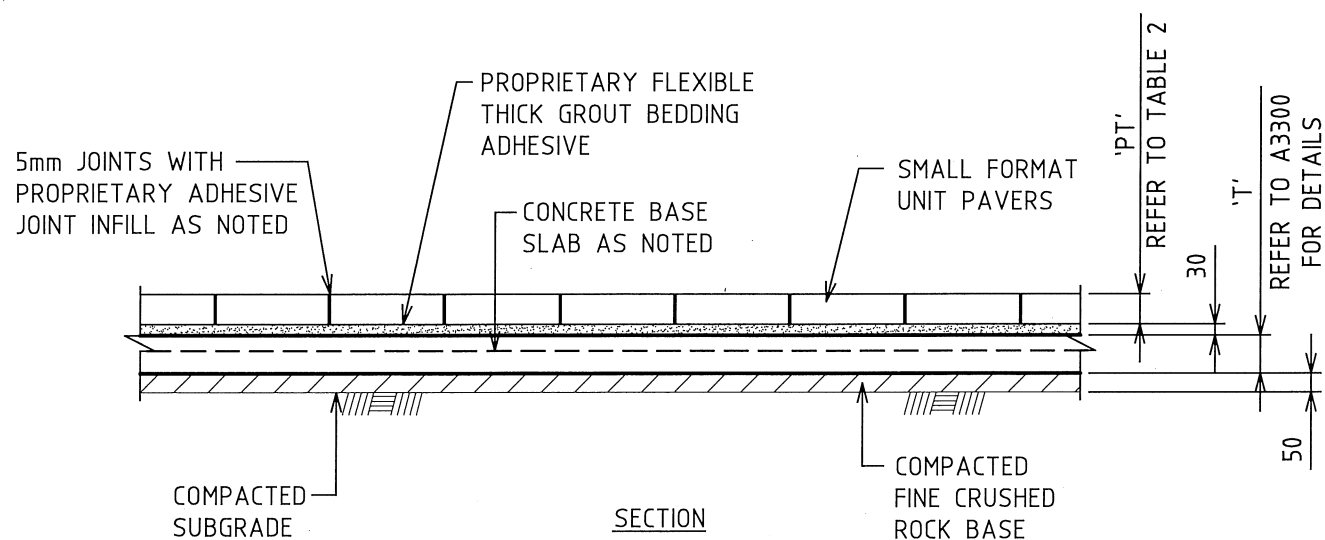


PLAN

**HARDSTAND - SMALL FORMAT UNIT PAVING ON A RIGID BASE SYSTEM (NON-INFILTRATION)**

SCALE 1:100



SECTION

**TYPICAL HARDSTAND PROFILE**

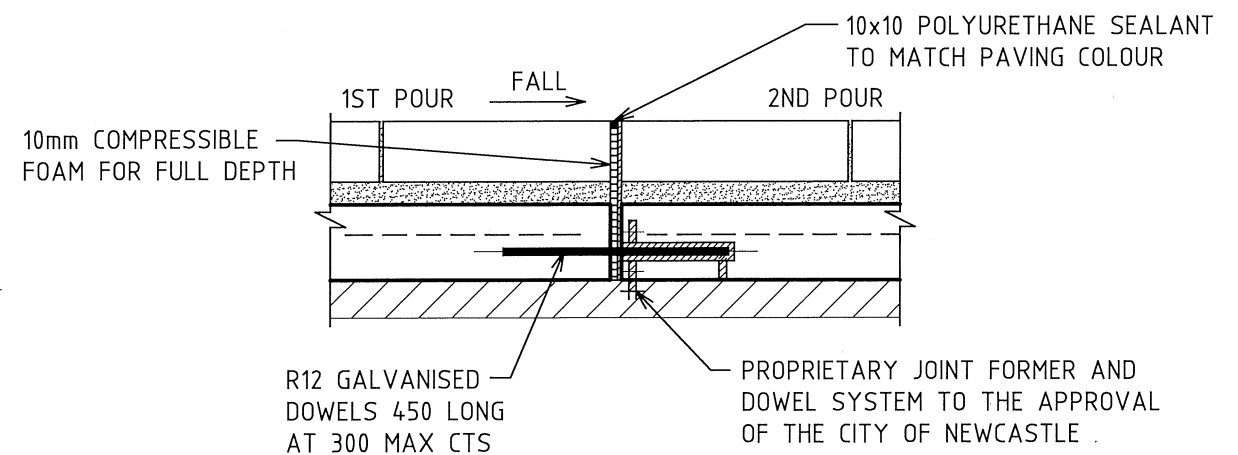
SCALE 1:20

**NOTES**

1. ALL WORKMANSHIP AND MATERIAL SHALL COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS IN PARTICULAR AS3600 AND AS3727 AS WELL AS ANY REQUIREMENTS OF THE RELEVANT AUTHORITIES.
2. PAVEMENT IS TO BE FOUNDED ON FIRM NATURAL CUT GROUND OR COMPACTED FILL. ANY SOFT AREAS ARE TO BE REMOVED AND REPLACED WITH COMPACTED FILL TO MEET A MINIMUM OF 100KPa ALLOWABLE BEARING PRESSURE.
3. ANY FILL MUST BE PLACED IN 150mm THICK MAXIMUM LAYERS AND COMPACTED TO A RELATIVE DRY DENSITY OF 98% TO AS1289.5.1.1.
4. THE BASE COURSE IS TO BE GRANULAR GRADED MATERIAL, SUCH AS FINE CRUSHED ROCK.
5. HARDSTANDS GENERALLY TO BE DESIGNED TO HAVE A 2.5% CROSS FALL. POORLY DRAINED SITES MAY REQUIRE SUB SURFACE DRAINAGE TO PROTECT THE PAVEMENT.
6. THE FINISHED LEVEL OF ANY PAVEMENT ABUTTING A WALL MUST BE BELOW THE DAMP PROOF COURSE AND MUST NOT OBSCURE ANY WEEP HOLES OR DRAINAGE OPENINGS.
