

Madison BRT Walnut St. Station Constraints

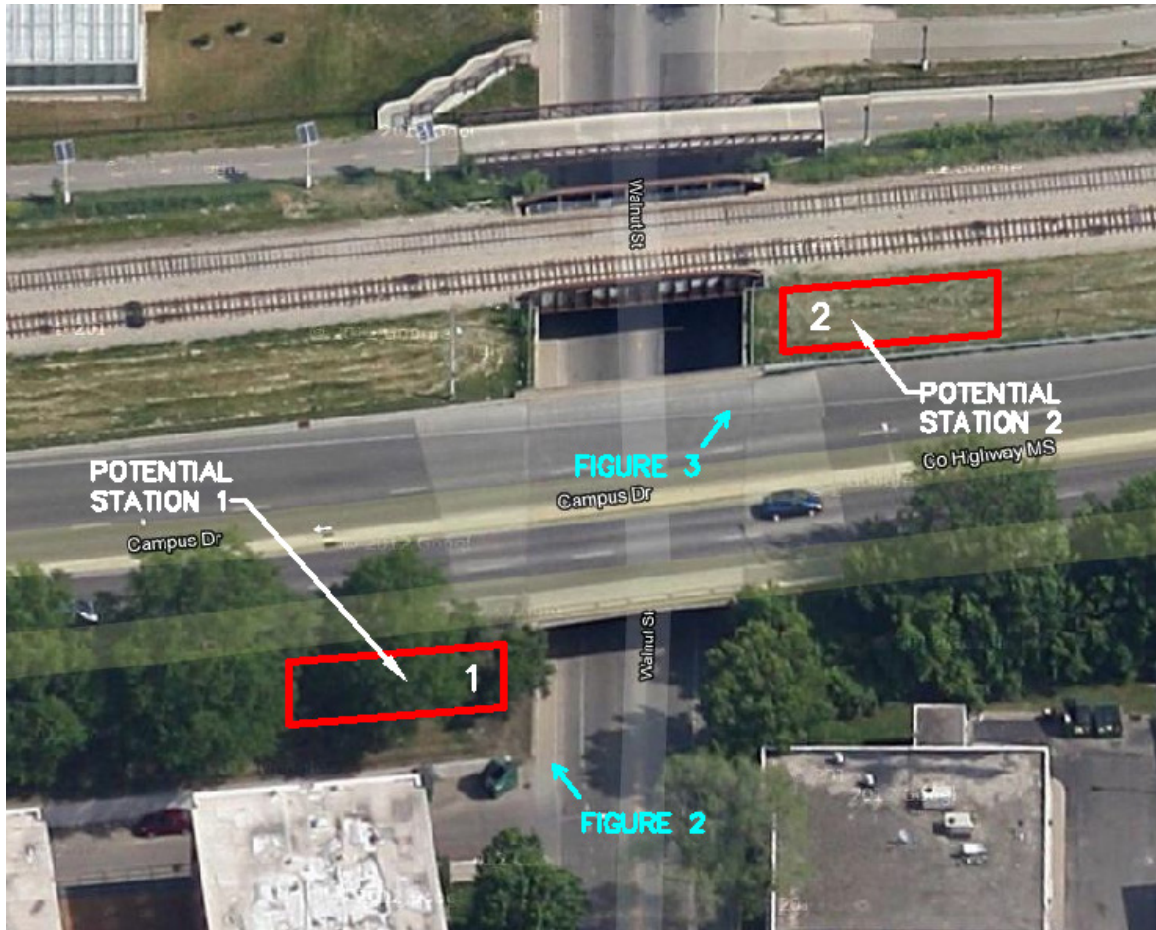


Figure 1: Walnut St./Campus Dr. Intersection



Figure 2: Grade Separation (shows the elevation view of the grade separation between these two roadways)



Figure 3: Potential Station Location 2 (elevation view of the potential bus location and the limited space that is available between the existing railroad and Campus Dr.)

