

IL Route 3, Waterloo, Illinois



REFERENCES:

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Scope:

The IL Route 3 project from North Market to Vandebrook Drive in Waterloo was initiated to alleviate congestion and improve intersection performance within the project limits. The scope included widening IL Route 3 from a two lane facility with a few turn lanes at intersections, to a four lane facility with a bi-directional turn lane. Although the project was anticipated to be a Categorical Exclusion, it was also considered a major expansion project. Therefore, in accordance with IDOT's policy, it was recommended that Context Sensitive Solutions (CSS) be applied to this project.

Outcomes :

Vandebrook Drive:

Early in the project, residents who lived just south of the project's limits voiced concern regarding safety of the existing access onto IL Route 3. They petitioned to have their intersection included in the project limits, and because of this early outreach, Vandebrook Drive, the street that intersects IL Route 3 just south of the project limits and provides access to over 200 residents, was added to the project. Not only was Vandebrook Drive included, but the Community Advisory Group (CAG) and the Project Study Team (PST) determined that the roadway would benefit from tying into the South Market intersection, creating a four legged intersection. Relocating Vandebrook Drive to the South Market intersection was not only safer for motorists to access IL Route 3 via traffic signals, the relocation proved to be more cost effective than extending the project limits to existing Vandebrook Drive.



Farm Equipment Accommodation:

Waterloo is a rural community with farming being the livelihood for many in the area. Prior to learning more about the context of the community, it was not known that IL Route 3 was a major thoroughfare for these farmers. Initially the PST assumed the existing typical section with driving lanes and 10 foot bituminous shoulders was rural due to the rural context of the community. It wasn't until the CAG meetings that the PST learned the full shoulders were necessary for farm equipment to navigate IL Route 3. When CAG members started considering design elements, full shoulders were accommodated as much as possible. Stakeholders considered full shoulders for farm equipment a priority over curb and gutter with storm sewer even though curb and gutter would have reduced the amount of required Right of Way (ROW).

Roundabouts with Farm Equipment Accommodation:



During the geometric review of the intersections within the project limits, the existing stop controlled intersection of Lakeview and IL Route 156, 300 ft west of the existing signalized intersection at IL Route 3 and IL Route 156, was investigated by the PST. Due to overlapping left-turn storage bays, the close proximity of these two intersections was already problematic. If IL Route 3 were to be widened to accommodate five lanes, the edge of pavement on IL Route 3 would be moved closer to the IL Route 156/Lakeview Drive intersection. Several options were investigated to improve the operation of these two intersections. Due to the location of buildings adjacent to the roadway, and traffic volume utilizing these intersections, conventional methods of signaling and providing additional turn lanes to help capacity would have greatly affected this area. In addition, the large number of farm equipment had to be considered in the design.

Taking into consideration the context of this area, the PST investigated the possibility of constructing a roundabout. The roundabout option was able to accommodate all the above noted constraints, including farm equipment accommodation, while providing the operational capacity that was desired. To help ease the farmers' concerns about navigating a roundabout, a plan of the roundabout was displayed at public meetings with scaled size cars and farm equipment so that people could "drive" through the roundabout. This technique gave reassurance to the farmers that the design would accommodate their equipment.

Other outcomes as a result of CSS:

In addition to the outcomes detailed above, there were other resolutions that came out of the CSS process. A community landmark (former train depot) was avoided, as it was a valued part of Waterloo's history. Also, a technical advisory group was formed to determine an acceptable alignment for Vandebrook Drive.