



Bethesda Purple Line Station Minor Master Plan Amendment, Staff Draft



Elza Hisel-McCoy, Assoc. AIA, LEED-AP, Planner Coordinator, Area 1, elza.hisel-mccoy@montgomeryplanning.org, 301.495.2115



Valdis Lazdins, Chief, Special Projects, valdis.lazdins@montgomeryplanning.org, 301.495.4506

Tom Autrey, Supervisor, Transportation, Functional Planning & Policy, 301.495.4533

David Anspacher, Planner Coordinator, Transportation, Functional Planning & Policy, 301.495.2191

Chuck Kines, Park and Trail Planner Coordinator, Parks Department, 301.495.2184

Parag Agrawal, Senior Planner, Area 1, 301.495.4621

Completed: 9.20.13

Description

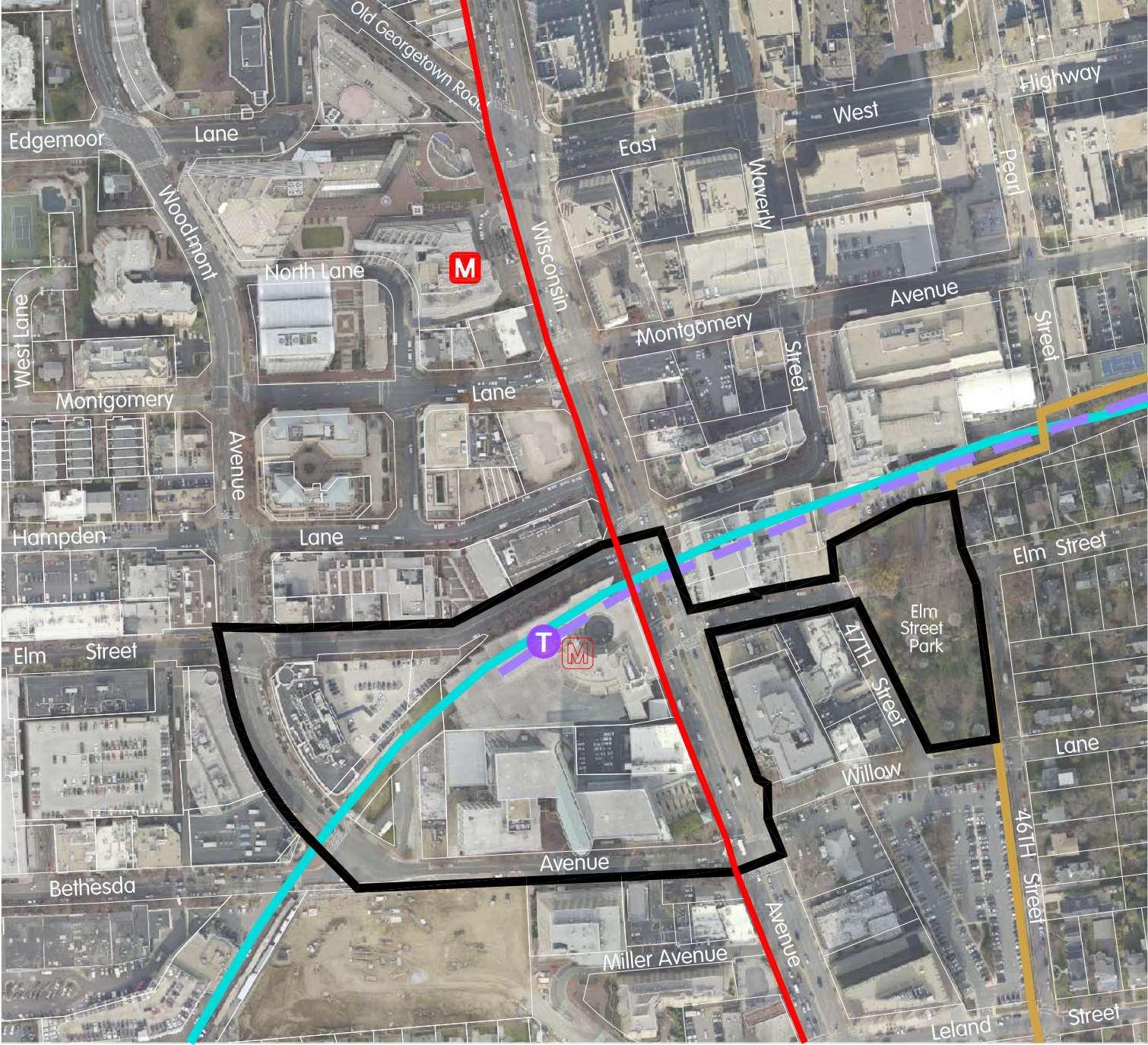
Present Staff Draft Minor Master Plan Amendment.

Staff recommendation: approve Staff Draft as Public Hearing Draft and set Public Hearing for November 7, 2013.

Summary

This memorandum presents the Staff Draft Bethesda Purple Line Station Minor Master Plan Amendment, including recommendations for land use and zoning, and transportation.

