TUKWILA SOUTH PROJECT FINAL EIS

Final Environmental Impact Statement

City of Tukwila, Washington
July, 2005

City of Tukwila

Steven M. Mullet, Mayor

Department of Community Development

Steve Lancaster, Director

July 7, 2005

RE: Tukwila South Project Final Environmental Impact Statement

Dear Interested Reader:

Attached is a copy of the Final Environmental Impact Statement (FEIS) for La Pianta LLC's Tukwila South Project. This Final EIS incorporates and modifies the Draft EIS issued on April 5, 2005, based upon comments received from interested agencies and individuals.

La Pianta LLC is proposing long-term development of up to approximately 14 million square feet in a large-scale, campus setting on approximately 498 contiguous acres located in the City of Tukwila and portions of unincorporated King County and the City of Kent that lie due south of the City. Proposed uses are campus-style office and research environments with an array of commercial, retail, residential, hotel and recreational uses. The proposed development could bring between 22,000 and 29,000 new jobs and between 700 and 1900 new residences to the site over the next 25 years.

Chapter 1 of this Final EIS provides updated project information, including summaries of updated drafts of the proposed Sensitive Area Master Plan, Fisheries Mitigation Plan, Wetland Mitigation Plan and Wetland and Stream Buffer Plan (see also Appendices A and B). These updates reflect minor corrections to the sensitive areas functional assessment included in the Draft EIS. Also included are summaries of updated assumptions related to site access and an alternative proposal for stormwater quality treatment during project construction (see also Appendix C).

Chapter 2 presents comments received on the Draft EIS and responses to those comments.

Chapter 3 identifies corrections to the Draft EIS and Appendices, including minor language changes and clarifications, based on comments received on the Draft EIS.

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Together, the April 5, 2005 Draft EIS and this Final EIS comprise the environmental impact statement for the Tukwila South proposal, as required by the Washington State Environmental Policy Act (Chapter 43.21C, Revised Code of Washington). It has been prepared for use by the public, agencies, groups and decision-makers in reviewing the Proposed Actions and alternatives.

Additional copies of the Draft and Final EIS are available for review at the Foster and Tukwila libraries, and at the City of Tukwila Department of Community Development office during business hours of 8:30 AM to 5:00 PM. Alternatively, the DEIS and FEIS can be reviewed and downloaded at the City of Tukwila's web site at: www.ci.Tukwila.wa.us.

Sincerely,

Steve Lancaster
SEPA Responsible Official
City of Tukwila

FINAL
ENVIRONMENTAL IMPACT STATEMENT

TUKWILA SOUTH PROJECT FINAL EIS

CITY OF
TUKWILA, WASHINGTON

Prepared for the Review and Comments of Citizens,
Groups and Governmental Agencies

In Compliance With
The State Environmental Policy Act of 1971 (RCW 43.21C)
and City of Tukwila SEPA Policies and Procedures

FACT SHEET

PROJECT TITLE Tukwila South

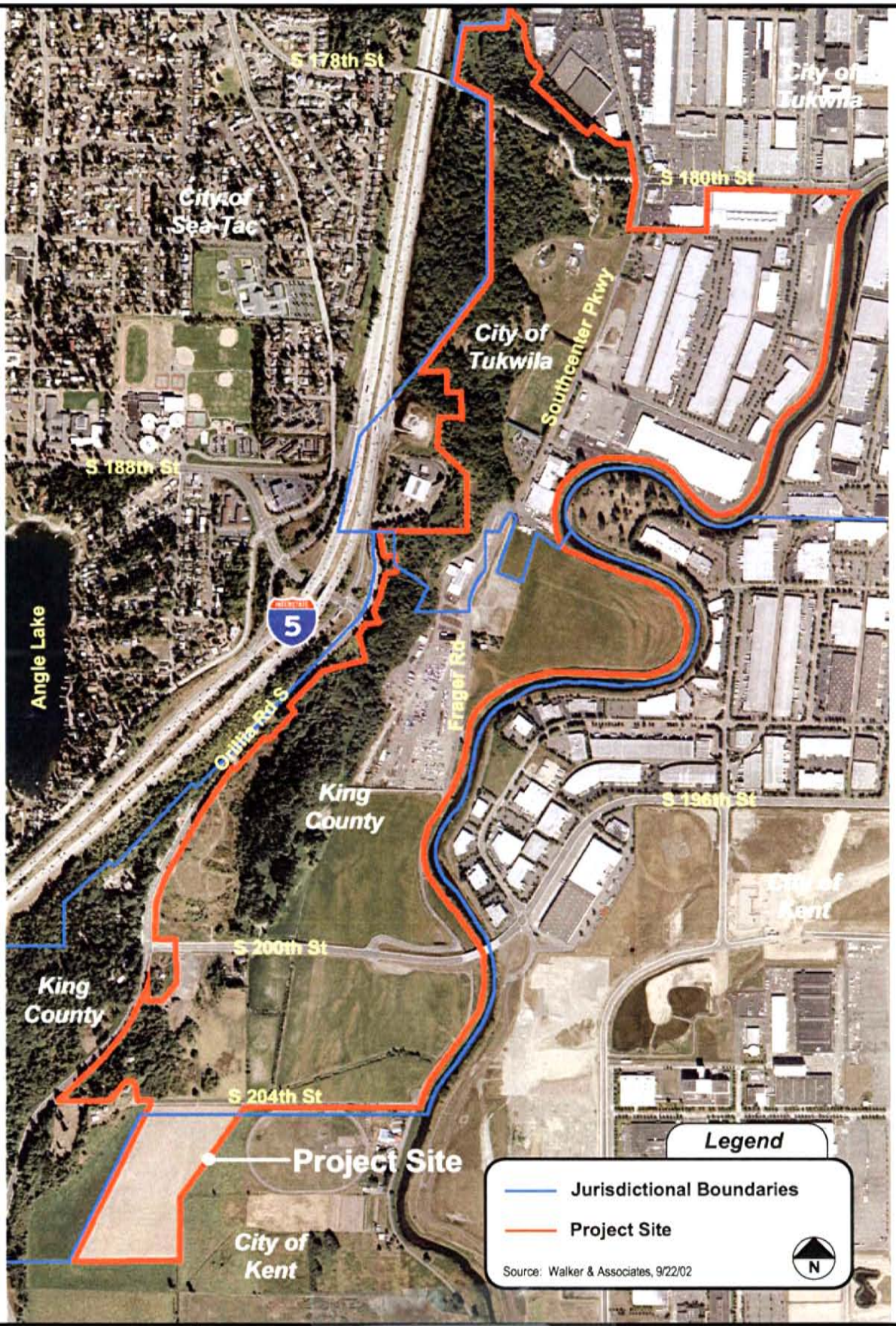
PROPOSED ACTION

La Pianta LLC is proposing long-term development of up to approximately 14 million square feet in a large-scale, campus setting on approximately 498 contiguous acres located in the City of Tukwila and portions of unincorporated King County and the City of Kent that lie due south of the City (see Figure 1). The majority of the site is under the control of the applicant. Proposed uses are campus-style office and research environments with an array of commercial, retail, residential, hotel and recreational uses. Overall, the project would be developed to accommodate the needs of national and international companies and institutions specializing in emerging technology industries that have need of an integrated campus setting with expansion opportunities, a range of uses, and adjacent amenities. The project is intended to create a major new employment hub and to implement the new vision and policies for the Tukwila South planning area outlined in the City of Tukwila's Comprehensive Plan (2004).

The Proposed Actions for the site include:

- City approval of a Master Plan for the site;
- Designation of the site as a Sensitive Area Master Plan Overlay district and approval of a Sensitive Area Master Plan for the site;
- Approval of other development-related code amendments relevant to site development (including modifications to the subdivision and zoning sections of the Municipal Code);
- A Development Agreement between the City of Tukwila and La Pianta LLC (under Chapter 36.70B RCW);
- Permitting and construction of infrastructure, buildings, roads and other improvements over the approximate 25-year buildout period (including grading, shoreline substantial development, site plan approvals, building permits); and,
- Extension of the City's Shoreline Master Program Urban shoreline to the annexed portion of the site within the shoreline management jurisdiction.

The City's Comprehensive Plan text and land use map amendments (2004) authorize expansion of the existing Master Plan Overlay boundaries to coincide with the



BLUMEN CONSULTING GROUP, INC	Figure 1 Site Map	Tukwila South Project EIS

boundary of the Tukwila South site. The proposed Tukwila South Project is intended to implement the relevant policies of the Comprehensive Plan. The proposed Tukwila South Master Plan, Sensitive Area Master Plan and long-term buildout of the site are analyzed in this Draft EIS. An updated Sensitive Area Master Plan, including the Wetland and Fisheries Mitigation Plans, are provided in this Final EIS. La Pianta LLC has proposed entering into a Development Agreement with the City of Tukwila in accordance with RCW 36.70B.170.

This EIS addresses the probable, significant environmental impacts that could occur as a result of the Proposed Actions and future development of the site. Implementation of the overall Tukwila South Project calls for construction of the major infrastructure elements in the initial phase. Installation of major infrastructure elements in the initial phase is intended to facilitate future development of the Tukwila South site in a more consistent and timely manner, and allow future development to efficiently respond to market conditions through buildout of the site. The initial infrastructure phase includes the extension and expansion of Southcenter Parkway to S 200th Street, and the alignment and reconstruction of S 178th Street west of Southcenter Parkway.

This EIS includes a sufficient level of analysis and detail to support federal, state, and local permit decisions related to both the initial site preparation and infrastructure development phase, as well as to support permit decisions for long-term development of the site.

The probable, significant impacts of the Tukwila South Project are evaluated for two primary time periods:

- Infrastructure Development Phase (2006 – 2008)
- Full Buildout (assumed by year 2030).

ALTERNATIVES

For purposes of environmental review, three development scenarios were developed (Alternatives 1 through 3) that encompass a broad range of land uses that the site could potentially accommodate in the future. The alternatives are intended to represent an overall envelope of potential development for analysis in the EIS. They function to provide representative levels and types of development that could be achieved incrementally over time, based on the Proponent's Objectives, the City's Comprehensive Plan policies for the Tukwila South area, the proposed elements of the Master Plan and market conditions.

Alternatives analyzed in the EIS include, in summary:

Alternative 1: High Intensity Campus Development
Alternative 1 would reflect a potential maximum end of the development envelope (approximately 14 million square feet of new development) that could potentially be developed by 2030. The mix of uses and densities under this alternative would be consistent with a dense campus environment, and would result in a higher intensity, denser, urban character of development. Assumed uses would include emerging technology (research and development and office campus), retail, residential, restaurant and hotel uses. Redevelopment of the existing Segale Business Park is assumed during the latter stages of the buildout period (see Figure 2-10 of the Draft EIS for a depiction of this Alternative).

Under Alternative 1, Southcenter Parkway would be expanded in a new alignment along the base of the western hillside to S 200th Street. S 178th Street would be realigned to intersect with Southcenter Parkway at Segale Park Drive C. The existing flood protection barrier dike would be relocated to the southern boundary of the site (north of S 204th Street). Alternative 1 includes implementation of a Sensitive Area Master Plan. Portions of the site would be preserved from development, including the seep/spring wetlands, and natural streams within the western steep slopes.

Alternative 2: Moderate Intensity Campus Development
Alternative 2 would reflect a level of development (approximately 10.3 million square feet of new development) that represents a "lower" end of what could potentially be developed by 2030. The mix of uses and densities under this alternative would also be consistent with a campus environment, and would result in a moderate intensity, less dense character of development than is represented by Alternative 1. Assumed uses would be the same as in Alternative 1, with the addition of flex-tech use (flex-tech includes business and professional offices, but may also include limited product production and distribution uses that are accessory to the office use). As for Alternative 1, redevelopment of the existing Segale Business Park is assumed during the latter stages of the buildout period (see Figure 2-11 of the Draft EIS for a depiction of this Alternative).

Southcenter Parkway and S 178th Street would be realigned in the same configuration as under Alternative 1. Relocation of the existing flood protection barrier dike to the southern

boundary of the site (north of S 204th Street) would also occur. Alternative 2 also includes implementation of the Sensitive Area Master Plan. The same portions of the site would be preserved from development as described under Alternative 1.

Alternative 3: No Action

The No Action Alternative is defined by what would be most likely to happen if the proposal did not occur, given existing zoning and site characteristics. This alternative would reflect a scenario that is consistent with the 25-year development potential of the site (approximately 2 million square feet of new development), assuming no approval of the Proposed Actions, no relocation of the existing protection barrier dike, and limited changes to existing wetland and ditch/stream conditions. It is assumed that the existing Segale Business Park and certain other existing uses would remain. This alternative assumes that annexation of the portion of the site within the City's Potential Annexation Area occurs at some point in the future; therefore, it assumes that development would occur consistent with existing City of Tukwila regulations. Under the No Action Alternative, improvements to S 178th Street are not assumed; however, the extension of Southcenter Parkway to support a lower-density, more industrial character of development is assumed, in an alignment that would bisect the site (different than under Alternatives 1 and 2). It is assumed that the site would develop consistent with the more traditional pattern of light industrial and warehouse land uses that exist in the area (see Figure 2-12 of the Draft EIS for depiction of this Alternative).

LOCATION

The site of the Tukwila South Project lies within the City of Tukwila's Tukwila South planning area, which extends from S 180th Street in the City of Tukwila to S 204th Street in King County. The site is proximate to SeaTac International airport and the regional transportation infrastructure network (I-5, I-405, and SR 167). General site boundaries are S 178th/S 180th Street on the north; S 204th Street on the south; Orillia Road and Interstate-5 on the west; and the Green River on the east. Approximately 217 acres are located within the City of Tukwila city limits; the remaining 281 acres are located in unincorporated King County and the City of Kent (an approximate 22-acre portion of the site in the southwest corner is located in the City of Kent). It is intended that the portion of the site in unincorporated King County will be annexed to the City in 2005, subsequent to issuance of this Final EIS and City decisions on the Master Plans and a Development Agreement between La Pianta and the City.

PROPONENT/APPLICANT La Pianta LLC

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PERMITS AND APPROVALS

City of Tukwila

- Master Plan approval
- Designation of the site as a Sensitive Area Master Plan Overlay district and approval of a Sensitive Area Master Plan
- Amendments to the Tukwila Zoning Map, including application of appropriate use designations to any newly annexed property. The Tukwila Shoreline Master Program applying appropriate shoreline use designations to any newly annexed property.
- Grading Permit
- Substantial Development permit
- Development Agreement between La Pianta LLC and the City of Tukwila

Other modifications to applicable code provisions, including:

- Modifications to zoning and subdivision sections of the Tukwila Municipal Code (including binding site plan provisions) and
- All other land-altering, building and construction permits for future development

Federal Government

US Army Corps of Engineers

- Section 404 Permit and possible other approvals

NOAA and US Fish and Wildlife Service

- ESA Compliance and Magnuson-Stevens essential fish habitat Consultation

- Consultation pursuant to Section 106 of the National Historic Preservation Act

Federal Emergency Management Administration

- Approval of change in floodplain

Federal Highway Administration

- Possible approvals for federal funding of Southcenter Parkway improvement

State of Washington

Department of Ecology

- Shoreline Master Program Amendment
- Section 401 Certification; Coastal Zone Management Act Consistency Determination
- Section 402 NPDES permit, including the Stormwater Pollution Prevention Plan
- Dam Safety approval
- Possible Model Toxics Control Act compliance

Department of Fish and Wildlife

- Hydraulic Project Approval

Department of Transportation

- Possible approvals for any changes to state facilities and funding

Department of Natural Resources

- Possible aquatic resources use authorization

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LOCATION OF BACK-GROUND INFORMATION

Background material and supporting documents may be obtained from:

City of Tukwila
Department of Community Development
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

DATE OF ISSUANCE

July 7, 2005

AVAILABILITY OF DRAFT AND FINAL EIS

The Draft EIS and this Final EIS have been distributed to agencies, organizations and individuals noted on the Distribution List following Chapter 3. Additional copies of this Final EIS are available for purchase at Tukwila City Hall at a reproduction cost of $20 per volume, plus tax. The mailing cost is $6.

Copies of the Draft and Final EIS are also available for review at:

Tukwila Library
14475 59th Avenue South
Tukwila, WA 98168

Foster Library
4060 S 144th Street
Tukwila, WA 98168

Tukwila Department of Community Development
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

Alternatively, the Draft and Final EIS can be reviewed and downloaded at the City of Tukwila web site at: www.ci.Tukwila.wa.us

Links are shown in RED below

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Chapter 1

Updated Project Information

CHAPTER 1
UPDATED PROJECT INFORMATION

1.1 INTRODUCTION

This chapter presents summaries of updated information prepared since publication of the Draft EIS. Summaries of the following are provided: updates to the draft Sensitive Area Master Plan (including updates to the Fisheries and Wetland Mitigation Plans); updates to the wetland functional assessment; the draft Wetland and Stream Buffer Plan; and, minor updates to the water quality treatment facilities proposed during construction and to site access assumptions in the northern portion of the site.

1.2 SENSITIVE AREA MASTER PLAN

The Sensitive Area Master Plan (SAMP) included as Appendix L to the Draft EIS has been updated since issuance of the Draft EIS. The updated SAMP (May 2, 2005) is included in this Final EIS as **Appendix A**. The SAMP is still considered a draft document, since it has not been approved by City of Tukwila. The updates to the SAMP were made to clarify and build upon the SAMP submitted to the City in March 2005, and included in the Draft EIS, and to respond to comments from the City of Tukwila on the initial SAMP. The updates were also made to provide more detail on proposed fisheries and wetland mitigation plans included in the Draft EIS, as requested by the Washington State Department of Ecology (Ecology). The updated SAMP does not result in changes to any conclusions regarding significant impacts from development under Alternatives 1 and 2 as reported in the Draft EIS; instead it provides added specificity in certain areas primarily based on further refinement of mitigation plans since issuance of the Draft EIS. Key updates to the SAMP are summarized below.

- A brief description of the EIS alternatives is added in order to help the reader understand the context of the SAMP.

- Incorrect references to the term wetland "class" under the City of Tukwila Sensitive Areas Ordinance are corrected to wetland "type."

- Clarification is added that the total 0.26 acre of proposed impact to Wetland 1 would occur from approximately 0.18 acre of fill for the Southcenter Parkway improvement and approximately 0.08 acre of other impacts from construction of the Parkway (i.e., impacts from construction machinery/vehicles).

- More detail is added on the specific stream and wetland functions (including wildlife habitat) that would be lost by proposed fill or buffer impacts, and the specific stream or wetland functions that would be gained as a result of proposed mitigation plans. Comparisons of existing and proposed conditions for fish and wetland habitat functions and values are summarized in Tables 2 and 3 of the updated SAMP (see **Appendix A**), which specify the net gains in functions and values that would be expected to occur from the proposed project. For wetlands, Table 3 summarizes details on the existing and future wetland ratings, hydrology, grading, soils, plantings, and habitat elements.

- The City of Tukwila Sensitive Areas Ordinance prioritizes avoidance of impacts. Clarification is added to the updated SAMP to explain that approximately 80 percent of the existing wetlands onsite and all of the natural (non-ditched) streams would be avoided and would be preserved without impact, as a result of the project. The updated SAMP further explains the efforts made to avoid and minimize impacts to streams and wetlands and their buffers. A new Section V.A, *Explanation of Unavoidable Wetland and Stream Impacts,* is added to the updated SAMP to explain why proposed impacts under Alternatives 1 and 2 are necessary in order to meet the project's purpose and need. Specific stream and wetland unavoidable impacts are summarized in Table 1 of the updated SAMP.

- Detail is added to explain the proposed timing of mitigation construction relative to large scale grading, temporary dewatering, stormwater pond construction and drainage management; and detail is added to clarify proposed construction sequencing of the Johnson Creek and Green River Off-Channel Habitat restoration areas, and Wetland 10 and 11 rehabilitation, creation, and restoration mitigation projects during the first three years of construction (see Section VII *Mitigation Construction and Monitoring* of the updated SAMP).

Fisheries Mitigation Plan

An updated Fisheries Mitigation Plan (Cedarock Consultants, Inc., April 13, 2005) is included as Exhibit 2 to the updated SAMP. Summaries of some sections of this plan are incorporated into the main body of the updated SAMP. Highlights of the updates to this plan are provided below.

The Fisheries Mitigation Plan includes the Green River Off-Channel Habitat Restoration Plan, as well as the Johnson Creek Restoration Plan, which together comprise the compensatory mitigation for fisheries impacts that would result from the proposed project. The Fisheries Mitigation Plan (Exhibit 2 to **Appendix A**) is updated to add detail on the proposed design and construction of the Green River Off-Channel Habitat Restoration Area and the Johnson Creek Restoration Area. A summary of functions and values that would be lost through proposed stream alterations and gained through the proposed compensatory mitigation is added to further explain the net increase in functions and values that would occur. A more specific discussion of fluvial geomorphological processes in the Green River (how the natural setting and human land uses in the watershed determine the shape of the river channel) is included, both in terms of existing conditions and how they will influence the proposed habitat creation. Habitat restoration features specifically targeted to geomorphological processes are identified, which would control or prevent erosion, deposition, and provide for bank stabilization. For the Johnson Creek restoration, sediment and deposition are assessed and explained, both in terms of existing conditions and how they will influence the proposed stream restoration. Success standards, monitoring and maintenance, and contingency plans are included for both the Green River and Johnson Creek fisheries mitigation elements.

Wetland Mitigation Plan

An updated Wetland Mitigation Plan (Raedeke Associates, Inc., April 20, 2005) is included as Exhibit 3 to the updated SAMP. Summaries of some sections of this plan are incorporated into the main body of the updated SAMP (see the *Wetland Mitigation Overview* on page 31 of **Appendix A** to the FEIS). Highlights of the updates to this plan are provided below.

The Wetland Mitigation Plan (Exhibit 3 to **Appendix A**) is updated to include and cite Washington Department of Ecology (Ecology) guidance contained in the Ecology, US Army Corps of Engineers, and US Environmental Protection Agency April 2004 *Guidance on Wetland Mitigation in Washington State*, particularly *Part 1 – Laws, Rules, Policies and Guidance for Wetland Mitigation*. The wetland mitigation proposal is explained using: the guidance definitions of rehabilitation, enhancement, and creation; distinctions between rehabilitation and enhancement; and specific actions most effective in compensating for prior site alterations in wetlands that are explained in this guidance. The SAMP and Wetland Mitigation Plan are also updated to include guidance contained in the Ecology draft August 2004 *Wetlands in Washington State*, particularly *Volume 2: Guidance for Protecting and Managing Wetlands*. Within this document, *Appendix 8-C Guidance on Widths of Buffers and Ratios for Compensatory Mitigation to be used with the Western Washington Rating System* is followed for its "basic assumptions on using the guidance on wetland mitigation ratios," including Table 9 in the guidance, and for the conditions for "increasing or reducing replacement ratios," as explained in the Wetland Mitigation Plan and the updated SAMP. The use of *Appendix 8-F Rationale for the Draft Guidance on Ratios for Compensatory Mitigation to be Used with the Wetland Rating System* as guidance in establishing the proposed mitigation ratios for the project is included.

The Wetland Mitigation Plan is updated to: (a) provide more details on the conceptual mitigation plan, including added wetland creation areas, planting plans, ditch breaching or interception for greater hydrologic improvement, site preparation and earthwork details, wetland plant community establishment, construction monitoring, compliance monitoring, long-term monitoring, performance standards, and a contingency plan; (b) describe additional shallow groundwater monitoring underway in the mitigation areas; (c) explain the relationship of hydrologic data contained in the Draft EIS (for the shallow and underlying aquifer) to wetland hydrology, providing assurance that wetland hydrology would be maintained in the mitigation areas; (d) further demonstrate why the proposed wetland mitigation would result in no net loss of functions and values, (e) define which aspects of the plan are defined as rehabilitation and which are enhancement; (f) identify buffers and mitigation site protection; (g) explain mitigation sequencing; and, (h) further explain impact avoidance.

The conclusions reached in the updated SAMP are consistent with those from the original SAMP contained in Appendix L to the Draft EIS. These conclusions support the proposal that the Tukwila South project be designated a Sensitive Area Master Plan Overlay District by the City of Tukwila, as provided by TMC 18.45.160. In part, the project is proposed for this designation because analyses in the SAMP, Draft and Final EISs, and associated appendices, demonstrate that a net increase in aquatic functions and values would result from implementation of the proposed SAMP, as compared to adherence to Tukwila's standard Sensitive Area Ordinance provisions. The net gain in environmental benefits would include both onsite and regional habitat benefits. New habitat created under the SAMP would include out-migration holding, summer rearing, winter refuge and upstream migration holding areas for fisheries resources. The new Johnson Creek would improve fish passage to the Green River. Over 32 acres of degraded wetland would be rehabilitated and connected to a habitat corridor through the new Johnson Creek channel to the Green River. This rehabilitation would provide greater enhancement of hydrology, biological, and water quality functions than could be achieved by in-kind mitigation (see page 3.7-21 and Section 3.4, Wetlands of the Draft EIS for details).

1.3 CHANGES TO THE WETLAND FUNCTIONAL ASSESSMENT

Updates to the Wetland Mitigation Plan since the Draft EIS was issued are described in Section 1.2 of the Final EIS. The overall concept of the Wetland Mitigation Plan is unchanged from the Draft EIS. The updated mitigation plan (see Exhibit 3 in **Appendix A** to the Final EIS) includes more refined topographic information and revised grading and planting plans. The revised grading plans show breaching ditch banks to intercept and route water flow into the Wetland 10 and 11 mitigation areas. The plans also show new wetland creation along Johnson Creek and the Green River. The refinements and additions to the Wetland Mitigation plan made since issuance of the Draft EIS altered the proportions of the proposed hydrologic zones and wetland vegetation types in enhanced and rehabilitated Wetlands 10 and 11 from those evaluated in the Draft EIS; this required recalculation of the wetland functional analysis contained in Appendix F to the Draft EIS. The newly added wetland creation areas also required recalculation of the wetland functional analysis. The Wetland Mitigation Plan in **Appendix A** to the Final EIS includes the revisions to those functional assessments made since issuance of the Draft EIS. The revised functional assessment is summarized in this section.

The updated functional assessment includes minor changes to the evaluation of Wetland 10 in response to comments from the Department of Ecology (see Letter 1, Comments 15 and 61). Wetland 10 contains two hydrogeomorphic classes consisting of approximately 15.5 acres of depressional outflow and 0.9 acres of slope wetland. In the Draft EIS, the entire acreage of Wetland 10 was evaluated as a single unit to determine quantitative functional scores. The Department of Ecology requested those two classes be separately assessed. Since the Washington State Wetland Functional Assessment Method (WAFAM) does not evaluate functions for slope class wetlands (as described in Attachment A to Appendix C of the Draft EIS), the Wetland 10 functional analysis for the existing and future (mitigated) conditions has been revised to exclude the slope portion of the wetland. As part of the proposed project, the slope portion of Wetland 10 would be retained and no impacts would result to this portion of the wetland within a Native Growth Protection Area under Alternatives 1 and 2. Other minor changes were included in the updated functional assessment calculations, as described in the response to Comment 61 in Letter 1.

The updated functional assessment analysis for the existing wetland conditions shows minor differences in function scores for some wetlands contained in Chapter 3, Errata, of this Final EIS. The updated function scores for all wetlands, including those affected by the functional scoring changes, are shown in revised Table 6 to Appendix F to the Draft EIS, (see Chapter 3, Errata). The tables in the Errata supersede those contained in the Draft EIS. Changes to these scores do not alter the assessment of existing conditions or any of the conclusions regarding significant impacts contained in the Draft EIS.

The updated functional assessment analysis for the future mitigated wetland conditions (with implementation of the Tukwila South project), and the net change from existing to future conditions, is provided in the Wetland Mitigation Plan (Exhibit 3 to **Appendix A** to the Final EIS). The refinements to the calculations described above resulted in minor changes to functional assessment scores, but did not change the conclusions regarding significant impacts and mitigation in the Draft EIS. As described in the Draft EIS, the functional assessment shows a net improvement in wetland functions from the project's wetland rehabilitation, enhancement, and creation proposal described in the Wetland Mitigation Plan. Under Alternatives 1 and 2, there would be a net gain in wetland functions, because the proposed mitigation plan would more than compensate for wetland function impacts under Alternatives 1 and 2.

The WAFAM functional assessment scores were also used to evaluate water quality functions in Attachment A to Appendix C of the Draft EIS (Wetland Water Quality and Impact Assessment). Changes to the Draft EIS functional assessment described above also altered the calculations in the water quality assessment. The addition of riverine class wetland creation along Johnson Creek and the Green River to the mitigation plan added a third hydrogeomorphic (HGM) class of wetland to the WAFAM-based assessment, which along with changes to the functional scores, required revision of Tables A-1 through A-4 (see Chapter 3, Errata). The overall conclusion of the wetland water quality function assessment is unchanged from that described in the Draft EIS. The assessment continues to show that water quality function, as measured by WAFAM, would be enhanced under Alternatives 1 and 2 as compared to existing conditions. The updated Wetland Mitigation Plan would offset the loss of water quality function from wetland fill for all three water quality functions: sediment removal, nutrient removal, and heavy metals and toxic organics removal. While the scores vary by HGM class and some scores are negative, the net conclusion that water quality would be increased under Alternatives 1 and 2 remains unchanged for the reasons discussed in Attachment A to Appendix C of the Draft EIS.

1.4 WETLAND AND STREAM BUFFER PLAN

The Wetland and Stream Buffer Plan (Buffer Plan) is provided in this Final EIS and is intended to accompany the updated SAMP (see **Appendix B** to the Final EIS). The purpose of the Buffer Plan is to provide added detail regarding protective buffers proposed for both retained and mitigation wetlands and streams on the Tukwila South site. The Buffer Plan outlines the characteristics of each buffer and, where warranted, explains how existing or proposed landscape features relate to the buffers. The Buffer Plan also describes offsite characteristics and code requirements for protection of wetland and stream functions and values where buffers (or wetlands) would extend beyond the site boundaries into properties in unincorporated King County or the City of Kent.

Wetlands, streams, and their buffers are proposed to be placed within designated Native Growth Protection Areas (NGPAs). These NGPAs are shown for the entire site in Exhibit 1 of **Appendix B** to the Final EIS, and individually in subsequent exhibits. The NGPAs are tracts that would be preserved from future development, except for certain infrastructure elements, such as trails, extensions of utility lines and other connecting elements that would be specifically defined in the Development Agreement between the City of Tukwila and the applicant. The NGPAs were not specifically defined in the Draft EIS. The designation of NGPA areas does not change the areas proposed to be preserved on the site, nor the conclusions regarding significant impacts and mitigation in the Draft EIS; these areas are formally defined as specific protective tracts with development restrictions in this Final EIS.

The proposed wetland buffers are analyzed in the Buffer Plan in comparison to standard buffer requirements under the City of Tukwila's Sensitive Areas Ordinance, based on wetland type, and Department of Ecology guidance for buffers, based on Ecology wetland classifications and functional scores for habitat, water quality, and hydrology. Where appropriate, wetland buffers are also analyzed in comparison to City of Kent and King County wetland classifications and buffer requirements. An example is the onsite Wetland 11 mitigation area, since Wetland 11 extends beyond the onsite mitigation area boundary into properties in unincorporated King County and the City of Kent. Stream buffers are analyzed in comparison to standard buffer requirements under the City of Tukwila's Sensitive Areas Ordinance, based on stream type. Green River buffers are analyzed in comparison to requirements of the "Urban Environment" designation in the City of Tukwila's Shoreline Master Program.

1.5 CONSTRUCTION STORMWATER QUALITY TREATMENT OPTIONS

The Draft EIS described a Cat-Floc 2953 polymer treatment system proposed for construction stormwater treatment (see page 3.2-19 of the Draft EIS text and pages 3-6 through 3-14 of the Water Quality Technical Report, Appendix B to the Draft EIS). The proposed construction stormwater quality treatment facilities included monitoring and compliance measures anticipated to be necessary by an Individual NPDES permit for construction discharge for this chemical treatment system. The stormwater treatment objective of Cat-Floc 2953 polymer use is sediment removal to comply with state water quality standards and Individual NPDES permit requirements, prior to discharge to the Green River.

Since preparation of the Draft EIS, a second option for stormwater treatment during construction has been added to the proposal, based on ongoing refinement of the stormwater treatment system. This second option, Chitosan enhanced sand filtration (CESF), would be equally feasible and effective as the Cat-Floc polymer option. CESF is a polymer treatment system followed by sand filtration. CESF is a method of continuously testing and adjusting inflow stormwater to neutral pH, treating with controlled dosages of a natural polymer (chitosan, derived from crab shells), and pressurized sand filtration to remove suspended sediments and lower turbidity to required discharge levels. Like Cat-Floc 2953, chitosan polymer is a coagulant that disrupts the negative electrical charge keeping fine sediments apart and in water suspension. That disruption allows fines to combine into particles removed by sand filtration. If the CESF method is selected for use instead of Cat-Floc polymer 2953, or in combination with Cat-Floc 2953 for pre-treatment, a CESF treatment plan for the Tukwila South project would be included in the Stormwater Pollution Prevention Plan (SWPPP) required by Ecology as part of the Individual NPDES permit for construction discharge.

The CESF process differs from the Cat-Floc 2953 polymer treatment system by being a flow through continuous process that could discharge directly to the Green River, rather than to surface ponds for testing and batch release control to the Green River. A provision for water storage is required as a contingency when continuous test results or maintenance do not allow release. The CESF system for construction stormwater treatment, along with proposed monitoring and compliance measures anticipated necessary by an Individual NPDES permit for such use, are described in detail in **Appendix C** to the Final EIS.

Under Alternatives 1 and 2, use of either the Cat-Floc 2953 polymer system or the CESF would be equally effective in removing sediment from construction-phase stormwater runoff before discharge to the Green River. The turbidity in discharge from either system would be within the background water quality levels in the Green River, and well within turbidity discharge limits defined by state water quality standards (WAC 173-201A). There is no toxicity risk from either chemical treatment system, when used under the restrictions required by Ecology for issuance of the Individual NPDES permit for construction discharge. The CESF system would require less land area for treatment than the Cat-Floc 2953 system, because it is a continuous flow contained treatment process, rather than a pond-based treatment system. Both systems would have the same minimum stormwater storage requirement by Ecology, which would be exceeded by the proposed Tukwila South system capacity under Alternatives 1 and 2.

If CESF is selected as the treatment option for construction stormwater, mitigation to avoid construction impacts would be the same as described in the Draft EIS for the Cat-Floc 2953

polymer system, except that system and monitoring requirements for CESF would be substituted in the Individual NPDES permit for construction discharge.

Under the No Action Alternative, CESF would not be used for construction stormwater treatment. The conclusions in the Draft EIS related to construction impacts on water quality would be unchanged.

1.6 SITE ACCESS FOR AREA B

Subsequent to issuance of the Draft EIS, the access assumptions relative to Area B of the Tukwila South site were refined by the applicant. For purposes of the Draft EIS, it was assumed that the eastern developable portion of Area B (east of the north stormwater pond) would be served via access to the Southcenter Parkway/Segale Park Drive C intersection, or directly onto Southcenter Parkway, and that the west leg of the Southcenter Parkway/S 180th Street intersection would be removed in conjunction with the proposed S 178th Street realignment (see page 3.12-35 of the Draft EIS). It is now proposed that the west leg would remain along a portion of the former alignment of S 178th Street, at a significantly reduced grade; this west leg would serve as an access driveway into Area B. The following assesses the impacts of this refinement, including level of service forecasts and potential improvements.

Based on this refinement in access and the provision of an access driveway from Area B to the Southcenter Parkway/S 180th Street intersection, it is estimated that approximately 40 percent of the trips anticipated in Area B at buildout would likely use the west leg of the Southcenter Parkway/S 180th Street intersection, resulting in a shift of between 250 and 300 PM peak hour trips from Intersection #33 (Southcenter Parkway/Segale Drive C) to Intersection #19 (Southcenter Parkway/S 180th Street), as compared to the estimated volumes in the Draft EIS analysis.

Revised level of service analysis was conducted at Intersections #19 (Southcenter Parkway/S 180th Street) and #33 (Southcenter Parkway/Segale Drive C) at 2015 and 2030. The following summarizes the results of the analysis.

Impacts under 2015 Baseline Network

For purposes of this analysis, geometric assumptions at Intersection #19 (Southcenter Parkway/S 180th Street) are the same under both Alternatives 1 and 2. Improvements to the intersection to accommodate this site access, would include reconstruction of the west intersection leg to allow for one entering lane into the site and two exiting lanes to provide separation of eastbound left turns from thrus and right turns leaving the site.

The phasing and geometry at Intersection #33 (Southcenter Parkway/Segale Drive C) is assumed to be the same as that identified in the Draft EIS analysis under both Alternatives 1 and 2.

Table 1-1 summarizes the LOS analysis under 2015 conditions. For comparison purposes, LOS analyses documented in the Draft EIS, using the original site access assumptions, are also provided in the table. As shown, Intersection #19 (Southcenter Parkway / S 180th Street) would operate at LOS D under both Alternatives 1 and 2 in 2015, assuming site access (the west leg) is provided at the intersection, as compared with LOS B/C, without site access (intersection as a

Table 1-1
2015 PM PEAK HOUR INTERSECTION LEVEL OF SERVICE IMPACTS
FOR INTERSECTIONS #19 AND #33

Int #	Intersection	Control	2015 Alternative 1			2015 Alternative 1 with Potential Improvements[1]			2015 Alternative 2			2015 Alternative 2 with Potential Improvements[1]		
			LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C
Selected Results from Table 3.12-5 of the Tukwila South Draft EIS Volume I – Assumes Southcenter Parkway/S 180th Street as a T-Intersection														
19	Southcenter Pkwy / S 180th St	Signalized	B	19	0.78	C	20	0.78	B	18	0.74	B	19	0.74
33	Southcenter Pkwy / Segale Park Drive C	Unsignalized	F	> 100	>1.25	--	--	--	F	> 100	>1.17	--	--	--
33	Southcenter Pkwy / Segale Park Drive C[1]	Signalized	--	--	--	E	78	1.07	--	--	--	E	67	1.00
Assumes Site Access is Provided at the West Leg of the Southcenter Parkway/S 180th Intersection														
19	Southcenter Pkwy / S 180th St	Signalized	D	38	0.81	D	37	0.81	D	36	0.76	D	39	0.76
33	Southcenter Pkwy / Segale Park Drive C	Unsignalized	F	> 100	>1.50	--	--	--	F	> 100	>1.50	--	--	--
33	Southcenter Pkwy / Segale Park Drive C[1]	Signalized	--	--	--	E	65	1.05	--	--	--	D	54	0.92

Source: Transportation Engineering Northwest, LLC, 2005
LOS at unsignalized intersections shown for all stop-controlled and yield movements.
All signalized intersections under future conditions were optimized for coordinated and uncoordinated cycle lengths, splits, and offsets.
For unsignalized intersections, Delay shown for F > 100 and V/C > 1.50 and for signalized intersections, Delay shown for F > 120 and V/C > 1.50 (Delay and V/C 50 percent greater than maximum LOS F threshold).
[1] Potential improvements were assumed to include installation of a traffic signal at the Southcenter Parkway/Segale Park Drive C intersection. Improvements at the Southcenter Parkway/S 180th Street intersection were assumed to include channelization improvements.

T-intersection) as assumed in the Draft EIS. With the refined site access, Intersection #33 (Southcenter Parkway/Segale Drive C) would operate at LOS F under either Alternative 1 or 2, and would experience a decrease in delay over the conclusions presented in the Draft EIS. With additional improvements in 2015 (signal control), the intersection of Southcenter Parkway/Segale Drive C would operate at LOS E under Alternative 1 and LOS D under Alternative 2.

Impacts under 2030 Baseline Network

With assumed buildout of the site in 2030 and the refined site access, Intersection #19 (Southcenter Parkway / S 180th Street) would operate at LOS F under Alternatives 1 and 2, without additional improvements, as compared to LOS F and E under Alternatives 1 and 2, respectively, based on the site access assumptions used in the Draft EIS (see **Table 1-2**). To maintain LOS E conditions in 2030 for Alternative 1 buildout; potential improvements would include reconstruction of the west leg and grade to allow for a minimum 4-lane cross-section (1 ingress and 3 egress lanes) for the site access driveway, an additional westbound left-turn only lane, and a 4-lane southbound approach that would allow for double left turning lanes, a single thru lane and a shared thru-right lane.

With Alternative 2 buildout in 2030, potential improvements would include reconstruction of the west intersection leg and grade to allow for a minimum 4 lane cross-section (1 ingress and 3 egress lanes) for the site access driveway, and an additional westbound left-turn only lane.

The improvements noted above for Alternatives 1 and 2 can be compared to those identified for the original access assumption in Table 3.12-13 of the Draft EIS. The geometry at Intersection #33 (Southcenter Parkway/Segale Drive C) was assumed to be the same as that identified in the Draft EIS analysis under Alternatives 1 and 2 at 2030.

Table 1-2
2030 PM PEAK HOUR INTERSECTION LEVEL OF SERVICE IMPACTS
FOR INTERSECTIONS # 19 AND #33

Int #	Intersection	2030 Alternative 1			2030 Alternative 1 with Additional Improvements[1]			2030 Alternative 2			2030 Alternative 2 with Additional Improvements[1]		
		LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C
Selected Results from Table 3.12-6 of the Tukwila South Draft EIS Volume I Assumes Southcenter Parkway/S 180th Street as a T-Intersection													
19	Southcenter Pkwy / S 180th St	F	119	1.35	D	41	1.03	E	75	1.17	E	71	1.17
33	Southcenter Pkwy / Segale Park Drive C	F	> 120	> 1.50	E	68	0.99	F	> 120	> 1.50	E	65	0.98
Assumes Site Access is Provided at the West Leg of the Southcenter Parkway/S 180th Intersection													
19	Southcenter Pkwy / S 180th St	F	> 120	1.44	E	70	1.11	F	115	1.24	E	69	1.08
33	Southcenter Pkwy / Segale Park Drive C	F	> 120	> 1.50	E	70	1.03	F	> 120	> 1.50	E	68	0.99

Source: Transportation Engineering Northwest, LLC, 2005
Intersections #19 and #33 are assumed to be signalized intersections.
All signalized intersections under future conditions were optimized for coordinated and uncoordinated cycle lengths, splits, and offsets.
For unsignalized intersections, Delay shown for F > 100 and V/C > 1.50 and for signalized intersections, Delay shown for F > 120 and V/C > 1.50 (Delay and V/C 50 percent greater than maximum LOS F threshold).
[1] Additional improvements include channelization improvements at both intersections.

This proposed minor change in site access would not have any significant impacts at other adjacent intersections or streets, nor would it adversely affect traffic congestion, levels of service, or safety.

Chapter 2

Comment Letters and Responses

CHAPTER 2
COMMENT LETTERS AND RESPONSES

This chapter of the Final EIS contains comments received on the Draft EIS and responses to the comments. A total of 17 letters were received during the comment period and 8 persons commented at the Draft EIS public meeting held on April 27, 2005 (see below for a list of the comment letters and public meeting commentors). Each letter and the transcript of the public meeting are included in this section of the Final EIS. Comment letters/numbers appear in the margins of the letters/transcript commentary and are cross-referenced to the corresponding responses. Responses are provided directly after each letter/transcript commentary. Expressions of opinions, subjective statements and positions for or against the Proposed Action and Alternatives are acknowledged without further comments.

Comment Letters:

Letter 1: Washington State Department of Ecology
Letter 2: Washington State Department of Fish and Wildlife
Letter 3: Washington State Department of Transportation
Letter 4: King County Department of Transportation, Metro Transit Division
Letter 5: King County Department of Transportation, Road Services Division
Letter 6: King County Department of Natural Resources, Solid Waste Division
Letter 7: King County Department of Natural Resources, Water and Land Resources Division
Letter 8: City of Kent
Letter 9: City of Renton
Letter 10: City of SeaTac
Letter 11: Muckleshoot Indian Tribe
Letter 12: Highline Water District
Letter 13: Water Resources Inventory Area 9
Letter 14: Segale Properties
Letter 15: James Greif
Letter 16: Lori Jenkins
Letter 17: Tony Zgraggen

Public Meeting Transcript:

Steve Butler
David Benoliel
Dale Schroeder
Bob Meyer
Bruce Mitchell
Roger McCracken
James Greif

Letter 1

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

May 5, 2005

Mr. Steve Lancaster, Director
Department of Community Development
City of Tukwila
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

Dear Mr. Lancaster:

Re: **Tukwila South Project - Draft Environmental Impact Statement**

Thank you for providing the Department of Ecology (Ecology) with the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Tukwila South Project. Ecology has completed its review of the DEIS as an agency with jurisdiction. Major comments are summarized in this letter. Detailed comments organized by DEIS chapter are included in the attachment.

Clearly, a great deal of effort was put into the preparation of the DEIS. In general, the document provides a comprehensive discussion of the project and its impacts. However, we have identified a number of corrections, additions and revisions. We hope you will find our remarks constructive and helpful.

Ecology's Role in SEPA Review - The Washington State Environmental Policy Act (SEPA), Chapter 197-11 of the Washington Administrative Code (WAC), establishes requirements for the environmental review of projects. Under the provisions of WAC 197-11-070, local and state agencies may not take actions (such as permit approvals) on a proposal until an environmental analysis is issued that complies with SEPA. Ecology is responsible for issuing permits and approvals for this project.

Most of our comments recommend additional information that should be included in the Final Environmental Impact Statement (FEIS). Providing this information in the FEIS will help to assure the adequacy of the EIS and expedite permit review, reducing the potential need for supplemental documents. When the FEIS is issued, we would appreciate a listing of where our comments are addressed, in order to expedite our review. 1

Study and Design has been ongoing - Please note that our comments are based on information provided in the DEIS and technical appendices. We understand that the applicant has continued to develop the design and refine the wetland and fish habitat mitigation plans. Some of our comments may be addressed in more recent documents. We did receive the April 20 mitigation plans, however we have not had time to review these plans during the DEIS comment period. 2

The technical appendices of the DEIS identify and reference a number of studies that are planned or recommended to support project design and implementation. For example, Appendix A of the DEIS identifies the need for future geotechnical studies to develop erosion control methods, design stormwater facilities and design fill placement. Because of the expedited schedule for this project, we expect a

number of these follow-on studies are either underway or completed. The FEIS should provide updated information about design refinements, additional study recommendations and mitigation plans relative to Ecology guidance. 3

Overview of Major Comments:

The following paragraphs highlight the major issues that Ecology urges the City of Tukwila and La Pianta, LLC to address in the FEIS.

- **DEIS Alternatives** - The DEIS Alternatives include two options in addition to "No Action": a development of 14 million square feet, and a development of 11 million square feet. Both alternatives are similar in general layout, road and infrastructure design. Both alternatives propose to locate large, steep-sided stormwater facilities in two locations. In one location, stormwater ponds would supplant about 4 acres of farmed wetlands. In the other location, the stormwater pond would be built after mass excavation of a landslide and erosion prone slope and terrace that includes 0.65 acres of forested wetlands. Both development alternatives propose to extend Southcenter Parkway along the toe of the slope within Stream E, and to relocate South 178th Street across the hillside. The FEIS should include an alternative that avoids or minimizes disturbance to wetlands, streams, and steep slopes. 4

- **Construction Impacts** - The FEIS should more fully discuss the magnitude of construction impacts, and describe the necessary, corresponding Best Management Practices (BMPs) and mitigation measures. The project proposes significant site disturbance during the first three years. Approximately 1.4 million cubic yards of excavation, reuse and placement of native soils as fill, and the import and placement of 500,000 to 900,000 cubic yards of imported fill, are proposed. The FEIS should explain the location, sequence and timing of excavation/cuts and the placement and depth of native and imported fill across the site (especially in areas A, B, F G, H, and I, and the mitigation areas as depicted in Figure 2-3, Volume I). It appears the project proposal is to construct a pond embankment with native soils and with slopes at a vertical-to-horizontal ratio of 1:1.5. The FEIS should describe where Ecology's dam safety requirements (for the above ground surface water impoundments, and/or the berm, dikes or retaining walls) are applicable. 5 6

- The small format graphics are not easy to read because of the scale of the development. We request a simple schematic or topographic map that allows for easy comparison of pre-development topography with post-development topography. The graphics should depict the details of the proposed mass grading, including areas to be cleared, the location, quantity and depth of excavation, and proposed fill placement across the site. 7

- The FEIS should provide additional discussion of how BMP and mitigation measures will be implemented. The DEIS includes a general list of BMPs, but their application and their effectiveness within specific areas should be clarified. Also, please include recommendations from more recent technical studies. 8

- Construction management is essential to protect water quality and beneficial uses. Tukwila's contractors will build roads and related infrastructure. The Applicant's contractors will construct stormwater ponds, temporary treatment ponds and habitat mitigation, and will haul and place up to a million cubic yards of fill across large areas of the site. A discussion of logistics, construction sequencing, and the level of coordination needed between the City of Tukwila's contractors and the Applicant's contractors should be provided. 9

- **Need for Supporting Studies** - The technical appendices, particularly Appendix A, "Geology, Soils and Groundwater," recommend a number of follow-on studies to be completed at final design. Recommendations from these studies should be included in the FEIS and permit applications, for expedited review for the project. If certain studies will be completed in later phases, the FEIS should identify a mechanism for assuring implementation of additional recommendations included in these studies. 10

- **Stormwater Manual** - The DEIS states that the Applicant relied on the 1998 King County Stormwater Manual in designing stormwater detention and treatment facilities and in design of stormwater construction measures. The 1998 King County Stormwater Manual does not have equivalency for flow control design standards to Ecology's Stormwater Manual for Western Washington (SMWW), nor is it equivalent for design standards set forth in the most recently adopted King County Stormwater Manual. The 1998 King County Stormwater Manual, therefore, cannot make the presumptive claim of meeting state water quality standards because it lacks full equivalency with Ecology's SMWW. The most recently adopted King County Stormwater Manual has been determined to be equivalent to Ecology's SMWW. 11

- This project requires Ecology to issue a 401 Water Quality Certification on the federal permits associated with it. In order for Ecology to issue this 401 Water Quality Certification, the agency must have reasonable assurance that water quality standards during construction and after build out will be met. In addition, an individual Section 402 NPDES Permit for Construction Activity will need to be issued for the discharge of construction stormwater run off from this project. If the design standards for stormwater facilities for the project are only to the standards of a manual that does not have equivalency to Ecology's or King County's stormwater manuals, Ecology's Water Quality Program will not be provided with reasonable assurance that water quality standards will be met and the project will not be able to meet the standard of AKART (all known, available and reasonable technologies) for the Section 402 NPDES permit. Currently, if not annexed by City of Tukwila, approximately 281 acres of the southern portion of the site is currently subject to the most recent King County manual (which, as previously stated, is equivalent to Ecology's SMWW). Because the stormwater infrastructure is being designed now to serve a development with eventual build out projected in 2030, and because of salmon and other beneficial uses of the Green River, there must be reasonable assurance the project can comply with water quality standards in order for Ecology to issue a 401 Water Quality Certification for the project. 12

- **Wetlands** - Avoidance of wetland impacts should be discussed in accordance with "Section 3: Antidegradation Decision-Making Process" in Ecology's *Water Quality Guidelines for Wetlands* (Ecology 1996). Additional analysis and discussion should be provided to clearly identify why the south basin stormwater pond must be placed in Wetlands 8 and 9. 13

- The action alternatives propose to eliminate 9.45 acres of wetlands, with less than 1:1 compensation of wetland area. This is a significant adverse impact. The mitigation plan presented in Appendix F of the DEIS proposes to "create, restore, and enhance" or to "create, restore, and rehabilitate" 33.43 acres of farmed wetlands as compensatory mitigation. Except for 0.05 acre of wetland creation, Ecology believes this mitigation should be characterized as enhancement, not restoration or rehabilitation. Regardless of how the mitigation is characterized, the proposed mitigation may not compensate fully for wetland impacts of the project. 14

- The mitigation plan should describe the buffers that would be needed to protect wetland functions

from future development. The plan should discuss how wetland buffers not in the control of the Applicant would be protected. The FEIS and mitigation plan should discuss possible effects of construction of the stormwater facility for the south basin and of the new dike on the hydrology of the adjacent mitigation wetlands. The FEIS should also discuss potential impacts on wetland hydrology if up gradient property is developed. 15

- **Shoreline Public Access** - The project borders 2.5 miles of the Green River shoreline. The proposed development does not propose public access along the shoreline. Because of the intensity of development, shoreline access would be desirable. The FEIS should discuss more specifically the City of Tukwila's Shoreline Master Program goals and requirements for public access. 16

- **Hazardous Materials** - The Applicant has worked with Ecology to assess a former 17.5 acre gravel pit and to obtain a no further action under voluntary cleanup provisions of the Model Toxics Control Act (MTCA), but no other data on soil, groundwater or water quality is available for the site. The site includes areas that are or were actively farmed, so some potential exists for residual soil or groundwater pesticide contamination. However, the project's compliance with MTCA cannot be assessed due to the lack of data. 17

Again, thank you for the opportunity comment on the DEIS. We recognize this project is a significant opportunity for the City of Tukwila and the region. We are committed to timely and efficient review of the project. My staff and I are available to discuss our comments, and to facilitate discussions among resource agencies as needed. If you have any questions regarding this letter or the attached comments, please feel free to call me at 425-649-7010, or Leslie Sacha, Project Manager, at (425) 649-7271. 18

Sincerely,

Ray Hellwig, Regional Director
Northwest Regional Office

RH:LS:sa
Attachment

cc: Sue Carlson, La Pianta LLC
Mario Segale, La Pianta LLC
Suzanne Skadowski, Seattle District Corps of Engineers, Regulatory Branch
T.J. Stetz, Seattle District Corps of Engineers, Regulatory Branch
Krista Rave-Perkins, U.S. EPA, Region 10
Larry Fisher, Washington Department of Fish and Wildlife
Jeannie Summerhays, Ecology, Shorelands and Environmental Assistance Program
Alice Kelly, Ecology, Shorelands and Environmental Assistance Program
Kevin Fitzpatrick, Ecology, Water Quality Program
Leslie Sacha, Ecology, Shorelands and Environmental Assistance Program

5.5.05

South Tukwila Project DEIS Review Comments

Comment #	Section Comment #	Page #	Paragraph	Comment
General				
1	1	vi	–	Under Permits and Approvals: State of Washington, Ecology – add "Shoreline Master Program Amendment"
Description of the Proposed Action and Alternatives – DEIS Chapter 2				
2	1	2-10	1	Change to "Extension of the City's Shoreline Master Program Urban shoreline environment designation to the annexed..."
3	2	2-10	6	Add Shoreline Master Program amendment to list of review processes and approvals
4	3	2-34	3	How do some of these potential uses (cinemas, theaters, art galleries, and night clubs) fit within the emerging technologies campus proposal? Does this fit within the purpose and need identified on pp 2-4?
5	4	2-35	1	Discussion states that retail development could be more traditional at first, with surface parking lots and grocery stores, and then transform to structured parking and more urban village forms. How likely is that transition in an area just recently built in the more traditional form?
Wetlands- DEIS Chapter 3.4				
6	1	3.4.1	4	Wetland boundaries have been confirmed by the Corps of Engineers (Corps) and Ecology. Please provide the wetland boundary confirmation letter to Ecology.
7	2	3.4.3	Table 3.4-1	Footnote 2 and column 3 title: Cowardin et al. (1992) should be 1979.
8	3	3.4.3	Table 3.4-1	It would be helpful if wetland acreages were totaled.
9	4	3.4.3	Table 3.4-1	Isolated wetlands should be noted in table.
10	5	3.4.3	Table 3.4-1	Wetlands have been rated based on local jurisdictions' regulations. Ecology will require that wetlands be rated according to Washington State Wetland Rating System for Western Washington (Hruby 2004) for the § 401 permit process.
11	6	3.4.3	Table 3.4-1	Buffers have been based on local jurisdictions' regulations. Based on Ecology's review of the scientific literature, wider buffers are needed to protect some wetland functions. Chapter 5 of Volume 1 and appendices to Chapter 8, Volume 2 of *Wetlands in Washington State* (Ecology 2005) discuss function-based buffers in detail.
12	7	3.4-4	2	Wetland 2 is hydrologically isolated. Please provide documentation from the Corps that Wetland 2 is hydrologically isolated. Ecology regulates isolated wetlands.
13	8	3.4-4	2	Wetland 3: same comment as Comment 7
14	9	3.4.5	3	Wetland 18 appears to connect to the stream. If not, clearly describe that it is separated from the riverine system.
15	10	3.4.5	3	Wetland 10 appears to contain both depressional and slope assessment units. Clarify its hydrogeomorphic class. If both classes are present, the wetland should not be assessed as one unit.
16	11	3.4.6	5	Sentence 2: "water quality" functions should be changed to "hydrologic" functions.
17	12	3.4.7	2	It is doubtful that Wetland 6 had any potential for fish habitat.
18	13	3.4-9	5	Figure 3.3-2 depicts wetland impacts, but only buffer impacts to Wetland 1. Impacts to the buffer of Wetland 10 are not shown. This figure also shows a buffer around Wetland 11 that is not shown in the mitigation plan. Information on the buffers needed to protect the functions of non-filled wetlands should be provided. Where buffers do not meet the guidance contained in *Wetlands in Washington State* (Ecology 2005), an assessment of potential indirect impacts to wetland functions must be provided. Additional mitigation may be needed to offset any significant indirect impacts.

South Tukwila Project DEIS Review Comments
(continued)

Comment #	Section Comment #	Page #	Paragraph	Comment
				The site-specific buffer assessment[1] should consider: • The functions and values of the aquatic resource to be protected by the buffer • The characteristics of the buffer itself and of the watershed contributing to the aquatic resource • The intensity of the adjacent land uses (existing and proposed) and the expected impacts that result from that land use The specific functions that the buffer would provide, including the targeted wildlife species to be protected and an understanding of their habitat requirements.
19	14	3.4.10	Table 3.4.2	Impact totals = 9.43a. We assume that because of rounding the total is different than the 9.45a in the text. Add totals to table.
20	15	3.4.10	Table 3.4.2	Including the mitigation acreage for Wetlands 10 and 11 in the impact table is confusing. We suggest removing mitigation impacts from the table and adding a footnote that 10.73 and 21.70 acres of mitigation will occur in Wetlands 10 and 11, respectively.
21	16	3.4.10	Table 3.4.2	Column heading: Cowardin et al. (1992) should be 1979.
22	17	3.4.11	2	It is unclear why impacts to Wetlands 8, 9, and 10 cannot be avoided. Explain in detail why ~ 5.1 acres of fill cannot be avoided. It appears from the data presented that the dike could be relocated northward to avoid Wetland 10. Ecology will require additional information regarding alternatives that further avoid or minimize wetland impacts. The project alternatives and design will be reviewed in accordance with guidance provided in "Section 3: Antidegradation Decision-Making Process" in *Water Quality Guidelines for Wetlands: Using the Surface Water Quality Standards for Activities Involving Wetlands* (Ecology Publication #96-06, 1996)
23	18	3.4.11	5	Identify here how much stream area would be filled.
24	19	3.4.11-3.4.12	7-1,2,3	Discuss mitigation activities that impact Wetlands 10 and 11.
25	20	3.4.12	4	Potential impacts to Wetland 15 from road construction, such as effects on the substrates that support perched hydrology in the wetland, should be discussed.
26	21	3.4.12	4	How will excavation and fill for construction of the dike and for the berms of the stormwater pond affect the hydrology of Wetland 10? Will surface or subsurface flows be altered? Will the stormwater berm create a ponding effect in Wetland 10? How will these possible effects be integrated into the mitigation plan?
27	22	3.4.12	4	More detail regarding the potential indirect impacts to wetlands not filled by the project should be provided. Analysis should address, for each remaining wetland, how water sources supporting the wetland may or may not alter wetland conditions in a manner that would impact wetland functions.
28	23			Discuss temporary impacts to Wetlands 10 and 11 from mitigation construction.
29	24	3.4-15	1	Same as Comment #21. Elaborate on no effect.
30	25	3.4-15	3	The cumulative impacts section should include other known projects in the area, or other cumulative effects pathways, that would cause additional wetland loss and cumulatively reduce wetland resources.
31	26	3.4-16	2	No functional buffer is provided on the east side of Wetland 1. Discuss how the proposed adjacent road will affect the functions of Wetland 1. The FEIS should identify measures to protect the remaining portions of Wetland 1.
32	27	3.4-16	3	It is stated that 32.43 acres of wetland rehabilitation, creation, and enhancement mitigation would occur. Table 3.4-2 shows that Wetlands 10 and 11 together are 32.43. On p. 3.4-17 2.95 acres of creation are proposed as mitigation. What is the total wetland mitigation proposed? Because of the net loss of wetland acreage proposed, the proposed compensation for this loss

[1] Washington State Department of Ecology. March 2005. *Wetlands in Washington State, Volume 1: A Synthesis of the Science*, Section 5.5 Buffers.

South Tukwila Project DEIS Review Comments
(continued)

Comment #	Section Comment #	Page #	Paragraph	Comment
				should be clear.
33	28	3.4-16	3	Mitigation is characterized as rehabilitation, rather than enhancement, of Wetland 10 and 11. Ecology believes that the proposed mitigation is enhancement. It is not clear if the proposed mitigation compensates for project impacts. Ecology will rely on guidance provided in *Wetlands in Washington, Volume 2: Guidelines for Protecting and Managing Wetlands* (Ecology publication #05-06-008) to evaluate the adequacy of the proposed mitigation to replace the functions lost by filling wetlands. The adequacy of mitigation will be evaluated in light of (1) the functions to be lost or impaired and those to be gained or enhanced; (2) the presence and likely effectiveness of buffers and other protection measures; and (3) the probability of success. This evaluation will be based on, among others, Ecology's rating system, the Washington Function Assessment Methods (WAFAM), the WSDOT function assessment tool, the draft interagency *Guidance on Wetland Mitigation in Washington State* (Ecology Publication 04-06-013b, April 2004), and best professional judgment. If proposed mitigation does not fully compensate for project impacts then additional mitigation would be required.
34	29	3.4-16	3	How much waterfowl habitat would be lost and not mitigated? Clarify type (overwintering, breeding, etc.), and species use (geese, widgeons, etc.?)
35	30	3.4-17	1	The final mitigation plan should also include: construction grading plan, fencing and signage, pre-planting weed control plan, buffers and site-protection measures, monitoring protocols, etc., and should follow the *Guidance on Wetland Mitigation in Washington State, Part 2* (April 2004). In particular, those items in Appendix A and its supplement need to be included in the plan.
36	31	3.4-17	2	The FEIS should state that monitoring will occur for at least 10 years to ensure that the forested wetland has been successfully established. Contingency measures and criteria should be included in the FEIS.
37	32	3.4-17	3,4	Is wetland creation along Johnson Ditch and in the off-channel habitat area part of the wetland mitigation plan?
38	33	3.4-17	5	It is not clear that the proposed mitigation would fully compensate for the proposed project impacts. It is clear that there would be a net loss of wetland acreage from the proposed project.
Wetlands – Appendix F				
39	1	4	4	Include a summary of the shallow groundwater well study in Appendix A and in the final mitigation plan to aid in evaluation of wetland hydrology.
40	2	11	5	Cowardin et al. (1979) should be 1992. Global change throughout.
41	3	12	3	Wetland 11 "is surrounded on three sides by ditches." Various figures show ditches on the east and north. Please clarify the location of all other ditches in the vicinity of the mitigation area.
42	4	17	5	Wetland 10 has an undisturbed portion but much of it is grazed and ditched.
43	5	25	3rd bullet	The temporary construction road was not discussed in Section 3.4 or below. Are there any impacts to wetlands or the buffer of the river? This construction road is in Shorelines jurisdiction.
44	6	25	1	It is unclear what small areas may be impacted in the future. Please clarify.
45	7	28	1	Because there is 4 million square feet less building area under Alt. 2, it is unclear why impacts to wetlands 7, 8, 9, and 10 cannot be avoided under Alt. 2
46	8	29	4	Explain functions of Wetlands 7, 8, 9, 10, and 11 for winter waterfowl.
47	9	31	1	As defined in the WAC, mitigation *does* include the items listed, plus rectifying the impact, reducing or eliminating the impact, and monitoring the impact and taking appropriate corrective measures.

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Comment #	Section Comment #	Page #	Paragraph	Comment
48	11	31	6	Based on the information presented, Alt. 2 should be able to avoid more wetlands.
49	12	32	1	Explain the measures that will protect the wetland mitigation area from potential on-site and off-site impacts over the long-term, including ownership, potential easements, land uses, or others.
50	13	32	3	It is unclear if created wetlands in the off-channel habitat and the stream channel are part of the wetland compensation.
51	14	33	3	Reed canarygrass root mats should be excavated 8-12 inches down to ensure that root propagules are removed.
52	15	33	4	Describe how the winter water levels would outlet. Ditches are on the east and north (and elsewhere?) of the mitigation wetland. It is unclear if they will be changed or if they will drain water from the mitigation area.
53	16	33	4	It is unlikely that planting extra shrubs within the perimeter of the forested wetland will adequately protect the mitigation area.
54	17	33	4	Please describe in more detail the results of the WAFAM analysis. The functional assessment reported in Appendix F indicates that the proposed mitigation as a whole replaces the functions of the wetlands filled by the project. Ecology will continue to evaluate this issue to determine adequate wetland mitigation for the project. While the WAFAM method provides an overview of how the project's mitigation may replace the functions lost by the filled wetlands, a narrative assessment summarizing each function lost should be provided. In addition to WAFAM, a narrative description of the functions lost and gained by the mitigation site should be provided (such an assessment is provided in Attachment A of the Water Quality Technical Appendix C). For wildlife species, emphasis should be on the specific wetland-dependent wildlife species anticipated in the impact and mitigation wetlands. Shifts in wildlife use between the impact and mitigation wetlands by differing species groups or guilds should be described and these trade-offs discussed. Professional judgment should also be applied to the WAFAM to more descriptively represent the actual functional performance of the impact or mitigation wetlands. In addition, a qualitative rating of the opportunity of the wetland mitigation area to perform each function should be conducted and included in the final mitigation plan. For example, this may be the case for the "wetland dependent mammals" function, where habitat conditions for beaver and muskrat are probably much higher in the mitigation wetland compared to that in any wetland impacted, yet the assessment indicates a net loss of acre-points for this function.
55	18	34	1	Until the trees mature, waterfowl will use the PEM areas.
56	19	34	2, 3	The final mitigation plan should also include: construction grading plan, fencing and signage, pre-planting weed control plan, buffers and site-protection measures, monitoring protocols, etc., and should follow the *Guidance on Wetland Mitigation in Washington State, Part 2*" (April 2004). In particular, those items in Appendix A and its supplement need to be included in the plan.
57	20	34	4	The FEIS should state that monitoring will occur for at least 10 years to ensure that the forested wetland has been successfully established. Contingency measures and criteria should be included in the FEIS.
58	21	35	1	It is not clear that the proposed mitigation would fully compensate for the proposed project impacts. It is clear that there would be a net loss of wetland acreage from the proposed project.
59	22	37	Altman 2001	USGS info from the next citation was mistakenly appended to this one.
60	23	37	Cowardin	1979, not 1992

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Comment #	Section Comment #	Page #	Paragraph	Comment
1	24	Table 6 & 9		A functional assessment was completed using *Methods for Assessing Wetland Functions Volume I: Riverine and Depressional Wetlands in the Lowlands of Western Washington* (Ecology Publication 99-116), referred to as the WAFAM. This analysis must be carefully reviewed and updated as necessary. For example, a check of the calculations for Wetlands 10 and 11, provided in Tables 6 and 9 of Appendix F against data sheets provided in the Joint Aquatic Resource Permit Application shows minor discrepancies that should be reconciled.
62	25	Figure 10A		To clarify hydrologic gradients across both wetland mitigation areas, shallow groundwater monitoring is needed in these areas in 2005; OBW-8 and OBW-9 are 1000 feet apart. Many more soil pits should be dug in Wetlands 10 and 11. Snohomish soils can have peat and clay lenses over deep sands. With extensive re-grading proposed for the wetland mitigation areas, there must be confidence that such sand deposits will not be encountered, especially in proposed emergent areas, which could dry out in summer.
63	26	Figure 10A		There are only three soil borings and hydrologic observation wells in Wetland 11 of the mitigation site. (There are three wells and borings at the north end of Wetland 10, all under the proposed river levee) The wells and borings are located near the perimeter of Wetland 11, where little excavation is planned. The risk that portions of the mitigation will not perform as planned can be reduced by installing additional monitoring wells in both wetlands and taking soil borings in the interior portions of the mitigation areas, where excavation is planned. These data can be used to assure excavation depths are designed in accordance with seasonal groundwater depths and that localized soil conditions (sand lenses, which may be better drained than other soil textures) are not exposed or are compensated for by the design. A plan for additional monitoring, and any necessary design modifications in response to it, would help assure the mitigation will perform as planned and should be included in the final mitigation plan.
64	27	Figure 10A		Related to the groundwater observation wells, Ecology is concerned that the measured water levels may not reflect soil saturation or shallow groundwater conditions if layers of low-permeability soils are present beneath the surface horizons. Please provide an assessment of the ability of the well data to accurately reflect shallow groundwater conditions in the upper 0 to 4 feet of soil, given the well-construction methods (screened between about 20 and 30 feet) and the observed soil strata in each well log.
65	28	Figure 10A		A comparison of projected elevations for emergent wetlands (14.3-15.5 ft) to OBW 8 and 9 in Tables 5-5 and Table 5-6, plus a review of Figure 22 of Appendix A suggests that emergent mitigation areas will only be saturated at best from July to mid-November. If sufficient peat is left at the bottom of excavation, this should be ok; if not, the dry soils in summer will limit the mergent species diversity. These areas should be inundated with 0-2 feet of water from March to June. The wetland hydrology expected in the mitigation area needs to more thoroughly described and confirmed to assure long-term persistence of the desired plant communities.
66	29	Figure 10A	legend	Add water depths expected in wetland classes in summer and winter.
67	30	Figure 10B		Add western red cedar to the list for proposed forested wetlands.
68	31	Figure 10B		Consider phased plantings of sun-intolerant species.

