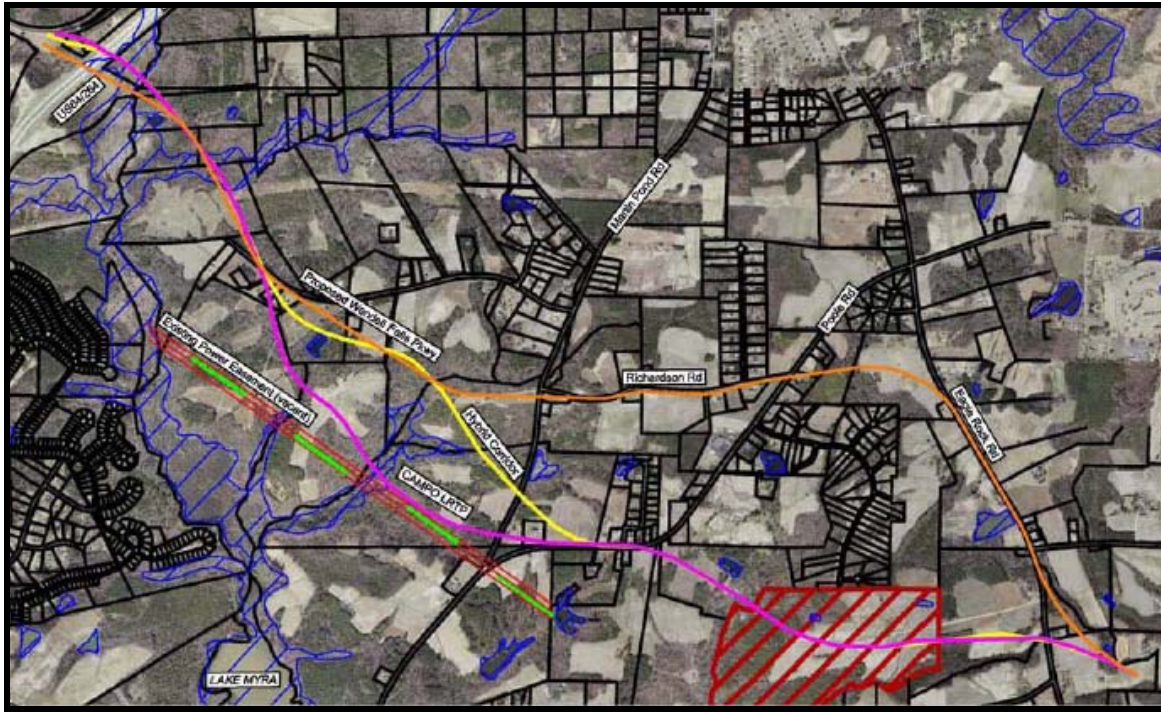


Mercury Development LRTP-Richardson Road Alignment Comparison

This document was developed to illustrate the items taken into consideration when determining the location of the proposed Wendell Falls Parkway.



Comparison Matrix

Category of Comparison	Units	Wendell Falls Parkway (Proposed Revised)	CAMPO Long Range Transportation Plan (Adopted Alignment)	Hybrid Alignment
Alignment Length	MI	7.16	7.07	7.16
Stream Crossings	#	3**	5	5
Stream Buffer Impacts	AC	1.11	1.68	1.96
Wetland Impacts	AC	5.41	6.01	5.41
Use of Existing Infrastructure	MI (LF)	0.76 (4029)	0.19 (1003)	0.19 (1003)
Use of Existing Thoroughfare	LF	2000	1450	900
Use of Existing ROW	AC	9.66	2.13	1.62
Increase in Impervious Area	AC	43.35	44.06	44.62
Homes within ROW	#	3*	1	0
Homes within 20' of ROW	#	5	3	3
Impacted Farmland	AC	8.29	9.52	9.99
Impacts to Open Space Parcel	AC	0.00	7.88	7.88

* The Developer has consulted with 2 of these owners in a effort to mitigate the impacts of the Richardson Road improvements. The Developer has offered to relocate one house and has designed the alignment to avoid the second house for Phase I improvements, and has offered to relocate the second house for Phase II improvements, at which time the road will be four-laned.

** The Developer proposes to span one of these crossings, which will result in zero impact to the stream and buffer.

Wake County Transportation Plan Compliance

The Wake County Transportation Plan outlines key requirements and guidelines that are to direct all future transportation and roadway design in the county.

