

INSTALL SHAKER GRID & WASHDOWN FACILITY  
AT ALL CONSTRUCTION ACCESS POINTS.  
FINAL LOCATION TO SUIT SITE  
SUPERINTENDENT'S REQUIREMENTS.

SEDIMENT BASIN  
VOLUME TO BE CALCULATED  
USING LANDCOM SOILS AND  
CONSTRUCTION MANAGING  
URBAN STORMWATER

PROVIDE TEMPORARY  
SEDIMENT FENCE AS PER  
DETAIL.

PROVIDE TEMPORARY  
SEDIMENT FENCE AS PER  
DETAIL.

THIS AREA UNDER CONSTRUCTION

AREA SUPPLY &  
STORES BUILDING

PROVIDE TEMPORARY  
SEDIMENT FENCE AS PER  
DETAIL.

SEDIMENT BASIN  
VOLUME TO BE CALCULATED  
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CONSTRUCTION MANAGING  
URBAN STORMWATER

The diagram illustrates the construction and function of a sediment fence. It shows a cross-section of the fence structure, which includes a wire or steel mesh supported by posts driven into the ground. The fence is designed to intercept sediment-laden runoff, allowing the sediment to settle in a designated area (the 'SURCHARGE OPENING WHERE DIRECTED') while the water flows through the mesh. Key dimensions and specifications are provided:

- DRAINAGE AREA:** 0.6ha MAX.
- SLOPE LENGTH:** 40m MAX.
- SLOPE GRADIENT:** 1:2 MAX.
- WIRE OR STEEL MESH:** The primary filtering component.
- DETAIL OF OVERLAP:** Shows the mesh panels overlapping to prevent gaps.
- DIRECTION OF FLOW:** Indicated by an arrow pointing towards the fence.
- 3.0m MAX:** The maximum height of the mesh structure.
- 0.7m MAX:** The maximum height of the sediment surcharge.
- POSTS DRIVEN 0.6m INTO GROUND:** The depth of the supporting posts.
- UNDISTURBED AREA:** The area behind the fence where sediment settles.
- SEDIMENT FENCE:** The overall structure shown.
- SURCHARGE OPENING WHERE DIRECTED:** The area where sediment is trapped and allowed to settle.
- DISBURSED AREA:** The area where the water is released after passing through the fence.

## INSTALLATION

1. EXCAVATE A TRENCH 200mm DEEP.
2. DRIVE POSTS 500-700mm INTO GROUND AT A MAXIMUM SPACING OF 3.0m CENTRES.
3. PLACE AND FIX SUPPORT MESH (F52) TO POST.
4. LAY BIOM GEOTEXTURE (SF 2000) AGAINST THE SUPPORT MESH AND FIX BY THE WIRE, STAPLES OR HOG RINGS.
5. PLACE BIOM IN TRENCH AND BACKFILL WITH SOIL.

**NOTE:**  
POSITION OF SEDIMENT FENCE AS DIRECTED BY SUPERINTENDENT. FENCE TO REMAIN IN PLACE UNTIL EXCAVATION IS BELOW FOOTPATH LEVEL. PROVIDE 200mm TURNED AREA ON DOWNSTREAM SIDE OF FENCE AT SURFACE DRAINING.

The diagram illustrates the cross-section of a typical sediment basin. Key components and dimensions include:

- PIPE RISER OPEN AT TOP**: The top opening of the riser pipe.
- SETTLING VOLUME STORAGE VOLUME**: The area above the pipe where sediment settles.
- 0.3m**: The diameter of the pipe.
- 0.75m**: The height of the settling volume above the pipe.
- 0.6m MIN**: The minimum distance from the pipe to the side wall.
- PIPE**: The main vertical pipe.
- CREST OF EMERGENCY OUTLET**: The top edge of the emergency outlet.
- PRIMARY OUTLET**: The main outlet for the basin.
- (MIN 0.25m DIA)**: The minimum diameter of the primary outlet.
- WEIGHTED BASE**: The base of the pipe riser.
- OUTLET PROTECTION**: A filter or mesh at the primary outlet.
- WIRE MESH**: A filter at the bottom of the pipe riser.
- GEOTEXTILE FILTER**: A filter at the bottom of the basin.