Fisheries – DEIS Chapter 3.3				
69	1	3.3.12 to 3.3.14	ALL	Please add a brief discussion of the riparian conditions for each stream, as this would set the stage for the functions and values discussion that will occur in the impacts analysis.
70	2	3.3.12	3	Please describe how the existing channel is partially isolated from fish bearing waters (e.g. by the number of feet that the stormwater pipe contains, drop structures, and a tide-gated outlet structure),
71	3	3.3.12	3	Reference source of water temperature data.
72	4	3.3.12	5	Second and third sentences seem to contradict each other on potential fish presence. Based on the criteria given in Paragraph 3, page 3.3-11 (Slope<25% and stream depth >1 inch) this lower reach would appear to classify as potentially fish bearing. Please

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				clarify if the lower reach of E-2 is or is not considered fish bearing, and ensure Table 3.3-1 is consistent with the information.
73	5	3.3.12	6	The only criteria given for determination of potential fish presence are a slope<25% and stream depth >1 inch (in Paragraph 3, page 3.3-11). However, for Stream E-2, it is stated that long term isolation from fish bearing waters (although Stream E is directly connected to Stream E-2, an assumed fish bearing stream) and general lack of habitat are the reasons for its classification as non-fish bearing. Please revise either the fish presence criteria or the individual stream descriptions so they are consistent on this point.
74	6	3.3.14	4	Mention at what elevation the current tide gate is at, as well as how this relates to the OHWM and the water elevation at the time of outmigration, when off-channel use is anticipated. Also, the size of the pipes leading to the outfall should be mentioned as they will be replaced with a larger pipe, improving fish passage conditions. WDFW has expressed concerns about the length of the piped section leading to the Johnson Ditch improvement and have indicated this section should be routed so that it is an open ditch.
75	7	3.3.14	4	Are the water quality parameters within Johnson Ditch currently impaired?
76	8	3.3-15	1 and 2	It would be helpful to explicitly state whether these ditches outlet into pipes or wetlands, or if are they totally hydrologically isolated from fish bearing waters.
77	9	3.3-15	5	Reference stock information by inserting a general statement like "information on salmonid stocks and their status are based on the SaSSI database (WDFW 1993, 1998, 2000)".
78	10	3.3-17	3	Which 4 streams have outfalls on the Green River and which streams are connected to the 1,000-foot long stormwater system? Also, Figures 5, 6, and 7 of Appendix E do not clearly show the outfall location.
79	11	3.3-17	3	Similar to Comment #6 please more thoroughly explain the existing elevation of the outfall relative to OHWM and how often and when fish may pass upstream of the outfall.
80	12	3.3-17	4 and 5	Are there any references (to papers or DEIS appendices) to insert that support historic landscape conditions and statements on historical and current stranding?
81	13	3.3-19	2	Insert statement that wetlands associated with streams C, D, and J-1 also going to be filled (thereby potentially affecting baseflow in Johnson Creek).
82	14	3.3-23	1	Since the flood plain mitigation site and outfalls for project area stormwater will discharge to the Green (involving inwater work), it does not appear appropriate to classify the Green River as an "offsite" area.
83	15	3.3-23	2	This is a good summary list of the 5 primary factors of development affecting fish habitat. However, some of these factors (i.e., sediment delivery, riparian condition, and impacts of use of the restored Johnson Creek for flood storage, water quality and quantity) are not discussed in the existing conditions sections, which make it somewhat difficult to assess the impacts and how they would vary conditions from the baseline.
84	16	3.3-23	4	In the last sentence, it may be more correct to state that "proposed impacts from stream fill" are discussed in the Table, and label the table "Stream channel loss due to Infrastructure Development on Streams" or something of the like. Also, discuss whether sedimentation is a direct effect for this project.
85	17	3.3-24	2	It appears as if the greatest potential for direct construction effects to fish in the Green River would occur during the process of connecting the excavated off-channel site with the mainstem Green (excavating the remaining berm/levy to the same elevation as the current stream bottom). Please discuss the extent of the instream work, and whether a coffer dam, sediment screen, or other method will be used to reduce potential impacts. This discussion should apply to the construction of the 4 new stormwater/stream outfalls as well. In addition, please discuss if and how use of Johnson Creek for flood storage during storm and high river flow conditions might affect fish.
86	18	3.3-26	3	Add a sentence or two briefly explaining that high levels of suspended sediment can cause a variety of adverse effects to salmonids, including reduced growth and feeding, respiratory impairment, and even lethal effects at very high concentrations.
87	19	3.3-26	5	Add a brief discussion of the potential affects of filling wetlands that currently serve as nutrient and contaminant filters for the various streams.

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88	20	3.3-27	3	Since the riparian mitigation is based on functions and values, it would be appropriate to have a table illustrating this in this EIS section, similar to Table 6 in Appendix E. It would also be helpful if the table includes information to convey pre- and post-project riparian functions and values for the project area as *a whole* (including the tributaries to be filled). This would help illustrate that although poor quality riparian areas would be lost on some smaller tributaries that are not known to contain fish, the scope of project mitigation on the 2 main fish bearing streams, would provide a post project condition that more directly supports riparian functions crucial for salmonids.
89	21	3.3-27	4	Explain whether the off-channel habitat restoration area will or will not fill in with sediment over time, and whether this is beneficial to fish.
90	22	3.3-27	4	The discussion of impacts should be expanded to elaborate on the new tide gate and culverts on Johnson Creek, specifically, how and why these structures will allow for better fish passage into the stream (e.g. bigger culvert and tide gate design that allows for increased usage by juvenile fish). Also, state what is the elevation of the new tide gate relative to the existing tide gate and the OHWM. Was the pipe/tide gate designed to allow for maximum utilization by juvenile salmonids during the time frame they are likely present and to provide off-channel rearing habitat (late winter through spring)? Compare the existing length of culvert connecting Johnson Ditch to the Green River to the proposed length. The diameter of the proposed culvert apparently is less than the width of stream channel. Identify if the proposed culvert & tide gate meet the WDFW criteria for fish passage (WAC 220-110.060).
91	23	3.3-28	2	The WRIA 9 Draft Habitat Plan was issued last month. The FEIS should discuss consistency of the proposed mitigation projects with the WRIA 9 Plan, particularly projects LG-26 and LG-27. This would demonstrate the mitigation is meeting specific habitat needs identified in the lower Green basin.
92	24	3.3-34	4	Please clarify whether there is a possibility of fish spawning in Stream E-2. This statement is not consistent with a previous classification of Stream E-2 as non-fish bearing. In addition, please address the fact that the proposed project would add 1,000 feet of additional pipe downstream of this tributary, and whether this would affect fish presence.
93	25	3.3-35	4	It is unclear why Johnson Creek will have "slightly more base flow" after construction of the project since Wetlands 4,5,7,8,9,13 and Stream C, D, and J-1 will be filled. In addition, impervious surface will cover much of the contributing drainage, reducing infiltration (as stormwater from this new impervious surface would be routed via stormwater facilities to the Green River). Also, the Fisheries Appendix states on Page 66 (bullets 1 and 2) that baseflow contribution on streams C and D would decrease due to the streams being filled. Considering this information, please discuss and provide justification for the statement that baseflows will increase.
94	26	3.3-36	5	Please identify specific channel design features that will provide refuge habitat for salmonids with Johnson Creek.
95	General	Impacts Section	NA	Table 5 in the Fish Appendix nicely summarizes existing conditions and proposed actions in relation to fish life history requirements. It might be useful to put this table, or an abbreviated form of it, near the end of the impacts section in the EIS.

Earth EIS Chapter 3.1				
95A	1	3.1.3 3.1-23	n/a	There is a good general discussion of the potential range of for Alternatives 1 and 2 in pages 3.1-13 through page 3.1-21. However, per comments in our DEIS cover letter, please include additional requested information regarding clearing, grading and placement of fill within specific site areas, a graphic depicting pre and post development changes in topography, the use and efficiency of BMPs and other controls in areas proposed for mass grading or in or near wetlands and the Green River, and construction management measures. Further if additional guidance has come out of follow-on geotechnical or other studies, please update the discussion to summarize these measures or any design changes or construction methods that may be recommended.
Water Resources EIS Chapter 3.2				
96	1	3.2-1	n/a	Please insert a paragraph at the introduction of the Surface Water Quantity section that briefly summarizes applicable regulations, similar to that provided on page 3.2-7 for Surface Water Quality.

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97	2	3.2-3	2	The EIS states that the S 180th Street pump station currently has excess capacity. Please state the amounts of the current load and current capacity of the system. In addition, please amend the Impacts section to include a statement of how much additional flow is anticipated to be added to the system in the under the Full Build-Out condition.
98	3	3.2-7	3	Please include brief summaries of the requirements/regulated constituents for waters classified for use by "Non-core Salmon/Trout" and "Primary Contact Recreational Use."
99	4	3.2-7	4	Please include a brief summary of the regulated constituents for State drinking water.
100	5	3.2-9	3 and 4	Provide a brief quantitative summary of the monitored parameters, especially those that fell outside of required ranges. If this information is the same as that presented in Tables 3.2-2 through 3.2-4, then please reference those tables in this section.
101	6	3.2-10 to 3.2-11	General	Provide a brief quantitative summary of the monitored parameters, especially those that fell outside of required ranges. If this information is the same as that presented in Tables 3.2-2 through 3.2-4, then please reference those tables in this section.
102	7	3.2-12	1	Please describe the existing conditions of the on-site ditches in more detail. Consider providing definitions and examples (vegetated with grass, shaded with tree vegetation, no vegetation and sediment-laden, etc.) of "good/very good," "moderate," and "poor" for the riparian conditions discussed.
103	8	3.2-12	2	Provide a brief summary of the water quality functions evaluated under the WAFAM.
104	9	3.2-12	3	Please provide a brief quantitative summary of the temperature monitoring results.
105	10	3.2-16	5	Provide a brief list of the regulated groundwater contaminants. At a minimum, list those that would or potentially could apply to the site.
106	11	3.2-17	3	Provide a brief quantitative summary of groundwater monitoring results.
107	12	3.2-19	1	Please update the text to clarify that in accordance with Ecology BMP C250: Construction Stormwater Chemical Treatment, "Formal written approval from Ecology and the Local Permitting Authority is required for the use of chemical treatment regardless of site size"
108	13	3.2-19	1	During the first construction year, how will water collected in the sediment traps be disposed of? Is it expected to infiltrate, will it be taken off-site, etc.? Given the extent of fill placement and mass grading, please confirm that the size and number of sediment traps will be adequate or describe plans for in field adaptive management. Please describe.
109	14	3.2-19	1 and 2	Please either reference the TESC measures described on pages 3.1-23 through 3.1-24 or restate them here. Also, see general comments in our cover letter requesting that
110	15	3.2-19	3 through 5	The EIS states that the flow control facilities will be sized according to the 1998 KCSWDM Level 1 requirements. The Level 1 sizing criteria and KCSWDM recommended target conditions do not meet the requirements of the 2001 Ecology Western Washington Manual. In addition, the Ecology Manual lists certain water bodies to be exempt from the higher flow control standard and the Green River is not among the exempt receiving waters. Please also see general stormwater comments in our DEIS cover letter.
111	16	3.2-21	4	Last sentence: The EIS states that there is "no need to employ LID measures to reduce water quality or quantity impacts." Please update the text to clarify that while LID measures may provide some additional benefit, these benefits are not necessary to meet water quality standards and may not be significant given the size of the Green River as a receiving water.
112	17	3.2-21	5	Please discuss how preservation of wet pond performance through plug-flow will be maintained with the backwatering expected in the inlet pipes. What happens during high groundwater table in late spring?
113	18	3.2-22	2	Discuss whether HSPF is an approved model by FEMA for both determination of flood hydrographs, and determination of water surface elevations, especially as it's used for determining the 100-year Johnson Creek flood plain elevation caused by the relocation of the flood protection barrier dike.

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114	19	3.2-22	5	The EIS seems to imply that some sediment transport occurring during construction may be acceptable given that "wetlands and ditches are deposition environments by nature." Please update the text to clarify that while wetlands may naturally be able to receive a small, gradual amount of sediment deposition, transport of sediment from open construction areas is beyond the magnitude of this natural process and must therefore be controlled through implementation of all available BMPs.
115	20	3.2-24	1	Please provide some examples of spill-control BMPs that may be implemented. See also comment on construction impacts in our DEIS cover letter.
116	21	3.2-31	4	Please update the text to comment on the temperature effects from the ponds and conveyance ditches in the event that storage is required during the summer.
117	22	3.2-32	7	Please provide details explaining why fecal coliform are expected to decrease in the future condition of the Northeast Basin.
118	23	3.2-35	Table 3.2-3	Please include a description of the "North Basin Open Area."
119	24	3.2-38	6	Please provide a brief summary of the results of the WAFAM water quality function evaluation.
120	25	3.2-39	5	The text seems contradictory by first stating that the Green River is susceptible to low dissolved oxygen during the summer, and then stating that low dissolved oxygen does not occur during the summer. Please clarify.
121	26	3.2-41	2	Since development will be taking place on the valley floor, which is a groundwater discharge location, please discuss how flooding/seepage into and around the new structures will be avoided (soil compaction, etc.). Will placement of impermeable linings in the stormwater ponds affect groundwater flow or cause mounding, particularly in nearby mitigation areas?
122	27	3.2-42	1	The EIS states that the flow control facilities, sized according to the 1998 KCSWDM Level 1 requirements, will protect the Green River from erosive effects. As stated previously, the Level 1 sizing criteria and KCSWDM recommended target conditions do not meet the requirements of the 2001 Ecology Western Washington Manual and may be insufficient to prevent increases in the stream channel erosion rates and protect fish habitat.
123	28	3.2-45	11	Provide a brief summary of potential concrete management techniques in this section. Additional details of the proposed concrete batch plant should be provided. Please explain how and confirm water quality treatment will control pH and fine suspended turbid discharge.
124	29	3.2-46	5	The EIS states that the new Johnson Creek elevation and interception of alluvial groundwater will offset any potential reduction in baseflow from the Qpog1, 2 springs. Has modeling or other analysis been conducted to support this statement? Please provide details. As described in the cover letter, please included additional information about use of BMPs
125	30	3.2-47	8	As stated on page 3.2-7 of the EIS, the reach of the Green River adjacent to the site is categorized by Ecology for Primary Contact Recreation Use by humans and that a Green River TMDL is under development for fecal coliform. Additional planning for control of fecal coliform discharges from the site should be included in the SWPPP and summarized in the FEIS. While alternative stormwater facility designs may not be effective in removing fecal coliform from the discharges, source control options (wildlife control/deterrents for stormwater facilities, public education for pet waste control, etc.) are available.
Stormwater Appendix A				
126	1	5-7-5-12		When comparing PEM elevations 14.3-15.5 to OBW 8, and 9, in Tables 5-5, and Table 5-6 plus a review of Figure 22 of Appendix A suggests that PEM mitigation areas will only be saturated at best from July – mid-November. If sufficient peat is left on bottom of excavation then should be ok, if not the dry soils in summer will limit the EM species diversity. . These areas should be inundated with 0-2 feet from March June. The wetland hydrology expected in the mitigation area needs to more thoroughly described and confirmed.
127	2	6-34	3	Evaluate how construction of the South Pond berm, the new dike and potential future up gradient (off site) development might affect hydrology in Wetland 10 on a temporary and long term basis. Evaluate how the keys affect Wetland 10 on a permanent basis.
128	3	Figure 21		Do/will the tidal changes influence the groundwater hydrology in Wetland 10 or 11?
129	4	Figure 23		The Northern Detention Pond is located in Zone 4: Very high risk landslide hazard area. S. 178th Street Realignment also crosses

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				Zone 4. These structures may cause landslide or erosion problems that could affect water quality. Please see cover letter and address construction methods, BMPs, avoidance and other measures that can be applied to minimize risk.
130	5	5-6	Table 6-1	Proposed mitigation measures for Zone 4 areas is controlled clearing and grading.
Earth				
131	1	3.1-7	Table 3.1-1	For each soil type, please include the classification type of till, outwash, wetland, etc.
132	2	3.1-23	6	EIS states that erosion control BMPs will be taken from 1998 King County Surface Water Design Manual (KCSWDM). However, page 3.2-45 of the EIS states that erosion control BMPs will be taken from KCSWDM and the 2001 Ecology Western Washington Manual. Please clarify and refer to our DEIS cover letter discussion on stormwater controls and need for AKART and reasonable assurance.
Utilities				
133	1	3.16-7	1	Please provide the amount of Highline's current yearly available water supply for comparison with the figures shown in Table 3.16-1.
134	2	3.13-9	1	Add the following BMP to list of mitigation measures: Develop a dust control plan during project planning to identify sources and activities that would be likely to generate fugitive dust and the means to control such emissions.
135	3	3.13-9	1	Add the following BMP to list of mitigation measures: *Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris, and avoid dust-generating activities during windy periods.*
136	4	3-13.9	1	Add the following BMP to list of mitigation measures: *Stage construction to minimize overall transportation system congestion and delays to regional emissions of pollutants during construction.*
137	5	3-13.9	1	Add the following BMP to list of mitigation measures: Cover or use soil stabilizers to minimize emissions from storage piles; minimize drop heights involved in creating storage piles or haul-vehicle loading.
138	6	3-13.9	1	Add the following BMP to list of mitigation measures: Implement restrictions on construction truck idling (e.g., limit idling to a maximum of five minutes).
Land and Shoreline Use- Section 3.6 of DEIS				
139	1	3.6-1	2	Affected Environment-, third sentence. This sentence states "The evaluation of potential impacts to land and shoreline use included in this section assumes annexation of the site into the City, and does not address consistency of the Tukwila South project with existing King County land use policies, designations, or zoning". This assumption is pre-decisional, and it should be removed. The assumption is predicated on the proposed annexation being approved subsequent to issuance of the Final EIS and City decisions on the Proposed Master Plan and Development Agreement between the City and the applicant. Although the project site lies within Tukwila's southern Potential Annexation Area (PAA), because the annexation of the southern portion of the Tukwila South site (currently located in unincorporated King County) is proposed under a separate action, and it has not been formally adopted, the EIS needs to address the potential impacts to the current land and shoreline uses within the project site. For the affected environment section, this would involve describing the current land and shoreline uses in the project site for the primary jurisdictions, including the City of Tukwila, King County, and the City of Kent (likely to include land use only). This is further important in adequately establishing the baseline conditions for the current land and shoreline use in the EIS because the majority of the site, approximately 281 acres of the overall 498 acres, is currently located within unincorporated King County and the City of Kent. Once the baseline conditions for current land and shoreline use have been established in the affected environment section of the EIS, this will set the stage for assessing the potential impacts to land and shoreline uses (e.g., potential change in land use/zoning, and potential change in shoreline designations).
140	2	3.6-2	1	Existing shoreline use. For consistency, add a figure that shows the current SMP designations for the site, including the City of Tukwila SMP designations, such as the "River Environment", "Low Impact Environment", and "High Impact Environment", as well as those currently in effect by King County, and the City of Kent. This figure would be similar to what is shown on Figure 3.6-2 for current zoning/comprehensive plan designations.

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141	3	3.6-2	1	Existing Shoreline Use. Generally describe the current King County "Rural" shoreline designation, and identify the types of land uses that exist within this portion of the project site.
142	4	3.6-2	1	Existing Shoreline Use. Recommend relocating the assumptions regarding annexation of the Tukwila South Site from the unincorporated King County segment of the site to the City of Tukwila, and thereby also extending the City's current Shoreline Master Program (SMP) regulations (e.g., Urban) to the annexed shoreline area. This section should describe the current shoreline use and regulations, not potential changes that are part of a separate action. Recommend that these assumptions be placed under the main affected environment section 3.6.1 to identify these issues up front as background.
143	5	3.6-5	1	Add City of Kent's Briscoe Park to Figure 3.6-1 or 3.6-2.
144	6	3.6-5	2	Comprehensive Plan and Zoning Designations, Tukwila South Site. In order to adequately establish the current baseline conditions for land use in the DEIS, for the current King County zoning that applies to the majority of the unincorporated portion of the site (e.g., (I) and (R-1)), generally describe the intent of theses zoning designations, and provide a general description of the permitted and conditional uses within these zones. The same applies for the portion of land currently within the City of Kent, and zoned SR-1. Generally describe the intent of this zone, and identify the permitted and conditional uses within this zone.
145	7	3.6-5	2	Comprehensive Plan and Zoning Designations, Tukwila South Site. Revise the following sentence: "The City is expected to apply zoning designations to the site upon annexation, which would correspond to the current Comprehensive Plan land use designations". Revise as follows: *Under a separate action, and pending approval of the annexation for the unincorporated portions of the site within King County, the City is expected to apply zoning designations to the area, which would correspond to the City's current Comprehensive Plan land use designations for Tukwila Valley South.*
146	8	3.6-8	3	Because section 3.6 is titled Land and Shoreline Use, add a new impact topic to the evaluation of impacts, Section 3.6.2. Title the new impact topic "changes in shoreline use and designations". This topic should be assessed for both the Proposed Action and Other Alternatives within Section 3.6.2. The focus should consider the baseline conditions for shoreline use on the project site (e.g., City of Tukwila, and Unincorporated King County SMP regulations), and compare these conditions to the proposed changes. For example, describe the effects of changing the SMP designations for the unincorporated King County portion of the site from "Rural" to the City's current "Urban" SMP designation. Describe the potential change in shoreline uses, the potential change in setbacks, and the potential change in development standards. Also generally describe how the critical areas ordinance (CAO) components of King County's CAO for the unincorporated portion of the site, and the City of Tukwila's CAO, will change. Wherever possible, quantify the changes between the plans.
147	9	3.6-9	1	Under the Major site preparation and infrastructure development proposed at the outset of the project to facilitate large-scale campus environment, and land use changes to the site during the infrastructure development phase (2006-2008) would include: extension of Southcenter Parkway in new alignment, realignment of S 178th Street, installation of major water, sewer, and stormwater utilities..., etc. Recommend listing each of these project elements within a table, and identifying the area of impact, the location on the project site, and identifying the degree impact to land use from construction and operation. Also recommend rather than cross-referencing to Chapter 2 for figures, that a composite base map be prepared generally identifying these elements, and the alternatives on the project site. The composite base map should be inserted into Section 3.6.2.
148	10	3.6-9	2	Recommend inserting a figure to generally identify the location and type of existing land uses that will be demolished during the infrastructure development phase.
149	11	3.6-9	3	This paragraph mentions that existing land uses within Tukwila South area not owned by the applicant could experience access disruptions during the infrastructure development phase. Where are these land uses in relation to the site, and what type of land uses are they (e.g. single-family, multi-family, commercial, etc.)? Generally identify the location and type of land uses.
150	12	3.6-10	6	This paragraph addresses future development options at the site and the potential effects on the 200-foot shoreline zone. Recommend relocating this discussion to the new impact topic "changes in shoreline use and designations" within Section 3.6.2. For the last sentence of this paragraph, recommend revising to state as follows: "*Under a separate action, and pending approval of the annexation for the unincorporated portions of the site within King County, the City is expected to apply their SMP standards to the annexed lands in the Tukwila South area, and if adopted, future uses would be required to comply with these standards.*
151	13	3.6-11	6	The paragraph states " conversion of site to higher density urban uses would not represent a significant land use impact" . Why is this not significant? Alt 1 sq footage is about 9 times percent higher than current use. No action alt would be 2.25 times higher than current square footage. Alt 1 sq footage would be almost 4 times higher than what could develop under No Action. What

South Tukwila Project DEIS Review Comments
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				parameters are used to determine moderate or significant levels of impact? The discussion points to the city's city vision, consistency with infill trends, comprehensive plan and zoning designations and the availability of other land in the area for warehouses and agriculture. This discussion of policies does not adequately represent the impacts to land use that would occur with this development.
Plans and Policies – Section 3.7 of DEIS				
152	1			Correct throughout City of Tukwila Shoreline Master Plan to the proper title "Shoreline Master Program"
153	2	3.7-2	1	Indicate that SMA jurisdiction is within 200 feet of the shoreline.
154	3	3.7-2	2	Amend sentence to read, "The proposed actions include amending Tukwila's Shoreline Master Program to apply the Urban shoreline environment designation to the shoreline of the Green River that is included in the proposed annexation area."
155	4	3.7-2	3	Amend first sentence to read, "Proposed amendments... subject to review and approval by...
156	5	3.7-2	3	Under the Consistency Discussion for the Shoreline Management Act, the applicant correctly states that proposed amendments to local shoreline master programs are subject to review by Ecology (RCW 90.58.090). However, it is assumed that the proposal to amend Tukwila's Shoreline Master Plan to include the newly annexed area would be considered a "less than comprehensive amendment" by Ecology. In accordance with Ecology's Guidance on Application of the WAC 173-26, Ecology can consider proposals for amendments of SMPs that are less than the comprehensive amendment, but based on the following approach: 1) As a threshold matter, the jurisdiction must recognize the general expectation of the State, as expressed through the recent amendments to the SMA and the adoption of the 2003 guidelines, is that a comprehensive review and amendment process must occur in the coming years, per the schedule provided in RCW 90.58.080. Thus, a "less than comprehensive" amendment is not a right. Ecology will consider review of those proposals and give appropriate priority to conducting a review based on the circumstances. 2) A less than comprehensive amendment should in fact be relatively minor for a jurisdiction. When more is involved in terms of uses, area, subject matter, then it becomes more likely that the procedural requirements, established in the WAC 173-26-201, applicable to comprehensive amendments, will be involved above the minimum requirements of 173-26-100. The applicant needs to demonstrate how the current proposal is relatively minor for a jurisdiction given the fact the proposal includes more that is involved in terms of uses, area, and subject matter.

				3) Even minor amendments have to be consistent with relevant and applicable provisions of the 2003 guidelines (WAC 173-26 Part III). Appropriate inventory and scientific basis will be expected as necessary to assure that the proposed change is appropriate and consistent with these guidelines. The applicant needs to demonstrate how this proposal will be consistent with the relevant and applicable provisions of the 2003 guidelines, including an appropriate inventory and scientific basis (to assure that the proposed change is appropriate and consistent). 4) A minor amendment can't be approved if it is not reasonably consistent with any aspects of a comprehensive update that can be reasonably anticipated, or which reflects a major subject matter for comprehensive updating. The applicant needs to demonstrate how the minor amendment would be reasonably consistent with any aspects of a comprehensive update that can be reasonably anticipated. 5) Minor amendments will be easier if they are creating protective measures, or if they are accompanied by sufficient new protective measures that are clearly neutral or better with regard to the "no net loss of ecological functions of the shoreline". This proposal needs to consider changes in uses allowed in environments, changes in environment designations, changes in mitigation requirements, and assurances of stricter permitting requirements of the new area- anything that can show that the minor amendment is overall consistent with what will be required in a major amendment.
157	6	3.7-2	3	In accordance with Ecology's Guidance on Application of the WAC 173-26 (2003 Guidelines) to Less Than Comprehensive Amendments to Master Programs, this publication identifies the General Standards of the Act/Guidelines. The broad principles of the guidelines, which reflect the act, provide a first level of review of a proposed amendment: 1) No net loss of shoreline ecological functions. 2) Use preference. 3) Public access and use of the shoreline. Consideration of how the proposal addresses these issues will provide a basis for determining the need for further evaluation and the type of evaluation necessary. The applicant provides a general discussion of these issues, however, more detailed analysis is needed, in particular with regard to demonstrating how the "no net loss of shoreline ecological functions" standard will be achieved under this proposal, and more detailed discussion on the proposal will meet the "use preference", and "public access and use of the shoreline" standards.
158	7	3.7-2	6	Need a more detailed comparison of the uses, public access requirements, and development standards allowed in the King County Rural shoreline environment and the Tukwila Urban shoreline environment.
159	8	3.7-3	2	No net loss discussion should provide a comparison of shoreline ecological functions currently and what would occur under the proposed action. This discussion should address the cumulative impacts on shoreline ecological functions that would result from future shoreline development.
160	9	3.7-4	1	Both Alt 1 and Alt 2 would provide significantly more jobs than the combined employment growth target of 16,497 for the City and its PAA, not a "significant portion" of the employment growth target.
161	10	3.7-8	4	Clarify the meaning of "The proposed Green River Off-Channel Habitat Restoration Area could meet at least a portion of the proposal's "public access" requirement in lieu of physical access."
162	11	3.7-22	1	Tukwila's permits for development within 200 feet of the shoreline also would include conditional use permits and variances.
163	12	3.7-22	2	Under the new SMP guidelines, the recommended shoreline environment designations include high –intensity, shoreline residential, urban conservancy, and rural conservancy, natural and aquatic. Local governments may establish a different designation system or use their current designations, as long as they are consistent with the purpose and policies of the WAC.

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164	13	3.7-22	3	This paragraph is somewhat incorrect. When a shoreline area is annexed to a jurisdiction, the jurisdiction shall develop or amend the master program to include the annexed area. The SMP amendment is not limited to the "map portion" of the SMP. Cities and towns planning under the Growth Management Act may predesignate environments on shorelines within adopted urban growth areas. The citation is WAC 173-26-150. SMP amendments must be approved by the Department of Ecology. The SMA and implementing regulations do not use the term, "map amendment." Please correct this paragraph.
165	14	3.7-23	2	"Portions of development located within the shoreline jurisdiction would comply with applicable regulations of the Tukwila SMP." What portions would comply and what portions would not comply with the SMP?
Wildlife – Section 3.3 of DEIS				
166	General			The EIS Section 3.3 and Appendix D were reviewed briefly for wildlife habitat and wildlife species issues. They appear to adequately describe the affected environment, project impacts, and mitigation measures.
General Comment - Water Quality Technical Report/Draft EIS/March 8, 2005				
167	1			The basic methodologies and approaches used to estimate pollutant loading, stormwater concentrations pre- and post-treatment, and receiving environment concentrations are appropriate and represent standard of practice for current projects in the Puget Sound area of Washington.
Water Quality Technical Report/Draft EIS/March 8, 2005				
168	1	2-11	3	The Ecology website currently indicates that only part of the 2003 changes in the Water Quality Standard were accepted by EPA (http://www.ecy.wa/gov/programs/wq/swqs/rev_rule.html). Please discuss and clarify where the 1997 rule for Surface Water Quality Standards was used and for what constituents and where the 2003 rule was used and for what constituents. Consider any changes of environmental affect on water quality these may have on the project.
169	2	Various	Tables 2-3 through 2-12	Please cite WAC 173-201A-040 (Toxic Substances) as the source of State Water Quality standards (rather than WAC 173-201A-030). This source (rather than the EPA Gold Book) is the ammonia water quality standard in the various tables.
170	3	3-45	Table 3-5	Use of site-specific studies for BMP percent removal efficiencies is a valuable consideration. However, it would be useful to compare these values to those reported in the national database maintained by USEPA (Winer 2000), those provided in WSDOT's Environmental Procedures Manual for use on their transportation projects (WSDOT 2004a), and those reported by WSDOT in their 2004 NPDES Progress Report (WSDOT 2004b). Overall, the removal efficiencies assigned to the Basic Wet Pond are on the low side, and represent a conservative approach to estimating discharge concentrations. In contrast, the removal efficiencies assigned to the basic wet vault seem high to very high based on many of the sources cited above. As such, the estimated metal discharge concentrations from basic wet vaults should not be considered conservative in this analysis. Please use lower percent removal efficiencies (more in the 10% - 20% range than the 40-55% values used in the analysis) and then determine any potential change in stormwater discharge concentrations.
171	4	Various	Tables 3-7, 3-8, 3-9	The use of site specific studies for the land use loading contributions to stormwater is a good approach. The land use characteristics in Tables 3-7 and 3-8 appear appropriate for commercial and office park impervious surfaces. However, recent research conducted in California (Kayhanian et al. 2002; Kayhanian et al. 2003) suggest that there is a relationship between Average Daily Trips (ADT) and pollutant loading (this is a non-linear multivariate relationship), and that urban traffic areas with ADTs>30,000 (Kayhanian et al. 2002) should experience metals concentrations between 1.5 and three two times higher than used in Table 3-9. A side by side comparison shows: (see Attachment A)

South Tukwila Project DEIS Review Comments
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172	5	3-50	1, 2, and 3	The report discusses local arterial roads, such as Lake Washington Boulevard in Renton with a current ADT of ~21,000, but does not present the site-specific information (and the basis of these data) in a separate table (as was done for the other land uses in Tables 3-7 and 3-8). The loading values for arterial roads reported in Table 3-9 should be presented in a separate table that specifically address runoff from arterial roads with ADTs of ~40,000.
173	6	Various	Tables 3-11, 3-12, 3-13, 3-14, 3-17	The consequence of using loading levels appropriate to 40,000 ADT with lower percent removal efficiencies for the wet vaults should be calculated and reported, to determine what effect, if any, this might have on the determination of environmental effect from this project.
174	7	3-80	2	The elevated discharge of fecal coliform to a water body listed as impaired for this constituent (i.e., included on the 2002/2004 Department of Ecology 303(d) list) requires additional evaluation and consideration. The report mentions the current development of a fecal coliform TMDL for the Green River. The project should consider the consequences for the likely assignment of a non-point source wasteload allocation for the permitted stormwater outfalls in the Green River. Also, in contrast to the statement included on page 3-80 ("There are no alternative facility designs likely to improve treatment for fecal coliform removal"), the Federal Highway Administration (2005) indicates that at least one emerging technology for Ultra-Urban sites (e.g., the StormTreat® System [STS], a constructed biofilter) is available for reducing fecal coliform levels in stormwater. Additional approaches could include wildlife control on lawns and at stormwater ponds and public education (see http://www.seattle.gov/mayor/issues/row.htm for a local effort to reduce pet waste as a source of stormwater fecal coliform). Control of fecal coliform should be further evaluated to develop a stormwater treatment plan that will not contribute to further degradation of the 303(d) listed sections of the Green River adjacent to this project.

Attachment A

Parameter	FROM: From Table 3-9 (A.C. Kindig 2005)	Table 3 (Kayhanian et al. 2002)	Table 7-1 (WSDOT 2004b)
Dissolved Copper (µg/L)	7	11.4	6.12
Dissolved Lead (µg/L)	1.5	3.2	NR[a]
Dissolved Zinc (µg/L)	36	59.4	52.8
Nitrate plus Nitrate Nitrogen (mg/L)	0.39	1.2[b]	NR
Total Phosphorus (mg/L)	0.17	0.3	0.18
TSS (mg/L)	42	94	121

Literature Cited

Federal Highway Administration (FHWA). 2005. Stormwater Best Management Practices in an Ultra-Urban Setting: Selection and Monitoring. http://www.fhwa.dot.gov/environment/ultraurb/uubmp3p9.htm. Accessed April 20, 2005.

Kayhanian, M., L. Hollingsworth, M Spongberg, L.C. Regenmorter, and K. Tsuey. 2002. Characteristics of stormwater runoff from Caltrans Facilities. Presented at: Transportation Research Board, 81st Annual Conference, Washington, D.C., January 13 – January 17, 2002.

Kayhanian, M., A. Singh, C. Suverkropp, and S. Borroum. 2003. Impact of Annual Daily Traffic on Highway Runoff Pollutant Concentrations. Journal of Environmental Engineering, 129: 11 - 990.

Washington Department of Transportation (WSDOT). 2004a. Environmental Procedures Manual. Revision 2004-1. Sections 431, 432, and 433. Publication Number M31-11, March 2004.

Washington Department of Transportation (WSDOT). 2004b. 2005 NPDES Progress Report. Cedar-Green, Island-Snohomish, and South Puget Sound Water Quality Management Areas. National Pollutant Discharge Elimination System. MS4 Permits WASM10001, WASM 20001, and WASM 30001. Submitted to Washington State Department of Ecology, Water Quality Program, Olympia, Washington by Washington State Department of Transportation, Environmental Services Office, Water Quality Program, Olympia, Washington.

Winer, Rebecca. 2000. National Pollutant Removal Performance Database for Stormwater Treatment Practices. 2nd Edition. Prepared by Center for Watershed Protection, Ellicott City, Maryland. Prepared for U.S. EPA Office of Science and Technology in association with Tetra Tech, Inc. Fairfax, Virginia. June 2000.

RESPONSE TO LETTER 1
Washington State Department of Ecology

1. Your comment is acknowledged for the record. This EIS represents the environmental analysis for the Tukwila South project, prepared consistent with WAC 197-11-402. As noted on page ii of the Draft EIS, this environmental analysis is intended to provide a sufficient level of environmental review to support federal, state and local permit decisions related to both the initial site preparation and infrastructure development phase, as well as to support permit decisions for long-term development of the site. Some information has been updated since publication of the Draft EIS, such as the Sensitive Area Master Plan (SAMP), which includes the updated Fisheries Mitigation Plan and Wetland Mitigation Plan; the Wetland and Stream Buffer Plan; a potential component of the proposed construction water quality treatment facilities; and site access assumptions in the northern portion of the site (see **Appendices A**, **B** and **C** for the complete updated plans and information and Chapter 1 for summaries of the updated information). This updated information addresses a number of the comments raised by Washington State Department of Ecology (Ecology) and other commentors. Additional information is also provided in this Final EIS in the following responses to specific comments from Ecology and others. Detailed information that is more relevant to the permitting process (i.e., Ecology's Section 401 Water Quality Certification and/or Section 402 NPDES permit, the State Department of Fish and Wildlife Hydraulic Project Approval; City of Tukwila grading, shoreline substantial development and other construction permits; and/or, Army Corps of Engineers Section 404 permit) was not included in this Final EIS, and has or will be submitted with the applications for those specific permits. The EIS addresses the probable significant impacts and relevant mitigation measures associated with implementation of the Tukwila South project.

2. Your comment is acknowledged for the record. See the response to Comment 1 in this letter.

3. The SAMP for the Tukwila South project was updated subsequent to issuance of the Draft EIS. (See **Appendix A** to this Final EIS for the updated SAMP and Section 1.2 of the Final EIS for a summary of the updated SAMP.) The Fisheries and Wetland Mitigation Plans were also updated subsequent to issuance of the Draft EIS to include mitigation design refinements, and the application of Ecology guidance, among other changes. Changes to the mitigation plans, including use of Ecology guidance documents in their preparation, are summarized in Section 1.2 of the Final EIS. Complete copies of both updated plans are contained in Exhibits 2 and 3 in **Appendix A** to the Final EIS.

The Draft EIS indicated that future design reports, design refinements and other details would be provided in order to obtain permits and implement the proposed project. Plans and documents would be submitted for these permits that would contain refined design elements for infrastructure, grading and fill placement. Specific Best Management Practices (BMPs) to be implemented during construction would be outlined in final geotechnical engineering reports and the construction Stormwater Pollution Prevention Plan (SWPPP) and Temporary Erosion Sediment Control Plan (TESCP) that would be required by the Individual NPDES permit for construction stormwater discharge. Those final plans cannot be prepared at this stage of project planning. See the response to Comment 10 in this letter.

4. It is acknowledged that mass grading and infrastructure development under Alternatives 1 and 2 would impact 2,807 linear feet of Stream E, a ditched stream, and 9.43 acres of primarily low quality wetlands in agricultural production onsite (see Appendices E and F and the Plants and Animals – Fisheries and Wetlands sections of the Draft EIS for further information on these impacts). Certain infrastructure development under Alternatives 1 and 2 (i.e., the realignment of S 178th Street) would also occur in areas of the site with high to very high potential erosion and landslide hazard risk. The No Action Alternative would result in minimal disturbance to onsite wetlands and steep slopes, no realignment of S 178th Street, and less reconfiguration of Southcenter Parkway than under Alternatives 1 and 2. The No Action Alternative would require filling 327 feet of Stream E.

Per WAC 197-11-440(5)(b), reasonable alternatives analyzed in an EIS must feasibly attain or approximate the proposal's objectives for the project, but at a lower environmental cost or decreased level of environmental degradation. The applicant's objectives and "purpose and need" for the project are described in Sections 2.1 and 2.2 of the Draft EIS. The validity of the purpose and need for the project will be further evaluated by the US Army Corps of Engineers as part of the Corps' Section 404 permit (required for the proposed fill of wetlands).

As noted above, alternatives must also result in reduced impacts to the environment, relative to the Proposed Action. Alternatives 1 and 2 and the No Action Alternative represent a broad range of development that could potentially be accommodated onsite in the future. Alternative 1 constitutes a high intensity alternative at approximately 14 million square feet of development; Alternative 2 constitutes a moderate intensity alternative at approximately 11 million square feet of development; and, the No Action Alternative constitutes a low intensity alternative under existing zoning at approximately 2 million square feet of development. Impacts to all elements of the environment would generally be less under the No Action Alternative than under Alternatives 1 and 2. Impacts to certain elements of the environment (i.e., transportation, public services, air quality, noise and land use) would be less under Alternative 2 than Alternative 1. Therefore, the No Action Alternative generally would reduce impacts relative to Alternatives 1 and 2, and Alternative 2 would reduce certain impacts relative to Alternative 1.

The Draft EIS concluded that significant unavoidable adverse impacts to earth, fisheries resources and wetlands would not result under Alternatives 1 and 2, assuming implementation of the proposed mitigation measures. Mitigation would include geotechnical best management practices (BMPs), the proposed Green River Off-Channel Restoration Area, the Johnson Creek restoration and the Wetland Mitigation Plan (see the geotechnical mitigation measures in Appendix A to the Draft EIS, and the updated draft SAMP with Fisheries and Wetland Mitigation Plans in Appendix A to this Final EIS). The EIS also noted that implementation of the SAMP would result in a net benefit to aquatic resources, compared to existing conditions. Therefore, inclusion of additional alternatives would not be necessary to reduce impacts to earth, fisheries and wetlands to non-significant levels.

For the reasons cited above, the City of Tukwila, as lead agency, determined that Alternatives 1, 2 and the No Action Alternative represent an adequate range of

reasonable alternatives required to be analyzed under SEPA. No other reasonable alternatives, that meet the full test for alternatives per SEPA, are required for this EIS.

5. Section 2.5 of the Draft EIS describes the mass grading proposal, its timing, and the construction sequence. The construction sequence is shown on Figures 2-3 through 2-7 of the Draft EIS. The control, retention and treatment of stormwater; the timing of in-stream work; and the magnitude of earthwork were included in the Draft EIS analysis of impacts to wetlands, fisheries, water quality, geology, and other environmental assessments.

Final comprehensive plans for cut and fill placement, erosion control BMP details, and specific work proposals for each construction season would be included in the SWPPP required for the NPDES permit for construction discharge. Application for the Individual NPDES permit, including the SWPPP preparation, is planned for summer 2005. Grading permits would also be required, which must contain specifications for construction of berms (in accordance with Army Corps of Engineers standards, where appropriate) and specifications and testing protocols for the re-use of onsite material.

6. Appendix 4 to the Geology, Soils and Groundwater report (Appendix A to the Draft EIS) indicated that the south and west berms of the south stormwater pond, which also serves as the barrier dike, would be classified as a dam, as defined by Ecology, and would be designed accordingly. The same analysis (Geotechnical Engineering Services, Storm Water Pond and Barrier Dike, South Tukwila Development, Tukwila, Washington, dated October 6, 2004) concluded that the north and east sides of the south stormwater pond would probably not be classified as a dam, as defined by Ecology, because of project fill on the north and east sides of the pond.

These findings were summarized on pages 6-31 to 6-35 of Appendix A to the Draft EIS, which recommended that the south and west berms of the south stormwater pond be designed in accordance with Ecology's dam safety guidelines.

7. The pre- and post-development topography graphics in the Draft EIS show future finished grades anticipated over large areas, with existing contours beneath. At the reduced scale required for Draft EIS publication it is difficult to precisely determine fills and cuts at specific locations. Larger scale drawings were used in all Draft EIS analyses for the evaluation of potential environmental impacts of the proposed grading plan under Alternatives 1 and 2. Detailed, larger format graphics with final plans would accompany future permit documents and plans as needed by permit applications, reviews, and approvals by the City and other agencies.

8. Specific details on the application of construction BMPs and mitigation measures to avoid impacts to surface and groundwater quality will be prepared in the SWPPP. The SWPPP is required prior to issuance of the Individual NPDES permit for Construction Discharge by Ecology, as described in the Draft EIS Water Resources section (Section 3.2) and Appendix C to the Draft EIS. Application to Ecology for the Individual NPDES Construction Discharge Permit, including the SWPPP, is anticipated in late spring 2005. The proposed construction sequence, site characteristics relevant to assessment of construction risks, stormwater management conceptual plans, specifics on Cat-Floc 2953 Polymer use for stormwater treatment during construction, conceptual plans for the application of BMPs to the construction site, dewatering, spill response and prevention,

concrete work BMPs, and soil amendment work BMPs are detailed on pages 3-1 through 3-28 of Appendix C to the Draft EIS. Chitosan has been added as an alternative to, or in combination with, Cat-Floc 2953 Polymer, for treating construction water (see Section 1.5 and **Appendix C** to the Final EIS). Level of performance and monitoring would be similar for either Chitosan or Cat-Floc 2953; no changes in environmental impacts described in the Draft EIS would result from the use of Chitosan instead of or in combination with Cat-Floc 2953.

Ecology's 2001 Stormwater Management Manual for Western Washington construction BMPs were compared to the City of Tukwila-adopted King County 1998 Surface Water Design Manual BMPs for the Tukwila South project in Tables 3-3 and 3-4 of Appendix C to the Draft EIS, which included a summary of how the construction BMPs would be applied to the proposed project and the expected effectiveness of the BMPs. Since the Draft EIS was issued, Ecology issued an updated 2005 version of the Stormwater Management Manual for Western Washington. The list of construction BMPs in the 2005 manual is the same as in the 2001 manual version.

See the response to Comments 3 and 10 in this letter regarding recommendations from future technical studies.

9. Plans and specifications for construction, including construction sequencing, traffic control, coordination between the City and the applicant's contractors, and other issues would be addressed during the City's engineering review and permit issuance process. The overall sequence of development and infrastructure construction was evaluated in the Draft EIS (see Section 3.1 of Appendix C to the Draft EIS and pages 2-26 through 2-28 of the Draft EIS text).

10. Appendix A to the Draft EIS indicated that additional geotechnical studies will be completed at the time of final facility design. The geotechnical studies referenced in this comment are specific studies for structural design engineering. These studies are necessary for specific plat- or project-level engineering designs prior to the City of Tukwila design review process. The City review process includes a mechanism to implement design geotechnical studies, as necessary. The design-related studies for final facility design are not necessary to determine whether the general design concept is environmentally and geotechnically feasible. Feasibility is demonstrated by information in the Draft EIS and appendices.

11. The City of Tukwila adopted the 1998 King County Surface Water Design Manual. The drainage analysis and proposed stormwater control plan described in the Preliminary Master Drainage Plan (see Appendix B to the Draft EIS) is intended to meet the objectives of the Tukwila Municipal Code and the 1998 King County Surface Water Design Manual. The 2005 (or its predecessor 2001) Ecology Stormwater Management Manual for Western Washington does not have independent regulatory authority and does not establish new environmental requirements (as described in Section 1.6.1 of the 2005 updated Ecology Manual). A municipality may adopt, or an applicant may propose, other methods to protect water quality. However, where municipalities adopt and/or applicants propose methods different from those in Ecology's manual, technical justification that the chosen methods will protect water quality must be provided (rather than make the presumptive claim that water quality is protected). For the Tukwila South project, technical analyses in the Draft EIS concluded, on the basis of evaluation of

hydrology, water quality, and fisheries and wetland habitat, that impacts would be reasonably avoided or mitigated, and that there would be a net gain in habitat functions and values. These analyses provide reasonable assurance that water quality standards would be met and that all known, available, and reasonable technologies necessary to meet water quality standards would be applied.

12. Technical analyses in the Draft EIS and additional information in the Final EIS conclude, on the basis of evaluation of hydrology, water quality, and fisheries and wetland habitat, that impacts would be avoided or mitigated and that there would be a net gain in habitat functions and values (see **Appendix A** to the Final EIS and Appendices A, B, C, E and F to the Draft EIS). These analyses provide reasonable assurance that water quality standards would be met and that all known, available, and reasonable technologies necessary to meet water quality standard compliance would be applied. The applicant will consult with Ecology and others as the Section 401 review process proceeds to ensure that information necessary for Ecology's determination that water quality standards would be met is provided.

With regard to the Section 402 NPDES permit for construction discharge, construction best management practices (BMPs) in Ecology's 2001 Stormwater Management Manual for Western Washington are compared to the City of Tukwila-required King County 1998 Surface Water Design Manual BMPs for the Tukwila South project in Tables 3-3 and 3-4 of Appendix C to the Draft EIS, which included a summary of how the construction BMPs (both City-required and those in the Ecology manual) would be applied to the proposed project. Since the Draft EIS was issued, Ecology issued an updated 2005 version of the Stormwater Management Manual for Western Washington. The list of construction BMPs in the 2005 manual is the same as in the 2001 manual. These BMPs and other information will be included in a SWPPP and submitted to Ecology as part of a Notice of Intent (NOI) application for a Section 402 Individual National Pollution Discharge Elimination System (NPDES) permit for construction discharge. As explained in the BMP summary in Appendix C to the Draft EIS, the SWPPP is expected to be functionally equivalent to Ecology's manual, provide reasonable assurance that water quality standards would be met, and provide all known, available, and reasonable technologies needed to protect water quality. The Section 402 NPDES permit and application process is described in Appendix C to the Draft EIS.

Under Alternatives 1 and 2, the Tukwila South project would be constructed after annexation of the southern portion of the site within the City of Tukwila's planned annexation area. After annexation, the entire Tukwila South project would be subject to Tukwila Municipal Code, which includes drainage requirements under the King County 1998 Surface Water Design Manual and aquatic resource protection under the City's Sensitive Area Ordinance. Under the No Action Alternative, it is assumed that the site would be annexed in the future and development would occur consistent with City of Tukwila regulations.

13. The purpose of an EIS is to disclose the probable significant impacts of a given proposal and its alternatives, and identify reasonable mitigation measures that would mitigate significant impacts (WAC 197-11-440 (6)(a)). Per SEPA, the Tukwila South Draft EIS focused on the evaluation of probable significant impacts and the identification of reasonable mitigation measures. In particular, a discussion of probable significant impacts to wetlands and proposed mitigation measures is included in Appendix F to the

Draft EIS and summarized on pages 3.4-9 through 3.4-17 of the Draft EIS text. It is acknowledged that the Department of Ecology has guidelines for using the Antidegradation Policy (WAC 173-201A-170) to establish compliance with water quality standards. The project's compliance with these guidelines will be determined by Ecology as part of the Section 401 Water Quality Certification permit process. Ecology will determine if sufficient justification regarding avoidance of impacts to wetlands has been provided as part of that process. This EIS provides data and analysis that will assist Ecology in making this determination.

The proposed stormwater pond location is part of the applicant's proposal subject to review in this EIS per SEPA. It is acknowledged that installation of the proposed south stormwater pond under Alternatives 1 and 2 would impact Wetlands 8 and 9, and a portion of Wetland 10. (A stormwater pond would not be constructed in the southern portion of the site under the No Action Alternative, as no development is assumed in that area, and associated impacts to wetlands would not occur.) This EIS adequately addresses the probable significant impacts and mitigation associated with the proposed location of the south pond under Alternatives 1 and 2, and the lack of construction of the pond under the No Action Alternative.

14. The project proposes to fill mainly low quality wetlands in agricultural fields and mitigate them by: (1) creation of new wetlands along a restored Johnson Creek, in a new Green River Off-Channel Restoration Area, and adjacent to existing Wetland 10; and (2) rehabilitating and enhancing existing wetlands by breaching dikes, breaking existing drainage tiles, grading, planting, and monitoring. The compensatory actions and mitigation ratios were prepared using the current 2004 Ecology guidelines in the Wetland Mitigation Plan (Exhibit 3 in **Appendix A** to the Final EIS). A summary of the Wetland Mitigation Plan updates is provided in Section 1.2 of the Final EIS. The Wetland Mitigation Plan includes an explanation of how Ecology guidance documents were used to define proposed wetland rehabilitation and enhancement, and to establish the proposed mitigation ratios.

The applicant has applied to the City of Tukwila for a Sensitive Areas Master Plan Overlay District designation for the site. This designation would allow for consideration of the proposed site-wide management of sensitive areas, buffers, and mitigation proposals with greater gains in functions and values than would be likely under standard Tukwila Sensitive Areas Ordinance provisions. The City's regulations call for no net loss in wetland and stream functions and values. The net gains in wetland habitat functions and values are summarized in the updated Wetland Mitigation Plan, and draft Sensitive Area Master Plan submitted with the Overlay District application to the City of Tukwila (see **Appendix A** to the Final EIS). The net gain in water quality functions that would result from the Wetland Mitigation Plan were described in Attachment A to Appendix C to the Draft EIS.

15. Wetland 11 extends offsite to the south. The offsite buffer conditions and protections of Wetland 11 from future offsite development are described in the updated Wetland Mitigation Plan (see Section 1.2 of the Final EIS for a summary of the changes to the updated Wetland Mitigation Plan, and Exhibit 3 in **Appendix A** to the Final EIS for the full updated Wetland Mitigation Plan). Wetland buffers, including the offsite buffer protection for Wetland 11, are also described in more detail in the Wetland and Stream

Buffer Plan, summarized in Section 1.4 of the Final EIS and contained in **Appendix B** to the Final EIS.

The undifferentiated $Qpog_{1,2}$ aquifer discharges as a series of springs and seepage lines along the base of the western slope. This aquifer system was described in Section 5.2.3 and Section 7.2.2 of Appendix A to the Draft EIS and summarized on pages 3.2-13 through 3.2-15 of the Draft EIS text. Clearing, grading and development of impervious surfaces could occur on portions of the western slope, but would not be likely to impact spring or seepage flows. This is because the site uplands are located in a groundwater discharge zone. No measurable impacts to Qpog springs or seepages on the slope from development under Alternatives 1 and 2 would be likely to occur.

Wetland 10 is located at the base of the western slope to the Green River valley. Wetland 10 hydrology is supported by direct precipitation and from groundwater seepages from the base of the western slope. The Appendix A to the Draft EIS described these seepages as originating from the undifferentiated $Qpog_{1,2}$ aquifer.

The majority of Wetland 10 would be unaffected by excavation and fill for the proposed flood protection barrier dike and stormwater berms. The stormwater berms would be constructed on the opposite side of the flood protection barrier dike from Wetland 10, and would not impact Wetland 10. The area where the south stormwater pond would be located is not hydrologically connected to Wetland 10 by (ditched) Stream C.

The flood protection barrier dike would extend west from the northwest corner of the proposed pond into the upland topography, and would cross a northern extension of Wetland 10. The flood protection barrier dike would be keyed into the existing ground surface. The area north of the flood protection barrier dike, east of the upland slope, and south of S 200th Street, would be filled to approximately elevation 29 or 30 feet msl. The retained portion of Wetland 10 would continue to be hydrologically supported by direct precipitation and groundwater seepages from the undifferentiated $Qpog_{1,2}$ aquifer, as well as by base flow contribution from ditched Stream C, which would be plugged and dispersed into Wetland 10 as part of the Wetland Mitigation Plan (see Exhibit 3 to Appendix A to the Final EIS).

16. The proposed project's relationship to the City of Tukwila Shoreline Master Program was discussed on pages 3.7-22 to 3.7-23 of the Draft EIS. No specific development plans have been prepared for the site to date, beyond infrastructure development; therefore, the specific design and location of public access to the shoreline cannot be determined at this time. The applicant will be required to follow all applicable regulations regarding public access to the shoreline.

The City of Tukwila Shoreline Master Program includes an overall goal to "provide safe and reasonable access for the public to the shorelines." The Public Access Element of the Tukwila Shoreline Master Program defines goals and policies relating to shoreline public access. Following are the goals and policies of the Public Access Element of the Tukwila Shoreline Master Program.

Goals:

1. Encourage safe, convenient and diversified access for the public to the shorelines of Tukwila.
2. Assure that the intrusions created by public access will not endanger life, property or have adverse effects on fragile natural features.
3. Increase public access to publicly owned shorelines.
4. Encourage public access to privately owned shorelines, consistent with private property rights.
5. Encourage inland location of development so that access along shorelines is enhanced.

Policies:

1. Public access to and along the water's edge should be provided in new developments.
    a. Water-dependent economic activities should be designed to allow substantial public access to the shoreline.
    b. For non-water dependent economic activities, where permitted, the entire water's edge should be available for public access, consistent with private property rights.
    c. For multifamily residential developments the water's edge should be kept free of buildings and fences with public access made possible.
    d. For a new single-family dwelling unit, the water's edge should be kept free of buildings and fences.
    e. For other non-specified development, the water's edge should be available for public access.
    f. All public shorelands, except as noted in other policies, should be available for public access to the water's edge.
2. Any modifications or extensions to existing development should be designed to allow public access.
3. A trail system should be developed along the river.
    a. Trails should be developed for linear access through public shoreline areas.
    b. Access points to and along the river should be linked by a system of trails.
    c. The connections of other trails in the region to the shoreline trail system should be encouraged and developed.
    d. To assist in developing a trails system, incentive should be offered to property owners for utilizing setback areas.

Additional policies regarding public access to the shoreline are included in the Shoreline Element of the Tukwila Comprehensive Land Use Plan. See pages 3.7-7 and 3.7-8 of the Draft EIS. The Tukwila Municipal Code does not specify public access requirements for the Shoreline Overlay Zone.

17. Information on existing surface and groundwater quality was described in Appendix C to the Draft EIS and summarized on pages 3.2-7 through 3.2-12, and 3.2-16 through 3.2-17 of the Draft EIS. A discussion of existing agricultural chemical use onsite in relation to existing water quality was provided in Appendix C and summarized on page 3.2-12 and 3.2-17 of the Draft EIS.

The Draft EIS acknowledged that no analysis of pesticides was performed on samples collected from the onsite surface water quality stations. The degree or frequency with

which any of these compounds occur in the onsite ditches and ditched streams is not known; however, it is reasonable to assume that some amount of pesticide product could enter the ditches and ditched stream when overland flow occurs from rainstorms shortly after application. In terms of groundwater quality, three groundwater wells (OB-3, OBW-12 and OBW-8) were sampled for water quality between November 2003 and March 2004 to characterize existing groundwater quality conditions. The results of these samplings indicated that localized influences on these wells from agricultural practices may be occurring during some times of the year. Poor water quality noted in well OBW-3 may be related to fertilizer use on the driving range. Elevated fecal coliform levels in all three wells are likely due to agricultural and wildlife influences onsite and to the south of the site offsite.

Prior to specific studies conducted for this EIS, in June 2001, limited samples of soils were taken in onsite agricultural fields south of S 200th Street. Analysis of these samples for the presences of pesticides found that potentially hazardous chemicals were at "non-detect" levels, and were well below MTCA cleanup levels. Therefore, further investigation for the presence of pesticides at potentially hazardous levels onsite was not conducted (Riley Conkin, Farallon Consulting, personal communication with Blumen Consulting Group staff, May 27, 2005). As indicated in the Draft EIS (page 3.5-7), if contamination is found in other areas of the site during construction and long-term buildout, beyond the former gravel pit area, investigation and any cleanup that may be warranted would be conducted consistent with MTCA regulations.

Matrix Comments

1. This revision to the Fact Sheet, Permits and Approvals, has been made. See Chapter 3, Errata, of this Final EIS.

2. This revision to the Draft EIS has been made. See Chapter 3, Errata, of this Final EIS.

3. This revision to the Draft EIS has been made. See Chapter 3, Errata, of this Final EIS.

4. The proposed development concept for the site is discussed on pages 2-11 through 2-14 of the Draft EIS. The proposed concept calls for an integrated campus with a range of uses. As indicated in the Purpose and Need section of the Draft EIS (page 2-4 through 2-6), it is the applicant's position that an integrated emerging technology campus must include supporting uses, such as retail, entertainment and restaurant uses. The applicant's position is that emerging technology industries and institutions value campus sites with convenient access to a range of uses and amenities to assist in their ability to attract talented labor. The validity of the purpose and need for the project, as defined by the applicant, will be evaluated as part of the US Army Corps of Engineers Section 404 permit (required for the proposed fill of wetlands). See response to Comment 4 above in this letter.

5. The transition of the proposed retail development from a more traditional form to a more urban form described on page 2-35 of the Draft EIS could occur gradually over a 15-plus year period, as the urban campus densities and the demand for more intensive retail uses onsite increase. This transition would not necessarily require demolishing existing, more recently built structures, but could occur through an infill/densification process.

The range of retail uses could expand over time from traditional retail tenants, including grocery store anchor(s) and possibly big box retail tenants, to more entertainment-type tenants. Over the transition period, the new structures that would be developed on the site could shift from one-story buildings with surface parking, to multi-storied buildings with structured parking, in order to more efficiently use the land area. Surface parking lots could be redeveloped to accommodate multi-story buildings and structured parking facilities.

6. The U.S. Army Corps of Engineers issued a Jurisdictional Determination letter on April 29, 2005, and provided a copy of the Jurisdictional Determination to Ecology on the same date.

7. Your comment is acknowledged for the record. *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al.) was originally published in 1979 and reissued in 1992. Either date reference is to the same document.

8. Total wetland area is provided on page 3.4-1 of the Draft EIS text and in Appendix F to the Draft EIS. Wetland totals are also included in Table 1 of the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS).

9. Wetland 3 is the only wetland determined to be isolated in the Army Corps of Engineer's Jurisdictional Determination; the Army Corps has taken jurisdiction of all other wetlands. Table 3.4-1 of the Draft EIS shows all wetlands and all proposed impacts, whether they are isolated or their jurisdictional status.

10. Table 1 in the updated Wetland Mitigation Plan (Exhibit 3 in **Appendix A** to the Final EIS) shows wetland classifications using the Ecology (Hruby 2004) rating system.

11. A Wetland and Stream Buffer Plan has been prepared that explains the buffers proposed for each stream and wetland, and the functions expected and required of these buffers to protect aquatic resources in each case. The Buffer Plan is summarized in Section 1.4 of the Final EIS, and attached as **Appendix B** to the Final EIS. Buffers for the Tukwila South project would be determined through the City's Sensitive Area Master Plan Overlay provisions in its Sensitive Areas Ordinance, as explained in the updated SAMP (see **Appendix A** to the Final EIS and the summary in Section 1.2 of the Final EIS).

12. Wetland 2 has no surface water connection to other waters, and therefore, was described as hydrologically isolated in the Draft EIS. However, the US Army Corps of Engineers has taken jurisdiction of Wetland 2, because there is a continuum of hydric soil between Wetland 2 and other waters of the U.S., as indicated in the April 29, 2005, Army Corps Jurisdictional Determination letter copied to Ecology.

13. Wetland 3 was determined to be non-jurisdictional by the US Army Corps of Engineers in the April 29, 2005, Jurisdictional Determination, because it has no surface water connection to other waters and is surrounded by upland soils. As noted in the response to Comment 9 in this letter, impacts to Wetland 3 and all wetland impacts, regardless of jurisdiction, were evaluated in the Draft EIS analysis and addressed in the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS).

14. The stream connection of Wetland 18 was described in Draft EIS Section 3.4.1, page 3.4-4, fourth paragraph.

15. It is acknowledged that Wetland 10 contains two hydrogeomorphic (HGM) classes. An updated functional assessment that includes separation of the slope and depressional outflow portions of Wetland 10, along with other changes, is summarized in Section 1.3 of this Final EIS. The results of the updated functional assessment are also provided in the updated Wetland Mitigation Plan, Exhibit 3 to **Appendix A** of the Final EIS.

16. Your comment is acknowledged for the record. This revision to the Draft EIS has been made. See Chapter 3, Errata, of this Final EIS.

17. Your comment is acknowledged for the record. The reference should have been to Wetlands 5 and 13, not Wetlands 6 and 13. This correction to the Draft EIS has been made. See Chapter 3, Errata, of this Final EIS.

18. See the response to Matrix Comment 11 in this letter.

19. Current plans propose 9.43 acres of wetland impact, which is the amount used in the updated Wetland Mitigation Plan (see Exhibit 3 of **Appendix A** to the Final EIS).

20. The City of Tukwila believes that including mitigation impacts in Table 3.4-2 is beneficial to understanding the nature of proposed wetland modifications. Table 1 of the updated Wetland Mitigation Plan summarizes impacts as requested in this comment (see Exhibit 3 of **Appendix A** to the Final EIS).

21. See the response to Comment 7 in this letter.

22. See also the response to Comments 4 and 13 in this letter. Your comment regarding Ecology's review is acknowledged.

It is acknowledged that impacts to 5.1 acres of wetland would be avoided by relocating the dike northward to avoid Wetland 10. However, the Final EIS describes how the functions and values lost as a result of the proposed dike relocation would be mitigated in compliance with Tukwila's Sensitive Areas Ordinance. See the updates to the wetland functional assessment in the Wetland Mitigation Plan in Exhibit 3 to **Appendix A** to the Final EIS, and the summary of the updated assessment in Section 1.3 of the Final EIS.

23. Stream impacts, including the total area proposed to be filled, were described in Section 3.3 of the Draft EIS and in the Fisheries Technical Report (See Table 4 in Appendix E of the Draft EIS).

24. Indirect and direct construction impacts were described in the Wetland Assessment (Appendix F to the Draft EIS). The updated Wetland Mitigation Plan includes detailed descriptions of creation, rehabilitation, and enhancement proposals for Wetlands 10 and 11 (see Exhibit 3 in **Appendix A** to the Final EIS). Mitigation construction sequencing is described in Section VII of the updated SAMP (see **Appendix A** to the Final EIS and the summary on pages 3.4-9 through 3.4-14 of the Draft EIS text).

