Welcome

Please sign in here.

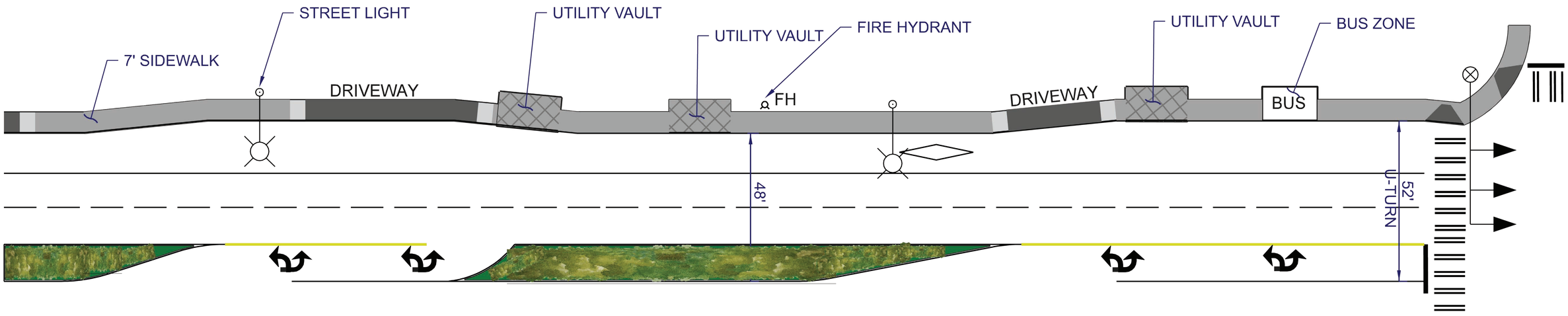
Meeting Objectives

- Share preliminary results of environmental analysis
- Present and receive community feedback on:
  - Draft Recommended Alternative
  - Recommended Stormwater Concepts
  - Draft Implementation Strategies

Meeting Agenda

6:00–7:00 p.m.	**Sign in**
7:00–7:30 p.m.	**Presentation**
7:30–8:30 p.m.	**Discussion, Q&A with Project Team at stations** **Submit comments**
8:30 p.m.	**End of meeting**

Alternative A



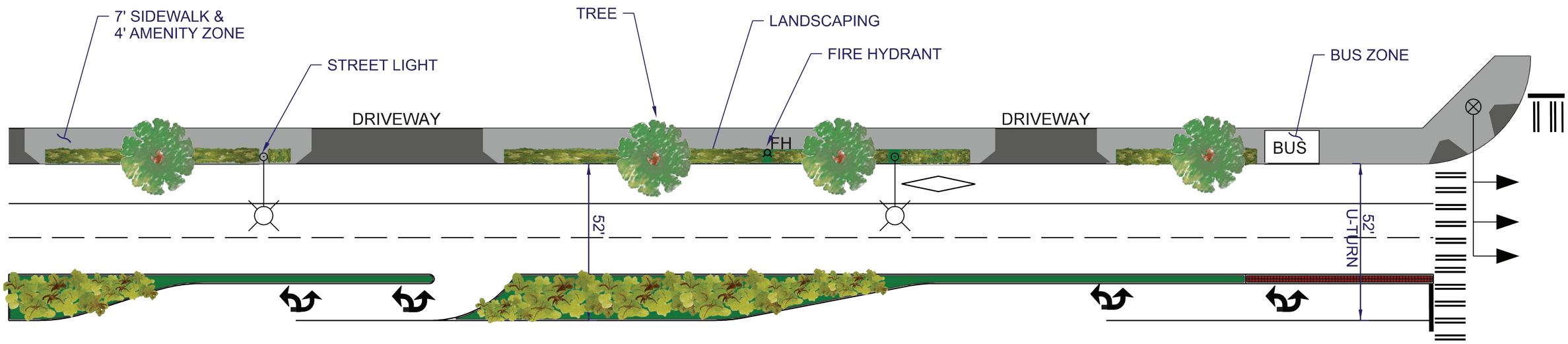
Characteristics common to all three alternatives

