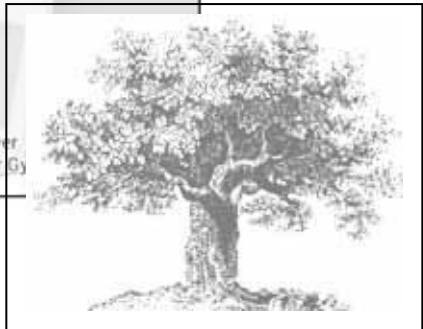


Lower East Side Greening Acceleration Program: Phase Two

A Comprehensive Work Plan for CB 3 Trees within 1/2 mile of the Con Ed Facility

Curbside: New Trees, Tree Bed Expansion for Existing Trees, and Tree Guards with Groundcover Plantings.
NYCHA and Community Gardens: New Plantings for Trees Damaged by Hurricane Sandy.



Street Segements within 1/2 mile of Con Ed Facility

Streets Completed in Phase 1

Street Choices Proposed for Phase 2

NYCHA Area Proposed for Phase 2

Lower East Side Greening Acceleration Program: Phase Two

A Comprehensive Work Plan for CB 3 Trees within 1/2 mile of the Con Ed Facility

**Curbside: New Trees, Tree Bed Expansion for Existing Trees, and Tree Guards with Groundcover Plantings.
NYCHA and Community Gardens: New Plantings for Trees Damaged by Hurricane Sandy.**

Application for Con Ed Settlement Funds

As the health and quality of life benefits of an urban tree canopy continue to be proven as valuable assets for communities the choice of establishing and maintaining these trees remains a sound investment. Phase Two of the Lower East Side Greening Acceleration Program's goals are to expand upon our past work by continuing tree pit expansions, adding new trees, and placing tree guards and ground cover plantings to more of the remaining sites within the 1/2 mile radius of the Con Edison East River Complex. In addition, we will be working with NYCHA and local community gardens on the expedited replacement of trees destroyed by Hurricane Sandy. This project focuses upon past successes while also acting to realize the vast potential of the other tree work which can be done to serve the community in this area.

This multifaceted project continues the LES Accelerated Greening Program accomplishments within the ½ mile radius zone of the Con Ed East River Complex (see Appendix 1). During this first phase we accomplished the expansion of 150 tree beds, planted 70 new trees, installed 240 tree guards, and planted 9600 Liriope plants and 8000 Daffodil bulbs. These results were achieved by using \$150,000 of Con Ed settlement funds to hire a guard contractor to fabricate and install guards (\$87,000), the purchase of Liriope, Bulbs, and tools for volunteer planting (\$16,000), and the hiring of a NY Tree Trust employee to manage the project for 6 months (\$47,000). These costs were matched dollar for dollar by \$150,000 in NYC Parks & Recreation funds and covered the 150 tree bed expansions (\$67,000) and 70 new tree plantings (\$83,000) in the area.

To complete Lower East Side Greening Acceleration Program (LES GAP) Phase Two we are seeking a total of \$300,000 from the Con Ed settlement funds; \$200,000 of which will be dedicated to providing 260 tree guards, ground cover planting costs, and project management. The remaining \$100,000 will be dedicated toward the replanting of 75 trees on NYCHA and Community Garden properties and project management. The \$100,000 of Con Ed funds for NYCHA and Community Garden new trees will be matched by the NYCHA agreement to cover the costly large tree removals from funds in their budget. The funds for all curb side work will be matched with \$200,000 from New York City Department of Parks & Recreation and will be utilized for 205 pit expansions and 55 new tree plantings. The total budget for all of this work within 1/2 mile of the Con Ed facility including Park's leveraged funds is \$500,000 (excluding leveraged funds from NYCHA to cover tree removals).