Since issuance of the Draft EIS, further refinement of construction plans for the relocated flood protection barrier dike has occurred which indicated that construction impacts to Wetland 10 would result. This construction is likely to include relocation of a Highline Water District water main now running under Wetland 10 to an alignment along Orillia Road S and S 200th Street. This relocation would cause impacts during the first construction season up to 50 feet south and west of the new flood protection barrier dike for a distance of approximately 940 feet (about 1.08 acres). This entire area is within the area planned for rehabilitation under the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS).

25. Section 5.1.2 in Appendix A to the Draft EIS explained that Wetland 15 is hydrologically supported by discharge from the $Qpog_1$ aquifer. No grading activity would occur upgradient from Wetland 15 that could impact recharge to the $Qpog_1$ aquifer or any other shallow hydrologic inputs to Wetland 15. Grading activity planned downgradient from Wetland 15 would not impact the spring discharge from the aquifer to Wetland 15, because the excavation would be lower than and east of its point of discharge. The proposed re-alignment of S 178th Street would be located approximately 200 feet downgradient and at an elevation approximately 50 feet below Wetland 15. The $Qpog_1$ aquifer was described in Section 5.2.3 of Appendix A to the Draft EIS and summarized on pages 3.2-13 through 3.2-15 of the Draft EIS. Groundwater and surface water interaction impacts are evaluated in Section 7.3 of Appendix A to the Draft EIS.

26. See the response to Comment 15 in this letter for a discussion of potential impacts to Wetland 10 from construction of the proposed flood protection barrier dike and south stormwater pond.

27. See the response to Matrix Comments 25 and 26 in this letter for information on retained Wetlands 15 and 10, respectively. None of the retained wetlands are hydrologically dependent on recharge from the developed project. No project development would occur upgradient of the remaining western slope wetlands (including Wetland 1). These wetlands would continue to be supported by groundwater seepages from either the $Qpog_1$, $Qpog_2$, undifferentiated $Qpog_{1,2}$ aquifers, shallow interflow, and direct precipitation (see Section 5.2.3 and 7.2.2 of Appendix A to the Draft EIS). Wetland 11 hydrology would continue to be supported by direct precipitation, seasonal flooding of the Johnson Creek system, and in some areas, groundwater flooding from the alluvial aquifer. Johnson Creek is hydrologically supported from offsite areas to the south and would not be impacted by the project. The alluvial aquifer underlying Wetland 11 is upgradient from proposed development, and subsequently would not be impacted by the project.

28. See the response to Matrix Comment 24 in this letter.

29. See the response to Matrix Comment 26 in this letter.

30. The original and greatest impacts to natural streams and wetlands in the site vicinity occurred in the late 1800s and early 1900s when river levees and drainage ditches were constructed, and wetlands were filled for agriculture. Other hydrologic impacts to the lower Green River system occurred when the White River was permanently diverted out of the basin and the Howard Hanson dam was built. These historic impacts were described in Appendices C and E to the Draft EIS.

There are no known projects that are pending in the immediate site vicinity. Any future projects in the area would be required to comply with applicable sensitive area and stormwater control regulations in order to mitigate potential impacts to wetlands and other water resources. It is acknowledged that the project would result in the fill and loss of wetland habitat. However, nearly all wetlands proposed for fill are low quality in agricultural production. Other future projects may or may not result in the loss of wetland area as well. The Tukwila South project proposes compensatory mitigation (i.e., the Green River Off-Channel Restoration Area, Johnson Creek restoration area and wetland rehabilitation in the southwestern portion of the site) that would result in an overall increase in wetland functions and values in the site area. To the extent that other projects maintain or enhance wetland functions and values, on a net basis overall wetland functions and values in the Green River Basin would be improved over its existing condition. Cumulative wetland impacts are also addressed in the response to Comment 13a in this letter.

All surface water from the Tukwila South site flows to the Green River; there are no intervening properties between the site and the river. Onsite surface flows originate from groundwater seeps and pipe outfalls along the western hillside. There are four existing drainage basins onsite: the northeast, north, central and south basins. All of the drainage basins, except the northeast basin, include some offsite area. The proposed stormwater control system described and analyzed in the Preliminary Master Drainage Plan (see Appendix B to the Draft EIS) and summarized on pages 3.2-19 through 3.2-21 of the Draft EIS text accounts for these offsite areas. In particular, with the proposed stormwater control system, baseflows entering the site from the undeveloped portions of the western hillside (including both on- and offsite areas) would bypass the stormwater system and remain separated from developed area runoff (i.e., north basin baseflow seeps tributary to Stream E, central basin baseflows to Wetland 1, and south basin baseflows tributary to the Johnson Creek basin).

31. No functional buffer currently occurs along the east side of Wetland 1. A vegetated buffer proposed along the eastern side of Wetland 1 and establishment of a forested Native Growth Protection Area (NGPA) extending several hundred feet upslope to the west of Wetland 1 are described in the Wetland and Stream Buffer Plan (see Section 1.4 and **Appendix B** to the Final EIS).

32. The total proposed wetland mitigation would consist of 27.80 acres of rehabilitated wetland, 4.35 acres of enhanced wetland, and 3.05 acres of created wetland. These figures, definition of rehabilitation versus enhancement, and explanation of the proposed mitigation ratios are provided and explained in the updated Wetland Mitigation Plan, which justifies the proposed compensatory mitigation using the recommended Ecology guidance (see Exhibit 3 in **Appendix A** of the Final EIS).

33. See the response to Comment 32 in this letter.

34. Use of the agricultural fields by waterfowl and other birds was discussed in Section 3.3.1 of the Draft EIS, and in Section 3.2.2 of the Plants and Animals Report (see Appendix D to the Draft EIS). Project impacts were discussed in Section 3.3.2 of the Draft EIS and in Section 4.1.2 of Appendix D to the Draft EIS. The agricultural fields encompass approximately 70 to 80 acres of the project site, and these fields are used by several species of birds as winter foraging sites, including Canada geese, wigeon, green-winged

teal, mallards, and gadwall. Killdeer were flushed from the fields during early spring and could nest on the fields until tilling and planting later in the spring. As discussed in the Draft EIS (page 3.3-21), these fields, and the winter foraging habitat they provide, would be eliminated under either Alternative 1 or 2, which would reduce such habitat in the valley incrementally. The wetland mitigation area south of S 200th Street would not be designed to provide waterfowl habitat, because it is within the 10,000-foot FAA hazard zone of SeaTac Airport. Much of the Green River Off-Channel Restoration Area would be outside this zone, and portions could benefit waterfowl; however, this site is designed primarily to provide fish habitat.

35. Final wetland mitigation plans to the level of detail described in this comment would be prepared in the future as part of the Sections 404 and 401 permitting process and would include the elements described in this comment. An updated, detailed Wetland Mitigation Plan is included in Exhibit 3 to **Appendix A** to the Final EIS and summarized in Section 1.2 of the Final EIS.

36. A 10-year monitoring plan and contingency plans are included in the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** of the Final FEIS).

37. The portions of the Johnson Creek restoration and Green River Off-Channel Habitat Restoration Areas with supporting hydrology for wetland vegetation are included in the updated Wetland Mitigation Plan (see Exhibit 3 to **Appendix A** of the Final FEIS). Approximately three acres of wetland habitat would be created in these areas in addition to the fisheries mitigation area provided (see the Fisheries Mitigation Plan in Exhibit 2 to **Appendix A** of the Final EIS).

38. See the response to Comment 14 in this letter. The proposed project would result in a net loss of wetland area. The updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS) provides details on the wetland functions to be replaced. The updated SAMP also explains the increase in wetland functions and values that would occur site-wide under Alternatives 1 and 2. The wetland functional assessment prepared for the Draft EIS showed a net gain in wetland functions in the project vicinity with the proposed mitigation (see Appendix F to the Draft EIS).

39. Hydrologic data are included in the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final FEIS), and in Draft EIS Appendices A and F. Hydrologic monitoring of the proposed mitigation sites is ongoing as explained in the updated Wetland Mitigation Plan.

40. See the response to Comment 21 in this letter.

41. See the figures showing drainage ditches in the vicinity of Wetlands 10 and 11 in the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS).

42. Your comment is acknowledged for the record.

43. There would be no wetland or wetland buffer impacts associated with the proposed temporary haul route. Impacts to streams and fisheries resources were evaluated in Section 3.1 of Appendix E to the Draft EIS and summarized on pages 3.3-23 through 3.3-30 of the Draft EIS text. The haul route would primarily follow the existing levee

maintenance road; therefore, no impacts to riparian vegetation would be expected. The haul route would be removed and plantings would be completed in the Green River Off-Channel Restoration Area during the third construction season.

44. There are small areas on the upper forested slopes along the western edge of the site that are outside of the open space encompassing sensitive areas and their buffers. This area is not proposed for development under Alternatives 1 and 2 (see Figures 2-10 and 2-11 of the Draft EIS). If this area is developed in the future, such development would require environmental review under SEPA.

45. As indicated in the Draft EIS, both Alternatives 1 and 2 would meet the objectives of the applicant, and call for implementation of the major infrastructure systems for the project at the outset of development (see page 2-29). Based on the applicant's proposal, Alternatives 1 and 2 would require the same total onsite developed area and would result in a similar amount of impervious surface area; therefore, these alternatives would have the same basic infrastructure requirements. As a result, impacts to Wetlands 7, 8, 9 and 10 would be the same under Alternative 2 as under Alternative 1. Avoidance of impacts will be evaluated by Ecology as part of 401 permit process. Also see the response to Comment 4 in this Letter for a discussion of the range of alternatives that were analyzed in the Draft EIS.

46. See the response to Matrix Comment 34 in this letter. As discussed on page 3.3-6 of the Draft EIS and in Section 3.2.2 of the Plants and Animals Report (see Appendix D to the Draft EIS) Wetlands 7, 8, and 9 function primarily as winter foraging and resting habitat for waterfowl (e.g., Canada geese, wigeon, teal, and gadwall). In particular, over-winter corn stubble provides food for wintering waterfowl. The fields are intensively managed for corn production for most of the year and undergo tilling, planting, and pesticide application, which limits their value to wildlife. The eastern portions of Wetland 10 currently consist largely of grazed pasture, which provides only limited foraging habitat during winter or other times of year for a variety of waterfowl, great blue herons, killdeer and other shorebirds, and other species, depending on their occurrence in the area. Because of livestock grazing in Wetland 10, cover and potential nesting habitat are limited for most wildlife species under current conditions.

47. See the response to Matrix Comment 22 in this letter.

48. See the response to Matrix Comment 45 in this letter.

49. The proposed Wetland and Stream Buffer Plan is summarized in Section 1.4 of the Final EIS and attached as **Appendix B** to the Final EIS. The buffer plan describes surrounding land uses, easements, zoning, and other issues pertinent to protection of the retained wetland and mitigation area functions.

50. See the response to Matrix Comment 37 in this letter.

51. Procedures to control reed canarygrass in the mitigation areas are included in the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS).

52. Detailed discussion of proposed wetland mitigation and anticipated hydrologic regimes is contained in the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the

Final EIS). No change to the outlet elevations of Wetlands 10 and 11 is proposed. Water would leave the mitigation areas at rates and volumes similar to under current conditions. Wetland 10 would receive additional supporting hydrology from plugged agricultural Ditch C, and existing drainage tiles in Wetland 10 would be broken. The East Fork of Johnson Ditch would be partially breached where it enters the site to direct drainage into Wetland 11.

53. See the response to Matrix Comment 18 in this letter.

54a. The updated Wetland Mitigation Plan (see Exhibit 3 to **Appendix A** of the Final EIS) incorporates the results of the revised WAFAM analysis. The request for more detail on the WAFAM analysis, functional assessment detail, and professional judgment, will be provided to Ecology along with the underlying data sheet scores for WAFAM as part of the Section 401 Water Quality Certification review process.

54b,c. The WAFAM analysis has been updated to be consistent with the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS). The wetland mitigation area would be planted primarily with woody cover to provide scrub-shrub and forest habitats over time, which are expected to have higher values for many wildlife species, including mammals, such as beaver and muskrat, than under existing conditions. Once they mature, the proposed vegetation cover in the mitigation areas would likely resemble the native wetland habitats that occurred in the valley prior to historic re-routing of the White River and conversion to agricultural fields via construction of levees, drainage ditches, and filling of wetlands. The wetland mitigation area may have lower values, however, for other species adapted to grassy pasture or worked cornfield habitats, such as field mice, voles and wintering waterfowl. The mitigation wetlands, once fully established, would represent an overall improvement in habitat functions, as compared to existing conditions.

55. Your comment is acknowledged for the record.

56. See the response to Comment 35 in this letter.

57. See the response to Comment 36 in this letter.

58. See the response to Comment 38 in this letter.

59. Your comment is acknowledged for the record. This correction to the Draft EIS has been made. See Chapter 3, Errata, of this Final EIS.

60. See the response to Matrix Comment 21 in this letter.

61. Discrepancies between the Joint Aquatic Resource Permit Application (JARPA) and the functional assessments in the Draft EIS, as well as their resolution, are explained below. Corrections are included in the revised functional assessment described in Section 1.3 of this Final EIS.

For Wetland 1, the December 2004 JARPA Sheet 7 showed the area of impact as 0.26 acres. The WAFAM input data sheet included in the JARPA showed an assessment unit (AU) area of 0.18 (indicated on the sheet as hectares). The WAFAM analysis has been

corrected to input the AU as 0.11 hectares, which equals 0.26 acres. The area of impact includes the area of fill (0.18 acres) plus the area of construction disturbance (0.08 acres). The 0.26 acres also represents the entire depressional portion of the wetland, so the existing condition and impact scores are the same.

For Wetland 5, Sheet 12 of the JARPA showed an impact area of 0.02 acres (0.01 hectares), whereas data tables showed 0.02 and 0.04 acres. The WAFAM analysis was conducted using the correct impact area of 0.02 acres (0.01 hectares); therefore, the functional scores for Wetland 5 have not changed from the JARPA or Draft EIS.

The March 30, 2005 JARPA Sheet 15 showed an impact area of 1.50 acres for Wetland 8, whereas Table 6 in the December 2004 JARPA and the Draft EIS Appendix F showed 1.45 acres. The existing condition and impact area is 1.50 acres, which represents the minor adjustment to the wetland delineation resulting from the wetland confirmation visits by the US Army Corps of Engineers and Ecology. This evaluation occurred between the December JARPA and the issuance of the Draft EIS. The functional assessment described in Section 1.3 of the Final EIS is updated using the revised area of 1.50 acres.

For Wetlands 7 and 8, a few minor discrepancies were found between the raw data sheets showing WAFAM inputs and the program spreadsheets that perform the analysis and calculate the functional scores. These inputs were corrected in the updated functional assessment. In addition to the area changes noted above for Wetland 8, the acreage for Wetland 7 was updated (3.07 versus 3.08 acres shown in Table 6 to Appendix F of the Draft EIS). Together, these changes do not result in substantial differences to the functional scores for Wetland 7, generally less than a tenth of a point. As noted above, the scores for Wetland 8 only changed by a few tenths for each function. The updated scores are shown in the revised Table 6 included in Chapter 3, Errata of this Final EIS.

The revised WAFAM analysis incorporates the minor corrections outlined above with respect to Wetlands 1, 7, 8, and 10 and calculates the functional loss from the proposed wetland alteration. This analysis is consistent with the identified impacts listed in Table 3.4-2 of the Draft EIS, as is the updated Wetland Mitigation Plan (Exhibit 3 of Appendix A of the Final EIS). Further, the wetland impacts shown in Table 3.4-2 of the Draft EIS are consistent with the corresponding wetland impact areas shown in the April 8, 2005 Public Notice for the Section 401/404 permit.

62. The updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS) explains that shallow groundwater monitoring wells (piezometers) are currently being monitored across the proposed wetland mitigation areas. The shallow wells will provide additional data regarding the near surface permeability and the ability of the soils to support wetland hydrology. Continuous recording of water levels in the deep wells is ongoing. The piezometers in Wetlands 10 and 11 were established in silt loam and peat soils to depths of 18 to 20 inches below the existing ground surface. The updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to the Final EIS) proposes to excavate no deeper than 24 inches below the existing ground surface. It is unlikely that excavation of the wetland mitigation site would expose highly permeable soils or result in draining of the wetland areas.

63. See the response to Matrix Comment 62 in this letter.

64. See the response to Matrix Comment 62 in this letter with regard to shallow hydrology monitoring. A fairly extensive zone of organic silt and peat is present within a few feet of ground surface in the vicinity of Wetland 11 (see soil descriptions on well logs for OBW-8, OBW-9 and OBW-10, in Appendix A to the Draft EIS). A seasonal 'ponded water' zone forms over this low permeability material during the wetter months of the year. Rainfall soaks into the ground through relatively permeable soil until it encounters a barrier, or less permeable layer, which slows further downward movement. As rainfall exceeds the amount of water these less permeable layers will allow to infiltrate, the excess water builds up and begins to 'pond' on the top of the barrier.

Wells OBW-8, OBW-9 and OBW-10 were completed (screened) in the alluvial aquifer. The groundwater level in the alluvial aquifer may or may not correspond to water present at or near ground surface. Water elevations in the alluvial aquifer may be near water year lows while the ponded water zone elevations may be at or near ground surface. This would likely occur near the start of the wet season, when infiltrated rainfall quickly builds up a groundwater mound on top of the organic silt/peat layer, while the alluvial aquifer begins to rise more slowly. Later in the wet season, the alluvial aquifer may also be at or near ground surface. Toward the end of the wet season, the water elevations in the alluvial aquifer would remain high and begin to drop back toward water year lows toward the end of summer/beginning of fall. Water elevations in the ponded water zone would likely drop more quickly after the end of the wet season, because direct rainfall is the primary source of recharge.

Where the organic silt/peat layer is very thin or absent, alluvial aquifer levels, as measured in wells OBW-8, OBW-9 and OBW-10, would likely correspond more directly to surface water levels. A series of piezometers has been installed across Wetlands 10 and 11 in the areas proposed for mitigation. Measurement of water levels in these wells is ongoing. The data from these wells, as well as from the deep monitoring wells, will be used to more fully describe the proposed plant communities and anticipated hydrologic regimes, and modify the design in the final Wetland Mitigation Plan, as warranted. The data presented in the Draft EIS and updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to this Final EIS) demonstrate that sufficient hydrology is present in the mitigation area to support wetland rehabilitation, enhancement and creation.

65. The updated Wetland Mitigation Plan (see **Appendix A** to the Final EIS) provides proposed performance criteria for wetland hydrology within the mitigation wetlands. Piezometers are currently being monitored across the proposed wetland mitigation areas. Continuous recording of water levels in the deep wells is ongoing (see the response to Comment 64 in this letter). The updated Wetland Mitigation Plan is based upon updated site topography and hydrologic monitoring data. Detailed hydrologic data within the wetland rehabilitation area continues to be collected. Data collected through publication of the updated Wetland Mitigation Plan indicates that sufficient near surface hydrology is present to support the vegetation communities proposed in the plan. The intent of excavating and reshaping a portion of the mitigation site is to establish hydrologic regimes different than under current conditions. Excavated portions of the site are anticipated to have water on the ground surface for longer durations than occurs under existing conditions. It is expected that the forested, scrub-shrub, and shallower emergent plant communities would not be inundated year-round, and that in drier years the deeper emergent communities also would be above water. In wetter years, depth and duration of inundation would be greater in these communities. The performance

criteria proposed for the wetland mitigation areas is to meet the federal and state definitions of wetland hydrology by containing saturation within a majority of the root zone for at least 12.5 percent of the growing season, which in western Washington is 30 days.

66. These details of the Wetland Mitigation Plan will be included as part of project permitting.

67. These details of the planting plan will be included as part of project permitting.

68. These details of the planting plan will be included as part of project permitting.

69. For brevity, the descriptions in the Draft EIS text were summarized from the full version found in Appendix E to the Draft EIS, the Fisheries Technical Report. See Section 2.5 (pages 16 through 24) of Draft EIS Appendix E for a description of each stream, including existing riparian conditions.

70. Stream E is isolated from fish-bearing waters by a pump station. Stream E flows either at extreme low flow into the existing P-17 pump station operated by the City of Tukwila, or at all other flows into the S 180th Street pump station, also operated by the City of Tukwila.

71. The source of this statement is Draft EIS Appendix C, page 2-44 and Table 2-4.

72. Appendix E to the Draft EIS described only the area of Stream E-2 near the confluence with Stream E as potentially fish-bearing. The rest of Stream E-2 upstream of the confluence area is considered non-fish-bearing. This area would not be affected by the project and as a result was not surveyed in detail. This statement in the Draft EIS has been clarified. See Chapter 3, Errata of this Final EIS.

73. The statement regarding long-term isolation in the sixth paragraph on page 3.3-12 of the Draft EIS, describes Stream E-3, not Stream E-2. Stream E-3 is isolated by several hundred feet of steep culvert.

74. Details on pipe size and elevation were provided in Appendix E to the Draft EIS (see page 22).

75. As described in Appendix E to the Draft EIS (see page 23), Johnson Ditch has low dissolved oxygen and low pH relative to preferred water quality conditions for salmonids. See Appendix C to the Draft EIS (Section 2.5.6; Tables 2-9 and 2-10) for a description of Johnson Ditch water quality and the summary on page 3.2-11 of the Draft EIS text. As described in the Draft EIS, Johnson Ditch did not meet the Primary Contact Recreation Use Category criterion (WAC 173-201A) for fecal coliforms. Elevated fecal coliform concentrations measured in December 2003, at both inflow and outflow stations coincided with the highest ammonia and phosphorus concentrations, which usually indicate animal waste influence.

76. Details on Ditches A and B, including hydrologic connections, are described in Appendix E to the Draft EIS (see pages 20-21).

77. References to the SASSI documents are provided in Appendix E to the Draft EIS (see Section 2.8).

78. The entire site drains to the Green River, thus all onsite streams and wetland drainage enters the river via the four outfalls. Figure 5 in Appendix E to the Draft EIS showed the northern site area drainage discharging to the "S 180th Street pump station to Green River". Figure 6 may be difficult to read, but showed central site area drainage discharging to two "pipes to Green River"; Figure 7 showed the southern site area drainage discharging to the "pipe to Green River". Additional description of site hydrologic characteristics was provided in Appendix C to the Draft EIS (see Section 2.2).

79. As described in Appendix E to the Draft EIS (see page 22), the Johnson Ditch outfall is currently at elevation 15 feet. This is above the approximate Green River Ordinary High Water Mark (OHWM) of 14 feet (see Figure 10 in Appendix E to the Draft EIS). The detailed hydrologic information necessary to quantify duration above a particular river stage is not available for the site. An outfall located above the OHWM would not provide frequent fish access, and may not provide access at all during the summer rearing season. The Draft EIS concluded that based on the proposal to locate the future outfall elevation below the OHWM, fish access would be improved.

80. The historic Green River Valley landscape is described in Collins and Sheikh (2004), which was referenced in Appendix E to the Draft EIS and summarized on page 3.3-17 of the Draft EIS text. Stranding references were based on the personal experience of the fisheries consultant and discussions with other fisheries professionals familiar with the lower Green River Valley.

81. Under existing conditions, groundwater seepage from the undifferentiated $Qpog_{1,2}$ aquifer contributes to baseflow in the upper portion of Johnson Ditch and the upper portion of Stream C (as described in Appendix A to the Draft EIS). The lower portion of Stream C, Stream D, Ditch J-1 and Johnson Ditch directly interact within the shallow alluvial aquifer system. The groundwater seepage contribution from the undifferentiated $Qpog_{1,2}$ aquifer to Johnson Ditch upstream from the Ditch J-1 confluence would not be affected by the project.

During July to October, baseflow contributions to Johnson Ditch from Stream C, Stream D and Ditch J-1 are very small. Any groundwater seepage from the undifferentiated $Qpog_{1,2}$ aquifer to the upper portion of Stream C must flow along approximately 1,500 lineal feet of channel without being "lost" as recharge to the alluvial aquifer or as evapotranspiration. Any groundwater seepages from the alluvial aquifer, which occur when the groundwater table is above the elevation of the channel bottom, would be only a fractional contribution to baseflow in Johnson Ditch due to the very low groundwater flow gradient from south to north across the site. Stream C (a ditched stream) would be plugged and base flow would be dispersed into Wetland 10 as part of the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to this Final EIS). Wetland 10 would continue to discharge to the new Johnson Creek. Although the fractional contribution to Johnson Creek baseflow from Stream C, Stream D and Ditch J-1 would be eliminated under Alternatives 1 and 2, groundwater contributions to baseflow from the alluvial aquifer system to the new Johnson Creek downstream from the Ditch J-1 confluence would be expected to increase with development. This concept was

discussed in detail in Section 5.3 and Section 7.3 in Appendix A to the Draft EIS and is summarized below.

When groundwater levels in the alluvial aquifer are higher than the stream/ditch bottom elevation, the alluvial aquifer likely is contributing to baseflow. Conversely, when the surface water elevation in the stream/ditch is higher than the alluvial aquifer elevation, the stream or ditch would likely contribute recharge to the alluvial aquifer. This relationship between a groundwater table aquifer and surface water flow in a channel intersecting the water table surface generally is referred to as a channel "gaining" or "losing" in terms of baseflow. When a channel intersects more of the water table, the channel gains proportionally more baseflow. Under existing conditions, for the majority of the summer dry season (July to September), Streams C, D and Ditch J-1 are perched above the alluvial aquifer.

The new Johnson Creek is designed to be lower in elevation than the existing Johnson Ditch, and would intersect more of the alluvial aquifer during the summer low-flow period than is currently experienced by the existing Johnson Ditch (as discussed in detail in Section 5.3 of Appendix A to the Draft EIS). The influence of the alluvial aquifer on baseflows in the new Johnson Creek would overwhelm any potential reduction in baseflow from the filling of Stream C (routed to Wetland 10 and supplied by both the alluvial aquifer and $Qpog_{1,2}$ groundwater seepages), or the filling of Stream D or Ditch J-1 (supplied by the alluvial aquifer table). Therefore, no probable significant impacts to baseflow in Johnson Creek would be anticipated from the filling of Stream C, Stream D or Ditch J-1.

82. The label "offsite" indicated that the Green River is not within the project site. Potential impacts to offsite properties are discussed in detail in the Draft EIS, as are those "onsite" areas.

83. Your comment is acknowledged for the record. Some of the detailed description presented in the Fisheries Technical Report (see Appendix E to the Draft EIS) was summarized for brevity in the Draft EIS. The baseline detail requested is found both in the Affected Environment section of Appendix E to the Draft EIS (see Section 2.0) and in the Impacts Analysis section (see Section 3.0) of this appendix.

84. Your comment is acknowledged for the record. This change has been made to the Draft EIS. See Chapter 3, Errata, of this Final EIS. Sedimentation was discussed in detail in Appendix E to the Draft EIS (see page 46) and in the updated Fisheries Mitigation Plan (see Exhibit 2 in **Appendix A** to the Final EIS).

85. See Section 3.1 and 3.2 of Appendix C and Section 3.1.1 of Appendix E to the Draft EIS for a description of proposed construction practices under Alternatives 1 and 2. These descriptions included sediment impact avoidance measures that would be employed for removal and relocation of the Green River Levee, connection of the Green River to the new excavated mitigation area, and construction of the new outfalls. As described in the Draft EIS (see page 3.2-45), TESC BMPs would be implemented and maintained in accordance with a SWPPP that would be prepared for the project, as required by the Section 402 Individual NPDES permit for construction discharge.

As described in Appendix C to the Draft EIS (see page 3-16), a temporary dike would be constructed adjacent to the river to prevent high river flows from entering the excavation area during construction and prior to connecting the area to the river during the window for instream work. Detail was added to the updated SAMP (see **Appendix A** to this Final EIS) to explain the proposed timing of mitigation construction. A flexible silt control curtain would be hung in the Green River around the work area prior to removal of the temporary dike. After final cuts and stabilization of the cut bank areas are complete, the sediment curtain would be removed.

Since the SAMP was updated, proposed use of the temporary haul road to connect construction sites north and south of S 200th Street, bypassing under the Green River bridge has been shortened to limit use of the road to two full construction seasons. The haul road alignment has been altered to use the top of the temporary dike (slanted away from the river so that runoff would drain away from the river) to access the crossing of S 200th Street under the bridge. At the end of the second construction season, the temporary haul road would be abandoned so that final mitigation grades and plantings could be placed in the Green River mitigation area. The river connection is now planned for the third construction season.

This comment requests more information on construction of four stormwater/stream outfalls. One new outfall for the relocated Johnson Creek and one new dual outfall for the south stormwater pond (one pressurized and one gravity flow) are proposed; four new outfalls are not proposed. To construct the new Johnson Creek outfall through the levee, a protective barrier would be established between the work zone and the river, and the levee would be cut down, as necessary, to a point approximately two feet above the Ordinary High Water Mark (OHWM), as shown in Figure 15 and described on page 45 in Appendix E to the Draft EIS. The flood gate would remain closed to protect the Green River from construction of the new Johnson Creek channel. The south stormwater pond dual outfall would be constructed in the same manner, but would be placed higher above the OHWM. Final plans for construction and BMP safeguards would be described in the SWPPP for the Section 402 Individual NPDES permit for construction discharge.

Under Alternatives 1 and 2, flooding of Johnson Creek under high flow conditions would continue as under existing conditions, with only minor changes to water depths (0.16-foot difference at 100-year event). While flooding could affect fish use of the area, the impacts would be minimal due to the insignificant change from existing conditions. See *Impacts to Surface Water Quality* in Appendix E to the Draft EIS (pages 66 through 70) for more detailed discussion of flooding effects on fish habitat.

86. Your comment is acknowledged for the record. The effects of sedimentation on fish were described in Appendix E to the Draft EIS (page 46) and in the updated Fisheries Mitigation Plan (see Exhibit 2 in **Appendix A** to the Final EIS) and summarized on pages 3.3-23 through 3.3-26, and 3.3-34 through 3.3-37 of the Draft EIS.

87. The water quality-related impacts of the proposed wetland fill were described in Attachment A (*Wetland Water Quality Function and Impact Assessment*) in Appendix C to the Draft EIS. The wetland fill would eliminate wetlands functioning to filter nutrients and contaminants, and the project would also eliminate the current annual agricultural application of approximately 61,600 pounds of fertilizer and 252 gallons of herbicides

(see Section 2.5.11 in Appendix C to the Draft EIS). The Draft EIS concluded that: agricultural fertilizer and pesticide use eliminated from the site would be replaced to a much lesser extent by landscape management products under Alternatives 1 and 2; agricultural influences would be removed from the restored wetlands and the Green River; the proposed stormwater treatment system, in combination with the proposed wetland mitigation, would offset any loss of toxics removal function from the filled wetlands; and, the nutrient removal function lost from the filled wetlands would be more than replaced by the proposed wetland mitigation.

88. For brevity, detailed analysis of riparian function and values was provided in the technical appendices and was summarized in the main text of the Draft EIS on pages 3.4-5 through 3.4-7. The entire riparian buffer functions and values analysis is presented in Appendix E to the Draft EIS (pages 55 through 60).

89. The specific hydrologic analysis needed to determine the final Green River Off-Channel Restoration Area is ongoing. One of the primary goals of the analysis will be to prepare a design that adequately mitigates sedimentation effects. This would be accomplished by introducing large woody debris and configuring the shoreline, as appropriate, to create turbulence and channelized velocities. Some natural sedimentation would still occur, as can currently be observed in other areas of the Green River.

90. The final detail requested by this comment is appropriate for the design phase, and is not necessary for an analysis of probable significant impacts under SEPA. A larger, shorter, and more fish accessible culvert has been proposed. Accessibility attributes include a lower invert on the Green River side and installation of a tide gate that would remain open at all times, except under flooding conditions. Under these conditions, most if not all fish species and lifestages would benefit, and a finding of no significant adverse impacts in the Draft EIS was appropriate. Final engineering details will be worked out in conjunction with the U.S. Army Corps of Engineers and WDFW.

91. The two major fish mitigation projects proposed for this project would be consistent with the WRIA 9 partnership goals for the basin, as described in documents preceding the Draft WRIA 9 habitat plan. Further discussion regarding consistency with the WRIA goals is provided in Section 3.1.1 of Appendix E to the Draft EIS (pages 31 and 37).

92. See the response to Matrix Comment 72 in this letter. The mouth of Stream E-2 at the confluence with Stream E may provide some potential spawning habitat. This entire area would be protected and additional riparian buffer planted under Alternatives 1 and 2.

93. The detailed analysis and discussion for this statement can be found in Appendix E to the Draft EIS (see pages 64 through 66). In summary, because the Johnson Creek channel would be deepened slightly to accommodate the new outfall, it would intersect more groundwater. The groundwater source (Alluvial Aquifer) is offsite and would not be affected by development at the site. See the response to Matrix Comment 81 in this letter for more detail.

94. The requested detail can be found in Appendix E to the Draft EIS (see pages 37 and 66 through 69.

95. Your comment is acknowledged for the record.

95a. See the response to Comment 5 in this letter.

96. Surface water is regulated according to the Tukwila Municipal Code (TMC) Title 14. Stormwater management is regulated according to TMC 14.30. This includes design of stormwater control systems per the 1998 King County Surface Water Design Manual. Additionally, the City of Tukwila currently manages floodplain hazards through the Flood Control Zone Permit Ordinance (TMC 16.52).

The Cities of Tukwila, Auburn, Renton and Kent, together with King County, entered into an agreement in 1985 (and updated in July 2002) to maintain the Green River Levee system and manage stormwater discharges to the Green River in a coordinated manner. Termed the Green River Management Agreement (GRMA, 1985), this document describes specific studies and improvements which were to be made to the levee system to improve flood protection in the valley. In addition, the GRMA placed restrictions on new and existing gravity and pump station discharges to the Green River. An associated document, the Green River Pump Operations Procedures Plan (POPP, 1985) provides additional technical detail on the coordinated stormwater control during periods of high Green River flow.

97. Appendix B to the Draft EIS and the Draft EIS text (see page 3.2-3) described the pump station capacity. See Section 5.1.4 (S 180th Street Pump Station Capacity Analysis) and an appended Hydrologic and Hydraulic Modeling report that contains Section 6.3.1 (South 180th Street Pump Station Capacity Evaluation) in Appendix B to the Draft EIS for the requested information.

98. Non-Core Salmon and Trout and Primary Contact Recreational Use Category constituents and associated standards were summarized in Table 2-1 in Appendix C to the Draft EIS. See the response to Matrix Comment 168 in this letter for a summary of the 2003 changes to state water quality standards approved and not yet accepted by EPA.

99. Washington State drinking water standards were described in Section 2.4.2 in Appendix C to the Draft EIS and summarized on page 3.2-7 of the Draft EIS text. These standards were described as similar to the groundwater standards in Table 2-2 of Appendix C to the Draft EIS. A table summarizing drinking water standards was not included in the Draft EIS, because there are no potable wells that could be influenced by development under Alternatives 1 and 2, and no degradation of groundwater quality or impairment of groundwater beneficial uses would be expected to result from the development.

100. The site monitoring listed on page 3.2-9 in the Draft EIS, along with other historic baseline data when available, were used to establish the baseline condition summarized in a portion of Tables 3.2-2 through 3.2-4 in the Draft EIS. Section 2.5 in Appendix C to the Draft EIS provided detail on all baseline data that were used in the water quality evaluation.

101. See the response to Matrix Comment 100 in this letter.

102. Detailed descriptions of riparian buffer vegetation and adjacent land uses for each watercourse were provided in Section 2.5 of Appendix E to the Draft EIS, including characterization of the habitat conditions.

103. Water quality functions evaluated under the WAFAM were described in detail in Attachment A (*Wetland Water Quality Function and Impact Assessment*) to Appendix C in the Draft EIS.

104. See Section 2.5.9 in Appendix C to the Draft EIS for a quantitative and qualitative assessment of onsite watercourse temperature surveys. The temperature survey results were mapped in Figure 2-4 in Appendix C to the Draft EIS.

105. Groundwater quality standards for primary and secondary contaminants were identified in Table 2-2 in Appendix C to the Draft EIS. A description of baseline groundwater quality and a list of the parameters measured during monitoring was provided in Section 2.5.10 in Appendix C to the Draft EIS. Analysis of groundwater quality impacts was provided in Section 3.9 of Appendix C to the Draft EIS and summarized on page 3.2-41 of the Draft EIS text.

106. A qualitative and quantitative description of baseline groundwater quality on the site was provided in Section 2.5.10 in Appendix C to the Draft EIS and summarized on pages 3.2-12 through 3.2-17 of the Draft EIS text.

107. Row two in Table 3-1 in Appendix C to the Draft EIS explained that Ecology and the City of Tukwila (as the local authority) must both formally approve the use of chemical treatment for the Tukwila South project.

108. There would be no offsite surface water discharge of stormwater planned during the first construction season until the long-term construction stormwater treatment system is completed and operating. As described in Section 3.1 of Appendix C to the Draft EIS (*Stormwater Management Overview* on page 3-5), stormwater would be collected in temporary TESC collection traps, which could overflow and be retained in four areas in the north, central, and south portions of the site. The collection traps would be located where closed depressions exist or can be formed; some infiltration potential may or may not exist in these areas, but infiltration would not be depended upon. A pressurized line and series of pumps would link all of the four temporary collection traps together, and ultimately would link each collection trap to the stormwater polymer treatment ponds and/or chitosan treatment system that would be constructed during the first year. This temporary stormwater retention system would be operable during the first construction season while the long-term treatment system for construction runoff is completed.

The onsite storage capacity for stormwater runoff during the first construction season would be larger than the greatest amount of rainfall ever observed for the proposed construction season (April 1 through October 31), even assuming no evaporative losses or infiltration losses between storms. There would be no need to discharge any stormwater offsite. Analysis of the capacity of the temporary TESC traps to contain water, along with a description of the proposal to pump water between the traps as required, was provided on pages 3-5 through 3-6 of Appendix C to the Draft EIS.

109. See the response to Comment 8 in this letter for a detailed reply to this comment.

110. Ecology's comment assumes Level 2 flow control should be implemented for control of erosion to physical infrastructure (such as levees) or for habitat quality. Guidance contained in the 2001 Ecology Stormwater Management Manual for Western Washington contains criteria for Level 2 flow control which presumptively prevents erosion impacts. The manual, however, also allows applicants to demonstrate that other methods for flow control are protective of water quality standards.

Based upon discussion with King County Water and Land Resources Division (WLRD) and others, it is understood that the primary and perhaps only issue for levee erosion in the lower reaches of the Green River is susceptibility to sloughing failures during drawdown after large floods. The issue is not velocity induced bank failures or erosion. There are no reported velocity induced scour issues within this reach of the Green River or downstream.

Levees accepted by the U.S. Army Corps of Engineers (COE) as part of the 205 levee system are constructed to an acceptable COE standard, together with an acceptable risk assessment by the COE, to prevent failure from river flows up to the maximum anticipated releases from Howard Hanson Dam (12,000 cfs) (refer to the response to Letter No. 7, Comments 23 through 26, for information on the easements proposed where the levee is not yet accepted as part of the COE 205 levee system). Thus, unlike a natural river environment, there is no particular sensitivity to changes in the durations of lower flows. Even the duration of maximum flows would have little bearing on the levee's structural stability. Movement of sediment or streambed material is controlled by river flows released from the Dam, not by tributary flows.

This is supported by the Code (TMC Title 14 and the King County 2005 Surface Water Design Manual), which allows for "direct discharge" to portions of the Green River both upstream and downstream of the site. The reach of the river that corresponds to the project site is excluded from the direct discharge designation in the 2005 King County Manual, because it is the area subject to flow control requirements of the Green River Pump Operations Procedures Plan (POPP, 1985) under the Green River Management Agreement (GRMA). This reach is not excluded from direct discharge because it requires flow control to prevent erosion or scour (see the response to Comment 96, above).

The Ecology Stormwater Manual (2005) states that flow control should be provided as needed to prevent downstream erosion and property damage, and should be reviewed using downstream analysis by local authority (see excerpt from Ecology 2005 Manual Section 2.5 below):

"Element 3: Control Flow Rates
• Properties and waterways downstream from development sites shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the project site, as required by local plan approval authority.

• Downstream analysis is necessary if changes in flows could impair or alter conveyance systems, stream banks, bed sediment or aquatic habitat. See Chapter 3 for offsite analysis guidance."

Neither Level 1 nor Level 2 flow control standards would provide a benefit or create a significant impact on downstream erosion in the Green River. This has been shown by downstream analysis of the proposed Level 1 flow control for the site (south basin) provided in the Preliminary MDP (Appendix B to the Draft EIS) reviewed by the City of Tukwila. The proposal to provide Level 1 flow control would meet Tukwila Municipal Code requirements, and would avoid the need to pursue a variance.

111. The *Assessment of the Benefit of LID Measures on the Site* in Section 3.6.5 of Appendix C to the DEIS (page 3-75 and summarized on page 3.2-21 of the Draft EIS text) concludes that *"Since stormwater is discharged to the Green River, and not to intervening tributaries, there is no expected downstream aquatic habitat benefit or need from a hydrologic or water quality perspective to employ LID measures on this particular site. Although not needed, LID measures to reduce runoff volumes could calculably reduce detention volume requirements."* This text was consistent with the comment made.

112. As explained on page 3-44 of Appendix C to the Draft EIS, because of the very flat nature of the site the inflow pipes to the north and south wet ponds would be expected to be permanently filled with water for lengths that could exceed 2,000 feet. From a water quality treatment perspective, the backwater in the pipes would not impair wet pond treatment, because the wet pond volume would not be reduced and full treatment would continue to be provided for all water entering the pond. To some degree, the lengthened hydrologic retention of water in the pipes (above and beyond that in the wet ponds) would enhance treatment by allowing for greater removal of contaminants via mechanisms that do not require sunlight.

To avoid direct contact between potential high groundwater in the spring, and water treated in the proposed wetpond, the wetpond would be lined with soil liners, consistent with the 1998 King County Surface Water Design Manual.

113. HSPF is a FEMA approved hydrologic model for the determination of flood hydrographs (see http://www.fema.gov/fhm/en_hydro.shtm). The estimation of floodplain elevations would normally be done using a hydraulic model. In the case of the Johnson Creek floodplain there is no readily available, FEMA accepted, continuous simulation, hydraulic model that could be applied to this situation. FEMA allows engineering judgment in the development of an approach for estimating flood inundation limits in interior drainage areas (behind levees). Northwest Hydraulic Consultants, Inc. has used, and had FEMA floodplain mapping studies approved, using Goldsmith Associates' in-house ROUTE model, which was applied to the estimation of flood water levels in the Johnson Creek ponding area (see Appendix B to the Draft EIS).

114. TESC BMPs are proposed to prevent uncontrolled sediment release during construction to onsite watercourses, wetlands, and the Green River. The section of the Draft EIS referred in this comment explained that the risk of adverse impacts to the retained wetlands on the site from short-term sediment introduction, if it were to occur, would be relatively low given their nature. There was no text in the Draft EIS that suggested discharge to waters of the state in excess of the Individual NPDES permit requirements would be acceptable.

115. Spill control BMPs during construction were summarized in Table 3-4 of Appendix C to the Draft EIS (see page 3-21), and spill response and prevention was conceptually described on page 3-23. Specific spill control BMPs and spill response and prevention plans would be part of the SWPPP required under the Individual NPDES permit for construction discharge. Also see the response to Comment 8 in this letter.

116. A detailed analysis of wet pond influence on water temperature (inflow, pond volume, and discharge) was provided in Section 3.6.1 of Appendix C to the Draft EIS (see pages 3-40 through 3-41), including the potential for adverse impacts to the Green River. The Draft EIS concluded that wet pond discharge temperatures would be within the background Green River temperature range during the summer. Wet ponds do not discharge during the summer before evaporative losses are made up, which the data show takes an extended period of cooler wet weather, during which temperatures fall. The analysis was based on thermal monitoring of a wet pond in Sammamish, Washington. An evaluation of wet pond, baseflow, and Green River Off-Channel Habitat Restoration Area temperature influences under Alternatives 1 and 2 is contained in Section 3.6.5 of Appendix C to the Draft EIS.

117. Under Alternatives 1 and 2, redevelopment of the existing industrial uses in the northeast basin would require that stormwater quality treatment be provided. The existing Segale Business Park development pre-dated water quality treatment requirements. As explained on page 3-44 of Appendix C to the Draft EIS, as a conservative measure closed wet vaults were assumed as the method of water quality treatment subsequent to redevelopment in the Draft EIS analysis. This was conservative, because vault performance is lower for many contaminants than pond performance. Any treatment for water quality would remove some fecal coliforms; therefore, any method of treatment would lower fecal coliform concentrations in the northeast basin (where there is currently no treatment) below present conditions. Existing conditions in the northeast basin were described in Section 2.5.4 of Appendix C to the Draft EIS and summarized on page 3.2-9 of the Draft EIS text.

118. "Open Area" refers to the open space on the western hillside of the site that is tributary to Stream E.

119. A detailed discussion of the results of the WAFAM water quality function evaluation is presented in Attachment A to Appendix C to the Draft EIS.

120. The characterization in the Draft EIS is correct. The Green River is most vulnerable to low oxygen conditions during the summer, when flow is lowest and temperatures are highest. A TMDL is proposed to address dissolved oxygen in the Green River. On the other hand, the potential for development under Alternatives 1 or 2 to contribute to dissolved oxygen problems from wet pond discharge in the Green River is very low, for the reasons given in the Draft EIS.

121. Designs for proposed structures would be developed to account for seasonal high groundwater elevations, where appropriate or necessary, to avoid flooding/seepage into and around the new structures. The placement of impermeable linings in the stormwater ponds, or the fill associated with pond berms or levees, would not be anticipated to impact groundwater flow or cause mounding in nearby mitigation areas due to the low regional groundwater flow gradient and the hydraulic conductivity of the sands

containing the alluvial aquifer. The excavation of the southern stormwater pond and placement of the liner is not designed to occur below elevation 10 feet. Based on information presented in the preliminary design report (GeoEngineers, 2004, Report, Geotechnical Engineering Services, Stormwater Pond and Barrier Dike, South Tukwila Development, Tukwila, Washington, dated October 6, 2004), the excavation would extend into the organic silt and peat deposits, and would not encounter the sands containing the alluvial aquifer. The effect of the fills on the upper few feet of ground surface would not be anticipated to affect the hydraulic conductivity of the underlying sands, which contain the majority of the alluvial aquifer.

122. See the response to Matrix Comment 110 in this letter with regard to stream erosion. With regard to habitat, the Draft EIS analysis for fish habitat impacts evaluated the modeled changes to baseflows and peak flows in the Green River and Johnson Creek. The 90 percent, 50 percent, and 10 percent exceedence flows were selected to evaluate the most common base flow rates from the site, as measured at the downstream site boundary. The 2, 10, 25, 50, and 100-year peak flows were selected to evaluate changes to instream habitat during these rare events. For each flow condition, instream habitat was evaluated as measured by changes in total flow, average water velocities, and stream depths. The analysis concluded that no impacts to fish habitat would be anticipated. (See Appendix E to the Draft EIS (*Impacts to Surface Water Quantity* for details).

123. A discussion of the potential for concrete work impacts to water quality, and measures proposed to prevent these impacts from occurring, was provided on pages 3-24 through 3-25 in Appendix C to the Draft EIS and summarized on page 3.2-24 of the Draft EIS text. The discussion included use of concrete for roads, curbing, foundations and other infrastructure construction, as well as the possible use of concrete as a soil amendment for compaction purposes. Detailed analysis of a temporary concrete batch plant, if used, was provided on pages 3-25 through 3-27 of Appendix C to the Draft EIS and summarized on page 3.2-25 of the Draft EIS text. Before any temporary batch plant could commence operation, a Sand and Gravel NPDES permit would be required to authorize discharge from the plant, which would require preparation and implementation of a SWPPP designed to preserve and protect water quality.

124. See the response to Matrix Comment 81 in this letter.

125. Fecal coliform concentrations in discharge from the site are predicted to rise under Alternatives 1 and 2 in all but the northeast basin, for the general reasons described on page 3-40 of the Appendix C to the Draft EIS. However, fecal coliforms would be within the observed background range in the Green River and have no measurable influence on Green River concentrations downstream of the site during any of the four seasons evaluated (see the discussion and Tables 3-16 and 3-17 on pages 3-66 through 3-68 in Appendix C to the Draft EIS).

The greatest increase would result from the analysis' conservative assumption that residential development would all be equivalent to townhomes, which generate a fairly high fecal coliform load, mainly through pet waste. However, all impervious surfaces generate fecal coliforms in runoff from wildlife and birds. Ecology continues to plan for a Green River TMDL to address (in part) fecal coliforms, but has yet to determine when it will occur or begin the process of gathering information necessary for development of a

TMDL. Deterrents to waterfowl use of wet ponds were proposed as a mitigating measure in the Draft EIS (see page 3.2-7) and in the updated Wetland Mitigation Plan (see Exhibit 3 in **Appendix A** to this Final EIS). Public education on pet waste control as another source control measure could be employed. The comment mentions incorporation of fecal coliform control in the SWPPP; however, that document is for management of construction discharge. Fecal coliforms are one result of developed stormwater runoff, not construction discharge.

126. See the response to Matrix Comment 65 in this letter.

127. See the response to Matrix Comment 26 in this letter.

128. Wetlands 10 and 11 are not tidally influenced, based on the investigations reported in Appendix A to the Draft EIS.

129. Specific geotechnical recommendations related to the re-alignment of S 178th Street, and the extension of Southcenter Parkway where construction would occur in Landslide Hazard Zone 4, were presented in preliminary geotechnical engineering reports attached as Appendix 4 to Appendix A to the Draft EIS, and summarized in Section 6.5.2 of Appendix A of the Draft EIS. Specific Best Management Practices (BMPs) to be implemented during construction would be outlined in the geotechnical engineering reports and Temporary Erosion and Sediment Control (TESC) plans for each project element. General BMPs and TESC measures were summarized in Section 6.1.2 (Erosion), Section 6.3.2 (Landslide), and Section 6.4.2 (Seismic) of Appendix A of the Draft EIS and on pages 3.1-23 and 3.1-24 of the Draft EIS text. Water quality mitigation measures were described in detail in Appendix C to the Draft EIS and summarized on pages 3.2-45 through 3.2-47 of the Draft EIS text. No landslide or slope failures or erosion problems or water quality degradation are anticipated if recommended BMPs and TESC measures are implemented.

130. See the response to Matrix Comment 129 in this letter.

131. Soils and parent geologic units were described in detail in Section 4.3.2 and summarized in Table 4-2 in Appendix A to the Draft EIS. Also see the summary on pages 3.1-2 through 3.1-5 of the Draft EIS text.

132. See the response to Comment 8 in this letter. The City of Tukwila requires use of the 1998 King County Surface Water Design Manual, including use of BMPs for construction, from that manual. However, that does not preclude the applicant from proposing additional BMPs, as warranted, in the SWPPP that will be required for the Tukwila South project Individual NPDES permit for construction discharge.

133. The site lies within the Highline Water District service area, and the District has indicated that adequate water supply is available for the Tukwila South project. The Applicant will be required to obtain formal water availability certificates from the District per development permit applications, and to enter into Developer Extension Agreements with the District for project design and construction.

134. Final selection of BMPs will occur when the SWPPP required for the Individual NPDES Permit for construction discharge is approved by Ecology. The Draft EIS compared and

discussed implementation of BMPs from the 1998 King County Surface Water Design Manual (adopted by City of Tukwila) and BMPs from the Ecology Manual. The full compliment of BMPs that will be submitted to Ecology in the SWPPP and other plans will include measures to: control dust, prevent airborne dust, avoid construction congestion, manage storage piles, and limit truck idling.

135. See the response to Matrix Comment 134 in this letter.

136. See the response to Matrix Comment 134 in this letter.

137. See the response to Matrix Comment 134 in this letter.

138. See the response to Matrix Comment 134 in this letter.

139. The Tukwila South project would not be undertaken if annexation of the portion of the site outside the City of Tukwila to the City does not occur. Annexation is a separate action that is not subject to SEPA. However, in response to this comment, King County land use and shoreline regulations applying to the unincorporated portion of the site, and City of Kent land use regulations applying to the portion of the site located within Kent, are discussed below. The relationship of the proposed project to these regulations is not evaluated in this EIS, as the project (Alternatives 1 or 2) would not be implemented without annexation. Given the long-term buildout potential of the site, the No Action Alternative also assumes that annexation to the City would occur in the future.

Land Use

King County

As stated on page 3.6-5 and illustrated by Figure 3.6-2 of the Draft EIS, current King County zoning that applies to the majority of the unincorporated portion of the site is Industrial (I); small areas in the southwestern and central western portion of the site are designated Urban Residential (R-1) by King County.

The purpose of the Industrial zone is "to provide for the location and grouping of industrial enterprises and activities involving manufacturing, assembly, fabrication, processing, bulk handling and storage, research facilities, warehousing and heavy trucking" and "to protect the industrial land base for industrial economic development and employment opportunities" (King County Code [KCC] 21A.04.130). Permitted uses in the Industrial zone include: a variety of manufacturing, warehouse, and traditional industrial uses; transportation and communications services facilities; parks, trails, marinas, campgrounds, bowling facilities, shooting ranges, museums, and other recreational uses; personal services, food stores, eating and drinking establishments, day care facilities, automotive repair shops, school district support facilities, commuter parking lots, auto and boat dealers, fuel dealers, livestock sales, agriculture, and aquaculture, among other uses. Conditional uses include: landfills, public agency training facilities, manufacturing of cars, trucks, railroad equipment, paper, plastics, and heavy machinery, primary metal industries, and wastewater treatment facilities.

The R-1 zone is King County's lowest density urban residential zone. The purpose of King County's urban residential zones is to "implement comprehensive plan goals and

policies for housing quality, diversity and affordability, and to efficiently use urban residential land, public services and energy. R-1 is applied "on or adjacent to lands with area-wide environmental constraints where development is required to cluster away from sensitive areas, on lands designated urban separators or wildlife habitat network where development is required to cluster away from the axis of the corridor, on critical aquifer recharge areas and on Regionally and Locally Significant Resource Areas (RSRAs/LSRAs) or in well-established subdivisions of the same density, which are served at the time of development by public or private facilities and services adequate to support planned densities" (KCC 21A.04.080). Permitted uses in the R-1 zone include: residential housing, townhouses, apartments, senior housing, home occupations, bed and breakfast guesthouses, parks, trails, golf facilities, cultural uses, conference centers, outdoor performance centers, day care facilities, schools, churches, commuter parking lots, agriculture, agricultural product sales, and eating and drinking establishments. Conditional uses include: cottage housing, mobile home parks, group residences, marinas, sports clubs, food stores, department and variety stores, drug stores, video stores, personal services, hospitals, funeral homes and school bus bases. The maximum density in this zone is 1 dwelling unit per acre.

As stated on page 3.6-2 of the Draft EIS, the majority of the site currently in unincorporated King County is undeveloped and in agricultural use. A former sand and gravel borrow pit occupies approximately 17.5 acres onsite adjacent to Orillia Road S, north of S 200th Street. A pioneer cemetery, located on approximately 0.4 acre is owned by the Tukwila Historical Society, and lies approximately 250 feet north of the former borrow pit. Several single-family residences are located in scattered areas within the unincorporated portion of the site.

City of Kent

Approximately 22 acres of the site, south of S 204th Street, are located within the City of Kent. As stated on page 3.6-5 and illustrated by Figure 3.6-2 of the Draft EIS, the zoning classification that applies to this area is Single-Family Residential Agricultural (SR-1). The purpose of the SR-1 zone is "to provide for areas allowing low density single-family residential development." SR-1 zoning is applied to areas with environmental constraints or that lack urban services. Permitted uses in this zone include single-family dwellings, certain types of group homes, home day care, and agricultural uses. Conditional uses include: retirement homes, convalescent homes, transportation and transit facilities, utility facilities, schools and other public facilities, day care centers, open space uses (such as parks, golf courses and cemeteries), and private clubs and lodges. The maximum density in this zone is 1 dwelling unit per acre.

As stated on page 3.6-2 of the Draft EIS, the portion of the site in the City of Kent is undeveloped and in agricultural use.

Shoreline Jurisdiction

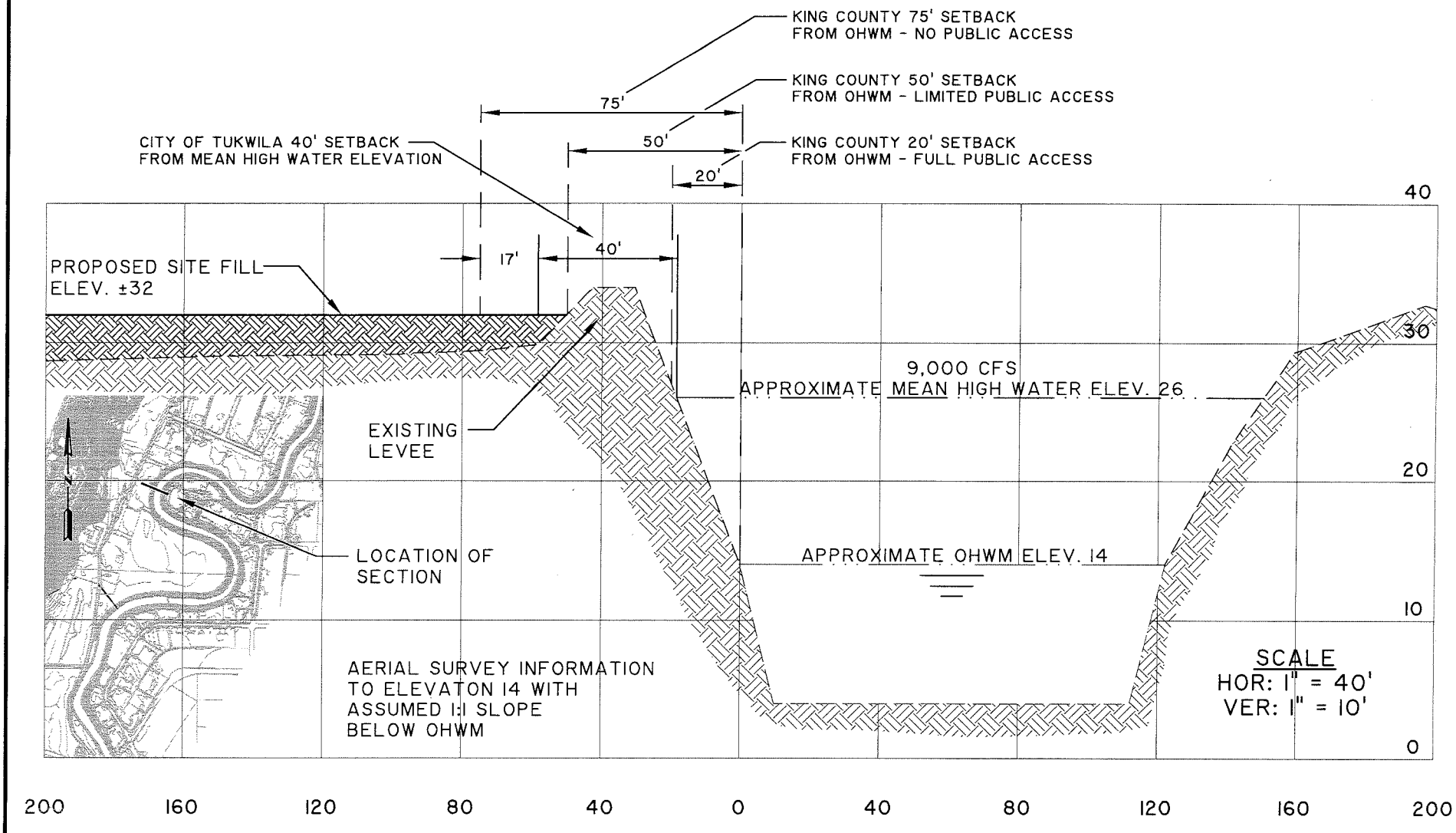
The current use of the shoreline jurisdiction area, onsite within the City of Tukwila, includes the Green River Levee; the Segale Business Park; industrial uses that include impervious surface areas, including Enterprise Rent-a-Car, Gaco Western, Mitchell Moving and Storage; and, corn fields.

As stated on page 3.6-2 of the Draft EIS, the shoreline zone applicable to the portion of the site within unincorporated King County is designated "Rural." This shoreline, located along the Green River, is comprised of the Green River Levee, a fire turn-around immediately north of S 204th Street, corn fields, and impervious surface areas associated with the S 200th Street bridge and roadway, the southern portion of Frager Road, and the Seattle Tractor business. A water service utility line is located within 200 feet of the river along Frager Road. Approximately 1,400 feet of overhead power lines are located along the Green River along Frager Road from S 200th Street to the flood protection barrier dike (see Section 3.16, Utilities, in the Draft EIS).

The King County Rural shoreline environment designation is intended for shoreline areas characterized by agricultural uses, low density residential uses where most urban services are not available, and areas which provide buffer zones and open space between predominantly urban areas. The purpose of the Rural designation is to preserve agricultural land, restrict intensive development along undeveloped shorelines, and maintain open spaces and opportunities for recreational use within the ecological carrying capacity of the land and water resource. Recreational access to the shoreline is to be encouraged in the Rural designation. It should be noted that under King County regulations, the existing Industrial zoning would control permitted uses in the unincorporated area of the site. Industrial development may be permitted in the Rural environment, provided it is permitted in the underlying zone (KCC 25.20.120). Non-water related industrial development shall maintain a setback of 75 feet from the Ordinary High Water Mark (OHWM), or 50 feet from the OHWM if it provides limited public access (KCC 25.20.120). **Figure 2-1** compares King County and City of Tukwila setback requirements. Limited public access is defined as "actual physical access from land to the ordinary high water mark that is limited to specific groups of people or to certain regularly prescribed times; or visual access available to the general public to the shoreline and adjacent waterbody that is specifically provided for in the development of the site" (KCC 25.08.020).

In terms of ecological functions and values, the Green River Levee separates the site from the river, as described in detail in Appendix E to the Draft EIS. There are no trees adjacent to the Green River large enough to qualify as large woody debris (LWD), which is beneficial to fish habitat, should they fall into the channel. The Green River Levee vegetation consists of reed canary grass, Himalayan blackberry, and some willow. Rip-rap has been placed along the Green River banks to ensure stability during high flows. Levee maintenance prohibits vegetation with stems greater than four inches in diameter. Johnson Ditch is a regulated watercourse tributary to the Green River. Johnson Ditch is channelized and maintained or dredged periodically to preserve capacity in the agricultural drainage ditch system which it serves. King County Drainage District #2 obtains King County and Washington Department of Fish and Wildlife permits to maintain Johnson Ditch. Ditch cleaning in the system has been ongoing since 1917, based on a log entry from the Board of Drainage Commissioners of Drainage District #2 of King County, and was last maintained in August 2001 (see Appendices C and D to the Draft EIS for details). Johnson Ditch is not a shoreline of the state, but passes through the Green River shoreline to an outfall with a floodgate installed through the Green River Levee.

No areas of the site are within the shoreline management area of the City of Kent.



BLUMEN CONSULTING GROUP, INC	**Tukwila South Project EIS**	**Figure 2-1** **King County & City of Tukwila Shoreline Setback Requirements**

140. Your comment is acknowledged for the record. See the response to Matrix Comment 146 in this letter for a description of Shoreline Master Program designations for the site.

141. See the response to Matrix Comment 139 in this letter regarding existing uses within the King County portion of the shoreline and the purpose of the current King County "Rural" shoreline designation.

142. Your comment is acknowledged for the record. The City has determined that the Draft EIS sections will not be reprinted in the Final EIS to show minor editing and formatting changes, such as requested in this comment; such requested changes would not modify the environmental impact analysis contained in the Draft EIS, nor would they modify conclusions regarding significant impacts or mitigation. See the response to Matrix Comment 139 in this letter regarding current shoreline use and regulations.

143. Briscoe Park in the City of Kent is included in Figure 3.9-1 in the Parks and Recreation section of the Draft EIS, and described in the Land Use section of the Draft EIS (page 3.6-5) and the Parks and Recreation section of the Draft EIS (page 3.9-4).

144. See the response to Matrix Comment 139 in this letter regarding the purpose and permitted uses in the zoning districts that apply to the portions of the site located in unincorporated King County and the City of Kent.

145. Your comment is acknowledged for the record. See the response to Matrix Comment 142 in this letter.

146. See the response to Matrix Comment 139 in this letter for a description of King County shoreline and land use regulations that currently apply to the site.

The portion of the site that lies outside the City of Tukwila limits is intended to be annexed to the City in 2005, subsequent to issuance of the Final EIS for the Tukwila South project and completion of a Development Agreement between La Pianta LLC and the City. Annexation of the site would occur consistent with RCW 35A.14. Further, it is proposed that the portion of the Green River shoreline within the Tukwila South site, currently in King County, would also be annexed into the City and included in the City's Shoreline Master Program through a minor amendment process. Current King County zoning that applies to the shoreline to be annexed is Industrial. The City of Tukwila is expected to apply zoning designations to the site upon annexation that correspond to the current City Comprehensive Plan land use designations (as described in Section 3.6 of the Draft EIS, Land and Shoreline Use). After annexation, the City anticipates applying its current shoreline regulations to the annexed shoreline area and designating it "Urban," consistent with the remainder of the Green/Duwamish River shoreline in the City.

Within the 200-foot Green River shoreline district, the City of Tukwila has designated three management zones, with uses prescribed in Tukwila Municipal Code (TMC) 18.44.120. The City of Tukwila Shoreline Master Program (SMP) designates a 40 foot "River Environment" zone measured from the mean high water mark of the river, where structures are limited to features such as: footpaths, picnic conveniences, pollution control support facilities, signs, dikes, bridges, fire and maintenance roads, and plaza

connectors (TMC 18.44.130). On the Tukwila South site, the 40-foot River Environment zone consists almost entirely of the Green River Levee and an access maintenance road. This zone is the most restrictive of the three shoreline zones in the SMP and allows no uses or structures other than those specified in TMC 18.44.130.

The Green River Levee and its vegetation would not change as a result of the project, except where the Green River Off-Channel Habitat Restoration Area and Johnson Creek restoration area (described below) would be constructed. The River Environment zone would remain essentially untouched by the development except for the proposed habitat creation and restoration projects (see **Appendix A** to this Final EIS for details).

The area from the River Environment (40 feet from the mean high water mark) outward 100 feet is designated the "Low Impact Environment"; any development in this area under Alternatives 1 and 2 would be consistent with the low impact regulations provided in the Tukwila SMP. Any proposed development within this zone would be consistent with the allowed uses specified in TMC 18.44.140, which include: structures not to exceed 35 feet in height; parking, loading and storage facilities adequately screened and landscaped; railroad lead and spur trackage, or public or private roads; utilities including towers; and, signs.

All uses allowed in the underlying zoning district are allowed in the High Impact Zone, which is the area designated from 100 feet to 200 feet from the mean high water mark (TMC 18.44.150).

Application of the City's Urban shoreline designation would result in the allowance of uses that are no more intensive than those allowed under the existing King County Rural shoreline designation. (As indicated previously, industrial uses would be allowed in the Rural environment, as such uses are permitted in the underlying industrial zoning classification.) Conversion of agricultural land to non-agricultural uses could occur under either the existing King County Rural shoreline designation or the proposed City of Tukwila Urban shoreline designation. The uses, setbacks, height restrictions and other provisions of the existing King County and proposed Tukwila SMP designations are similar as they pertain to the proposed shoreline annexation area within the site. Under King County Code (KCC Title 25, Shoreline Management) the setback from the ordinary high water mark (OHWM) starts approximately 10 to 12 feet closer to the river than the City of Tukwila "River Environment" setback, which the City defines by the 9,000 cfs flow water elevation. King County defines the OHWM as the dominant line of evident water flow, which runs closer to the center of the river than the Tukwila definition. Therefore, the City's setback of 40 feet for the River Environment affords equal or greater protection than the King County setback of 50 feet where limited public access is provided. The Tukwila South project proposes limited public access, which King County defines as actual physical access from land to the OHWM being limited to specific groups of people or certain regularly prescribed times, or visual access available to the general public to the shoreline and adjacent waterbody, such as access being specifically provided for in the development of the site (KCC 25.08.020).

