THE PROJECT

Van Cortlandt Extension

The City of New York created the Bronx Extension Authority ("the Authority"), a three person, single purpose Public Authority, to oversee the design and construction of an extension of existing elevated subway lines in the borough of the Bronx. The Van Cortlandt Extension, (the "Project") will extend the No. 1 subway line from the W. 242nd Street Station to a new terminal station at W. 254th Street and Broadway, to be located inside a planned 20-building housing development. The housing developer, Alpha Housing Associates, Inc. ("Alpha"), is partially funding the subway extension in exchange for tax abatement.

The principal features of the Project are:

1. Two tracks compatible with existing subway system and attendant power and controls;
2. Project length - Sta. 50+25 to Sta. 91+25 = 4100 LF;
3. Terminal Station compatible with existing train length and geometry, with access and egress for 75 people per train;
4. Triple-cell 15 ft-span x 9 ft-rise concrete box culvert;
5. Relocation of a 36-in diameter high-pressure water line ("HPWL") and construction of a pumping station; and
6. Relocation of the Van Cortlandt Stream and construction of the subway embankment over the 50-ft deep stream channel.

Project Organization

As its first order of business, the Authority convened to determine the appropriate delivery system for the design and construction of the project. The Authority invited several consulting engineers to make presentations on the pros and cons of each project delivery system.

After weighing the options and considering statutory restrictions, the Authority determined that the only viable project delivery system for the extension would be a Design-Bid-Build system.

Project Design

The Authority hired a qualified engineering consultant, Beta Engineering, P.C. ("Beta"), to design the extension and draft the construction contract documents. The Authority agreed to pay
Beta’s scope of work contained many design constraints, including:

1. Rail gauge and width must be compatible with the existing subway system;
2. Station must have one entrance with token booth, an additional exit and an off-hour waiting area;
3. Station must conform to Americans with Disabilities Act (ADA) standards.

Beta’s contract with the Authority authorized Beta to retain subconsultants. Beta retained Muddy & Silt Consulting Engineers ("Muddy"), to perform various aspects of the geotechnical design of the Project. Muddy was responsible for conducting investigations and performing tests to evaluate the strength and condition of the rock that would support the temporary relocation of the HPWL.

**Construction Contract Documents**

The construction contract documents specified completion dates for several critical phases of the Project. Based on the Authority’s intent to advertise for bids in the spring of 2010, Beta included the following milestones in the construction contract documents:

1. March 10, 2011: Completion of the temporary diversion of the stream and temporary relocation of the HPWL.
2. December 1, 2011: Completion of concrete box culvert and pumping station foundation.
4. June 1, 2013: Completion of balance of work under contract.

The construction contract contained the following liquidated damages provisions:

1. Failure to meet the March 10, 2011 milestone... $40,000/day
2. Failure to meet the December 1, 2011 milestone... $40,000/day
3. Failure to meet the December 15, 2012 milestone... $50,000/day
4. Failure to meet the June 1, 2013 milestone... $50,000/day

The solicitations for bids contained the following language, in accordance with statutory requirements for contracts for construction of public works:
(1) Bidders must be bonded for 10% of the dollar value of their bids.

(2) Bidders must include the cost of Performance Bonds and Payment Bonds in their bids, and all subcontracts must contain equivalent provisions.

(3) The bid amount includes the cost of “full insurance.”

(4) Bidders must agree to comply with all applicable Laws and Regulations.

In addition, a newly-enacted City affirmative action statute required the Authority’s contractors to include Minority Business Enterprise (“MBE”) provisions in their subcontracts to assure equal access to the bidding process for minority and start-up subcontractors.

**Bidding Phase**

The Authority advertised the contract for public bids on March 1, 2010, with bids due on April 14, 2010.

At the bid opening on April 14, 2010, Not So Sharp Construction Co. (“NSS”) was the apparent low bidder. An employee in the Authority’s contract’s section started to prepare a Notice of Award, but inadvertently placed the notice in a stack of papers to be filed. On June 5, 2010, NSS realized that it had made mistakes in its bid, resulting in a bid priced well below its cost. The first mistake arose from NSS’s confused interpretation of an ambiguous term in the technical specifications. NSS’s estimator confirmed his erroneous understanding of this term in a telephone conversation with the administrative assistant to the President of the Authority. In addition, NSS transposed a six (6) for a two (2) when typing a six-figure item into its final bid draft.

