

## **FIRM PROFILE**

### ***DISTINCT ENGINEERING SOLUTIONS, INC.***



Distinct Engineering Solutions, Inc is an engineering consulting firm with a mission to provide solutions that are tailored to meet clients' needs, project scope and budget; and bring synergy to design and construction projects. Our vision is to establish a strong relationship with our clients through proactive thinking, and provide responsive and cost effective solutions for their success. DESI is certified in NY & NJ to provide engineering services and is certified as SBE by the State of New Jersey; M/DBE certification is pending.

We employ and/or engage individuals who possess strong academic qualifications and practical experience to serve our clients. Our experienced professional staff is willing and able to support clients primarily in geotechnical and environmental project design, construction or act as owner's representatives to ensure the proposed project is completed to the satisfaction of all stake holders. Our trained and experienced professionals in design and construction will serve as client's confidant, providing distinct solutions to their project needs from inception through completion. Our professionals have expertise in the following areas

#### **Design Phase**

- Site Feasibility Studies for New and Redevelopment Projects
- Phase 1, Preliminary Assessment, Site Investigations
- Evaluation of Subsurface Soil and Ground Water Conditions
- Estimate Soil Properties and Design Embankments for Road, Rail, Dam, etc.
- Recommendations for Ground Improvements & Foundation System Design
- Slurry Walls, Jet Grouted Columns, Landfill Liners and Covers (soil and synthetic type)
- Sampling and Analyses of Soil and Ground Water for Delineation/Monitoring
- Remedial Investigations, Remedial Action Selection and Remedial Design
- Underground and Above Ground Storage Tank System Installation and Closure
- Assess Surface and Ground Water Conditions, Estimate Contamination Plume Migration
- Storm Water Management Plans and Storm Water Pollution Prevention Plans
- Evaluation of Building Materials through Non Destructive Testing
- Evaluation of Building Hazards Asbestos, Mold and Mildew, Radon, Lead Based Paint
- Develop Construction Bid Documents and Specifications
- Risk Identification, Evaluation and Develop Mitigation Measures
- Cost Estimation and Value Engineering

#### **Construction Phase**

- Review Bid Specs and Drawings and assist with planning, scoping and cost estimation
- Site Health & Safety, Emergency Management Plans, Community Air Monitoring Plan
- Evaluation of Soil Reuse Options, Excavation Management Plan
- Oversee Test Pile and Production Pile Installation, Pile Load Test and Reporting
- Construction Administration, Inspections and Document Control
- Pre & Post Construction Condition Survey, On-site Monitoring
- Instrumentation and monitoring for settlement, lateral movement, vibration, etc.
- Resident Engineering
- Project Management

**Please contact for all teaming arrangements, project needs and any other clarifications  
Mr. Ram Tirumala, P.E. (732) 658-1052, E-mail: [rtirumala@distinct-esi.com](mailto:rtirumala@distinct-esi.com).**

## Key Staff Experience Summary

### *DISTINCT ENGINEERING SOLUTIONS, INC.*

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**Mr. Ram Tirumala, P.E.** Principal/Sr. Project Manager has over 24 years of experience in geotechnical, environmental, construction and project management. He has directed subsurface investigations and feasibility studies, and has managed engineering projects for governmental agencies (NJDOT, NJ Transit, NJ Turnpike, MTA CC/NYCT/Metro North, NYCDOT, etc.), schools & Universities, pharmaceutical firms, utility companies, developers and casino industry clients. He has managed several environmental projects from Phase 1 Environmental Site Assessment (ESA) to remediation; Brownfield pilot studies and redevelopment; evaluation and abatement design for asbestos, lead, mercury, PCB and radon and mold for schools, municipal and county governments, financial institutions, and lawyer; pharmaceutical and chemical manufacturers. His specialty includes managing remedial investigations; feasibility studies to assess hazardous material; develop remediation plans for contaminated sites; develop air monitoring and construction oversight. His expertise in cap and cutoff wall design led to the development of containment remedies for sites with complex subsurface conditions.

Mr. Tirumala's geotechnical experience includes evaluation of subsurface materials, performance of engineering analysis and design of spread footings, piles, caisson foundations, steel bulkheads and seawalls. He has designed and supervised construction of ground improvement schemes consisting of vertically draining wicks, deep dynamic compaction and surcharging to improve the bearing capacity of poor soils as well as land-filled material. His site civil experience includes preparation of site plans, parking and grading plans, drainage and storm water management, and utilities. He has prepared specifications, drawings, cost estimates and engineering reports. He has assisted in preparation of NPDES, SWPP, Land Use Regulation Permits, etc. He has offered extensive technical assistance and supervision at project sites as part of construction administration and support services. He holds a masters degree in Civil Engineering; Professional Engineers license in New Jersey, New York and Pennsylvania; US EPA certified Asbestos Project Designer, and NJDEP Subsurface Evaluator and UST System Installation & closure.