Further, development under King County regulations would not specifically require any changes to the existing wetland and fish habitat functions and values, nor would development under City of Tukwila shoreline regulations if the shoreline is annexed. However, implementation of the proposed Sensitive Area Master Plan (SAMP), a part of

the Tukwila South project (assuming that annexation occurs), would increase net functions and values within the shoreline area. Additionally, both the King County Rural designation and the Tukwila Urban designation have similar requirements for public access.

Regarding the King County and City of Tukwila Critical Areas Ordinances (CAOs), it is proposed that the project would not follow the standard provisions of the Tukwila CAO, but would instead include designation of a Sensitive Area Master Plan Overlay and implementation of a Sensitive Area Master Plan (SAMP), as provided for by the Tukwila CAO and as described on pages 2-9 and 2-28 of the Draft EIS. As noted in Appendix L to the Draft EIS and in **Appendix A** to this Final EIS, the SAMP would result in greater ecological functions and values than the standard provisions of either the King County or City of Tukwila CAO. Further, the project would not proceed if the unincorporated portion of the site is not annexed to Tukwila and the proposed Sensitive Area Master Plan Overlay and SAMP are not approved by the City.

147. Your comment is acknowledged for the record. The details of the proposed infrastructure development phase are described in Chapter 2 of the Draft EIS and in Appendices B and C to the Draft EIS. The probable significant impacts of the infrastructure development phase were also evaluated in detail in the Draft EIS (see Section 3.6.2 in the Draft EIS). Please note that Section 3.6.2 has been corrected in Chapter 3, Errata, of this Final EIS to indicate that not all land uses that would be demolished under Alternatives 1 and 2 are owned or controlled by the applicant. A new figure, **Figure 2-2**, has been added to this Final EIS to identify uses on the site that could be affected by the infrastructure development phase.

148. **Figure 2-2** has been added to this Final EIS to show uses within the site that would be demolished or otherwise impacted by the infrastructure development phase of the Tukwila South project.

149. See the response to Matrix Comment 148 in this letter. The properties of concern would be provided access to the realigned Southcenter Parkway, as part of the Southcenter Parkway improvement project. Temporary access would be maintained throughout the infrastructure development phase.

150. Your comment is acknowledged for the record. See the response to Matrix Comment 142 in this letter and Errata, Chapter 3 of this Final EIS.

151. Your comment is acknowledged for the record. As described in the Draft EIS, development under Alternatives 1 and 2 would be consistent with the City's adopted vision for the Tukwila South area, as well as with the King County Countywide Planning Policies. The transition of the site from a low-intensity industrial/agricultural site to an urban campus would occur incrementally over a 25-year buildout period. While conversion of the site to higher density uses would occur, the probable adverse impacts of this conversion on area land uses and land use patterns would not be significant.

152. This correction to the Draft EIS has been made. See Chapter 3, Errata of this Final EIS.

153. This correction to the Draft EIS has been made. See Chapter 3, Errata of this Final EIS.

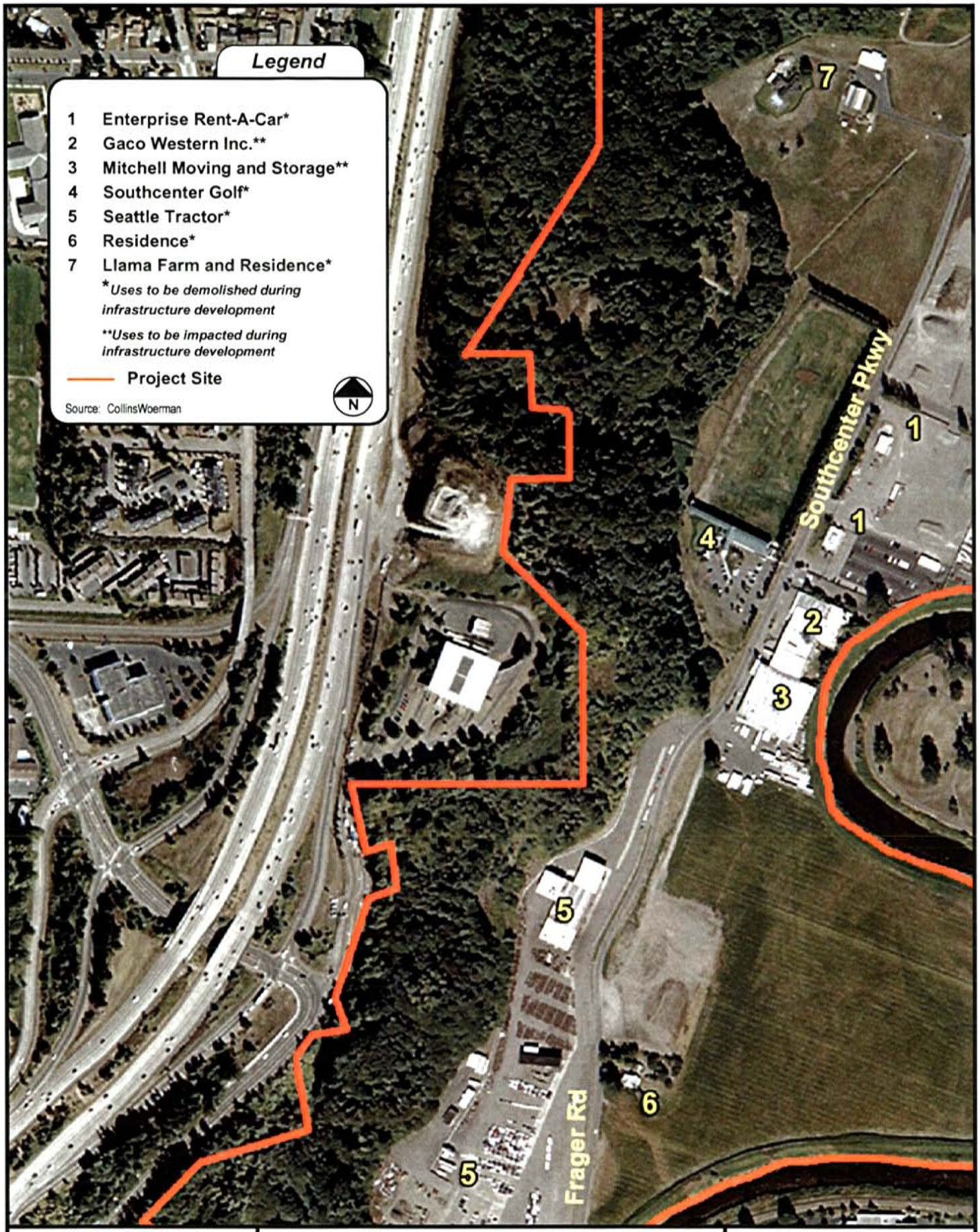


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Figure 2-2
On Site Land Uses

Tukwila South Project EIS

154. This correction to the Draft EIS has been made. See Chapter 3, Errata of this Final EIS.

155. This correction to the Draft EIS has been made. See Chapter 3, Errata of this Final EIS.

156. Your comment is acknowledged for the record. It is understood that the process for amending the shoreline master program would be determined in conjunction with Ecology, as noted on page 3.2-2 of the Draft EIS.

157. Your comment is acknowledged for the record. The demonstration of how the "no net loss of shoreline ecological functions" standard would be achieved, and more detailed discussion of how the "use preference" and "public access and use of the shoreline" standards would be met, will occur as part of the Shoreline Master Program amendment process. The updated Sensitive Area Master Plan (SAMP) contains detailed information on "no net loss of shoreline ecological functions" (see **Appendix A** to this Final EIS).

158. See the response to Matrix Comment 146 in this letter for a comparison of existing King County shoreline regulations to shoreline regulations after annexation to the City of Tukwila.

159. Direct shoreline modifications to the shoreline jurisdiction area on site are proposed for habitat restoration projects: the Green River Off-Channel Habitat Restoration Area and the Johnson Creek restoration area (see the updated Fisheries Mitigation Plan for details, Exhibit 2 in **Appendix A** to this Final EIS). Approximately 800 feet of the existing Green River Levee would be eliminated and a new levee would be constructed to the west, away from the existing river, to create a 7-acre off-channel habitat area designed to provide summer rearing, winter refuge, and upstream migrant holding habitats. Construction of the Green River Off-Channel Habitat Restoration Area would allow the creation and planting of a buffer immediately adjacent to the river with an average width of about 100-feet. This buffer would be larger than the 40 foot "River Environment" zone required by the City of Tukwila under its Urban Environment shoreline designation and the 50-foot setback currently required by King County. The 2.58-acre upland area of the Green River Off-Channel Habitat Restoration Area would be planted with native species including: groundcovers, shrubs, and small trees, as allowed by landscaping constraints on the levee. The plants have been selected and would be located to provide a dense vegetated thicket of native species that fringes and overhangs the water's edge during normal flows. Overall, a net gain in fisheries habitat functions, through improvements in physical habitat suitability, water quality, and riparian conditions, would result from the construction of the Green River Off-Channel Habitat Restoration Area and the portion of Johnson Creek within the shoreline under Alternatives 1 and 2.

The Johnson Creek restoration project would create a meandering stream channel with a new fish-passable flood gate installed at the confluence to the Green River to allow fish to migrate through the levee and into the tributary under most flow conditions. The updated Fisheries Mitigation Plan, Exhibit 2 in **Appendix A** to this Final EIS, and summarized in Section 1.2 of the Final EIS, provides details on the proposed habitat restoration projects, and compares existing and proposed conditions for fish habitat functions and values for the Tukwila South project as a whole.

Water quality in the Green River would be preserved with implementation of the proposed stormwater control system and the Wetland Mitigation Plan which would rehabilitate, enhance, and create 35.2 acres of shoreline-associated wetlands (see the Wetland Water Quality Function and Impact Assessment, Attachment A to Appendix C to the Draft EIS) and the updated Wetland Mitigation Plan in **Appendix A** to this Final EIS. The Draft EIS analysis concluded that the proposed stormwater system would protect the Green River and lower Johnson Creek from hydrologic impacts, preserving both water quality and fish habitat (see the Preliminary Master Drainage Plan, Appendix B to the Draft EIS; and the Fisheries Technical Report, Appendix E to the Draft EIS). Hydrology would be rehabilitated in much of the shoreline-associated wetland mitigation area by breaking all existing drainage tiles and/or plugging and dispersing drainage ditch water through the rehabilitated wetlands or excavating into a (largely) offsite drainage ditch at the point where it enters the site, to allow drainage flow to disperse through the rehabilitated wetlands (see the updated Wetland Mitigation Plan, Exhibit 3 in **Appendix A** to this Final EIS).

Compliance with the Urban Environment shoreline designation under the City of Tukwila would not specifically require any change to the existing wetland and fish habitat functions and values, nor would compliance with King County's existing Rural shoreline designation. Under Alternatives 1 and 2, there would be an increase in shoreline net functions and values. Designation of the site as a Sensitive Area Master Plan Overlay District would allow greater environmental benefits than could be achieved under standard TMC 18.45 Sensitive Areas Ordinance provisions, under which avoidance or like-kind mitigation for impacts to agricultural wetland and drainage ditch watercourses would be required (see the updated Sensitive Area Master Plan in **Appendix A** to this Final EIS for details).

With regard to cumulative shoreline impacts, the Tukwila South site shoreline area is located between the existing City of Tukwila industrial/commercial development to the north (downstream), and the City of Kent to the south (upstream). The shoreline within the City of Kent is zoned Agricultural, 1 dwelling unit per 10 acres and the property immediately adjacent to the site is dedicated Farmland Preservation area. The opposite shoreline from the site in the City of Kent is built out as allowed by the existing zoning: Industrial Park, Limited Industrial, and Commercial/Limited Industrial. Development of Tukwila South would have no significant impacts on the underlying zoning or existing development on adjacent shoreline properties. The original and most significant impacts to the Green River and associated wetlands in the site vicinity occurred in the late 1800s and early 1900s when river levees and drainage ditches were constructed, and wetlands were filled for agriculture. Other hydrologic impacts to the lower Green River system occurred when the White River was permanently diverted out of the basin and the Howard Hanson dam began to regulate flows in the Green River, cut off coarse sediment supply (spawning gravels) to the lower river, and curtailed periodic flood flows to move coarse sediment downstream. These historic impacts are described in Appendices C and E to the Draft EIS.

Beyond the impacts to wetlands that would occur during the infrastructure development phase, no additional adverse impacts to wetlands or the Green River would result from project buildout. Therefore, the impacts described in the Draft EIS represent the full extent of the cumulative impacts under Alternatives 1 and 2; the net gain in functions and values resulting from the proposed Wetland Mitigation Plan and Fisheries Mitigation

Plan would prevent any further cumulative loss of Green River and shoreline-associated wetland functions and values for the portion of the Green River shoreline occupied by the site.

160. This correction to the Draft EIS has been made. See Chapter 3, Errata of this Final EIS.

161. The referenced statement relates to the proposal's consistency with the Shoreline Element of the Tukwila Comprehensive Plan. The Shoreline Element provides for flexibility in providing public access to the Green/Duwamish River shorelines. It recognizes and attempts to balance sometimes-competing goals such as physical accessibility, site security, private property rights and environmental protection. For example, Tukwila Comprehensive Land Use Plan Policy 5.6.6 states:

"Require subdivisions, multi-family residential uses and commercial and industrial uses along the shoreline to provide a trail for public access along the river in areas identified for trail connections, consistent with the King County Green River Trail Master Plan. Require any property not included in the King County Green River Trail Plan to provide public access or a private natural area in lieu of physical public access" (emphasis supplied).

162. It is recognized that future permits for development within the shoreline management jurisdiction could include requests for conditional use permits or variances. However, since specific development plans cannot be determined at this time, it is not certain that such requests would be made.

163. Your comment is acknowledged for the record.

164. Your comment is acknowledged for the record. Revisions to this paragraph in the Draft EIS have been made. See Chapter 3, Errata of this Final EIS.

165. It is the applicant's intent that any future development that would occur within 200 feet of the shoreline would comply with the applicable regulations of the Tukwila Shoreline Master Program. A revision clarifying this sentence in the Draft EIS has been added to this Final EIS. See Chapter 3, Errata of this Final EIS.

166. Your comment is acknowledged for the record.

167. Your comment is acknowledged for the record.

168. The water quality standards for temperature, dissolved oxygen, pH, and turbidity used in the Draft EIS and supporting analyses were the Ecology-proposed 2003 water quality standards. That EPA has yet to approve the 2003 standards for these four constituents does not change the analysis or conclusions in the Draft EIS. The 2003 rule is considered to be either slightly more restrictive or equally restrictive to the 1997 standard for the four parameters; therefore, the analysis was conservative. The differences are summarized in **Table 2-1** for the Non-Core Salmon/Trout Use Category applicable to the Tukwila South project.

Table 2-1
SUMMARY OF THE DIFFERENCE BETWEEN THE 2003 AND 1997 WATER QUALITY STANDARDS

Parameter	Non-Core Salmon/Trout Use Category (2003 Rule) Used in DEIS	Class A (excellent) (1997 Rule)
Dissolved oxygen	The lowest 1-day minimum is **8.0** mg/L. Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.	Shall exceed **8.0** mg/L. Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.
Temperature	Shall not exceed a **17.5**°C measured by the 7-day average of the daily maximum temperatures (7-DADMax) due to human activities. The 7-DADMax is the arithmetic average of 7 consecutive measures of daily maximum temperatures. When a water body's temperature is warmer than 17.5°C, and that condition is due to natural conditions, than human actions considered cumulatively may not cause the 7-DADMax temperature of that water body to increase more than 0.3°C.	Shall not exceed **18.0**°C due to human activities. When natural conditions exceed 18.0°C, no temperature increases will be allowed that will raise receiving water temperatures by greater than 0.3°C.
pH	Shall be within the range of **6.5 to 8.5** with a human-caused variation within a range of less than 0.5 units.	Shall be within the range of **6.5 to 8.5** with a human-caused variation within a range of less than 0.5 units.
Turbidity	Shall not exceed **5** nephelometric turbidity units (NTU) over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.	Shall not exceed **5** nephelometric turbidity units (NTU) over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

Source: A.C. Kindig & Co., 2005.

169. Your comment is acknowledged for the record. The table citation in the Draft EIS was corrected. See Chapter 3, Errata, of this Final EIS.

170. The sources of wet vault performance data used in the Draft EIS and recommended by Ecology in this comment were compared and discussed during a meeting with Ecology on May 13th and 16th, 2005. The use of the EPA national database (the National Urban Runoff Program, or NURP) is considered too old to reliably predict today's urban runoff quality, because it dates back to when leaded automotive fuels, different exhaust and brake designs, and different vehicle construction methods resulted in much higher contaminants than are measured today. The WSDOT 2004 NPDES Progress Report referenced in this comment describes monitoring results for two different types of vaults (one "open" and one "closed") constructed to the general design criteria in WSDOT's 1995 Highway Runoff Manual. The comment recommendation to use "lower percent removal efficiencies (more in the 10 percent to 20 percent range)" pertains to dissolved

zinc and copper removal and the "open" vault monitored by WSDOT, as reported in the 2004 NPDES Progress Report. That "open" vault showed 14 percent removal for both dissolved zinc and copper, compared to the 45 percent and 40 percent (respectively) removals used in the Draft EIS analysis. The type of vault that could be used for redevelopment in the northeast basin of the Tukwila South site would be closed. The "closed" vault monitored by WSDOT obtained 68 percent and 43 percent removals of dissolved zinc and dissolved copper (respectively), which is greater than the performance values used in the Draft EIS analysis. It was agreed with Ecology at the meeting on May 13th and 16th, that the vault performance data used in the Draft EIS analysis would be retained (and no new analysis would be performed using the WSDOT data) for the following reasons:

1. The WSDOT data were internally inconsistent, with the "open" vault performing worse than the "closed vault" and the open wet pond, and the "closed vault" performing better than the wet pond in WSDOT's study;
2. The Lakemont wet vault database used in the Draft EIS analysis (see Table 3-5 in Appendix C to the Draft EIS) was obtained from three years of flow proportionate data from Bellevue, Washington. The Lakemont study provides more data than the WSDOT study, and thus provides more confidence in independent estimates of contaminants entering the vault and leaving the vault than the WSDOT data;
3. The Lakemont wet vault contains a bypass that prevents "flow through" of storms greater than the treatment design, meaning the results are not skewed by flow-through from larger storms. The WSDOT vaults are flow through systems; and,
4. The WSDOT vaults are treating runoff solely from highways. There are no highways that would be treated by vaults in the northeast basin of the Tukwila South site. The Lakemont vault data set was for runoff from mixed urban uses, more similar to the type of runoff that would occur in the northeast basin of the site.

171. The analysis of Average Daily Trips (ADT) and highway stormwater runoff constituents from Caltrans Facilities in California State by Kayhanian *et al*. (2003 and 2004) contains the same general conclusions on the relationship of ADT to highway contaminants that is described in Section 3.6.1 (pages 3-36 to 3-37) of Appendix C to the Draft EIS (*Stormwater Contaminants*). Similar to the studies reported in the Draft EIS, the Kayhanian *et al.* (2004) analysis found no correlation of ADT to contaminants for highways with less than 60,000 ADT (which includes the range of ADT that would occur on the access roads serving the Tukwila South project), and that the surrounding land use plays a significant role in highway runoff quality. Unlike results from Western Washington, the Caltrans data from California showed a first flush phenomenon (most contaminants in the leading edge of runoff), which has not been conclusively shown to exist in the Puget Lowlands. This suggests that climate variables between the two areas differentially affect the ADT to contaminant relationship.

Kayhanian *et al*. (2003) evaluated 83 highways sites ranging in ADT from 1,800 to 328,000 with a median ADT of 128,000. The data in "Attachment A" to this comment reflect the average of the data from the 83 highway sites. The three largest roadways that would serve within the Tukwila South project are S 200th Street (projected ADT of 44,000 in 2030), Southcenter Parkway (projected ADT of 40,000 in 2030), and S 178th Street (projected ADT of 20,000 in 2030).

During consultation with Ecology about this comment, it was agreed the Caltrans runoff data were for highways generating far more traffic than would occur at the Tukwila South project, and, therefore, Caltrans highway runoff data should not be used to forecast Tukwila roadway runoff quality as initially recommended by this comment.

172. The requested data are provided in the column labeled "arterial roadways" in Table 3-9 in Appendix C to the Draft EIS. The origins of the datum used for each parameter is described in the text on page 3-50 in Appendix C to the Draft EIS (*Arterial Roadway*). The Kayhanian *et al*. (2004) analysis (referred to in Matrix Comment 171 in this letter) found no correlation of ADT to contaminants for highways with less than 60,000 ADT (which includes the range of ADT that would occur at the Tukwila South project). This is consistent with the Draft EIS analysis that concluded a poor correlation of ADT to storm contaminants (see Section 3.6.1 (pages 3-36 to 3-37) of Appendix C to the Draft EIS). The data used to estimate runoff quality from arterial roadways was predominantly from roadways with less than 60,000 ADT; all of the roadways at the Tukwila South project would have less than 45,000 ADT in 2030.

173. Stormwater runoff from all main arterial roadways at the Tukwila South project would be treated by wet ponds, not wet vaults. The response to Matrix Comment 170 in this letter showed that the wet pond contaminant removal factors used in the Draft EIS analysis were low and thus conservative (underestimating water quality improvement). As explained in the response to Matrix Comment 170 in this letter, it was agreed during consultation with Ecology that the vault performance data recommended in Matrix Comment 170 in this letter should not be used for the Tukwila South EIS analysis, and that the highway runoff data recommended for use in this comment not be used, because they were derived from highways with traffic greatly exceeding Tukwila South project projections.

174. See the response to Matrix Comment 125 in this letter. The applicant expects to work with Ecology to identify suitable and effective control measures (such as public education to control pet waste) in consultations during the 401 Water Quality Certification review process. During this period, Ecology's continued planning to develop a TMDL for (in part) fecal coliform control may provide useful perspective on control strategies in the Green River basin.

Letter 2

State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Mailing Address: 16018 Mill Creek Boulevard ≅ Mill Creek, WA 98012
(425) 775-1311 ≅ Fax (425) 379-2323

May 4, 2005

City of Tukwila
Department of Community Development
ATTENTION: Steve Lancaster, Director
6300 Southcenter Boulevard, Suite 100
Tukwila, Washington 98188

Dear Mr. Lancaster:

SUBJECT: **Draft Environmental Impact Statement (DEIS), Tukwila South Project, Johnson Creek and Unnamed Creeks, Tributaries to Green River, and Green River, Tributary to Duwamish River, King County, WRIAs 09.0038 and 09.0001**

The Washington Department of Fish and Wildlife (WDFW) has reviewed the above-referenced DEIS and the current project *Fisheries Mitigation Plan* and offers the following comments at this time. Other comments may be offered as the project progresses.

One issue of concern to WDFW is the proposed mitigation involving Johnson Creek. WDFW wants to ensure that this aspect of the project will be consistent with our policies and fish passage criteria and with the *Green/Duwmish and Central Puget Sound Watershed Draft Salmon Habitat Plan*. This plan includes project LG-27 on page 6-63. WDFW encourages the project proponent to incorporate more of the strategies of project LG-27 into the proposed project. WDFW anticipates that changes will need to be made to the fisheries mitigation plan prior to permitting. Preliminary comments include that the proposed alignment needs to be shifted at the downstream end to avoid the extra long culvert, and the elevation of the outlet to the Green River needs to be lowered to meet WDFW fish passage criteria. It would also be preferable not to have a stormwater outfall directly adjacent to the creek outlet, since fish trying to access Johnson Creek might be confused by the two water sources. 1

WDFW believes the off channel habitat proposed on the Green River is a valuable mitigation concept.

WDFW staff are available to provide technical assistance on these issues. A review of the proposed project by a WDFW engineer prior to submittal for permitting should help ensure the project moves along in the process with appropriate changes to the plans to help ensure the success of the mitigation. A site review with our engineer is recommended as early as possible in the development of the project plans. 2

Another area of concern is temporary erosion and sedimentation control (TESC), particularly due to the massive amounts of grading required for the project and the work directly in the Green River. Further consideration needs to be given to Best Management Practices (BMPs) needed to meet water quality standards. Use of a sediment curtain has not been an effective BMP for other instream projects. A combination of ecology blocks and heavy plastic materials has been used effectively on other projects. 3

There are many other detailed comments which could be made related to fisheries, wetlands, and stormwater; the Washington Department of Ecology has compiled a list of them; so there is no need for WDFW to repeat these. Suffice it to say that meeting guidelines for wetland mitigation and the current DOE stormwater manual are important to WDFW. 4

Thank you for the opportunity to provide these comments. If there are any questions concerning this, please contact me at 425-649-7042 or fisheldf@dfw.wa.gov.

Sincerely,

Larry Fisher
Area Habitat Biologist

LF:lf:TukwilaSEPA.doc

cc: WDFW: Eturaspe, Brock, Barnard
DOE: Sacha

RESPONSE TO LETTER 2
Washington State Department of Fish and Wildlife

1. The applicant will work with Washington State Department of Fish and Wildlife (WDFW) during the Hydraulic Project Approval (HPA) process to ensure that the project meets all requirements of the hydraulic code (WAC 220-110).

Under existing conditions, flow from Johnson Creek to the Green River passes through a total of 215 feet of culvert (a 150-foot long by 24-inch pipe followed by a 65-foot long by 36-inch pipe). Water discharges to the Green River near elevation 15 feet, which is about one foot above the ordinary high water mark (OHWM) of the Green River. A flap gate on the end of the culvert is normally almost closed. As both King County and WDFW biologists have stated, salmonids are able to migrate upstream through the culverts despite the sub-optimal length and diameter of the culvert, the height above the Green River water surface, and the existing partially closed flap gate.

As currently proposed, the replacement culvert would be shorter (by 10 feet), wider (by one to two feet), and lower (several feet below the Green River OHWM mark). In addition, a flap gate designed to remain open except during floods would be installed. While not optimal, these conditions would increase the existing ability of fish to access Johnson Creek.

The existing width of the levee at the proposed channel crossing location is not related to the project, but to the presence of the fire truck turnaround (a state fire code requirement). The applicant has contacted the City of Tukwila regarding possible options to move the fire truck turnaround away from this area. If the turnaround can be eliminated or modified, it may be possible to further shorten the length of the culvert through the levee.

It is not expected that fish would confuse the proposed stormwater outfall with the new Johnson Creek outfall for several reasons: 1) the two pipes would not be adjacent to each other, but would be separated by approximately 100 feet; 2) the proposed stormwater outfall would have a standard flap gate, which would generally be closed, except as necessary to allow stormwater to leave (standard flap gates are not generally fish passable); 3) the stormwater outfall pipe mouth would be much smaller than the Johnson Creek pipe (about one-quarter the area) and would normally be closed by the flap gate, rather than entirely open as with the fish-friendly gate on the Johnson Creek pipe; 4) water leaving the proposed stormwater pipe would consist of treated impervious surface water runoff, as opposed to the mix of surface water runoff, wetland drainage, and groundwater leaving the Johnson Creek pipe (fish would be able to detect the differences); and, 5) the invert of the proposed stormwater outfall would be over two feet higher than the Johnson Creek outfall making it less accessible to fish.

See the updated Fisheries Mitigation Plan contained in Exhibit 2 to **Appendix A** and the summary of the updated plan in Section 1.2 of the Final EIS for details on the proposed fisheries mitigation.

2. The offer of working with WDFW engineers to ensure success of the final mitigation design is appreciated. As stated in the response to Comment 1 in this letter, the

applicant will work with WDFW during the HPA process to ensure that the project meets all requirements of the hydraulic code (WAC 220-110).

3. Under Alternatives 1 and 2, Temporary Erosion and Sediment Control (TESC) best management practices (BMPs) would be implemented and maintained in accordance with a Stormwater Pollution Prevention Plan (SWPPP) that would be prepared for the project, as required by an Individual NPDES permit for construction discharge. Conceptual construction stormwater management and the application of BMPs to prevent water quality and habitat degradation during construction are described in Section 3.1 of Appendix C to the Draft EIS. A Hydraulic Project Approval (HPA) would be required from WDFW for construction of the new outfalls through the Green River Levee, and the proposed mitigation elements (as well as other aspects of the proposed project), which would include WDFW review of the construction methods and BMPs specified in the HPA application(s). The applicant will work with WDFW during the HPA review process to make sure the project meets all requirements of the hydraulic code (WAC 220-110).

4. Your comment is acknowledged for the record. Please see the responses to the comments raised by the Department of Ecology in Letter 1.

Letter 3

Washington State
Department of Transportation
Douglas B. MacDonald
Secretary of Transportation

Northwest Region
15700 Dayton Avenue North
P.O. Box 330310
Seattle, WA 98133-9710

206-440-4000
TTY: 1-800-833-6388
www.wsdot.wa.gov

May 5, 2005

Steve Lancaster, Director
City of Tukwila
Department of Community Development
6300 Southcenter Blvd, Suite 100
Tukwila, WA 98188

Subject: SR 5, MP 152.28, CS 1727
City of Tukwila, Tukwila South Project Draft EIS

Dear Mr. Lancaster:

Thank you, for giving WSDOT the opportunity to review and comment on La Pianta proposed mixed use development of up to 14 million square feet on 498 acres located generally south of S 178th/S 180th Street, east of I-5 and Orillia Road, north of S 204th Street and west of the Green River. This proposed development includes commercial, office, retail and residential uses. Approximately 217 acres of the project site are currently within the Tukwila city limits; approximately 259 acres are in unincorporated King County and will be annexed into the City of Tukwila. Approximately 22 acres proposed for environmental mitigation are located within the City of Kent.

WSDOT has reviewed the Transportation Impacts found in this Draft EIS and have the following comments:

The Washington State Department of Transportation has previously identified several of the impacted ramps as high accident locations (HAL's). The significant number of additional trips that this proposal would add to these locations will require further mitigation in order to address safety impacts. 1

In addition, WSDOT does not believe that an appropriate level of mitigation as been identified for the I-5/S 188th/Orillia Rd S interchange. In addition to general capacity improvements at the interchange, all ramps will require additional queue storage (both off-ramps as well as on-ramps for ramp metering). At this time it is not clear to WSDOT whether adding minor capacity improvements to a selected few turning movements by converting them from single lane turns (left or right) to dual turn lanes will mitigate the additional trips and corresponding congestion. 2

A more significant interchange revision may be appropriate. The DEIS does not address operational and safety impacts to I-5, I-405, or SR167. Significant increases in ramp volumes serving any of these facilities could result in secondary impacts to the interstate system that may require mitigation. 3

If you have any questions on our statements or require some additional information, please contact Donald Hurter of our Developer Services section by phone at 206-440-4711, or via e-mail at hurterd@wsdot.wa.gov.

Sincerely,

Donald Hurter for,

Ramin Pazooki
Sno-King Area Planning and Operations Manager

RP dh

cc: Don Sims, WSDOT Traffic Section MS 120

RESPONSE TO LETTER 3

Washington State Department of Transportation

1. The most recent public information on High Accident Locations (HALs) available from WSDOT (2002 HAL Program Selection) does not identify any HAL locations within the study area; therefore, none were evaluated in the DEIS. The comment does not identify any specific HALs to address. The EIS transportation consultant attempted to reach Donald Hurter, the WSDOT contact referenced in this letter, on May 26, 2005 via phone and e-mail ,for information on this issue. Neither the EIS transportation consultant nor the City of Tukwila received a response or transmittal of any kind. Therefore, no direct response to this comment is possible.

2. The Draft EIS disclosed probable significant transportation impacts and potential mitigation improvements of all development alternatives in order to evaluate the long-term impacts of each alternative under SEPA. Although I-5 interchanges are exempt from LOS standards under the Growth Management Act (GMA) (because I-5 is designated a Highway of Statewide Significance), for review under SEPA the Draft EIS transportation analysis identified potential improvements to achieve LOS E at the I-5/S 188th Street/Orillia Road S interchange ramp junctions (referred to in the Draft EIS as I-5/Orillia Road S). As disclosed and described in the Draft EIS, when considering buildout of Alternative 1 (14 million square feet of development at Tukwila South), LOS E could not be achieved at the I-5/S 188th Street/Orillia Road S interchange and at other vicinity intersections without additional investment in transportation infrastructure or trip reduction programs (see Table 3.12-6 of the Draft EIS). Buildout of Alternative 2 (10.3 million square feet of development at Tukwila South) could achieve the LOS E level of service standard with identified mitigation. Potential transportation improvements were identified in Tables 3.12-12 and 3.12-13 in the Draft EIS, and Tables 15 and 16 in Appendix I to the Draft EIS.

With respect to the I-5/S 188th Street/Orillia Road S interchange, channelization improvements at the northbound and southbound ramp junctions were identified to maintain LOS E conditions in 2030 for Alternative 2 (refer to Table 3.12-13 of the Draft EIS, intersections #30 and #31). The specific design and configuration of the improvement(s) would be determined and evaluated as the improvements are planned for implementation in the future. However, to address the comment concerning "the conversion of lanes", the EIS transportation consultant obtained right-of-way plans and existing channelization plans, and conducted additional field research of potential intersection and ramp improvements identified in the Tukwila South Draft EIS at the I-5 and S 188th Street/Orillia Road S interchange. It should be noted that the identified potential mitigation did not assume a simple lane conversion, but included ramp widening and intersection approach widening to accommodate the forecasted traffic demands at this interchange in 2030 under Alternative 2.

The Tukwila South Draft EIS identified the following transportation improvements as potential improvements in the year 2030 at the I-5/S 188th Street/Orillia Road Interchange:

- Intersection #30 (I-5 SB Ramps at S 188th Street/Orillia Road S). Provide a westbound left-turn lane for double lefts. In the southbound direction, provide

double left-turn lanes and a thru-right lane. Provide double eastbound right-turn lanes.

- Intersection #31 (I-5 NB Ramps at S 188th Street/Orillia Road S). Provide double westbound right-turn lanes. In the northbound direction, provide double left-turn lanes, a thru-right lane, and a right-turn only lane.

At intersection #30 (I-5 SB Ramps at S 188th Street/Orillia Road S), paved shoulder widths on S 188th Street east of the I-5 SB Ramps are approximately 8 to 10 feet in width. Therefore, as with many other closely spaced interchange systems in the Puget Sound region, it is possible to add an additional lane underneath the I-5 Southbound bridge abutments, and eliminate the paved shoulder for a short distance under the structure to allow for the additional westbound left-turn lane. To construct an additional southbound left-turn lane, additional right-of-way is available, but a small retaining structure may be necessary on the west side of the ramp. The identified potential eastbound right-turn only lane may not be feasible to implement, given adjacent wetlands on the southwest corner of the intersection and downstream right-of-way constraints; however, this additional lane is not needed to maintain LOS E conditions.

At intersection #31 (I-5 NB Ramps at S 188th Street/Orillia Road S), there is sufficient area to provide two additional lanes on the east side of the I-5 NB Ramps as well as construct an additional ramp lane, weave area, and transition onto northbound I-5. An existing channelization plan was not available for the I-5 northbound off-ramp; however, field review indicates that implementation of potential improvements to this off-ramp appear feasible to construct and that adequate right-of-way is available.

East of the I-5 NB Ramps, curbs, gutters, and sidewalks with a 4-foot paved shoulders are provided on the west side of S 188th Street/Orillia Road S with curbs and 8-foot paved shoulders on the east side of the street. Nearer to S 200th Street, curbs, gutters, sidewalks and a 4-foot paved shoulders are provided on the east side of the street. A guardrail is also provided on the east side of Orillia Road S south of the interchange street for approximately 1,000 along the roadway, where steep slopes exist. It should be noted that, east of the guardrail, there is a relatively flat patch of land about 10 to 20 feet in width for a couple hundred feet before a steep decline occurs. After the guardrail ends, the steep decline on the east side of the hill becomes relatively flat and easily accessible. It is, therefore, feasible to provide an additional westbound travel lane approaching the I-5 interchange for several thousand feet by either limited fill and construction of a retaining structure on the east side of Orillia Road S and/or cutting into the west side of Orillia Road S.

3. The regional freeway systems of I-5, I-405, and SR 167 are Highways of Statewide Significance (HSS), and are, therefore, not subject to level of service or concurrency requirements under GMA. Therefore, to address impacts under SEPA to these facilities, traffic impacts to access points at key interchange systems of I-5, I-405, and SR 167 serving the study area were evaluated and disclosed in the Draft EIS and potential mitigation was identified.

It should be noted that regional planning and forecasting of future improvements to these freeway systems consider the densification of growth within urban areas, such as Tukwila, to avoid sprawl into rural areas, consistent with GMA goals and the King County

Countywide Planning Policies. As such, future planning and capacity expansion plans of the regional freeway system in the study area already consider this type of growth within the urban area. Future development at the Tukwila South site is consistent with GMA goals related to urban in-fill, as well as the goals and vision adopted by the Puget Sound Regional Council (PSRC), King County and the City of Tukwila (see Section 3.7 of the Draft EIS for further discussion of the relationship of the proposal to area plans and policies).

Although no specific regional freeway forecasts were completed as part of the Draft EIS analysis, trip distribution analysis of Alternative 2 indicates the following relative impacts onto freeways based upon relative traffic carrying capacities during a typical PM peak hour (see **Table 2-2**; Alternative 1 is not addressed since LOS E cannot be achieved in 2030 without additional mitigation or transportation demand management measures). The largest estimated two-way traffic volume impact would occur on I-5 north of I-405 under Alternative 2 in 2030, with approximately 1,015 PM peak hour trips impacting this freeway segment, representing approximately 4.0 percent of available traffic carrying capacity. On I-405 and SR 167, project trips in 2015 would use between 0.7 and 1.0 percent of the carrying capacity, and project trips in 2030 would use between 1.3 and 2.8 percent of the carrying capacity, as shown in **Table 2-2**).

Table 2-2
ALTERNATIVE 2 IMPACTS ON FREEWAY CAPACITIES IN SITE VICINITY
(PM PEAK HOUR TWO-WAY VOLUMES)

	2015		2030	
Highest Impact on Regional Link	**Site-Generated Traffic/Peak Hour Capacity[1]**	**Percent Use of Available Capacity**	**Site-Generated Traffic/Peak Hour Capacity[1]**	**Percent Use of Available Capacity**
I-5 North of I-405	300/25,300	1.2%	1,015/25,300	4.0%
I-405 East of SR 167	90/13,800	0.7%	305/23,000	1.3%
SR 167 South of I-405	150/13,800	1.0%	510/18,400	2.8%

Source: TENW, 2005.

[1] Mainline freeway capacity assumes 2,300 passenger car/hour/lane maximum service flow rate at LOS E conditions assuming a freeway free flow speed of 60 mph and a minimum lane speed of 51 mph (Exhibit 23-2 – LOS Criteria for Basic Freeway Segments, *2000 Highway Capacity Manual*).

Letter 4

King County Department of Transportation
Metro Transit Division, Design & Construction Section
Environmental Planning and Real Estate, MS KSC-TR-0431
201 South Jackson Street
Seattle, Washington 98104-3856
(206) 684-1418 FAX: (206) 684-1900

May 3, 2005

Mr. Steve Lancaster, Director
City of Tukwila
Department of Community Development
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

Subject: Tukwila South Project Draft EIS

Dear Mr. Lancaster:

King County Metro staff reviewed the Tukwila South Project Draft EIS and have the following comment. The bus routes listed in the draft EIS are incorrect; they appear to be routes serving the Renton area. Please contact Doug Johnson, Transit Planner, (206-684-1597, doug.johnson@metrokc.gov) to discuss transit routes serving the project area. 1

Thank you for the opportunity to comment on this proposal.

Sincerely,

Gary Kriedt

Senior Environmental Planner

RESPONSE TO LETTER 4

King County Department of Transportation, Metro Transit Division

1. As noted in the Draft EIS (see page 3.12-12), the only fixed route service provided by King County-Metro in the vicinity of the existing Segale Business Park is Route 155, which stops on S 180th Street at its intersections with Southcenter Parkway and Andover Park W. All other fixed route transit services documented in the Draft EIS either serve the Westfield Shoppingtown Southcenter Mall vicinity, north of the site area, park-and-ride facilities, or the commuter rail station within Tukwila.

From: "Melnikoff, Ron" <Ron.Melnikoff@METROKC.GOV>
To: "'lverner@ci.tukwila.wa.us'" <lverner@ci.tukwila.wa.us>
Date: 5/5/05 4:58PM
Subject: FW: Tukwila South Project Draft EIS

Letter 5

>
> E-mail address corrected
>
> -----Original Message-----
> From: Melnikoff, Ron
> Sent: Thursday, May 05, 2005 4:42 PM
> To: 'leverner@ci.tukwila.gov'
> Subject: FW: Tukwila South Project Draft EIS
>
>
> Steve Lancaster
> SEPA Responsible Official
> Director,
> Department of Community Development
> City of Tukwila
> Suite 100
> 6300 South Center Boulevard
> Tukwila WA 98188
>
> Dear Mr. Lancaster:
>
> The following comments are on the Transportation Section (3-12) of the
> draft Tukwila South Project draft EIS. They are from the King County Road
> Services Division.
>
> The EIS should acknowledge the King County Roads CIP projects. There is
> at least one project, Trans-Valley ITS project, in the immediate study
> area of S 180 Street. The complete CIP can be found on-line at
> http://www.metrokc.gov/kcdot/roads/cip/default.aspx 1
>
> The EIS should acknowledge the long-term King County Roads Comprehensive
> Plan projects contained in the Transportation Needs Report (TNR). The TNR
> projects can be found on-line at
> http://www.metrokc.gov/kcdot/roads/planning/tnr/200 2
>
> It appears that the Orillia Road at the S.200th Street infrastructure
> improvements would occur between 2006 and 2008. If this is the case and
> the City has not annexed the unincorporated area by that time, the King
> County Road Services Division will have to review and approve the work.
> Fatin Kara and Kristen Langley of the Road Services Traffic Section need
> to be contacted. They will review the proposed intersection improvement. 3
>
> The EIS identifies possible construction material haul routes. If the
> haul route uses an unincorporated King County arterial or if haul material
> is taken from or disposed within a site in unincorporated King County; Jon
> Cassidy at the Road Services Division Maintenance Section, needs to be
> contacted. He will review the proposed routing and specifics of the haul
> operation. 4
>
> If you wish to discuss these coments further, please contact me.

>
> Ron Melnikoff
> Senior Environmental Engineer
> Phone: (206) 296-3735
> FAX: (206) 296-3735
> Address: King County Road Services Division
> Department of Transportation
> M.S. KSC-TR-0231
> 201 South Jackson Street
> Seattle, WA 98104-3856
>
>
>
>
>

RESPONSE TO LETTER 5

King County Department of Transportation, Road Services Division

1. The CIP project cited in this comment for the Trans-Valley ITS corridor would not contain any capacity-related transportation improvements. The project calls for installation of four cameras along this corridor for information posting on traffic conditions for both traffic managers and public viewing. As such, this project was not listed as an assumed baseline transportation improvement in the Tukwila South Draft EIS.

2. A review of the 2004 Transportation Needs Report, November 2004, was conducted to determine if any improvements are planned within the Tukwila South study area, and none were found.

3. It is anticipated that the area will be annexed to Tukwila prior to commencement of the proposed road improvements. Tukwila acknowledges the need to coordinate any such improvements in unincorporated areas with King County Road Services Division.

4. Your comment is acknowledged for the record. Where specific haul routes are identified, coordination with King County would occur as applicable.

Letter 6

King County

Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 701
Seattle, WA 98104-3855

206-296-6542
711 TTY Relay

May 3, 2005

Steve Lancaster
SEPA Responsible Official
City of Tukwila
6300 Southcenter Blvd, Suite 100
Tukwila, WA 98188

Dear Mr. Lancaster:

Thank you for the opportunity to comment on the Tukwila South Project Draft EIS. The King County Solid Waste Division operates a transfer and recycling station located off 18800 Orillia Road South. Our concerns pertain mainly to the transportation impact of the proposed development in the vicinity of Orillia road and I-5. We would like to see a thorough project impact analysis that addresses the followings:

1. The analysis of the transportation impacts of this project assumes that Southcenter Parkway will be widened to 5 lanes. However, as indicated on page 35 of Volume III of the draft EIS, the widening of Southcenter Parkway is non-funded. What is the likelihood that this project will be funded and what happens if it is not funded? How will Tukwila South project be accessed? 1

2. What would be the traffic impact of the Tukwila South project on Orillia Road, between S. 200th street and S. 188th Street? Where is the analysis of the projected traffic going to/from SeaTac airport, going to/from I-5 north/south that the Tukwila South project will generate? What would be the traffic impact on the intersection of Orillia Road and South 188th Street? Do the I-5 on/off ramps have the capacity to carry the increased traffic load? What would be the traffic delay and queue lengths at the Orillia Road/S. 188th Street intersections? 2

3. Did the Tukwila South project consider extending S. 200th Street directly west to I-5 to alleviate the traffic impact on Orillia road and the intersection of Orillia Road and S. 188th Street? 3

4. Where are intersection #'s 77 and 78 located? 4

5. Figure 2-11, Vol. I of the Draft EIS shows a continuation of Orillia Road South, North to S. 178th Street. Discussion of this road and associated impacts should be discussed in the Draft EIS. 5

We look forward to having these comments addressed. Thank you again for giving us the opportunity to comment on the Tukwila South Project Draft EIS. If you have any questions, please call Dwin Ugwoaba at 206-296-4428.

Sincerely,

Kevin E. Kiernan, P.E.
Engineering Services Manager

KK:DU:er
DU18/Bow Lake TS – Tukwila So Dev Proj Draft EIS Comments – Final 050305

cc: Neil Fujii, Managing Engineer, Solid Waste Division (SWD), Department of Natural Resources and Parks (DNRP)
Dwin Ugwoaba, Engineer III, SWD, DNRP

RESPONSE TO LETTER 6

King County Department of Natural Resources, Solid Waste Division

1. The City of Tukwila is actively seeking grant funding and is evaluating its options with regard to City funding and developer participation.

Widening Southcenter Parkway to 5 lanes is an integral component of the proposal evaluated by this EIS. In the event adequate funding cannot be secured for this improvement, and the improvement is not implemented, development as proposed would not occur absent changes to the proposed such as alternative access options, reduced development intensity, development phasing or other approaches to meeting access needs and transportation concurrency and level-of-service requirements. Such changes could require further environmental review.

2. The Draft EIS analysis included an analysis of future trip distribution to and from the site. Figure 3.12-5 in the Draft EIS highlights general trip distribution patterns based upon trip assignments traveling to and from the site. Given the scope and nature of the study area, detailed figures of traffic assignments were not provided in the main Draft EIS text, but can be found in Attachment A of Appendix I. The assignments are summarized by horizon year, EIS alternative, and intersection. Traffic operational impacts were evaluated based on the trip distribution and trip assignment analyses, which included estimated trips between the site and I-5, and between the site and SeaTac airport.

Traffic operational impacts to study intersections #31 (I-5 northbound Ramps at S 188th Street/Orillia Road S) and #32 (Orillia Road S at S 200th Street) were disclosed in Tables 3.12-5 and 3.12-6 in the Draft EIS and Tables 8 and 9 of Appendix I to the Draft EIS. The analysis concludes that intersection levels of service at #31 (I-5 northbound Ramps at S 188th Street/Orillia Road S) would be LOS E or better with development under Alternatives 1 and 2 in 2015, but would degrade to LOS F by the 2030 horizon year with or without the project. LOS at intersection #32 would be C or better in 2015 and would degrade to F under Alternatives 1 and 2 in 2030. Potential intersection and arterial approach improvements would be required to accommodate future baseline growth (background traffic unrelated to Tukwila South development), as well as traffic from the project at these intersections by 2030, as identified in Table 3.12-13 of the Draft EIS and Tables 15 and 16 of Appendix I to the Draft EIS.

In 2015, with or without identified improvements, the delay at the southbound ramps intersection would be 45 seconds under Alternative 1 and 40 seconds under Alternative 2, and the northbound ramps intersection would be 79 seconds and 74 seconds under Alternatives 1 and 2, respectively (see Table 3.12-5 in the Draft EIS). In 2030, without identified improvements, the delay at both the northbound and southbound ramps intersections would be greater than 120 seconds under either Alternative 1 or 2. With improvements as identified in the Draft EIS, the delay at the southbound ramps interchange would be 102 and 64 seconds under Alternatives 1 and 2, respectively, and the delay at the northbound ramps would be 101 and 61 seconds under Alternatives 1 and 2, respectively (see Tables 3.12-6 in the Draft EIS).

Given the long-range nature of this analysis, and that both future transportation network and land use assumptions will likely change over time, vehicle queuing estimates are not

warranted at this stage. While estimates of future delay are averages for an entire intersection, estimates of queue length apply to each intersection movement and, therefore, must be based on more specific information in order to provide a reasonable degree of accuracy. As specific transportation improvements are planned and defined in the future, detailed queuing analyses would be conducted to determine operational needs.

3. The extension of S 200th Street west toward I-5 or over the Interstate is not feasible for a number of reasons, including significant topographic grade challenges and the proximity of the S 188th Street interchange. The reason Orillia Road S is configured the way it is, is to provide the east-west connection from S 200th Street to the regional freeway system and S 188th Street, consistent with the topography of the area.

4. Intersections #77 and #78, identified in Table 3.12-6 of the Draft EIS, would be two new intersections created by a future east-west on-site arterial connection between Orillia Road S and the realigned Southcenter Parkway extension. The exact location, timing, and alignment of this roadway have not yet been determined, but would be coordinated with the City of Tukwila, and would depend upon the ultimate mix and density of uses developed at the site, particularly within Areas G and H (see page 3.12-38 of the Draft EIS for further discussion).

5. The segment of Orillia Road S north to S 178th Street does not currently exist. Future improvements to Orillia Road S north of the I-5 interchanges are not part of the proposed Tukwila South project. If an extension of Orillia Road S is proposed in the future, it would be required to undergo additional environmental review and obtain applicable permits. The correction to the figure has been noted. See Chapter 3, Errata in this Final EIS.

Letter 7

RECEIVED
MAY 05 2005
COMMUNITY DEVELOPMENT

King County

Water and Land Resources Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855
206-296-6519 206-296-0192 Fax

May 5, 2005

Steve Lancaster, Director
Department of Community Development
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

RE: Tukwila South Project Draft EIS Comments

Dear Mr. Lancaster:

The King County Water and Land Resources Division has conducted a limited review of the draft Environmental Impact Statement (EIS) for the Tukwila South project. Our comments are presented below.

General Comments

1. The document does not adequately reflect the extensive body of work that has been generated as part of the Water Resource Inventory Area (WRIA) 9 Salmon Habitat planning process over the past six years. In particular, this includes the following two technical products:

- WRIA 9 Habitat Limiting Factors and Reconnaissance Assessment Report (December 2000)
- Draft WRIA 9 Strategic Assessment Report – Scientific Foundation for Salmonid Habitat Conservation (June 2004), including associated reports.

The change analysis of the Strategic Assessment found that the mainstem river channel area in the Lower Green has been reduced by 67 percent and floodplain wetlands reduced by 45 percent. To address these extensive historical losses, the Strategic Assessment identifies the following priority conservation hypothesis for the Lower Green subwatershed. 1

> **LG–1 (Tier 1)**: Protecting and creating/restoring habitat that provides refuge (particularly side channels, off channels, and tributary access), habitat complexity (particularly pools) for juvenile salmon over a range of flow conditions and at a variety of locations (e.g., mainstem channel edge, river bends, and tributary mouths) will enhance habitat quality and quantity and lead to greater juvenile salmon residence time, greater growth, and higher survival.

Juvenile salmonid rearing habitat in the Lower Green is especially constrained. Specific priority habitat management strategies identified for the Lower Green include: (1) rehabilitating low velocity/shallow water habitat, (2) rehabilitating off-channel habitat, and (3) restoring tributary access.

Given the extensive historical losses of mainstem, tributary, and floodplain habitat in the Lower Green, development proposals of this magnitude should be required to make substantial improvements to these conditions. The proposed off-channel habitat of 4.5 acres and Johnson Creek improvements amount to 2

just over one percent of the proposed development area (498 acres). If we hope to recover Chinook salmon in this watershed, we must make greater efforts to improve habitat in this reach. Ideally, the levee should be set back along the entire length of the proposed development to increase flood conveyance, provide off-channel rearing and high flow refuge habitat. In the absence of such a setback, it is recommended that off-channel or side-channel habitat be created at 4-5 pockets along the 2.5 mile left bank (RM 15 to 17.5) of the Green River, comparable to the proposed Habitat Mitigation area. Finally, Johnson Creek was identified by WRIA 9 as one of three tributaries in the Lower Green River for improving tributary access for salmonids. 2 cont.

2. A draft report for the City of Tukwila (January 2003) entitled, "Inventory of Shoreline Habitat and Riparian Conditions of the Green/Duwamish River within the City of Tukwila" identified this property as "the highest restoration potential of any site evaluated in terms of potential area of side-channel or off-channel habitat that could be created." Given this potential and the opportunities afforded by development of this property, it is disappointing to see the minimal mainstem Green River habitat restoration proposed. The EIS should assess this information and provide recommendations as to how the Green River riparian zone could be designated an area that could receive future habitat restoration projects. 3

3. Site design incentives should be considered that allow for greater building heights or more dense development on portions of the site (e.g., greater square footage than otherwise allowed by City of Tukwila standards or zoning) in exchange for further setbacks from the Green River and more aquatic habitat restoration. 4

4. It is not clear why the recently updated King County Surface Water Design Manual (2005), reflecting the best available science regarding stormwater management, is not being used for the Master Drainage Plan (MDP) and onsite stormwater management. 5

Land and Shoreline Use

Much of the "Tukwila South Project" property is currently within unincorporated King County, and is thus subject to King County's environmental regulations. However, the EIS states that evaluation of potential impacts to land and shoreline assumes annexation of the site into the City of Tukwila. In making this assumption, the applicant fails to address the strong lack of consistency of the proposed project mitigations with existing King County land use policies, critical area ordinance provisions, shoreline use designations, zoning, etc. The EIS acknowledges that the entire shoreline of the Green River within the City of Tukwila is designated "Urban," but it is also important to note that the Green River shoreline affected by this project is designated as "Rural" in King County's Shoreline Master Plan (SMP). Instead of retaining the protective provisions codified in King County's SMP for rural shorelines, the applicant proposes that the City apply its own current SMP regulations and redesignate it as an "Urban" shoreline. The purported rationale is to make the shoreline designation of this very sensitive segment of the lower Green River consistent with that of the highly commercial and industrial reach of the Green/Duwamish River within the City of Tukwila. This begs the question of whether this shoreline redesignation is consistent with parcels that are currently largely in agricultural use, and encompass multiple sensitive areas including 100-year floodplain areas along Johnson Creek and the lower Green River, wetlands, steep slopes, landslide hazard areas and a seismic hazard area. Instead of taking the above-mentioned approach, impact assessment to the Green River shoreline environment (i.e., the channel of the Green River, Johnson Creek, the 100-year floodplains of these waterbodies and their associated wetlands) should, at a minimum, be based on the current King County designations. 6

In addition, the EIS fails to describe the difference between current conditions and what the shoreline environment will look like at full build-out. Without this description in narrative and graphic formats, it is virtually impossible for decision-makers to determine what impacts to the Green River and the other sensitive areas will take place, and what mitigations would be necessary to avoid and minimize these impacts. This comment also pertains to the need for the EIS to discuss the difference between the protections to this site afforded by all of King County plans, policies, and codes, including the King County Comprehensive Plan and the recently adopted Critical Areas Ordinance (CAO), when compared to provisions of the City of Tukwila's regulations. Even the following cursory comparison of the salmonid-bearing stream buffer requirements of Tukwila, King County and several other Seattle area municipalities makes it clear that the shoreline buffer requirements will decrease drastically as a result of the proposed shoreline redesignation. 7

Jurisdiction	Classification	Standard Buffer Width
City of Tukwila	Class 1	40 feet
WA DCTED	Type 2	250 feet, plus 15 foot setback
King County (as of 2005)	Type F	115 to 165 feet, plus 15 foot setback
City of Kent	Class 1 Class 1	100 plus 15 foot setback 200 feet[1]
City of Renton (draft)	Class 2	100 feet
City of Bellevue (draft)	Type F	100 feet plus 20 foot setback

1. Within the Green River Corridor Special Interest District.

Plants and Animals

The EIS appears not to have utilized any of the information generated by the WRIA 9 conservation planning effort. The WRIA 9 entities, which include King County and the City of Tukwila, recently completed a Strategic Assessment Report that presents a large body of scientific findings on historical and current habitat conditions and salmonid habitat utilization in the Green-Duwamish River watershed, and recently published a Draft Salmon Habitat Plan to guide salmon recovery in the Green/Duwamish and Central Puget Sound Watershed. The Habitat Plan, which will be completed later this year, recommends a diverse array of habitat protection and restoration projects, land use policy and regulatory changes, and educational programs based on the best available science and informed by community values. The scientific studies conducted in order to prepare the Habitat Plan show that there is a significant lack of juvenile rearing habitat in the Lower Green River. One of the reports on which the Habitat Plan is based, the WRIA 9 Strategic Assessment, recommends increasing mainstem and off-channel habitats in the Lower Green River in order to increase juvenile Chinook salmon rearing habitat, life-history diversity and stock productivity. The Strategic Assessment and the Habitat Plan both recommend that riparian zones be enhanced and effective vegetative buffer widths be established to provide adequate riparian habitat functions. The narrow vegetative buffer that would apply to this project is grossly inadequate to ensure a functional riparian zone, and does not even extend to the modest width needed to accommodate the future setback of the levee to a stable slope angle. Due to their extreme height, and, to the fine-grained alluvial soils that prevail in the lower Green River valley, the slopes of the levees along this 2.4 mile stretch of the left bank of the Green River affected by this project should be no steeper than 2.5H:1V to enable them to withstand the erosive and hydraulic forces that could trigger levee slumping and breach failures. Ideally, easements and buffers should be wide enough to accommodate reshaping the river bank to include a low vegetated bench that could be planted with native riparian trees and shrubs. 8

Because a portion of this levee is already a federal levee, and the remaining portion is proposed for future inclusion into the U.S. Army Corps of Engineers (Corps) Section 205 levee system, it is subject to Corps maintenance standards that specifically preclude the establishment or growth of riparian vegetation, including native trees, in excess of four inches in diameter at breast height (dbh). The only way to establish such beneficial native riparian vegetation is on bank segments that are surplus to the levee prism, i.e., on single or multiple slope benches. Examples of such benches can be seen on numerous recent levee repairs elsewhere on the lower Green River in the Cities of Tukwila, Kent, Auburn and in unincorporated King County. When levees are modified or repaired to provide mid-slope benches, they not only become more structurally stable, it is also much cheaper to access them, should they experience future damages, than levees without benches. The benches can serve as construction platforms for heavy equipment, and the added costs of excavation, storage of excavation spoils, and replacement of fill in situ are avoided. 9

While the proposal does include several acres of off-channel rearing habitat along Johnson Creek, it is proposed that Johnson Creek, which is currently channelized and serves as an agricultural drainage ditch in spite of the fact that it supports juvenile salmonids, including Chinook, will be relocated into a new channelized alignment confined within newly-created raised berms within the 100-year floodplains of the creek and the Green River. In addition to causing a net reduction in the combined area of these 100-year floodplains, the berms will severely limit the aerial extent of riparian buffer along the creek. A simple way to address these impacts would be to widen the habitat restoration corridor along the full length of the relocated Johnson Creek by setting back the flood control levee along the northerly edge. 10

The final EIS should describe a set of mitigations that will ensure that future actions necessary to recover Endangered Species Act (ESA)-listed populations of Chinook salmon and bull trout, as well as steelhead trout which is likely to be ESA-listed in the near future, are not precluded (see web site for listing information: http://www.nwr.noaa.gov/1salmon/salmesa/stlhpug.htm). Specifically, such actions will very likely include the restoration of instream and riparian habitat in and adjacent to the lower Green River and all of its major tributaries, including Johnson Creek. The project proposal described in the EIS does not appear to be consistent with the ESA-mandated need to refrain from precluding future salmon recovery actions, because it does not provide a sufficient riparian corridor , nor does it achieve slope stability, let alone provide enough space to conduct even minimal restoration of instream habitat and riparian habitat should the existing levee be damaged during future flood events. 11

A serious flaw of the DEIS is that it describes the Green River as if it were in a pristine state. The assumption throughout the DEIS seems to be that doing nothing to the existing river bank will somehow therefore avoid adverse impacts. This is far from accurate. By failing to provide for future restoration of riparian habitat within a buffer along the river corridor, the project will instead guarantee the ongoing, long-term degradation of aquatic and riparian conditions in the reach by perpetuating the existing degraded habitat conditions. At present, the 2.4 miles of riverbank that borders this project is vegetated almost exclusively with invasive, non-native species such as blackberries and reed canarygrass. Native trees, even saplings, are largely absent on the two-mile segment of the lower Green River throughout the proposed project site. The existing vegetation does not provide adequate shade, overhanging cover or the potential for future recruitment of large woody debris into the river, all of which are considered necessary future conditions for salmon recovery. The reason that colonization of native tree and shrub species has not occurred at this site, in spite of vegetation maintenance by the Green River Flood Control District (GRFCZD) over the past 15 years that focuses on removing non-native vegetation and protects native vegetation to the maximum extent practicable, is that the existing bank is oversteepened and the saplings of such species tend to slough off before they can grow to a size that can provide positive riparian functions. The single exception to this is one setback levee location on the right bank just upstream from 12

the S. 200th Street bridge. Elsewhere within the project reach, the project will simply maintain the current level of habitat degradation for the foreseeable future. 12 cont.

As mentioned above, the only way it will ever be possible to establish native riparian trees in the future at this location in a manner that is consistent both with ESA-mandated necessary future conditions for salmon recovery and U.S. Army Corps of Engineers federal levee standards is to reshape the levee slope to create one or more mid-slope benches above the ordinary high water mark (OHWM) that can be considered to be surplus to the levee prism. The results of past levee and revetment setback projects along the lower Green River indicate that such mid-slope benches are not only amenable to riparian revegetation with native trees and shrubs, they also provide space for installation of Large Woody Debris (LWD) below the OHWM and on the benches themselves. When vegetation and LWD are installed in this fashion, they form zones of slower water velocities during floods. Typically within five to ten years following construction, native riparian plantings also form abundant overhanging cover that protects fish from high velocities as well as aquatic and avian predators. The vegetation on these benches, and on the banks and tops of the slope generally also serve as habitat for aquatic and terrestrial insects that provide food for juvenile salmon. 13

Levee setbacks also facilitate the installation of large coniferous woody debris, which is an important component of healthy freshwater habitat for all salmonid species. Natural sources of LWD include hillslope processes such as landslides, and adjacent and upstream riparian vegetation. However, in urbanized settings such as that of the lower Green River, LWD may have to be deliberately placed along the riverbank toe or within the channel to serve the same functions as naturally recruited wood, until such time as the riparian zone becomes sufficiently reforested to provide even a modicum of natural LWD recruitment. Instream LWD serves many critical ecological functions including sediment routing, local reduction of water velocities during peak flows, maintenance of channel bedform and bank stability, and provision of hydraulic refugia and cover that are important for the formation and maintenance of the spatial template within which salmonids exist. Within the lower Green River, this template includes pool bedforms, backwater and edgewater habitats, and cover that provides adult holding habitat, juvenile summer and overwintering habitats, and refuge from aquatic and avian predators. Reduction in the quantity or quality of any of these habitats may result in reduced survival of salmonids during the life-history stages in which those habitats are used. In the lower Green River, juvenile salmonid abundance in particular is strongly related to the amount of large woody debris in the channel. Large woody debris provides surfaces that can be colonized by macroinvertebrates, and can capture and temporarily store floating wood, resulting in increased habitat cover for fish. Woody debris also plays a key role in the retention of salmon carcasses that are a major source of nitrogen and carbon in stream ecosystems. 14

The current proposal does not allow enough space for either future deliberate installation of stable LWD, or its natural recruitment, because it does not provide adequate riparian buffer widths (at least 100 feet measured from the OHWM) to allow for the eventual reconfiguration of the overall bank slope to an overall angle of 2.5V:1H needed for vegetated bench creation and minimal bank stability. Given that the proposed project lifespan will likely exceed 100 years, it is a virtual certainty that the need for slope reconfiguration will be necessitated by future flood damages, ESA-mandated salmon recovery actions, or even impacts caused by future sea-level rise leading to increased backwatering from Elliott Bay during heavy storms and/or annual high tides.

In summary, the consequences of not providing adequate riparian buffer zone at this site are as follows: 15

- Over two miles of the lower Green River within the Cities of Tukwila will continue to be characterized by nearly uniform, smaller diameter riprap and quarry spalls, rarely exceeding two

to three feet in mean diameter. The uniform, monotonous, nearly featureless extent of these materials below the OHWM will continue to provide relatively little in the way of high quality aquatic habitat, including habitat for ESA-listed salmonids. 15 cont.

- The existing local fast velocity regime near the bank will be unmodified, and the existing absence of resting and feeding opportunities for foraging juveniles as well has cover for upstream-migrating adult salmonids will persist. 16

- The current condition of frequent small and medium-sized slumps and larger-scale failures will continue to generate sediment and turbidity impacts except during summer baseflow conditions, and will precipitate additional impacts associated with subsequent levee repairs. 17

- If flood damages to these facilities worsen catastrophically, even more damaging flood-fighting measures, including end-dumping rock during severe floods may be necessary to prevent loss of life and limb in the event of catastrophic facility failures. 18

- The lower Green River adjacent to this site will continue to receive inputs of nonpoint pollution from fine soil particles when segments of the oversteepened, rock-line levees and revetments bordering this site enter the river from slumping and erosion of riverbank surface. As a result, water quality in the lower Green River will continue to be at risk for the multiple of salmonids, including ESA-listed species that occupy the river. 19

- Instream LWD within the affected reach of the lower Green River will continue to be grossly deficient, compared to levels in healthy river systems. At present, what little LWD exists is in this reach is typically in the form of widely scattered single deciduous logs and relatively old, decayed, deeply embedded, coniferous pieces. Due to the continuing lack of riparian trees, recruitment of LWD into this reach will remain negligible. 20

- The growth of shade-producing riparian vegetation will be precluded due to federal levee maintenance standards, and the existing, ongoing absence of shade cover, insect production and detrital inputs will be perpetuated. 21

- Overall, a persistent condition of degraded aquatic edge and riparian habitat will be locked into place for the very long term by the proposed project configuration. 22

Levee Design and Construction Standards

King County is party to several signed interlocal agreements with the City of Tukwila and other municipal jurisdictions within the lower Green River Valley, establishing construction and maintenance standards for flood containment levees along the banks of the Green River. Under the terms of these agreements, King County has agreed to use funding secured by the GRFCZD to maintain and repair levees within easements granted to the GRFCZD, and to King County, for this purpose. This King County maintenance role is conditional on levees being brought into compliance with current design and construction standards by each affected jurisdiction. According to Section 4.2.4 of the July 2002 Interlocal Agreement for the Administration of the GRFCZD, "Local land use actions shall also provide for the obtaining of any additional easement areas or tracts of land reasonably necessary to accommodate levee structural integrity and slope stability needs. Such needs shall be determined in a manner consistent with applicable federal levee engineering guidelines, and with any additional engineering or geotechnical

studies prepared for this purpose." King County, Tukwila, and Kent are all signatory parties to this Interlocal Agreement.

Compliance with such standards is predicated on establishing flood containment levee structures which have been shown to meet minimum factors of safety for several structural failure modes. A range of levee stability analyses and relevant factors of safety are set forth by the United States Army Corps of Engineers in their published Engineering Manuals EM 1110-2-1913, and EM 1110-2-1902.

