

Reconstruction Of West Chatfield Avenue

Nominating Agency: Jefferson County

Accomplishment: Jefferson County Transportation and Engineering Division utilized a unique design approach in widening this two-lane arterial through a residential neighborhood. By concentrating on the intent of the project and not a strict adherence to the County’s typical section, Jefferson County was able to meet the safety and capacity objectives of the project while minimizing impacts to the adjacent property owners. The project was funded by the Jefferson County 2001 election sales tax improvement program, and was designed by Merrick & Company. The project was constructed in two phases; total construction cost for both phases was \$6.9 million. Improvements



included: widening from two lanes to four lanes with turn lanes and raised medians; safer vertical curves; safety improvements at a busy off-set intersection; curb, gutter, and sidewalks; storm sewer; major drainageway crossing improvements; landscaping, including visual traffic calming; intersection improvements at a State Highway; retaining walls; privacy fencing; and removal of residential driveways from the arterial.

Innovation: Jefferson County’s innovative approach to the design process resulted in public acceptance of this safer, higher capacity roadway. From the start, Jefferson County approached the project with an open mind, determined to find a way to widen the road, correct the unsafe vertical curve and off-set intersection and avoid total purchases of developed residential lots. Working closely together, Jefferson County and Merrick & Company developed non-standard cross-sections (horizontal and vertical) and unique retaining wall designs that minimized ROW and easement needs, and utility relocations, while still meeting AASHTO criteria.



Achievement: West Chatfield Avenue is currently providing safer and more efficient vehicular and pedestrian traffic compared to its pre-construction condition. Specific benefits include:

- Four through lanes, plus turn lanes where needed.
- Adequate left turn capacity at the busy off-set Carr St. intersection that no longer impacts through traffic.
- Vertical curves that improve visibility and meet AASHTO criteria.
- Visual traffic calming that helps slow traffic to the posted speed (speeds in this section of Chatfield have been historically excessive).
- Sidewalks on both sides of the streets.
- Drainage improvements that keep runoff off the roadway and will remove some properties from the floodplain.
- Removal of almost all residential driveways from this arterial roadway.
- Medians that eliminate unsafe left turns from side streets.

Transferable: Jefferson County’s innovative design approach is certainly transferable to other Cities and Counties. The idea of working with stakeholders to develop “win-win” scenarios is not a new idea, but it is often overlooked due to difficulty, expense, criteria waivers, etc. In this case, the roadway project was approved by the voters; Jefferson County Transportation and Engineering Division had an obligation to build it, but also an inherent obligation to minimize impacts and relocations to residents. This is an example of how the “system” worked to everyone’s benefit.

Cooperation: Extensive cooperation was required with the adjacent property owners and CDOT to meet the project’s goals. Jefferson County established a comprehensive public involvement program early in the design process; one that involved over 30 adjacent property owners in initial right-of-way decisions that would lead to mutually beneficial solutions, specifically solutions that would accommodate the various existing uses of the

property and avoid total purchases of the properties. Property owner cooperation continued throughout the design process to ensure property owner needs were met, and also during the construction process since the resulting design required extensive improvements on residential front and side yards. Additionally, cooperation was required with many agencies, particularly with CDOT. Jefferson County split the project into two phases and expedited the design and construction of the first phase to coincide the planned CDOT traffic signal improvements to the Wadsworth intersection. CDOT then designed the traffic signal per the proposed Chatfield improvements. This allowed for a smooth transition between construction projects and ensured that the federally funded traffic signal would be constructed on schedule.

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Summary: Jefferson County Transportation and Engineering Division utilized a unique design approach in widening this two-lane arterial through a residential neighborhood. By concentrating on the intent of the project and not a strict adherence to the County’s typical section, Jefferson County was able to meet the safety and capacity objectives of the project while minimizing impacts to the adjacent property owners. Improvements included: widening from two lanes to four lanes with turn lanes and raised medians; safer vertical curves; safety improvements at a busy off-set intersection; curb, gutter and sidewalk; storm sewer; major drainageway crossing improvements; landscaping, including visual traffic calming; intersection improvements at a State Highway; retaining walls; privacy fencing; and removal of residential driveways from the arterial. ●



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