



Department of Planning & Community & Economic Development

Planning Division

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To: Plan Commission, Common Council
June 23, 2017

**RE: High Point-Raymond Neighborhood Development Plan
Rationale for recommending the Jeffy Trail extension**

As part of the High Point Raymond Neighborhood Development Plan Update, Planning staff was asked to revisit the decision to extend Jeffy Trail. Upon review, staff believes that the extension of Jeffy Trail to Raymond Road is appropriate. Below is a summary of factors that led to this recommendation.

1. The street connection is required by the City's Land Subdivision ordinance.

The City's land division ordinance specifically prohibits cul de sacs in new development unless specific conditions prevent street connections from occurring. Exceptions where cul de sacs have been allowed are limited to steep slopes where grades physically prevent road connections from occurring. The ordinance also requires subdivisions be consistent with the adopted neighborhood development plan, which has shown the street extension to Raymond Road since the 2005 amendment to the plan.

MGO 16.23(8)(a)1 Land Subdivision Regulations: Design Standards - Streets and Alleys.

General. In any new subdivision the street layout shall conform to the arrangement, width and location indicated on the official map, master plan or component neighborhood unit development plan. In areas for which such plans have not been completed the streets shall be designed and located in proper relation to existing and proposed streets, to the topography, to such natural features as streams and tree growth, to public convenience and safety, to the proposed use of the land to be served by such streets, and to the most advantageous development of adjoining areas. The use of narrower, performance-based streets in new subdivisions and in the reconstruction of local streets may accomplish some or all of the following objectives: improved neighborhood livability from a more pedestrian-friendly environment; more compact development patterns that use less land, increase in land available for residential and commercial activities; more extensive streetscape vegetation and preservation of existing streetscape vegetation; reduction in the cost of street construction and maintenance, as well as development costs; reduction in traffic speed and non-local traffic; and reduction in stormwater runoff. Cul-de-sacs shall not be used in any street layout, unless the topography or other unique physical feature of a development makes cul-de-sacs the only, or most logical, street layout. Where cul-de-sacs are determined to be necessary, a sidewalk, connecting path or multi-use path shall be provided to connect to another public right of way unless topography or other unique physical features make this connection impossible. The subdivision shall be such as to provide each lot by means of a public street satisfactory access to any existing public street. The subdivision shall further maximize the use of street orientations which provide solar access to lots and contemplated buildings. (Am. by Ord. 8128, 10-17-83; ORD-06-00054, 5-4-06; Am. by ORD-07-00042, 4-5-07)

In 2013, when the Plan Commission and City Council approved the Wolfe Addition to Hawks Creek subdivision, the last parcel required to connect Jeffy Trail to Raymond Road, they did not find topography or other unique physical features that would necessitate a cul de sac on Jeffy Trail.

Also relevant is the concept of maximum block length discussed later in the land subdivision ordinance.

MGO 16.23(8)(c)1 Land Subdivision Regulations: Design Standards - Blocks.

*The lengths, widths and shapes of blocks shall be suited to the planned use of the land, zoning requirements, need for convenient access, pedestrian safety, control and safety of street traffic, and the limitations and opportunities of topography. While there is not a minimum block length requirement included in the subdivision ordinance, **in the TR-C3 Zoning District, block lengths shall not, as a general rule, exceed 500 feet in length between street lines unless required by exceptional topography or other limiting factors when approved by the Plan Commission.** (Am. by Ord. 11,505, 1-26-96; ORD-13-00087, 5-29-13)*

The discussion of block lengths and sizes is intended to prevent “superblocks” or blocks so large that they inhibit connectivity and concentrate traffic on adjacent streets. As part of the subdivision approval, the zoning assigned to residential parcels within the Wolfe Addition was TR-C3 (Traditional Residential – Consistent 3)¹, a zoning district often used in new neighborhoods of relatively compact single family homes. While the ordinance does allow for exceptions, it speaks to a general character of a highly interconnected development pattern that should be associated with TR-C3. Without the Jeffy Trail extension, there would be no through streets² between High Point Pleasant View Roads, a distance of one mile along Raymond Road, resulting in a superblock of approximately 150 acres.

When the City purchased and subdivided the former Smithies property, it took on the responsibility of following its own development standards. If a private developer had subdivided the property, the City would have required the street be constructed concurrently with development.

2. The connection is consistent with City policies for new neighborhoods

Neighborhood Development Plans are one of the implementation mechanisms of the City's Comprehensive Plan, which is the guiding policy document for the development of new neighborhoods. The Comprehensive Plan lists several relevant Goals, Objectives and Policies, predominately located in the Future Neighborhoods section of the Land Use Chapter.