**Mr. Nick Capuano**, Project Manager has over 25 years of experience in environmental due diligence assessments, site investigation/remediation and project management. He has worked in the electric utility industry providing management of the wastewater treatment systems, hazardous waste, hazardous materials storage and disposal, and permit compliance. He has extensive global experience working in several countries in Europe, Asia, and South America; conducting environmental due diligence performance of site characterization on industrial properties, leaking underground fuel storage tanks, alternate fuel sites, and other real estate. He has instituted state of the art remedial methods to clean-up sites saving time and money. His implementation of soil vapor extraction and hydrogen peroxide treatment to clean impacted groundwater system could bring an early closure to a project site. His ability to convince stake holder in implementing peroxide treatment in place of conventional pump and treat resulted in reducing cleanup cost and duration. He quickly and cost effectively completed a soil/groundwater cleanup in New Jersey, at a site that had been treating groundwater for many years. He convinced state regulators by providing irrefutable data that the source of the groundwater contamination was not due to operations at the facility in question, thereby, avoiding an extensive groundwater cleanup. He earned the prestigious Lucent Environmental hero Award for completion of Phase I, II, and III at a manufacturing site in Poland. He holds a Masters Degree in Environmental Engineering and Project Management Certificate.

## Key Staff Experience Summary (Contd.)

*DISTINCT ENGINEERING SOLUTIONS, INC*



**Mr. Rammohan Kasturi, P.E.** Sr. Project Engineer with over 15 years of expertise in subsurface investigations, variety of geotechnical engineering projects for residential and commercial developments, infrastructure projects (CT DOT, NJDOT, NJ Turnpike, US Coast Guard), and waterfront development. He has completed numerous geotechnical projects starting from initial planning; organization of field subsurface investigation and laboratory testing programs; evaluation of data and submission of final reports within stipulated budget and schedule. He has developed and recommended innovative solutions to construct on sites with complex geotechnical concerns.

He is proficient in subsurface soil investigations, soil profile analysis, planning and coordination of soil testing programs, identify design soil parameters, liquefaction analysis, foundation design for buildings, bridges and retaining walls, design and analysis of deep pile foundations, foundation settlement analysis, slope stability analysis of embankments, geotextile applications, design and evaluation of MSE retaining walls, design and rehabilitation of pavement structures for roadways and parking lots, design and analysis for stabilizing foundations of existing structures using mini/micro piles. Experienced in installing and configuring various software packages required for geotechnical design projects. He holds a masters degree in Civil Engineering; Professional Engineers license in New York, Connecticut, and District of Columbia.

**Dr. Suresh Puppala, P.E.** is a Project Engineer with over 12 years of experience in engineering studies, data evaluation and analyses, remedial design. He has overseen implementation of multiple Brownfield's Redevelopment projects in NJ and NY including liaison with regulatory agencies; monitor compliance with regulations and guidance documents; track compliance with community participation plans and community air monitoring plans; overseen implementation of Remedial Investigation Work plans, remedial design document, prepared and submitted monthly progress reports, final engineering reports and site management plans. He managed various environmental aspects of a landfill closures and redevelopment project funded by New Jersey Environmental Infrastructure Trust. Specific roles included liaison with NJDEP; oversee site grading operations, landfill capping soil quality control and placement; approval of subcontractor submittals associated with installation of leachate collection/treatment system, landfill gas collection system, temporary and permanent landfill gas flares. Also evaluate landfill gas detection systems for building interiors, preparation and submission of monthly progress reports and a Landfill Closure Report.

He has also prepared proposals and cost estimates to comply with Technical Requirements for Site Remediation (N.J.A.C 7:26E) at hazardous waste sites; prepared proposals for procuring "Brownfield" grants from NJEDA Hazardous Discharge Site, Remediation Fund and USEPA Brownfields Assessment, Revolving Loan Fund and Cleanup Grant programs; worked on relatively complex projects involving, former/current Superfund sites, Brownfield redevelopment, NJSCC sites and NJ Sports & Exposition Authority sites; coordinated completion of Phase 1/PA and Environmental Site Assessment reports, implemented work plans and prepared reports for Site Investigation, Remedial Investigation, Remedial Action, for numerous hazardous waste sites; responsible for overseeing implementation of bench-scale and pilot scale treatability studies in support of Remedial Actions such as Enhanced Monitored Natural Attenuation, Soil Vapor Extraction, Air Sparging and Surfactant Flushing. Coordinated the full-scale implementation of some of these technologies to function as engineering controls and establishing institutional controls such as Classification Exception Areas and Deed Notices to address groundwater and soil contamination. He holds a doctorate degree in Civil Engineering; Professional Engineers license in New Jersey, New York, and Pennsylvania and NJDEP UST Certification.

**Dr. JINHYUNG CHUNG P.E.**  
Project Engineer

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### ***EDUCATION***

Ph.D. in Civil Engineering - University of Illinois at Urbana-Champaign, Urbana, IL  
M.S. in Civil Engineering, Yonsei University, Seoul, Korea  
B.S. in Civil Engineering, Yonsei University, Seoul, Korea

### ***PROFESSIONAL REGISTRATION***

Registered Professional Engineer in New Jersey (24GE04710800)  
Registered Professional Engineer in California (C72504)

### ***LABORATORY TEST SKILLS***

General Lab and Field Tests for Geotechnical Engineering  
GCL Related Tests: Flexible Wall Permeameter, Fluid loss, Free Swell, Flow Box Test,  
and Mineral Analysis Tests: Gas Adsorption, MIP, XRD, SEM

