

## Medium and Low Voltage Power Distribution Corridor Widths

MV/LV power distribution corridors shall be used for 33kV, 22 kV, 11 kV and 0.4 kV and should preferably be located under the Pedestrian Realm if space is available. Alternatively, they shall be located under Frontage Lanes or Parking bays, if interlocking pavers are used, to facilitate inspections and repair during maintenance operations.

MV/LV power distribution cables and chambers shall be located within a combined corridor and be in accordance with ADWEA, ADDC, and/or AADC requirements.

Fibre optic cables shall be installed in separate ducts alongside power cables within the same corridor, together with associated fibre optic chambers as illustrated in Figure 4.28.

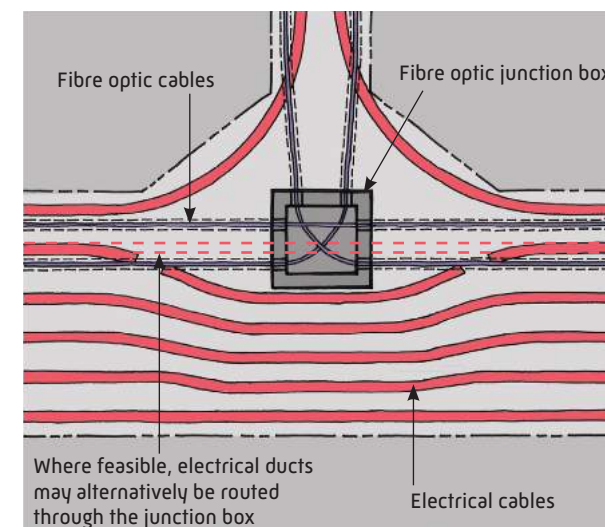


Figure 4.28: Typical electrical and fibre optic cable spacing arrangement

## Power Corridor Locations

The power supply corridors considered in this Manual are:

- **High Voltage (HV) Power Transmission corridor [PT]:** in Avenue or Boulevard Medians only;
- **Medium and Low Voltage (MV/LV) Power Distribution corridors [PD]:** under the Pedestrian Realm and Frontage Lanes or Parking bays, only if interlocking pavers are provided; and
- **Street Lighting corridor (SL):** under the Pedestrian Realm or Medians, usually combined with tree corridors.

Power supply corridor locations are illustrated in Figures 4.25 to 4.27.

Chambers associated with power transmission and power distribution are located within the service corridor width and therefore it is not possible for

these chambers to share with other utility chamber corridors.

## High Voltage Power Transmission Corridor Width

HV power transmission corridors shall be used for 400 kV, 220 kV and 132 kV and shall be located under the Median in Avenues and Boulevards only.

HV power transmission corridor widths shall accommodate the cables, joint pit, link box and joint-and-route markers.

HV power transmission chambers shall be located within the chamber corridors and be in accordance with TRANSCO requirements.

Power corridor width allocations are presented in Table 4.14.

The HV corridors may be used for 33 kV/MV in instances where the 132 kV HV lines are not used.

Table 4.14: HV, MV/LV and Street Lighting Power Corridors Allocation

Corridor Width (mm)	Street Families									
	Boulevard			Avenue			Street		Access Lane	
	Side 1	Middle	Side 2	Side 1	Middle	Side 2	Side 1	Side 2	Side 1	Side 2
Power Transmission (HV) Service/Chamber Corridor	-	2 x 2000	-	-	1 x 2000	-	-	-	-	-
Power Distribution (MV/LV) Service/Chamber Corridor	6000			4000			3000		2000	
Street Lighting/Tree Service/Chamber Corridor	1500 [1000/700]	1500 [1000]	1500 [1000/700]	1500 [1000/0]	1500 [1000]	1500 [1000/0]	1500 [1000/700]	1500 [1000/700]	1500 [1000/500]	-

Note: Values shown in brackets [ ] denote the minimum required corridor widths where the RoW is limited.

A summary of utility corridor widths for each utility is provided in Table 4.2.

For each Street Family, the power distribution corridor width is equal to the sum of all distribution corridors (i.e. may be split to several parts within the RoW).