

Urban Design

OVERVIEW

This Plan's urban design goals are to create an urban scale, walkable community with connections to transit, parks, and services and with amenities and facilities for residents and employees.

The 1992 Plan, working within different boundaries, focused its pedestrian recommendations on the Metro and MARC stations, and on creating an area-wide pedestrian network. This Plan continues to emphasize pedestrian connections throughout the planning area, makes specific recommendations for street character, and identifies opportunities for public amenities and streetscaping on sites with redevelopment potential. Urban design choices should take every opportunity to incorporate the form and function of the natural environment.

The Plan's recommendations for TOMX zones require that development be shaped by the goals of the master plan. Accordingly, site-specific guidance for urban design is provided and applies to both standard and optional method projects.

OBJECTIVES

- Establish a network of streetscaped vehicle and pedestrian routes that connect within and outside the Plan area.
- Define appropriate amenities and facilities to be provided through redevelopment and encourage high quality design for all redevelopment.
- Encourage urban design improvements that generate benefits for the natural environment.

EXISTING CONDITIONS

Based on geography and land uses, the Plan area is divided into three districts with distinct uses and characters that combine to create a well-rounded community.

West of Twinbrook Parkway, the Metro Core Area is a mix of office, retail, and industrial uses. Twinbrook Parkway, by virtue of its overpass, traffic, and topography is a route through the planning area, but also a barrier, particularly for pedestrians.

East of Twinbrook Parkway, the Technology Employment Area of Fishers Lane and Parklawn Drive has begun to redevelop and has the potential for more office and laboratory projects. Its parallel streets are a defining feature and the Plan's recommendations aim to create them as active streets, lined with commercial, retail, and residential uses, making a direct connection to the Metro station. The 1992 Plan likewise identified these two streets as paths running between the Parklawn Building and the Metro station.

The Light Industrial Area to the south will undergo less redevelopment and should remain a functional commercial area. Some of the area is built in a traditional street grid, while other sites are in a suburban pattern of buildings set in parking lots. Development throughout the area is an opportunistic pattern of large offices, small businesses, and light industrial uses that has proceeded with little attention to the public realm or the natural environment. Projects should create pedestrian routes and public open spaces, including a sidewalk along Washington Avenue and an east-west pedestrian route that spans the area, eventually connecting to the Metro station.

TOMX ZONE DESIGN STANDARDS AND GUIDELINES

The TOMX Zones are intended to create “distinct and compact mixed use centers for housing and employment,” in accordance with guidelines in master and sector plans. Allowing mixed uses and requiring significant public amenities under both standard and optional methods of development helps create a pedestrian-oriented, mixed-use environment.

