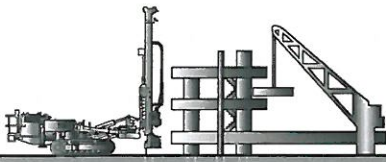


Structural Engineer  
Signed and Stamped Letters in  
Response to Test Pit Investigation



## STRUCTURAL ENGINEERING TECHNOLOGIES, P.C.

40-12 28<sup>TH</sup> Street, Long Island City, NY 11101 • (P) 718-706-7196 • (F) 718-472-4464 • (E) structuralet@aol.com

Mr. Omar Ramotar  
ROUX ASSOCIATES, INC.  
209 Shafter Street  
Islandia, New York 11749

November 9, 2015

RE: Paragon Paint and Varnish Co.  
Site Remedial Action  
45-40 Vernon Boulevard, Queens, NY.

Dear Mr. Ramotar,

As you are aware, the steel sheet piling along the east side of the proposed excavation was installed approximately 4'-6" away from the existing building, in lieu of (min.) 2'-0" as shown on our drawing SOE-100.

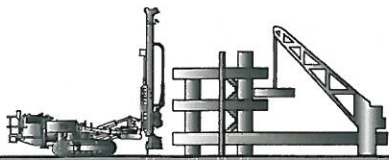
This occurred because many obstructions were encountered at shallower depths at the closer distance. It is believed that these hard obstructions are actually part of the existing building concrete foundations, which probably extend down to bedrock. Indeed, it turned out the sheet piling found refusal at the bedrock level, approximately 14 ft. below grade level.

Respectfully Yours,

**STRUCTURAL ENGINEERING TECHNOLOGIES, P.C.**

*George J. Cambourakis*  
George J. Cambourakis, P.E., C. Eng.  
President





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Mr. Omar Ramotar  
ROUX ASSOCIATES, INC.  
209 Shafter Street  
Islandia, New York 11749

November 9, 2015

RE: Paragon Paint and Varnish Co.  
Site Remedial Action  
45-40 Vernon Boulevard, Queens, NY.

Dear Mr. Ramotar,

As you are aware, the above-referenced building contains several large underground tanks that had at one time stored various chemicals for manufacture of paint and varnish. The tanks were inspected and found to contain small amounts of those liquids.

Sketches 1, 2 and 3, dated October 26, 2015 (attached) show a plan and sections through these tanks. The original plan for this portion of the project was to remove these tanks and backfill the site.

As the Support of Excavation (SOE) Engineer for this project, my firm was to provide SOE drawings showing all sheeting and underpinning details for temporary support of the south, east and west foundation walls, so that the tanks can be removed.

Due to the very close proximity of these large tanks to the foundation walls, and to the fact that they extend deeper than these walls, and that the groundwater level lies well above the bottom of these tanks, sheeting and underpinning of these walls cannot be done in a safe manner. There is literally no space for workers to excavate along these walls. The structural stability of the existing building would be compromised. Excavation by mechanical means would also prove to be unsafe, as even small excavations and other construction equipment can collapse these tanks, causing spillage of the liquid chemicals into the ground.

It is therefore strongly recommended that these tanks remain in place, be cleaned of all chemicals, and filled with clean sand, RCA or flowable fill. A gravel layer can then be placed over the tanks, and a new concrete slab can be placed over the gravel.

Again, removal of these tanks and the severe hazards to worker safety, structure stability, and ground contamination poses a far greater risk than the safer solution of leaving the tanks in place and filling them with sand.

Please consider our proposal carefully.

