

BEFORE THE METRO CONTRACT REVIEW BOARD

FOR THE PURPOSE OF AUTHORIZING THE) RESOLUTION NO. 04-3425
CHIEF OPERATING OFFICER TO AMEND THREE)
ENVIRONMENTAL CONSULTANT CONTRACTS)
TO COMPLETE THE SOUTH CORRIDOR PROJECT)
(I-205/PORTLAND MALL) FINAL)
ENVIRONMENTAL IMPACT STATEMENT) Introduced by Councilor Brian Newman

WHEREAS, the South Corridor Project is the Metro Area's next light rail transit priority project for Federal New Starts Funding after the North Corridor Interstate MAX Light Rail Project; and

WHEREAS, authorization of Federal New Starts Funding for the South Corridor Project will require that the Metro Area maintain an aggressive schedule to get the project included in the next Federal 6-year Surface Transportation Bill; and

WHEREAS, the use of consultant resources is necessary to support the Metro, TriMet and local jurisdiction staffs by providing specific technical expertise in environmental analysis, transportation and traffic analysis; and financial analysis for preparation of the Final Environmental Impact Statement (FEIS); and

WHEREAS, in April of 2001, Metro Council authorized the release of a Request for Proposals for assistance with the South Corridor Project Supplemental Draft Environmental Impact Statement (SDEIS) that expressed the intent to amend the SDEIS consultant contracts for the Final Environmental Impact Statement (FEIS); and

WHEREAS, in the summer of 2001 Metro executed three consultant contracts to provide assistance in preparation of the SDEIS: Metro Contract No. 923312 with URS to assist with the environmental analysis; Metro Contract No. 923315 with Siegel Consulting to assist with the financial analysis; and Metro Contract No. 923313 with DKS to assist with the traffic analysis; and

WHEREAS, in December of 2002, the Federal Transit Administration (FTA) the Federal Highway Administration (FHWA) and Metro published the South Corridor Project SDEIS; and

WHEREAS, on April 17, 2003, the Metro Council approved Resolution No. 03-3303 (For the Purpose of Amending the Locally Preferred Strategy For the South/North Corridor Project to Define a Two-Phased Major Transit Investment Strategy For the South Corridor, With the I-205 Light Rail Transit Project as the Phase 1 Locally Preferred Alternative Followed By the Milwaukie Light Rail Transit Project in Phase 2), adopting a two phased Locally Preferred Alternative (LPA) for the South Corridor including the I-205 LRT Alignment as Phase 1 and the Milwaukie alignment as Phase 2; and

WHEREAS, in October of 2003, the FTA, FHWA and Metro published the Downtown Portland Amendment to the South Corridor Project SDEIS; and

WHEREAS, on January 15, 2004, the Metro Council approved Resolution No. 04-3403 (For the Purpose of Finalizing the Decision to Add the Portland Mall Alignment to the Locally Preferred Alternative For Phase I of the South Corridor Light Rail Project), affirming the Portland Mall light rail transit alignment as the LPA for downtown Portland; and

WHEREAS, on January 15, 2004, the Metro Council approved Resolution No. 03-3372 (For the Purpose of Amending the South/North Land Use Final Order, to Include the Two Phases of the South

Corridor Project Consisting of the Addition of the I-205 Light Rail Transit Project From Gateway to Clackamas Regional Center With the Downtown Portland Transit Mall Alignment, and Modifications of the Proposed Light Rail From Milwaukie to Clackamas Regional Center, and to Reflect From Milwaukie to Clackamas Regional Center, and to Reflect the Final Interstate Max Design), amending the South/North Land Use Final Order (LUFO) to include the 1-205, Portland Mall and Milwaukie light rail transit alignments; and

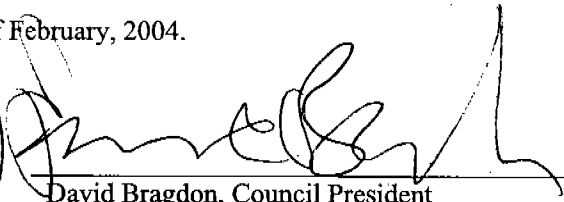
WHEREAS, the Metro Council is concurrently considering Resolution No. 04-3424 (For the Purpose of Authorizing the Chief Operating Officer to Enter Into an Intergovernmental Agreement With TriMet for Completion of the South Corridor Project (I-205/Portland Mall) Final Environmental Impact Statement), authorizing execution of a revenue Intergovernmental Agreement (IGA) that will provide revenue to Metro from TriMet to pay for the South Corridor FEIS work; now therefore

BE IT RESOLVED that the Metro Council authorizes the Chief Operating Officer to execute amendments to the following Metro contracts for work on the South Corridor I-205/ Portland Mall light rail project FEIS:

1. Metro Contract No. 923312 with URS for environmental analysis for an amount not to exceed \$500,000;
2. Metro Contract No. 923313 with DKS for Traffic analysis for an amount not to exceed \$175,000; and
3. Metro Contract No. 923315 with Siegel Consulting for financial analysis for an amount not to exceed \$20,000.

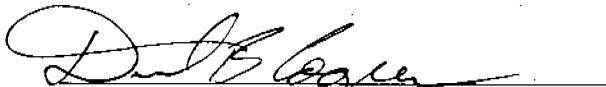
ADOPTED by the Metro Council on this 26th day of February, 2004.





