

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Aurora Corridor Improvement Project (N 165 th to N 205 th Street)- Alternative Selection and Adoption of the Implementation Strategies
DEPARTMENT:	Public Works
PRESENTED BY:	Kirk McKinley, Aurora Corridor Project Manager Kris Overleese, PE, Capital Projects Manager

PROBLEM/ISSUE STATEMENT:

The environmental analysis of the three project alternatives for the Aurora Corridor Improvement Project (N 165th to N 205th Street) has been drafted and submitted to the State for review. The analysis identified project impacts to parking, buildings, traffic, noise, air, cultural resources, economic impacts, etc. From these findings, and with extensive consultations with the public and business and property owners, staff developed a draft recommended flexible alternative. This flexible alternative has been shared with the community at the June 20, 2007 project Open House and staff has recently met with approximately 23 property/business owners to review the alternative. The Aurora Business and Community Team, the Shoreline Chamber of Commerce, and Vision Aurora endorse the flexible alternative and project Implementation Strategies (See Attachment A for letters). Staff will be recommending that Council adopt the Draft Recommended Flexible Alternative as the project Preferred Alternative and the Implementation Strategies. The July 16, 2007 meeting is a public hearing to take community testimony regarding all of the alternatives under consideration and the Implementation Strategies.

After the project public hearing, staff will review the alternatives for any recommended changes. At the July 23 meeting, Council will be requested to 1) adopt the Flexible/Hybrid Alternative as the "Preferred Alternative" and 2) adopt the updated Implementation Strategies (formerly the 32 Points). Following selection of the preferred alternative, staff will complete the environmental analysis by the end of the year. FHWA (Federal Highways Administration) and WSDOT (Washington State Department of Transportation) will be consulted to determine the appropriate level of NEPA (National Environmental Policy Act) environmental analysis to be completed. It is anticipated that another public meeting would be held this fall to discuss the analysis.

BACKGROUND:

The City has been working on the Aurora Corridor Improvement Project since 1998 when it started the project pre-design study. In 1999 the City endorsed the design concept and adopted the 32 Points (strategies to guide design and construction). In July of 2005, construction began on the segment from N 145th to N 165th Street and is now substantially complete.

In 2006, staff began development of the alternatives to complete the project from N 165th to N 205th Street. Staff worked with the Aurora Business Team to develop Alternative A, and staff and consultants developed Alternatives B, and C. All three project alternatives were then analyzed in environmental reports, instead of picking a preferred alternative to analyze up front. This process led to the community scoping meetings on November 30, 2007 and December 6, 2007 to review the three project alternatives. The scoping period that ended on January 16, 2007 resulted in over 200 comment letters from the community and over 1,000 comments.

A broad based 23 member Aurora Business and Community (ABC) Team was appointed to assist in the environmental review. This team met 11 times to review the methodology for environmental analysis of the three alternatives and the “do nothing” option. With the preliminary environmental analysis complete, staff developed a draft recommended flexible alternative and updated Implementation Strategies that have been shared with Aurora business/property owners and the community at the June 20, 2007 Open House.

ALTERNATIVES:

The preliminary environmental analysis by the consultant Jones & Stokes, reviewed all three build alternatives and “do nothing” for the following disciplines: air, water quality, noise, environmental justice, geology, utilities, cultural resources, economic impacts, hazardous materials, transportation, visual quality, wetlands, and lands use plans/policies.

Common design elements of all three build alternatives include: undergrounding of utilities, new illumination system, 7 foot sidewalks, two general purpose traffic lanes in each direction, one Business Access Traffic (BAT) lane in each direction, proposed new signals at N 182nd and N 196th/Firlands, intersection improvements, and new curb ramps.

No Build Alternative: The corridor receives no capital investment other than general street maintenance or frontage improvements required with new development.

Alternative A: The base cross section of this alternative is 98 feet including 7 foot sidewalks and no amenity zone. The median is four feet narrower than alternatives B and C. An additional three feet behind the sidewalks would be needed in several locations for utilities and a four-foot bump out would be required where there are left turns to maintain the 52' turning radius required for u-turns. Landscaping would be included in the median (Attachment B).

Alternatives B and C: The base cross section for these alternatives is 110 feet. They include a 7 foot sidewalk and a four foot utility/amenity zone. The median is 16 feet wide and no bump outs are needed for u-turns. Where additional right of way is required: Alternative B shows acquisition of property to the east and Alternative C shows acquisition to the west (Attachments C and D). The median and amenity zone provide for natural stormwater system concept implementation.

Draft Recommended Flexible Alternative: This alternative focuses on being flexible in addressing impacts to buildings or parking as the design is developed over the next several months. It is generally based on the goals of a 110 foot cross section and includes a four foot amenity/utility zone, 7 foot sidewalk, and a 16 foot median. This alternative predominantly shifts east in the vicinity of N 175th Street and balances impacts and benefits throughout the corridor. Flexibility options include eliminating the amenity zone, narrowing sidewalks, narrowing medians, and shifting the roadway alignment to minimize impacts to business parking, buildings and business operation. This alternative recommends using the amenity zone for implementation of natural stormwater system concepts (Attachment E).

FUNDING:

Funding is included in the adopted Capital Improvement Program for the Aurora Corridor Improvement Project (N 165th to N 205th Street). Currently the City has secured funding commitments for approximately one half (or 1 mile) of the total project, and is actively pursuing funding from State, federal, and regional (RTID) agencies for the balance. Staff will be providing Council a more detailed report on funding and construction phasing options within the next two months. The total cost estimate (inflated) for the next two miles is \$93 million dollars. The project costs are broken down in more detail in the body of the report.

RECOMMENDATION

No action is required as this report provides background information for the public hearing.

Approved By: City Manager  City Attorney ____

INTRODUCTION

The community has been working on the Aurora Corridor Improvement Project since 1998. Completing the Aurora Corridor Improvement Project is currently Council Goal #4. The first mile (N 145th to N 165th Street) is substantially complete and staff has been working over the past year to develop and perform preliminary analysis on three project alternatives. With the preliminary analysis complete, and after having received significant feedback from the community, staff has developed a draft recommended flexible alternative. Council is currently scheduled to select a preferred alternative on July 23, 2007. The environmental analysis will then be completed on the preferred alternative by the end of the year.

The purpose of the environmental analysis is to evaluate the proposed project and to determine if the project has negative impacts. If there are determined to be impacts, then the environmental analysis proposes ways to minimize and mitigate impacts. A project may have negative impacts and still be chosen. The environmental analysis is about full disclosure to the community and decision makers. Positive impacts and project cost are not evaluated in the environmental process though this information is used for the final project decisions.

BACKGROUND

Three project alternatives were created in 2006 for the Aurora Corridor Improvement Project. As mentioned, Alternative A was developed with assistance from the Aurora Business Team. Alternatives B and C were developed by staff. The last formal action Council took on the project was October 16, 2006 when they authorized a contract with Jones & Stokes to complete the environmental analysis and develop natural stormwater systems for the project. At the time of contract award, Council emphasized their interest in including natural stormwater systems in the project.

Two scoping meetings were held on November 30 and December 6, 2006. The formal scoping period to receive comments the environmental analysis was held through January 16, 2007. Over 200 people/groups submitted comments during the scoping period which resulted in over 1,000 individual comments. This information was provided to the technical experts for consideration in completing the environmental analysis.

The 23 member Aurora Business and Community Team, a group of citizens and business owners, met January through June to review the methodology of the environmental analysis disciplines (noise, air, economics, etc). Jones and Stokes has completed their technical analysis of the three alternatives and the “do nothing” alternative. The preliminary results of the environmental analysis provided information for staff to develop a draft recommended flexible alternative.

Natural Stormwater System Concepts: As the project will upgrade the existing stormwater system on Aurora, the post project quality of water will be improved from the project site. However, the City has Council Goal #6 that encourages sustainability. As part of the project, staff has worked with SVR design, Tom Holz and other stormwater professionals to develop natural stormwater system concepts for the project. A stormwater charette was held on March 26 and included Tom Holz, Michael Broili, Matt

Loper of Shoreline Community College, John Lombard of Steward and Associates, Councilmembers Janet Way and Rich Gustafson, SVR and Jones & Stokes staff as well as City staff.

From this session, and feedback from the ABC Team on natural stormwater system solutions, SVR developed a toolkit of Low Impact Development (LID) concepts (Attachment F). Their toolkit includes: stormwater planter boxes, tree box filters, bioretention swale medians, and porous sidewalks. The project will also include conventional stormwater pipes and catch basins to convey overflow water from the LID treatments and to convey the water that enters Aurora from adjacent properties/businesses. Deep water infiltration in the area is unlikely due to the existing glacial till soils.

