

### 6.2.3 Grade Separated Junctions

In accordance with the USDM, motor vehicle grade separation, as illustrated in Figure 6.5 should not be used in urban streets, other than with an exception from the UPC, concerned Municipality and DoT. Where grade-separated junctions are considered, allocation of utility corridors shall follow the guidelines provided for bridges within this Chapter.



Figure 6.5. Example of a grade separated junction, Sultan Bin Zayed the First Street, Abu Dhabi

### 6.3 Transitions

Where new streets connect to existing streets, configuration and/or RoW width may differ. Consequently, a transition from new to existing streets is required for both the street elements and the utility corridors.

The following guidance is provided for developing the transitioning of utility corridors:

- Tie-in locations (i.e. points of connection) for a given utility should be identified. Not all utilities require tie-in at each transition, for instance, a potable water tie-in may be required on one street, whereas power tie-in may be required on another street;
- Minimum required vertical clearances maintained;
- Gravity networks should be prioritised because of gradient constraints in addition to limiting the number of chambers;
- Relocation of utilities, as a result of tie-in for a given utility, should be limited;
- Where space permits, utility corridor alignments may be locally adjusted to cater for infrastructure works associated with the tie-in (e.g. space for thrust restraints, etc.);
- Where only one or several utility tie-ins are required at a particular transition, full utility corridor arrangements should still be provided in the new street, inclusive of all utility corridor allocations presented in Table 4.2. This facilitates future upgrades;
- Where a new street connects to an existing street longitudinally or to a junction leg:

- One or more of the existing utility corridor positions may be maintained within the new street, provided the allocation rules and utility corridor widths are respected, as illustrated in Figure 6.7;
- Crossover of utilities may be required to bring the utility corridors into the correct position. Where possible the number of crossovers should be minimised; and
- Where multiple crossovers cannot be avoided, the length of the transition zone may be extended to facilitate crossovers taking place at different locations over a longer distance.

All transitions from new to existing streets should be developed in conjunction with the requirements of the relevant utility providers. Figure 6.6 illustrates an example of the transitioning of utility corridors at a T-junction, with selected utility tie-ins.

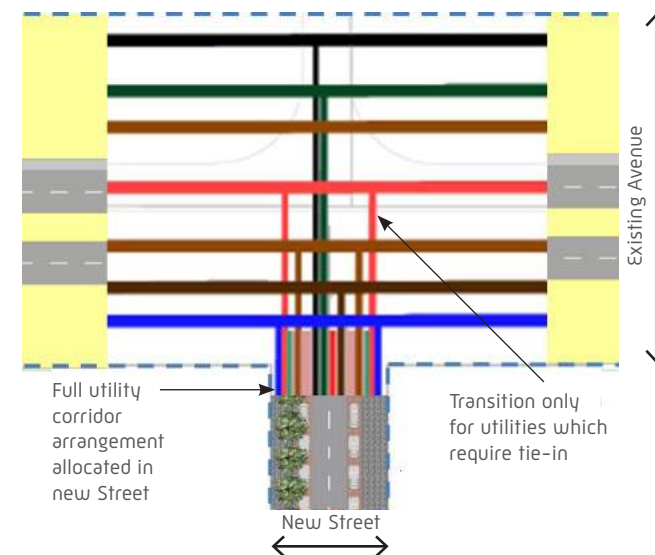


Figure 6.6. Example of transitioning of utility corridors at a T-junction