7. DOWELS ARE TO BE ACCURATELY ALIGNED PARALLEL TO THE PAVEMENT SURFACE AND THE PAVEMENT CENTRE LINE. ALL DOWELS AND JOINT FORMERS ARE TO BE GALVANISED.
8. POLYURETHANE / SILICONE SEALANT TO MATCH PAVING COLOUR TO TOP 10mm JOINT.
9. CONCRETE THICKNESS, GRADE, REINFORCEMENT AND COVER FOR THE CONCRETE BASE IS AS DETAILED ON STANDARD DRAWING A3300 TABLE 1
10. TO ASSIST IN THE CURING AND DURABILITY OF THE CONCRETE BASE SLAB:
  - THE SUB BASE SHOULD BE THOROUGHLY MOISTENED PRIOR TO PLACING CONCRETE (RESULTING IN REDUCED LOSS OF MOISTURE);
  - CURING SHOULD INITIATED BY APPLYING A CURING COMPOUND AT THE RATE OF 0.3 L/MIN<sup>2</sup>.
  - WATER SHOULD NOT BE ADDED TO THE AS-DELIVERED MIX.
11. SMALL FORMAT UNIT PAVING IN ACCORDANCE WITH TABLE 2 MINIMUM REQUIREMENTS.
12. PREPARATION AND INSTALLATION OF BEDDING AND PAVERS IS TO BE IN STRICT ACCORDANCE WITH THE PAVER MANUFACTURERS SPECIFICATIONS.
13. TOLERANCE 3mm MAX CHANGE IN HEIGHT EACH SIDE OF JOINT.
14. HARDSTAND PAVEMENT IS DESIGNED FOR LIGHT DUTY TRAFFIC LOADING (OPERATION OF VEHICLES NOT EXCEEDING 3 TONNES) OR MEDIUM DUTY TRAFFIC LOADING (OPERATION OF VEHICLES NOT EXCEEDING 10 TONNES).

