



November 21, 2005

Dale Schroeder
Director of Public Works
City of SeaTac
4800 S. 188th Street
SeaTac, WA 98188

Central Link Light Rail Project
Airport Link Stormwater Management

Dear Dale:

Sound Transit is proposing to discharge drainage from its trackway, the SeaTac / Airport station, pedestrian overpass, and kiss & ride into the City of SeaTac's storm drainage system at various connection points. At the International Boulevard trackway crossing and in the SR 518 interchange area, connections are proposed in the Gilliam Creek basin that would drain to the City's storm drainage system. Between Station 847+65 and the SeaTac / Airport Station (as shown on the 30% plans dated August 31, 2005) including the station, pedestrian overpass, and kiss & ride, runoff is proposed to be conveyed to the City's storm drainage system in the Des Moines Creek basin. The remainder of the trackway will be designed to drain to WSDOT's storm drainage system located in SR 518.

The aerial and at-grade trackway that Sound Transit is proposing to build for Airport Link is the same type as we are now constructing in Tukwila. Attached is a copy of a letter that Sound Transit sent to the City of Tukwila regarding the utilization of non-pollution generating light rail technology for the purpose of meeting their permitting requirements. Please note that this letter references and attaches concurrence letters received by Sound Transit from the USFWS and NOAA Fisheries regarding new non-pollution generating impervious surfaces associated with the Link light rail project. Upon review and discussion of this subject with Sound Transit, Tukwila imposed specific conditions for the management of stormwater runoff from the trackway through their Public Works Construction Permit, which was issued on May 18, 2005. (See attached Conditions 1 and 2).

It is Sound Transit's understanding that the City concurs with the conclusions made by federal regulatory agencies that under normal operating conditions, Sound Transit's light rail trackway system utilizes non-pollution generating technology in accordance with current regulations. Therefore, the City will not require Sound Transit to install water quality treatment systems to treat stormwater runoff from the Airport Link trackway prior to discharge to the City's existing storm drainage system. The City will also not require Sound Transit to monitor and test the runoff from the Airport Link trackway drainage system until such time as the City is required to implement a monitoring and testing program for its storm drainage system by other state or federal

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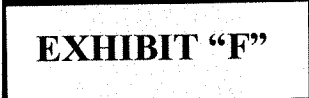
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CHIEF EXECUTIVE OFFICER

Joni Earl



regulatory agencies. Sound Transit agrees to install water quality improvements to bring trackway runoff into NPDES Phase 2 compliance, if necessary, as those requirements are promulgated. Sound Transit agrees the City's concurrence on water quality issues pertains to trackway runoff discharged to the City's storm drainage system.

Sound Transit provides routine maintenance and best management practices of the light rail facilities in order to ensure that water quality runoff is not degraded during operations. The light rail vehicles will contain limited quantities of fluids which are contained in sealed systems and short of a catastrophic failure, would not leak fluids on the trackway. In the event that fluids were leaked onto the trackway, Sound Transit maintenance staff will respond immediately with appropriate spill kit materials to capture the leak and prevent transfer into the City's storm drainage system.

The trackway requires periodic rail grinding to maintain the proper rail-wheel interface and is scheduled on a four to five year cycle. Sound Transit will utilize a track sweeper / vacuum truck that would be deployed in conjunction with rail grinding to ensure that all metal particles on the trackway are removed and do not enter the City's storm drainage system.

Sound Transit desires to substitute participation in funding of stormwater projects in the Des Moines Creek Basin that the City currently has planned in lieu of constructing a detention facility at the kiss & ride. The City will determine the appropriate drainage area scope based on the available existing conveyance capacity. Sound Transit will make a payment to the City in an amount equivalent to the construction cost of the detention facility that would be necessary to address the trackway stormwater directed to the City drainage system. The payment amount will be based on a mutually agreeable cost estimate. The City would be responsible for basin improvement design and construction. The City may, at its sole discretion, modify, delete, or add scope to the basin improvements with the understanding that Sound Transit's contribution for these improvements is fixed.

Sound Transit agrees to continue to work with the City, WSDOT, and the City of Tukwila to design acceptable stormwater management facilities for discharge into the Gilliam Creek Basin that satisfy the City's stormwater regulations.

If you have any questions, please feel free to contact Rod Kempkes, Airport Link civil design manager at (206) 398-5374 or by e-mail at kempkesr@soundtransit.org.

Please indicate your concurrence by signing below.

