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Final DRAFT

August 2021

Memorandum

To: Supervisor Alcorn and the Fairfax County Board of Supervisors (Board)

From: The Wiehle Avenue Pedestrian Crossing Study Group (Study Group)

Re: Results of the Study Group Findings

Background

The purpose of the Study Group

The Study Group was established in December 2019 in accordance with a proffer made by TF Cornerstone, the applicant of the Campus Commons development. (See the specific proffer language in Appendix 1). The applicant proposed an at-grade pedestrian crossing and three additional bridge alternatives. The Study Group was tasked to review the applicant's options and make recommendations for the proposed pedestrian crossing of Wiehle Avenue at the Dulles Toll Road eastbound access ramps on the south side of the Dulles Toll Road. If none of the bridge alternatives are chosen or the Study Group could not come to a recommendation by Oct 2021, the applicant agreed to contribute a monetary amount of \$1,650,000 to be used for any other alternative. The Study Group was also able to consider and recommend other crossing alternatives.

The participants in the Study Group

The Study Group held its first meeting in February 2020 and held 16 meetings as of the date of this document. The Study Group was made up of many interested parties including Reston residents, near-by Homeowner Associations, Reston P&Z Committee, RCA, FCDOT, VDOT, representatives of the Commerce Metro Center Property, and county staff. Accordingly, the Applicant and its representatives, FCDOT, VDOT and county staff recused themselves from making a recommendation.

Information made available to the Study Group

Fairfax County hired a consultant to review the proposed bridges and crosswalks and to provide preliminary findings regarding constructability and financial analysis of the proposed bridges and crosswalks. The consultant's information is provided in two reports given on September (background information and options) and October 2021 (Crossing times and associated costs) - Appendix 2.

Information that was not available to the Study Group

Pending funding availability, Fairfax County plans to hire a transportation consultant to conduct a more comprehensive evaluation of Wiehle Avenue from Sunrise Valley Drive to the Washington & Old Dominion (W&OD) Trail. Additionally, we were informed that Fairfax County is planning to conduct a future traffic study of the traffic patterns along Wiehle Avenue to determine whether the opening of the Phase 2 Metro will change the traffic patterns along Wiehle Avenue. Unfortunately, neither of these traffic evaluations would begin until after the Study Group's recommendation deadline.

Results of the Study Group

The goal of this Study Group was **not to vote on a singular option** but provide to the Board a general sense of the preferences from the community and other interested parties. Therefore, an overview of the Study Group's findings is provided below along with the verbatim comments from Study Group participants. Additionally, some Study Group participants provided associated exhibits to correspond with their respective comments which are included for your review.

An overview of the Study Group's findings is as follows:

1. Based on the comments below, the Study Group does not support the at-grade crosswalk across Wiehle Ave at the Dulles Toll Road as shown in the CDP/FDP on Sheet C-07. (See Appendix #5).
2. 100% (17 out of 17) of the Study Group who chose to respond below **do not** support any of the three Pedestrian Overpass Options as presented by the applicant. Additionally, according to FCDOT and FCDOT's consultants, all three of the applicant's options would likely require significant changes to comply with applicable design safety codes and VDOT regulations.
3. Approximately 71% (12 out of 17) of the Study Group who chose to respond below favor an underpass as an alternative option. Many of those in favor recognize there may be cost implications with this alternative.
4. Approximately 59% (10 out of 17) of the Study Group who chose to respond below believe an enhanced at-grade pedestrian crosswalk across Wiehle Avenue at the Dulles Toll Road Eastbound Ramps associated with a more multimodal approach and potential road diet may be an alternative for consideration.
5. 41% (7 out of 17) of the Study Group who chose to respond below added comments to support proposed improvements to the existing at-grade pedestrian crossing at Wiehle Avenue and Sunrise Valley Drive. The applicant has proffered to provide improvements at this intersection.

Additionally, many in the Study Group commented throughout this process that they would have preferred to have more information regarding the future of Wiehle Avenue prior to sending our final recommendations to the Board.

The following are individual comments provided by each Study Group participants for those who chose to provide comments.

MAURICE FLIESS (Reston resident of Harborside Cluster and member of a local Multimodal Transportation Advisory Committee) was in favor of an underpass and did not want an at-grade crosswalk at the Dulles Toll Road ramps. He also advocated adding a Sunrise Valley Drive crosswalk on the east side of the intersection with Wiehle Avenue.

Regarding the latter position, Maurice elaborated as follows:

At the May 20 meeting, a couple of people said they favor the currently planned 2-crosswalk intersection because a 4-way crosswalk exists a block away at the Sunrise Valley Drive intersection with Upper Lake Drive and the Campus Commons entrance road. But those crosswalks are of no use to pedestrians approaching southwestern Campus Commons from west of Wiehle Avenue on the recently built sidewalk on the south side of Sunrise Valley Drive. Let's say a resident of Wethersfield Cluster or upper Great Meadow Drive, or a worker at Kensington assisted living, wants to walk to a restaurant in that part of Campus Commons. Without the east-side crosswalk across Sunrise Valley, she or he would have to cross first Sunrise Valley on the west side and then Wiehle – time-consuming and inconvenient. Likewise, a worker in the proposed office building in the southwestern corner of Campus Commons would have to cross both busy streets to walk directly to the Sunrise Valley Center for a hair cut. In addition, the crosswalk on the east side of the Sunrise Valley-Wiehle intersection would link to the sidewalk on the east side of Wiehle that shows in Cornerstone's site plan for Campus Commons – and eventually to a much-needed east-side-of-Wiehle pedestrian/bike crossing of the Dulles corridor to JBG Smith's Midline development.

MICHELLE KIMMEL (Reston Resident, neighbor to Campus Commons; Reston P&Z Committee and member of Save our Sunrise)- was in favor of an underpass and does not want an at-grade crosswalk the Dulles Toll Road.

CONNIE HARTKE (Reston resident and representative of RCA)- I am no longer in favor of a grade-separated crossing only because of the problems with who owns and maintains each side of the pedestrian overpass. An underpass would be what I would prefer to use, but the cost surely means this would be too far into the future, if ever. This leaves us with improving the at-grade crossings. Color should be used to delineate pedestrian and bike routes clearly. This not only helps the pedestrians; it helps drivers who want to avoid pedestrians but can get confused in heavy traffic or bad weather conditions.

At any point where TF Cornerstones returns for a "special exception," consider increasing the amount of the proffer.

Please view the video at the following link: <https://youtu.be/ahUaUfC28lc>

I hope this will be helpful, perhaps to generate or solidify ideas as we look toward the reality of living with street-grade crossings for the foreseeable future. This webinar was presented by Dr. Ralph Buehler, professor and chair of Urban Affairs and Planning at Virginia Tech. Perhaps some of you watched this in April when the Northern Virginia Regional Commission hosted it. The beginning gives many statistics on safety, and it really educated me on the need to slow traffic in many situations. Probably all of you already know this part. Another thing that really stuck out to me and that I wanted to share with you is the need/advantage of using color to designate lanes. Fast-forwarding beyond the traffic fatality statistics, he shows examples of protected cycling lanes at about 18:42. This graphic is explained at 22:34.

MICHAEL McDERMOTT (Reston resident and Chair of the a local Multimodal Advisory Committee) - is in favor of an underpass and does not want an at-grade crosswalk at the Dulles

Toll Road ramps. He also advocated adding a Sunrise Valley Drive crosswalk on the east side of the intersection with Wiehle Avenue.

STEPHEN CERNY (Reston resident and Chair of the Hunter Mill Land Use Committee) – Steve commented, “I don’t think there is anywhere near enough foot or bike traffic between Campus Commons and the Metro station, now or in the future, to justify an investment in an underpass. In addition, people who reside on the south side of Sunrise Valley Drive (SVD) can easily cross SVD at the crosswalk on the west side of the Wiehle/SVD intersection. I do not favor an overpass either. I am neutral regarding a crosswalk across Wiehle at the ramps to coming off and entering the Dulles Toll Road. I have some doubts as to whether such a crossing can be made safe enough for pedestrians”.

TAMMI PETRINE (Reston resident, Reston 20/20 Chair, Reston Association Planning and Zoning Member, Coalition for a Planned Reston Co-Founder, Reston Master Planning Task Force Member) – **Synopsis:**

A detailed description of my comments can be found in Appendix 3 at the end of this report. A synopsis of my comments is as follows:

I support the tunnel and am against the proffered at-grade crosswalk and against any of the bridge options. In addition:

- While I favor a tunnel under Wiehle, Comstock, as owners of the parcel on the west side of Wiehle, must be involved in financing it. Until they come forward with amendments to their plan, their behavior is moot.
- I reluctantly support a redesigned on-grade crossing south of the E-bound DTR ramps because people will cross there as shortest route across street to and from Cornerstones to Comstock/Metro/destinations to the north and at this time NO east side Wiehle pedestrian bridge is available. However, NO PORK CHOP designs are allowed.
- Given current infrastructure, my best Wiehle area connectivity solution is:
 - Employ color coded lanes for both cyclists and pedestrians in the entire area of Wiehle, Sunrise and Sunset.
 - Alter Wiehle lane widths and number to provide cycle tracks on BOTH sides of Wiehle as well as WIDEN the existing west side sidewalks on bridge. Protect cyclists sharing bridge deck with vehicles by Jersey Barriers.
- To learn during course of study that NONE of Cornerstones bridge options were buildable due to code and safety concerns (line of sight, protection of median supports, inability to use VDOT or FAA land as elevator locations, etc.) was shocking. Hopefully, Cornerstone will reconsider their alternative \$1.65M proffer ‘offer’ and revise accordingly. Also, I hope this is a lesson for all parties to inspect proffers carefully so that this situation never repeats.

BRUCE WRIGHT (Reston resident and President of Fairfax Alliance for Better Bicycling) - I live within walking distance of the proposed crossing of Wiehle Ave and I walk, bike, or drive along and across that section of Wiehle daily. I support a safe at-grade crossing south of the Dulles Toll

Road. I do not support an elevated crossing. Most people will not want to climb and descend stairs or wait for an elevator to cross the street.

The fact that the study group spent over a year planning how to cross Wiehle Avenue indicates the passion residents have to ensure pedestrians and cyclists can safely navigate this area. It also indicates the challenge of transforming a road that is currently devoted mostly to moving traffic as quickly as possible into a multimodal corridor. Now is the best time to figure out how Wiehle can be transformed between Sunrise Valley Dr and Sunset Hills Rd, especially with the planned development that is happening on both sides of the road next to the Metro station.

I support the vision expressed by Rob Walker's comments and his diagram of what a future Wiehle Ave might look like; a truly multimodal street that is safe for all users.

JAY MONROE (*Reston resident and President of the Hampton Meadow Cluster (immediately south of Wiehle and Sunrise)*) - Loves the concept of a tunnel; however, does not think that it is financially reasonable for such a small impact area. Doesn't think many beyond this development would use the tunnel/bridge/crosswalk infrastructure, as residents who live south of Sunrise Valley will proceed on that sidewalk and cross on the west side of Wiehle. Doesn't like any of the bridge options. Thinks that a road/crosswalk can be made safe by traffic engineers (endorse Rob Walker's ideas).

JENNIFER JUSHCHUK (*Reston resident*) - was in favor of an underpass and did not want an at-grade crosswalk the Dulles Toll Road.

DAVE BRYANT (*Representative of Comstock, a neighboring developer*)— *Dave commented:*

1. We do not support any version of the bridge overpass options
2. We do not support a pedestrian underpass as it really won't be used as intended
3. We do support an additional at grade crossing of Wiehle Avenue, south of the Dulles Toll Road with proviso...
 - A. We support reducing the lane widths to 11' as wider lanes only encourage higher motor vehicle speeds
 - B. The EB Ramp is already no right turn on red, extend the same restriction to NB Wiehle to EB DTR
 - C. Include NB AND SB bicycle lanes
 - D. Remove all unnecessary lanes, including the 2 lanes south of the DTR ramp approaching the WB DTR turn lanes. Case in point, NB Wiehle is down to 1 lane shortly north of Isaac Newton Square
 - E. Add median to channel all vehicles into the correct NB lanes from EB DTR off ramp

In general, quit the mentality of rewarding bad driver behavior with the ability to just go faster without concern for surroundings in an urban environment

FIONNUALA QUINN - in favor of an underpass (best option) and grudgingly in favor of the at-grade crossing because she knew people would do it anyway

Sarah McCue Skelly (*Reston resident*) – An at-grade crosswalk is neither feasible nor safe for Campus Commons residents to cross multiple lanes of traffic across Wiehle Avenue to reach the

Wiehle Metro. An overpass or underpass is needed. I remain concerned for the safety of those crossing along Sunrise Valley Drive to reach the Metro – there must be a sense of urgency to create a comprehensive plan for the thousands of pedestrians who will cross all along Sunrise Valley Drive to reach the Wiehle Metro.

LORRI ZELL (Reston resident and Co-Founder of Save our Sunrise) – is in favor of an underpass and did not want an at-grade crosswalk the Dulles Toll Road. An underpass will cost the least in human lives and has the fastest crossing time compared with the other options per page 22 of the FCDOT Oct 15th presentation in Appendix 2. Safety of our neighbors will only become more of an issue when the completed building of Campus Commons adds a daily influx daily of 6,400 car trips in 24 hours. Then, when the Mid Town complex is completed, and the Comstock complex is completed this issues will only compound.

In addition, an east side, north/south crossing on Wiehle for both pedestrians and bicycles is essential to remove congestion and increase safety for our neighbors.

The lack of collaboration, thought and coordination given to this vital intersection by all interested parties means that everyone loses. Rushing to build without an integrated long-term solution for how the community will “live, work and play” is the antithesis of how Reston was created and our future families and neighbors will lose out. Thoughtful planning went into creating Reston. It is a highly sought after neighborhood integrated with a diverse community who live, work and play together and which we enjoy today. How can we provide future generations any thing less?

ROB WALKER (Reston resident and Chairman of the Reston P&Z Committee) – Prefers enhanced streetscapes, narrow traffic lanes, and a multimodal approach to slow traffic. He proposes the removal of the ex. free- flow vehicular movements and create safe at-grade crossings at both the Dulles Toll Road and at Sunrise Valley Drive as well as other crossings further north along Wiehle Ave. He does not believe any of the bridge options are a good idea and believes the tunnel is too expensive and would not help to address the future north /south pedestrian and bike traffic.

(See enclosed Appendix 4 for Rob’s example of an at-grade enhanced at-grade pedestrian crossing)

MAGGIE PARKER (Comstock, neighboring developer; Reston resident and neighbor of Campus Commons) – Supports enhanced crosswalks (with lower speed limits). Prefers enhanced streetscapes, narrow traffic lanes, and a multimodal approach to slow traffic. Remove ex. free flow vehicular movements and create safe at-grade crossings at both the Dulles Toll Road and at Sunrise Valley Drive as well as other crossings further north along Wiehle Ave. Does not believe any of the bridge options are a good idea and believes the tunnel unrealistic due to feasibility, expected cost and expected low usage. It might, in fact, encourage jaywalking by pedestrians and bicyclists who often defer to the ‘shortest route between two points’ theory. Neither overhead nor underground provide answers to north/south safe connectivity.

R. SCOTT LEARY (Reston resident) –Scott commented, “A separated grade crossing is the most preferable option. That said, pedestrian overpasses are notoriously underused and often serve

as point of at grade pedestrian activity – both at intersections and midblock. For this reason, I do not support any of the proffered above grade options.

A below-grade crossing, located proximal to the Dulles Toll Road, would be the ideal solution IF this crossing is to be part of the larger transportation network. The costs involved with this type of improvement cannot be justified if the intent is to serve only the projected residents and workers in the revitalized Campus Commons.

A well-designed at-grade crossing that allows pedestrians to cross in a single movement (no refuge island) without any vehicular conflicts is the most practical solution to this. This should be required as a matter of final approval and not be considered an applicable condition of proffer.

The Concepts and Engineer's Estimates presented as possible proffered above-grade options each far exceed the proffered amount of \$1.5 million (plus contingency). I would request that the County ask TF Cornerstone to increase the contribution amount to an amount equal to cheapest Engineer's Estimate for one of the proffered options.

To answer the proffer question – I reject the proffered bridges and prefer the contribution from TF Cornerstone. I further request that this contribution be used for improvement of the larger Wiehle Avenue corridor crossing of the Dulles Toll Road.”

DAVID TOMS (Reston Resident)

We can't put a price on someone's life. Solutions other than an underpass are impractical or dangerous, and unacceptable.

RECEIVED
Dept. of Planning & Development

OCT 15 2019

Zoning Evaluation Division

3:30 PM

**CAMPUS COMMONS
PROFFER STATEMENT
RZ/FDP 2017-HM-018
PCA 79-C-023**

**May 24, 2018
Revised October 9, 2019**

Pursuant to Section 15.2-2303 (A) of the Code of Virginia (1950, as amended) and Sect. 18-204 of the Zoning Ordinance of Fairfax County (1978, as amended) (the “Zoning Ordinance”), the property owner and applicant, for itself and its successors and assigns (the “Applicant”), in this rezoning application from the I-3 to PRM District proffers that the development of the parcels under consideration and shown on the Fairfax County Tax Map as parcels 17-4 ((1)) 33 and 17-4 ((1)) 34 (collectively, the “Property”) will be in accordance with the following conditions (“Proffers”) if, and only if, RZ/FDP 2017-HM-018 and PCA 79-C-023 (the “Application”) is granted. In the event that this Application is denied, these Proffers will be immediately null and void and of no further force or effect.

GENERAL

1. Conceptual Development Plan/Final Development Plan. The Property will be developed in substantial conformance with the Conceptual Development Plan/Final Development Plan (“CDP/FDP”) dated April 5, 2017, and revised through October 3, 2019, prepared by VIKA Virginia, LLC, and consisting of 71 sheets, as further described below.
2. CDP Elements. Notwithstanding that the Conceptual Development Plan and the Final Development Plan are presented on the same sheets and defined as the CDP/FDP in Proffer 1, it will be understood that the CDP consists of (i) the maximum square footage of permitted development on the Property, including the proposed mix and locations of uses as set forth on the CDP/FDP and as qualified under Proffers 5 and 6; (ii) the minimum proposed open space; (iii) the general location and arrangement, minimum setbacks, and maximum building height of the buildings on the Property as shown on the CDP/FDP; (iv) the points of access to the Property and accompanying pedestrian and vehicular circulation routes through the Property as shown on the CDP/FDP; and (v) the general quality and character of the streetscape as shown on the CDP/FDP (collectively, the “CDP Elements”). The Applicant reserves the right to request approval from the Planning Commission of a Final Development Plan Amendment (“FDPA”) pursuant to Section 16-402 of the Zoning Ordinance for elements other than the CDP Elements for all or a portion of the Property and the CDP/FDP, provided such FDPA is in substantial conformance with these Proffers.
3. Minor Modifications and Minor Variations. Minor modifications to the CDP/FDP may be permitted by the Zoning Administrator pursuant to Section 16-403(4) of the Zoning Ordinance when necessitated by sound engineering or when necessary as part of final site design or engineering. Minor modifications to the Proffers may be permitted by the Zoning Administrator pursuant to Section 18-204 of the Zoning Ordinance. Minor variations to the CDP/FDP and/or Proffers may be permitted by approval of the Board of Supervisors with public notice, but without the need for a public hearing or a Conceptual Development Plan Amendment

management facilities that are part of the Proposed Development (“SWM Facilities”). The SWM Agreement will require the Applicant (or its successor UOA/HOA/COA/CA) to perform regular routine maintenance of the SWM Facilities in accordance with the maintenance specifications provided in the approved site plan, and to provide a maintenance report annually to the Fairfax County Maintenance and Stormwater Management Division of DPWES, provided DPWES requests such a maintenance report. The SWM Agreement also will address easements for County inspection and emergency maintenance of the SWM Facilities to ensure that the facilities are maintained by the Applicant in good working order.

- C. Future Regulations. In the event the U.S. Environmental Protection Agency, the Commonwealth of Virginia, Fairfax County, or their designee, issue new or additional stormwater management regulations which affect the Proposed Development, the Applicant will have the right to accommodate necessary changes to its stormwater management designs without the need for a CDPA, FDPA, or PCA, provided such stormwater management changes do not materially affect the limits of clearing and grading, building locations, or road layouts and otherwise are in substantial conformance with the CDP/FDP. If, however, provisions in any such new regulations permit “grandfathering” clauses which would allow the Property to be developed under the current stormwater management regulations, the Applicant may, at its sole discretion, pursue coverage under such “grandfathering” provisions and avoid the need for any modifications to the stormwater management design presented in the Application.

TRANSPORTATION IMPROVEMENTS

23. Wiehle Avenue Right-of-Way Dedication. As part of the first site plan approval for the Proposed Development, the Applicant will dedicate the right-of-way shown as “PROPOSED RIGHT-OF-WAY” and “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP in fee simple to the Board of Supervisors for public street purposes, except as otherwise provided below. The Applicant will maintain such dedicated right-of-way area up to and until the time such portion of Wiehle Avenue is accepted by VDOT for maintenance purposes. The Applicant will pursue VDOT acceptance of such portion of Wiehle Avenue for maintenance purposes.