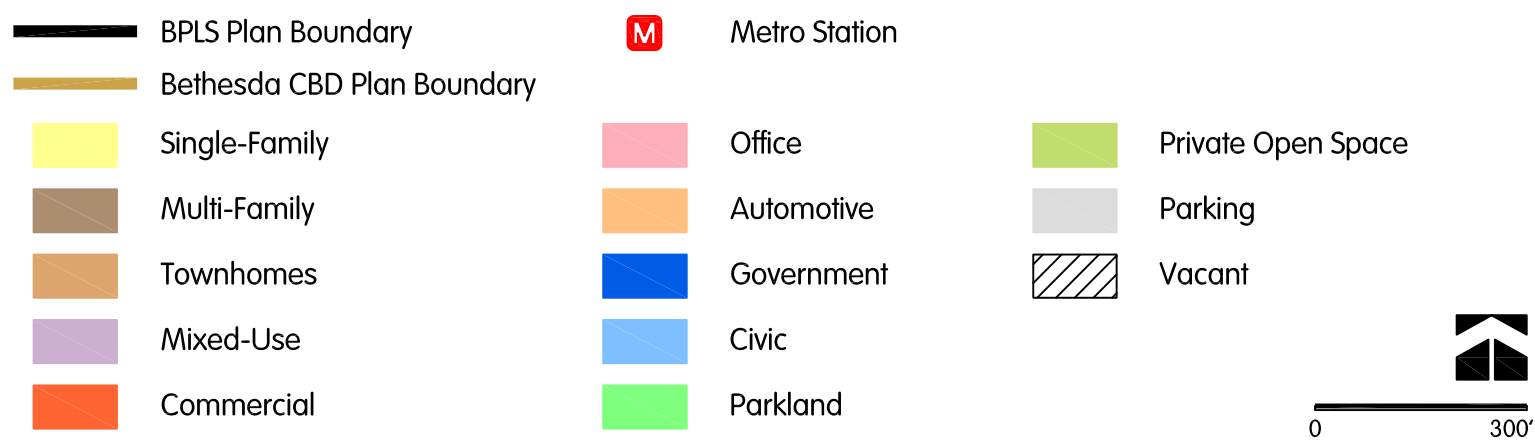
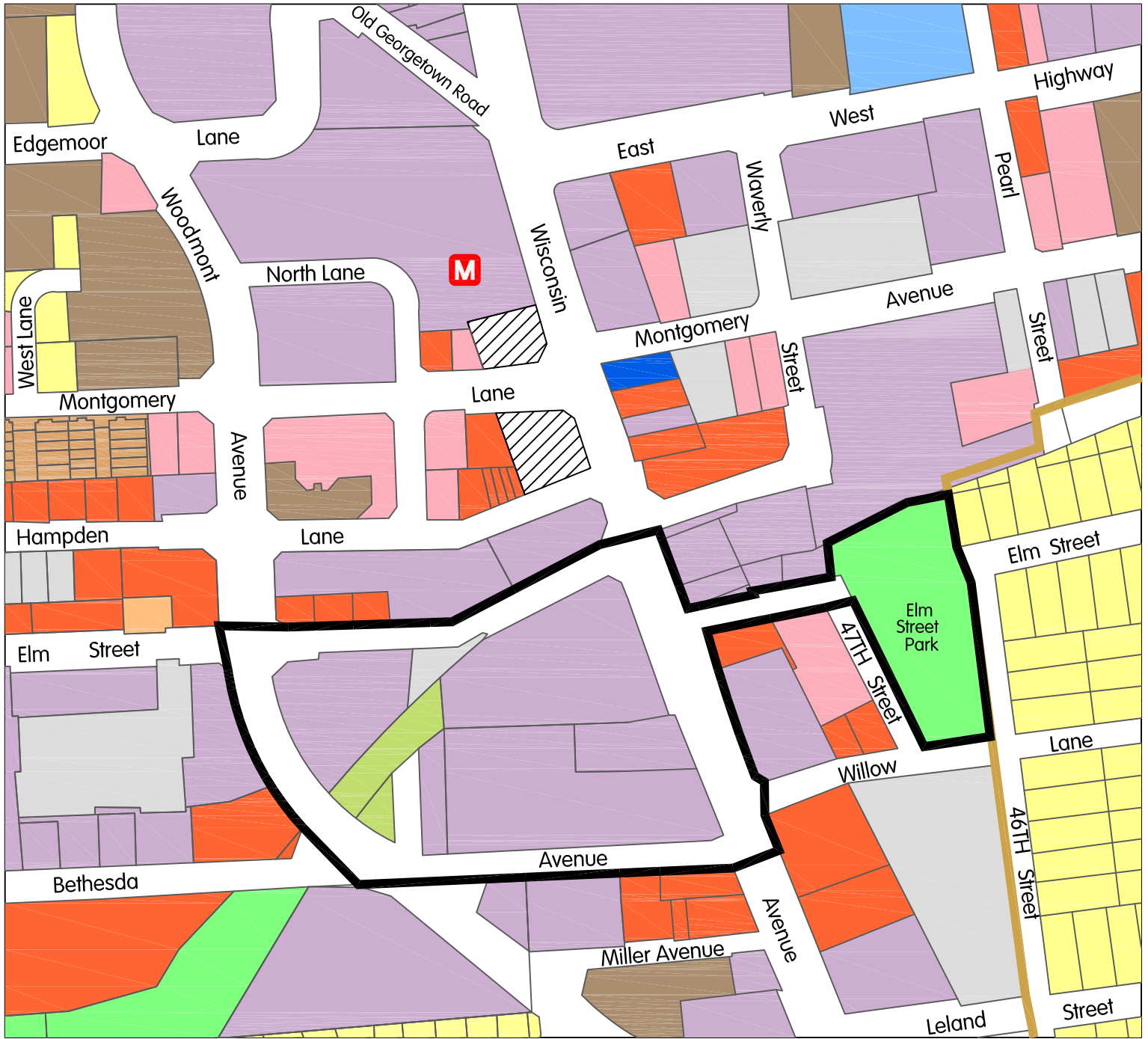
Existing Conditions



- BPLS Plan Boundary
- Bethesda CBD Plan Boundary
- Capital Crescent Trail
- Purple Line
- Red Line
- M Metro Station
- M Proposed Metro Station South Entrance
- T Planned Purple Line Station



Existing Land Use



Introduction

A Vision of Transit Future

With an improved Purple Line Station, the south entrance to the Bethesda Red Line Metro Station, and the Capital Crescent Trail literally under one roof, the Minor Master Plan Amendment Area has the potential to become the new “best address” of the Bethesda Central Business District (CBD). This Area, chiefly the block bound by Wisconsin Avenue, Elm Street, Woodmont Avenue, and Bethesda Avenue, is the eastern gateway to the popular and successful Bethesda Row, the primary center of activity in the CBD, and a key component of the Wisconsin Avenue commercial corridor. The addition of this multi-modal transit hub will enhance the level of activation, access, and amenity for residents, businesses, and visitors.

This Minor Master Plan Amendment envisions an urban multi-modal transit station that is integrated into the life of Bethesda. Thousands of transit riders will use the station to come to Bethesda to live, work, and play and, from Bethesda, county residents will access the many rich benefits of the region. Hundreds of cyclists will use the Capital Crescent Trail (CCT) to get to the many centers and neighborhoods between Silver Spring and Georgetown.

Every day this station will bring thousands of people to Wisconsin Avenue, Elm Street, Woodmont Avenue, and Bethesda Avenue. This foot and bicycle traffic will make the station location the pre-eminent address in the CBD, anchored by a signature building at this “100 percent corner,” and a source of renewed growth and activity for the surrounding business, lifestyle, and entertainment district.

The Plan vision for the corner of Wisconsin Avenue and Elm Street showcases a generous and welcoming plaza at the ground floor of a signature building, where commuters have easy direct access to the Purple Line station and, via high-speed elevators, to the Red Line Metro station below. The spacious Purple Line station would be welcoming and easy to navigate, with a large open platform and plenty of room for the projected ten thousand plus daily riders. Getting to the Red Line station would be efficient and streamlined. One level below the street, cyclists will be able to rapidly move through the CBD to get to work, play, or home, in an environment free of automobiles.

From Woodmont Avenue, pedestrians would walk past the many shops, cafes, and restaurants, into the landscaped Woodmont Plaza and directly into the Purple Line station. Cyclists would have a direct route through the plaza into a short tunnel that comes out just the other side of Wisconsin Avenue, with an easy ride through Elm Street Park and on towards Rock Creek Park and Silver Spring.

