

Anatomy: World Trade Center/ Staten Island Landfill Recovery Operation

Following the September 11, 2001 World Trade Center terrorist attack, Phillips and Jordan, Inc. (P&J) was called to New York by the U.S. Army Corps of Engineers. P&J was tasked by the Corps as their Advanced Contracting Initiative (ACI) Disaster Debris Management Contractor to serve in a strategic planning and monitoring role. P&J was also tasked with managing the Forensic Recovery/Debris Disposal operation at the Staten Island Landfill where debris from the World Trade Center site was taken.

The following is a brief account of Phillips and Jordan's role and efforts following this national tragedy, that not only changed our world forever, but also yielded the largest crime scene the United States had ever experienced and the most complex debris field in our Country's history.

The First Days

Just before 9:00 a.m. on September 11th, Phillips and Jordan's Zephyrhills, Florida office received a call informing us of a plane crashing into the North Tower of the World Trade Center in New York City. We tuned into coverage of the event and watched in dismay as a second plane hit the South Tower. At that point everyone realized that this was no accident. At 9:59 a.m. the South Tower collapsed, twenty-nine minutes later the North Tower collapsed. We like the rest of America, knew that life as we knew it had changed forever.

At 11:00 the next morning, September 12th, P&J received a phone call from the Baltimore District office of the U.S. Army Corps of Engineers. They told us that our ACI contract might be activated and wanted to know how quickly we could respond with 100-200 dump trucks and 200 torch crews. We called them back a couple of hours later and told them everything was in readiness. We were told to stand by in case they needed us.

At 9:30 p.m. we received a second call, this time from Allen Morse, a disaster debris management expert with the Corps' Mobile, AL office. Morse said that he was assembling a team of debris experts in New York and he wanted P&J on that team. As all non-military aircraft had been grounded, at 1:30 p.m. three of our managers began the 18 hour drive from Florida to New York, while two more of our managers from Knoxville, Tennessee left 12 hours later to join them. They arrived at the Corps of Engineers terminal at Caven Point, New Jersey, the closest they could get to Manhattan, in the early morning hours of the 14th.

Ground Zero

After a 10 a.m. briefing, the Phillips and Jordan team boarded a boat for the short trip to lower Manhattan. It was a gray, drizzly noontime when the five men and their party rounded the Statue of Liberty and, through the still-billowing smoke, caught their first glimpse of the devastation.

The P&J team accompanied the Corps, Federal Emergency Management Agency (FEMA), and representatives from the City of New York Department of Design and Construction (DDC) on a "look-see" tour of the site soon to be called Ground Zero. Even though it was a terrible site, the P&J team didn't feel the effort would be insurmountable. They estimated that Ground Zero looked to have about a million cubic yards of debris; we had handled four times that much following Hurricane Andrew.





"Ground Zero" - 09/14/01

There was so much going on visually that it was impossible to grasp the enormity of it, so the team took pictures to allow them to study the specifics of the site in more detail. The initial debris estimate included 125,000 tons of glass, 250,000 tons of steel, 450,000 cubic yards of concrete, 12,000 miles of electrical cable, and 198 miles of ductwork.

There was a great deal of confusion in those earliest days as to who would be charged with the debris removal chores. On Saturday, September 15th, Morse told the P&J team it did not appear as if the Corps would play a role in the recovery effort. The men turned in their safety equipment and prepared to leave. By the time they got to the gate to leave Ben Turner was told to stay, but to go ahead and send the other P&J managers home.



"Ground Zero" - 09/19/01

Staten Island

The City didn't have to look very far for a place to handle the tons of debris that were being removed from Ground Zero. To meet a campaign promise, Mayor Giuliani had recently shut down the Fresh Kills Landfill on Staten Island (later renamed

the Staten Island Landfill) where, for years, barges had brought in garbage from New York City. Newly capped with a layer of soil, the 2,200 acre landfill was a perfect choice.

