4.1.2 Utility Corridor Widths

Each utility corridor comprises both a service corridor and a chamber corridor, as illustrated schematically in Figure 4.1.

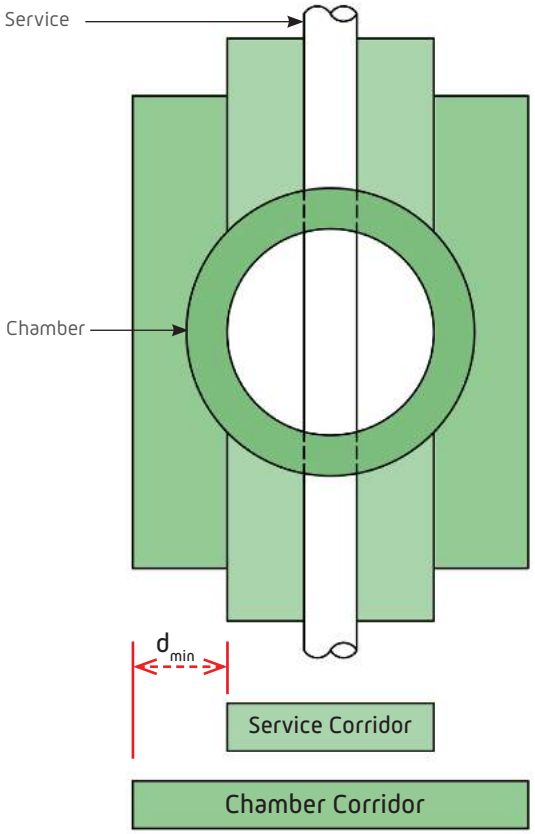

Figure 4.1: Schematic representation of a service and a chamber corridor

All corridor widths and offsets (d_{min}) have been developed in conjunction with the respective utility providers and are based on their requirements.

- The **service corridor** is dedicated for the installation of the utility, (e.g. pipes, cable and duct arrays). The service corridor width is based on the size of a utility for a given Street Family and the horizontal clearance required from the utility to the edge of service corridor.
- The **chamber corridor** is dedicated for the installation of chambers (e.g. manholes and inspection pits for the respective utility). The chamber corridor width is based on the size of the respective chamber width, which can vary according to utility size and purpose of the chamber.
- '**d_{min}**' represents the minimum offset permitted between the edges of a service corridor and the edges of its corresponding chamber corridor. d_{min} is based on the chamber standard details for each utility.

Wherever possible, the chamber corridors of any two adjacent utilities shall overlap to share a common space facilitated by staggering the chambers. The chamber corridor of one utility must not protrude into the adjacent service corridor. To retain flexibility in design, the width of the shared space is limited to the smaller of the two d_{min}.

As mentioned in Chapter 2, an appreciable reduction in land take within the RoW may be achieved when applying the UCDM in conjunction with the USDM, as compared with previous practice in the Emirate of Abu Dhabi. This results from:

- Defining utility corridor widths specific to each Street Family; and
- Sharing of space within the RoW due to staggering of chambers for different utilities.

Figure 4.2 illustrates the efficient development of utility corridors when UCDM standards are applied. Table 4.2 summarises the service corridor and chamber corridor widths for each utility.

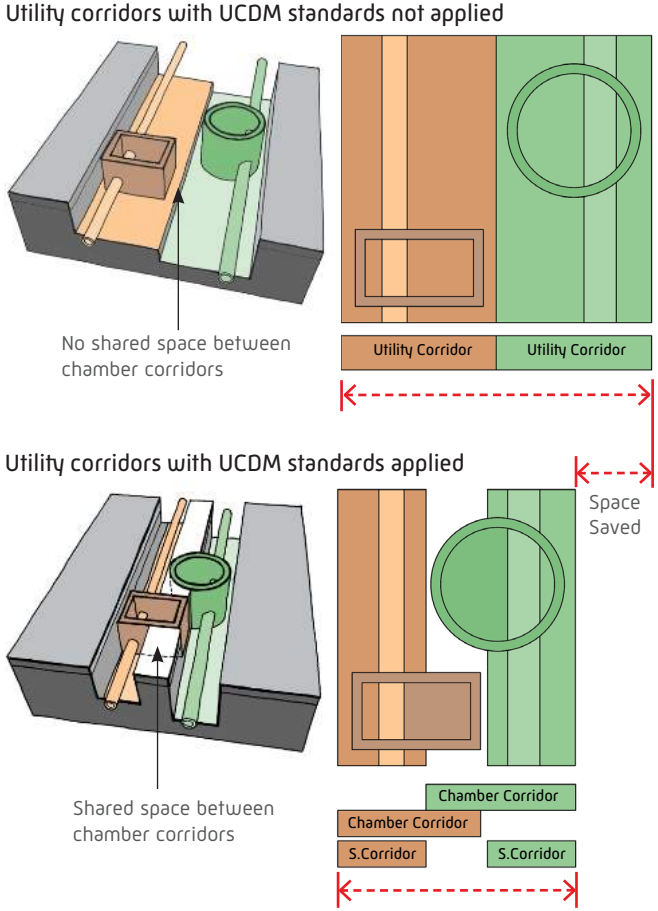

Figure 4.2: Indicative comparison between applying and not applying UCDM standards