Goals, Objectives and Policies for Future Neighborhoods

Goal: *Madison will be a city of compact, interconnected, mixed-use neighborhoods that are attractive, well-maintained, safe, and provide an engaging residential environment to meet the needs of a diverse population.*

Objective 32: *Develop and extend a system of local residential streets that are highly interconnected, relatively narrow, and designed to meet the needs of pedestrians, bicyclists, motorists, public transit, and vehicles associated with periodic service providers.*

1 A previous version of this memo erroneously reported TR-C3 was applied to outlots. After the approval of Wolfe Addition an error was made updating the City's zoning map and parcel databases, and outlots were shown as TR-C3. This error went unnoticed until June 21. Approval documents confirm outlots should be zoned CN. Maps and parcel databases were updated June 23 to reflect the correct information.

2 The plan does call for Hickory Ridge Road to connect to the future neighborhood on the Marty farm. Hickory Ridge is a Town of Verona road and the City of Madison does not have authority to make the connection at this time.

Policy 1: Neighborhood streets and sidewalks should provide an interconnected transportation network that links neighborhoods, districts and corridors without forming barriers between them. Dead-end streets and cul-de-sacs shall generally be avoided unless necessary to protect sensitive environmental features or address significant changes in topography.

Policy 2: Neighborhood street networks should be designed to discourage cut through non-local traffic and excessive travel speeds.

Policy 3: Neighborhood street spacing should create compact blocks with short block faces and perimeters to enhance pedestrian convenience and activity. For example, the common short block face standard is 400' to 600' long.

Policy 4: Design the street networks in all City neighborhoods and districts to provide good access and circulation routes for current or future transit service.

In addition to providing a southern outlet for the neighborhood, Jeffy Trail establishes an improved link to residential areas on Raymond Road, connecting homes on Oak View Drive to the remainder of the neighborhood to the north. The Madison Area Transportation Planning Board (MPO) projected that 11% of trips where the adjacent neighborhood is an origin or destination would use the extension of Jeffy Trail to access Raymond Road. The projection was made using a build-out road scenario in the NDP, and includes the High Point Road Extension and Raymond/Midtown connection.

In reviewing the Jeffy Trail extension, staff could find no routing or potential generators of non-local “cut through” traffic. Additionally, traffic projections generated by the MPO don’t support Jeffy Trail becoming a major street, with estimated traffic counts less than 1,000 cars per day³. Staff believes speeds can be controlled through street design, primarily narrowing roadway width

While regular transit service is not likely in Jeffy Trail, it could prove useful for school transportation operated by Madison Metro. Residents on Oak View Drive and Hickory Ridge Road would likely see significant improvement in service and reduced walk distances. Similarly, the connection would improve the efficiency of routing for City service vehicles, such as refuse collection and snow plowing.

