

Key Changes Proposed to the Existing Roadway System as Part of the Murphy Road Crossing IAMP Project

Key roadway changes identified in the transportation analysis for the Murphy Road Crossing alternative for the IAMP study area occur along Powers Road, Murphy Road and Third Street. The following pages describe the existing conditions and identified changes along these facilities, along with other key changes in the study area based on analysis in Tech Memos #3 and #5. **Figure 3** shows the Existing 2005 volumes/lane configurations, and **Figure 6** shows the estimated volumes and lane assumptions used in the Synchro/SimTraffic model.

Powers Road

Existing: Powers Road is a two-lane east/west facility in the study area with two-way stops at Brookwood Boulevard and Parrell Road at the west and east edge of the study area. Traffic signals exist at the intersection of Powers Road with the U.S. 97 Parkway and Third Street. Bike lanes are marked along Powers Road between Brookwood Boulevard and Third Street. Sidewalks occur along Powers Road between Third Street and the southbound U.S. 97 Parkway connection, and west of Brookwood. Powers Road is classified as a Major Collector in the City of Bend TSP. Posted speed is 25 to 35 miles per hour.

Future: With the future volumes estimated for this facility, Powers Road will need to be improved to a four or five lane facility between Brookwood Boulevard and Third Street. Per current analysis, an over-crossing of U.S. 97 with a diamond-style interchange at Powers Road will be required, as originally recommended by the South Bend Parkway Refinement Study (2004). The effect of a Powers Road over-crossing without local connections to the Parkway has not been analyzed. If ramps exist in the future at Powers Road, new traffic signals would be included at the northbound and southbound on/off ramps with Powers Road, and potentially a roundabout or signal would be needed at Powers Road and Blakely Road. Bike lanes and sidewalks should be included as part of the final roadway improvements. Truck movements need to be addressed in appropriate designs between the Expressway on/off ramps and this Major Collector facility.

Murphy Road

Existing: Murphy Road is an east/west facility on the east side of the U.S. 97 Parkway that creates a T-intersection with Third Street at a traffic signal. Murphy Road is a two-lane facility with bike lanes in the study area and is classified as a Major Collector in the City of Bend TSP. The posted speed is 35 miles per hour.

Future: In the future, Murphy Road is improved from a two-lane facility to a multi-lane facility that intersects Third Street at a new signalized location to the south. Murphy Road would continue over the U.S. 97 Parkway on a new over-crossing and connect to Brookwood Boulevard. West of the Parkway, Murphy Road would connect to a new frontage road at a roundabout or 'T' intersection, and further to the west, a new roundabout would connect Murphy Road to a new southbound road into a future development site to the west of U.S. 97 (TAZ 503). A new signal at Murphy Road/Parrell Road is anticipated. Bike lanes and sidewalks should be included as part of the final roadway improvements. Truck movements need to be addressed in appropriate designs along Murphy Road, and especially at Third Street.

