



## Streamlined Navigation of the NYCVCP

**C**A RICH has successfully completed one of the first "Track 1" cleanups under the New York City Office of Environmental Remediation's (OER) Voluntary Cleanup Program (NYCVCP) (formerly the Brownfield Cleanup Program). The Track 1 cleanup is the highest level of cleanup which qualified our client for the maximum allowable grant monies available under OER's Brownfield Incentive Grant (BIG) Program to help offset the cleanup costs. This cleanup was performed in conjunction with an extremely aggressive construction schedule - a requirement typical of many projects in New York City.

The project started in February 2011 when Artimus Construction, Inc. called upon CA RICH to discuss their redevelopment plans for a 26,000 SF site located



at 260 W26th St. in Chelsea. The site was "E"- designated for hazardous materials and improved with a partially-occupied two-story building and parking lot.

Artimus was concerned that requisite environmental compliance associated with OER's "E"

Program would delay their construction schedule and add additional costs to the overall redevelopment plan. To fast-track the project, CA RICH expedited a combination Phase I/II Environmental Site Assessment to

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## Sandy's Surge & Shifting Sand - Rebuild or Relocate

Editorial By Charles Rich

**S**uperstorm Sandy, although downgraded to 'post-tropical cyclone' storm intensity, had an immense counterclockwise 800-mile wide, wind field that affected many people across New York's densely-populated region (see photo). With such a large storm, surges of seawater can precede storm landfalls by several hours extending the flood damage. Storm surges are even further exacerbated when a landfall happens to coincide with a lunar high tide - as Sandy's did. Out in Long Beach, LI, Sandy's surge was observed to overflow the banks of Reynolds Channel (north side of Long Beach) as early as Sunday afternoon, a relatively quiet day preceding Sandy's arrival (eyewitness account).

Unlike nor'easter winter storms sustained for days, hurricanes move rapidly across Long Island in only a few hours. In Sandy's case, the rate and direction of her northwest track was complicated by a second storm to the west. Fortunately, Sandy's relatively low rainfall moisture content and the natural high infiltration rate of Long Island's permeable Upper Glacial aquifer soils, helped to buffer further damage to Long Islands' 3 million residents. However, despite this relatively rapid movement, damage was considerable:



flooding of basements, washed-out roadways, blockages of transportation routes, evacuations, extensive tree damage, and massive weeks-long power outages (almost a million LI customers).

Along barrier islands, environmental damage relative to health & safety included sewage backflows (e.g. a temporarily inoperable Bay Park STP), drinking water interruption, tank & appurtenant piping breakage, oil spills, sinkholes, water damage, residual toxics, heavy metals and gasoline now in soils, overwash sands that are now dirty, asbestos, mold growth from damp drywall (as well as from moist cloth, carpets, leathers, wood & insulation), disappearance of dunes and boardwalks, and emergency dumping of collected storm & demolition debris. These problems are amplified by the absence of environmental testing and questionably-qualified restoration efforts and cleanups. Sandy presents a host of new issues such as address-

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identify any concerns or conditions that could impede the redevelopment of the property into a 12-story LEED-certified 204-unit residential building. As the results of the assessment and testing became known, CA RICH initiated a pre-application meeting with OER to discuss entering the property into the NYCVCVCP.



**Community Air Monitoring**

The construction team needed an approved Remedial Action Work Plan and Notice-to-Proceed issued from OER within 60 days. Consequently, an accelerated approach to complete the Remedial Investigation was developed along with a conceptual agreement of the necessary components for a cleanup plan and the timeframe for the completion of reporting deliverables.

OER assured the redevelopment team it would issue a Notice-to-Proceed within the aggressive construction schedule. It was also decided that since the site was "E" designated and had to satisfy OER's requirements accordingly, the developer would enter the VCP Program, and in doing so, be able to take advantage of the maximum possible Brownfield Incentive Grant (BIG) for a preferred community development project.

