAINS/CLIVES PROVIDED TO THE ENGINEER’S APPROVAL.

Asphalt Construction

Subgrade CBR to be a minimum of 3%.

NOTES:

1. ALL PATHS TO BE FOUNDED ON IN SITU MATERIAL.
2. PATHS IN FILL BE FOUNDED ON IN SITU MATERIAL.
3. CONCRETE TO BE 25MPa AT 28 DAYS.
4. DRAINAGE MUST BE CONSIDERED AND TABLE DRAINS/CLIVES PROVIDED TO THE ENGINEER’S APPROVAL.

RESERVE PATH, SHARED BICYCLE/FOOT PATH

Standard Landscape Drawings
5 BOLLARD AND FENCING DETAILS
5.1 Detail of timber post & rail barrier

- **100 x 75mm TREATED TIMBER RAILS**
- Clearance from ground level: 700mm
- Holes drilled through centre posts only, part drill holes at end posts
- **125x125x1000mm HIGH TREATED PINE TIMBER BOLLARDS**
- **100 x 75mm TREATED TIMBER RAILS**
- Clearance from ground level: 700mm
- **125x125x1000mm HIGH TREATED PINE TIMBER BOLLARDS**
- **100 x 75mm TREATED TIMBER RAILS**
- Clearance from ground level: 700mm

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**Note:**
- 600mm into ground with a minimum of 100mm cement stabilised backfill cover to all sides
- 1800 opening for pedestrian and vehicular access
- 2800 opening for pedestrian and vehicular access
5.2 Detail of timber post & steel rail barrier

- **75mm Ø GALVANIZED STEEL PIPE**
- CLEARANCE FROM GROUND LEVEL: 700mm
- HOLES DRILLED THROUGH CENTRE POSTS ONLY
- PART DRILL HOLES AT END POSTS

**125x125x1000mm HIGH TREATED PINE TIMBER BOLLARDS**

- **REMOVEABLE BOLLARD**
- **GROUND LINE**

- OPENING FOR PEDESTRIAN AND VEHICULAR ACCESS: 2800mm
- 600mm INTO GROUND WITH A MINIMUM OF 100mm CEMENT STABILISED BACKFILL COVER TO ALL SIDES

**Holes**: 600mm into ground with a minimum of 100mm cement stabilised backfill cover to all sides. **Steel**: 75mm Ø galvanized steel pipe. **Clearance**: From ground level: 700mm. **Bollards**: 125x125x1000mm high treated pine timber. **Holes**: Drilled through centre posts only. **Part** drill holes at end posts. **Removeable Bollard**. **Ground Line**.

**Dimensions**:
- 1800mm
- 2800mm
- 600mm
- 700mm
5.3 Detail of gable end bollard

150 X 125 X
1000mm HIGH
TREATED PINE
TIMBER BOLLARD
FREE OF KNOTS
AND SPLITS
SPACED AT
1400mm CENTRES

EXISTING SITE SOIL
COMPACTED TO A
DEPTH OF 80mm

BOLLARDS TO BE
INSTALLED 600mm
INTO GROUND WITH A
MINIMUM OF 100mm
CEMENT STABILISED
BACKFILL COMB TO
ALL SIDES.

INSERT 150mm BRIDGE
SPIKE
50mm INTO POST

Amendments

FENCING DETAILS

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HUME CITY DESIGN DETAILS AND
TECHNICAL NOTES FOR OPEN SPACE

OCTOBER 2003

PAGE 29
5.4 Detail of bevel end bollard

PLAN VIEW OF 'BEVEL' END

BOLLARDS TO BE INSTALLED 600mm INTO GROUND WITH A MINIMUM OF 100mm CEMENT STABILISED BACKFILL COVER TO ALL SIDES.

150mm HIGH TREATED PINE BOLLARD FREE OF KNOTS AND SPLITS - SPACED AT 1400mm CENTRES.

