GOROVE SLADE
Transportation Planners and Engineers

TECHNICAL MEMORANDUM

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Date:	October 17, 2025	
Subject:	Long Reach Village Center Circulation Study	

Introduction

This memorandum summarizes the proposed circulation plan for the redevelopment of the Long Reach Village Center (LRVC) in Howard County, Maryland. The Circulation Study provides a preliminary framework for the internal street network, vehicular circulation, pedestrian circulation, and parking strategy to support the LRVC redevelopment. As this represents a preliminary submission, additional in-depth analysis will be conducted and refined as part of subsequent site plan submissions.

The redevelopment program proposes to replace the existing shopping plaza with a mixed-use community including approximately 255 multifamily units, 200 senior multifamily units, 50 townhomes, and 258,330 square feet of commercial space. Construction is expected to be implemented in five (5) phases. At full build-out, the project is anticipated to provide approximately 781 garage parking spaces, 90 surface lot spaces, and 72 on-street parking spaces.

The project site is located at 8775 Cloudleap Court in Howard County, Maryland. The site is bounded by Cloudleap Court and Tamar Drive to the north, Foreland Garth to the east, Longwood Apartments to the south, and Timber Apartments and Route 175 to the west. This location places the LRVC within a well-established suburban setting, framed by residential neighborhoods, community-serving uses, and regional transportation infrastructure.

Surrounding land uses include a mix of multifamily residential, single-family residential, educational, and recreational facilities. Long Reach High School and associated recreational fields are located to the southeast of the site, while adjacent apartment communities such as Longwood and Timber provide higher-density residential uses directly to the south and west. The Elkhorn Branch Trail and open space areas are situated nearby, offering community access to recreational amenities and connections to the broader Columbia pathway system.

The circulation plans outlined in this study, including the design of internal street segments, are guided by the following goals:

- **Establish Connectivity:** Create a cohesive network of pedestrian and bicycle pathways that formally link the LRVC with adjacent properties and the existing CA pathway system. This includes providing new pedestrian connections with crosswalks.
- **Enhance Accessibility and Comfort:** Ensure that multimodal routes within the LRVC are visibly identifiable, physically accessible, and accommodate all users. Pathways will be designed with appropriately scaled lighting and enhanced with landscaping to promote safety, comfort, and a welcoming environment.
- **Facilitate Efficient Access for Daily Users and Visitors:** Design clearly defined and direct routes to parking, loading, and pick-up/drop-off areas to minimize internal congestion and enhance overall circulation.

Non-Motorized Circulation

Existing Pedestrian and Bicycle Facilities

The project site is served by existing sidewalks along Tamar Drive, Cloudleap Court, and Foreland Garth, which provide pedestrian connections to Long Reach High School as well as surrounding residential neighborhoods. However, gaps in sidewalk infrastructure exist surrounding the existing Village Center, limiting overall pedestrian connectivity. Internal to the site, sidewalks are provided along the building frontages. Due to the existing land uses, building configuration, and extensive pavement coverage, sidewalk connectivity within the site is currently limited. This lack of continuous pedestrian infrastructure constrains safe and efficient circulation, reduces accessibility between key destinations, and weakens overall integration with the broader pedestrian network.

Bicycle facilities in the vicinity include both separated and shared lanes along southbound and northbound Old Dobbin Lane. These lanes, however, terminate abruptly between Dobbin Lane and Tamar Drive, and no dedicated bicycle infrastructure is present within the project site.

The project is located adjacent to the Elkhorn Branch Trail, a 1.9-mile loop trail traversing the Elkhorn Branch wetlands in central Columbia. The trail can be accessed via a trailhead on Tamar Drive, just north of Cloudleap Court. At present, there is no direct connection between the trail and the existing Village Center.

The Tamar Drive Complete Streets Project will include 6’ dedicated bicycle lanes along both directions on Tamar Drive. Additional improvements include pedestrian facilities improvements including high visibility crosswalks.

Future Pedestrian and Bicycle Circulation

As part of the proposed circulation plan, new sidewalks, pathways, trail access, and bike lanes will be introduced to enhance the existing non-motorized network. These improvements will provide safe and convenient pedestrian and bicycle access both within the site and to the surrounding community.

Figure 1 illustrates the proposed pedestrian and bicycle facilities and circulation within the project site.

Pathways

The proposed redevelopment will establish a new non-motorized pathway along the single-family residential frontage, providing pedestrian and bicycle connectivity between Cloudleap Court and the remainder of the development. No additional vehicular connections are proposed between Cloudleap Court and the rest of the development. The curb cut along Cloudleap Court will serve only as an access point to an internal parking garage, which will remain disconnected from the broader on-site circulation network.