Third Street at Murphy Road and U.S. 97

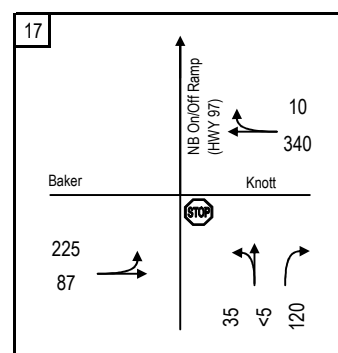
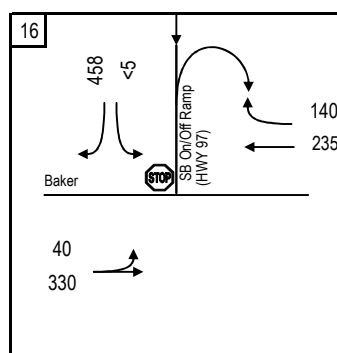
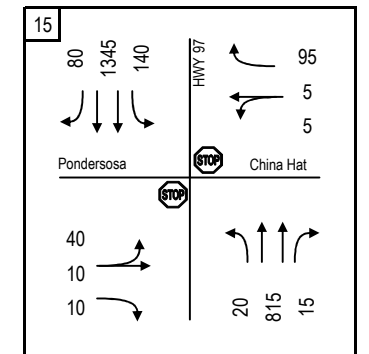
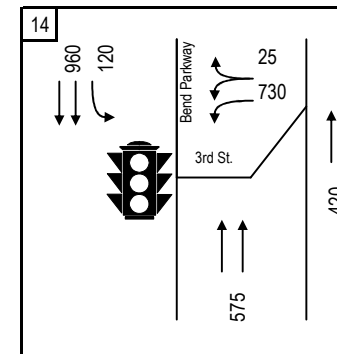
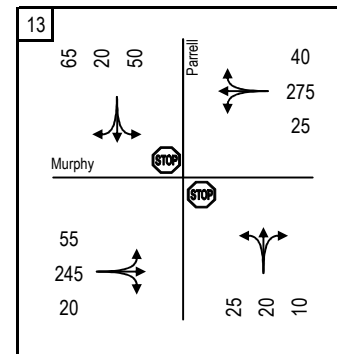
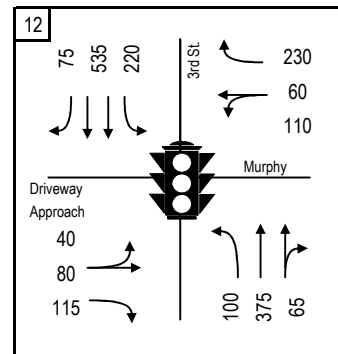
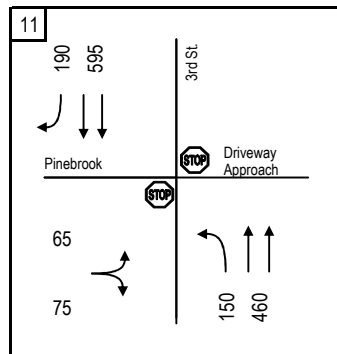
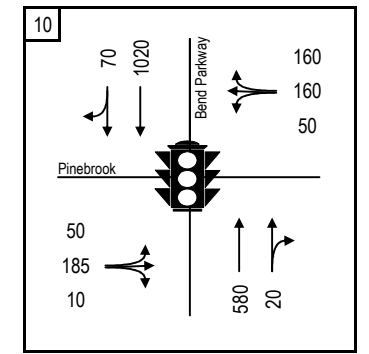
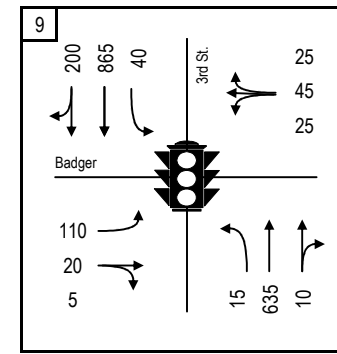
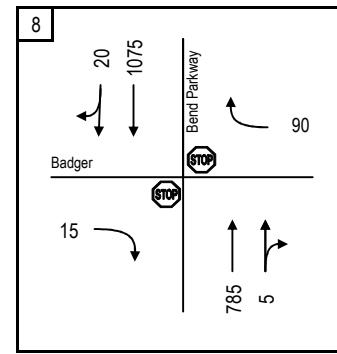
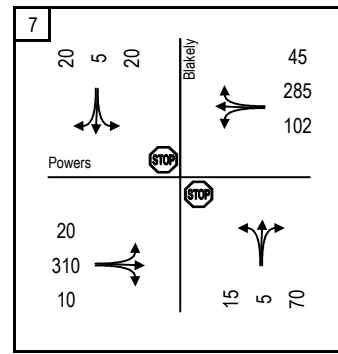
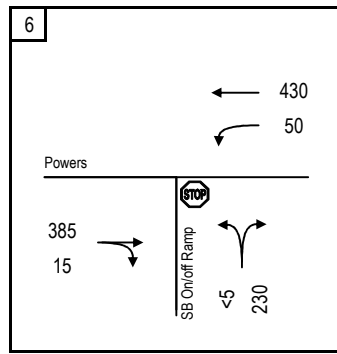
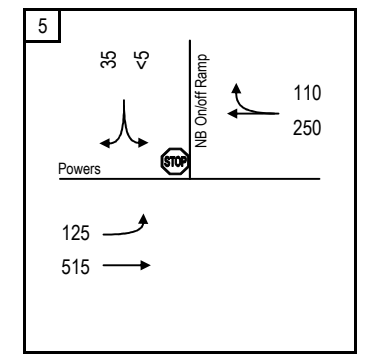
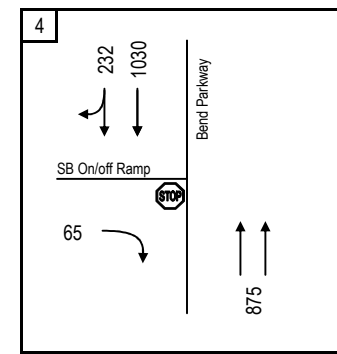
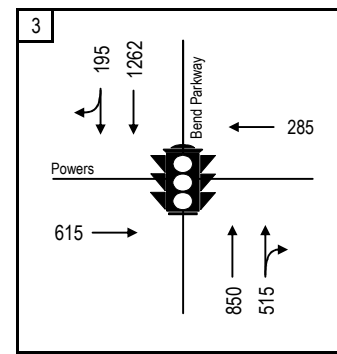
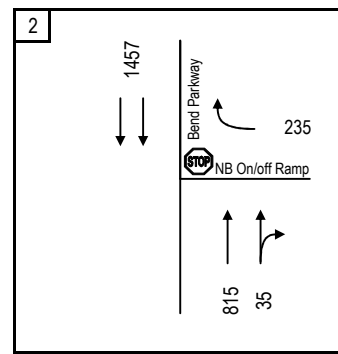
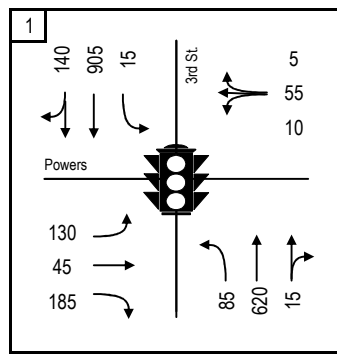