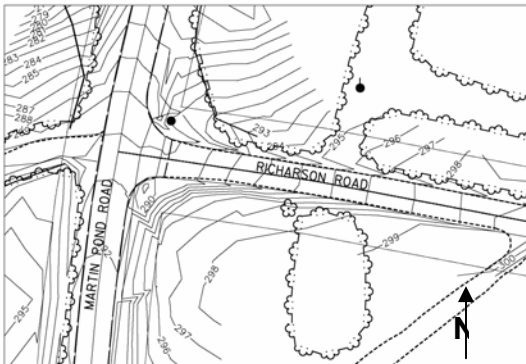
The Wake County Transportation Plan also specifies to “create a plan that accommodates community growth and its related traffic increases,” and also to “relieve existing congestion on key roadways.” Wendell Falls Parkway and the associated development fulfills both of those tenets in that it will create 4,000 homes and provide a secondary entrance and gateway into Wendell. Wendell Boulevard, which serves as the only entrance into Wendell off of US 64, traffic volumes in 2030 are projected to be double of current traffic volumes. Wendell Falls Parkway would alleviate and provide capacity for the expected community growth and its related traffic increases.

Also mentioned in the Wake County Transportation Plan is the guideline of maintaining and improving roadway safety. The current intersection of Martin Pond Road and Richardson Road currently has inadequate sight distance. Intersection improvements are proposed as part of Wendell Falls Parkway. Sight distance and dedicated turn areas are slated to improve intersection safety at the intersection of Martin Pond Road and Richardson Road thereby fulfilling part of the Wake County Transportation Plan. (See the “Intersection Improvements/Safety” portion below for additional information)

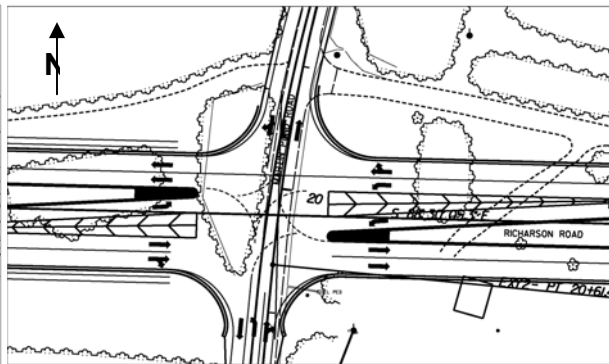
An important guideline of the Wake County Transportation plan is to “minimize environmental impacts”. The proposed Wendell Falls Parkway and thoroughfare plan have fewer stream impacts and avoid more wetlands, specifically the Marks Creek area and Lake Myra, than the CAMPO LRTP alignment. Another key factor to reducing environmental impacts is the fact that the Wendell Falls Parkway and accompanying thoroughfare plan provide connectivity using existing roadway infrastructure (Richardson Road and Eagle Rock Road) whereas the CAMPO LRTP and Hybrid alignments use more new construction thereby having greater environmental impacts.

Intersection Improvements/Safety

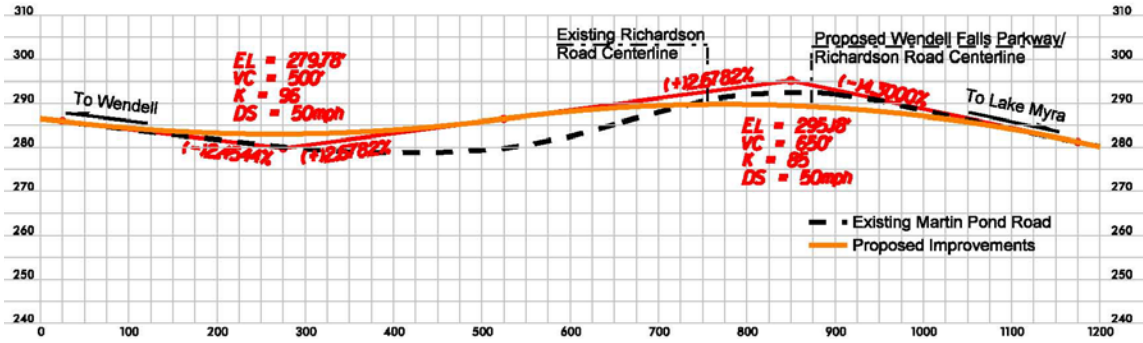
The existing intersection of Richardson Road and Martin Pond Road does not meet design standards, making the safety of this intersection questionable at best. Due to a substandard vertical crest curve, the location of the intersection in the curve on Martin Pond Road, and limited sight distance due to topographic features, a motorist turning from Richardson Road has limited sight distance in either direction. (See drawing below). These features also limit the sight distance for vehicles traveling northbound on Martin Pond Road. This impaired sight distance has dangerous ramifications; a driver may in turn pull out in front of an oncoming vehicle.



