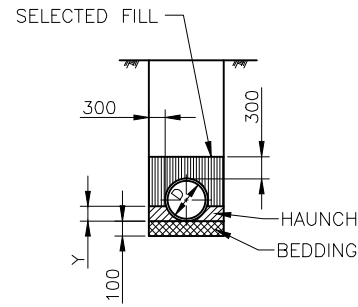


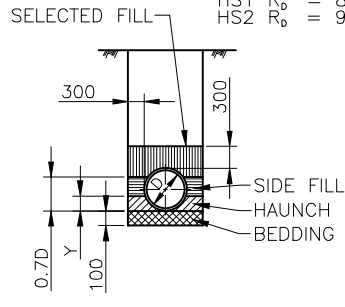
Y = 0.1 D FOR H1 TYPE
 Y = 0.3 D FOR H2 TYPE
 D = NOM. PIPE DIA.

Y = 0.1 D FOR HS1
 Y = 0.3 D FOR HS2
 D = NOM. PIPE DIA.

COMPACTION
 HS1 R_p = 85% (Std)
 HS2 R_p = 90% (Std)



TYPE H



TYPE HS

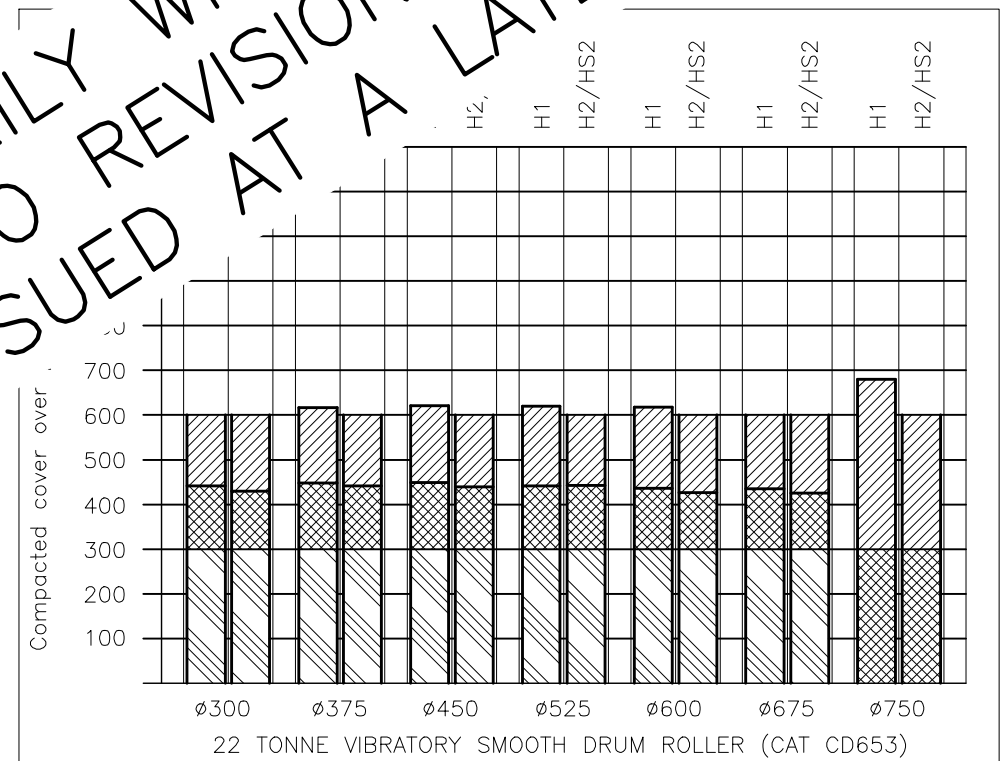
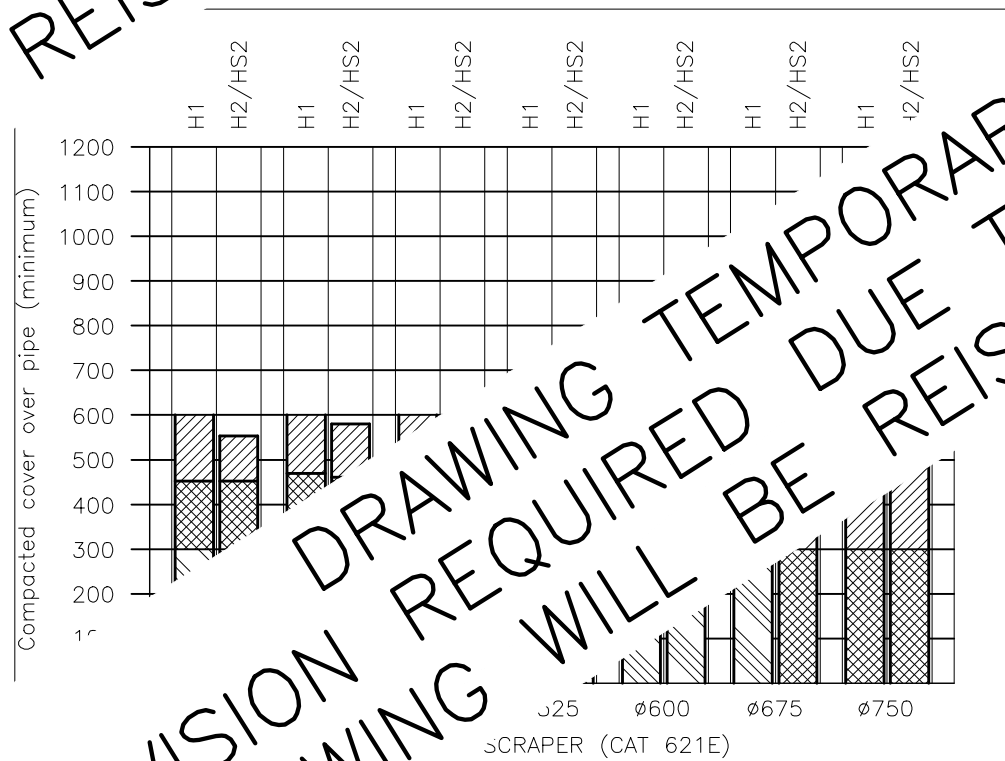
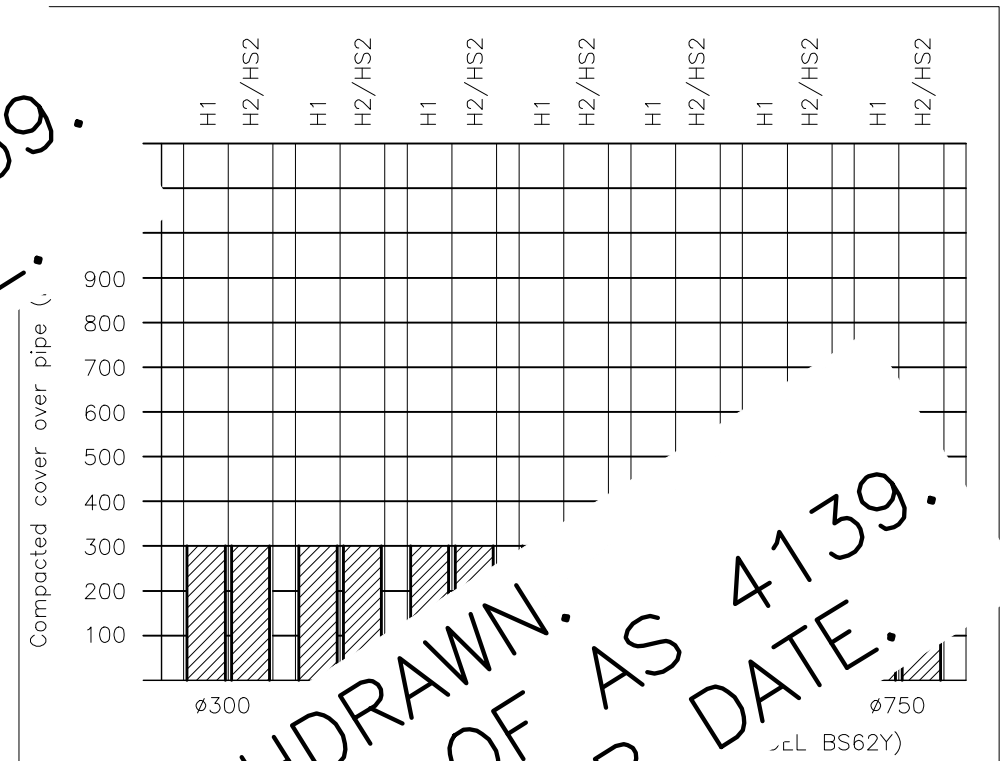
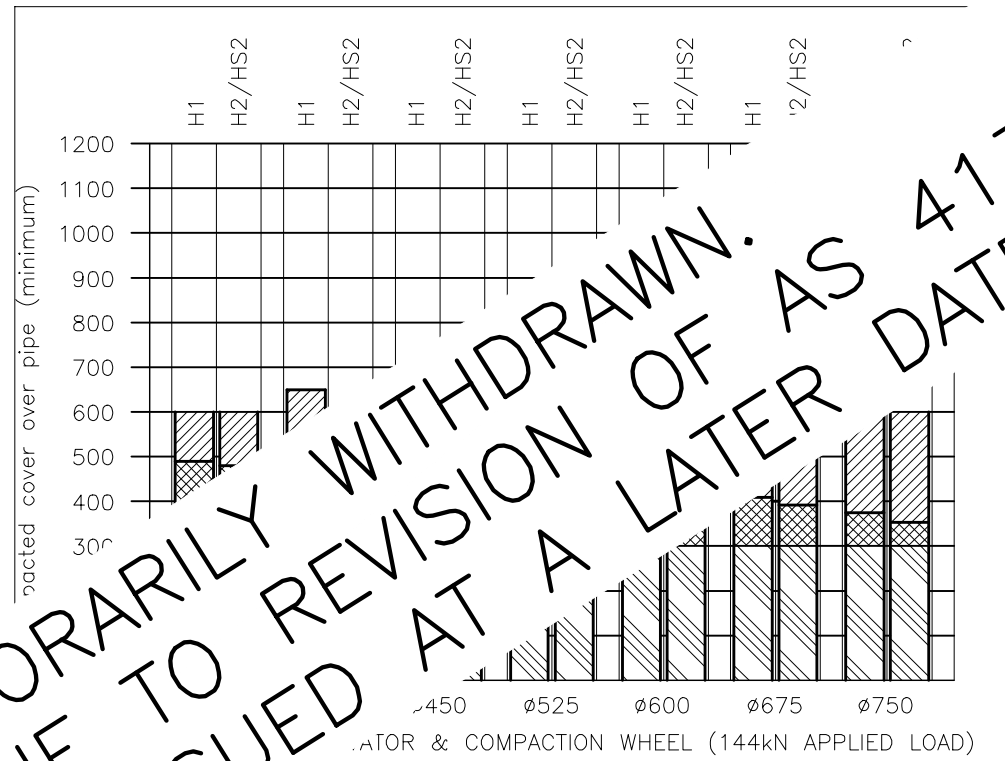
NOTES:

- THE VERTICAL PIPE LOAD CALCULATION IS APPLICABLE FOR CONSTRUCTION LOADING ONLY, AND DOES NOT INCORPORATE THE ULTIMATE SERVICE LOADING.
- THE CONTENT OF THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY JAMES HARDIE FRC PIPES. THE LOAD CHARTS SHOULD BE USED FOR GUIDANCE ONLY.
- THE LOADING CALCULATIONS HAVE BEEN DERIVED FROM THE FOLLOWING ASSUMPTIONS:
 - PIPE SUPPORT CONFIGURATION AS DEFINED IN AS 4139:1989. THE TRENCH SUPPORT GIVEN IS APPROX. EQUIVALENT TO THE TRENCH SUPPORT GIVEN IN AS 4139:1989.
 - EVEN LOAD DISTRIBUTION WHEN THE PIPE IS FULLY SUPPORTED.
 - SOIL DENSITY OF 18kN/m³.
- FOR SPECIAL APPLICATIONS, THE LOADS SHOWN ON THE DRAWING WILL INCREASE. A REVIEW OF THE DRAWING IS REQUIRED.
- INCREASED VIBRATORY LOADS (eg. VIBRATORY RAMMER) IN THE LONGITUDINAL SECTION OF THE TRENCH.
- COMPACTION EQUIPMENT CAN BE USED TO ACHIEVE THE COMPACTION STANDARD IN THE TRENCH. A 450mm DIA. CLASS 2 PIPE LAID WITH 1.0m FILL HEIGHT ABOVE THE PIPE WILL REQUIRE THE ULTIMATE SERVICE LOADING. THE LOADS SHOWN ON THE DRAWING INDICATE THAT A 3.3 TONNE VIBRATORY RAMMER MUST BE USED TO COMPACT THE 300-460mm FILL OVER THE PIPE. A 25 TONNE EXCAVATOR AND COMPACTION WHEEL MAY BE USED FOR FILL HEIGHT ABOVE 460mm.
- DIMENSIONS IN MILLIMETRES (UNO).

LEGEND:

PIPES MANUFACTURED TO AS 4139

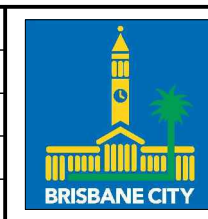
- CLASS 1 PIPE
- CLASS 2 PIPE
- CLASS 3 PIPE



REVISION DRAWING TEMPORARILY WITHDRAWN. DRAWING REQUIRED DUE TO REVISION OF AS 4139. DRAWING WILL BE REISSUED AT A LATER DATE.

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	OCT '13	OCT '13	OCT '13

DRAWING AUTHORISED FOR PUBLICATION B.BALL SIGNATURE ON ORIGINAL DATED 29/06/01				DESIGN	Std Dwg's WG	DATE	APR '01
MANAGER ASSET SUPPORT - R.P.E.Q. 3852				DRAWN	CPO - P&D	DATE	APR '01
DESIGN APPROVED B.HANSEN SIGNATURE ON ORIGINAL DATED 27/06/01				CHECKED	M.STEER	DATE	MAY '01
PRINCIPAL ASSET OFFICER ROADS AND DRAINAGE				DRAWING FILENAME	BSD-8002.dwg		
				ASSOCIATED PLANS	SUPERSEDES UMS-302		



BRISBANE CITY COUNCIL STANDARD DRAWING	
MINIMUM PIPE COVER FOR CONSTRUCTION LOADS—FIBRE REINFORCED CONCRETE PIPES	
SCALE	NOT TO SCALE
DWG No.	BSD-8002
ORIGINAL SIZE	A3
REVISION	A