A review of the DEIS and relevant Technical Appendices shows that only some of these analyses have been completed, and only for very limited portions of the levee system bordering the eastern margins of the proposal site area, along a 2.4 mile reach of the Green River. The full range of stability analyses required in EM 1110-2-1913 has not yet been provided, nor has the full length of the levee system been addressed. This deficiency needs to be remedied, levee construction standards established, and sufficient easements or other rights of way for levee construction and maintenance repairs required as conditions of approval, prior to issuance of development permits for site construction activities. 23

The DEIS has addressed only the two portions of the levee system which are currently proposed for reconstruction or relocation as part of the Alternative 1 and 2 proposal. These two levee segments include the 700 foot portion of the overall levee system adjoining the proposed mainstem channel habitat feature, and the system of levees and pond berms which are proposed to provide flood containment along the southern margins of the site adjoining the relocation of Johnson Creek. Results for the stability analyses of these two levee segments in the DEIS differ, which may have to do with the differences in construction techniques proposed. Other portions of the levee system required for flood containment throughout the reach and for areas downstream within presently developed portions of the City of Tukwila are simply not addressed. 24

Using the findings of the applicant's consultants for stability of the mainstem Green River habitat embayment levee setback proposal as set forth in Appendix 4 to Appendix A of the DEIS, a bank slope of 3H:1V appears to adequately address Green River levee embankment stability requirements, at least for the analyses completed to date. This result is wholly consistent with the results of similar analyses for worst-case assumptions concerning rapid drawdown impacts on slope stability for levees throughout the lower Green River, as developed by geotechnical consultants for King County (Shannon and Wilson, May, 1999). Less restrictive assumptions for drawdown conditions also yield acceptable factors of safety for slopes constructed at 2.5H:1V, in this same King County analysis.

Many of the existing levee embankment slopes throughout the length of the river reach bordering the proposed project site, from So. 204th Street to So 180th Street, are currently constructed at slope angles significantly steeper than this minimum requirement for slope stability. According to previous surveys provided by the project applicant, levee slopes in this reach may be as steep as 1.3H:1V to 1.7H:1V, or up to twice as steep as the minimum slope angle needed to be considered reasonably stable against levee failure. Portions of the levees in this reach have required repeated, significant expenditures of the GRFCZD funds, and additional federal funds, in order to perform repairs required by continuing levee deterioration and stability problems. These expenditures have greatly exceeded all other levee maintenance and repair costs within the GRFCZD's jurisdiction, when compared with all other levee repairs, on the basis of dollar cost per linear foot of repair. As all of the new project area and much of the existing City of Tukwila downstream will depend on securing these levees against failure over the very long term, this is a significant concern which is nowhere addressed in the DEIS for the project. This is a significant deficiency and needs to be remedied with appropriate analytical findings and easement dedications required as a condition of approval before issuance of site development permits. 25

The Tukwila Municipal Code (TMC) explicitly recognizes this concern by including a specific subsection dealing with "all areas adjacent to the Green River," which clearly includes the project proposal. TMC 16.52.100.C.1 requires "construction or reconstruction of the dike/levee system," "as part of the floodproofing for developments adjacent to the Green River through Tukwila." Such work needs to be "in accordance with...engineering studies...and the Green River Management Agreement...as part of the plan submittal."

Even "if dike/levee improvements are not required, and the natural riverbank is allowed as bank protection, then a river bank stability analysis shall be provided as part of the plan submittal" (TMC 16.52.100.C.2). Given that older, oversteepened, existing levees are in fact present, it should be clear that the natural riverbank is not being considered as bank protection here, but that the development is in fact relying on the levees for flood containment. In either case, the TMC requirements for proposals adjacent to the Green River would seem to require the analyses which the DEIS omits. It would seem appropriate for the final EIS document to address this deficiency and for relevant findings to be used as the basis for establishing adequate easement dedications as a condition of approval prior to issuance of site development permits. 26

Levee Maintenance Easement Standards

TMC 16.52.100.C.3 further provides that "all properties adjacent to the Green River shall, as part of their development, dedicate construction and maintenance easements for access and maintenance of existing or future dikes/levees/riverbanks along the Green River as part of their plan submittal." The DEIS has not addressed this question.

Using information from the applicant's earlier surveys in this overall 2.4-mile-long reach, and a thorough familiarity with the levees in question, King County has determined that a minimum easement area measuring approximately 110 feet landward from the present location of the Ordinary High Water Mark (OHWM as defined in the Washington State Shorelines Master Program) on the river is needed to adequately provide for future maintenance and repair needs of the existing levee system. This easement width is the minimum required for locating and constructing future levee repairs at the minimum 2.5H1V slope gradient needed to provide for the minimum required factors of safety against ongoing levee slope failures. Recording of this easement in favor of King County and the GRFCZD at this dimension needs to be a requirement of any future permits issued for new development, or for future redevelopment, for every portion of the proposed project site which is adjacent to the Green River. 27

Cutoff Levee Construction

With respect to the proposed construction of a "cutoff barrier dike," which is a proposed extension of the levee system westward across the Johnson Creek floodplain to the base of the valley wall, King County is concerned that this feature is proposed to include the western and southern portions of a constructed berm surrounding a proposed detention pond, with an overflow culvert proposed to pass through the earthfill berm prism. Partly because the pond bottom is shown in the DEIS as being excavated below the elevation of the existing water table, into sediments containing layers of peat deposits, which add underseepage concerns to levee maintenance requirements, King County is concerned that this portion of the levee proposal would incorporate levels of risk which are unsuited to securing the long-term integrity of the levee system. Moreover, this design arrangement would essentially put the County in the position of needing to secure the structural integrity of the applicant's own stormwater detention facility. This does not appear to be an appropriate element within the overall levee maintenance role assumed by King County, which is not intended to address interior runoff systems, or their stormwater detention needs. Therefore, King County requests that the configuration of the levee system in this location be modified 28

from that currently proposed, to be aligned along the western and northern boundaries of the proposed stormwater pond. This design change would remove the pond from any part of the levee system, thereby clearly segregating responsibility for securing its structural integrity from that of levee maintenance and flood containment. 28 cont.

Pump Operations Procedures Plan (POPP)

Another area of concern to King County involves the significant reduction in floodplain storage within the Johnson Creek tributary sub-basin, with the attendant increase in discharge of stormwater runoff to the Green River during flood stage conditions. The DEIS incorrectly states that the increase in discharge is compensation for the reduction in storage, when this pumping can only be considered part and parcel of the same environmental impact. The DEIS correctly notes that current interlocal agreements signed both by King County and Tukwila require compliance with the terms of the 1986 POPP with respect to discharge and interior flood storage volumes. The POPP basically establishes two requirements for new stormwater discharged to the Green River. These are: (1) Discharge needs to be terminated for those periods of time when the levee system is at full capacity, during flows at or above 12,000 cfs as measured at the Auburn gauge, and; (2) Capacity must be demonstrated within the affected tributary sub-basin, in a volume sufficient to store runoff from the 100-year, seven-day duration rainfall event. The DEIS incorrectly states that this requirement may be met by providing equivalent volumes of storage within the excavated margins of the mainstem Green River. This is exactly contrary to the terms of the POPP, which requires storage within the interior drainage system for the duration of the 100-year, seven-day event, prior to any runoff being discharged into the river. Similarly, the DEIS incorrectly states that POPP requirement for terminating discharge into the river at 12,000 cfs flow levels can be met by continuing pumped discharge of stormwater runoff during such events. 29

According to the POPP requirements, discharge and storage requirements of the POPP may be exempted only by the approval of the Green River Basin Technical and Executive Committees. The project proponent has submitted a request for this purpose, which is currently under consideration by the Technical Committee. The DEIS needs to be revised to more accurately reflect the terms of compliance with POPP standards, and to document that the current proposal, to continue pumping during peak river flood conditions, and to provide less than the storage volumes required, will require approval of an exemption from the POPP standards. 30

Other Specific Comments

Page S-9, last bullet – Regular oversight, inspection and implementation of TESC measures during construction is critical to minimize sediment transport offsite. 31

Page 15, last bullet – It is unlikely that the proposed water quality treatment will result in an improved water quality condition onsite. The assumptions related to developed area concentrations and removal efficiencies are overly optimistic. 32

Page S-25, first bullet – The filling of five watercourses onsite that are presumed to be fish-bearing should be adequately mitigated. 33

Page S-25, last bullet – This bullet should note that salmonid rearing habitat in the Lower Green is the critical issue. 34

Page S-26, last bullet – It is unrealistic to conclude that the overall quality of stormwater discharge from the site is expected to increase. It will likely improve in that portion of the site that is developed and treated, but it will not improve in the area that is largely undeveloped. 35

Thank you for this opportunity to comment on this project. If you have any questions about our comments, please call Steve Foley, Senior Engineer with the Stormwater Services Section in the Water and Land Resources Division with the Department of Natural Resources and Parks, at 206-296-1973.

Sincerely,

Daryl Grigsby
Director
Water and Land Resources Division

cc: Dave Clark, Manager, Flood Hazard Reduction Services Section (FHRS), Water and Land Resources Division (WLRD), Department of Natural Resources and Parks (DNRP)
Andy Levesque, Senior Engineer, FHRS, WLRD, DNRP
Lorin Reinelt, Water Quality Planner III, Scientific and Technical Services Support (STS), WLRD, DNRP
Ruth Schaefer, Senior Ecologist, STS, WLRD, DNRP
Josh Kahan, Green/Duwamish Basin Steward, Land and Water Stewardship Section, WLRD, DNRP
Curt Crawford, Supervising Engineer, Stormwater Services Section (SWS), WLRD, DNRP
Steve Foley, Senior Engineer, SWS, WLRD, DNRP

RESPONSE TO LETTER 7

King County Department of Natural Resources, Water and Land Resources Division

1. It is recognized that a draft of the WRIA 9 Habitat Plan for Salmon Recovery in the Green/Duwamish and Central Puget Sound Watershed was prepared and circulated for public and steering committee review and comment on March 10, 2005. The comment period on the draft habitat plan ended on April 25. The steering committee will prepare the final habitat plan this summer. The final habitat plan will recommend a mix of habitat protection and restoration projects, land use policy and regulation changes, and education programs. The recommendations from the habitat plan have not been finalized and have not been adopted by any agency to date.

Many of the documents prepared as part of the WRIA 9 planning process were reviewed and relevant resource condition information and recommendations incorporated or referenced in the Draft EIS (e.g. Appendix E, pages 25 and 37). While the change analysis and conservation hypotheses are interesting and help provide the historical setting for the Green River Valley, they have little relevance to the requirements of the State Environmental Policy Act (SEPA) (WAC 197-11-402). SEPA requires examination and comparison of the proposed action and alternatives to existing conditions, not historical conditions nor a hypothetical future condition. However, some of the recommendations promulgated by the committee were adopted as the basis for the updated Fisheries Mitigation Plan proposed by the applicant (see Exhibit 2 in **Appendix A** to the Final EIS).

2. The proposed project incorporates mitigation that is intended to meet and/or exceed all regulatory requirements to address the project's probable significant impacts. Per SEPA (WAC 197-11-440(6)(a) and 197-11-440(6)(c)(iv)), the project is not responsible for mitigating impacts caused by construction of the Green River Levees, agricultural drainage ditches, and wetland fill that occurred in the early 1900's. Nor is the project responsible for mitigating impacts caused by the permanent diversion of the White River out of the Green River/Duwamish system and construction and operation of the Howard Hansen Dam. These historic impacts are described in Appendices C and E to the Draft EIS. The updated Fisheries Mitigation Plan (Exhibit 2 in **Appendix A** to the Final EIS) proposes to: create low velocity/shallow off-channel habitat by relocating a portion of the Green River Levee; improve fish access to a restored Johnson Creek channel; and create, rehabilitate, and enhance wetlands associated with Johnson Creek and the Green River (see the updated Wetland Mitigation Plan, Exhibit 3 in **Appendix A** to the Final EIS). The net habitat functions and values of the site would be improved under Alternatives 1 or 2 (see the comparison of existing versus proposed conditions on page 2 of the updated Fisheries Mitigation Plan).

Suggesting that the value of the proposed fisheries mitigation is limited to its aerial percentage of the total project area is not valid. The project has avoided significant impacts to all natural streams. The project proposes approximately four times more restored fish habitat than would be impacted under Alternatives 1 and 2, with a net gain in functions and values.

Throughout the process, the applicant has worked with the City, other jurisdictions and agencies, the Muckleshoot Indian Tribe, and neighbors to propose mitigation that would result in improvements to aquatic habitat.

3. Your comment is acknowledged for the record. The No Action Alternative analyzed in the Draft EIS describes what would occur should the Tukwila South project not be approved or implemented. SEPA does not require individual projects to evaluate potential proposals that are not linked to the identification of probable significant impacts (see the response to Comment 2 in this letter).

The proposed Sensitive Area Master Plan has been updated since issuance of the Draft EIS. The updated plan is contained in **Appendices A** and **B** to this Final EIS and summarized in Section 1.2.

4. Your comment is acknowledged.

5. Per Tukwila Municipal Code (TMC) 14.30.070 (2): "The 1998 King County Surface Water Design Manual, adopted hereby by reference as if fully set forth herein, except that, unless the context indicates otherwise, the "county" and "King County" shall refer to the City of Tukwila and except as amended in the Public Works Development Guidelines and Design and Construction Standards. The Director will review subsequent amendments, revisions and versions to the 1998 King County Surface Water Design Manual and will adopt these as needed and as applicable."

The analysis in the Draft EIS assumed that Tukwila South Alternatives 1 and 2 would be implemented only after annexation of the entire site into the City of Tukwila. The 1998 KCSWDM is the regulatory code for stormwater control in the City and environmental analysis in the Draft EIS found compliance with it adequate to prevent significant environmental impacts.

6. Your comment is acknowledged for the record. See the response to Matrix Comment 139 in Letter 1 for a discussion of the existing King County zoning and shoreline regulations that currently apply to a portion of the site. See the response to Matrix Comment 146 in Letter 1 for a comparison of the existing King County and proposed City of Tukwila Shoreline Master Plan designations that would apply to the shoreline jurisdiction area and Matrix Comment 159 in Letter 1 for a comparison of potential impacts under both County and City regulations. The Tukwila South project would not occur without annexation of the site to the City of Tukwila.

7. See the response to Matrix Comment 139 in Letter 1 regarding existing King County regulations that apply to a portion of the site. See the response to Matrix Comment 146 in Letter 1 for a comparison of King County and proposed City of Tukwila regulations that would apply to the shoreline area.

See the response to Matrix Comment 159 in Letter 1, which addresses the first part of this comment.

Under Alternatives 1 and 2, there would be an increase in shoreline net functions and values and the Tukwila South site would be designated as a Sensitive Area Master Plan Overlay District by the City of Tukwila. This District designation would allow

development that results in greater environmental benefits than could be achieved under standard TMC 18.45 Sensitive Areas Ordinance provisions, under which avoidance or like-kind mitigation for impacts to agricultural wetland and drainage ditch watercourses would be required (see the updated draft Sensitive Area Master Plan, **Appendix A** to the Final EIS for details). Buffers in areas designated as Sensitive Master Plan Overlay Districts can be more flexible than under standard Tukwila Sensitive Area Ordinance provisions, but there must be a net gain in site-wide functions and values relative to standard provisions. The updated draft Sensitive Area Master Plan is summarized in Section 1.2 of the Final EIS and included in its entirely as **Appendix A** to the Final EIS. A Wetland and Stream Buffer Plan has been prepared which describes the proposed buffers, their condition, and their ability to protect functions and values in retained wetlands and streams (see **Appendix B** to the Final EIS and the summary in Section 1.4).

8. See the response to Comment 1 in this letter. The purpose of this EIS is to evaluate the proposed action and alternatives. SEPA does not require evaluation of an individual project's relationship to an unadopted plan that includes recommendations. Mitigation requirements must be tied to the probable significant impacts of a given proposal.

The Green River shoreline, which contains the Green River Levee, would be regulated by the City of Tukwila Shoreline Master Program under an "Urban Environment" designation under Alternatives 1 and 2. The project would be required to obtain a Shoreline Substantial Development Permit from the City. A Wetland and Stream Buffer Plan has been prepared since the issuance of the Draft EIS which provides more details on proposed buffer conditions under Alternatives 1 and 2 (see the summary in Section 1.4 of the Final EIS and the Buffer Plan in **Appendix B** to the Final EIS).

9. Your comment is acknowledged for the record. The planting plans in the updated Fisheries and Wetland Mitigation Plans (Exhibits 2 and 3 in **Appendix A** to the Final EIS) exclude plants with stems that could potentially reach four inches and with roots that could extend into the structural prism of any levee. There is no proposal to create riparian vegetation along the Green River Levee except within the Off-Channel Habitat Restoration Area, which would create varying slopes and benches in excess of the Corps of Engineers structural levee prism. Likewise, the proposed Johnson Creek mitigation project would create a "riparian bench" at the toe of the proposed flood barrier dike. Any plantings on the flood barrier dike would be on varying slopes in excess of the dike prism.

10. Your comment is acknowledged for the record. There is no documented use of Johnson Ditch by Chinook salmon, although King County and WDFW biologists have reportedly observed salmonids in the stream (see Appendix E to the Draft EIS and pages 3.3-14 and 3.3-15 of the Draft EIS). Figures 2-7 and 2-8 of Appendix B to the Draft EIS show the proposed Johnson Creek realignment and restoration. The significant features in these conceptual drawings include a 50-foot benched riparian corridor containing the Johnson Creek meander zone. The riparian vegetation would be planted outside of the flood protection barrier dike structural prism (see the response to Comment 9, in this letter). The Fisheries Mitigation Plan proposed under Alternatives 1 and 2 would result in a net improvement in habitat functions and values (see Exhibit 2 in **Appendix A** to the Final EIS).

The Draft EIS described that under the proposed action, stormwater that currently flows to the Johnson Creek basin would be rerouted to discharge directly to the Green River. This rerouting is proposed to compensate for the reduction in floodplain storage in the Johnson Creek basin. The Draft EIS also evaluated a scenario where pumping at the south pond would be curtailed in an emergency situation, for a reasonable period of time (i.e., all durations where the Green River has historically reached or exceeded 12,000 cfs at Auburn over the period of record). This analysis showed that the Johnson Creek 100-year floodplain would continue to be maintained at or below current levels. Therefore, the proposed project would not be expected to significantly impact the floodplain (see the preliminary MDP in Appendix B to the Draft EIS and the summary on pages 3.2-28 and 3.2-29 of the Draft EIS text for further information).

11. As required under Section 7 of the Endangered Species Act (ESA), consultation with the U.S. Army Corps of Engineers (COE), National Marine Fisheries Service, and U.S. Fish and Wildlife Service is being conducted to further evaluate the proposed actions in relation to ESA listed species. The ESA is a federal law, thus consistency with the act is under the purview of federal authorities. As is normal for the Section 7 review, a detailed process will be undertaken to ensure consistency with ESA requirements for Chinook salmon, bull trout, bald eagle, and other protected species.

12. The Draft EIS describes the existing diking, controlled river flows, loss of sediment input, channelization, and loss of habitat in the Green River (see pages 24 through 25 in Appendix E to the Draft EIS). The U.S. Army Corps of Engineers regulates plantings on the levee. No trees greater than 4-inches in diameter are allowed. Plantings are not controlled by the adjacent landowners, and cannot be modified by local regulation. As described in the response to Comment 2 in this letter, SEPA does not require mitigation for existing conditions; mitigation is required to address the probable significant impacts of a given project.

13. Your comment is acknowledged for the record. See the response to Comment 12 in this letter with regard to planting on the Green River Levees. The project proposes reduced slopes, riparian plantings, and placement of large woody debris within a newly created Green River Off-Channel Habitat Restoration Area (see the updated Fisheries Mitigation Plan, Exhibit 2 in **Appendix A** to the Final EIS). ESA issues are being addressed with the federal authorities as required (see response to Comment 11 above).

14. Your comment is acknowledged for the record. See the responses to Comments 12 and 13 in this letter with regard to Green River Levee plantings and riparian improvements. The COE is responsible for the stability of the Green River Levee and flood protection. See the response to Comment 139 in Letter 1 with regard to requirements of the Tukwila Shoreline Master Program along the Green River shoreline.

15. Maintaining an existing condition is not considered a probable significant impact, and mitigation to alleviate an existing condition is not required under SEPA. Under Alternatives 1 and 2, there would be benefits to local and regional salmonids as described in Appendix F to the Draft EIS and summarized on pages 3.3-34 through 3.3-37 of the Draft EIS. While the Green River would not be returned to pre-European conditions, habitat conditions would be improved for native salmonids and other species as a result of the proposed project.

16. This comment is incorrect as it pertains to that portion of the river bank to be modified by the proposed off-channel habitat area. The updated Fisheries Mitigation Plan (see the summary Section 1.2 of this Final EIS and Exhibit 2 in **Appendix A** to the Final EIS) is specifically designed to provide enhanced juvenile rearing habitat, per recommendations of the WRIA 9 committee. Under Alternatives 1 and 2, over 5 acres of new off-channel habitat would be created in the mainstem Green River and in Johnson Creek. Resting and feeding opportunities would be enhanced with roughness elements, such as large woody debris, and new overhanging riparian vegetation. This would directly benefit both juvenile and adult salmonids.

17. The existing condition of the levee and maintenance requirements for the levee along the Green River would not change in the future under Alternatives 1 and 2, except for the portion of the levee that would be removed to create the approximately 7-acre Green River Off-Channel Habitat Restoration Area (see the updated Fisheries Mitigation Plan, Exhibit 2 in **Appendix A** to the Final EIS). In the restoration area, reduced slopes, vegetation planting, and placement of large woody debris and log jams would reduce erosion potential. The minor slumps referred to in this comment occur during rapid reductions in river flow artificially caused by Howard Hanson Dam operations, and are not due to any natural relationship between storm discharge hydrographs and river flow. Hydrologic controls described in the Preliminary Master Drainage Plan (Appendix B to the Draft EIS) would prevent any increase in erosion or scour potential of the channelized Green River by the Tukwila South project, or any impairment of fish habitat (as described in Appendix E to the Draft EIS).

18. See the responses to Comments 23 through 26 in this letter.

19. See the response to Comment 17 in this letter.

20. Your comment is acknowledged for the record. Under Alternatives 1 and 2, the amount of large woody debris and its recruitment would be improved within the Green River Off-Channel Habitat Restoration Area (see Exhibit 2 in **Appendix A** to the Final EIS).

21. Your comment is acknowledged for the record. Under Alternatives 1 and 2, the growth of riparian vegetation that would shade the river, insect production, and detritus inputs would be improved within the Green River Off-Channel Habitat Restoration Area; in addition, such improvements would also result in restored Johnson Creek, along a portion of Stream E, and along Stream J2 (see Exhibit 2 in **Appendix A** to the Final EIS).

22. See the response to Comments 15 and 21 in this letter. Under Alternatives 1 and 2, the aquatic edge and riparian habitat would be improved within the Green River Off-Channel Habitat Restoration Area, in restored Johnson Creek, along a portion of Stream E, and along Stream J2 (see Exhibit 2 in **Appendix A** to the Final EIS). However, it is acknowledged that development under any of the alternatives evaluated by this EIS would likely foreclose future opportunities to increase levy setbacks and reduce bank slopes beyond that proposed with the Green River Off-Channel Habitat Restoration area.

23 through 26.

The Green River Flood Control Zone District maintains the Green River Levee system in the site vicinity. The Flood Control Zone District will continue to maintain and repair this section of the levee system whether or not Alternatives 1 or 2 are implemented.

There is an existing maintenance easement for the portion of the Green River levee that is located north of the existing flood protection barrier dike (at approximately S 196th Street, if extended). This easement would be preserved in its current location under the proposal. This portion of the levee is currently part of the Corps of Engineers 205 Levee System. Proposed grading of the project site would require filling for infrastructure development. This fill would be placed adjacent to the current levee, which would reduce levee breaching and stability concerns.

The portion of the Green River south of the existing flood protection barrier dike is not currently part of the Corps of Engineers 205 Levee System. The applicant is discussing a new levee maintenance easement for this portion of the levee with the Corps. This easement would likely be of a dimension to allow for levee reconstruction at some point in the future, to current Corps standards (i.e. 2:1, H:V, levee banks from the river toe to the top of the levee and standard levee width). Proposed grading of this portion of the project site would also require filling for infrastructure development. Similar to the northern portion of the levee, this fill would reduce levee breaching and stability concerns.

It is acknowledged that the proposed project would be required to adhere to TMC Ch. 16.52 and the Interlocal Agreement for Administration of the GRFCZD.

27. See the response to Comments 23 through 26 in this letter. Dedication of easements in accordance with the TMC would be made as required under Alternatives 1 and 2.

28. The flood protection barrier dike, proposed to be located along the west and south margins of the south stormwater pond, is proposed to be constructed to meet the structural integrity and other standards and specifications required of other portions of the levee system. See Comment 6 in Letter 1, which describes dam safety standards required for the portion of the dike along the south and west margins of the south stormwater pond. The project proposes to design and build the dike as required for structural stability. Specific maintenance requirements for the south stormwater pond would be detailed in the Development Agreement between the applicant and City of Tukwila.

29 and 30.

The Green River Pump Operations Procedures Plan (POPP, 1985) provides specific criteria for the design of new outfalls, including new, non-pressurized gravity outfalls to the Green River (POPP Section V.B) and new pumping plans (POPP Section III). Criteria for the design and operation of new outfalls, proposed under Alternatives 1 and 2, are specified in the POPP; the most notable are paraphrased below:

- Section III.A.1 – New pumped outfalls to the Green River shall be designed to limit their operation to periods when the flow at the Auburn gage is less than 9,000 cfs (it

is understood that the criterion now considered to be 12,000 cfs although a formal POPP revision has not been completed).

- Section III.B.1 and Section V.B.3 – Stormwater storage facilities shall be designed to accommodate a 100-year flood event for a 7-day duration
- Section V.B.2 – The [non-pressurized gravity] conveyance system shall be designed to prevent discharges when Green River flows at Auburn exceed 9,000 cfs (again, considered to be 12,000 cfs).
- Section V.B.5 – To the maximum extent possible, storage facilities shall be designed for multi-purpose uses (wildlife, fish habitat, open space, recreation)

The requirement for storage of the 100-year, 7-day flood is to prevent site flooding when the Green River is at or above flood stage (12,000 cfs at Auburn). During these periods, the director of King County's Department of Natural Resources and Parks, or the directors designee, may require that projects tributary to the Green River and downstream of the Auburn gage (USGS #12113000) retain stormwater runoff on-site. The 7-day period corresponds to the U.S. Army Corps of Engineers (COE)-authorized operations of Howard Hanson Dam for a 100-year event, under which flows at Auburn would, in theory, be maintained at 12,000 cfs for a period of up to 7 consecutive days.

The applicant has proposed to vary from these guidelines in order to locate the POPP required 100-year 7-day storage within the proposed Green River Off-channel Habitat Restoration Area. To accommodate flood control storage within the Green River levee, the project would need to be allowed to continue pumping to the Green River even when Green River discharges at Auburn exceed 12,000 cfs, the threshold at which most discharges to the Green River would be curtailed. According to the Green River Management Agreement (GRMA) which contains the POPP, the Tukwila South project proposal to vary from the POPP agreement will require approval by the GRMA Executive Committee. The applicant's proposed justification for this request to vary from POPP guidelines is provided below. If approval to vary from the POPP guidelines was not granted, then the 100-year 7-day runoff volume would need to be retained on the site west of the Green River Levee and north of the relocated flood barrier protection dike.

The following factors apply to the applicant's request to vary from the POPP guidelines:

1. The authorized operation of Howard Hanson dam allows the COE to target discharges of 12,000 cfs at Auburn for storms with recurrence intervals between 2- and 500-years. However, the observed discharge record at the Auburn gage has only shown 2 brief periods since 1961 where flows reached this level (several hours each in 1975 and 1996). Thus, while the theoretical operation under a 100-year flood would have the COE targeting a flow of 12,000 cfs at Auburn for 7 consecutive days, observations over the past 44 years indicate that this flow is rarely reached and on those rare occasions, flowed only for a few hours. Estimating inflow between Howard Hanson and Auburn is difficult, and the COE generally targets a flow somewhat below 12,000 cfs to provide a reasonable factor of safety. The COE operations target a flow of between 10,000 and 11,000 cfs on the rising limb of the hydrograph and about 11,500 cfs on the falling limb (personal communication between Northwest Hydraulic Consultants, Inc. and Marian Valentine at COE, March 11, 2003, in relation to the Springbrook Creek Floodplain Mapping Project).

The estimated 100-year, 7-day runoff from the southern portion of the Tukwila South project is approximately 112 acre feet. The proposal is to provide the same storage area (footprint) as would be required by the POPP, in approximately 7 acres of land north of S 200th Street. This storage area would be provided by excavating to the elevation of the river bottom. The proposed volume would be provided over a depth of 26 feet.

2. The project proposal includes installation of twin 3.9 cfs pumps in the south stormwater pond (or a total pump capacity of 7.8 cfs) to evacuate water from the onsite facility during periods of high Green River stage. The estimated 100-year Green River discharge at the project site (from the effective Flood Insurance Study) is 12,100 cfs. Thus, if the pumps were allowed to continue operating coincident with the 100-year flow, the additional flow would be about 0.06 % of the total river flow. An analysis using a HEC-RAS model developed from the flood insurance study HEC-2 model predicts that the additional flow would cause an increase in water levels in the river of less than 0.01 feet through the project site reach (maximum difference 0.0076 feet).

31. Your comment is acknowledged for the record. Best Management Practices (BMPs) for Temporary Erosion and Sediment Control (TESC) would be implemented and maintained in accordance with a Stormwater Pollution Prevention Plan (SWPPP) that would be prepared for the project, as required by the Individual NPDES permit for construction discharge. The application of BMPs to project construction, monitoring, and mitigation measures that are proposed to be implemented are described in detail on pages 3-1 through 3-31 of Appendix C to the Draft EIS.

32. The Draft EIS water quality analysis was based on measurements of stormwater from similar projects in the local area and from similar stormwater facilities to those proposed. The analysis is, therefore, representative of future conditions that would result under Alternatives 1 or 2. Also see the responses to Matrix Comments 168 and 170 through 173 in Letter 1.

33. The applicant has worked with biologists from the Army Corps of Engineers, the Muckleshoot Tribe, and Washington Department of Fish and Wildlife to develop a mitigation plan that would adequately mitigate for the filling of five agricultural ditched watercourses. The proposed plan would include restoration of Johnson Creek and creation of the Green River Off-Channel Restoration Area. Implementation of the plan would result in a net benefit to fisheries functions and values (see the updated Fisheries Mitigation Plan, Exhibit 2 in **Appendix A** to the Final EIS for details).

34. The analysis of probable significant impacts evaluated all salmonid lifestages and habitat types, including rearing habitat (see Appendix F to the Draft EIS for details).

35. See the response to Comment 32 in this letter. The water quality analysis in Appendix C to the Draft EIS concluded that under Alternatives 1 and 2, site-wide water quality would be improved or comparable to the existing condition for several reasons:

1. Agricultural fertilizer and pesticide use would be eliminated from the site, and replaced to a much lesser extent by landscaping management products under Alternatives 1 and 2 (approximately 61,600 pounds of fertilizer and 252 gallons

of herbicide are applied to the corn fields annually; and approximately 6,000 pounds of fertilizer and 10 gallons of herbicide are applied to the hayfield annually);

2. Baseflow and stormwater runoff from the undeveloped western slopes would be conveyed to the Green River in a cooler condition and with higher dissolved oxygen content under Alternatives 1 and 2, as compared to the existing condition.
3. No adverse impacts to the Green River would be expected to occur, because the site's stormwater contributions to the Green River are, and would continue to be, very small relative to the Green River flow; because river flow is controlled by Howard Hanson Dam operations, not periods of runoff from individual storms; and because the discharged stormwater on a site-wide basis following development would be similar to the background quality in the Green River;
4. There are three discharge points from the site either directly to the Green River (the south outfall) or to the City of Tukwila stormwater system (north and northeast basin connection points); water quality of most site discharge would improve, except for a rise in fecal coliforms at the "end of pipe" locations under Alternatives 1 and 2. None of these site-boundary discharges are forecast to cause degradation or measurable change to Green River water quality during any season, as described in Appendix C to the Draft EIS;
5. The quality of water passing through and discharging in restored Johnson Creek would be improved under Alternatives 1 and 2, by eliminating agricultural ditch and field influences;
6. Johnson Creek and associated created wetlands, and the rehabilitated and enhanced Wetlands 10 and 11, would be permanently protected from receiving developed area runoff from the Tukwila South site; and,
7. Stormwater runoff from the existing industrial/office complex (Segale Business Park) in the northeast basin, Frager Road and other roadways, and commercial operations north of the existing flood protection barrier dike would no longer discharge to the Green River untreated. Instead, runoff from these site areas would be treated for water quality prior to discharge.

Letter 8

KENT
WASHINGTON

RECEIVED
MAY 05 2005
COMMUNITY DEVELOPMENT

May 5, 2005

COMMUNITY DEVELOPMENT
Fred N. Satterstrom, AICP
Director

PLANNING SERVICES
Charlene Anderson, AICP
Manager

Mailing Address:
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Steve Lancaster
Director, Department of Community Development
City of Tukwila
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

RE: Tukwila South DEIS
La Pianta, LLC Development

Dear Mr. Lancaster:

The City of Kent has reviewed the Draft Environmental Impact Statement issued on April 5, 2005 and would like to offer the following comments:

Water Resource

1. Regarding Section 3.2.2 of Volume One, Water Resources, the habitat project proposed to be constructed in the Green River is an excellent habitat project that will provide many functions to the river that have been heavily impacted. However, this habitat project will not provide compensatory flood storage. The storage will be submerged at the time that the river flow exceeds 12,000 cfs, which is when the storage is needed to be available. The proposal should provide flood storage volume in accordance with the Green River Management Agreement so that it will be available during flood events. 1

2. Also regarding Section 3.2.2 of Volume One, the proposal to pump the stormwater into the Green River even when the flow is above 12,000 cfs is an exception to the Green River Flood Control Agreement, as stated in the Draft EIS. All of the pumps which have been installed since the Pump Operations Procedures Plan was implemented and are located in jurisdictions involved in the Green River Flood Control Zone District are required to comply with this requirement. Regardless of the minimal additional contributions to the Green River when it is above 12,000 cfs, this additional water discharge would be an incremental increase to a flow which is already at the maximum capacity of the levee system. This proposal should comply with the pumping restriction at the 12,000 cfs flood stage as is required of all other pump stations discussed above. 2

3. The conclusion on page 3.2-21 of Volume One that Low Impact Development (LID) is not needed (due to stormwater discharge to the Green River) is not accurate. The purpose and benefits of LID methods are to prevent impacts to the environment from developments. This development will have significant impacts to the environment, many of which are detailed and discussed in the Draft EIS. An example of an impact that LID could mitigate is that, due to the amount of 3

added impervious surface, this development will contribute an increased volume of stormwater runoff to the Green River immediately after rainfall. Much of this rainfall currently infiltrates into the ground and is stored until the summertime, when it moves through the soil and into the river. This groundwater provides the river, its habitat and the fish and other creatures living in it with a supply of cool water during the drier times of the year. 3 cont.

4. Table 3.3-2 of Volume One, Infrastructure Development Impacts to Streams, is unclear regarding the total impacts to buffers from proposed filling. Please clarify on the areas of streams and their buffers to be filled and mitigated. The stream buffers required by the City of Tukwila for the different types of streams were not included in the Draft EIS. 4

5. Regarding Section 3.3.2 of Volume One, the existing groundwater which supplies some of the streams that flow south from S. 200th Street would be an ideal source of water for the proposed wetland restoration sites on the southwestern portion of the development. This water, which currently flows through Streams C and D, is proposed to be piped to Johnson Creek, but could be routed to the wetland mitigation site on the north side of S. 204th St. at the west side of the development. 5

6. As a member of the Green River Flood Control Zone District, the City recommends that the project proponent coordinate with the Green River Flood Control Zone District to provide easements to allow future setbacks of the Green River levees through this development. The Green River Flood Control Zone District, which receives its funding from property owners in a large area through the Green River Valley, and which has completed costly repairs on the levee in this reach of the Green River, is attempting to incrementally set back the levees to provide a more stable slope and decrease the amount of future maintenance required. Providing for adequate easements to provide levee setbacks through this development at this time, when the entire site will be constructed or reconstructed, would facilitate any future levee work and minimize impacts to the property owners and residents. The Green River levee setback projects are also providing for reestablishment of native riparian vegetation and fish and wildlife habitat along the Green River. 6

Transportation

1. The Transportation Impact Study, dated March 28, 2005, Appendix I, does not fully address the resultant impacts to several arterial intersections within the City of Kent, including, but not limited to, the following arterial corridors: S 196th Street, S. 212th Street, S. 228th Street, 64th Ave South, 68th Ave South (also known as West Valley Highway), 72nd Ave South, and 84th Ave South (also known as East Valley Highway). 7

2. The study fails to consider the impacts of permitted developments within the City of Kent that are not yet fully built, hence not generating trips that would be expected at maturation of the approved development. The study fails does not consider the impacts resulting from residential permits approved or submitted within the City of SeaTac that depend on traffic capacity on Orillia Road, available at the time of permit application. Additionally, the study does not consider the impacts of the City of Kent's adopted land use plan for the horizon year 2015 on the arterial street network or the regional and statewide highway network. 8

Please consider these as Kent's comments on the DEIS. Should you like to discuss any of these issues further, I can be contacted directly at (253) 856-5436, or via email at kmarousek@ci.kent.wa.us.

Sincerely,

Kim Marousek, AICP
SEPA Responsible Official

KM\cb\S:\permit\plan\env\2005\comment letters\Tukwila South DEIS.doc
cc: Fred Satterstrom, Community Development Director
Larry Blanchard, Public Works Director
Gary Gill, City Engineer
Nathan Torgelson, Economic Development Manager
Steve Mullen, Transportation Engineering Manager
Mike Mactutis, Environmental Engineering Manager
File

RESPONSE TO LETTER 8
City of Kent

1. See the responses to Comments 29 and 30 in Letter 7.

2. See the responses to Comments 29 and 30 in Letter 7.

3. The Draft EIS analysis concluded that no significant unavoidable adverse impacts to surface and groundwater systems would result under Alternatives 1 or 2. Since stormwater would be discharged to the Green River and not to intervening tributaries or wetlands, there would be no expected downstream aquatic habitat benefit or need from a hydrologic or water quality perspective to employ permeable pavement or other Low Impact Development (LID) features on this site. Stormwater discharge would not be expected to have an effect on Green River quality or alter hydrology of the river in a manner that would impair any beneficial use or habitat use downstream. There would be no adverse impacts to the groundwater aquifer or its recharge; base flow from the aquifer to the Green River or Johnson Creek; aquifer hydrologic support to wetlands; water quality in wetlands, streams or the Green River; or Green River hydrology or erosion or scour potential, that would require or would benefit from mitigation by typical LID features.

Nevertheless, the City is aware of the broad range of environmental benefits that Low Impact Development techniques can provide. The City will consider these benefits and potential applicability to the Tukwila South project.

4. Under the City of Tukwila's Sensitive Area Master Plan Overlay provisions, there are no defined buffers. Appropriate buffer widths and treatments are determined on a case-by-case basis under criteria established by the Sensitive Areas Ordinance. These criteria include "no net loss" of stream function and value, as determined through application of the best available science. The proposed buffers for the Tukwila South site, as a Sensitive Master Plan District, are described in the Wetland and Stream Buffer Plan (**Appendix B** to the Final EIS). The proposal's stream impacts are described in Appendix B to the Draft EIS.

5. Your comment is acknowledged for the record. The updated Wetland Mitigation Plan (Exhibit 3 in **Appendix A** to the Final EIS) calls for blocking the ditch conveying western slope baseflow from north of S 200th Street (that currently enters Stream C) and diverting it into a rehabilitated area of Wetland 10 (the wetland on the north side of S 204th Street). Existing drainage tiles would also be broken to more fully restore hydrology in Wetland 10. Other spring baseflow from the western slope south of S 200th Street would be preserved in areas where it is in a natural stream channel, or dispersed through Wetland 10 where it enters an agricultural drainage ditch which would be removed. These activities would rehabilitate the eastern and southern 6.1 acres of Wetland 10.

6. See the response to Comments 23 through 26 in Letter 7.

7. The transportation analysis for the Tukwila South Draft EIS evaluated 16 key intersections along some of the arterials identified in this comment (including one intersection on the border between the Cities of Kent and Renton; see Figure 3.12-2 in the Draft EIS). Several corridors mentioned in the comment, namely S 228th Street, 64th Avenue S, and 72nd Avenue S, were not evaluated, given that future vehicle trips associated with development at Tukwila South would represent a very small percentage of trips on these corridors and significant impacts to these arterial corridors would not occur (project-generated traffic along secondary corridors not specifically evaluated in the Draft EIS would range from between one and four percent). Key intersection impacts were evaluated and disclosed along S 196th Street, S 212th Street, 68th Avenue S, and 84th Avenue S, as these would serve future traffic between the Tukwila South site and the regional freeway system (see pages 3.12-25 through 3.12-31 of the Draft EIS for details).

8. The Draft EIS transportation analysis considered regional growth projections for the Cities of Tukwila, Renton, Kent, SeaTac, and the region as a whole for both the 2015 and 2030 horizon years based upon 2020 PSRC growth forecasts (see discussion of forecasting on page 39 of Appendix I to the Draft EIS). For the City of Kent specifically, land use adjustments were made to consider the entitled development at the Kent Space Center facilities (Pacific Gateway pipeline project), which was not included in regional land use projections. For the baseline 2020 projections used within the City of Tukwila's EMME/2 forecasting, buildout of 4.6 million square feet of industrial/business park uses was assumed to account for Kent Space Center development. These projections were adjusted annually to derive both 2015 and 2030 forecasts. The regional growth projections included in the Draft EIS analysis also accounted for residential growth in SeaTac that is assumed to be consistent with planned/permitted units.

During the 2000-2020 time period, approximately 1,000 new households are forecasted to locate within the predominately manufacturing/commercial area east of I-5, termed the Kent Industrial forecast analysis zone by the PSRC. Some of this residential development has already occurred, and traffic generation from these occupied homes would have been captured in traffic counts conducted for this Draft EIS in May/June 2004. The remaining buildout was considered in the Draft EIS analysis, because such residential growth was included in the PSRC's 2020 regional forecasts, from which the baseline 2015 and 2030 transportation forecasts for the Tukwila South Draft EIS were derived.

The analysis of planned transportation improvements and network assumptions for 2015 and 2030 contained in the Draft EIS was based on the status of various local and state plans at the time. Typical of long-range transportation analyses, assumptions and forecasts related to such plans will change as the status of funding changes and area needs are refined over time. At the time of completion of the Draft EIS transportation studies, all local and state agencies were contacted to obtain the most up to date information on transportation commitments, priorities, and funding status of future transportation improvements. Based upon this data, careful consideration was given to the assumed baseline transportation improvements identified in the Draft EIS for both the 2015 and 2030 horizon years. The key arterial widening projects within the City of Kent (namely, the S 228th Street corridor completions), were assumed to occur after the 2015 horizon year as a conservative approach.

The Draft EIS for the Tukwila South project analyzes the long-term probable significant impacts associated with development on the local and regional transportation network. The analysis included assumptions about baseline growth that would occur within the study area and improvements that would be implemented to serve such growth based on PSRC's regional land use forecasts and the City of Tukwila's travel demand model. Baseline Network assumptions for 2015 and 2030 were formulated, against which impacts from Tukwila South were tested (network assumptions include improvements in the City of Kent). In this way, the cumulative impacts of Tukwila South and growth in the study area were evaluated. To the extent that Kent's land use plan for 2015 is consistent with PSRC forecasts, the impacts of growth under the plan have been considered. It is beyond the scope of this EIS to address the comprehensive impacts of Kent's adopted land use plan on the transportation network.

Kathy Keolker-Wheeler, Mayor

CITY OF RENTON
Planning/Building/PublicWorks Department
Gregg Zimmerman P.E., Administrator

May 4, 2005

Letter 9

Steve Lancaster
Director
Department of Community Development
City of Tukwila
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

Subject: Tukwila South Project
Draft Environmental Impact Statement (DEIS), April 2005

Dear Mr. Steve! Lancaster:

Thank you for the oportunity to review the above referenced document. The City of Renton has several comments on the DEIS, most of which are related to transportation issues. These are described below.

General Comments:

- The Draft EIS provides a description of the magnitude of the proposed Tukwila South Project – approximately 498 acres with development of up to approximately 14 million square feet, generating up to 3,728 p.m. peak hour trips in 2015 and up to 13,975 p.m. peak hour trips in 2030. Due to the magnitude of this project, we recommend the draft EIS also discuss the City of Renton's traffic mitigation program. 1

- We anticipate that impacts on Renton's transportation system from traffic generated by the Tukwila South Project will be mitigated through payment of a fee based on daily trips generated. Terms and conditions of this mitigation could be established in a separate agreement between the Tukwila South Project developer (Segale) and the City of Renton, if this is Tukwila's preference. 2

- Based on review by Transportation Operations, we concur with the traffic analysis (existing intersection levels of service) for Renton intersections. 3

- Volume 1, page 3.12-12 and Appendix I, page 26: The City of Renton has an accident program that identifies high accident locations. Information on Renton's high accident locations can be provided upon request. 4

- We recommend that the section of Planned Transportation Improvements and the 2015 and 2030 networks be updated to reflect the 2005 Transportation Partnership Account 5

funding package recently passed by the state legislature. It can be assumed that the I-405 and SR 167 improvements in this package will be constructed as part of the Nickel funding package. 5 cont.

- Volume 1, Tables 3.12-12 and 3.12-13, and Appendix I, Tables 15 and 16 list potential intersection improvement measures, including those triggered by Alternative 1 and 2. We recommend the tables clearly denote between recommended intersection improvements (in general) and mitigation triggered by the Tukwila South Project. 6

- We have made specific comments below on potential intersection improvements for intersections within the City of Renton.

Specific Comments:

- Volume 1, page 3.12-6, and Appendix I, page 11 – SW 43rd Street (S 180th Street) has a center turn lane within Renton. 7
- Volume 1, page 3.12-7 – Descriptions of Rainier Avenue S, SW Grady Way, SW 16th Street and SW 27th Street in Renton and S 176th Street in SeaTac are not included. However, they are included in Appendix I, pages 12 and 13. 8
- Volume 1, page 3.12-7 and Appendix I, page 12 – Regarding the description of existing Lind Avenue SW, revise the third and fourth sentences as follows: "Curbs and gutters are located on both sides of the street. Six to eight foot sidewalks along various sections are also located on both sides of the street." 9
- Volume 1, pages 3.12-14 and 3.12-16 - Reference the City of Renton's 6-year TIP, 2005-2010, rather than 2004-2009. In Appendix I, page 32, reference the City of Renton's 6-year TIP, 2005-2010. From the list of Renton projects on page 32, delete "Oakesdale Avenue Phase 2", as it has been completed. 10
- Volume 1, page 3.12-14, and Appendix I, page 36 – 2030 Baseline Network: delete "direct access arterial HOV lanes on SW 27th Street between East Valley Rd and Oakesdale Avenue SW". This is no longer proposed. Also, indicate that the "new direct access/HOV interchange at SR 167 and SW 27th Street" is only to and from the south. A full HOV interchange is not planned. 11
- Volume 1, page 3.12-29, Baseline Condition and Appendix I, page 48 – Intersection #55 is in Renton, not Kent. 12
- Volume 1, Table 3.12-12, and Appendix I, Table 15, Intersection #25 – To provide an additional WB left-turn lane will require widening of the east/west legs of the intersection, which may not be feasible due to the SR 167 overcrossing just east of this intersection. 13

Re: Tukwila South Project Draft EIS (April, 2005)

- Volume 1, Table 3.12-12, and Appendix I, Table 15, Intersection #55 – To provide an additional SB left-turn lane will require widening of the north leg of the intersection. It appears that the EB-WB movement recommendations have been flip-flopped. Assuming they have – to provide WB dual left-turns, a thru lane and a right-turn lane, the SR 167 off-ramp will have to be widened. Also, this should be revised to read dual left-turns, a thru lane and a thru/right lane. The EB movements can only be rechannelized to a left turn, thru lane, and a thru/right-turn lane should the SR 167 SB on-ramp be widened to accommodate 2 lanes. We are not sure if widening the on-ramp to 2 lanes is part of the planned SR 167 HOV ramp improvements. 14
- Appendix I, page 12 – To the description of existing Rainier Avenue S, add the following: "curbs, gutters and sidewalks are located on both sides of the street." 15
- Appendix I, page 12 – Revise the first sentence description of existing SW 16th Street as follows: SW 16th Street, west of Oakesdale Avenue SW, is an east-west roadway … Add after the second sentence: 5-foot painted bicycle lanes are located on both sides of the street. Revise the third sentence as follows: East of Oakesdale, the roadway consists of … 16
- Appendix I, page 12 – Revise the first sentence of the description of existing SW 27th Street as follows: SW 27th Street, west of Lind Avenue SW, is a four-lane, east-west roadway… After the last sentence, add the following: "East of Lind Avenue, the roadway is three lanes with one lane in each direction and a center turn lane. Curbs and gutters are located on both sides of the street, with sidewalks on both sides of the street for a majority of its length." 17
- Appendix I, page 33 – Regarding the transportation improvements identified for Sound Transit's HOV Access Project, Grady Way HOV direct access has been deleted and the I-405/SR 167 interchange is still being evaluated by WSDOT. Contact WSDOT for the latest status of the I-405/SR 167 interchange. 18
- Volume 1, Table 3.12-13, and Appendix I, Table 16, Intersection #23 – The potential improvements will require widening of the Oakesdale approach by two additional approach lanes. 19
- Volume 1, Table 3.12-13, and Appendix I, Table 16, Intersection #25 – To provide an addition WB left-turn lane will require widening of the east/west legs of the intersection, which may not be feasible due to the SR 167 overcrossing just east of this intersection. 20
- Volume 1, Table 3.12-13, and Appendix I, Table 16, Intersection #55 – See comment on Volume 1, Table 3.12-12, Intersection #55. 21

Re: Tukwila South Project Draft EIS (April, 2005)

Should you have any questions or concerns, please contact Nick Afzali at (425) 430-7245.

Sincerely,

Gregg Zimmerman, P.E., Administrator
Planning/Building/Public Works

cc : Sandra Meyer, Transportation Division Director
Nick Afzali, Transportation Planning & Programming Supervisor
Karl Hamilton, Transportation Operations Manager
Bob Mahn, Transportation Planning & Programming
Keith Woolley, Transportation Planning & Programming
File

RESPONSE TO LETTER 9
City of Renton

1. Consistent with the purpose of an EIS under SEPA (WAC 197-11-400(2)), this EIS discloses the probable significant impacts that would result from the Proposed Actions and alternatives and identifies measures to mitigate such impacts. The project site, as developed under the Proposed Action, would be located within the jurisdiction of the City of Tukwila and would be subject to Tukwila's transportation concurrency and mitigation requirements. At present, there is no interlocal agreement between the Cities of Tukwila and Renton that requires or authorizes implementation of Renton traffic mitigation programs for developments within Tukwila.

2. Your comment is acknowledged for the record. No interlocal agreement requiring or authorizing traffic mitigation payments for development within each jurisdiction currently exists between the Cities of Tukwila and Renton; however, a separate voluntary agreement could be established between the applicant and the City of Renton.

3. Your comment is acknowledged for the record.

4. The EIS transportation consultant requested a listing of high accident locations in order to evaluate potential impacts at key locations where safety was a concern. On Feb 22, 2005, Jennifer Jorgendon at the City of Renton provided collision statistics within the City for the Draft EIS. However, the City was also asked to provide threshold criteria for determining which intersections were defined as high collision locations, but did not provide this information. As such, no evaluation of high accident locations could be completed within Renton's City limits.

5. The analysis of planned transportation improvements and network assumptions for 2015 and 2030 contained in the Draft EIS was based on the status of various local and state plans at the time. Typical of long-range transportation analyses, assumptions and forecasts related to such plans will change as the status of funding changes and area needs are refined over time. At the time of completion of the Draft EIS transportation studies, all local and state agencies were contacted to obtain the most up to date information on transportation commitments, priorities, and funding status of future transportation improvements. Based upon this data, careful consideration was given to the assumed baseline transportation improvements identified in the Draft EIS for both the 2015 and 2030 horizon years. While the 2005 Transportation Partnership Account recently passed by the state legislature provides more certainty on funding allocation, it does not change the overall basis of assumed future transportation improvements contained within the Draft EIS.

6. The tables referenced in the EIS comment clearly identify improvements needed for "Existing" conditions and for future "Baseline" conditions, as well as improvements needed because of Tukwila South development in the years 2015 and 2030 for all EIS alternatives. ("Existing" refers to the existing transportation network. "Baseline" refers to the future transportation network in 2015 or 2030 with or without Tukwila South development). If a column headed "Existing" or "Baseline" is denoted with a "Yes", an improvement is needed under existing and/or future baseline conditions. This means a particular improvement is required now or in a future horizon year regardless of whether

Tukwila South is developed. It is recognized that the Tukwila South project would contribute to these needs. If the notation is a “No” under “Existing” and “Baseline”, but a “Yes” under one or more of the EIS Alternatives, the improvement is needed due specifically to development under the No Action Alternative, Alternative 1 and/or Alternative 2 in 2015 or 2030, depending upon the table. In some cases, a transportation need is required under existing or baseline conditions without Tukwila South, but additional or different needs would result from impacts created by Tukwila South traffic, and a potential different improvement would be warranted. These additional or different improvements are explained in the tables.

7. Your comment is acknowledged for the record. This revision is noted in Chapter 3, Errata.

8. Your comment is acknowledged for the record. Volume 1 of the Draft EIS presents a summary of the Transportation technical report; therefore, not all of the information was brought forward into the main Draft EIS text.

9. Your comment is acknowledged for the record. This revision is noted in Chapter 3, Errata.

10. Your comment is acknowledged for the record. See also the response to Comment 5 in this letter. This revision is noted in Chapter 3, Errata.

11. Your comment is acknowledged for the record. See also the response to Comment 5 in this letter. This revision is noted in Chapter 3, Errata.

12. Your comment is acknowledged for the record. This revision is noted in Chapter 3, Errata.

13. Prior to 2030, with or without Tukwila South, widening of SR 167 is planned to occur; the planned widening will require reconstruction of many bridge structures along the SR 167 alignment, including the overcrossing of SW 43rd Street. In addition, reconfiguration of existing interchanges may also be necessary to accommodate the planned freeway widening. Assuming reconstruction of the SW 43rd Street overcrossing occurs, the identified potential intersection improvement to serve future traffic demands could be accommodated.

14. Your comment is acknowledged for the record. It is correct that the identified potential improvements in the eastbound-westbound corrections were incorrectly mislabeled in Volume I, Table 3.12-12 and 3.12-13, and Appendix I, Table 15 and 16 at Intersection #55. Those improvements identified for "eastbound" movements should read "westbound" movements, and those reported for "westbound" movements should read "eastbound" movements. These revisions are noted (see **Chapter 3**, Errata). See also the response to Comment 13 in this letter regarding future widening of SR 167 with or without the project and feasibility of identified improvements along this corridor.

15. Your comment is acknowledged for the record. See also the response to Comment 5 in this letter. This revision is noted in Chapter 3, Errata.

16. Your comment is acknowledged for the record. See also the response to Comment 5 in this letter. This revision is noted in Chapter 3, Errata.

17. Your comment is acknowledged for the record. See also the response to Comment 5 in this letter. This revision is noted in Chapter 3, Errata.

18. Your comment is acknowledged for the record. See also the response to Comment 5 in this letter.

19. Your comment is acknowledged for the record.

20. Your comment is acknowledged for the record. See the response to Comment 13 in this letter.

21. See the response to Comment 14 in this letter.

Letter 10

CITY OF SEATAC

"The Hospitality City"

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

5, 2005 Via Hand Delivery and E-mail

teve Lancaster, Community Development Director
of Tukwila
Southcenter Boulevard, Suite 100
ila, WA 98188

Re: Tukwila South Development Project Draft EIS

Dear Mr. Lancaster: Steve

Thank you for the opportunity to comment on the Draft EIS for the proposed Tukwila South Project. As you know, the City of SeaTac has serious concerns about the impacts of the proposal. The comments below detail those concerns.

COMMENTS: IMPACTS TO THE TRANSPORTATION SYSTEM

TR 1. The DEIS documents that the trip distribution patterns for all alternatives were based on the City of Tukwila's 2020 EMME/2 travel demand model assuming the land use information for the No Action alternative. This distribution appears to have been used for all of the future alternatives in 2015 and 2030. It is anticipated that with changes to both the mix of land-uses and size of development associated with each Alternative that the distribution of project traffic would also change. Therefore, the assumption that one distribution pattern is appropriate for the analysis of multiple horizon years with multiple land use scenarios would not be accurate. 1

Requested Action
Please revise the analysis of each alternative in 2015 and 2030 using a trip distribution appropriate to each development alternative developed from the EMME/2 travel demand model.

TR 2. Even without consideration of the above comment related to the distribution and volume forecasts, Figure 14 of the DEIS shows 2 percent of project traffic traveling east/west on several major corridors within the City of SeaTac. This

equates to approximately 40-75 new trips per corridor for the 2015 alternatives and as many as 280 additional trips for 2030 Alternative 1. The impacts from these trips were not evaluated or disclosed in the DEIS for intersections west of Military Road, where the addition of project traffic of this magnitude would travel through additional intersections located within the City of SeaTac and could impact their operations.

Requested Action

As requested in SeaTac's August 17, 2004 comment letter, please provide an analysis of conditions at additional key signalized intersections within the City of SeaTac between I-5 and SR 99 (inclusive) to document project impacts to City of SeaTac facilities. Analysis to include all signalized intersections within the following corridors: 2

S. 176th St. – Military Road to International Blvd.

Military Road – S. 176th St. to International Blvd.

S. 188th Street – I-5 to International Blvd.

Orillia Rd. S. – I-5 to S. 212th St.

Please identify additional mitigation improvements as needed.

TR 3. While the 2015 traffic volume forecasts were developed from the City of Tukwila's 2020 travel demand model, it appears from the information provided in Appendix A of the DEIS, the initial step in forecasting the 2015 volumes include only 55 percent of the growth anticipated to occur between the existing year and 2020, with the remaining 45 percent projected to occur between 2015 and 2020. A comparison of Existing 2004 traffic volumes in the DEIS with those projected for 2015 and 2030 provided in Appendix A for baseline conditions do not correlate well with intersections SeaTac spot checked. For example, the intersection of Military Rd/S 188th is forecast to be more than 400 trips lower in the PM peak hour in 2015 than in 2004. Likewise, forecasts at the intersection of Military Rd/176th only show minor increases in traffic volumes (less than a half a percent per year). This brings serious questions as to the validity of the traffic volume forecasts. The City has experienced growth of approximately 3% per year at these locations. 3

Requested Action

Please provide a comparison of 2015 volumes to 2020 volumes with documentation and detailed calculations that can be tracked to support the assumptions on which the 2015 volumes are based. Based on our spot checks, we feel that the forecasts are not valid and need to be revised to reflect more accurate growth rates. This would require revising the operational analysis and the proposed mitigation measures to accurately evaluate the true impacts of the project.

TR 4. From the documentation provided in the EIS it appears that 2030 traffic volume forecasts were developed from 2015 forecasts rather than directly from the 2020 forecasts generated directly from the City of Tukwila's EMME/2 model. 4

Requested Action
Please revise the 2030 traffic volume forecasts based on the output of the City of Tukwila's EMME/2 model.

Please also provide a comparison of 2020 and 2030 traffic volumes.

TR 5. It appears from the forecast traffic volumes that a blanket growth rate assumption was applied throughout the entire study area as the initial step in developing traffic forecasts for the two future horizon years. With long range horizon years 15 years apart, the growth rates often differ between corridors within a large study area due to changes in levels of congestion and travel times along parallel facilities which impact the attractiveness of alternative routes. 5

Requested Action
Please revise the 2015 and 2030 traffic volume forecasts to account for changes in travel patterns between study corridors, based on the output of the City of Tukwila's EMME/2 model. Also provide 2020 traffic volumes for comparison purposes.

TR 6. The transportation analysis does not evaluate the roadway operations outside the City of Tukwila. A spot check of PM peak hour volumes on the approaches to the I-5 ramp terminal intersections with Orillia Road S indicates that during the 2030 weekday PM peak hour for Alternative 1, Orillia Road to the east of I-5 is anticipated to carry up to 7,724 vehicle per hour (vph) with 3,005 traveling eastbound and 4,719 traveling westbound. Orillia Road is currently a four lane road just east of I-5. Based on King County standards, a typical four lane road on level terrain has a capacity of between 1,930 and 2,600 in each direction, depending on variables such as turn lane channelization, width of roadway, and intersection spacing. Using these standards, Orillia Road would be well over capacity in both directions. The resulting combination of poor operations would also result in significant vehicle queuing on the approaches to this and other key intersections. 6

Requested Action
Please provide an evaluation of arterial levels of service for key corridors within the study area, including Orillia Rd. In addition a queuing analysis would also provide a valuable insight into operations within the study area and the interaction between adjacent intersections.

TR 7. As part of Alternatives 1 and 2, S 178th Street west of Southcenter Parkway is proposed to be re-routed through the proposed site. The DEIS evaluates traffic

shifts within the City of Tukwila related to the realignment but there is no discussion regarding potential shifts that may occur across I-5 into SeaTac.

As part of the Infrastructure Measures section at the bottom of page 64, there is mention that the new roadway would need to be between 2 and 4 lanes in 2030 depending on the land use mix and density; however, no analysis is provided to support this statement. 7

It is our understanding that the existing roadway has a 21 percent grade and currently has safety problems. The proposed grade of the realignment is not mentioned in the analysis; however, it is reasonable to assume that the grade would be less than the existing 21 percent. The combination of additional capacity and removal of grade as a restriction on the roadway would likely increase its use as an east/west connection across I-5, which could impact City of SeaTac transportation facilities. 8 9

Requested Action
Please provide documentation of existing operations, safety conditions, and any restrictions resulting from the grade of the existing roadway. 10

We would like the grade of the roadway identified and that the east-west shifts in traffic between SeaTac and Tukwila be clearly identified. The exact grade may not be available as the engineering and design of the roadway is probably not completed, but the project team should be able to provide an approximate value. If the existing grade is significantly improved, the roadway would likely become more attractive to east-west traffic between SeaTac and Tukwila and this should be clearly documented and evaluated. An improved grade may also make it a more attractive route for project traffic, which would impact trip distribution patterns. 11

TR 8. The proposal calls for the relocation of S. 178th St. in Phase 1 of the project, beginning in 2006. The DEIS shows that only 2% of the traffic from the site will use S. 178th St., and that the majority of traffic will access the site from the south, north, or east. Under this assumption, the relocation of S. 178th St. is not justified by the analysis 12

Requested Action
Please amend the proposal to move the relocation of S. 178th St. to after 2015, when traffic volumes would justify this action.

Alternatively, as pointed out in our comment TR5, we are requesting that 2015 and 2030 traffic volume forecasts be revised to account for changes in travel patterns between study corridors, based on the output of the City of Tukwila's EMME/2 model. If this revision justifies the relocation of S. 178th St., we request that the EIS propose mitigation for the impacts to the SeaTac intersections that will be affected by the increase in traffic along S. 176th St. 13

TR 9. No infrastructure measures were proposed to City of SeaTac intersections in 2015. However, 2015 operations show that the I-5 NB Ramps/Orillia Road intersection will operate at LOS E with a V/C over 1.3 for both Alternatives 1 and 2. The combination of poor intersection operations and the high forecast traffic volumes at this intersection would likely result in extensive vehicle queuing, which would likely impact operations at the adjacent SB ramp termini intersection.

Requested Action
Please provide documentation of vehicle queuing at this and other study intersections to provide an adequate disclosure of project impacts at study intersections. If additional impacts are identified as a result of the queuing analysis, please identify appropriate additional mitigation measures to offset the project impacts. Since operations are poor in 2015 for the Orillia Road/I-5 Ramps and other intersections, we would suggest that operational impacts of the project be evaluated for 2010 or similar horizon year based on future traffic volume forecasts derived from existing volumes. 14

TR 10. The easiest access from the site to northbound I-5 is only via the Orillia Rd. ramps (Intersections #30 and #31). Northbound traffic leaving the site could access northbound I-5 from the north side of Southcenter, but because of route complexity and distance from the site, this is an unlikely choice for most drivers.

Even with the mitigation measures proposed for intersections #30 and #31, these intersections fall from LOS C in 2004 to LOS F in 2030 under Alternative 1, and to LOS E under Alternative 2 (Table 3.12-6). Essentially, this means that the proposed project absorbs virtually all of the remaining capacity at intersections #30 and #31 within the City of SeaTac. 15

Requested Action
Please propose the maximum improvements that could be made at the I-5/Southcenter Parkway ramps and evaluate the capacity of these improvements mitigate the impacts to intersections #30 and #31.

TR 11. Improvements are proposed in 2030 for City of SeaTac intersections, including:

Military Road/S 176th Street
- EB/WB right-turn only lanes (2030 Alternative 1)

I-5 SB Ramps/Orillia Road
- Provide an additional WB left-turn lane for dual lefts and an additional EB right-turn lane for dual rights. Rechannelize the SB leg for dual left-turn lanes and a thru-right lane. (2030 Alternative 1 and 2) 16

I-5 NB Ramps/Orillia Road

- Provide dual WB right-turn lanes. Rechannelize the NB leg for dual left-turn lanes, a thru-right lane, and a right-turn lane. (2030 Baseline, No Action, Alt 1 and 2)

Requested Action
Please provide documentation that, given the existing geometric constraints associated with the interchange area, construction of the identified mitigation measures is possible. If this is not the case, please identify alternative mitigation measures to offset project impacts at these locations. Please evaluate queuing lengths on the northbound and southbound ramps to I-5 during peak hours to assess the ability of the ramps to accept more traffic from Orillia Road. 16 cont.

TR 12. The base case assumption for 2015 includes completion of SR 509 and the Airport South access roadway. At this time, it appears that assumption is not valid. The additional capacity assumed at Orillia Road/S. 188th St. and I-5 by the completion of that project will probably not be available until much later (2020 to 2025). 17

Requested Action
Please evaluate the impact of SR 509/South Access Road not being constructed until 2020 to 2025 and propose contingency mitigation necessary in the likely event that SR 509 will not be available until then.

TR 13. In Section 3.12.5. Significant Unavoidable Adverse Impacts, it states that high capacity transit measures and/or new freeway connections to I-5 are required to meet Tukwila concurrency standards and new I-5 freeway connections may not be feasible. We are not aware of funded high capacity transit measures to serve the site and that would bring the project into concurrency for Alternative 1.

Requested Action
Please clarify which intersections would not meet Tukwila concurrency standards. 18

Please identify high capacity measures that are programmed or funded to serve the site. 19

If high capacity measures are available, please evaluate the project's ability to meet Tukwila concurrency standards. 20

If I-5 connections and high capacity measures are not feasible, please describe the changes in the development proposal that are necessary for the project to meet concurrency. 21

COMMENTS: IMPACTS TO THE LAND AND SHORELINE USE

LU 1. The Tukwila South Development proposal is not designated as an Urban Center under the King County Countywide Planning Policies (CPP), although Tukwila's Southcenter area is (at a size of approximately 1.35 sq. mi.).

Vision 2020 is the regional land use and transportation growth strategy, adopted by the Puget Sound Regional Council. It articulates a vision for the future growth of the region, in part by identifying a number of designated Urban Centers (designated by the CPP), connected by a public high capacity transit system designed to serve these centers and reduce reliance on the single occupant automobile. Regional public investments in major infrastructure projects are guided by Vision 2020 and the CPP, and the distribution of regional population and employment forecasts upon which these plans are based. 22

The Tukwila South proposal will be a de facto extension of Tukwila's designated Urban Center, and will add approximately 0.77 sq. mi. to the existing 1.35 sq. mi. resulting in an Urban Center that exceeds the 1.5 sq. mi. maximum for Urban Centers set forth in the CPP.

