Council Meeting Date: July 23, 2007 Agenda Item: 8(a)

## CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: Aurora Corridor Improvement Project (N 165th to N 205th Street)-

Preferred 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 165<sup>th</sup> to N 205<sup>th</sup> 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 (ABC Team), the Shoreline Chamber of Commerce, Vision Aurora, Pro Shoreline, and the Planning Commission representatives on the ABC Team endorse the flexible alternative and project Implementation Strategies (See Attachment A for letters). On July 16, 2007 Council held a public hearing to take community testimony for all of the alternatives under consideration and the Implementation Strategies.

This evening Council is requested to 1) adopt the Flexible/Hybrid Alternative as the "Preferred Alternative" to complete the environmental analysis and 2) adopt the updated Implementation Strategies (formerly the 32 Points). Please see Attachment B, Resolution 263 (note: Exhibit B to resolution 263 is the Draft Recommended Alternative roll plot and is not physically included with this report). 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 145<sup>th</sup> to N 165<sup>th</sup> Street and is now substantially complete.

In 2006, staff began development of the alternatives to complete the project from N 165<sup>th</sup> to N 205<sup>th</sup> 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 182<sup>nd</sup> and N 196<sup>th</sup>/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 C).

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 D and E). 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 175<sup>th</sup> 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 F).

## **FUNDING:**

Funding is included in the adopted Capital Improvement Program for the Aurora Corridor Improvement Project (N 165<sup>th</sup> to N 205<sup>th</sup> 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

Staff recommends that Council adopt Resolution 263.

Approved By:

ty 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 145<sup>th</sup> to N 165<sup>th</sup> 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. Once a preferred alternative is selected, the environmental analysis will then be completed on the preferred alternative.

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 G). 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 172<sup>nd</sup> Street to N 188<sup>th</sup> Street of where the future Aurora right of way lines would be. Because Seattle City Light property is adjacent to Aurora from approximately 180<sup>th</sup> Street to N 188<sup>th</sup> 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 182<sup>nd</sup> and Firlands Way (approximately N 196<sup>th</sup> Street). If signals are not approved at these locations, the N 182<sup>nd</sup> intersection would operate as right/left onto N 182<sup>nd</sup> and right out onto Aurora only from N 182<sup>nd</sup>. 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 195<sup>th</sup> Street will remain open operating the same way as N 182<sup>nd</sup> (right/left onto N 195<sup>th</sup> and right out only onto Aurora Avenue N).

## **ALTERNATIVES ANALYSIS**

With the preliminary environmental analysis completed (Attachment H) by Jones & Stokes, and the development of the draft recommended flexible alternative, an Evaluation Matrix has been developed (Attachment I) 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 J). 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.

| Alternati | Right-of- | Construction | Design and   | Total   |
|-----------|-----------|--------------|--------------|---------|
| ve        | way       | with         | Construction |         |
|           |           | Contingency  | Management   |         |
| Α         | \$12.9M   | \$44.8M      | \$9.7M       | \$67.7M |
| В         | \$14.9M   | \$46.6M      | \$10.2M      | \$71.8M |
| С         | \$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 additional 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**

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 in 2009.

## RECOMMENDATION

Staff recommends that Council adopt Resolution 263.

## **ATTACHMENTS**

Attachment A: Letters from the ABC Team, Shoreline Chamber of Commerce,

Vision Aurora, Pro Shoreline, and the Planning Commission

Representatives on the ABC Team

Attachment B: Resolution 263
Attachment C: Alternative A

Attachment D: Alternative B
Attachment E: Alternative C

Attachment F: Draft Recommended Flexible Alternative

Attachment G: Low Impact Development Toolkit

Attachment H: Preliminary Summary of Potential Effects and Mitigation

Attachment I: Evaluation Matrix

Attachment J: 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, 165<sup>th</sup> to 205<sup>th</sup> 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 20<sup>th</sup> 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 145<sup>th</sup> to 165<sup>th</sup> 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.

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June 21, 2007

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City Manager's Office

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

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 2<sup>nd</sup> and 3<sup>rd</sup> miles of Aurora, and willingness to adopt helpful lessons from the recently completed 1<sup>st</sup> Mile of the Aurora Avenue Project.

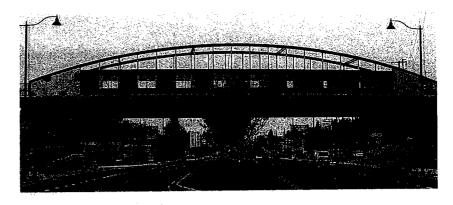
We commend you for the great public processes instituted to ensure a better, community-oriented process. We especially appreciate the Aurora Business and Community Team which included Chamber members and through whom the Chamber was able to participate and contribute positively.

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,

Yudy 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 165<sup>th</sup> to 205<sup>th</sup>.

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  $B - 110^{\circ}$  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

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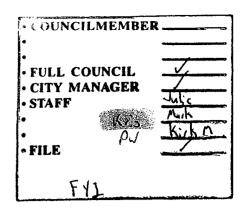
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City Manager's Office



July 8, 2007

Shoreline City Council 17544 Midvale Avenue North Shoreline, WA 98133-4921



Dear Mayor Ransom and City Councilmembers:

Pro Shoreline is a non-partisan organization consisting of hundreds of individuals committed to working together to ensure that the city of Shoreline remains a great place to live and work, and where residents and businesses are respected and their voices are heard. Our members have told us to work to promote a positive agenda in our city and that they care most about:

## Aurora Project

Continue the first phase design north to the city limits leveraging local resources with federal, state and grant funds.

## **Environment**

Conserve, protect and improve our natural resources for an environmentally healthy community that benefits current and future generations.