The Applicant will work diligently with VDOT and FCDOT during the site plan approval process to ensure that the proposed areas designated as the landscape amenity panels and sidewalks (collectively, the “LAP/SW Areas”) can be accepted by VDOT and/or the County. To that end, the Applicant will either locate electrical vaults, stormwater management facilities, utilities, and other similar facilities outside of the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP (to the extent such facilities would prevent VDOT and/or the County from accepting the dedication of such LAP/SW Areas) or coordinate with VDOT and FCDOT as necessary to allow VDOT and/or the County to accept the dedication of such LAP/SW Areas with any electrical vaults, stormwater management facilities, utilities, and other similar facilities within the dedication areas, as follows:

- A. If at the time of site plan approval it is determined that stormwater management facilities, utilities, or other similar facilities proposed to be located within the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP would prevent VDOT and/or the County from accepting the dedication of such LAP/SW Areas, then the Applicant will first coordinate with VDOT and FCDOT in a good faith effort to relocate any such facilities that would prevent VDOT and/or the County from accepting the dedication of such LAP/SW Areas to the extent reasonably practicable. In the event the relocation of any such facilities is reasonably practicable, the Applicant will dedicate such LAP/SW Areas to the Board of Supervisors in fee simple for public street purposes. In the event the relocation of any such facilities is not reasonably practicable, the Applicant will provide dedication measuring 18 inches from the proposed face of curb and will grant a public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP. The public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. In addition, upon written request of the County, the Applicant will grant to the Board of Supervisors an easement for bus pads/shelters and any other public transportation facilities within any privately owned portion of the LAP/SW Areas.
- B. If at the time of site plan approval it is unclear whether stormwater management facilities, utilities, or other similar facilities proposed to be located within the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP would prevent VDOT and/or the County from accepting the dedication of such LAP/SW Areas, then the Applicant will provide dedication measuring 18 inches from the face of curb and will reserve for potential future dedication in fee simple to the Board of Supervisors the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP. The Applicant will grant a temporary public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP. The temporary public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. In addition, upon written request of the County, the Applicant will grant to the Board of Supervisors a temporary easement for bus pads/shelters and any other public transportation facilities within any privately owned portion of the LAP/SW Areas.
- C. If at the time of final street acceptance inspection, VDOT and/or the County determines that any stormwater management facilities, utilities, or other similar

facilities within the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” as shown on Sheet C-7 of the CDP/FDP would not prevent VDOT and/or the County from accepting the dedication of such LAP/SW Areas, then the Applicant will dedicate such LAP/SW Areas to the Board of Supervisors in fee simple for public street purposes upon the written request of the County.

- D. If at the time of final street acceptance inspection, VDOT and/or the County determines that any stormwater management facilities, utilities, or other similar facilities within the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” as shown on Sheet C-7 of the CDP/FDP would prevent VDOT and/or the County from accepting the dedication of such LAP/SW Areas, then the Board of Supervisors will release the reservation for potential future dedication and the Applicant will grant a permanent public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as “LANDSCAPE AMENITY PANEL/SIDEWALK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP. The permanent public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. In addition, upon written request of the County, the Applicant will grant to the Board of Supervisors a permanent easement for bus pads/shelters and any other public transportation facilities within any privately owned portion of the LAP/SW Areas.

24. Sunrise Valley Drive Right-of-Way Dedication. As part of the first site plan approval for the Proposed Development, the Applicant will dedicate the right-of-way shown as “PROPOSED RIGHT-OF-WAY” and “LANDSCAPE AMENITY PANEL/4’ BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP in fee simple to the Board of Supervisors for public street purposes, except as otherwise provided below. The Applicant will maintain such dedicated right-of-way area up to and until the time such portion of Sunrise Valley Drive is accepted by VDOT for maintenance purposes. The Applicant will pursue VDOT acceptance of such portion of Sunrise Valley Drive for maintenance purposes.

The Applicant will work diligently with VDOT and FCDOT during the site plan approval process to ensure that the proposed areas designated as the landscape amenity panels and cycle track (collectively, the “LAP/Cycle Areas”) can be accepted by VDOT and/or the County. To that end, the Applicant will either locate electrical vaults, stormwater management facilities, utilities, and other similar facilities outside of the area shown as “LANDSCAPE AMENITY PANEL/4’ BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT” on Sheet C-7 of the CDP/FDP (to the extent such facilities would prevent VDOT and/or the County from accepting the dedication of such LAP/Cycle Areas) or coordinate with VDOT and FCDOT as necessary to allow VDOT and/or the County to accept the dedication of such LAP/Cycle Areas with any electrical vaults, stormwater management facilities, utilities, and other similar facilities within the dedication areas, as follows:

- A. If at the time of site plan approval it is determined that stormwater management facilities, utilities, or other similar facilities proposed to be located within the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" on Sheet C-7 of the CDP/FDP would prevent VDOT and/or the County from accepting the dedication of such LAP/Cycle Areas, then the Applicant will first coordinate with VDOT and FCDOT in a good faith effort to relocate any such facilities that would prevent VDOT and/or the County from accepting the dedication of such LAP/Cycle Areas to the extent reasonably practicable. In the event the relocation of any such facilities is reasonably practicable, the Applicant will dedicate such LAP/Cycle Areas to the Board of Supervisors in fee simple for public street purposes. In the event the relocation of any such facilities is not reasonably practicable, the Applicant will provide dedication measuring 18 inches from the proposed face of curb and will grant a public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" on Sheet C-7 of the CDP/FDP. The public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. In addition, upon written request of the County, the Applicant will grant to the Board of Supervisors an easement for bus pads/shelters and any other public transportation facilities within any privately owned portion of the LAP/Cycle Areas.
- B. If at the time of site plan approval it is unclear whether stormwater management facilities, utilities, or other similar facilities proposed to be located within the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" on Sheet C-7 of the CDP/FDP would prevent VDOT and/or the County from accepting the dedication of such LAP/Cycle Areas, then the Applicant will provide dedication measuring 18 inches from the face of curb and will reserve for potential future dedication in fee simple to the Board of Supervisors the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" on Sheet C-7 of the CDP/FDP. The Applicant will grant a temporary public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" on Sheet C-7 of the CDP/FDP. The temporary public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. In addition, upon written request of the County, the Applicant will grant to the Board of Supervisors a temporary easement for bus pads/shelters and any other public transportation facilities within any privately owned portion of the LAP/Cycle Areas.

- C. If at the time of final street acceptance inspection, VDOT and/or the County determines that any stormwater management facilities, utilities, or other similar facilities within the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" as shown on Sheet C-7 of the CDP/FDP would not prevent VDOT and/or the County from accepting the dedication of such LAP/Cycle Areas, then the Applicant will dedicate such LAP/Cycle Areas to the Board of Supervisors in fee simple for public street purposes upon the written request of the County.
- D. If at the time of final street acceptance inspection, VDOT and/or the County determines that any stormwater management facilities, utilities, or other similar facilities within the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" as shown on Sheet C-7 of the CDP/FDP would prevent VDOT and/or the County from accepting the dedication of such LAP/Cycle Areas, then the Board of Supervisors will release the reservation for potential future dedication and the Applicant will grant a permanent public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as "LANDSCAPE AMENITY PANEL/4' BEHIND CYCLE TRACK FOR ROW DEDICATION OR PUBLIC ACCESS EASEMENT" on Sheet C-7 of the CDP/FDP. The permanent public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. In addition, upon written request of the County, the Applicant will grant to the Board of Supervisors a permanent easement for bus pads/shelters and any other public transportation facilities within any privately owned portion of the LAP/Cycle Areas.
- E. As part of the first site plan approval for the Proposed Development, the Applicant will grant a permanent public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as "PROPOSED PUBLIC ACCESS EASEMENT" on Sheet C-7 of the CDP/FDP. The permanent public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. In addition, upon written request of the County, the Applicant will grant to the Board of Supervisors a permanent easement for bus pads/shelters and any other public transportation facilities within any privately owned portion of the area subject to the public access easement and utility easement.

25. Wiehle Avenue Improvements.

- A. Construction of Wiehle Avenue Improvements. Subject to VDOT approval, the Applicant will construct improvements to Wiehle Avenue as shown on Sheets C-7 and C-9 of the CDP/FDP prior to the issuance of the first RUP or Non-RUP for the Proposed Development. Such improvements will consist of additional pavement on the northbound side of Wiehle Avenue, relocation of the median,

removal of the southbound channelization at Sunrise Valley Drive, and restriping, such that the northern section of Wiehle Avenue proximate to the Dulles Toll Road Ramps (as illustrated in “PROPOSED SECTION A” on Sheet C-9 of the CDP/FDP) will consist of (i) on the northbound approach: three 11-foot travel lanes, one 11-foot left turn lane, one 14-foot left turn lane, a one-foot shy line at the median, one 11-foot right turn lane, one 5-foot bike lane, and 2.5 feet for curb and gutter; and, (ii) on the southbound approach: three 11-foot travel lanes, a one-foot shy line at the median, one 11-foot right turn lane, one 5-foot bike lane, and 2.5 feet for curb and gutter. The southern section of Wiehle Avenue proximate to Sunrise Valley Drive (as illustrated in “PROPOSED SECTION B” on Sheet C-9 of the CDP/FDP) will consist of (i) on the northbound approach: three 11-foot travel lanes, a one-foot shy line at the median, one 5-foot bike lane, and 2.5 feet for curb and gutter; and, (ii) on the southbound approach: four 11-foot travel lanes transitioning into two 11-foot right turn lanes and two 11-foot left turn lanes at the approach to Sunrise Valley Drive, a one-foot shy line at the median, a 5-foot bike lane, and 2.5 feet for curb and gutter. For purposes of this Proffer 25 and also Proffer 26, the term “construct” will mean open to traffic but not necessarily accepted by VDOT. The Applicant will pursue VDOT acceptance of such improvements to Wiehle Avenue for maintenance purposes.

- i. Alternative Wiehle Avenue Bike Lane Configuration. Notwithstanding the striping configuration described above in Proffer 25.A and as shown on Sheets C-7 and C-9 of the CDP/FDP, to the extent that VDOT and/or FCDOT request that the Applicant implement an alternative Wiehle Avenue striping configuration to relocate the northbound Wiehle Avenue bike lane either (i) to the west of the northbound right turn lane or (ii) to the west side of Wiehle Avenue to be combined with the southbound Wiehle Avenue bike lane, the Applicant will implement such revised striping (and adjust the Wiehle Avenue median as may be necessary) in coordination with VDOT and/or FCDOT, provided the location of the face of curb along the Property’s frontage on Wiehle Avenue as shown on the CDP/FDP remains unchanged.
- B. Wiehle Avenue Streetscape Elements. Subject to the provision of all necessary approvals from VDOT and/or Fairfax County, the Applicant will install the streetscape elements along the east side of Wiehle Avenue as shown on Sheets L-5.0 and L-7.0 of the CDP/FDP prior to the issuance of the first Non-RUP for Building B. The streetscape elements will consist of a landscape amenity panel, sidewalk, and building zone along the east side of Wiehle Avenue as shown on Sheets L-5.0 and L-7.0 of the CDP/FDP.
 - C. Interim Sidewalk. Subject to the provision of all necessary approvals from VDOT and/or Fairfax County, the Applicant will install an interim 5-foot wide sidewalk along the east side of Wiehle Avenue as shown on Sheet C-21 or C-22 of the CDP/FDP (depending on the phasing of the Proposed Development) concurrently with the construction of the first phase of development of the Property. In addition, the Applicant will provide and maintain interim pedestrian

connections within the Property to facilitate pedestrian access to the Wiehle-Reston East Metro Station during all phases of development.

- D. Wiehle Avenue Grade-Separated Crossing. The Applicant has developed three preliminary designs for a potential pedestrian bridge to provide a grade-separated crossing of Wiehle Avenue, which are shown as “Pedestrian Bridge Option A” on Sheet S-01 of the CDP/FDP (“Bridge Option A”), “Pedestrian Bridge Option B” on Sheet S-02 (“Bridge Option B”), and “Pedestrian Bridge Option C” on Sheet S-03 of the CDP/FDP (“Bridge Option C”). Bridge Option A and Bridge Option B would each be located within VDOT right-of-way and be subject to approval by VDOT. Bridge Option C would be located partially within VDOT right-of-way and partially on the property identified on the Fairfax County Tax Map as 17-4 ((12)) 11D5, 11K, and 11M (collectively, the “Commerce Metro Center Property”), and be subject to approval by VDOT and the owner of the Commerce Metro Center Property.
- i. Study Group. Within ninety (90) days of the approval of this Application, the Applicant will coordinate with the Hunter Mill District Supervisor to convene a study group which may include representatives from DPD, FCDOT, VDOT, the Washington Metropolitan Area Transit Authority (“WMATA”), the owner of the Commerce Metro Center Property, the Reston Association, the Reston Planning and Zoning Committee, the community (consisting of the Hampton Meadows, Boston Ridge, Harborside, and Winterport associations and the owners of residential properties on Great Meadow Drive and Upper Lake Drive), and other members as may be recommended by the Hunter Mill District Supervisor (collectively, the “Study Group”). The purpose of the Study Group will be to determine the appropriate location and desired type (above-grade bridge or below-grade underpass/tunnel) of a Wiehle Avenue pedestrian crossing. The Study Group will determine whether one of the three potential pedestrian bridge options shown on the CDP/FDP (Bridge Option A, Bridge Option B, or Bridge Option C) would be the most appropriate Wiehle Avenue pedestrian crossing, or if an alternative pedestrian crossing (such as an alternative pedestrian bridge or an underpass/tunnel) would be the most appropriate Wiehle Avenue pedestrian crossing. The Study Group will select Bridge Option A, Bridge Option B, Bridge Option C, or an alternative Wiehle Avenue pedestrian crossing, and provide its recommendation to the Fairfax County Board of Supervisors within twenty-four (24) months of the approval of this Application.
 - ii. Board of Supervisors Review. The Board of Supervisors may consider any recommendation of the Study Group and will have the right to determine the ultimate location, type of crossing (above-grade bridge or below-grade underpass/tunnel), and design of the Wiehle Avenue pedestrian crossing.
 - iii. Implementation. The Applicant will implement the Wiehle Avenue pedestrian crossing as follows:

- a. Bridge Option A. If the Board of Supervisors notifies the Applicant no later than twelve (12) months after the Study Group has provided its recommendation to the Board (such notification will be within thirty-six (36) months of the approval of this Application) that the Board of Supervisors has determined the Applicant should implement Bridge Option A, then the Applicant will construct Bridge Option A as shown on Sheet S-01 of the CDP/FDP, subject to approval by VDOT prior to the issuance of the first RUP for Building C. If the Board of Supervisors selects Bridge Option A, but VDOT does not approve Bridge Option A, then the Applicant will contribute the amount of the Pedestrian Crossing Cost Estimate (as defined below) to the County prior to the issuance of the first RUP for Building C to be utilized for an alternative Wiehle Avenue pedestrian crossing to be provided by others.
- b. Bridge Option B. If the Board of Supervisors notifies the Applicant no later than twelve (12) months after the Study Group has provided its recommendation to the Board (such notification will be within thirty-six (36) months of the approval of this Application) that the Board of Supervisors has determined the Applicant should implement Bridge Option B, then the Applicant will construct Bridge Option B as shown on Sheet S-02 of the CDP/FDP, subject to approval by VDOT, prior to the issuance of the first RUP for Building C. If the Board of Supervisors selects Bridge Option B, but VDOT does not approve Bridge Option B, then the Applicant will contribute the amount of the Pedestrian Crossing Cost Estimate (as defined below) to the County prior to the issuance of the first RUP for Building C to be utilized for an alternative Wiehle Avenue pedestrian crossing to be provided by others.
- c. Bridge Option C. If the Board of Supervisors notifies the Applicant no later than twelve (12) months after the Study Group has provided its recommendation to the Board (such notification will be within thirty-six (36) months of the approval of this Application) that the Board of Supervisors has determined the Applicant should implement Bridge Option C, then the Applicant will construct Bridge Option C as shown on Sheet S-03 of the CDP/FDP, subject to approval by VDOT and the owner of the Commerce Metro Center Property, prior to the issuance of the first RUP for Building C. If the Board of Supervisors selects Bridge Option C, but VDOT and/or the owner of the Commerce Metro Center Property does not approve Bridge Option C, then the Applicant will contribute the amount of the Pedestrian Crossing Cost Estimate (as defined below) to the County prior to the issuance of the first RUP for Building C to be utilized for an

alternative Wiehle Avenue pedestrian crossing to be provided by others.

- d. Alternative Wiehle Avenue Pedestrian Crossing. If the Board of Supervisors notifies the Applicant no later than twelve (12) months after the Study Group has provided its recommendation to the Board (such notification will be within thirty-six (36) months of the approval of this Application) that the Board of Supervisors has determined the Applicant should implement an alternative Wiehle Avenue pedestrian crossing, then the Applicant will construct such alternative Wiehle Avenue pedestrian crossing selected by the Board of Supervisors, subject to approval by VDOT and the owner of the Commerce Metro Center Property, if applicable, prior to the issuance of the first RUP for Building C, provided the cost of such alternative Wiehle Avenue pedestrian crossing does not exceed \$1,500,000 as escalated for inflation in accordance with Proffer 53 plus an additional 10% contingency (the "Pedestrian Crossing Cost Estimate"). If the Board of Supervisors selects an alternative Wiehle Avenue pedestrian crossing that does not exceed the Pedestrian Crossing Cost Estimate, but VDOT and/or the owner of the Commerce Metro Center Property, if applicable, does not approve such alternative Wiehle Avenue pedestrian crossing, then the Applicant will contribute the amount of the Pedestrian Crossing Cost Estimate to the County prior to the issuance of the first RUP for Building C to be utilized for such alternative Wiehle Avenue pedestrian crossing to be provided by others. If the Board of Supervisors selects an alternative Wiehle Avenue pedestrian crossing that exceeds the Pedestrian Crossing Cost Estimate, then the Applicant will contribute the amount of the Pedestrian Crossing Cost Estimate to the County prior to the issuance of the first RUP for Building C to be utilized for such alternative Wiehle Avenue pedestrian crossing to be provided by others.
- e. No Pedestrian Crossing Selection. If the Board of Supervisors does not notify the Applicant within twelve (12) months after the Study Group has provided its recommendation to the Board (such notification will be within thirty-six (36) months of the approval of this Application) regarding the selection of Bridge Option A, Bridge Option B, Bridge Option C, or an alternative Wiehle Avenue pedestrian crossing, the Applicant will, at its sole discretion: (i) select Bridge Option A, Bridge Option B, or Bridge Option C, and construct such option, subject to approval by VDOT and the owner of the Commerce Metro Center Property, if applicable, prior to the issuance of the first RUP for Building C, and if VDOT and/or the owner of the Commerce Metro Center Property, if applicable, does not approve the Applicant's selection, then the Applicant will contribute the amount of the Pedestrian

Crossing Cost Estimate to the County prior to the issuance of the first RUP for Building C to be utilized for such alternative Wiehle Avenue pedestrian crossing to be provided by others; or, (ii) contribute the amount of the Pedestrian Crossing Cost Estimate to the County prior to the issuance of the first RUP for Building C to be utilized for an alternative Wiehle Avenue pedestrian crossing to be provided by others.

- f. Public Access Easement. To the extent that any portion of Bridge Option A, Bridge Option B, Bridge Option C, or an alternative Wiehle Avenue pedestrian crossing selected by the Board of Supervisors is located within the Property and outside of public right-of-way, the Applicant will grant a public access easement, in a form acceptable to the County Attorney, over any such area.
- g. Limited Access Easement. To the extent that Bridge Option A, Bridge Option B, Bridge Option C, or an alternative Wiehle Avenue pedestrian crossing selected by the Board of Supervisors requires the elimination or modification of any Dulles Toll Road limited access easement boundary, the Applicant will pursue any such elimination or modification with the Metropolitan Washington Airports Authority (“MWAA”), the Commonwealth Transportation Board (“CTB”), VDOT, and/or the County, as applicable. The Applicant’s obligation to implement Bridge Option A, Bridge Option B, Bridge Option C, or an alternative Wiehle Avenue pedestrian crossing selected by the Board of Supervisors is subject to approval of any necessary elimination or modification of any limited access easement boundary by MWAA, the CTB, VDOT, and/or the County, as applicable. If MWAA, the CTB, VDOT, and/or the County, as applicable, does not approve any required elimination or modification of any Dulles Toll Road limited access easement boundary, then the Applicant, in lieu of constructing Bridge Option A, Bridge Option B, Bridge Option C, or an alternative Wiehle Avenue pedestrian crossing selected by the Board of Supervisors, will contribute the amount of the Pedestrian Crossing Cost Estimate to the County prior to the issuance of the first RUP for Building C to be utilized for such alternative Wiehle Avenue pedestrian crossing to be provided by others.
- h. Elevator Maintenance. To the extent that Bridge Option A, Bridge Option B, Bridge Option C or an alternative Wiehle Avenue pedestrian crossing selected by the Board of Supervisors includes an elevator on the eastern side of Wiehle Avenue, the Applicant will maintain such elevator.

- iv. Corner Park Modifications. Notwithstanding the commitments described in Proffer 37.A below, the Applicant may modify, adjust, and/or remove the pavilion and metro connection plaza in the Corner Park to accommodate the grade-separated Wiehle Avenue crossing described in this Proffer 25, subject to approval by the Zoning Administrator, without the need for a PCA, CDPA, or FDPA.