Sincerely,



Rod Kempkes, P.E.
Airport Link Design Manager
Link Light Rail



Robert R. Parsons, P.E.
Civil Engineering Manager
Link Light Rail

Dale Schroeder
November 21, 2005
Page 3 of 3

Concurrence:



Dale Schroeder
Director of Public Works
City of SeaTac

1 11/29/05
Date

Enclosures

C: Martin Schachenmayr
Phil Harrison
Leonard McGhee
Terry Beals
Steve Sheehy
Al Walley, HMM
Joe Kurrus, RWE
LDCC



February 5, 2004

Mr. Jack Pace
Department of Community Development
City of Tukwila
6300 Southcenter Boulevard
Tukwila, WA 98188-2544

**RE: UTILIZATION OF NON-POLLUTION GENERATING
TECHNOLOGY FOR LINK LIGHT RAIL ALIGNMENT**

Dear Jack:

At the January 8, 2004 UUP Coordination Meeting the City requested that Sound Transit provide materials supporting the conclusion that the trackway on the Central Link light rail project will be a non-pollution generating surface. Attached please find copies of appropriate pages from the November 1999 NOAA Fisheries Central Link Biological Assessment (BA) discussing pollution-prevention elements incorporated into Sound Transit's proposed vehicle design and the determination that new impervious surfaces used solely for light rail trackway are considered to be non-pollutant generating. Below I have also outlined some of the key points stated in the BA.

The WA Department of Ecology Stormwater Management Manual and King County Surface Water Design Manual define *pollution-generating impervious surface* as those impervious surfaces considered to be a significant source of pollutants in surface and stormwater runoff. Such surfaces include those subject to vehicular use; industrial activities; or storage of erodible or leachable materials, wastes, or chemicals, and which receive direct rainfall or the run-on or blow-in of rainfall. (Department of Ecology Stormwater Management Manual, Volume 1, p. 2-5, 2-6)

The BA discusses the estimated increases in new impervious surface for the light rail project and specifies that the design and implementation of specific water quality treatments will depend upon whether new impervious surface is considered non-pollutant or pollutant generating. Consistent with the manuals' definition above, the BA states that new impervious surfaces used for automobile traffic are considered to be pollutant generating, while new impervious surfaces used solely for light rail trackway are considered to be non-pollutant generating.

The BA notes that pollution-generating impervious surfaces associated with the light rail project include park-and-ride facilities, bus layover lots, and parking lots. As such, these surfaces will be designed to meet state standards for receiving water quality and the generation and release of pollutants as established by Ecology. In contrast, the light rail trackway is not considered a pollution-generating impervious

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Mr. Jack Pace
February 5, 2004
Page 2

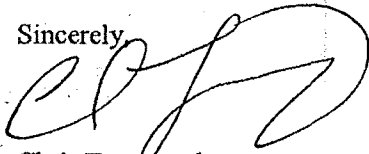
surface because the light rail vehicles are electric and therefore lack pollution-generating combustion engines. Potential sources of pollution from the proposed light rail vehicles would arise from the need for lubrication on vehicles (see also sources of potential pollutants in Table 6). Measures to prevent pollution from these sources include:

- Sealed housing roller bearings for all axle bearings
- Self-contained gear units with very long periods of operation between maintenance
- Totally enclosed and sealed motor bearings
- Enclosed truck bearings designed to exclude dirt
- Hydraulic brake systems which are likely to leak only during shop servicing when pollution control procedures will be employed
- Sealed door mechanisms
- Pantograph pivots with long-life, sealed units
- Enclosed, sealed electrical contractors
- On-board batteries contained within sealed enclosures
- Air conditioners with refrigerant enclosed in sealed system and motors with sealed bearings

The USFWS and NOAA Fisheries have concurred with the assertion that the new impervious surface associated with construction of the Link light rail project will be non-pollution generating, and concur that measures incorporated into design of light rail will prevent potential sources of pollution related to system operation. Copies of these concurrence letters are also attached.

If you have further questions about this issue please call me at (206) 398-5135.

Sincerely



Chris Townsend
Senior Environmental Planner

Enclosure

C: Nora Gierloff, City of Tukwila
Rod Kempkes, Sound Transit
James Irish, Sound Transit
Leonard McGhee, Sound Transit
Abigail Bonk, Sound Transit
Steve Sheehy, Sound Transit

Stormwater detention can provide some water quality benefits through settlement of suspended sediments and other pollutants. Detention ponds do not necessarily require a water quality component to function; however, they are typically combined with water quality facilities when treating runoff from pollution generating surfaces.

Water quality impacts are generally regulated by federal and state guidelines, usually through standards for receiving water quality and limitations on the generation and release of pollutants. Washington State's Department of Ecology (Ecology) has established regulations to protect water quality from point and non-point source pollution. A National Pollution Discharge Elimination System (NPDES) permit would be required for this project. If a general permit is obtained, specific discharge treatments, monitoring, and reporting requirements applicable to individual project sites would be included for park-and-ride and maintenance facilities and stations.

Significant water quality impacts are also not expected during construction if erosion control BMPs and spill control measures are properly implemented. This will be done by the contractor during construction; monitoring frequency, methods, standards, and reporting techniques will be established in a SWPPP.

