District Cooling Corridor Locations

District cooling corridors include two types of pipes and their spacing requirements are illustrated in Figure 4.23:

- Supply pipe; and
- Return pipe

Wherever placement of a district cooling corridor under the Pedestrian Realm or Parking is not feasible, it may be placed under Travel Lanes since the frequency of maintaining district cooling pipelines is lower than most of the other utilities. When placed under Travel Lanes, district cooling chamber access covers shall be placed close to the centre of the Travel Lane for the reasons explained under Section 4.6.2.

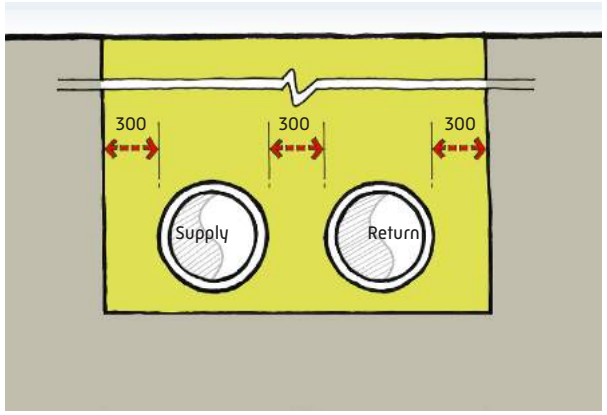

Figure 4.23: District cooling supply and return pipes spacing arrangement

Similar to stormwater and wastewater networks, district cooling networks shall be installed during the early stages of construction of infrastructure works to avoid disruption to the Travel Lane surface finish.

District cooling supply pipes require an insulation to avoid temperature losses. The typical insulation thicknesses are :

- 50 mm for pipes with diameters less than 16" (400 mm); and
- 75 mm for pipes with diameters equal or greater than 16" (400 mm).

District Cooling Corridor Widths

District cooling corridors are not typically allocated for residential/Emirati neighbourhoods as it is not generally economically and environmentally viable due to lower density populations and buildings, as found in these areas.

District cooling chambers shall be located within the chamber corridors and be in accordance with the relevant utility providers' requirements.

District cooling corridor requirements and width allocations are presented in Tables 4.12 and 4.13.

Service and chamber corridor offsets (d_{min}) for each of the district cooling corridor combinations are illustrated in Figure 4.24.

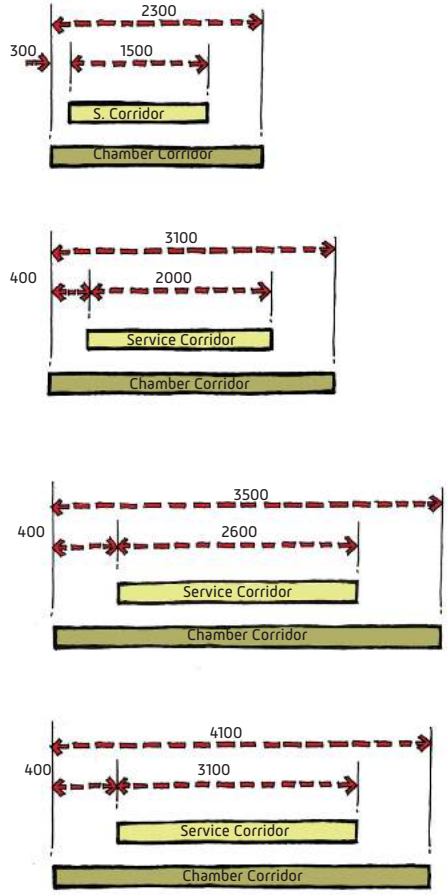

Figure 4.24: District Cooling service and chamber corridor offsets