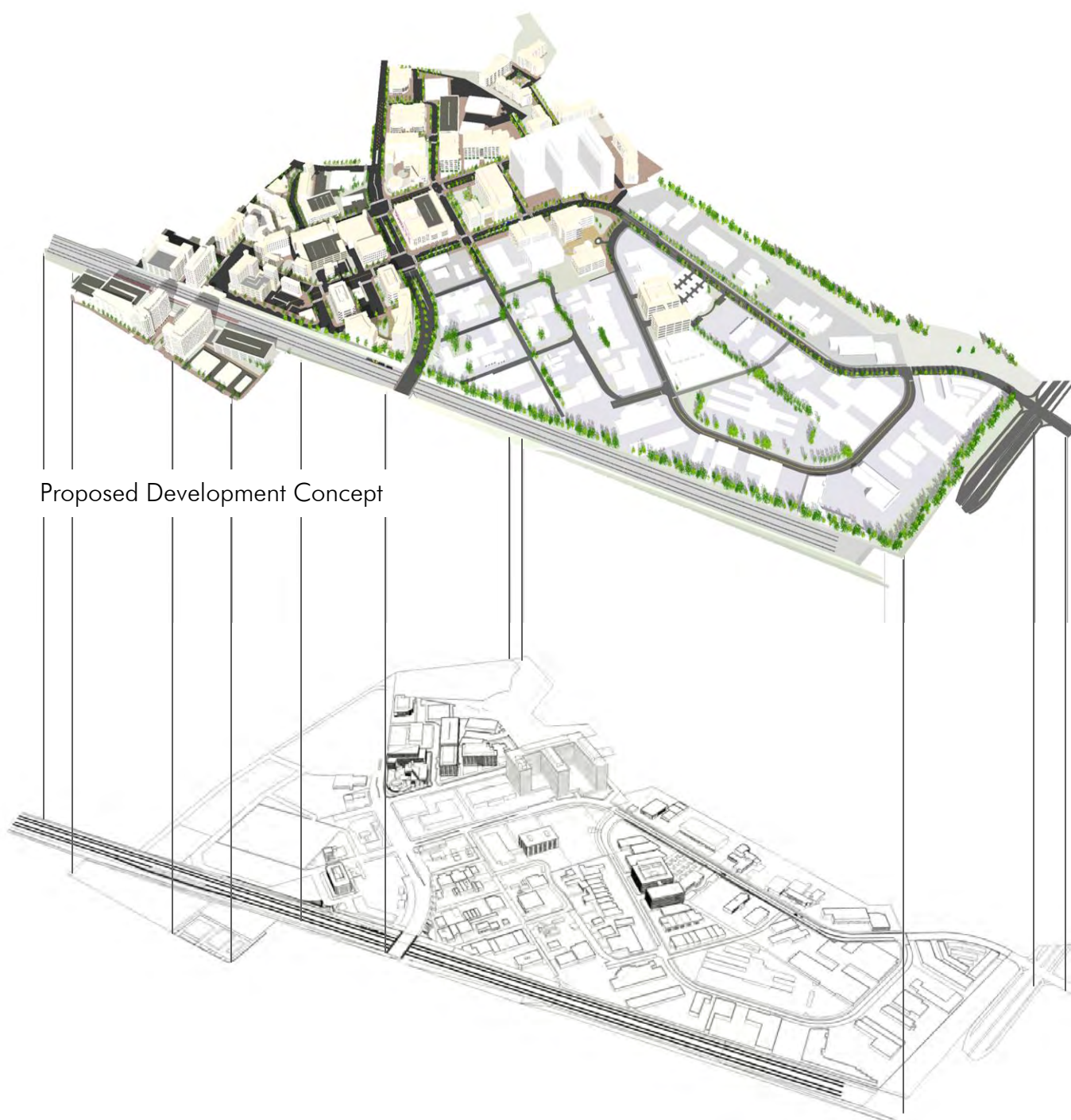
These zones’ required improvements are intended as amenities beyond the minimal public facilities needed to accommodate development. The broad list of acceptable public amenities is intended to create public open spaces, give attention to the character of streets, create pedestrian routes, and enhance the natural environment. For example, fountains can serve as visual design features as well as be placed to mask noise and help mitigate heat islands. Shared mid-block parking facilities can contribute to streetscape with retail frontage, green facades, etc. Security elements, as necessary, should also be provided in the context of streetscape enhancements between buildings and the curb, such as raised planters, decorative walls and fencing, hardened street furniture, bollards, and light fixtures.

The zones’ guidelines for site planning require street-oriented buildings; side, rear, or below-grade parking; activating street facades and uses; continuous, safe, and landscaped pedestrian routes; and screening of loading and mechanical structures. Guidelines for streetscape include lighting, street tree planting, street furniture, and enhanced crosswalks.

The TOMX zones also require that specific decisions about amenities be guided by master and sector plan recommendations. In Twinbrook, the density and proximity of retail, office, laboratory, and varied residential spaces require attention to project design.

In the Metro Core District, new development should create a high quality pedestrian environment that will enhance the connections to the Metro station. Redevelopment in the Technology Employment Area will require new building types to serve 21st century employers. As their businesses evolve, advanced technology and biotechnology users will require a changing mix of changing uses that are not permitted in the 1992 Plan. These projects often include conference spaces, offices, laboratories, and limited manufacturing of prototypical products, nearby or sometimes in the same building. High quality interior and exterior spaces can support collaborative efforts that drive innovation. The TOMX zones encourage innovative design, flexible uses, and a streamlined development process that all support business development.