David Bragdon, Council President

Approved as to Form:



Daniel B. Cooper, Metro Attorney

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 04-3425, FOR THE PURPOSE OF AUTHORIZING THE CHIEF OPERATING OFFICER TO AMEND THREE ENVIRONMENTAL CONSULTANT CONTRACTS TO COMPLETE THE SOUTH CORRIDOR PROJECT (I-205/PORTLAND MALL) FINAL ENVIRONMENTAL IMPACT STATEMENT

Date: February 12, 2004

Prepared by: Sharon Kelly

BACKGROUND

The South Corridor Project (I-205 and the Portland Mall) is the Metro Area's next light rail priority for Federal New Starts funding. Completion of the Federally mandated Environmental Impact Statement (EIS) must be done prior to federal approval of funding for final design and construction of the project. The South Corridor Project represents the southern portion of the larger South/North Project. Interstate MAX is the northern part and is expected to open this spring. Phase 2 of the South Corridor Project will include the Milwaukie light rail project.

ANALYSIS/INFORMATION

1. Known Opposition None.

2. Legal Antecedents On April 12, 2001, the Metro Council adopted Resolution No. 01-3051 (For the Purpose of Authorizing the Issuance of a Request For Proposals For Personal Services For the South Corridor Study Supplemental Draft Environmental Impact Statement), authorizing the release of a Request for Proposals (RFP) for consultant assistance on the South Corridor Project. The RFP solicited proposals for Conceptual Design, Social and Environmental Analysis, Transportation Analysis and Financial Analysis and Technical Assistance. The RFP also stated Metro's intent to amend the initial contracts for work on the FEIS at Metro's discretion. Four contracts were executed and the work was completed. The SDEIS was published in December 2002 and the ASDEIS was published in October 2003. These contract amendments will support completion of the South Corridor FEIS.

Separate from the history of the contracts related to the South Corridor, there is a long history of legal actions that have led to the current action on the South Corridor Project, including federal authorizing legislation for the South/North Project, state legislative action for the Land Use Final Order, and numerous regional and local jurisdiction actions. The most recent actions by the Metro Council include:

- Adoption of Resolution No. 03-3303 on April 17, 2003 (For the Purpose of Amending the Locally Preferred Strategy For the South/North Corridor Project to Define a Two-Phased Major Transit Investment Strategy For the South Corridor, With the I-205 Light Rail Transit Project as the Phase 1 Locally Preferred Alternative Followed By the Milwaukie Light Rail Transit Project in Phase 2), amending the Locally Preferred Alternative for the South Corridor to include the I-205 Light Rail Alignment;
- Adoption of Resolution No. 04-3403 on January 15, 2004 (For the Purpose of Finalizing the Decision to Add the Portland Mall Alignment to the Locally Preferred Alternative For Phase I of the South

Corridor Light Rail Project), amending the Locally Preferred Alternative to include the Portland Mall light rail alignment with a terminus at PSU in downtown Portland; and

- Adoption of Resolution No. 04-3372 on January 15, 2004 (For the Purpose of Amending the South/North Land Use Final Order, to Include the Two Phases of the South Corridor Project Consisting of the Addition of the I-205 Light Rail Transit Project From Gateway to Clackamas Regional Center With the Downtown Portland Transit Mall Alignment, and Modifications of the Proposed Light Rail Between Downtown Portland and Milwaukie, Deletion of Plans to Extend Light Rail From Milwaukie to Clackamas Regional Center, and to Reflect the Final Interstate Max Design), amending the South/North Land Use Final Order to include the I-205 light rail alignment and the downtown Portland Mall alignment to PSU.

3. Anticipated Effects This action will authorize the Chief Operating Officer to execute amendments to three contracts with consultant firms to assist Metro and TriMet staff in completion of the South Corridor Project (I-205/Portland Mall) Final Environmental Impact Statement. The attached draft scopes of work and budgets provide additional details of the proposed contract amendments. Metro staff is continuing to refine the details and the final contract amendments will likely vary slightly from the attached drafts.

4. Budget Impacts The adopted Metro budget has anticipated amendments to these contracts to complete the FEIS. The concurrent resolution authorizing an IGA with TriMet will provide the revenue to Metro to pay for these contracts. Work on the FEIS will extend into the FY 04-05 budget year.

The budget estimates for these three contracts are as follows:

• Metro Contract No. 923312 URS (environmental)	\$500,000
• Metro Contract No. 923313 DKS (traffic)	\$175,000
• <u>Metro Contract No. 923315 Siegel Associates (financial)</u>	<u>\$ 20,000</u>
• Total	\$695,000

RECOMMENDED ACTION

Michael J. Jordan, Chief Operating Officer, with the concurrence of David Bragdon, Council President, recommends adoption of Resolution No. 04-3425.

ATTACHMENTS:

- Attachment A: Draft URS Scope of Work and Budget
- Attachment B: Draft DKS Scope of Work and Budget
- Attachment C: Draft Siegel Consulting Scope of Work and Budget

URS Environmental Consultant Scope of Work and Budget Draft - February 18, 2004

The purpose of this work scope is to outline the URS consultant team's role and project deliverables. This work scope amends the previous consultant work scope for the South Corridor DEIS. The prime consultant for this work is URS with assistance from Leon Skiles and Associates, TW Environmental, Newlands Company, and Archaeological Investigations Northwest (AINW). This work scope assumes a 9 month with the consultant work ending on or about September 30, 2004.

Metro has requested that the South Corridor consultant team assist them in the development of the South Corridor Final Environmental Impact Statement (FEIS). This analysis will look at the impacts and mitigation measures associated with the Locally Preferred Alternative (LPA) The LPA consists of the I-205 LRT alignment and the LRT alignment on the Transit Mall.

