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# Engineers-And

In Vienna the Girdle Line or Outer Boulevard is about eight miles in length; the total width between buildings is 248 feet. A separates trip of the road is set apart for the tramways and fast traffic; a continuous recreation ground or playing space is included in the scheme, well planted with trees to provide shade during the hot season.

Another circumferential avenue in Vienna is the Ring Street or Hub, 178 feet wide. It has a central carriageway  $41\frac{1}{2}$  feet wide, which is principally used by fast and through traffic vehicles. On either side are the tramways on the electric conduit system. A riding track and a premenade for foot passengers occupy the spaces between the trees, and slow and stopping vehicles find accommodation on the two outer roads.

These circumferential routes which connect up the various parks and open spaces are largely used by residents, motorists and cyclists as circular drives.

The layout and construction of Avenues and Boulevards.

It must be born in mind that all objects in the street, utilitarian or otherwise, are things to be seen, part of an organic whole, each having their respective part and place.

Athens and Rome were each crowded with such objects arranged for the most part in picturesque association. Although it will be impossible for young cities to expend much money, if any, upon beautification, beyond the planting of trees, a town planning scheme should allow for such improvements at some future date at a minimum of expense.

Long straight avenues, with buildings of approximately the same height and no object to break the horizon should be avoided. If natural scenic effect cannot be obtained, then provision should be made for some architectural feature to break the skyline. By careful planning it can generally be arranged to place a church, a public building, or artistically designed residence to break the monotony of long streets.

In Germany this branch of town planning is given careful consideration, and long avenues are usually broken by means of "squares" so that the line of sight will be met by a building, the architecture of which, has been previously approved by the local authority.

In planning out the widths of main roads it is difficult to estimate what the future will demand, but in any case it will be better to err on the wide side rather than the narrow.

The various types of streets usually required in a city

- (a) Main business avenues with provision for tramways and boulevards; width from 100 to 200 feet.
- (b) Secondary business avenues without provision for tramways; from 80 to 150 feet.
- (c) Semi-residential avenues with provision for tramways, side and centre boulevards; from 80 to 120 feet.
- (d) Semi-residential avenues without provision for tramways, but with side and centre boulevards; from 80 to 100 feet.
- (e) Residential avenues without provision for tramways, but with side and centre boulevards; from 60 to 80 feet.
- (f) Secondary residential avenues with carriageways to take local traffic only, with side boulevards and an established building line of 30 feet; from 40 to 60 feet.