**CROSS SECTION OF TYPICAL SEDIMENT BASIN**

Diagram illustrating a Temporary Construction Exit/Entrance. The structure features a berm (0.3m MIN HIGH) with a MIN LENGTH 15.0m and MIN WIDTH 3.0m. The exit/entrance is constructed with a 0.2m layer of Geotextile Fabric over a 50-75mm Gravel base. Runoff from the pad is directed to a sediment trap. The existing roadway is shown adjacent to the structure.

**TEMPORARY CONSTRUCTION EXIT/ENTRANCE**

**INLET SEDIMENT TRAP**

TYPICAL SECTION THROUGH CATCH DRAIN

Diagram illustrating the SHAKER GRID construction. The grid consists of a layer of 200x100 SLEEPERS with a 200 GAP, overlaid by a layer of COARSE AGGREGATE (75 NOM. SIZE 150 THICK OVER GEOTEXTILE). The aggregate layer is shown in three segments, each 5.0' wide.

The diagram illustrates a cross-section of a sandbag kerb inlet sediment trap. It shows a series of sandbags laid out to form a trap. Key components and dimensions are labeled:

- SANDBAGS OVERLAP ONTO KERB**: Points to the top edge of the sandbag row.
- 2000 Min.**: Dimension for the length of the sandbag row.
- 800 Min.**: Dimension for the width of the sandbag row.
- RUNOFF**: Points to the water flow entering the trap from the left.
- GAP BETWEEN BAGS ACT AS SPILLWAY**: Points to the space between individual sandbags.
- THREE LAYERS OF SANDBAGS WITH ENDS OVERLAPPED**: Points to the bottom layer of the trap.

**SANDBAG KERB INLET SEDIMENT TRAP**  
NOT TO SCALE

1. REFER TO SHEET 4363-CV-SI-100.00 FOR SEDIMENT & EROSION CONTROL NOTES.

**LEGEND**

-  PROPOSED SEDIMENT FENCE
-  PROPOSED CATCH DRAIN
-  PROPOSED SEDIMENT BASIN
-  PROPOSED RIP RAP
-  INSTALL TEMPORARY SILT TRAPS AROUND PITS UNTIL SURROUNDING PAVEMENTS HAVE BEEN COMPLETED.
-  PROVIDE TEMPORARY SANDBAGS AROUND PITS
  1. AFTER PAVEMENT WORKS IF CONSTRUCTION IS ONGOING UPSTREAM.
  2. TO EXISTING GRATED PITS DOWNSTREAM OF CONSTRUCTION WORKS.
-  SHAKER GRID AND WASH DOWN FACILITY

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| Project No.<br><br>4363                                                                        |                                                                                                 |
| Project<br><br>DUBBO BASE HOSPITAL<br>REDEVELOPMENT STAGE 1 / 2<br><br>MYALL STREET, DUBBO NSW |                                                                                                 |
| Drawing Title<br><br>SEDIMENT & EROSION<br>CONTROL PLAN & DETAILS<br>SHEET 1 OF 4              |                                                                                                 |
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NSW GOVERNMENT]
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|-------------|-----------------------------------------------------------------------------|
| Project No. | 4363                                                                        |
| Project     | DUBBO BASE HOSPITAL<br>REDEVELOPMENT STAGE 1 / 2<br>MYALL STREET, DUBBO NSW |