### ***COMPUTER RELATED SKILLS***

**Geotechnical Analysis Programs:** Plaxis, Plaxis 3D Foundation, GRL-Weap, MSEW, Geo-Slope, LPiLES, Proshake, Unisettle, Unipile, FLAC 2D/3D  
**Office Programs:** MS Excel, Word, Visio, Powerpoint, MathCad, Surfer, Autocad

### ***PROFESSIONAL EXPERIENCE***

Mr. Chung has over 15 years of geotechnical and geo-environmental engineering experience in field investigations, engineering design and laboratory testing and evaluation. He has extensively worked on geosynthetic clay liner research projects, landfill development projects and various projects related to the technical analysis and design of shallow and deep foundation systems, stability of embankments and natural slopes, design of geo-structures, various laboratory test project in geotechnical and geo-environmental engineering including landfill materials. He has worked as a project engineer on geotechnical and civil engineering in northeastern part of the United States, and South Korea.

### ***REPRESENTATIVE PROJECTS***

#### **Kingsland Park Sanitary Landfill Project, Lyndhurst, NJ**

Landfill Stability Analysis: Slope Stability, Settlement Analysis, Historic and Current Instruments Data Review: Inclinator, Piezometer, and Settlement Plate

#### **Red Bull Soccer Stadium Project, Harrison, NJ**

3000+ Wooden Pile Driving Inspection and Reviewing, Settlement Analysis for Organic Layer, Fill Installation Inspection

#### **MGM Casino & Hotel Project, Atlantic City, NJ**

Settlement analysis: Immediate/Consolidation Settlement Analysis  
Structural Design/Analysis: Mat Foundation w/ Pile Support Structure  
Seismic Analysis: Site-specific Seismic Analysis using Proshake

**Dr. JINHYUNG CHUNG P.E.**  
**Representative Projects**



**Revel Casino Project, Atlantic City, NJ**

Settlement analysis: Immediate/Consolidation Settlement Analysis  
Structural Design/Analysis: Mat Foundation w/ Pile Support Structure using Plaxis 3D  
Seismic Analysis: Site-specific Seismic Analysis using Proshake  
Field engineering: Boring, ACIP Observations

**Palisades Point Project, Yonkers, NY**

Slope stability analysis: Construction/Longterm Stability Analysis  
Seismic Analysis: Site-specific Seismic Analysis using Proshake  
Pile Design/Analysis: Static/Dynamic Pile Analysis using LPile & GRL WEAP  
Field engineering: Boring observations

**Meadowland Golf Redevelopment Project (60 ac)/Arlington Valley Redevelopment**

Settlement analysis: Surcharge design, Construction/Longterm Settlement Analysis  
Slope stability analysis: Construction/Longterm Stability Analysis  
Structural Design/Analysis: Retaining Wall, MSEW, Pile Design and Analysis  
Instrument (Inclinometer, Extensometer, VW, etc.) data analysis  
Field engineering: Boring, Dynamic Compaction, Wick Drain installation observation, instrument installation/reading

**Lincoln Park Golf Course Project**

Settlement Analysis, Stability Analysis, Subsurface Investigation

**Various Subsurface Investigation & Design/Analysis Projects, NJ,**

Newbridge Road Sound Barrier Project, Levittown, NY  
Hudson County Plaza P/L Pavement Project, Jersey City, NJ  
Rutgers Christian Community Church Redevelopment Project, Franklin Twp, NJ  
Visy Paper Recycling Facility Expansion Project, Staten Island, NY  
Pershing Road Construction Phase I, Weehawken, NJ  
Bagatelle Road Substation, Huntington, NY  
Red Bull Soccer Field Settlement Analysis,  
Firmenich Newcaps Pile WEAP Analysis, Newark, NJ  
Pier C Park Pile WEAP Analysis, Hoboken, NJ

**Experimental Analysis of Hydraulic Behavior of GCL/Bentonite**

Hydraulic conductivity of GCLs permeated with fly-ash leachate  
Verification of index tests (fluid loss, free swell) for bentonite in GCLs  
Development of modified fluid loss tests for better index of bentonite permeability  
Hydraulic behavior of GCLs permeated with inorganic chemical solutions  
Flow through puncture and overlaps in geomembrane

**Analysis and Design of Incheon LPG Underground Storage Cavern, Incheon, Korea,**

Design of Construction Hoist Foundations  
Design and Analysis of Slurry Trench Wall  
Field monitoring and Field soil tests

**Construction Proposal of Incheon LNG Receiving Terminal (In-ground Tank),  
Incheon, Korea,**

Design of slurry trench wall of in-ground tank  
Analysis of thermal effect by in-ground tank

## Dr. JINHYUNG CHUNG P.E.

### Representative Projects



**Analysis of Concrete Crack due to Hydration Heat, Seoul, Korea,**  
Sohae Grand Bridge pier foundation (pipe-cooling, multi stage pouring, ponding)  
Foundation and wall of Seoul 6th Subway Construction

**Design and analysis of Seohae Grand Bridge Foundations, Dangjin, Korea,**  
Analysis and design of concrete mixture for foundation and pier  
Application of non-destructive tests for pier quality control: statnamic, dynamic load tests,  
sonic logger test

**Estimation of Layer Moduli of Asphalt Concrete Pavement Considering Depth to Rigid Rock and Nonlinear Properties of Subgrade,**  
Application of non-destructive test method (falling weight deflectometer) for highway pavement analysis