1. Air Quality Analysis

Both the I-205 alignment and downtown segment of the preferred alignment alternative are included in the currently conforming RTP. The only potential issue for the regional analysis would be if the configurations under consideration for the downtown segment cause regionally significant changes in emissions and require a modification to the regional conformity analysis. I have assumed that this is unlikely and that only minor analysis may be needed to support a finding of no significant change to the regional analysis results.

Task 1.1 – Regional Verification

A limited analysis of the potential regional emissions changes due to design options under consideration for the downtown segment will be performed. It is assumed that the analysis will focus on rerouting of buses and will compare bus VMT and speed information.

Task 1.2 - Develop Emission Factors

TW Environmental will use the U.S. Environmental Protection Agency's (EPA) MOBILE5a_H, or MOBILE6 model to calculate emission factors for use in the hot spots analysis. The model input will either be consistent with the assumptions used in attainment planning (in the case of MOBILE5a_H), or will be developed in coordination with DEQ and Metro staff. Model input assumptions will be summarized in a memorandum and distributed to DEQ and Metro staff prior to performing the modeling.

Task 1.3 - Local Hot Spots Analysis

TW Environmental will perform a hot spots analysis following the guidance in the 1992 EPA document *Guideline for Modeling Carbon Monoxide from Roadway Intersections* and EPA guidance for analyses in maintenance areas. For purposes of budgeting, it is assumed that a **maximum of 6 intersections** will be modeled for existing, no build, and the build alternative for a maximum of three analysis years. The draft budget assumes that the 6 intersections will include all potential impacts including those from park-and-ride facilities.

Modeling will be performed using the EPA CAL3QHC model. Model input assumptions will be included in the methodology memorandum submitted to DEQ and Metro staff prior to modeling.

Task 1.4 – Prepare Report

An air quality technical memorandum will be prepared. The memorandum will include existing conditions, analysis methodology, results, and supporting documentation. The memorandum will include a qualitative discussion of construction related impacts. A brief summary will be prepared and delivered electronically for inclusion in the Final Environmental Impact Statement. The draft budget assumes we will provide one version of a draft memorandum, and a final memorandum.

2. Consultant Project Management

The consultant Project Manager will conduct the day to day management of the consultant resources and team for the FEIS and associated environmental issues. Metro and TriMet Staff will work directly with the consultant task managers. The budget assumes that the project manager will attend weekly Metro staff meetings, conduct monthly consultant coordination meetings and if requested by Metro attend meetings with regulatory agencies. These tasks include but are not limited to:

- Sub-Consultant Contracts and Invoices
- Consultant Team Budget Tracking and Management
- Weekly two (2) hour meetings with Metro's Project Manager and staff (up to 25 meetings)
- Invoicing including Preparation of monthly project status reports
- Conduct consultant coordination meetings as needed
- Meetings with regulatory agencies (up to 6 meetings @2 hours each)

3. Contingency

A contingency of \$50,000 is included in the contract budget. The contingency is included to cover the cost of additional consultant support that may be required due to currently unforeseen circumstances or issues that may be identified during the FEIS work. The contingency is available at Metro's discretion for work by the consultant team. Utilization of the budget contingency requires authorization in writing by the Metro's Contract Manager. Authorization to use the contingency will be made only when a detailed Scope of Work and Budget are agreed upon between Metro and the URS Team.

4. Document Production and Editing

The FEIS document production and editing includes assistance on drafting, editing, reviewing, and revising the FEIS Document. The document is expected to be approximately 300 pages plus appendices. The FEIS document will be subject to a series of reviews and edits by numerous groups such as Metro and TriMet staffs, local jurisdiction staff and elected officials, state and federal regulatory agencies, and the Federal Transit Administration and the Federal Highway Administration. The document will be prepared consistent with federal, state, regional and local laws and regulations, and must be done in the format as identified in the South Corridor Project Style Guide. The FEIS document will be created and reviewed by Chapter and Topic as identified in the *draft Table of Contents for the South Corridor Project (I-205/Portland Mall) Final Environmental Impact Statement*. All final graphics will be produced by Metro staff and all tables in the document will be in the format as defined in the Style Guide.

5. Ecosystems and Water Quality Analysis (2/09 draft)

This section describes detail for the hours and cost spreadsheet for the South Corridor FEIS project for an Ecosystems FEIS section, wetland delineations/determinations, a Wetlands FEIS section, a Water Resources Analysis and FEIS section, a Biological Assessment, a mitigation plan and overall task management for these tasks. The hours and costs in the attached spreadsheet are based on the tasks and assumptions outlined below.

Task 5.1 – Draft and Final Fish/Wildlife Ecosystems FEIS Section

Task 5.1a - Research and Summarize Change Conditions

Resource specialists including NEPA and ESA specialists will review changes in physical conditions, species listing designations, or design changes since issuance of SDEIS. This will be done in an interdisciplinary format to understand and coordinate integrated and connected actions that might occur from these changes. This process (agreement by all resource specialists) will assist in the streamlining of ESA consultation and the FEIS review process.

Task 5.1b – Author and Submit Draft Fish and Wildlife Ecosystems FEIS Section

Resource specialists will compose the draft fish and wildlife ecosystems section, submit it for peer review, revise accordingly, and submit for Metro comments. The format of this memo will follow guidelines outlined by Federal NEPA and CEQ regulations which meet FTA and/or FHWA requirements. This format will be reviewed and agreed on by Metro.