26. Sunrise Valley Drive Improvements.

- A. Construction of Sunrise Valley Drive Improvements. Subject to VDOT approval, the Applicant will construct improvements to Sunrise Valley Drive as shown on Sheets C-7 and C-9 of the CDP/FDP prior to the issuance of the first RUP or Non-RUP for the Proposed Development. Such improvements will consist of additional pavement on the westbound side of Sunrise Valley Drive across the frontage of the Property, removal of the westbound channelization at Wiehle Avenue, and restriping, such that the westbound half section of Sunrise Valley Drive will consist of one 11-foot travel lane, a one-foot shy line at the median, two 11-foot right turn lanes, and 2.5 feet for curb and gutter as shown on Sheets C-7 and C-9 of the CDP/FDP. The Applicant will pursue VDOT acceptance of such improvements to Sunrise Valley Drive for maintenance purposes.
- B. Sunrise Valley Drive Streetscape Elements. Subject to the provision of all necessary approvals from VDOT and/or Fairfax County, the Applicant will install the streetscape elements along the north side of Sunrise Valley Drive as shown on Sheets L-5.0 and L-7.0 of the CDP/FDP prior to the issuance of the first RUP or Non-RUP for Building A or Building B, whichever is later. The streetscape elements will consist of a 10-foot landscape amenity panel, a 10-foot cycle track, a minimum 2-foot buffer, a minimum 8-foot sidewalk, and building zone along the north side of Sunrise Valley Drive as shown on Sheets L-5.0 and L-7.0 of the CDP/FDP.

27. High Visibility Crosswalks and Cycle Track Crossing.

- A. Wiehle Avenue/Sunrise Valley Drive. Subject to the provision of all necessary approvals from VDOT and/or Fairfax County, the Applicant will, prior to the issuance of the first RUP or Non-RUP for the Proposed Development, install two high visibility crosswalks and associated pedestrian signals at the intersection of Wiehle Avenue and Sunrise Valley Drive, which will include one high visibility crosswalk across Wiehle Avenue and one high visibility crosswalk across Sunrise Valley Drive, as shown on Sheet C-7 of the CDP/FDP.
- B. Wiehle Avenue/Dulles Toll Road Ramps. Subject to the provision of all necessary approvals from VDOT and/or Fairfax County, the Applicant will, prior to the issuance of the first RUP for Building C, install one high visibility crosswalk, associated pedestrian refuges, and pedestrian signals at the intersection of Wiehle Avenue and the eastbound Dulles Toll Road access ramps as shown on Sheet C-7 of the CDP/FDP, provided, however, that such crosswalk, associated

pedestrian refuges, and pedestrian signals will be included in the Study Group review and subject to approval of the Board of Supervisors as described in Proffer 25.D above. The Applicant's provision of such crosswalk, associated pedestrian refuges, and pedestrian signals as determined by the Board of Supervisors will be in addition to, and not in lieu of, the Applicant's obligation to implement Bridge Option A, Bridge Option B, Bridge Option C, or an alternative Wiehle Avenue pedestrian crossing selected by the Board of Supervisors, or to contribute the amount of the Pedestrian Crossing Cost Estimate, in accordance with Proffer 25.D above.

- C. Sunrise Valley Drive/ Campus Commons Drive (West)/Upper Lake Drive (West). Subject to the provision of all necessary approvals from VDOT and/or Fairfax County, the Applicant will, prior to the issuance of the first RUP or Non-RUP for the Proposed Development, install high visibility crosswalks across Sunrise Valley Drive at the intersection of Sunrise Valley Drive, Campus Commons Drive (West) and Upper Lake Drive (West).
- D. Cycle Track Crossings. Subject to the provision of all necessary approvals from VDOT and/or Fairfax County, the Applicant will, prior to the issuance of the first RUP or Non-RUP for the Proposed Development, install striping for the cycle track crossings on Wiehle Avenue and Campus Commons Drive as shown on Sheet C-7 of the CDP/FDP.

28. Traffic Signal Modifications.

- A. Wiehle Avenue/Sunrise Valley Drive. Subject to approval by VDOT, the Applicant will implement modifications to the existing traffic signal at the intersection of Wiehle Avenue and Sunrise Valley Drive as necessary to accommodate the improvements described in Proffers 25 and 26 above and as shown on Sheets C-7 and C-9 of the CDP/FDP (such as additional traffic signal heads, signage, and signal timing adjustments) prior to the issuance of the first RUP or Non-RUP for the Proposed Development. Such traffic signal modifications may require land that is not within public right-of-way. The Applicant will not be required to install or modify any traffic signal equipment outside of the public right-of-way or a traffic signal easement. The Applicant will diligently pursue all necessary right-of-way and/or easements, at no greater cost to the Applicant than fair market value as determined by an independent appraisal, from other property owners as necessary to facilitate the installation of the required traffic signal equipment. In the event any such owners do not dedicate any necessary right-of-way or grant any necessary easements to allow the installation of the required traffic signal equipment prior to the issuance of the first RUP or Non-RUP for the Proposed Development, the Applicant's obligation to install the traffic signal will be deferred until the necessary right-of-way and/or easements have been dedicated or granted to the County.
- B. Sunrise Valley Drive/Campus Commons Drive (West). Subject to approval by VDOT, the Applicant will implement modifications to the existing traffic signal at

the intersection of Sunrise Valley Drive and Campus Commons Drive (West), which will include the removal of the north/south split phase and changing the leading left turn to a lagging left turn (including the implementation of any additional traffic signal heads, signage, and signal timing adjustments as necessary) prior to the issuance of the first RUP or Non-RUP for the Proposed Development. Such traffic signal modifications may require land that is not within public right-of-way. The Applicant will not be required to install or modify any traffic signal equipment outside of the public right-of-way or a traffic signal easement. The Applicant will diligently pursue all necessary right-of-way and/or easements, at no greater cost to the Applicant than fair market value as determined by an independent appraisal, from other property owners as necessary to facilitate the installation of the required traffic signal equipment. In the event any such owners do not dedicate any necessary right-of-way or grant any necessary easements to allow the installation of the required traffic signal equipment prior to the issuance of the first RUP or Non-RUP for the Proposed Development, the Applicant's obligation to install the traffic signal will be deferred until the necessary right-of-way and/or easements have been dedicated or granted to the County.

- C. Sunrise Valley Drive/Campus Commons Drive/Upper Lake Drive (East). Within six (6) months of the issuance of the first RUP or Non-RUP for the Proposed Development, the Applicant will complete and submit to VDOT a Signal Justification Report ("SJR") for the intersection of Sunrise Valley Drive, Campus Commons Drive, and Upper Lake Drive (East). If VDOT determines that a traffic signal is not justified, the Applicant will complete and submit to VDOT one (1) additional SJR no earlier than eighteen (18) months after the issuance of the first RUP or Non-RUP for the Proposed Development and one (1) additional SJR no earlier than thirty (30) months after the issuance of the first RUP or Non-RUP for the Proposed Development. If VDOT determines that a traffic signal is justified based on any of the three (3) SJRs required under this proffer, then the Applicant will diligently pursue the design and installation of the traffic signal, which also will include crosswalks and associated pedestrian signals if approved by VDOT. The installation of the traffic signal may require land that is not within public right-of-way or a traffic signal easement. The Applicant will not be required to install any traffic signal equipment outside of the public right-of-way or a traffic signal easement. The Applicant will diligently pursue all necessary right-of-way and/or easements, at no greater cost to the Applicant than fair market value as determined by an independent appraisal, from other property owners as necessary to facilitate the installation of the required traffic signal equipment. In the event any such owners do not dedicate any necessary right-of-way or grant any necessary easements to allow the installation of the required traffic signal equipment prior to the issuance of the first RUP or Non-RUP for the Proposed Development, the Applicant's obligation to install the traffic signal will be deferred until the necessary right-of-way and/or easements have been dedicated or granted to the County. If VDOT determines that the traffic signal is not justified at this location after the third SJR, then the Applicant will contribute \$300,000 to the County for such traffic signal at such time as VDOT determines that a traffic

signal is justified based on a subsequent SJR provided by others, provided VDOT makes a determination that the traffic signal is justified based on such subsequent SJR within five (5) years of the issuance of the first RUP or Non-RUP for the Proposed Development. Upon the earlier of the expiration of such five (5) year period or such contribution, the Applicant will be relieved of its obligations and this proffer will be of no further force and effect.

- D. Sunrise Valley Drive/South Lakes Drive/Preston White Drive. Subject to approval by VDOT, the Applicant will implement signal timing modifications to the existing traffic signal at the intersection of Sunrise Valley Drive, South Lakes Drive, and Preston White Drive, prior to the issuance of the first RUP or Non-RUP for the Proposed Development.
- E. Accelerated Traffic Signal Timing Modifications. Within forty-five (45) days of the approval of this Application, the Applicant will submit a request to VDOT for modifications to the signal timing for the existing traffic signal at the intersection of Sunrise Valley Drive, Campus Commons Drive, and Upper Lake Drive (West) to increase the time available for turning movements from Upper Lake Drive onto Sunrise Valley Drive. Such modifications, if approved by VDOT, will be implemented by VDOT.

29. Campus Commons Drive Improvements.

- A. Right-of-Way Dedication. The right-of-way area shown as “PROP. CAMPUS COMMONS ROW DEDICATION” on Sheet C-7 of the CDP/FDP currently is subject to an existing private ingress-egress easement recorded in Deed Book 6402, at Page 197, among the land records of Fairfax County, Virginia (the “Existing Private Ingress-Egress Easement”). As part of the first site plan approval for the Proposed Development, the Applicant will grant a public access easement and utility easement, in a form acceptable to the County Attorney, over the area shown as “PROP. CAMPUS COMMONS ROW DEDICATION” on Sheet C-7 of the CDP/FDP. The public access easement and utility easement will allow for the installation of signage necessary for safety and operation of the street as well as parking regulation equipment to be installed and maintained by VDOT and/or the County. Upon the request of the County, the Applicant will dedicate the right-of-way shown as “PROP. CAMPUS COMMONS ROW DEDICATION” on Sheet C-7 of the CDP/FDP in fee simple to the Board of Supervisors for public street purposes, except as otherwise provided below. The Applicant will use good faith efforts to pursue the vacation of the Existing Private Ingress-Egress Easement prior to the dedication of any right-of-way to the Board of Supervisors which is encumbered by the Existing Private Ingress-Egress Easement. The County may defer such right-of-way dedication until such time as the Applicant is able to obtain the vacation of the Existing Private Ingress-Egress Easement. In such event the Applicant will continue to use good faith efforts to pursue such vacation prior to final bond release for the Proposed Development. In the event the County requires the dedication of any right-of-way encumbered by the Existing Private Ingress-Egress Easement prior to the vacation of such

easement, the Applicant's obligation to dedicate such right-of-way will be subject to the County's agreement to accept such right-of-way dedication subject to the Existing Private Ingress-Egress Easement. At such time as: (i) the County has received the dedication of right-of-way from all owners of property along Campus Commons Drive and funding commitments for future modifications to Campus Commons Drive as may be necessary for acceptance of Campus Commons Drive by VDOT for maintenance purposes, and (ii) a site plan and/or public improvement plan for such modifications has been approved by the County, the Applicant will contribute \$74,500 to the County for such modifications to be implemented by others. The Applicant will maintain such dedicated right-of-way area up to and until the time such portion of Campus Commons Drive is accepted by VDOT for maintenance purposes. The Applicant will cooperate in efforts by others to obtain VDOT acceptance of such portion of Campus Commons Drive as a public street, provided that the Applicant will not be required to modify the design of such portion of Campus Commons Drive from that shown on Sheet C-7 of the CDP/FDP and the Applicant will have no obligation to obtain acceptance by VDOT.

- B. Construction of Campus Commons Drive Improvements. Subject to approval by VDOT, any applicable approvals by Fairfax County, and the approval of and the granting of any necessary off-site easements by the owners of the parcels identified on the Fairfax County Tax Map as 26-2 ((1)) 9D, 10, and 11 (the "Campus Commons Parcels"), the Applicant will implement lane restriping and median removal as necessary to create four lanes on Campus Commons Drive between Sunrise Valley Drive and the first site entrance into the Property north of Campus Commons Drive as shown on Sheets C-7 and C-10 of the CDP/FDP, three lanes between the first and second site entrances into the Property north of Campus Commons Drive, and two lanes between the second site entrance north of Campus Commons Drive and the Interim Road Way as shown on Sheets C-7 and C-10 of the CDP/FDP prior to the issuance of the first RUP or Non-RUP for the Proposed Development. In the event VDOT or Fairfax County does not grant any required approvals for, or the owners of the Campus Commons Parcels do not approve of, or grant the necessary off-site easements for, such restriping prior to the first site plan approval for the Proposed Development, the Applicant's obligation to implement the lane restriping will be deferred until final bond release for the final building to be constructed as part of the Proposed Development. In the event VDOT and Fairfax County grant any required approvals and the owners of the Campus Commons Parcels dedicate the land area to the County or grant the necessary easements to the County, or the County otherwise acquires such land area or easements, prior to final bond release for the final building to be constructed as part of the Proposed Development, the Applicant will implement the lane restriping as necessary, as shown on Sheets C-7 and C-10 of the CDP/FDP prior to final bond release for the final building to be constructed as part of the Proposed Development.

30. Sunrise Valley Drive/Lakeport Way Improvements. Subject to VDOT approval, and any necessary temporary construction easements, the Applicant will install "Do Not Block

Intersection” signs at the east and west approaches to the Sunrise Valley Drive/Lakeport Way intersection and implement restriping to appropriately stripe the intersection to prevent blockages. The Applicant will install such signs and implement such restriping prior to the issuance of the first RUP or Non-RUP for the Proposed Development.

31. Interim Road Way. Prior to the issuance of the first RUP or Non-RUP for Building C, the Applicant will construct the Interim Road Way along the eastern boundary of the Property as shown on Sheets C-7 and C-9 of the CDP/FDP. The Interim Road Way will be for the purpose of serving the parking garage entrance and loading spaces for Building C, and will be a private road in the interim condition until the approval and establishment of a public road connection from Campus Commons Drive. The Applicant will design and construct the Interim Road Way in the interim condition in accordance with VDOT standards (for a half-section of a future public road connection) such that in the future the Interim Road Way may serve as a half-section of a public road connection to be built in accordance with VDOT standards upon the redevelopment of the parcel identified on the Fairfax County Tax Map as 26-2 ((1)) 9D, provided, however, that such modifications to the Interim Road Way by others will not require any modifications to the parking garage entrance and loading spaces for Building C. Following the dedication of right-of-way for such a public road connection by the owner of such parcel, the Applicant will dedicate the right-of-way area shown as “PROPOSED RIGHT-OF-WAY” on Sheet C-7 of the CDP/FDP in fee simple to the Board of Supervisors for public street purposes upon the written request of the County. The Applicant will have no obligation to pursue VDOT acceptance of the Interim Road Way for maintenance purposes.

32. Private Streets. The Applicant will construct each segment of the private streets within the Property identified as Site Loop Road and Interim Road Way as shown on Sheets C-7 and C-10 of the CDP/FDP concurrently with the development of the Building(s) with frontage on such segments of such streets. At the time of site plan approval, the Applicant will grant to the Board of Supervisors a public access easement, in a form acceptable to the County Attorney, over each segment of such private streets included in such site plan. The public access easements will include the landscape amenity panel and sidewalk areas associated with the applicable segments of the private streets.

33. Reston Transportation Fund.

A. Residential Units. The Applicant will make a contribution in the amount of \$2,183 per Residential Unit constructed on the Property as set forth in the Reston Road Fund Plan endorsed by the Board of Supervisors on February 28, 2017, and as amended. The contribution will be paid prior to the issuance of the first RUP for each of the Residential Buildings (based on the actual number of residential units in such building). The Applicant will have the right to receive and deduct credits against the contributions that would otherwise be due to the Reston Road Fund in accordance with the Reston Road Fund Guidelines established by the Board of Supervisors, as determined by FCDOT.

B. Non-Residential Uses. The Applicant will make a contribution in the amount of \$9.99 per square foot of gross floor area of new non-residential uses constructed on the Property as set forth in the Reston Road Fund Plan endorsed by the Board

of Supervisors on February 28, 2017, and as amended. The contribution will be paid prior to the issuance of the first Non-RUP for each building (based on the actual gross floor area of non-residential uses in the building). The Applicant will have the right to receive and deduct credits against the contributions that would otherwise be due to the Reston Road Fund in accordance with the Reston Road Fund Guidelines established by the Board of Supervisors, as determined by FCDOT.

34. Traffic Signal Preemption. Prior to the first site plan approval for the Proposed Development, the Applicant will contribute \$20,000 to the Capital Project entitled “Traffic Light Signals – FRD Proffers in Fund 300-C30070, Public Safety Construction” for use in the installation of emergency vehicle preemption equipment on traffic signals within the Hunter Mill District as determined by the Fire and Rescue Department. The Applicant will have no responsibility for installation or maintenance of the preemptive signal devices.

TRANSPORTATION DEMAND MANAGEMENT

35. Transportation Demand Management. This proffer sets forth the programmatic elements of a transportation demand management program (the “TDM Program”) that will be implemented by the Applicant, and/or its successors and assigns, which may include any UOA/HOA/COA/CA or other association established for the Property (but for purposes of this Proffer 35 will not include the Reston Association), to encourage the use of transit (Metrorail and bus), other high-occupant vehicle commuting modes, walking, biking and teleworking, all in order to reduce automobile trips generated by the Residential Units and the Office Uses constructed on the Property.

A. Definitions.

- i. Applicant Control Period for Residential Units. The “Applicant Control Period for Residential Units” is the period starting immediately following approval of this Application and ending on the date when three (3) consecutive Trip Counts conducted annually starting at least one (1) full calendar year after the Residential Units reach Build Out show that vehicle trips generated by the Residential Units are less than or equal to the TDM Goal (as defined herein). Upon expiration of the Applicant Control Period for Residential Units, the Applicant may assign responsibility for the ongoing implementation of the Residential Units portion of the TDM Program to a UOA/HOA/COA/CA, in the event such an association is created that includes the Residential Units, provided the Applicant gives written notice to FCDOT within ten (10) days of any such assignment. Upon such an assignment, the Applicant will have no further obligations under this Proffer 35 with respect to the Residential Units.
- ii. Applicant Control Period for Office Uses. The “Applicant Control Period for Office Uses” is the period starting immediately following approval of this Application and ending on the date when three (3) consecutive Trip Counts conducted starting at least one (1) full calendar year after the



Wiehle Avenue Crossing

Study Group Meeting

September 2020

Marc L. Dreyfuss, AICP
Fairfax County Department of Transportation

September 17, 2020



Agenda



Background of Study Group Effort



Discussion of Initial Crossing Options Assessments



Consultant Presentation



Questions/Comments



October Meeting Preview



Study Group History

- Campus Commons Application
 - Approved October 15, 2019
 - Included commitment to construct one of three bridge options or provide contribution to alternative





Study Group History

- Campus Commons Application
 - Included separate commitment to implement an at-grade crossing of Wiehle
 - May be in addition to grade-separated crossing





Study Group History

- Study Group
 - Formed in December 2019
 - Tasked with determining preferred crossing option(s) of Wiehle Avenue at the Dulles Toll Road
 - Recommends preferred option to the Board of Supervisors within two years of approval (October 2021)
 - Board of Supervisors to make final determination within one year of Study Group recommendation (October 2022)



Review of Discussions

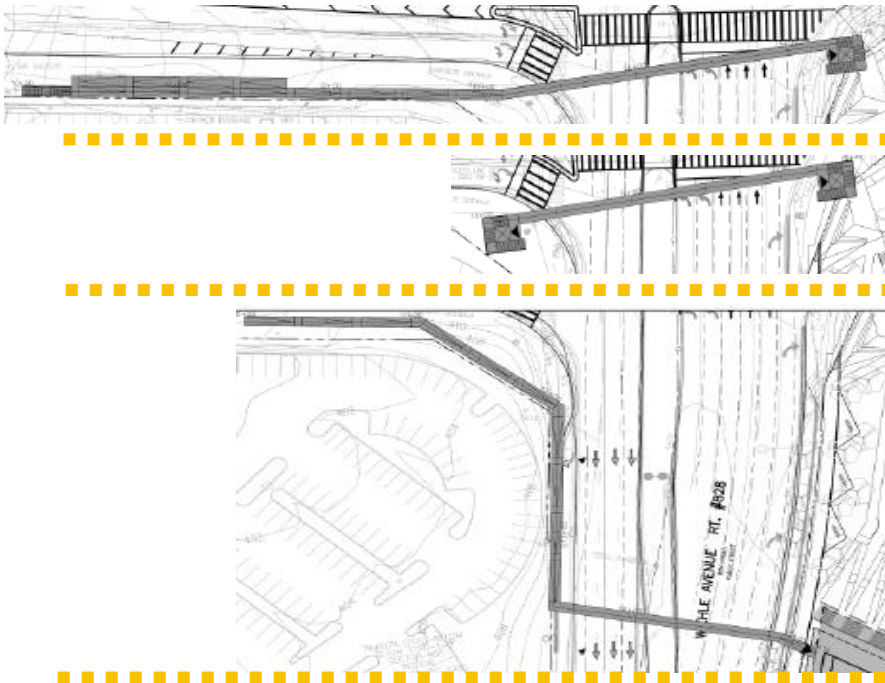
Overpasses, Underpasses, and At-Grade Crossings