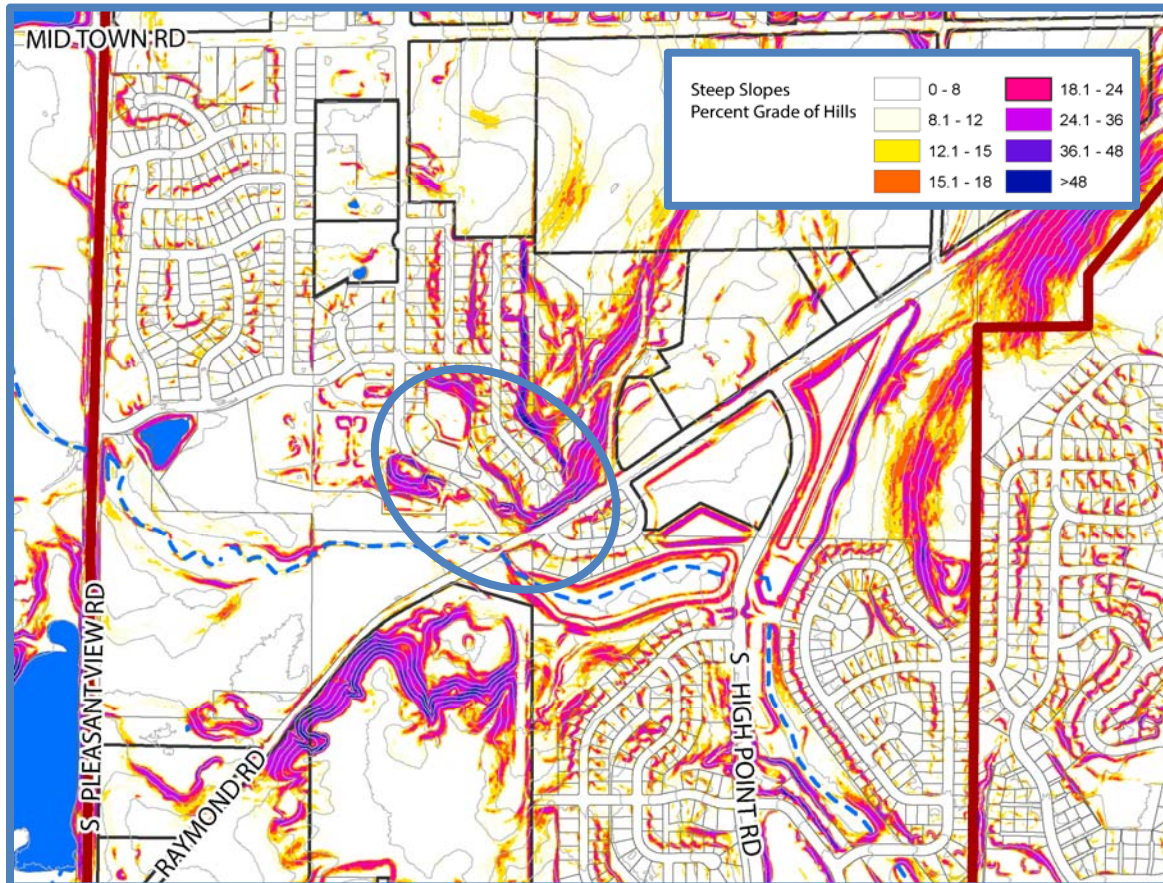
While staff acknowledges many residents are opposed to the street connection, we must also acknowledge the extensive public participation that went into establishing the policies and recommendations in the Comprehensive Plan. Twenty three open houses were held throughout the city to solicit input and receive feedback from residents in order to shape the plan. In addition to those meetings, many boards, commissions and committees approved the plan, including the following:

- Housing Committee
- Board of Park Commissioners
- Transit and Parking Commission
- Economic Development Committee
- Urban Design Commission
- Long Range Transportation Planning Committee
- Board of Estimates (Now Finance Committee)
- Pedestrian/Bicycle/Motor Vehicle Commission
- Plan Commission
- Common Council

³ Less than 1,000 cars per day is the total projecting, including existing and new traffic, measured at the center point of Jeffy Trail. The current traffic count is unknown for Jeffy Trail since measurements are rarely taken on roads with this low of use.

3. Topography and existing development prevent any other option

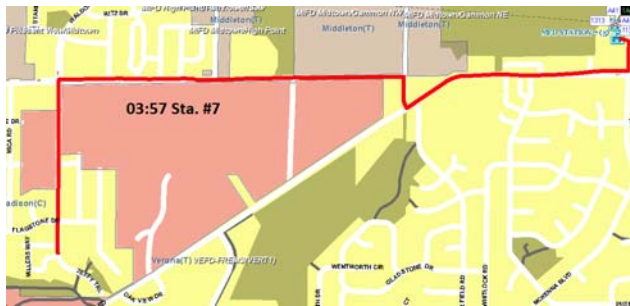
Between High Point and Pleasant View, there are very few options for connections with the existing development pattern and topography. As previously discussed, a connection with Hickory Ridge Road is shown in the plan but there is no certainty of construction. The right of way for Jeffy Trail follows a narrow corridor where grades allow for a connection to Raymond. The graphic below highlights the difference between Jeffy Trail and Trevor Way just to the east. When the Wolfe Addition to Hawks Creek was platted, the Plan Commission found the significant elevation change and steep slopes between Trevor Way and adjacent streets, both Raymond Rd and Jeffy Trail, prevented a road connection from occurring and allowed a cul-de-sac as a result.



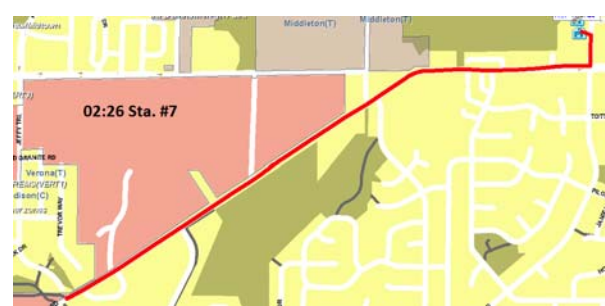
4. Emergency response

Per Madison Fire Department estimates, extending Jeffy Trail would improve response by one minute thirty one seconds using the existing road network. Although the existing response time is within the City's standard, there are instances where 91 seconds could be critical. There are also instances where the time would have no consequence. Using Raymond instead of Mid Town Road also eliminates two challenging turning movements on the very steep section of Gammon Road.