## **Economic Development**

Build a strong business community to provide needed goods and services to the community as well as creating tax dollars to help lessen the tax burden on residents.

With this in mind, we have reviewed the staff recommendation for completion of the Aurora improvements from 165<sup>th</sup> to 205<sup>th</sup>. This project has a long history starting with the "32 points" adopted by city council on August 23, 1999 via Resolution 156 as well as Ordinance 326 adopted on July 14, 2003, which stipulated that the improvements from 172nd to 192nd were to move to the east. In addition, the completed first section has stimulated tremendous business reinvestment.

Pro Shoreline is supportive of the staff recommendation as it is consistent with the completed section of Aurora. As the design is refined, we recommend that staff evaluate the trade off between left turn pockets and planted medians for environmental and safety reasons so that the landscaping/street trees is consistent with the completed portion.

Sincerely,

eott Jepsen

Chair

The Honorable Robert Ransom, Mayor and City Councilmembers 17544 Midvale Avenue North Shoreline, Washington 98133-4921

Dear Mayor Ransom and Shoreline City Councilmembers,

As the three planning commissioners who served on the Aurora Business and Community (ABC) Team over the past several months, we would like to take this opportunity to congratulate you, the other members of the City Council, and City Manager Bob Olander for creating this team as part of the environmental review process for the second phase of the Aurora Corridor project. The team represented a very broad range of citizen, neighborhood and business interests in the north central part of our city. Our discussions were very frank, yet cordial and respectful. You can be proud that this process has brought transparency to this very important project, as well as a significant degree of consensus among the different interests and parties represented on the team.

We would especially like to commend city staff, particularly Kris Overleese and Kirk McKinley, for their excellent facilitation skills and for the professionalism with which they ran each and every meeting.

At this time, we would also like to offer some points for you to consider as you work on final design of the segment from 165<sup>th</sup> Street to 204<sup>th</sup> Street.

## (1) Opportunities for Low Impact Development Treatments

We feel that portions of the next segment of Aurora are ideal for applying low impact development techniques for managing stormwater. Such techniques are more natural, better reduce flood risk, improve overall water quality, and can be more cost effective over time. In particular, such treatments would be appropriate along the Heritage Park portion from 177<sup>th</sup> to 185<sup>th</sup>, as well as north of 185<sup>th</sup> by Sky Nursery. At the ABC team meetings, it was suggested that the City could explore partnering with the nursery along its segment of Aurora to develop prototype rain gardens or similar systems with attractive vegetation. Such prototypes stormwater gardens would be a civic enhancement, as well as a model for community for innovative approaches to managing stormwater.

## (2) Identify Subdistricts Along the Remaining Portions of Aurora

There was near consensus among ABC team members that it makes sense to continue the basic overall design for Aurora throughout the entire city. Time and again, we heard that this is probably the most important project the City will consider this century and it needs to be done well. While Aurora serves multiple functions – as our city's main street, it is the community's public living room and should be designed accordingly.

We would encourage the City Council to consider specific subareas or subdistricts along Aurora, where extra design elements should be incorporated. One such subarea that was mentioned during the team meetings is our evolving civic center from 175<sup>th</sup> to 185<sup>th</sup>. This is an area where additional features, such as special sidewalk pavement treatments, additional street furniture, and enhanced landscaping would be especially appropriate.

## (3) Enhanced Street Tree Canopy

One of the natural features that sets our urban region apart from others is our historic forest cover. Unfortunately, the central part of the city along the Aurora corridor has been almost completed denuded of trees. Consider the following:

- Landscaping with trees increases property values
- Landscaping with trees stimulate economic development, attracting new business and tourism. Urban districts and neighborhoods with tree canopies are 5 to 10 degrees cooler; near buildings trees can reduce air conditioning and heating needs
- A mature urban tree provides nearly \$300 in environmental and economic benefits each year because of contributions to maintaining ambient temperatures, stormwater runoff, and controlling air pollution.

(For more detail on each of these points, as well as other benefits, see Attachment titled: *The Value of Trees in Urban Settings*, excerpted from <u>True Urbanism</u>, by Mark Hinshaw.)

We strongly encourage the City Council to work with city staff, neighborhood and community groups, and the business community to identify areas adjacent to Aurora where a more enhanced street canopy can be developed – beyond the preferred overall design. In particular, a multi layered tree canopy can more closely mimicking natural systems which further increases evapo-transpiration opportunities to reduce stormwater runoff, while exercising care in the landscape design to maintain good sight lines for business and safety. Again, key opportunities exist for the segments along Heritage Park, by Sky Nursery, and adjacent to the park-and-ride at 192<sup>nd</sup> Street. Such landscaping enhancements are a direct, tangible, and immediate way we can honor our commitment as a community to address climate change.

## (4) Safety and Flexibility

The staff preferred alternative is a remarkable product and represents tireless dedication on the part of city staff, the community and neighborhoods, and business to craft the best possible recommendation for the next two miles of Aurora. In particular, the willingness to develop flexible solutions at locations at that are particularly problematic – such as where buildings go up to the right-of-way – is commendable. However, flexibility regarding elimination of the amenity zone should only be considered in the most difficult locations. Having such a zone to separate the increasing number of pedestrians that will be using Aurora from vehicles is a critical safety feature. That safety zone should be maintained as the norm and exceptions should only be granted where no viable option exists.

## (5) Historic Red Bricks

We encourage a creative and flexible approach to reuse of the historic red bricks that are currently located on the east side of Aurora Avenue near 175<sup>th</sup> Street. Reusing the bricks by incorporating them into features at Heritage Park, the City Hall site, and along the sidewalks adjacent to Aurora and 175<sup>th</sup> is a reasonable way to continue to mark their historic significance, while providing opportunities for business expansion and redevelopment – especially for the set of bricks south of 175<sup>th</sup>.

