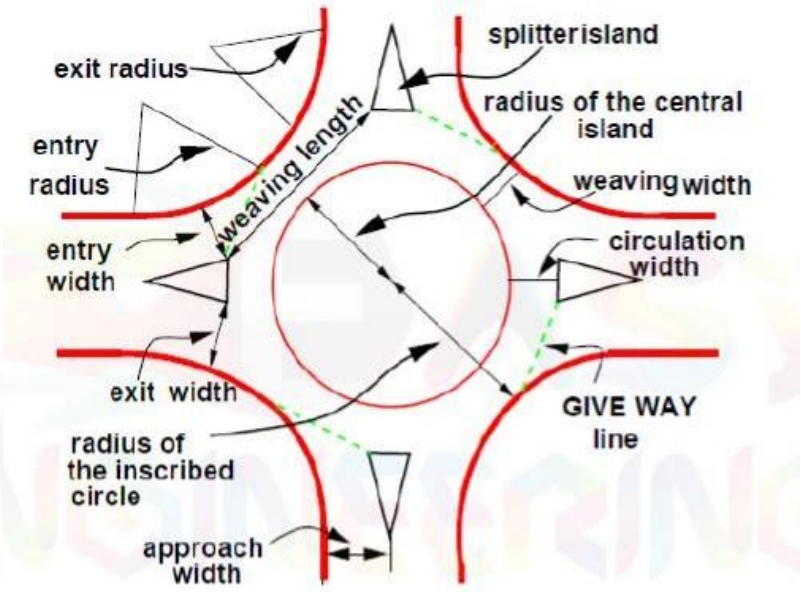
4.1 ROTARY INTERSECTION

A rotary intersection is an enlarged road intersection where all converging vehicles are forced to moveround a large central island in one direction (clock wise direction).



ADVANTAGES OF ROTARY INTERSECTIONS

- The main objective of providing a rotary are eliminate the necessity of stopping even for crossstreams of vehicles and to reduce the area of conflict.
- An orderly & regimented traffic flow is provided by rotary one-way movement.
- Normally, all traffic proceeds simultaneously & continuously at fairly uniform, though lowspeed. Frequent stopping & starting are avoided.
- All turns can be made with ease, although little extra travel distance is required for allmovements except left turns.
- A rotary is especially suited for intersections legs, and /or where there are right-turningmovements.
- For moderate traffic, rotaries are self-governing& need no control by police or traffic signals.

DISADVANTAGES OF ROTARY INTERSECTIONS

- A rotary requires more land & may not be feasible in many built-up locations.
- Where pedestrian traffic is large, a rotary by itself is not sufficient to control traffic & has to be supplemented by traffic police. When used on high speed roads. rotaries require extremely large size.
- Traffic turning right has to travel a little extra distance.
- A rotary requires many warning & directional signs for safety. The central island & entrances &exists must be well lighted at night. These tend to make it costly.

Guidelines for Selecting a Rotary Type of Intersection

- A total volume of 3000 vehicles per hour entering from all the intersection legs appears to be themaximum practical capacity of high type rotaries.
- A rotary design is most appropriate when the proportion of turning traffic is very high.
- A rotary is a good choice when there are more than four approaches to the junction.
- Rotaries are not generally warranted for intersections carrying very light traffic. Normally, the lowest traffic volume for which a rotary design should be considered is about 500 vehicles per hour.