Existing and Proposed Development Concept



Proposed Development Concept

Existing Development

DISTRICT RECOMMENDATIONS

Metro Core Area

Development on these sites west of Twinbrook Parkway should continue the street and community character established by Twinbrook Station. With the Metro and dense mixed uses, this entire area should become a center for the Twinbrook neighborhoods in Rockville and the County. It should be a walkable area, where people can do errands and also enjoy the mix of uses and public amenities. Development should also make pedestrian and vehicle connections to Metro and to other parts of the Plan area.

Areas 1, 2, and 3

- Establish varied building heights, but no higher than those at Twinbrook Station, with 10 to 12 stories near the Metro station, stepping down to four and five stories along Twinbrook Parkway.
- Establish a mix of uses, including street-oriented, neighborhood serving retail and office uses. Residential uses should be created through TDRs.
- Provide a variety of urban open spaces.
- Locate buildings close to the street with parking in the rear or center of the blocks.
- Create shared parking when possible.
- Redevelopment should be compatible with the height, use, and connections of surrounding uses.
- Make improved sidewalk connections to the recreation center north of the sites on Twinbrook Parkway.
- As redevelopment occurs south of Wicomico Avenue, provide a pedestrian path to the Metro station from Frederick Avenue, under Twinbrook Parkway.

Technology Employment Area

This area is envisioned as an active commercial and residential community with a mix of laboratory, office, technology, and retail uses designed with a streetfront focus and connections to the Metro station. The proposed zone allows a mix of uses from storage and small-scale manufacturing to corporate headquarters uses that can accommodate a changing business environment. The goal is to improve the area's urban environment, build on its existing concentration of technology uses, and create an employment district with a high quality public and private realm that can serve residents and employees. An internal network of streets should make pedestrian and vehicle connections that create safe and pleasant routes to Metro and other destinations. Streetscape should be substantial and can be transferred to create visible and useful public open spaces, particularly along Parklawn Drive. Buildings of varied height and character should define Fishers Lane and Parklawn Drive.

Area 4

- Overcome Twinbrook Parkway's effect as a pedestrian barrier by improving the safety of pedestrian crossings at its intersection with Fishers Lane. Consider both operational and design features.
- Fishers Lane should be lined with buildings oriented to the street and treated with streetscape features that connect to the public open space at the eastern end of the street.

- Place buildings along Twinbrook Parkway to create a wide and buffered sidewalk.
- Create a connected grid of new streets throughout this large block that are defined by buildings, streetscaping, and public spaces.
- Development should be compatible with adjacent garden apartments.

Area 5

- Create a public space at the eastern end of Fishers Lane to mirror the public open space proposed at the western end in Twinbrook Station.
- Create sidewalk and path connections through this site that connect with the proposed trail connection to the north.
- Contribute to a street grid that serves vehicles and pedestrians.
- Add park space at the north end of the site to pull the proposed park connection into the Plan area and to further buffer the adjacent stream.
- Development should be compatible with adjacent garden apartments.

Area 6

- Create the extension of Washington Avenue north across Parklawn Drive to Fishers Lane as a pedestrian-friendly environment lined with buildings and streetscaping, and marked with public open space.
- Land uses and building arrangement along the block of Twinbrook Parkway between Fishers Lane and Parklawn Drive should mirror pedestrian-scaled uses across Twinbrook Parkway at Twinbrook Station.
- Establish streetscape and contribute to a new urban park along Parklawn Drive, west of Twinbrook Parkway.
- Improve the pedestrian crossing at Parklawn Drive with Twinbrook Parkway.

Area 7

- Create a public space at the eastern end of Fishers Lane to mirror the public open space proposed at the western end in Twinbrook Station.
- Build the extension of Wilkins Avenue with streetscaping and sidewalks and contribute to a street grid.
- Improve access to and visibility of the existing pedestrian route at the eastern end of the Parklawn Building.
- Any reconfiguration of the Parklawn Building should incorporate street orientation, pedestrian connection, a shuttle bus route, and public spaces into the design.
- Contribute to a new urban park along Parklawn Drive, west of Twinbrook Parkway.

