Evaluation Criteria Matrix – South Century Drive/Venture Lane Intersection Alternatives

The following criteria are based on engineering judgment and represent the professional opinions of the Design Team.

Evaluation Criteria	Performance Measures	Alternative 1: Peanut Roundabout	Alternative 2: Single Roundabout + Turn Lane	Alternative 3: Teardrop Roundabout	Alternative 4: Barbell Roundabout
Estimated Construction Cost		**$4.1M**	**$4.3M**	**$3.5M**	**$4.6M**
Safety	Crash Reduction Factors	➤ Signal to Roundabout = 78% reduction	➤ Signal to Roundabout = 78% reduction ➤ New intersection with dedicated left turn lane = 33% reduction ➤ Results in uncontrolled movement on S Century Drive	➤ Signal to Roundabout = 78% reduction ➤ Minor street stop control to Roundabout = 82% reduction	➤ Signal to Roundabout = 78% reduction
Mobility	Pedestrian/Bicycle Accommodations	➤ Multiuse path circulation provided at roundabout.	➤ Multiuse path circulation provided at roundabout.	➤ Multiuse path circulation provided at roundabout. ➤ NB pedestrian/bicycle users must circulate farther east around both roundabouts. ➤ Right-turn bypass lane results in additional conflict point for pedestrians.	➤ Multiuse path circulation provided at roundabout.
	Future Traffic Performance/Operations	➤ Future traffic projections show westbound backups potentially reaching the gas station driveway	➤ Operates acceptably in Year 2045 ➤	➤ Westbound traffic at the South Century roundabout is expected to back up, reaching the Venture Lane roundabout in the future	➤ Operates acceptably in Year 2045
	Freight	➤ Through traffic on South Century only needs to traverse through one roundabout. ➤ Direct access to the Business Park. ➤ Some out-of-direction travel for deliveries to the north half of the Business Park.	➤ Through traffic on South Century only needs to traverse through one roundabout. ➤ Direct access to the business park with minimal out-of-direction travel. ➤ Option for freight to use roundabout or left-in, right-in, right-out intersection.	➤ Through traffic on South Century only needs to traverse through one roundabout. ➤ Direct access to the business park. ➤ Undesirable geometry for freight vehicles bound for Business Park.	➤ Through traffic on South Century has to traverse through two roundabouts. ➤ Direct access to the Business Park.
Impacts	Impact to Business Access & Circulation	➤ Venture Lane through traffic will need to circulate through the South Century roundabout in both directions. Closure of two business driveways.	➤ Maintains access to all business driveways. ➤ Counterclockwise through traffic on Venture Lane must use S Century roundabout. ➤ No left turns out at the south connection to SCD	➤ Counterclockwise through traffic on Venture Lane must circulate to South Century roundabout. ➤ Closure of two business driveways.	➤ Traffic on Venture Lane will have multiple options to access South Century Drive, providing redundancy in connectivity Maintains access to all business driveways. ➤ Counterclockwise through traffic on Venture Lane must use S Century roundabout.
	Access to Three Rivers School	➤ School traffic will navigate a more complex route to access the school	➤ Simple access to/from direction of school. ➤ Multiple ingress points for school traffic.	➤ School traffic will navigate a more complex route to access the school. ➤ School buses will have to navigate tight radius and multiple concrete aprons.	➤ Simple access to/from direction of school. ➤ Multiple ingress points for school traffic. ➤ Two separate ingress/egress points along Venture Lane for school traffic.
	Impacts During Construction	➤ Will require temporary road and traffic shift during construction. ➤ Vehicles wanting to access south side of Business Park must loop around Venture Lane.	➤ Will require temporary road and rerouting during construction.	➤ Most of the improvements can be constructed outside of existing roadway. ➤ Vehicles wanting to access south side of Business Park must loop around Venture Lane.	➤ Will require temporary road and traffic shift during construction
	Estimated Right-of-Way (ROW) Acquisition	**1.5 acres**	**1.1 acres**	**1.6 acres**	**2.1 acres**

Green = Preferred, Yellow = Neutral, Red = Not Preferred