Ordinance 326: In July of 2003, Council adopted this ordinance to provide assurance to property owners in the vicinity of N 172nd Street to N 188th Street of where the future Aurora right of way lines would be. Because Seattle City Light property is adjacent to Aurora from approximately 180th Street to N 188th Street on the east side, it was assumed that needed right of way could be acquired from Seattle City Light. During the scoping period, Seattle City Light sent in a formal letter stating that all project alternatives should not utilize their right of way. Therefore, in January of 2007, Alternative C was modified to show all needed right of way acquired on the west side. Shoreline and Seattle City Light (SCL) staff has been working closely to resolve these right of way issues. The City has hired an electrical transmission engineering company, HDR, to evaluate SCL's needs and propose line configurations to meet SCL's future transmission needs. Though SCL has not yet agreed to the elements of the study, the City and SCL have agreed to work out the right of way needs for both agencies.

Cultural Resources: Several properties within the project limits have been identified as eligible for the natural historic register by the City's cultural resources consultant, Western Shore Heritage Services: The Auto Cabins (17203 Aurora), The North Trunk (Brick) Road, The Erickson House (19502 Aurora), and the Echo Lake Tavern (19508 Aurora). The cultural resources analysis indicates that all of the build alternatives have potential impacts on the North Trunk Road that can be mitigated. None of the other eligible resources would be impacted by any of the build alternatives.

New Traffic Signals: The State is currently reviewing the City analysis supporting new signals at N 182nd and Firlands Way (approximately N 196th Street). If signals are not approved at these locations, the N 182nd intersection would operate as right/left onto N 182nd and right out onto Aurora only from N 182nd. If the signal at Firlands Way is not approved, the project will not add the connection to the east to Echo Lake Place and N 195th Street will remain open operating the same way as N 182nd (right/left onto N 195th and right out only onto Aurora Avenue N).

ALTERNATIVES ANALYSIS

With the preliminary environmental analysis completed (Attachment G) by Jones & Stokes, and the development of the draft recommended flexible alternative, an Evaluation Matrix has been developed (Attachment H) to compare "do nothing" with

build Alternatives A, B and C and the newly created Draft Recommended Flexible Alternative.

The opportunities and challenges of each are discussed below:

Do nothing – this option does not address the project roadway capacity needs, improve transit, improve driver and pedestrian safety, implement LID stormwater concepts, improve aesthetics or enhance economic potential of the corridor. The do nothing option, however, is the least expensive and has the least impacts on adjacent property/business owners.

Common Amongst A, B, C and Draft Recommended Alternatives – All build alternatives provide a high level of improvement to roadway capacity through intersection improvements and signal timing. They all add the BAT lanes and signal improvements for upgraded transit mobility. All build alternatives provide a high level of improved vehicle safety and enhanced economic potential. All alternatives have the same configuration for left/u-turn pockets. Left and u-turn opportunities are offered an average of every 300 feet. Approximately 23 businesses have no direct left turn access, but six businesses would have direct left turns that currently don't have them.

Western Shore Heritage Services' analysis of cultural resources shows that all build alternatives have mitigatable impacts to the North Trunk Road. None of the build alternatives impact the other eligible resources. Staff is currently waiting for the State's feedback on this analysis.

Alternative A – Due to its slightly narrower cross section, Alternative A requires the least property acquisition which lessens the impact to adjacent property owners. Alternative is the lowest cost of all build alternatives. As there is no amenity zone and a narrower median, there is less opportunity for utilization of LID stormwater concepts and less opportunity for planting vegetation. Alternative A also has the lowest opportunity for improving aesthetics given it has less room for vegetation. The lack of an amenity zone also makes Alternative A less safe for pedestrians as there is no separation between the sidewalk and BAT lane. Alternative A is in keeping with Ordinance 326.

Alternative B – Alternatives B provides stormwater LID opportunities due to the amenity zone and wider median. It is in keeping with Ordinance 326 because it widens to the east, but requires purchase of more right of way and thus has more property/business owner impacts. Alternative B scores high in all other categories.

Alternative C – Alternative C scores high in all categories but for property take. The most property would be acquired under this alternative and therefore it is the most costly of all alternatives. There are the most parking and building impacts under alternative C. Alternative C is not consistent with Ordinance 326 as it widens to the west.

Draft Recommended Flexible Alternative – This alternative has not been formally analyzed in the preliminary environmental analysis phase of the project. However, as it fits within the footprint of the project, its relative opportunities, impacts, and challenges are known. This recommended alternative ranks high in all categories. The key to this

alternative is that it includes the flexibility to narrow the width of the sidewalk, amenity zone, and median to minimize impacts to business parking, buildings, and business operation. Due to this flexibility: LID concepts can be utilized, property takes (impacts) are lessened, pedestrians are separated from the BAT lane, and aesthetics are improved.

This alternative balances the property required between east and west in the vicinity of Seattle City Light. Should Council adopt the draft recommended flexible alternative as the preferred alternative (for environmental review), they would also be providing needed direction as amendments updating the Comprehensive Plan for the Central Shoreline Subarea are drafted. That task is already on the adopted work program for fall of this year and will incorporate the Council's policy preference for the design of Aurora, for example by deleting extraneous or obsolete policies, such as Appendix 5.

This alternative is relatively lower in cost than Alternative C and more in keeping with Alternative B.

Implementation Strategies (formerly 32 Points) – The 32 Points were principles for the first mile of Aurora that guided design and construction. This tool provided project flexibility and direction to minimize impacts to property/business owners. This document has been reviewed and discussed by the ABC Team. ABC Team members had excellent suggestions that have been incorporated into a new document titled the Implementation Strategies (Attachment I). For comparison purposes, the updated points are in the right column and the original 32 Points are in the left column.

The implementation strategies recommend project flexibility, recommend that the City pay for business/utility hook ups, make recommendations for construction mitigation, and address the LID stormwater toolkit. The Implementation Strategies would apply to any preferred Alternative chosen by Council.

STAKEHOLDERS

From the beginning, this project has had a large group of stakeholders and a large community outreach component. Recently, the project has worked with the Aurora Business Team and the Aurora Business and Community Team. In 2006, project staff met with all property owners along the corridor to discuss the project and to get feedback. As mentioned, two scoping meetings were held in 2006 and on January 17, 2007 staff held a meeting with utility providers, transit providers, and local public agencies to give them an update. Late May and early June staff met individually with approximately 22 property/business owners along the corridor to review the draft recommended alternative. At the June 20, 2007 open house that had over 200 attendees, the community reviewed the draft recommended alternative. Staff has also met with the Fire Marshall to review the project.

City Planning Direct Joe Tovar is the City's State Environmental Policy Act (SEPA) official for the project. As the City has federal funds for the project, the Federal Highways Administration (FHWA) is the lead National Environmental Policy Act (NEPA) agency. The Washington State Department of Transportation is our liaison to FHWA.

Ultimately, FHWA will approve the NEPA documentation for the project (end of the year) and the City's SEPA Official will approve the SEPA documentation.

FUNDING

The City's engineering consultant developed preliminary order of magnitude cost estimates for all of the alternatives, including the draft recommended flexible alternative. These costs are very preliminary, because there are many unknowns about the project. They are based on schematic designs and 2007 dollars. The updated Capital Improvement Program demonstrates the project cost to be \$93.4 million by the time the project is completed. This is due to right of way and construction inflation over the next several years (construction is estimated to be completed by 2012). The final project costs will depend on actual labor and material costs, actual site conditions, market conditions, final scope, schedule and right-of-way.

Once Council selects an alternative, and as design moves through the process, many of the unknown costs will be better understood. Also, because we haven't begun to acquire right-of-way, these costs may be quite different than presented. The contingency assumption which is included in the cost estimates below is 30% of the estimated construction costs.

Alternative	Right-of-way	Construction with Contingency	Design and Construction Management	Total
A	\$12.9M	\$44.8M	\$9.7M	\$67.7M
B	\$14.9M	\$46.6M	\$10.2M	\$71.8M
C	\$16.6	\$47.6M	\$10.4M	\$74.7M
Flexible	\$14.1M	\$45.8M	\$10M	\$70.1M

The city currently has secured funding for the next two miles of \$42.3 million, of which \$31.9 million is from grants or from partner agency participation. The City is actively pursuing funding from several sources including Federal Transit Administration, Transportation Improvement Board, and other grant programs, as well as earmarks at the Federal level. In addition the Regional Transit Investment District package includes \$40 million for the Aurora 165th to 205th project. This will be on the November 2007 ballot. The utility costs for Seattle City Light, Seattle Public Utilities, and Ronald Wastewater are separate projects within the Capital Improvement Program.

NEXT STEPS / SCHEDULE

After the project public hearing, staff will review the draft alternatives for any recommended changes. At the July 23 meeting, staff will be recommending that the City Council adopt the Flexible/Hybrid alternative as the "Preferred Alternative" and adopt the updated Implementation Strategies (formerly the 32 Points). Following

selection of the preferred alternative, staff will complete the environmental analysis by the end of the year. FHWA and WSDOT will be consulted to determine the appropriate level of NEPA environmental analysis to be completed. It is anticipated that another public meeting would be held this fall to discuss the analysis.

