



Seattle Department of Transportation

Gregory J. Nickels, Mayor

Grace Crunican, Director

July 9, 2009

Councilmember Jan Drago
Seattle City Council
600 Fourth Avenue, Second Floor
Seattle, WA

Councilmember Drago:

In the past few weeks, the Seattle Department of Transportation (SDOT) has received several inquiries from *The Seattle Times* regarding work completed by the Surface Repair section of Street Maintenance Division. The nature of the questions is specific to work that needed to be redone, known in the construction industry as "rework." Due to the complexity of this inquiry, I would like to take a moment to outline for you the information that was shared with *The Seattle Times* and the nature of rework completed by the Surface Repair section. We believe an accurate presentation of the facts will show SDOT conforms very favorably to industry standards, and the people of Seattle benefit from our intense level of scrutiny.

There are three typical examples of work in the Surface Repair section that may need to be redone:

- Work that was incorrectly completed. This includes human error and problems with materials. A recent example of this would be a curb poured out of line because of incorrectly laid wooden frames.
- Design incompatibility. This occurs when a design drafted in the office does not suit a given project site in the field. Designing a sidewalk that does not adequately support vehicular crossing points would be an example of this type of rework.



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- Pilot programs. The City of Seattle remains committed to looking for new and improved ways to maintain and operate our infrastructure for Seattle residents. These pilot programs, however, typically require additional analysis and adjustments to support their success. An example of one that required additional work from SDOT crews was the installation of in-pavement flashing lights at the pedestrian crossing at First Avenue and Railroad Way.

We take quality assurance very seriously, both for our own crews and private contractors. The public must receive the best possible product, each and every time. Anything less is unacceptable. Rework is how we make sure our roads, sidewalks and bridges meet our standards.

As part of *The Seattle Times* inquiry, we provided information on five instances from 2007-2009 where work was not done right the first time and needed to be redone (please see attachment #1). We have since reviewed our records and have identified two additional instances, one of which is planned this year.

Rework in the Surface Repair section is estimated to be less than one percent of its annual budget. To put that into context, five percent rework is common in heavy construction, as outlined in the article "Measuring the Impact of Rework on Construction Cost Performance" (please see attachment #2). While SDOT makes every effort to minimize this type of error, I am pleased that the Surface Repair section's work beats the construction industry norm.

SDOT's estimate of less than one-percent rework is based on the rework undertaken (or scheduled) in the period 2007-2009. According to SDOT Street Maintenance records, two projects required rework in 2007 and one project in 2008. The actual year to date cost of the 2009 rework (three job sites) is \$60,979 and to fix a 2007 project an additional \$70,000 is projected to be spent over the rest of the year for a total of approximately \$130,000. Comparing that expense to the annual budgeted expenditures in the Surface Repair section of \$26,492,514 comes to an annual percentage of one half of one percent. As you can see from three years of data, the number of incidents is small and there is no statistically significant trend.

Though our crews performed above construction industry norms, I believe that the City can always do better and that is why we continue to make improvements in many areas of the Surface Repair section. The new management team in the Surface Repair section is working to improve training in pavement restoration techniques, plan reading, and safe work practices, and supervisors and managers responsible for delivering the work inspect for quality every step of the way. In addition, we are working to improve record keeping, to include deployment of a new work order management system.

Quality is important to me and my team, and we strive to deliver high quality results for the city. When instances of poorly performed work are discovered, SDOT moves quickly to fix the problem. My focus continues to be on minimizing and improving areas where work was done incorrectly. Like other public and private entities, the City of Seattle has standard plans and specifications for construction in the right of way. City repair crews are required to meet those standards and their supervisors inspect each job to ensure that those standards are met.

The Seattle Department of Transportation's mission is to deliver a safe, reliable and efficient transportation system that enhances Seattle's environment and economic vitality and the department's staff works hard to provide that in a cost effective and competent manner. We continue to look for opportunities to improve our work efforts and minimize human errors. Thank you for the opportunity to provide information. Should you have any follow-up or clarifying questions, please contact me at 684-5000 or via e-mail at grace.crunican@seattle.gov.

Sincerely,

A handwritten signature in black ink that reads "Grace Crunican". The signature is written in a cursive, flowing style.

Grace Crunican, Director
Seattle Department of Transportation

Cc: Tim Ceis, Deputy Mayor