DIRECT EFFECTS ASSOCIATED WITH LIGHT RAIL OPERATION

All Segments

Water Quality

Pollutants, sediment, and nutrients from natural or anthropogenic sources are among the potential sources of water quality problems. Potential pollutant sources identified for this operation of this project include creation of new impervious surfaces, and operation of maintenance facilities, stations and tunnels, and trackways. Hydrocarbons, copper, heavy metals, and other pollutants commonly associated with runoff from impervious surfaces supporting automobile traffic are anticipated at park-and-ride facilities and bus layover facilities. Locations where operation related water quality impacts would be expected are summarized in Table 6 below.

Table 6. Potential Pollutants From Operational Phases of Link Light Rail

| Source | Pollutant | Point of Discharge | Mitigation |
|----------------------------------|---|---|---|
| Trackway | | | |
| Bearing lubrication ¹ | Grease | Track near short-radius curves | None, insignificant discharge |
| Wheel lubrication | Lubricant | Track near short-radius curves | None, biodegradable |
| Transit Cars | | | |
| Bearing lubricant | Grease | Full length of track | None, insignificant discharge, spill control, countermeasures |
| Maintenance Facilities | | | |
| LRT Vehicle Wash System | Road grime, detergents, cleaning agents | Sanitary sewer | Treat and recycle wash water, oil/water separators and filters on all discharge points to meet local requirements |
| Maintenance | Oil, grease, lubricants, solvents | Interior drainage system: Sanitary sewer system; Exterior drainage systems: Storm drain system leading to Duwamish/Elliott Bay | Oil/water separator, spill control, and countermeasures Oils and other automotive pollutants will receive water quality treatment prior to discharge |
| Paint booth | Paints and solvents | Will not be discharged from site | Spill and fume control would be provided to meet local regulations |
| Lubricate vehicles | Grease | Will not be discharged from site | Waste grease recycled and rags collected for disposal |

Park-and-Ride Facilities

| | | | |
|---|------------------------------|----------------------------------|---|
| Pollutant Generating Impervious Surface | Metals, hydrocarbons | Storm, sewer, stream, or wetland | Approved water quality treatment facilities |
| Tunnel | | | |
| Tunnel Drainage Sumps | Chlorine (fire pump testing) | Sanitary Sewer System | None |
| Tunnel Station Sumps | Grit, oil, cleaning solution | Sanitary or CSO System | None |

Stations

| | | | |
|----------------------|------------------------------|----------------------------------|---|
| Elevator | Hydraulic Fluid | Will not be discharged from site | Sealed container; no discharge from elevator pits |
| Janitorial functions | Detergents, cleaning liquids | Sanitary sewer | Grit trap and oil/water separator |

Note: ¹ Lubricant would be used at short-radius turns to minimize squealing

New Impervious Surface

Increases in impervious surface replace complex, natural drainage channels with a network of culverts, drainage pipes and ditches. This results in a loss of infiltration through the soil. As a result, stormwater enters area streams and rivers episodically resulting in increased peak flows and reduced base flows. Increases in stormwater delivery can also lead to the occurrence of more frequent flood events. Other potential impacts include increases in the pollutant levels and occasionally in water temperatures in receiving waters.

The amount of new impervious surface proposed for construction of the light rail project is summarized in Table 7. Overall, the increase in new impervious surface in all segments stretching from N.E. 45th Street to SeaTac (totalling 0.043 square miles) will represent a 0.09 percent increase in the 48 square miles of the Duwamish River basin.

The modern light rail transit car proposed for the Link Light Rail will employ systems and equipment that culminate a long evolution dedicated to the production of efficient, reliable, and low-maintenance vehicles. For every mile traveled, its electric propulsion motor will replace the main source of pollution—the internal combustion engine—in the urban areas where it will operate.

With the elimination of the engine from the vehicle, there still remain several vehicle systems where moving parts must interface, requiring lubrication with the potential to cause pollution. A critical component of reliably operating these lubricated systems is to exclude dirt. As a result, bearings and gears are fully enclosed and sealed with virtually no chance to release lubricants to the environment. A review of the technology anticipated for the link vehicle systems where potential pollutants are used shows the following measures to suppress pollution are included in the design:

- Sealed housing roller bearings for all axle bearings
- Self-contained gear units with very long periods of operation between maintenance
- Totally enclosed and sealed motor bearings
- Enclosed truck bearings designed to exclude dirt
- Hydraulic brake systems which are likely to leak only during shop servicing when pollution control procedures will be employed
- Sealed door mechanisms
- Pantograph pivots with long-life, sealed units
- Enclosed, sealed electrical contractors
- On-board batteries contained within sealed enclosures
- Air conditioners with refrigerant enclosed in sealed system and motors with sealed bearings

The effectiveness to which this goal is accomplished can be seen on the light rail properties where track slabs do not display measurable quantities of contamination. Table 8 summarizes the regulations applied to at-grade, elevated, and tunnel portions of light rail projects in other states.