EXISTING SITE SOIL COMPACTED TO A DEPTH OF 80mm

GROUND LINE

FIGURE 150

150

B 350

150

1000

150

600

620

150

INSERT 150mm BRIDGE SPIKE 50mm INTO POST.

Amendments

FENCING DETAILS

Rev. Detail Initial Date
A Updated for PDF EK 07.07.05
LD305

S O L E N E S

SEPT 2002
5.5 Detail of gable end bollard with recess.

- **Bollards to be installed 600mm into ground with a minimum of 100mm cement stabilised backfill cover to all sides.**
- **Existing site soil compacted to a depth of 80mm.**
- **150 x 125 x 1000mm high treated pine timber bollard free of knots and splits spaced at 1400mm centres.**
- **Form rebate as detailed: 150mm bridge spike 50mm into post.**
- **Insert 150mm bridge spike into post.**
5.6 Detail of removable bollard and square options

- TIMBER, POWDER COATED or GALVANISED STEEL BOLLARD OF VARYING SIZES
- EYE BOLT AND PADLOCK
- MS CHECKPLATE WITH SLOT FOR EYE BOLT, ATTACHED TO SUBMEY HINGE AT BASE
- MS SLEEVE WITH 125 x 125 x OR 125 DIA. INTERNAL DIMENSIONS
- BASE OF POST 120 x 120 OR 120mm x DIA
- CONCRETE FOOTING - MINIMUM 150mm FROM ALL SIDES
- LARGE DRAINAGE HOLE AT BASE PLATE

NOTE:
Maintain drainage hole in base plate.

Amendments

- Standard Landscape Drawings

REMovable BOLLARD, ROUND AND SQUARE OPTIONS

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SCALE: NTS
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6 PARK FURNITURE DETAILS
6.1 Detail of timber slat bench.

FINISH:
- CAST ALUMINIUM - POWDER COATED TO COLOUR APPROVED BY COUNCIL
- TIMBER - OILED OR STAINED FINISH
- MILD STEEL - GALVANISED AND POWDER COATED TO APPROVED SELECTED COLOUR

FIXING:
- BOLTS FIXED TO CONCRETE PAD
- BOLT DETAIL - 4 No. M8 X 65MM ZINC PLATED DYNABOLTS
- TAMPER PROOFING DYNABOLTS - BURRING OFF THREADED TOP
- CONCRETE PAD 2000x1200 WIDE x 125mm THICK

NOTE:
- CAST ALUMINIUM - POWDER COATED TO COLOUR APPROVED BY COUNCIL
- TIMBER - OILED OR STAINED FINISH
- MILD STEEL - GALVANISED AND POWDER COATED TO APPROVED SELECTED COLOUR

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6.2 Detail of metal bench seat

**FIXING:**
BOLTS FIXED TO CONCRETE PAD
BOLT DETAIL - 4 No. M8 x 65mm ZINC PLATED DYNABOLTS.
TAMPER PROOFING DYNABOLTS - BURRING OFF THREADED TOP.
CONCRETE PAD 2000x1200 WIDE x 125mm THICK

**NOTE:**
FINISH:
MILD STEEL - GALVANISED AND POWDER COATED TO APPROVED/SPECIFIED COLOUR

**METAL BENCH SEAT**

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**FURNITURE DETAILS**

**SCALE:** NTS
**Dwg:** LD402
**SEPT 2002**
### 6.3 Detail of picnic table with attached seats.

**GROUND LINE**

1800 x 1300 x 720mm

HARWOOD TIMBER, POWDER
COATED STEEL OR STAINLESS
STEEL AND STEEL FRAME PICNIC
TABLE

**FIXING**

TIMBERS TO FRAME - REAR FIXED WITH M6 ZINC PLATED, TAMPER PROOF, HEX HEADSCREWS
WELD STEEL SLATS TO FRAME

PICNIC SETTING TO GROUND -
1. BASE PLATE - MILD STEEL PLATE FIXED TO CONCRETE PAD - 400x400x10mm PLATE DRILLED WITH 4 No. 17mm DIA. BOLT HOLES
BOLTS - 4 M16 GALV. DYNABOLTS OR RAG BOLTS
TAMPER PROOF DYNABOLTS - BURNING OFF THREADED TOP
2. DIRECT BURY - EXTEND LEG 1000mm, WELD ROD ANCHOR TO BASE AND BURY DIRECTLY INTO PLACE
6.4 Detail of picnic table with non-attached seats.

