Item No. 3(b)
March 11, 2013

CITY COUNCIL STUDY SESSION ITEM

SUBJECT:
Review of construction activities, impacts, and future work on:

- West Lake Sammamish Parkway, Phase One, from I-90 to SE 34th Street (CIP Plan No. PW-R-141), and Small Diameter Water Main Replacement near SE 40th Street (CIP Plan No. W-16);
- 2013 Overlay (PW-M-1);
- WSDOT I-405 Concrete Pavement Rehabilitation Project;
- Coal Creek Parkway Culvert Replacement Project (CIP Plan No. D-103 and P-AD-89).

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FISCAL IMPACT:
No additional fiscal impact is expected under this information/discussion item.

DIRECTION NEEDED FROM COUNCIL:
_____Action
__X__Discussion
__X__Information

Staff will highlight construction activities and impacts of these projects.

West Lake Sammamish Parkway – Phase 1

POLICY ISSUES:
Comprehensive Plan:
The objective of this project is improving safety along the West Lake Sammamish Parkway corridor for pedestrians and bicyclists by separating them from vehicular traffic. This objective implements the Transportation Element of the Comprehensive Plan, which guides the maintenance of our existing street system and management of vehicular, pedestrian, and bicycle systems.

Environmental Stewardship Initiative:
This project is consistent with the City's Environmental Stewardship Initiative as it will implement water quality improvements on roadway storm-water runoff before discharging in to Lake Sammamish.

Other Adopted City Plans:
This project was identified as a high priority in current and previous Capital Investment Program Plans, including the 2007 Supplemental CIP, and is consistent with the City's 2009 Pedestrian and Bicycle Transportation Plan.

Utilities Department Policy:
As established in the adopted Utilities Water Comprehensive Plan, the City supports investing resources as necessary to construct, maintain, and renew water system infrastructure and equipment to assure consistent, reliable customer service.

Utilities Department Practice:
It is the Department's practice to replace small diameter asbestos cement watermain installed in the late 1940's and 1950's to reduce the possibility of watermain breaks. CIP Plan No. W-16 has been designated for this function.

BACKGROUND/ANALYSIS:
On April 11, 2005, Council adopted a project scope for improvements on West Lake Sammamish Parkway (WLSP) after extensive public involvement with the local community and other users of the Parkway. The outcome of that effort reflects the greater community's interests in providing key project features such as a multi-purpose trail separated from vehicular traffic by a landscaped buffer where feasible and pedestrian crossings along the corridor.

In the same timeframe, the Utilities Department planned to replace parts of the existing water main within the roadway project limits. In order to maximize efficiency, reduce overall costs, and reduce impacts to WLSP users, the Transportation and Utilities Departments collaborated to combine the water main replacement project with the roadway improvement work into a single construction contract.

On November 5, 2012, Council approved the award of Bid No. 12221, West Lake Sammamish Parkway, Phase One, from I-90 to SE 34th Street (CIP Plan No. PW-R-141), and Small Diameter Water Main Replacement near SE 40th Street (CIP Plan No. W-16) to Active Construction, Inc. (ACI) as the lowest responsible and responsive bidder.

CONSTRUCTION ACTIVITIES:
Recognizing the limited construction area on the Parkway, the corresponding expected traffic impacts, and the desire to reach substantial completion so this environmentally sensitive site would not have to over-winter, the Transportation Department developed a contract with early completion incentives to achieve the most time-efficient construction duration and to have the Parkway open for two-way traffic as soon as possible. Incentives include: $10,000 for project substantial completion by October 25, 2013 and $1,500 each day prior to October 25, 2013, up to a total incentive not to exceed $32,500 for the contract.

Following completion of the contract and other necessary project documents, and substantial completion of the relocation of private utilities, ACI began construction in January 2013. Initial work included erosion control, vegetation removal, wall construction and City utility work at multiple sites within the one-mile long project corridor. As planned, traffic was managed through the use of multiple flaggers allowing two-way, controlled traffic flow. Established work hours for this scenario are 8:30am to 4:30pm Monday-Friday in an attempt to avoid hindering the majority of the morning and evening commute periods. Work was publicized in a number of

ways: *Bellevue Reporter, It's Your City,* in the *Lake-to-Lake* Bellevue TV programming, the WLSP webpage, via *BvueTrans* Twitter, the Traffic Advisories webpage, general news releases, in direct mailers, and through on-site variable message signing.