Review of Overpass Discussion

Advantages

- Developer-Funded
- Separated from traffic



Challenges

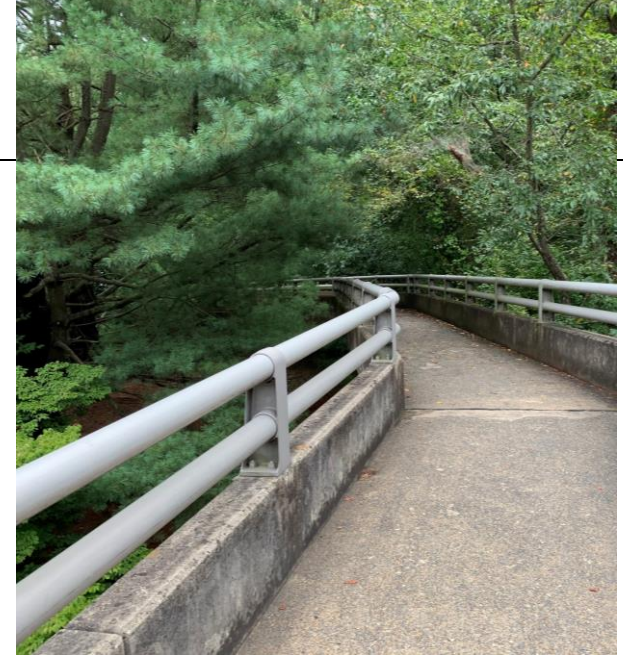
- Open bridges can be hot, wet, or icy
- Indirect path/inconvenient
- Crossing Time
- Bicycle access
- No street activation
- Utilization concerns
- Grade issues
- Potential site impacts
- Visual impacts
- Maintenance/cleaning issues



Overpass Maintenance

- Elevators
 - Planned and unplanned issues
 - ADA access
- Cleaning
 - Debris
 - Smells
 - Vandalism/Graffiti
- Snow/Ice Clearance
- Responsibility TBD





Over Wiehle
Avenue at
North Shore Drive





Review of Underpass Discussion

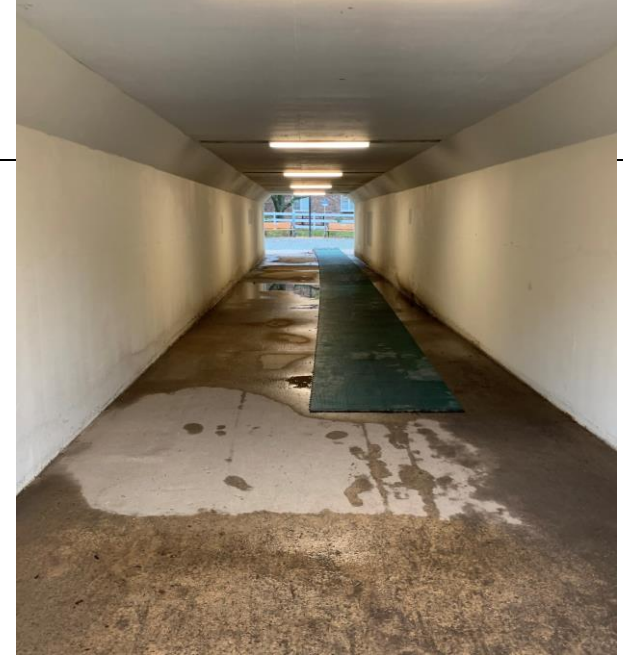
Advantages

- Makes use of existing grade
- No major elevation changes needed
- Protected from the elements
- Easier ADA access
- No visual impacts from road



Challenges

- Length (170'+)
- Safety concerns
- Cost/funding
- Timing uncertain
- Feasibility (utility impacts)
- No street activation
- Maintenance/cleaning
 - Responsibility TBD
- Vandalism/graffiti



Under Reston Parkway at Bowman Towne Drive

(90' long | 12' wide | 12' high)

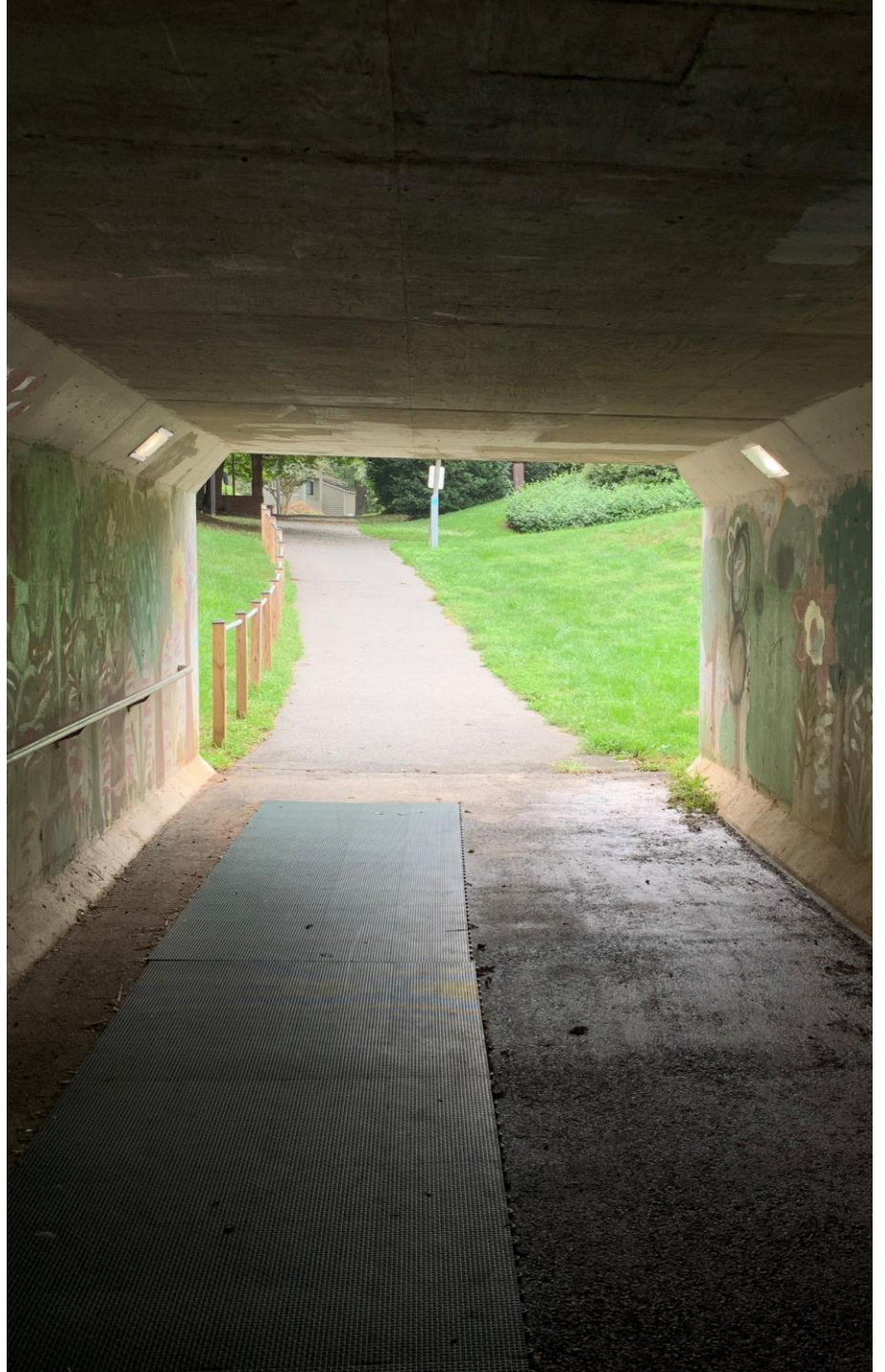


Under Baron
Cameron Avenue
at Browns
Chapel Park
(100' long | 12' wide | 10' high)





Under South
Lakes Drive at
South Lakes
Shopping Center
(90' long | 12' wide | 8' high)





Under South Lakes Drive at South Lakes Drive Park

(90' long | 6' wide trail | 14' high)





At-Grade Crossing Recap





Key Considerations

- Long-Term Viability
- Demand/Utilization
- Desirability for Users
- Aesthetics
- Placemaking
- Modal Balance
- Safety
- Ongoing Long-Term Maintenance





About the Consultant

- Fehr & Peers

- On July 15, 2020, Fehr & Peers was hired to provide analysis of the crossing options
- Fehr & Peers is a national transportation consulting firm focused on multimodal planning



- STV, Inc.

- Subconsultant STV is supporting civil engineering review of crossing options
- STV has worked on numerous multimodal projects across the country, including Richmond Highway BRT





Wiehle Avenue Crossing Assessment

Matthew Ridgeway, Fehr & Peers

Cullen McCormick, Fehr & Peers

Study Group Presentation

September 17, 2020



What We'll Cover This Evening



Review Project
Alternatives



Address Study
Group Preliminary
Questions



View Example
Crossings



What We'll Cover This Evening



Review Project
Alternatives



Address Study
Group Preliminary
Questions



View Example
Crossings



Study Area Considerations



Substantial Elevation Change

Approximately 30' elevation change between Campus Commons and Wiehle Ave



Lengthy Crossing Distance

Approximately 140' curb-to-curb width across Wiehle Ave south of Dulles Toll Rd EB ramps



Existing Cut-Through Routes

Informal paths through developments create faster routes to Wiehle-Reston East Station than sidewalks



Crossing Alternatives 1 – 3



Alternative 1

Bridge Option A

Ramp and stairs
on west side and
elevator and stairs
on east side



Alternative 2

Bridge Option B

Elevators and
stairs on both
sides



Alternative 3

Bridge Option C

Ramp on west
side and egress
into building on
east side



Crossing Alternatives 4 – 6



Alternative 4
Tunnel

Cut through
Wiehle Ave
retaining wall



Alternative 5
At-Grade:
“Intersection

Porkchop” crossing
island, high-visibility
crosswalks, new
pedestrian signals,
and median refuge



Alternative 6
At-Grade:
Midblock

Two HAWK signals
(1 NB and 1 SB),
high-visibility
crosswalks, and
median refuge



What We'll Cover This Evening



Review Project
Alternatives



Address Study
Group Preliminary
Questions



View Example
Crossings



Study Group Preliminary Questions

1

How long does it take to cross using each option?

2

What are the origins and destinations of people using the crossings?

3

What are the site and multimodal impacts of each option?

4

Are there at-grade crossing safety considerations?



Crossing Time by Alternative



Alternative 1

Bridge Option A

Fastest: stairs + ramp. Slowest: ramp + elevator

2m:57s – 3m:28s



Alternative 2

Bridge Option B

Fastest: stairs alone. Slowest: elevator alone

2m:2s – 2m:50s



Alternative 3

Bridge Option C

Assumes elevator to exit building on east side

3m:5s



Alternative 4

Underpass

1m:8s

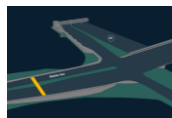


Alternative 5

At-Grade: Intersection

Fastest: no wait for walk signal. Slowest: PM peak full wait for walk signal

0m:50s – 2m:55s



Alternative 6

At-Grade: Midblock

Fastest: no wait for walk signal. Slowest: PM peak full wait for walk signal

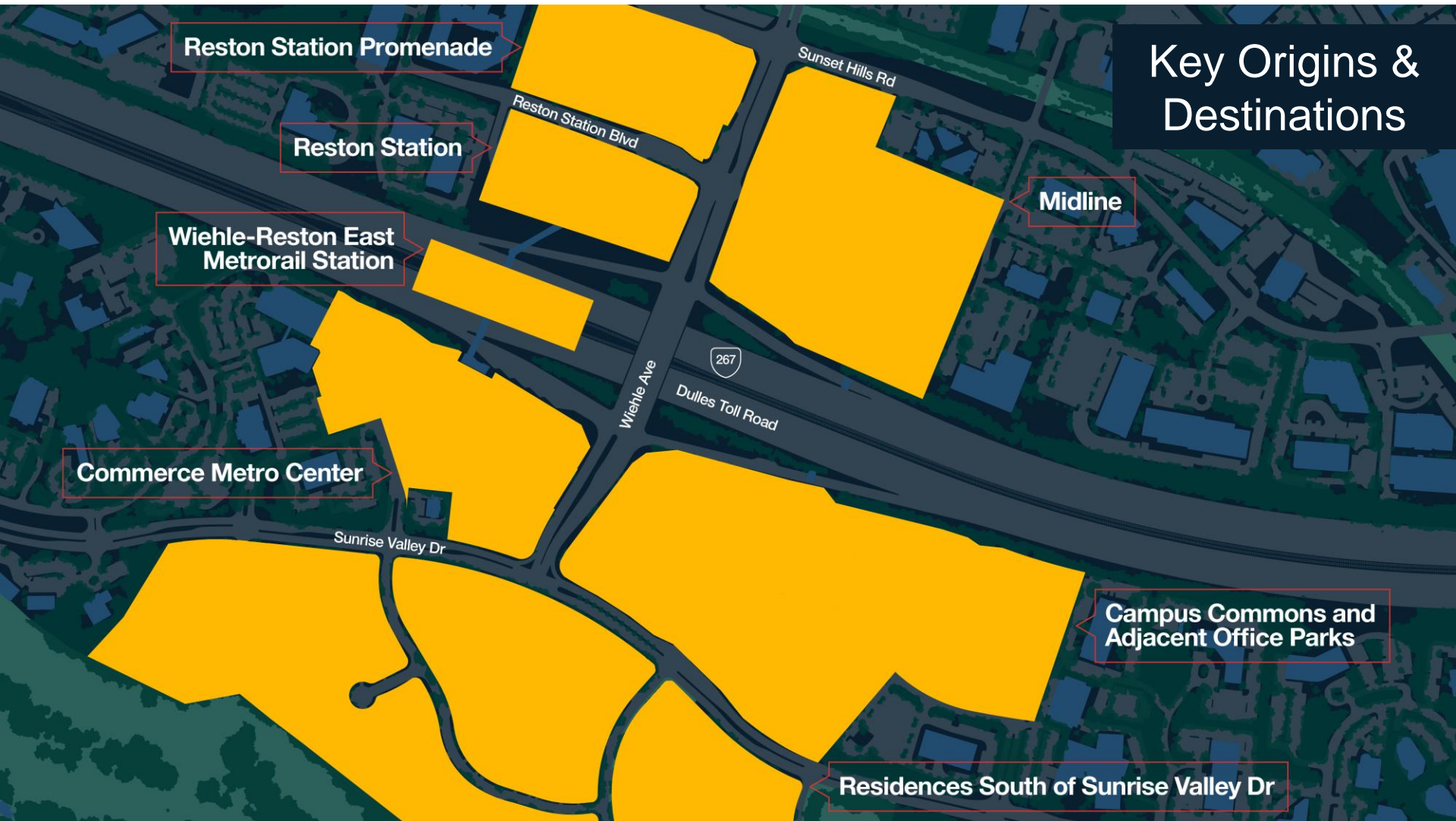
0m:27s – 2m:32s

Comparison

Wiehle Ave at Sunrise Valley Dr

Fastest: no wait for walk signal. Slowest: AM peak full wait for walk signal

0m:24s – 2m:9s





Pedestrian Desire Lines



- All crossing alternatives generally satisfy pedestrian desire lines
- Some alternatives (1, 3, 6) require out-of-direction travel for certain walking trips
- Pedestrians are likely to avoid routes requiring elevation change when a flatter alternative is present
- While cut-through paths across Commerce Metro Center will be altered by the redevelopment, pedestrians are still likely to cut through Commerce Metro Center to access the neighborhoods south of Sunrise Valley Dr



Site & Multimodal Impacts

Alternative 1

Bridge Option A



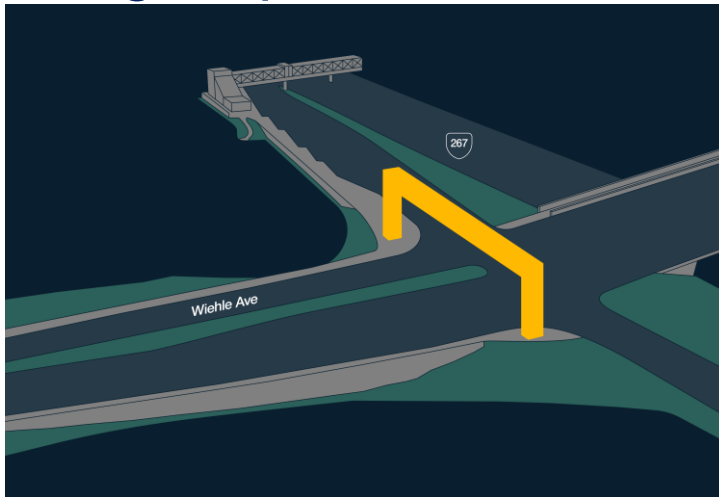
- Pros**
 - Ramp creates direct connection to Metro Station plaza
 - No multimodal conflicts
- Cons**
 - Ramp design requires out-of-direction travel for some users
 - Ramps, stairs, and elevators, plus considerable elevation change may discourage use
 - Elevator and bridge maintenance/cleanliness
 - No street activation on west side of Wiehle Avenue
 - Creates highway experience
 - ADA Concerns



Site & Multimodal Impacts

Alternative 2

Bridge Option B



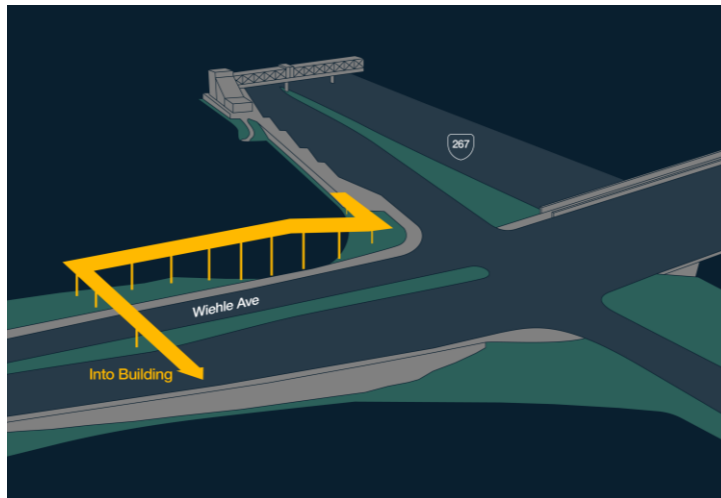
- Pros** • Use of elevators and stairs minimizes out-of-direction travel
- No multimodal conflicts
- Cons** • Ramps, stairs, and elevators, plus considerable elevation change may discourage use
- Elevator and bridge maintenance/cleanliness
- Creates highway experience
- ADA Concerns



Site & Multimodal Impacts

Alternative 3

Bridge Option C



- Pros**
- Ramp creates direct connection to Metrorail Station plaza
 - No multimodal conflicts
 - No offsite elevator maintenance
- Cons**
- Ramp design requires out-of-direction travel for users not traveling to/from the Metro Station or points north via Metro station bridge
 - Ramp requires connection through Campus Commons development, which may discourage users
 - Extend their travel times
 - Bridge maintenance
 - Visual issues
 - Creates highway experience



Site & Multimodal Impacts

Alternative 4

Underpass



- Pros** • Takes advantage of grade to avoid excessive elevation change
- Shortest consistent crossing time
- No multimodal conflicts
- Cons** • Ramp design requires out-of-direction travel for some users
- Potential utility conflicts
- Highest public cost option
- Tunnel design is critical to users feeling safe
- Lighting/security concerns
- Maintenance/cleanliness



Site & Multimodal Impacts

Alternative 5

At-Grade: Intersection



- Pros**
 - Lower-cost treatment than bridge or tunnel alternatives
 - No out-of-direction travel
 - Street activation
 - Modal balance
- Cons**
 - Signal retiming is required to accommodate pedestrian crossing time, which requires mitigations to maintain traffic flow
 - Two-stage crossing



Site & Multimodal Impacts

Alternative 6

At-Grade: Midblock



- Pros**
 - Lower-cost treatment than bridge or tunnel alternatives
 - Fewer conflict points for pedestrians
- Cons**
 - Adding a new pedestrian crossing may result in driver delay
 - Adding HAWK signals is more expensive than adding pedestrian signal heads as used in the intersection at-grade option
 - Two-stage crossing
 - Safety concerns
 - Lack of driver expectation



At-Grade Crossing Safety

Issue	Potential Strategy	Intersection	Midblock
Long crossing distance increases pedestrian exposure to traffic	Two-stage crossing (increases crossing time); median refuge islands	X	X
Conflict with turning vehicles	Pedestrian refuge island at end of offramp with pedestrian crosswalk phase	X	
Failure of driver to yield to pedestrian	Mitigated by HAWK pedestrian signal, and potentially enforcement		X
Wide intersection	Square up the intersection, reevaluate road cross section	X	



What We'll Cover This Evening



Review Project
Alternatives



Address Study
Group Preliminary
Questions



View Example
Crossings



Example Crossings

1

The REACH at the Kennedy Center (example of what TF Cornerstone is proposing)