Table 7. Estimated New Impervious Surface and Floodplain Fill by Segment

| Segment by Alternative | Non-Pollutant Generating | | Pollutant Generating ² | New Impervious Surface (ft ²) | |
|---|--------------------------|--------------------------------|-----------------------------------|---|--|
| | Track | Station/Buildings ¹ | | Total | Displaced Flood storage (ft ³) |
| Segment A (Northgate to University District) | | | | | |
| A1 | 230,000 | 50,000 | 0 | 235,000 ¹ | N/A |
| A1.2 | 237,000 | 50,000 | 0 | 242,000 ¹ | N/A |
| A2.1 | 267,000 | 150,000 | 0 | 282,000 ¹ | N/A |
| A2.2 | 348,000 | 150,000 | 0 | 363,000 ¹ | N/A |
| Segment B (University District to Westlake Station) | | | | | |
| B1.1 | 0 | | 12,000 ³ | 12,000 | N/A |
| Segment C (Westlake Station to S. McClellan Street) | | | | | |
| C1.2 | 223,000 | 4,000 ⁴ | 0 | 227,000 | N/A |
| Segment D (S. McClellan Street to Boeing Access Road) | | | | | |
| D1.1 | 138,000 | 5,000 | 35,700 | 178,700 | N/A |
| Segment E (Tukwila) | | | | | |
| E1.1 | 217,000 ⁵ | 0 | 154,000 | 371,000 | 24 ⁸ |
| Segment F (SeaTac) | | | | | |
| F2.3 | 80,000 | 0 | 137,800 | 217,800 | N/A |
| Maintenance Facilities | | | | | |
| M1-A Holgate St. to Lander St | 0 | 0 ⁶ | 187,300 | 187,300 | N/A |
| M1-B Holgate St. to Lander St | 0 | 0 ⁶ | 154,000 | 154,000 | N/A |
| M1-C Massachusetts St. to Holgate St. | 0 | 0 ⁶ | 133,100 | 133,100 | N/A |
| M1-D Rainier Brewery/Roadway Express | 0 | 0 ⁶ | 156,800 | 156,800 | N/A |
| M1-E Rainer Brewery/Airport Way | 0 | 0 ⁶ | 188,200 | 188,200 | N/A |
| Total All Segments⁷ (45th St. to SeaTac) | 658,000 | 9,000 | 508,500 | 1,187,500 | 24 |

- Notes: ¹ Other non-pollutant generating surfaces include buildings, tunnel portals, and vent shafts.
² Pollutant generating surfaces include park-and-ride facilities, bus layover lots, and parking lots.
³ New impervious surface associated with SR 520 vent shaft maintenance road.
⁴ New impervious surface associated with tunnel portals.
⁵ 217,000 = new impervious surface due to additional road widening after the Tukwila Improvement Project.
⁶ Maintenance facilities result in a net reduction in total impervious surface area.
⁷ Totals for all segments were calculated assuming Maintenance Facility M1-E; it represents the worst case scenario.
⁸ This fill would be located in floodplain that is not mapped by FEMA., half in Southgate Creek, half in Riverton Creek.
N/A = Not applicable

Table 8. Summary of Water Quality Regulations Applied in other States

| Location ¹ | Trackway | | |
|---------------------------------------|---|---|---|
| | At-grade | Elevated | Tunnel |
| Boston, MA – MBTA(1984-2003) | No treatment or detention. Connection to municipal Storm drainage system. | No treatment or detention. Connection to municipal storm drainage system. | No treatment or detention. Connection to municipal storm drainage system. |
| Miami, FL – Metro Rail (Design Phase) | Detention provided. | Detention provided.. | Still in developmental stage. |
| Atlanta, GA – MARTA (2000) | No treatment or detention. Connection to municipal Storm drainage system. | No treatment or detention. Connection to municipal storm drainage system. | NA |

| | | | |
|---------------------------------------|---|--|----|
| Newark, NJ – Hudson-Berger LRT (2000) | No treatment or detention. Connection to municipal Storm drainage system. | No treatment or detention. Connection to municipal storm drainage system or direct flow. | NA |
| Portland, OR – TRJ-MET (1998) | No treatment or detention. Connection to municipal storm drainage system. | No treatment or detention. Run-off piped to water body | NA |
| Salt Lake City, UT – UTA (1998) | No treatment or detention. Connection to municipal storm drainage system. | NA | NA |
| Virginia Beach, VA – VBLRT (1999) | No treatment or detention. Connection to municipal storm drainage system. | NA | NA |

¹ The number in parenthesis represents the completion date of the project.
 NA = indicates projects that do not have elevated or tunnel segments
 Source: Sound Transit

Stormwater control techniques can mitigate the effects of long- and short-term hydrologic changes. State and local regulations establish standards for detention, retention, and other methods of stormwater control. In general, post-development runoff rates are required to match existing discharge rates which can range from the 2 year to the 100-yr design storm event, depending on the point of discharge. Mitigation is usually accomplished by reducing or attenuating peak runoff rates from a developed site, either by detention (store and release to surface waters) or retention (store and infiltrate or evapotranspire runoff). Stormwater detention can provide some water quality benefits through settlement of suspended sediments and other pollutants.

