





Paulus, Sokolowski and Sartor Engineering, PC

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Rockaway Park Former Manufactured Gas Plant Site Rockaway Park, Queens County, New York

Review of Submittal

Signed and Stamped Foundation/Anchoring System and Revised Procedures for the Relocation of Temporary Fabric Enclosure

Reference Nos: 13120 and 01010 1.3.1 Bullet 21

(Received via e-mail on August 7, 2008)

Response:

Revise and Resubmit. Posillico has provided answers to the original PS&S questions below.

- (1) Ballast Block Calculation No comments.
- Posillico submitted a drawing, Drawing BB-1, which presents the proposal to supplement the tent base beam to add support to aid in the proposed relocation procedure. The intent of the supplemental support is to allow the tent to be relocated in either direction without the need for a crane-pick. Posillico has stated that they were working in conjunction with Universal on this modification. However, the drawing is presented on a Posillico border that is not signed and stamped by a New York State Professional Engineer. In addition, no information has been included in the submittal that the manufacturer of the enclosure has been consulted, reviewed or approved of this modification. As the modification presents a change to the design of the foundations system for the enclosure, the submittal must include documentation from the manufacturer which notes that they have reviewed the modification and that it will not affect the overall design and performance of the enclosure structure. Further, the manufacturer should be consulted regarding the proposed relocation procedure (see Comment #3). This letter should be signed and stamped by a New York State Professional Engineer.

Posillico has provided a letter from the manufacturer, Universal Rentals, LLC, detailing their involvement in the proposed relocation procedure. Posillico has also supplied a letter with calculations from our NYPE that address the caveats in Universal's letter. The NYPE has based his letter off of drawing BB-1 which he has also stamped and is provided for your use. The letters and drawings supplied also answer the concerns stated in paragraph three.

(3) It is stated that the temporary structure will be relocated by means of dragging and/or rolling from location to location. The rolling will be performed by lifting sections of the enclosure and

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installing timber poles to act as rollers. This procedure represents a method of relocating the structure for which the structure was not designed. Temporary fabric enclosures are typically designed to be relocated by dragging and/or by crane pick. Posillico has asserted that they have been working in conjunction with manufacturer to formulate this alternate method of moving the enclosure. The submittal must provide documentation that the manufacturer has been consulted and approves of this method and that it will not adversely impact the performance of the enclosure.

The process of relocating the structure involves picking the structure up at the center of the cross-beams. No information has been provided to reflect that the current design can support this lifting at the center of the beam.

The process of relocating the structure shows two pay-loaders with forks positioned at the center of the cross-beams. Their purpose is not to pick the structure, but to support the base frame at it's center-point since it will be suspended, due to the use of the timber piles placed perpendicular to the direction of travel. The base frame's cross-bracing is not subjected to the loads from the tent ribs, thereby the pay-loaders are compensating solely for the weight of the base frame.

The submittal must provide information/documentation from the manufacturer stating that they have reviewed this procedure and approve of its use. PS&S does not object to utilizing an alternate relocation procedure but requires



Universal Rentals, LLC



05 Sept 2008

RE: Keyspan, Rockaway Park, Queens, NY; former MGP Site

To Whom It May Concern:

This letter is to address the comments by Paulus, Sokolowski and Sartor Engineering, PC to the Review of Submittal document.

Drawing BB-1 submitted by Posillico presents a method to relocate the structure by supporting it on a frame that is elevated onto rollers, and then subsequently dragged into position.

The modification presents a change to the design of the foundation system. As long as the frame that is supporting the structure has sufficient stiffness to transfer the structure's loads to the grade, the overall design and performance of the structure will not be affected when supported by this frame.

The structure, once supported on the frame, will be relocated by means of rolling the supporting frame over timber rollers. As long as the frame that is supporting the structure has sufficient stiffness to transfer the structure's loads to the rollers, the overall design and performance of the structure will not be affected.

The proposed structure support and relocation method, as described in the text above, has been reviewed and sealed by a New York State Professional Engineer.

Chander Name A PE #65000

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1205 St. Paul Street - Baltimore, MD 21202 - Ph. 410.605.9216 1455 Copper Sage Street, Las Vegas, NV 89115 - Ph. 702.699.9195 RENTUNIVERSAL.COM Date: October 1, 2008

Keyspan Rockaway Park MGP Remediation Project Tent Frame design

To Whom It May Concern:

The rectangular base frame supporting the tent structure is made out of W14X90, Grade 50 beams with a moment capacity of 385 kip-ft for an unbraced length of 24.5 feet. And for the same unbraced span of 24.5 feet the beam can safely carry a total uniform load of 125.5 kips (By interpolation from table on page no. 2-117 of AISC Manual, 9^{th} edition), equivalent to 125.5/24.5 = 5.12 kips per lin. foot of the beam.

The total weight of the tent structure is 47.425 kips. The tent ribs are perpendicular to the shorter length (98'-0") of the frame. Therefore, the maximum uniform load per lin. foot of base beam from the tent structure is (47.425X1.5*)/(2X98) = 0.363 kip/ft., which is much smaller than the allowable 5.72 kip/ft.

(*Load increased to account for any error.)

As depicted in the Procedure for movement of the tent structure the base beam will always be supported on 12" diameter timber poles at 10' intervals. This spacing of the timber poles acting as rollers could vary up to a maximum of 15 feet and still be structurally safe to withstand the weight of the tent structure.

Sincerely.

Mohammed A. Azeem

