CONTRACTING FOR URBAN TREE MAINTENANCE¹

by William B. Lough

Abstract. New York City has significantly increased the contracting out of municipal forestry work in the 80's. Unit Price contracts were initially used but the Time and Material format has been implemented as being more efficient, less costly and allowing a greater degree of management flexibility.

Résumé. La ville de New York a significativement accrû le travail à contrat pour les travaux municipaux de foresterie dans les années 80. Les contrats à prix unitaire étaient initialement employés, mais le format du temps avec matériel a été mis en oeuvre par la suite étant plus efficace, moins coûteux et allouant un plus grand degré de flexibilité dans la gestion.

Today the New York City Parks Department continues to preserve, protect and maintain the largest urban forest in the nation. Forestry personnel conducted 213,299 tree inspections citywide in 1989, serviced 82,033 request work orders. Thanks to increased funding and the efforts of nearly 30 forestry crews citywide, New York's estimated 2.7 million trees, 700,000 of which line city streets, received an increased level of tree removal, pruning and preservation.

Forestry crews and private contractors removed 19,473 dead, diseased or dangerous trees. In addition, 49,108 trees were pruned and 6,321 stumps were removed from city rights-of-way. And further emphasis was placed on urban forest preservation, as over 12,000 new nursery-grown trees were planted on city streets by Parks.

A number of pilot programs were developed and implemented last year, including the successful task force Tree Removal Program in Queens. Started in response to the large backlog of dead trees in Queens, the Tree Removal Program enabled Forestry to remove more than 10,400 trees in that Borough.

Other innovations being tested include the introduction of new equipment. New operational procedures to standardize crew sizes and to reduce travel time between work sites all have contributed to increased efficiency. Contracting out has played a vital part within our operations.

From an Urban Forestry maintenance perspec-

tive New York City has not recovered from the fiscal crisis of the late seventies. Forestry and all other city services were severely reduced. In the early 80's in-house personnel were hired, but at a much slower rate than they were terminated. For a number of years, requests for services were not answered and this led to legislative action that appropriated additional funds to contract out forestry work.

New York City is unusual in that its street trees, park trees and large naturally forested areas are managed by one governmental agency. Chicago, as an example, has its Bureau of Forestry that does street tree maintenance, the Chicago Park District that manages it's park trees and the Cook County Forest Preserve District that manages over 56,000 acres of forested land, much of it within the city limits.

There are many advantages to contracting out for forestry services whether you are a large or small governmental agency. Reduced cost is probably the greatest advantage. New York City has open shop laws. Therefore wages and fringes paid to contractual employees are usually less than that paid to city employees. While organized labor makes efforts to reduce outside contracting, it recognizes that funds appropriated for contracting would not be appropriated for direct city hiring. Contracting out also allows an agency to take advantage of one time funding. The New York City Council can add funds to the budget with no commitment for succeeding years. Also Parks can accept federal, state, or private grant monies to perform additional work.

The one time aspect also allows Parks to maintain a smaller equipment fleet and a corresponding smaller maintenance force. These are expensive items with equipment purchases being funded from capital bonds. There is also a lesser need to carry spare equipment for repairs.

Outside contracting provides additional management benefits. Parks can increase its capabilities to meet emergencies or unusual pro-

blems. Specialized equipment can be contracted for instead of being purchased. As Chief Forester, I can schedule work on a programmed basis versus unprogrammed or in response to complaints. Finally, I have a stronger control over the contractual forces than in-house forces. If contractors do not perform in a satisfactory manner, I simply do not pay them. If their employees do not come to work or perform poorly, I have to have them replaced. Contracting returns the ability to hire and fire to municipal operations.

Through 1986 New York City was using a "unit price" contracting format. I believe the disadvantages of the unit price contracts far outweigh the advantages to their use. Tree work in New York City was bid by diameter size classes with no consideration given to species or work location. Significant administrative costs were incurred to develop these contracts by address and size class. The trees were inspected prior to pruning, during the operation, after punch-list corrections were made and upon requests for payment.

The city was locked into the printed contract locations, a daily production rate and a specific completion date. Management flexibility was limited. Scheduled work could not be changed regardless of work priorities or storm emergencies. The supervision requirements were large. Inspectors were required every day, all day.

I instituted a pilot "time and materials" contract in 1987. It required a specific crew size, equipped as I directed. The T & M type contract returns daily management decisions to me. Our Forestry managers develop a work program, but can change it at a moments notice. We move contract crews to address storm and ice emergencies. Their crews are already working for the City and with a specific commitment to furnish New York City additional crews first if there is a major storm.

The T & M contracts have minimum daily production specified and include all trees on the block, regardless of their size, conditions or the work activity required. Contract crews will either prune or remove a tree. We do not require separate contracts for each work activity.

My supervision requirements are greatly reduc-

ed. We line up the area for work, check on the daily performance and ensure that the crews start and stop at the appointed times. I do not have a city forester with them for the entire day and have little lead administrative requirements. If the crew does not achieve their minimum daily performance, are short handed, or the equipment breaks down or performs unsatisfactory work, I do not pay the contractor. There is no easy appeal from this decision.

I have introduced multi-year T & M contracts that allow Parks to further reduce the administrative requirements. Contracts are bid for two years and if the money is appropriated the second year, work can be started immediately.

Contracting out for forestry work has some obvious disadvantages. Funding is subject to immediate or abrupt changes. It can be eliminated when there is an economic down turn. The termination of full time employees is always a hard choice. Performance is only as good as your supervision. In New York City, we must accept the lowest bid as long as the contractor meets all other requirements. While they are bonded, if performance is poor and default proceedings are initiated, it is a long and troublesome process. Finally, a municipality must maintain an appropriate mix of in-house crews and outside contract crews. The in-house crews compete with the commercial crews and this keeps the contract costs low. If you reduce your in-house capabilities and begin to rely on contracts alone, the prices will increase.

In summary, contracting for forestry services in New York City provides for lower unit costs, lower equipment costs, more efficient and productive operations and can significantly increase a manager's ability to manage. New York City has evaluated and used both the "unit price" and "time and material" type contracts and has found the "time and material" to be the better choice.

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