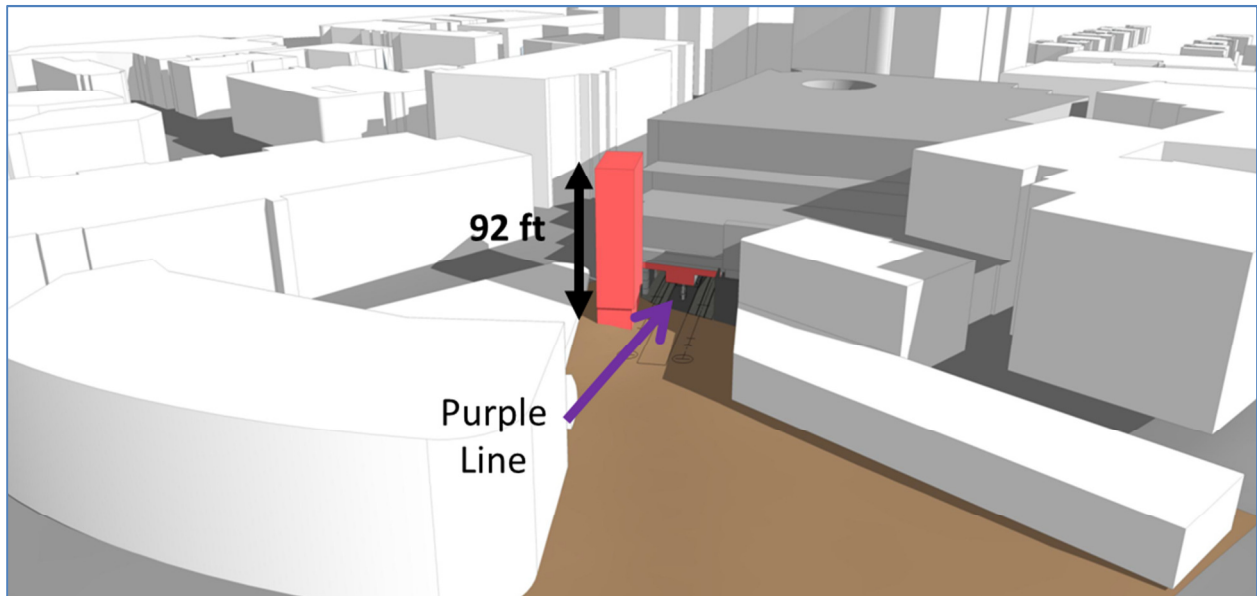
Businesses around the station would benefit from greatly increased pedestrian traffic, with more eyes on shop windows. Offices, hotels, and apartments around the station block will command premiums for their proximity to the multi-modal station, the CCT, and the Bethesda Row entertainment district.

This is a vision of a new multi-modal transit station that provides room for Bethesda to grow into, creating new opportunities for businesses, residents, and visitors.

Station Default

The Maryland Transit Administration's (MTA) default designs for the Purple Line station will not be able to fully implement this exciting vision because they are constrained by the limits of the existing conditions – the configuration of the current tunnel and the Apex building support structures. The Purple Line tracks will be located within the existing tunnel – now used as a bicycle path – that runs east from Woodmont Plaza, under the Apex building, Wisconsin Avenue, and the Air Rights building. The physical limitations of this tunnel will negatively impact the quality of service provided by the station:

- the tunnel forces a narrower platform that constrains the number of people that can fit on it at one time;
- the platform is interrupted by numerous structural columns for the Apex building above, impeding circulation for riders;
- the tunnel is curved, necessitating a curved station platform that creates gaps between the train cars and the platform;
- the narrowness of the existing tunnel requires the station platform to be located closer to Woodmont Plaza, resulting in “over-run” tracks extending 100 feet into the plaza, near the existing movie theatre and eateries;
- a free-standing metal ventilation tower – about the size of a 90' high townhouse– must be located in Woodmont Plaza.



Aerial View of Vent Tower Impact

EXISTING APEX BUILDING

Wisconsin Avenue Level Plan

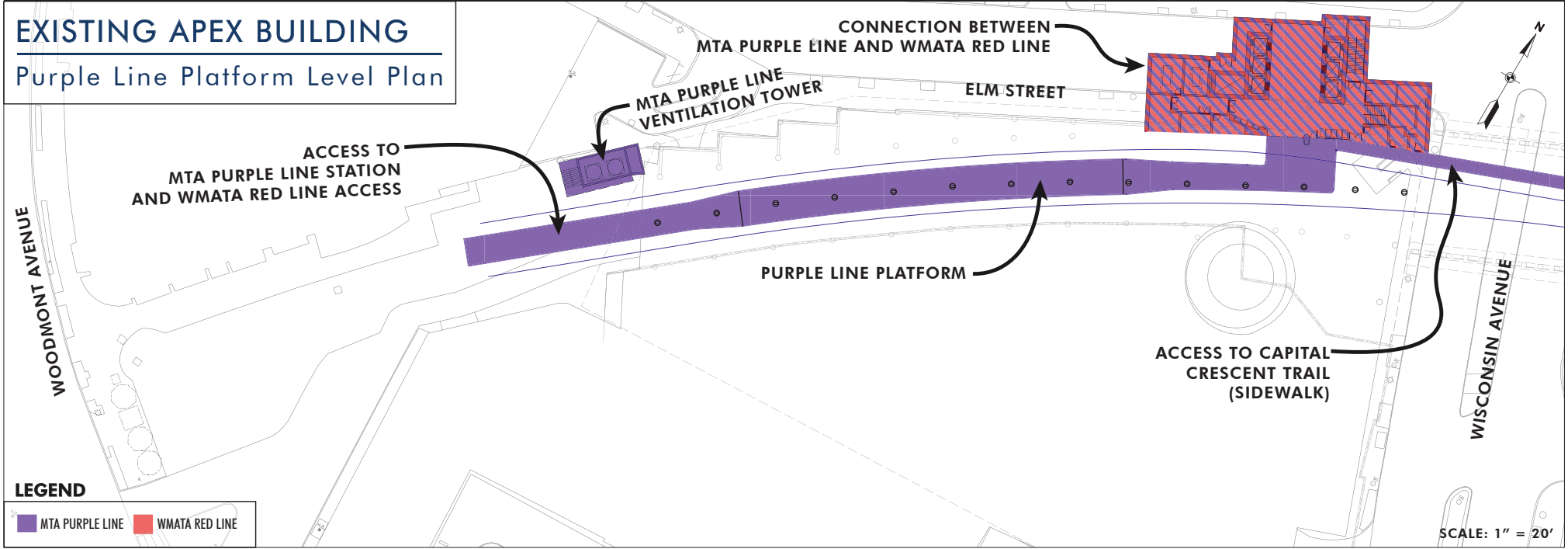


LEGEND

■ MTA PURPLE LINE ■ WMATA RED LINE

EXISTING APEX BUILDING

Purple Line Platform Level Plan



LEGEND

■ MTA PURPLE LINE ■ WMATA RED LINE

With only a minimum amount of space in the existing tunnel for the Purple Line station, the new south entrance to the Red Line Metro station must be located underneath Elm Street, within the public right-of-way. This location also negatively impacts the quality of service of the station:

- commuters will have limited direct access from the street to the Metro station, and may have to travel one level down for additional elevators;
- stair and elevator access from street level to the Metro elevators below will be located in a sidewalk bump-out on Elm Street, creating potential bottle-necks that significantly disrupt the pedestrian use of Elm Street;
- riders transferring between the Red Line and Purple Line will have to cross the train tracks at track level, creating potential conflicts between trains and riders.



Rendering of Elm Street Elevators

Finally, with no room in the existing tunnel for the CCT, cyclists will be forced to use a surface route along busy Bethesda Avenue and across the heavily trafficked Wisconsin Avenue.

