



**Issues from the *Final Engineering Report* for Bannerman Road  
McBride Hills HOA Board of Directors**

**Revised** December 20, 2021

**RESPONSES: January 7, 2022**

Contact: Chuck McClure, PhD, President, McBride Hills HOA [crmccclure999@yahoo.com](mailto:crmccclure999@yahoo.com)

The McBride Hills HOA Board of Directors have reviewed the *Final Engineering Report*, <https://www.bannermanroad.com/>, for the widening of Bannerman Road and have a number of issues that need to be addressed before proceeding with this project.

1. **Reynolds Road and Bannerman Road Intersection.** Not allowing a left (West) turn from Reynolds onto Bannerman Road (as recommended in the *Final Report p. 1160*) will funnel traffic to the McClure Drive and Bannerman Road Intersection exacerbating an already bad situation causing likely backups for those trying to make a left turn from McClure onto Bannerman.
  - There must be a redesign that will allow a left turn onto Bannerman from Reynolds.
    - o The project engineers have studied the traffic pattern of the McBride Hills community and have determined that the opportunities provided by the design team for safe traffic movements will create a more efficient entrance and exit pattern for the community. Experience, research, and design guidelines all support that traffic will not re-route to the McClure intersection to exit westbound on Bannerman Rd, but will in fact use the more safe and efficient option of the U-turn at Tekesta Dr under a protected 'green arrow' condition. This is the recommended solution for the project in this area along Bannerman Rd.

Reynolds Dr. is approx. 250 feet from the signalized intersection of Bannerman Rd. and Tekesa Dr. The engineering team contemplated an option for a west-bound left from Reynolds Dr. on to Bannerman

Rd. and based on the FDOT Access Management Design Guide (2019) Section 3 and engineering analysis, this turning movement is considered a high-risk being in such close proximity to the signalized intersection at Tekesta Dr. The minimum spacing for a median opening is 1,320 feet (Table 8), Reynolds Dr. is only 210 feet from Tekesta Dr.

- In addition, a vehicle operator would have to negotiate two additional conflict-points while attempting a left (west-bound) turn through the directional median opening that is in close proximity of Reynolds Dr.

The existing crash data indicates a number of accidents have occurred in this area already, therefore, the engineering design team does not recommend a left out of Reynolds Dr. due to high probability of safety impacts to the traveling public.

### 3.3.1 Spacing Standards

The F.A.C. Rule Chapter: 14-97.003 regulates median opening spacing and provides recommended distances. [Table 8](#) shows the median types and spacing standards for each roadway access classification.

**Table 8 – Median Opening Spacing Standards**

Roadway Access Class	FDOT Context Classification	Median Type	Median Opening Spacing (feet)		Minimum Signal Spacing (feet)***
			Directional	Full	
2	C1 Natural, C2 Rural	Restrictive w/Service Roads	1,320	2,640	2,640
3	C1 Natural, C2 Rural, C2T Rural Town, C3R Suburban Residential, C3C Suburban Commercial	Restrictive	1,320	2,640	2,640
4	C2T Rural Town, C4 Urban General, C5 Urban Center, C6 Urban Core	Non-Restrictive**			2,640
5		Restrictive	660	2,640/1,320*	2,640/1,320*
6		Non-Restrictive**			1,320
7		Both Median Types**	330	660	1,320

\*Spacing 1,320 feet when roadway speed limit is 45 mph or below

\*\*It is recommended that additional safety/operational analysis is completed for non-restrictive medians

\*\*\*Traffic signals, which are proposed at intervals closer than the access management standard for the designated access class, will only be approved where the need for such signal(s) is clearly demonstrated for the safety and operation of the roadway and approved through the signal warrant process. (F.A.C. Rule Chapter: 14-97.003) Applicants requesting or requiring the addition, removal, or modification of a traffic signal for Category E, F, and G connections, must submit an Intersection Control Evaluation Form, Form 750-010-30 (F.A.C. Rule Chapter: 14-96.003). This language is in the draft version of rule 14-96.

Source: Adapted from FDM 201 - Design Controls and FDOT Context Classification

- This situation will be especially problematic during morning and afternoon rush hours where it is currently almost impossible to make a left turn from McClure onto Bannerman.
  - U-turn movements offer a safer alternative to direct left-out movements. According to FHWA, avoiding the left-turn and performing a U-turn can reduce severe left-turn crashes by 70 percent.