Task 5.1c – Final Fish and Wildlife Ecosystems FEIS Section

Revise fish and wildlife ecosystems FEIS section according to Metro's comments and submit Final Fish and Wildlife Ecosystems FEIS section for Metro's incorporation into the FEIS, as appropriate.

Task 5.1d – 3 Coordination meetings for 2 people at 3 hours per meeting

Deliverables –

- Detailed outline of FEIS section
- Draft and Final FEIS section

Assumptions

- That wildlife and botanical work needs are extremely limited.
- Metro will purchase ONHP species list and request USFWS/NOAA Fisheries species lists

Task 5.2 - Conduct Wetlands Delineations and Determinations

Task 5.2a – Wetlands Project Review

Review existing data and, where appropriate, conduct wetland delineation along project corridor as required in the DEIS and Supplement.

Task 5.2b – Wetland Delineation Report

Wetland ecologist will prepare a wetlands delineation and function and value assessment for the Johnson Creek area and produce a document incorporating Task 2a information. This will be submitted for peer review and assembled for a draft to submit to Metro for comments. Comments will be incorporated into the final and submitted to Metro.

Deliverables

- Draft and Final Wetland Delineation Report
- function and value assessment for Johnson Creek and
- review of remaining corridor.

Assumptions

- That a wetland review will be conducted along the entire route as specified in the DEIS. This work will include delineation for the Johnson Creek Crossing, which was included in the Wetland Determination Report.
- That no further wetlands will be identified for delineation and no Clean Water Act section 404 or conceptual wetland mitigation plan will be required (riparian mitigation may be needed). If more wetland areas are identified along the route, a scope and/or budget amendment to include more tasks will be required.
- That Metro will obtain landowner permission for access to properties other than ODOT/FHWA right-of-way.
- HGM-based judgmental assessment will be used. Metro's and DSL's comments will be minor and not require development of additional information or field studies.

Task 5.3 - Author Draft and Final Wetlands FEIS section; submit to Metro

Task 5.3a - Wetland ecologist will research and summarize conditions, designation, or design changes since issuance of SDEIS, if any.

Task 5.3b - Prepare FEIS section; complete peer review and address comments; assemble draft and submit for Metro comments. This FEIS section will follow the outline for aquatic and terrestrial as noted in Task 5.1.

Task 5.3c - Review Metro comments; revise draft, peer review; re-submit to Metro.

Deliverable – Draft and Final Wetland FEIS section

Task 5.4 – Author Draft and Final Water Resources Analysis and FEIS section

Task 5.4a – Review information and changes

Research and summarize conditions, designation, or design changes since issuance of SDEIS, if any. Water resource specialist including NEPA and ESA specialists will review change conditions, designation, or design changes since issuance of SDEIS. This will be done in an interdisciplinary format to understand and coordinate integrated and connected actions that might occur from these changes. This process (agreement by all resource specialists) will assist in the streamlining of consultation and FEIS review process in the future.

Task 5.4b – Water Volumes

Analyze existing and with-project runoff volumes and peak flows; develop appropriate BMPs; develop estimates of existing and with-project impacts after implementation of BMPs.

Task 5.4c – Assess new design

Analyze new I-205 corridor design for water quality, water quantity, and floodplain impacts.

Task 5.4d – Draft FEIS section

The water resource specialist will submit FEIS section or new information analysis for peer review; assemble draft and submit for Metro comments. The format of this memo will follow guidelines outlined by Federal NEPA and CEQ regulations for New Information Analysis, which meet FTA requirements (outlined in Task 1). Water resource specialist will address Metro comments and submit final FEIS section and NIA for Metro to incorporate into the FEIS as appropriate.

Task 5.4e – Review Metro comments and revise draft

Task 5.4f – 5 Coordination meetings for 1 person at 3 hours per meeting

Deliverables – Draft and Final FEIS section for water quality and quantity

Assumptions

- Assumes pre-treatment and infiltration on-site at Park and Ride lots, percolation tests not available and not conducted by contractor.
- Assumes that tie and ballast is considered a pervious surface; track is impervious only where currently impervious.
- Does not include development of performance specifications for selected design team (Metro or Consultant).

Task 5.5 – Draft and Final BA

Task 5.5a – Draft BA; submit to Metro

Prepare draft BA; peer review; submit to Metro for comment.

Task 5.5b - Final BA; submit to Metro

Review and address Metro comments; peer review; prepare final document for submittal to regulatory agencies.

Task 5.5c - Final BA; respond to agency comments

Review and respond to NOAA Fisheries comments, if any; prepare final document for re-submittal and completion of consultation.

Task 5.5d – Water Resource Coordination

Coordinate water resources/ stormwater data for BA and Fish/Wildlife FEIS sections.

Task 5.5e – 5 coordination meetings for 1 person at 3 hours per meeting

Deliverables – Draft and Final Biological Assessment for aquatic species and a No Effect letter for terrestrial species

Assumptions

- Assumes No Effect for USFWS species, and Formal consultation for NOAA Fisheries species. Assumes that a determination has been made regarding the use of 30% designs to complete ESA Consultation and/or that a ROD may be issued without conclusion of ESA Consultation.

- Assumes pre-treatment and infiltration will occur on-site at Park and Ride lots, percolation tests not available and not conducted by contractor.
- Assumes that tie and ballast is considered a pervious surface; track is impervious only where currently impervious.

Task 5.6 – Prepare Mitigation Plan

Task 5.6a – Obtain mitigation measures from aquatic, terrestrial, water resources and wetlands sections of the FEIS. Organize these measures according to: effectiveness mitigation and monitoring, implementation mitigation and monitoring; and permit conditions mitigation and monitoring. Peer review the draft plan and incorporate suggested revisions. Assemble draft for Metro comments.

