

CEPOA-EN-CW-HH (1105-2-10b)

MEMORANDUM THRU CEPOA-EN-CW-HH (Hardy)  
FOR RECORD

SUBJECT: Gold Creek Annual Inspection of Completed Projects Report

I traveled to Juneau on 4 May 2009 to inspect the Gold Creek channel. I made a courtesy call to the City and Borough of Juneau, but they declined to accompany me on the inspection.

Water level was only a few inches deep in the channel, and running clear so the channel bottom could be readily seen.

The debris basin was clear of debris. A view of the basin and the sill is shown in figure 1.



Figure 1.

The City of Juneau has an active maintenance program. However, the project was completed in 1958, and it has reached the point where a more intensive maintenance program is required.

There is moderate erosion throughout the channel. The concrete is eroding between the rails, just below the debris basin. There are small areas of erosion along the joints between the channel floor and walls, throughout the channel. This erosion needs to be patched.

There are two areas where there is misalignment between adjacent slabs of the channel wall. One is below the Calhoun Street Bridge, the other is near the Federal Building. These need to be monitored to make certain the areas are stable. The Calhoun Street site needs to be measured against a fixed point, since both sections could be moving. Measurements were taken in this area several years ago; if possible, the same reference point should be used.

Vegetation is a problem in many areas. This involves four separate conditions:

A few small plants had started growing in joints along the channel. This is the most serious problem; the plants need to be removed and the joints refilled as soon as possible.

Moss along the channel walls is the most common problem, as shown in figure 2. Care must be used, to remove moss without removing concrete

In some areas, vegetation from adjacent lots is spreading down the channel wall. This vegetation needs to be trimmed back and dirt removed from the top of the wall. Plants with large root systems need to be kept several feet from the edge of the channel, to prevent possible displacement of the wall panels.



Figure 2.

There is a large area of spalling on the north side, downstream of the Federal Building. This appears to involve a poorly-bonded thin layer of concrete placed over the original wall, rather than spalling of the original concrete. This is shown in figures 3 and 4.





Figure 3.



Figure 4.

Initially, any exposed cracks need to be sealed and eroded areas near the floor need to be patched. In the longer term, the moss and any deteriorated concrete need to be removed and a more suitable coating, such as high-strength shotcrete, applied.

The fence along Capital Ave. near the 11<sup>th</sup> St. cross walk needs immediate repair as it could be a hazard to young children. A view of this section of fence is shown in figure 5.



Figure 5.

The project maintenance is currently considered marginally satisfactory. However, the level of maintenance needs to be increased in the immediate future to avoid deterioration in the project.

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