The first goal in this Phase Two program is to ensure that more of the available street tree planting locations radiating from the Con Edison facility are planted. NYC Parks has estimated there are approximately 55 remaining curb side tree planting opportunities as well as at least 60 NYCHA and 15 Community Garden tree planting opportunities within the ½ mile area. Next, existing trees will be surveyed for tree pit expansion, low-cost tree guard installation, and groundcover/ flowering bulb plantings until remaining funds are used. We estimate the funds requested will enable the expansion for at least 205 trees beds and the guarding and ground cover planting for 260 sites depending on the amount of new tree planting locations that are derived from the survey. The rehabilitation of existing tree beds, installation of affordable tree guards, and any new trees planted will create a visual consistency to all street tree beds within the focus ½ mile area as well as ensuring each trees growing conditions are optimized for tree longevity.

These efforts will be further refined by a variety of public outreach on tree care and community

empowerment to provide additional boost to future tree health and longevity, as tree longevity will maximize the benefits these trees bring to this neighborhood. We will be working intensively with our in-house experts at MillionTreesNYC to explore a variety of new ways we can engage and educate the community to care for their trees and the resources this project will bring to their streets. LES GAP Phase Two will also continue the partnership established with the Lower East Side Ecology Center (LESEC) in co-leading groundcover/bulb planting days. These events were highly successful for the Phase One planting of 9600 Liriope plants and 8000 Daffodil bulbs solely using volunteer help, (Numbers are projected to be completed by the end of fall 2013). These events brought in a variety of volunteer groups including high school and corporate groups and neighborhood volunteers of all ages who learned about the benefits of an urban canopy and the benefits of this project for the neighborhood. As before, the NYC Tree Trust will provide all materials (bulbs, groundcover, tools, etc) needed for the work days while the LESEC helps to coordinate the planting events as their own to leverage LESEC's already sterling reputation throughout the neighborhood and their many connections with stewards and volunteer groups. In addition we will be setting up a zone wide evaluation of young tree pruning needs utilizing citizen pruners to complete any needed work. We will be able to sponsor the training thru Trees New York of up to 5 neighborhood citizens interested in becoming a citizen pruner.

LES GAP will be led by New York City Department of Parks & Recreation and the New York Tree Trust. They will coordinate with the LESEC, MillionTreesNYC, NYCHA, property owners, area community gardens, adopt a tree pledges, and citizen pruners. The New York Tree Trust, a 501-3c non-profit, will accept the settlement funds for the trees and tree work. NYC Parks will match those dollars and coordinate the use of these funds according to the Program's stated budget and goals, and coordinate the installation of trees and tree work.

The LES GAP will satisfy the settlement funds scope as a healthy canopy of trees is one of the best ways to provide local air quality improvement and subsequently neighborhood health improvement. The Program will also provide stewardship and outreach efforts that will serve the local community in a variety of ways thru the numerous other benefits that trees and neighborhood beautification provides. These efforts equally satisfy NYC's Million Tree goals by enabling the planting of more trees in an area of need. In addition, Parks has already planted many trees in the area and it has become clear that the infrastructure of the neighborhood restricts some tree planting locations. Therefore, it is critical to the long term development of canopy within this neighborhood that existing trees receive extra care to ensure for their longevity. By increasing the health of existing trees this plan also works to offset future tree maintenance and tree replacement costs, which again helps NYC Park's goals of increasing the longevity of large trees and the benefits those large trees provide. The partnership of these goals will provide environmental, economic, and health benefits to the local community for generations to come.

Timeline

- May-July 2014 - NYC Parks will survey for curb-side sites within ½ of a mile of the East River Complex for tree planting viability and the expansion of existing tree beds. NYC Parks will work with NYCHA and Community Gardens to determine tree planting locations.
- July-August 2014 - NYC Parks will manage the curb-side tree bed expansion work, confirm NYCHA funded tree removal work, and finalize the tree planting work plans on NYCHA and Community Garden properties. NYC Parks will supervise the instillation of trees guards at all expanded sites.
September 2014 - LESEC and NYC Parks will host volunteer planting days for groundcover and bulbs.
- October-November 2014 - NYC Parks will manage new tree plantings for all curb-side sites, NYCHA, and Community Gardens. NYC Parks will manage guard instillation for curb-side sites. LESEC and NYC Parks will host volunteer planting days for groundcover and bulbs.
- December 2014 - NYC Parks will provide a final report to the Community Board detailing the fall work completed.
- January-March 2015 - NYC Parks will survey for curb-side sites within ½ of a mile of the East River Complex for tree planting viability and the expansion of existing tree beds. NYC Parks will manage the curb-side tree bed expansion work. NYC Parks will supervise the instillation of trees guards at all expanded sites.