Through the first month of work significant traffic backups were realized, as anticipated. In order to address this, staff have:

- Adjusted contractor work hours to avoid the majority of the AM commute;
- Directed the implementation of the planned southbound closure effective March 19, 2013;
- Sent additional e-mails to Microsoft that were distributed through their organization advising their employees that work was ongoing on WLSP and that they should plan their travel routes and work times accordingly;
- Submitted additional information to the media and posted on the WSLP webpage, the Traffic Advisories webpage, and released daily tweets on Twitter; and,
- Provided additional information on the on-site variable message signing.

As Council was advised in November 2012, work on WLSP will require the removal of the roadway surface for a significant length of the project for water line replacement and repair/ removal of concrete roadway panels in preparation for resurfacing. Both sides of the roadway will be affected. Work will be done in half sections in order to maintain one lane of traffic. Due to the normal, significant two-way traffic volumes it will not be possible to carry two-way traffic through the construction area without creating extreme backups in both directions that would be unmanageable and create significant life-safety and property access concerns.

Beginning on March 19, 2013, the City will be closing the southbound lane of WLSP on a 24/7 basis, detouring the southbound traffic to SE 34th Street and the I-90/Eastgate interchange area. This closure will remain in place until two-way traffic can be restored. It is anticipated that two-way traffic would be restored by October 25, 2013. The public, local businesses and others have been made aware of this closure scenario. Appropriate signing for detours and access will be provided.

2013 Overlay (PW-M-1)

POLICY ISSUES:

Comprehensive Plan:

The policies that guide the 2013 Overlay Program are consistent with the Transportation Element of the City's Comprehensive Plan, which guides the maintenance of our existing transportation system. Furthermore, the City's Comprehensive Financial Management policies guide capital investment decisions during the budget process. Specifically, existing policy language states "Preserve existing capital infrastructure before building new facilities". The annual overlay contract addresses this policy.

BACKGROUND/ANALYSIS:

The City places a high priority on allocating adequate resources to maximize the benefits of investments previously made in the transportation system. Expenditures on maintenance and preservation defray and can prevent costly reconstruction projects in addition to contributing to the overall safety of the system.

Preservation of the City's 1,068 lane-miles of streets is achieved through a rigorous pavement management program. The condition of each street is reviewed every two years to document information about how the street should best be maintained. Through this practice the City prioritizes and invests in preventative maintenance rather than wait for major pavement failure, which is significantly more expensive to repair.

The 2013 Overlay Program will focus on paving approximately 22.5 lane-miles of roadway. The majority of the roadways consist of arterial and collector roadways. The major arterials include Factoria Boulevard, SE Eastgate Way and NE 20th Street.

Included in the 2013 Overlay Program are the large scale pavement restorations required following Utility Department projects. By combining the Utility overlay work in the overlay contract, a cost savings is realized by taking advantage of the favorable asphalt prices that Transportation historically experiences in its much larger overlay contracts. The Utility project sites are in various neighborhoods throughout the City.

Bellevue has a five-year moratorium on the cutting of new street pavements and asphalt overlays. Coordination with other departments and franchise utilities occurs through early notification, both through meetings and letters, during the design phase, followed up by monthly project updates during the Construction and Permit Coordination meetings held by the Transportation Department Right-of-Way Use division.

CONSTRUCTION ACTIVITIES:
Paving activities will involve multiple lane closures on the major arterials identified above. In these sensitive areas work will be performed at night or on weekends to avoid commuter impacts to the extent possible. Advance public notice through the media, City websites, blog/Twitter, and via on-site variable message signing proved very successful during the 2012 Overlay Program implementation. All will be used again in 2013.