- **PLAN**
  - 100x50mm REDGUM
  - 100x100mm REDGUM POST
  - SEATS ON 3 SIDES
  - ONLY VACANT SIDE FOR WHEELCHAIR ACCESS
  - PROVIDE ACCESS FROM NEAREST PATH

- **SECTION**
  - 200x50 REDGUM
  - ALL BOARDS TO BE FREE OF ROUGH EDGES AND SPLINTERS
  - 2 No. 10mm COACH BOLTS PER CONNECTION

- **Amendments**
  - **Furniture Details**
    - LD404
    - Scale: NTS
    - Sept 2002
6.5  Detail of table and seat fixing.

POST OF SEAT/TABLE
76mm EXTERNAL DIA., 65mm INTERNAL DIA. GALVANISED TUBE WITH 5mm MACHINE BEVELLED EDGE AT TOP
8mm DIA. THREADED GRUBSCREW
20mm SQUARE TUBE – UNDER SIDE SET FLUSH WITH GROUND LEVEL
30mm COMPACTED LAYER TYPEL ASPHALT SIZE 10 / OR MATCH TO SURROUNDING FINISH
16mm DIA. GALVANISED RODS ON BOTH SIDES OF TUBE WELDED TO POST - HOT TOP
GALVANISE AFTER FABRICATION
20MPa CONCRETE FOOTING

Table and seat fixing details:

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6.6 Detail of drinking fountain - standard.

- **Stainless Steel Bubbler and Bowl**
- **Flexible Stainless Steel Pipe**
- **Stainless Steel Body**
- **300mm Diameter Base Plate Bolted to Paving with 4 No. 10 or 12mm M.S. Bolts**
- **Connect to Water Supply**
- **Position on 1000x1000x100mm Thick Concrete Paving Slab F72 Mesh Placed Centrally**

**Amendments**

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**Furniture Details**

- **Scale**: N/1
- **Date**: Sept 2002
6.7 Detail of drinking fountain – accessible

**STAINLESS STEEL BUBBLER**

**STAINLESS STEEL BODY**

**FLEXIBLE STAINLESS STEEL PIPE**

300 x 300mm GALV. STEEL MOUNTING PLATE BOLTED WITH 4 No. (2M8 M.S. BOLTS TO PAVING OR FOOTING)

CONNECT TO WATER SUPPLY

GROUND LEVEL

MIN. 650

MIN. 500

870

POSITION ON 1000x1000x300mm THICK CONCRETE PAVING SLAB F72 MESH PLACED CENTRALLY

770

**FURNITURE DETAILS**

**Dwg**: LD407

**Scale**: NTS

**Date**: SEPT 2002

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**STANDARD LANDSCAPE DRAWINGS**

**HUME CITY DESIGN DETAILS AND TECHNICAL NOTES FOR OPEN SPACE**

**HUME CITY COUNCIL**
6.8 Detail of rubbish bin enclosure.

- Side entry punched perforated cast aluminium sheet 120 or 80 litre capacity bin surround.
- Powder coated - colour to council approval.
- Galvanised steel socket.
- Lockable door entry.

- Peaked stainless steel entry lid for recycle bin.

- Placement of bin:
  - Avoid corners.
  - Where possible, place near poles.
  - 500mm minimum distance from kerbs.
  - 5m minimum distance from seats.
  - Door to open parallel/open to kerbs.