- Two general-purpose lanes in each direction
- BAT lane in each direction
- Sidewalk
- Underground utilities
- Access management, left-turn and u-turn pockets
- Vegetation
- Proposed new signals at N 182nd Street and Firlands Way N/ N 196th Street
- Improvements to Echo Lake Place (north of N 195th Street)
- Improvements to Midvale Avenue N (north of N 175th Street)

Additional characteristics of Alternative A

- 104-foot cross section (+ additional 3 feet on each side of roadway for utilities)
- Shift east in the vicinity of N 175th Street
- 7-foot sidewalk
- No amenity/utility zone
- Utility vaults and light/signal poles behind sidewalks
- C-curb access management/median (narrower than Alts B and C)
- Low growing/minimal vegetation in medians
- Road widening of additional 4 feet at U-turn and left-turn pockets to accomodate U-turns

Alternative B



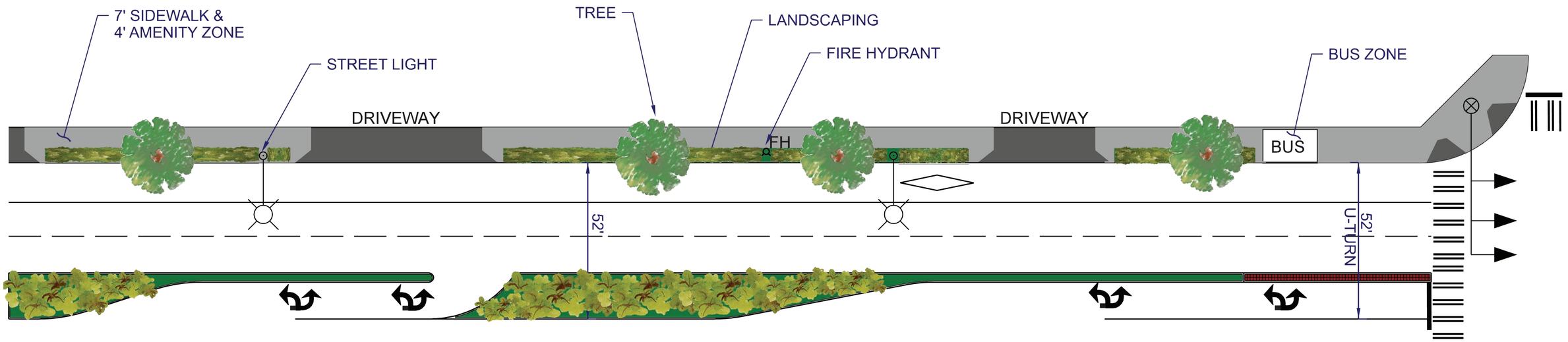
Characteristics common to all three alternatives

- Two general-purpose lanes in each direction
- BAT lane in each direction
- Sidewalk
- Underground utilities
- Access management, left-turn and U-turn pockets
- Vegetation
- Proposed new signals at N 182nd Street and Firlands Way N/ 196th Street
- Improvements to Echo Lake Place (north of N 195th Street)
- Improvements to Midvale Avenue N (N 175th Street to N 183rd Street)

Additional characteristics of Alternative B

- 110-foot cross section
- 4-foot vegetated amenity/utility zone between curb and sidewalk
- 7-foot sidewalk
- Landscaped medians for access management
- Shift east in vicinity of N 175th Street and N 200th Street
- Light poles in the amenity zone
- Signal poles in sidewalk

