## **Appendix G. Alternatives Pros & Cons List**

This list of pros and cons was prepared for the public meeting and public survey to assist in the selection of a preferred alternative for the public. All pros and cons included in this list were also included in the public survey.

Code	Alternative	Pros	Cons	
	Segment 1: Piney Branch Road			
1A	Multi-Use Path	<ul> <li>No changes to on-street parking on Piney Branch Road.</li> <li>Multi-use path is most consistent facility type with other sections of the Metropolitan Branch Trail.</li> <li>Bicyclists further separated from vehicle traffic.</li> <li>Intuitive connection to existing Metropolitan Branch Trail section at Eastern Avenue traffic light.</li> </ul>	<ul> <li>Requires bicyclists and pedestrians to share space on the trail.</li> <li>Redundancy with existing protected bike lanes on Piney Branch Road may cause confusion for users.</li> </ul>	
1B	Two-way PBL	<ul> <li>Minimal changes to on-street parking on Piney Branch Road.</li> <li>Provides dedicated, protected travel space for bicyclists and pedestrians.</li> <li>Intuitive connection to existing Metropolitan Branch Trail section at Eastern Avenue traffic light.</li> </ul>	<ul> <li>4-foot bike lanes on the south side of Piney Branch Road are narrow and may not be comfortable if user volumes are high.</li> <li>Bicyclists at the same level as vehicle traffic.</li> </ul>	
	Segment 2: Piney Branch Road NW to Chestnut St NW			
2C	10-foot multi- use switchback ramp, retaining wall and 7,300 SF green space	<ul> <li>Gentle slopes (5% max)</li> <li>Large amount of usable green space</li> </ul>	<ul> <li>No direct walkway</li> <li>Requires retaining wall</li> <li>Higher cost</li> </ul>	
2D	10-foot multi- use switchback ramp, retaining wall and 8,300 SF green space	<ul> <li>Gentle slopes (5% max)</li> <li>Large amount of usable green space</li> </ul>	<ul> <li>No direct walkway</li> <li>Requires retaining wall</li> <li>Higher cost</li> </ul>	
2E	10-foot multi- use switchback ramp, staircase and 4,600 SF green space	<ul> <li>Gentle slopes (5% max)</li> <li>Direct walkway provided via staircase</li> </ul>	<ul> <li>Minimal usable green space</li> </ul>	



Code	Alternative	Pros	Cons	
2F	10-foot multi- use curvilinear path and 5,500 SF green space	<ul> <li>Curved alignment feels more natural</li> <li>No retaining walls lowers cost</li> </ul>	<ul><li>Minimal usable green space</li><li>No direct walkway</li></ul>	
2G	10-foot multi- use curvilinear path, staircase and 5,500 SF green space	<ul> <li>Curved alignment feels more natural</li> <li>No retaining walls lowers cost</li> <li>Direct walkway provided via staircase</li> </ul>	Minimal usable green space	
		Segment 3: Chestnut St NW		
3A	Neighborhood bikeway	<ul> <li>Existing vehicle speeds and volumes are low.</li> <li>No changes to on-street parking or street configuration.</li> </ul>	• People biking and driving share the same space.	
Segment 4: Sp	oring Place NW			
4A	Neighborhood bikeway treatment with gateway	<ul> <li>Existing vehicle speeds and volumes are low.</li> <li>Creates gateway feature for public art and wayfinding at Spring Place/Chestnut Street intersection.</li> </ul>	<ul> <li>People biking and driving share the same space.</li> <li>No mid-block treatments to reduce vehicle speeds.</li> <li>Changes to existing on-street parking may be necessary.</li> </ul>	
4B	Woonerf with chokers	<ul> <li>Existing vehicle speeds and volumes are low.</li> <li>Uses regular street narrowings to reduce vehicle speeds.</li> <li>Street narrowings create space for plantings.</li> </ul>	<ul> <li>People biking and driving share the same space.</li> <li>Changes to on-street parking may be necessary.</li> </ul>	
	Segment 5: 343 Cedar Street NW			
5A	10-foot multi- use path with 5- foot retaining wall (8.3% slope, max.)	<ul> <li>Retaining wall required only on east side of trail</li> <li>Fewer impacts to adjacent slope</li> <li>Lower cost</li> </ul>	<ul> <li>Steeper slopes (8.3% max)</li> <li>Narrower path (10-feet)</li> </ul>	