In general, any water quality impacts associated with the construction or operation of these facilities will be addressed under the appropriate City of Seattle code within the city limits and King County Surface Water Design Manual Level 2 treatment outside of the city limits. The design and implementation of specific water quality treatments will depend upon whether new impervious surface is considered non-pollutant or pollutant generating. New impervious surfaces used for automobile traffic are considered to be pollutant generating, while new impervious surfaces used solely for light rail trackway are considered to be non-pollutant generating.

The water quality treatments for pollutant generating surfaces will be designed to meet state standards for receiving water quality and the generation and release of pollutants as established by the Washington State Department of Ecology (WSDOE). A National Pollution Discharge Elimination System (NPDES) permit issued by WSDOE would be required for this project. If a general permit is obtained, specific discharge treatments, monitoring, and reporting requirements applicable to individual project sites would be included for park-and-ride and maintenance facilities and stations.

Copper in Project Stormwater

The potential source of copper in stormwater from the light rail project would be from overhead catenary system (OCS) wires¹. The existing (King County Metro) bus system has approximately 120 miles of routes throughout its entire system (based on 60 miles of 2-way wire) (Alex Wolak personal communication, October 5, 1999). The total length of above ground trackway with the preferred alternative is approximately 160,000 ft (30.3 miles) (based on about 80,000 ft of northbound and 80,000 ft of southbound at-grade or elevated trackway).

To determine the potential impact of adding additional OCS sources of copper to the project area, we examined the existing OCS system in the Rainier Valley. The Rainier Valley was chosen based on the stormwater design in this part of the project and the availability of stormwater and Duwamish River copper data for this area. Primary existing sources of copper in the Rainier Valley include automobile, bus, and

¹ Along the routes, light rail trains will be braked using engine brakes, and therefore will not use friction brake pads. Friction brakes on trains will be used only within covered maintenance facilities. Buses will use regular friction brake pads.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Western Washington Fish and Wildlife Office
510 Desmond Drive SE, Suite 102
Lacey, Washington 98503
Phone: (360) 753-9440 Fax: (360) 753-9518

COPY FOR YOUR
INFORMATION

RECEIVED

JAN 30 2002

REGIONAL TRANSIT
AUTHORITY

JAN 25 2002

Ms. Helen Knöll
U.S. Department of Transportation
Federal Transit Administration
915 Second Avenue
Federal Building, Suite 3142
Seattle, Washington 98174-1002

FWS Reference: 1-3-02-I-0147

Dear Ms. Knoll:

This letter is in response to your letter and Tukwila Freeway Route Biological Assessment in King County, Washington. The letter was dated October 22, 2001, and it was received in our office on October 25, 2001. Additional information was received during a meeting with U.S. Department of Transportation, Sound Transit, Parametrix, and the National Marine Fisheries Service on January 3, 2002.

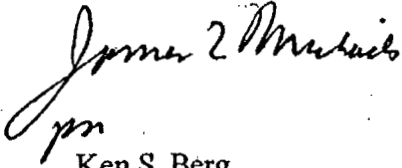
The Federal Transit Administration determined that the Tukwila Freeway Route "may affect, but is not likely to adversely affect" bull trout (*Salvelinus confluentus*) and will have no effect on bald eagles (*Haliaeetus leucocephalus*). The U.S. Fish and Wildlife Service believes that sufficient information on effects of project activities has been provided for us to concur with your determination of effect for listed species. This concurrence is based on the fact that no in-water work will occur between August 15 and June 30 in order to protect bull trout, in addition to the implementation of best management practices to minimize impacts to wetlands and stormwater quantity and quality.

This concludes informal consultation pursuant to 50 CFR 402.13. The project should be reanalyzed if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this consultation; if the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation; and/or if a new species is listed or critical habitat is designated that may be affected by this project.

800V 307 Y980
INFORMATION

If you have further questions about this letter or your responsibilities under the Endangered Species Act of 1973, as amended, please contact Liane Wedemeyer at (360) 753-9536.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ken S. Berg".

Ken S. Berg
Western Washington Fish and Wildlife Office

cc: Sound Transit, Seattle (Townsend)
NMFS, Lacey (Guy)



D.G.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

December 10, 2001

Ms. Linda M. Gehrke
Deputy Regional Administrator
Federal Transit Administration
Jackson Federal Building
915 Second Avenue, Suite 3142
Seattle, Washington 98174

Re: Endangered Species Act Section 7 Informal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Amended Route Segment, Tukwila Freeway Route, Central Link Light Rail Project, King County (NMFS No. WSB-01-457).