WSDOT I-405/SR-518 Concrete Pavement Rehabilitation Project

POLICY ISSUES:
Comprehensive Plan:
This WSDOT project completes needed pavement rehabilitation work on northbound I-405 in the area generally from SE 8th Street to NE 8th Street – the area between the northbound "Braids" project and the I-405 South Bellevue project. City cooperation in this effort supports Comprehensive Plan objectives to work actively and cooperatively with other jurisdictions and regional and state agencies to plan, design, fund, and construct transportation projects that carry out the City's transportation goals.

BACKGROUND and UPCOMING CONSTRUCTION ACTIVITIES:
Through the I-405 northbound "Braids" project and the South Bellevue project, WSDOT has addressed many of the broken and/or displaced concrete roadway panels that led to a rough ride and generated more environmental noise than desired. Replacing broken panels, doweling adjacent panels together to avoid differential settlement, diamond-grinding concrete surfaces, and overlays have improved the ride and reduced noise considerably. WSDOT will complete work in the freeway section between the two projects (generally between SE 8th Street and NE 8th Street) in the summer of 2013. This work will require two weekend (Friday night to Monday morning) northbound freeway closures in the manner performed in the past in cooperation with

the City. Dates of the closures have not been determined. City staff will continue working with WSDOT and their contractor, Atkinson Construction, to participate in the public information process and work to minimize impacts of this project to the extent possible.

Coal Creek Parkway Culvert Replacement Project

POLICY ISSUES:

Comprehensive Plan:

The policies that guide the fish passage and stream habitat features of the Coal Creek Parkway Culvert Replacement Project are consistent with the **Environmental Element** of the City's Comprehensive Plan. The policies provide guidance to manage aquatic habitats, including shoreline and riparian (streamside) habitats, to preserve and enhance their natural functions or providing fish and wildlife habitat and protecting water quality; and prohibit creating new fish passage barriers and remove existing artificial fish passage barriers in accordance with applicable state law regarding water crossing structures.

The policies that guide the park trail features of this project are consistent with the **Parks, Open Space and Recreation Element** of the City's Comprehensive Plan. The policies provide guidance to establish a coordinated and connected system of open space and greenways throughout the city that provide multiple benefits including preserving natural systems, protecting wildlife habitat and corridors, and providing land for recreation; incorporate utility, storm drainage, and other public lands into the open space system through cooperative use agreements; and develop pedestrian and bicycle linkages between neighborhoods and major natural areas, recreation facilities, and education centers.

Utilities Department Policy:

As established in the adopted Utilities Comprehensive Drainage Plan, the Utility shall own and maintain all elements of the storm drainage system in the right-of-way and in easements or tracts dedicated to, and accepted by, the Utility. Furthermore, the Utility shall identify drainage capital projects that prevent or reduce flooding or property damage, protect or improve water quality, and maintain or improve the reliability and integrity of the drainage system.

Utilities Department Practice:

The Utilities Department policies provide for identification and implementation of capital projects via the CIP to rehabilitate or replace deteriorated elements of the storm water system to ensure that utility customers are provided with consistent and reliable service. Utilities CIP No. D-103 has been designated to implement these policies for the Coal Creek Parkway Culvert Replacement Project.

Parks Department Practice:

The Parks Department policies provide for development of new trails and amenities for increased recreation opportunities in Bellevue's Parks and Open Space system, and implement plans to design, permit and build "missing links" in the Coal Creek system. Parks CIP No. P-AD-89 has been designated to implement these policies.

BACKGROUND/ANALYSIS:

The existing 9-foot diameter Coal Creek Parkway Culvert is in poor condition and needs to be replaced. The bottom of the culvert is corroded through in several places, deformations are occurring in the pipe barrel, and erosion is happening around the downstream headwall and

embankment. The Utilities Capital Investment Program (CIP) went through a prioritization process to assess this project against other City needs. It was then presented at a CIP open house in 2008 for public comment.

This project was given a high priority because of potentially critical public safety considerations. If the culvert is not replaced and were to fail, it would impact the nearly 28,000 people that use Coal Creek Parkway each day. In addition, the vital infrastructure in the road embankment includes fiber optic cables, a 12-inch high-pressure natural gas main, and 16-inch and 20-inch high-pressure fuel pipe lines owned by Olympic Pipe Line Company (OPL). Rupturing these gas and fuel lines would have significant public safety and environmental consequences.

