

FRANCK STREET MANHOLES PROJECT-NARRATIVE EXPLAINING CHANGE ORDER #1

The sewers in the southeast section of Town are among the oldest sewers in Friday Harbor. They were installed long before there were construction standards for sewage collection systems, and are in many ways inadequate by today's standards. One of these inadequacies is an absence of manholes.

Franck Street had no manholes for its entire length and in recent years had become a problem because sewer backups would occur and the only access for clearing and jetting was the basement of a resident and the corner of Geneste, who incidentally would be flooded out with sewage when this occurred. As a side issue to this problem was the fact that there was no access point by which the sewer department could inspect the sewer line to detect damage or leaks. The sewer department wanted to correct this by having manholes installed on the existing line.

In order to expedite the job, we called Mike Carlson Enterprises and arranged for that company to order and install these manholes based on the limited information we had. We estimated the cost of this would be \$24,000.00 on the basis of recent past jobs, and anticipated that the price would have to be adjusted once the work was complete.

Several unexpected events happened.

The first event was the discovery that the existing storm drain line from the west end of Linder Street was directly in the way of one of the new manholes. This required that the storm drain be relocated to go around the manhole structure.

The second event was more serious. One of the manholes was to be placed in the intersection of Franck and C Streets, based on the Sewer Department's presumption that the Franck Street sewer continued straight down to a 90 degree elbow at the C street sewer. This presumption turned out to be in error. The Franck Street sewer actually made about a 30 degree bend about 60' further up Franck Street and cut across the intersection to a 60 degree bend on C Street. In order to install the manhole as intended (and consistent with modern standards) the Franck Street sewer and the C Street sewer had to be extended to the proposed manhole location. This required extra potholing to identify possible utility conflicts and caused problem reconnecting existing sewer laterals, which had to be rearranged in order to function properly.

While preparing to do this work the third event took place. The sewer on C Street was TV inspected and found to be in imminent danger of collapse. This had not been known before this due to access problems and because The Town has only recently acquired TV inspection equipment. Once this was known it only made sense to replace all 307 LF immediately since there was a contractor already on site. The situation was presented to the Town Administrator, who concurred with the decision to replace the sewer immediately at time and materials as a

change to the contract. He reported this action in his administrator's report at the next Council meeting along with the fact that the change would be costly but that we did not have the figures at that time.

These three changes added up to \$65,885.67 causing the total cost of the sewer work to be \$89,885.67. In addition to the sewer work, replacement of the sewer line caused the need for a large amount of pavement restoration in the form of a patch 307 LF long by 4-6 feet wide. This cost \$17,628.49

The cost of replacing the sewer line came to 191.60/LF including tax. This compared well with the total cost of the sewer component of replacing the Park Street sewer, which amounted to \$194/LF including tax based on the billing records from finance. The cost of the pavement repair was also comparable to previous work. So it's safe to say that we are not being gouged. This is just a big change order for necessary work.