Once Council has selected a preferred alternative, staff will ask that Council award the design contract to KPG in August so we may complete the design. At this time, staff is working to hire a property acquisition team and anticipate asking Council to award the contract this fall. By the end of the year it is anticipated that Council will be requested to approve the Right of Way Acquisition Manual and authorize staff to acquire property. Formal right of way acquisition is anticipated to begin early in 2008 with construction starting potentially in 2009.

RECOMMENDATION

No action is required as this report provides background information for the public hearing.

ATTACHMENTS

- Attachment A: Letters from the ABC Team, Shoreline Chamber of Commerce
- Attachment B: Alternative A
- Attachment C: Alternative B
- Attachment D: Alternative C
- Attachment E: Draft Recommended Flexible Alternative
- Attachment F: Low Impact Development Toolkit
- Attachment G: Preliminary Summary of Potential Effects and Mitigation
- Attachment H: Evaluation Matrix
- Attachment I: Implementation Strategies

Date: June 28, 2007
To: City Manager Bob Olander
From: Aurora Business and Community Team
Re: Comments on the Aurora 165th – 205th Project

We want to thank you and the City Council for the opportunity to assist in developing the design of the next two miles of Aurora. You appointed us to this committee in December, 2006, with the charge of ensuring that the environmental process for Aurora, 165th to 205th was fair, transparent and thorough. We have met eleven times, and have discussed methodology of all elements of the environmental documents, the "32 Points", reviewed construction strategies, as well as all of the alternatives. We want the public, the Council and you to know, that we feel the process to develop the environmental reports achieved the objectives of being fair, transparent, and thorough, and followed objective analysis based on the best information available.

At our last regularly scheduled team meeting on May 9, 2007, you asked us to extend our service and charge in order to provide feedback on the draft recommended alternative and on the Implementation Strategies (formerly known as the "32 Points"). We accepted this expanded role, and have met three times since to review the Implementation Strategies, the Draft Recommended Alternative, and input from the June 20th Open House.

The Team would like to offer the following recommendations:

- 1) The team would like to be on record that our review and involvement in the preparing the environmental analysis has been valuable, and we believe the process and approach has been fair, transparent, and scientific. We encourage the Council to take full advantage of the material and information that has been generated as part of this process.
- 2) We support and recommend that the Council adopt the revised Implementation Strategies. These are intended to provide flexibility and to give direction in the design, construction and maintenance of the project. The strategies reflect lessons learned from the Aurora 145th to 165th project, and also include new strategies for stormwater, construction, and economic development.
- 3) We urge the Council to approve the Draft Recommended Flexible Alternative.

We want to thank you, the Mayor, and Council for the opportunity to participate in this very important process, and look forward to the City completing the project in the next few years.

Gretchen Atkinson

~~Don Johnson~~
RICK STEPHENS

John Winterland Jacuz
Zachary R. Arney

~~Kevin Reeve~~
Kevin Reeve

Larry & Heesacker

Thomas J. Hsieh

Robin McClelland

Donald Ding

Mark Deutsch

Samuel Scott

~~Carolyn Mayer~~
Carolyn Mayer

Rocky Piro

ROCKY PIRO

Joanne C. Hargrave

Joanne Hargrave

Dale Wright

DALE WRIGHT

Pamela Gust



June 21, 2007

RECEIVED

JUN 27 2007

City Manager's Office

Mr. Bob Olander
City Manager, City of Shoreline
Shoreline City Hall
17544 Midvale Ave. N.
Shoreline, WA 98133-4921

6/28/07
COPY TO
ACM
Kirk
Mark
City Council
file

Dear Mr. Olander:

We are writing to notify you of the modification of the Shoreline Chamber of Commerce's previous endorsement of Alternative A for the second phase of the Aurora Avenue Project.

At our last Board of Director's meeting on June 20, 2007, we resolved that the new Hybrid Plan, also referred to as the Flexible Plan, is the best alternative because of its responsiveness to the Shoreline businesses' concerns.

The Shoreline Chamber of Commerce believes it is in the best interest of our community to complete all three miles of the Aurora Avenue Project. We truly appreciate you and your staff's hard work on the Aurora Avenue Project, responsiveness to the concerns of the community and affected businesses regarding the 2nd and 3rd miles of Aurora, and willingness to adopt helpful lessons from the recently completed 1st Mile of the Aurora Avenue Project.

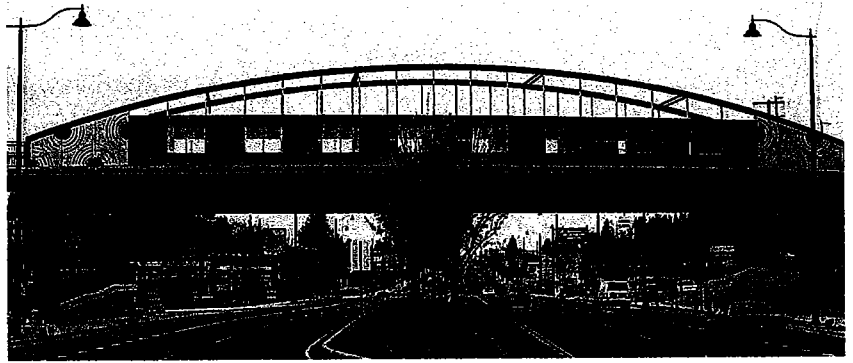
We commend you for the great public processes instituted to ensure a better, community-oriented process. We especially appreciate the Aurora Business and Community Team which included Chamber members and through whom the Chamber was able to participate and contribute positively.

We look forward to continuing to work with you on this exciting endeavor. Please let us know how we may be of help; as we hear of or identify improvements or suggestions from our membership, we will be sure to pass them on to you.

Sincerely,

Judy Smith, Board President
Shoreline Chamber of Commerce

Vision Aurora



To: Shoreline City Council

July 6, 2007

Chair
Dale Wright

Steering Committee
Carolyn Ballo
Darlene Feikema
Paulette Gust
Dennis Heller
Mary Jo Heller
Judy Parsons
Don Sands

Address
18546 Burke Ave N
Shoreline, WA 98133

Phone
(206) 542-3759

Email
mail@VisionAurora.com

Website
www.VisionAurora.com

Vision Aurora represents approximately 1000 people who want the Community's Vision and Goals for Aurora to be achieved in all three miles of the project. We, therefore, would like to comment on the city staff's "Draft Recommended Flexible Alternative" for the Aurora project 165th to 205th.

As you know, the city is currently concluding an environmental review of three alternative designs, which are as follows:

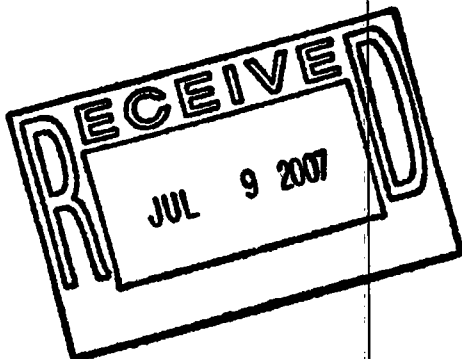
Alternative A – 98' width which would eliminate the 4' amenity zones between the curb of the roadway and the sidewalks, and reduce the width of the Medians.

Alternative B – 110' width which shifts the roadway to the east

Alternative C – 110' width which shifts the roadway to the west.

The City Staff has developed their "Draft Recommended Flexible Alternative" which they will recommend to you for your adoption. The "Draft Recommended Flexible Alternative" is basically Alternative B with the updated "Implementation Strategies". The alternative B is basically the same as the first 1.2 miles and retains all of its design components that are required to achieve the Community's Goals and Vision for the Aurora Corridor. There is continuity of design between the first phase and the last two miles of the project and all three miles will look the same.

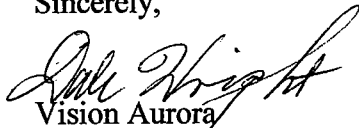
In the first 1.2 mile the city added to the basic project design "32 points" to assure flexibility in the final design and implementation so as to address concerns of businesses while at the same time maintaining the community's vision for the project. The updated "Implementation Strategies" referred to above, is in essence, the 32 points of the first mile with a few changes to respond to different conditions in the last two miles. The variations from the basic design are relatively few in number and consist primarily of eliminating amenity zones for specific properties so as to



prevent the removal of buildings and to retain parking. In addition, some of the updating of the "Implementation Strategies" is to take advantage of new technology in stormwater, construction, and economic development.

We of Vision Aurora have reviewed this in some detail and are of the opinion the city staff's recommended "Draft Recommended Flexible Alternative" will meet our criteria. This design should achieve the Community's Vision and Goals for the Aurora Corridor which is our goal, and basically all three miles will be the same. We, therefore, agree with and support the city staff's "Draft Recommended Flexible Alternative", including the updated "Implementation Strategies", and strongly recommend that you adopt it as the preferred Alternative.