Please contact any of us if you have questions or would like any follow-up on our comments. We look forward to this exciting period of rejuvenation of our core area.

Sincerely,

Robin McClelland

Rocky Piro

## Attachment

Letter to Mayor Ransom and City Council submitted by Broili, McClelland, Piro

9 July 2007

## The Value of Trees in Urban Settings

## MONETARY VALUE

- One mature tree can have an appraised value of between \$1,000 and \$10,000. (Council of Tree and Landscape Appraisers, www.almanacnews.com)
- Trees can boost the market value of a home by 6 or 7 percent. (Dr. Lowell Ponte, www.arborday.org)
- Landscaping, especially with trees, can increase property values as much as 20 percent. (Management Information Services/ICMA, www.arborday.org)
- Nationwide, trees add an average of \$5,000 in value to a residential lot. (U.S. Forest Service, www.urbanforest.org.)
- The annual benefits outweigh the costs by about \$54 each year for every single tree. (Tree Foundation of Kern, www.urbanforest.org.)
- Trees stimulate economic development, attracting new business and tourism. Commercial retail areas are more attractive to shoppers, apartments rent more quickly, tenants stay longer, and space in a wooded setting is more valuable to sell or rent. (The National Arbor Day Foundation, www.arborday.org)

## **ENVIRONMENTAL VALUE**

• The net cooling effect of a young, healthy tree is equivalent to 10 roomsize air conditioners operating 20 hours a day. (U.S. Department of Agriculture, www.arborday.org)

- Trees properly placed around buildings can reduce air conditioning needs by 30 percent and heating needs by 20–50 percent. (U.S. Department of Agriculture Forest Service, www.arborday.org)
- A cypress buffer two feet thick between a yard and a busy street can reduce street noise by five decibels. (Associated Landscape Contractors of America, www.igin.com)
- Properly positioned plant materials can lower heating and cooling costs by as much as 20 percent.
  (Associated Landscape Contractors of America, www.igin.com)
- Three strategically planted trees can provide shade that will lower cooling costs by 10 to 50 percent. (Tree Foundation of Kern, www.urbanforest.org)
- A "well-treed" neighborhood is 5–10 degrees cooler than a new development. (Tree Foundation of Kern, www.urbanforest.org)
- A single urban tree with a 50-year life span yields about \$273 in environmental and economic benefits each year: air conditioning, \$73 savings; stemming erosion and stormwater runoff, \$75; providing wildlife shelter, \$75; controlling air pollution, \$50. Compounding \$273 for 50 years at 5 percent yields \$57,151 in benefits per urban tree. (Tree Foundation of Kern, www.urbanforest.org)

Attachment Letter submitted by Broili, McClelland, Piro 9 July 2007

## **RESOLUTION NO. 263**

A RESOLUTION OF THE CITY OF SHORELINE, WASHINGTON, ADOPTING THE DRAFT RECOMMENDED FLEXIBLE ALTERNATIVE AS THE PREFERRED ALTERNATIVE FOR THE AURORA CORRIDOR PROJECT N  $165^{th}-205^{th}$ , ADOPTING IMPLEMENTATION STRATEGIES FOR THE AURORA CORRIDOR PROJECT N  $165^{TH}-205^{TH}$  AND DIRECTING STAFF TO PROCEED WITH COMPLETION OF THE ENVIRONMENTAL ANALYSIS

WHEREAS on August 23, 1999 the City Council adopted Resolution No. 156 which provided for 32 specific points to guide the design and implementation of the Aurora Corridor Project; and

WHEREAS staff and the Aurora Business and Community Team have reviewed these 32 points (hereafter "Implementation Strategies") and identified needed updates to the Implementation Strategies; and

WHEREAS three build alternatives and one do nothing alternative have been developed for the Aurora Corridor Project  $165^{TH} - 205^{TH}$  and preliminary environmental analysis and mitigation measures have been developed for these alternatives; and

WHEREAS public open house meetings were held on November 30, 2006 and December 6, 2006 to review the three build alternatives and a public open house was held June 20, 2007 to review the three build alternatives, the Draft Recommended Flexible Alternative and the Implementation Strategies; and

WHEREAS the Aurora Business and Community Team evaluated and provided input on the three build alternatives, the do nothing alternative, the Draft Recommended Flexible Alternative, and the Implementation Strategies; and

WHEREAS the City conducted a public hearing on July 16, 2007 on the three build alternatives, the Draft Recommended Flexible Alternative, and the updated Implementation Strategies; and

WHEREAS public involvement and review of the project, alternatives, and Strategies has been extensive and adequate to ensure a substantial relationship to the public interest, health, safety and welfare; and

WHEREAS the preliminary environmental analysis addressed a reasonable range of alternatives including a no action alternative that accomplishes the purpose and need for the project; and

WHEREAS in order to implement this project environmental analysis must be completed; and

WHEREAS the updated Implementation Strategies will provide project flexibility; and direction through the design, right of way acquisition and construction phases of the project.

## NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SHORELINE, WASHINGTON, HEREBY RESOLVE AS FOLLOWS:

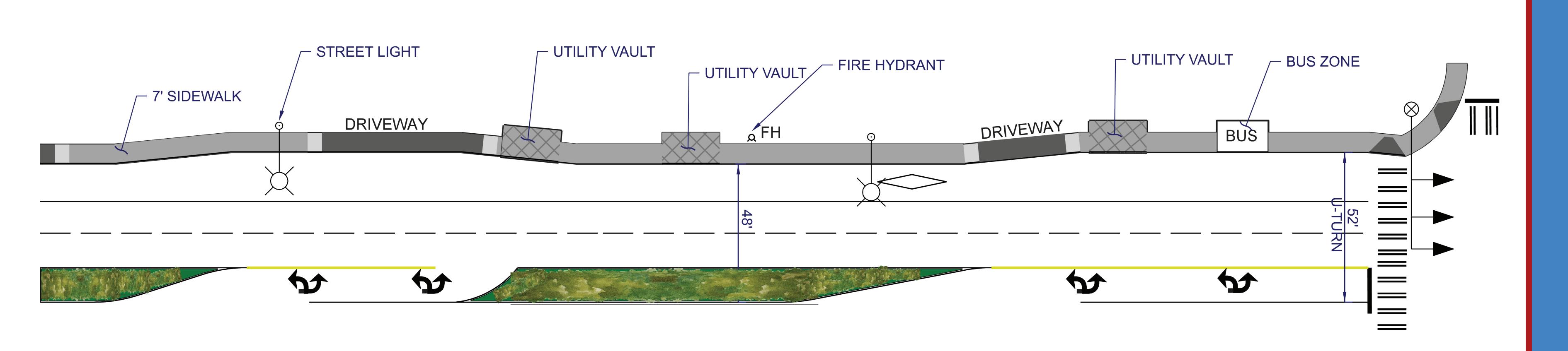
- A. <u>Draft Recommended Flexible Alternative Adopted.</u> The Draft Recommended Flexible Alternative, filed with the City Clerk's Office under Clerk's Receiving No. 4393, is adopted as the Preferred Alternative to carry through the environmental process.
- B. <u>Implementation Strategies Updated.</u> The Implementation Strategies, filed with the City Clerk's Office under Clerk's Receiving No. 4394, are updated to guide the design and implementation of the project.
- C. <u>Environmental Review.</u> Council hereby directs staff to proceed with completion of the environmental analysis.

ADOPTED BY THE CITY COUNCIL THIS 23<sup>rd</sup> DAY OF JULY, 2007.

|              | Mayor Robert Ransom |
|--------------|---------------------|
| ATTEST:      |                     |
| Scott Passey |                     |
| City Clerk   |                     |

## 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

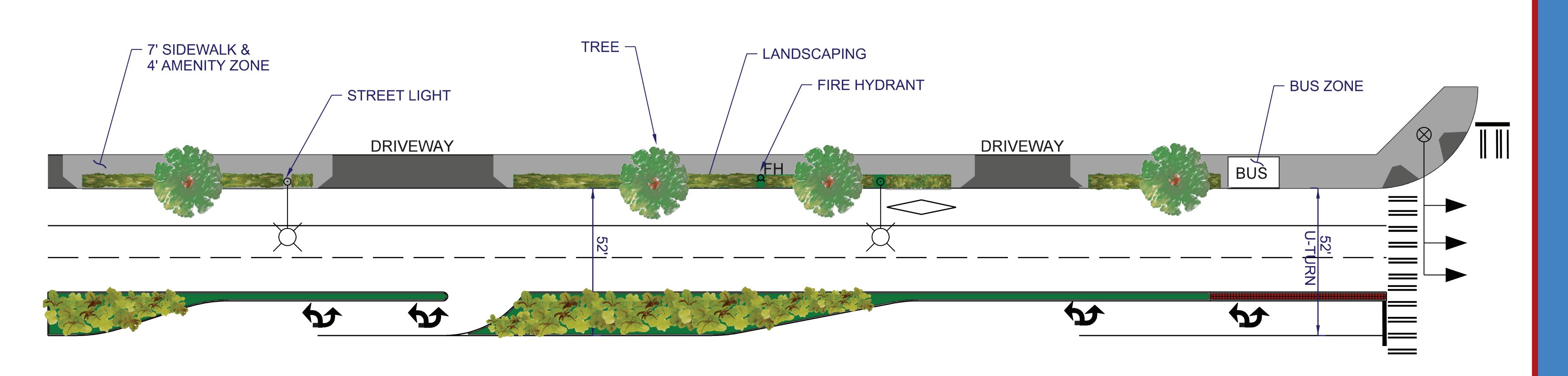
- 104-foot cross section (+ additional 3 feet on each side of roadway for utilities)
- Shift east in the vicinity of N 175th Street
- 7-foot sidewalk
- No amenity/utility zone
- Utility vaults and light/signal poles behind sidewalks
- C-curb access management/median (narrower than Alts B and C)
- Low 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