Requested Action
The EIS should acknowledge the impacts to the size of the Tukwila Urban Center and identify City action needed to address the inconsistency between the proposal and the adopted Urban Center criteria.

LU 2. Phase 1 of the project calls for mass grading of the site, in preparation for infrastructure improvements that would serve the full buildout. On a site as large as this site, this seems like an unusual approach. If the anticipated development doesn't materialize, what will the proponent do with the site? 23

The City is concerned about potential interim uses of the regraded site. Given the lucrative financial nature of commercial park'n fly operations (which the City of SeaTac is well aware of the pressure for) we are concerned that the proponent will establish a park 'n fly operation, and use the relocated S. 178th St. to access Sea-Tac Airport via S. 176th St., with obvious negative impacts to SeaTac neighborhoods and residents. 24

Given the unusual mass grading approach and the uncertainty of the anticipated development, the potential for this scenario is very real. The EIS does not disclose this potential outcome, nor its impacts. 25

Requested Action
Please amend the EIS to identify and address the impacts of this potential outcome of the proposed project.

COMMENTS: IMPACTS TO WATER RESOURCES

WR 1. Surface water flows from the upstream areas located in the City of SeaTac currently join other surface water bodies in the area of the proposal. What infrastructure is planned to either bypass these flows or allow for the connection of the upstream flows into the system that will serve the proposed development area. We are particularly concerned about those areas of SeaTac east of I-5 that border the project area. 26

Requested Action
Please address the upstream drainage basin of the project area, particularly flows generated from the upstream areas that are in the City of SeaTac.

WR 2. What is the source of potable water for the proposed development? If water will be drawn from an aquifer to serve the proposed development, this should be included in the scope of the EIS. 27

Requested Action
Please address the impacts to aquifers or other potable water sources in the EIS.

COMMENTS: IMPACTS TO PUBLIC SERVICES

PS 1. The City of SeaTac Fire Department will respond both primarily, and as backup, to the south end of the development where the City currently responds to in 5 minutes or less. This impact was not disclosed in the DEIS. Given the proximity of the Tukwila Fire stations and concurrent calls for Station 51, SeaTac will be used to supplement the City of Tukwila. Call volume in the DEIS was inaccurate for the south end of the development. 28

Requested Action
Please address the impacts of the project area, particularly increased requests for service from the City of SeaTac.

PS 2. Increased traffic from the development will impact the streets in the City of SeaTac and likely result in higher traffic accidents, thereby increasing the requests for service from the City of SeaTac Fire Department. 29

Requested Action
Please address these impacts on the City of SeaTac Fire Department.

PS 3. Impacts to the City of SeaTac Police Department will likely be similar to the impacts noted in our comment PS1.

Requested Action 30
Please address the impacts of the project area, particularly increased requests for service from the City of SeaTac Police Department.

COMMENTS: IMPACTS TO PARKS AND RECREATION

PR 1. Some of SeaTac's most popular and heavily used parks are accessible from the site of the proposed development, including:

Valley Ridge Park at 188th St. & I-5

Angle Lake Park at S.194th St. & International Blvd.

Both of these parks attract visitors from outside SeaTac. These parks will likely be affected by the project. 31

Requested Action

The EIS should specifically address likely impacts to all of SeaTac's park and recreation facilities, not simply connections to the trail and shoreline. In addition, there should be thoughtful analysis and consideration of requiring new parks on the development site, to mitigate the potential impacts to SeaTac's parks.

Thank you again for the opportunity to comment on the scope of the EIS for the Tukwila South Development proposal. Please let me know if you have any questions about our comments.

Sincerely,

Stephen C. Butler

Stephen C. Butler, AICP
Director of Planning and Community Development

cc: SeaTac City Council
Bruce Rayburn, City Manager
Craig Ward, Assistant City Manager
Dale Schroeder, Director of Public Works
Kit Ledbetter, Director of Parks & Recreation
Bob Meyer, Fire Chief
Greg Dymerski, Police Chief
Ramin Pazooki, WSDOT
Steve Mullet, Mayor, City of Tukwila

RESPONSE TO LETTER 10
City of SeaTac

1. The Draft EIS transportation analysis does not state that land use information for the No Action Alternative was used to develop trip distribution assumptions for all of the EIS Alternatives. The City of Tukwila's EMME/2 forecasting model was used to derive general trip distribution assumptions via select zone assignments using Alternative 1 land use assumptions. These trip distribution assignments took into consideration future roadway network assumptions for 2015 and 2030, baseline growth in traffic volumes, and future congestion levels with site-generated trips. Alternatives 1 and 2 would have a similar mix of land use types, but a different density and overall development level. The No Action Alternative, with substantially less development assumed, would contain a mix of land uses, but with a greater proportion of industrial uses as compared to the other EIS alternatives, and assumes no housing. The model analysis showed that, based on the differences in land use assumptions among the alternatives, the larger difference between the alternatives would be in trip generation, rather than trip distribution. A separate select zone assignment was performed for the No Action Alternative to determine trip distribution; however, no significant differences in general trip distribution patterns were determined. Minor adjustments in trip distribution patterns were made for all of the EIS Alternatives to account for changes in roadway network assumptions and site access points.

2. A total of 75 intersections were analyzed in the Draft EIS, 34 of which are located outside of the City of Tukwila limits. The methodology used to define the study area intersections and determine evaluation criteria for the Draft EIS analysis included: review of potential arterials that serve the site and provide connections to regional freeway systems; identification of key freeway access points and critical intersections where significant impacts could result; and preliminary level of service analysis.

In conducting the traffic impact analysis, it was determined that, where significant traffic impacts would not result at intersections on the fringe of the study area boundary, significant impacts to intersections outside of the study area boundary, which would experience less site-generated traffic than those on the fringe, would also not result. Generally, these intersections would experience 5 percent or less of total site-generated traffic. The segment of S 176th Street from Military Road S to SR 99, the segment of Military Road S from S 176th Street to SR 99, and the segment of S 188th Street from Military Road S to I-5 would each experience 2 percent or less. Orillia Road from I-5 to S 212th Street would experience 5 to 20 percent; however, four signalized intersections within this corridor were evaluated in the Draft EIS. Therefore, relative increases in traffic on SeaTac arterial streets would be expected to include approximately 2 percent or less of site-generated traffic. When this traffic is distributed onto the SeaTac street network, it would not result in any significant adverse traffic impacts beyond the general study area boundary. Therefore, no further analysis of intersections, beyond those evaluated in the Draft EIS, is warranted.

3. Fifty-five percent of the 20-year growth forecasted to occur between 2000 and 2020 from the City of Tukwila EMME/2 model was applied to factor existing 2004 counts to determine 2015 volumes, using a Fratar methodology. It was assumed that the remaining 45 percent of the 20-year growth had either already occurred between 2000

and 2004 or would occur between 2015 and 2020 as a portion of overall growth. It should be noted that, in the Fratar methodology, varying growth factors are determined for each approach at every study intersection; the growth factors used are not an aggregate or composite. At each study intersection approach a 20-year growth rate was estimated for the 2000-2020 timeframe. As previously explained, since the counts being factored were done in 2004 and the horizon year was 2015, 55 percent of each 20-year approach growth rate was used to determine 2015 volumes for every approach.

The detailed traffic forecasts prepared for the Tukwila South Draft EIS considered planned local and regional infrastructure improvements in evaluating growth in land use and changes in travel patterns to determine future volumes at study intersections. These improvements are reflected in the 2015 and 2030 baseline networks. At the S 188th Street/Orillia Road S and I-5 interchange, 20-year projections of future baseline traffic at this intersection are forecasted to decrease relative to existing conditions, as other freeway system improvements are implemented as part of the baseline network (specifically, the SR 509 extension and South Access Freeway to SeaTac Airport). These improvements would reduce demand for regional airport access via this interchange and on the I-5 mainline. The reduction in demand at this interchange would, in turn, reduce demand on parallel or adjacent roads to this interchange, including the Military Road S and S 176th Street corridor. While demand on these local arterials would be reduced, it was not forecasted to decrease in demand relative to existing conditions, but to grow at a slower rate over time. The City recognizes that impacts of the proposed action may be greater to these facilities if certain planned improvements to the regional transportation network are delayed or abandoned.

4. The 2015 forecasts contained within the Draft EIS were derived using the City of Tukwila's 2020 EMME/2 model forecasts, in combination with a refined Fratar growth factoring methodology to process more accurate turning movement projections at study intersections. A 2030 model was not available for use in preparing this Draft EIS. As such, 2030 traffic volume forecasts were developed from 2015 forecasts using an annualized growth factoring process, as outlined on page 41 in Appendix I to the Draft EIS. Given that the logical horizon years of planned infrastructure improvements and buildout of the site did not coincide with the 2020 horizon year, no detailed turning movement forecasts were developed for the year 2020.

5. The Draft EIS traffic forecasts were not developed by using a blanket growth rate. Rather, the forecasts were developed by applying a variable growth rate at each approach at each study intersection, using a Fratar growth factoring methodology that balances turning movements at the intersection. This accounted for changes in travel patterns and trip distribution that would result from the variation in future land use growth assumptions and assumed transportation improvements in 2015 and 2030. Please see the responses to Comments 1 through 4 in this letter.

6. As concluded in the Draft EIS, the land use densities and trip generation levels assumed under Alternative 1 could not be accommodated by conventional arterial systems serving the site area (see page 3.12-40 of the Draft EIS). At the I-5 and S 188th Street/Orillia Road S interchange and the Orillia Road approach east of the interchange, LOS F conditions would result in 2030; therefore, unless additional freeway connections to I-5 to directly serve the site area were completed (that would reduce access demands at other interchange connections and along arterials leading to established interchange

systems), Alternative 1 would result in significant adverse traffic impacts. As noted in the Draft EIS, however, previous studies of potential freeway connections in the site vicinity have determined that this type of solution was not feasible in the immediate site vicinity. High capacity transit measures could also be considered to reduce congestion along arterials, and at intersections and freeway ramps; however, no assumptions were made to account for this type of system in the Draft EIS analyses.

Given the long-range nature of this analysis, and that both future transportation network and land use assumptions will likely change over time, vehicle queuing estimates are not warranted at this stage. As specific transportation improvements are planned and defined in the future, detailed queuing analyses should be conducted to determine operational needs.

Please see the responses to Comment 2 in this letter, which addresses analysis of intersection operations outside of the City of Tukwila.

7. The exact nature and density of onsite land uses that would have access onto S 178th Street is not known at this time, given that there is no definitive building development plan. The Draft EIS indicates that the roadway could contain a 2- or 4-lane section in the future. This flexibility was intended to ensure that adequate right-of-way for turning movements onto and off of S 178th Street would be provided, and "through" capacity between the City of SeaTac and Tukwila could be provided as needed.

8. The specific future grade of the S 178th Street realignment is not known at this time; however, it is estimated at approximately 10 percent, considerably less than the existing approximate 21 percent grade, and would address the safety concerns of the existing grade.

9. The potential for increased use and attractiveness of this corridor to general background growth and site-generated traffic was considered in the analysis of traffic impacts in the Draft EIS. However, proposed improvements to S 178th Street would not likely contribute to a major change in trip distribution. The trip distribution impacts would be localized to vicinity streets within the City of Tukwila, and are not forecasted to result in significant shifts in east-west demand between parallel corridors connecting the Cities of SeaTac and Tukwila. The technical basis for the projected redistribution of traffic associated with the S 178th Street realignment was contained in a sensitivity analysis requested by the City of Tukwila and summarized on Draft EIS pages 3.12-35 through 3.12-37. Pages 55 through 57 of Appendix I to the Draft EIS contain the complete analysis of redistribution and operational impacts associated with the proposed realignment. The S 178th Street realignment is proposed to facilitate development of the area as envisioned by the proposed Tukwila South Master Plan.

A greater shift in the local distribution of traffic would occur as a result of the Southcenter Parkway improvements; this change is accounted for in the analysis (see pages 3.12-35 through 3.12-37 of the Draft EIS). In addition, capacity and congestion levels on parallel east-west arterials (i.e. S 200th Street, Orillia Road S) were also considered in future projections (based on land uses and distribution) of traffic demand on the S 178th Street/S 176th Street corridor and in the evaluation of impacts of the EIS Alternatives.

10. As documented in the Draft EIS, existing roadway conditions along S 178th Street were disclosed in Appendix I, page 11, as well as an approximate roadway grade. It should

be noted that, in addition to these general roadway conditions, trucks exceeding 10,000 pounds in gross vehicle weight are restricted on the steep grade of S 178th Street.

In addition, levels of congestion were documented at S 176th Street/S 178th Street and Military Road (Intersection #18) and at S 178th Street/S 180th Street and Southcenter Boulevard (Intersection #19) (see Table 3.12-2 in the Draft EIS). Historical collision statistics at the intersection of S 178th Street/S 180th Street and Southcenter Boulevard intersection were also documented.

To expand upon existing safety conditions, further review of historical collision statistics was undertaken for S 178th Street west of Southcenter Boulevard. The City of Tukwila records for over an 11-year period (from January 1, 1994 to May 9, 2005) show that during this timeframe, only two reported collision occurred on this segment of S 178th Street (between I-5 and Southcenter Parkway). This results in an annual average collision rate of 0.18 collision per year and a weighted collision rate of approximately 0.04 collisions per million vehicle miles of travel. This rate is approximately 100 times lower than the most recently reported statewide average of 4.27 collisions per million vehicle miles of travel reported on all State Route collector arterials in Washington State.

11. See the responses to Comments 8 and 9 in this letter.

12. The proposal includes construction of major infrastructure improvements at the outset of the project, such that roadway, utility, stormwater, and mitigation efforts are completed in the first few years (refer to Chapter 2 of the Draft EIS for further discussion of the infrastructure development phase). Realignment of S. 178th Street in the initial infrastructure development phase is integral to the Tukwila South development proposal. In order to accomplish the grading and infrastructure improvement objectives of the first phase of the project, the realignment must occur at the outset. Grading related to the realignment would provide onsite fill material for other project infrastructure features, and would facilitate development as envisioned by the proposed Tukwila South Master Plan.

The 2 percent trip distribution percentage, noted in the comment, is the level of site-generated traffic estimated to impact the area west of the site on S 176th/S 178th. Further east along the realigned S 178th Street (immediately west of Southcenter Parkway and within the site area), site-generated traffic levels would comprise up to 10 percent of total site-generated traffic. The 10 percent level would be reached over time, as access driveways and new uses are developed along this roadway.

13. See the responses to Comments 2, 3, 5 and 9 in this letter.

14. Potential transportation improvements are identified at locations where forecasted operating conditions would result in LOS F conditions as a result of Tukwila South development. No LOS F conditions would result at intersections within the City of SeaTac in 2015. The I-5/Orillia Road S intersections are forecast to function at LOS D (southbound) and LOS E (northbound) in 2015, based on development under both Alternatives 1 and 2; as such, improvements were not identified for 2015. Conditions in 2010 would include less project-generated traffic than in 2015; therefore, 2010 conditions also would be better than LOS F and would not require mitigation. Further, new development on the site by 2010 and its associated potential to generate trips

would likely be limited, as the infrastructure construction phase would be expected to last several construction seasons (through 2008).

As shown in the Draft EIS, by 2030, improvements to the I-5 and S 188th Street/Orillia Road S interchange (northbound ramps) would be required with or without the project, due to trips generated by baseline growth (traffic generated by growth exclusive of the Tukwila South development). The Tukwila South project would be a contributor to these needs as disclosed in the Draft EIS. Potential improvements are identified for both ramp intersections for the 2030 horizon year, and given their close proximity to each other, concurrent improvements would likely be required (see Table 3.12-13 in the Draft EIS).

Given the long-range nature of this analysis, and that both future network and land use assumptions will likely change over the next 15 to 25 years, the analysis of specific vehicle queuing is not warranted at this stage. While estimates of future delay are averages for an entire intersection, estimates of queue length apply to each intersection movement, and therefore must be based on more specific information in order to provide a reasonable degree of accuracy. As specific transportation improvements are proposed for implementation in the future, detailed design and operational studies (including queuing studies) would be required.

15. Many factors go into the decision by a driver to use one route over another. Existing and future congestion levels (and travel times) would be roughly equivalent at the two alternative access points to northbound I-5 noted in this comment. Decisions on access would depend upon where one is located on the 500-acre Tukwila South site, and where a given origin or destination is located. Most drivers resist "out-of-direction" travel, as would be required for northbound traffic to access the Orillia Road/I-5 interchange from much of the Tukwila South site.

The LOS analysis at Intersections #30 and #31 factored growth and changes in baseline trips that will use these intersections and utilize capacity.

See also the responses to Comment 2 in Letter 3 (WSDOT) and Comment 14 of this letter.

16. The comment asks whether mitigation in the interchange area is feasible**.** Although the comment noted that potential improvements at S 176th Street and Military Road are identified as mitigation for Alternative 1, these improvements are not associated with the "interchange area". Therefore, the request to address feasibility of potential improvements at the interchange area does not include this intersection.

In order to respond to the comment relating to the interchange area, right-of-way plans and existing channelization plans were obtained and additional field research was conducted regarding potential intersection and ramp improvements identified in the Draft EIS for the I-5 and S 188th Street/Orillia Road S interchange in 2030. Parts of S 188th Street, Military Road, and Orillia Road S at the interchange are within WSDOT's right-of-way and access control, while a majority of Orillia Road S is within unincorporated King County.

The Tukwila South Draft EIS identified the following transportation improvements as potential improvements needed in 2030 at the I-5/S 188th Street/Orillia Road S Interchange (see Table 3.12-13 in the Draft EIS):

- Intersection #30 (I-5 SB Ramps at S 188th Street/Orillia Road S). Provide an additional westbound left-turn lane for double lefts. In the southbound direction, provide double left-turn lanes and a thru-right lane. Provide an additional eastbound right-turn lane for double eastbound right-turn lanes (needed for Alternatives 1 and 2).

- Intersection #31 (I-5 NB Ramps at S 188th Street/Orillia Road S). Provide double westbound right-turn lanes. In the northbound direction, provide double left-turn lanes, a thru-right lane, and a right-turn only lane (required under baseline conditions with or without Tukwila South).

At intersection #30 (I-5 SB Ramps at S 188th Street/Orillia Road S), paved shoulder widths on S 188th Street east of the I-5 SB Ramps are approximately 8 to 10 feet in width. Therefore, as with many other closely spaced interchange systems in the Puget Sound region, it is possible to add an additional lane underneath the I-5 southbound bridge abutments, and eliminate the paved shoulder for a short distance under the structure to accomplish the additional westbound left turn lane. To construct an additional southbound left turn lane, additional right-of-way is available, but a small retaining structure may be necessary on the west side of the ramp. The potential additional eastbound right-turn only lane may not be feasible to implement given adjacent wetlands on the southwest corner of the intersection and right-of-way constraints; however, this additional lane is not needed to maintain LOS E conditions, but was identified as a potential improvement given forecasted right turning volumes from the S 188th Street corridor onto Southbound I-5 in 2030. As part of the identified potential improvements, no impacts or additional improvements to the S 188th Street and Military Road intersection are anticipated.

At intersection #31 (I-5 NB Ramps at S 188th Street/Orillia Road S), there is sufficient right-of-way to provide two westbound right-turn lanes on the east side of the I-5 NB Ramps, as well as to construct an additional ramp lane, weave area, and transition onto Northbound I-5. An existing channelization plan was not available for the I-5 Northbound off-ramp; however, field review indicates that implementation of potential improvements to this off-ramp appears feasible, and adequate right-of-way is available.

East of the I-5 NB Ramps, curbs, gutters, and sidewalks with a 4-foot paved shoulders are provided on the west side of S 188th Street/Orillia Road S, with curbs and 8-foot paved shoulders on the east side of the street. Nearer to S 200th Street, curbs, gutters, sidewalks and a 4-foot paved shoulders are provided on the east side of the street. A guardrail is also provided on the east side of Orillia Road south of the interchange street, for approximately 1,000 feet along the roadway where steep slopes exist. It should be noted that east of the guardrail, there is a relatively flat patch of land about 10 to 20 feet in width for approximately 200 feet before a steep decline occurs. After the guardrail ends, the steep decline on the east side of the hill becomes relatively flat and easily accessible. It is, therefore, feasible to provide an additional westbound travel lane approaching the I-5 interchange for several thousand feet by either limited fill and construction of a retaining structure on the east side of Orillia Road S and/or cutting into the west side of Orillia Road S. Additional right-of-way, outside of the immediate interchange vicinity, may be needed to undertake this improvement.

The specific design and configuration of these improvements would be determined in the future, when improvements are proposed to be implemented and permits obtained. Please see the responses to Comment 2 in Letter 6, and Comment 6 in this letter, regarding queuing analysis.

17. While the SR 509 project did not receive a significant funding allocation in the recently passed bill by the state legislature (the 2005 Transportation Partnership Account), WSDOT still expects to receive the remainder of its funding need via the November 2006 Regional Transportation Improvement District (RTID) ballot measure. Although the recent political funding decisions have not referenced SR 509, passage of the RTID funding measure would fully fund SR 509. Many other regional projects are also included in the RTID measure. The 2005 Transportation Partnership Account allocation was intended to fill the gaps in funding by RTID, and to maintain the pace of right-of-way acquisition and design efforts for the SR 509 project (WSDOT, personal communication with John White, June 2005). The total time for completion of the SR 509 project is approximately 6 years. Even if the funding decision gets delayed for several more years, the 2015 buildout assumption in the Draft EIS is still reasonable, given that this is a high priority project and WSDOT is further along in right-of-way acquisition and design relative to other regional projects. See also the response to Comment 3 in this letter.

18. Even with the improvements identified in the Draft EIS (Tables 3.12-12 and 3.12-13), access to/from the south via Southcenter Parkway (Intersection #34 Southcenter Parkway at S 200th Street) would not meet the City of Tukwila's intersection LOS concurrency standards under Alternative 1. In addition, the interchange at I-5 and S 188th Street/Orillia Road S would not support buildout assumptions for Alternative 1 (14 million square feet of development).

19. There are currently no funded or programmed high capacity transit facilities that would directly serve the site. As indicated in the Draft EIS, if high capacity transit facilities are implemented over the next 25 years, reduction in estimated peak hour trips and associated transportation impacts from Tukwila South would be likely to result.

20. None are currently available or programmed and, therefore, no specific analysis as to their ability to address the City's concurrency standards was performed for this EIS.

21. It was disclosed in the Draft EIS that full buildout of Alternative 1 (14 million square feet) would not meet existing City of Tukwila concurrency requirements without high capacity transit and/or new freeway connections (see page 3.12-48 of the Draft EIS). Buildout of land uses assumed under Alternative 2, however, was found to meet the City's concurrency standards with identified potential transportation improvements and site specific mitigation, as outlined in the Draft EIS.

22. The City has not proposed that the Tukwila South area be included in the existing Tukwila Urban Center; nor has the City proposed that Tukwila South be designated as a separate urban center. Nothing in the Growth Management Act, Vision 2020 or the King County Countywide Planning Policies requires that development such as is proposed by La Pianta LLC be located within a designated urban center.

23. A stated objective of the Proponent is to "develop the major site infrastructure requirements in the initial phase of the project in order to advance the long-term vision

and to facilitate future development." This EIS addresses the Proposed Actions and alternatives as defined in Chapter 2 of the Draft EIS and evaluates the probable, significant impacts associated with implementation of the infrastructure development phase and full buildout of the site. Subsequent to completion of the infrastructure phase, the site would be available to accommodate building development. It is recognized that development would occur incrementally over the 25-year period. The specific timing of development and the phasing of uses cannot be determined, as they would be dependent on market conditions. It is possible that certain interim uses could be pursued by the applicant.

24. Impacts from interim uses at the site, such as park and fly operations, would be within the range of impacts evaluated in the Draft EIS (which analyzes impacts from development in 2015 and 2030 under three alternative scenarios). Further, if park and fly uses were developed on an interim basis, it is possible that such uses would result in fewer trips to the airport than other assumed uses, if they were to result in trips to the airport in high-occupancy shuttles rather than individual vehicle trips. Trips to/from the airport from proposed uses on the site were accounted for in the trip generation and distribution estimates used in the analysis of impacts (see pages 42 through 45 of Appendix I to the Draft EIS and Attachment B to Appendix I for further detail on estimated trip generation and trip distribution). It should be noted that such uses would be allowed under current City of Tukwila and King County regulations that apply to the site.

25. The City of Tukwila will review all future development proposals within the Tukwila South area to ensure that impacts fall within the range of impacts evaluated and disclosed by this EIS. In the event specific project-related impacts go beyond those anticipated by this EIS, additional environmental review will be required. See also the responses to Comments 23 and 24 in this letter.

26. In accordance with the drainage requirements of TMC Title 16, the Preliminary Master Drainage Plan (Appendix B to the Draft EIS) evaluated upstream tributary flows. Property within the City of SeaTac east of I-5 is not part of the proposed Tukwila South site. As indicated in the Draft EIS, drainage from any future development on this property would be accommodated within the proposed Tukwila South stormwater system under Alternatives 1 and 2. All other properties have been considered and evaluated under their existing conditions.

27. Potable water for the proposed development would be provided by the Highline Water district, as discussed on page 3.16-7 of the Draft EIS. Highline Water District would have sufficient capacity to serve buildout of the project. Water would not be withdrawn from underlying aquifers to serve the project. Impacts to aquifers are described in Section 3.2, Water Resources, of the Draft EIS.

28. Your comment is acknowledged for the record. Following annexation, the Tukwila Fire Department will have primary responsibility for incidents within the Tukwila South area. However, the City of Tukwila and SeaTac Fire Departments have an automatic mutual aid agreement with each other. As a result of the existing mutual aid agreement, the SeaTac and Tukwila Fire Departments currently provide back-up fire resources to each other. The annexation and subsequent development of Tukwila South would not change this agreement. Therefore, the project would likely result in increased demand on the

SeaTac Fire Department. As indicated on pages 3.15-14 and 3.5-15 of the Draft EIS, with buildout of Alternatives 1 and 2, the Tukwila Fire Department would seek to relocate its Station 51 near or on the site. This would reduce impacts on the SeaTac Fire Department.

The call volume shown in the Draft EIS for areas within the Tukwila Fire Department service area is accurate according to Tukwila Fire Department data. Tukwila's south Potential Annexation Area (PAA) is currently part of by King County Fire Protection District #24, which is under contract for service to the City of SeaTac Fire Department. Fire District #24 comprises approximately 1 square mile, including the unincorporated portion of the site and additional unincorporated area in the vicinity. **Table 2-3** shows call volume data from 2002 through 2004 for Fire District #24.

Table 2-3
CALLS FOR SERVICE, FIRE DISTRICT #24

Type of Call	2002[1]	2003	2004
Fire Protection	-	2	1
Emergency Medical	7	22	21
Other[2]	4	6	3
Total Calls	**11**	**30**	**25**

Source: City of SeaTac Fire Department, 2005.

[1] 2002 data represents February 28 through December 31, as provided by the SeaTac Fire Department.

[2] "Other" calls include hazardous conditions, good intent, and false calls, as documented by the SeaTac Fire Department. Two good intent calls were recorded in 2002, 4 in 2003, and 1 in 2004. Only one false call was recorded in the 3-year period, in 2004.

29. Your comment is acknowledged for the record. The transportation analysis presented in the Draft EIS (see Section 3.12, Transportation and Appendix I to the Draft EIS) acknowledged increased traffic volumes on certain road segments and reduced level of service at certain intersections within the City of SeaTac. It can be assumed that increased traffic levels from the project would increase the number of collisions per year.

30. Your comment is acknowledged for the record. Local law enforcement activities within the project area would be the responsibility of the Tukwila Police Department. It is anticipated that the assistance of neighboring Departments would be requested on occasion, depending upon the availability of enforcement resources at any given time. The frequency and impact of such requests would depend to a large extent upon the ability of the Tukwila Police Department to secure additional resources as development of Tukwila South progresses.

31. Your comment is acknowledged for the record. Page 3.9-10 of the Draft EIS discussed the potential for increases in demand on Valley Ridge and Angle Lake Parks, and increased demand on recreational facilities in the City of SeaTac, as a result of the project. As stated in the Draft EIS, standards for dedication and/or improvement of trails, parks and open spaces could be included in the Development Agreement between the City and the applicant.

Letter 11

MUCKLESHOOT INDIAN TRIBE
Fisheries Division
39015 - 172nd Avenue SE • Auburn, Washington 98092-9763
Phone: (253) 939-3311 • Fax: (253) 931-0752

May 5, 2005

Steve Lancaster
Director, Department of Community Development
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

RE: Draft Environmental Impact Statement- Tukwila South Project

Dear Mr. Lancaster:

The Muckleshoot Indian Tribe Fisheries Division has reviewed the Draft Environmental Impact Statement (DEIS) for the proposed Tukwila South Project, a 498 acre development along the Green River and Johnson Creek. In general, we are pleased to see that the proposal comprehensively considers potential impacts to fisheries resources and proposes to restore a portion of Johnson Creek and the Green River floodplain to benefit fish.

The Johnson Creek, the Green River Off-Channel Habitat Restoration Area, and the 32.4 acres of wetland rehabilitation mitigation measures are more than sufficient to compensate for the 1.07 acre fill to streams and 9.45 acre of fill to wetlands on site. We are committed to work with the City, the applicant, and the other permitting agencies to ensure that the project designs maximize the benefits for fish as a result of these mitigation measures. 1

We have a few technical comments, which are attached for your review and consideration. Please contact me at 253-876-3109 if you would like to discuss these comments further. Thank you for the opportunity to comment on this project.

Sincerely,

Isabel Tinoco
Director

Cc: Suzanne Skadowski, US Army Corps of Engineers
Mark Segale, La Pianta, LLC

Technical Comments

Shoreline areas of the Green River

The project abuts approximately 2.5 miles of the lower Green River. This project presents a unique opportunity to enhance this portion of the Green River, particularly for juvenile fish. We recommend that Tukwila and the applicant consider additional actions to benefit fish when developing specific development plans for the site in the future. The Tribe will work with the applicant on this issue as future plans develop. 2

Johnson Creek

It is not clear from the DEIS what will happen to the flood flap gate that is at the current outlet of Johnson Creek. The DEIS notes that this flap gate will be abandoned, but lacks details such as if the gate will be removed and fill and wood would be placed here. 3

Also, please clarify which construction year the relocated Johnson Creek will actually have water from the former Johnson Creek flowing through it. 4

We would like additional information about the proposed "fish-friendly" flap gate on the relocated Johnson Creek to analyze its likelihood of success to allow fish passage. 5

RESPONSE TO LETTER 11
Muckleshoot Indian Tribe

1. Your comment is acknowledged for the record.

2. Your comment is acknowledged for the record. The applicant is working with the Muckleshoot Indian Tribe on the specifics of the proposed Sensitive Area Master Plan, including the proposed Fisheries Mitigation Plan and Wetland Mitigation Plan, and on the Wetland and Stream Buffer Plan. These plans have been updated since issuance of the Draft EIS. The updated plans are contained in **Appendices A** and **B** to this Final EIS and summarized in Sections 1.2 and 1.4 of the Final EIS.

3. The existing flap gate would be removed and the culvert would be slurry filled.

4. Flows would be permanently diverted from the old channel into the restored Johnson Creek channel during the second construction season.

5. Your comment is acknowledged for the record. The applicant is working with Nehalem Marine to select an appropriate design for the new fish-friendly flap gate. One design under consideration is currently being tested in the Humboldt Bay National Wildlife Refuge as a means to increase juvenile Chinook use of this estuarine area. Additional installations in Tillamook and Coos Bay, Oregon will be evaluated under the Oregon Sea Grant Program. Performance data from these studies will be considered during the final selection process of the flap gate for the Johnson Creek outfall. All data will be provided to the Tribe for their review. Also see the response to Comment 2 in Letter 2.

Letter 12

HIGHLINE WATER DISTRICT

May 2, 2005

Serving the Southwest Metropolitan Area since 1946

RECEIVED
MAY 03 2005
COMMUNITY DEVELOPMENT

Mr. Steven Lancaster
SEPA Planning Official
Dept. of Community Development
City of Tukwila
6300 Southcenter Blvd., Suite 100
Tukwila, WA 98188

Subject: Tukwila South (La Pianta) Draft EIS Comments

Dear Mr. Lancaster:

The Highline Water District has reviewed the draft EIS and has the following comments. Before getting into specifics, the District would like the City of Tukwila to know that we look forward to this project and the positive outcomes that will result once it is completed.

As the District is a special purpose district we've reviewed the documents based solely on our priorities, specifically how the proposed 498 acre development would affect District infrastructure and the environment (i.e. water quality). The District will leave issues related to transportation, social impacts, etc. to the appropriate entities.

The District's comments are as follows:

1. It appears that no hydraulic analysis was conducted regarding the impact of the proposed development on the District's water mains, yet in several sections it mentions the water system will adequately meet the project's needs. The District agrees to the general assessment. The District does have adequate source of supply, storage and transmission facilities to this area. However, to ensure the project will comply with the District's comprehensive plan and the owner's needs, we request the owner work with the District to complete a hydraulic analysis report to determine the necessary size and location of water mains to adequately serve the project. 1

2. The District intends to honor our existing franchise agreement with the City of Tukwila. However, any upsizing of relocated mains and any new mains will be the responsibility of the owner (i.e., growth will pay for growth). This needs to be discussed with the three entities (City, District, Owner) if the Southcenter Parkway portion of project is to stay on current track. 2

3. All future water main extensions off Southcenter Parkway will be done via the District's development extension process. All design and construction related costs will be borne by the owner/developer per District policy. 3

23828 - 30th Ave. S. • P.O. Box 3867 • Kent, WA 98032 • (206) 824-0375 / FAX: (206) 824-0806

4. Major excavations or increases in impervious surfaces can impact the aquifer system. The District would like to request we be present at any group coordination or review efforts between the City and the Owner to allow for better planning. 4

5. Pervious surface area optimization should be a consideration when new construction is proposed for a property. The District is a proponent of infiltration through pervious surfaces as it is a major source of aquifer recharge. The District encourages the City and Owner to consider this option. 5

6. The document suggests and the District encourages the City and Owner to follow the WSDOE Best Management Practice Guidelines to ensure impacts to groundwater supplies are eliminated or properly mitigated. 6

The District would like to once again reiterate our position as a proponent of the project. We look forward to working with the City and the owner to bring this vision to fruition. If you have any questions or need clarifications, please feel free to reach me at your earliest convenience. I can be reached directly at 206-592-8904.

Sincerely,

Thomas D. Keown, P.E.
Construction/Operations Manager

Cc: Matt Everett, General Manager
Jim Murrow, Public Works Director, Tukwila
Sue Carlson, Segale Properties

RESPONSE TO LETTER 12
Highline Water District

1. Your comment is acknowledged for the record. A hydraulic analysis to determine the necessary size, location and other parameters of the water distribution system to serve the project will be prepared and coordinated with the District.

2. Your comment is acknowledged for the record. Discussions are currently underway.

3. Your comment is acknowledged for the record. These items would be defined through the Applicant's agreement and application process with the District. Discussions are currently underway.

4. Your comment is acknowledged for the record.

5. Your comment is acknowledged for the record. Appendix C to the Draft EIS and the summary on Draft EIS page 3.2-21 discuss Low Impact Development (LID) considerations. See also response to Comment 3 in Letter 8.

6. Under the current proposal, managed stormwater on all impervious surfaces would be treated and discharged to the Green River or to the City of Tukwila stormwater drainage system; none would infiltrate to groundwater. For most of the developed area onsite, compacted and relatively fine-grained fill would prevent any impacts to groundwater quality from rainfall. Overall, groundwater quality under Alternatives 1 and 2 would be improved by elimination of existing agricultural runoff, septic discharge to groundwater, and untreated runoff from existing roadways and industrial development areas draining to roadside ditched streams. No adverse impacts to beneficial uses of groundwater quantity or quality were predicted by the Draft EIS analysis (see Appendix C to the Draft EIS).

WATER RESOURCE INVENTORY AREA 9 (WRIA 9)

GREEN / DUWAMISH AND CENTRAL PUGET SOUND WATERSHED

Algona
Auburn
Black Diamond
Burien
Covington
Des Moines
Enumclaw
Federal Way
Kent
King County
Maple Valley
Normandy Park
Renton
SeaTac
Seattle
Tacoma
Tukwila

May 5, 2005

Mr. Steve Lancaster, Director
City of Tukwila
Department of Community Development
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

Re: WRIA 9 Comments on Tukwila South Project Draft EIS

Dear Mr. Lancaster:

I am writing to present the comments on behalf of Water Resource Inventory Area (WRIA) 9 to the *Tukwila South Project Draft EIS, City of Tukwila, Washington, April, 2005* for La Pianta LLC's Tukwila South Project.

As you are aware, WRIA 9 has been working in partnership with the 16 cities and King County of the Green/Duwamish and Central Puget Sound Watershed to prepare a long range Salmon Habitat Plan to respond to the region's Chinook salmon, listed as "threatened" under the federal Endangered Species Act (ESA) in 1999. As noted by Mayor Steven Mullet, Mayor of Tukwila and WRIA 9 Watershed Forum Chair, in a letter introducing the *Draft Habitat Plan: Making Our Watershed Fit for a King,* "The Draft Plan reflects thousands of hours of work since 1998 by the Forum, Steering Committee, and supporting working groups and committees. It demonstrates the positive results of our inclusive partnership to help improve our watershed's health for people and salmon. Moreover, the Draft Plan presents a road map, based on sound scientific evidence and the collaborative efforts of many, for our watershed's contribution to turning around salmon decline in Puget Sound."

The Draft Habitat Plan was preceded by two key WRIA 9 documents, the "Habitat Limiting Factors and Reconnaissance Assessment Report", published in 2000 (J. Kerwin, and T.S. Nelson, Eds.) and the "Near Term Action Agenda for Salmon Habitat Conservation: Green/Duwamish and Central Puget Sound Watershed", May 2002. A "Strategic Assessment" built upon information in the Habitat Limiting Factors and Reconnaissance Assessment Report contributed to the understanding of problems and opportunities in the watershed related to salmon and salmon habitat conservation and recovery, providing the scientific foundation for the Draft Salmon Habitat Plan, published in March 2005. Although much of the scientific foundation for the habitat plan was available prior to publication through published reports, plans and the WRIA 9 website, it is not clear that the information was utilized to prepare the Tukwila South Draft EIS. The Draft Habitat Plan provides critically important information and guidance in preparing the Final EIS for the Tukwila South Project. Following are the WRIA 9 comments on the Tukwila South Project Draft EIS based upon the Draft Habitat Plan documents: 1

EIS Section 3.3: Plants and Animals -- Lower Green River Subwatershed Conditions:
The Tukwila South property has long been identified as a key opportunity for habitat restoration. The Lower Green River Subwatershed is critical for juvenile rearing and spawning, but has been impacted by severe hydromodification through urbanization, water diversions, revetments, and levees. Further, flood-control levees and other land use changes have reduced the amount of habitat available to salmon in the subwatershed, particularly refuge habitat for juveniles. It is particularly important that developments such as the Tukwila South Project quantitatively improve and rehabilitate the habitat in this portion of the river. The following, drawn from the Draft Habitat Plan, provides substantive information on the Lower Green River Subwatershed:

Historical Conditions
The wide, low-gradient valley bottom of the Lower Green River was historically a mosaic of floodplain forest and wetlands. The Black, White, and Green rivers were all tributaries of the lower Green River, resulting in frequent floods. During flood events, the Lower Green River overflowed its banks creating a network of ephemeral streams that fed the wetlands and tributaries within the valley. It is likely that some juvenile salmon were carried along in the floodwaters and eventually ended up in the tributaries, wetlands, and side channels, providing refuge during flood events and serving as rearing habitat. The majority of the floodwaters flowed to the east and fed the Springbrook Creek drainage complex and re-entered the system through the Black River. Floodwaters from the historical White River fed the Mill Creek drainage complex. Sand and gravel bars were common (15 ha) in the reach between RM 25 to 32 directly downstream of the White River confluence (USACE 1907). These gravel bars and LWD created shallow habitat for juveniles and suitable spawning habitat that still persists today.
At approximately RM 18, Hilbert et al. (2001) describes the village of Stook that means "a big jam of logs." In the mid-1860s, the mainstem channel was wide (~72 m) and covered about 316 ha. Historically, the river migrated throughout the floodplain, leaving behind oxbows and wetlands. Tributaries provided important habitat and accounted for approximately one-third of total channel area and 62 percent of channel edge, there were approximately 1,700 ha of wetlands and black cottonwood was the most abundant tree (Collins and Sheikh 2004). 1 cont.

Current Conditions
There is one assessment segment in the Lower Green River. Key habitat attributes were monitored in four reaches, including bankfull width, bank conditions, canopy cover, riparian vegetation, pool habitat, LWD, and riffle particle size distribution. In general, the observed habitat conditions reflect extensive alterations to the river and floodplain from dam operations, and urban and agricultural development. Key findings of the survey were (Anchor Environmental 2004a): (1) instream habitat quality and quantity for juvenile and adult salmonids is significantly impaired; (2) the channel is confined throughout the Lower Green, with extensive riprap bank armoring; (3) habitat types are generally homogenous and off-channel habitat is limited; (4) the dominant pool forming factors are manmade structures, such as bridge abutments; (5) spawning size gravels occur only in the upper third (RM 25-32) of the segment; (6) the connectivity between the riparian zone and instream habitats is limited by levees; (7) the riparian zone is dominated by invasive species and lacks native vegetation; and (8) numerous stormwater and tributary outfalls discharge to the river.

Anchor Environmental (2004) summarized conditions by noting that gradual channelization of the river in the last century has resulted in substantial losses in the quality and quantity of mainstem spawning, winter and summer rearing, and adult holding habitat. Encroachment of land use, roads, trails, and levees to the river margins has greatly reduced the extent of existing or

potential riparian habiatat. Bank tree cover is sparse, and existing non-native vegetation provides little cover for fish.

Change in Habitat Conditions

The Lower Green valley bottom has been dramatically altered from the once densely forested floodplain with numerous large "swampy" wetlands scattered throughout. The most obvious and significant land cover change has been urban development. It is estimated that ~60% of the valley bottom is either high density (100% impervious) or low density (50% impervious) development. Road density is 8.1 km/km^2 and there are 69 road crossings of the river. This development has resulted in clearing of the floodplain forest (~87%) and filling of wetlands (~40%). Historically, there were several large wetlands located in the major tributary drainages and numerous smaller wetlands were scattered throughout the valley. The total area of historical wetlands was estimated at 1,495 ha, compared to 927 ha today (Collins and Sheikh 2004; USGS 1990). In the present Southcenter Mall area, there was a large wetland (159 ha), but it was completely filled except for a small area. There was also a 109 ha wetland further south on the west side of the river that was described as a "cranberry marsh." This wetland was unique because it was symbolized on the GLO plat map with numerous springs. Today, this area remains undeveloped, but it is used for agriculture and drained by Johnson Creek.
Historically, tributaries were the dominant type of channel edge in the lower Green River because of the geologic and glacial processes that formed the river. Flooding was common, creating a network of flood channels that fed the tributaries and wetlands. Tributaries provided important habitat and accounted for approximately one-third of total channel area and 62 percent of channel edge (Collins and Sheikh 2004). Side channels contributed about 6.5 km of channel edge habitat. Today, the tributaries are heavily altered due to development of the floodplain and are rarely fed by floodwater. Approximately 20% of Springbrook Creek is contained in drainage ditches and its confluence is upstream of the Black River Pump Station, a partial fish passage barrier.

1 cont.

Fish Utilization

Nelson et. al. (2004) studied juvenile Chinook in the Lower Green during 2001-2003, focusing on timing, growth rates and relative abundance of hatchery and naturally-produced Chinook. Natural Chinook passed through the Lower Green River quickly (hours to days) from late winter to late summer with peaks for fry and fingerling migration coinciding closely with the Middle Green. Flows seem to play an important role in the residence time within this reach. Flood control facilities (e.g., levees) have severely limited the ability of Chinook to find refuge during high flows, resulting in juveniles being prematurely flushed downstream to the estuary. River flows in 2001 were unusually low during the winter and early spring, and it appears that a higher proportion of fry may have reared in the Middle and Lower Green River compared to the proportions of fish that reared there during 2002 and 2003 (Nelson et al. 2004). In recent years, about 3.5 million hatchery Chinook fingerlings were released annually in WRIA 9. These fish typically travel through the Lower Green at a time when smaller and much less abundant natural fingerlings are present, thus the more abundant and larger hatchery fish may prematurely force natural fish to the estuary. As a result of such interactions, hatchery fish likely have a competitive advantage (at a minimum, due to fat reserves) over their natural conspecifics if the food supply is limited.

This subwatershed of the Lower Green River comprises the low gradient, wide valley segment of the river from the historic White River confluence downstream to the estuary. Earlier information summarizes conditions in the lower river noting that channelization over the last century has resulted in substantial losses in the quantity and quality of mainstem spawning, winter and summer rearing, and adult holding habitat—large, channel-wide pools. Riparian habitats have been lost to roads, levees, and various encroaching land uses. The result for VSP has been a

reduction in productivity and spatial structure as habitat elements that supported spawning aggregations and juvenile aggregations have been lost. If the historic habitat conditions are an indication, this subwatershed once provided extensive areas for juvenile rearing and growth. In particular, off-channel sloughs and backwaters presented large areas for flood refuge and summer feeding. By extension, the extent and diversity of the once-common off-channel habitats in this Subwatershed may have supported a greater diversity of life-history trajectories than occurs today. The recovery of these VSP attributes is keyed to the achievement of a set of Necessary Future Conditions that will require extensive rehabilitation and restoration of habitats. The VSP objectives for this Subwatershed reflect the goal of increasing population productivity watershed-wide. Along with the estuary and nearshore, the lower river is a critical juvenile growth area. The habitat management strategies reflect the intent to recover those habitats that are most associated with juvenile productivity and meet the targets set in the NFCs for this Subwatershed. These habitats include mainstem channel pools, side channels, ponds and wetlands, and shallow channel edge.

Given the extent of channel and floodplain modification, and the intensive development of the surrounding landscape, there is little opportunity for habitat protection at the scales and magnitudes necessary to influence VSP. Protection will be an important secondary strategy but will be reduced to relatively small areas that are now somewhat disconnected from the processes that support them. The opportunities for restoration are as limited as the protection options so, once again, rehabilitation is the dominant strategy throughout this Subwatershed. *The National Research Council (1992) identifying Habitat Management Strategies, recommends "rehabilitation" as the appropriate strategy where habitat is impaired and restoration of full function and supporting processes is not feasible but specific improvements to functions and supporting processes can be achieved; "substitution" should occur where function is required but habitat features are irretrievable and supporting processes cannot be recovered.* The habitat strategies that are applicable to the proposed development are (italicized strategies are particularly important):

1 cont.

- *Rehabilitation remains the main strategy in this subwatershed. The objectives of this strategy are: large pool structure in the mainstem river, existing but disconnected side channels and sloughs, shallow, bank-edge habitats along the river margin, riparian habitats, and areas suitable for flood inundation;*
- *Substitution objectives are floodplain wetlands, side channels, and floodplain ponds. These habitats will have to be recreated from semi-developed areas of the existing floodplain and will require designs for specific functions;*
- Protection objectives are limited to locations where habitats and channel forms have been the least affected by land use and channel manipulations. This, in essence, protects marginally functional habitats that are scattered throughout the watershed. To achieve greater function, these habitats will require some intervention; and
- Restoration options are probably the most severely limited of any strategy in this subwatershed. Especially for the river system, the spatial scale necessary for restoration of the segment function is unavailable. More local restoration, provided a logical "unit" for this strategy can be found, is possible only in very few places, and will likely be restoration of form only (closer to the definition of rehabilitation).

Scientific Framework of the WRIA 9 Draft Habitat Plan:
The Draft Habitat Plan is based upon a solid scientific framework that guides the evaluation of actions and implementation, leading to conservation hypotheses developed for each subwatershed, and management strategies leading to actions. Conservation Hypotheses appropriate to this subwatershed include the following (italics are added to emphasize the Conservation Hypotheses with the greatest importance in the Tukwila South Project site):

***LG-1**: Protecting and creating/restoring habitat that provides refuge (particularly side channels, off channels and tributary access), habitat complexity (particularly pools) for juvenile salmon over a range of flow conditions and at a variety of locations (e.g. mainstem channel edge, river bends and tributary mouths) will enhance habitat quality and quantity and lead to greater juvenile salmon residence time, greater growth and higher survival.*

LG-2: Restoring and enhancing sediment recruitment (particularly spawning gravels) by reconnecting sediment sources to the river will reduce channel downcutting, increase shallow habitats, improve access to tributaries, and improve spawning habitat, thereby leading to greater juvenile salmon residence time, greater growth, and higher survival.

***All – 2**: Protecting and improving riparian conditions by adding native riparian vegetation will enchance habitat quality by improving water quality, stabilizing streambanks, providing overhanging vegetation and large woody debris (LWD), and contributing organic matter, nutrients, and terrestrial prey items, thereby leading to greater juvenile salmon growth and higher survival.*

1 cont.

All–4: Allowing natural flows (including low flows and habitat-forming flows) in a relatively unconstrained river channel will enhance habitat diversity and provide habitats that can support spawning and rearing salmon at a greater variety of flow conditions, thereby leading to expanded salmon spatial distribution, greater juvenile salmon growth, and higher survival. [Note: May be less applicable to the marine nearshore.];

***All–6**: Preventing new bank/shoreline armoring and fill and removing existing armoring, fill and other impediments (e.g., levees) will enhance habitat quality and quantity and lead to improved juvenile salmon survival, spatial distribution, and diversity;*

***All–1**: Protecting and improving water quality (e.g., temperature, dissolved oxygen, turbidity, and chemical contamination conditions) by addressing point and nonpoint (specifically stormwater runoff and agricultural drainage) pollution sources will enhance habitat quality and lead to greater juvenile salmon growth, disease resistance, and survival. Improved water quality will also enhance survival of adult salmon, incubating salmon eggs, and salmon prey resources, such as forage fish;*

***All–3**: Protecting and improving access to tributaries will increase the quantity of available habitat, particularly for juvenile Chinook and coho salmon, and lead to expanded salmon spatial distribution, greater juvenile salmon growth, and higher survival; and*

***All–5**: Preserving and protecting against watershed and upland impacts by implementing Low Impact Development techniques, including minimizing impervious surfaces, will maintain habitat quality by helping maintain flow and reduce sedimentation, thereby leading to greater salmon survival.*

EIS Section 3.2: Water Resources – Necessary Future Conditions for Salmon Survival:
Necessary Future Conditions (NFCs) emphasize that the Tukwila South development must contribute to the achieving all NFCs, in particular contributing to conditions targeted for functioning habitats. As reported in the Draft WRIA 9 Habitat Plan, significant environmental impacts will occur if the Tukwila South development proposal does not quantitatively contribute to the NFCs.

Necessary Future Conditions
There is one assessment segment within this subwatershed: *Lower Green Valley* (Segment 3, RM 11.0 - 31.3). The necessary future habitat conditions identified for the Lower Green subwatershed follow (All are critical to be factored into the proposed development mitigation plan):

- Water quality and quantity meets State and instream flow standards to increase productivity of spawning areas (e.g., increase egg-to-fry and spawner-to-spawner productivity) and to increase juvenile life-stage productivity;

- Sediment processes and transport rates that produce spawning gravel (RM 25 to 32) are reestablished and improved to increase productivity spawning areas, increase spatial structure, and maintain and develop habitats (e.g. pool tail outs, spawning riffles, shallow channel edge) that will increase life history productivity. Spawning habitat target with suitable gravel size is ~45 percent of historical levels (5,000 CY/year) for viability of population; 2

- Mainstem, tributary, and off-channel habitats are improved to increase juvenile rearing, life-stage diversity and productivity (increase egg-to-fry and fry-to-fingerling survival rates). Targets are functioning habitats representing ~45 percent of historical habitat area. Habitats include side channels (target = 4.5 km), wetlands (target = 763 ha), tributaries within the valley bottom (target = 36 km), ponds (target = 13 ha), shallow channel edges, LWD jams, and in-channel pools;

- Hydrologic connection to floodplain, tributaries and historical off-channel habitats are restored to achieve access to ~45 percent of historical habitat area and

- Riparian zone is functioning and effective buffer widths are established to provide all riparian functions (shade, bank stabilization, sediment control, organic litter, large woody debris, nutrients, and microclimate).

EIS Section 2.2: Purpose and Need – Ecological Economic Benefits:
Restoration in this key zone has huge potential ecological economic benefits not being considered with this plan. As noted in the EIS (Chapter 2.2 Purpose and Need), the prospect of future technology industries, institutions, jobs and economic benefits of the proposed development are significant. However, the socio-economic services as documented by the "Ecosystem Services Enhanced by the Salmon Habitat Conservation in the Green/Duwamish and Central Puget Sound Watershed (Asia Pacific Environmental Exchange, February 2005)" are potentially greater. As noted in the Executive Summary of the Ecosystem Services report, "WRIA 9 ecosystems produce 1.7-6.3 billion dollars of value in goods and services each year, benefiting individuals, communities, businesses, and governments within WRIA 9." 3

The ecological services provided by restoring degraded habitat are exceptionally high in the Lower Green Subwatershed where such services have been substantially altered. Potential ecosystem goods and services enhanced by rehabilitation, and substitution actions on the Tukwila South Project site include flood protection, natural storm water maintenance, drinking water production and filtration, reduction of pathogens and pollutants, waste absorption, storm protection, biodiversity preservation, nutrient regulation, increased production of fish, erosion control, aesthetic value, recreational fishing, hiking bird watching and educational and scientific benefits. Healthy ecosystems produce goods and services for free and in perpetuity and are essential to maintaining a healthy economy and livable communities within WRIA 9. The values of the ecosystems and the benefits of restoration/rehabilitation actions at the Tukwila South development should be evaluated using the approach defined in the APEX report. 4

EIS Section 2.3: Site Description

The EIS does not adequately describe the proposed conditions of the significant shoreline property adjacent to the Green River. The River is a feature that should shine as the central feature of planning design for Tukwila South. Instead, the plan provides few provisions for riparian corridor, points of interest, riverside promenades or other clear advantages to the property – nor does the plan indicate reasonable/acceptable set backs for the developer or others to implement riverfront habitat. 5

As noted with the Draft WRIA 9 Habitat Plan, policies provide important guidance for future actions. Among the WRIA-wide policies for landuse are the following:

LU3: Maintain basin imperviousness below 20% or utilize practices to maintain an equivalent of storm water runoff potential; and

LU5: Local jurisdictions and developers should reduce volume of stormwater runoff through use of Low Impact Development techniques. Low impact development includes the use of: 6

- Native vegetation and small-scale treatment systems to treat and infiltrate stormwater runoff close to where it originates;
- Clustering of buildings and narrower and shorter roads to reduce total impervious areas and leave larger areas in native vegetation; and
- Porous or permeable paving.

The plan also recommends a valuable suite of education and stewardship tools for improving and protecting salmon habitat, including:

- Coordinating with local businesses, property management companies, and homeowners associations regarding storm water practices related to parking lot cleaning, storm drain maintenance and road cleaning; and 7
- Working with private property owners to provide them with information, technical assistance, and encouragement in improving stewardship of their land.

Editorial Comment:

Page 31 of the Fisheries Technical Report by Cedarock Consultants, Inc. refers incorrectly to the "Salmon and Steelhead Habitat Limiting Factors Analysis for the Cedar River". This citation is not correct; the watershed is the Green/Duwamish River. 8

Conclusion:
Thank you for the opportunity to comment on the Tukwila South Project Draft EIS. I hope that the WRIA 9 comments will be useful in the preparation of the Final EIS and development plans.

Sincerely,

Doug Osterman
WRIA 9 Watershed Coordinator

Cc: Steve Mullet, Mayor, City of Tukwila

RESPONSE TO LETTER 13
Water Resources Inventory Area 9

1. Your comment is acknowledged for the record. Many of the WRIA 9 documents referenced in this comment were useful in developing the proposed Fisheries Mitigation Plan. This plan has been updated since issuance of the Draft EIS (see Exhibit 2 in **Appendix A** to the Final EIS for the updated plan and Section 1.2 of the Final EIS for a summary of the updated plan). The Conservation Hypotheses are the basis for the proposal to create the Green River Off-Channel Habitat Restoration Area and improve habitat conditions in, and access to, Johnson Creek. See also responses to Comments 1 and 2 in Letter 7.

2. See the response to Comment 1 in Letter 7 for a description of the status of the habitat plan for the Green/Duwamish and Puget Sound watershed, and the applicability of the habitat plan's recommendations to the Tukwila South project.

SEPA requires examination and comparison of the probable significant impacts of the proposed actions and alternatives to existing conditions, not to pre-European settlement conditions or a future hypothetical condition. The determination of significant impacts is "*more than a moderate adverse impact on environmental quality*" (WAC 197-11-794). When existing fisheries habitat conditions are compared with those conditions expected under Alternatives 1 and 2, the result would be a net improvement in most of the Necessary Future Condition goals set by the WRIA 9 Steering Committee. Reaching the WRIA 9 committee goal of re-establishing ideal salmonid habitat in a river degraded by over a century of impacts (as described in Appendix E to the Draft EIS) is not necessary to mitigate the proposed impacts of an individual project, per SEPA (WAC 197-11-440(6)(a) and 197-11-440(6)(c)(iv)). The proposed Fisheries Mitigation Plan (Exhibit 2 in **Appendix A** to the Final EIS) is consistent with the WRIA 9 goals and meets the SEPA requirements for mitigating probable significant adverse impacts to environmental quality that could result from the proposed project.

3. Your comment is acknowledged for the record.

4. Your comment is acknowledged for the record. See the response to Comment 2 in this Letter.

5. Your comment is acknowledged for the record. Specific plans for mitigation features adjacent to the Green River (the Off-Channel Habitat Mitigation Area) were described in the Draft EIS (Appendix E) and are further updated in this Final EIS (**Appendix A**, Exhibit 2). The City of Tukwila will consider measures to take advantage of the potentials created by the Green River, as cited in your comment, as it reviews the proposed Tukwila South Master Plan, amendments to development regulations, and a proposed development agreement.

6. The Draft WRIA 9 Habitat Plan has not been adopted and its proposed policies currently have no regulatory effect. Furthermore, it is not clear that the proposed policies cited by the comment would have a substantial beneficial effect with regard to the Tukwila South proposal. Howard Hanson Dam operations, and the confinement of the river between levees designed to contain peak Howard Hanson Dam releases, have altered the typical

relationship between rainfall runoff hydrographs, river flow, and bank scour and erosion in the Green River. Dam operations cause an artificial domination of river flow independent of rainfall runoff in the lower Green River basin, in which the site is located. Because the levees are designed to convey maximum dam releases, the banks and river bottom of the Green River are not affected by stormwater detention with regard to: erosion or scour, and velocity and wetted perimeter considerations, which pertain to fish habitat and water quality protection (see Appendix B and Appendix E to the Draft EIS). The Pump Operations Procedures Plan (POPP) is designated to protect the levees from damage at high river flows independent of typical stormwater detention requirements, as described in the Preliminary Master Drainage Plan (Appendix B to the Draft EIS). Also see the responses to Comments 29 and 30 in Letter 7, which pertain to the relationship of the POPP to the Tukwila South project. Restricting effective impervious area on the site would have no beneficial effect on stormwater runoff influence on the Green River.

With regard to Low Impact Development measures (LID), please see the response to Comment 3 in Letter 8.

7. Your comment is acknowledged for the record. Stormwater source control and public education are readily available via private and public information services on the internet.

8. Your comment is acknowledged for the record. This correction to the Draft EIS has been made. See Chapter 3, Errata of this Final EIS.

SEGALE PROPERTIES
A LA PIANTA LLC TRADE NAME
INDUSTRIAL • COMMERCIAL • AGRICULTURAL • NATURAL RESOURCES

Letter 14

RECEIVED
MAY 05 2005
COMMUNITY DEVELOPMENT

May 5, 2005

Mr. Steve Lancaster, Director
Department of Community Development
6300 Southcenter Boulevard
Suite 100
Tukwila, WA 98188

RE: Comment on Tukwila South Project Draft EIS

Dear Steve,

The attached memo from Michael Hodgins, Berk and Associates documents our comments on the staffing and facility analysis presented in the public service section of the Tukwila South Project Draft EIS. The memo focuses on the analysis of the fire and law enforcement services staffing.

Please let me know if you have questions concerning any of the information contained in the memo.

Sincerely,

Susan Carlson
Director of Development
Segale Properties

PO BOX 88028 • TUKWILA, WA 98138 • 5811 SEGALE PARK DRIVE C • TUKWILA, WA 98188
P 206.575.2000 • F 206.575.1837 • www.segaleproperties.com

BERK & ASSOCIATES

Strategic and financial planning • Public finance
Policy development • Facilitation

MEMORANDUM

DATE: May 5, 2005

TO: Sue Carlson, Segale Properties

FROM: Michael Hodgins

RE: **Comments on the Public Services Section of the Tukwila South EIS**

The purpose of this memorandum is to document our comments on the staffing and facility analyses presented in the public services section of the Tukwila South EIS. We have focused our review on the analysis of fire and law enforcement services and have organized our comments accordingly.

Fire Protection Services

The analysis of potential impacts to fire protection services identifies three primary areas of impact: Suppression Division staffing; Fire Prevention Bureau staffing; and fire facilities. Each of these is addressed below.

Suppression Division Staffing. The following is the only reference to potential staffing impacts for fire suppression:

> 1. *It is possible that the assumed level of development under Alternatives 1 and 2 over the long term would also require expanded personnel levels and fire and emergency response equipment to ensure adequate response levels to the site. The addition of a ladder truck, for example, would require a minimum of 18 additional staff in the Department. The addition of an engine would require a minimum of 15 additional staff in the Department (Fire Chief Olivas, February 2005).*

Comments:

- There is no supporting analysis of the potential need for additional fire suppression equipment. The City currently has 3 engine crews and one ladder truck spread over four fire stations. In the event that Station 51 is relocated to the Tukwila South area, then at least one engine crew would be located within the development area. 1
- The estimated level of staffing for each additional piece of fire suppression equipment is higher than the current City of Tukwila staffing levels. The current City staffing in the Fire Suppression Division includes: 2

i. Three (3) Shift Captains, twelve (12) Lieutenants, and thirty-nine (39) Firefighters.

ii. These positions staff four fire stations providing 24-hour service.

iii. The equipment provided at these stations currently includes 3 engine crews, 1 ladder crew and 1 aid car.

- The staffing levels cited for an additional ladder truck or engine appears to be significantly higher than the current staffing levels would imply. Using the staffing levels from the EIS suggests minimum staffing for the equipment currently in service would be 63 firefighters, excluding staffing for the aid car at Station 54 and the three shift captains. This compares to a staffing level of 51 firefighters, which includes staffing for the aid car, but excludes the shift captains.

2 cont.

Fire Prevention Bureau Staffing (Inspectors). There are two references in the EIS to additional staffing requirements for fire inspection services:

1. *The Fire Department estimates that one additional inspector would be needed during the infrastructure development phase (Fire Chief Olivas, February 2005).*

2. *At full buildout, it is estimated that two to three additional fire inspectors would be needed to handle the added workload of inspecting development under Alternatives 1 and 2. The need for these inspectors would transition incrementally as buildings are developed. One inspector would likely be needed during the initial part of development, and the need for two to three would develop over full buildout of the site for periodic compliance checks (Fire Chief Olivas, February 2005).*

Comments:

- It is unclear whether the additional inspector identified in the infrastructure development phase would be the same inspector needed for inspections during the initial part of the development. Depending on the resolution of this comment, total staffing impacts are estimated to be a minimum of two (2) inspectors or a maximum of four (4) inspectors.
- The estimated total increase in staffing related to fire inspection services seems high relative to current staffing levels in the Fire Prevention Bureau of the City of Tukwila. The current City staffing level includes one (1) Fire Marshall (Captain), two (2) Inspector/Investigators (Lieutenants), one (1) Senior Fire Inspector and one (1) Administrative Support Technician. This level of staffing provides services to a commercial base of approximately 21 million square feet of development (Colliers and Cushman Wakefield reports). Even assuming a linear relationship between staffing and commercial space, the lower end of the staffing impact range would seem more appropriate.

3

Fire Facilities. The following are the key findings related to fire facilities:

1. *The Tukwila Fire Department has an overall response time goal of an average of four minutes; however, the department has no adopted standard. The Department estimates that current response times to the site are approximately 3.2 to 4.2 minutes or less to the north end of the site (depending on traffic congestion and time of day) and would be approximately 6.2 to 7.5*

minutes to the south end of the site (service is not currently provided by the Department to the unincorporated portion of the site and the condition of the existing Frager Road limits the ability to respond quickly) (Fire Chief Olivas, February 2005).

2. *The Fire Department has indicated that it would seek to relocate Station 51 to a site closer to S 180th Street at some point during the buildout period. The Department has also indicated that the addition of a new fifth station would not be warranted (Fire Chief Olivas, September 2004 and February 2005). The specific timing of the relocation of Station 51, as well as the specific site, would be determined by the City based on future operational considerations, and actual growth at the Tukwila South site and in other parts of the service area.*

3. *A site near or within Tukwila South would be required for the Station 51 relocation, in order to meet the department's response time goal of 4 minutes to all portions of the site. Site sizes for fire stations vary significantly depending on the availability and cost of land in a specific area, configuration of a site, amount of developable area and the density of surrounding development, and typically range from less than one acre to over two acres. The Department has indicated, however, that a site of up to 4 to 6 acres could be needed to serve existing and future Department needs and anticipated growth, at the Tukwila South site, as well as other development in the area (this figure assumes that future fire protection standards would necessitate development of the station in a one-story configuration) (Fire Chief Olivas, March 2005).*

Comments:

- It is unclear from the analysis when the relocation of Station 51 would be required. To better understand the implications of the project, an assessment of response times to specific development areas would be necessary to assess the trigger for the suggested relocation. 4
- There is no supporting analysis for the suggestion that a 4-6 acre site would be required to house a relocated Station 51, given that a range of less than one acre to over two acres was given as a typical site for a fire station. 5

Law Enforcement Services

The analysis of potential impacts to law enforcement services identifies three primary areas of impact: Commissioned officer staffing; support staffing; and police facilities. Each of these is addressed below.

Police staffing. The following are the key findings related to police staffing impacts identified in the EIS:

1. *The Tukwila Police department determines personnel requirements based on the number of calls for service and level of crime versus a ratio of officers to population. The Tukwila Police Department meets annually with the Mayor's office to determine staffing levels and equipment needs. From 2001 to 2003, the Department responded to an annual average of between 430 and 446 calls for service per officer (City of Tukwila Police Department 2003 Annual Report).*

2. *In summary, at full buildout in 2030, development of Tukwila South under Alternatives 1 and 2 could result in a need for an additional 5.3 to 19.5 police officers, according to the above estimates. It is assumed that this need for additional police officers would be realized incrementally over the 25-year buildout period.*

3. *Based on the approximately 1.04 to 1.59 million square feet of assumed retail uses at Tukwila South under Alternatives 1 and 2, 1.5 detectives could be needed to serve development under Alternatives 1 and 2 at buildout (Officer R.W. Abbott, February 2005).*

4. *The Department currently has four traffic enforcement officers which serve the overall City. Based on the Police Department's calculation of the future daytime population of Tukwila South (including retail customers), one additional traffic enforcement officer could be needed to serve the site at buildout (Officer R.W. Abbott, February 2005).*

5. *The Department currently has two service transport officers which serve the overall City. Based on the estimated number of calls for service to retail uses and the types of crimes expected to occur at retail uses (such as shoplifting), one additional service transport officer could be needed to serve development under Alternatives 1 and 2 at buildout (Officer R.W. Abbott, February 2005).*

6. ***The Department currently has eight support staff which serve the overall City. Based on the estimated number of calls and officer staffing needs, an additional three support staff members could be required to serve development under Alternatives 1 and 2 at buildout (Officer R.W. Abbott, February 2005).***

Comments:

- The analysis of police staffing requirements is premised on the assumption that an additional officer is needed for every additional 440 calls for service. This average was determined using the City of Tukwila Police Department's 2003 Annual Report, which showed 68 officers and 30,337 service calls resulting in 446 calls per officer. Using service calls per total commissioned officer will likely overstate the demand for new police services, since not all officers are directly engaged in activities related to service calls. 6
- According to the City's budget, the breakdown of the commissioned officers is as follows:
  i. Six (6) officers engaged in administrative functions (a police chief, (2) two captains and three (3) lieutenants),
  ii. Forty (40) officers in the patrol unit.
  iii. Nine (9) officers in the investigations unit,
  iv. Eight (8) in special operations (mostly related to gambling, narcotics and vice activities)
  v. Two (2) officers engaged in crime prevention activities.
  vi. Three (3) officers engaged in traffic management and control activities
  vii. One (1) officer responsible for training activities.