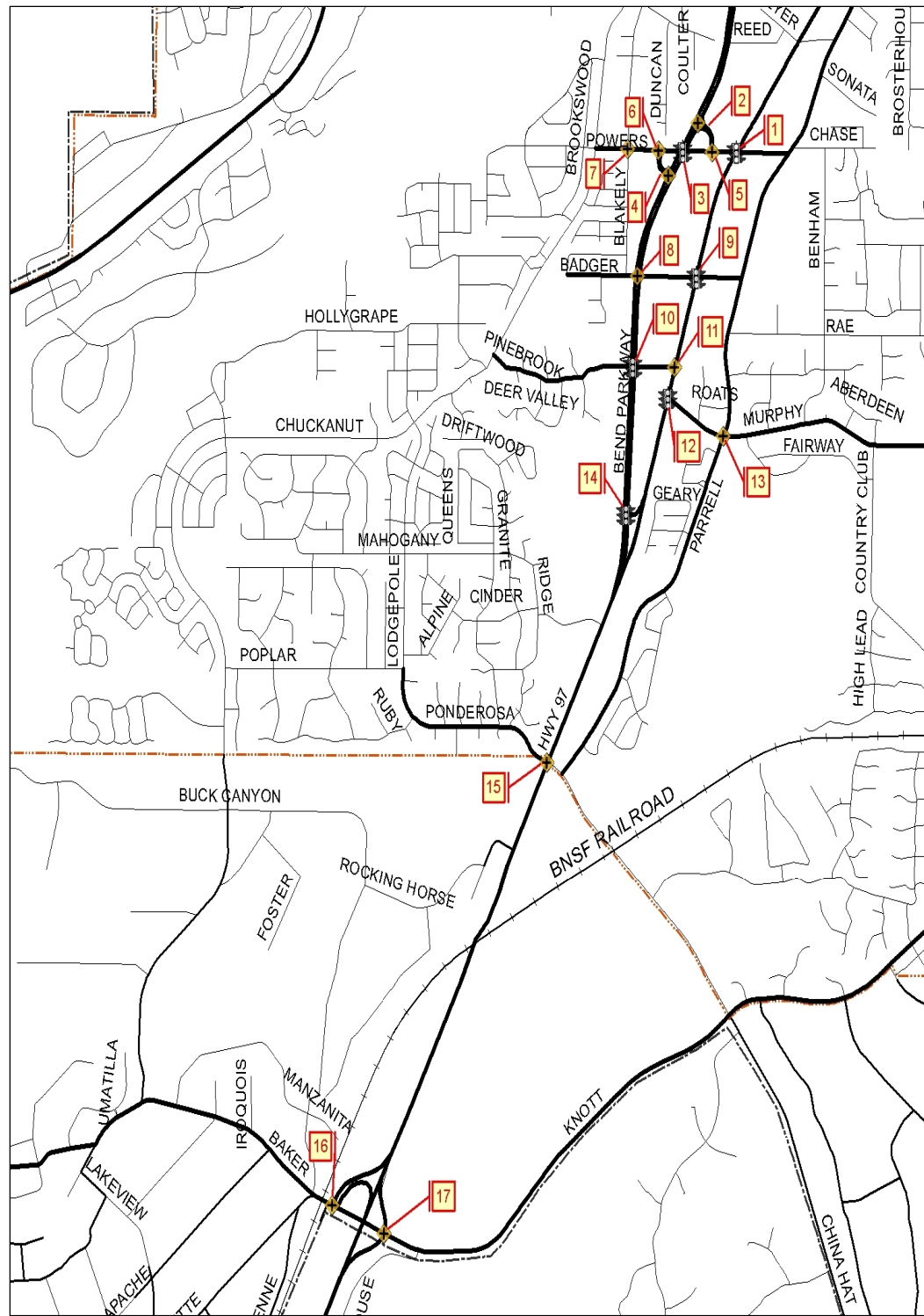
Existing: Third Street, also known as Business 97, is now under the City of Bend jurisdiction. This is a north/south facility that parallels the Parkway and consists of four travel lanes and a center left turn lane from its junction at a traffic signal with the U.S. 97 Parkway south of Murphy Road, through the study area, and beyond Powers Road to the north. Third Street is classified as a Principle Arterial in the City of Bend TSP and provides multiple access points to commercial development along its corridor. Bike lanes are marked along the length of Third Street, with sidewalks typical but intermittent. The posted speed in the study area is 45 miles per hour. The posted speed drops to 35 miles per hour north of Reed Lane.

