

Best Practice

Super Winch Water Service Connection

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THE PRACTICE

The nominated practice involves a new process to replace residential water piping between the public water main and the curb stop owned by the city. The process uses a winch, cable, and pipe-cutter to pull the replacement line through the existing line. It is known internally as the "Super Winch" project.

THE PROCESS

Creating the Super Winch was essentially an internal process to the City of Regina. Technical staff in the Public Works Division undertook discussions with the supervisor of the service connection crew, who then challenged the front line members of the crew to work with him to design a new solution. The consultations were internal in nature, between the technical and repair crew personnel.

The supervisor, crew members, and engineering staff collaborated to adapt existing tools and technology to this new purpose. The city invested approximately \$3,000.00 for modifications to the winch and development of a winch box to be employed in the new practice. The resulting prototype was tested at the city shops, and then deployed on site on an actual service connection replacement. Based on the results in the field the equipment and procedures were modified to better suit the task. The creation of this process required the person-hours time of the supervisor and crew, and the time of shop staff, plus the investment of some \$3,000 for materials.

THE RESULTS

The result of the deployment of the Super Winch is a direct saving from \$1,000 up to \$2,100.00 for each replacement of the existing pipe between the water main and curb stop. This saving is realized by using city staff rather than outside contractors to complete the repairs. The saving is ongoing. Evaluation takes the form of realized cost of service reductions as the practice continues to be employed in the field. On average, the City of Regina is required to replace the existing poly-b service pipe 134 times per year. Based on the known savings per project, this has resulted in a calculated cost reduction of up to \$281,480 per year.

The benefits of the Super Winch practice include:

- Direct cost savings of service connection replacement
- Simplification of staff/contractor scheduling, job scheduling
- Reduced disruption of homeowner property and public streets
- Increased city staff engagement through consultation and participation in

- the development of the process
- Enhanced perceived value of innovative approaches to existing problems
- throughout city operational procedures (i.e. demonstrated value of this project)
- The challenges of the process were:
 - Motivating staff and management to accept need for change
 - Development of required equipment modifications
 - Codification of the practice into an operational manual

In any attempt to bring a new practice to bear on an existing problem that has a traditional working solution, the first hurdle is to create a positive motivation for change. At the beginning of the process there are many obvious arguments against the development of a new practice and criticisms of its weaknesses and flaws, and many less direct reasons why it is worth trying. Working through that initial resistance requires time, patience, and an improved level of communication with staff. There must be a strong commitment by the administration to push forward and to stay with the process of change when there are setbacks or problems.

Any administration entering into this type of innovative thinking must be prepared to collaborate closely with front line employees, to invest some money in materials and to allow staff time away from their regular duties to engage in the thinking, discussion, and work time required to develop and perfect the process or practice.

LESSONS LEARNED

The primary lesson we learned was that by challenging a traditional approach to a problem, and by engaging our front line staff in the development of a new solution, innovative and creative solutions are available. We also learned that our operations are not at the mercy of the cost of contracted suppliers, if we are prepared to invest time and energy in finding a new approach to an existing problem

Perhaps to research available options at an earlier stage in the development of a new process or practice, to insure that a preferred solution does not already exist. In our case there was no such solution, but more research into the alternatives may have helped bring about our own solution sooner.