

## Location of Manhole Covers in Carriageway

### 1. Purpose

The purpose of this paper is to seek members' endorsement on the proposed requirement on locations of manhole covers in carriageway.

### 2. Background

Due to congestion of underground utilities in Hong Kong, it is not uncommon that utilities are required to be installed beneath carriageway, with the utilities chambers (manholes) constructed within traffic lanes. Normally the sizes of the manhole covers are relatively small and would not occupy more than half of a traffic lane. It follows that only one traffic lane will be closed when a manhole cover is opened for inspection or maintenance activities. If the manhole cover is located at the centre line of the traffic lane, i.e. away from the wheel tracks, it can also avoid most of the braking / traction damages from vehicles, and minimize the rocking noise caused by vehicles running onto the cover.

### 3. Observed Problems

It is however noted that locations of manhole covers have not always received adequate attention they deserve. Many manhole covers have been constructed at wheel tracks, which become subject of complaint on rocking noise when they are loosened or subside. In other cases manhole covers are installed right at the interface of two traffic lanes, which lead to the closure of two traffic lanes (instead of one) when the covers are opened for maintenance activities. The traffic and environmental disturbance in both cases can be alleviated if the manhole covers are properly located during the planning and construction stages.

### 4. Proposal

In view of the aforesaid problems, the following guidelines are proposed for planning and construction of manhole covers in carriageway:

- (a) For manhole covers of widths not exceeding 90% of the lane width, the manhole covers:-
- (i) shall be located at the centre line of the lane as far as possible;
  - (ii) shall be located at the slow lane as far as possible (to facilitate access from verge/footpath where necessary); and
  - (iii) shall not intercept the boundary line of two traffic lanes unless Highways Department agrees otherwise.
- (b) For manhole covers of widths exceeding 90% of the lane width, the locations of the manhole covers shall be decided on a case by case basis and subject to agreement from HyD.
- (c) For existing manhole covers in carriageway to be reconstructed, the responsible utility undertakings should take the opportunity to relocate their covers at least to comply with (a)(iii) of the guidelines.

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