### **Development of a Rehabilitation System for Flexible and Rigid Pavement Structures**

Development of pavement analysis system using falling weight deflectometer

### **PUBLICATIONS**

1. Chung, J.H. and Daniel, D.E. (2008), "Modified Fluid Loss Test as an Improved Measure of Hydraulic Conductivity for Bentonite," *Geotechnical Testing Journal*, ASTM, Vol. 31, No. 3, pp. 243-251.
2. Olsta, J.T., Chung, J.H., and Daniel, D.E. (2004), "Various Aspects of Sodium Bentonite Testing," *Advances in Geosynthetic Clay Liner Technology: 2nd Symposium*, ASTM STP 1456, R.E. Mackey and K. von Maubeuge, Eds., ASTM International, West Conshohocken, PA, pp. 3-10.
3. Chung, J., (2004), Hydraulic conductivity of GCLs permeated with inorganic chemical solutions, Ph.D. Dissertation, University of Illinois at Urbana-Champaign
4. Eun, H., and Chung, J., (1996), "Dynamics and Control of Holonomic and Nonholonomic Systems using GIM," *Journal of Korean Society for Noise and Vibration Engineering*.
5. Kim, J., Kim, K., and Chung, J., (1996), Stress Analysis due to Heat of Hydration on Concrete Structures, Research Report of Construction Technology Institute, LG Construction Co./KIST.
6. Chung, J., (1996), "A Study on Control of Concrete Crack due to Heat of Hydration," *Proceedings of Construction Technology Institute Association, Spring '96 National Conference*.
7. Chung, J., (1994), A Study on Steep Slope Stability Methods, Research Report of CTI, LG Construction Co.
8. Chung, J., (1993), Design and Construction Methods for Soft Ground Improvement, Research Report of CTI, LG Construction Co.
9. Chung, J., (1992), An Experimental Study on the Deformation Behavior of Sand under Dynamic Loading, M.S. Thesis, Yonsei University

**Project References**  
**DISTINCT ENGINEERING SOLUTIONS, INC.**



The strength of the Distinct Engineering Solutions, Inc (DESI) is derived from the expertise of key people engaged by the firm in providing engineering solutions to those projects for which they have provided unique solutions through DESI and other prior firms. Representative projects managed by our key staff are herein referenced.



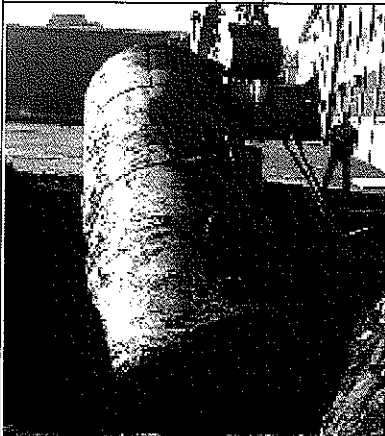
**Site Feasibility Studies** at the Gladys Hillman Jones School, a New Jersey Schools Development Authority project in Newark were performed to evaluate the project feasibility from many different angles including functional requirements, preliminary evaluation of site subsurface and surface conditions, environmental assessments, traffic studies, availability of resources for the development such as additional land and utilities, permit requirements and time to obtain permits; regulatory constraints and approval process. Based on the results of feasibility studies the initial scope of the project was expanded and subsequent phases of the project such as preliminary design, design development and final design were implemented.

Contact: Mr. Jonathan Dean, Timber Architecture Office  
Phone: (856) 778-2500

**Phase 1/Preliminary Assessment** is routinely performed to identify recognizable environmental concerns at properties to assess potential risks and liability associated with past uses of the property. DESI staff has performed numerous such Phase1/PA studies as part of real estate transactions adhering to ASTM D1527 procedures or NJDEP Technical Regulations for Site Remediation which included review of historical data, field visits, the review of municipal, county, state and federal records, and interviewing persons knowledgeable of the property. Where required, a site investigation to confirm the findings is also performed. DESI performed a Phase 1 for the Tinicum Lodging to assist with the acquisition of Caprice Whitestone Motel in Bronx New York.



Contact: Mr. Raj Naik, Tinicum Lodging  
Phone: (732) 789-7648



**Underground and Above Ground Storage Tank System Closure/Installations** were performed by certified DESI staff for numerous facilities in New Jersey and New York. DESI is certified by NJDEP to perform the entire UST work. DESI assisted the Newark Public School (NPS) with closure of a 20,000 gallon #4 heating oil tank located within the basement, obtained variance from the NJDEP for sampling requirements and submitted a facility questionnaire to de-list the tank. The impact to groundwater is currently being investigated. Assisted NPS on UST compliance and closure at several other school sites as well.