Area 8

- Contribute to a new urban park along Parklawn Drive, west of Twinbrook Parkway.
- Buildings along this southern frontage of Parklawn Drive should be oriented to the street, with parking to the rear or side. Street frontage should include pedestrian amenities and streetscape.
- Redevelopment in this area should make street and landscaping connections with the proposed northern extension of Washington Avenue.
- Consider adding a pedestrian crossing on the south side of the intersection of Parklawn Drive and Twinbrook Parkway.

Light Industrial Area

The mix of light industrial and retail uses in the area around Washington and Wilkins Avenues should be maintained with an opportunity for businesses to evolve in place. Redevelopment is intended to be on the existing small sites, not on assembled lots and accordingly improvements to the public realm will be minimal. Vehicle and pedestrian connections should build to follow the existing street grid pattern and cross-section. Connections across this area to the Metro station will be incremental, but vital to linking residents and employees to transit, shopping, and parks facilities.

Area 9

- Ensure a sidewalk connection to the hiker-biker trail proposed for the Montrose Parkway.
- Encourage redevelopment projects to contribute to the area's environmental and urban design goals, including accommodating stormwater management.
- Undertake a capital improvement project for sidewalks along Washington Avenue, working with property owners, and recognizing that this is and will continue to be an important pedestrian route to the Metro.
- Ensure a pedestrian and bicycle connection at the southern end of Washington Avenue across the CSX tracks to connect with the Montrose Crossing shopping center.
- Create a pedestrian connection to the Metro station beneath Twinbrook Parkway along the east side of the railroad tracks. Work with the County-owned outlots and private owners to create a safe and feasible route.
- Explore the potential for a mid-block pedestrian connection between Wilkins Avenue and Parklawn Drive to improve pedestrian access to bus service.

CONNECTIONS

The Plan's proposed density and use changes must be supported by connected systems of sidewalks, bike routes, and streets to make Metro truly accessible. In this relatively small Plan area, attention to detail will help create effective connections that are essential to making Twinbrook a functioning residential and commercial transit-oriented community. The system and character of sidewalks, paths, and streets proposed through redevelopment will offer a variety of travel options.

Pedestrian System

A successful pedestrian environment is a collaboration of public and private design efforts and the accumulation of many decisions. The following recommendations are intended to focus attention on those details and identify improvements in the public and private realms to create streets to serve pedestrians, transit users, drivers, residents, shoppers, and employees.

This Plan recommends a local network of sidewalks lining Twinbrook streets, but also makes regional connections with paths and sidewalks to Metro and to regional park trails. Routes through the area can also connect residents in the Plan area and beyond it to commercial services along Rockville Pike.

- Construct streetscaped sidewalks throughout the Plan area. They should be 8 to 10 feet wide, set off the curb, and buffered with street trees.
- Redevelopment projects should devise a streetscape plan that coordinates all aspects of the street and building relationship to create pedestrian safety, comfort, and convenience.
- Buildings should be sited and designed to create clear streetfront entrances and active street facades.
- Sidewalks and bike routes should connect to open spaces in the Plan area, to Metro, and to regional trails, parks, and destinations.

Street Character

Streets are the most important open space elements in defining the public realm and creating memorable places. Using buildings to create spaces defines the street as public space and provides an interesting pedestrian environment. Streets should include amenities, landscaping, and sidewalks, but most importantly, should make desired connections.

The County's current evaluation of the Road Code will establish standards that support the goals of the Twinbrook Plan for safe and pleasant pedestrian routes and street crossings for the business streets in the this Transit Station Development Area.

Some streets in the Light Industrial Area date from the land's initial subdivision as a residential community, and are built to older standards. These streets function adequately and should be allowed to remain with minimal improvements, to allow small lots to redevelop without undue burden.

All other new and existing streets in the area of the Twinbrook Plan should be designed to meet the needs of pedestrians, with the following features.

- Facades located to create a continuous building line along the street with the occasional defined and usable open space
- Closely spaced street trees in a lawn panel where parking is prohibited. Trees should be given extensive soil treatment and irrigated with graywater, where possible
- On-street parking and a minimal number of driveway cuts

- Utilities relocated underground and within the street right-of-way on highly visible streets
- Street crossings that are smoothly paved, visible to drivers and pedestrians, buffered from traffic, and unencumbered by utilities

Along with the features listed above, the design of the following four streets should be distinctive to the areas they serve and the functions they perform.