Task 5.6b –Review and address Metro comments; peer review the final plan and submit to Metro.

Task 5.6c – 3 coordination meetings for one person at 3 hours per meeting

Task 5.7 - Environmental Task Management

Task 5.7a – Project Kickoff

Attend project kick-off meeting, set up and monitor Natural Resources administrative and financial systems; monitor execution of tasks (QAQC), prepare and submit invoices and associated documents.

Task 5.7b – Monthly in-house interdisciplinary meetings Organize and attend monthly in-house project status meetings.

Task 5.7c – 4 Coordination meetings for one person at three hours per meeting

Deliverables –

- Monthly status reports
- Kickoff Meeting notes

Overall Assumptions

- One round of comment-response for FEIS sections and reports will be sufficient.
- That no substantive change to relevant SDEIS sections will be necessary beyond review and minor revision and supplementation for the FEIS sections.
- That time spent on external coordination meetings/phone conferences will be limited to the meetings/phone conferences listed per section in the spreadsheet.
- All final GIS work and figure creation will be done by Metro.

6. Hazardous Materials Investigation and Risk Assessment

The SDEIS and ASDEIS have identified a number of Hazardous Materials sites in close proximity to the LPA that would need to be examined in more detail in the FEIS and Final Design phases. Previous Hazardous Materials work is incomplete in the downtown area south of PSU. Analysis will focus on sites that may present a risk to the LPA. Updating information on the current status of

remediation on some sites may be necessary. A mitigation plan for construction will be required for contaminated sites.

URS staff will assist Metro staff and TriMet engineers on this task. Metro will manage this task. URS staff will provide consultant assistance. Metro will draft the FEIS section and URS staff and TriMet will review and comment. URS staff will prepare a draft Hazardous Materials mitigation plan that will be closely coordinated with TriMet engineers and construction management staff.

7. Historic and Cultural Resource Analysis

There is a significant amount of new work to be done for this task for the FEIS. Archaeological Investigations NW will provide historic, cultural and archaeological assistance to Metro staff on this task. A large body of work was done for the S/N DEIS, and it was used for the SDEIS and ASDEIS. However, it is largely out of date and the State Historic Preservation Office (SHPO) expects it to be done to newer standards. The SHPO has new forms for determinations of eligibility and determinations of effect. There are several resources (approximately 10) that need to have National Register eligibility determined. Each determination requires use of the SHPO's form and could require significant research and documentation. All the identified historic resources that are within the area of potential effect must also have the SHPO's determination of effect forms prepared. There are approximately 66 historic resources that must have effect forms prepared.

Formal Consultation with the SHPO will be required to negotiate a Memorandum of Agreement (MOA) to mitigate the effects of the project on historic resources. The mitigation will need to be clearly defined and agreed to. The previous work (including a draft MOA) will be helpful, but staff turnover at the SHPO and the amount of new work that must be done will make this task challenging.

Metro will manage this task and be the primary contact with the SHPO. Consultant assistance will be required to complete the research and documentation on the determination of eligibility forms. Either Metro staff will prepare the first draft of the determination of effect forms. Consultant assistance will be required to review the forms and support the development of the mitigation plans. Details of the downtown station locations will be important information in preparation of the effect forms because the effects relate directly to the proximity of stations to the historic resources.

8. Noise and Vibration Impact Analysis

Although an analysis needs to be completed to verify the status of potential noise impacts in downtown, previous analyses have shown noise impacts are unlikely in this area. Potential noise impacts were identified for the I-205 segment during the SDEIS analysis. Therefore, the primary topics to be addressed by the Noise and Vibration analysis are the development of a noise mitigation plan for the I-205 segment, and a careful analysis of potential vibration impacts in downtown. The potential for noise impacts downtown and vibration impacts along I-205 also need to be verified.

Task 8.1 - Field Monitoring and Mapping

TW Environmental staff will collect additional 24-hour monitoring data along I-205 to assess existing noise levels. 24-hour monitoring data will be collected at a maximum of 8 locations. Photographs of microphone placement will be taken at each monitoring location and existing noise

sources will be documented. Limited traffic counts for I-205 will be taken during certain hours of the monitoring for use in calibration of the noise model to be used in the mitigation analysis.

The current land use of 1st row and some 2nd row structures will be mapped for use in determining impacts for both the I-205 and downtown segments.

Task 8.2 – Estimate Operational Noise Impacts

Source noise levels will be estimated using previous measurements of similar trains or using FTA calculation methods for train passbys. We have assumed no new measurements will be required and that we will coordinate with Metro staff to develop source levels for train operating conditions. Using the source-level data, LRT noise levels will be estimated at locations of interest during the peak operational period and over a 24-hour period. These calculations will follow FTA guidance for detailed analyses. Calculated sound levels will be compared with existing monitored levels to estimate project-related noise impacts.

Based on sound level measurements and calculated levels of LRT noise, total noise levels will be estimated at sensitive receptor locations and impacts will be identified.

Task 8.3 - Analyze Noise Mitigation Measures

Several areas along I-205 were identified in the DEIS where noise mitigation would potentially be feasible. Responsibility for mitigation of LRT noise impacts is limited to the impacts themselves. Metro and TriMet are not responsible for mitigating existing noise levels for I-205. However, the overall effectiveness of noise mitigation can potentially be significantly affected by I-205. Therefore, for the segment of LRT line adjacent to I-205 between approximately Division Street and Sunnyside Road, the Transportation Noise Model (TNM) will be used to evaluate barrier type mitigation measures. I-205 traffic data will be included in the modeling. The LRT line will be input to the model as a new vehicle type and the model will be used to facilitate an understanding of the performance of mitigation in the complex topography and noise environment of the alignment.