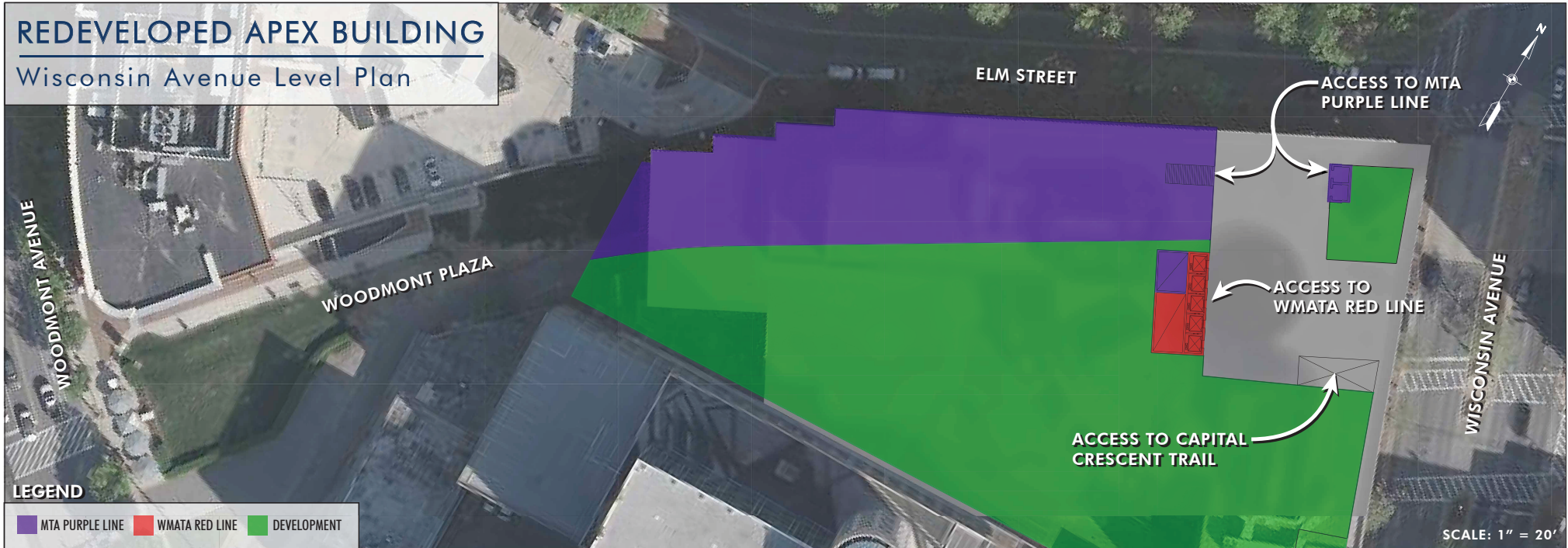
This default design provides adequate service while minimizing costs, but would be challenged to accommodate the future growth that would be expected of a successful and attractive transit center in downtown Bethesda.

(Re)Developing a Better Alternative

In coordination with the Planning and Parks Departments and regional, state, and local transportation agencies, MTA has developed an alternative station design that better realizes the Plan vision. But the vision and its many public benefits will not be realized unless the station site, the location of the existing Apex building, is redeveloped in coordination with the construction of the Purple Line, expected to begin by the end of 2015.

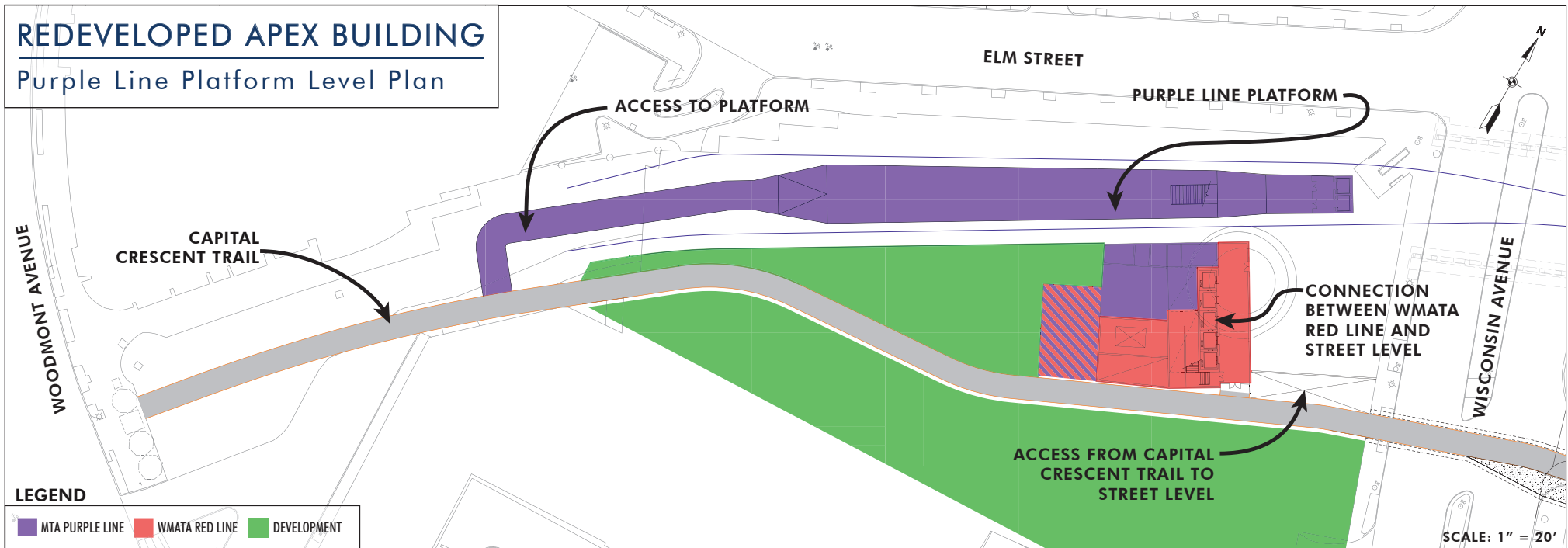
REDEVELOPED APEX BUILDING

Wisconsin Avenue Level Plan



REDEVELOPED APEX BUILDING

Purple Line Platform Level Plan



The alternative design significantly improves the quality of the service provided by the station:

- the Purple Line platform would be larger and without interrupting columns would provide more room for riders and trains;
- the Purple Line station platform would be straight, eliminating gaps between the train and the platform;
- the Red Line Metro south entrance would be located within the new building with access to high-speed elevators directly from the street;
- CCT users would have a choice to cross Wisconsin Avenue either in a new tunnel or at street level;
- the 90' ventilation tower would be incorporated into a new building and the over-run tracks can be significantly shortened, leaving more of Woodmont Plaza available for public enjoyment;
- the station can accommodate space for full-service bike storage (i.e., a "bike station").

This alternative design moves well beyond an adequate solution to provide a high quality transit experience that will be attractive, functional, and serve Bethesda the now and future.