Contact: Mr. Satish Desai, P.E. Newark Public Schools  
Phone: (973) 733-8572

## Project References (Contd.)

### *DISTINCT ENGINEERING SOLUTIONS, INC*



**Asbestos and Hazardous Material Evaluation** was essential for the deconstruction of buildings for the Fulton Street Transit Center in lower Manhattan, NY. Our engineer developed a program to complete survey for identification for the presence of asbestos, lead based paint, PCB, mercury and other chemicals in 5 occupied buildings slated for total renovation/deconstruction. Also developed emergency management plan (EMP), health and safety plan (HASP) etc. to meet MTA Capital Construction program requirements. Survey reports were prepared with a clear illustration of sampling locations on plans, photo documentation and a summary of test results. Abatement designs were developed with clearly identified waste routes, work and decon areas, containment structures, monitoring requirement etc. Survey and abatement design was performed adhering to the NYSDOL regulations and MTA policies. Also our engineer assisted on geotechnical, environmental investigations and utility identification.



Contact: Mr. Craig Covil, Arup  
Phone (212) 897-1361



**Integrated Geotechnical and Environmental Studies to Minimize Project Cost and Accelerate Schedule** were performed routinely by our engineers. Lincoln Park Coast Cultural District (LPCCD) is a project with a mission to transform blighted lots in a low-income neighborhood in Newark, NJ, into an urban eco-village. For this project our engineer performed subsurface soil and ground water studies identified locations of underground storage tanks, impacted and unsuitable soil, developed foundation design parameters recommendations for the site development. Also construction inspections were performed to verify the subgrade preparation and compaction were performed as per project specifications.

Contact: Mr. Baye Adofo Wilson  
Phone: (973) 242-4144

**Excavation Support System for Site Remediation** was essential in ensuring the structural stability of existing buildings in a former MGP Site. Our engineer demonstrated to ConEdison that a scheme of sheet pile wall and trench box to support excavation is a cost effective alternative to the expensive scheme of slurry wall, sheet pile and tiebacks. A test section was built to study potential complications and upon satisfactory performance a full scale excavation support was implemented. Additionally a monitoring scheme using settlement plates, inclinometers, pressure transducers and optical survey gauges was developed and implemented. Lateral movements of wall and the ground settlement were within the design limits.



Contact: Mr. Jeff Rutowski, ConEdison  
Phone (718) 204-4019

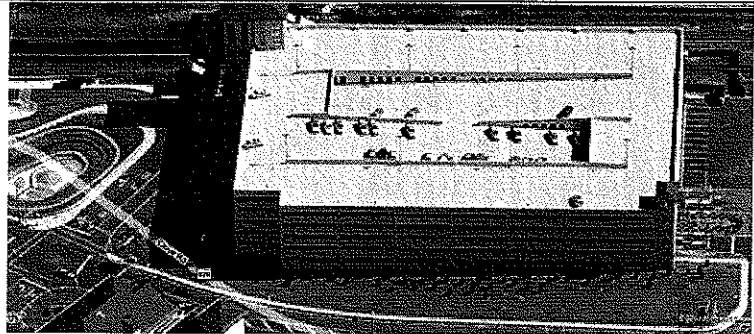


## Project References (Contd.)

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**Proactive Investigation and Remedial Actions** were necessary to complete the MSU Station and Parking Garage on time. It was built on a former quarry site. During the progress of construction activities contaminated soil, free product and impacted groundwater were identified. Our engineer proactively developed a Health and Safety Plan and work plan adhering to the NJDEP Technical Regulations for the Site Remediation and performed



investigative and remedial activities ensuring project schedule was not affected and the environment was not impacted. A monitoring scheme was developed to verify if installation of piles for foundations is affecting the migration of contamination.

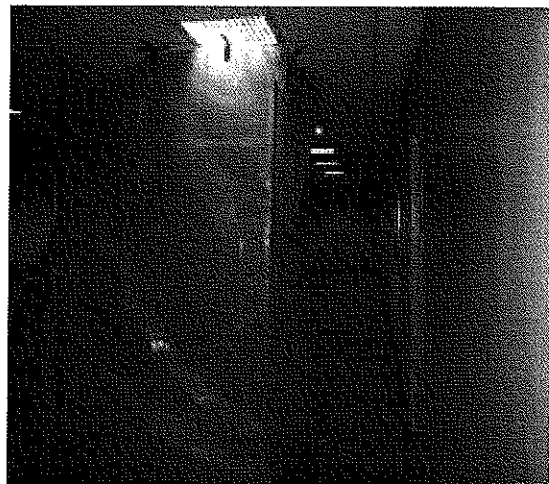
Contact: Mr. Martin Judd, NJ Transit  
Phone: (973) 491-7980



**Redeveloping an Abandoned Former Filling Station into Office Building** was impeded by the environmental concerns. Our engineers performed subsurface, soil and groundwater investigations expeditiously, identified UST and areas of soil contamination arranged for disposal. Our Engineers demonstrated to the NJDEP that groundwater contamination is due to migration of contamination from offsite sources and obtained a No Further Action statement from the NJDEP.