Sincerely,



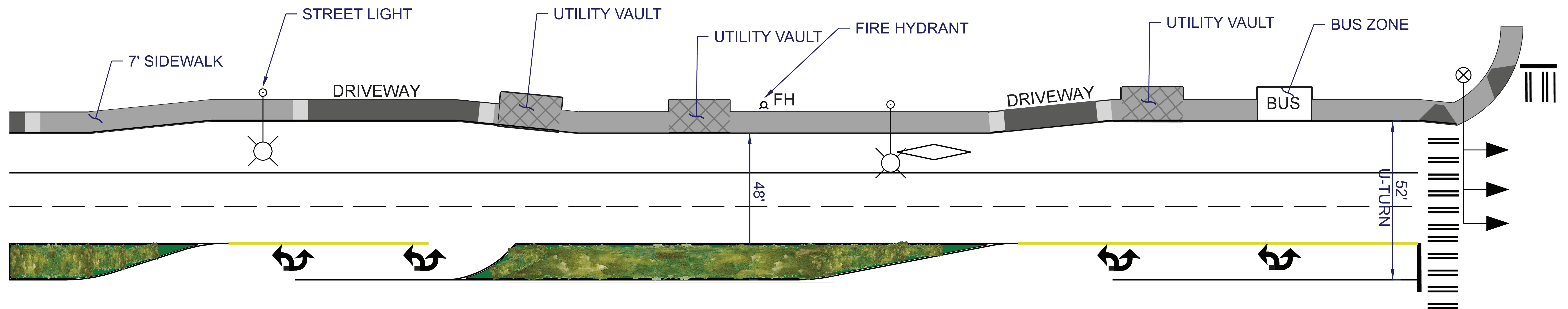
Vision Aurora

Dale Wright – Chair

18546 Burke No

542-3759

Alternative A



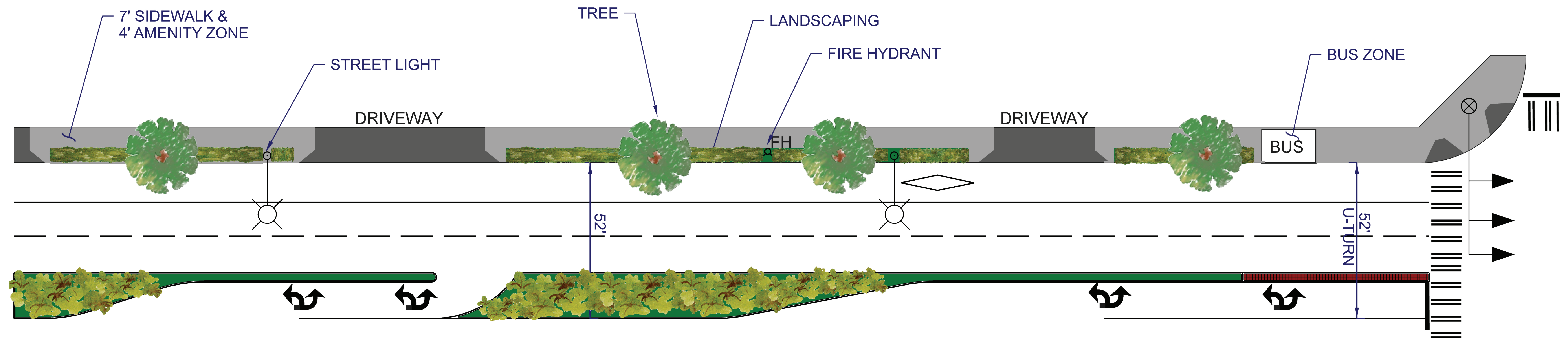
Characteristics common to all three alternatives

- 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 accommodate U-turns

Alternative B



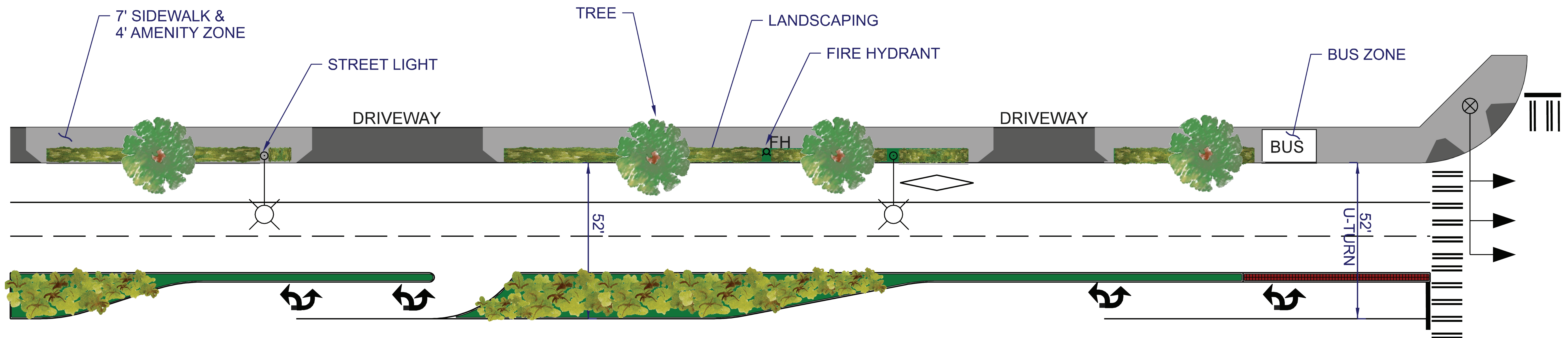
Characteristics common to all three alternatives

- 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



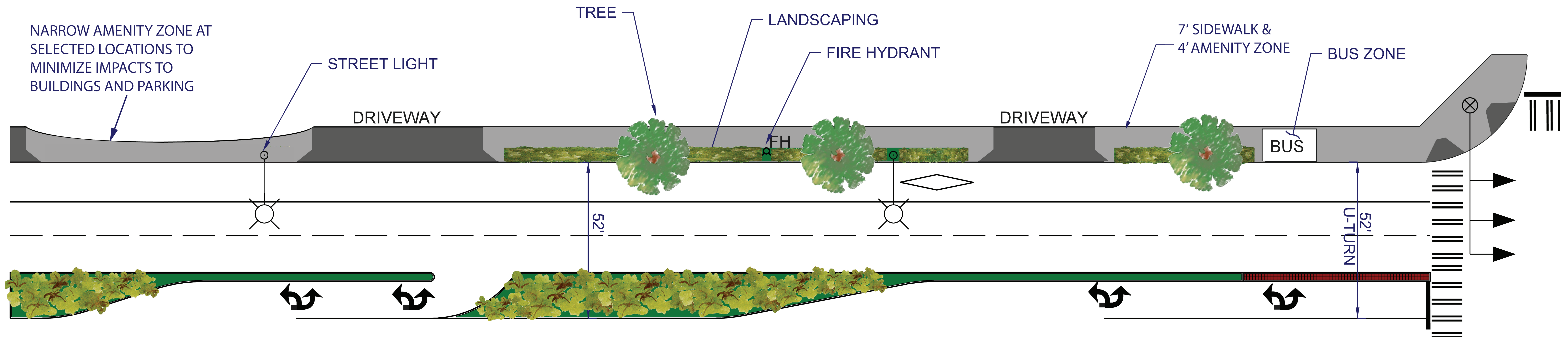
Characteristics common to all three alternatives