Giuliani had promised that 100 percent of the victims would be identified, and the way he chose to do that was to haul everything to the Staten Island Landfill, lay it out and let the agents (NYPD, FBI, Secret Service, CIA, and K-9 units) go through the debris looking for evidence. The landfill had been closed since March of that year, but all the apparatus remained in place: barges, haul trucks, bulldozers, loaders, as well as 90 workers the Mayor would not lay off.

All of the efforts at that time were focused on the crime scene at Ground Zero, and no one was paying any attention to the disposal operation. So, that afternoon, Turner went over to Staten Island for the first time to see the back end of the operation. From what he observed, he knew that if they didn't get a handle on the disposal operation, by the time they finished the rescue operation, it would be positively overwhelming. Turner spent time with members of the Department of Sanitation asking such questions as "How deep is the water in the channel? How deep is the water at the dock? What are all the obstacles in making this as effective as it can be?" From that information and his observations, he wrote a Management Plan for the debris disposal operation.

Tasking by the Corps

By Sunday night, September 16th, FEMA had tasked the Corps with Strategic Planning for both debris removal and debris disposal operations. The Corps looked to Phillips and Jordan, their ACI Contractor for Debris Management. Turner was told to turn his men around and get the team back to New York.

This initial tasking by the Corps included:

- Strategic planning for debris removal operations
- Strategic planning for debris disposal operations
- Monitoring activity at Ground Zero
- Monitoring activity at the Staten Island Landfill
- Development of a back-up plan for Ground Zero

As a result of the sheer need to get it out of the way at Ground Zero, debris had been coming into the Staten Island Landfill since September 11th. As the days progressed the agencies who became involved with the Forensic Investigation of the debris were overwhelmed with the magnitude of debris and the complexities associated with receiving, sorting, and

handling it. On September 25th, to alleviate the confusion and bring order to the debris disposal mission, the New York City Office of Emergency Management requested that FEMA task the Corps with activation of its ACI Debris Management Contract. The Corps in turn tasked Phillips and Jordan with the management of operations at the Staten Island Landfill. This would later include the creation, implementation, and management of a Site Specific Health and Safety Plan under the City of New York's directive to "donate no more souls to the terrorists".

That same day the P&J team went to the Landfill to meet with the New York City Police Department (NYPD) officials who were running the forensic recovery operation. "They told us that they were overwhelmed with the amount of debris, as well as the number of contractors coming in and telling them they had the solution," Turner related. "They were looking for someone to turn down all the 'noise' in their ears so they could do their job. That was our first assignment. We had to do our job in such a fashion as to win their trust. There was no blueprint for doing this, so we just made it up as we went along."

Some of the unique requirements of this operation were to: utilize the subcontractors and suppliers already on site; negotiate with and utilize both union and non-union labor; facilitate local government agency requests for services utilizing federal government contract administrative procedures; work under multi-agency oversight; coordinate the 16 Federal, State, and Local agencies and 4 subcontractors that were onsite; and do it all quickly and effectively.

Management of the Staten Island Landfill Operation

Phillips and Jordan officially took over management of the Staten Island Landfill Operation on October 2nd. At that time there were about 137,000 tons of debris already stockpiled at the site that had not been inspected. That number grew to around 170,000 tons by the third week of October. By the eighth of November, under P&J's management, the number was down to less than 1,400 tons.

The first thing the P&J team did when they took over the site was to make life easier for the agents. The debris was being laid out on the ground, and the agents (about 2,000 of them working 24/7) would have to rake through the debris looking for body parts, personal effects, and evidence at their feet. We brought in Picking Stations, which placed the debris at waist level on conveyor belts. This immediately cut down on the fatigue level and increased productivity.