Plan of Fishers Lane

Between Washington Avenue extended and the Parklawn Building

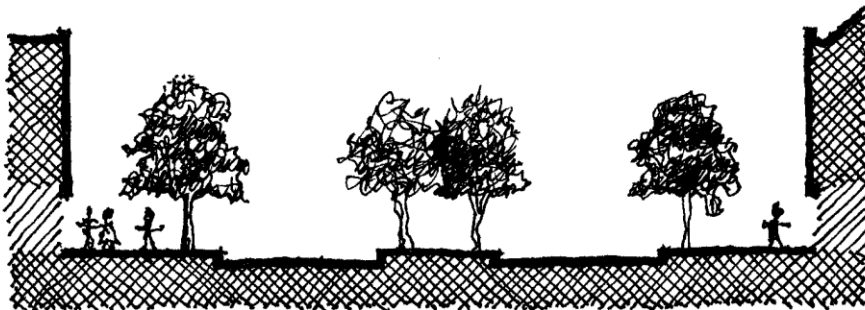


Plan of Twinbrook Parkway

Between Fishers Lane and Parklawn Drive



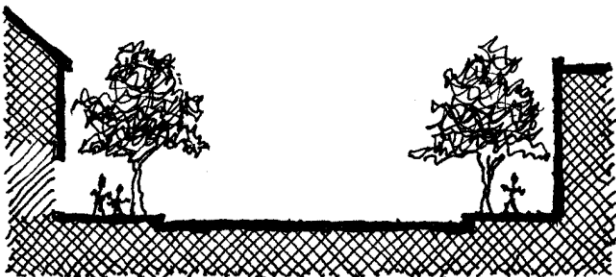
Street Sections



Twinbrook Parkway at Fishers Lane
120' ROW - 6 Lanes Divided



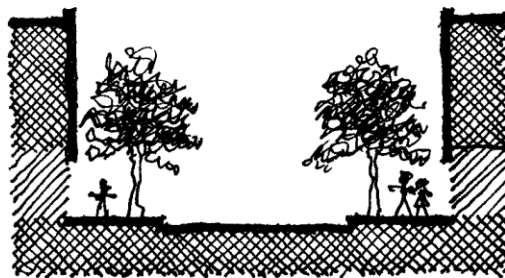
Parklawn Drive at Washington Avenue
80' ROW - 4 Lanes Divided



Parklawn Drive at Wilkins Avenue
80' ROW - 4 Lanes



Fishers Lane at Washington Avenue
70' ROW - 2 Lanes



Other Streets
60' ROW - 2 Lanes

Twinbrook Parkway is a visible arterial road. From the southern Rockville City Limits to Ardennes Avenue, it should be a six-lane, divided road. From Ardennes Avenue north to the boundary of the Plan area, it should be a four-lane, divided road. Its right-of-way should include bike lanes and sidewalks set off from the curb by a lawn panel of street trees.

Twinbrook Parkway should serve through traffic as well as pedestrians, particularly at its intersections with Fishers Lane and Parklawn Drive, where building massing, frontage, and uses are encouraged to be pedestrian oriented. Features should include:

- Buildings sited to frame public space and to allow for sidewalks on both sides of the street and using reflective paving materials if possible
- Pedestrian crosswalks at the intersections with Fishers Lane and Parklawn Drive should be clearly marked, provide adequate distance from stopped cars, and made handicapped accessible
- Signal timing that allows safe pedestrian crossings at morning and evening rush hour
- Combined vehicular entrances to minimize driveway cuts
- Pedestrian refuge in the median

Illustrative of Twinbrook Parkway at Fishers Lane



Fishers Lane is a commercial-industrial street with a 70-foot right-of-way that should include two vehicle travel lanes, on-street parking, sidewalks, and streetscaping. It is envisioned as a pedestrian-oriented street lined with activating retail and service uses, connecting to the Metro station. The street should focus more on the pedestrian experience and less on the vehicle. Its intersection with Twinbrook Parkway is a significant pedestrian crossing and should be marked by wide sidewalks. Features should include:

- Retail, employment, formal public spaces and other activating uses lining the street
- Wide sidewalks on both sides of the street using reflective paving materials if possible
- An anchoring feature at the eastern end of the street that includes a major green open space incorporating complementary environmental and design features
- On-street parking with single-station parking meters, shared parking facilities, and combined vehicle entrances to minimize curb cuts.