NSS notified the Authority in writing that it was formally withdrawing its bid, citing the two errors as justification for withdrawal. NSS also claimed that because the 45-day period for acceptance of bids had passed, it could withdraw its bid without cause or forfeiture of its bid bond. When it received NSS’s withdrawal notice, the Authority realized it had not issued a Notice of Award. On June 6, 2010, the Authority formally accepted NSS’s bid and issued a written Notice of Award. The Authority then declared NSS in default and made a claim against its Bid Bond.

The next lowest bidder was D&E. D&E is a joint venture between Delta General Contracting (“Delta”) and ExStatic Electrical Engineering (“ExStatic”) that was formed specifically to bid on the Van Cortlandt Extension.

**Award of Contract**

D&E was awarded the contract and given Notice of Award on August 2, 2010.
Following its acceptance of D&E's bid, the Authority attempted to renegotiate the contract terms. In a post-bid negotiation, the Authority induced D&E to lower its bid by $500,000 in exchange for a relaxation of the subcontractors' bonding requirements and substitution of a less expensive tile finish in the new terminal station.

**Challenge of Award**

After the award to D&E was made public, an Article 78 proceeding was brought by Sour Grapes Construction Co. ("SGC") to halt the award. SGC, a design and contracting firm and the third lowest bidder, based its challenge on three grounds. First, SGC maintained that the bid requests did not comport with General Municipal Law §103 because there was no competitive bidding for the project's design. Secondly, SGC questioned D&E's status as a responsible bidder. SGC offered evidence that one of Delta's partners was convicted, on five separate occasions, of failing to pay child support. Additionally, SGC maintained that the project was improperly bid since the construction is subject to the Wicks Law. Finally, SGC claimed that the post-bid negotiations between the Authority and D&E were illegal.

**Project Schedule**

In accordance with the contract documents, D&E submitted its preliminary CPM schedule to the Authority on August 7, 2010, within 10 days of the Notice of Award.

Beta reviewed the schedule and returned it to D&E on August 12, 2010, bearing the stamp, "Reviewed and Accepted."

**Temporary Relocation of HPWL and Stream**

On August 12, 2010, D&E moved drilling and blasting equipment to the site to construct the rock cuts for the temporary relocated HPWL and temporary diversion of the stream. Work commenced on August 12, but the Authority directed D&E to stop work on August 15, because of lack of right-of-way clearance. There was a dispute as to who held title to the property comprising the area where the HPWL and stream relocation would be situated.

The schedule submitted by D&E and accepted by Beta had shown D&E beginning excavation of both temporary relocations on August 12, 2010. Although D&E had proceeded with its mobilization and moved its drilling and blasting equipment on the site, its power shovel, loader, and dump trucks did not arrive on the site until September 1, 2010.

The Authority, through the City of New York, obtained clear title to the land on October 3, 2010. On October 4, 2010, the Authority advised D&E that it could continue work. D&E wrote to the Authority informing it of D&E's intention to make a claim for additional time and damages because the Authority failed to turn over the property for the period of August 15, 2010, through October 3, 2010.

D&E's rock excavation proceeded at the rate indicated on the CPM. It was unable to improve
on its progress because the limited space within the gully precluded adding additional equipment.

After excavation for the HPWL, which was to be temporarily relocated on a bench cut into the west slope of the relocated stream channel, was completed investigators for the New York State Department of Environmental Conservation ("DEC") discovered significant levels of chromium in the excavated topsoil stockpiled at the site. D&E was fined $50,000 for removing the soil in violation of DEC regulations and for three days of unprotected storage on site at $10,000/day. D&E spent over $800,000 to hire consultants and abatement specialists to remove the soil and dispose of it in a hazardous waste landfill. Muddy, who was responsible for preparing the geotechnical report on the strength and condition of the rock to support the temporary relocation of the HPWL, had discovered the presence of excess levels of chromium during testing which had been performed outside the scope of its contract. This finding was communicated to Beta, which chose not to disclose the information to the Authority or to DEC because it was afraid of the schedule implications and the possible impact this disclosure could have on the Authority's ability to provide potable water for the community.