Existing Intersection



Proposed Intersection



Proposed Profile Improvements

Significant improvements are needed at the intersection of Martin Pond Road and Richardson Road to improve public safety. Included in the proposed Wendell Falls Parkway project are significant improvements to this intersection. The intersection would be realigned to more closely follow the natural ridge, and creates more a more desirable angle of intersection. Improvements would also be made to the profile of Martin Pond Road, with the vertical curve being flattened to increase sight distance. Dedicated left turn bays would also be added along Martin Pond Road. Asymmetrical widening toward the proposed Wendell Falls Development (west) is proposed to limit further impacts to residents along Martin Pond Road. In the drawing above titled “Proposed Intersection” the proposed geometric improvements are detailed. The proposed improvements would greatly increase motorist safety in the intersection. It is also important to note that Martin Pond Road is not scheduled to receive any improvements by the year 2030.

Route Continuity

Route connectivity and vehicle flow is integral to traffic corridor function. Each of the proposed transportation corridors will provide connectivity between Eastern Wake County and Johnson County, however maintaining flow of existing routes is an important element to consider. Poole Road is a heavily traveled key corridor which provides access between the Town of Wendell and the City of Raleigh, and is identified in CAMPO’s funded long range projects to widened to a four-lane facility by 2030; the more southerly LRTP proposes to incorporate the existing east-west section of Poole Road as part of the proposed corridor. Intersection improvements will be required at the existing Martin Pond Road / Poole Road split, as well as the northeasterly turn in Poole Road. These improvements will disrupt the continuity of Poole Road due to added intersections, requiring vehicles traveling on Poole Road to make a right turn then an immediately left to remain on Poole Road. This greatly disrupts vehicle flow. The more northerly alignment, proposed Wendell Falls Parkway, will provide essential access while maintaining traffic flow along existing Martin Pond Road and Poole Road and will improve the two existing intersections of Martin Pond Road and Poole Road with Richardson Road to meet design standards. Vehicles traveling west will be able to use an improved Richardson Road to get to Poole Road; with Richardson Road being the minor road in the intersection various traffic direction schemes can be implemented to decrease the impact to a driver on Poole Road. Using the CAMPO LRTP alignment and making a large intersection of Martin Pond Road, Poole Road, and the LRTP alignment would require massive traffic coordination which would disrupt a driver using Poole Road as a key corridor in their travel. While the proposed northerly alignment will also require improvements to realign and tie Eagle Rock Road to the proposed thoroughfare, Eagle Rock Road is not as heavily traveled as the Poole Road corridor.

Gateway into Wendell

Currently, from the US 64 bypass there is only one interchange, Wendell Boulevard, that serves as a gateway into Wendell. Wendell Falls Parkway would serve as an additional public gateway into Wendell. A passing motorist has only one chance to exit US 64 off a roadway directly associated with Wendell. The Town of Wendell sits in an ideal location to be involved with the

unprecedented growth of the Triangle. Having only one entrance from the well used US 64 bypass will be inadequate as that growth happens. Expected traffic volumes in 2030 are more than double current traffic volumes. Wendell Boulevard may not have enough capacity as growth occurs to adequately serve the town of Wendell. The planned Wendell Falls Parkway provides an additional gateway into the Town of Wendell with commercial areas, proposed medical facilities, schools, and homes welcoming people into the town of Wendell. With Wendell Falls Parkway residents would have a landing area, such as residential areas, before using the full amenities and opportunities that Wendell offers its residents. Wendell Falls Parkway would serve as a public face and gateway to properly represent Wendell to people coming from the Raleigh area, would have enough capacity and options for motorists, and is ½ mile closer to Wendell than the original LRTP alignment.

School Locations

Should the proposed Wendell Falls Parkway and accompanying thoroughfare plan not be approved, development around the CAMPO LRTP may only occur in the Phase 1 area, which consists of the interchange and a segment of Wendell Falls Parkway. Connectivity based on using an abbreviated Wendell Falls Parkway would affect school sites, and it should be noted that Wake County Schools have hand selected the prime locations of proposed schools to be included in the overall Wendell Falls development. Should the CAMPO LRTP southern path be used, land designated for schools as part of the larger Wendell Falls Development would be less accessible from major roadways. The CAMPO LRTP path would be farther south of these sights and would draw residential development and potential roadway improvements away from these selected sites.