- 120 or 240 litre plastic wheeled bin.

- Concrete footing.

- Ground line 300x300x450mm.

- DWG: LD408

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6.9 Detail of rubbish bin security posts.

1110mm HIGH SINGLE OR DOUBLE
LOCKED, GALVANISED STEEL
SECURITY POSTS
POWDER COATED - COLOUR TO
COUNCIL APPROVAL

SUITABLE FOR 120 AND
240 LITRE PLASTIC
WHEELED BINS

WHERE BIN IS SITUATED
WITHIN GRASSED AREA,
CONSTRUCT CONCRETE PAD
TO ALLOW FOR MOVING
AROUND BIN

FIXING:
OPTIONAL 300 X 300 X 8mm BASE
PLATE BOLTED DOWN TO PAVEMENT
SURFACE OR POST SET IN
400X300X300mm CONCRETE FOOTING
AND 1500X1000X100mm DEEP
CONCRETE PAD
6.10 Detail of bike rack and footings.

- **Detail of bike rack and footings.**

  - **810mm HIGH X 50.8mm DIAMETER**
  - **STAINLESS STEEL TUBE WITH POLISHED OR POWDER COATED FINISH - COLOUR TO COUNCIL APPROVAL**

  - 450mm RADIUS

  - **STEEL TUBE STIFFENER**

  - **PAVING, CONCRETE OR ASPHALT SURFACE**

  - **350 X 350 X 350mm CONCRETE FOOTING**

  - **150X150X5mm STEEL PLATE ANCHORED 300mm FROM GROUND LEVEL INTO FOOTING**

  - **PLACE:**

    - POSITION PARALLEL TO TREE GRILLS AND PERPENDICULAR TO KERB WHERE POSSIBLE
    - SPACE AT MINIMUM 1000mm APART
    - POSITION MINIMUM DISTANCE OF 1000mm FROM SEATING

  - **ALTERNATIVE FIXING:**

    - 50mm DYNA BOLT / 10 mm DYNA BOLTS WITH NUTS TACK WELDED FOR SECURITY THROUGH 150X150X5mm STEEL BASE PLATE INTO GROUND

  - **UPDATE FOR PDF**

  - **Amendments**

  - **FURNITURE DETAILS**

  - **LD410**

  - **SCALE:** NTS

  - **DATE:** SEPT 2002

  - **INITIALS:** DK

  - **DATE:** 27/07/05
6.11 Detail of reserve pole light

LANTERN (e.g. BOURKEHILL, NOSTALGIA OR KENSINGTON SERIES) WITH INTEGRAL P.E. CELLS AS PER AS3771

Access Door

IN-GROUND FIXING

LANTERN AND POLE
UNIFORM IN COLOUR
(e.g. BLACK, CLARET RED, HAWTHORN GREEN)

NOTE:
LANTERNS MUST CONFORM WITH THE VESI GUIDELINES FOR NON-STANDARD PUBLIC LIGHTING AND BE UNIFORM THROUGHOUT THE ESTATE

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SCALE: NTS

SEPT 2002
6.12 Detail of Electric BBQ unit

CONCRETE FOOTING, BRICK PAVERS
OR GRANITIC GRAVEL SURFACE:
1000mm WIDE STANDING ARMS ON
ALL SIDES. ALLOW 30mm FALL FROM
TAP TO PIT.

GATIC L500 PIT GRATE
BRICK PIT WITHIN
CONCRETE BASE

CONCRETE SLAB FOOTING
150mm THICK F72

MONIER UNI-PAVE BUTTED TO BRICK COURSE
REINFORCED CONCRETE F7
REINFORCING MESH

STAINLESS STEEL HOT PLATE SET ON TOP OF
BENCHTOP IN ACCORDANCE WITH MANUFACTURERS
SPECIFICATIONS. PROVIDE TWO PUSH BUTTON
OPERATED ELECTRIC BARBEQUES TO EACH UNIT.