FTA does not have criteria for cost effectiveness. To serve as a preliminary guide to cost effective mitigation, the ODOT barrier cost effectiveness criteria will be used in evaluating potential barrier mitigation measures in the I-205 corridor. A preliminary summary of the mitigation effectiveness and cost effectiveness using ODOT criteria will be presented to the Metro team for discussion and guidance in developing the final mitigation plan. We have assumed 2 3-hour meetings will be sufficient to discuss the preliminary results, make decisions and confirm a final approach.

In addition to the LRT-only analysis, a section of existing noise wall on the west side of I-205 near Sunnyside Road will require relocation. An analysis of the existing and future configuration of the wall will be performed at a level sufficient to obtain a clearance approval for the relocation from ODOT.

A qualitative discussion of construction noise impacts and mitigation will be prepared. Detailed calculations of construction noise impacts will not be provided.

Task 8.4 – Vibration Assessment

Potential vibration impacts associated with the operation of the LRT will be analyzed using data and analysis methods included in the South/North Corridor Project Noise and Vibration Impacts Results

Report (February 1998). The vibration estimation method used in the report appears reasonably conservative. Background vibration levels will be assumed typical and existing background vibration will not be measured. Assumptions about track configurations relative to vibration force density spectra will be verified with HMMH staff. If areas of potential vibration impact are identified, general mitigation measures will be identified and discussed with the project team prior to inclusion in the mitigation plan.

Task 8.5 - Prepare Noise and Vibration Mitigation Plan

A noise and vibration mitigation plan will be prepared. The report will include existing conditions, a regulatory analysis that includes local regulations, analysis methodology, results, and supporting documentation. A brief summary will be prepared and delivered electronically for inclusion in the Environmental Impact Statement. I have assumed we will provide one version of a draft report, and a final report. For budgeting purposes, I have assumed we will provide five copies of the draft and final reports.

Project Team Meetings and Public Meeting Support

TW Environmental staff will prepare for and attend up to 2 public information meetings to present and discuss noise and vibration analysis results. I have assumed that we will provide graphics in 11-inch by 17-inch format. If wall graphics are required, I have assumed URS, or Metro will prepare them. I have assumed attendance at 4 project team or project management team meetings.

9. Technical Support, Analysis and Assistance

The work performed under this task includes assistance to Metro and TriMet Staff on preparation of the following sections of the FEIS:

- Executive Summary
- Chapter 1 Purpose and Need
- Chapter 2 Description of the Alternatives
- Chapter 4 Transportation Impacts
- Chapter 7 Evaluation of the Locally Preferred Alternative

Leon Skiles and Associates will provide the primary consultant assistance on this task.

10. Visual Analysis

The Visual Analysis for the South Corridor FEIS will require revisions to the SDEIS and ASDESI sections on Visual Analysis to reflect the selection of the LPA and Public Comments received during the two public comment periods. URS Staff will draft the Visual Impacts and Mitigation section of the FEIS.

11. Visual and Video Simulations

Visual Simulations are very effective in presenting the project to the general public and elected officials in a way that makes it much easier to understand. New video simulations will be prepared for the Downtown Mall, reflecting the revised station locations and design, once there is agreement.

Also a video simulation will be prepared for the I-205 LRT alignment. Donald Newlands will prepare these simulations with assistance from Metro staff and TriMet engineers.

URS Team Draft Budget Estimate:

URS Budget for the South Corridor Project FEIS	
Task	Budget
Air Quality	25,000
Consultant Project Management	25,000
Contingency	50,000
Document Production and Editing	40,000
Ecosystems and Water Quality	150,000
Hazardous Materials	15,000
Historic and Cultural Resources	25,000
Noise and Vibration	70,000
Technical Support (Skiles)	50,000
Visual Analysis	5,000
Visual and Video Simulations	45,000
Total	500,000

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FEIS Traffic Scope of Work
DKS Associates
February 18, 2004 - Draft

Introduction

This Work Scope describes the tasks that will be performed by the traffic consultant in support of the overall South Corridor Final Environmental Impact Statement (FEIS). These tasks include updating the intersection analyses to a 2025 forecast year, further refinement to traffic issues identified in the South Corridor SDEIS and the Downtown Amendment to the South Corridor SDEIS and analysis of traffic issues where the light rail design has been modified.

The FEIS traffic analysis will use output from updated 2025 regional travel demand model runs. The 2025 model runs will be based on the Financially Constrained network in the Regional Transportation Plan (RTP) federal update, which was completed in January 2004.

This traffic analysis will include two alternatives, No-Build and the Locally Preferred Alternative (LPA). The No-Build Alternative will be based on the updated Financially Constrained RTP roadway and transit networks and will be consistent with the No-Build Alternative analyzed in the SDEIS and ASDEIS. The LPA will include I-205 Light Rail between Clackamas Town Center and Gateway operating through-routed to downtown Portland and using the Portland Mall alignment between the Steel Bridge and SW Jackson Street near Portland State University (PSU).

Task 1: Update Intersection Analyses to 2025 Forecast Year

Purpose: The intersection analyses included in the South Corridor SDEIS and the Downtown Amendment to the South Corridor SDEIS were based on 2020 travel forecasts that were developed consistent with the RTP 2020 Financially Constrained network. FTA has requested that the FEIS use a 2025 forecast year for both traffic analysis and ridership forecasts. Metro will prepare new Financially Constrained 2025 travel forecasts based on updated RTP networks and TAZ growth allocations.