Contact: Mr. Calvin Shin, UB 1, LLC  
Phone 2019445845

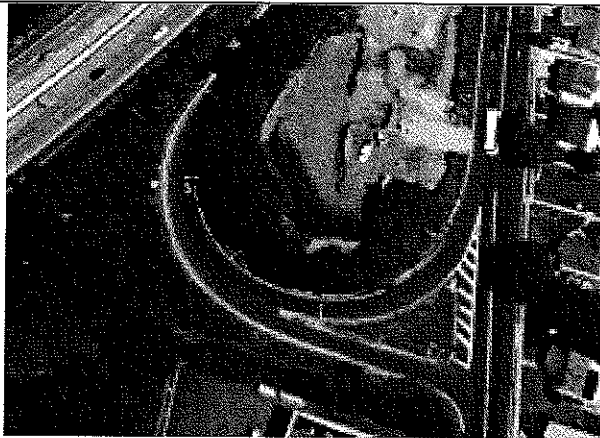
The **Asbestos Survey and Abatement Design** in accordance with the USEPA AHERA regulations published in the Federal Register in 40 CFR Part 763 were performed at the Peter Rodino Federal Building in Newark, NJ. The purpose of this survey was to identify asbestos containing material (ACM) within the building elements and subsequently develop an abatement design. Field information was organized as per the AHERA concept of Homogeneous Area (HA). Surveying an occupied public building posed several challenges and our engineer developed a flexible containment system that could be erected for safe sampling. The Bulk samples of suspect ACM collected were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and the National Emissions Standard for Hazardous Air Pollutants (NESHAPS). Analytical results have shown friable sprayed-on ceiling materials and other non-friable ACM. Recommendations were made to abate these materials prior to building modernization.



Contact: Mr. Jeffrey Dugan, Dattner Architects  
Phone: (212) 247 2660

## Project References (Contd.)

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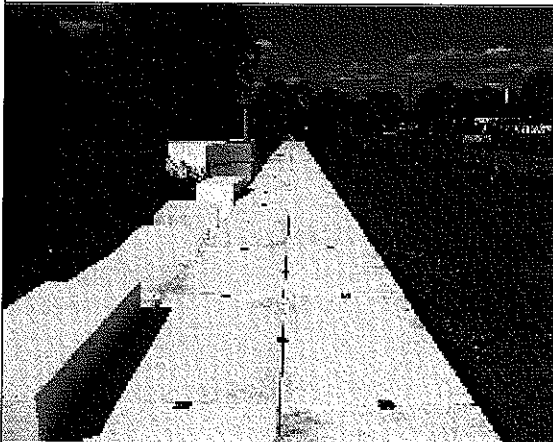
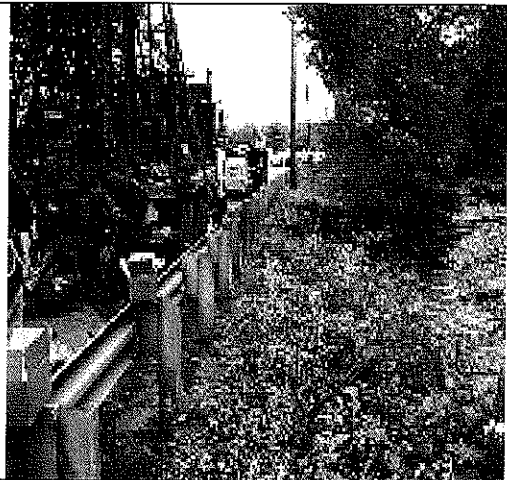


**Subsurface Soil and Groundwater Evaluation** was performed to assess the condition of roadway embankment and develop corrective actions to minimize settlements and erosion. Our engineer was involved in several DOT projects and investigated causes for the erosion, unusual cracking, settlement, etc., and developed schemes for improvements. Slope stability analyses were performed to verify the embankment slopes are stable. Also performed investigations for the design of storm water detention; foundation systems for high mast lighting in compressible soft soils (over 100 feet thick); foundations of bridge abutments as well as box culverts,

Contact: Mr. Chandu Bhorania, P.E. Medina Consultants  
Phone: (908) 850-3366

**A Ground Improvement Scheme for Bridge Approach Road** was designed by our engineer to minimize unequal settlement of new approach roads built for a new bridge in Staten Island, NY. Since the new bridge was a replacement bridge on a busy thoroughfare, construction was planned in multiple phases to maintain traffic flow. Subsurface soil consisted of compressible organic material and marine clays and our engineer developed a scheme of surcharge and wick drains that allowed initial settlement of embankment in each phase to be variable, yet post construction settlement are uniform. Also developed design parameters for the bridge abutment.

Contact: Ms. Mariatte Rajan, STV  
Phone: (973) 776-3661



**Ground Improvement for Athletic Field Reconstruction** was critical at Essex County West Side Park in Newark, NJ. Our engineer was engaged by LandTek Group to assist with the reconstruction of athletic field that required filling of low lying areas to build a new multipurpose synthetic turf ball field and a running track to meet the County requirements. Investigation at the site revealed that the compressible subsurface soil resulted in unequal settlement old storm water system and the expansion could result in about 18 inches of unequal settlement. Our engineer developed a ground improvement scheme, carefully selecting light weight aggregate and geofoam to minimize future settlement as well as to prevent uplift due to buoyancy during flooding. Also designed pile foundations for the floodlight structure.