150mm REINFORCED CONCRETE
SUSPENDED SLAB

SPRING LOADED SELF CLOSING TAP

CONCEAL PIPE IN BRICKWORK OR BLUE STONE

GATIC L500 PIT GRATE, BRICK PIT
AND CONCRETE BASE

200mm DIA. R.G. DRAIN PIPE

VENTILATE BRICKWORK

UNDER SIDE OF LINTEL 100X0.4M S. GALV.

240V 6 KW PUSH BUTTON OPERATED BBQ

MONIER UNI-PAVE BUTTED TO BRICK COURSE

REINFORCED CONCRETE F7
REINFORCING MESH

ELEVATION

PLAN

HUME CITY DESIGN DETAILS AND
TECHNICAL NOTES FOR OPEN SPACE
OCTOBER 2003
PAGE 45
7 SIGNAGE GUIDELINES

7.1 Formatting

7.1.1 Colour
All Hume City Council signs are to follow colour and type specifications. The logo is to appear in only two formats:

1. On a white background using Black and Blue PMS 2728.
2. On a green background, the logo will appear in two colours: black and blue. On a blue background, the logo will be reversed out in white.

Background colour of Heading area is to be solid blue strip to match PMS 2728 as shown above. Bottom strip to be green to match PMS 376.

7.1.2 Font
Text is always to be Swiss 721 BT as depicted unless otherwise approved.

7.1.3 Heading
Heading text is to be centred on the panel and always appear white reversed out of blue background. The exception to this rule is Sh1 (Shopping Centre Sign) where the blue field is increased to incorporate the title of the Shopping precinct, and the text is left justified.

7.1.4 Information Area
The white field is set according to the proportions given in this document.

7.1.5 Bottom Strip
The green strip will incorporate by-lines and the Hume City Council logo as required by each sign type.
7.2 Detail of facility name signage

7.2.1 Uses
Reserve entrances.
Entrance to kindergartens, libraries, community centres.

7.2.2 Locations
As close to entrance as possible.
To be located in soft earth.

7.2.3 Construction notes
Signs fabricated from aluminium with 50mm return to sides.
50mm SHS posts.
7.3 Detail of interpretation signage

7.3.1 Uses
To signify points of interest.
Wording of ‘Points of Interest’ to be replaced by title of area or feature.

7.3.2 Locations
To be situated within 2m of point of interest or at entrance to site.

7.3.3 Construction notes
Signs fabricated from aluminium with 50mm return to sides.
Painted finish.
Anti-graffiti finish may be required.
50mm SHS posts powdercoated to match silver PMS 877.
Height ‘X’ to be determined by information to be displayed.
7.4 Detail of gateway signage

7.4.1 Uses
G1 - At major roadway entrances to Hume City, generally in a rural setting.
G2 - At minor roadway entrances to Hume City, or at major roadway entrances in a highly urbanised setting.

7.4.2 Locations
G1 - To be determined on site having regard to visibility and traffic safety requirements
G2 - Within 1m of kerb.

7.4.3 Construction notes
Signs fabricated from aluminium with 50mm return to sides.
90mm SHS posts on G1, 50mm SHS on G2.
7.5 Detail of suburb signage

7.5.1 Uses
- S1 – To signify townships within Hume City.
- S2 – At entrances to suburbs in urban settings within Hume City.

7.5.2 Locations
- S1 – Semi-rural settings within one metre of kerb, facing direction of traffic
- S2 – To be determined on site having regard to visibility and traffic safety requirements.
- Sh1 – At entrances to shopping precincts

7.5.3 Construction notes
- Aluminium panels with 50mm returns.
- 90mm SHS posts on S1, Sh1, 50mm SHS on S2.
8 SHELTERS AND GAZEBOS
8.1 Detail of hexagonal picnic pavilion.