Alternative C



Characteristics common to all three alternatives

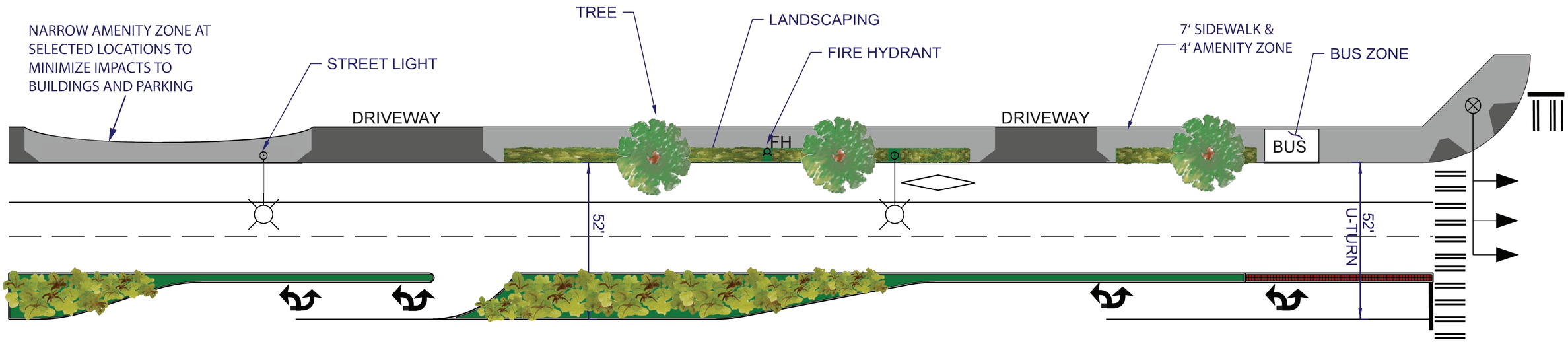
- Two general-purpose lanes in each direction
- BAT lane in each direction
- Sidewalk
- Underground utilities
- Access management, left-turn and u-turn pockets
- Vegetation
- Proposed new signals at N 182nd Street and Firlands Way N/ N 196th Street
- Improvements to Echo Lake Place (north of N 195th Street)
- Improvements to Midvale Avenue N (N 175th Street to N 183rd Street)

Additional characteristics of Alternative C

- 110-foot cross section
- 4-foot vegetated amenity/utility zone between curb and sidewalk
- 7-foot sidewalk
- Landscaped medians for access management
- Shift west in the vicinity of N 175th Street and N 200th Street
- Light poles in the amenity zone
- Signal poles in sidewalk

Draft

Recommended Alternative



Characteristics of Draft Recommended Alternative

- Two general-purpose lanes in each direction
- BAT lane in each direction
- Sidewalk
- Underground utilities
- Landscaped medians for access management with left-turn and U-turn pockets
- Proposed new signals at N 182nd Street and Firlands Way N/ N 196th Street
- Improvements to Echo Lake Place (north of N 195th Street)
- 110-foot base cross section:
  - 4-foot vegetated amenity/utility zone between curb and sidewalk
  - 7-foot sidewalk
  - Amenity/utility zone narrowed at selected locations to minimize impacts to buildings and parking
- Shift east in vicinity of N 175th Street and N 200th Street
- Light poles in the amenity zone
- Signal poles in sidewalk

Projected Timeline
for Environmental Analysis

2006

November

Public Scoping Period

November 30, 2006–January 2, 2007

2007

December

Public Meeting #1

Review and comment on alternatives and environmental process.

January–June

Develop Environmental Discipline Reports

Analyzing 1 No Build and 3 Build Alternatives. Individual Discipline Reports will be available for public review after finalization by WSDOT and FHWA.

July

City Selects Recommended Alternative

Lead agencies determine necessary level of NEPA/SEPA environmental review.

August

Develop Draft NEPA/SEPA Environmental Documents

for Recommended Alternative.

September–October

Public Review of NEPA/SEPA Documents

November–December

Finalize NEPA/SEPA Documents

Regular City Council Briefings by Project Team

Continuous Community Outreach

ABC Team Meetings

Public Meeting #2

Present results of environmental analysis of three alternatives and the Draft Recommended Alternative.

We are here.

Public Meeting #3

Public review of and comment on NEPA/SEPA document Recommended Alternative.