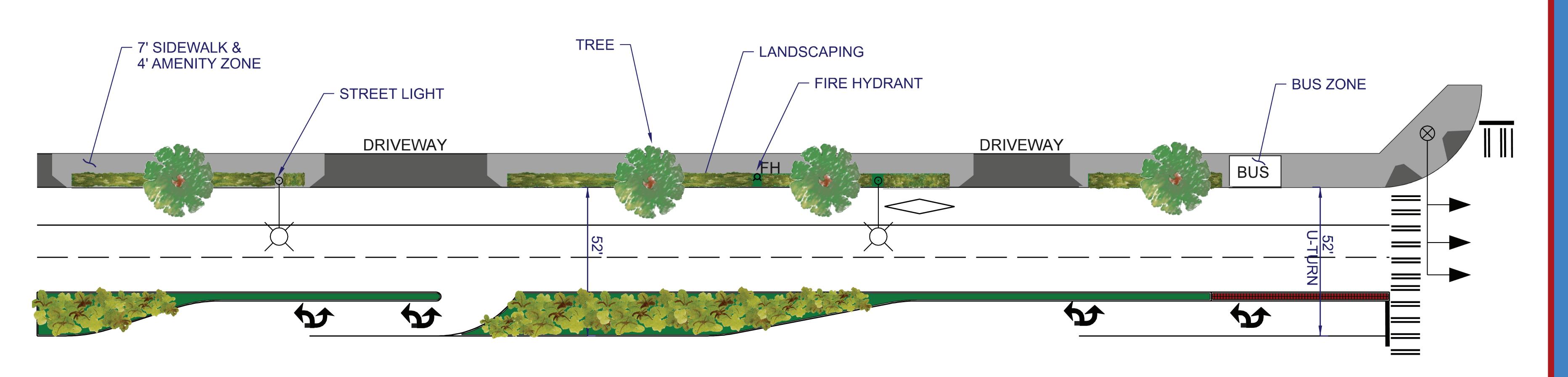
- 110-foot cross section
- 4-foot vegetated amenity/utility zone between curb and sidewalk
- 7-foot sidewalk
- Landscaped medians for access management
- Shift east in vicinity of N 175th Street and N 200th Street
- Light poles in the amenity zone
- Signal poles in sidewalk





## 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

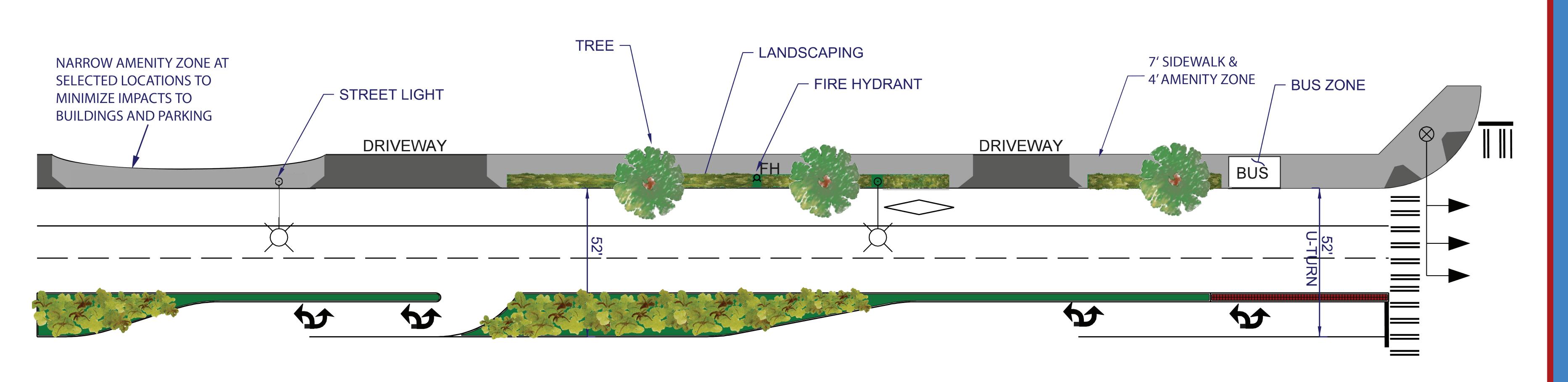
- 110-foot cross section
- 4-foot vegetated amenity/utility zone between curb and sidewalk
- 7-foot sidewalk
- Landscaped medians for access management
- Shift west in the vicinity of N 175th Street and N 200th Street
- Light poles in the amenity zone
- Signal poles in sidewalk