Code	Alternative	Pros	Cons
5B	12-foot multi- use path with 6- foot retaining wall (8.3% slope, max.)	<ul> <li>Wide path (12-ft)</li> <li>Retaining wall required only on east side of trail</li> <li>Lower cost</li> </ul>	• Steeper slopes (8.3% max)
5C	12-foot multi- use path with 6- foot retaining wall along CSX embankment and 3-foot retaining wall along 343 Cedar Street property (5% slope, max.)	<ul> <li>Gentle slopes (5% max)</li> <li>Wide path (12-ft)</li> </ul>	<ul> <li>Retaining walls required on both sides of trail</li> <li>Higher cost</li> </ul>
		Segment 6: Cedar Street and Blair Road interse	ction
6B.1	20-ft multi-use path, two-way crossing on the east side	<ul> <li>Provides dedicated, protected travel space for bicyclists and pedestrians.</li> <li>Maintains existing on-street parking.</li> </ul>	<ul> <li>Conversion of the westbound "right turn only" lane into multi-use path reduces capacity for vehicles.</li> <li>Bicyclists at the same level as vehicle traffic.</li> <li>Bikeway path across Cedar Street is meandering and may be confusing to users.</li> <li>Cedar Street crossing is near driveways on both sides of Cedar Street.</li> </ul>
6C.1	20-ft multi-use path, two-way crossing on the west side	<ul> <li>Multi-use path is most consistent facility type with other sections of the Metropolitan Branch Trail.</li> <li>Bicyclists further separated from vehicle traffic.</li> <li>Bikeway path across Cedar Street is straight and intuitive.</li> <li>Maintains existing on-street parking.</li> </ul>	<ul> <li>Conversion of the westbound "right turn only" lane into multi-use path reduces capacity for vehicles.</li> <li>Requires bicyclists and pedestrians to share the same space.</li> </ul>



Code	Alternative	Pros	Cons
		Segment 6: 4th Street	
6A.2	5-ft two-way protected bike lanes on the east side	<ul> <li>Provides dedicated, protected space for bicyclists to connect across Cedar Street.</li> <li>No changes to on-street parking or street configuration.</li> </ul>	<ul> <li>Requires transitioning bicyclists from two-way facility to one-way facilities somewhere south of Aspen Street.</li> </ul>
6A.3 6B.4	Neighborhood bikeway	<ul> <li>Existing vehicle speeds and volumes are low.</li> <li>No changes to on-street parking or street configuration.</li> </ul>	• People biking and driving share the same space.
6B.3 6C.4	6-ft two-way protected bike lanes on the east side	<ul> <li>Provides dedicated, protected space for bicyclists to Aspen Street.</li> <li>No changes to on-street parking supply.</li> </ul>	• Requires converting this segment of 4 <sup>th</sup> Street from two-way operation to one-way (southbound) operation.
6C.3	6-ft one-way bike lanes on east and west sides	<ul> <li>Provides dedicated space for bicyclists, separate from vehicle traffic.</li> <li>No vehicle lane reduction or re-configurations are necessary.</li> </ul>	<ul> <li>Requires removing on-street parking on the east side of 4th Street.</li> </ul>
6A.4	5-ft advisory bike lanes on east and west sides	<ul> <li>Provides space for bicyclists, generally separated from vehicle traffic.</li> </ul>	<ul> <li>Requires removing parking along east side of 4<sup>th</sup> Street from Aspen Street to Van Buren Street.</li> <li>Vehicle traffic may merge into bike lane when oncoming traffic is present.</li> </ul>
		Segment 6: Butternut Street, Aspen Street, Whittier Street, ar	nd Van Buren Street
6B.5 6B.6 6B.7 6B.8	Neighborhood bikeway	<ul> <li>Existing vehicle speeds and volumes are low.</li> <li>No changes to on-street parking or street configuration.</li> </ul>	People biking and driving share the same space.
6A.5	5-ft one-way bike lanes on east and west sides	<ul> <li>Provides dedicated space for bicyclists, separated from vehicle traffic.</li> <li>No changes to on-street parking or street configuration.</li> </ul>	• Fort Totten segment will only come to Aspen Street, not connecting to Butternut Street.
6A.6	5-ft one-way bike lanes on east and west sides	<ul> <li>Provides dedicated space for bicyclists, separated from vehicle traffic.</li> </ul>	<ul> <li>Requires removing parking on the north side of Aspen Street.</li> </ul>