Beyond the time savings, the connection adds significant flexibility for positioning equipment. On a cul-de-sac, all emergency vehicles must come from the same direction and locations are fixed once fire hoses are pressurized.



Existing emergency access



Emergency access with Jeffy Trail Extended.

5. The extension does not appear to have negative safety impacts

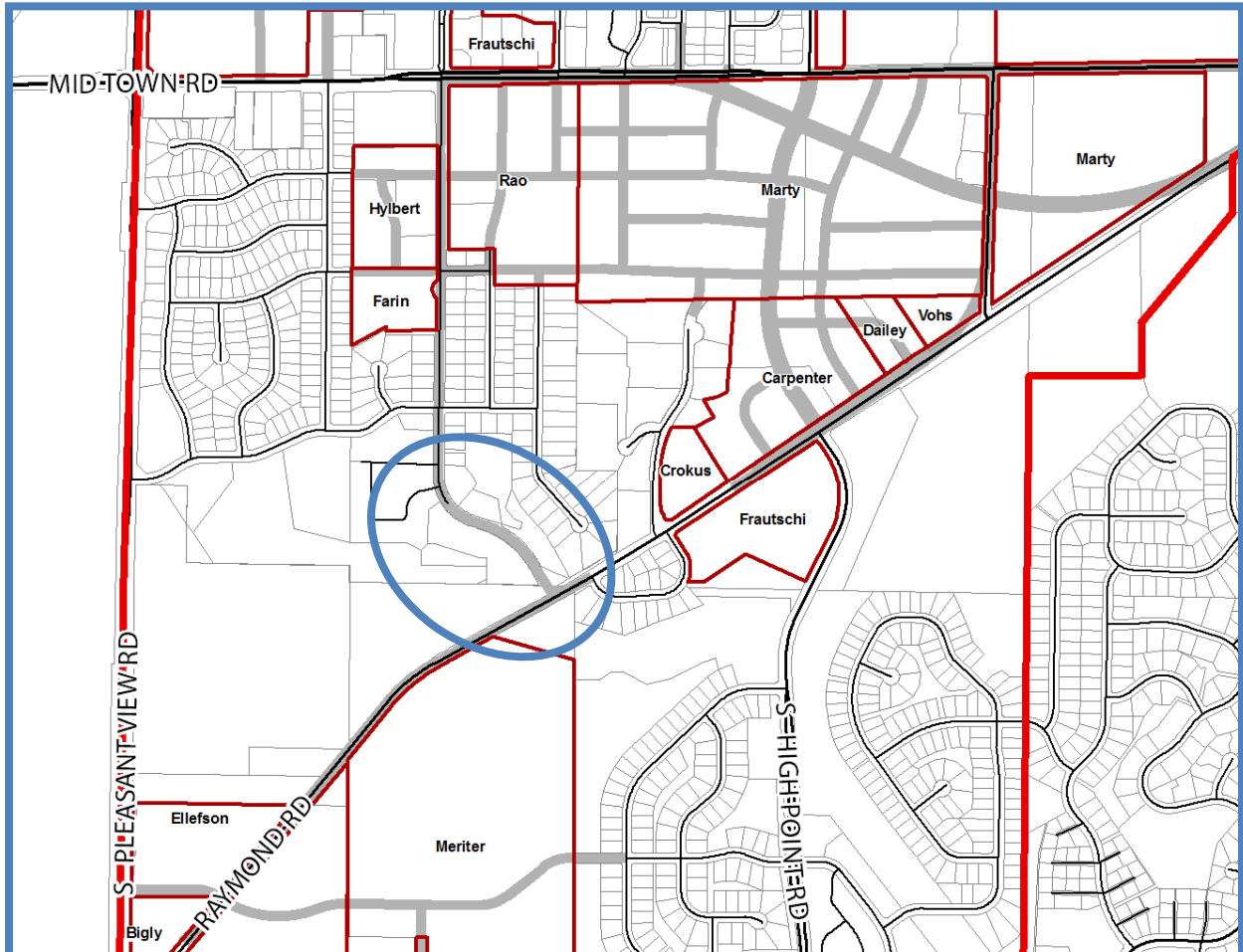
One of the reasons cited by neighbors opposed to the street extension is it would create a less safe condition. This assumes that any increase in vehicular traffic on Jeffy Trail will have a direct negative impact on safety in the neighborhood. While this is a reasonable perception, data does not support this and any safety impact is likely negligible.