CITY OF SHORELINE

AURORA CORRIDOR

Aurora Corridor Improvement Project • N 165th Street–N 205th Street

Potential Construction Effects

- Increased traffic congestion
  Mitigation: Construction Staging Plan; Traffic Control Plan; Communication Plan
- Potential for impedance to business access
  Mitigation: Construction Staging Plan; Traffic Control Plan; Communication Plan
- Intermittent and temporary interruptions to utility service
  Mitigation: Communication Plan; Construction Staging Plan; Night Construction
- Increased construction noise
  Mitigation: Construction Noise Reduction Plan
- Potential for dust in the air
  Mitigation: Apply Best Management Practices to minimize dust related to construction
- Potential for contamination of water runoff
  Mitigation: Apply Best Management Practices to avoid contamination of water runoff related to construction
- Temporary adverse effect on visual quality
  No mitigation recommended.
- Potential adverse effect on business receipts
  Mitigation: City will work with Chamber of Commerce and business owners, prior to construction, to help establish business economic health and to develop programs to assist businesses during construction.

(Refer to Implementation Strategies for guidance on development of plans.)

Property Effects

Building and Parking Effects:

- Full take of 2 business properties under all Build Alternatives.
- Major or partial building demolition/remodeling of up to 3 businesses under Alternative A, 5 businesses under Alternative B, and 8 businesses under Alternative C.
- Some businesses will lose parking under all Build Alternatives.
- Potential relocation of some residences located on one property (~19600 Aurora Ave N) under all Build Alternatives.

Mitigation

– Property owners will be compensated for property take per federal requirements.

– City will assist relocated residents in finding comparable housing, and compensate for out-of-pocket moving expenses, if necessary.

Hazardous material effects:

- Up to four properties identified for which additional investigation of soil and groundwater is warranted.

Mitigation

– Only needed if contamination is discovered, in which case, City will remediate.

Noise effects:

- Identified at 2 houses, 2 apartment buildings, and 1 commercial establishment.

No mitigation recommended. No noise abatement measures would satisfy WSDOT's feasibility and reasonableness criteria.

Beneficial Effects

The project is expected to have beneficial effects on:

- Traffic operations and safety
- Transit operations
- Pedestrian and bicycle mobility and safety
- Water quality and flow control
- Aesthetic quality
- Economic development

Stormwater Management Options

Considered as Part of Project Design

Conventional Systems

- Curb and gutter.
- Catch basins and conveyance pipes.
- Stormwater treatment catch basin vaults where stormwater is held and pollutants settle out and are collected.

Stormwater Treatment Vault


Catch Basins

Storm Drain Maintenance Holes


Stormwater Planter


Tree Box Filter *(Photo: www.wsud.org)*


Porous Pavement (left)


Stormwater Planter

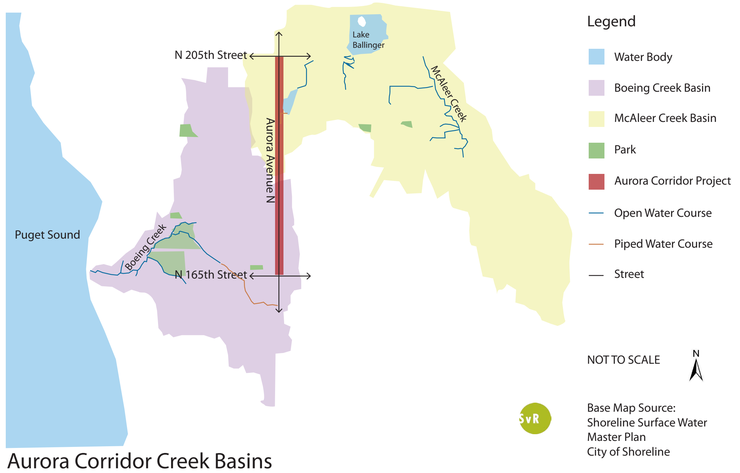
Low Impact Development Elements Combined With Conventional Systems

- Vegetation used to slow down water to collect pollutants.
- Reduction of impervious surfaces.
- Enhanced aesthetics.
- Potential reduction of large underground stormwater management systems.
- Potential use of porous pavement.