# 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



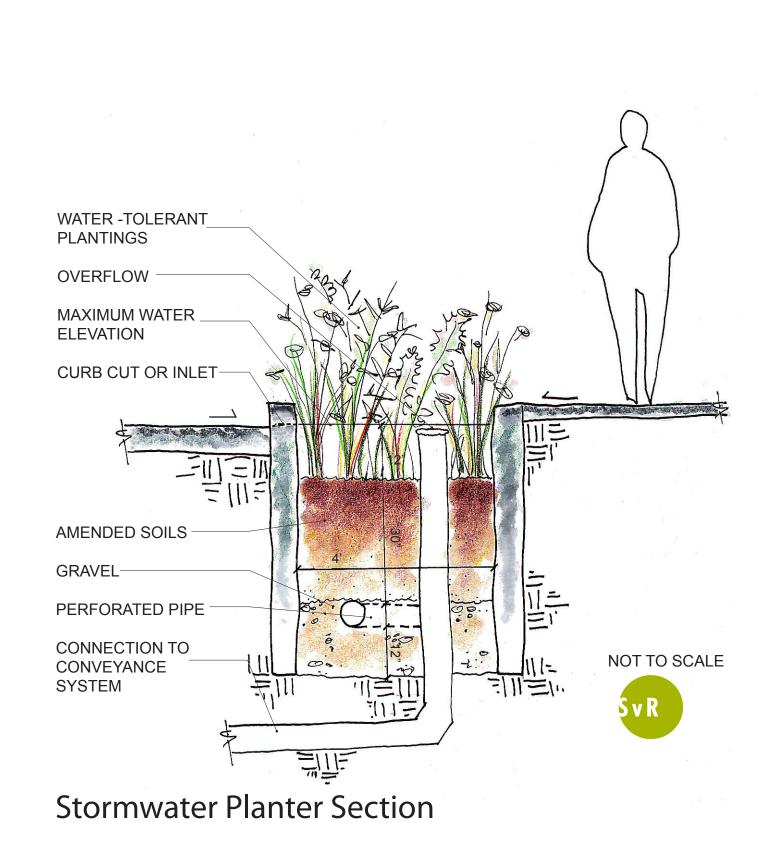


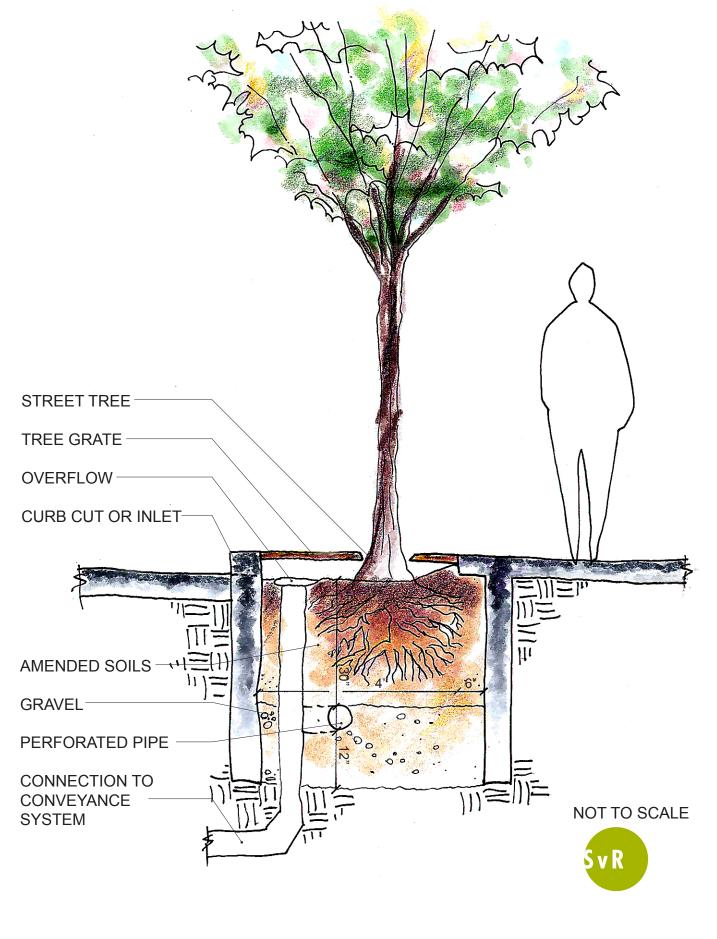
# Low Impact Development Toolkit Options for the Aurora Corridor Project



## Stormwater Planter Boxes & Tree Box Filters

(Standard road design)



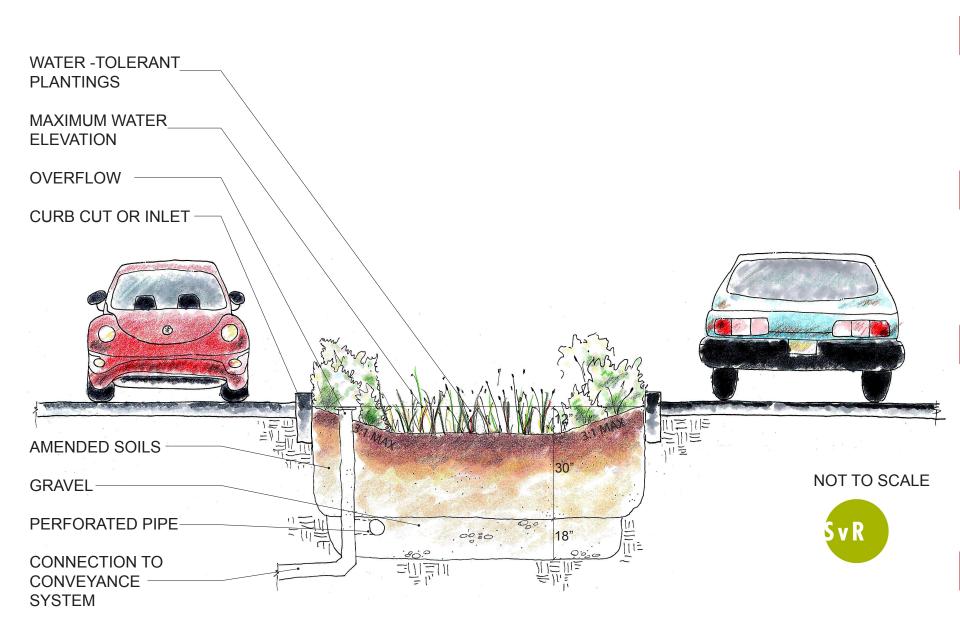


Tree Box Filter Section

- 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

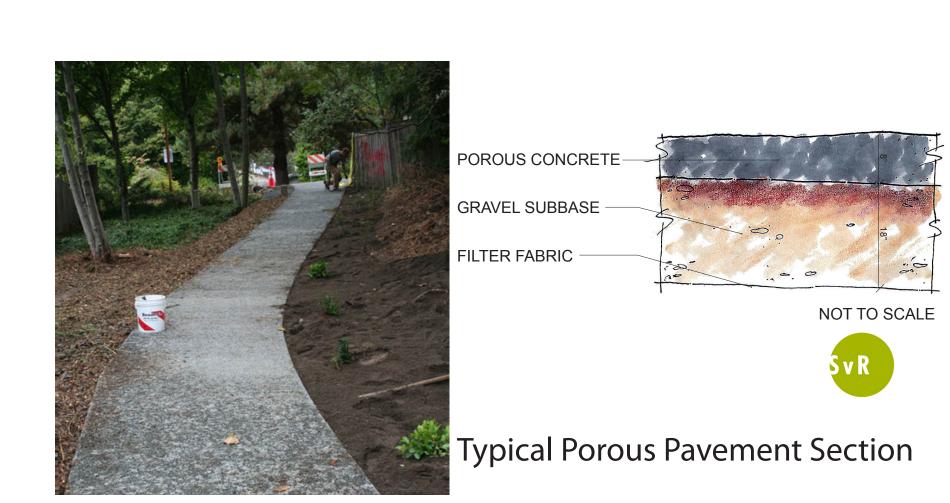
(Reverse crown road design)



**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

- 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.