Furthermore, the redevelopment program includes the integration of multiple community spaces and parks strategically located throughout the site. These features will expand the availability of green space, enhance the public realm, and support both active and passive recreational opportunities for residents and visitors.

Sidewalks

The redevelopment will expand the existing sidewalk network by eliminating dead-end segments and providing continuous pedestrian connections throughout the site. In addition, formal crosswalks will be installed at key street crossings. These improvements will establish direct, well-defined pathways that enhance pedestrian safety and support efficient movement throughout the site.

Trail Connection

As part of the redevelopment, a direct connection will be established between the development and the Elkhorn Branch Trail. This improvement will enhance multimodal connectivity, provide convenient access to recreational amenities, and promote sustainable transportation options for residents, visitors and the broader community.

Figure 1: Non-motorized Circulation

Vehicular Circulation

Existing Vehicular Circulation

Vehicular access to the site is provided from two (2) existing curb cuts along Cloudleap Court and multiple curb cuts along Foreland Garth. These access points connect directly to the site's internal circulation system, which consists of private drive aisles and local roadways serving the buildings and surface parking lots. The internal street network allows for east–west and north–south circulation within the site and provides connectivity between the various parking lots and building entrances.

No direct vehicular connection is provided between the site and Tamar Drive. Instead, vehicles must access the site via Foreland Garth or Cloudleap Court, which in turn connect to Tamar Drive.

Tamar Drive functions as a major collector roadway, accommodating three to four lanes of two-way traffic. In 2024, Tamar Drive carried an average daily traffic (ADT) volume of approximately 11,900 vehicles per day. This roadway provides important east–west regional connectivity and serves as the primary approach corridor for the surrounding neighborhood system.

Foreland Garth and Cloudleap Court are designated local streets operating at lower volumes and speeds. Both serve as the primary gateways to the site from Tamar Drive and facilitate circulation between the regional roadway system and the site's internal network.

Future Vehicular Circulation

The proposed internal circulation network has been designed to balance functional access needs with the goal of creating a multimodal, pedestrian-oriented development. Vehicular movements within the site are anticipated to operate under four primary circulation plans based on land use: residential, retail and recreational facilities, and loading/service circulation. Each plan is described below.

Residential Circulation

Townhomes (Building A)

Primary access to the proposed townhome garage parking is anticipated to occur via Cloudleap Court. At this time, no internal vehicular connections are envisioned between the townhomes and the broader development. Instead, the townhome frontage street is intended to function as a pedestrian-oriented corridor, designed to encourage non-motorized activity and minimize potential vehicular conflicts. Connectivity between the townhomes and the remainder of the development is therefore expected to occur primarily through pedestrian and bicycle linkages. These may include access via the proposed pedestrian-only street, as well as adjacent sidewalks and shared bikeway facilities that provide seamless integration with the larger development.

Parking for the townhomes is proposed to be accommodated within a below-grade structure. This facility could provide approximately 105 spaces in total, designed to serve both residents and visitors. Locating parking below grade minimizes the visual and physical impact of vehicles on the public realm, thereby supporting a more walkable and pedestrian-friendly environment at street level. This arrangement also supports efficient land use, preserves opportunities for landscaping and open space, and ensures that anticipated parking demand is met in a manner consistent with the project's multimodal vision.

Multifamily and Retail Building (Building C)

Primary vehicular access to the residential component of Building C is expected to occur via Proposed Street A. Vehicles may enter the site from Foreland Garth or from the proposed curb cut on Tamar Drive, with circulation directed to Street B for access to the underground parking garage.

The multifamily building is envisioned as a mixed-use facility, incorporating approximately 255 dwelling units and 19,650 square feet of retail space. Parking is proposed within an underground structure containing approximately 316 spaces. These spaces are anticipated to be shared between residential and retail uses, thereby maximizing efficiency and providing flexibility to meet

peak demand periods. Locating parking below grade further reduces the impact of vehicles on the streetscape and supports the pedestrian-oriented development goals of the site.

Senior, Retail and Commercial Building (Building E)

Primary access to the residential component of Building E is anticipated to occur via Foreland Garth. The building is envisioned as a mixed-use facility, including approximately 200 dwelling units, 41,920 square feet of retail space, and a 31,890 square foot commercial space.

Parking is proposed to be accommodated within both a below-grade structure and an at-grade surface lot, with approximately 210 spaces provided underground and an additional 90 surface spaces. These facilities are intended to serve residents, visitors, retail patrons, and commercial space users. The combination of structured and surface parking has the potential to offer both convenience and operational flexibility while maintaining compatibility with adjacent uses.