- The EIS considers the impact of the development on each of these functions separately, but the call-driven estimate already includes all department functions.
- Separating the functions that are addressed separately in the support staff section, the analysis in summarized in Table 3.15-11 should be based on patrol functions only. Since the patrol function is most affected by increases in service calls, this is also a more appropriate call per officer ratio for conducting staffing impact analysis. Using the patrol function only results in 740 calls per officer, which would reduce the range of potential staffing impacts identified in 3.15-11 to 6.5 to 11.6 FTE's for Alternative 1 and 3.2 to 6.7 FTE's for Alternative 2.
- There is insufficient analysis to support the estimated increase in staffing of 1.5 detectives, one traffic officer, one transport officer and the three support personnel for a total of 6.5 positions. This level of staffing suggests a very high ratio of more than 1 support positions for each additional patrol position in the lower density scenarios, which seems quite high given the inevitable economies of scale in certain administrative, training, evidence and investigation functions.

Police facilities. The following is the only discussion of police facilities:

1. *The Department has indicated that, based on response time goals and operational requirements, development on the site under Alternatives 1 and 2 could be more efficiently served with the location of a second, outlying police facility on or near the site. Such a facility would allow officers to file reports and return to the field to respond to calls without driving to Police Headquarters at City Hall. Such a facility would require approximately 850 square feet or could be combined with another facility, such as a fire station or within retail development.*

Comments:

- While the DEIS suggests that an outlying facility could improve efficiency, there is no supporting analysis that an outlying police facility would be required. In addition, the purpose of such a facility is premised on the potential for increased efficiency, though there is no connection to the staffing analysis contained elsewhere in the EIS section, showing how this increased efficiency might reduce staffing needs.

RESPONSE TO LETTER 14
Segale Properties

1. The projected need for additional fire suppression equipment is based on two factors.

First, the addition of 10 to 14 million square feet of new development would result in additional calls for service. Due to uncertainty over the specific future mix of land use types, it is not possible to predict with confidence the actual number of calls for service. However, the Draft EIS provides information upon which estimates can be formulated.

Alternative 1 could result in an estimated 9.6 million square feet of new research campus, office campus and office use (Draft EIS Table 2-1). Extrapolating from the experience of the City of Redmond and its Microsoft campus (Draft EIS page 3.15-14) this level of development may be expected to generate approximately 2.4 calls for service per day, or approximately 875 calls per year[1]. Alternative 1 could result in an estimated 1.6 million square feet of new retail and restaurant use (Draft EIS Table 2-1). Based on the experience of the Tukwila Fire Department with developments such as the Westfield Southcenter Mall, this level of retail development could be expected to generate approximately one call per year for every 6,100 square feet, or approximately 260 additional calls for service per year (City of Tukwila, Westfield Shoppingtown Southcenter Expansion EIS, 2004)[2]. These two categories of use could result in roughly 1,135 additional calls for service per year (an average of slightly more than 3 calls per day). This would represent a 25 percent increase over total Tukwila Fire Department calls for service in 2003, the most recent year for which this data is available (Draft EIS Table 3.15-1). Additional calls for service would be anticipated based upon an estimated 900,000 square feet of hotel and 1.9 million square feet of residential development.

Alternative 2 could result in an estimated 7.3 million square feet of new research campus, office campus and office use and an estimated 1.0 million square feet of new retail and restaurant use (DEIS Table 2-1). Using the same factors mentioned above for Alternative 1, this level of development could be expected to generate approximately 837 additional calls for service per year (an average of approximately 2.3 calls per day) for office and retail uses. This would represent nearly a 20 percent increase over total Tukwila Fire Department calls for service in 2003 (Draft EIS Table 3.15-1). Additional calls for service would be anticipated based upon an estimated 750,000 square feet of hotel and 700,000 square feet of residential development (Draft EIS Table 2-1).

2. Based upon a potential increase in calls for service of 20 to 25 percent, equivalent increases in staffing and equipment needs may be fairly anticipated. The Tukwila Fire Department currently maintains a fire suppression equipment inventory that includes five pumpers (three staffed, two reserve); one ladder truck; and two aid cars (one currently staffed 20% of the time, one reserve) and employs 61 uniformed staff.

[1] 1.5 calls for service per day for Microsoft's 6 million square feet equals 1 call per day per 4 million square feet. Applied to the potential for 9.611 million square feet of similar development at Tukwila South indicates 2.4 calls for service per day, or 875 calls per year.

[2] 129 calls for service per year for 787,903 square feet equals one call per year for every 6108 square feet of retail/restaurant space. Applied to the potential for 1.589 million square feet of similar development at Tukwila South indicates 260 calls for service per year.

The second factor indicating the need for additional fire suppression equipment has to do with the potential height of buildings and intensity of development within the Tukwila South area. Development under Alternative 1 is assumed to average between four and eight stories, with building heights ranging from 60 to 100 feet. Development under Alternative 2 is assumed to average between 4 and 6 stories, with slightly lower building heights (Draft EIS page 2-35 and Table 2-3). The Tukwila Fire Chief has determined it will be necessary to relocate the ladder truck and aid car currently housed at Station 54 to Station 51 to provide adequate emergency response to the Tukwila South area. This will result in a need to acquire a new piece of apparatus to provide adequate coverage for the area served by Fire Station 54 (letter from Nick Olivas to Blumen Consulting Group, Inc., May 20, 2005).

Staffing needs for additional fire suppression equipment is based upon minimum staffing levels of 3 uniformed personnel per pumper or ladder truck. A, B and C shifts work three rotating 24-hour shifts on a Modified Detroit Schedule. Eighteen personnel are presently assigned to each shift. Four personnel are allowed off every day to accommodate contractual leave (vacation and Kelley days). The resulting staffing is 14 per shift. Fourteen personnel allow minimum staffing of the city's three front line engines and ladder truck. Once the number of personnel assigned to a shift exceeds 19, there would not be a sufficient number of days available to meet vacation and Kelley days obligations; the number of personnel allowed off each day would need to increase. Maintaining existing staffing levels for the ladder, aid car and a fourth engine would require a minimum daily staffing of 18, necessitating a minimum shift staffing of 24 or 25. The increase in shift personnel identified in the Draft EIS would represent the minimum needed by the Fire Department to manage the workload associated with the proposed development.

3. The Tukwila Fire Chief anticipates the need for up to 4 additional fire prevention staff, depending upon the pace of development within the Tukwila South area (letter from Nick Olivas to Blumen Consulting Group, May 20, 2005). Fire Prevention staffing needs are related more closely to the pace of new development than to the amount of existing development. Therefore, a linear relationship between staffing and existing commercial space cannot be assumed.

4. Your comment is acknowledged for the record. Timing of the need to relocate Station 51 would depend upon the timing, location and nature of future development.

5. Upon further consideration, Tukwila's Fire Chief forecasts that a 3-4 acre site would be more appropriate for a relocated Fire Station 51 (letter from Nick Olivas to Blumen Consulting Group, May 20, 2005). This facility would serve an area significantly larger than the Tukwila South area and, as the Department's headquarters station, would include some facilities intended to support citywide fire protection functions.

6. Total number of service calls is a reasonable indicator of overall demand placed upon Tukwila Police Department commissioned officers. Even officers not directly engaged in responding to such calls (administrators, investigators, crime prevention and training officers, etc) are involved in activities affected by the overall volume of activity within the Department. Please note that the Draft EIS provided an alternative "population ratio" method of forecasting demand on commissioned personnel needs for comparison (see Draft EIS page 3.15-17).

7. Contrary to the comment, the Draft EIS analysis did not include all department functions in the call-driven estimate of personnel needs. Specifically, the following functions were not included in the estimate of commissioned officer personnel needs: detectives, traffic enforcement officers, service transport officers, and general support staff. Likely demand for additional personnel in these functions was estimated separately (see Draft EIS pages 3.15-20 and 3.15-21). In this way, the potential for double-counting personnel needs was avoided.

For the reasons stated in the response to Comment 6 in this letter, it is not accurate to assume that only patrol functions are affected by volume of service calls.

8. As indicated by Comments 6 and 7 in this letter, service calls alone may not be an accurate indicator of demand for certain police functions. The Draft EIS recognizes this by providing separate estimates for these functions, based upon the best professional judgment of the Tukwila Police Department (Draft EIS pages 3.15-20 and 21).

9. Your comment is acknowledged. The Draft EIS does not state that an outlying police facility would be required, but if available would reduce transport time otherwise spent driving to police headquarters for certain routine purposes.

Letter 15

From: "James Greif" <jgreif51@hotmail.com>
To: <slancaster@ci.tukwila.wa.us>, <lverner@ci.tukwila.wa.us>, <terrya@ci.seatac.wa.us>, <bernard.thompson@metrokc.gov>, <brucer@ci.seatac.wa.us>, <lblanchard@ci.kent.wa.us>
Date: 5/5/05 12:34PM
Subject: Tukwilla South add to Line of site safety hazard for traffic off I5 and SR167

May 5, 2005

This e-mail is to be included in the Tukwilla South Project Comments including attached
pictures to this email along with recorded Comments made by James Greif at the April 27, 2005 6:00Pm Public Meeting in the Tukwilla City County Chambers.

We don't want politics deciding the safety of our Children and the General Public.

Dear Steve Lancaster
Director of Community Development
slancaster@ci.tukwila.wa.us

Dear Lisa Verner
Project Coordinator for the City
lverner@ci.tukwila.wa.us

Because our road connects to a Major Corridor between I5 and Sr167 we would like to meet
at the location with all of you to discuss resolving and reducing the number of traffic accidents as a result of road modifications and future Road modifications. There are other large developments planned for this same corridor along with Tukwilla South project and we have seen what happens when underground springs are disrupted and start pumping up into the road which caused 3 major accidents in 3 days into and around our properrty this year. The Tukwilla South Project could result in similar spring activity diverted into these major roads along with added traffic to a already dangerous 42nd Ave south Traffic 2002 road modification. I attached the City of Kent Council Minutes from Jan 4, 2005 which a complaint was filed to the City of Kent Mayor and City of Kent Council members regarding one of the accidents caused from Spring water diverted up thru the dangerous 42nd Ave road after Polygon modified the Road. 1

As a result of Gary Young Poligon road modification we went from a 530 + feet line of site to current 102 feet hazardous Line of site traffic
condition according to City of Kent Police Department and City of Kent Public works Engineer Len Olive. We know it is only a matter of time before someone is hurt or killed. I have included pictures showing the line of site from a satellite view and from ground view. I also attached the City of Kent Line of Sight Standard which is 530 feet
minimum traffic Site distance. The Tukwilla Project will asserbate the current hazardous
42nd Avenue conditions. 2

I lost my sister from a traffic accident and I do not want to loose anymore Family members.

A number of my close Friends were also killed in car accidents.
I find it sick and offensive that city Officials would even say well your Sister was not killed
in front of your E.V.A.R. on 42nd Ave South."

Lt Bob Cline of the City of Kent Police Department called the 42nd Avenue South Modification a road hazard and I attached his phone message which he states it is a Road HAZARD along with a number of emails from City of Kent Public Works Engineer Len Olive regarding the safety issues and the 3 accidents in 3 days as a result of the road 42nd Avenue not being safe.

The Developer Gary Young who modified the 42nd road has stated they cannot afford to fix the safety Hazard so we need to find someway to make it safer and we need your help.
The Tukwila South Project will just add more Hazard to an existing hazard and add more
delay in getting it fixed.

In order to protect School Children at our E.V.A.R
Don Walkup Kent School district Supervisor of Transportation has repeadely voiced and written his concerns to both City of Kent and City of SeaTac and I have attached a July 24, 2003 letter
with his concerns.

We don't want politics deciding the safety of our Children and the General Public.

James Greif
206-850-8684

-----Original Message-----
From: Olive, Leonard [mailto:LOlive@ci.kent.wa.us]
Sent: Friday, October 03, 2003 2:09 PM
To: 'Kelly Foster'
Cc: 'LenaK@ci.seatac.wa.us'; 'James Greif'; 'dhallenberger@ci.seatac.wa.us'; 'Bui, Vanlan T'; Wickstrom, Don; Gill, Gary; Carrasquilla, Ozzie; Damon, Mark
Subject: Wall design on 42nd

Kelly,

You were going to bring me a new 42nd wall design reflecting my redline comments, as well as SeaTac comments, on September 25th. As of now I still do not have anything from you. I have been working with your organization in excess of one year to reach an appropriate solution to the safety issues that exist as a result of the 42nd improvements. Is it really your intent to bring a solution to the table?

I am putting a "HOLD" on everything Polygon has in process at the City of Kent till I get a complete and viable plan.

Len Olive, P. E. | Development Engineering Manager
City of Kent | Public Works
220 Fourth Avenue South | Kent, WA 98032-5895

Voice 253.856.5591 | Fax 253.856.6500
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****

James Greif
206-850-8684

-----Original Message-----
From: Gill, Gary [mailto:GGill@ci.kent.wa.us]
Sent: Wednesday, June 30, 2004 2:51 PM
To: Bui, Vanlan T
Subject: RE: Issues to complete and sign off for plans to fix Our E.V.A.R.

James & Family,

I have not received revised plans yet. I did, however, discuss the issue with Gary Young from Polygon this morning at our South 228th Street Corridor ground breaking ceremony. He indicated that they were trying to reach a final decision on the wall design and were looking at several alternative designs because the latest cost estimates are greatly exceeding their original estimates. They will be getting back to us soon with their revised plans and preferred alternative. I will send you an update when I have new news to report. They clearly want to complete the construction of the wall this summer while the weather conditions are favorable.

Gary

-----Original Message-----
From: Olive, Leonard [mailto:LOlive@ci.kent.wa.us]
Sent: Thursday, February 13, 2003 1:16 PM
To: 'Randy Forsyth'
Cc: 'jgreif51@hotmail.com'; 'Bui, Vanlan T'
Subject: Grief Driveway.
Randy,
What is happening with the Greif driveway? I haven't received an update from you since last year. Please update me with a plan and a schedule.
Thanks,
Len Olive, P. E. | Development Engineering Manager
City of Kent | Public Works
220 Fourth Avenue South | Kent, WA 98032-5895
Voice 253.856.5591 | Fax 253.856.6500
w w w . c i . k e n t . w a . u s

From: "Olive, Leonard" <LOlive@ci.kent.wa.us
To: 'Kelly Foster' <Kelly.Foster@PolygonHomes.com, "Olive, Leonard" <LOlive@ci.kent.wa.us
CC: "'LenaK@ci.seatac.wa.us'" <LenaK@ci.seatac.wa.us, 'James Greif' <jgreif51@hotmail.com, "'dhallenberger@ci.seatac.wa.us'"

<dhallenberger@ci.seatac.wa.us, "'Bui, Vanlan T'" <vanlan.t.bui@boeing.com, "Wickstrom, Don" <DWickstrom@ci.kent.wa.us, "Gill, Gary" <GGill@ci.kent.wa.us, "Carrasquilla, Ozzie" <OCarrasquilla@ci.kent.wa.us, "Damon, Mark" <MDamon@ci.kent.wa.us, "Spanjer, Frank" <FSpanjer@ci.kent.wa.us
Subject: RE: Wall design on 42nd
Date: Tue, 7 Oct 2003 10:56:45 -0700

Kelly,

Read your previous transmittal: "This package includes the revised wall design per your redline comments..." "...I wanted to wait until we had a complete submittal rather than rush in with an incomplete one." Your submittal of yesterday accomplished neither of these and is woefully incomplete. The submittal does not include a "wall design;" it is only a conceptual drawing at best. Conceptually, this configuration may work, but I will need to have a full set of engineered plans to make the final determination.

In an attempt to address your concerns: 1) Kent's SEPA official has been in contact with SeaTac officials regarding the SEPA requirements, and it is my understanding that this issue has been handled to everyone's satisfaction. 2) On what are you waiting for permission to proceed? 3) As I have told you many times over, easement procurement will not be possible until final construction plans have been approved.

Please submit a complete set of plans ASAP.

Len Olive, P. E. | Development Engineering Manager
City of Kent | Public Works
220 Fourth Avenue South | Kent, WA 98032-5895
Voice 253.856.5591 | Fax 253.856.6500
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MEMORANDUM

TO: TOM GUT
PUBLIC WORKS ENGINEERING

JACK DODGE
PLANNING DEPARTMENT

FROM: GEORGE GOODALL
FIRE PREVENTION BUREAU

DATE: September 10, 1999

RE: 42 Avenue South realignment (north of South 216 Street)

42 Avenue South realignment (north of South 216 Street)

Thank you both for inviting me to the meeting earlier this week with Richard

Rawlings of Polygon Northwest regarding the possible realignment of 42 Avenue South near South 216 Street.

Based upon our discussions and the drawing provided, the Fire Prevention Bureau has the following comments regarding this proposal:

1) The Kent School District transportation staff has expressed concerns about the present lack of a walkway or sidewalk on the west side of 42 Avenue South especially as there are dwellings on that side of the street that may have school children who would need to catch the school bus on this street. The proponent together with both cities should coordinate with the school district to determine what their needs and/ or preferences are in this regard. As such, it may be necessary to relocate the eastside sidewalk/bike path to the opposite side or provide an additional minimum width sidewalk or walking path on the west side -either or both of these would probably require additional right of way on the west side of the street.

2) As the present approximately 400 foot long southern part of 42 A venue South would be deleted by the proposed realignment, and because this portion presently serves a couple of existing dwellings, this portion will need to be maintained in some form in order to provide access and egress to and from the dwellings. Because this will include emergency vehicle access, this remaining piece of 42 Avenue South should continue as right of way and should not revert to the adjacent property owners through vacation and should also be maintained at least at Fire Code minimum standards (minimum 20 foot wide driving surface and minimum 13-6 overhead clearance). In addition, because of the length of the new dead end, a proper emergency vehicle turnaround in the form of a minimum 80 foot diameter cul-de-sac should be provided

at the north end -this, too, would require additional right of way as the present right of way is only 60 feet wide. As an alternative, the north end could be tied to the curve of the revised 42 Avenue South yet blocked or barricaded against routine traffic at the connection by bollards or a gate that the Fire Department could easily open. Because this would be located inside the City of Kent, the Kent Fire Department should be consulted on this (even though the SeaTac Fire Department would normally provide service to these adjacent dwellings located within the City of SeaTac).

3) I do not know whether the issue of water supply and fire hydrants has come up before (I neglected to mention it when we met). At present, the hydrants in this area are few and far between (the nearest hydrant is located on the south side of South 216 Street west of the intersection with 42 A venue South or approximately 300 feet west of the new intersection of South 216 Street and 42 A venue South; the next nearest hydrant to the north is a South 204 Street and Orillia Road). Accordingly, additional fire hydrants should be provided along the reconfigured streets. For SeaTac, this would result in hydrants a maximum of 700 feet on center for the adjacent single family residential use; I do not know what Kent's requirements are in this regard. A site visit confirms that Kent has required additional hydrants elsewhere in the vicinity (south of South 216 Street for the new housing development). In my professional judgment, at the very least, a new hydrant should be provided at the new intersection of

South 216 Street and 42 A venue South with one additional hydrant north of this intersection a maximum of 700 feet from the former. Please note that there is a new hydrant on the south side of South 216 Street approximately 300 feet east of the existing intersection with 42 A venue South; tI1is hydrant was presumably installed for the adjacent new development but will be stranded away from the street if the intersection is relocated as proposed.

Corridor Traffic Safety Program
The goal of the Corridor Traffic Safety Program is to reduce collisions on roadways using low-cost, near-term solutions through partnerships with community groups, business, engineering, enforcement, education, and emergency services organizations. The program is locally led and coordinated in each community.

A corridor is selected based on two things:

* There is statistical evidence that a section or set of roadways has a significant crash problem.
* There is energy on the local level to undertake a corridor project.

Once selected, a task force is recruited. Invited to be part of that task force will be all law enforcement agencies, public works and state highways agencies, emergency response agencies, businesses, schools, civic organizations, citizen activists, appropriate federal agencies and interested political entities such as county commissioners or city officials. All agencies sit as equal members of the local corridor project task force.

The Washington Traffic Safety Commission is the lead agency in the Corridor Traffic Safety Program that is a joint effort between the Commission and the Washington State Department of Transportation. The Washington State Patrol is also a major partner in the program.

Contact Information:
Marv Ryser, Program Manager
360-586-3870 FAX 360-586-6489
mryser@wtsc.wa.gov

Monica Petersen-Smith, Program Manager
360-664-3192 FAX 360-586-6489
mpetersen@wtsc.wa.gov

CC: <ecooper@psra.org>, <mryser@wtsc.wa.gov>, <sbutler@ci.seatac.wa.us>, <mmbartolo@ci.seatac.wa.us>, <citycouncil@ci.kent.wa.us>, <keiser_ka@leg.wa.gov>

On April 7, 2005, I, DANICA WETTLAND, listed to and correctly transcribed the following phone message as follows:

(253)856-5299 Received October 12, @ 10:27 am

Mr. Greif this is Lieutenant Bob Cline from the Kent Police Department, I'm returning your call. Ah, I am going to be leaving work on Wednesday and I wont be back until November. Ah, I have had an opportunity to talk with Gary Gill from our city who is dealing and working on this issue. He understands my prospective on this that yes it is a hazard. However, like I explained to you, I don't know whose responsibility it is to fix it, and, but it sounds like he is working on it and he is your best hope at this time to get some resolution and assistance from the city, so I would encourage you to continue to work with him. If I can help you by answering any other questions, I will be glad to, but like I said, ah, I won't be here until, or after Wednesday. Thank you.

I certify under penalty of perjury that the foregoing is a true, correct and accurate transcription of the phone message I was asked to listen to.

DANICA M. WETTLAND

SUBSCRIBED & SWORN before me this 7TH day of APRIL, 2005.

RAQUEL A.B. CARLSON NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES 6-29-07

RACHEL AB CARLSON

Notary Public for the State of Washington

Commission Expires 6-29-07

On April 7, 2005, I, DANICA WETTLAND, listed to and correctly transcribed the following phone message as follows:

This is Phil (phone cuts out and last name is inaudible) from the City of Kent. I got a sand truck on the way to 42nd Avenue to sand that street really good. I don't know if it's a main break under that thing or if its just a spring but I have to keep an eye on it. I just wanted to let you know that King County had given me a call and I'm just responding to that. Sorry for calling so late. I will try back tomorrow sometime to see what's going on. Okay talk to you later. Bye.

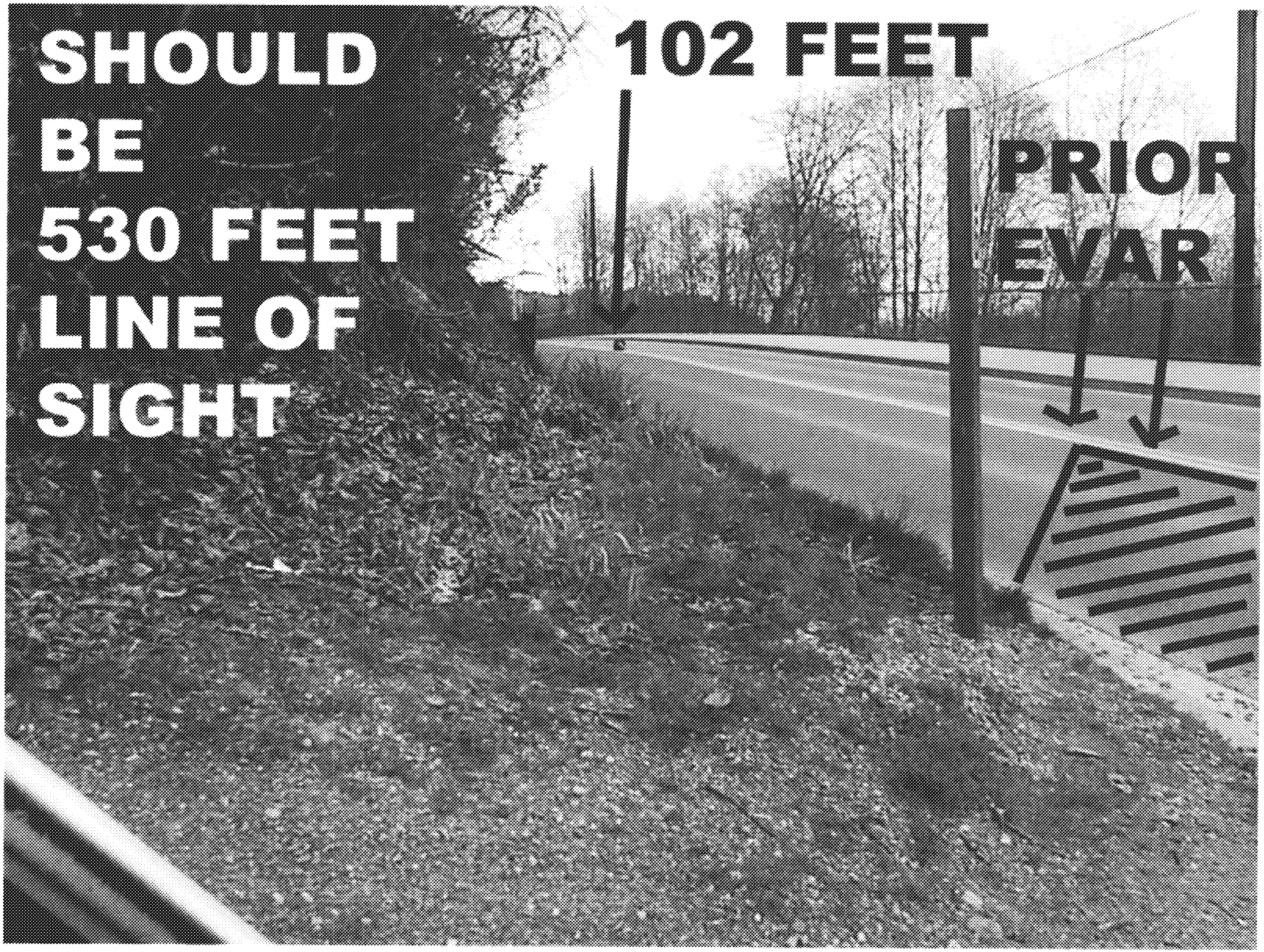
I certify under penalty of perjury that the foregoing is a true, correct and accurate transcription of the phone message I was asked to listen to.

DANICA M. WETTLAND

SUBSCRIBED & SWORN before me this 7th day of APRIL, 2005.

RAQUEL A.B. CARESS
NOTARY PUBLIC
STATE OF WASHINGTON
COMMISSION EXPIRES 6-29-07

RACHEL AB CARESS
Notary Public for the State of Washington
Commission Expires 6-29-07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BE
530 FEET
LINE OF
SIGHT
102 FEET
PRIOR
EVAR

102 FEET

530'
SHOULD BE
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1000
GALLON
EXISTING 102'
LINE OF SITE
MODIFIED EVAR
PRE-LOADED
AREA

EXHIBIT 22

KENT SCHOOL DISTRICT

July 24, 2003

Stephen C. Butler, AICP
Director of Planning & Community Development
4800 S 188th ST
Seatac, WA 98188

Dear Mr. Butler:

Subject: Student Pedestrian Considerations on 42nd AV S

As the Supervisor of Transportation for the Kent School District, I have had conversations with Mr. James Greif the past several months and have been the recipient of numerous documents regarding the various issues surrounding 42nd AV S between Orillia RD S and S 216th ST. I suppose that the complexity of resolving these issues may be exacerbated by the fact that 42nd AV S is a common line between the City of Seatac and the City of Kent. Both sides of 42nd AV S, however, lie within the Kent School District boundary.

Although I am still puzzled by the fact that the 10-foot sidewalk was installed on the east side of 42nd AV S without a clear benefit for pedestrians, I stand by our earlier, stated position that any development on the west side of 42nd AV S should be accompanied by appropriate pedestrian walkway improvements to the street.

Therefore, I strongly urge you to require installation of a sidewalk from Orillia RD S to S 216th ST as a condition for approval of any proposed developments on the west side of 42nd AV S.

Thank you for your consideration for student pedestrians. Please consider their safety when deciding future development on the west side of 42nd AV S.

Sincerely,

Don Walkup
Supervisor of Transportation

c Dan Moberly, KSD Assistant Superintendent of Business Services
Len Olive, City of Kent Development Engineering Manager
James Grief, Resident, 21265 42nd AV S

Transportation
25211 104th Ave SE
Kent, Washington
98030-6438
Ph: 253-373-7442

SIGHT DISTANCE REQUIREMENTS

These requirements are intended to provide guidance to property owners and design engineers on what sight distance criteria the City of Kent will require and accept as a result of specific development actions. This document combines the requirements of the City of Kent Construction Standards, the City of Kent Zoning Code, AASHTO's A Policy on Geometric Design of Highways and Streets; and the City of Kent Subdivision Code.

CRITERIA FOR MEASURING SIGHT DISTANCE

Sight distance is the distance along a roadway that an object of specified height is continuously visible to the driver. This distance is dependent upon the height of the driver's eye above the road surface, the specified object height above the road surface, and the height of obstructions within the line of sight.

For sight distance calculations for passenger vehicles, the height of the driver's eye is considered to be 3.50 feet above the road surface for both stopping sight distance and for passing sight distance. For stopping sight distance calculations, the height of the object that must be seen is considered to be 0.50 feet above the road surface. For passing sight distance calculations, the height of the object that must be seen is considered to be 4.25 feet above the road surface.

Generally speaking, the City of Kent has determined that when sight distance calculations are made for intersections; the stopping sight criteria and stopping sight distances are to be used. When sight distance calculations are made for driveways; the passing sight criteria for the height of the object shall be used, but the stopping sight distances are to be used.

SIGHT OBSTRUCTIONS

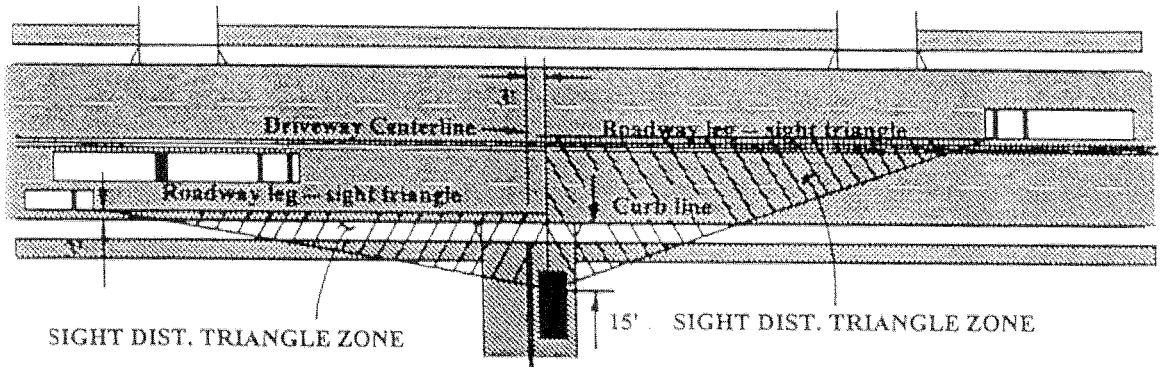
The obstruction that limits the driver's sight distance on tangents is usually the road surface at some point on a crest vertical curve. The obstruction that limits the driver's sight distance on horizontal curves may be the road surface at some point on a vertical curve, or it may be some physical feature outside of the traveled way, such as a longitudinal barrier, a bridge-approach fill slope, a tree, foliage, or the backslope of a cut section. Accordingly, all street and driveway plans must be checked in both the vertical and horizontal planes for sight distance obstructions.

DRIVEWAY ENTRANCE SIGHT DISTANCE TRIANGLES

In order to ensure that proper sight distance is maintained at all driveways, and across private property at intersections, no obstructions or landscaping materials exceeding 30 inches in height as measured at the flow line of the curb & gutter (or the edge of pavement where curbs are not constructed) will be permitted within the sight distance triangle for driveways and intersections.

The length of the roadway leg of the sight distance triangle is a function of the PREVAILING SPEED - NOT the Speed Limit - on the street. The prevailing speed is usually found by adding 5 MPH to the posted Speed Limit, unless otherwise determined by a Speed Study, or by the Transportation Engineer.

SPEED (MPH)	ROADWAY LEG DISTANCE	
	DISTANCE TO THE LEFT	DISTANCE TO THE RIGHT
25	250 feet	195 feet
30	350 feet	260 feet
35	440 feet	350 feet
40	530 feet	440 feet
45	635 feet	570 feet
50	740 feet	700 feet
> 50	Contact the City for Distance	Contact the City for Distance



Typical Site Distance Triangle at a Driveway

When sight distance triangles for driveways are drawn on civil engineering plans, the roadway leg distances must be dimensioned as given in the table above.

Typical sight distance obstructions include: young trees; shrubbery; banners, A-frame or other temporary or portable signs; parked vehicles; or such permanent obstructions as monument signs, above-ground utility vaults / service points, buildings, earth berms with or without landscaping, retaining walls / rockeries, fences, etc. Street light poles, sign poles, and similar obstructions may be acceptable within the sight distance triangle PROVIDING that the width of such obstructions is not too large, and PROVIDING FURTHER that no other obstruction other than the pole is permitted between the heights of 2.5 feet and 9 feet. Similarly, mature trees may be permitted within the sight distance triangle, PROVIDING that the trunk diameter is not too large, and that the first spreading branch is located at least 9-feet above the flow line of the adjacent gutter, or above the edge of the street pavement where gutters do not exist.

Last revised October 17, 2000

Kent City Council Meeting
January 4, 2005

The regular meeting of the Kent City Council was called to order at 7:00 p.m. by Mayor White. Councilmembers present: Clark, Harmon, Peterson, Ranniger, Raplee, Thomas and White. (CFN-198)

CHANGES TO AGENDA

A **From Council, Administration, or Staff.** (CFN-198) The Home Street Bank Donation was removed from the agenda, and two appointments were added to the Consent Calendar. Property Acquisition was added to the Executive Session and Pending Litigation was removed. A minor change to Item 6D (City of Auburn Agreement) was noted.

B. **From the Public.** (CFN-198) Rachael Victrin, 4400 37th Ave South expressed safety concerns with pooling water on 42nd Place South. Blanchard agreed to meet with her.

PUBLIC COMMUNICATIONS

A. **Employee of the Month.** (CFN-147) The Mayor announced that SEPA Official and Principal Planner Kim Marousek is the Employee of the Month for January.

B. **Introduction of Appointees.** (CFN-198) The Mayor announced recent appointees and introduced those in attendance.

C. **King County Council.** (CFN-198) Representative Julia Patterson gave a brief wrap-up of King County issues.

CONSENT CALENDAR

PETERSON MOVED to approve Consent Calendar Items A through P, with the revision to Item 6D. Clark seconded and the motion carried.

A. **Approval of Minutes.** (CFN-198) The minutes of the regular Council meeting of December 14, 2004 were approved.

B. **Approval of Bills**. (CFN-104) Payment of the bills received through November 30 and paid on November 30 after auditing by the Operations Committee on December 7, 2004 were approved.

Approval of checks issued for vouchers:

Date		Check Numbers	Amount
11/30/04	Wire Transfers	1887-1899	$1,024,573.27
11/30/04	Prepays &	570737	914,062.51
11/30/04	Regular	571309	1,788,066.25
			$3,726,702.03

Approval of checks issued for payroll for November 1 and paid on November 19, 2004:

Date		Check Numbers	Amount
11/19/04	Advices	171919-172570	$1,176,686.12
11/19/04	Checks	280503-280762	210,797.01
11/19/04	Interim Checks	280763-280767	4,264.79
11/19/04	Void Checks	276136;277007; 277384;276013; 274738	(4,264.79)
			$1,387,483.13

Approval of checks issued for Fire Holiday Cashout of November 30 and paid on December 2, 2004:

Date		Check Numbers	Amount
12/2/04	Advices	172571-172664	$87,410.81
12/2/04	Checks	280768-280770	2,818.18
			$90,228.99

Approval of checks issued for payroll of November 16 and paid on December 3, 2004:

Date		Check Numbers	Amount
12/3/04	Advices	172665-173318	$1,426,870.01
12/3/04	Checks	280771-280999	241,719.19
			$1,668,589.20

C. **Corrections Facility Food Vendor Contract.** (CFN-122) The Mayor was authorized to sign the jail food services agreement between the City of Kent and Consolidated Food Management, Inc.

D. **City of Auburn Interlocal Agreement, Fire Investigation Task Force.** (CFN-122) The Mayor was authorized to sign the Interlocal Cooperative Agreement between Auburn and Kent for the creation and operation of the South King Fire Investigation Task Force, with a minor revision on page 4 changing "prior sections" to "Section XIII hereof."

E. **City of Covington Interlocal Agreement, Fire Investigations.** (CFN-122) The Mayor was authorized to sign the Interlocal Agreement between Covington and Kent relating to Fire Investigations.

F. **Department of Homeland Security/Office of Domestic Preparedness Grant.** (CFN-122) The Department of Homeland Security and the Office for Domestic Preparedness FY04 Assistance to Firefighters Grant was accepted, the budget was amended and the Mayor was authorized to sign any agreements necessary to accept the grant and spend funds related to the purchase and installation of the compressor/cascade fill system and thermal imaging cameras.

G. **Diversity Advisory Board Ordinance.** (CFN-1127) Ordinance No. 3732 amending KCC 2.56.040 to increase the Diversity Advisory Board's membership from seven (7) to nine (9) members was adopted.

H. **2004 Accounts Receivable Write-Offs.** (CFN-104) The write-offs of various accounts receivable in the amount of $42,477.39 was approved. The Finance Department recommended write-offs of uncollectible accounts that are over one year old.

I. **Udaloy Environmental Services Contract.** (CFN-1038) The Mayor was authorized to sign the Consultant Agreement Change Order with Udaloy Environmental Services for $64,995 to provide the City with technical assistance on the Landsburg Mine.

J. **United States Fish & Wildlife Services Contract.** (CFN-1038) The Mayor was authorized to sign the contract with the United States Fish and Wildlife Services (USFWS) in the amount of $95,550 to provide assistance in the development of the proposed Habitat Conservation Plan (HCP) at Clark Springs & Rock Creek and for the preparation of the associated environmental documents including an Environmental Impact Statement (EIS).

K. **Littler Environmental Consulting, Inc. Contract.** (CFN-1038) The Mayor was authorized to sign the contract with Littler Environmental Consulting, Inc. for $44,915 to provide technical assistance on the Landsburg Mine and Model Toxic Control Act (MTCA) issues.

L. **Washington State Law Enforcement Association Grant.** (CFN-122) The Washington State Law Enforcement Association grant was accepted. The funds from this grant in the amount of $3,000 will be used to provide training for police personnel.

M. **Wildwood Ridge II Final Plat.** (CFN-1272) The final plat mylar for Wildwood Ridge Two was approved and the Mayor was authorized to sign the Mylar.

N. **Drinking Driver Task Force Re-appointment.** (CFN-122) The Mayor's re-appointment of Mr. Rod Blalock to continue serving as a member of the Kent Drinking Driver Task Force was confirmed. His term will continue until 1/1/08.

ADDED ITEMS

O. **Land Use and Planning Board Re-appointment.** (CFN-174) The Mayor's re-appointment of Mr. Greg Worthing to continue serving as a member of the Kent Land Use and Planning Board was confirmed. His term will continue until 12/31/07.

P. **Kent Human Services Commission Re-appointment.** (CFN-873) The Council President's re-appointment of Councilmember Debbie Raplee to continue serving as the non-voting Council representative to the Kent Human Services Commission was confirmed. Her term will continue until 1/1/06.

OTHER BUSINESS

Downtown Strategic Action Plan Update, Comprehensive Plan & Zoning Amendments AND 2004 Annual Comprehensive Plan & Zoning Map Amendments. (CFN-462,377&131) This proposal includes an update of the Downtown Strategic Action Plan and adoption of regulations to

implement portions of that plan. Following public hearings before the Land Use and Planning Board, the Planning & Economic Development Committee has recommended approval of the update as modified by the Committee. Following a public hearing before the Land Use & Planning Board, the Planning & Economic Development Committee is forwarding their recommendations on the 2004 annual comprehensive plan and zoning map amendments.

Charlene Anderson, Planning Manager, explained that this item (7B) and the following item (7C) are part of one package, therefore both should be heard before taking action. Bill Osbourne of the Planning Department explained both items 7B and 7C, and read a letter from Polygon Northwest withdrawing the Muth application. HARMON MOVED to make the letter a part of the record. Clark seconded and the motion carried. Ranniger recused herself from voting. Peterson recommended that staff do further research on the options and said Council needs time to analyze the options. CLARK MOVED to send Items 7B and 7C (Downtown Strategic Action Plan Update, Comprehensive Plan & Zoning Amendments, and 2004 Annual Comprehensive Plan & Zoning Map Amendments) to the Planning Committee with the intent that there be a public hearing on the Lotto proposal which would address 1) widening the buffer, 2) the impact of design review, including use and 3) a three-acre option. Peterson seconded and the motion carried.

REPORTS

Planning and Economic Development Committee. (CFN-198) Clark noted that, due to the holiday on January 17, the Committee will meet at 5:00 p.m. on Wednesday, January 19th.

Administrative Reports. (CFN-198) Martin reminded Council of an Executive Session of approximately 10 minutes regarding property acquisition with possible action afterwards.

EXECUTIVE SESSION

The meeting recessed to Executive Session at 7:55 p.m. and reconvened at 8:02 p.m. (CFN-198)

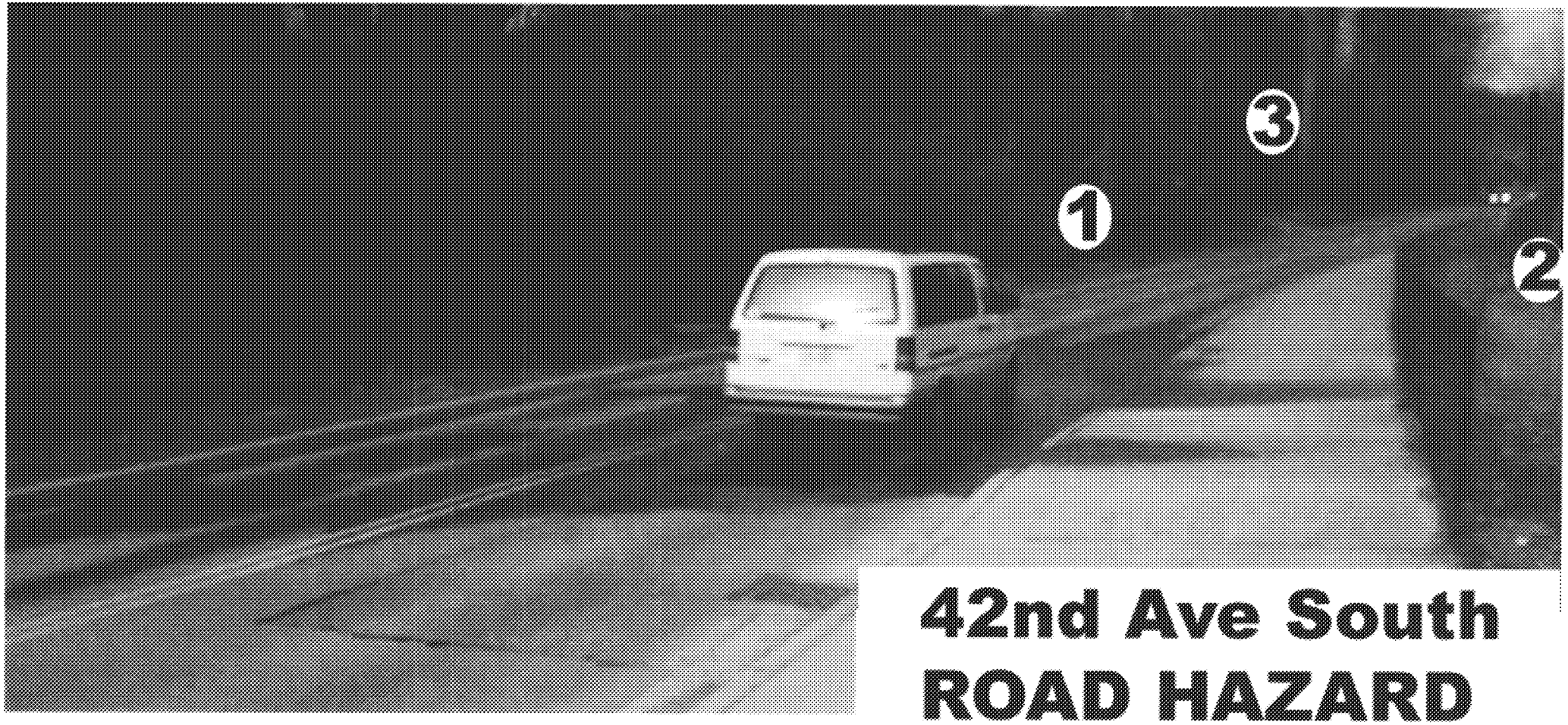
ACTION AFTER EXECUTIVE SESSION

Property Acquisition. CFN-239) PETERSON MOVED to authorize the Mayor to enter into a purchase and sale agreement for the England Property in an amount not to exceed the fair market value, to authorize the Mayor to execute any and all documents necessary to close the transaction upon review by the City Attorney, and to appropriate $320,000 plus feasibility and closing costs from the Park Land/England Property acquisition account toward this purchase. Clark seconded and the motion carried.

ADJOURNMENT

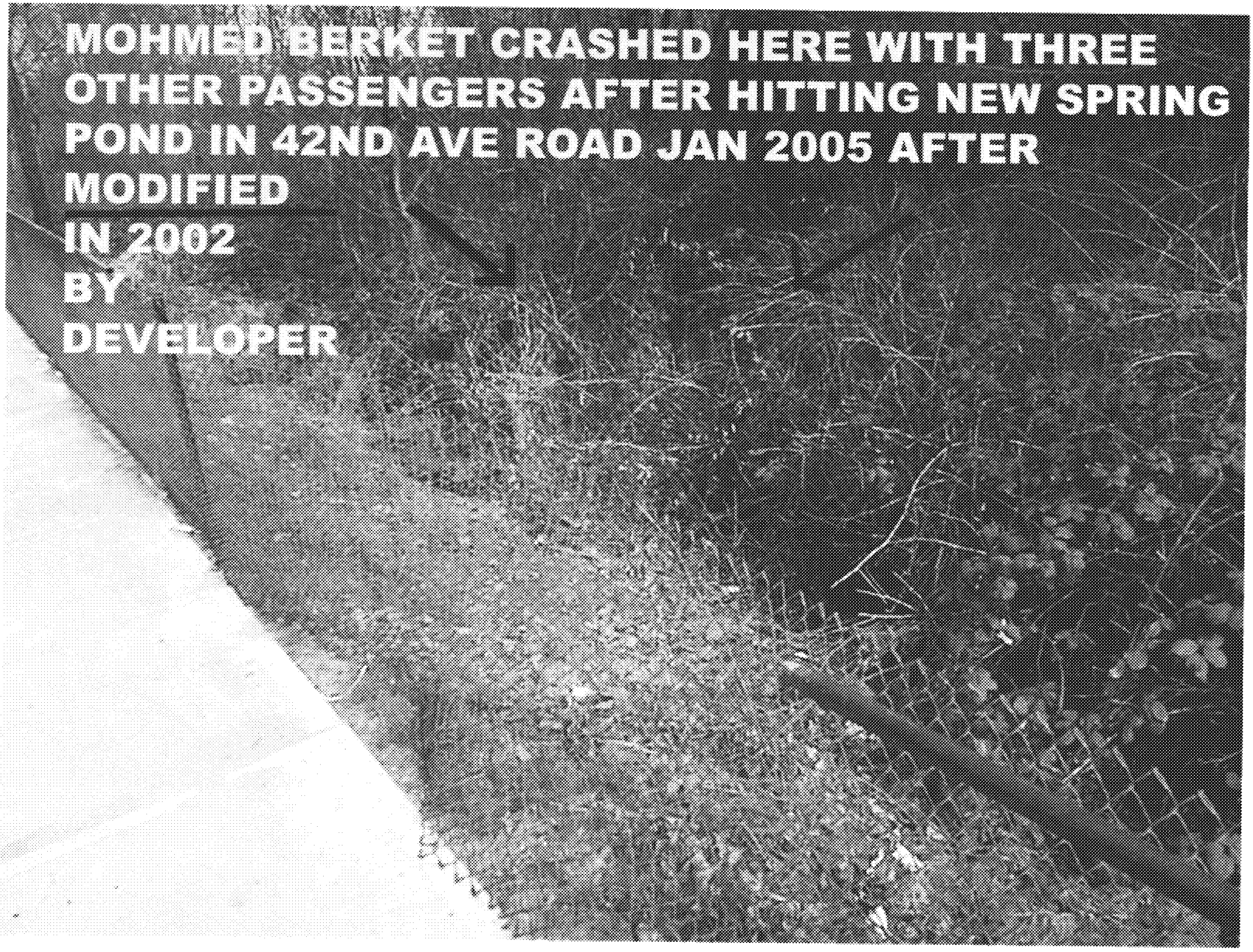
At 8:02 p.m., PETERSON MOVED to adjourn. White seconded and the motion carried. (CFN-198)

Brenda Jacober, CMC
City Clerk



42nd Ave South
ROAD HAZARD

Both South & North bound Asphalt coming Apart, Water coming up along with Hazardous Line of Site, in violation of City of Kent Codes. Road repaired twice by City of Kent " 3 ACCIDENTS "


MOHMED BERKET CRASHED HERE WITH THREE OTHER PASSENGERS AFTER HITTING NEW SPRING POND IN 42ND AVE ROAD JAN 2005 AFTER MODIFIED IN 2002 BY DEVELOPER

RESPONSE TO LETTER 15
James Greif

1. S 178th Street is proposed to be re-aligned as part of the Tukwila South project. Preliminary geotechnical studies have identified groundwater at various locations along the western slope of the site. Geotechnical recommendations for controlling groundwater seepages are presented in Appendix 4 to Appendix A in the Draft EIS. Additional geotechnical studies would be performed as part of the design and permitting process, and prior to City approval of the proposed roadway alignment.

2. Based upon the description of the sight distance concern included in this comment, sight distance was apparently reduced by reconstruction of a portion of 42nd Avenue S. Total project-generated trips on this road segment (both directions combined) for the PM peak hour period, are estimated at approximately 120 trips in 2015 and approximately 405 trips in 2030.

Letter 16

From: Lori Jenkins <loj@CascadeControls.com>
To: sea-tac <lverner@ci.tukwila.wa.us>
Date: 5/2/05 3:31PM
Subject: proposed Tukwila South Project

I am against the development of the Tukwila South (S178th/180th to north of 204th).

Traffic on that little road that runs by the farm/golfcourse and out to the Orillia Road entry is already busy and many cars go too fast (like its a freeway!). 1

Also it has become of sorts a wildlife refuge for the ducks/geese since the river is right there. What would be done about that and other wildlife in the area (eagles,hawks are often there as well). 2

Many people who work in the industrial park (Segale and others) in this area, already use that little road to and from work (coming off of Orillia) and cannot possibly handle more "proposed" traffic, without the roads backing up (even more so than they do now)

There is no light at the end of that road when you turn right or left (and by going right out of industrial park way drive) you end up going towards Orillia road. 3

Many things would have to be done and the possible development, meaning building the area up, also includes delays in traffic for those of us commuting to work. Thats another headache too.

Thank you for your time.

Lori
Des Moines, WA
Tukwila BusinessPark-Worker

RESPONSE TO LETTER 16
Lori Jenkins

1. Your comment is acknowledged for the record. Section 3.12, Transportation, of the Draft EIS summarized the analysis of traffic conditions with development of the project, and identified roadway improvements that could mitigate probable significant impacts (see Appendix I to the Draft EIS for the Transportation Technical Report).

2. Your comment is acknowledged for the record. Section 3.3, Plants and Animals, of the Draft EIS summarized the analysis of wildlife and habitat conditions with development of the project (see Appendix D to the Draft EIS for the Plants and Animals Report). In particular, Draft EIS page 3.3-21 discussed the degraded quality of existing habitat, impacts to waterfowl and future habitat improvements for species including, but not limited to, hawks that would result from the proposed project. See also response to Comment 11 in Letter 17.

Draft EIS page 3.3-22 discussed potential effects on eagles using the site, and concluded that most of the onsite habitat features potentially used by eagles would not be disturbed.

3. Your comment is acknowledged for the record. Please see the response to Comment 1 in this letter.

Letter 17

May 3, 2005

Steve Lancaster, Director
Department of Community Development
6300 Southcenter Boulevard, Suite 100
Tukwila, WA 98188

Dear Mr. Lancaster,

I wish to provide public comment on the Tukwila South Project.

Introduction

Starting in about 1924 my family owned, rented and farmed approximately 200 acres in the southern part of the study area. We currently own land adjoining the proposed mitigation area and are prepared to convert approximately 15 acres of field into a wetland mitigation land-bank.

Focus

While there are fisheries enhancement options associated with the north flowing ditch and central ditch/outlet (water flow from hillside springs and the old "Orillia Water System"), I will only comment on the south drainage area and proposed wetland mitigation site south of 200th Street.

Site Description

The proposed mitigation site consists of 2 large agricultural fields south of 200th Street and in the center of a significant floodplain.

The site is extremely unique and irreplaceable in the heavily developed Puget Sound area. The peat (organic soil) averages at least 10 feet deep with areas potentially 15 to 25 feet deep. Four significant sources of water flow through the mitigation area. Seasonal flooding to the depth of 3 or 4 feet is common. I have seen flooding greater that 5 feet several times.

Large numbers of waterfowl have historically used this area. Recent bird counts by Washington State biologists have reached near the 4000 to 5000 range on a single day. Numbers in this range and larger have been common during my lifetime.

During the last century the land was actively farmed/grazed and the ditches (primarily spring feed) were maintained by local drainage district. There was limited shade along ditches but the water was relatively deep and duckweed would often grow in the summertime. With floating duckweed the water would often back up slightly and the average depth of the water significantly increased in the summer. A worm dropped upstream of almost every section of duckweed, overhanging bank or grass clump would

instantly be grabbed by a trout or bullhead. As a young boy I caught an 8, 10 and 12 inch rainbow from a single spot within 30 minutes. While this was unusual it certainly was common to catch fish in the 5 to 9 inch range.

As little as ten years ago I still found a significant number of fish hitting bait and many small fish visible. (Probably in the range of 100's if totaled for the entire length of ditch)

I am surprised and saddened by a recent sampling completed by fisheries experts that found no trout, salmon or bullheads.

Pre-European Site Conditions

This basin was almost certainly a dynamic area of shallow lake, beaver ponds, willows and meandering streams. Animal activity from muskrats, beaver, waterfowl and larger grazing animals would have released abundant food items into the creeks and river.

The site is in a bowl (surrounding land is significantly higher) with no natural low elevation outlet to the river. The current water table is maintained by a significant ditch system that was supplemented by a pump station during much of the past century.

There is no evidence of significant trees or stumps in the deep peat area although there is a clear natural pattern of forest growth in the surrounding lands. In deep canyons on our property and adjoining properties it is still possible to see 6 to 8 foot diameter cedar stumps. In dry summers it is easy to identify long streaks of dry grass directly above buried logs. In almost every case this is at the perimeter of the floodplain and laying perpendicular to the slope line. For example, a large tree will establish itself on the solid soil of a lake edge, lean towards sunlight and ultimately fall into the lake.

General Comments

With the development of the off-channel project, the re-alignment of Johnson creek and the permanent preservation of the wetland mitigation site, the developer has adequately mitigated for development in the southern drainage area. 1

However, the wetland mitigation site is so unique and rare it must not be wasted.

To move quickly with a rather simplistic design would be an environmental disaster. 2

At the very least a comprehensive plan for the basin should be developed prior to any significant on-site work. Work should be completed in a series of carefully crafted small projects as the full potential of the area is understood.

Beyond the gifting of the mitigation site (and negotiated cash contribution) the developer need not be involved with the details of the mitigation work and should be allowed to move forward without any additional liability associated with the site.

Specific Comments

1) The spring and creek associated with the old Jenson pond should flow into the wetland site and a series of fisheries enhancement features should be designed for this branch of the creek system. 3

2) The current outlet of Johnson creek has a lower culvert and an upper culvert that drastically increases total capacity during flooding. While surrounding land is farmed equal or greater capacity must be maintained at the replacement outlet. 4

3) The mitigation site on the south side of 204th is slightly lower in elevation than surrounding fields. Until these areas are voluntarily converted into additional mitigation areas, existing drainage patterns must be maintained across site. 5

4) Some of the area north of 200th Street was historically part of the 100 year floodplain. It is uncertain if modeling allowed for the loss of these areas or the consequences of emergency overflow from the detention ponds. 6

5) The long-term adjustment of water level (or selected grading) should be explored to recreate the pre-European conditions of the site. 7

6) The option of 1 or 2 natural rearing ponds (outside of the floodplain) should be explored. 8

7) A second independent fisheries sampling should be completed to establish a base line for future enhancement projects. 9

8) The 10,000 foot FAA boundary should be reviewed within the context of the 400 foot elevation difference, existing waterfowl use and flight paths. 10

9) Existing agriculture crops and green pasture grass attract thousands of waterfowl. Even a fully restored condition would not attract the current numbers of birds. 11

10) Research should be done to explore if there is any current conflicts during peak waterfowl usage in this wetland and SeaTac traffic. 12

Conclusion

This is a unique site that must not be wasted. Certainly many well know environmental organizations would consider working with the local property owners to develop a comprehensive and high quality site design.

Tony Zgraggen
43014 212th Ave SE
Enumclaw, WA 98022

RESPONSE TO LETTER 17
Tony Zgraggen

1. Your comment is acknowledged for the record.

2. Your comment is acknowledged for the record. The applicant is working with local, state and federal agencies on the specifics of the Sensitive Area Master Plan, including the proposed Fisheries Mitigation Plan and Wetland Mitigation Plan, and on the Wetland and Stream Buffer Plan. These plans have been updated since issuance of the Draft EIS. The updated plans are contained in **Appendices A** and **B** to this Final EIS and summarized in Sections 1.2 and 1.4 of the Final EIS. Prior to implementation of the proposed project, a number of permits and approvals must be obtained (see list of required Permits and Approvals in the Fact Sheet section of this Final EIS).

3. It is acknowledged that additional fish enhancement features for the old Jensen Pond creek would provide additional benefits for fish. The plan developed for the project to mitigate environmental impacts first identified mitigation opportunities within the project site, as is normally the highest priority. Offsite mitigation is only considered when onsite opportunities are inadequate. The proposed Fisheries Mitigation Plan was developed in conjunction with biologists from the Army Corps of Engineers, Muckleshoot Tribe, and Washington Department of Fish and Wildlife, and is based on a regional salmonid habitat study conducted by the Army Corps of Engineers; King County; local, state, federal, and tribal agencies; and various private organizations. The proposed plan identified mitigation associated with Johnson Creek and the Green River that would adequately mitigate for impacts to fish habitat caused by the project and provides direct benefits to Chinook salmon, a species listed as threatened under the federal Endangered Species Act (see the updated Fisheries Mitigation Plan in Exhibit 2 to **Appendix A**, and the summary of the updated plan in Section 1.2 of this Final EIS). As such, no additional project-sponsored mitigation, including offsite mitigation, are proposed.

4. The Preliminary Master Drainage Plan (see Appendix B to the Draft EIS) analyzed the existing and proposed Johnson Creek outlets and their impacts on flood conditions in the Johnson Basin. The analysis showed insignificant changes under Alternatives 1 and 2, with no increase in the 100-year floodplain, relative to the existing condition. See Figures 7 and 8 of the Hydrology and Hydraulics Report Appendix to the Preliminary MDP in Appendix B to the Draft EIS for further detail.

5. Your comment is acknowledged for the record.

6. Modeling analysis in the Preliminary Master Drainage Plan (see Appendix B to the Draft EIS) accounted for both the loss of floodplain area and overflows from the proposed stormwater facility. See the response to Comment 4 in this letter.

7. See the response to Comment 3 in this letter.

8. See the response to Comment 3 in this letter.

9. The Draft EIS assumption of fish presence in Johnson Creek and its tributaries was based on the past history of fish presence and periodic fish sightings reported by neighbors and agency fisheries biologists. Additional fish population investigation is not necessary for the analysis or implementation of the Fisheries Mitigation Plan (see Exhibit 2 in **Appendix A** to this Final EIS).

10. It is acknowledged that the Tukwila South site is located several hundred feet lower in elevation than the SeaTac airport, and thus well below jet and airplane flight paths associated with the airport. Whereas the difference may limit the actual potential for collisions between waterfowl and airplanes in flight, the Tukwila South proposed wetland mitigation site south of S 200th Street would be located within the 10,000-foot waterfowl exclusion zone for SeaTac airport, regardless of elevation, and the Wetland Mitigation Plan has been designed to discourage waterfowl use (see Exhibit 3 in **Appendix A** to this Final EIS for the plan and Section 1.2 of the Final EIS for a summary of the plan).

11. It is acknowledged that under existing conditions the agricultural fields may attract waterfowl of several species (e.g., Canada goose, wigeon, green-winged teal, and gadwall) during winter. Waterfowl use of the site was discussed on page 3.3-6 of the Draft EIS text and in Section 3.2.2 of the Plants and Animals Report (see Appendix D to the Draft EIS). However, the site is not shown on the Washington Department of Fish and Wildlife (WDFW 2004) Priority Habitats and Species (PHS) database as a "waterfowl concentration area."

As discussed on page 3.3-21 of the Draft EIS text and Section 4.1.2 of the Plants and Animals Report, development of the site under Alternatives 1 or 2 would result in the loss of agricultural fields (both wetland and non-wetland) north of S 204th Street, which would eliminate much of the winter foraging habitat for waterfowl onsite. As stated in the response to Comment 10 in this letter, because the wetland mitigation area is located within the FAA 10,000-foot exclusion zone for SeaTac, the mitigation plan has been specifically designated to limit waterfowl use.

12. The current level of conflicts between waterfowl use of the site or vicinity and air traffic associated with SeaTac Airport is not known. However, federal, state and local agencies reviewing permit applications associated with the project will require that the proposed Wetland Mitigation Plan compensate for wetland fill in a manner consistent with provisions promoting public health, safety and welfare. Such provisions would preclude establishment of waterfowl habitat as part of the wetland mitigation area on site, because it is within the FAA hazard zone. Therefore, as noted in the response to Comments 10 and 11 in this letter, the proposed mitigation plan has been designed to discourage waterfowl use.

RE: TUKWILA SOUTH DRAFT ENVIRONMENTAL IMPACT STATEMENT

Public Hearing

City of Tukwila

April 27, 2005, 6:00 p.m.

Tukwila, Washington

J. Gayle Hays, CRR, RPR, Reporter

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EXAMINATION INDEX

BE IT REMEMBERED that on Wednesday, April 27, 2005, at 6200 Southcenter Blvd., Tukwila, Washington, at 6:23 p.m., before J. Gayle Hays, CCR, RPR, Notary Public in and for the State of Washington;

WHEREUPON, the following proceedings were had, to wit:

<<<<<< >>>>>>

MR. LANCASTER: We'll go ahead and get started with the program here.

First of all, I want to reiterate the purpose of this meeting. The City has issued a Draft Environmental Impact Statement for the proposed development that we've been talking about here. The main volume of the EIS it is in three volumes actually. Copies are available over on the counter over there. If people would like to have a copy of their own, they certainly are available. The EIS is also on the City's website, and you can access it there, and we can provide computer disks also of the document.

Our purpose here tonight is to get your input on the Environmental Impact Statement to be sure that, when we publish a Final EIS, it is as accurate, thorough and complete as we can make it, and it answers the questions that are going to be important to the decision-makers who

ultimately will be faced with deciding on various approvals and permits for the proposed project.

We'll start out with a brief description of the proposal of Lisa Verner. As I introduced her earlier, Lisa is the project coordinator for this project. And after her description, I'll invite any of you who'd like to come up and give us your oral comments.

We also have some forms in the back of the room. If

you prefer to put your comments in writing, you can do that. You can do both oral and written comments. The written documents you can do tonight and leave with us; or if you prefer, you can mail them or deliver them to us later. They are due by 5 p.m. on May 5th in order to be considered in the Final EIS. And all comments that we receive tonight and in writing will be considered and responded to in the Final EIS.

With that, I think I would like to -- oh, one more thing. When I do ask you to come up and make your comments, I would like you to come up to the podium for a couple reasons; one, to make sure that, when you're talking, you have the floor, and you have the ability to speak to the issues that you're interested in without interruption. And another thing is, we do have a court reporter here tonight who will be taking a -- making a verbatim record of this, so we want to make sure we get your comments accurately.

So I'd like to ask Lisa to just give a brief description of the proposal.

MS. VERNER: This is the project site. It's 498 acres. It's south of 180th -- approximately south of 180th, east of I-5, west of the Green River, and generally north of 204th Street. It's 217 acres in the City, and 259 acres from here down that are in the county -- in King County, and there are 22 acres down here that are in the City of Kent.

There's one property owner, the Segale family, and their corporate name is LaPianta LLC.

They are proposing long-term development on the

property, a size of 10 to 14 million square feet of overall development. The uses that they are proposing include commercial, retail, office, R & D, hotel, recreational use and Talbot. And we're looking at Life Sciences Biotech corporate headquarters, Campus Office Park, and some village retail, grocery store, big box retail, entertainment retail, and some housing in terms of apartments and condominiums.

In terms of the environment, they are going to be proposing to improve the wetlands on the site which are generally down in this area, as you can see, doing a cutout in the Green River here for fish habitat.

They produced a master plan, which is this document, and that's available here if you're interested in reading

it. But the master plan is their vision of the whole property.

There will be major improvements to Southcenter Parkway. Currently it goes in a two-lane road down to the property, and that will be widened to five lanes. The proposal is to widen that to five lanes and to move it over and connect it down to 200th. And they're also proposing to cut 170th Street. 170th Street crosses the freeway from Sea-Tac and comes down to 180th. The proposal is to have it cut into the hillside and have it go down here to Valley Park Drive.

And in these improvements that would be built, the road improvements would include a trunk line of sewer, water and storm drainage. And the proposal is to complete that infrastructure piece between 2006 and 2008, and so that then they could also do -- they would also be doing mass grading

adding on the -- not this site, but the rest of the site down here, so they could bring it up to a grade and put accessibility.

They would also be doing the wetland work and the cutout in the Green River, so there's sort of this big infrastructure piece that's supposed to be the first activity that would prepare the site for building anywhere along the site during the build-out period. The build-out period has been evaluated in the EIS to go through 2030.

The kind of approval they need from the City, including master plan approval, they need the City Council to approve the master plan. They also need the City Council to designate the site as sensitive areas of the Overlake District, and then they will obtain approval for a sensitive areas master plan.

They need approval of the developers agreements which is essentially the contract between the City and the developer and the property owner with the rules and terms and conditions of what will occur.

They're looking for development of a new zone for the property called the Tukwila South Overlake Zone and then application of that zone to the property; and they're also looking for an amendment to the City Building Code and possibly the Subdivision Code. They're also looking for extension of the City Master Program Designation which is urban for everything in Tukwila to the property to be annexed. So this Shoreline Master Program that governs what happens along the river is the part of the -- in the City now is an urban designation, so they're hoping to have this

part that's currently in the county designated urban which will become effective upon the annex, and then they're looking for annexation of this piece, so essentially all of this will be in the City.