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

## **Potential Effects During Project Construction**

|   | Alternatives |   |   |   |   |  |
|---|--------------|---|---|---|---|--|
|   | No<br>Action |   | A | В | C |  |
| Air Quality   |              |   |   |   |   |  |
| Construction of the Project would generate temporary emissions of fugitive dust and tailpipe emissions from construction equipment.   |              | Х | Χ | 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. | Χ | Χ | Χ |
| Potential adverse effects on business receipts.  | Χ | Χ | Χ |

Χ

Χ

Χ

## 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.

## 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:

- 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.

June 20, 2007

<sup>\*</sup>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.

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

| Potential Effects During Project Construction  |              |   |   |   |  |  |
|--|--------------|---|---|---|--|--|
|  | Alternatives |   |   |   |  |  |
|  | No<br>Action | A | В | С |  |  |
| Fish, Vegetation and Wildlife  |              |   |   |   |  |  |
| Potential for downstream effects to fish, due to increased risk of construction-related sediment released to stormwater.   |              | Χ | Χ | Χ |  |  |
| <b>Mitigation:</b> 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. |              | Х | Х | X |  |  |

Χ

Χ

Χ

Χ

Χ

## 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.

## 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.

## 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).

## 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.

2 June 20, 2007

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

## **Potential Effects During Project Construction**

|   | Alt          | erna | tives |   |
|---|--------------|------|-------|---|
|   | No<br>Action | A    | В     | 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).  |              | Х    | Х     | Х |
| 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.  |              | Χ    | Χ     | Χ |
| <b>Mitigation</b> : Provide Contaminated Material Contingency Plan for construction contractors.  |              |      |       |   |
| Potential for construction spills.  |              | Χ    | Χ     | Х |
| <b>Project elements that will prevent or avoid significant effect:</b> 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.   |              | Х    | Χ     | Х |
| 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.   |              | Χ    | Χ     | Х |
| 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.   |              |      |       | Х |
| <b>Mitigation:</b> If right-of-way is needed outside the boundaries defined, the City will take action to make the Project compliant with the Comprehensive Plan.   |              |      |       |   |

<sup>\*</sup>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.

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

## **Potential Effects During Project Construction**

|   | Alt          | erna | tives |   |
|---|--------------|------|-------|---|
|   | No<br>Action | A    | В     | C |
| Transportation  |              |      |       |   |
| Reduced traffic flow.   | '            | Χ    | Χ     | Х |
| <b>Mitigation:</b> 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.   |              | Χ    | Χ     | Х |
| <b>Mitigation:</b> 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.  |              | Χ    | Χ     | Х |
| <b>Mitigation:</b> 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.  |              | Χ    | Х     | Х |
| <b>Mitigation:</b> 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).   |              |      |       |   |

<sup>\*</sup>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.

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

## **Potential Effects During Project Construction**

|  | Alternatives |   |   |   |
|--|--------------|---|---|---|
|  | No<br>Action | A | В | C |
| Disruption of utility service during construction of the Project and utility relocation.   |              | Х | Х | Х |
| <b>Mitigation:</b> 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.   |              | Х | Х | Х |
| <b>Mitigation:</b> 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  |              | Х | Χ | Х |
| No mitigation recommended.   |              |   |   |   |
| Temporary lighting, detours, and construction-related clutter  |              | Χ | Χ | Х |
| <b>Mitigation:</b> 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.   |              | Χ | Χ | Х |
| <b>Mitigation:</b> 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.  |              | Х | Х | Х |
| <b>Mitigation:</b> Utilize temporary erosion and sediment control measures during construction.  |              |   |   |   |

<sup>\*</sup>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.

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

## **Potential Effects to Properties**

|  | Alternatives |   |   |          |
|--|--------------|---|---|----------|
|  | No<br>Action | A | В | <u> </u> |
| Full acquisition of 2 business properties (17750 and 17760 Aurora Avenue N)  | Action       | X | X | Х        |
| <b>Mitigation:</b> 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.)  |              | Х | Х | Х        |
| <b>Mitigation:</b> 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.   |              | Х | Χ | Х        |
| <b>Mitigation:</b> 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).   |              | Х | Х | Х        |
| <b>Mitigation:</b> 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.  |              |   |   |          |

<sup>\*</sup>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.

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

| Potential Effects After Project is Complete   |              |   |   |   |  |
|---|--------------|---|---|---|--|
|   | Alternatives |   |   |   |  |
|   | No<br>Action | Α | В | 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 | Х |

## 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.   | Χ | Χ |   |   |
| 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 | Χ | X | Χ |

## 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). | Х | Х | Х | Х |
| <b>No mitigation recommended:</b> No noise abatement measures satisfy the WSDOT feasibility and reasonableness criteria.   |   |   |   |   |

stResults 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.

