

| EVALUATION CRITERIA | | Design Alternative | | |
|-------------------------------------|---|--|--|--|
| | | B4 - Single Roundabout | C5 - Double Roundabout | Existing Signal |
| Geometry / Complexity | | - | Two roundabouts more complex than one | - |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 4 | 2 | 3 |
| Safety | Vehicular Safety | 8 Vehicular Conflicts | 10 vehicular conflicts | 32 vehicular conflicts |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 4 | 3 | 2 | |
| | Bike Safety | Less Merging | More Merging | No bike accommodations |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 4 | 3 | 2 | |
| | Pedestrian Safety | Parkways (separate peds from traffic) | Crossings are further apart | Missing crossing |
| | | Net Effect: | Net Effect: | Net Effect: |
| 4 | 3 | 2 | | |
| Driver Familiarity | Single roundabout more familiar | Double Roundabout | Typical | |
| | Net Effect: | Net Effect: | Net Effect: | |
| 4 | 2 | 3 | | |
| Constructability | | Wall may be required on NE corner which may require special construction methods due to proximity of house. | Possibly more complicated traffic control. Wall may be required on NE corner which may require special construction methods due to proximity of house. | - |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 3 | 2 | 3 |
| Operations | Auto/Bus Level of Service | Future LOS Acceptable | Future LOS- Better AM, Similar PM | Lower LOS, Future LOS unacceptable |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 3 | 4 | 2 | |
| | Ease of Use/Comfort for Bicycles | Wider (10') multi-use path, maybe wider lanes, may want separated facility | Going through two intersections vs one using the vehicle travel lane more tough | Long crossing with intersection offsets |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 3 | 2 | 2 | |
| Ease of Use/Comfort for Pedestrians | With islands much shorter crossings w/o signal | With islands much shorter crossings w/o signal | - | |
| | Net Effect: | Net Effect: | Net Effect: | |
| 4 | 4 | 3 | | |
| Bus/Truck Accommodation | Accommodates WB 67 + Bus | Accommodates WB 67 + Bus | Accommodates WB 67 + Bus | |
| | Net Effect: | Net Effect: | Net Effect: | |
| 3 | 3 | 3 | | |
| Env. Impacts | Noise Quality | Less acceleration and deceleration noise | Less acceleration and deceleration noise | No change acceleration and deceleration noise |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 4 | 4 | 3 | |
| | Air Quality | Less emissions due to smoother flow | Less emissions due to smoother flow | More emission due to stop and go traffic and longer idling |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 4 | 4 | 2 | |
| | HAZMAT | Removal of building would likely result in additional ACM & LBP sampling and Phase I Site Assessment | May require some additional ACM and LBP sampling. | No additional HAZMAT work required |
| | | Net Effect: | Net Effect: | Net Effect: |
| 1 | 2 | 3 | | |
| Level of NEPA Documentation | Due to ROW requirements, residential displacement, impacts to access for residential/businesses, and/or community impacts, the project may require a D checklist. | Would more than likely remain under existing CE checklist | No CE required | |
| | Net Effect: | Net Effect: | Net Effect: | |
| 1 | 2 | 3 | | |
| Utility Impacts | | Similar with both | Similar with both | - |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 2 | 2 | 3 |
| EVALUATION CRITERIA | | B4 - Single Roundabout | C5 - Double Roundabout | Existing Signal |
| Access Management | | Provides more management with median islands | Provides more management with median islands | Access Managed at Signal |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 4 | 4 | 2 |
| Right-of-Way | | More property to take. (Approx. 16,000 sq. ft.) | Less property to take. (Approx. 10,000 sq. ft.) | Existing |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 1 | 2 | 3 |
| Stakeholder Acceptance | Bike & Ped Committee | BAC PAC Feedback | BAC PAC Feedback | BAC PAC Feedback |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 4 | 3 | 2 | |
| | Transportation Commission | TC Feedback | TC Feedback | TC Feedback |
| Net Effect: | | Net Effect: | Net Effect: | |
| 4 | 3 | 2 | | |
| Character Improvement Opportunities | | Larger Landscaping opportunities. May allow for realigning NW pedestrian access to not be elevated and possible removal of some existing wall. | Smaller Landscaping opportunities. May allow for realigning NW pedestrian access to not be elevated and removal of existing wall. | No change |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 5 | 4 | 2 |
| Building/Structures Impact | | One residential home take. Possible driveway/access impacts to adjacent home to east of full take. | Loss of side yard and access, no building impact | No Impacts |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 1 | 2 | 3 |
| Project Costs | Construction | May be slightly less, but very close in cost | May be slightly more, but very close in cost | No cost, existing |
| | | Net Effect: | Net Effect: | Net Effect: |
| | | 2 | 2 | 3 |
| | Operations & Maintenance | Signing and Striping | Signing and Striping | Signal equipment maintenance |
| | | Net Effect: | Net Effect: | Net Effect: |
| | 4 | 4 | 3 | |
| | ROW | Full property acquisition | Partial property acquisitions | No change |
| Net Effect: | | Net Effect: | Net Effect: | |
| 1 | 2 | 3 | | |
| Total Net Effect: | | 74 | 68 | 62 |

Criteria Rating

- 1 - Strong Disadvantage
- 2 - Some Disadvantage
- 3 - Neutral
- 4 - Some Advantage
- 5 - Strong Advantage



N Fourth St. @
E Cedar Ave. & E Lockett Rd.
Flagstaff, AZ
12.17.20

Scale: 1:50

MTJ CONCEPT DESIGN
ALT B4: COLOR WITH AERIAL

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