The McClure Dr. intersection is currently the more 'safe' condition for a left-out movement due to the distance from the Tekesta Dr. signalized intersection. The anticipated full median opening intersection at McClure Dr. will maintain full in-out access that is currently provided, along with an option to perform a safe U-turn if desired approximately 2,000 feet to the east at Trinity Church or Summit Ridge Dr.

- With the coming of a Publix and other commercial stores at Bull Headley and Bannerman, we can anticipate more (not less) traffic from McClure Drive and Reynolds wanting to turn left (West) onto Bannerman.
  - o U-turn movements offer a safer alternative to direct left-out movements. According to FHWA, avoiding the left-turn and performing a U-turn can reduce severe left-turn crashes by 70 percent.

The proposed traffic solution for the McBride Hills community offers multiple safe options to drive westbound on Bannerman Rd. once the project is completed.

- Given the difficulty of making a left turn onto Bannerman from McClure, it may require folks to make a right turn onto Bannerman and go East to the round-about at Bannerman Crossing, go around the round-about and then go back West on Bannerman.
  - o The McClure Dr. intersection is currently the more 'safe' condition for a left-out movement due to the distance from the Tekesta Dr. signalized intersection. The anticipated full median opening intersection at McClure Dr. will maintain full in-out access that is currently provided, along with an option to perform a safe U-turn if desired approximately 2,000 feet to the east at Trinity Church or Summit Ridge Dr.

The design team has accounted for the option for U-turns along the Bannerman Rd. corridor. The intersection at Trinity Community Church (~1,400 feet) east of McClure Dr. is being considered for safe U-turn movements, and Summit Ridge Dr. (~2,000 feet) will accommodate a safe U-turn.

Requiring single occupant vehicles to make U-turns and subsequent right turns instead of direct left turns is a well-documented strategy for improving safety and minimizing delay along arterial corridors. According to the Transportation Research Board of The National Academies Access Management Manual, "U-turns are generally safer than direct left turns. A study of the safety and operational implications of U-turns versus direct left turns on multilane arterial roadways with a nonreversible median was conducted in Florida in

2000. The analysis of 250 sites revealed that right-turn plus U-turn maneuvers on arterials exhibited a 17.8% lower crash rate and 27.3% lower injury/fatality rate than direct left turns. The study also found that U-turning drivers experience less delay than those making a direct left turn from a drive-way under high-volume conditions. The findings were statistically significant at a 95% confidence level.”

A similar situation to the final condition at Reynolds Dr. occurs on Mahan Dr. just south of Pedrick Rd. Following the FDOT road improvements on Mahan Dr. in 2010, the residents along Charlais St. and Highland Dr. are now required to perform a U-turn at Edenfield Rd. in order to head south toward downtown Tallahassee (see GoogleMaps images below).

Original Condition: Mahan Dr. at Charlais St. & Highland Dr. – GoogleEarth 2009



New Condition - Mahan Dr. at Charlais St. & Highland Dr. –  
GoogleMaps 2021



Mahan Dr. at Edenfield Rd.



Mahan Dr. at Charlais St.



\*GoogleMaps – 2021

- Limiting access into and out of the Reynolds/McClure and Bannerman is a significant safety issue as emergency, police, etc. may encounter difficulties getting into an out of these neighborhoods.
  - o The emergency fire service station is located one mile west of the McBride Hills community, and therefore, has direct access to either entrance of McBride Hills without encountering a median. Emergency vehicles approaching from the east will have a functional U-turn at Greystone Dr. that is ~580 feet past Reynolds Dr. Emergency vehicles operate with lights/sirens, so this new traffic pattern is not expected to impact response times of emergency vehicles from either direction.

The additional proposed lanes that will be added as part of the project will also provide a more speedy response from this location as personal vehicles opposing or impeding the emergency vehicles will have an additional lane to seek ‘refuge’ in to allow emergency vehicles to pass.

2. **Bannerman Road and McClure Drive Intersection.** A new design for this intersection is required as there are numerous problems with the recommended design (*Final Report, p. 1162*).
  - There needs to be a longer left turn turning lane onto McClure Drive (going South) from Bannerman when traveling West on Bannerman.
    - o The current condition at McBride Hills neighborhood entrances does not facilitate an opportunity for residents traveling westbound on Bannerman Rd. to utilize a turn-lane off the only travel lane of Bannerman Rd. The NE Connector project not only increases vehicle capacity for the entire community along Bannerman Rd, but it also

provides for many 'operational' improvements that will create a much more efficient transportation network in this area of our community. Currently the 15% design plans show the 'minimum' turn-lane cue length for the proposed design speeds along Bannerman Rd. The final design will evaluate the traffic demand for each intersection and the cue length will meet the access management standards for the anticipated demand of the community and be optimized for each intersection - the minimum cue length will provide for 2 to 3 cars of storage. The final required cue length for this intersection will be determined in the final design phase of the project. The final condition for the intersection will be a safer than that exists today by reducing the risk of rear end collisions and will also be more operationally efficient by removing turning vehicles from the thru travel lane.

