To: Transportation Commission

Re: Complete Green Streets Guide conflicts with Fire Code

On 1/3/2023 the City of Madison Council adopted a new Complete Green Streets Policy (CGSP) to incorporate Complete Green Streets principles of street design for all modes of transportation into public way improvements and project phases (City Resolution # RES-23-00003).

The policy provides guidelines and dimensions for each type of street in the City. City staff utilize the policy to recommend appropriate street geometry for new proposed developments. During meetings for some proposed development projects, a conflict was noted between maximum travel way width and minimum fire lane requirements, if parking is desired on both sides of the street. Specifically, the neighborhood street and neighborhood mixed use street types only allow for a maximum of 22' travel way. If the development team propose to use the street as a fire lane to meet desired densities, and the construction is over 30' tall, minimum fire lane width is 26'. This can provide a conflict in approving the plat or conditional use development.

The fire lane requirement referenced in this document is summarized as follows:

- 20' clear is required for commercial (per fire code) buildings up to 30' tall
- 26' clear is required for buildings over 30' tall when Aerial Apparatus is required. Required on one side of the building, at least 25% of the building face.

The CGSP requirements referenced in this document are summarized as follows:

- Maximum Travel Way Width, Neighborhood Street 22'
- Maximum Travel Way Width, Neighborhood Mixed Use Street 22'

A staff team including representatives from Engineering, Traffic Engineering, Fire Department and Planning Department was formed to identify the conflicts and potential routes forward for consideration. A summary of potential solutions are as follows:

- 1. A development team could ask the Transportation Commission (TC) for a variance. The TC would then have to look at each specific instance, weigh the pros and cons, and propose a motion to grant or deny the variance. This option is useful for flexibility purposes, however other administrative options are probably more desired to keep this option to a minimum.
- 2. A development team could redesign their site to include fire lane requirements on the parcel and not in the street. This is done sometimes in parking lots. However, in denser developments, this may not be practical if the City develops in the ways it shows in adopted Plans. Many times, in taller, dense developments, much of the parcel is covered by the building.
- 3. A development team could choose to upgrade construction methods to follow the equivalency guide. This may include upgrading a wood frame to steel, provide multiple staircases to the roof

or install an enhanced sprinkler system as a few examples. While these options are available to the developer, we cannot require them due to state statute.

- 4. There are a few alternative street designs that would be atypical that could meet both CGSP and the fire lane requirement. They are shown as follows:
 - a. Limit Parking to one side of street
 Include a 4' paved terrace
 Include a 4" rolled curb

Notes: Signs and light poles would be allowed in 4' terrace. Need to verify 4" curb will work with stormwater management plan. Snow plowing on 4' terrace will be responsibility of property owner, not City.



Figure 1. Limit Parking to one side, include 4' paved terrace.

b. Build 26' street with no parking 22' pavement with 2' curb pans



Figure 2. 26' Street with no parking.

c. Limit Parking to one side of street Include a 4' curb pan (this is similar to 5.a. however could be used if stormwater management plan requires full curb head) to reduce pavement/travel way width.



Figure 3. – Limit Parking to one side, include 4' curb pan

For reference E. Washington Ave has a stretch of road similar to this:



Figure 4. – E. Washington Ave Wide curb pan/bike lane

d. Build a small island in the center of the street (not full curb height).

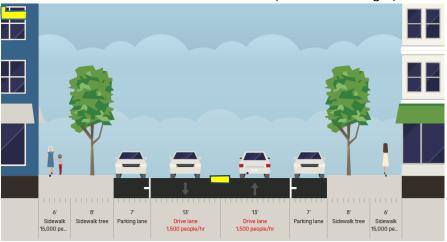


Figure 5. Low profile median

e. One side parking with back in angled parking

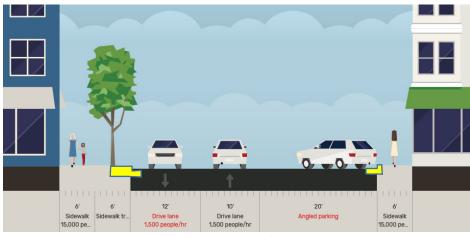


Figure 6. Limit Parking to one side, include 4' paved terrace, back in angled parking.

In summary the staff team believes that all of these options are feasible options forward for instances where maximum travel way width conflicts with minimum fire lane dimensions for proposed developments. Utilizing all of the proposed solutions would provide staff and commissioners flexibility in approving the appropriate design for each situation. Solution 1 could be used at a minimum, but, initially, other solutions would be considered prior to seeking a variance.