- 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

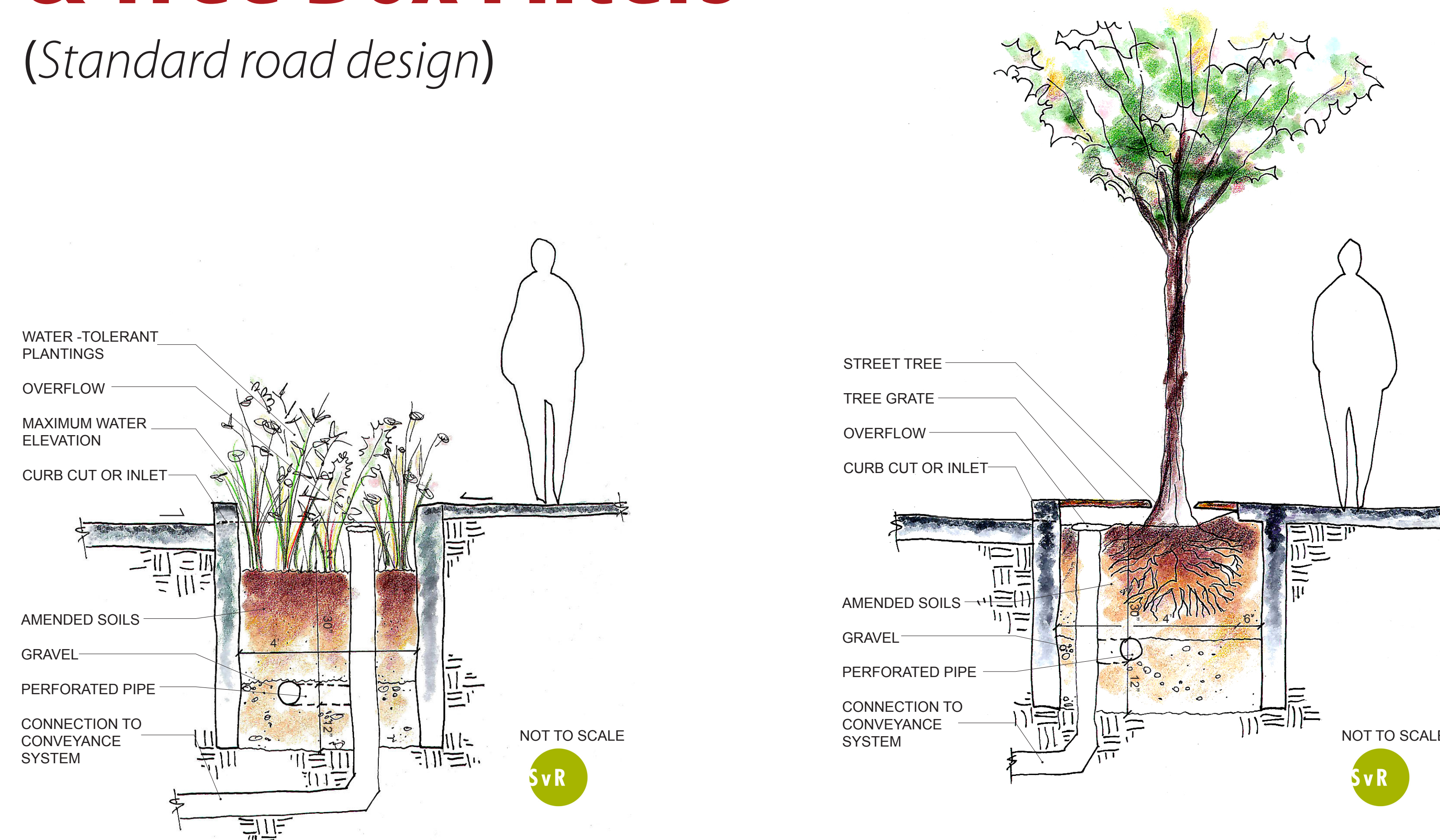
- Two general-purpose lanes in each direction
- BAT lane in each direction
- Sidewalk
- Underground utilities
- Landscaped medians for access management with left-turn and U-turn pockets
- Proposed new signals at N 182nd Street and Firlands Way N/ N 196th Street
- Improvements to Echo Lake Place (north of N 195th Street)
- 110-foot flexible 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

Low Impact Development Toolkit

Options for the Aurora Corridor Project

Stormwater Planter Boxes & Tree Box Filters

(Standard road design)



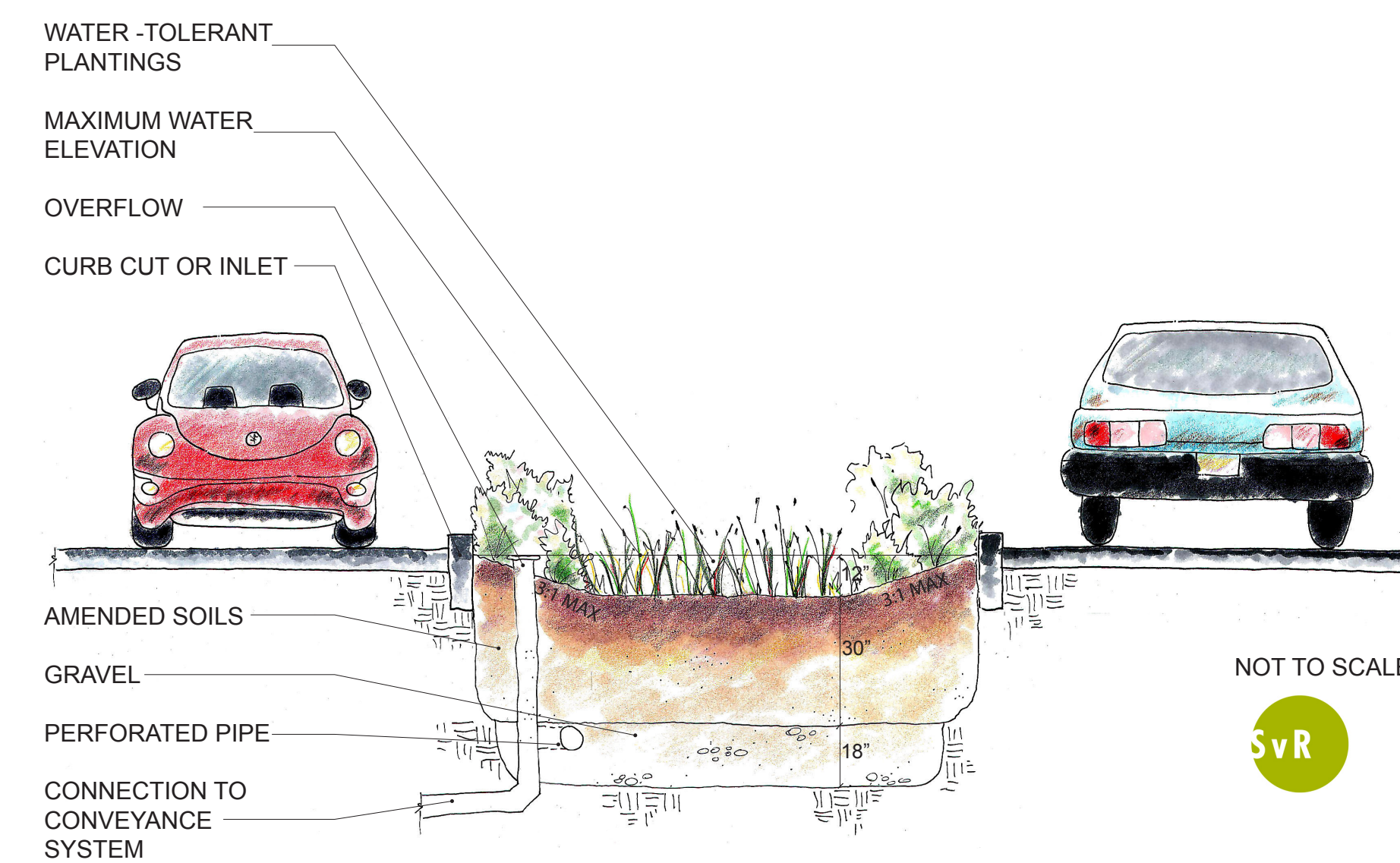
Stormwater Planter Section

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

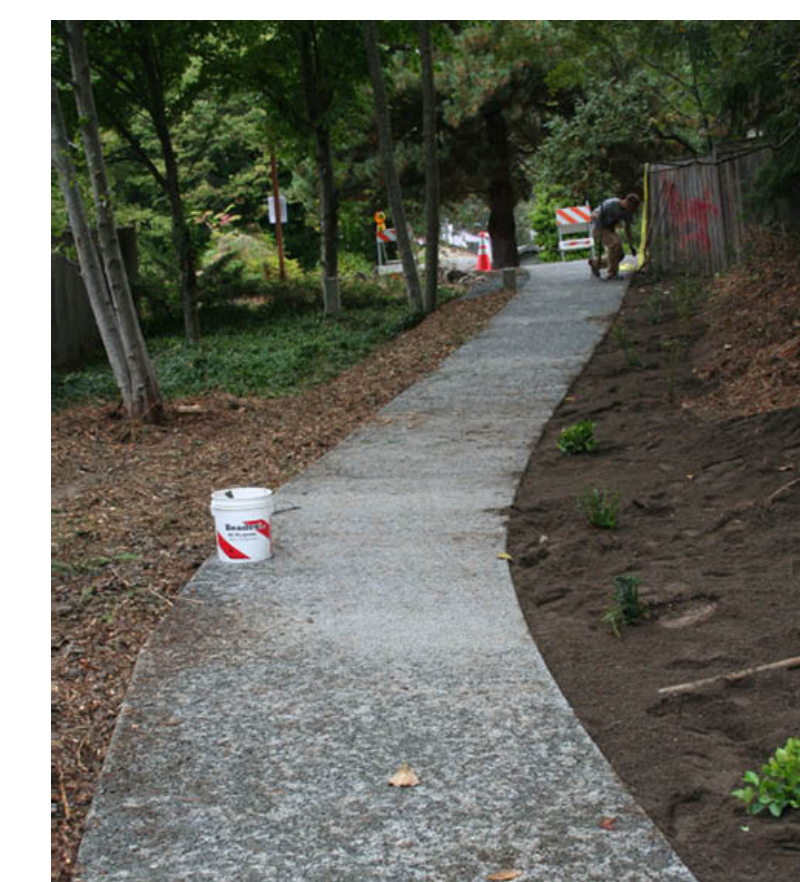
(Reverse crown road design)



