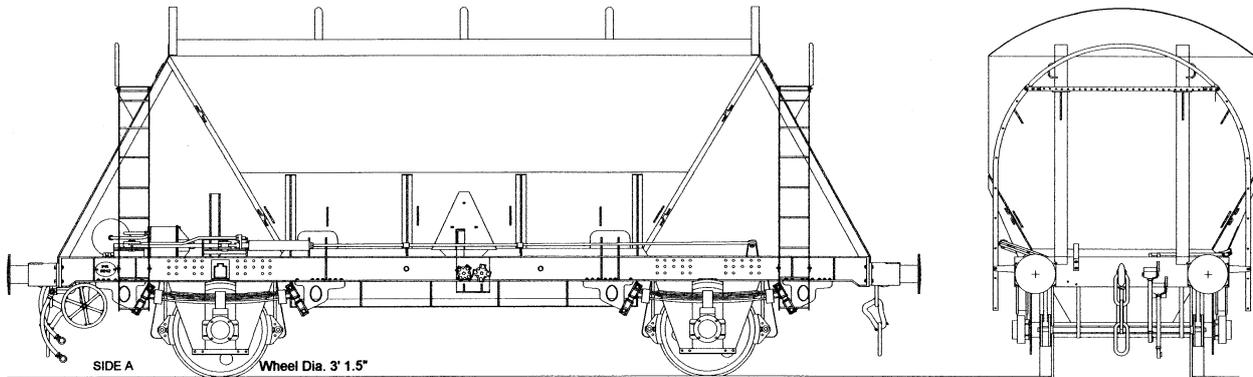
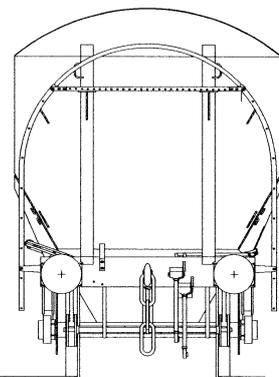


**PGB/PGA Design Codes PG002A - D PR8201 - PR8255**

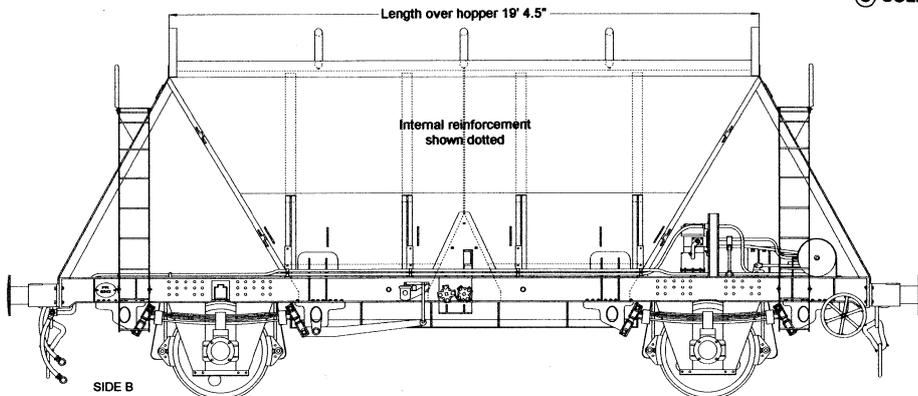


SIDE A Wheel Dia. 3' 1.5"



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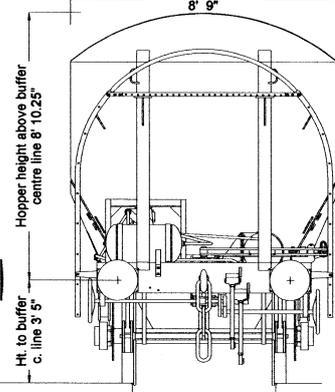
Width over hopper 8' 9"



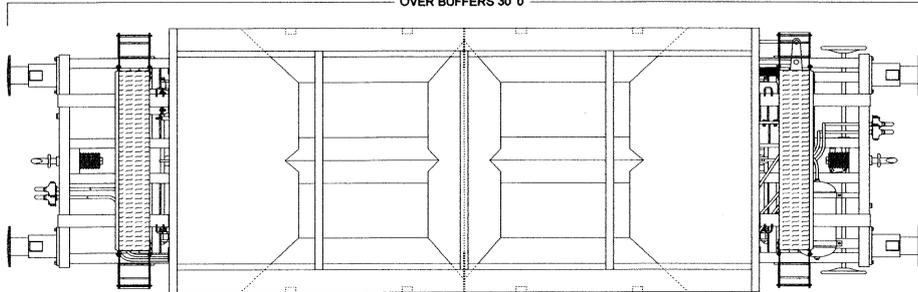
SIDE B

Length over hopper 19' 4.5"