Realizing the Vision

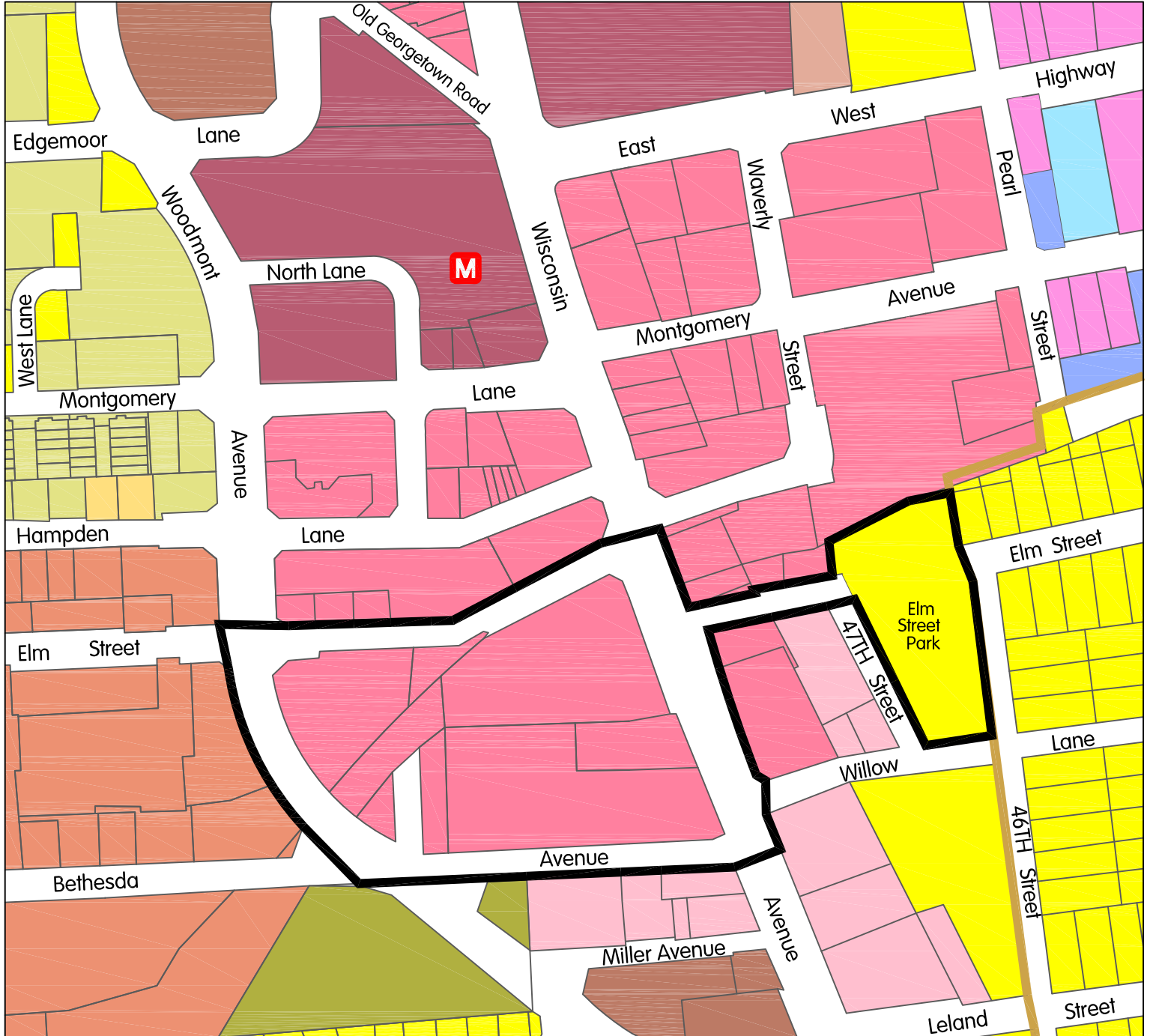
Land Use and Zoning

To encourage redevelopment of the Apex Building to allow for the realization of a superior multi-modal transit station and a new tunnel for the CCT, the Plan recommends significant additional density on the Apex building site. The Plan recommends rezoning the Apex site from CBD-2 (FAR 5.0, max. height 143') to CR 8.0, C 8.0, R 8.0, H 200. This added density and building height are consistent with those recommended in the existing Bethesda CBD Sector Plan for the area around the north entrance of the Red Line Metro Station, under the CBD-3 zone.

The CR zone provides both a standard and an optional method of development. The standard method limits overall density to a 0.5 FAR, while the optional method creates incentives to provide public benefits, thereby earning additional density. Public benefits provided under the optional method are drawn from seven categories outlined in the Zoning Ordinance. This Plan identifies the transit station "major public facility" as the top priority for the Plan area. This does not preclude consideration of other benefits, as listed in the CR Zone, to achieve the maximum permitted FAR. All public benefits requested by the developer will be analyzed to make sure they are the most suitable for the Plan area, that they are consistent with the Plan's vision, and that they satisfy the changing needs of the area over time.

Given the configuration of the Apex site and its relationship to the transit station and existing development on the block, may limit the amount of density that can be accommodated on the site. The increase in density is thus further intended to encourage joint redevelopment with adjoining properties on the block. Under a joint redevelopment scenario, allowable density form multiple sites within one redevelopment project can be combined and redistributed among the sites, as long as the height limitations of the zones are not exceeded. Coordinated redevelopment that looks at the Plan Area as a whole will take maximum advantage of these