Study Approach: Metro will provide the consultant with an EMM2 bank that includes the 2025 traffic assignment. The consultant will update the intersection analyses for the No-Build and Build Alternatives using Synchro to determine the level-of-service (LOS), delay and queuing at the intersections previously studied in the SDEIS and ASDEIS at the following locations:

- CTC Subarea 9 previously studied intersections
- Fuller Rd. Subarea 9 previously studied intersections (P&R change)
- Foster-Flavel Subarea 7 previously studied intersections (P&R change)
- Stark-Powell-Holgate Subarea 10 previously studied intersections (P&R changes)
- Gateway-Rose Quarter No intersection analysis
- North Transit Mall Subarea 14 previously studied intersections
- Central Transit Mall Subarea Intersection analysis needs TBD
- South Transit Mall Subarea 19 previously studied intersections

Inputs: Metro will provide an assigned p.m. peak hour EMME2 bank to the consultant. Metro will also provide the consultant with detailed plan and profile sheets and bus route and light rail operations information.

Product: The product of this task will be tables and graphics for the FEIS and Mitigation Report that describe the intersection LOS, delay and queuing.

Schedule: Metro will provide the assigned EMME2 bank by April 1, 2004. The consultant will complete this task, including tables and graphics by May 31, 2004.

Task 2: Prepare 2025 Analysis for New Intersections

Purpose: As a result of modifications to the Build Alternative design, some intersections not included in the SDEIS or ASDEIS need to be analyzed. This analysis will be developed to be comparable to the Synchro analysis described above in Task 1.

Study Approach: Metro will provide the consultant with an EMME2 bank that includes the 2025 traffic assignment. The consultant will prepare the intersection analyses for the No-Build and Build Alternatives using Synchro to determine the level-of-service (LOS), delay and queuing at the following locations:

- Approximately 6 intersections in the vicinity of the Main Street P&R
- Approximately 5 intersections between Rose Quarter and NE 13th Avenue
- Approximately 8 intersections in downtown Portland.

Inputs: Metro will provide an assigned p.m. peak hour EMME2 bank to the consultant. Metro and TriMet will also provide the consultant with detailed plan and profile sheets and bus route and light rail operations information.

Product: The product of this task will be tables and graphics for the FEIS and Mitigation Report that describe the intersection LOS, delay and queuing.

Schedule: Metro will provide the assigned EMME2 bank by April 1, 2004. The consultant will complete this task, including tables and graphics by May 31, 2004.

Task 3: Additional Traffic Analysis by Subarea

Purpose: The purpose of this task is to prepare traffic analyses that address specific issues in each of the subareas. This includes locations where the design has been modified subsequent to the SDEIS and issues where the need for more detailed assessment was identified in the SDEIS. In addition, some traffic issues have been identified through the design process. The FEIS traffic consultant will coordinate with TriMet's design team to analyze specific design-related traffic issues. This task addresses analysis over and above the updated intersection analysis.

Study Approach: This task will address the following issues in each subarea:

Clackamas Town Center Subarea – Updated designs include a new access road at SE 95th and Monterey. The consultant will modify the traffic analysis to include this intersection.

Fuller Road Subarea – The consultant will update the discussion of Fuller Road Park-and-Ride access to reflect the new park-and-ride design, size and location. This will include discussion of the likely access and egress routes for park-and-ride traffic. The updated park-and-ride site may include a direct access to SE Otty Road. The consultant will update all of the traffic analysis in this subarea to reflect the decisions made regarding future access patterns at SE Johnson Creek Boulevard and SE Fuller Road and the revised park-and-ride access. The consultant will also analyze the need for a traffic signal at the intersection of SE Otty Road and SE Fuller Road, using updated traffic counts if needed.

Foster – Flavel Subarea - The consultant will update the discussion of Foster Road Park-and-Ride access to reflect the new park-and-ride design, size and location. This will include discussion of the likely access and egress routes for park-and-ride traffic and potential downstream traffic impacts. If the new park-and-ride design includes access via SE 92nd Avenue, the consultant will need to address intersection operations and turn lane configuration at the intersections of SE 92nd at Holgate, SE 92nd at Foster, SE 92nd at Woodstock and SE 92nd at the park-and-ride access points. The consultant will also describe how the traffic associated with the proposed park-and-ride works in coordination with PDC and community plans for traffic operations in downtown Lents.

Stark-Powell-Holgate Subarea – The Holgate Park-and-Ride has been reduced from the 400 spaces analyzed in the SDEIS to approximately 125 spaces. The consultant will update the analysis to reflect the smaller size and determine if the park-and-ride access requires a traffic signal. The Powell Park-and-Ride remains at 400 spaces as analyzed in the SDEIS, but the street alignment is slightly modified. The consultant will determine the need for a traffic signal at the park-and-ride access and reconfirm the mitigation plan for SE 92nd and Powell Boulevard. This will include working with the TriMet design team on the half-street improvement proposed between the park-and-ride access and Powell. The Main Street Park-and-Ride was not included in the SDEIS. The consultant will prepare an analysis of the impacts associated with the Main Street Park-and-Ride, including a determination of the need for a traffic signal at SE 96th and Main Street at the park-and-ride access.

