

Route K/Old Plank Road Roundabout

Concerns voiced at interested parties meeting and/or via the City's Be Heard site:

Comment: The truck apron at the Route K/Sinclair Road roundabout is a horrible color and difficult to see at night. Consider using a different color.

City Response: *At the interested parties meeting staff discussed using a lighter color and/or painting the edge so that it will stand out at night or rainy weather. We will make a determination on the best practice while completing the final plans for the project.*

Comment: Close gas station entrance at Little General gas station that is across from Vermillion and instead connect it to the turnabout on Old Plank Road.

City Response: *The City is working with MoDOT on access control for the entrances onto Route K. This comment will be taken into consideration during the design of the final plans for the roundabout.*

Comment: Pedestrian signs should say "Stop for Pedestrians" instead of "Yield for Pedestrians".

City Response: *RSMo. 300.375 states that "when traffic control signals are not in place or not in operation, the driver of a vehicle shall yield the right-of-way to a pedestrian crossing the roadway within a crosswalk when the pedestrian is on the half of the roadway on which the vehicle is traveling, or when the pedestrian is approaching so closely from the opposite half of the roadway as to be in danger." Thus, State law requires the yielding to pedestrians.*

Comment: Lower speed limits before Breaktime gas station and at Gateway South subdivision.

City Response: *The City has considered lowering the speed limits as traffic approaches the roundabout and is working with MoDOT on the speed limits since Route K is a State maintained road.*

Comment: Would rather have a signal instead of a roundabout.

City Response: *The roundabout is considered overall the safest improvement for the intersection for all modes of transportation (motorized and non-motorized). For the following safety, traffic flow, and maintenance reasons, Staff recommends a roundabout over a signal to improve this intersection:*

- a. *The roundabout has fewer vehicle conflict points compared to a signalized intersection. The severity of a collision is determined largely by the speed and angle of impact. A roundabout changes the geometry of the roadway in a way that forces drivers to slow down and alter their direction. This results in fewer and less severe collisions. Signalization relies on driver's obedience of traffic control devices to eliminate collisions. The most severe collisions at signalized intersections occur when there is a violation of the traffic control device designed to separate conflicts by time (i.e. the driver runs a red light). Also, the rear-end collision rate may increase with a traffic signal given the historical trends of*

- signalized intersections due to queues at the light. With roundabouts the most severe types of crashes (right-angle, left-turn, and head-on) are unlikely to occur.*
- b. A pedestrian crossing a leg of the 4-way stop intersection faces six potential vehicular conflicts, each coming from different movements and different directions for those movements. A pedestrian crossing a leg of a roundabout will face two potential vehicular conflicts and each conflict point will be at a separate time from only one direction. For the roundabout the first potential conflict will be coming from the left, with a refuge on the median island, before facing the other potential conflict, which will be coming from the right.*
 - c. Vehicular speeds are lower in a roundabout allowing more time for vehicles and pedestrians to react, which reduces the consequences of error. Also, the crosswalks are set back at the roundabout to allow drivers more time to react to pedestrians while merging into or out of the roundabout.*
 - d. Roundabouts bring conflicting traffic streams into a steady flow and allow vehicles to merge without the stop-and-go conditions. Roundabouts provide greater traffic flow benefits by reducing average vehicle delay and vehicle queuing compared to a signal.*
 - e. Roundabouts keep traffic flowing even during non-peak periods since vehicles would not have to wait at a red light when little or no traffic is coming from the conflicting direction.*
 - f. Long-term maintenance costs are lower for a roundabout than a signal due to the electrical cost and operation/maintenance cost of a signal.*

Comment: Traffic access to the existing roads during construction.

City Response: *The City is working with MoDOT on the construction traffic control plan. At this time, the plan is for the intersection to remain generally open during construction. However, during different phases of construction, certain legs will need to be closed to construct that portion of the roundabout. Access will be maintained for both gas stations and the surrounding subdivisions and properties.*

Comment: Question on plans for maintaining the bike lanes on Route K.

City Response: *The bike lanes along Route K are maintained by MoDOT. For the design of the roundabout, the bike lanes will be included in the design. At the roundabout, the bicyclist will be able to access the sidewalk to navigate the intersection or the bicyclist will need to merge with the vehicles in traversing the roundabout. The roundabout is designed such that the vehicles will need to slow down to traverse the roundabout.*

Comment: The roundabout will cause traffic to back up at the intersection making it difficult to access Route K from Gateway Subdivision. Traffic exiting the roundabout going west will speed up making it unsafe to access Route K from Gateway subdivision. Therefore, the resident would like the City to construct a road to connect Gateway Boulevard to Keegan Court.

City Response: *The project was initiated to improve the safety of the Route K and Old Plank Road intersection. The roundabout is not anticipated to cause a back up in*

vehicles entering the roundabout. In other locations within the City, construction of roundabouts have been found to reduce back of vehicles at an intersection. For vehicles exiting the roundabout, the vehicle speed will be slower because the driver needs to slow down through the roundabout. Currently, vehicles driving along Route K do not need to slow down at the intersection. The construction of a road to connect Gateway Boulevard to Keegan Court would help improve the connectivity for the Gateway South subdivision, but will not improve the safety of the Route K and Old Plank Road intersection.

Comment: The hill on Route K just west of the entrance into Dollar General is extremely dangerous and should be taken care of before construction of the roundabout.

City Response: *With the design of the roundabout at Route K and Old Plank Road, the hill between Southwest Way and Old Plank Road is being lowered to improve sight distance into the roundabout. The hill west of Dollar General is out of the scope of this project.*

Comment: Safety and traffic issues could be addressed instead by realigning Old Plank Road to connect with Route K at a 90-degree angle and adding a center turn lane on Route K between the entrance to Bonne Femme and the entrance to Dollar General.

City Response: *As with the comment requesting a signal at the intersection, staff recommends a roundabout for the improvement based on safety measures included in the roundabout design including slowing vehicle speeds, greatly reducing the potential for right-angle, left-turn, and head-on collisions, and providing safer crosswalks for pedestrians due to the geometry of the roundabout.*

Be Heard Comment: The design and location of the project reduces access to Leatherwood Hill. The traffic circle greatly favors directing drivers towards the Break Time instead. This plan for development unjustly favors direct access to the multi-million dollar corporation over the small, locally-owned business.

City Response: *It is not the intent to reduce access to Leatherwood Hill. Both drive approaches to the gas station are intended to remain in place.*

Be Heard Comment: From what I can find from ward maps, this looks to be outside of the 6th ward. Why are we spending time and energy coming up for solutions to problems that don't actually lie inside city limits? According to property records, the city of Columbia ends with the properties on Daycrew Loop. Why are we doing road work outside of our city? Is there a lack of projects inside city limits that we can work on?

City Response: *The City Public Works Department maintains Old Plank Road. MoDOT maintains Route K. This project is a cost share project being funded by both the City and MoDOT to improve the safety of the intersection.*