Code	Alternative	Pros	Cons
6A.7 6A.8	5-ft advisory bike lanes on east and west sides	<ul> <li>Provides space for bicyclists, generally separated from vehicle traffic.</li> </ul>	<ul> <li>Requires removing parking on either the south side of Whittier Street or the north side of Van Buren Street.</li> <li>Vehicle traffic may merge into bike lane when oncoming traffic is present.</li> </ul>

After the results of the public survey were shared with the team, the team created alternatives to reflect the community preferences. The project team created a pros and cons list to assist the team in selecting alternatives to advance to the 30 percent design phase. These alternatives are specific to the Whittier and Van Buren alternatives. The alternatives with no code were eliminated from further consideration and will not advance to the 30 percent design phase.

Code	Alternative	Pros	Cons
6C.7	10-ft multi-use path on the south side	<ul> <li>No changes to on-street parking on Whittier Street.</li> <li>Multi-use path is most consistent facility type with other sections of the Metropolitan Branch Trail.</li> <li>Bicyclists further separated from vehicle traffic.</li> <li>Intuitive connection to planned Fort Totten MBT Segment</li> </ul>	<ul> <li>Requires bicyclists and pedestrians to share space on the trail.</li> </ul>
N/A	Multi-Use Path on North Side	<ul> <li>No changes to on-street parking or curb-to-curb configuration on Van Buren Street.</li> <li>Multi-use path is most consistent facility type with other sections of the Metropolitan Branch Trail.</li> <li>Bicyclists further separated from vehicle traffic.</li> </ul>	<ul> <li>Requires bicyclists and pedestrians to share the same space.</li> <li>Constrained by residential section from 3<sup>rd</sup> Street to Blair Road.</li> <li>Would impact Takoma Playground.</li> </ul>
N/A	Multi-Use Path on South Side	<ul> <li>No changes to on-street parking or curb-to-curb configuration on Van Buren Street.</li> <li>Multi-use path is most consistent facility type with other sections of the Metropolitan Branch Trail.</li> <li>Bicyclists further separated from vehicle traffic.</li> </ul>	<ul> <li>Requires bicyclists and pedestrians to share the same space.</li> <li>Constrained by residential section from 3<sup>rd</sup> Street to Blair Road.</li> <li>Constrained by tennis courts on south side of Van Buren Street.</li> </ul>
N/A	Neighborhood Bikeway with 2- way Conversion	<ul> <li>Existing vehicle speeds and volumes are low.</li> <li>No changes to on-street parking.</li> <li>Relatively low bicycle facility costs.</li> <li>No change from 3<sup>rd</sup> Street to Blair Road.</li> </ul>	<ul> <li>Bicyclists at the same level as vehicle traffic.</li> <li>Requires parking removal on one side of the street.</li> <li>No separation between vehicles and people biking.</li> <li>Will induce additional traffic on the segment from 4<sup>th</sup> Street to 3<sup>rd</sup> Street</li> </ul>



6C.8	7-ft contraflow bike lane on the north side	<ul> <li>Existing vehicle speeds and volumes are low.</li> <li>Relatively low bicycle facility costs.</li> <li>No change from 3<sup>rd</sup> Street to Blair Road.</li> <li>Enables bicyclists to travel both directions on Van Buren Street.</li> </ul>	<ul> <li>Bicyclists at the same level as vehicle traffic.</li> <li>Requires parking removal on the north side.</li> </ul>
6D.8	5-ft two-way protected bike lanes on the north side	<ul> <li>Provides dedicated, protected space for bicyclists and pedestrians.</li> <li>Aligns with community's preferences based on survey data.</li> </ul>	<ul> <li>Bicyclists at the same level as vehicle traffic.</li> <li>Requires carrying this design through residential section from 3<sup>rd</sup> Street to Blair Road.</li> <li>Requires parking removal on the north side.</li> </ul>