Stormwater Management
on Aurora Avenue

Existing Conditions

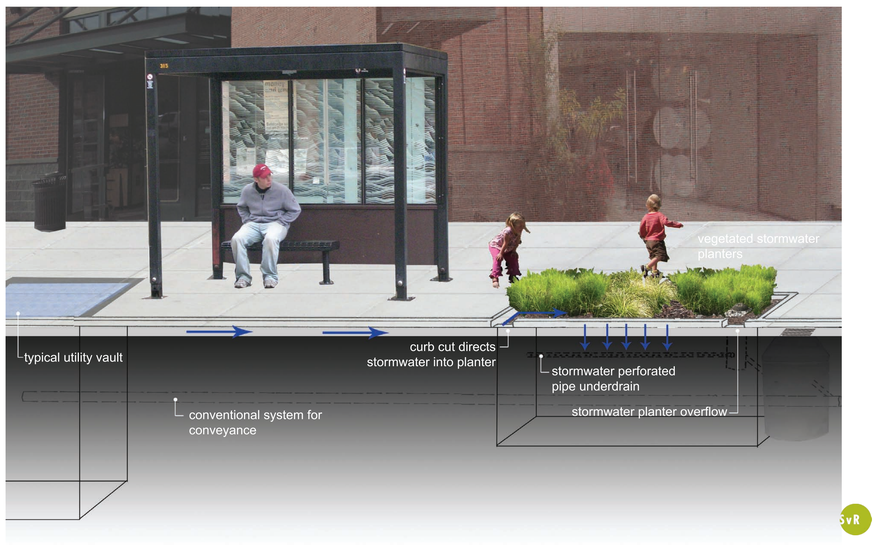
- Typically no curb and gutter.
- Drains to Boeing Creek and McAleer Creek.
- Sediment deposits on roadway.
- Soils (glacial till) have low infiltration rates.
- Right-of-way limitations.
- Commercial corridor.



Aurora Corridor Creek Basins

Regulations

- Meet current City of Shoreline stormwater code.
- WSDOT Roadway Standards.
- No flow control required.
- Improve conveyance and collection.
- Maintain subbasin boundaries
- Underground utilities.



Opportunities to incorporate Low Impact Development within the amenity zone

Goals

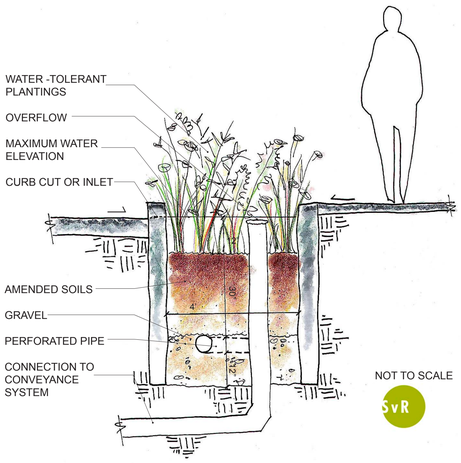
- Target upcoming stormwater regulatory changes.
- Meet Council goals for sustainability and construction of Aurora.
- Inform the community about Low Impact Development and natural drainage.
- Enhance aesthetics.
- Maintaining user safety and mobility.
- WSDOT approval.