A simplified outline of the Debris Flow Process is as follows:

- Debris from Ground Zero was brought to the landfill via truck or barge
- Large metal debris was separated and investigated
- Remaining debris was carried to Shaker Screens by front-end loaders where grapple backhoes fed the Shakers
- The Shaker Screens separated the debris into two distinct debris streams: larger fragments that slid off the top of the screen and finer debris (fines) that fell through the screen
- The larger fragments were moved to a manual sorting area for investigation
- The fines were taken to one of the Screening Plants for processing where they were further separated into two debris streams: small mixed fragments and very small mixed fragments
- These two sizes of mixed fragments were passed onto separate conveyor belts that carried the debris to Picking Stations where agents manned each side of the conveyor belt and investigated the debris as it passed

After sorting and investigation by agents, the debris was dealt with as follows:

- Human remains were separated and placed into protective containers and then removed to the on-site morgue for further analysis
- Evidence was placed in secure Evidence Trailers for future processing
- Separated metal was taken off-site to a recycler under contract to the Department of Sanitation
- Mixed debris was landfilled at the active bank on-site

Part of our task at the Landfill was to construct and maintain the infrastructure facilities for the operation. We erected and maintained office and meeting facilities for the NYPD, FBI, Port Authority, FEMA, EPA, Corps, and Coast Guard. We also erected and maintained property and evidence facilities, the mess hall, the hydration/warming stations, the decontamination and personal hygiene station, the surgical unit, and hanger structures to provide covered evidence investigation areas for the agents. All of this was done while managing the massive amount of debris arriving daily from Ground Zero. All of this was on top of the largest active methane gas-producing landfill in the world.

P&J also worked to make the operation all-weather, with winter coming. We hired a company in Florida to design



Completion

The last debris was processed on July 26, 2002, day 321 of the project. At the close of the Staten Island Landfill mission:

- 1,462,000 tons of debris had been received and processed
- 35,000 tons of steel had been removed (165,000 tons were removed directly at Ground Zero)
- 806,000 tons of debris had been screened, an average of 75 tons per hour
- 14,968 workers had been through the PPE process
- 43,600 people (39,795 NYPD, 6,212 non-NYPD) had been through the Site Specific Indoctrination
- Over 1.7 million man hours had been worked
- Over 55,000 discrete pieces of evidence had been recovered
- 4,257 body parts had been recovered
- 209 victims had been positively identified

greenhouses which were built to withstand winds in excess of 105 miles per hour. The greenhouse structures were built around the Picking Stations. Though there was enormous skepticism on the part of officials, we did not lose even one greenhouse and the agents were provided with a warm, dry work area.

The P&J team set a mission goal to have the inspection of debris finished within one week of the completion of the removal operation at Ground Zero. It was normally taking about two days of disposal for each day of collection but, beginning November 8th, Staten Island stayed on parity with the removal at Ground Zero. It was a phenomenal chore to get the operation at Staten Island caught up by the eighth of November, but in doing so we had won the trust of NYPD and other agencies at the site. We had taken something that was in disarray and now had it running like a finely tuned machine, all with just a management team on-site, using none of our own equipment or workforce. Agencies came from all over the world to view the operation, and they were blown away by the highly-mechanized and orderly process. One-hundred percent of what was brought in one day was processed the next day.

When P&J took over the operation the Landfill was processing about 1,750 tons of debris a day; at the peak of operations in mid-October we had increased that number ten-fold to 17,000 tons a day. Over the duration of the project the average amount of debris processed was 4,900 tons per day. Another achievement, true to the directive to “donate no more souls to the terrorists”, was that only one lost-time accident occurred during the entire mission at Staten Island. A table used by the EPA blew over onto a policeman’s foot during a strong gust of wind, breaking his ankle.

The P&J team worked alongside the other agencies and contractors at the Staten Island Landfill operation that ran 7 days a week, 24 hours a day, for 10 months. The end result of this effort was a truly successful project. In a letter following the completion of the operation NYPD Inspector James Luongo wrote, “When you first came here (to the Landfill) I was apprehensive about intrusting a private contractor with a project of this magnitude and importance. P&J exhibited an extremely high level of ethics, professionalism, and patriotism... I cannot express my gratitude for all that P&J has done for the people of New York and the New York City Police Department. You will always be considered ‘one of the boys on the hill’ ”.

Following this project, we earned an Outstanding Performance Evaluation from the Corps of Engineers and nomination for Civil Works Contractor of the Year as well as awards of recognition from the FBI, the NYPD, and the Detective Bureau of the NYPD.