Illustrative of Fishers Lane with Urban Park



Parklawn Drive should maintain its classification as a four-lane arterial road for its length from Montrose Parkway to the Metro station. Its vehicle and pedestrian function should be improved with four lanes and include a wide sidewalk and bike lane. Sidewalks on both sides of the street should be set off from the curb edge by a lawn panel and street trees. Pedestrian crosswalks should be provided at Twinbrook Parkway and Wilkins Avenue.

Its intersection with Washington Avenue should be marked and landscaped for safe pedestrian crossing and Metro access. Achieving this will require additional right-of-way. With future traffic generated by Montrose Parkway, design recommendations will ensure that the road also serves as a safe and pleasant pedestrian route. Features should include:

- Retail, employment, formal public spaces and other activating uses lining the street
- Wide sidewalks on both sides of the street using reflective paving materials if possible
- Possible on-street parking opportunities with single-station parking meters
- Realignment to the south, away from the Parklawn Building, to improve site security and create a safe pedestrian crossing, only if necessary to meet the tenant's security needs.
- Shared parking facilities and combined vehicle entrances to minimize driveway cuts.

The streetscape of both Fishers Lane and Parklawn Drive should connect with the proposed pedestrian connection between the two streets. Planting patterns, street furniture, and crossing points should all mark and support this pedestrian space.

Illustrative of Parklawn Drive at Twinbrook Parkway



Washington Avenue runs from the southern end of the Plan area north through an area of light industrial uses, crossing Parklawn Drive and Fishers Lane. It is planned as a connection to Twinbrook Parkway. Improvements should recognize the changing character of the land uses along the road and its importance as a pedestrian link.

- Work with business and property owners south of Parklawn Drive through the CIP to determine an appropriate route and character for a sidewalk.
- Ensure that redevelopment does not preclude pedestrian connection across the CSX tracks.
- Redevelopment along Washington Avenue in the block between Parklawn Drive and Fishers Lane should use buildings to define Washington Street and provide sidewalks and significant streetscaping.

BUILDINGS AND THE PUBLIC REALM

An area's success relies on the interlocking functions and characters of buildings, spaces, and systems that support people and their activities. Buildings in Twinbrook will make significant contributions to re-shaping the area's character and while they will need to meet the County's evolving green building standards, they should also offer high quality design that contributes to defined open spaces, streetscapes, and walkability.

The TOMX Zones allow the type of mixed uses to serve advanced technology businesses that need flexibility as their work evolves. The zones also seek to create a supportive public realm as guided by master plan recommendations.

The public realm is shaped by streets, sidewalks, and public spaces, but is also formed by the relationship between public and private buildings and spaces. While each of the Plan's districts have a different character and activities, their public realms should be shaped to suit those uses and reinforce their character.

Metro Core

This area, closest to Metro should have a character similar to the adjacent Twinbrook Station project. The mix of uses should generate a market street character, with tightly spaced buildings.

- Buildings heights ranging from four and five stories to ten and twelve stories
- Building facades, entrances, and windows oriented to the street
- Distinctions between residential and commercial buildings
- Support the activities of the street, with seating, shelter, and retail services integral to building design

Technology Employment Area

This area of technology employment, streetfront, convenience retail, and housing will be built to be street oriented, but with a campus like feel on larger lots with public open spaces.

- Varied building heights
- Building facades and entrances oriented to the street
- Distinctions between residential and commercial buildings

Light Industrial Area

Unlike the two other districts, this area will undergo minimal redevelopment and lot assembly and will have fewer opportunities for significant reshaping.