Pick-Up, Drop-Off, and Deliveries

To further support the development and minimize circulation conflicts, designated on-street pick-up and drop-off areas are proposed along two key frontages: between the townhomes and the multifamily-retail building, and between the senior building and the multifamily building. These areas are envisioned to accommodate a variety of short-term activities, including passenger pick-up and drop-off, small-scale package deliveries, and food delivery services. By consolidating these functions within specific, well-defined locations, the development has the potential to manage delivery and passenger activity in an efficient manner.

The residential circulation plan is shown in Figure 2.

Retail/Commercial Circulation

Standalone Commercial Building (Building B)

Building B is proposed as a standalone commercial building without a dedicated parking garage. Patrons are expected to utilize parking spaces located elsewhere within the community and access the building by walking, biking, or being dropped off at designated pick-up and drop-off (PUDO) locations. Short-term loading and passenger activity is anticipated to occur at the turn circle immediately adjacent to the building, providing convenient and efficient access while minimizing potential circulation conflicts.

Multifamily and Retail Building (Building C)

The retail component of Building C is expected to be primarily accessed via Proposed Street A, with additional connectivity from Foreland Garth and Proposed Street B, east of the sports complex. PUDO activity associated with retail uses is anticipated to occur along the frontage of Proposed Street A. This arrangement is intended to balance access for retail customers while maintaining overall circulation efficiency for the mixed-use building.

Senior, Retail and Commercial Building (Building E)

Retail access for Building E is proposed to occur primarily via Foreland Garth. The majority of retail patrons are expected to utilize the surface parking lot located adjacent to the building, with additional spaces available within the underground parking garage to accommodate overflow demand. PUDO activity is anticipated along the site frontage on Proposed Street A, providing direct and convenient access to retail functions while maintaining integration with the senior residential and commercial use components of the building.

The retail/commercial circulation plan is shown in Figure 3.

Commercial and Sport's Complex Circulation

Multi Sports Complex and Retail (Building D)

Primary access to Building D is anticipated to occur via Foreland Garth, with a secondary access point from the Tamar Drive entrance. Parking is proposed to be provided within a below-grade structure that could accommodate approximately 150 spaces to serve both retail and recreational uses.

PUDO activity is expected to potentially occur along the building frontage on Proposed Street B. Vehicles entering the site from Foreland Garth may be required to utilize the proposed roundabout in order to turn and reach the designated PUDO spaces. This circulation arrangement is intended to provide an efficient means of managing short-term passenger and delivery activity while minimizing conflicts along the frontage and supporting safe and convenient access for all site users.

Senior, Retail and Commercial Building (Building E)

For the commercial use circulation, primary access to Building E is anticipated via Foreland Garth. Commercial use patrons are expected to primarily utilize the surface lot, with additional capacity available within the below-grade garage for overflow. PUDO activity is anticipated within the surface lot, providing convenient access while minimizing potential conflicts with on-street traffic circulation.

The Sports Complex and Commercial circulation plan is shown in Figure 4.

Loading Circulation

Loading truck access to the site is anticipated to occur exclusively via Foreland Garth. Trucks are expected to be accommodated within designated loading areas, thereby minimizing the potential for conflicts with general traffic or circulation on adjacent streets. Loading operations are anticipated to occur primarily during non-peak hours, which would further reduce potential impacts on access, circulation, and adjacent roadway conditions.

The loading circulation plan is shown in Figure 5.

Additional Street Parking

Additional on-street parking is proposed to be provided throughout the site. These spaces are anticipated to serve short-term parking needs, offering convenient access for visitors, service providers, and patrons of the mixed-use components of the development. By distributing spaces across multiple frontages, the development has the potential to accommodate diverse user needs while supporting circulation efficiency and preserving flexibility in site operations.

Conclusion

The proposed circulation framework for the LRVC redevelopment is designed to establish a safe, functional, and balanced transportation system that supports multiple modes of travel. Non-motorized circulation improvements including new sidewalks, pathways, crosswalks, and a direct connection to the Elkhorn Branch Trail are anticipated to enhance connectivity within the site and integrate it with the surrounding community network. Residential, retail, and community-serving uses will be supported by structured and surface parking facilities, strategically located pick-up/drop-off zones, and distributed on-street parking, providing flexibility to meet a range of user needs.

Service and loading operations are anticipated to be limited to Foreland Garth and contained within designated loading areas, reducing conflicts with general traffic and pedestrian activity. Together, these strategies have the potential to create a cohesive circulation system that improves multimodal connectivity, minimizes traffic impacts on surrounding roadways, and enhances the overall accessibility, safety, and aesthetic quality of the development.

Figure 2: Residential Circulation

Figure 3: Retail/Commercial Circulation

Figure 4: Sports Complex and Commercial Use Circulation

Figure 5: Loading Circulation