- April-May 2015 - NYC Parks will manage new tree plantings and guard installation for all curb-side sites. LESEC and NYC Parks will host volunteer planting days for groundcover and bulbs.
- May 2015 - NYC Parks will provide a final report to the Community Board detailing the spring work.
- May 2015-May 2017 - All trees will get weeded and watered once every two weeks through the growing season (May 15-October 15). Any trees that die will be replaced in the subsequent season.

Budget

The New York Tree Trust has obtained estimates from approved NYC Department of Parks & Recreation contractors of approximately \$1,600 to install each curb-side street tree and \$925 for each NYCHA or Community Garden site. See below for a summary of the three different types of tree beds for this project:

- Plant street tree, install tree guard, install groundcover, install bulbs \$2,110 (55 estimated)
- Expand tree bed, install tree guard, install groundcover, install bulbs \$1,060 (205 estimated)
- Plant tree at NYCHA or Community Garden site \$925 (75 estimated)

These funds will pay for a contractor to oversee all sidewalk site preparation, the actual tree, tree and ground cover planting (which may include hand digging of more difficult tree planting sites), a two-year guarantee period, maintenance and watering for two years, and all necessary permits to perform the work from both NYC Department of Parks and Recreation (DPR) and the Department of Transportation (DOT). This price also covers supervision of all trees while they are planted to ensure they are planted to DPR's specifications. DPR will coordinate the full survey of underground electric and gas utilities and obstacles in the area and tree planting locations. The project management costs listed includes staff time needed to carry out the coordination, implementation, and management of this proposal for the 12-month timeline.

Funding

Settlement Funds for curb-side work	\$200,000
Settlement Funds for NYCHA and Community Garden New Trees	\$100,000
<u>Matching Funds from Parks & Recreation</u>	<u>\$200,000</u>
Total	\$500,000

Costs

55 Newly Planted Curb-Side Trees (\$1600 per tree) <i>Covered by Parks matching funds</i>	\$88,000
205 Existing Tree Bed Expansions (\$550 per tree) <i>Covered by Parks matching funds</i>	\$112,750
60 Newly Planted NYCHA Trees and 15 Newly Planted Comm. Garden Trees (\$925 per tree) <i>Covered by Con Ed portion of the grant</i>	\$69,375
Project Management (Salary and fringe for grant line - 12 months) <i>Covered by Con Ed portion of the grant</i>	\$97,275
260 Tree Guards covering fabrication and installation (\$450 each) <i>Covered by Con Ed portion of the grant</i>	\$117,000
Groundcover and Bulbs for 260 sites, includes purchase, delivery, and incidental costs in using volunteer help for installation. (\$60 each site) As well as miscellaneous costs and Citizen Pruner Scholarships. <u><i>Covered by Con Ed portion of the grant</i></u>	<u>\$15,600</u>
Total	\$500,000

Deliverables

At the completion of surveying and marking in both Fall 2014 and Spring 2015 Lower East Side Greening Acceleration Program (NYC Parks) will provide a report to the Community Board detailing the proposed address of each new tree to be planted, tree bed to be expanded, guard to be installed, and tree bed to be planted with ground cover. LES GAP (NYC Parks) will also provide a final report to the Community Board at the conclusion of each season in December 2014 and May 2015.