WHERE LIGHTING IS REQUIRED, INSTALL INTO APPEX A 'PIERLITE' VO2118 WITH TWIN 18W FLUOROTUBES AND OPAL POLYCARBONATE DIFFUSER, CONTROLLED WITH PECELL CIRCUIT TO BE RCD PROTECTED AND WIRING TO RUN THROUGH GALVANISED STEEL CONDUIT.

NOTE:
BUILDING PERMIT IS REQUIRED AND MUST BE SUPPLIED TO COUNCIL AT HANDOVER

8.2 Detail of square picnic pavilion

WHERE LIGHTING IS REQUIRED, INSTALL INTO APEX/PERLITE VC218 WITH TWIN 18W FLUOROTUBES AND OPAL POLYCARBONATE DIFFUSER, CONTROLLED WITH PECELL CIRCUIT TO BE RCD PROTECTED AND WIRING TO RUN THROUGH GALVANISED STEEL CONDUIT.

NOTE:
BUILDING PERMIT IS REQUIRED AND MUST BE SUPPLIED TO COUNCIL AT HANDOVER.
9 WATER FEATURES AND WETLAND DETAILS
9.1 Detail of stormwater outlet for large diameter pipes

- Larger toe rocks: 1000-1200mm diameter
- Smaller bank rocks: 800-1000mm diameter
- Extend rock over edge of pipe to hide outlet
- Voids between rocks on side of embankments to be filled with top soil and appropriate plants (indigenous)
- Voids to base of stream filled with concrete to ensure water flows over and around rocks and not underneath
- Larger toe rocks to be 3000-1200mm diameter
- Smaller bank rocks to be 800-1000mm diameter
- Note: Angle pipe 45° downstream any disturbed area of existing embankment resulting from the works is to be planted with suitable vegetation

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HUME CITY DESIGN DETAILS AND TECHNICAL NOTES FOR OPEN SPACE

OCTOBER 2003

PAGE 55
9.2 Detail of ephemeral pond & settling pond

**EPHEMERAL POND**

- SPORTS TURF GRASSES, LOMANDRA, CAREX OR JUNCUS
- HIGH WATER LEVEL
- MAXIMUM 1:6 GRADE INTO POND

**SETTLING POND**

- TYPICAL OUTFLOW PIPE FROM STREET DRAIN, BASEMENTS OR OPEN SPACE
- SEDIMENT FIRST RUSH SETTLING POND FILLED WITH CRUSHED ROCK BALLAST AND RANGE OF RIVER PEBBLES -- MAXIMUM 50mm DIAMETER
- ROCK RIPPLE BUFFER TREATMENT - ROCKS TO BE OF VARYING SIZES WITHIN A 300-500mm DIAMETER SIZE RANGE
- PLANTING OF REEDS AND RUSHES IN POND AND ALONG MEANDERING FILTRATION BED (E.G. CAREX SPP., ELEOCHARIS SPP.)

**NOTE:**
SUPPLY MAINTENANCE/MANAGEMENT PLAN DETAILING WATER QUALITY TESTING REQUIREMENTS, SILT AND VEGETATION MANAGEMENT SCHEDULES

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**WATER FEATURES**

| Scale: TNS | SEPT 2002 |
9.3 Detail of Permanent Ornamental Pond.

**SECTION VIEW**

- Minimum 2 metre buffer planting to embankment - maximum water depth 300mm. Use of Carex, Eleocharis, Amphibromus, Isolepis species and Cyperus species.
- Lomandra, Danella, Poa and Danthonia species.

**GROUND LEVEL**

- Water level at capacity
- Trough
- Where space permits in larger ponds, create refuge islands.

**IF NECESSARY CREATE MOAT FILTRATION SYSTEM AROUND EDGE OF POND. PLANT SPECIES AS PER BUFFER PLANTING.**

**WHERE SPACE PERMITS IN LARGER PONDS, CREATE DEEPER TROUGHS AS FISH HABITATS AND TO ESTABLISH GREATER WATER MOVEMENT.**

**PROVIDE OVERFLOW OUTLET IN LOCATION AS DETERMINED ON SITE.**

**NOTE:**

- Supply maintenance/management plan, detailing water quality testing requirements, silt and vegetation management schedules.