To enter the VCP and stay on track with the important construction schedule, CA RICH quickly submitted a NYC Brownfield Cleanup Application along with the Phase I Environmental Site Assessment Report, Remedial Investigation Report, Remedial Action Work Plan (RAWP), Construction Health & Safety Plan, Public Notice and a Voluntary Cleanup Agreement — all within only 30 days. As agreed upon, OER issued an approval for the RAWP and Notice-to-Proceed and executed a Stipulation Agreement after the requisite 30-day public comment period, maintaining our Client's construction schedule.

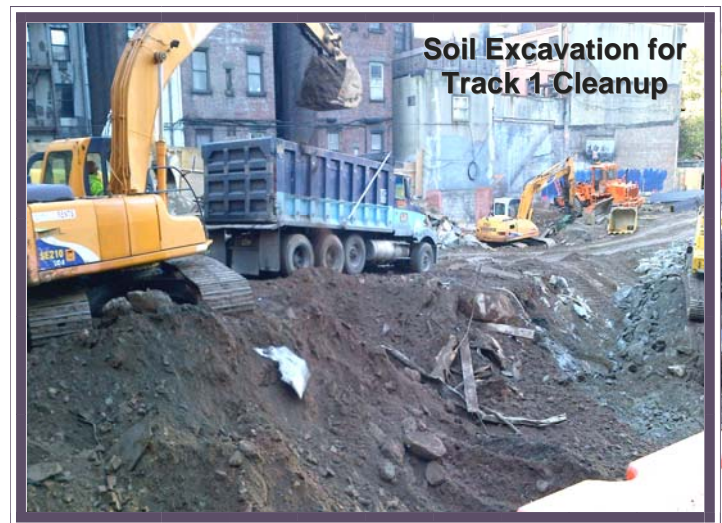
Upon RAWP approval, CA RICH prepared a remedial cost estimate to execute all the environmental work as stipulated in the approved RAWP. In addition, this estimate was intentionally designed to be acceptable to

institutional investors for financing purposes which then proved to further expedite the development process, permitting, and site demolition.

The remedial work included: collection of in-situ soil waste classification samples to profile the soil and obtain disposal approval at suitable facilities; implementation of a Community Air Monitoring Program for particulates and volatile organic compounds; screening of excavated soil/fill during construction for contamination; site-wide excavation to buried bedrock to achieve Track 1 Soil Cleanup Objectives (SCOs) for unrestricted property usage; transportation and disposal of all soil/fill materials at permitted facilities; and installation of a waterproofing membrane beneath the building slab and around basement walls.

Attaining the most stringent Track 1 cleanup is typically challenging. For this development, it was crucial to the successful completion of the project because it eliminated what otherwise would have been necessary: encumbering this property with a Deed Restriction and the costs of implementing a Site Management Plan. It also carried the benefit of an additional \$25,000 "Track 1" bonus grant.

The rewards of going through the NYCVCVCP include limited liability protection, grants using City funds to stimulate Brownfield projects, and "Clean Property Certifications". Clean Property Certifications are recorded on a City Registry and on a "Clean Map" of New York City. A Certificate suitable for public display is awarded to the property Owner to formally advertise participation and successful completion in the NYCVCVCP.



**Soil Excavation for Track 1-Cleanup**

Be sure to call CA RICH for more information on the NYCVCVCP and to help you economically navigate your next Brownfield deal.

*Sandy... Continued from page 1)*



**Seawater inundating homes**

ing revisions to building codes, expedited permitting, strengthening building materials in flood-hazard zones, escalating insurance premiums, and even possibly future problems with property taxes. In short, more than 300,000+ homes have been destroyed with the number of homeless or displaced still unquantifiable at this time. Sandy's cost keeps going up in our NY/NJ region. As you read this, it's now projected to be as much as \$70-80 billion.

Why did this decaying tropical storm, downgraded from a hurricane, cause so much damage? It was not an isolated event and so the question arises: will a future bigger hurricane, perhaps more aptly named 'Satan' rather than Sandy, be far worse and should those displaced by Sandy rebuild as-is, or try to relocate elsewhere? This is a difficult social and political issue but is timely and best explored now, rather than put off, and certainly needs to incorporate our aversions to risk, costs, newly-mapped expanded flood zones, and the potential losses and suffering from future storms.