Based on traffic modeling by the MPO, the vast majority of traffic using the southern extension of Jeffy Trail would have its origin or destination in the surrounding neighborhood. As a result trips using the Jeffy extension would result in a direct reduction of trips on Flagstone, Mica or Jeffy Trail north of Flagstone. At the logic's most basic form (vehicular trips equate with risk), this results no overall change in risk, but a slight relocation resulting from balancing trips on multiple entry and exit points of neighborhoods.

Likely more relevant to safety is the physical design of the street. Staff from Planning, Traffic Engineering and Engineering have responded to concerns over safety by exploring road design solutions that reduce vehicular speed by keeping the roadway as narrow as possible. See the Jeffy Trail Conceptual Street Designs section for more information.

6. Jeffy Trail is the only southern connection that can occur in the near term with certainty

Without Jeffy Trail, the existing pattern of property ownership prevents a direct southern connection without multiple properties developing. The map below highlights major contiguous property ownerships in the vicinity.



With recent development interest in the Marty property, the east west connection linking Mid Town and Raymond Roads seems possible in the near term. However development is always uncertain and market forces often dictate timing, which could result in project delays. Additionally, the Carpenter property contains the last segment of High Point Road alignment, between the Marty property and Raymond Road, which creates added questions about the timing of that connection. Similarly, all local street connections from the developed neighborhood south Mid Town Road to the Marty property would need to traverse the Rao property.

Conceptual Jeffy Trail street designs

As previously mentioned, staff from Planning, Traffic Engineering and Engineering have explored road design solutions intended to maintain lower, neighborhood-appropriate speeds on the street while enhancing connectivity and minimizing tree loss.

Two alternatives are shown on the following pages. First is one of the City's standard street designs for residential streets. In the second concept, the street was narrowed primarily by removing on-street parking lanes where low utilization would be expected, and accommodating bikes and pedestrians with an off-street multi-use path or sidewalk in the 300 ft section where the temporary path would be relocated.

Note that these designs are conceptual and detailed design phases of engineering have not occurred. If Jeffy Trail is included in the plan, the Engineering Division will proceed to develop more detailed designs for consideration in the future, which could potentially result in changes based on more detailed study of the right of way.