2

Desirable and undesirable underpass designs

3

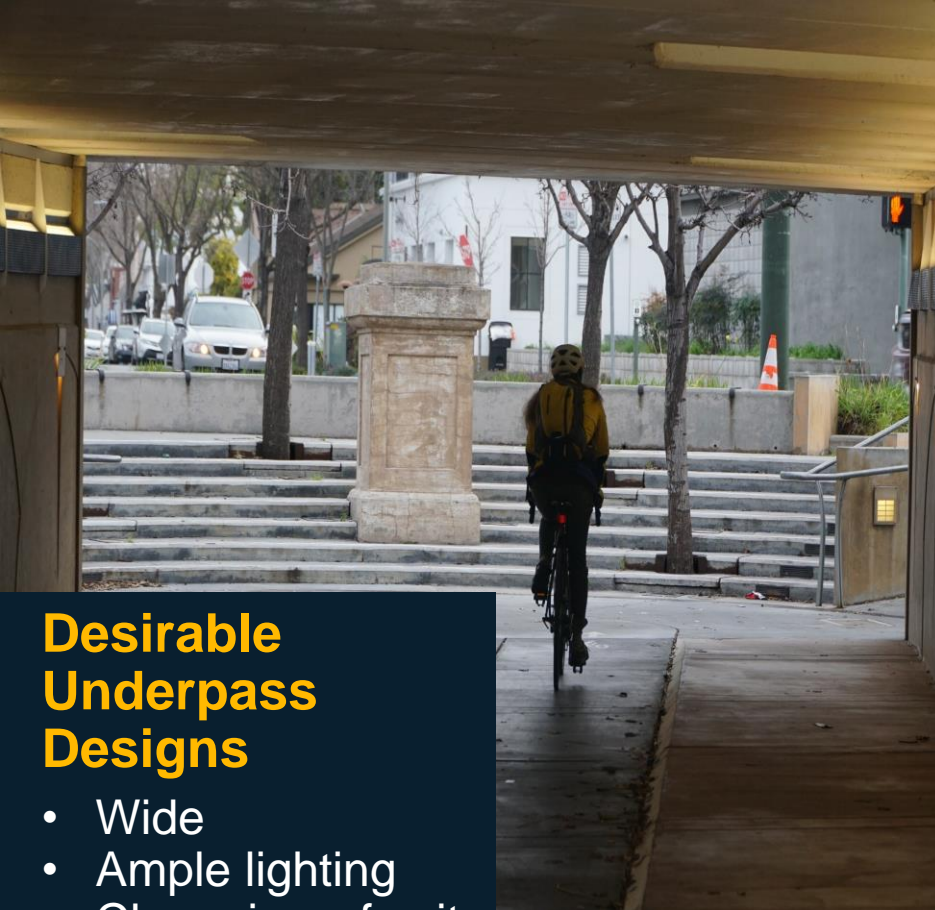
Desirable and undesirable at-grade crossings designs



**The REACH at
the Kennedy
Center**



**Overpass Tower
Cape Coral, FL**



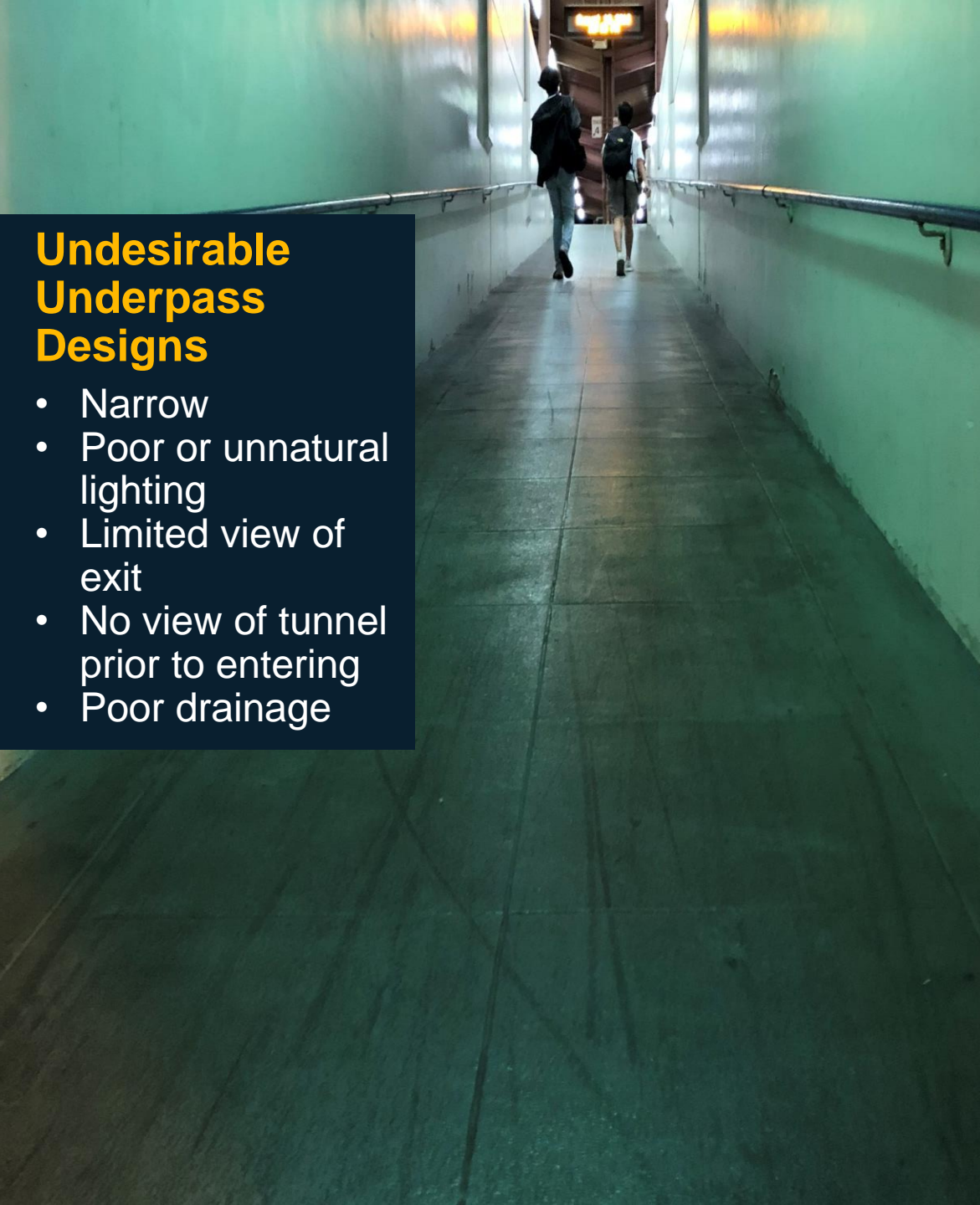
Desirable Underpass Designs

- Wide
- Ample lighting
- Clear view of exit



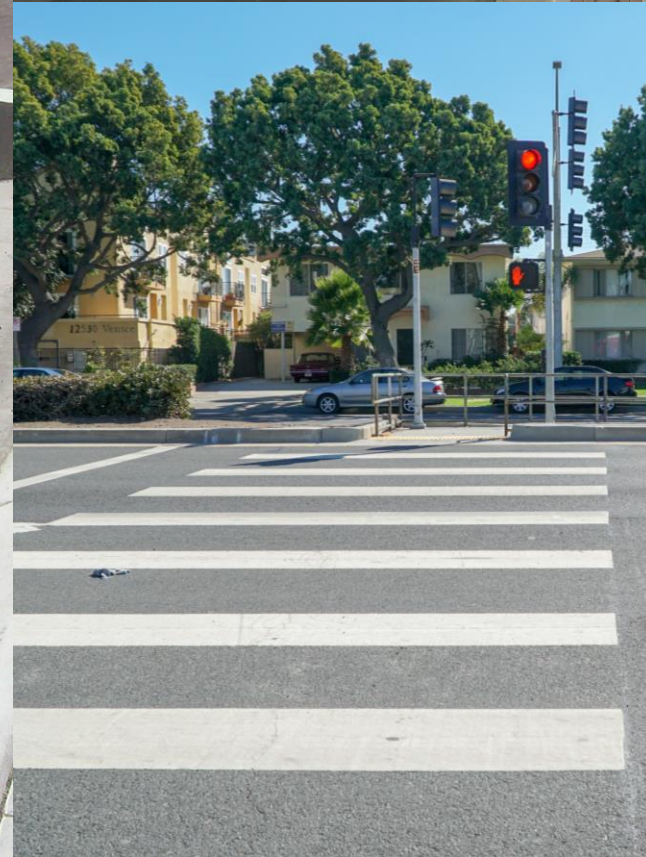
Undesirable Underpass Designs

- Narrow
- Poor or unnatural lighting
- Limited view of exit
- No view of tunnel prior to entering
- Poor drainage



Desirable At-Grade Boulevard Crossing Designs

- Median refuge and/or 2-stage crossing
- High-visibility crosswalks
- Pedestrian-actuated midblock crossings
- Directional curb ramps
- Advanced stop or yield lines
- Protected turn phases



Undesirable At-Grade Boulevard Crossing Designs

- No median refuge
- No marked crosswalks or no high-visibility crosswalks
- Lack of pedestrian-actuated signals at midblock locations
- Large corner radii
- No curb ramps
- Permissive left-turns during crossing phase





Questions?



October Meeting Preview

- Crossing Demand Analyses
- Alternatives Utilization Estimates
- Cost Estimates
- Engineering Feasibility Review



County of Fairfax, Virginia

Wiehle Avenue Crossing

Study Group Meeting

October 15, 2020

Marc L. Dreyfuss, AICP
Fairfax County Department of Transportation

Matthew Ridgeway and Cullen McCormick
Fehr & Peers

Sagar Adivarekar
STV, Inc.



What We'll Cover This Evening



Walk Shed
Comparison



Walk Time
Comparison



Crossing
Refinements



Cost
Estimates



What We'll Cover This Evening



Walk Shed
Comparison



Walk Time
Comparison



Crossing
Refinements



Cost
Estimates



Crossing Alternatives 1 – 3



Alternative 1

Bridge Option A

Ramp and stairs
on west side and
elevator and stairs
on east side



Alternative 2

Bridge Option B

Elevators and
stairs on both
sides



Alternative 3

Bridge Option C

Ramp on west
side and egress
into building on
east side



Crossing Alternatives 4 – 6



Alternative 4

Tunnel

Cut through
Wiehle Ave
retaining wall



Alternative 5

Intersection

High-visibility
crosswalks, new
pedestrian signals,
and median refuge



Alternative 6

Midblock

Two HAWK signals
(1 NB and 1 SB),
high-visibility
crosswalks, and
median refuge



Walk Shed Comparison

What Is It?

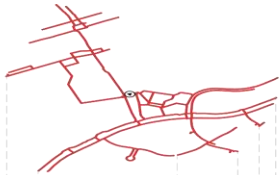
Analysis of how far the average person can walk in 5 and 10 minutes using sidewalks and walkways in the project area (omits informal paths). Assumes shortest wait times for traffic signals and elevators

Why Are We Doing It?

Compares how much access to destinations each crossing alternative provides



Legend for Following Maps

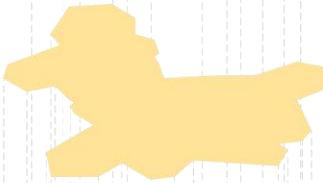


Walking Routes

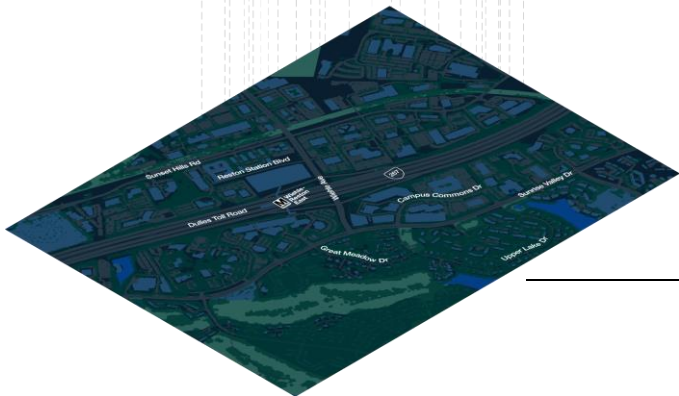
- ▶ Originating from the center of the crossing



5-Minute Walk Shed



10-Minute Walk Shed



Alternative 1

Bridge Option A

Lineal Feet (10-min)

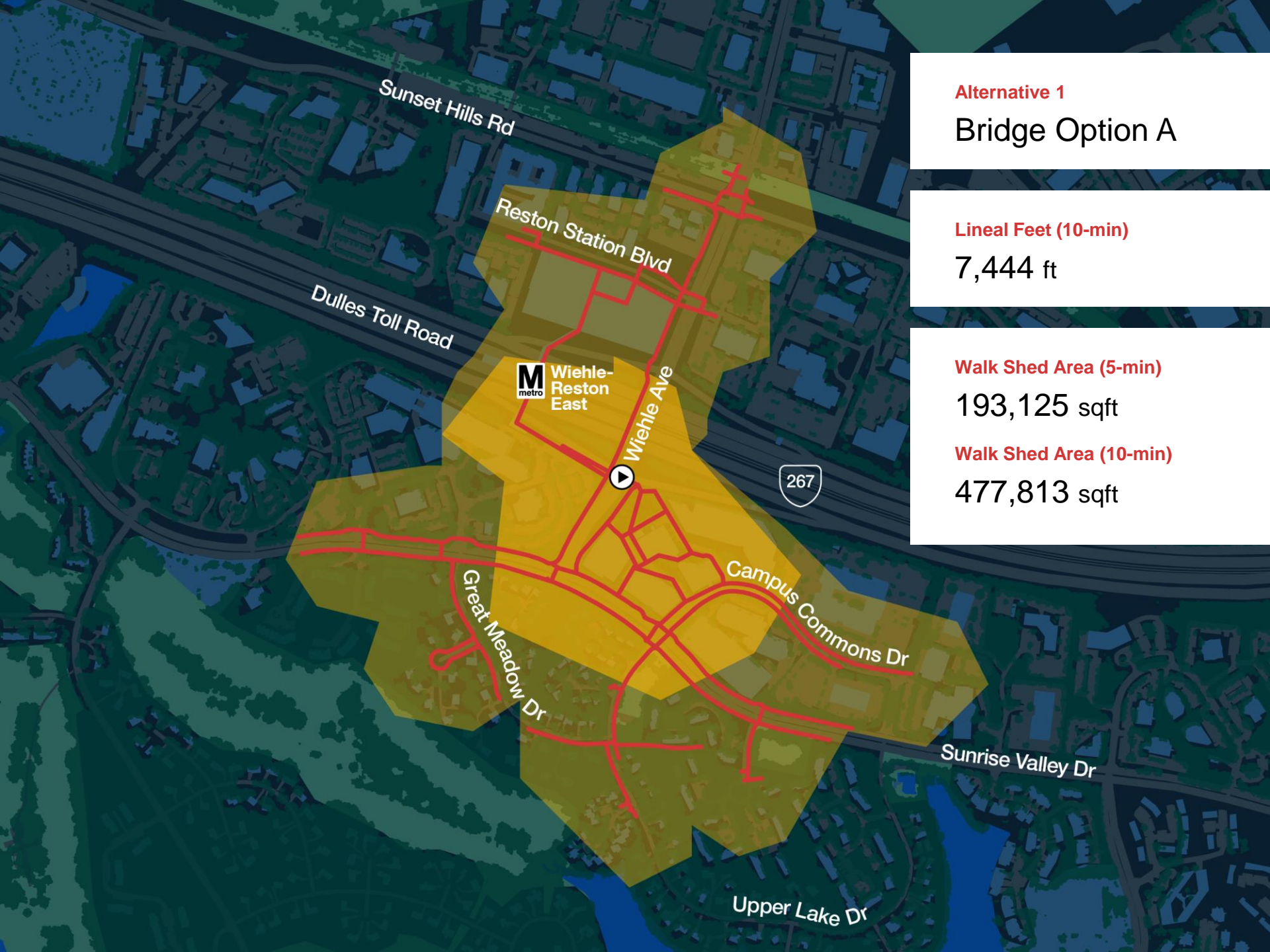
7,444 ft

Walk Shed Area (5-min)

193,125 sqft

Walk Shed Area (10-min)

477,813 sqft



Alternative 2

Bridge Option B

Lineal Feet (10-min)

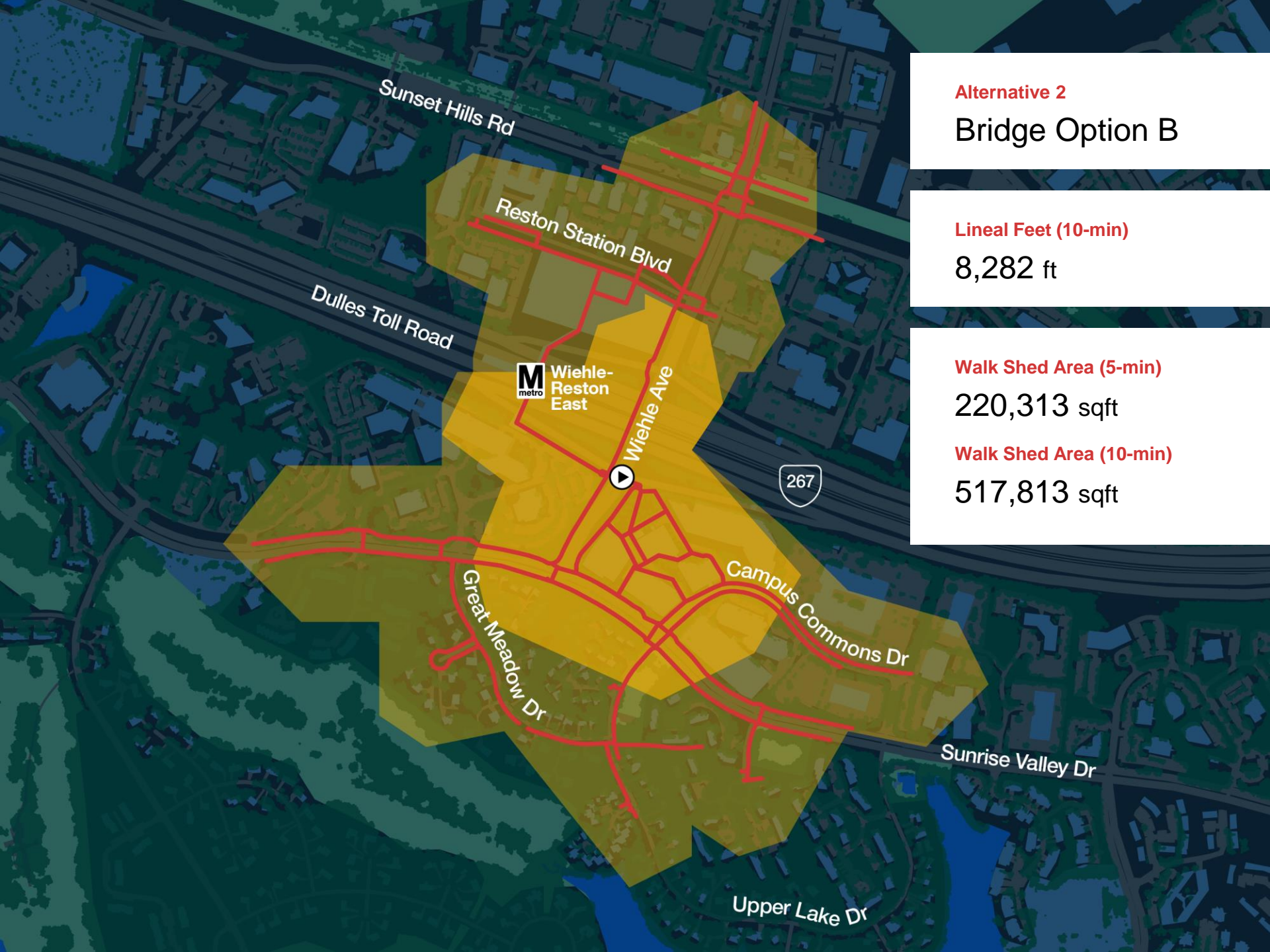
8,282 ft

Walk Shed Area (5-min)

220,313 sqft

Walk Shed Area (10-min)

517,813 sqft



Alternative 3

Bridge Option C

Lineal Feet (10-min)

7,784 ft

Walk Shed Area (5-min)

191,563 sqft

Walk Shed Area (10-min)

498,438 sqft





Alternative 4

Tunnel

Lineal Feet (10-min)