SEDIMENT & EROSION  
CONTROL PLAN & DETAILS  
SHEET 2 OF 4

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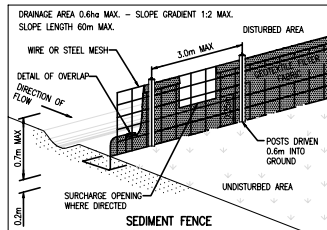
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| Co-ordinated: LH.        | Scale: 1:250     |
| Project Engineer: LH.    | Date: 14/06/2012 |
| Project Director: T.B.D. | Revision: 04     |
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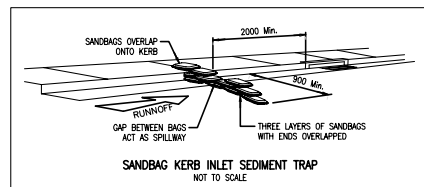
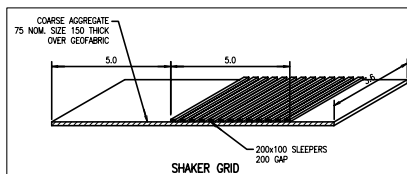
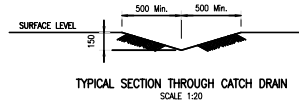
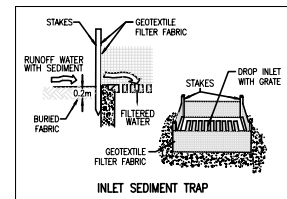
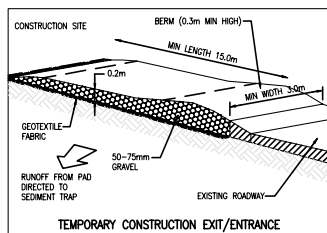
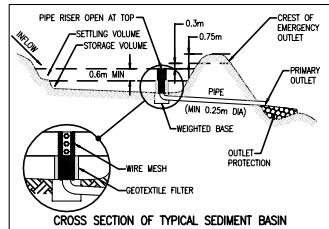


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1. EXCAVATE A TRENCH 200mm DEEP.
2. DRIVE POSTS 500-700mm INTO GROUND AT A MAXIMUM SPACING OF 3.0m CENTRES.
3. PLACE AND FIX SUPPORT MESH (F52) TO POST.
4. LAY BIDIM GEOFABRIC (SF 2000) AGAINST THE SUPPORT MESH AND FIX BY TIE WIRE, STAPLES OR HOG RINGS.
5. PLACE BIDIM IN TRENCH AND BACKFILL WITH SOIL.

**NOTE:**  
POSITION OF SEDIMENT FENCE AS DIRECTED BY  
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2mx2m TURFED AREA ON DOWNSTREAM SIDE OF FENCE  
AT SURCHARGE OPENINGS.



1. REFER TO SHEET 4363-CV-SI-100.00 FOR SEDIMENT & EROSION CONTROL NOTES.

|                                                                                       |                                                                                                                                                                       |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | PROPOSED SEDIMENT FENCE                                                                                                                                               |
|  | PROPOSED CATCH DRAIN                                                                                                                                                  |
|  | PROPOSED SEDIMENT BASIN                                                                                                                                               |
|  | PROPOSED RIP RAP                                                                                                                                                      |
|  | INSTALL TEMPORARY SILT TRAPS AROUND PITS UNTIL SURROUNDING PAVEMENTS HAVE BEEN COMPLETED.                                                                             |
|  | PROVIDE TEMPORARY SANDBAGS AROUND PIT<br>1. AFTER PAVEMENT WORKS IF CONSTRUCTION IS ONGOING UPSTREAM.<br>2. TO EXISTING GRATED PITS DOWNSTREAM OF CONSTRUCTION WORKS. |
|  | SHAKER GRID AND WASH DOWN FACILITY                                                                                                                                    |

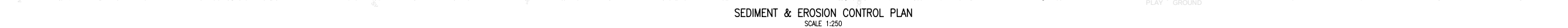
1. AFTER PAVEMENT WORKS IF CONSTRUCTION IS ONGOING UPSTREAM.
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Client

|                                                                                                            |                                                |
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| <br>NSW<br>GOVERNMENT | Health<br>Infrastructure                       |
| <br>NSW<br>GOVERNMENT | Health<br>Western NSW<br>Local Health District |



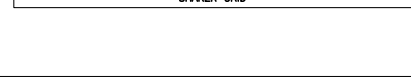
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1. REFER TO SHEET 4363-CV-SI-100.00 FOR SEDIMENT & EROSION CONTROL NOTES.