- Will the entry sign of "McBride Hills" on McClure Drive need to be removed or moved and if yes, who will pay for the replacement?
  - o Any impact to the community entrance sign has not been determined at this time. If impacted by the project, Blueprint will work with the neighborhood to develop and reconstruct (at project expense) a replacement sign of similar likeness that will be reconstructed outside of the right-of-way. Any impacts from the proposed project will be replaced to provide 'same' or 'better' conditions by the conclusion of the project.
- How many turning lanes will there be from McClure Drive onto Bannerman going East? The existing situation of one to the left and one to the right (sort-of) is dangerous and not clear.
  - o Improvements to McClure Dr. outside the right-of-way are not part of the project scope. McClure Dr. is a private road and not maintained by the local or state government.
- There needs to be a continuous right turn turning lane when going East from McClure to Bannerman.
  - o Improvements to McClure Dr. outside the right-of-way are not part of the project scope. McClure Dr. is a private road and not maintained by the local or state government.
- How can a new design for McClure and Bannerman intersection better facilitate a left turn (going West) on Bannerman from McClure?
  - o Currently residents of McBride Hills making a left-out on to Bannerman Rd. must negotiate opposing traffic patterns to 'time' the exit in a safe manner. The proposed solution will provide a wide enough median to accommodate a turning vehicle at a 'refuge' point, eliminating the driver expectation to negotiate opposing traffic and 'time' the exit safely. Also, the project team is happy to discuss the specific concerns of the McBride community and see if any

engineering solutions can be realized to help the residents of McBride Hills.

3. **Availability of Space to Widen Bannerman on the North Side between Tekesta and the Bannerman Crossing round-a-bout?** If Bannerman is widened with the additional two lanes on the North side of Bannerman and multi-use paths on both sides of Bannerman, it appears that the widened road will be immediately in the back yard of some of the Killearn homes?

- a. The engineering design team has proposed an alignment for the four-lane Bannerman Rd. (inclusive of pedestrian/multi-modal facilities) that minimizes impacts to existing homeowners along the corridor. In fact, the original 2012 concept for the corridor improvements included a right of way width that was approximately 40' wider than the one included in the 2021 Final Engineering Report.

The existing right-of-way in this area of the project is almost fully capable of accommodating the planned improvements, and therefore, impacts to land owners are minimized. In addition, the project team has been working closely with the Killearn Lakes HOA who supports the NE Connector project goals - to improve regional mobility and enhance connectivity for motorized and non-motorized users.

4. **Turning Lanes.** To what extent will there be left and right turning lanes for all the roads off Bannerman between the round-about at Bannerman Crossing and Tekesta?

- a. The engineering design team has proposed strategic median openings that facilitate the safest and most efficient corridor possible while considering all the drive/entrances that exist along this corridor. Median openings (with turning cues) that facilitate unopposed U-turn movements are placed at specific locations to minimize impacts to existing and future users.

Proposed median openings for Segment 2 & 3 are as follows:

- a. Cawthon Development
- b. Sable Chase Dr. (directional only)
- c. Greystone Dr.
- d. Tekesta Dr. (signalized)
- e. McClure Dr.
- f. Trinity Church (contemplated)
- g. Summit Ridge Dr.
- h. Duck Cove Rd.
- i. Quail Common Dr.

5. **Safety of the Multi-use paths on both sides of Bannerman.** What precautions will be made to ensure the safety of users of the multi-use paths as they cross all the roads off Bannerman?

- These crossings are especially of concern at major intersections such as the McClure Drive and Tekesta Road intersections.
  - o Pedestrian crossings will meet all applicable FDOT and Federal standards. Currently, pedestrians and bicyclists are highly exposed if traversing along Bannerman Road – the addition of the multi-use path will provide a much safer facility for the multi-modal user.

At all intersections/cross-streets along Bannerman Road, vehicle operators are brought to a ‘stop’ condition before advancing onto Bannerman Road (unless signalized). Both the north and south side of Bannerman Road will have pedestrian facilities that will allow users to reach signalized intersections where they will have pedestrian crossing signals and markers to assist with crossing Bannerman Road. All vehicular stop condition cross-streets will include the standard ‘Stop Bar’ pavement marking along with standard 8” pedestrian pavement markings to clearly delineate the pedestrian crossing(s).