- Buildings should be oriented to the street and make connections to sidewalks
- Place parking to side or rear
- Maximize lot coverage

PUBLIC AMENITIES AND FACILITIES

The TOMX Zones require a significant component of public amenities, recognizing that, along with land uses, they contribute to defining the character of a place. This Plan proposes specific, large public open spaces that will anchor a network of smaller spaces, both created through redevelopment. They are designed to serve both residents and employees with places for the informal activities of public life.

The zone's requirement for 20 percent public use space is significant, and those spaces should be high quality environments that will serve well into the future, that will provide an attractive setting for technology businesses, and that will serve as meeting points between the varied land uses allowed in the zone.

At the same time, the Plan's recommendation to maintain the existing light industrial uses under an amended I-4 Zone recognizes a business area in which improvements to the public realm are less important.

- Public spaces should be intensively designed to offer varied recreation and open space options on small sites.
- Public spaces should function to support and enhance the natural environment with design features that also perform environmental functions, such tree coverage and pervious surfaces.
- Allow public space requirements on separate sites to be combined to create larger spaces or design with more function and visual impact than individual sites.

1. Fishers Lane Streetscaping and Intersection Improvements

Though this intersection is marked with special paving, redevelopment will increase the number of people crossing to and from Metro. Pedestrian safety issues that can be addressed in design and operations should be examined. Improvements here should also be coordinated with Parklawn Drive's intersection with Twinbrook Parkway and should contribute to creating the east side of Twinbrook Parkway between the two streets as a pedestrian environment.

2. Sidewalk and Trail Connection to Rock Creek Park

This opportunity for a bike and pedestrian connection to a local and regional park should not be overlooked. It will be necessary to work with property owners to create a short easement between the Plan area and the park.

3. Parklawn Drive-Fishers Lane Pedestrian Connections

These routes already exist as a driveway and a somewhat hidden stairway. Both should be made more visible and accessible to create a comprehensive pedestrian route through the area that eventually reaches Metro.

4. Parklawn Drive Streetscaping and Intersection Improvements

As with Fishers Lane, the sidewalks, street character, and pedestrian crossing should be upgraded for safety and appearance through redevelopment.

5. Washington Avenue Sidewalk

The street is proposed to be extended to the north as a vehicle and pedestrian connection, and anchored at the south with a pedestrian crossing of the CSX tracks that also serves the extended Kraft Drive from the east. Accordingly, a sidewalk along the street, through the Light Industrial Area will create a complete pedestrian network.

6. Frederick Avenue-Wicomico Avenue Pedestrian Link

A desire line path has already been created here to link to Metro, but it is a dangerous route, climbing up an embankment and crossing Twinbrook Parkway at mid-block. This route should be safely established beneath the Twinbrook Parkway overpass and through redevelopment of the Wicomico Avenue area.

7. Kraft Drive-Bou Avenue Pedestrian Link

Extending Kraft Drive to meet the southern end of Washington Avenue completes one link in an east-west pedestrian route through the Plan area.

8. Wilkins Avenue-Parklawn Drive Pedestrian Link

This route through private property would complete another link in an east-west pedestrian route and create a shortcut for walkers to bus stops on Parklawn Drive.

9. Parklawn Drive-Montrose Parkway Trail Connection

The Montrose Parkway will make a vehicle connection with Parklawn Drive, and designs should include a safe and separate pedestrian and bike route from existing sidewalks to the proposed trail.

10. Twinbrook Station Green

Though outside the Plan area, this green is a significant space that marks the Metro station and provides a community focus. It will be mirrored by a similar, green open space at the eastern end of Fishers Lane.

11. Fishers Lane Park

This is one of the large public open spaces proposed in the Plan and while at the intersection of proposed streets and driveways, should be large, visible, and predominantly green.

12. Parklawn Drive Park

This park is the second large public open space proposed in the Plan and will be created at some point along the length of Parklawn Drive. It should coordinate with the pedestrian space at Washington Avenue and should be visible and predominantly green.

13. Higgins Cemetery

This historic site is privately owned and maintained, but is a significant open space in this largely developed Plan area. Any redevelopment of sites and paths adjacent to it should respect the cemetery's design and boundaries and complement them whenever possible.

Public Amenities and Facilities