Future: In the future, Third Street no longer connects with U.S. 97 at a signal. A new southbound on ramp to U.S. 97 will begin south of Murphy Road, cross over U.S. 97 and enter U.S. 97 southbound. It is proposed that a new northbound loop ramp will begin south of Murphy Road, go under the Murphy Road over-crossing and connect to northbound U.S. 97. In the intersection analysis, the southbound Third Street approach to Murphy Road included a dual left turn to eastbound Murphy Road and a Right Turn Only lane to westbound Murphy Road.

Other Key Future Street Modifications

Road closures will be timed with completion of various ramps on the South Parkway.

- Badger Road is disconnected from U.S. 97/Bend Parkway. On the west side Badger Road will “T” into the Blakely/New Frontage Road. On the east side, Badger will need to end in a turn around.
- Pinebrook Boulevard is disconnected from U.S. 97/Bend Parkway. On the west side Pinebrook Boulevard will “T” into the Blakely/New Frontage Road. On the east side Pinebrook will need to end in a turn around.
- Romaine Village Way is also disconnected from U.S. 97, and as Badger Road and Pinebrook Boulevard, it would connect to a new Frontage Road west of U.S. 97.



- Legend**
- Intersections Analyzed in IAMP
 - Traffic Signal
 - Stop Sign

*South Parkway
Murphy Interchange IAMP*

Figure 3
Year 2005 30th Highest Hour Volumes