**TYPICAL APPLICATION**

1. GRANITE SET BANDING INSERT IN CONCRETE SLAB OR LARGE FORMAT UNIT PAVING
2. USE IN SMALL QUANTITIES ONLY.
3. TYPICAL PRODUCTS INCLUDE;
  - a) CONCRETE BRICK SIZED PAVERS TYPICALLY 150Wx300Lx80D
  - b) STONE SETT TYPICALLY 90Lx90W OR 100Lx100W AND 40-100 DEEP



**TYPICAL EXPANSION JOINTS - EJ1**

SCALE 1:10

1	CONSTRUCTION	18.12.14	T.A.
0	PRELIMINARY	18.11.14	T.A.
No.	AMENDMENT DETAILS	DATE	INITIALS
A3 ORIGINAL THIS SHEET WAS PREPARED IN COLOUR AND WILL BE INCOMPLETE IF COPIED			

SCALE	AS SHOWN
COORDINATE SYSTEM:	HEIGHT DATUM: AHD

LIVEABLE CITY  
INFRASTRUCTURE  
MANAGEMENT SERVICES

REVIEWED: J.C.

APPROVED:

SIGNED: *[Signature]*  
INFRASTRUCTURE MANAGEMENT SERVICES MANAGER

DATE: 16/11/15



THE CITY OF NEWCASTLE

HARDSTAND  
SMALL FORMAT UNIT PAVING ON A  
RIGID BASE SYSTEM (NON-INFILTRATION)

NCC PLAN No.	A3302	SHEET No.	1
			OF
			2
AMENDMENT No.		SHEETS	

TABLE 2 - SMALL FORMAT UNIT PAVING (NON-INFILTRATION) - MINIMUM REQUIREMENTS

PAVEMENT APPLICATION	MATERIAL	NOMINAL SIZE (mm)	'PT' PAVEMENT THICKNESS (mm)	STRENGTH		MAXIMUM ABRASION RESISTANCE FOR PEDESTRIAN VOLUME AS4456.9			SLIP RESISTANCE CLASS AS4586
				CONCRETE CHARACTERISTIC BREAKING LOAD (KN) AS4456.5	STONE FLEXURAL STRENGTH (MPa)	LOW	MEDIUM	HIGH	
PEDESTRIAN AND LIGHT TRAFFIC	CONCRETE	150x300	50	3.0 KN	-	7	5.5	3.5	W
	STONE	100x100 150x150 150x300	40	-	11	7	5.5	3.5	W
PEDESTRIAN AND MEDIUM TRAFFIC	CONCRETE	150x300	60	5.0 KN	-	7	5.5	3.5	W
	STONE	100x100 150x150 150x300	60	-	14	7	5.5	3.5	W

<table border="1"> <tr> <td>1</td> <td>CONSTRUCTION</td> <td>18.12.14</td> <td>T.A.</td> </tr> <tr> <td>0</td> <td>PRELIMINARY</td> <td>18.11.14</td> <td>T.A.</td> </tr> <tr> <td>No.</td> <td>AMENDMENT DETAILS</td> <td>DATE</td> <td>INITIALS</td> </tr> </table>			1	CONSTRUCTION	18.12.14	T.A.	0	PRELIMINARY	18.11.14	T.A.	No.	AMENDMENT DETAILS	DATE	INITIALS	SCALE AS SHOWN		 LIVEABLE CITY INFRASTRUCTURE MANAGEMENT SERVICES		APPROVED:  SIGNED: ..... INFRASTRUCTURE MANAGEMENT SERVICES MANAGER DATE: 16/11/15		THE CITY OF NEWCASTLE HARDSTAND SMALL FORMAT UNIT PAVING ON A RIGID BASE SYSTEM (NON-INFILTRATION)		NCC PLAN No. <b>A3302</b>		SHEET No. 2 OF 2 SHEETS	
1	CONSTRUCTION	18.12.14	T.A.																							
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