- LEGEND

## PROPOSED SEDIMENT FENCE

- 
- SHAKER GRID AND  
WASH DOWN FACILITY

SHAKER GRID AND  
WASH DOWN FACILITY

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## Client



Project No.

4363

Project

2

REDEVELOPMENT STAGE 1 / 2  
MYALL STREET, DUBBO NSW

Drawing Title

SEDIMENT & EROSION  
CONTROL PLAN & DETAILS  
SHEET 4 OF 4

Document Control Status:

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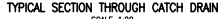
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| Project Director: T.B.B. | Revision: 04     |
| Drawing Number:          | North:           |

CIV-SI-100-14



1. EXCAVATE A TRENCH 200mm DEEP.
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GENERAL NOTES:

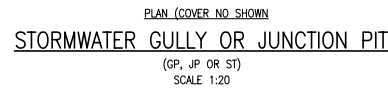
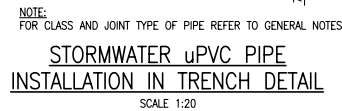
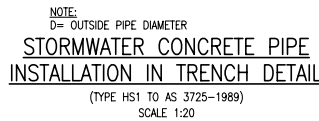
1. REFER TO SHEET 4363-CV-SI-100.00 FOR SEDIMENT & EROSION CONTROL NOTES.

### LEGEND

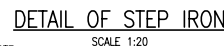
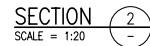
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|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
|  | PROPOSED SEDIMENT FENCE                                                                   |
|  | PROPOSED CATCH DRAIN                                                                      |
|  | PROPOSED SEDIMENT BASIN                                                                   |
|  | PROPOSED RIP RAP                                                                          |
|  | INSTALL TEMPORARY SILT TRAPS AROUND PITS UNTIL SURROUNDING PAVEMENTS HAVE BEEN COMPLETED. |
|  | PROVIDE TEMPORARY SANDBAGS AROUND PITS                                                    |
|                                                                                       | 1. AFTER PAVEMENT WORKS IF CONSTRUCTION IS ONGOING UPSTREAM.                              |
|                                                                                       | 2. TO EXISTING GRADED PITS DOWNSTREAM OF CONSTRUCTION WORKS.                              |
|  | SHAKER GRID AND WASH DOWN FACILITY                                                        |







V GRATE TO MATCH ADJACENT DISH DRAIN PROFILE. SEE PIT SCHEDULE FOR SPECIFICATIONS



SECTION 5  
SCALE 1:20



SECTION 7  
SCALE 1:20

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**Dubbo Base Hospital Expansion**

**Civil Works Design Statement for Early Works REF**

The following outlines the principles of the stormwater design for the Dubbo Base Hospital Early Works expansion project.

The REF application is for the construction of the new car park areas and associated service diversion works.

A stormwater management report has been prepared for the development and should be read in conjunction with this statement.

The following standards and guidelines have been adopted during the concept design process for the project.

- Australian Rainfall & Runoff May 2003;
- AS3500 Part 3, 2003 – Plumbing and Drainage: Stormwater Drainage;
- AS1428 Part 1, 2009 – Design for Access and Mobility: General requirements for access – New Building Work;
- AS2890 Parts 1,2 and 6 – Parking Facilities;
- Dubbo City Council Development Control Plans;
- Austroads Guide to Road Design Publication;
- Austroads Guide to Pavement Technology.

All civil works have been designed to comply with the above design standards.



.....  
Ian Harris  
Associate

14.06.12.....  
Date