

# INSTALLATION OF THE PLANT MATERIAL IN CONSTITUTION PLAZA, HARTFORD, CONNECTICUT<sup>1</sup>

by William A. Rae

Constitution Plaza is a contemporary expression of the age in which we live. Constitution Plaza occupies two blocks in downtown Hartford. The commercial buildings are grouped around two pedestrian plazas and include three office buildings, a major hotel, a brokerage house, retail stores, and a radio and television station. The two landscaped plazas are built on top of two large parking garages, covering two city blocks, divided by Kinsley Street. The plazas are higher than the surrounding street levels and are connected at the plaza level by a pedestrian bridge. Another pedestrian bridge spans State Street.

The landscaping has created a refreshing, interesting setting for the commercial area; an oasis where the people of Hartford can leisurely enjoy the beauty entirely separated from the automobile.

The nuclei of the plaza development are the two major open spaces formed by the North and South plazas. The South Plaza is identified by an interesting and unusual sculptural fountain. The fountain is accented by the formal groupings of honeylocust and little-leaf linden. These trees, in addition to being attractive, create interesting shadows on the pavement and on the windows of the buildings. This scene is even more impressive when observed from one of the many windows facing the plaza. There is also a garden that provides a rich display of ericaceous plants.

The North Plaza is identified by a clock tower. The Mound Garden, with its green grass and willows, provides a quiet foil to the busy retail stores that surround it. The orchard, a bosc of flowering crabs, contains an intimate sitting area. The raised planting areas are so designed that the coping also served as a bench for people to pause and relax to enjoy the plantings and the sun. An excellent spot to study people and nature. Constitution Plaza, as you see it today, is a \$40,000,000 commercial center that has brought new living vistas to downtown Hartford.

I will describe the landscaping of the plaza, the plant materials used, and the methods and procedures followed. Sasaki Associates of Watertown, Massachusetts were the landscape architects. The Travelers Insurance Company is the owner. Frost and Higgins was the landscape contractor. We were very fortunate as we had a working cooperative team; the owner and the architects cooperated in every way, and any problems that developed were mutually solved.

Basically the landscaping was divided into two parts: selection of the plant material and the installation of the plant material and soil mixture. The plant list was relatively simple because only plants best suited to withstand the severe winters were chosen. All the plant material was personally selected by the landscape architect and us. Only the best plants were acceptable, as we wanted this project to be outstanding. We covered a great deal of territory before we finally found the specimen plant material in the size and quantity needed. In the selection of the plant material we worked closely with Mr. Valteau Curtis of Curtis Nurseries, Callicoon, New York; Mr. Curtis did an outstanding job.

The plant material selected was:

- 24 -5½-6" caliper Morraine locust
- 74 -4½-5" caliper *Tilia cordata*
- 55 -5½-6" caliper *Acer saccharum*
- 60 -3-3½" caliper *Malus hopy*
- 3 -10-12" caliper *Quercus rubrum*
- 4 -8-10' height *Magnolia stellata*
- 12 -various size *Salix*
- 1 -4-5" caliper *Prunus subhirtella pendula*
- 500-3½-4' and 4½-5' spread *Taxus baccata repandens*
- 325-rhododendron, Boule de neige, maximum alba, azalea, etc.
- 75,000-ground cover (pachysandra, vinca, Baltic ivy)

A few of the nurseries that supplied us with the plant material were: Siebenthaler's Nurseries,

<sup>1</sup>Presented at the annual conference of the International Society of Arboriculture in Hartford, Connecticut in August 1980.

Dayton, Ohio; Charles Fiore Nurseries, Inc., Prairie View, Illinois; Peter Cascio Nursery, Inc., West Hartford, Connecticut; Norley Nurseries, Gardiner, New York; Weston Nurseries, Hopinton, Massachusetts; Millcreek Nurseries, Newark, Delaware; Styer's Nurseries, Concordville, Pennsylvania; Detmer's Nursery, Tarrytown, New York; Parmentier's, Bayport, Long Island, New York; and LeBars, Stroudsburg, Pennsylvania. As this project was more than two years under construction, many plants were selected and held at the nurseries until needed. As most of the plant material was selected soon after we started work, we appreciated the excellent cooperation from them all.

In addition to the plant material, another problem was the planting-soil mixtures. There were four specific soil mixtures to be used; the basic mixture was: 25% screened topsoil, 50% coarse sand, and 25% peat moss. Bonemeal, uramite, and muriate of potash were added to this mixture. The soil mixtures for the Mound Garden and the Perennial Garden differed slightly.

As there were approximately 4,000 cubic yards of soil mixture needed, we had a mixing and storage problem as the material could not be used at one time and could not be stockpiled in large quantities on the plaza due to the weight factor and there was no room at street level. We subcontracted the preparation and delivery of the soil mixture to Russo Bros. of Hartford. We made an excellent choice as Russo Bros. handled their responsibilities very efficiently.

The location of the main project, bordered by four streets, plus the fact that 95% of the material had to be placed onto the plaza decks upon delivery, created a problem in logistics. There were two periods each day of heavy traffic, 7:30-9:00 a.m. and 3:30-6:00 p.m. At times, it seemed that everyone entering Hartford passed by the plaza. The major problem was the handling of the soil as we had to have all material off the street and cleaned up by 3:30 p.m. each day, and this was done. We used a truck crane equipped with a clamshell bucket to move the soil from the street to the plaza deck. Wherever possible the soil was placed directly into the planting areas and containers.

Many of the planting areas could not be reached by the crane, so we stockpiled the material on the deck and used power buggies and a Ford loader to place the soil where needed. Because of the load factor on the deck, which is also the roof of the garage, we could only stockpile in certain areas and we were limited as to the size of the equipment we could use. With excellent cooperation from Russo Bros. the deliveries of soil were timed so that the crane always had enough material to keep busy and that by 3:30 p.m. the last truckload was delivered and placed onto the deck. Usually by 3:30 p.m. the soil was gone and the street was clean.

The truck crane was used to unload the trucks and place the trees onto the deck. The smaller plants were placed in a flat-materials bucket and swung onto the deck; this saved a great deal of time and labor. Wherever possible, the crane set the trees directly into the raised planters and containers. Where the crane would not reach we used a special Gantry rig or the Ford loader.

As with most large projects, the construction schedules change; there are other contractors on the project, so the planting schedules changed quite often. Therefore, it was necessary to have some plant material stored on the deck at all times.

One of the most important factors of a project of this type is the cooperation between the architect, the general contractor, and the other subcontractors. This takes a superintendent that knows how to get along with these people without having them take advantage of him. Labor relations with the Unions was an important factor at Constitution Plaza, as it is on most large projects; on this project we worked with the engineers and the laborers. There were many other trades on the project at the same time and we endeavored to work together as smoothly as possible. We were fortunate to have had an excellent superintendent and an able assistant on this project; good people are necessary for good results.

*President,  
Frost and Higgins,  
Burlington, Massachusetts*