Low Impact Development Toolkit

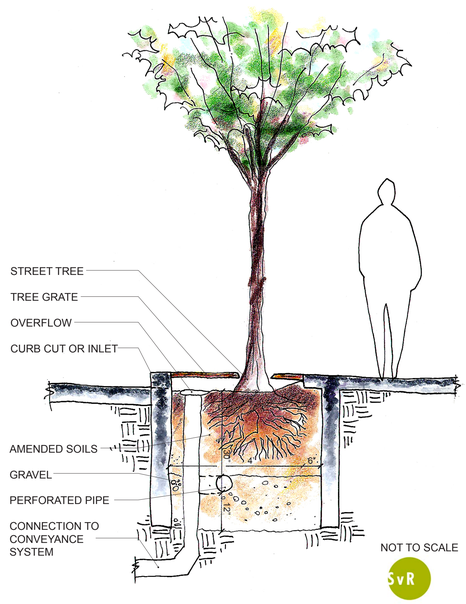
Options for the Aurora Corridor Project

Stormwater Planter Boxes & Tree Box Filters

(*Standard road design*)



Stormwater Planter Section

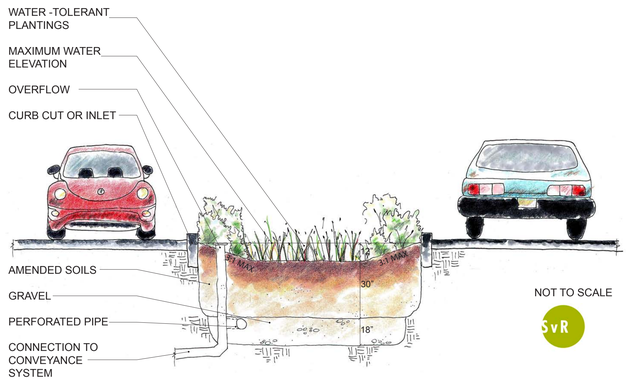


Tree Box Filter Section

- Fits within the amenity zone of alternative B , alternative C, and draft recommended alternative.
- Meets Basic Water Quality treatment regulations by removing over 80% of Total Suspended Solids (sediment).
- Collects curb/gutter flow.
- Conveys excess stormwater or overflows to catchbasin.
- Creates a separation between motor vehicle and pedestrian travel modes.

Bioretention Swale Medians

(*Reverse crown road design*)

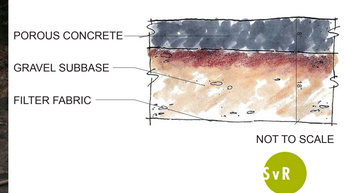


Bioretention Swale Median Section

- Fits in median for all alternatives.
- Collects flow from center median curb/gutter.
- Meets Basic Water Quality treatment regulations for sediment removal.
- Conveys excess stormwater or overflows to catchbasin.
- Reverse crown road design requires WSDOT approval.

Porous Sidewalks & Side Streets

Shoreline Porous Sidewalk



Typical Porous Pavement Section

- Stormwater filters through pavement and sub-base conveys it.
- Can be used on residential side streets with low traffic volume and sidewalks.
- Not suitable for streets with high traffic volume (arterials).
- Looks different from concrete - does not have a smooth finish.
- Demonstration opportunities for side streets adjacent to Aurora Avenue.

Evaluation Matrix
for Alternatives

	Alternatives				
	No Action	A	B	C	Draft
Address roadway capacity needs	○	●	●	●	●
Improve transit mobility	○	●	●	●	●
Improve pedestrian & bicycle mobility	○	◔	●	●	●
Improve vehicle safety	○	●	●	●	●
Improve pedestrian & bicycle safety	○	◐	●	●	●
Implement natural stormwater system	○	◐	●	●	●
Improve aesthetics	○	◐	●	●	●
Minimize property take	●	◔	◐	◐	◔
Enhance economic potential	○	●	●	●	●

Extent to which goal is satisfied:

- ● High
- ◔ Medium High
- ◐ Medium
- ◔ Medium Low
- ○ Low

Development of Implementation Strategies

- 32 Points were originally adopted prior to construction of the first mile of Aurora Avenue N improvement.
- Experience from the first mile indicated that:
  - some of the original strategies were non-applicable, and
  - some additional strategies would be appropriate.
- City staff asked Aurora Business and Community (ABC) Team to provide feedback on the 32 Points.
- ABC Team input was incorporated in developing the Implementation Strategies document (formerly 32 Points).
- Implementation Strategies will be adopted after community review (in conjunction with Draft Recommended Alternative).