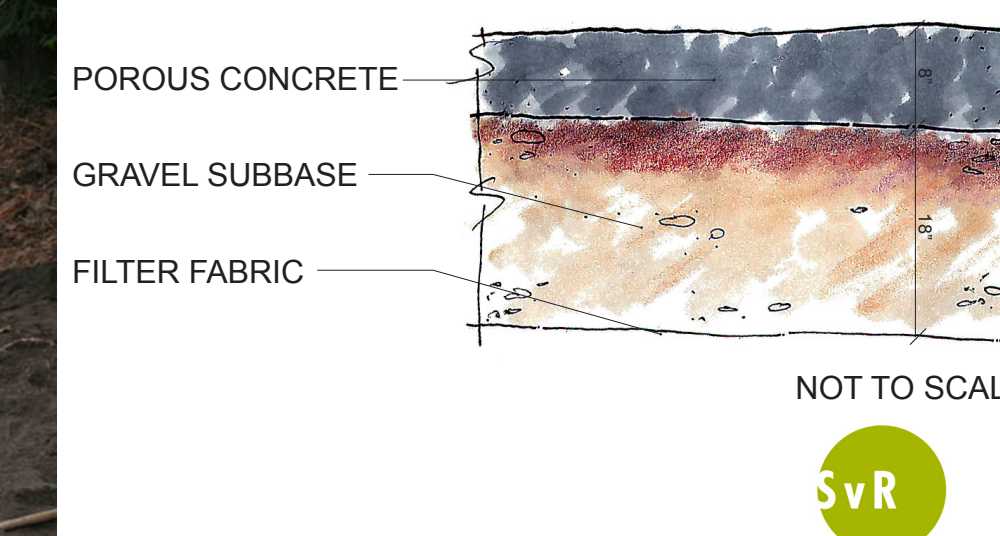
Bioretention Swale Median Section

- 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.

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects During Project Construction

	Alternatives			
	No Action	A	B	C
Air Quality				
Construction of the Project would generate temporary emissions of fugitive dust and tailpipe emissions from construction equipment.		X	X	X
Mitigation: Control fugitive dust and emissions during construction using Best Available Control Technology and stationary-source emission controls as required by Puget Sound Clean Air Agency regulations. Air quality impacts during construction will be minor, temporary, and localized, so no mitigation measures beyond standard BACT are warranted.				
Cultural				
State review of cultural report is underway. Results of cultural analysis cannot be released until State review is complete.				
Economics				
Impacts identified related to property acquisition. See Potential Effects to Properties on page 6 of this handout.		X	X	X
Potential adverse effects on business receipts.		X	X	X
Mitigation: City will work with the Chamber of Commerce and business owners, prior to initiation of Project construction, to help establish business economic health and to develop programs to assist businesses during construction.				
Environmental Justice				
Some minority businesses located along the corridor would experience construction-related impacts similar to other businesses along the corridor.		X	X	X
Mitigation: Communication measures will be implemented during project construction to provide construction-related information and to minimize construction effects on minority and low-income populations should include: <ul style="list-style-type: none"> ▪ Informing the public, schools, and transit agencies of traffic changes ahead of time ▪ Posting informational flyers at key stores, park-and-ride lots, schools, nonprofits and religious institutions. Public outreach related to Project will be conducted in Spanish, Korean and Chinese. City will provide translation service for all materials related to Project, upon request.				

*Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects During Project Construction

	Alternatives			
	No Action	A	B	C
Fish, Vegetation and Wildlife				
Potential for downstream effects to fish, due to increased risk of construction-related sediment released to stormwater.		X	X	X
Mitigation: Utilize temporary erosion and sediment control measures during construction.				
Geology and Soils				
Potential for degradation of the subgrade in areas of moisture sensitive soils from use of heavy equipment during wet weather or in areas of seepage or shallow groundwater.		X	X	X
Mitigation: Limit major earthwork to drier late spring to early fall season. Maintain proper surface drainage. Minimize the area of ground disturbance. Limit the number of turns by heavy equipment on the subgrade. Minimize the amount of tracking on the subgrade. Cover the final sub-grade elevation with a working mat of crushed rock and/or geotextile.				
Potential for increased erosion due to exposure of erosion prone soils.		X	X	X
Mitigation: Implement a Temporary Erosion and Sedimentation Control (TESC) plan to control the movement of sediment. Measures in the TESC would include avoiding unnecessary vegetation clearing and installation of structures such as silt fences and sediment traps. Implement construction procedures identified in the geotechnical investigation that are designed to maintain or enhance slope stability.				
Potential for increased erosion from unstable fill during a storm event.		X	X	X
Mitigation: Implement a Temporary Erosion and Sedimentation Control (TESC) plan to control the movement of sediment. Measures in the TESC would include covering fill stockpiles and disturbed areas.				
Hazardous Materials				
Potential for encountering known soil contamination at the former Mac-Ray Dry Cleaner (18419 Aurora Avenue N).				X
Mitigation: Conduct Phase II Soil Investigation - If contaminated soil is encountered in the Phase II investigation, it should be remediated by Hazardous Waste Operations, Planning, and Emergency Response (HAZWOPER)-certified contractors before site grading begins. Depending on the Phase II findings, this could require a Phase III Remedial Investigation and Feasibility Study (RI/FS).				

**Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.*

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects During Project Construction

	Alternatives			
	No Action	A	B	C
Potential for encountering known soil contamination at former Bill Langeberg gas station (18425 Aurora Avenue N); and former Joe's ARCO gas station (17550 Aurora Avenue N).		X	X	X
Mitigation: Conduct Phase II Soil and Groundwater Investigation - If contaminated soil is encountered in the Phase II investigation, it should be remediated by Hazardous Waste Operations, Planning, and Emergency Response (HAZWOPER)-certified contractors before site grading begins. Depending on the Phase II findings, this could require a Phase III RI/FS.				
Potential for encountering unknown soil contamination at unreported spill sites.		X	X	X
Mitigation: Provide Contaminated Material Contingency Plan for construction contractors.				
Potential for construction spills.		X	X	X
Project elements that will prevent or avoid significant effect: City maintains spill prevention and spill response protocols that include the 9-1-1 emergency system and hazmat trained prevention crews and spill responders. City will require construction contractors to submit spill prevention and response plans, which are a required element of the construction stormwater permit issued by Ecology.				
Potential for asbestos and lead based paint in structures to be demolished.		X	X	X
Project element that will prevent or avoid significant effect: All structures to be partially or fully demolished will be tested for asbestos and lead based paint. Identified asbestos and lead based will be abated in accordance with state and federal regulations prior to demolition.				
Noise				
Temporary construction noise at nearby noise-sensitive receivers.		X	X	X
Mitigation: Implement Construction Noise Reduction Plan.				
Plans and Policies				
Right-of-way requirements are outside the boundaries defined by City Ordinance 326, which was adopted as an amendment to the City Comprehensive Plan.				X
Mitigation: If right-of-way is needed outside the boundaries defined, the City will take action to make the Project compliant with the Comprehensive Plan.				

*Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects During Project Construction

	Alternatives			
	No Action	A	B	C
Transportation				
Reduced traffic flow.		X	X	X
Mitigation: Implement construction Best Management Practices. Develop Traffic Control Plan, Construction Staging Plan, and Communication Plan for residents and businesses, to minimize effects of Project construction on traffic operations.				
Transit re-routed or stops relocated.		X	X	X
Mitigation: Coordination with the Metro and Community transit agencies would be ongoing throughout the construction period to minimize impacts to transit service. Bus zone relocation or closure would be clearly signed and communicated to transit riders. Temporary stops would be provided in a safe and accessible location, separated from other traffic and construction activity by traffic barriers.				
Business access revised disrupting delivery and patron access.		X	X	X
Mitigation: Temporary access revisions would be well marked and would provide the most direct access to properties possible. Owner/tenants along the corridor will be kept informed of construction schedules, schedule changes, and information detailing construction activities. Develop Traffic Control Plan and Construction Phasing Plan to minimize disruption to businesses.				
Utilities and Services				
Decreased level of service for emergency services and other public service providers due to increased traffic congestion on Aurora Avenue N during construction.		X	X	X
Mitigation: Coordinate with public service providers to minimize delays, including notifying public service providers of the construction schedule and of any temporary lane or access closures. Coordinate with school officials before and during construction. Schedule lane closures for off-peak hours when feasible (e.g., at night).				

**Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.*

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects During Project Construction

	Alternatives			
	No Action	A	B	C
Disruption of utility service during construction of the Project and utility relocation.		X	X	X
Mitigation: Map all utilities prior to starting construction to avoid accidental disruptions. Coordinate with utility providers to minimize disruption of service. Notify and coordinate with fire departments for waterline relocations that may affect water for fire suppression, and establish alternate supply lines prior to any breaks in service. Coordinate with business and property owners to schedule utility connection work to minimize impacts on business operations.				
Potential for increased need for police for crime prevention at construction sites and for traffic and pedestrian control during construction.		X	X	X
Mitigation: Coordinate with law enforcement agencies to implement crime prevention principles and to ensure adequate staffing for traffic and pedestrian control during construction.				
Visual Quality				
Visual prominence of traffic cones and barriers along roadway, used for construction-related traffic control and channelization		X	X	X
No mitigation recommended.				
Temporary lighting, detours, and construction-related clutter		X	X	X
Mitigation: Locate/screen storage and staging areas in areas that minimize visual prominence. Shield/screen light fixtures to minimize glare.				
Water Quality				
Increased risk of sediment released to stormwater.		X	X	X
Mitigation: Utilize temporary erosion and sediment control measures during construction.				
Wetlands and Other Waters of the U.S.				
Increased risk of sediment released to stormwater runoff to ditches. No wetlands were identified within the Project area.		X	X	X
Mitigation: Utilize temporary erosion and sediment control measures during construction.				

*Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects to Properties

	Alternatives			
	No Action	A	B	C
Full acquisition of 2 business properties (17750 and 17760 Aurora Avenue N)		X	X	X
Mitigation: Property owners will be compensated for property take per federal requirements.				
Major or partial demolition of commercial buildings to construct Project. (3 businesses under Alternative A, 5 businesses under Alternative B, and 8 businesses under Alternative C.)		X	X	X
Mitigation: Property owners will be compensated for property take per federal requirements. City will compensate property owners to allow them option to rebuild or remodel on their existing site.				
Property acquisitions necessary for construction of the Project would reduce commercial parking available for businesses, possibly affecting minimum on-site parking requirements within the City's parking regulations.		X	X	X
Mitigation: Property owners will be compensated for property take per federal requirements. If Project results in available parking for a business to drop below City requirements, the business will be grandfathered in as parking-compliant. If renovation to the property occurs after Project construction is complete, the business would need to come back into parking compliance.				
Potential relocation of some rental residences located on one property (~19600 Aurora Avenue N).		X	X	X
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.				

*Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects After Project is Complete

	Alternatives			
	No Action	A	B	C
Air Quality				
No potential adverse effects to air quality are identified. The Project satisfies state and federal requirements, so no mitigation measures are needed.				
Cultural Resources				
State review of cultural report is underway. Results of cultural analysis cannot be released until State review is complete.				
Economics				
Analysis of economic effects after project is complete is pending.				
Fish, Vegetation and Wildlife				
No potential adverse effects to fish, vegetation, and wildlife are identified.				
Geology and Soils				
No potential adverse effects to geology and soils are identified.				
Hazardous Materials				
Increase in traffic volumes over time increases potential for fuel spills caused by traffic accidents.	X	X	X	X
Project element that will avoid or minimize significant effect: City to maintain spill prevention and spill response protocols that include the 9-1-1 emergency system and hazmat trained prevention crews/spill responders.				
Land Use Patterns, Plans, and Policies				
Project is generally consistent with the 32 Points, adopted in 1999, except:				
No amenity zone included in Alternative A.	X	X		
Curb bulb-outs not proposed on side streets; no pedestrian-only signals are proposed; and reduction in speed limit to 35mph cannot be implemented without evidence for need from corridor speed study.	X	X	X	X
Mitigation: Implementation Strategies are currently under development to reflect current community priorities for the corridor.				
Noise				
Modeled noise levels exceed noise abatement criteria at one outdoor seating area (20121 Aurora Avenue N); two apartment buildings (19523 Firlands Way N and 935 N 200th Street); and two houses (19370 Firlands Way and 19344 Firlands Way).	X	X	X	X
No mitigation recommended: No noise abatement measures satisfy the WSDOT feasibility and reasonableness criteria.				

**Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.*

Preliminary Summary of Potential Effects and Mitigation*

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

Potential Effects After Project is Complete

	Alternatives			
	No Action	A	B	C
Transportation				
Intersection operations at N 170th Street, N 182nd Street, and N 195th Street are projected to fail under existing and projected 2030 conditions, and fail to meet the City's adopted traffic operational standards. No mitigation available.	X			
Projected increase in vehicular, pedestrian, and bicycle traffic over time would result in increased potential for safety conflicts, without the improvements proposed under the Build Alternatives. No mitigation available.	X			
The widening of Aurora Avenue N would result in longer crossing distances and pedestrian crossing times at signalized intersections. Mitigation: Provide standard signal timing to allow pedestrians to cross the entire distance in one cycle length.		X	X	X
Utilities and Services				
No potential adverse effects to utilities and services are identified.				
Visual Quality				
Minimal addition of light and/or glare due to addition of lane in each direction. Project elements that addresses potential effect: Plant vegetation within median. Plant vegetation within amenity zone (Alternatives B and C only). Best management practices that addresses potential effect: Shield/screen light fixtures to minimize glare. Use low-sheen and non-reflective materials.		X	X	X
Water Quality				
No potential adverse effects to water quality are identified.				
Wetlands				
Loss of 401 square feet of ditches. No wetlands were identified within the Project area. Mitigation: Construction of stormwater treatment facilities.		X	X	X






**Results presented in this summary are considered preliminary because Washington State Department of Transportation and Federal Highway Administration reviews of environmental technical reports are not yet complete.*

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



Draft Implementation Strategies for Aurora 165th to 205th

(Proposed Updates to the “32 Points”)

June 6, 2007

The following “32 Points” were adopted by the Shoreline City Council in Resolution #156 on August 23, 1999, accepting the recommendation of the Citizens Advisory Task Force (CATF) on the Preferred Alternative. The “32 Points” were intended to provide flexibility and strategies for the implementing the adopted design concept for the corridor. The adopted design was based upon Alternative 2, the people mover alternative. The main features of this design concept include the addition of business access/transit lanes on the outside of the roadway; curbs, gutters, landscaping/street furnishing strip, and sidewalks on both sides; and the creation of a landscaped center median with left and u-turn pockets. The recommendation also included four new signalized intersections and four new pedestrian activated signalized crossings.

The CATF was a 13-member steering committee appointed by City Council to guide the development of a preferred design concept for Aurora. The CATF consisted of an equal representation by businesses and Shoreline citizens. The 32 Points were approved unanimously by the CATF on July 8, 1999. The City Council directed that the 32 Points be used as guides during design and implementation of the project to ensure that flexibility existed to address the concerns and vision of the community and City Council.

Since the 1999 adoption of the “32 Points”, several significant actions have occurred that suggest a re-visit of the implementation strategies. An environmental review for first mile (145th to 165th) of the project has been completed, and the first mile has been constructed. The City Manager has appointed an Aurora Business and Community Team to review the “32 Points” in preparation for the environmental, design and construction for the remaining two miles.

The goal of the Aurora Corridor Project is to improve safety for pedestrians and drivers, improve the aesthetics and image of the street, add people moving capacity, and support existing and future business investments along the street. Landscaping is a key feature in strengthening the image and in supporting the walkability of the corridor.

	32 Points (adopted by City Council)	Implementation Strategies (proposed changes)
1	The maximum number of lanes on an intersection leg shall not exceed eight lanes including turning lanes. Seven lanes is the desired width.	No change.
2	Provide ability at intersections for all pedestrians to safely cross (and include median refuge at intersections with pedestrian pushbuttons). New mid-block pedestrian	Provide ability at intersections for all pedestrians to safely cross (and include median refuge at intersections with pedestrian pushbuttons when space permits). New mid-

	crossings should include pedestrian activated signals. Bus stops and pedestrian crossings will complement each other.	block pedestrian crossings should include pedestrian activated signals. Bus stops and pedestrian crossings will complement each other.
3	Twelve foot sidewalks will be provided on both sides of Aurora the entire length. Consider reducing the initial sidewalk width to mitigate land impacts/acquisitions on existing businesses. Note: a minimum of four feet of a landscaping/street furnishing zone is included in the twelve foot width total above.	The base design shall include seven foot wide sidewalks separated from the curb by a four foot wide utility/amenity zone. Consider reducing the initial sidewalk width to mitigate land impacts/acquisitions on existing businesses. In locations where sidewalk and amenity zone create significant loss of parking or building/structure impacts, an interim width curbside sidewalk must meet the allowable minimum width (seven feet is the preferred minimum width). Once properties redevelop, the full standard will be applied.
4	Utilize more landscaping or colored pavement in sidewalk areas to soften the look. The four foot landscaping/street furnishing strip behind the curb should utilize trees in tree grates/pits (consider a combination tree protector/bike rack), low growing ground cover/shrubs, and could utilize some special paving (or brick) between curb and sidewalk to strengthen the identity of an area.	Use more landscaping or colored pavement in sidewalk areas to improve visual quality. The four foot utility/amenity zone behind the curb should include trees in tree grates/pits, low growing ground cover/shrubs to improve water quality, and could utilize some special paving (or brick) between curb and sidewalk to strengthen the identity of an area. Continue the special scoring of sidewalk and curb return areas used between 145 th and 165 th .
5	Strive to design the project so that new sidewalks can link to existing recently constructed sidewalks (such as Seattle Restaurant Supply, Drift-on-Inn, Schucks, Hollywood Video, and Easley Cadillac).	Strive to design the project so that new sidewalks can link to existing recently constructed sidewalks (such as Hollywood Casino, Drift-on-Inn, Schucks, Hollywood Video, Fire Administration, Walgreens, Sandberg Cadillac, Discount Tire, and Starbucks).
6	Re-align the street where possible to avoid property takes.	No change.
7	As the final design is developed, work with WSDOT to obtain design approvals for lane width reductions, and look for opportunities to reduce (but not eliminate) the median width both to enable reduction of pavement widths, construction costs, and land impacts/acquisition on existing businesses.	No change – Confirm with WSDOT the lane width and other deviations approved in 145 th to 165 th .
8	Develop median breaks or intersections for business access and U-turns at least every 800-to-1000 feet (these details will be worked out during future design phases and will be based in part on the amount of traffic entering and exiting businesses).	Develop median breaks or intersections for business access and U-turns on the average of at least every 500 to 800 feet. Prioritize left and u-turn pockets as follows: signalized intersections, immediately upstream of signalized intersections, at local streets, and at high volume or shared driveways.
9	Use low growing drought resistant ground-cover and space trees in the median to allow visibility across it.	Use low growing, low maintenance, hardy ground-covers and space trees in the median to allow visibility across it. Frontage trees should be columnar shaped, while trees with more canopy are acceptable in the medians. Explore the potential for evergreen trees.
10	Unify the corridor by adding art, special light fixtures, pavement patterns (and coloring at crosswalks), street furniture, banners, unique bus shelters, etc. to dramatically enhance image and uniqueness of the streetscape and develop it differently than the standard design that has been constructed for most streets.	No change.
11	Unify the entire corridor by the use of street trees, lighting, special paving, bus zone design, and other elements to visually connect the corridor along its length.	No change.
12	Provide elements in the Interurban/Aurora Junction area,	Provide elements in the Interurban/Aurora Junction area,