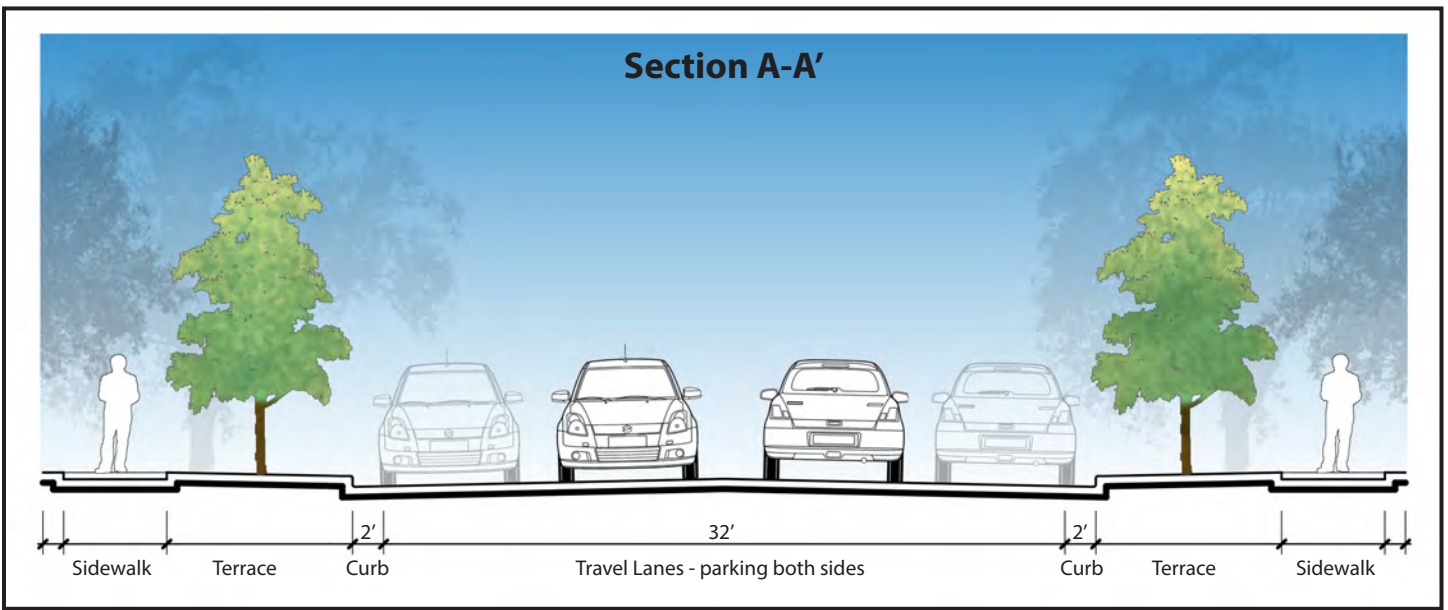
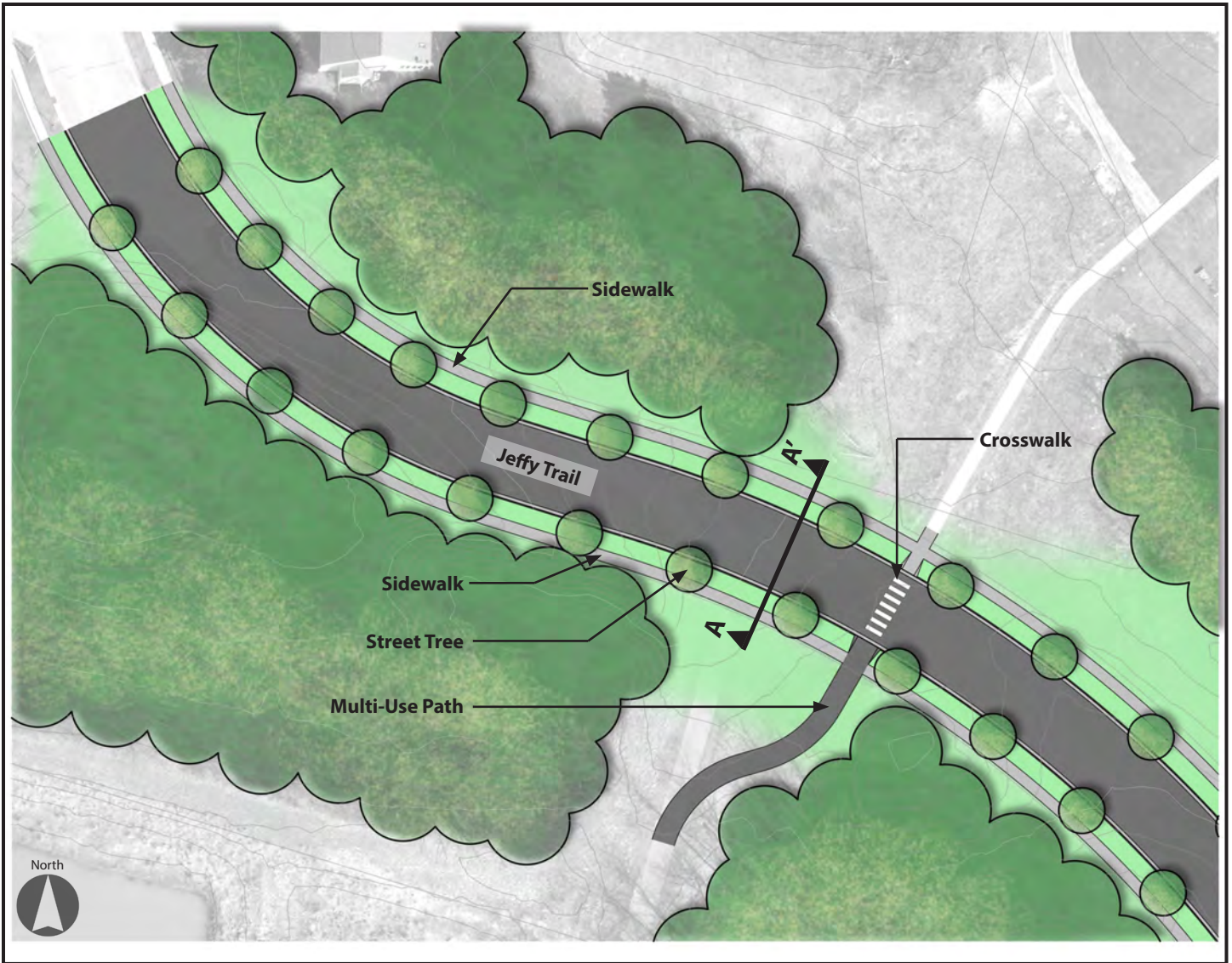


