

**REVISED MPD LIST OF PUBLIC INFRASTRUCTURE DEVIATIONS**  
for  
**WOODHAVEN SUBDIVISION**  
**220269**  
**Last Updated: 3/9/2022**

The proposed MPD zoning allows the developer the option to deviate from "Typical" public infrastructure standards, in an effort to provide more affordable and more inclusive housing options. Because of this, the following Public Infrastructure Deviations are being requested:

**1A. Soil Modification of Fill Material**

Per City requirements, roadway sub-grades, specifically in a "fill" condition, are required to be modified with additional cementitious like materials (cement, fly-ash, or lime treatments) for soil that does not have Atterberg limits within the City's Liquid Limit (LL) or Plasticity Index (PI) ranges. This MPD plan requests the removal of this requirement, provided that the top 9" of the soil sub-grade be treated with 5% Portland Cement. This request is supported by the Geotechnical Letter dated February 2<sup>nd</sup>, 2022 and full report dated February 8th, 2022 from CFS Engineers.

**1B. Roadway Typical Section**

Per City requirements, roadway typical sections for Residential Local Roads and Residential Collectors, are required to contain 8" and 9" of asphalt, respectively, including 6" of gravel base rock, and un-treated soil sub-grade. This MPD Plan requests a 3" reduction in asphalt thickness for both roadway classification. This equates to 5" of asphalt (2" asphalt surface with 3" asphalt base) for residential local roads and 6" of asphalt (2" asphalt surface and 4" asphalt base) for residential collector roads. Both sections will also include 6" of gravel base rock, with the top 9" of the soil sub-grade be treated with 5% Portland Cement. This request is supported by the Geotechnical Report dated February 8th, 2022 from CFS Engineers.

**2. Sidewalks on Both sides of the Street**

Per City requirements, sidewalks are required on both sides of residential streets. This MPD plan requests the removal of sidewalk on one side of the street for residential local roads. The proposed sidewalk locations are shown within this plan, to identify the proposed locations of sidewalks.

**3. Storm Sewer Structure Details**

Per City requirements, all public storm sewer curb inlets are required to be concrete boxes with throat openings only. This MPD plan requests the consideration, to allow an alternate curb inlet detail. The alternate curb inlet detail has yet to be designed, but requests consideration for a concrete structure with a combination throat and grate opening. This alternate detail is intended to allow for increased inlet capacities, which decreases the quantity and size of curb inlets. The detail will be further discussed prior to permit plans and coordinated with the City.

**4. ~~Sanitary Sewer Manhole Locations~~**

Per City requirements, sanitary sewer manholes are required to be outside of the roadway paving, generally behind the curb. This MPD plan is not requesting any deviations for alternate sanitary sewer manhole locations.

**5. ~~Public Waterline Materials~~**

Per City requirements, all public waterline is required to be Ductile Iron Pipe (DIP). This MPD plan is not requesting any deviations for alternate waterline pipe materials.

**6. Flowable fill requirement**

Per City requirements, all utilities located underneath the proposed roadway paving, are required to have flowable fill backfill. This MPD plan requests the removal of this requirement entirely, provided the backfill material (suitable soil material or aggregate) meets the recommendation of the Geotechnical Report Letter dated February 8th, 2022 from CFS Engineers.

**7. Public Street Lighting Illumination Levels**

Per City requirements, typical residential roads are required to have average illuminance levels of 6.0 to 8.8 Lux, which equates to street lighting levels that are 1.5 to 2.2 times greater than IES (Illumination Engineering Society) standards. City requirements also apply a discount factor (Light Loss Factor) of 0.68, which diminishes the output of each fixture. This MPD plan requests decreased lighting levels, to allow for proposed lighting levels equal to IES, as shown below in **red**, which is approximately a 1/3 reduction in lighting levels. The chart below, further clarifies this revised MPD lighting levels (KCMO levels shown for reference).

Entity	Classification	Avg.	Avg/ Min	LLF
<b>IES</b>	<b>Local Residential</b>	<b>4.0</b>	<b>6:1</b>	<b>0.80</b>
<b>IES</b>	<b>Residential Collector</b>	<b>6.0</b>	<b>6:1</b>	<b>0.80</b>
<b>Kansas City, MO</b>	<b>Local Residential</b>	<b>6.0 to 8.8</b>	<b>6:1</b>	<b>0.68</b>

**8. Street Trees**

Per City requirements, street trees are required at 30' on center, for all residential streets. This plan requests that only 1 street tree be required per residential lot.