Existing Zoning



 BPLS Plan Boundary

 Metro Station

 Bethesda CBD Plan Boundary

 CBD-1


 C-2

 TS-M

 CBD-2

 C-O

 TS-R


 CBD-3

 C-T

 O-M

 CBD-R1

 R-10

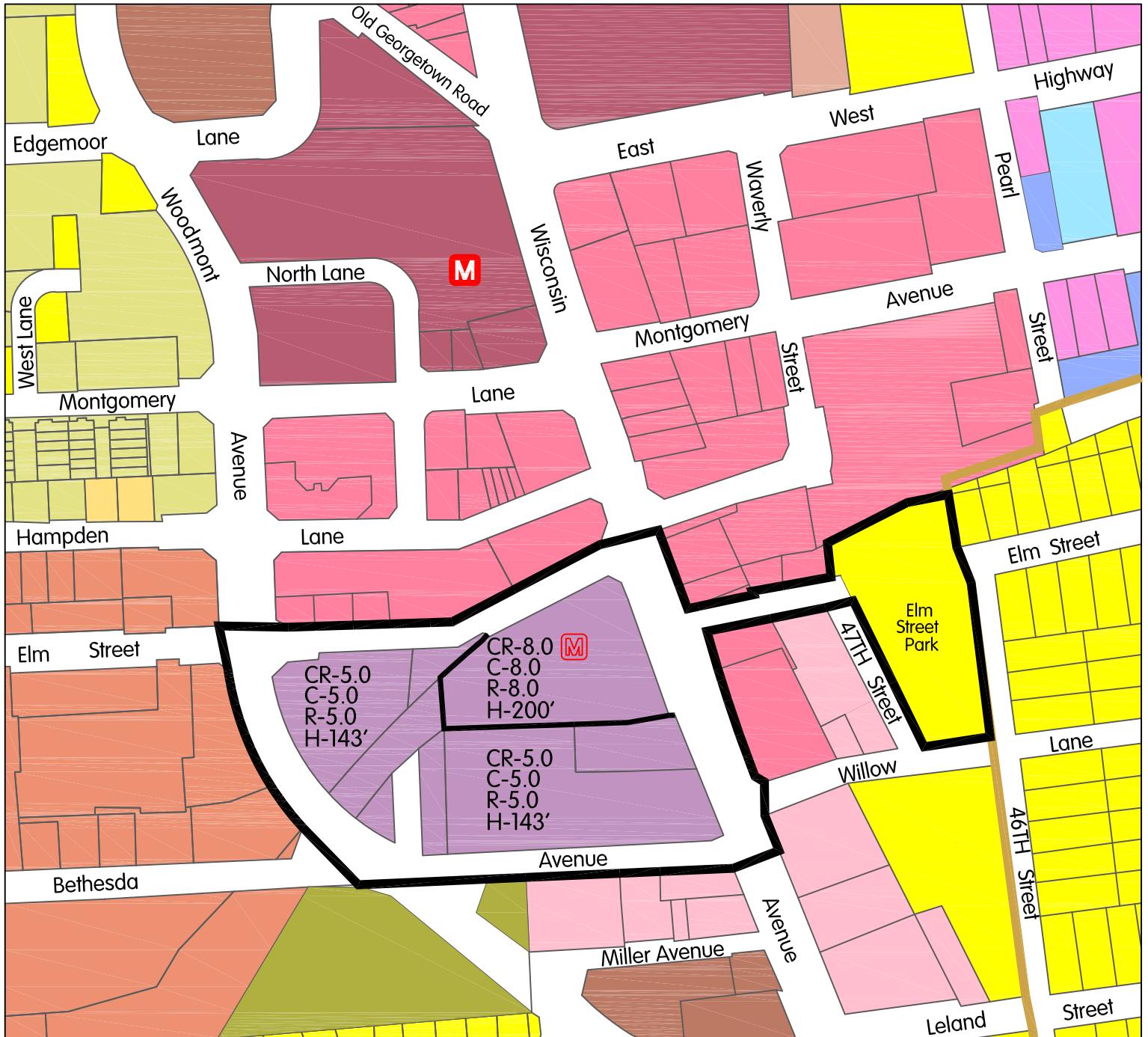
 CBD-R2



















 R-60

0 300'



Proposed Zoning



- | | | | | | |
|--|----------------------------|---|---------------------------------------|---|------|
|  | BPLS Plan Boundary |  | Metro Station | | |
|  | Bethesda CBD Plan Boundary |  | Proposed Metro Station South Entrance | | |
|  | CBD-1 |  | C-2 |  | TS-M |
|  | CBD-2 |  | C-O |  | TS-R |
|  | CBD-3 |  | C-T |  | O-M |
|  | CBD-R1 |  | R-10 |  | CR |
|  | CBD-R2 |  | R-60 | | |



unique circumstances, resulting in a better and more efficient design, with more inviting open space connections, a better mix of activating uses, and will be more economical to build. To facilitate this joint redevelopment, the Plan recommends rezoning the remaining properties on the block from CBD-2 to CR 5.0, C 5.0, R 5.0, H143. For these properties, the new zone does not provide any additional density or building height, but merely updates zoning to facilitate development review.

Beyond Land Use and Zoning: Visionary Partners

The Planning Department hired Bolan Smart Associates to review the public and private costs of realizing the alternative station designs within the 2015 timeframe set by MTA. Their analysis, which is included in the appendix, shows that the increased economic value of additional density on the Apex site is largely offset by the significant cost associated both with relocating the existing tenants, including the building owner and an established, though aging, movie theatre, and the additional private costs related to construction of the Purple Line station. Although additional zoning may incentivize redevelopment, additional measures, beyond those available to the Planning Board, are necessary to help guarantee redevelopment on MTA's timetable.

Planning staff has worked closely with the Montgomery County Department of Economic Development (DED) and others to explore additional tools to incentivize redevelopment. These include financing based on significant anticipated increases in property taxes, as well as participation of the public-private partnership ("P3") that MTA is exploring for the construction and operation of the Purple Line. This Plan supports those efforts.

Making the Connections: Transit and Bikeway Recommendations

Transit Station

The Plan makes station area recommendations under two scenarios, depending on whether the Apex Building is demolished before or after construction of the Purple Line.

The Apex building is demolished before Purple Line construction

If the Apex Building is demolished before the Purple Line is constructed, for MTA's concept design the Plan recommends the following:

- the property owner provide easements on the Purple Line platform level and Wisconsin Avenue level to accommodate the station;
- station platforms located under a future building on the Apex site;
- station and tracks on a straight alignment;
- stairs providing pedestrian and bicycle connections between Wisconsin Avenue and the Purple Line platform ;
- high-speed elevators for a new south entrance to the Bethesda Red Line Metro station that provide a pedestrian and bicycle connection to Wisconsin Avenue and the Purple Line platform;

- a travel time study and a pedestrian level of service study for Red Line passengers to determine whether the elevators stop at Wisconsin Avenue and / or the Purple Line level;
- a walkway providing a pedestrian and bicycle connection to Woodmont Avenue via Woodmont Plaza;
- over-run tracks extending west from the station platform into the Woodmont Plaza for not more than 30 feet from the tunnel's western end;
- incorporating ventilation equipment into the new building;
- a minimum 10,000 sf. space reserved for a full-service bicycle storage facility located adjacent to the CCT tunnel route, the Purple Line platform, and the Red Line entrance. At a minimum, this facility should offer a range of bicycle parking options (e.g., short v. long term; minimum security v. higher security), shower and changing facilities, and bicycle repair.

The Apex building is demolished after Purple Line construction

If the Apex Building is demolished after the Purple Line is constructed, for MTA's concept design the Plan recommends the following:

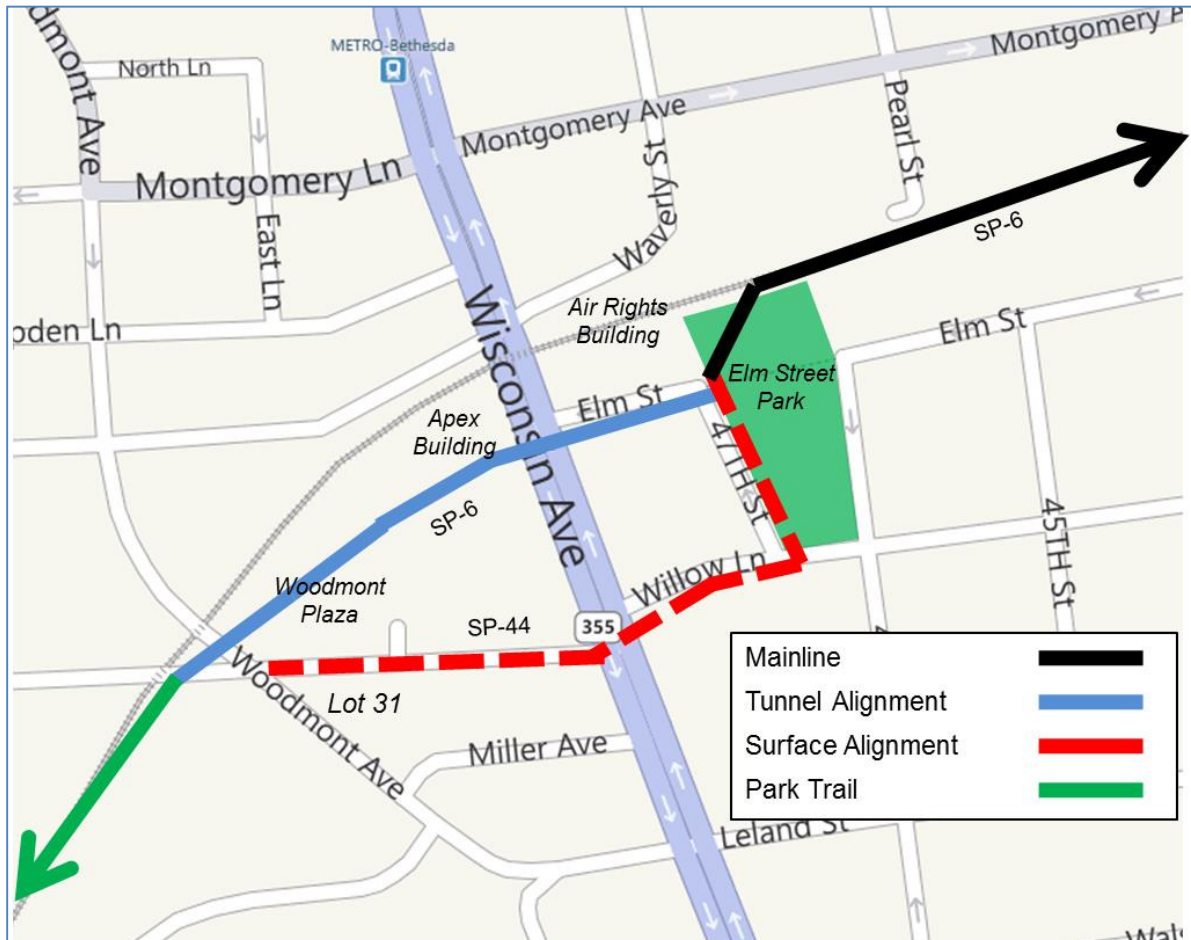
- the property owner provide easements on the Purple Line platform level and Wisconsin Avenue level to accommodate the station;
- station platforms under the Apex Building;
- station and tracks on a curved alignment;
- stairs for pedestrian connection between Elm Street and the Purple Line platform;
- high-speed elevators for a new south entrance to the Bethesda Red Line Metro station that provide a pedestrian and bicycle connection between Elm Street, the Purple Line platform, and the Red Line mezzanine;
- a walkway providing a pedestrian and bicycle connection to Woodmont Avenue via Woodmont Plaza ;
- a pedestrian connection in the existing tunnel east to the CCT via a 5-7'-wide sidewalk on the north side of the tracks;
- over-run tracks extending west from the station platform into Woodmont Plaza for not more than 100 feet from the tunnel's western end;
- ventilation equipment to be located into a new building or in Woodmont Plaza;
- a minimum 10,000 sf. space reserved for a full-service bicycle storage facility located adjacent to the CCT tunnel route, the Purple Line platform, and the Red Line entrance. At a minimum, this facility should offer a range of bicycle parking options (e.g., short v. long term; minimum security v. higher security), shower and changing facilities, and bicycle repair.

Capital Crescent Trail

The CCT is a master-planned shared use path that will connect the Silver Spring Transit Center to Bethesda. Between Elm Street Park and Woodmont Avenue the trail branches into a tunnel under Wisconsin Avenue and a surface route that crosses Wisconsin Avenue at grade. The two branches converge at the intersection of Woodmont Avenue and Bethesda Avenue, and the trail continues to Georgetown via an existing, hard-surface park trail. In 2012, the County Council decided not to proceed with the tunnel as then envisioned, because of cost and liability

issues associated with having the trail and the Purple Line in the same tunnel under the Apex Building. This meant that all trail users would use the Surface Route of the Capital Crescent Trail.

This Plan segments the CCT into the Mainline, Tunnel Route, and Surface Route. Each is described below.



Capital Crescent Trail Mainline

In the Plan area, the CCT mainline (SP-6) runs from the northern edge of Elm Street Park (just south of the Purple Line) to the intersection of Elm Street and 47th Street, where it branches into the Tunnel Route and the Surface Route. The Plan recommends as key features of the CCT mainline within the Plan area:

- a smooth transition into Elm Street Park, avoiding sharp turns;
- a trail 11' wide with 2' shoulders through the northern portion of Elm Street Park, subject to grading analysis;
- an identifiable junction with the Tunnel Route and Surface Route in Elm Street Park at the corner of Elm Street and 47th Street;

- stormwater management and grading impacts associated with the CCT and/or Purple Line improvements within Elm Street Park must be included as part of the overall Purple Line stormwater management plan and should be designed to not reduce the useable area of the park available for existing and planned recreational facilities.

Capital Crescent Trail Tunnel Route

The CCT Tunnel Route (SP-6) will run from the intersection of Elm Street and 47th Street to Woodmont Avenue in a new tunnel beneath Wisconsin Avenue. The Plan recommends as key features of the Tunnel Route:

- a marked at-grade crossing of 47th Street that prioritizes trail users, with physical identifiers (such as a raised crosswalk) conveying a transition zone;
- a minimum 15'-wide trail on the south side of Elm Street between 47th Street and Wisconsin Avenue that ADA-compliant transitions from street level to tunnel level;
- a new tunnel (minimum 10' vertical clearance and 16' width) under Wisconsin Avenue south of the Purple Line station ;
- a trail between Wisconsin Avenue and Woodmont Plaza (minimum 14' vertical clearance and 16' width) that limits conflicts with non-trail users and is visible from other areas of the station by non-trail users.

The Tunnel Route should meet American with Disability Act (ADA) requirements and not exceed a 5 percent slope. However, the current tunnel concept is constrained by a driveway serving 4610 Elm Street, which requires an 8 percent tunnel grade. This slope exceeds ADA requirements and requires an elevator at the southeast corner of Wisconsin Avenue and Elm Street. While the combination of the 8 percent slope and the elevator are fully ADA compliant, it would be far better if the slopes were reduced to 5 percent. This could be accomplished by either closing or relocating the 4610 Elm Street driveway, which the County should explore with the property owner.