Figure 2:
 Jeffy Trail Potential
 Street Cross Section
 City Standard

High Point - Raymond
 Neighborhood Development Plan
 Amendment

City of Madison Planning Division

Drawing not to scale

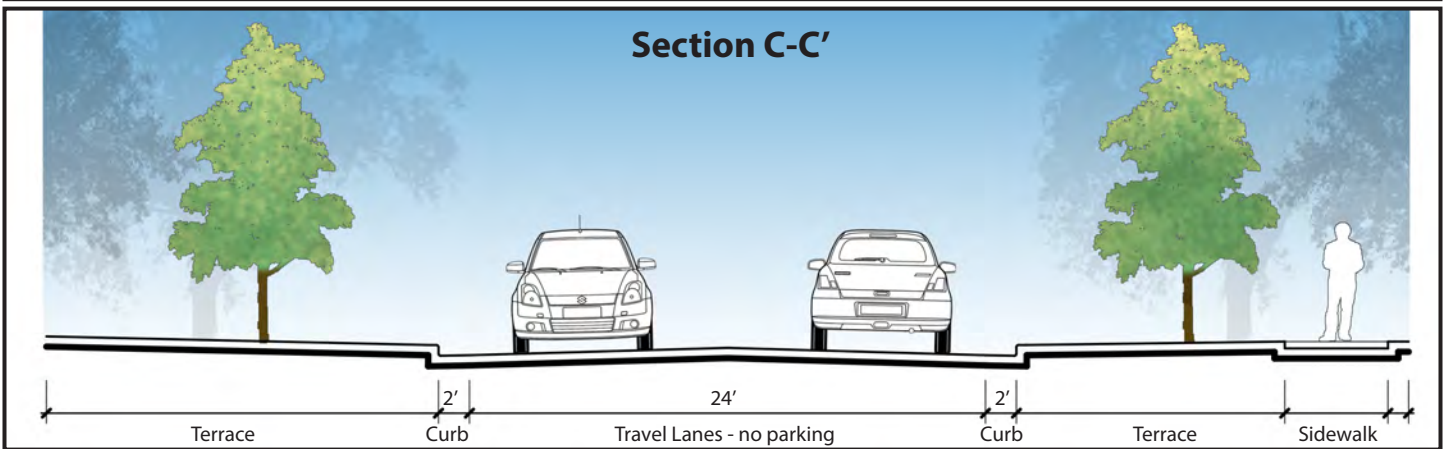
