1. Compressive strength of concrete at 28 days to be 32MPa.
2. 75mm minimum benching to half pipe height total benching to obvert of pipe.
3. 100mmØ subsoil drainage pipe 3.0m long wrapped in fabric sock to be provided in pipe trenches adjacent to inlet pipes.
4. Provide step irons where pit is deeper than 1.0m at 300mm centres.
5. Pits over 2.1m in depth to be designed by structural engineer.
6. Grates shall be bicycle safe and have maximum inlet capacity. All grates must be approved by the City’s representative.
7. Reinforcement to comply with AS 1302, 1303 & 1304.
8. Drainage pipe to be minimum 375Ø class 4 reinforced concrete pipe.

**NOTE:** All dimensions in millimetres unless otherwise stated.
NOTES:
1. COMPRESSION STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.
2. 75mm MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE.
3. FABRIC SOCK TO BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES.
4. PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m AT 300mm CENTRES.
5. PITS OVER 2.1m IN DEPTH TO BE DESIGNED BY STRUCTURAL ENGINEER.
6. GRATES SHALL BE BICYCLE SAFE AND HAVE MAXIMUM INLET CAPACITY. ALL GRATES MUST BE APPROVED BY THE CITY’S REPRESENTATIVE.
7. REINFORCEMENT TO COMPLY WITH AS1302, 1303 & 1304.
8. DRAINAGE PIPE TO BE MINIMUM 3750 CLASS 4 REINFORCED CONCRETE PIPE.

SCALE 1:50

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED

PITS & PIPES
STANDARD GULLY PIT WITH STONE INLET

DRAINAGE
Rev C Dwg No. 7.1.2
Date 21.11.13 Approved P S
NOTES:

1. ALL LIGATURES TO BE R6 WITH DEPTHS AS SPECIFIED.

2. ALL REINFORCEMENT TO COMPLY WITH AS1302, 1303 & 1304.

3. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.

4. 75mm MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE.

5. 100mm SUBSOIL DRAINAGE PIPE 3.0m LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES.

6. PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m AT 300mm CENTRES.

7. PITS OVER 2.1m IN DEPTH TO BE DESIGNED BY STRUCTURAL ENGINEER.

8. GRATGES SHALL BE BICYCLE SAFE AND HAVE MAXIMUM INLET CAPACITY. ALL GRATGES MUST BE APPROVED BY THE CITY’S REPRESENTATIVE.

9. DRAINAGE PIPE TO BE MINIMUM 3750 CLASS 4 REINFORCED CONCRETE PIPE.

PITS & PIPES
DOUBLE GRATE/LINTEL PIT WITH STONE INLET

SCALE 1:50

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED
NOTES:

1. COMPRRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.

2. 75mm MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE.

3. PRECAST CONCRETE LINTEL - MIN 3.0m EKI OPENING OR AS APPROVED

4. PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m AT 300mm CENTRES.

5. PITS OVER 2.1m IN DEPTH TO BE DESIGNED BY STRUCTURAL ENGINEER.

6. GRATES SHALL BE BICYCLE SAFE AND HAVE MAXIMUM INLET CAPACITY. ALL GRATES MUST BE APPROVED BY THE CITY’S REPRESENTATIVE.

7. REINFORCEMENT TO COMPLY WITH AS1302, 1303 & 1304.

8. DRAINAGE PIPE TO BE MINIMUM 375B CLASS 4 REINFORCED CONCRETE PIPE

---

PLAN

- DUCTILE IRON, CLASS D & BIKE SAFE GRATE AND FRAME
- CONCRETE AROUND GRATE TO BE FINISHED WITH EDGING TOOL 5 RAD
- PRECAST CONCRETE LINTEL - MIN 3.0m EKI OPENING OR AS APPROVED