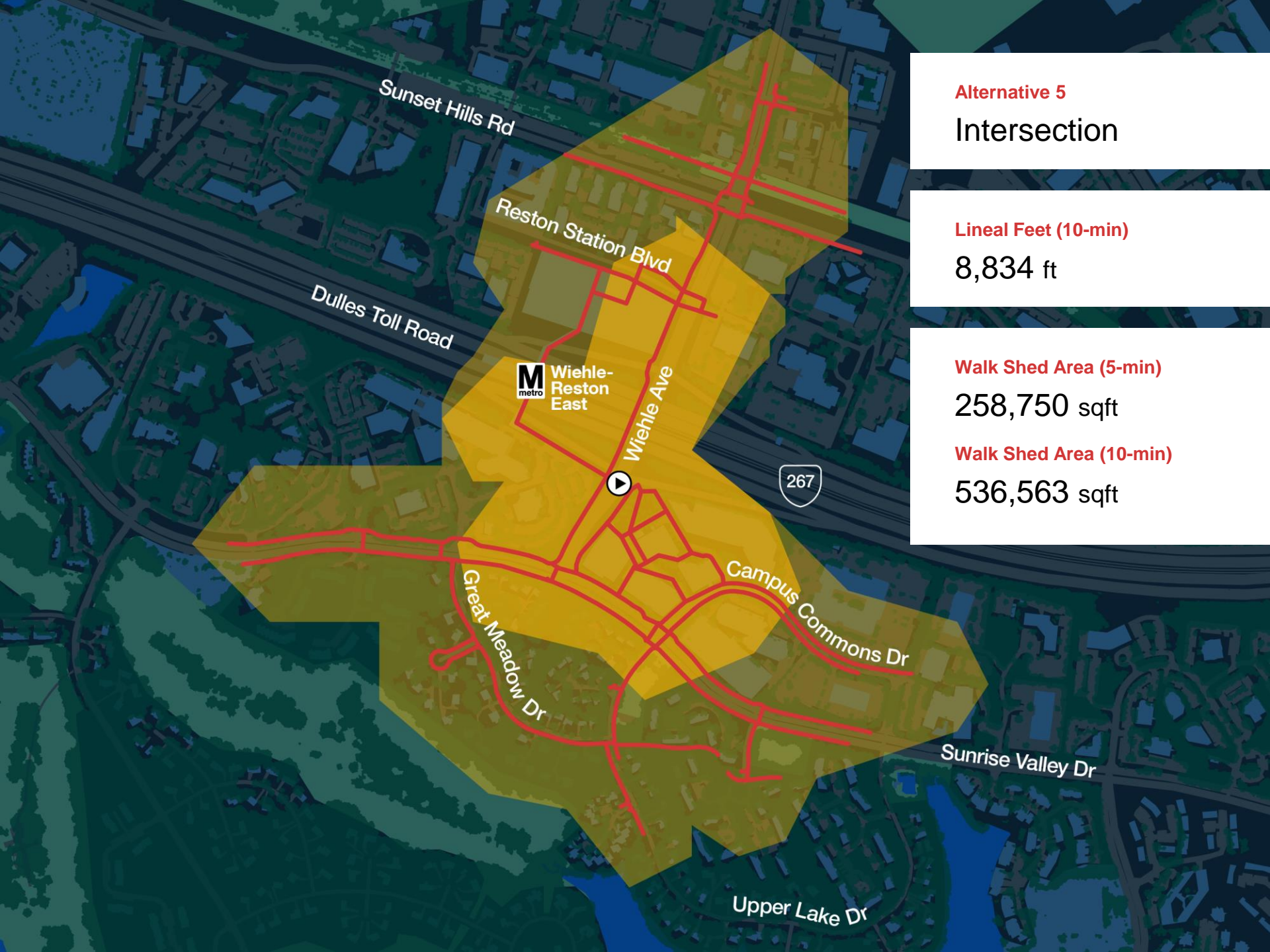
8,201 ft

Walk Shed Area (5-min)

196,250 sqft

Walk Shed Area (10-min)

525,938 sqft



Alternative 5
Intersection

Lineal Feet (10-min)

8,834 ft

Walk Shed Area (5-min)

258,750 sqft

Walk Shed Area (10-min)

536,563 sqft



Alternative 6
Midblock

Lineal Feet (10-min)

8,720 ft

Walk Shed Area (5-min)

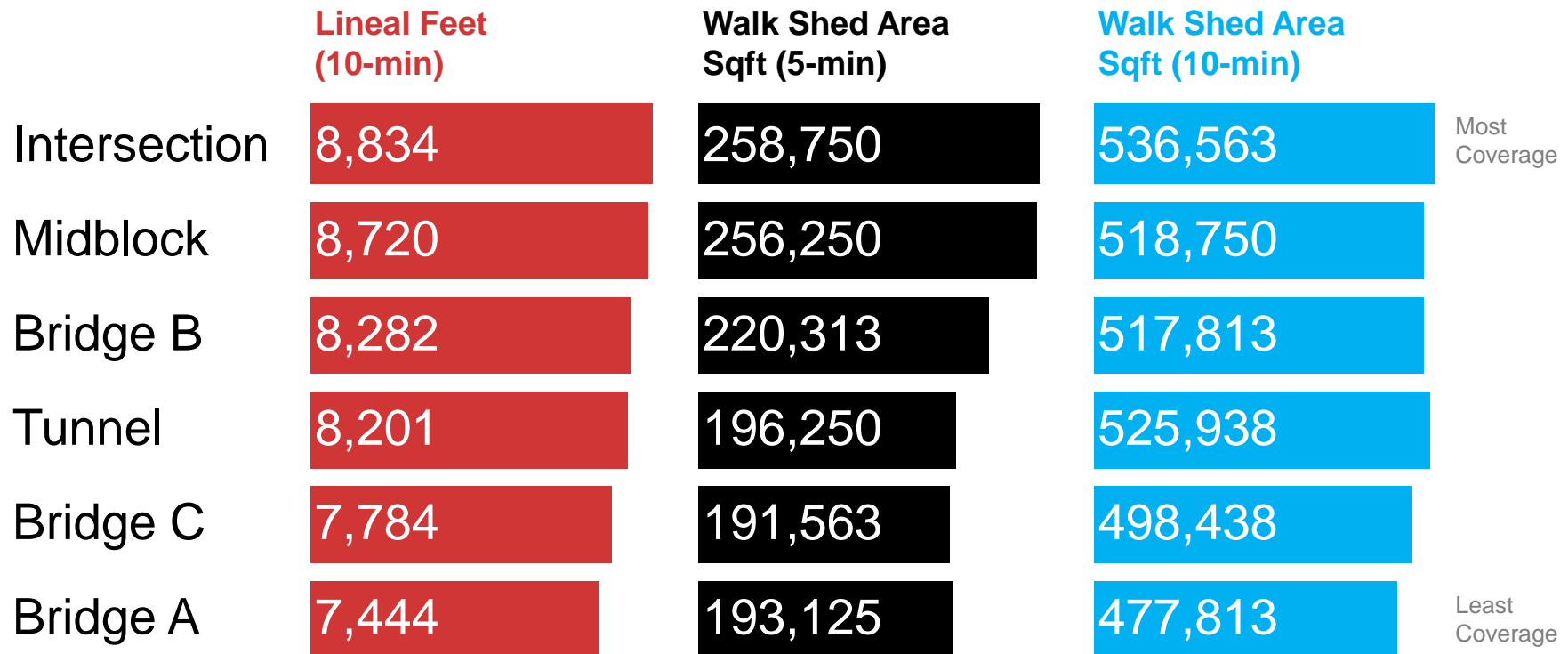
256,250 sqft

Walk Shed Area (10-min)

518,750 sqft



Walk Shed Comparison





Walk Shed Observations

All crossings generally provide similar coverage

Major station-area commercial and office destinations

Large portions of Sunrise Valley Dr neighborhoods

At-grade crossings have the largest walk shed

Most direct travel routes and no grade changes

The Intersection crossing has the best overall coverage

Bridge A has the smallest walk shed

Bridge Option A has a 15% decrease in lineal feet and 25% decrease in 5-min walk shed from the Intersection crossing



What We'll Cover This Evening



Walk Shed
Comparison



Walk Time
Comparison



Crossing
Refinements



Cost
Estimates



Walk Time Comparison

What Is It?

How long it takes the average person to walk, including intersection and elevator wait times, from:



Wiehle-Reston East
Station, south entrance

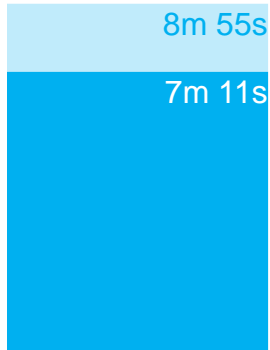
Sunrise Valley Dr & Campus
Commons Dr, southwest corner

Why Are We Doing It?

Provides a real-world comparison of the efficacy of each crossing alternative, taking into consideration out-of-direction travel and elevation change



Legend for Following Charts



Maximum Walk Time

Full wait at intersection or elevator

Minimum Walk Time

No wait at intersection or elevator



Wiehle Avenue West Sidewalk Routes



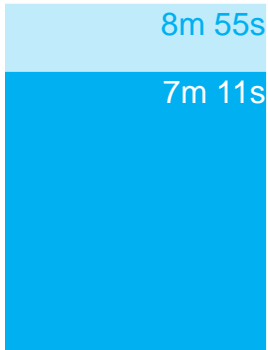
Wiehle Avenue East Sidewalk Routes



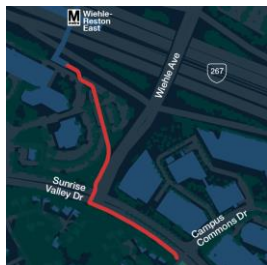
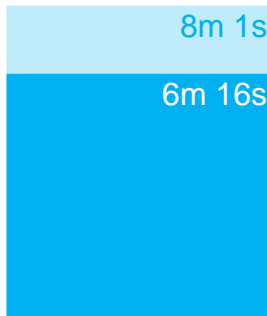
Campus Commons Cut-Through Routes



Wiehle Ave West Sidewalk



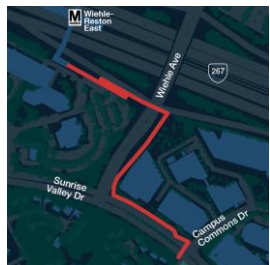
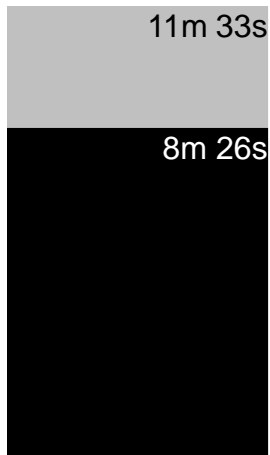
West Sidewalk



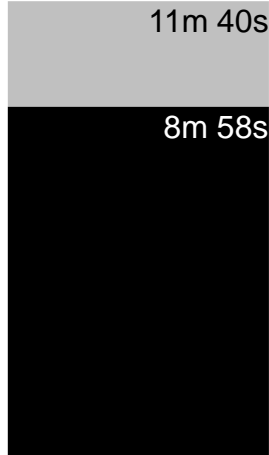
Commerce Metro
Center Cut-Through



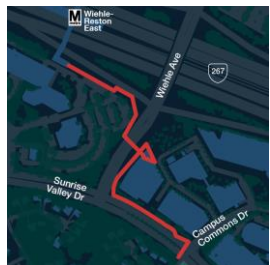
Wiehle Ave East Sidewalk



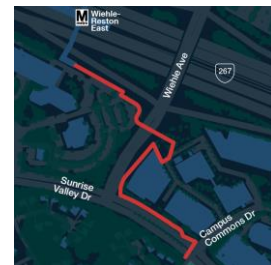
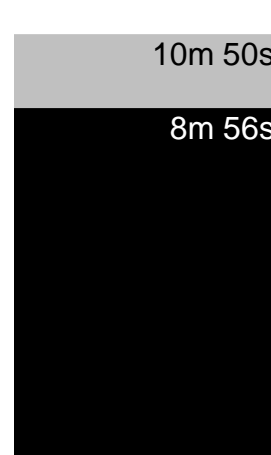
Bridge Option A



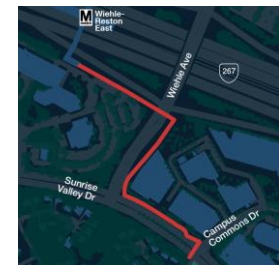
Bridge Option B



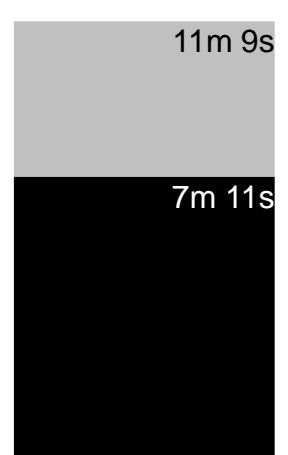
Bridge Option C



Tunnel



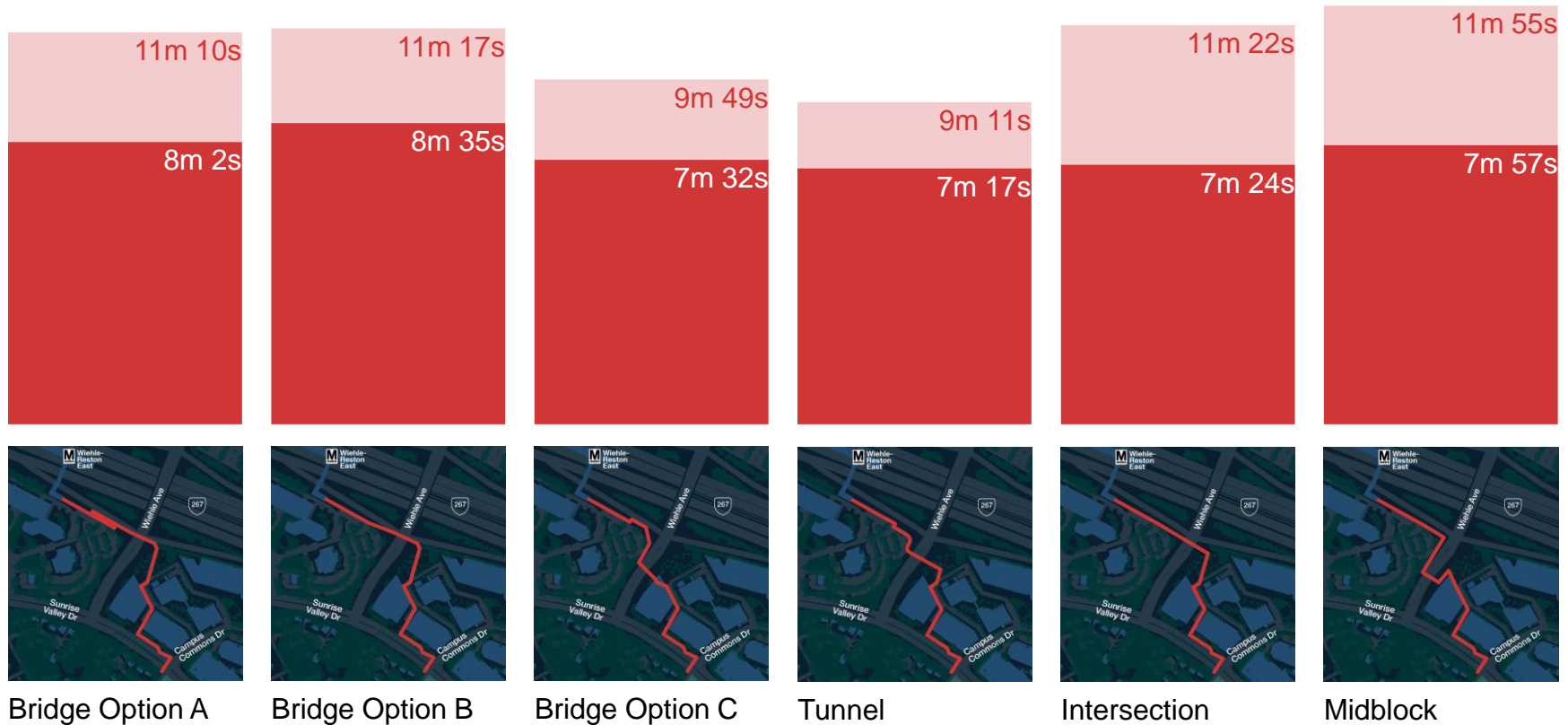
Intersection



Midblock

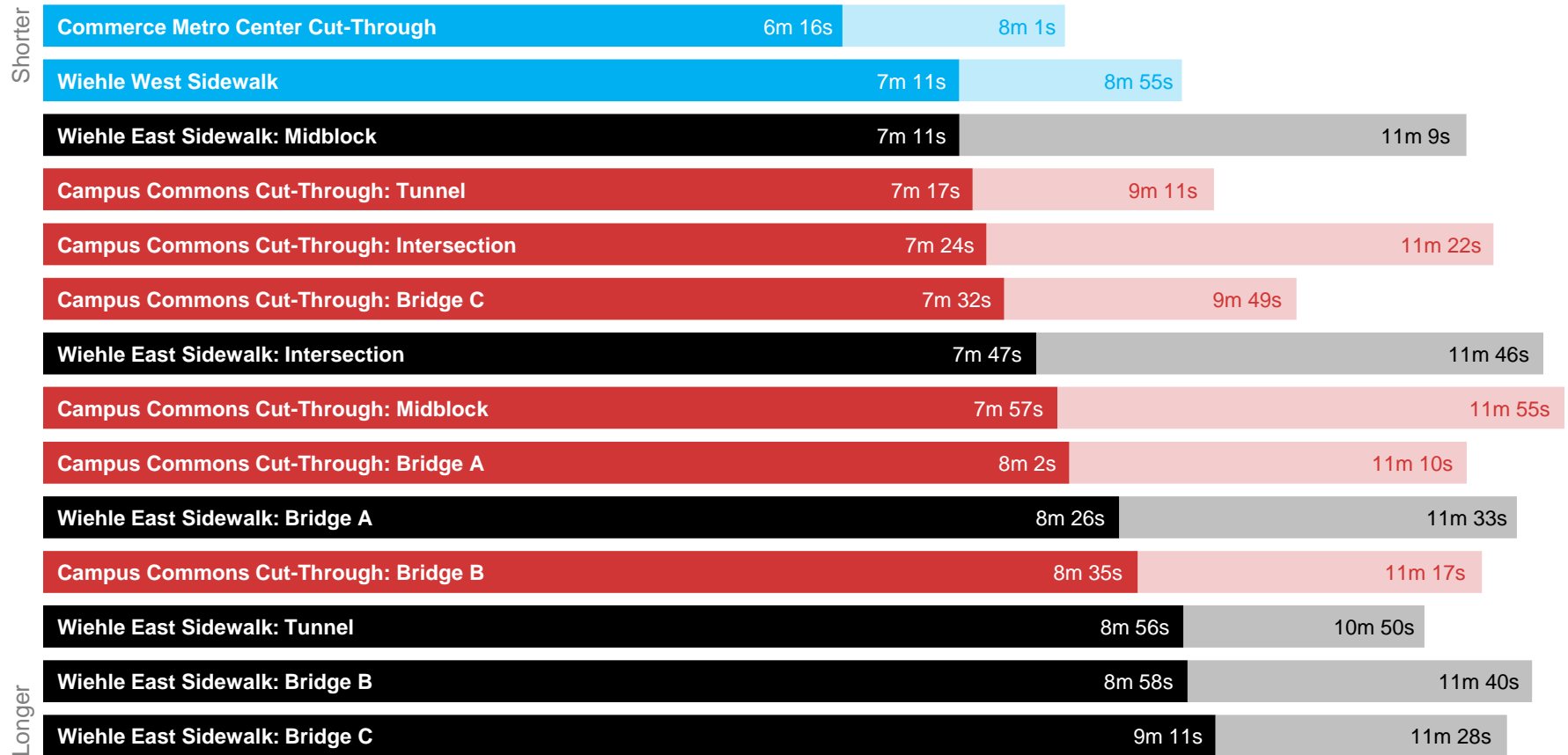


Campus Commons Cut-Through





Walk Time Comparison





Walk Time Observations

Existing routes along west side of Wiehle Ave remain the fastest option

Fewer intersections;
direct travel route

Traffic signals and elevators greatly increase travel time variability

Elevators, in particular, may discourage use

Campus Commons cut-through is generally faster than Wiehle Ave east sidewalk

Less out-of-direction travel when walking through Campus Commons



What We'll Cover This Evening



Walk Shed
Comparison



Walk Time
Comparison



Crossing
Refinements



Cost
Estimates



Crossing Reviews & Refinements

What Is It?

Fehr & Peers' subconsultant, STV, reviewed the Applicant's three bridge crossings for:

- Concept refinements
- Design feasibility
- Utility conflicts

STV developed a conceptual design and similar analysis for the Tunnel alternative

Why Are We Doing It?