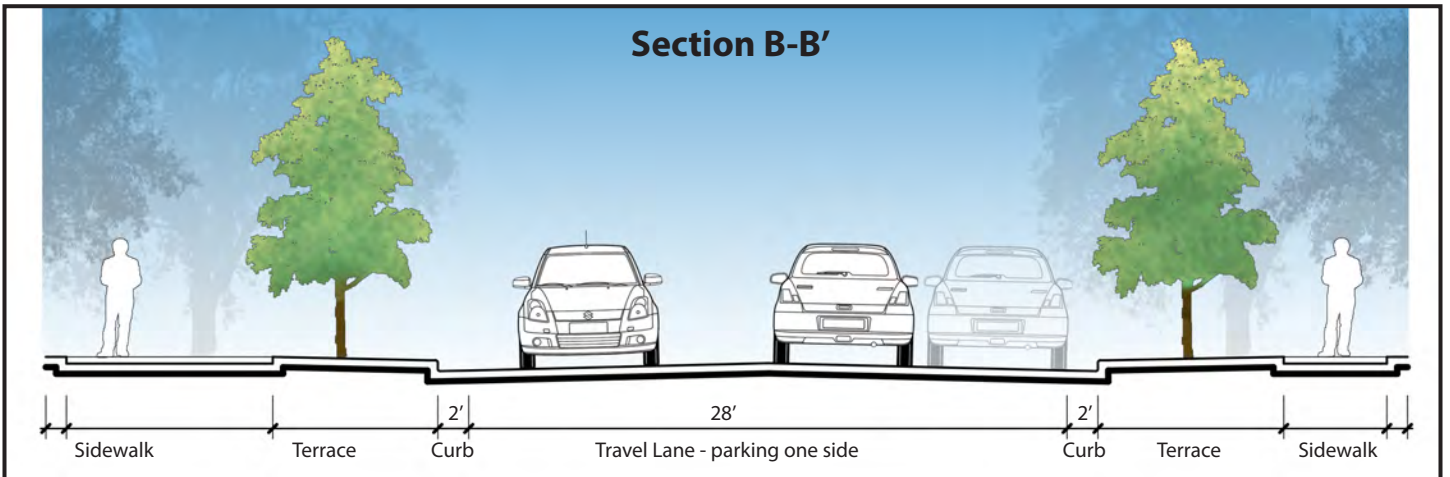
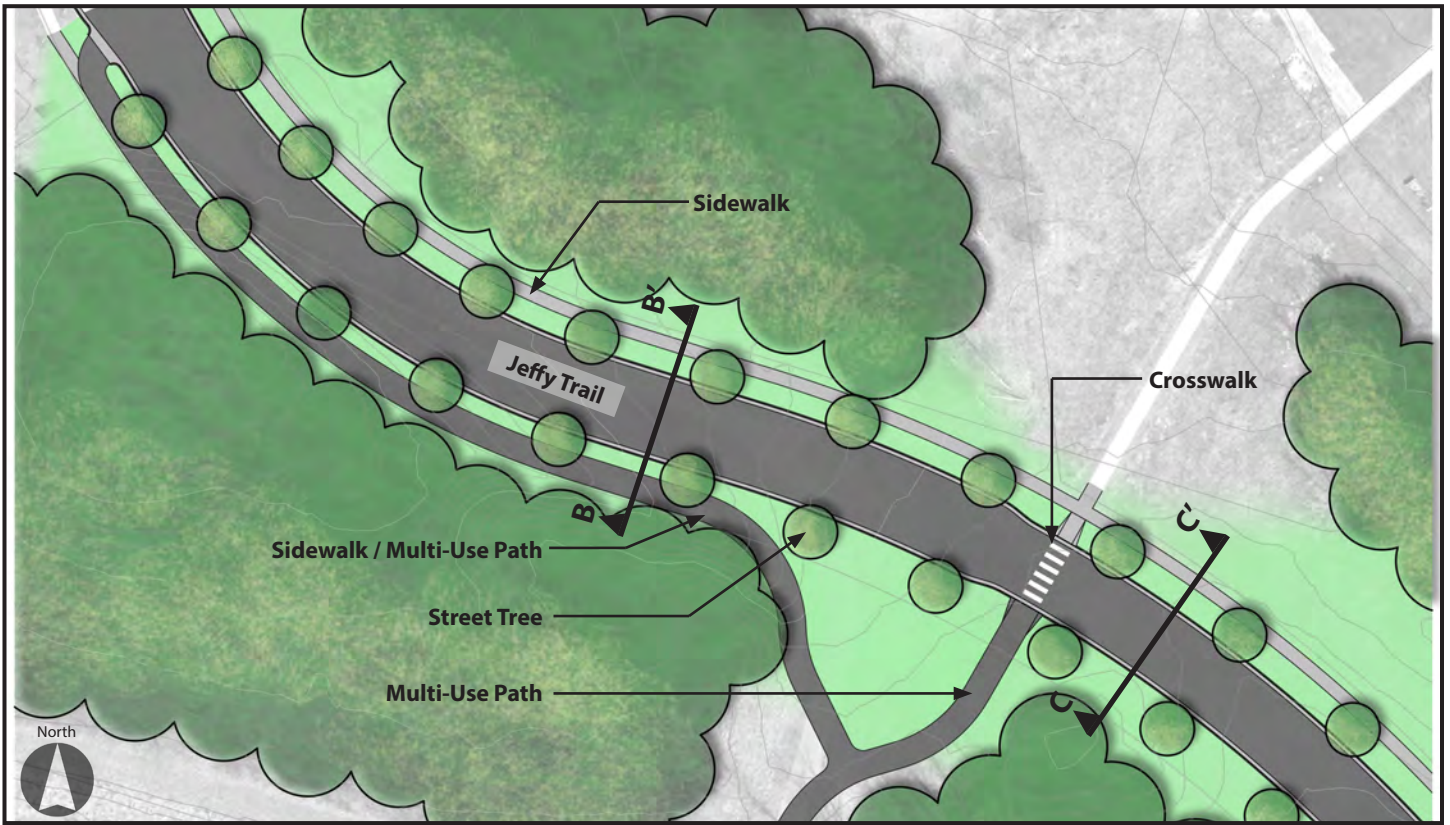


Figure 3:
 Jeffy Trail Potential
 Street Cross Section
 Potential Alternative

High Point - Raymond
 Neighborhood Development Plan
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