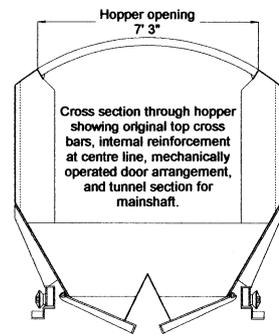
WHEELBASE 16' 0"  
OVER HEADSTOCKS 26' 7"  
OVER BUFFERS 30' 0"



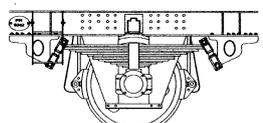
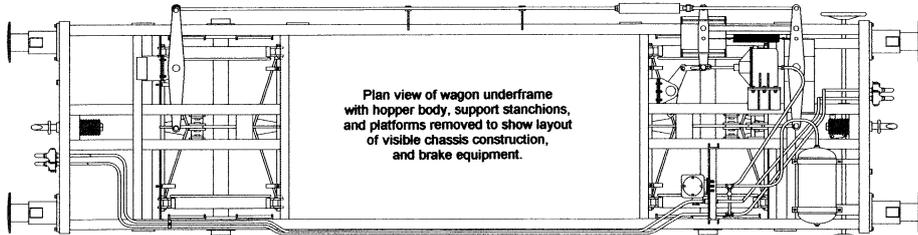
Hopper height above buffer centre line 8' 10.25"  
Ht. to buffer c. line 3' 5"



Plan view of wagon underframe with hopper body, support stanchions, and platforms removed to show layout of visible chassis construction, and brake equipment.



Cross section through hopper showing original top cross bars, internal reinforcement at centre line, mechanically operated door arrangement, and tunnel section for main shaft.



Design Code PG002A Original double link suspension



Scale 4mm to 1 foot

Drawings performed on CAD by Colin Craig, using principal available dimensional data, and photographs and measurements by Phil Eames.

**Notes:**  
 Built by Standard Wagon, Heywood in 1971 as PGB design code PG002A, they were equipped with double link suspension, and a through vacuum pipe. In use, it was found that the ride characteristics were poor, and three different suspension modifications were tried: Design code PG002B with ESC friction pedestal (PR8221, & PR8241), design code PG002C with BR Friction Link (PR8237), and design code PG002D with FAT26 (PR8208, & PR8253). The latter was chosen for the refurbishment, the through vacuum pipes were removed, and the wagons re-designated as PGAs. The evidence of the through vacuum pipe can be seen with the holes for the hose brackets on the lower LH side of the headstocks, and the holes for the pipe clips above the air pipes on the side hopper supports.  
 This design has mechanically operated bottom doors, but differs from later PGAs in having two full length doors, which are bridged by the partial central divide. There were three strengthening bars across the top opening, which also provided support for sheeting required with salt traffic; these were removed on those wagons which survived to be used in aggregate traffic.  
 The brake cylinder, distributor, and air reservoir are mounted above the solebar at one end with the handbrake wheels below; an external linkage along the side connects to the clasp brakes at the opposite end. The wheel operated handbrake is connected to the linkage, and operates on both axes. The handbrake wheels are offset vertically with a gearbox for directional control.  
 The underframe is open at both ends which facilitates ease of maintenance, but equally provides no protection from load spillages. Buffers are Oleo parallel shank with 16" heads, although stepped shank were sometimes used for replacements.  
 The ladders to the end platforms have a characteristic shape with the top handrail following the same line of curvature.  
 Originally they were equipped with the conventional two brake hoses; the reservoir hoses were subsequently removed, but the associated pipework often left in situ. Only 3 rusting survivors, awaiting disposal, remained in 2002.  
 The drawing shows design code PG002D after refurbishment, with the vacuum hoses and pipe removed; the top cross bars are still in place, as are also the reservoir hoses; the original double link suspension of the PG002A is shown inset.