The EIS considers three alternatives. These are

graphically shown here. No. 1 will operate through a build-out period through 2030, and the uses that are proposed are emergent technology, R & D, office campus basically, retail, residential, hotel and then eventual redevelopment of the park. And this proposal would generate external PM peak-hour trips of 3,728 in 2015 and almost 14,000 in 2030.

Alternative 2 is a moderate campus development, and this will be a little over 10 million square feet, also, with a build-out period to 2030 with basically the same kinds of uses with the addition of maybe some flex tech use throughout the area, and then eventual replacement of the business park with something more preferred use. The trips that are generated from this proposal are external PM peak-hour trips of 3,000 in 2015 and a little over 10,000 in 2030.

And this alternative is the no-action alternative, basically what would happen if we didn't do this proposal. So here, the existing building in both King County and the City would remain, and we estimate that would generate about 2 million square feet of industrial development. And the PM peak-hour trips would be about 1,900 in 2015 and a little over 1,900 in 2030.

The current zoning here in King County is industrial.

The zoning in the City part is heavy industrial in Tukwila

South, low density residential, and the mixed office. So there's a variety of zoning in the City. It's pretty much an industrial zone in King County.

So the schedule is, due on May 5th is the Draft EIS. We're to issue the Final EIS by the end of June. The Planning Commission will review -- finish the review in July with the City Council decision in August. And then we would do annexation in October and commence the construction of the Southcenter Parkway that next spring.

MR. LANCASTER: Any questions before we move on?

SPEAKER: Would you repeat the time schedule?

MS. VERNER: Sure. The Draft EIS is due May 5th. We're anticipating the Final EIS would be ready by the end of June. The final planning reviews would be in July, and the City Council decision in August.

MR. LANCASTER: With that, I'm going to invite those who are interested in coming up, please come up. Why don't you just, if you want to, just line up here. That will be fine.

I want to just make it clear, first of all, I would appreciate if you would start your comments by giving your name and address; and if you're representing an entity, if you provide us with that information as well.

And I think that's it, so please proceed.

MR. BUTLER: Thank you. I'm Steve Butler. I'm the planning director for the City of Seatac. The address is 4800 South 188th Street, Seatac, Washington 98188.

I want to thank you for giving us the opportunity to speak. I'm here along with our public works director and our fire chief. You'll hear from them in a few moments.

I'd like to start out by saying we recognize how exciting and important this project is to the City of Seatac -- I'm sorry, the City of Tukwila. It's interesting to be on this side of the podium. We understand that this is an important project for the City of Tukwila.

However, the City of Seatac is very concerned about the quality and adequacy of the Draft EIS that's been done on this project. In particular, we have issues with adequacy of the transportation-related analysis that was done for the DEIS and the lack of proposed mitigations to address impacts from your project to our city. Dale Schroeder, our public works director, will elaborate on some of those issues after I'm finished.

But before he does that, I'd like to focus on one transportation-related project as an example of our concern. That project is the realignment of South 178th Street. And this part of the project will result in impacts to the City

1

of Seatac beyond those identified in the Draft EIS. Those of you who aren't familiar with it, it's basically a reconfigured roadway that will deal with, in some ways, a road that's pretty treacherous on icy and rainy days, but it basically represents a convenient backdoor access to Sea-Tac

International Airport. The project from our perspective is that that access would be through an established residential neighborhood in our city. 1 cont.

The phasing of the development proposal calls for a majority of the grading and site preparation and infrastructure development to be done in phase one at the beginning well in advance of most of the building project development. This, in our mind, will provide an opportunity for the site to be used as surface parking, commercial park and fly, in the interim. We're concerned that the large -- that a large or series of large park and fly operations will have detrimental impact to our Seatac neighborhood and believe that the Draft EIS is deficient in not addressing this issue. 2

The Draft EIS also downplays likely use of this area, the impacts on our residential neighborhoods, the intersection of 176th and Military by the project residents, employees as the project gets built out. I know you're envisioning a lot of people visiting there, a lot of people working there. Again, it's going to provide a convenient

 3

access or shortcut to and from the project site, to the airport. Again, that would impact our residential neighborhoods more than is described and addressed in the Draft EIS.

I could say a lot more. I'm going to save it for the written comments. But I would like to conclude by making the following remark. While we appreciate the opportunity to have commented during the scoping portion of the process and on the preliminary Draft EIS, unfortunately we feel that

most of our comments have been underplayed or ignored. We will be submitting written documents by the deadline, and are hopeful that our comments will receive more substantive responses this time than perhaps has happened in the past.

However -- and I feel it's only fair to state this -- if our concerns aren't adequately addressed and mitigated, then the City will have to seriously consider appealing the Final EIS.

Finally, I would ask the City of Seatac and me specifically to be made an official part of the record for the duration of the process -- I'm sure that's already been done -- and for all subsequent actions that are taken by the City of Tukwila relating to any aspect of this development proposal. 4

Thank you for your time.

MR. LANCASTER: Thank you.

MR. BENOLIEL: My name is David Benoliel, and I'm a real estate broker in the Seattle area, commercial real estate broker -- I have been for the last 35 years -- working in the commercial area. And I have an interest in approximately a two-acre parcel which is a part of this assemblage. And I want to refer to Lisa Verner's comments a few moments ago that this is a single ownership.

There are several references in the printed material about this project that it is a single ownership. It is not a single ownership. I'm here to say that the Mitchell Moving & Storage Building is a building owned by the M&P Partnership, and I represent the P of the M&P Group of heirs of a deceased uncle. 5

So we own property in the area, but frankly, this is the first opportunity we've had to comment on any aspect of this proposed development. I think that the way this has evolved would appear consistent with a single property owner. We were not notified of the early process here of the early EIS and so forth.

I came to meet Lisa when we heard through the grapevine really about this project and became more informed about the details.

So here we have a moving and storage facility at 18800 Southcenter Parkway. A number of negative impacts will be suffered by that property if this project goes along

as described; and it would appear that the EIS doesn't recognize that there are more than one owner in this assemblage. Frankly, I feel like we've been treated pretty shabbily. I have told Mario Segale that directly, but he assured me that that was not his intention, and I have taken him at his word on that. But as a practical matter, we've been steamrolled. We have a property. We weren't consulted at all about the program. It is from the beginning to this point being treated as a single ownership.

We've come to understand that as part of the process in the rezoning of these various areas for the newly intended uses, our use may become a nonconforming use. That impact has not been considered at all. 6

We presently front Southcenter Parkway. If the plan is developed to move Southcenter Parkway to the west, we will no longer front Southcenter Parkway. That's a negative impact to our property, and it would appear that, if that's 7

allowed to happen, it's a kind of eminent domain without any right to do so.

Further, we understand that the area of the project where we are located is to be filled to a higher grade. We've had no discussion, no approach, about that. We have a dock high warehouse building. If the adjacent properties were filled to the level required, we would be a bathtub essentially. So further, no consideration at all that there 8

are other ownerships and other activities going on in this real estate.

Access, we've had no discussion nor do we find anything in the EIS relative to how this property would be provided access. Tonight, I heard that the old Southcenter Parkway, the existing Southcenter Parkway, will be vacated; and as an adjacent property owner, we would be entitled to one-half of that roadway, which is a step in the right direction to get us back to fronting Southcenter Parkway, which I think is our right to maintain. 9

Generally, we think we've been grossly overlooked in this entire process. And again, the statements and the materials that have been developed refer to one ownership. It's wrong, and the EIS didn't take it into account. Thank you.

MS. VERNER: Thank you.

MR. SCHROEDER: My name is Dale Schroeder. I'm the public works director for the City of Seatac, 4800 South 188th Street, Seatac, Washington 98188. And my comments are primarily geared toward the transportation impacts and the work that was done in the

Draft EIS.

I have a total of four issues I'd like to address tonight. Two of them are regarding the modeling and the assumptions that were done and the transportation model, and

then two of them specifically toward the two corridors that are accessed to the City of Seatac from the development site.

My comments on the modeling are pretty technical, so I'll go slowly. But I will also submit them in writing, so if you miss something, don't worry. They will be coming May 5th.

One concern we had -- and the concerns related to accuracy -- my understanding in reading the preliminary EIS is the trip distribution, and that is the model that assigned a percentage of traffic from this development to various corridors and streets throughout the area. That trip distribution model was based on Tukwila's existing transportation model, which is based on the no-action alternative, and that is the one furthest right on the board.

The no-action alternative has some common land uses with the proposal and some that aren't. And so that trip distribution model was the template, so to speak, then for projecting traffic to 2015 and the 2030 scenarios.

10

Now, that's kind of a generalized approach. That's maybe not uncommon in traffic modeling, but we feel that a more accurate approach would be to develop independent distribution patterns for the proposals in 2015 and 2030. We feel that would give a more accurate indication of how

the trips are distributed on the network.

Why is that important to us? We think it tends to diminish the trip distribution between the development and the airport which has to pass through the City of Seatac. And because of the magnitude of the development, particularly in the 2030 scenario, even a small percentage, even one percent change in that trip distribution model results in a fairly large number, between one and 200 vehicles per peak hour at the intersections, and that's enough to make a significant impact on surface levels. 11

My second comment regards baseline assumptions. In the EIS, there is an assumption that SR509 and the south access roadway into the airport will be constructed by or before 2015. A couple of years ago, I would have said, yeah, I think that's going to happen. Today, I question if that's a valid assumption.

Our legislature just passed a nine and a half cent gas tax to be implemented over the next ten years. A lot of projects were on that list. The big winners were the ones we all hear about, the viaduct, 520 and 405. Out of that package, SR509 got $30 million. That sounds like a lot of money, but it's a $1 billion project, so we're talking about three percent in the next ten years.

I would suggest that you direct your consultant to discuss with the Washington State Department of

Transportation the likelihood that 509 will be built and

available by 2015.

And why is that important? It's important because traffic that goes -- comes from the south into the airport, a lot of that traffic currently uses I-5, Orillia Road, 188th, and 188th through Seatac to the airport. If 509 and the south access is built, then that takes that traffic off of that interchange, and it creates what I would call some freed-up capacity in that intersection, which this development can use and which is assumed, I believe, in the traffic modeling, because the assumption is 590 is there. But if it's not there, then the capacity is not there either, and that has a major impact, I think, on surface levels in the immediate area. The DEIS does not address this issue.

I would suggest that, at least, some contingency language be included and some analysis of what happens if we don't have that dimension available to us.

My last two comments are on arterials that provide access to the development site and to the City of Seatac. And the first one, Steve Butler addressed, and that's the 178th realignment. I think he expressed our concern. Let me just add though that the distribution model that I referred to in my first comment indicates there's a three percent of the total PM peak-hour trips generated by this

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proposal would use that arterial, and that was based on existing conditions. It was calibrated to existing conditions, and existing conditions are you have a route that has a 21 percent hill climb until you get past the freeway, and even beyond that it's fairly steep. So what

happens when you change that grade, say, you're somewhere 12 and 18 percent, 15 percent? Well, to me it seems logical that what that will do is increase the attractiveness of that corridor. It doesn't seem likely that it would remain at the current three percent that is projected. 14

Also, a question on the profile adjustment there, does that mean now that trucks find that route as an alternative or trucks can use it? If it does, we certainly have some issues with our neighborhoods in the immediate area. The DEIS really does not address what happens in the neighborhoods as a result of that realignment of South 178th Street. 15

My final comment is on Orillia Road. We believe that the Draft EIS indicates that Orillia Road cannot handle the traffic projected by the model in the 2030 scenario. The model results indicate that the traffic volume on Orillia Road by 2030 exceeds the capacity in its current four-lane configuration. I did not find any discussion of mitigations for expansion of Orillia Road in the DEIS, so I believe that that does not meet concurrency standards, and something

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would need to be done to bring it to concurrency standards. Either an alternate route would needed to be provided, the development would need to be scaled back to traffic levels that could be handled by existing Orillia Road, or maybe the development needs to occur over a longer span of time.

Also, on Orillia Road, I have a concern with the analysis that was done at the intersections with the I-5 north and southbound ramps. The mitigations that were suggested for those intersections in the 2030 scenarios was

to add turn lanes, and these turn lanes would be turn lanes into the ramps either northbound or southbound. While that may sound good on paper -- and if you look at the intersection just in isolation, it might work. What really happens is, I don't believe that's a realistic solution, because the ramps themselves channel down to one lane. During the PM peaks, they often do have queues on the ramps, and they're backed up. So it doesn't really matter if you have two turn lanes or four turn lanes to access that ramp if it already has a queue. 17

So I believe the EIS should have an estimate, at least a ballpark estimate of the queue length that would be needed for those turn lanes, whether it's even feasible to build them, and also an estimate of the queue length on the ramps that would access the traffic on these turn lanes. 18

Just as a side note, a few years back, WS-DOT was considering on those ramps doing ramp metering, which I believe would further exacerbate the problems there.

That's my comments. Thank you very much for the opportunity to comment.

MR. MEYER: Good evening. My name is Bob Meyer, M-E-Y-E-R. I'm fire chief of the City of Seatac, my address is 2929 South 200th in Seatac, 98188. I'm not in City Hall.

I'm not as well prepared as my two counterparts here tonight, but I can tell you that I have some serious concerns with the EIS in response times and who's going to respond to this particular area. I would encourage your consultant to have some dialogue with myself and the Tukwila

fire chief to understand that the acreage that you're going to annex from King County Fire District 24 to the City of Tukwila which is my responsibility or will continue to be my responsibility, most likely, when it's annexed into the City of Tukwila, only because our system -- response system is designed to send the closest unit. That's the City of Seatac.

Chief Olivas will, I'm sure, tell you that we can get there quicker than he will. And I'm not saying we're not going to respond. Clearly service level to the community is what we're here for. What I'm saying is, the City of Seatac Fire Department was never taken into consideration as this

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would impact my responses.

I would encourage the consultant to go back and define response times with your fire chief. Response time has many facets to it. And there are also national standards that we have to meet or kind of adopt that are more definitive. A four-minute average response time, if you took any college classes in statistics, an average is a skewed number. I would love to have an average response time, except my city management would probably not allow that, because you could have a zero-minute response time and a five-minute response time, and your average is two and a half. It's not a very good number.

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And you need to define response times. Response time, in most cases, is from the time that dispatcher tells my people to get going to the time the wheels stopped at the incident. I can tell you that my travel time, which is the time the wheels roll to the time the wheels stop in this

particular area, is less than four minutes. I guarantee you that the response time that's in the DEIS is probably not too accurate. 20 cont.

And I don't want to stand here and disparage my good friend, Nick Olivas, but I think some more work needs to be done with those response times to define those better, not only for the property owner, but to find out what the true impact is going to be to your fire department and to mine.

We will continue to respond there even after it's annexed. We will continue to send resources even on any structure fire down there, just like we do now; as he does for me in my city as well.

The other piece that concerns me is, Orillia Road produces some of the most gnarly accidents we have in the City of Seatac, and it's large trucks meeting small cars. They fly up and down those hills. Any increase in traffic -- and as my public works director has said -- if we increase traffic, my incident rate is going to go up. The more I'm tied up outside the City of Seatac, the less protection I can offer to my community. Plus when a dump truck meets a car, usually the car loses, and it's not fun. 21

I would encourage your consultants to talk to myself and to Nick, and see if we can help this process along. I'm concerned that not all the facts are there, and the response times are skewed. And the fact that -- we do have a no-borders issue here in King County, and we work real well together, and it's a benefit. It helps me on the north end of Seatac when Station 54 can get there a lot quicker than my Station 47 can. And that's a good thing for the

community. But it needs to be taken into consideration on both sides, the impacts to my organization and to the City of Tukwila.

Thank you very much.

MR. MITCHELL: Good evening. My name is Bruce Mitchell. I'm concerned about Mitchell Moving & Storage property at 18800 Southcenter Parkway. My mailing address is PO Box 99151, Seattle 98199.

We purchased that property in 1968, and it's been there there continuously as commercial citizens, that people didn't know that, and that we weren't informed is quite a mystery. All of the impacts that David Benoliel mentioned are of concern to me. The truck traffic that we have that is continual. There can be as many as 20 trucks a day going in and out in the summer.

The oversight of not informing us that the project was going on seems to be echoed in the lack of consideration of what the impact of our activities are on the environment. There's noise and the traffic issues that are there.

In addition, there's the issue that's been raised about the landfill and the water management which is dealt with in the proposal as if we weren't there. So once again, I don't see how an Environmental Impact Statement can be complete when they ignore substantive issues that are bound to come up.

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We have access problems. We've been dealing with those access problems independent of knowledge of this particular project for some time. I met with Mr. Ernst and his staff numerous times between 1990 and now prior to his -- I

think -- I don't think he's here anymore, but there are letter communications with regard to paving access.

We have a truck scale in front of the warehouse that has been used by the whole valley that brings trucks in. The environmental impact of those trucks is a much different situation with the surroundings you have in the two projects that are not the maintain the old style. So there are a number of issues that are not considered by the impact statement that are of great concern to us.

The access is very significant. If we have that number of trucks coming in wanting to get weighed, and there's not a way for them to get conveniently into the weighing station, it's a problem.

So as I understand it, it's even possible that, with the raising of the land, that we could have a lake there. And in that case, I suppose there's a fish impact to be covered by the Environmental Statement.

So I hope you will -- we will submit written comments by May 5th. And I hope that these matters will be taken into consideration as you deal with the project. Thank you.

MR. MCCRACKIN: I'm Roger McCrackin, 19600 International Boulevard, Suite 206. I'm here as a private property owner. We own -- myself and my partners own a number of developable sites in the City of Seatac.

I'm concerned primarily about the lack of attention

given to the traffic that could come up to the City of Seatac and impact the already high levels of service on our

intersections.

As a developer, the concurrency on those, as time goes on and more business comes in, I have to pay for it. If uses are not addressed in a project of this size, and it impacts those intersections, my cost of doing business in Seatac goes up dramatically.

It's also stated in the EIS in chapter one that it's in close proximity to the Sea-Tac Airport, so that means to me that it's a high priority on this future development.

There are three concerns that I have to that level that go to raising the traffic levels. Number one, in your development on your second phase you're talking about R & D projects and hotel projects. When you talk about R & D properties, that's low-volume high-price shipping that can go out on airplanes. It seems to me that that would increase traffic substantially from those facilities. And hotels, it's logical that a big market would be coming to and from the airport.

There's also another major concern during the interim period before you get to the first phase, and that is what are the interim uses that the City of Tukwila is going to allow this project. I'm concerned about the rental car storage on particular lots. As the Port of Seattle

continues to move rental cars off of airport property and into their new garage scheduled by 2006, the rental car facilities are looking for land to store cars. They need land. That means every car that comes in, every person that rents a car has to come into their dropoff point in Sea-Tac, then that car is transported to a storage facility possibly

down in this development during the interim stage, and then dropped back up to Sea-Tac to be rented again. That's a double use of the same car on the already congested intersections.

The other major concern I have with the Port of Seattle is limiting access to the airport, thereby creating higher densities at certain intersections. They're proposing 170th be the major north access, and 200th be the major south access. Both these intersections could be severely impacted by traffic coming up 176th and 188th to get to those locations. 26

The EIS did not address any intersection west of -- I can't think -- Military Road. That's a real concern to me, because it's stated in here that the airport is a priority in this project. And it seems logical that you're looking to the airport to get it. 27

I'd like the EIS to address some of these issues on the interim use and the long-term use. And if mitigation has to happen on intersections in the Sea-Tac, this project should

be responsible for some of the costs. Let's see.

That's it. Thank you very much.

MR. GREIF: My name is James Greif. I currently have property at 21231 42nd Avenue South in Seatac.

And fortunately, I am in Seatac, because they are very responsive to some of the concerns I've had in the past with issues. And unfortunately though, my road is in the City of Kent, and this new development will be intersecting with my road.

And I've already seen the impact from another developer. I won't say Mr. Segale is a developer. A developer that I was dealing with in the past said that my area would not be substantially altered by the impact of what they were going to be doing to my area. And I have yet to be able to move my family, and I started with my property in 1998 trying to get a house built in that area. And they were at the same time planning their development Polygon to the south of me, and they needed to widen 42nd Avenue which intersects with Orillia.

And in the process, they promised, like I said, there would be no substantial change in the road. And the City of Seatac, which I found out later, had submitted comments just like they have tonight, and none of those comments were listened to. And unfortunately, everything that the City of

Seatac said came true. So I would put a lot of weight on what they say. They are very, very good at understanding the situation. Even though they are a small city, the people that work there seem to look out at things that are more to the environment. And they pointed out some things to me that I didn't even see before because, as you know, 228th is going to be intersected across to the Green River. And in that process, there's going to be a road that's going to go through that new Polygon development, which is also adding to the traffic that's going to be going up Orillia.

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So right now, if your projection is based on development, which you can see on the drawing that's in the center there, there's a -- on the Scowzal (phonetic) property, they plan to put in, I think, about 170 units.

And then the property north of that, I'm not sure, probably Dale or the other planner knows how many units are going there, so that traffic is going up Orillia. There's going to be substantially more than probably you're predicting, because if you didn't base it on their planning model, then that also is going to be a lot larger.

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And then I have a very big concern and a valid one with any landfill or any dirt that's going to be added to the ground, because I was told also -- and you can see on the drawing on the left, that is a north-south -- the top is north of 42nd. You can see on the left side of 42nd there's an area that looks like plastic, and that's where they landfilled, and they told me that there would be no impact to my driveway or that road.

Well, that's spring fed, because it's in the same hillside. If you want land on springs, it tends to change it. And what ended up, it took almost three years for the water to come up through the road. That didn't exist before.

So there was four major accidents in January; two almost head-on collisions. And I've got pictures over on the right where some of the people crashed through the fence on that new road. Two of them crashed into my driveway, and one truck was up like this; and that was because of that water coming up from the road.

What happened is, it was dry for two weeks in January, and there was an icing. But because that water was coming up, it iced up, and the people crashed. And it was quite significant.

And I also have some of the documentation from the City of Kent maintenance, who also agree with what I said. They said that new springs popped up, and they hadn't seen them before. But this was due to that dirt that was put on the land, so I have some real concerns with that that I don't think are being addressed.

And then there's another concern which I have on this

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map that I received from Tukwila of the flood plains. I don't see a flood plains map right now, but this is the one they gave me, which I don't know if you'll be able to see it, but it has -- this is the 1922 flood plains map. And some of the area that -- it shows there's flooding. I've seen it there before. But some of the areas that were in 1996 and other years, I don't see on that map.

And I was down there quite a bit, because I was trying to get in my house. But I have a real concern because, if you fill in those areas and you put development on top of them, and you have a heavy downpour storm, and the water comes down, it's going to be pushed into those new storm areas. Well, that land that they're putting a new construction on, that water is not going to seep up immediately under those buildings or that land; it's going to be pushed off to the side. So that water is going to have to go some place.

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And I know there's a minimum amount of water that can be pumped into Green River. And I don't know what the rate is, but if that water has to be pumped into the Green River, it's going to exceed that, and it's going to be flooding on the Green River. And I saw it in 1996 when the water was

going right up to the Boeing building. I know I'm upland of it; or as they say, I'm kind of upstream of it. But I've seen my area flood across to me. And all that development

that's to the south Polygon is going to be building up the dirt there also, so you're going to have -- that land is also going to be shed from the downpour, and that water wouldn't be able to be saturated into that soil. So it's going to have to be pushed to the north towards me and toward you. So that's another area of concern. So any questions?

MR. LANCASTER: Thank you.

MR. GRIEF: Also, I would like to mention, the fire department, I would like to mention that, because initially, in the 1999 memo, they were concerned about access. And based on what they've talked about tonight, I would really be concerned with that because, if you change your roads and you change the way that traffic is going in and out, and how much traffic, it's going to cause a great deal of problems, because that whole area is being developed to stop this home. So they're going to have to fight that traffic to get to their jurisdiction, which is actually through the -- to the west of me and to the south of me and to the east of me and still take care of that area. So they're going to have to go down to Orillia to get though all those other homes that are in that area. So that's going to be causing that problem, along with the fact that 278th is going to interconnect through Polygon and to Orillia Road, which is 212th connecting, so all that traffic

coming up through there. So there's a lot of traffic models I don't think are being represented.

So thank you very much.

MR. LANCASTER: Thank you. Is there anybody else who would like to comment at this time? If not, I'll remind you that the comments period does remain open through May 5th, and we will be accepting written comments that arrive in our office until 5:00 on that day. That means either arrives through the mail or hand-delivered by 5:00 p.m. and also, we do have some forms. If you prefer to write your comments out, you can also do that.

I'll just say a few words about the next step. I believe, as Lisa commented, we do expect to issue the Final EIS this summer. That will contain all of the comments that were provided to us here tonight and responses to those comments. And we expect that public hearings on the projects itself are likely to happen this summer before the City Plan Commission and City Council. Again, if you're interested in being informed of those, make sure you've left your name on our signup sheet.

Unless there are any questions anybody has right now, we'll close the formal portion of the meeting. I will be around at least for a few minutes if people have other things they'd like to discuss. I'd like to thank you all for coming. Mr. Mitchell?

MR. MITCHELL: I spoke briefly about the process on the roadway and spoke to the person that's

currently doing that. He said the money has been allocated, and they're proceeding ahead a little quicker than what I heard tonight.

MR. LANCASTER: With the --

MR. MITCHELL: The Southcenter Parkway.

MR. LANCASTER: That's maybe something you and I could talk about. I want to make sure we get all the comments on the EIS itself and are able to let the court reporter finish up her business. Anything else? Thanks very much for coming. We really appreciate your comments.

(Proceedings concluded at 7:20 p.m.)

STATE OF WASHINGTON)
) ss
COUNTY OF KING)

I, J. Gayle Hays, CCR, RPR, CCR # 1964, a duly authorized Notary Public in and for the State Of Washington, residing at Renton, do hereby certify:

That the foregoing hearing for the City of Tukwila was taken before me and completed on April 27, 2005, and thereafter was transcribed under my direction;

That I am not a relative, employee, attorney or counsel of any party to this action or relative or employee of any such attorney or counsel and that I am not financially interested in the said action or the outcome thereof;

That I am promptly delivering the same to the City of Tukwila.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal this 30th day of April, 2005.

J. Gayle Hays, CCR, RPR, Notary Public in and for the State of Washington, residing at Renton.

RESPONSE TO COMMENTS RECEIVED AT PUBLIC MEETING HELD APRIL 27, 2005

Steve Butler

1. A summary of traffic distribution impacts of the S 178th Street realignment is provided on page 3.12-35 of the Draft EIS and further discussed on page 56 of Appendix I to the Draft EIS. The trip distribution impacts of this roadway realignment would be localized to vicinity streets within the City of Tukwila, and are not forecasted to result in major shifts in east-west demand between parallel corridors connecting the Cities of SeaTac and Tukwila. The alignment is proposed to address safety concerns of the existing grade, to better serve existing and future properties along the corridor with the City of Tukwila, and to better distribute traffic within the City of Tukwila and surrounding areas. Further, the realignment is an integral part of the Tukwila South grading and infrastructure development program in the initial phase of the project. See the responses to Comments 7 through 12 in Letter 10.

2. Your comment is acknowledged for the record. Park and fly operations and other similar uses are allowed uses under existing King County and City of Tukwila zoning regulations that currently apply to the site (KCC 21A.08.060 and TMC 18.34.020 and 18.40.020). Please see the responses to Comment 24 in Letter 10.

3. See the responses to Comments 7 through 12 in Letter 10.

4. Your comment is acknowledged for the record. You and the City of SeaTac are both parties of record.

David Benoliel

5. Pages i, 1-1 and 2-1 of the Draft EIS state that the majority of the site is under the control of a single property owner. It is recognized that the Mitchell Moving and Storage facility site is under separate ownership.

6. Your comment is acknowledged for the record. La Pianta LLC has submitted proposed amendments to the Tukwila Zoning Code that would recognize uses such as Mitchell Moving and Storage as "existing legal uses." Under the La Pianta proposal, such uses would be given all the rights of other permitted uses within the district, including the right to remodel or expand. The City has made no decision whether to adopt these proposed amendments, or whether to apply them to the Mitchell property.

7. Your comment is acknowledged for the record. **Figure 2-2** in this Final EIS identifies existing uses within the site that could potentially be affected by the proposed infrastructure development phase and buildout of the Tukwila South project. Provisions would be made to maintain Mitchell Moving and Storage's (Mitchell) and GACO Western's access to/from the realigned Southcenter Parkway, subsequent to the Southcenter Parkway improvement.

8. The Mitchell and GACO Western properties currently drain directly to the Green River via two 12-inch outlet pipes through the levee (there is no portion of the Tukwila South

site between the Mitchell and GACO Western properties and the levee). The Mitchell and GACO Western properties could potentially be connected to the proposed stormwater control system if filled to an appropriate elevation. The site grading and stormwater control systems proposed for Tukwila South would not impact Mitchell's or GACO Western's existing drainage conveyance to the Green River.

There is currently a potential for the Mitchell's and GACO Western's stormwater control system to overflow onto the Tukwila South site when their two outlet pipes through the levee are blocked by high stages of the Green River. Subsequent to development, this overflow could continue to discharge onto the Tukwila South site, most likely into Stream E. This condition could be managed effectively subsequent to development of Tukwila South.

9. Your comment is acknowledged for the record. See the response to Comment 7 in this Hearing Transcript.

Dale Schroeder

10. See the response to Comment 1 in Letter 10.

11. See the response to Comments 1 and 2 to in Letter 10.

12. See the responses to Comments 3 and 17 in Letter 10.

13. The traffic distribution to the realigned S 178th Street from Tukwila South development was not based upon existing conditions, but was estimated using the City of Tukwila's EMME/2 forecasting model. General trip distribution assumptions were derived using select zone assignments assuming Alternative 1 land use assumptions, which took into consideration future network assumptions, other baseline growth, and future congestion levels with site-generated trips (see the responses to Comments 1, 4, and 7 through 12 in Letter 10).

14. See the response to Comments 7 through 12 in Letter 10.

15. Restriction of truck traffic on S 178th Street is beyond the scope of this EIS, and is an issue that should be addressed operationally between the Cities of SeaTac and Tukwila and the adjoining properties that are served along the route.

16. See the responses to Comments 14, 18 and 21 in Letter 10.

17. See the responses to Comment 2 in Letter 3; Comment 2 in Letter 6; and Comments 6, 14 and 18 through 21 in Letter 10.

18. See the responses to Comment 2 in Letter 6 and Comment 14 in Letter 10.

Bob Meyer

19. Your comment is acknowledged for the record. See the response to Comment 28 in Letter 10.

20. Your comment is acknowledged for the record. The Tukwila Fire Chief has confirmed the information concerning Tukwila Fire Department average response time as described in the Draft EIS.

21. It can be assumed that increased traffic levels from the project would increase the number of collisions per year. See the response to Comment 29 in Letter 10.

Bruce Mitchell

22. Your comment is acknowledged for the record. Section 3.2, Water Resources, and Appendix B to the Draft EIS included information on proposed grading and stormwater control. See responses to Comment 8 of the Hearing Transcript for more information.

23. See the response to Comment 7 in this Hearing Transcript regarding preservation of access to Southcenter Parkway and Comment 8 regarding existing drainage conveyance from the Mitchell Moving and Storage and GACO Western properties. Stormwater from areas proposed for development on the Tukwila South site that could potentially impact these properties would be collected and piped directly to the northern detention facility (see the Preliminary Master Drainage Plan in Appendix B to the Draft EIS and the summary of the proposed stormwater control system on pages 3.2-19 through 3.2-21 of the Draft EIS). The site grading and stormwater control systems proposed for Tukwila South would not impact the Mitchell or GACO Western properties or their drainage conveyance to the river.

Roger McCracken

24. The Draft EIS addresses the reasonably anticipated impacts associated with buildout under the EIS alternatives. The analysis of impacts was based on the level and distribution of project-generated trips. The level of trips was estimated using Institute of Transportation Engineers (ITE) trip generation rates for specific uses. The ITE trip generation rates used in the analysis include specific rates for hotel and R&D uses; the rates also account for the level of trips to an airport facility such as SeaTac airport (see pages 42 through 44 of Appendix I to the Draft EIS, and Attachment B to Appendix I for details).

The trip distribution assumptions used in the analysis took into account the location of the site in relation to potential trip origins and destinations (see pages 44 though 45 of Appendix I to the Draft EIS). Therefore, trips to/from the airport from proposed uses on the site were accounted for in the trip generation and distribution estimates used in the analysis of impacts. While in general, future traffic generated by the site would make a certain number of trips to/from the airport (just as other business and residential properties throughout the region), these typically would occur outside of peak commute hours. The Draft EIS did not consider the potential for a supporting airport facility or use tied directly to airport operations, as such uses were not proposed by the applicant.

25. Your comment is acknowledged for the record. See the response to Comment 24 in Letter 10.

26. Traffic from development at Tukwila South would contribute to volumes along the roadways noted in the comment over the long term; however, results of the Draft EIS

analysis conclude that impacts from such traffic are not expected to be significant. See the responses to Comments 2 and 7 through 12 in Letter 10 for further discussion of impacts to streets in the City of SeaTac.

27. See the responses to Comments 2 and 12 in Letter 10.

28. Future baseline transportation assumptions used in the Draft EIS do consider the completion of the S 228th Street corridor across the Green River. In addition, the transportation analysis considered regional growth projections for the Cities of Tukwila, Renton, Kent, SeaTac, and the region as a whole for both the 2015 and 2030 horizon years. Within the site vicinity, land use adjustments were made to consider the entitled development at the Kent Space Center facilities, which were not included in regional land use projections. Future baseline levels of service approaching the I-5 interchange on Orillia Road S/S 188th Street are estimated at LOS E by 2015 and LOS F by 2030 without development at the Tukwila South site. Planned extension of SR 509 and completion of the South Access freeway to the SeaTac Airport will significantly reduce existing and future baseline demand at this interchange; however, future improvements will still be required even without development at the Tukwila South site. Please see the response to Comment 8 in Letter 8.

Within the PSRC forecast analysis zone (FAZ) that includes the residential development sites mentioned in this comment, approximately 1,000 new households are forecasted to locate within this predominately manufacturing/commercial area east of I-5, termed the Kent Industrial zone by the PSRC during 2000-2020. Some of this residential development has already occurred, and traffic generation from these occupied homes would have been captured in traffic counts conducted for this Draft EIS in May/June 2004. The remaining buildout was considered in the Draft EIS analysis, as such residential growth was included in PSRC's 2020 regional forecasts, from which the 2015 and 2030 baseline transportation forecasts for the Tukwila South Draft EIS were derived.

29. See the responses to Comment 8 in Letter 8 and Comment 28 in this Hearing Transcript.

30. Your comment is acknowledged for the record. The proposed project would not impact groundwater/surface water interaction in the offsite area mentioned in this comment. All surface water runoff from the site flows to the Green River. Surface water flows originate from groundwater seeps and pipe outfalls along the hillside. See Appendix B to the Draft EIS and Section 3.2, Water Resources of the Draft EIS for details.

31. The Tukwila South project includes short and long-term construction stormwater management systems and a permanent comprehensive stormwater management system, that would be installed during the infrastructure development phase (see the Preliminary Master Drainage Plan in Appendix B to the Draft EIS and the summary on pages 3.2-18 and 3.2-19 of the Draft EIS text). The comprehensive, permanent stormwater control system would manage runoff from full buildout of the project. Hydrologic modeling was performed to confirm the expected performance of the stormwater control system (see Appendix B to the Draft EIS). The Draft EIS analysis concluded that there would be no offsite impacts to surface or groundwater resources with implementation of mitigation measures and the proposed stormwater system.

32. See the response to Comment 28 in this Hearing Transcript.

Chapter 3

Errata

CHAPTER 3
ERRATA

This chapter identifies corrections to the Draft EIS and Appendices to the Draft EIS, including minor language changes and clarifications, based on comments received on the Draft EIS.

Draft EIS (Volume 1)

References to the City of Tukwila "Shoreline Master Plan" throughout the Draft EIS are hereby changed to read "Shoreline Master Program".

On page vi of the Draft EIS, the following is hereby added to the list of State of Washington, Department of Ecology permits and approvals:

> "- Shoreline Master Program Amendment".

On page vi of the Draft EIS, in the list of State of Washington, Department of Ecology permits and approvals, "- Section 402 NPDES permit" is hereby changed as follows:

> "- Section 402 NPDES permit, including the Stormwater Pollution Prevention Plan".

On page 2-10 of the Draft EIS, the second bullet point "Extension of the City's Shoreline Master Plan Map designation of urban to the annexed portion of the site within the shoreline management jurisdiction." is hereby changed as follows:

> "Extension of the City's Shoreline Master Program Urban shoreline environment designation to the annexed portion of the site within the shoreline management jurisdiction."

On page 2-10 of the Draft EIS, in the last paragraph, the sentence "These include review of the proposed Master Plan, the Sensitive Areas Master Plan Overlay designation and development-related code amendments by the Planning Commission and/or City Council; and review of the Development Agreement by the City Council." is hereby changed as follows:

> "These include review of the proposed Master Plan, the Sensitive Areas Master Plan Overlay designation and development-related code amendments by the Planning Commission and/or City Council; review of the Development Agreement by the City Council, and the Shoreline Master Program amendment."

On Figures 2-10, 2-11 and 2-12 of the Draft EIS, the narrow gray line connecting Orillia Road S to S 178th Street is hereby deleted.

On page 3.3-12 of the Draft EIS, in the fifth paragraph, the last sentence, "The natural stream is not considered fish-bearing due to the steep channel gradient and general lack of habitat, and was classified as Type 3 per the City of Tukwila's watercourse rating system." is hereby changed as follows:

"With the exception of the area immediately adjacent to the confluence with E Creek, this natural stream is not considered fish-bearing due to the steep channel gradient and general lack of habitat, and was classified as Type 3 per the City of Tukwila's watercourse rating system."

On page 3.3-23 of the Draft EIS, in the fourth paragraph, the last sentence, "Proposed construction impacts are highlighted in Table 3.3-2, depicted in Figure 3.3-2, and summarized in greater detail in Appendices C and E." is hereby changed as follows:

"Proposed direct construction impacts are highlighted in Table 3.3-2, depicted in Figure 3.3-2, and summarized in greater detail in Appendices C and E."

On page 3.3-24 of the Draft EIS, the title of Table 3.3-2, "Infrastructure Development Impacts to Streams" is hereby changed as follows:

"Direct Infrastructure Development Impacts to Streams."

On page 3.4-6 of the Draft EIS, in the fourth full paragraph, the second sentence, "Due to their large size, Wetlands 10 and 11 received the highest scores for potential overall performance for all water quality functions, even though these wetlands were not given the highest index scores." is hereby changed as follows:

"Due to their large size, Wetlands 10 and 11 received the highest scores for potential overall performance for all hydrologic functions, even though these wetlands were not given the highest index scores."

On Page 3.4-7 of the Draft EIS, in the first full paragraph, the sentence "Wetlands 6 and 13 received scores for potential suitability for anadromous and resident fish; however, it is not likely that these wetlands actually provided fish habitat due to the barriers created by culverts under S 200th Street and at existing Johnson Ditch (see Section 3.3, Plants and Animals, including Fisheries, and Appendix E for further discussion of fish habitat and barriers)." is hereby changed as follows:

"Wetlands 5 and 13 received scores for potential suitability for anadromous and resident fish; however, it is not likely that these wetlands actually provided fish habitat due to the barriers created by culverts under S 200th Street and at existing Johnson Ditch (see Section 3.3, Plants and Animals, including Fisheries, and Appendix E for further discussion of fish habitat and barriers)."

On page 3.6-9 of the Draft EIS, the last sentence of the third paragraph reads:

"It should be noted that land uses that would be demolished during the infrastructure development phase are located on land owned or controlled by the applicant."

The statement is incorrect and is hereby deleted. Structures on the "llama farm" that would be demolished during the proposed infrastructure development phase are not owned or controlled by the applicant.

On page 3.7-2 of the Draft EIS, at the end of the first partial paragraph, the following is hereby added:

> "SMA jurisdiction applies to the area within 200 feet of the shoreline."

On page 3.7-2 of the Draft EIS, in the second paragraph, the sentence "The Proposed Actions include amending Tukwila's Shoreline Master Plan (SMP) to apply Tukwila's "Urban Environment" designation to the portion of the site proposed for annexation (see City of Tukwila Comprehensive Plan, Shoreline Element, below)." is hereby changed as follows:

> "The Proposed Actions include amending Tukwila's Shoreline Master Program (SMP) to apply the Urban shoreline environment designation to the shoreline of the Green River that is included in the proposed annexation area (see City of Tukwila Comprehensive Plan, Shoreline Element, below)."

On page 3.7-2 of the Draft EIS, in the second paragraph, the sentence "Proposed amendments to local shoreline master programs are subject to review by the Washington State Department of Ecology (RCW 90.58.090)." is hereby changed as follows:

> "Proposed amendments to local shoreline master programs are subject to review and approval by the Washington State Department of Ecology (RCW 90.58.090)."

On page 3.7-4 of the Draft EIS, in the first paragraph, the sentence "These would represent a significant portion of the CPP employment and housing unit growth targets for the City of Tukwila and its PAA for the 2001 to 2022 time period." is hereby changed as follows:

> "These would represent more jobs than the CPP employment growth target of 16,000 new jobs for the City of Tukwila and its PAA for the 2001 to 2022 time period, and a significant portion of the CPP housing unit growth target for that period."

On page 3.7-22 of the Draft EIS, in the first paragraph, the sentence "In compliance with the SMA, the City has established use regulations and a permitting system for issuance of Shoreline Substantial Development Permits for development within 200 feet of the shoreline." is hereby changed as follows:

> "In compliance with the SMA, the City has established use regulations and a permitting system for issuance of Shoreline Substantial Development Permits, conditional use permits, and variances for development within 200 feet of the shoreline."

On page 3.7-22 of the Draft EIS, the third paragraph "When a shoreline area is annexed to a jurisdiction, the SMA requires the jurisdiction to attach a specific shoreline designation to the annexed shoreline, typically under a minor amendment process to the SMP. The procedure for designation requires the City to amend the map portion of its SMP and apply a designation within one year of annexation. Jurisdictions may also "pre-designate" shoreline environments within urban growth areas, prior to annexation (WAC 173-62-150). The designation and map amendment would require approval by the Washington State Department of Ecology. See discussion under State of Washington Plans and Policies – Shoreline Management Act, above." is hereby changed as follows:

"When a shoreline area is annexed to a jurisdiction, the SMA requires the jurisdiction to develop or amend its SMP to include the annexed area. The procedure for designation requires the City to submit its amendment to the Washington State Department of Ecology within one year of annexation. Cities and towns planning under the Growth Management Act may "pre-designate" environment designations on shoreline within adopted urban growth areas, prior to annexation (WAC 173-26-150). The amendment would require approval by the Washington State Department of Ecology. See discussion under State of Washington Plans and Policies – Shoreline Management Act, above."

On page 3.7-23 of the Draft EIS, in the second paragraph, the sentence "Portions of development located within the shoreline jurisdiction area would comply with applicable regulations of the Tukwila SMP." is hereby changed as follows:

"Any development that would occur within the shoreline jurisdiction area (within 200 feet of the Green River shoreline) would comply with applicable regulations of the Tukwila SMP."

On page 3.12-6 of the Draft EIS, in the fourth paragraph, which begins with "**S 180th Street (SW 43rd Street)**", the following sentence is hereby added after the first sentence:

"Within the City of Renton, the roadway includes a center turn lane."

On page 3.12-7 of the Draft EIS, in the third paragraph, which begins with "**Lind Avenue SW**", the third sentence, "Curbs, gutters and 6- to 8-foot sidewalks are located on the west side of the street and along various sections of the east side of the street." is hereby changed as follows:

"Curbs and gutters are located on both sides of the street. Six to eight foot sidewalks along various sections are also located on both sides of the street."

On page 3.12-14 of the Draft EIS, in the second full paragraph, and on page 3.12-16 of the Draft EIS, in the paragraph following the bulleted list, the text "the City of Renton's Six-Year TIP, 2004-2009" is hereby changed as follows:

"the City of Renton's Six-Year TIP, 2005-2010."

On page 3.12-19 of the Draft EIS, under the heading "2030 Baseline Network" the second bullet point, "Construct a new direct access/HOV interchange at SR 167 and SW 27th Street." is hereby deleted.

On page 3.12-29 of the Draft EIS, in the bulleted list under the headings "2015" and "*Baseline Condition*", the last bullet "Int. #55 – E Valley Road at SR 167 SB Ramps (in Kent)." is hereby changed as follows:

"Int. #55 – E Valley Road at SR 167 SB Ramps (in Renton)."

On page 3.12-44 of the Draft EIS, in Table 3.12-12, in the row for intersection 55, Potential Improvement(s) column, the text "Provide an additional SB left-turn lane for dual lefts. Rechannelize EB movements to provide dual left-turns, a thru lane and a right-turn lane.

Rechannelize WB movements for left-turn lane, thru lane, and a thru-right lane." is hereby changed as follows:

> "Provide an additional SB left-turn lane for dual lefts. Rechannelize WB movements to provide dual left-turns, a thru lane and a right-turn lane. Rechannelize EB movements for left-turn lane, thru lane, and a thru-right lane."

On page 3.12-47 of the Draft EIS, in Table 3.12-13, in the row for intersection 55, Potential Improvement(s) column, the text "Provide an additional SB left-turn lane for dual lefts. Rechannelize EB movements to provide dual left-turns, a thru lane and a right-turn lane. Rechannelize WB movements for left-turn lane, thru lane, and a thru-right lane." is hereby changed as follows:

> "Provide an additional SB left-turn lane for dual lefts. Rechannelize WB movements to provide dual left-turns, a thru lane and a right-turn lane. Rechannelize EB movements for left-turn lane, thru lane, and a thru-right lane."

Appendices to the Draft EIS (Volumes 2 and 3)

In Appendix C to the Draft EIS, Tables 2-3 through 2-12, the footnote citations "the EPA Gold Book (EPA 440/5-86-001)" are hereby changed as follows:

> "WAC 173-201A-040"

In Appendix C to the Draft EIS, on page A-7 (Attachment A to Appendix C), Table A-1 is hereby replaced with the table on the following page:

Table A-1
WATER QUALITY SCORES FOR WETLANDS TO BE FILLED OR PARTIALLY FILLED UNDER ALTERNATIVES 1 AND 2

Wetland	Location/Land Use	Wetland Type	Sediment Removal Scores		Nutrient Removal Scores		Heavy Metals and Toxic Organics Removal Scores	
			Score	(score x acreage filled)	Score	(score x acreage filled)	Score	(score x acreage filled)
1*	Forested-east-facing slopes	Depressional Outflow	8.62	2.24	9.90	2.57	9.19	2.39
2 (1)	Corn Field	Depressional Closed	10	0.90	5.0	0.45	6.45	0.58
3 (1)	Forested-east-facing slopes	Depressional Closed	10	0.30	5.0	0.15	0.32	0.01
3-A	Corn Field	Depressional Outflow	3.85	0.04	2.27	0.02	4.49	0.04
4-A	Corn Field	Depressional Outflow	3.85	0.15	2.27	0.09	4.49	0.18
5	Corn Field	Depressional Outflow	5.77	0.12	3.92	0.08	6.02	0.12
6	Corn Field	Depressional Outflow	5.13	0.15	3.88	0.12	5.98	0.18
7	Corn Field	Depressional Outflow	6.41	19.66	4.98	15.28	4.62	14.18
8	Corn Field	Depressional Outflow	6.41	9.62	8.05	12.08	7.48	11.22
9	Corn Field	Depressional Outflow	6.41	17.37	5.49	14.48	5.10	13.81
10*	Pasture	Depressional Outflow	3.32	1.88	1.88	0.66	3.41	1.85
13	Scrub-shrub south facing slopes	Depressional Outflow	3.85	0.42	2.78	0.31	1.39	0.15
16	Forested-east-facing slopes	Depressional Outflow	5.90	3.84	4.59	2.98	3.79	2.46
Depressional Outflow Wetlands: Total Score Wetlands Filled under Alternatives 1 and 2				**56.69**		**49.27**		**47.17**
Depressional Closed Wetlands: Total Score Wetlands Filled under Alternatives 1 and 2				**1.2**		**0.60**		**0.59**

* Partially filled wetlands; only the portion that would be filled is represented. Score is calculated by subtracting the WAFAM functional value for Wetland 10 after development from the WAFAM functional value of Wetland 10 before development (Raedeke Associates, Inc. 2005).

[1] The WAFAM does not allow comparisons of water quality functions across HGM classifications. As a result, a separate total performance score was calculated for depressional outflow wetlands and depressional closed wetlands.

In Appendix C to the Draft EIS, on page A-8 (Attachment A to Appendix C), Table A-2 is hereby replaced by the following table:

Table A-2
WATER QUALITY SCORE FOR WETLANDS 10 AND 11 PRIOR TO REHABILITATION UNDER ALTERNATIVES 1 AND 2

Wetland	Location/Land Use	Wetland Type	Sediment Removal Scores		Nutrient Removal Scores		Heavy Metals and Toxic Organics Removal Scores	
			Score	(score x acreage)	Score	(score x acreage)	Score	(score x acreage)
10*	Pasture	Depressional Outflow	3.32	48.47	1.88	27.45	3.41	49.79
11	Forested-east-facing slopes	Depressional Outflow	3.85	83.46	2.27	49.22	4.49	97.37
Existing Mitigation Area Depressional Outflow Wetland Total Scores				**131.93**		**76.67**		**147.16**

In Appendix C to the Draft EIS, on page A-8 (Attachment A to Appendix C), Table A-3 is hereby replaced by the following table:

Table A-3
SUMMED WATER QUALITY SCORE FOR ALL WETLANDS TO BE ALTERED UNDER ALTERNATIVES 1 AND 2 (SUM OF TABLES A-1 AND A-2)

HGM Classification	Sediment Removal Score (score x acreage)	Nutrient Removal Score (score x acreage)	Heavy Metals and Toxic Organics Removal Score (score x acreage)
Depressional Outflow Wetlands	188.62	125.94	194.33
Depressional Closed Wetlands	1.20	0.60	0.59

In Appendix C to the Draft EIS, on page A-9 (Attachment A to Appendix C), Table A-4 is hereby replaced by the following table:

Table A-4
WATER QUALITY SCORES OF THE REHABILITATED AND CREATED WETLANDS PROPOSED UNDER ALTERNATIVES 1 AND 2

Rehabilitated and Created Wetlands	Wetland Type	Sediment Removal Score		Nutrient Removal Score		Heavy Metals and Toxic Organics Removal Score	
		Score	(score x acreage)	Score	(score x acreage)	Score	(score x acreage)
10	Depressional Outflow	4.84	70.66	2.52	36.79	4.25	62.05
11	Depressional Outflow	6.30	136.79	5.73	124.32	6.01	130.32
Depressional Outflow Total Score for the Rehabilitated/ Enhanced/Created Wetlands			**207.45**		**161.11**		**192.37**
Green River Off-Channel Habitat Area	Riverine Flow-Through Wetland	2.99	4.34	2.99	4.34	5.20	7.54
Johnson Creek Restoration Plan	Riverine Flow-Through Wetland	5.03	7.80	5.03	7.80	5.59	8.66
Riverine Flow-Through Total Score for Created Wetlands			**12.14**		**12.14**		**16.20**
Depressional Closed Total Score			**0**		**0**		**0**
Net change in Depressional Outflow Scores			**18.8**		**35.2**		**-1.9**
Net Change in Riverine Flow Through Scores			**12.14**		**12.14**		**16.20**
Net Change in Depressional Closed Scores			**-1.2**		**-0.60**		**-0.59**

In Appendix E to the Draft EIS, page 31, in the last sentence, the citation, "Salmon and Steelhead Habitat Limiting Factors Analysis for the Cedar River" is hereby changed as follows:

> "Salmon and Steelhead Habitat Limiting Factors Analysis for the Green/Duwamish River."

In Appendix F to the Draft EIS, page 37, the reference to "Altman (2001)" is hereby changed as follows:

> "Altman Oliver Associates, Inc. 2001. Wetland Delineation and Restoration Report for the Coluccio Property."

In Appendix F to the Draft EIS, on pages 67 through 71, Table 6 is hereby replaced with the following table:

Table 6
SUMMARY OF WAFAM INDICES FOR EXISTING WETLANDS ON THE TUKWILA SOUTH PROPERTY[1]

	Wetland:	1		2		3	
	Acreage:	0.26		0.09		0.03	
	HGM Classification:	DO[2]		DC		DC	
Function		Index Score	Score x Acres	Index Score[3]	Score x Acres	Index Score	Score x Acres
Water Quality	Potential for Removing Sediment	8.62	2.24	10.00	0.90	10.00	0.30
	Potential for Removing Nutrients	9.90	2.57	5.00	0.45	5.00	0.15
	Potential for Removing Heavy Metals and Toxic Organics	9.19	2.39	6.45	0.58	0.32	0.01
Hydrologic Functions	Potential for Reducing Peak Flows	6.03	1.57	10.00	0.90	10.00	0.30
	Potential for Reducing Decreasing Downstream Erosion	5.41	1.41	10.00	0.90	10.00	0.30
	Potential for Groundwater Recharge	7.33	1.91	7.33	0.66	0.67	0.02
Biologic Functions	General Habitat Suitability	3.54	0.92	0.75	0.07	2.33	0.07
	Habitat Suitability for Invertebrates	3.05	0.79	0.25	0.02	0.83	0.02
	Habitat Suitability for Amphibians	2.83	0.74	0.72	0.06	1.45	0.04
	Habitat Suitability for Anadromous Fish	1.98	0.51	N/A	N/A	N/A	N/A
	Habitat Suitability for Resident Fish	4.82	1.25	N/A	N/A	N/A	N/A
	Habitat Suitability for Wetland Associated Birds	3.94	1.02	2.17	0.20	2.73	0.08
	Habitat Suitability for Wetland Associated Mammals	2.37	0.62	0.96	0.09	2.40	0.07
	Native Plant Richness	1.11	0.29	0.22	0.02	1.70	0.05
	Primary Production and Export	9.78	2.54	N/A	N/A	N/A	N/A

	Wetland:	3-A		4-A		5	
	Acreage:	0.01		0.04		0.02	
	HGM Classification:	DO		DO		DO	
Function		Index Score	Score x Acres	Index Score	Score x Acres	Index Score	Score x Acres
Water Quality	Potential for Removing Sediment	3.85	0.04	3.85	0.15	5.77	0.12
	Potential for Removing Nutrients	2.27	0.02	2.27	0.09	3.92	0.08
	Potential for Removing Heavy Metals and Toxic Organics	4.49	0.04	4.49	0.18	6.02	0.12
Hydrologic Functions	Potential for Reducing Peak Flows	1.30	0.01	1.85	0.07	2.15	0.04
	Potential for Reducing Decreasing Downstream Erosion	1.90	0.02	2.71	0.11	1.69	0.03
	Potential for Groundwater Recharge	4.00	0.04	4.00	0.16	7.00	0.14
Biologic Functions	General Habitat Suitability	0.97	0.01	0.97	0.04	0.73	0.01
	Habitat Suitability for Invertebrates	0.65	0.01	0.65	0.03	0.00	0.00
	Habitat Suitability for Amphibians	0.78	0.01	0.78	0.03	1.33	0.03
	Habitat Suitability for Anadromous Fish	0.31	0.00	0.31	0.01	0.00	0.00
	Habitat Suitability for Resident Fish	0.59	0.01	0.59	0.02	0.00	0.00
	Habitat Suitability for Wetland Associated Birds	1.93	0.02	1.93	0.08	1.85	0.04
	Habitat Suitability for Wetland Associated Mammals	0.81	0.01	1.52	0.06	0.43	0.01
	Native Plant Richness	0.20	0.00	0.20	0.01	0.68	0.01
	Primary Production and Export	6.67	0.07	6.67	0.27	8.67	0.17

[1] The WAFAM does not evaluate wetland functions within slope HGM class wetlands. See Table 7 for the WSDOT evaluation of Wetlands 1 (slope portion), 14, and 18.
[2] The slope portion of Wetland 1 (1.93 acres) was not included in the WAFAM evaluation.
[3] Shaded index scores indicate scores "locked in" by Hruby based on potential provided by wetland's HGM.

Revised Table 6 Continued

	Wetland:	6		7		8	
	Acreage:	0.03		3.07		1.5	
	HGM Classification:	DO		DO		DO	
Function		**Index Score**	**Score x Acres**	**Index Score**	**Score x Acres**	**Index Score**	**Score x Acres**
Water Quality	Potential for Removing Sediment	5.13	0.15	6.41	19.66	6.41	9.62
	Potential for Removing Nutrients	3.88	0.12	4.98	15.28	8.05	12.08
	Potential for Removing Heavy Metals and Toxic Organics	5.98	0.18	4.62	14.18	7.48	11.22
Hydrologic Functions	Potential for Reducing Peak Flows	1.81	0.05	7.34	22.52	6.67	10.00
	Potential for Reducing Decreasing Downstream Erosion	2.64	0.08	7.32	22.46	7.32	10.98
	Potential for Groundwater Recharge	7.33	0.22	2.67	8.19	4.00	6.00
Biologic Functions	General Habitat Suitability	0.69	0.02	1.25	3.84	1.53	2.30
	Habitat Suitability for Invertebrates	0.24	0.01	0.65	2.00	1.14	1.71
	Habitat Suitability for Amphibians	0.78	0.02	0.78	2.39	1.15	1.72
	Habitat Suitability for Anadromous Fish	0.23	0.01	0.52	1.61	0.57	0.85
	Habitat Suitability for Resident Fish	0.52	0.02	1.23	3.79	1.96	2.94
	Habitat Suitability for Wetland Associated Birds	1.27	0.04	2.01	6.16	2.60	3.90
	Habitat Suitability for Wetland Associated Mammals	0.81	0.02	1.76	5.39	1.81	2.71
	Native Plant Richness	0.20	0.01	0.20	0.63	0.20	0.31
	Primary Production and Export	8.89	0.27	5.78	17.74	6.67	10.00

	Wetland:	9		10		11	
	Acreage:	2.71		15.5		21.7	
	HGM Classification:	DO		DO		DO	
Function		**Index Score**	**Score x Acres**	**Index Score**	**Score x Acres**	**Index Score**	**Score x Acres**
Water Quality	Potential for Removing Sediment	6.41	17.37	3.32	51.47	3.85	83.55
	Potential for Removing Nutrients	5.49	14.88	1.88	29.09	2.27	49.26
	Potential for Removing Heavy Metals and Toxic Organics	5.10	13.82	3.41	52.85	4.49	97.43
Hydrologic Functions	Potential for Reducing Peak Flows	6.67	18.08	3.33	51.67	3.33	72.26
	Potential for Reducing Decreasing Downstream Erosion	7.32	19.84	5.85	90.73	4.88	105.90
	Potential for Groundwater Recharge	4.00	10.84	3.33	51.67	4.00	86.80
Biologic Functions	General Habitat Suitability	1.53	4.15	5.49	85.16	0.90	19.53
	Habitat Suitability for Invertebrates	0.65	1.76	3.22	49.84	1.87	40.58
	Habitat Suitability for Amphibians	0.78	2.11	1.85	28.70	0.67	14.54
	Habitat Suitability for Anadromous Fish	0.52	1.41	2.63	40.80	0.53	11.50
	Habitat Suitability for Resident Fish	1.23	3.33	3.34	51.79	2.40	52.08
	Habitat Suitability for Wetland Associated Birds	2.41	6.53	6.03	93.51	3.00	65.10
	Habitat Suitability for Wetland Associated Mammals	1.76	4.77	3.37	52.23	2.54	55.12
	Native Plant Richness	0.20	0.54	4.29	66.43	0.27	5.86
	Primary Production and Export	6.67	18.08	6.53	101.27	6.67	144.74

Revised Table 6 Continued

	Wetland:	13		15		16	
	Acreage:	0.11		0.99		0.65	
	HGM Classification:	DO		DO		DO	
Function		**Index Score**	**Score x Acres**	**Index Score**	**Score x Acres**	**Index Score**	**Score x Acres**
Water Quality	Potential for Removing Sediment	3.85	0.42	3.33	3.30	5.90	3.84
	Potential for Removing Nutrients	2.78	0.31	3.93	3.89	4.59	2.98
	Potential for Removing Heavy Metals and Toxic Organics	1.39	0.15	5.56	5.50	3.79	2.46
Hydrologic Functions	Potential for Reducing Peak Flows	2.82	0.31	1.75	1.73	4.84	3.15
	Potential for Reducing Decreasing Downstream Erosion	5.35	0.59	4.99	4.94	7.08	4.60
	Potential for Groundwater Recharge	2.00	0.22	2.00	1.98	2.00	1.30
Biologic Functions	General Habitat Suitability	2.14	0.24	3.74	3.70	2.56	1.66
	Habitat Suitability for Invertebrates	1.14	0.13	3.58	3.54	2.85	1.85
	Habitat Suitability for Amphibians	0.78	0.09	1.88	1.86	1.02	0.66
	Habitat Suitability for Anadromous Fish	1.12	0.12	2.70	2.67	1.28	0.83
	Habitat Suitability for Resident Fish	1.07	0.12	3.72	3.68	3.28	2.13
	Habitat Suitability for Wetland Associated Birds	2.21	0.24	2.57	2.54	2.35	1.53
	Habitat Suitability for Wetland Associated Mammals	1.36	0.15	2.34	2.32	2.01	1.31
	Native Plant Richness	1.16	0.13	4.08	4.04	1.36	0.88
	Primary Production and Export	5.33	0.59	3.11	3.08	7.47	4.86

	Wetland:	17	
	Acreage:	0.05	
	HGM Classification:	RF	
Function		**Index Score**	**Score x Acres**
Water Quality	Potential for Removing Sediment	5.09	0.25
	Potential for Removing Nutrients	5.09	0.25
	Potential for Removing Heavy Metals and Toxic Organics	3.03	0.15
Hydrologic Functions	Potential for Reducing Peak Flows	7.67	0.38
	Potential for Reducing Decreasing Downstream Erosion	9.30	0.47
	Potential for Groundwater Recharge	2.67	0.13
Biologic Functions	General Habitat Suitability	3.11	0.16
	Habitat Suitability for Invertebrates	1.57	0.08
	Habitat Suitability for Amphibians	2.62	0.13
	Habitat Suitability for Anadromous Fish	6.02	0.30
	Habitat Suitability for Resident Fish	2.23	0.11
	Habitat Suitability for Wetland Associated Birds	4.14	0.21
	Habitat Suitability for Wetland Associated Mammals	2.44	0.12
	Native Plant Richness	6.67	0.33
	Primary Production and Export	7.50	0.38

In Appendix I, page 11, in the fifth paragraph, which begins with **"S 180th Street (SW 43rd Street)"**, the following sentence is hereby added after the first sentence:

"Within the City of Renton, the roadway includes a center turn lane."

In Appendix I, page 12, in the fifth paragraph, which begins with "**Lind Avenue SW**", the third sentence, "Curbs, gutters and 6- to 8-foot sidewalks are located on the west side of the street and along various sections of the east side of the street." is hereby changed as follows:

> "Curbs and gutters are located on both sides of the street. Six to eight foot sidewalks along various sections are also located on both sides of the street."

In Appendix I, page 12, in the seventh paragraph, which begins with "**Rainier Avenue S**", the following is hereby added after the second sentence:

> "Curbs, gutters and sidewalks are located on both sides of the street."

In Appendix I, page 12, in the last full paragraph, "**SW 16th Street** is an east-west roadway consisting of two travel lanes with a center left-turn lane and a total curb-to-curb width of 44 feet. Curbs, gutters and 6-foot sidewalks are located on the south side of the street, and curbs and gutters are located on the north side of the street. The roadway consists of curbs, gutters and 6-foot sidewalks on the south side of the street, and 5-foot painted bicycle lanes on both sides of the street. The posted speed limit is 25 mph west of and 35 mph east of Oaksdale Avenue SW." is hereby revised as follows:

> **SW 16th Street**, west of Oakesdale Avenue SW, is an east-west roadway consisting of two travel lanes with a center left-turn lane and a total curb-to-curb width of 44 feet. Curbs, gutters and 6-foot sidewalks are located on the south side of the street, and curbs and gutters are located on the north side of the street. Five-foot painted bicycle lanes are located on both sides of the street. East of Oakesdale Avenue SW, the roadway consists of curbs, gutters and 6-foot sidewalks on the south side of the street, and 5-foot painted bicycle lanes on both sides of the street. The posted speed limit is 25 mph west of and 35 mph east of Oaksdale Avenue SW.

In Appendix I, the last partial paragraph on page 12 continuing onto page 13, "**SW 27th Street** is a four-lane, east-west roadway with two travel lanes in each direction. The total curb-to-curb width is 44 feet. Curbs, gutters, 16-foot landscaped planters and 6-foot sidewalks are provided on the north side of the street. Curbs are located on the south side of the street. The roadway continues west of its intersection with Oaksdale Avenue SW, however, it is blocked off to the public via signs and a gated entrance. The speed limit is posted at 35 mph." is hereby changed as follows:

> "**SW 27th Street**, west of Lind Avenue SW, is a four-lane, east-west roadway with two travel lanes in each direction. The total curb-to-curb width is 44 feet. Curbs, gutters, 16-foot landscaped planters and 6-foot sidewalks are provided on the north side of the street. Curbs are located on the south side of the street. The roadway continues west of its intersection with Oaksdale Avenue SW, however, it is blocked off to the public via signs and a gated entrance. The speed limit is posted at 35 mph. East of Lind Avenue SW, the roadway is three lanes with one lane in each direction and a center turn lane. Curbs and gutters are located on both sides of the street, with sidewalks on both sides of the street for a majority of its length."

In Appendix I, on page 32, in the paragraph following the first bulleted list, the text "the City of Renton's Six-Year TIP, 2004-2009" is hereby changed as follows:

> "the City of Renton's Six-Year TIP, 2005-2010"

In Appendix I, on page 32, the second from last bullet point "**Oakesdale Avenue Phase 2: SW 27th Street to SW 31st Street.** Construct new four-lane plus turn lanes roadways. Includes curbs, gutters, sidewalks, bicycle lanes and traffic signals." is hereby deleted.

In Appendix I, page 36, under the heading "2030 Baseline Network" the second bullet point, "Construct a new direct access/HOV interchange at SR 167 and SW 27th Street." is hereby deleted.

In Appendix I, on page 48, under the heading "**Impacts under 2015 Baseline Network**" the last bullet "Int. #55 – E Valley Road at SR 167 SB Ramps (in Kent)." is hereby changed as follows:

> "Int. #55 – E Valley Road at SR 167 SB Ramps (in Renton)."

In Appendix I to the Draft EIS, on page 65, in Table 15, in the row for intersection 55, Potential Improvement(s) column, the text "Provide an additional SB left-turn lane for dual lefts. Rechannelize EB movements to provide dual left-turns, a thru lane and a right-turn lane. Rechannelize WB movements for left-turn lane, thru lane, and a thru-right lane." is hereby changed as follows:

> "Provide an additional SB left-turn lane for dual lefts. Rechannelize WB movements to provide dual left-turns, a thru lane and a right-turn lane. Rechannelize EB movements for left-turn lane, thru lane, and a thru-right lane."

In Appendix I to the Draft EIS, on page 68, in Table 16, in the row for intersection 55, Potential Improvement(s) column, the text "Provide an additional SB left-turn lane for dual lefts. Rechannelize EB movements to provide dual left-turns, a thru lane and a right-turn lane. Rechannelize WB movements for left-turn lane, thru lane, and a thru-right lane." is hereby changed as follows:

> "Provide an additional SB left-turn lane for dual lefts. Rechannelize WB movements to provide dual left-turns, a thru lane and a right-turn lane. Rechannelize EB movements for left-turn lane, thru lane, and a thru-right lane."

Chapter 4

Distribution List

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