Dear Ms. Gehrke:

This correspondence is in response to your request for consultation under the Endangered Species Act (ESA). Additionally, this letter serves to meet the requirements for consultation under the Magnuson Stevens Fishery Conservation and Management Act (MSA).

Endangered Species Act

National Marine Fisheries Service (NMFS) has reviewed the above referenced Biological Assessment (BA) received October 24, 2001. According to the submitted BA the project proponents are proposing to assess the impacts of an amended route segment (segment E) on listed species and designated critical habitat. The new project segment maintains one river crossing of the Duwamish River and an elevated passage over two other streams that are not known to be utilized by listed species. A combination of man-made fish barriers in conjunction with stream size (flow) are the presumed reasons for absence. We concur with your finding of "may affect but not likely to adversely affect" for Puget Sound chinook salmon (*Oncorhynchus tshawytscha*).

NMFS concurrence with your finding is based the level of analysis that was provided to the original submittal of the Light Rail Transit project and the fact that the environmental impacts of this amended segment appear similar to the original proposal. Additionally, NMFS notes that floodplain, wetland, and stormwater impacts are included in a mitigation proposal for the project. The incorporation of best management practices for construction practices and sequencing further supports the effects determination. Finally, working in the appropriate timing window also weighed in the consideration as it minimizes the interaction of the project with rearing salmonids.



FTA.

per Dan Goy

-2-

This concludes informal consultation on these actions in accordance with 50 CFR 402.14(b)(1). The ~~United States Army Corps of Engineers (ACOE)~~ must re-analyze this ESA consultation if: 1) new information reveals effects of the action that may affect listed species in a way not previously considered; 2) the action is modified in a manner that causes an effect to the listed species that was not previously considered; or 3) a new species is listed, or critical habitat designated, that may be affected by the identified action.

Magnuson-Stevens Fishery Conservation and Management Act

Federal agencies are required, under §305(b)(2) of the MSA and its implementing regulations (50 CFR 600 Subpart K), to consult with NMFS regarding actions that are authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat (EFH). The MSA (§3) defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." If an action would adversely affect EFH, NMFS is required to provide the Federal action agency with EFH conservation recommendations (MSA §305(b)(4)(A)). This consultation is based, in part, on information provided by the Federal action agency and descriptions of EFH for Pacific salmon contained in Appendix A to Amendment 14 to the Pacific Coast Salmon Plan (August 1999) developed by the Pacific Fishery Management Council and approved by the Secretary of Commerce (September 27, 2000).

The proposed action and action area are described in Section 2.2.2 of the Biological Evaluation. The project area includes habitat which has been designated as EFH for various life stages of chinook and coho (*O. kisutch*).

Because the habitat requirements (*i.e.*, EFH) for the MSA-managed species in the project area are similar to that of the ESA-listed species, and because the conservation measures that the ACOE included as part of the proposed action to address ESA concerns are also adequate to avoid, minimize, or otherwise offset potential adverse effects to designated EFH, conservation recommendations pursuant to MSA (§305(b)(4)(A)) are not necessary. Since NMFS is not providing conservation recommendations at this time, no 30-day response from the ACOE is required (MSA §305(b)(4)(B)).

FTA

This concludes consultation under the MSA. If the proposed action is modified in a manner that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations, the ~~ACOE~~ will need to reinitiate EFH consultation with NMFS in accordance with NMFS implementing regulations for EFH at 50 CFR 600.920(k).

FTA

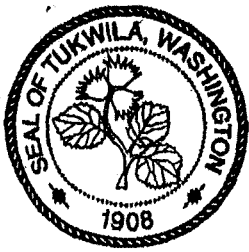
per Dan Goy

If you have any questions, please contact Dan Guy of my staff at the Washington Habitat Branch,
(360) 534-9342.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. Robert Lohn".

D. Robert Lohn
Regional Administrator



City of Tukwila

Steven M. Mullet, Mayor

Department of Public Works

James F. Morrow, P.E., Director

6300 Southcenter Boulevard, Suite #100
Tukwila, Washington 98188
Phone: 206-433-0179
Fax: 206-431-3665
Web site: ci.tukwila.wa.us

PUBLIC WORKS CONSTRUCTION PERMIT

Parcel No.:
Address:
Suite No:
Location: **SOUND TRANSIT GUIDEWAY/MLK TO BOUNDARY**

Permit Number: **PW04-094**
Issue Date: **05/18/2005**
Permit Expires On: **11/14/2005**

Tenant:

Name: **SOUND TRANSIT STATION**
Address: **SOUND TRANSIT GUIDEWAY/MLK TO BOUNDARY,**

Owner:

Name:
Address: ,
Phone:

Contact Person:

Name: **TERRY BEALS** Phone: (206)398-5237
Address: **UNION STATION, 401 S JACKSON ST**

Contractor:

Name: **P C L CONSTRUCTION SRVC INC** Phone: 425-454-8020
Address: **PO BOX 52868, BELLEVUE WA**
Contractor License No: **PCLCOSI099NW** Expiration Date: 06/04/2007

DESCRIPTION OF WORK:

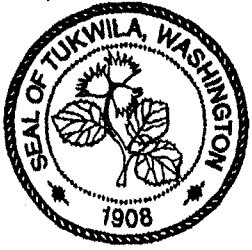
CONSTRUCTION OF SOUND TRANSIT'S GUIDEWAY (APPROX 4.5 MILES) STARTING JUST SOUTH OF MLK JR WAY S IN SEATTLE TO THE BOUNDARY OF THE S 154TH ST STATION.

Value of Construction: \$0.00 Fees Collected: 825,283.25

Public Works Activities:

| | | | |
|-------------------------------------|---|------------------------|------------------|
| Channelization / Striping: | N | | |
| Curb Cut / Access / Sidewalk / CSS: | N | | |
| Fire Loop Hydrant: | N | Number: 0 | Size (Inches): 0 |
| Flood Control Zone: | N | | |
| Hauling: | N | Start Time: | End Time: |
| Land Altering: | Y | Volumes: Cut 7380 c.y. | Fill 2381 c.y. |
| Landscape Irrigation: | N | | |
| Moving Oversize Load: | N | Start Time: | End Time: |
| Sanitary Side Sewer: | N | Number: 0 | |
| Sewer Main Extension: | N | Private: N | Public: N |
| Storm Drainage: | N | | |
| Street Use: | N | Profit: N | Non-Profit: N |
| Water Main Extension: | N | Private: N | Public: N |
| Water Meter: | N | | |

** Continued Next Page **



City of Tukwila

Steven M. Mullet, Mayor

Department of Public Works

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Permit Center Authorized Signature: *Laurie White* Date: 05/18/05

I hereby certify that I have read and examined this permit and know the same to be true and correct. All provisions of law and ordinances governing this work will be complied with, whether specified herein or not.

The granting of this permit does not presume to give authority to violate or cancel the provisions of any other state or local laws regulating construction or the performance of work. I am authorized to sign and obtain this construction permit.

Signature: *Terry Beas* Date: 05/18/05

Print Name: TERRY BEAS

This permit shall become null and void if the work is not commenced within 180 days from the date of issuance, or if the work is suspended or abandoned for a period of 180 days from the last inspection.



City of Tukwila

Department of Community Development / 6300 Southcenter BL, Suite 100 / Tukwila, WA 98188 / (206) 431-3670

PERMIT CONDITIONS

| | | |
|-------------|----------------|-------------------|
| Parcel No.: | Permit Number: | PW04-094 |
| Address: | Status: | ISSUED |
| Suite No: | Applied Date: | 11/16/2004 |
| Tenant: | Issue Date: | 05/18/2005 |

SOUND TRANSIT STATION

1: *****PUBLIC WORKS DEPARTMENT CONDITIONS*****

2: The Guideway Runoff Dispersion system shall not be used over roadways, pedestrian areas or other paved surfaces. The system shall be maintained in good condition with any breaks or missing parts repaired or replaced within five (5) working days of initial detection or notification. The Low Impact Drainage zone or ground receiving area of runoff dispersion shall be monitored and maintained in good condition. A plant establishment period of three (3) years is required.

3: The permittee is required to comply with the requirements of the City's NPDES Permit. The permittee shall implement a water quality monitoring and testing program of the surface water collected and discharged from the light rail guideway at such time as the City is required by NPDES Permit to develop and implement a water quality monitoring and testing program.

4: The relocation of the City waterlines will require shutdown by the City and a minimum two week notification for each location. Each shutdown shall not exceed 4 hours. The City will work with Sound Transit and the contractor to coordinate the day and time of a shutdown with the affected customers. The new waterline shall be tested, disinfected, and flushed in accordance with City standards.

5: The waterline relocations on East Marginal Way require separate, successive system shutdowns. Sound Transit shall provide a temporary, continuous feed to the Red Lion Motel located on Tukwila International Blvd.

6: All new City sanitary sewer shall be air tested and TV inspected with a copy of the video provided to the City. All new City storm drain pipe shall be TV inspected with a copy of the video provided to the City.

7: Prior to construction, all utilities in the vicinity shall be field located. For City of Tukwila utility locates, Contact 1-800-424-5555.

8: Traffic control within the public right-of-way shall be in accordance with the current edition of the Manual on Uniform Traffic Control Devices.