There are interesting natural factors that should be integrated into decision-making oftentimes misunderstood or ignored such as the unique geological character of the 'barrier' islands that protect the Island, as long as they are preserved in their natural state. Obviously, building too close to the beach, a past practice along many parts of Long Island, invites disaster. Geologically, LI's barrier island system is dynamic and sustained by the ability of sand originating from the eastern end of LI and offshore to slowly move/migrate westward with littoral drift all the way to the Far Rockaways, and beyond. Engineered efforts to block the movement of nourishing sand, such as protective jetties or groin fields, or dredging offshore sand and simply dumping it on beaches to restore eroded dunes, although deemed advantageous to widening short sections of beach

for nearby homeowners, and/or maintaining navigable inlets, also 'starves' beaches to the west of needed sand.

It's also important to recognize that some of the wider low-lying land areas and wetlands along the north side of the barrier islands are more sensitive to the effects of hurricanes having been repetitively breached by past storms. These storm-sensitive areas are accessible flat sand overwash zones and are desirable from a real estate development perspective. However, improvements built upon them remain relatively more exposed to hurricane flood damage. These higher-hazard areas are discernible on historical aerial photographs illustrating conditions directly preceding and following hurricanes.

It's a well-known meteorological fact that northern hurricanes develop wider wind fields. With ocean temperatures warming faster than predicted (the fuel for these storms), Sandy may only have been a modest preview to stronger storms, perhaps at catastrophic hurricane density, entering the NY Bight in the years ahead. Throw in a high tide, and it would not be unreasonable to expect flooding and erosion far in excess of Sandy's – possibly producing storm surges as high as 20-25 foot above sea level.

Sandy's significant physical and environmental damage may represent some of the effects of global warming. This experience coupled with what we already know about the ephemeral nature of coastlines must be a red flag to enlightened planners and politicians. Change is needed. It is recommended that a regional Storm Management & Preparedness Plan be developed and adopted publicly. Such a Plan should provide a roadmap for homeowners to be able to readily decide whether to rebuild on the beach at greater costs, or relocate away from it. It should also provide independent but coordinated environmental testing, mitigation, and enforcement needed in these occupied higher-risk flood-hazard areas.



**Damage from shifting sand**

### What's new at CA RICH

We are pleased to announce Eric Weinstock, VP, is an invited Expert Panelist for the US Green Building Council's upcoming "Brownfield to Greenfield" Conference & Expo, January 16th at the RXR Omni Theatre in Uniondale, NY.

Congratulations to Deborah Shapiro, Sr. Proj. Mgr., who has been recently elected to serve on the Board of Directors of the New York City Brownfield Partnership.

CA RICH continues to participate in the New York City Office of Environmental Remediation's Turbo Training Certification Program convened at the CUNY Graduate Center in Manhattan. Participation further advances the Firm's technical qualifications in providing remediation services for E-Designated Sites and the City's Voluntary Cleanup Program.

The Firm commends our own Victoria Whelan, Proj. Hydrogeologist, for volunteering her valuable time on weekends and after hours to assist homeowners affected by Sandy throughout the Long Beach, NY community. Aside from her humanitarian efforts, she is assisting affected folks with technical advice on responsive environmental testing and cleanup procedures.

*Best wishes for a happy and healthy  
Holiday Season and a prosperous New Year  
from your friends at  
CA RICH*

*For more information about CA RICH or the ENVIRONMENTAL  
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The Company supplies environmental consulting; Phase I & II Assessments; Compliance audits; Investigation; Remediation; Groundwater resource management; Storage tank, indoor air quality & hazardous waste management; Soil vapor intrusion mitigation; Brownfield redevelopment; Property acquisition; Sustainability, Expert testimony; Strategic thinking & dispute resolution; and all other professional services related to evolving regulations and client needs.

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