7 June 20, 2007

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

## **Potential Effects After Project is Complete**

|  | Alternatives |   |   |   |
|--|--------------|---|---|---|
|  | No<br>Action | A | В | С |
| 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. | Х            |   |   |   |
| 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.   | Х            |   |   |   |
| No mitigation available.   |              |   |   |   |
| The widening of Aurora Avenue N would result in longer crossing distances and pedestrian crossing times at signalized intersections.   |              | Χ | Χ | Χ |
| <b>Mitigation:</b> Provide standard signal timing to allow pedestrians to cross the entire distance in one cycle length.   |              |   |   |   |
| 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.  |              | Χ | Х | Χ |
| <b>Project elements that addresses potential effect:</b> Plant vegetation within median. Plant vegetation within amenity zone (Alternatives B and C only).   |              |   |   |   |
| <b>Best management practices that addresses potential effect:</b> Shield/screen light fixtures to minimize glare. Use low-sheen and non-reflective materials.  |              |   |   |   |
| 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.   |              | Χ | Х | Χ |
| Mitigation: Construction of stormwater treatment facilities.   |              |   |   |   |

June 20, 2007

<sup>\*</sup>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 | В | C | Draft | Exteris is sat   |
| 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                |              |   |   |   |       | JACK ROBERTS APPLIANCE GE - FRIGIDAIRE MANAGEMENT AND ADMINISTRATION OF THE PROPERTY OF THE PR |
| 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 (145<sup>th</sup> to 165<sup>th</sup>) 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 <sup>th</sup> and 165 <sup>th</sup> .  |
| 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 <sup>th</sup> to 165th.  |
| 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 <sup>th</sup> and 185 <sup>th</sup> that create a safe, pedestrian oriented streetscape. Elements can include special treatments of crossings, linkages to the Interurban Trail, etc.  | between 175 <sup>th</sup> and 185 <sup>th</sup> 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 <sup>th</sup> to 185 <sup>th</sup> . |
|----|--|--|
| 13 | Develop signature gateway designs at 145 <sup>th</sup> and 205 <sup>th</sup> 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 <sup>th</sup> , 175 <sup>th</sup> , 185 <sup>th</sup> , and 205 <sup>th</sup> 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 <sup>th</sup> to 160 <sup>th</sup> 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 <sup>th</sup> and 155 <sup>th</sup> by developing a southbound right turn lane at 155th 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 Westminister 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 <sup>th</sup> , closing Firlands north of 195 <sup>th</sup> , and developing a new signal at 195 <sup>th</sup> .  | 17. Pursue modifying the access to Firlands at 185 <sup>th</sup> , closing Firlands at 195 <sup>th</sup> , and developing a new signal just north of 195 <sup>th</sup> .   |
| 19 | The preferred design shall include:  | 18. The preferred design shall include:  |
|    | Stormwater management improvements to accompany the project that follow the city's policies;   | Traffic signal control and coordination technology<br>(including coordination with Seattle and Edmonds SR<br>99 signal systems);   |
|    | <ul> <li>Traffic signal control and coordination technology<br/>(including coordination with Seattle and Edmonds<br/>SR 99 signal systems);</li> </ul>   | Traffic signal technology to enable transit priority operations;   |
|    | Traffic signal technology to enable transit priority operations;   | Continuous illumination for traffic safety and pedestrian scale lighting;  |
|    | Continuous illumination for traffic safety and pedestrian scale lighting;  | Undergrounding of overhead utility distribution lines<br>(including those on the west side of Midvale, between<br>175 <sup>th</sup> and 185 <sup>th</sup> ).   |
|    | Undergrounding of overhead utility distribution lines.   |  |
| 20 | Traffic signals will include audible elements for the sight-<br>impaired, and wheelchair detection loops for wheelchair<br>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 <sup>th</sup> to 165 <sup>th</sup> 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 cutthrough 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 <sup>th</sup> , preserve its heritage by relocating it elsewhere.  | 26. Strengthen and preserve the heritage of the red brick road north of 175 <sup>th</sup> by developing the Heritage park north of Walgreens and include red bricks in the Aurora design between 175 <sup>th</sup> and 185th.  |
| 28 | Consider new signalized intersections at 152 <sup>nd</sup> , 165 <sup>th</sup> , 182 <sup>nd</sup> , and 195 <sup>th</sup> .   | 27. Consider new signalized intersections at 149 <sup>th</sup> , 152 <sup>nd</sup> , 165 <sup>th</sup> , 182 <sup>nd</sup> , and just north of 195 <sup>th</sup> . Note that 152 <sup>nd</sup> and 165 <sup>th</sup> have already been constructed.  |
| 29 | Consider new pedestrian only signalized crossings in the vicinity of 149 <sup>th</sup> , 170 <sup>th</sup> , 180 <sup>th</sup> and 202 <sup>nd</sup> .   | 28. Maintain pedestrian signal at 170 <sup>th</sup> , and eliminate the 180 <sup>th</sup> pedestrian signal if the full signal at 182 <sup>nd</sup> is approved.   |
| 30 | Sign Ronald Place south of 175 <sup>th</sup> 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 <sup>th</sup> to 175 <sup>th</sup> , the east side between 192 <sup>nd</sup> and Echo cove Condos, the west side between 195 <sup>th</sup> and 198 <sup>th</sup> , and the east side between 198 <sup>th</sup> and 200 <sup>th</sup> .   |

| 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. |
|---|
| 33. Use the Economic Development program resources:     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<br>with loan programs  |
| 34. Minimize impacts to businesses during construction by:     creatively and clearly delineating driveways and access points   |
| improving nightime safety with lighting, visible lane<br>markings, and signage  |
| continuous pro-active communications with affected businesses   |
| moving non-safety construction materials and cones<br>out of roadway during non-work hours  |
| investigating opportunities for non-invasive night work<br>and shortening construction periods during the holidays  |
| providing adequate advance signing to direct traffic to<br>freeways when major delays or construction activities<br>are planned.  |
| park construction vehicles so as to not block access or<br>visibility of businesses, especially during non-<br>construction hours   |
| Require approval by City prior to allowing lane blockages during peak hours.  |
| 35. Manage and respond to increases on neighborhood streets during construction.  |