Contact: Mr. Jeff Long, LandTek  
Phone: (631) 691-2381 Ext 22

## Project References (Contd.)

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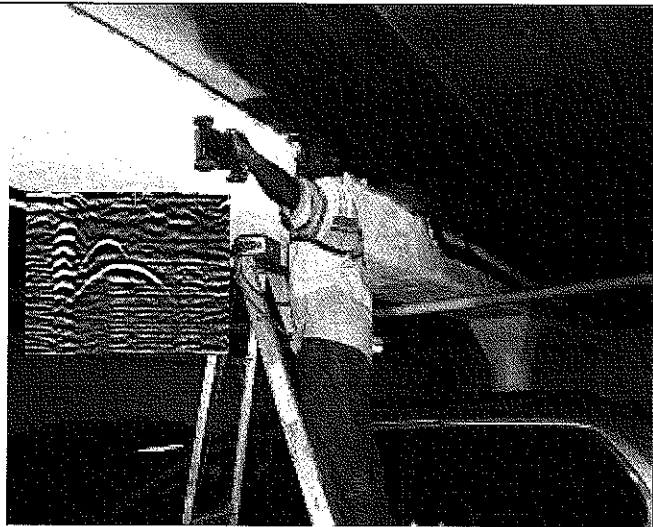


**Mold/Mildew Prevention and Confirmatory Sampling** scheme, a proactive approach was developed by our engineer to minimize the risk of potential mold/mildew growth in several of luxury apartment & hotel buildings developed by Alexico Management Group in Manhattan. As a part of this our engineer performed periodic survey of the construction activities at the site, identified potential path ways of water/moisture entry and environments for mold/mildew growth and provided mitigation methods for immediate implementation. Upon completion of construction of each apartment, collected and analyzed clearance air samples for presence of fungi and the results were presented in a report.

Contact: Mr. Niso Bahar, Alexico Group  
Phone: (212) 371-8188

**Non Destructive Testing (NDT) to Identify Building Elements** was designed by our engineer for the 2<sup>nd</sup> Avenue Subway Project. Several buildings will undergo modifications to allow construction of access ways, train stations, air vent shafts etc. and to identify structural members and strength of different building material without causing damage was a challenge faced by the design engineers. To alleviate this problem our engineer developed a NDT scheme using the GPR, proofometer, impact hammer, etc. to estimate limits of building footings, rebar location, concrete and steel strengths etc and prepared reports that are easy to read and are useful for design of improvements

Contact: Mr. Chris Bennette, DHA JV  
Phone(212) 607 4167



**Trans Hudson Express (THE) Tunnel CCM and Value Engineering** services were provided by our engineer for the new tunnel proposed to be built between the Secaucus in New Jersey and 33<sup>rd</sup> Street and 6<sup>th</sup> Avenue. As part of Consulting Construction Management services our engineer was involved in preparation of quantity estimates costs for the proposed civil works. As part of value engineering the preliminary design was reviewed and recommendations for improvements were made.

Contact: James Rolling, THE CM Consortium  
Phone: (973) 565-7919

## Project References (Contd.)

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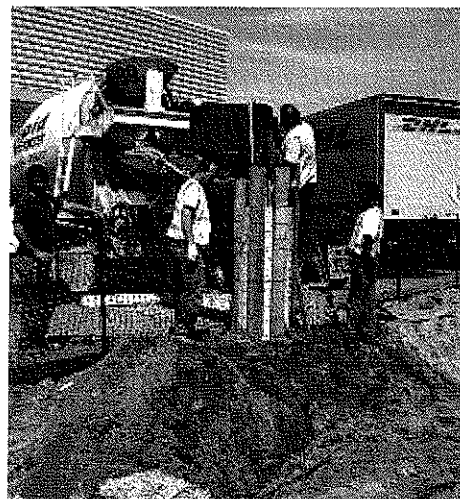


**Athletic Field Design and Construction Inspection Services** were provided to numerous project sites for the Take the Fields a not for profit organization in five boroughs of New York. Our engineers performed integrated geotechnical and environmental investigations to assess the subsurface soil and groundwater conditions, provided recommendations for the design of field, running track pavement, drainage, bleacher and field-house foundations. Develop plans and specifications for the removal of impacted soil, construction of cap. Developed health and safety plans (HASP) and community air monitoring program (CAMP), monitored dust levels, collected air samples, post remediation sampling, analyzed samples,

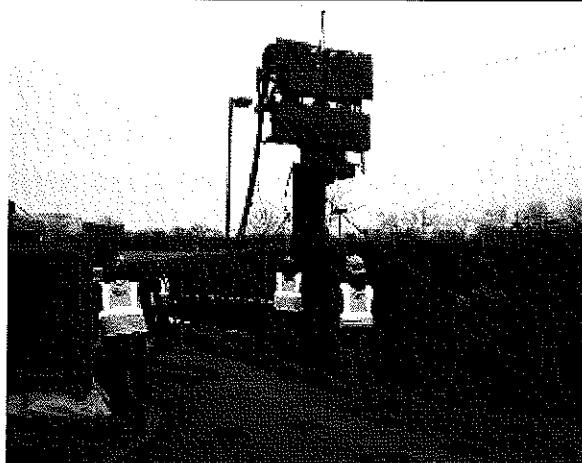
evaluated results and prepared reports for submission to the NYSDEC.

Contact: Mr. James H. Jones, TDX Construction Corporation  
Phone: (212) 879 1981

**Parking Lot Design and Resident Engineering** services were provided by our engineer adhering to the Port Authority of New York New Jersey design guidelines. DHL Air Cargo Facility at the JFK Airport required access improvements and additional space to park trucks. As part of this expansion, a Phase 1 ESA was performed to identify potential areas of concerns, a site design including storm water and foundations for the lighting poles were developed. To ensure the construction activities were completed as per the PANY&NJ design standards, resident engineering services were also provided by our engineer. Since site subsurface soils exhibited historical fill contamination, fill was quality was evaluated for disposed at NYSDEC approved disposal facility.