Additional Information on Tree Benefits and the Improved Community Health Trees Provide

The benefits of planting trees in cities have been studied extensively. Trees have been found to consistently provide environmental benefits, economic benefits, and health benefits to the local community (Appendix I). In addition to these benefits LES GAP focuses specifically on improving and protecting the tree health of large high value existing trees by targeting them for pit expansion, guard, and/or groundcover planting. The benefits of expanded trees pits and guards are that they simply provide trees the space and resources they need to remain healthy, thus enabling the trees to provide these listed air quality and public health benefits well into the future. The use of groundcover and bulb plantings is a two pronged approach to tree health and neighborhood quality of life problems in that they both aid in tree health and add aesthetic value to the neighborhood. The aesthetic value of groundcover planting generally raises neighborhood awareness to trees, beautify the neighborhood, and add incentive to public and business engagement in tree care activities. The LES GAP will have many positive effects on community health, some more specific information on these benefits of trees include:

- **Improved Air Quality** - Net annual air pollutants removed, released, and avoided average 1.73lb. per tree and are valued at \$5.27 million or \$9.02 per tree (New York City, 2007). In fact, one tree can remove 26 pounds of carbon dioxide from the atmosphere annually, the equivalent of 11,000 miles of car emissions. In addition, trees remove dust and other pollutants from the air.
- **Improved Health** - There is strong evidence that trees help reduce air pollutants that can trigger asthma and other respiratory illnesses. A 2008 study in the Journal of Epidemiology and Community Health found that children in NY living in areas with more street trees have a lower prevalence of asthma. Studies find that by planting trees, there is a high likelihood of lowering childhood asthma rates in the area served by Community Board 3. (Appendix III). Green spaces also encourage physical activity-a healthy habit for any New Yorker.
- **Community and Business District Appeal** - The greening of business districts increases community pride and positive perception of an area, drawing customers to the businesses. Studies have found that tree-lined retail districts encourage more frequent visits, more time spent shopping and more spending by consumers (Journal of Forestry, 2005).
- **Reduced Crime** - A study by University of California horticulturalist Ted Stamen in 1993 found that urban spaces which had been planted had a 90% chance of remaining graffiti free.
- **Storm Water Capture** - New York City's street trees capture rain both in their canopies and tree beds, reducing storm water runoff by 890.6 million gallons annually. This has an estimated value of \$35.6 million and the average tree captures 1,432 gallons of storm water each year (New York City,2007).
- **Slowing Global Climate Change** - Urban trees help offset climate change by capturing atmospheric carbon dioxide in their tissue, reducing energy used by buildings, and reducing carbon dioxide emissions from fossil-fuel based power plants. NYC trees remove over 42,000 tons of carbon each year.

- **Lower Summer Air Temperature** - According to the U.S. Environmental Protection Agency, urban forests reduce urban temperatures significantly by shading buildings and concrete and returning humidity to the air through evaporative cooling.
- **Natural Resource Conservation** - By using trees to modify temperatures, the amount of fossil fuels used for cooling and heating by homeowners and businesses is reduced.
- **High Return of Investment** - Over the years the City has invested millions in its urban forest. NYC Park Department estimates that trees provide \$5.60 in benefits for every dollar spent on tree planting and care.

Additional Information on Local Support, Community Outreach & Continuing Efforts

LES GAP will use its contact list of already vested tree care entities and business owners in the Lower East Side for community outreach. This outreach coupled with field visits in the neighborhood will ask for support from the local community to assist in monitoring, watering, and maintaining the trees once the two-year guarantee has lapsed. These efforts will operate in tandem with DPRs existing Adopt-a-Tree effort. Information about DPRs volunteer stewardship effort to get the community to care for trees can be found here; <http://stewardship.nycparks.org/>