Pedestrian and Greenway Connectivity

Currently, there are no existing greenways in the vicinity of the Wendell Falls proposed development. The Wendell Falls Parkway alignment will include pedestrian facilities (sidewalks and crosswalks) and shared bike lanes along the length of the alignment. Future plans for the development have also proposed greenways/multi-purpose paths throughout, several parks and recreation centers, expanded buffers around streams for additional green space and greenway options, and connections to future Town of Wendell greenways/multi-purpose paths. In conjunction with these internal greenways/multi-purpose paths, the Wendell Falls Parkway alignment will include connections to all of the development's greenway facilities at each stream crossing (a total of three within the development). It will be practical to build these connections as well as pedestrian facilities along the proposed alignment in order to connect with greenway and pedestrian facilities within the new development.

As proposed, the proposed Wendell Falls Parkway is a more central artery for the proposed development, which is more conducive to encouraging use of pedestrian and bicycle facilities, whereas the CAMPO LRTP corridor has more a southerly location within the proposed development. As previously mentioned, if the more southerly CAMPO LRTP alignment is selected, an abbreviated version of the proposed Wendell Falls Parkway and an amended Phase 1 development around the proposed interchange will be constructed. A combination of cost and delays associated with additional environmental impacts will delay construction of the main corridor, and in turn the main pedestrian and bicycle facilities and greenway connections along that main corridor.

Open Space

The Wendell Falls Parkway alignment will preserve current open space areas, and thereby have a limited impact on future parks and open space both inside and outside the proposed development, while the CAMPO corridor will not preserve current open space. The Wendell Falls Parkway alignment preserves current open space by using portions of a direct, existing route to Richardson Road and avoiding several large tracts of undeveloped land and tributaries to Lake Myra. This allows the alignment to maintain existing property lines and protect existing trees and

vegetation. By preserving existing property lines, a greater portion of the land is more likely to be maintained as open space.

The CAMPO Corridor, by swinging south, rather than connecting to the existing Richardson Road alignment, will cross a portion of Lake Myra tributaries on new roadway and cut through several large tracts of undeveloped land beyond the boundaries of the proposed Wendell Falls Development. In doing so, the CAMPO Corridor will eliminate the potential to preserve this undeveloped land as open space or a park in the future. In addition, the CAMPO Corridor will create new access to this undeveloped land. It is generally accepted that better access to undeveloped land is often a strong incentive for development, and thus the CAMPO Corridor will create a greater potential for the open land along its alignment to be developed. With the CAMPO Corridor so close to Lake Myra, this raises the potential for increased impervious surfaces due to development which may lead to impacts in water quality in the Lake, its tributaries, and the Marks Creek area.

Parks

Given that there are currently no existing parks within the Wendell Falls development or along either proposed alignment, neither alignment will have any impact on existing parks. The Wendell Falls Parkway alignment, with its pedestrian facilities and greenways connections, will provide connections to the proposed parks and recreation centers as part of the Wendell Falls development, and it will also allow for smoother and more direct connections to any future parks or recreation facilities that may be constructed by the Town or other developers. In addition, by protecting greater chunks of open space, the Wendell Falls Parkway alignment allows for the potential for some of the land to be converted into parks or recreational use. The CAMPO Corridor, however, will be too distant from any existing or proposed parks or greenways to provide connections to them. It will also divide undeveloped land and provide more transportation access for future potential development of current open space, thus decreasing the likelihood that the land will be preserved as a park or recreation area.

Economic Growth and Unity

The Town of Wendell is in the position to grow into one of the next large suburbs of the Triangle area. The proposed Wendell Falls Parkway and accompanying thoroughfare plan will create the ideal transportation foundation for this growth. The more southerly CAMPO LRTP plan would divide Wendell into two distinct areas, one of growth and one of the older established town. The CAMPO LRTP plan runs too far south away from the established city of Wendell to effectively fuse new areas of economic development and existing commercial areas together as one. Using the CAMPO LRTP plan would also draw economic growth and expansion south towards Johnston County and away from Wendell due to its southerly location. Adopting the proposed Wendell Falls Parkway and accompanying thoroughfare plan would ensure connectivity and road improvements along with a large consumer base, without losing the connectivity desired for a future bypass. Designated commercial areas are included in the overall development plan along with 4,000 households to sustain economic development and growth. If the CAMPO LRTP plan is used, an abbreviated segment of Wendell Falls Parkway and the interchange will be built thereby stunting a connected gateway into Wendell and areas of economic potential.