Contact: Mr. Randy Bennett, Integrated Companies, Inc.  
Phone: (412) 661-6600



**Sheet Pile Installation, Instrument Monitoring & Excavation Inspection Services** were performed during the progress of remedial activities that required excavation and removal of contaminated soil to a depth of 20 feet, about 8 feet below water table. Sheet pile installation was monitored to ensure they are installed as per project specifications and design intent. Our engineer planned and installed inclinometers and read them on a regular basis to ensure the lateral movement of the sheeting is within project design limits. Also our engineer reviewed data provided by surveyor to check building settlement/lateral movement are within tolerable limits. Field report summarizing daily activities performed and steps for maintaining safe progress were prepared and submitted to the contraction foreman.

Contact: Anthony LaBato, Conti Corporations  
Phone: (908) 791 4117

**THE UNIVERSITY OF THE STATE OF NEW YORK  
EDUCATION DEPARTMENT**

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

DISTINCT ENGINEERING SOLUTIONS INC PC  
2 STALLION WAY  
NORTH BRUNSWICK, NJ 08902-4843

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 10/01/2008 TO 09/30/2011.

*Frank Munoz*  
FRANK MUNOZ  
ASSOCIATE COMMISSIONER  
OFFICE OF THE PROFESSIONS  
CERTIFICATE NUMBER  
0005741



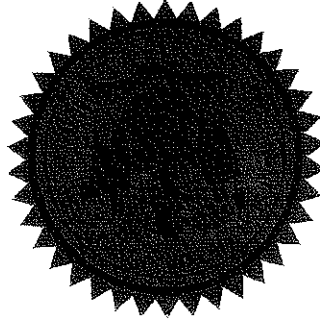
*Richard P. Mills*  
RICHARD P. MILLS  
PRESIDENT OF THE UNIVERSITY  
AND COMMISSIONER OF EDUCATION

Issued: August 27, 2008

Expiration: August 26, 2009

Certification Number: 43461-20

Donald Newman  
Senior Manager



This certificate acknowledges **DISTINCT ENGINEERING SOLUTIONS INC** as a **Category 1 & 4** approved Small Business Enterprise that has met the criteria established by N.J.A.C.12A:10, N.J.A.C.12A:10A (N.J.A.C.17:13).  
This approval will remain in effect for one year. This office must be notified within 20 days of any material changes in the business that affect ownership and control. Failure to do so may result in an immediate revocation of this approval.

by the  
NEW JERSEY COMMERCE COMMISSION  
OFFICE OF BUSINESS SERVICES  
under the  
Small Business Set-Aside Act  
and  
Women and Minority Certification Program

**APPROVED**

KEVIN J. DRENNAN  
Executive Director



JON S. CORZINE  
Governor

# State of New Jersey

## Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

DISTINCT ENGINEERING SOLUTIONS, INC.  
2 STALLION WAY  
North Brunswick NJ 08902

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

### CERTIFICATE OF AUTHORIZATION

to offer the following services

*Engineering*

09/23/2008

08/31/2010

Person in Responsible Charge

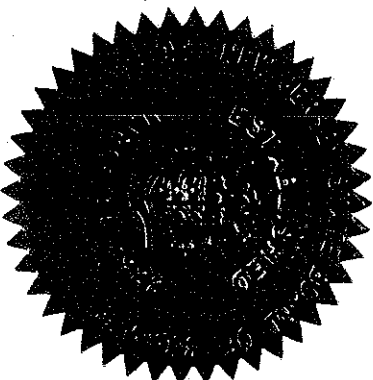
RAMNARAYAN K TIRUMALA

For the names of other Responsible Charge Licensees, go to: <http://www.njconsumeraffairs.com/bels/certtpt.pdf>

Date: October 23, 2008

Certificate No. 24GA28155500

Expiration: 08/31/2010



Executive Director

New Jersey Unified Certification Program

**NJTRANSIT**  
THE WAY TO GO



THE PORT AUTHORITY OF NJ & NI

*Certified*  
**DISADVANTAGED BUSINESS ENTERPRISE**  
***Distinct Engineering Solutions, Incorporated***

This certificate acknowledges that the above named firm is certified as a Disadvantaged Business Enterprise as defined in Title 49, Part 26 of the US Code of Federal Regulations. This certification will remain in effect for three years from the certification date and must be updated annually. The Port Authority of New York & New Jersey/Office of Business & Job Opportunity must be notified within 30 days of any changes in the business that may affect ownership and control.

Your firm will be listed in the NJ UCP directory under the following NAICS Code(s).

<b>NAICS CODE</b>	<b>541330</b>	<b>541611</b>	<b>541620</b>
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The Port Authority of New York & New Jersey/Office of Business & Job Opportunity certified your firm as a DBE on behalf of all NJ UCP partners.

Signed:   
Lash Green, Director

Signed:   
Rosemary Jenkins-Varela, Manager

CERTIFICATION DATE: December 19, 2008

EXPIRATION DATE: December 19, 2011