SECTION B-B

- PRECAST CONCRETE LINTEL - MIN 3.0m EKI OPENING OR AS APPROVED

SECTION C-C

- FINISHED FOOTPATH LEVEL 1800
- GUTTER TRANSITION

SECTION D-D

- PRECAST CONCRETE LINTEL - MIN 3.0m EKI OPENING OR AS APPROVED

SECTION A-A

- PRECAST CONCRETE LINTEL - MIN 3.0m EKI OPENING OR AS APPROVED
- DUCTILE IRON, CLASS D & BIKE SAFE GRATE AND FRAME
- REINSTATE ROAD TO MATCH EXISTING

- CORNER BARS TYP

- FOOTPATH AS PER STANDARD

- X CENTRALLY LOCATED

- 75mm MIN BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE

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PIT SPECIFICATIONS

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<th>D</th>
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MINIMUM DIMENSION A (mm) | INLET LENGHT - EKI (m)
---|---
250 | 1.8
300 | 2.4
400 | 3.0
450 | 3.6
500 | 4.2

---

MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE

- 75mm MIN BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE

---

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED
NOTES:

1. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.
2. 75mm MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OVERT OF PIPE.
3. 100mmD SUBSOIL DRAINAGE PIPE 3.0m LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES.
4. PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m AT 300mm CENTRES.
5. PITS OVER 2.1m IN DEPTH TO BE DESIGNED BY STRUCTURAL ENGINEER.
6. GRATES SHALL BE BICYCLE SAFE AND HAVE MAXIMUM INLET CAPACITY. ALL GRATES MUST BE APPROVED BY THE CITY’S REPRESENTATIVE.
7. REINFORCEMENT TO COMPLY WITH AS 1302, 1303 & 1304.
8. DRAINAGE PIPE TO BE MINIMUM 0375 CLASS 4 REINFORCED CONCRETE PIPE.

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.
NOTES:
1. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.
2. 75mm MINIMUM BENCHING TO HALF PIPE HEIGHT TOTAL BENCHING TO OBVERT OF PIPE.
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7. REINFORCEMENT TO COMPLY WITH AS 1302, 1303 & 1304.
8. DRAINAGE PIPE TO MINIMUM 3750 CLASS 4 REINFORCED CONCRETE PIPE.

Note: All dimensions in millimetres unless otherwise stated.
PIT LID IS A CLASS D DUCTILE IRON HINGED LID WITH A SPRING LOCKING SYSTEM. THE LID SHALL BE A KORUM MANHOLE COVER (REF: CDK060EFX17) OR SIMILAR PRODUCT APPROVED BY THE CITY.

VARIABLE HEIGHT TO ALLOW FOR ADJUSTMENT OF MANHOLE COVER TO SUIT DESIGN SURFACE LEVELS AND GRADING. LID MAY BE RECESSED INTO THE CONVERTER SLAB AS REQUIRED. ADJUST NUMBER OF RISERS AS REQUIRED.

MINIMUM DIMENSIONS OF PIT (mm)

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</tbody>
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NOTE: PIT LID CAN BE CENTRED OR OFF-CENTRED AS REQUIRED.
WRAP FLASHTAC TAPE WITH 100mm OVERLAY ON EACH SIDE OF JOINT

CLEAN PIPE SURFACES PRIOR TO CONSTRUCTING THE BANDAGE JOINT

ENCASE WITH MASS CONCRETE 150mm THICK WITH 50mm OVERLAY ON EACH SIDE OF TAPE

SECURE TAPE WITH WIRE

SECTION A-A

MASS CONCRETE ENCASEMENT

FLASH TAC TAPE

SCALE 1:10

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED
CONCRETE PIPE TRENCH BACKFILL DETAIL

EXISTING SURFACE LEVEL

FOOTPATH/ROAD TO SUIT
(REFER TO PAVEMENT DETAILS)

BACKFILL ZONE

OVERLAY ZONE

SIDE ZONES

HAUNCH ZONES

BED ZONE

SECTION 1:10

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED

NOTE: DRAINAGE PIPE TO BE
MINIMUM 3750 CLASS 4
REINFORCED CONCRETE PIPE

DRAINAGE

PITS &PIPES

TYPICAL PIPE TRENCH BACKFILL

Rev C
Date 21.11.13
Approved P S
Dwg No. 7.1.9