**PLAN VIEW**

- Headwall and inlet from stormwater system, street drains, easements or open space.
- Flow of water through moat filtration system if applicable.

**PERMANENT ORNAMENTAL POND**

**STANDARD LANDSCAPE DRAWINGS**

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**WATER FEATURES**

- LD603
- Scale 1:50
- Sept 2002
10 RECOMMENDED SPECIES LIST

See separate document: S5b - Species Lists
11. GUIDE TO REVEGETATION IN HUME WITH INDIGENOUS SPECIES

See separate document: S5b - Species Lists
12 NEW ASSET INSPECTION SHEET

See separate document: S5b – New Asset Inspection Sheet
13 LIST OF INDIGENOUS PLANT SUPPLIERS

1. Western Plains Flora
   Telephone 9740-3178
   628 Wildwood Road
   Wildwood

2. Greybox and Grassland Indigenous Nursery
   Telephone 5369-5221
   50 Schools Road
   Balliang East 3340

3. Victorian Indigenous nurseries Co-operative
   Telephone 9482-1710
   Yarra Bend Road
   PO Box 24
   Fairfield 3978
## 14 LANDSCAPE TREATMENTS TABLE

14.1 Appropriate landscape treatments for neighbourhood landscape character types

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1. For screening - to maintain vision
2. To maintain motorist vision
3. At activity nodes
4. In association buildings and carparks
5. Entrances only
### 14.2 Appropriate landscape treatments for subregional landscape character types

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1. For screening - to maintain vision
2. To maintain motorist vision
3. At activity nodes
4. In association with civic space
5. Entrances only
### 14.3 Appropriate landscape treatments for regional landscape character types

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<th>Informal Shrub Massing (indigenous, native or exotic)</th>
<th>Low Informal Groundcover and Shrub Planting</th>
<th>Indigenous Groundcover</th>
<th>Indigenous Mixed Groundcover and Shrub Massing</th>
<th>Indigenous Shrub &amp; Tree (including Grooving Revetment Beds)</th>
<th>Indigenous Trees &amp; Groundcover Massing</th>
<th>Indigenous Trees (discrete)</th>
<th>Advanced Canopy Trees (non indigenous)</th>
<th>Irrigated Mown Turf (lawn)</th>
<th>Non-Irrigated Mown Turf</th>
<th>Differentially Mown Turf</th>
<th>Rough Turf or Grasped Area</th>
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1. For screening - to maintain visual interest
2. To maintain motorist vision
3. At activity nodes
4. In association with civic space
5. Entrances only
### 14.4 Appropriate landscape treatments for roadside landscapes

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<th>Informal Shrub Massing (indigenous, native or exotic)</th>
<th>Low Informal Groundcover and Shrub Planting</th>
<th>Indigenous Groundcover</th>
<th>Indigenous Mixed Groundcover and Shrub Massing (including Greening Revegetation Beds)</th>
<th>Indigenous Shrub &amp; Tree Massing</th>
<th>Indigenous Tree Massing</th>
<th>Indigenous Trees (discrete: advanced Canopy Trees (non indigenous))</th>
<th>Irrigated Mown turf (lawn)</th>
<th>Non-irrigated Mown turf</th>
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1. To maintain motorist vision
2. In association with civic space
15 LIST OF REFERRAL DOCUMENTS

Children Services Regulations 1998
Hume Bicycle Strategy Plan 1996
Hume City Council Street and Reserve Tree Policy 1996
Hume Greening Strategy 1996
Hume Interpretation Strategy 1999
Hume Open Space Strategy 1999
16 POLICY FOR THE PROTECTION OF VEGETATION IN IDENTIFIED VEGETATION PROTECTION AREAS (VPAS)

