

#### Step IV: Select Closest Applicable UCDM Cross Section Arrangement

The street typology for the selected street is a Residential Access Lane. In order to select the most applicable utility cross section arrangement from the Manual, the following attributes must be understood:

- The number of existing Travel Lanes;
- The configuration of existing parking; and
- The width and composition of the Pedestrian Realm.

The cross section illustrated in Figure B.4 is therefore selected from the Manual as the closest applicable cross section. It is noted that the overall RoW is narrower than the existing Access Lane, however the configuration of street elements match. The Pedestrian Realm widths on the UCDM typical arrangement may therefore be stretched to match the existing.

#### Step V: Adjust and Finalise Utility Corridors Retrofit in Optimal Location

Based on the available space, the utilities identified during Step III may be located in the most optimal locations based on the UCDM location rules and reservation widths. As illustrated in Figure B.5, the following infrastructure retrofitting is achieved:

- (A) The Pedestrian Realm is widened (previously just a sidewalk);
- (B) Shade through landscape is provided and irrigation pipelines are added adjacent to the tree corridor;
- (C) A additional row of street lighting columns is added to light the widened Pedestrian Realm;

Since resurfacing is taking place, it is possible to place new utilities under the Travel Lanes. Space would otherwise be sought within the Pedestrian Realm:

- (D) A gas pipeline is added under the Travel Lane, away from existing buildings; and
- (E) A wastewater pipeline is added under the Travel Lane.

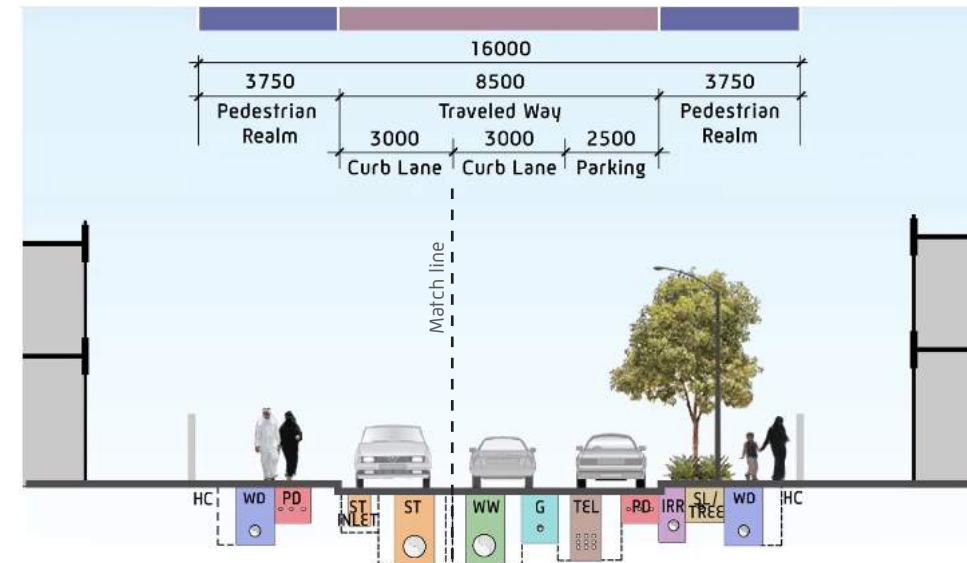


Figure B.4. UCDM typical Residential Access Lane (16 m wide)

In this example, curbs are not being realigned as part of a street retrofit

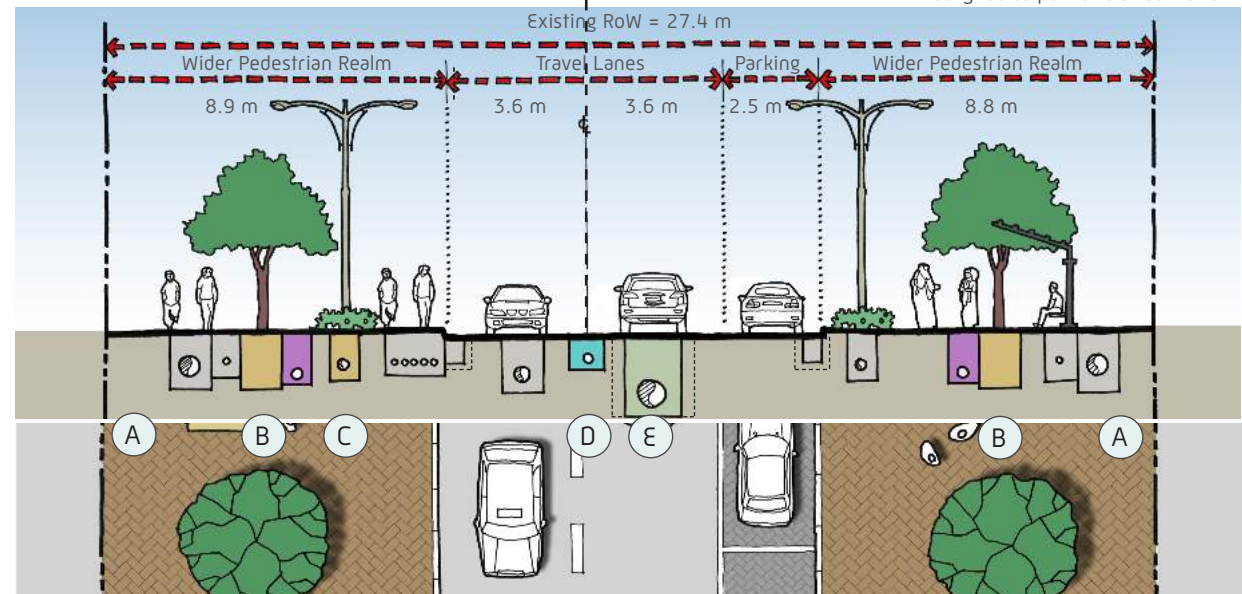


Figure B.5. Adjusted utility corridors in most optimal location