9: Demolition of any residential, commercial or industrial buildings requires application for and approval of a demolition permit. Permit application must be submitted a minimum 90 days prior to any demolition related work.

10: A detector check valve assembly and remote readout panel with radio transmitter are required for the relocation of existing water meter at approximate Station 580+90.

11: Emergency vehicle access is required through locations of freeway or ramp closures. Alternate routes for emergency vehicles must be approved by the City.

12: A paved hammerhead for emergency vehicles is required at the easterly end of S. 138th Street.

13: A two inch pavement grinding and overlay in conformance with City standards is required on Macadam Road, S 144th Street, E. Marginal Way and 42nd Avenue where utilities will be installed. 52nd Avenue will require overlay with pavement reconstruction.



City of Tukwila

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- 14: The median design for Martin Luther King Way must be revised in accordance with previous comments. The deferred submittal must be received by the City at least six (6) months prior to scheduled construction of the improvements.
- 15: The driveway grade to City of Seattle property on Plan Sheet 374, Book 2, Volume 3, shall not exceed 15 percent.
- 16: The detention pond access road on Plan Sheet 388, Book 2, Volume 3, will require an easement from adjacent property owner.
- 17: The permittee shall obtain City approval for any work that is beyond the scope and limits of the project as approved by this permit.
- 18: The permittee shall obtain City approval of any revisions of work within the public right-of-way. Revisions of plans or specifications must be submitted a minimum of 90 days in advance of the work for City review and approval.
- 19: The applicant shall follow all recommendations identified in the Final Design Noise Analysis dated July 2004, memorandum dated May 6, 2005 and May 9, 2005 from Michael Minor. As recommended in memo dated May 6, 2005 Sound Transit will design and construct an additional noise wall and modify the track fasteners in the area around S. 136th Street to mitigate the noise and vibration impacts. This noise wall shall be extended south till station 674+80 to be continuous with the acoustic barrier proposed to mitigate impacts to receivers 9A. Sound Transit shall submit revised plans reflecting the changes recommended in May 6 and May 9, 2005 memorandum within 60 days of the issuance of this permit.
- 20: Steel plating will not be allowed in the roadway for any construction work in S. 144th Street from 51st Avenue to the west.
- 21: ***PLANNING DEPARTMENT CONDITIONS***
- 22: The applicant shall follow all recommendations identified in the Final Design Noise Analysis dated July 2004, memorandum dated May 6, 2005 and May 9, 2005 from Michael Minor. As recommended in memo dated May 6, 2005 Sound Transit will design and construct an additional noise wall and modify the track fasteners in the area around S. 136th Street to mitigate the noise and vibration impacts. This noise wall shall be extended south till station 674+80 to be continuous with the acoustic barrier proposed to mitigate impacts to receivers 9A. Sound Transit shall submit revised plans reflecting the changes recommended in May 6 and May 9, 2005 memorandum within 60 days of the issuance of this permit.
- 23: Prior to the final inspection of the guideway Sound Transit shall develop a 3-year noise and vibration monitoring program for the Tukwila Freeway Route Project to be approved by the City. The 3-year period shall start from the start of revenue service. If measured levels show that noise or vibration attributable to the Tukwila Freeway Route project exceed FTA criteria as identified in the Final Design Noise Analysis Sound Transit shall provide appropriate reasonable mitigation acceptable to the City.
- 24: The applicant shall follow all recommendations outlined in the Tukwila Freeway Route Link Light Rail Sensitive Areas Study Wetlands and Streams and the addendum -Appendix E- Mitigation at Botham-Bautista Parcels prepared by Parametrix dated July 2004.
- 25: Prior to the final inspection of the guideway Sound Transit shall provide a cost estimate for the monitoring associated with the mitigation and enhancement work. The cost estimate must be approved by the City and Sound Transit shall post a bond to guarantee monitoring and maintenance associated with all the sensitive area mitigation. Also, an as-built plan of the mitigation areas will be prepared and submitted within one year of the mitigation construction. Subsequently a monitoring report will be submitted to the City of Tukwila by October 31st of each monitoring year for the next ten years.



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26: Sound Transit has proposed to retain areas of existing landscaping to provide screening of detention ponds and buffering of residences. In the event that these existing trees and plants do not survive the construction of the Tukwila Freeway project, Sound Transit shall replace them according to the schedule at TMC 18.54.030(3) prior to the issuance of an occupancy permit for the South 154th Street Station.

****continued on next page****



City of Tukwila

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I hereby certify that I have read these conditions and will comply with them as outlined. All provisions of law and ordinances governing this work will be complied with, whether specified herein or not.

The granting of this permit does not presume to give authority to violate or cancel the provision of any other work or local laws regulating construction or the performance of work.

Signature: _____

Terry Beals

Date: _____

05/18/05

Print Name: _____

TERRY BEALS