16.1 Policy Basis

The protection of remnant and other significant vegetation in the assessment of planning applications is identified specifically within the Hume Planning Scheme and is included in the assessment of Planning Permit Applications. Where vegetation (which may include trees, shrubs and/or ground flora) is identified and recommended for protection in a planning permit, appropriate management during development works is critical to its retention and long-term survival. Damage to branches, compaction of soil, covering of ground flora and so forth must be avoided. The identification of Vegetation Protection Areas (VPAs), which will incorporate all of the significant vegetation identified during the planning process, and compliance with the following requirements will ensure that significant vegetation is given full protection in the spirit of the Planning Scheme.

16.2 Objective

To ensure the protection, during development works, of significant vegetation that has been identified for protection in the planning process.

16.3 Policy

It is Council’s policy that any remnant or other significant vegetation identified for protection in a planning permit will be included in a Vegetation Protection Area (VPA) to be clearly identified in the Planning Permit.

The following requirements are to be followed during the course of all development works in order to comply with the planning permit conditions:

1. Prior to the commencement of works, the boundaries of defined VPAs are to be fully fenced, and fencing maintained during development works, to the satisfaction of Council, unless otherwise indicated in the Planning Permit conditions. Fences are to, as a minimum standard, comprise of star pickets, at an interval of 1.5m, two strands of wire, top and bottom, and parawebbing securely fixed to the wire. In some instances, temporary cyclone fencing may be required.

2. The Developer and any Contractors shall refrain from destroying, removing, pruning or clearing any vegetation growing within Vegetation Protection Areas or removal of any rocks and soil. Where it is necessary to remove or prune existing vegetation, beyond that identified specifically in the planning permit, written approval must first be obtained from Council and an amendment to the planning permit may be required.

3. Any approved tree pruning must be undertaken by a qualified arborist.

4. The storage or mixing of materials and chemicals; vehicle passage or parking; disposal of liquids, soil or building refuse; machinery repairs and refuelling or construction of site buildings shall not occur within a nominated VPA.

5. No signs, stays, guys or other objects are to be attached to trees or placed within any nominated VPA.
6. No stormwater or sediment is to be diverted temporarily from or to a VPA (ie. no changes, additional to changes to drainage or landform, as approved within the planning permit).

7. Council is to be informed within 48 hours of any damage to tree trunks, crown or root systems. All damage is to be immediately repaired by a qualified arborist to the satisfaction of Council. Cut branches and roots are not to be sealed with wound sealing products unless specified by Council.

8. Council is to be informed by the applicant, or their nominee, of any damage to the VPA, within 48 hours. All damage is, where possible, to be repaired to Council’s satisfaction.

9. No soil disturbance, including cut and fill operations, is to occur within VPAs. Where disturbance is specifically permitted in the Planning Permit, the original surface profile is be restored and replanted with species identified by Council, unless otherwise specified in the Planning Permit.

10. Where excavations are carried out to within 5 metres of a VPA, a hand excavated trench is to be used to locate roots. In some circumstances a lesser distance may be negotiated prior to the issue of a Planning Permit, depending on vegetation type, works proposals etc. Any tree roots greater than 40mm in diameter must be clean cut with a sharp saw and notification must be provided immediately by the applicant or their nominee to Council, who may arrange inspection of the works.

11. Control of herbaceous or woody weeds within a VPA is only to be undertaken using approved herbicides and hand tools. Weed control requiring other equipment is to be undertaken only with permission from Council.

16.4 Non-compliance directive

Should the vegetation within any VPA’s be damaged or removed in error by the Developer or their Contractors, damage shall be assessed and restoration works are to be conducted by the Developer to Council’s satisfaction. Additionally, penalties associated with a breach of planning permit conditions may be applicable.

16.5 Review

The Policy is proposed to be reviewed by Council in 2004.