Provides an assessment of potential design enhancements and construction feasibility



Alternatives Studied



Alternative 1

Bridge
Option A



Alternative 2

Bridge
Option B



Alternative 3

Bridge
Option C



Alternative 4

Tunnel

This assessment focuses on construction feasibility of structural elements. Since the two at-grade crossing options (Intersection and Midblock) do not include structural elements like bridges or tunnels, they are not included in this evaluation



Alternatives Studied



Alternative 1

Bridge
Option A



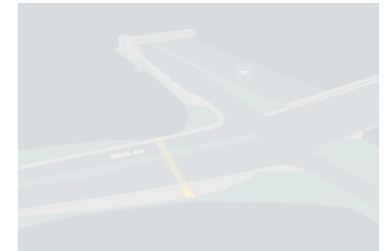
Alternative 2

Bridge
Option B



Alternative 3

Bridge
Option C



Alternative 4

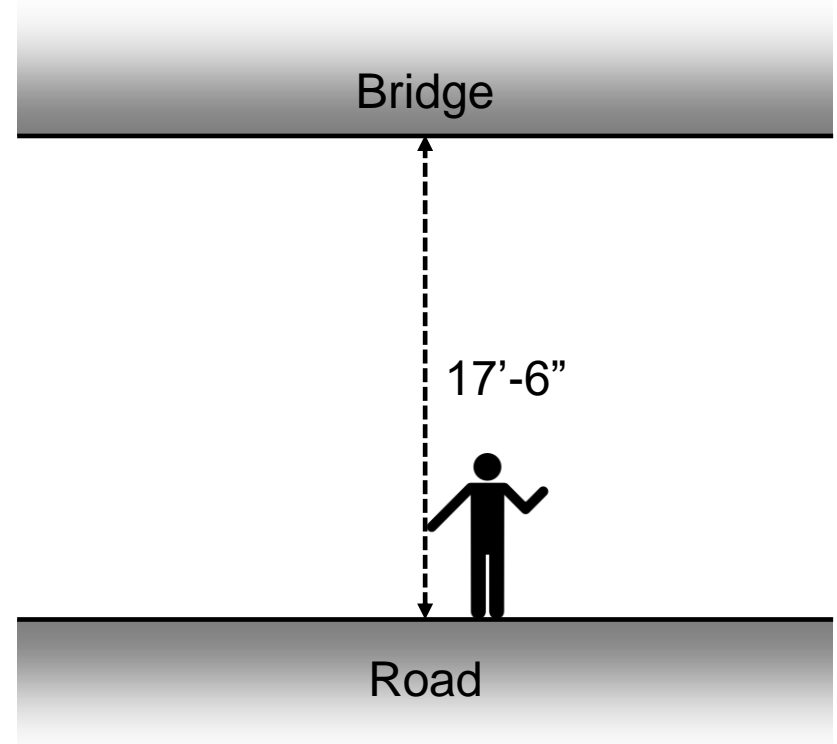
Tunnel



Concept Refinements

Vertical Clearance

- 17'-0"** Minimum vertical clearance of Applicant's bridge
- 16'-6"** Minimum required vertical clearance for highway bridges
- 17'-6"** Minimum required vertical clearance for pedestrian/bike bridges (1ft higher than for highway bridges)



Guidance: AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition, 2009

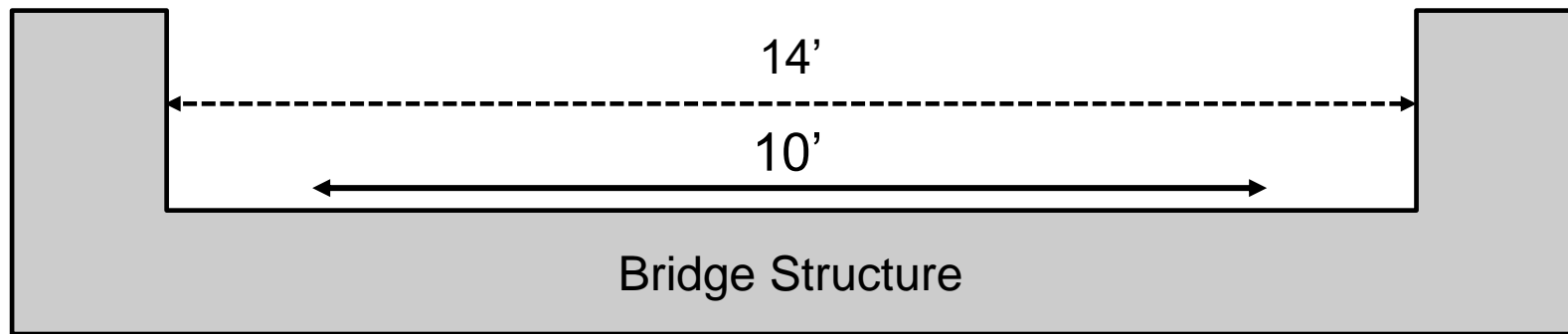


Concept Refinements

Pathway Width

6'-0" Minimum clear width of Applicant's bridge
(face-to-face of rails/curbs)

14'-0" Minimum required clear width for pedestrian/bike bridges
(10'-0" pathway with 2'-0" buffers on each side)



Guidance: VDOT Structure and Bridge Design Aids



Concept Refinements

Pathway Fencing and Railing

- Applicant's bridges have a 3'-0" pedestrian railing
- Recommend adding fencing
- Recommend adding 3'-6" tall handrail along both sides of bridge



Guidance: VDOT Structure and Bridge Design Aids



Concept Refinements

Pathway Lighting

- Applicant's concept drawings did not include details for lighting on the bridge, ramps, or stairs
- Recommend adding pedestrian-scale lighting in bridge designs





Concept Refinements

Structural Protection

- All structure units within 30'-0" from the edge of a traffic lane must be protected from collision
- If the structure cannot be designed to resist collision, then a crashworthy (Test Level-5) ground mounted barrier needs to be provided

Guidance: AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017; AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition, 2009





Concept Refinements

Structural Protection & Site Distance

Bridge Options A and B

Recommend relocating the bridge further south along Wiehle Ave to accommodate bridge pier protection and improve sight distance for the existing traffic signals

Recommend relocating elevator tower/stairs further away from traffic lanes

Bridge Option C

Recommend relocating elevated ramps along Wiehle Ave further west to minimize impacts to existing retaining wall and sidewalk



Concept Refinements

Other Considerations

- Consider adding metal bollards to prevent motorized vehicles on bridge ramp
- Consider providing an architectural treatment to blend bridges with the surrounding environment





Design Feasibility

Technical Considerations

Design Compliance	Must comply with AASHTO LRFD guide Specifications for Design of Pedestrian Bridges, 2nd Edition, 2009 and pertinent parts of the AASHTO LRFD Bridge Design Specification, 8th Edition, 2017
Bridge Inspection Frequency	Depends on the type of superstructure used. Structures with fracture-critical members (e.g. trusses, steel 2-girder systems) generally will need to be inspected twice as often as structures without them. Consider precluding use of fracture-critical members
Bridge Maintenance	Depends on types of materials used in construction. Structural steel girders require regular painting depending on type of coating system used. Bridge joints need to be maintained regularly
Traffic Impacts	Likely will occur on Wiehle Ave during bridge construction
Retaining Wall: Bridge Option C	Portion of bridge's elevated ramp structure along west side of Wiehle Ave will impact existing retaining wall and sidewalk



Design Feasibility

Technical Considerations

Bridge Foundation

Bridge structure can likely be supported by shallow foundation or deep foundation depending upon the soil conditions. A geotechnical report was not available during the assessment of the bridge designs; therefore, foundation types have not been identified

Auto Crash Protection: Bridge Options A and B

Adequate length of crashworthy ground-mounted pier protection barrier cannot be placed as piers are too close to the intersection

Elevator/stair tower is too close to travel lanes on Wiehle Ave. It may not be feasible to connect it to sidewalks given bridge substructure protection requirements

Auto Crash Protection: Bridge Option C

There may not be sufficient space to accommodate a crashworthy ground mounted pier protection barrier along Wiehle Ave



Design Feasibility

Technical Considerations

Sight Distance

Will need to be evaluated for northbound Wiehle Ave towards the intersection of Wiehle Ave/Dulles Toll Rd Ramps. The northwest and northeast traffic signal poles could require relocation if inadequate sight distance is determined

The northeast poles (across Toll Rd on-ramps) will conflict with Bridge Options A and B and need to be relocated





Design Feasibility

Utility Considerations

Light Poles

Poles on west side of Wiehle Ave will conflict with bridge structures and need to be relocated (1 pole for Bridge Option A; multiple poles for Bridge Option C)

Electrical Junction Boxes

Relocating the elevator/stair towers further from traffic lanes will conflict with existing electrical junction boxes (Bridge Options A and B)





Alternatives Studied



Alternative 1

Bridge
Option A



Alternative 2

Bridge
Option B



Alternative 3

Bridge
Option C



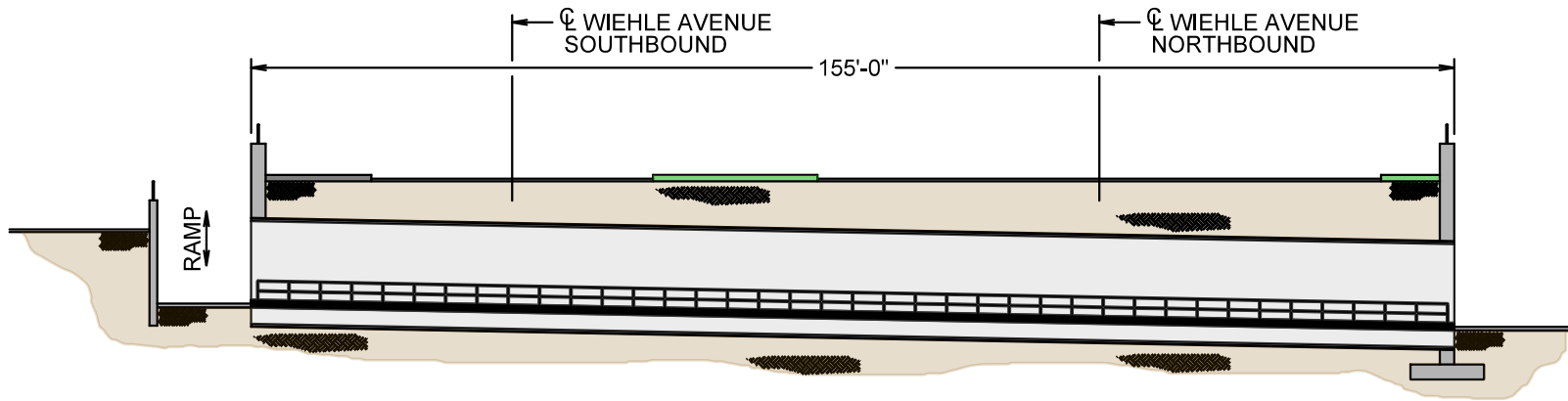
Alternative 4

Tunnel

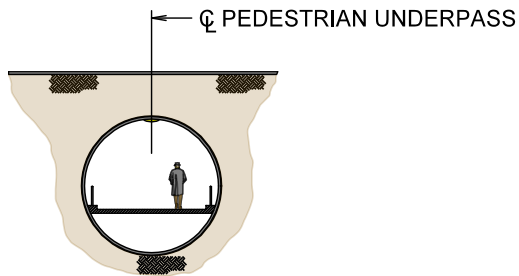


Tunnel Dimensions

Longitudinal Section



Typical Section





Tunnel Dimensions

Precedent Examples



Suwanee, GA



Malvern, PA



Design Feasibility

Technical Considerations

Tunnel Construction

Can be constructed using cut-and-cover or hand mining techniques

Cut-and-Cover Traffic Operations

Construction would require traffic on Wiehle Ave to be staged or detoured

Hand Mining Traffic Operations

Traffic on northbound Wiehle Ave would be affected. Elsewhere, construction can be performed without disrupting traffic by maintaining a minimum of 5'-0" high soil fill above the top of the tunnel during construction



Design Feasibility

Technical Considerations

- Retaining Walls** Walls on east and west sides of Wiehle Avenue will be affected. They will need to be supported during tunnel placement and portions of the walls are anticipated to need reconstruction
- Tunnel Portals** The east and west portals will have an elevation difference between the top of pavement at Wiehle Avenue and top of pavement at parking lot. Excavation will be required to daylight the tunnel at the west portal. The tunnel is anticipated to be at subgrade and will have a ramp leading to the existing parking lot



Design Feasibility

Utility Considerations

- | | |
|-----------------------|---|
| Concrete Pipes | Two 15" reinforced concrete pipes under northbound Wiehle Ave will need to be relocated |
| Drainage Inlet | Inlet and associated pipes in the median of Wiehle Ave will need to be abandoned or relocated |
| Light Poles | Poles along Wiehle Avenue on the top of the retaining wall to the east will be in conflict and need to be relocated |



What We'll Cover This Evening



Walk Shed
Comparison



Walk Time
Comparison



Crossing
Refinements



Cost
Estimates



Cost Estimates

- What Is It?** High-level, rough order-of-magnitude costs for designing, constructing, and inspecting the various crossing options
- Why Are We Doing It?** Compares the amount of investment required for each crossing alternative



Intersection Cost Estimates

Rough Order of Magnitude (Thousands)

Intersection (\$37, \$19) **\$56**

Midblock (\$689, \$345) **\$1,034**



Construction



Preliminary Engineering

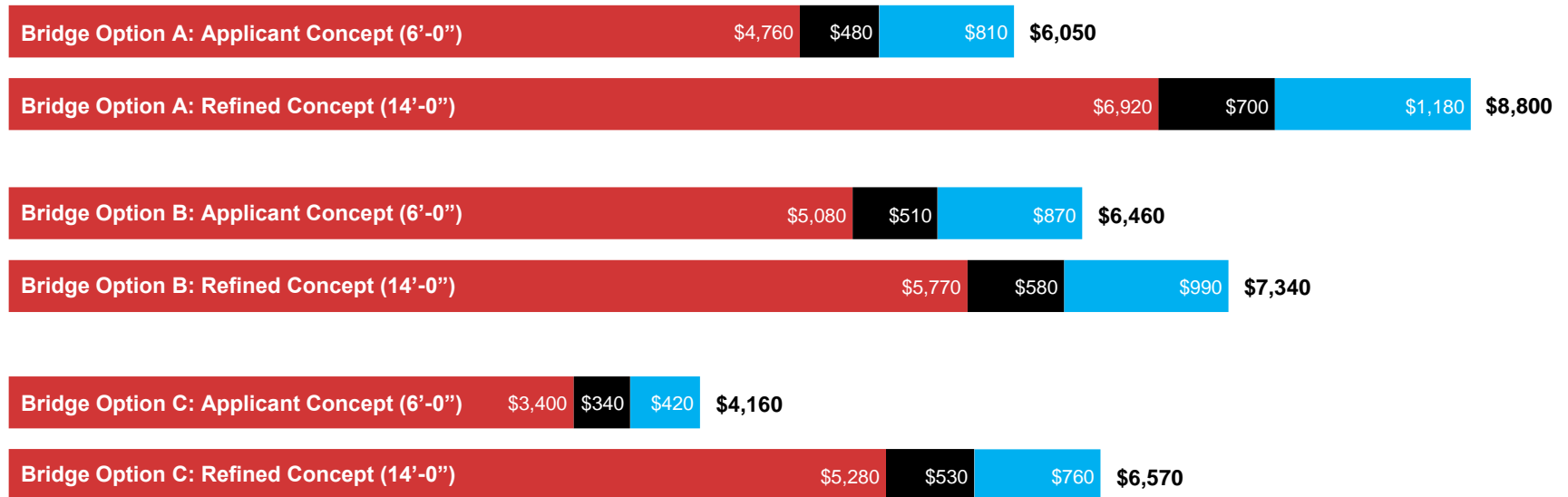


Construction Engineering & Inspection



Bridge Cost Estimates

Rough Order of Magnitude (Thousands)

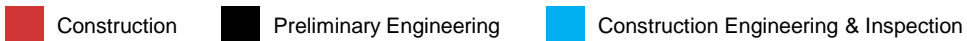


Construction Preliminary Engineering Construction Engineering & Inspection



Tunnel Cost Estimate

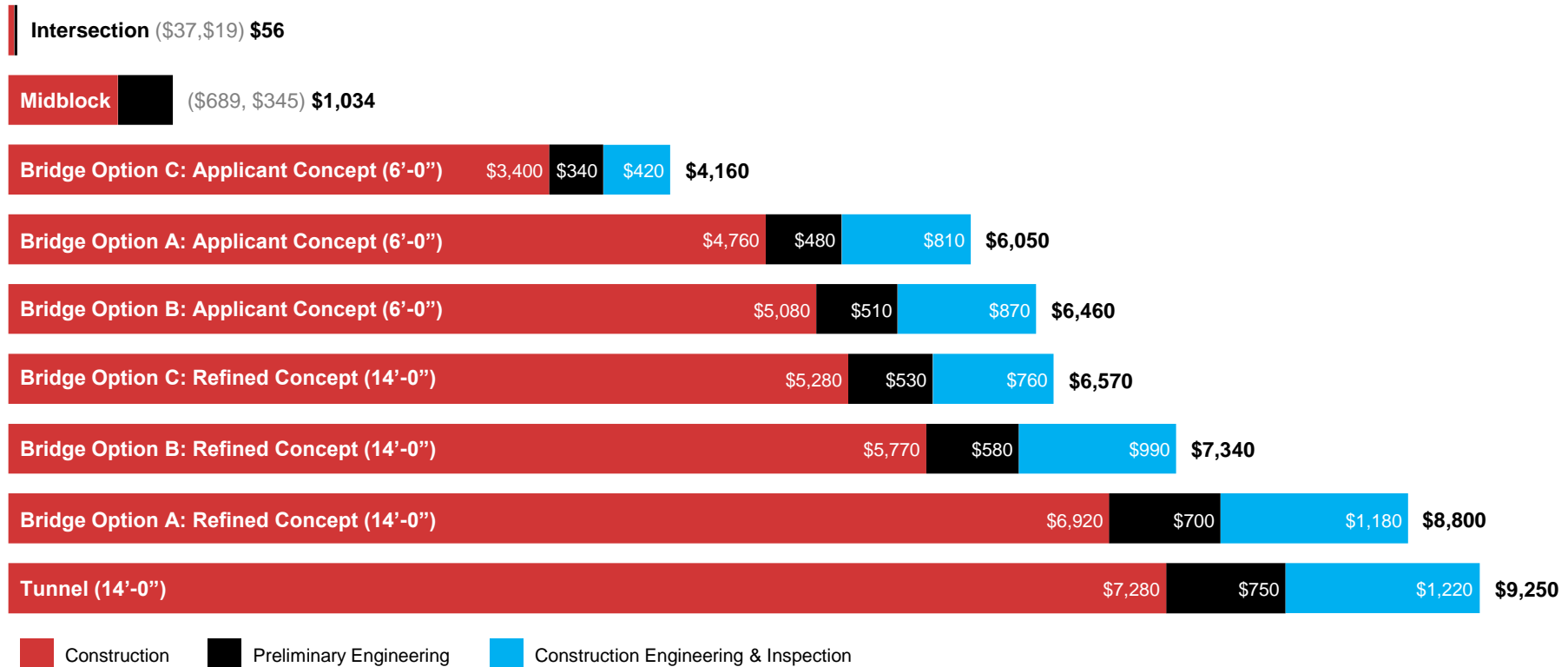
Rough Order of Magnitude (Thousands)





Cost Estimate Comparison

Rough Order of Magnitude (Thousands)





Questions?

Wiehle Crossing Study Group - Tammi Petrine's Suggestions (7-28-21):

Wiehle Ave. Details:

1. Provide on **both** East and West sides of Wiehle/DTR (Dulles Toll Road) bridge a **one-way 6'** wide cycle track from Sunrise Valley to Sunset Hills Road.
 - a. Tracks to be located adjacent to far-Right curb of bridge.
 - b. Note western side of bridge must be modified to provide wider than existing two-way sidewalk. See #3. Addition of two cycle tracks and wider sidewalk on west side will necessitate a shifting of lanes to east and removal of one (or two) lanes total on bridge deck.
 - c. On Wiehle bridge deck, track to be separated from autos/trucks (hereafter termed 'vehicles') by Jersey barriers or some such sturdy barrier to protect cyclists from faster traffic.
 - d. **Track to be painted a definable color to designate usage for cycles, e-scooters and other faster than pedestrian travel modes – i.e., skate boarders, roller bladers, etc.) (Faster non-vehicular traffic must be kept separate from pedestrians.)**
 - i. Color coding of lanes should extend throughout TSA area including Sunrise/Sunset where possible.
 - ii. Sharrow pavement symbols of designated cycle color to be used where not tracks are not possible.
 - iii. Lane turn options should be painted by dashed lines and arrows of same color where appropriate/safe/desired to keep traffic flows logical and predictable.
 - e. Track to be heated by pavement coils for ice/snow melt during cold weather.
 - f. Track to be cleaned/swept on regular schedule to prevent debris accumulation.
2. For Future Implementation: Coordinate cooperation of quadrant owners of the DTR/Wiehle area to fund/build a separate pedestrian AND cycle track bridge on EAST side of DTR.
 - a. Until that EAST side pedestrian/cycle bridge is constructed, provide NO east side Wiehle sidewalk from Sunrise Valley north to Wiehle bridge but DO leave ROW room for future sidewalk. Goal is to reduce pedestrian traffic with no direct destination except to cross Wiehle at more dangerous DTR ramp location. Do NOT plant trees in Wiehle ROW which would interfere with future sidewalk and prep area for future sidewalk, so tree roots are NOT impacted when sidewalk is installed.
3. In meantime, **ALL pedestrian traffic must cross Wiehle Bridge on WEST side existing bridge.**

- a. **Widen existing west side pedestrian walkway** to accommodate two-way traffic of all pedestrian traffic (wheelchair users, strollers, dog-walkers, etc.)
 - b. Ensure pedestrian walkway is always maintained including metal railings.
 - c. Install heating coils to prevent ice/snow in inclement weather and extend across all ramps leading to DTR.
 - d. **Pedestrian walkway to be painted a definable color to designate usage for pedestrians ONLY.**
4. On-grade crossing of Wiehle at South Side Ramps to DTR details:
- a. Ramp radii to be reduced to slow traffic.
 - b. Location to be south of DTR ramps; **use of porkchops strictly prohibited due to pedestrian safety concerns not only from vehicular traffic but from forced containment of dog walkers with others (dog behavior unpredictable).**
 - c. Pedestrian / cycle crossing to be governed by stoplight.
 - d. For east-bound DTR ramp traffic, eliminate “right turn on red” completely.
 - e. Due to complexity of N/S and E/W intersection and volume of traffic on Wiehle, eliminate pedestrian-controlled ‘request to cross’ button.
 - f. All pedestrian traffic crossing east-bound MUST be directed east into Campus Commons development vs. south to Sunrise. Hopefully, this will reduce persons using this more dangerous on-grade crossing.