6. **Environmental impact of multi-use pathways and widening.** What is the material that will be used for the multi-use pathways? Will it be permeable, semi-permeable, or what?
  - a. The project team is developing options for consideration. Traditionally, multi-use paths are asphalt paved. The engineers are required to account for all ‘run-off’ due to any impervious surface created as part of the project, this includes the multi-use paths.
  
7. **Storm water drainage.** The McClure Drive-Bannerman intersection already floods after heavy rain. What steps will be taken to ensure adequate drainage of this (and other) intersections?
  - a. This section of the project is located in the Leon County Bradfordville Study area that includes the most comprehensive standards for stormwater runoff and treatment. The entire Bannerman Road corridor is being ‘re-designed’ to this enhanced standard. The corridor will also utilize a ‘closed’ drainage system via curb-gutter and piping systems.
  
8. **Tekesta and Bannerman intersection.** There are a number of issues with the recommendations for the intersection of Bannerman at Tekesta.
  - We recommend that this intersection be a round-about and NOT a signal. Continued reliance of a signal light here will result in major back-ups to the East on Bannerman which are already a serious problem. What is the rationale for NOT using a round-about here?
    - o The engineers tested a round-about solution for this intersection. The round-about fails to perform at an adequate level of service when compared to the signal. The round-about would also require the acquisition and relocation of an existing homestead at 7926 Reynolds

Dr. The engineers recommend a signalized intersection at Tekesta Dr. and Bannerman Rd.

All signalized intersections will be analyzed and updated (timing) upon completion of the new road opening to insure both safe and efficient commuting.

- During evening rush hour it is not uncommon now for traffic to be backed up from the Tekesta traffic light back to the Bannerman Crossing round-about. This situation makes for turning West onto Bannerman from McClure virtually impossible.
  - o The project will create additional capacity by widening the road. The project will also make ‘operational’ improvements by adding a median and turn lanes along the corridor that will facilitate more ‘free-flow’ traffic. The intersection of Tekesta Dr. and Bannerman Rd. will also be enhanced operationally including a ‘free-flow’ right off of Bannerman Rd. on to Tekesta which will alleviate backups that are currently occurring (see image below).



- If this intersection stays as a signal the continuous right turn turning lane from McClure onto Tekesta should be longer than that depicted in the *Executive Summary*, p. 20.

- For clarity – BPIA assumes the author intended to type: “...turning lane from BANNERMAN ROAD onto Tekesta Dr...”
  - The final length of the ‘free-flow’ right from Bannerman Road on to Tekesta Dr. will be determined during the final design phase. Then intent will be to allow adequate length to permit ‘free-flow’ right turns while the signal at Tekesta Dr. is holding westbound Bannerman Road traffic at a ‘stop’ condition.
9. **Property Values.** Some HOA members have raised concerns about property values going down because of traffic congestion and limited access into and out of our neighborhood. Have project staff considered the impact of the *Final Engineering Report* on property values if, in fact, the recommendations result in worse congestion and traffic delays?
- a. Studies have shown that access to trails and multi-modal facilities increases property value. Currently no such facilities exist along the Bannerman Road corridor and therefore are seen as a potential ‘benefit’. While a specific market study has not been conducted for the McBride Hills community as part of this project, the reduced congestion and travel times that this project will realize are usually seen as a ‘benefit’ to the value of real estate.
10. **Project Schedule.** Is it possible to provide a more detailed schedule of project activities (especially construction) and a timeline for when these activities would occur?
- a. The project design is scheduled to be substantially complete in 2023. At this time, the project team anticipates constructing Segment 2 and 3 simultaneously and prior to constructing Segment 1. Specific contractor’s proposed phasing and schedule will not be available until the project is advertised for construction. The project has a goal to start construction in 2023 and conclude by the end of calendar year 2026.

It should be pointed out that there are three different homeowner associations in this area affected by the recommendations in *The Final Engineering Report*: McBride Hills, McBride Estates and MacLean Hills. Homeowners in these three HOAs all have access out of and into the neighborhood **only** via the Reynolds and McClure intersections.

We appreciate the opportunity to provide this input and raise these issues and would like to schedule a Zoom meeting between the McBride Hills HOA Board of Directors and Bannerman Road project staff and/or Commissioner Welch to discuss these concerns in the very near future.