Walnut Street Station Constraints

- Campus Dr. is currently grade separated from Walnut St. and runs parallel to an existing railroad and bike path, limiting the amount of ROW available to construction BRT Station 2.
- This section of the BRT route is identified to run in mixed traffic. Construction of a station at this location would require construction of a pullout to minimize impacts to traffic on Campus Dr., which currently operates at a 40 mph speed limit. Construction of a pullout would have an impact on the existing ROW available between the roadway and existing railroad tracks to construct a station.
- Currently there is no sidewalk access within a reasonable distance from the potential station along Campus Dr. In order to allow pedestrians access to this station location, there would be a substantial amount of civil work necessary along Campus Dr.
- BRT Station 1 sits on a severely sloped parcel of land including significant vegetation. The incorporation of a station would require a substantial amount of earthwork and vegetation removal adjacent to the roadway, potentially resulting in higher noise levels for residents. This would also include significant structural work, including retaining walls to support the proposed station.
- One option to provide safe pedestrian access to Station 1 and Station 2 includes construction of an elevator/stair tower to provide vertical circulation down to Walnut St. to allow pedestrians to move between Walnut St. and Campus Dr. Construction of the elevator/stair tower would likely require modifications to the existing bridge abutment to accommodate the elevator/stair tower.
- Alternatively, vertical circulation could be provided with ramps connecting Walnut Street to the BRT stations. This would require significantly long ramps at grades that cannot exceed 5% due to ADA compliance and the pedestrian path would be long and circuitous (See Figure 4).
- A second option to provide pedestrian access to Station 1 and Station 2 includes construction an elevator/stair tower at both station locations (stations would need to be located on the same side of the bridge) and a pedestrian bridge across Campus Dr. and the existing railroad. Vertical circulation between Station 1 and Walnut St. may also be required at the BRT Station 1 in order to accommodate pedestrian movements south of Campus Dr.

- Both alternatives would require a larger BRT station footprint than currently identified in the BRT study to provide sufficient space for the elevator and stairs. The additional space that is required would likely encroach into the railroad ROW.
- Relocation of the existing railroad tracks would require relocation of the existing trail and would be a significant cost to the project.

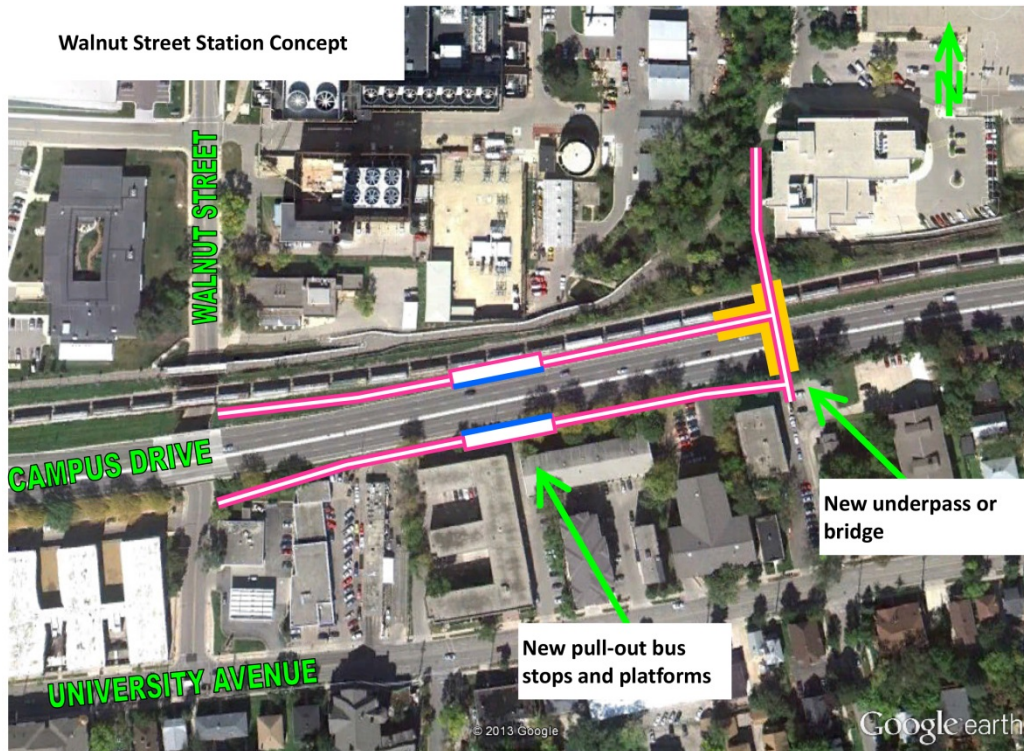


Figure 4: Walnut Street Station Concept