To maintain the horizontal and vertical alignment of the temporary relocated HPWL, the plans showed placement of vertical steel straps, anchored 50-ft on center, and horizontal steel straps, anchored 100-ft on center. The anchors consisted of #18 bars embedded in 6-ft deep grout-filled drilled holes. An item called "HPWL Anchors" was included in the bid form, to be bid on a unit price basis. The bid form did not delineate between vertical and horizontal anchors.

During the rock excavation, it became evident that the rock was more fractured and not as hard as Muddy had indicated. This condition resulted in a design change. D&E was advised on November 15, 2010, that rock conditions required that "anchors" be placed vertically and horizontally 25-ft on center.

Since the contract was a unit price contract, the Authority proposed to pay for the additional anchors at the existing price for "HPWL Anchors." In the letter transmitting drawings to D&E showing the changes, the Authority requested the contractor to concur with the changes at the existing prices. D&E did not concur, however, saying that its preliminary examination of the drawings indicated that the changes in the anchors materially increased the unit price of the work. D&E indicated it intended to submit a claim for added cost when it completed a thorough study.

D&E’s study indicated that the original conditions required twice as many "vertical" as "horizontal" anchors, with the construction operations for a "vertical" anchor not as time-consuming as that of a "horizontal" anchor. The changed conditions increased both items, however, and there were now as many "horizontal" as "vertical" anchors.

D&E notified the Authority that its cost had increased materially, citing the conditions as stated above and requesting a time extension to be determined subsequently. Beta recommended that the Authority deny the request for additional costs, noting the unit price encompassed "HPWL Anchors" and stating that any request for a time extension appeared to be without merit.
To expedite operations for the “HPWL Anchors,” D&E mobilized two Crane and Drill Rigs and one Jury Rig, as opposed to the custom-designed drill rig that it had mobilized and anticipated using on the job.

The contract documents set a completion date of March 10, 2011, for the temporary relocation of the HPWL and stream. This completion date was predicated on the requirements of the State Department of Wildlife, which included a prohibition against working on the stream during the trout-spawning period from March 15 to June 15 of each year. The Authority would be assessed a fine of $1,000 per day for each day that construction operations impacted trout spawning. In addition, the New York City Department of Environmental Protection advised the Authority that it would be relying on the temporarily relocated HPWL as the sole source of potable water for a 4-square block area of the Bronx during replacement of an existing 20-inch cast iron watermain with a 24-inch diameter main that was scheduled for March 10, 2011 through May 25, 2011. Beta suspected that a March 10, 2011 completion date was unrealistic. However Beta chose to hold bidders to the completion date under peril of liquidated damages, preferring to force the successful contractor into either accepting acceleration or paying LDs, confident that the stringent delay provisions of the contract would make the contractor liable for the delay.

In December 2010, D&E realized that its present schedule of operations must be accelerated in order to meet the March 10, 2011 completion date. In light of the Project’s delayed start and the design changes for the “HPWL Anchors,” D&E instituted a 6-day per week schedule, stretching the workday by use of floodlights. D&E notified the Authority on January 2, 2011 of the delays and its added cost of premium time and special lighting equipment required.

This accelerated schedule resulted in the completion of the relocation of the HPWL on February 14, 2011. The HPWL was tested and accepted on February 18, 2011. D&E completed the relocation of the stream on March 8, 2011.

**Concrete Box Culvert and Pumping Station Foundation**

Concurrently with the construction of the temporary relocation of the HPWL and stream diversion, D&E began drilling, blasting and excavation of the alignment of the box culvert and pumping station foundation.

On December 1, 2010, the weather turned extremely cold and it snowed the entire day. Several days later the weather warmed up and made working the site extremely difficult. When it snowed again in December 8, D&E petitioned for a partial shutdown, as it did not intend to place concrete through the winter.

