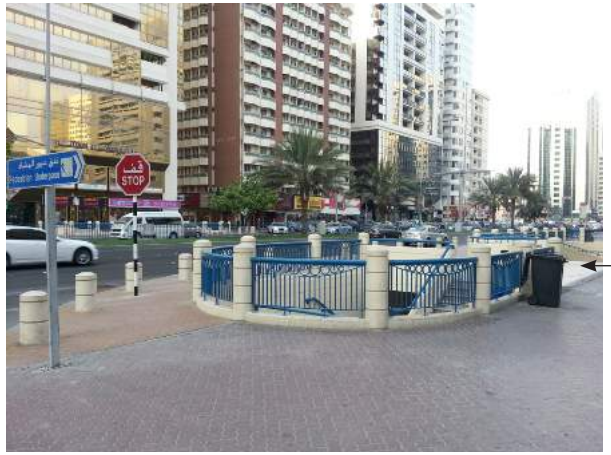
6.4.3 Pedestrian Underpasses

Pedestrian underpasses, for which guidance is provided in the USDM, are underground structures to traverse a major obstacle such as a street, a waterway or a dedicated transit corridor.

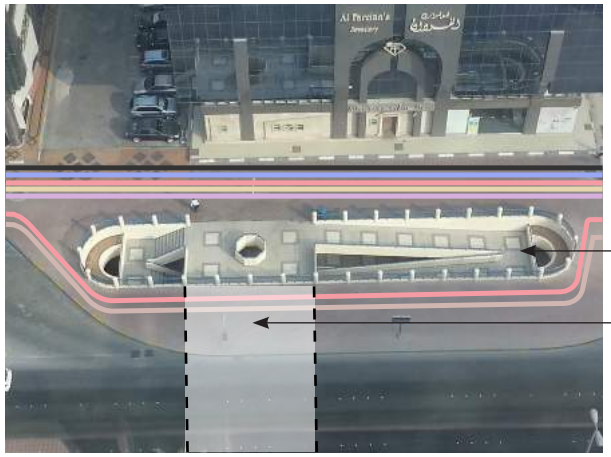
Pedestrian underpasses form vertical and horizontal obstructions. As a result, the development of a utility corridors arrangement near pedestrian underpasses should consider:

- Diverting utility corridors around the underpass access, as illustrated in Figure 6.12;
- Where possible, installing utilities above the underpass crossing and maintaining minimum utility cover. When minimum utility cover is compromised, protection should be provided in accordance with utility providers' requirements;
- Where gravity pipelines cannot be installed above the underpass crossing, they may be diverted around the underpass access. Priority should be given to gravity pipelines due to gradient constraints; and
- The road surface levels should be graded away from the underpass crossing to avoid the need for localised storm water inlet corridors.

The above considerations may also be followed where utility corridors cross other underground structures (e.g. utility tunnels or transit tunnels)



Street view of underpass



Utility corridors superimposed on aerial view of underpass

Figure 6.12. Example of pedestrian underpass in a City Bouvelard