North Mall Subarea – The consultant will work with the TriMet design team to further develop concepts for the proposed traffic signal operation at the west end of the Steel Bridge. The consultant will coordinate with the TriMet design team to prepare two plans for motor vehicle, bus and LRT operations in the vicinity of W Burnside and NW Couch Streets. One plan will assume the status quo (Burnside and Couch operate as they do today) and a second plan will assume the full implementation of the city's Burnside-Couch couplet plan. The consultant will also provide a qualitative assessment of the impact of the North Mall LRT operations to the function of the downtown “portal” locations at NW Everett and NW Glisan.

Central Mall – The consultant will provide a qualitative assessment of the impact of the Central Mall LRT operations to the function of the downtown “portal” locations at SW Washington and Alder.

South Mall – The consultant will update, as needed, the SDEIS South Mall analyses regarding diversion from SW 5th and 6th Avenues to SW 4th Avenue and SW Broadway. The consultant will work with Metro and City staff to determine whether the traffic forecasts used for downtown Portland should be updated based on the change from a 2020 forecast year to a 2025 forecast year. The consultant will also coordinate with TriMet and ODOT to address issues related to access to and from the I-405 ramps. This could include analysis of intersections south of I-405 as requested by ODOT. The consultant will also

provide a qualitative assessment of the impact of the Central Mall LRT operations to the function of the downtown “portal” locations at SW Clay and Columbia.

Inputs: Metro will provide an assigned p.m. peak hour EMME2 bank to the consultant. Metro and TriMet will also provide the consultant with detailed plan and profile sheets and bus route and light rail operations information. The consultant and Metro will coordinate with City staff to determine if revisions to the downtown Portland traffic forecasts are required.

Product: Technical memoranda addressing the traffic analysis issues for each subarea.

Schedule: Technical memoranda should be completed by June 30, 2004.

Task 4: Prepare FEIS Sections

Purpose: The consultant will prepare a first draft and a final draft of a traffic impacts section to be included in Chapter 4 Transportation Impacts in the FEIS. This section will address pedestrian, bicycle and automobile impacts associated with the Build Alternative when compared with the No-Build Alternative.

Study Approach: The pedestrian and bicycle impacts are not expected to change significantly from the SDEIS and ASDEIS. The consultant will update and incorporate the pedestrian and bicycle analysis into the FEIS text.

The automobile impacts section will be based on the updated 2025 forecast and will include the updated intersection analysis and new analysis based on park-and-ride lot changes and downtown alignment changes.

Inputs: The SDEIS and ASDEIS provide the basis for much of the impacts discussion to be included in the FEIS. The FEIS write-up will also use the updated analysis described in Tasks 1 & 2.

Product: The Traffic Impacts and Mitigation section for the FEIS.

Schedule: The FEIS section should be completed by June 30, 2004

Task 5: Prepare Traffic Mitigation Plan

Purpose: The consultant will prepare a traffic mitigation plan by subarea. The mitigation plan will describe traffic signal operations, signal priority and preemption, intersection channelization, turn pocket lengths, and other traffic operations elements as needed to mitigate impacts *directly* associated with the operation or design of the I-205/Portland Mall LRT or the new park-and-ride lots included in the I-205 segment.

Study Approach: Based on the mitigation criteria included in Chapter 2 of the *South Corridor Project Local Traffic Impacts Results Report* (December 2002), the consultant will identify locations where direct traffic impacts that would require mitigation are found. The consultant will work with the TriMet design team, City of Portland and Clackamas County to identify and test possible mitigation concepts. This task shall utilize and update mitigation analysis previously developed for the SDEIS. The

consultant will assist the TriMet design team to reach consensus with local jurisdictions regarding the mitigation plans.

Inputs: The consultant will use the updated 2025 intersection analysis results and the mitigation concepts developed for the SDEIS.

Product: The Traffic Mitigation Plan to be produced as a stand-alone report or as part of a larger, comprehensive FEIS Mitigation Plan.

Schedule: The mitigation plan should be completed by July 15, 2004

Budget:

The current estimate for these tasks is **\$175,000**. Metro Staff will continue to work with DKS to refine the scope and budget prior to execution of the contract amendment.

South Corridor FEIS Scope of Work and Budget Financial Analysis - Siegel Consulting

Task Description: This task develops and describes the financial plan to fund the capital and operating costs of the South Corridor I-205/Portland Mall Light Rail Project. Previously completed work in the South Corridor SDEIS and the Downtown Amendment to the SDEIS will be updated and local funding commitments secured during the FEIS phase of the project. Inputs required for this task include capital and operating cost estimates, the proposed construction schedule and capital expenditures by federal fiscal year. Outputs of this task include:

- Capital funding plan including confirmed local, state and federal funding sources.
- Identification of the costs of borrowing or interim financing when federal appropriations or availability of local sources lag behind construction requirements
- Detailed cash flow analysis for construction
- Assessment of project capital feasibility
- System fiscal feasibility analysis including effect on working capital and capital reserve
- Analysis of risks and uncertainties
- Implementation of the financing plan

Roles and Responsibilities: Metro and TriMet staff will develop inputs for this task and coordinate the overall development of the finance plan with local jurisdictions, the state and FTA and FHWA. The Consultant will perform the detailed financial analyses and will assist Metro and TriMet in the development of the overall funding strategy for the project. Consultant products will include a draft and final version of the *FEIS Chapter 6 - Financial Analysis*, as well as materials required for developing and negotiating the finance plan with project partners. The consultant may also participate in discussions with FTA and FHWA regarding the project's federal funding.

Budget:

To complete this work, a \$20,000 amendment will be made to Metro Contract No. 923315 with Siegel Consulting.