Sunrise Valley ‘T’ Intersection Details:

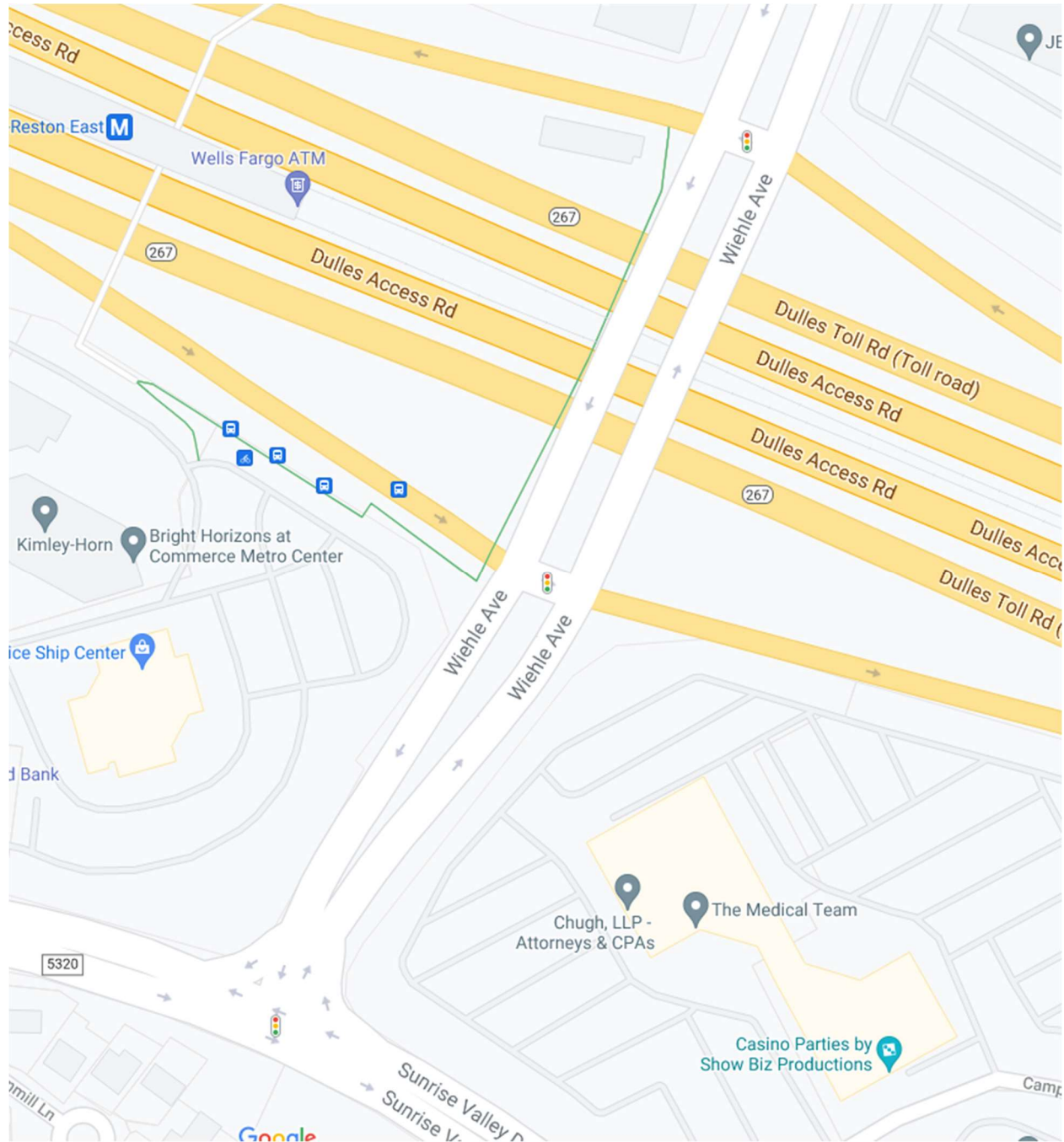
- 5. Reduce vehicular curb turn radii to slow down traffic.
- 6. For south-bound Wiehle traffic, eliminate continuous right turn option and emphasize FULL STOP for vehicular/cycle traffic turning west-bound onto Sunrise Valley.
- 7. Consider blinking red during late night/early morning hours of light multi-modal usage at this intersection.
- 8. **Provide N/S pedestrian crossing ONLY at west side of Sunrise Valley T due to huge demand on Sunrise of vehicles to access Wiehle Bridge and complex stoplight timing challenges.**
 - a. Need to prevent west-bound backups/stack-backs on Sunrise Valley that prohibit southside neighborhoods from accessing Sunrise Valley Drive during rush hours despite provision of two traffic lights allowing same.
 - b. Reconsider adding east side pedestrian crossing with accompanying north-bound sidewalk to this T intersection ONLY when East side pedestrian and cycle track bridge across DTR is provided.

9. Provide simple E/W pedestrian/cycle track crosswalk at junction of Wiehle/Sunrise governed by stop light with no porkchops. Continue color codes as appropriate to promote predictability in this crosswalk.
10. Designated colors for peds/cycle lanes continue onto Sunrise so that users stay in appropriate lanes for safety/predictability.

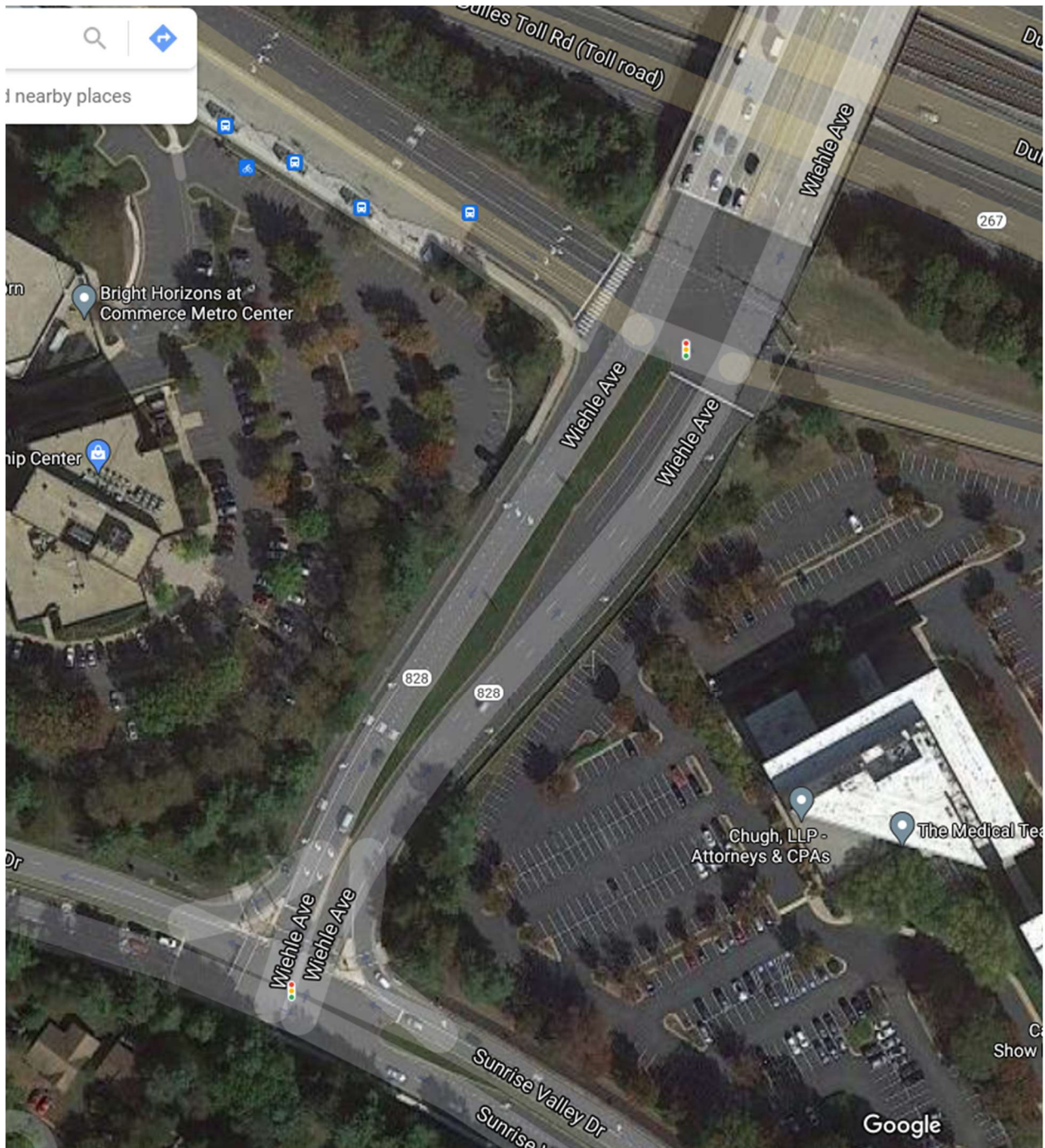
Overall Wiehle TSA details:

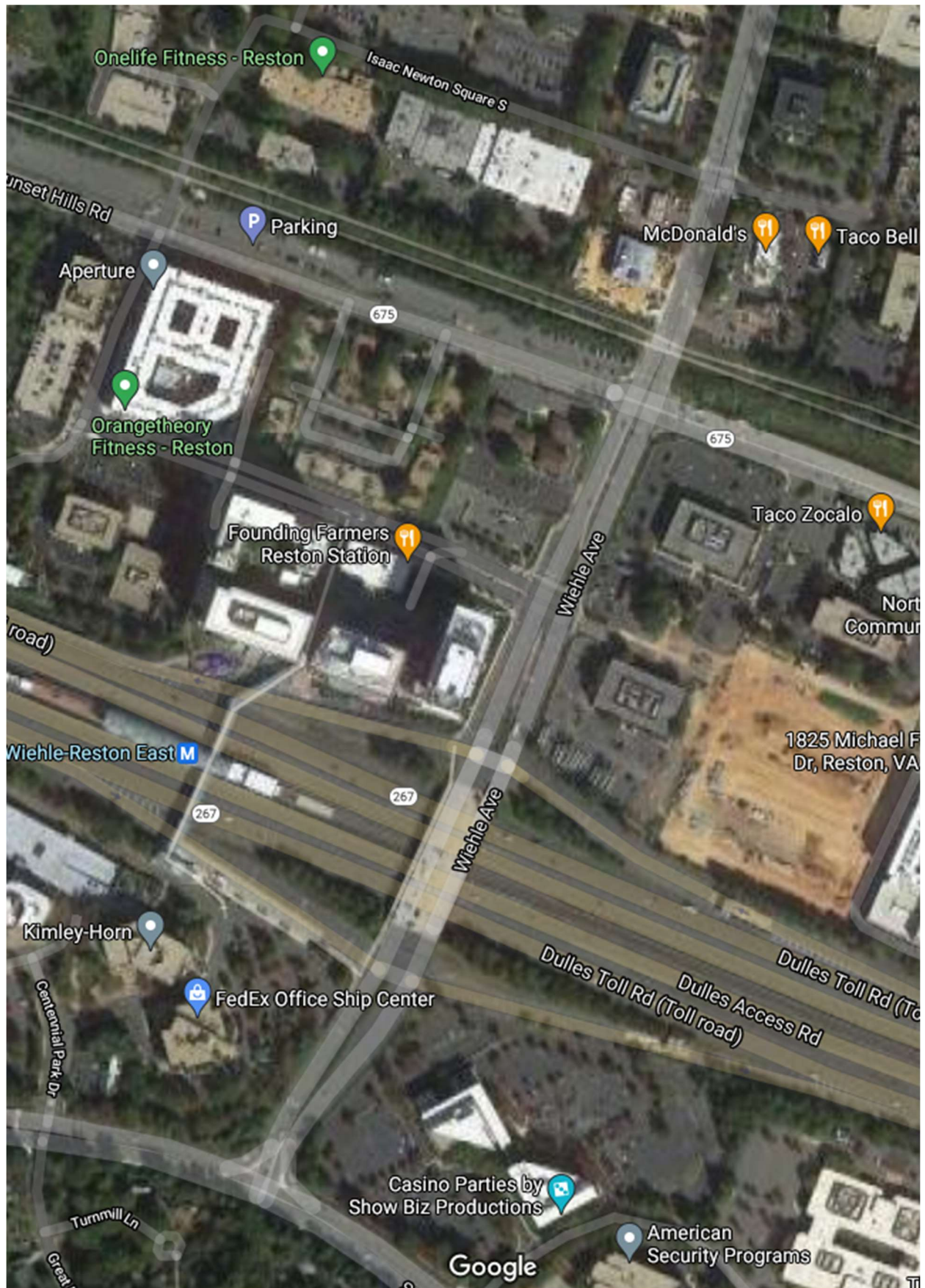
Comprehensive multi-modal connectivity study AND implementation is imperative ASAP.

Note: Attached maps for reference of area only. Read text for recommendations.

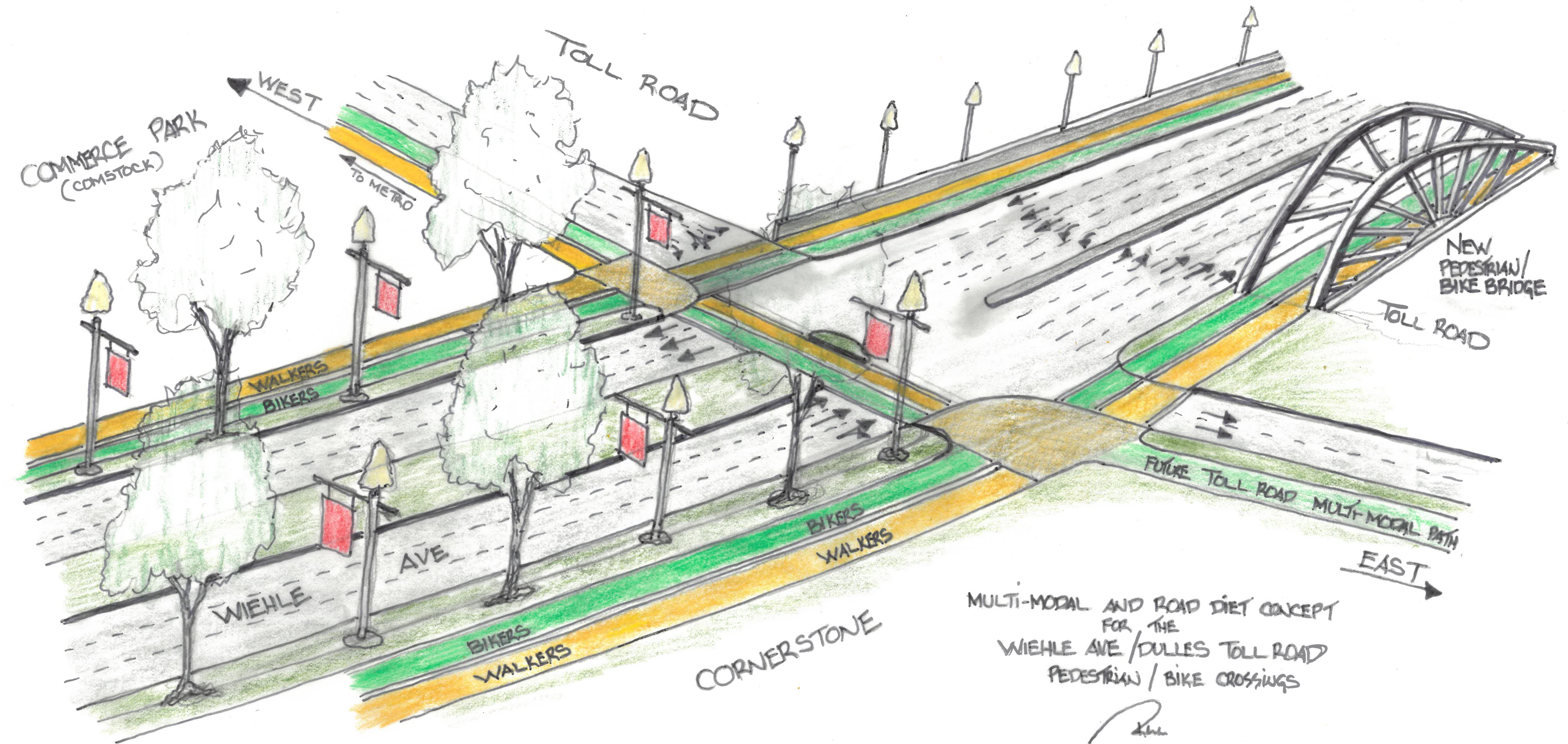


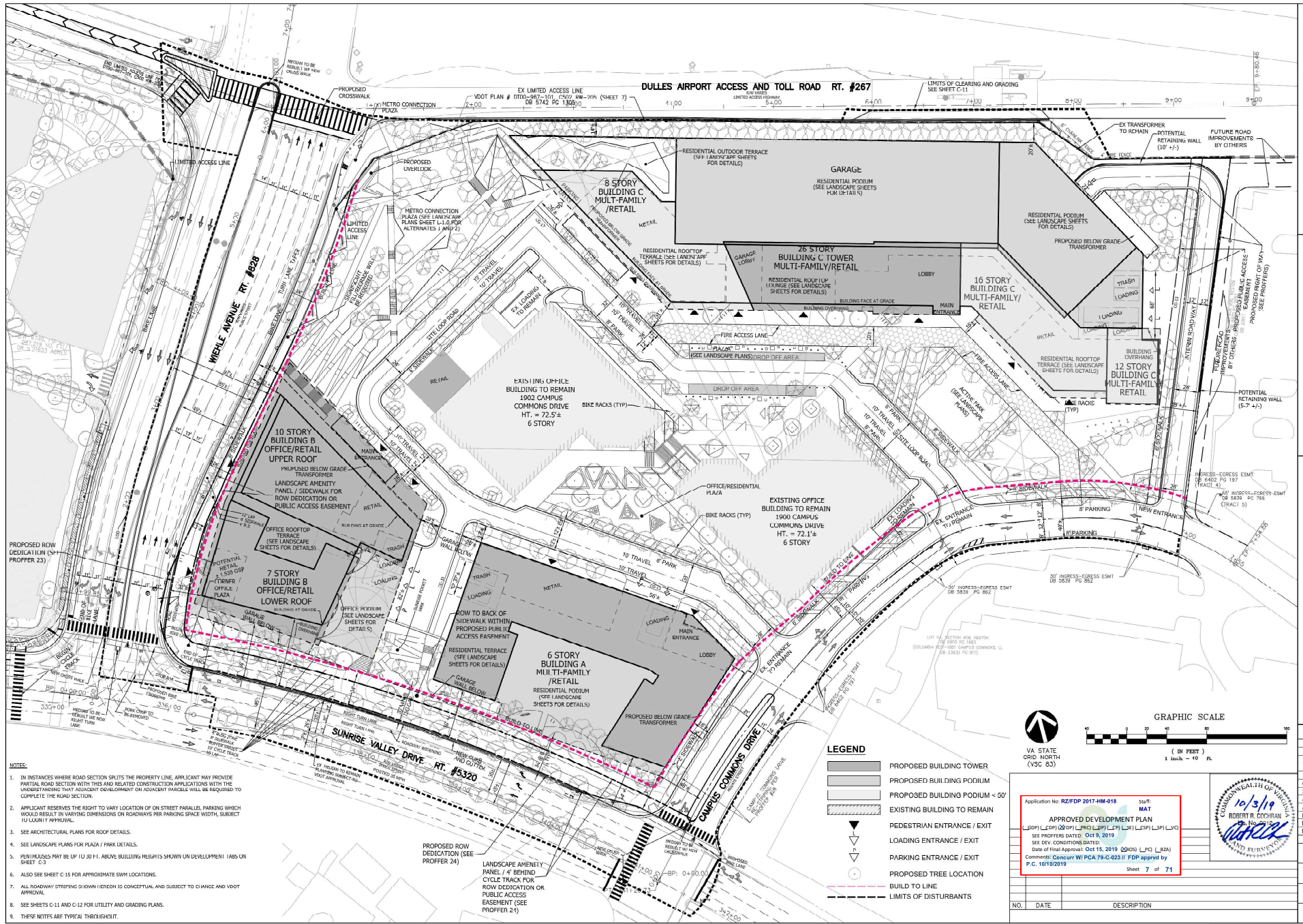






Appendix 4- Rob Walker's Road Diet and Crosswalk Concept





1. IN INSTANCES WHERE ROAD SECTION SITS THE PROPERTY LINE, APPLICANT MAY PROVIDE PARTIAL ROAD SECTION WITH THIS AND RELATED CONSTRUCTION APPLICATIONS WITH THE FOLLOWING: A. ADEQUATE DEVELOPMENT ON ADJACENT PLOTS WILL BE REQUIRED TO COMPLETE THE ROAD SECTION.
2. APPLICANT RESERVES THE RIGHT TO VARY LOCATION OF ON STREET PARKING, PARKING WIDTH AND RELATED DIMENSIONS ON ROADWAYS PER PARKING SPACE WIDTH, SUBJECT TO LAYOUT APPROVAL.
3. SEE ARCHITECTURAL PLANS FOR ROOF DETAILS.
4. SEE LANDSCAPE PLANS FOR PLAZA / PARK DETAILS.
5. PORTHOLEDS MAY BE UP TO 1' H, ADEQUATE HEIGHTS SHOWN ON DEVELOPMENT LAYOUT SHEET C-3.
6. ALSO SEE SHEET C-15 FOR APPROXIMATE SIGN LOCATIONS.
7. ALL ROADWAY STRIPPING SHOWN HEREON IS CONCEPTUAL AND SUBJECT TO CHANGE AND VOOT APPROVAL.
8. SEE SHEETS C-11 AND C-12 FOR UTILITY AND GRADING PLANS.
9. TREE NOTES ARE TYPICAL. TREE THIN/CHOP.