

APPENDIX B

CORRESPONDENCE REGARDING SHEETING LAYOUT

1. Vachris Eng. 08/08/05 letter to JDPosillico RE: Temp Support of Excavation
2. Langan 08/09/05 letter to Silverstein RE: Installation of Sheet Piling

**VACHRIS
ENGINEERING, P.C.**

370 OLD COUNTRY ROAD
GARDEN CITY, NY 11530

TEL: 516-747-5096

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August 8, 2005

J.D. Posillico, Inc.
1610 New Highway
Farmingdale, NY 11735

Attn: Joseph Sheehan

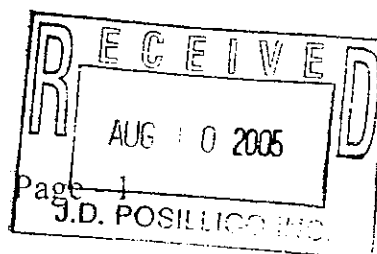
Re: River Place Phase II
42nd Street at 11th Avenue
Silverstein Properties
New York, New York
TEMPORARY SUPPORT OF EXCAVATION

Gentlemen:

We have received a copy of a Memo from Alan Poeppel of Langan Engineering to Bill Dacunto of Silverstein Properties, dated July 28, 2005, suggesting consideration of a substitute support of excavation system in the area of the former gas holders. The suggested system consists of a combination of steel soldier piles, tie-back, and flat steel sheet piling inwards of the soldier piles after removal of the former gas tank foundations. Langan provides a soldier beam size, spacing, and embedment as well as the tie-back, and toe pin forces.

We have not had the opportunity to analyze the suggested design, but feel strongly that it would be more prudent to continue the installation of the steel sheet piling by removing those portions of the gas tank foundations by augering/drilling/etc., along the line of the sheeting, then backfilling the trench with clean soil, and then installing the steel sheet piling in the cleared trench.

It is our opinion that continuing with the steel sheet piling would be a more economical solution and present fewer difficulties in the long run for the following reasons:



J.D. Posillico, Inc.
River Place Phase II
August 8, 2005


1. Since it would likely be necessary to auger/drill/etc. to install the suggested soldier beams, the same equipment would be used to auger/drill/etc, tangent holes to clear the obstructions in a continuous trench.
2. It has been our experience that it is difficult to install horizontal timber lagging in an organic silt stratum
3. Changing from one support of excavation system to another and back again becomes problematical at the points where the substitute system starts and stops and must be connected to the steel sheet piling to insure a continuous structure.
4. The flat steel sheet piling suggested does not have much lateral stability and is difficult to drive to refusal.
5. The flat steel sheet piling would have to be supported by at least two levels. It would likely not have the strength to span from the level of the tie-backs to the embedded tip or to the toe pin, and, therefore, would need another level of tie backs at a lower elevation.

We believe that removing the obstructions to permit the installation of the steel sheet piling to continue is preferable to changing the support of excavation system.

Should you have any questions, or require additional information, please do not hesitate to contact us. Thank you.

Very truly yours,

VACHRIS ENGINEERING, P.C.


Charles F. Vachris, P.E.

9 September 2005

Mr. William R. Dacunto
Vice President, Managing Director - Operations
Silverstein Properties, Inc.
530 Fifth Avenue
18th Floor
New York, NY 10036

Re: Installation of Steel Sheetpiling
Northeast Perimeter of Excavation
River Place II
New York, NY
Project No. 5582401

Dear Bill:

This letter summarizes the difficulties installing the interlocking steel sheetpiles near the northeast corner of the site and provides our evaluation of the contractor-proposed method for passing the encountered obstructions. The interlocking steel sheetpiles are needed for temporary excavation support as well as for a permanent groundwater cut-off.

Existing Conditions

BlueWater Environmental, Inc (BWI) initially attempted to install steel sheetpiles in the northeast corner of the site using a conventional vibratory hammer. However, underground obstructions severely impeded to the extent that the sheets penetrated only a few feet into the ground before refusal was met.

BWI then attempted to remove the underground obstructions by pre-excavation and filling in with sand. Attempts to install individual steel soldier pipes proved feasible but very difficult. Pre-excavation of obstructions around the entire perimeter was expected by all involved and was performed by BWI in other areas of the site. The pre-excavation revealed large boulder-sized rock pieces stacked and mortared together along the northerly perimeter of the site fronting West 42nd Street. The boulders are present below the entire width of the sidewalk and extend into the property to the south and below 42nd Street to the north. Excavation of these boulders risks undermining the roadway pavement.

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George P. Kelley, P.E.
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Daniel D. Disario, P.E.
Edward H. Gelbert, M.S.
Christopher M. Hager, P.E.
Joel B. Landes, P.E.
Matthew E. Meyer, P.E.
R. S. Murati, M.S.
Richard R. Steiner, P.E.

Inquires to NYC DOT have been made by BWI and Season's Industrial for closure of the adjacent 42nd Street turn lane to allow pre-excavation in a relatively safe manner. We understand that DOT is very reluctant to grant a lane closure in that area. If a lane closure is granted, it would be on a very limited and intermittent basis, e.g. six hours on Saturday only, according to the contractor. This is not a practical solution with respect to schedule as well as cost.

We studied moving the sheeting line to the south of the boulder zone to avoid the boulder obstructions. However, the line of sheeting would encroach onto the property and therefore encroach into the basement of the planned building. This was deemed not viable by ownership.

Contractor Proposal

BWI has proposed a method of pre-drilling through the boulder obstructions. The work would be performed by a large diameter (24 inch) air-percussion hammer, according to correspondence and conversations with BWI. The percussion hammer pulverizes any type of boulder, concrete, or brick obstruction to create a clean cylindrical shaft. The drill holes would be on a tight spacing so as to create a perforation through the boulder obstructions. Each drill hole would be filled with sand to prevent collapse. The steel sheeting would then be installed through the sand filled shafts.

Conclusions

BWI has successfully installed the required interlocking steel sheetpiles for the majority of the perimeter using conventional vibratory hammers in tandem with the pre-excavation of obstructions. However, the concentration of boulder obstructions near the northeast corner of the site combined with the constraints of both the property line to the south and the 42nd Street roadway to the north make these techniques impractical.

In our opinion, the proposed pre-drilling of the obstructions is a viable and most appropriate method to overcome these obstacles and install the required sheeting. We recommend that the contractor be directed to proceed with the pre-drilling work.

As stated in our 22 August 2005 letter, we believe that the contractor is entitled to additional compensation for the pre-drilling work. We recognize that the pre-drilling work was discussed on a conceptual basis in the geotechnical report. However, the specification make no requirements for pre-drilling work, nor was an allowance for pre-drilling work discussed with the contractor or included in the contractor bid.

We trust this adequately addresses the issue. If you have any questions or need additional information, please call.

Very truly yours,

Langan Engineering and Environmental Services, P.C.

A handwritten signature in cursive script that reads "Alan Poeppel".

Alan R. Poeppel, P.E.
Associate

ARP

Cc: J. Landes

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