Due to its degraded condition, this culvert is at the end of its useful life, and rehabilitation is not feasible. In order to reliably pass major storm flows and debris, and to provide fish passage and habitat, this project will replace the deteriorating corrugated metal culvert with a large open-bottom concrete box culvert. During the design process, the Utilities and Parks Departments determined that it would be beneficial to the City to widen the box culvert from 32 feet to 39 feet in order to add a walkway along the south wall of the culvert for hikers to safely cross under Coal Creek Parkway.

The trail feature was designed and funded in cooperation with the Parks Department, which will contribute 10% of the final construction costs. This trail connection beneath Coal Creek Parkway will provide a safe way for hikers to cross the road, and will eliminate an existing gap in the Coal Creek Park trail system. Parks had previously budgeted funds to construct a 0.2 mile trail extension to allow hikers to cross Coal Creek Parkway at an existing crosswalk at Forest Drive. Addition of this trail connection to the culvert will eliminate the need for the trail extension, thereby significantly reducing Parks' costs to connect the trail system.

Bids were opened on March 5, 2013 and construction is scheduled to begin in May.

CONSTRUCTION ACTIVITIES:

Traffic Impacts

The 16-inch and 20-inch OPL fuel pipe lines, which currently sandwich the existing culvert, will need to be relocated to construct the new bridge. The pipe line relocation work will require close coordination, which includes several phases of construction over a two-year period. Another constraint on the schedule is the limitation on work within Coal Creek. Since this is a fish-bearing stream subject to requirements of the Endangered Species Act, state and federal permits only allow in-stream work to take place between June 16 and September 30. This limitation, along with the need to allow time for relocation of the regional fuel and natural gas transmission lines, make construction in one season impossible.

Year One Construction – 2013:

During the first year of construction, traffic will be restricted to one lane in each direction on the east half of Coal Creek Parkway. Once the west half of the bridge is constructed, the project site will be turned over to OPL to relocate their pipe lines to the west side of the road at their cost. Once the pipe lines are relocated, the west side of the road will be repaved and Coal Creek Parkway will be reopened for approximately four months until construction resumes in 2014.

Year Two Construction – 2014:
During the second year of construction, traffic will be moved to the west side of Coal Creek Parkway, so the east half the bridge can be constructed. Construction is expected to be completed around the end of October 2014.

The Utilities Department developed a contract with early completion incentives to achieve the most time-efficient construction duration and to have the Parkway open to all four lanes of traffic as soon as possible. Incentives include: $1,500 each day for project substantial completion prior to the allotted number of traffic impact days in 2014, up to a total incentive not to exceed $22,500 for the contract.

Public Outreach Efforts

Open House:
An open house was held on November 15, 2012 at Bellevue City Hall to provide information about the project, allow opportunities for the public to ask questions about the project, and provide feedback on ways to minimize impacts during construction. City and consultant staff were on hand at the open house to discuss the project and answer questions. Display boards were used to explain construction sequencing and impacts. A project handout that describes the project, its benefits, and potential impacts was distributed and attendees were provided with comment forms to write down any comments or concerns. A number of outreach methods were used to inform the public about the project and the open house. These included:

- Mailing approximately 11,500 open house invitation postcards;
- Providing information about the open house on the City's website;
- Advertising in the *Bellevue Reporter* and distributing a press release to local media;
- Posting signs at the Trailhead parking lot and other public locations;
- Providing open house information on a Portable Changeable Message Sign located at the project site for several days ahead of the open house.

Media Outreach:
Media outreach to local and regional media outlets will help to broaden the project's exposure and minimize surprises to the traveling public once construction begins. Media outreach includes:

- Press releases to the City's identified media outlets prior to the open house and prior to construction;
- Advertising in the *Bellevue Reporter* prior to the open house and prior to construction;
- A short segment on Bellevue TV's *Lake to Lake* show;
- Meetings/site tours with reporters;
- Updates on the City's website and press releases as needed during construction;
- A dedicated website that provides project information and include an option to receive email update alerts when the page is updated with new information.