With the completion of the temporary relocation of the stream and the HPWL on March 8, 2011, D&E now had the entire alignment of the box culvert ready for construction.
In order to meet the December 1, 2011, completion date for the concrete box culvert, it was necessary to start concrete placement as soon as weather conditions permitted. Weather conditions allowed work to begin on March 12, 2011.

The December 1, 2011 completion date was critical for several reasons. D&E has lost four weeks of concrete time in the fall of 2010, and needed a coordinated effort to complete this phase of the work.

Although the winter temperatures in the Bronx were such that excavation and some limited backfilling could be carried on in the daytime, temperatures at night dropped well below freezing between December 1 and March 1. If concrete was to be placed during the period, winter protection would be necessary during the mixing, transporting, placing, finishing and curing. D&E felt that its schedule allowed sufficient time to cover normal problems that might arise and that it could avoid the added cost connected with winter concrete.

In the spring and summer of 2011, D&E worked the box culvert operations 6 days per week, in two shifts. In general, formwork was performed during the first shift and concrete placement during the second shift.

On July 8, 2011, the project site was swept by the worst flood that the Bronx had experienced in over 40 years. D&E’s haul roads and stream crossings were washed out. In addition, the work area inundated in spite of D&E’s diversion ditching and diking.

D&E was unable to reestablish construction operations until July 15, 2011. D&E notified the Authority of the delay by letter dated July 16, 2011.

On October 16, 2011 just as the concrete subcontractor, Rock-Hard Co., Inc. (“Rock-Hard”), was ready to place concrete, an inspector for Beta realized that Type IV cement was being utilized rather than Type II cement, without formal authorization from BETA. D&E knew of the cement substitution by its subcontractor, but chose to remain silent, hoping that the slump test would be acceptable. In addition, the slump test conducted on the concrete turned up a slump of 5 inches, whereas the concrete specifications specifically called for a slump between 2 to 3 inches. The Authority rejected the attempted substitution. Due to a strike at the cement supplier’s plant, all concrete operations came to a halt until October 23, 2011, when Rock-Hard was able to procure the correct type and mix of cement. D&E notified the Authority of this delay in accordance with the contract.

As December 1, 2011 approached, it became quite evident that the contractor would still have some concrete to place.

On November 15, 2011, D&E wrote Beta informing that it proposed to shut down concrete operations between December 1, 2011, and March 1, 2012. It further requested that the box culvert completion date and final completion date each be extended 64 days, citing as excusable reasons for the extension:
(1) Authority’s failure to provide access -- 50 days;
(2) Bad Weather -- 20 days;
(3) Storm in July 2011 -- 7 days; and
(4) Strike at the cement supplier’s plant, October 2006 -- 7 days.

Beta denied the request for extension of time, saying that the specified completion dates were final and that D&E must organize and schedule its remaining work to meet them. D&E saw no alternative to working concrete through the winter and proceeded to mobilize for winter concrete. By December 1, 2011, D&E had placed approximately 75% of the box culvert concrete and had completed the pump station foundation.

D&E continued working after December 1, 2011 but with noticeable reduction in production. The box culvert was completed on March 12, 2012. D&E again requested an extension of time, this time requesting an additional 27 days for winter work. Beta replied as before, that the specified completion dates must be met.

On March 15, 2012, Beta inspected and accepted the box culvert. Diversion of the stream was not accomplished until June 16, 2012, after the trout spawning period.

Rock-Hard filed a mechanic’s lien against D&E, the Authority, and the Project because it was not paid within the allotted time stipulated in its contract with D&E. D&E’s contracts with its subcontractors contained provisions that stated that payments would be made by D&E within five days after receipt of payment from owner and that placed the risk of owner non-payment wholly on the subcontractors. Rock-Hard filed its notice of lien on the 91st day after it submitted its invoice to D&E.