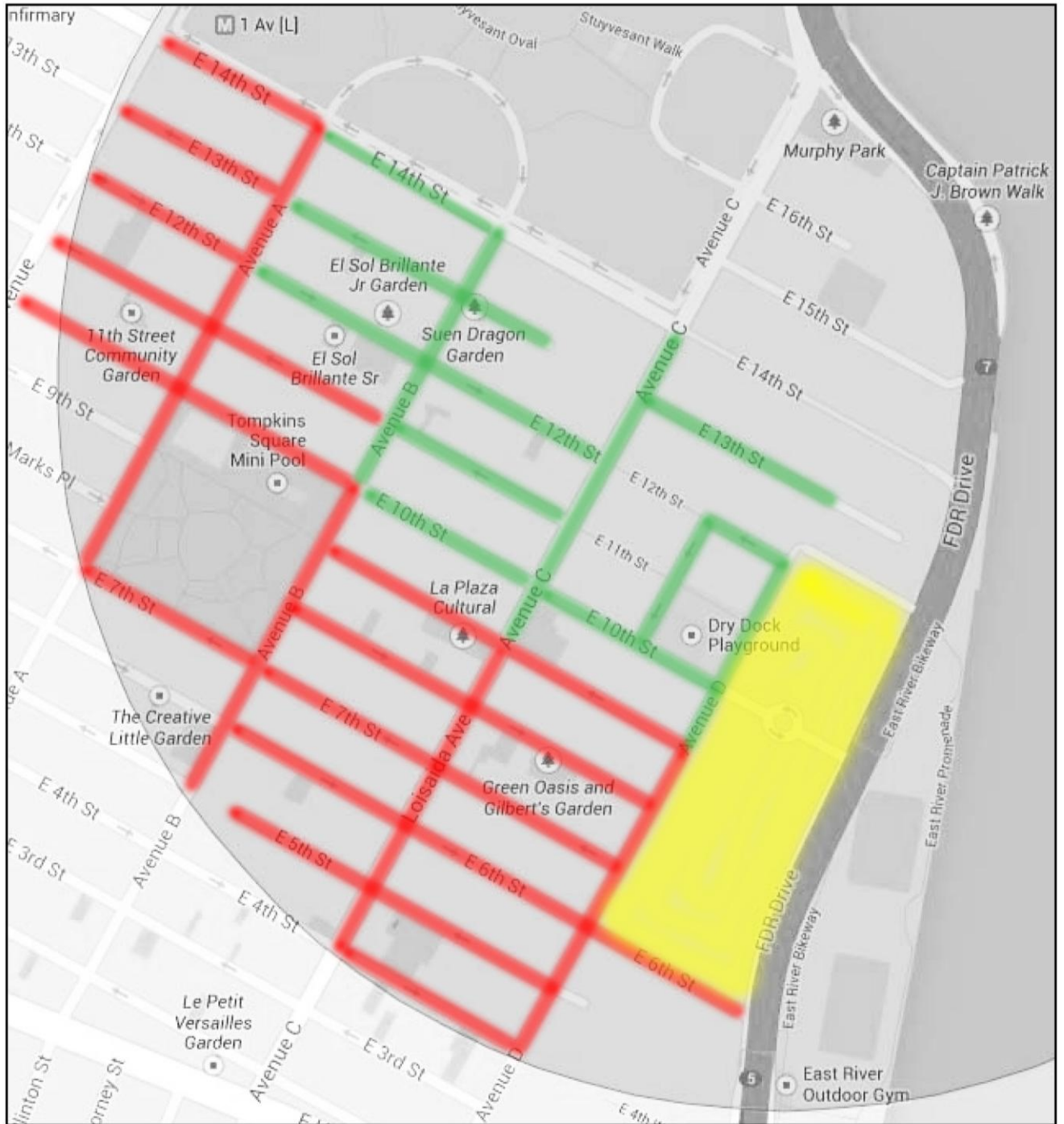
The continuing efforts for all specific work items will also be contractually binding for two years. The installers hired by New York City Parks and the Tree Trust will be required to water the trees every two weeks during the growing seasons and to guarantee each tree for a two-year period.

Additional information on NYC Department of Parks & Recreation Trees Planting efforts in this Area.