Capital Crescent Trail Surface Route

The CCT Surface Route (SP-44) will run from the intersection of Elm Street and 47th Street to Woodmont Avenue, crossing Wisconsin Avenue at grade. The Plan recommends as key features of the Surface Route:

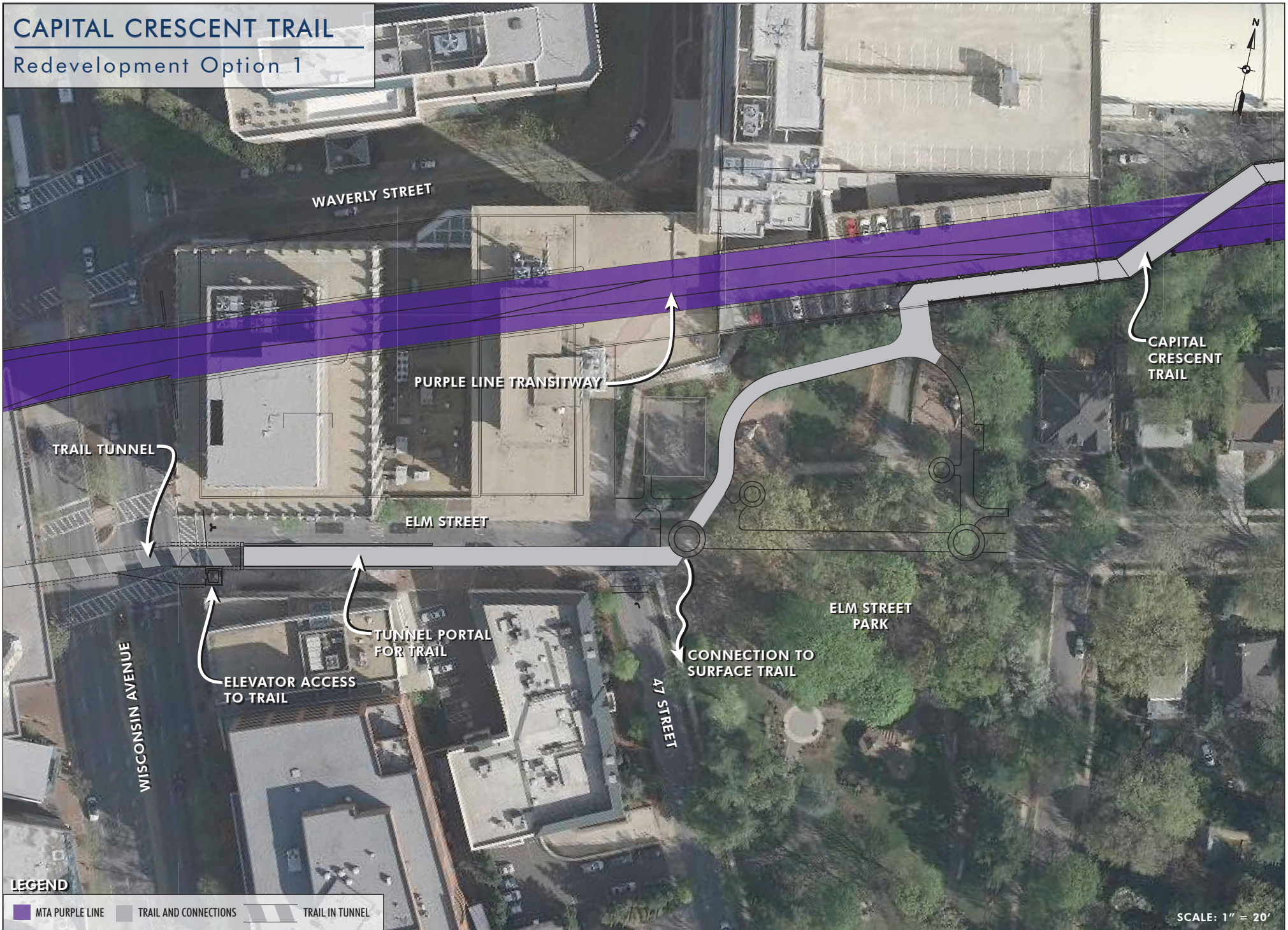
- a trail along the west side of Elm Street Park that consists of an 11' shared-use path separated from 47th Street by a 5' buffer, to be located within the 47th Street right-of-way and/or Elm Street Park;
- a trail along the south side of Willow Lane that includes an 11'-wide two-way cycle track¹ for bicyclists and a sidewalk for pedestrians;

¹ Cycle tracks include the following characteristics:

- maintains horizontal separation with a buffer between the sidewalk and cycle track and a minimum 3 foot buffer between the cycle track and street
- maintains vertical separation between cycle track, roadway, and pedestrian space to support intuitive use elevate cycle track above the roadway but below the sidewalk
- maintains visual continuity and be differentiated from the pedestrian space by utilizing an asphalt surface along with a unique paver or concrete treatment or by utilizing a green marking

CAPITAL CRESCENT TRAIL

Redevelopment Option 1



- a safer and more convenient protected crossing at the intersection of Wisconsin Avenue, Willow Lane, and Bethesda Avenue;
- a trail along the north side of Bethesda Avenue that includes an 11'-wide two-way cycle track for bicyclists and a minimum 10'-wide sidewalk for pedestrians;
- consolidated driveways on the north side of Bethesda Avenue to minimize conflicts between trail users and vehicles on the trail;
- sufficient queuing space for trails users and non-trail users at all intersections.

Improving the User Experience

The branding of the tunnel and surface routes for the CCT should be consistent with the mainline trail between Bethesda and Silver Spring, including lighting, signing, surface treatments, furniture, and pavement markings. As a segment of the trail where usage is expected to be the highest, continuous lighting on the trail is a priority. Lighting spillover into adjacent homes should be minimized by installing fixtures that prevent the light from rising above the level of the fixture and from extending beyond the desired area.

Issues to be addressed in Future Plans

Bethesda CBD Sector Plan Update

- CCT crossing of Woodmont Avenue and Bethesda Avenue intersection;
- transfers between the Purple Line and bus routes that currently stop only at the bus loop at the current Bethesda Metro station.

Outreach

Within the limited timeframe afforded by MTA's schedule, staff has sought to engage the public in the development of the staff draft recommendations. Staff maintains a dedicated Plan website (www.montgomeryplanning.org/bethesdapurpleline) updated with new information, including MTA's latest plans, and an opportunity to leave comments. Staff regularly updates over 150 interested parties via e-mail and more on twitter (@bethesdaPL, #bethesdapurpleline). The Plan has also received a fair amount of media coverage.

In early September, staff held a series of well-publicized Open House meetings at the Bethesda Chevy Chase Regional Services Center. Attended by 50-75 people, the meetings provided face-to-face opportunities for the public, media, and elected officials to see the new design alternatives, ask questions, and share thoughts.

The comments received from our outreach efforts indicate strong support for both the improved Purple Line station design, including the larger platform and the potential for long-term bike storage, and the new CCT tunnel. Safety and security were also of particular concern for the Purple Line Station, the CCT tunnel, and the CCT surface route, specifically:

- the length and curve of the tunnel;
- the slope of the tunnel as it comes back to street level;
- the tunnel will be safer than the surface route;
- the surface route should be designed for safety and marked clearly;
- lighting and security within the tunnel.

Other comments indicated the interest in an upgraded movie theatre, increased building height on this site and the CBD in general, pedestrian access to the Purple Line Station from the east, and consideration for future upgrade to heavy rail.

Analysis of the costs of redevelopment and of the CCT tunnel options was not complete by the time of the Open Houses and was therefore not presented. It is included in the appendices to this Plan.

Appendices

- I. Planning Framework
- II. Recent Development Approvals in the Plan Area
- III. Transportation
- IV. Elm Street Park
- V. MTA drawings
- VI. Bolan Smart Associates report
- VII. MTA memo on Purple Line Cost Implications for Apex Building