**Construction of Pumping Station**

The contract called for the installation of customized electrical panels in the pumping station. The panels were to be used in conjunction with equipment whose exact configuration was unknown at the time of bidding. The bid documents estimated that 20 units would be installed, but neither the specifications nor the contract drawings showed the exact locations for panel installation. The contract stated that any quantities set forth in the price schedule were “estimates given for the uniform comparison of bids and do not constitute a guarantee of the quantity to be installed.” D&E based its bid on the 20-unit estimate.

As D&E commenced construction of the pumping station, Beta determined that only 15 units would be required to accommodate the equipment configuration. D&E protested Beta’s determination and demanded payment of the full bid price (the unit price x 20 units). D&E asserted that:

(1) deletion of 5 units constituted a change in scope with respect to that part of the work; and

(2) its unit price included various “fixed” costs (not dependent on quantity)
amounting to 80% of the total bid price for 20 units. D&E argued that the unit prices, applied to 15 units, would not permit it to recover its fixed costs.

D&E indicated it would not proceed with the work on the electrical panels until the Authority issued a change order.

In the meantime, Peppy Paints, the painting subcontractor, began working. The specifications for painting the pumping station stated, in part, as follows:

Paint all exterior surfaces. Work to include all doors, frames and trim, including flashing and railings.

Peppy was ordered by the Authority to repaint the electrical conduit located on the outside of the pumping station. Peppy claimed that this was extra work, particularly since it had specifically discussed the matter with Beta during an on-site inspection prior to bid submission. The contract did provide, however, that any interpretations must be requested in writing and that “oral explanations or instructions given before the award of the contract will not be binding.”

**First Stage Embankment**

It became apparent to D&E that it was not going to be able to divert the stream through the box culvert until after the trout-spawning period. D&E made plans to start the railroad embankment on either side of the stream, leaving a gap in the center. D&E began embankment operations on March 15, 2012. It had envisioned raising the elevation of the entire gully uniformly, but instead D&E had to develop a complicated fill staging operation in order to avoid the stream relocation area. Fill placement to final grade was limited to the eastern and western edges of the alignment, where relatively little fill was to be placed. These sections of the embankment were completed on May 15, 2012.

**Site Safety**

To expedite the work and facilitate movement of materials and labor between both sides of the embankment, Beta suggested to D&E that it run some sort of walkway across the gap. D&E followed Beta’s recommendation and laid down a wooden plank that spanned the length of the gap. Fearing that the makeshift bridge was unsafe, Beta required D&E run ropes along the sides of the walkway to serve as rails.

The walkway was used without a hitch for several days. However, it was clear anyone who looked as someone walked across it that the walkway was not very sturdy. The middle of the walkway sagged noticeably and was beginning to splinter. In fact, an inspector for Beta walked across the walkway and was overheard saying that the walkway felt like it would give at any moment. The inspector failed to raise the issue with D&E.

Al Waysfalls, a laborer for D&E, was walking across the walkway pushing a wheelbarrow overloaded with steel ties, when the walkway collapsed under the weight. Al Waysfalls landed hard on his side, seconds before the wheelbarrow and almost a hundred ties landed on
his leg, fracturing it in two places. Aside from the fractured leg, Al suffered only minor injuries. Al was immediately transported to the hospital and after a short break the work resumed as usual.

**HPWL Relocation and Embankment, Stage Two**

On June 17, 2012, D&E began excavation for the HPWL, utilizing the existing streambed and the relocation channel for the temporary stream diversion. This alignment required very little additional excavation and the first sections of pipe were laid from the upstream end. The pipeline was completed on August 30, 2012. The HPWL was tested and accepted by Beta on September 9, 2012.

D&E started to close the embankment gap on September 10, 2012, and completed the embankment on October 21, 2012. D&E began its Track Work on October 1, 2012, and completed it on December 1, 2012.

**Landscaping**

After the winter, the topsoil and landscaping were completed by May 15, 2013, well in advance of the specified completion date. However, during the landscaping, D&E was directed by the Beta to install warning signs along the track because they are required under New York State Department of Transportation ("DOT") regulations. Warning signs were not mentioned anywhere in the plans or specifications. The specifications did provide, however, that all work must comply with the requirements of the DOT. After completing the work, D&E requested a change order.