DPR receives and records each request to plant a tree in the city through a database. While DPR attempts to plant trees as quickly as possible NYC Parks is only scheduled to plant some of these requests in the 2014 planting seasons as requests can take up to 1 year to be surveyed. As of October 1, 2013 the DPR request based system has only 9 requests within the proposed 1/2 mile zone. In addition, there is no current funding for the expansion of tree pits or guarding of trees in the LES. Unrequested tree sites and trees in need of pit expansion are often delayed in being addressed as public demand for trees are given top priority. These sites and this neighborhood are perfect candidates for specific grant based funds such the LES GAP. By focusing in on the neighborhoods in the immediate proximity to the East River Complex the LES GAP will both quicken the pace of planting, provide opportunities for tree planting in often neglected sites, and increase existing tree health by expanding pits, guarding trees, and using ground cover plantings.

Appendix 1: Map of Proposed Work Area.

Note: Street Segments in Phase Two receiving new trees and expanded tree beds will be carefully considered and discussed with the granting committee prior to work beginning.



Street Segments within 1/2 mile of Con Ed Facility

Streets Completed in Phase 1

Street Choices Proposed for Phase 2

NYCHA Area Proposed for Phase 2

Lower East Side Greening Acceleration Program Participants

New York Tree Trust



The New York Tree Trust is a non-profit established in 1994 to protect, preserve, and enhance New York City's street, park and forest trees. The goals of the Tree Trust are to foster public-private partnerships in urban forestry, raise public awareness of the importance of urban forestry conservation and stewardship, promote new technologies to enhance tree survival and advance innovative management tools, and revitalize historically and arboreal significant municipal trees. The New York Tree Trust's fiscal sponsor is the City Parks Foundation whose tax ID number is 133561657.

NYC Department of Parks and Recreation



The Parks Department Central Forestry division and forestry divisions of each borough provide a variety of tree and sidewalk-related services to New York City. NYC Parks evaluates each tree planting location to determine the sites suitability and potential infrastructure conflicts.

MillionTreesNYC, one of the PlaNYC initiatives, is a citywide, public-private program with an ambitious goal: to finish planting and care for one million new trees across the City's five boroughs over the next five years. By planting one million trees, New York City can increase its urban forest a valuable environmental asset made up of street trees, park trees, and trees on public, private and commercial and by an astounding 20%, while achieving the many quality-of-life benefits that come with planting trees. More information about MillionTreesNYC can be found at:

<http://www.milliontreesnyc.org>

Lower East Side Greening Acceleration Program Contacts

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New York City Tree Trust



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Friday, October 4, 2013

Con Edison Settlement Fund Task Force
Community Board 3
59 East 4th Street
New York, NY 10003

Re: Letter of Agreement: NYCHA Tree Removals and NY Tree Trust Tree Replanting at Jacob Riis Houses

To Whom It May Concern:

This letter confirms an agreement between NYCHA and New York Tree Trust for the partnership in removing and replanting the trees in Jacob Riis Houses which were destroyed by Hurricane Sandy. The NY Tree Trust will be applying for a grant thru the Con Ed Settlement Funds and Community Board 3 which, if approved, will have a portion of funds dedicated to fully covering the costs for the replacement of at most 60 trees at Jacob Riis Houses. These costs will cover the procurement of 60 balled and burlapped 2.5-3" caliper trees using existing NYC Parks & Recreation contracts, the preparation of 60 lawn tree beds including replacement soil, and the actual tree planting using a contractor hired and managed by NY Tree Trust. NYCHA has agreed to cover all of the costs of tree removals at Jacob Riis Houses and their agreement to remove the destroyed trees will be considered as matching funds in the grant application which enable the approval of Grant Funds for tree replacement.

The timeline for these efforts will be focused upon having sites ready for planting by the Fall 2014 or Spring 2015 planting seasons. The final planting locations, species choices, and contactor access will be agreed upon during the Summer of 2014 by both a NY Tree Trust and NYCHA representative.

If you have further questions do not hesitate to contact me.

Best regards,

Michael Vacek
Project Manager
New York Tree Trust

Luis Ponce
Vice-President for Operations
New York City Housing Authority (NYCHA)

Since 1994 Tree Trust has fostered public-private partnerships in urban forestry, raised public awareness of the importance of urban forestry conservation and stewardship, promoted new technologies to enhance tree survival, advanced innovative management tools and revitalized historically significant trees.