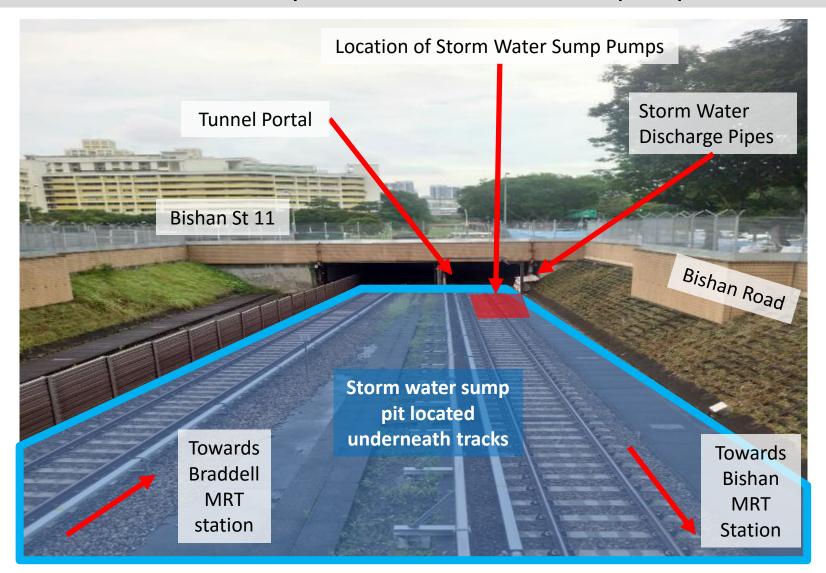
## 7 OCTOBER 2017 TUNNEL FLOODING INCIDENT BETWEEN BISHAN AND BRADDELL MRT STATIONS

Ministerial Statement by Coordinating Minister For Infrastructure and Minister for Transport

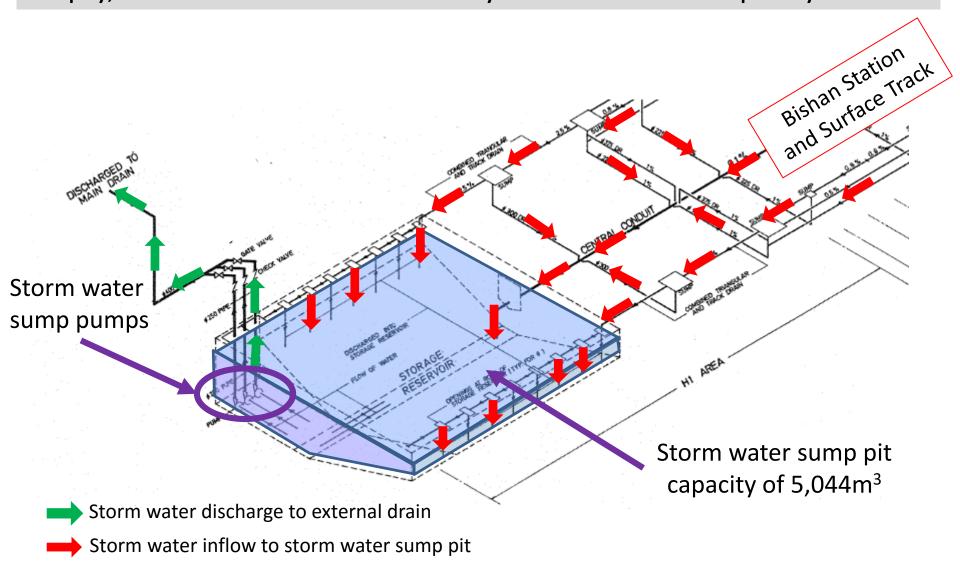
Mr Khaw Boon Wan

7 Nov 2017

The Bishan storm water sump pit is located underneath the tracks leading into Bishan tunnel portal. It has a capacity of 5,044m<sup>3</sup>, equivalent to two Olympic-sized swimming pools, and can contain six hours of continuous heavy rainfall even if all three pumps fail.



The storm water sump pit was already close to full on 7 Oct 2017, before the rain started. About 640m<sup>3</sup> of rain water overflowed into the Bishan tunnel portal. If the storm water sump pit had been empty, this amount would have only filled 13% of its capacity.



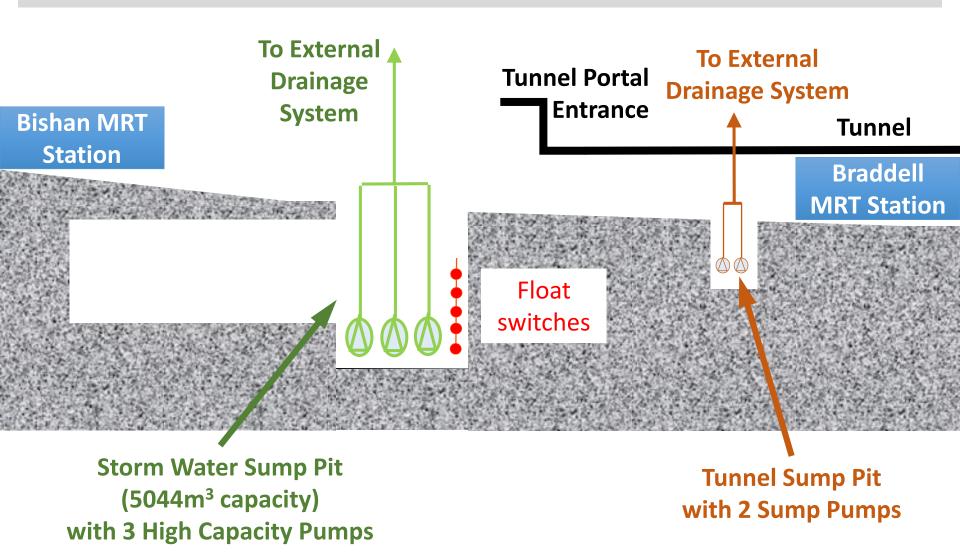
The water level inside the sump pit is easily visible through the grating on top. Maintenance checks would have quickly established if the pit was full.





A properly maintained storm water sump pit should be clean, free of sludge, silt and debris, and empty in anticipation of the next storm so that it can do its job.

MRT tunnels are fully protected against flooding by the storm water sump pits and pumps, which are sized with a huge buffer. The Bishan storm water sump pit has a capacity of 5,044 m<sup>3</sup>, compared to the 640 m<sup>3</sup> of flood water pumped out of the tunnels.



Cases of falsification and wilful dereliction of duties are limited to teams in the Building & Facilities (B&F) Maintenance Group. B&F makes up less than one-tenth of the total staff strength of SMRT Trains.