**Construction of the Terminal Station**

Leaky Plumbing Co. ("Leaky") held a subcontract for the plumbing work required under the contract for the construction of the terminal station. Leaky progressed to the point of 65% completion when it defaulted on the subcontract. D&E completed the work at a cost exceeding any balance due Leaky. South Pipe, Inc. ("SP"), had supplied Leaky with piping and other plumbing fixtures. SP was never paid by Leaky. It filed a notice of lien and sued to foreclose the lien.

D&E rebutted SP’s claim by arguing that since it did not owe any money to Leaky following the completion of the defaulted contract, SP could not recover under the existing Lien Law.

On October 17, 2010 work stopped on a portion of the new terminal station when two laborers were injured. The two men were injured while loading material from the ground level to a subsurface section of the station. Although the workers sustained only minor injuries, it took over five hours to extricate the men because the lift itself was damaged.

The men were riding the lift with the material contrary to the recommendations of the equipment leasing company and in violation of the job site safety rules. The workers claim they were
instructed to ride down with the supplies while their supervisor denied having given such instructions. The supervisor maintained that he instructed the workers to use the ladders provided on site.

One of the accident victims was an employee of a materialman for the station project and the other employee was borrowed from the general contractor for the adjacent housing project.

On a “walk-through” of the site, an inspector for Beta noticed that the station platform height seemed too high. When he measured the height, his fears were confirmed. The inspector immediately notified both D&E and the Authority.

There was an error in the drawings. The platform height as dimensioned from the bottom of the platform to grade was too high by 4 inches. However, the specifications contained a schedule stating the correct height of the platform. Furthermore, the specifications also stated that in case of any discrepancies:

figure dimensions on drawings shall govern over scale dimensions, and detailed drawings shall govern over general drawings.

D&E had apparently not noted the discrepancy in platform height between the written specifications and the drawings.

Normally, the inspector for Beta would inspect the terminal station construction site twice a week. Yet, during the construction of the station platform, there was other critical work being performed at other locations. The inspector did not have the opportunity to make his second “walk-through” as he felt his presence was more critical at the other locations.

The increased height of the platform, coupled with the usual horizontal gap between the subway cars and the platform, would make it extremely difficult for persons in wheelchairs to get on and off the train. Fearing this obstacle would render the station in violation of the ADA, the Authority ordered D&E to correct the problem. Realizing that whatever solution was undertaken by D&E would be costly, the Authority made it clear to both Beta and D&E that it intended to hold them both liable for the increased cost. Beta and D&E each fault the other for the error.

**Termination of D&E**

On June 12, 2013, inspectors from the Authority discovered a construction error along the entire length of the extension’s electrified third rail. The insulating cover above the third rail was 1/2-inch lower than the minimum clearance necessary for the trains’ conductive arms. The existing brackets would not allow for further upward adjustment.

The Authority, already frustrated by what it perceived as multiple delays, notified D&E in writing that the contract was terminated. D&E filed a lawsuit in New York County Supreme
Court, alleging that the termination was wrongful because D&E was not given a reasonable opportunity to cure. D&E maintained that it was aware of the condition and had already ordered new insulator brackets for the entire length of the extension. D&E also brought an action for breach of contract due to late and reduced progress payments from the Authority.

Because of cash flow problems due to late payments from the Authority, D&E has been unable to meet its obligations to the project’s subcontractors and materialmen. D&E has accused the Authority of withholding payment in order to purposefully sabotage D&E’s performance. The Authority maintains that the payments are not in fact late because D&E has not properly justified its payment and change order requests. The same day it sued for wrongful termination, D&E filed a petition as debtor for bankruptcy under Chapter 11 at the Southern District of New York Federal Court.

Meanwhile the Authority contacted D&E’s surety, demanding that it complete the Project. The Surety responded by saying it would investigate the termination of its principal, D&E, before agreeing to satisfy the performance bond.

The Authority withheld $4,160,000 (104 days @ $40,000 per day) “pending final determination of the extent of liability for liquidated damages” connected with D&E’s failure to complete the concrete box culvert and pumping station foundation on December 1, 2011, as required.