	between 175 th and 185 th that create a safe, pedestrian oriented streetscape. Elements can include special treatments of crossings, linkages to the Interurban Trail, etc.	between 175 th and 185 th that create a safe, pedestrian oriented streetscape. Elements can include special treatments of crossings, linkages to the Interurban Trail, etc. The Interurban Trail will serve as the sidewalk on the east side of Aurora from approximately 177 th to 185 th .
13	Develop signature gateway designs at 145 th and 205 th with special interest landscaping, lighting, paving and public art to provide a visual cue to drivers that they have entered a special place.	Develop signature gateway designs at 145 th , 175 th , 185 th , and 205 th with special interest landscaping, lighting, paving and public art to provide a visual cue to drivers that they have entered a special place.
14	Develop themes that reflect the character and uses of different sections of the street (such as the 150 th to 160 th area which has a concentration of international businesses, recall the historic significance of the Interurban or other historic elements, and Echo Lake).	No change.
15	Utilize the Arts Council and neighborhoods to solicit and select art along the corridor.	Use the 1% for arts program, the Shoreline/Lake Forest Park Arts Council and neighborhoods to solicit and select art along the corridor. Consider artist made building parts in the design of the project.
16	Strengthen connections to the Interurban Trail through signing and other urban design techniques.	No change.
17	Develop a design for closure of Westminster Road between 158 th and 155 th by developing a southbound right turn lane at 155 th Street and converting the existing road section to a driveway entrance to Aurora Square. Also, develop an elevated Interurban trail crossing through "the Triangle" that is integrated with future development of the Triangle (reserve the option to build above Westminster should we not be successful in closing the roadway).	No change, except to note that this has been completed/accomplished.
18	Pursue modifying the access to Firlands at 185 th , closing Firlands north of 195 th , and developing a new signal at 195 th .	17. Pursue modifying the access to Firlands at 185 th , closing Firlands at 195 th , and developing a new signal just north of 195 th .
19	<p>The preferred design shall include:</p> <ul style="list-style-type: none"> • Stormwater management improvements to accompany the project that follow the city's policies; • Traffic signal control and coordination technology (including coordination with Seattle and Edmonds SR 99 signal systems); • Traffic signal technology to enable transit priority operations; • Continuous illumination for traffic safety and pedestrian scale lighting; • Undergrounding of overhead utility distribution lines. 	<p>18. The preferred design shall include:</p> <ul style="list-style-type: none"> • Traffic signal control and coordination technology (including coordination with Seattle and Edmonds SR 99 signal systems); • Traffic signal technology to enable transit priority operations; • Continuous illumination for traffic safety and pedestrian scale lighting; • Undergrounding of overhead utility distribution lines (including those on the west side of Midvale, between 175th and 185th).
20	Traffic signals will include audible elements for the sight-impaired, and wheelchair detection loops for wheelchair users.	19. Traffic signals will include audible elements for the sight-impaired, countdown pedestrian signal heads, and other ADA features.
21	The City should establish a right-of-way policy to retain or relocate existing businesses along the corridor, including those that do not own the land on which they are located. Consideration should be given to providing financial	20. The City will abide by federal and state right-of-way acquisition guidelines. The City covered the costs of underground hookups, and sharee the costs of property owner appraisal reviews in the 145 th to 165 th project -- .

	incentives to those businesses.	the update of the Right-of-Way Policies and Procedures Manual should continue this practice. Consideration should be given to providing financial incentives to those businesses.
22	Work with property and business owners during the preliminary engineering phase to consolidate driveways, share driveways, and potentially to share parking and inter business access across parcel lines. Be creative and sensitive to the parking needs of businesses, including consideration for some potential clustered/shared parking lots (especially if remnant parcels are available).	21. Work with property and business owners during the design and right-of-way phases to consolidate driveways, share driveways, and potentially to share parking and inter business access across parcel lines. Be creative and sensitive to the parking needs of businesses, including consideration for some potential clustered/shared parking lots (especially if remnant parcels are available). Where frontage parking will be impacted by the project, work with property owners to develop a single access lane shared across parcels with parallel or angled parking.
23	Provide improvements that will not generate an increase in neighborhood spillover traffic.	22. Provide improvements that will not generate an increase in neighborhood spillover traffic.
24	Work with transit agencies to provide increased service and seek capital investments from them to support this project.	23. Work with transit agencies to provide increased service and seek capital investments from them to support this project. Design bus zones to accommodate future bus rapid transit needs.
25	Develop partnerships with WSDOT and King County/Metro to jointly fund the project.	24. Continue to aggressively pursue funding opportunities and partnerships with the goal of minimizing the City share of project costs.
26	Provide curb bulbs where practical on side streets to reduce pedestrian crossing width and to discourage cut-through traffic.	25. Provide needed turn lanes and capacity on side streets including pedestrian amenities.
27	Strengthen and preserve the heritage of the red brick road. If the design impacts the red brick road in its current configuration/location north of 175 th , preserve its heritage by relocating it elsewhere.	26. Strengthen and preserve the heritage of the red brick road north of 175 th by developing the Heritage park north of Walgreens and include red bricks in the Aurora design between 175 th and 185 th .
28	Consider new signalized intersections at 152 nd , 165 th , 182 nd , and 195 th .	27. Consider new signalized intersections at 149 th , 152 nd , 165 th , 182 nd , and just north of 195 th . Note that 152 nd and 165 th have already been constructed.
29	Consider new pedestrian only signalized crossings in the vicinity of 149 th , 170 th , 180 th and 202 nd .	28. Maintain pedestrian signal at 170 th , and eliminate the 180 th pedestrian signal if the full signal at 182 nd is approved.
30	Sign Ronald Place south of 175 th as the route to I-5.	Delete.
31	Pursue reducing the speed limit to 35 mph where appropriate recognizing the potential impacts of spillover traffic with a lower posted speed.	29. No change.
32	Seek funding to develop a program to assist and encourage businesses to improve their facades.	30. No change.
		31. Provide back of lot (rear) access roads/alleys when possible during project development or as a condition of redevelopment to provide rear access to signalized intersections. Key locations include: both sides of Aurora from 165 th to 175 th , the east side between 192 nd and Echo cove Condos, the west side between 195 th and 198 th , and the east side between 198 th and 200 th .

		<p>32. Include natural storm drainage features along the corridor when possible. Raingardens, stormwater planter boxes, tree boxes/filter pits, center median swales should be considered. Opportunities for porous concrete should also be explored. Conventional methods such as conveyance pipes, catch basins (with filters), water quality filters, and vaults are also tools that will be explored and used.</p>
		<p>33. Use the Economic Development program resources:</p> <ul style="list-style-type: none"> • to provide pre-construction training for businesses • to work with business community on joint marketing efforts • to improve/maximize business health prior to construction • to financially assist businesses during construction with loan programs
		<p>34. Minimize impacts to businesses during construction by:</p> <ul style="list-style-type: none"> • creatively and clearly delineating driveways and access points • improving nighttime safety with lighting, visible lane markings, and signage • continuous pro-active communications with affected businesses • moving non-safety construction materials and cones out of roadway during non-work hours • investigating opportunities for non-invasive night work and shortening construction periods during the holidays • providing adequate advance signing to direct traffic to freeways when major delays or construction activities are planned. • park construction vehicles so as to not block access or visibility of businesses, especially during non-construction hours • Require approval by City prior to allowing lane blockages during peak hours.
		<p>35. Manage and respond to increases on neighborhood streets during construction.</p>