Respectfully Yours,

**STRUCTURAL ENGINEERING TECHNOLOGIES, P.C.**

*George J. Cambourakis*  
George J. Cambourakis, P.E., C. Eng.  
President



CLIENT / PROJECT PARAGON PAINT-RAWP

PAGE 1 OF 3

BY J. KENDROT DATE 10/26/15

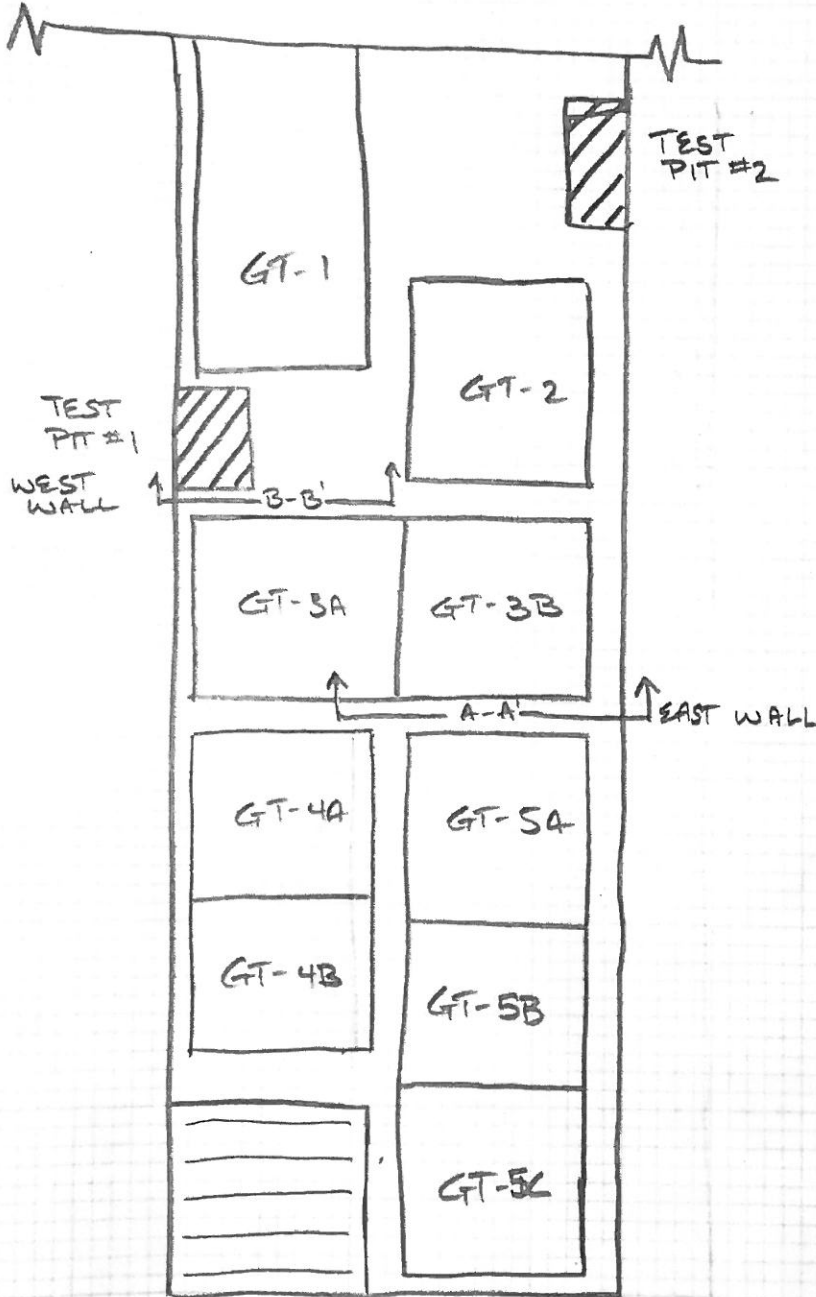
PROJECT NO. \_\_\_\_\_

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

DESCRIPTION VIEW OF GARAGE UST EXCAVATION W/ FOOTING TEST PITS

NOT DRAWN TO  
SCALE

TOP VIEW



46 AVE.

CLIENT / PROJECT PARAGON PAINT-RAWP

PAGE 2 OF 3

BY J. KENDROT DATE 10/26/15

PROJECT NO. \_\_\_\_\_

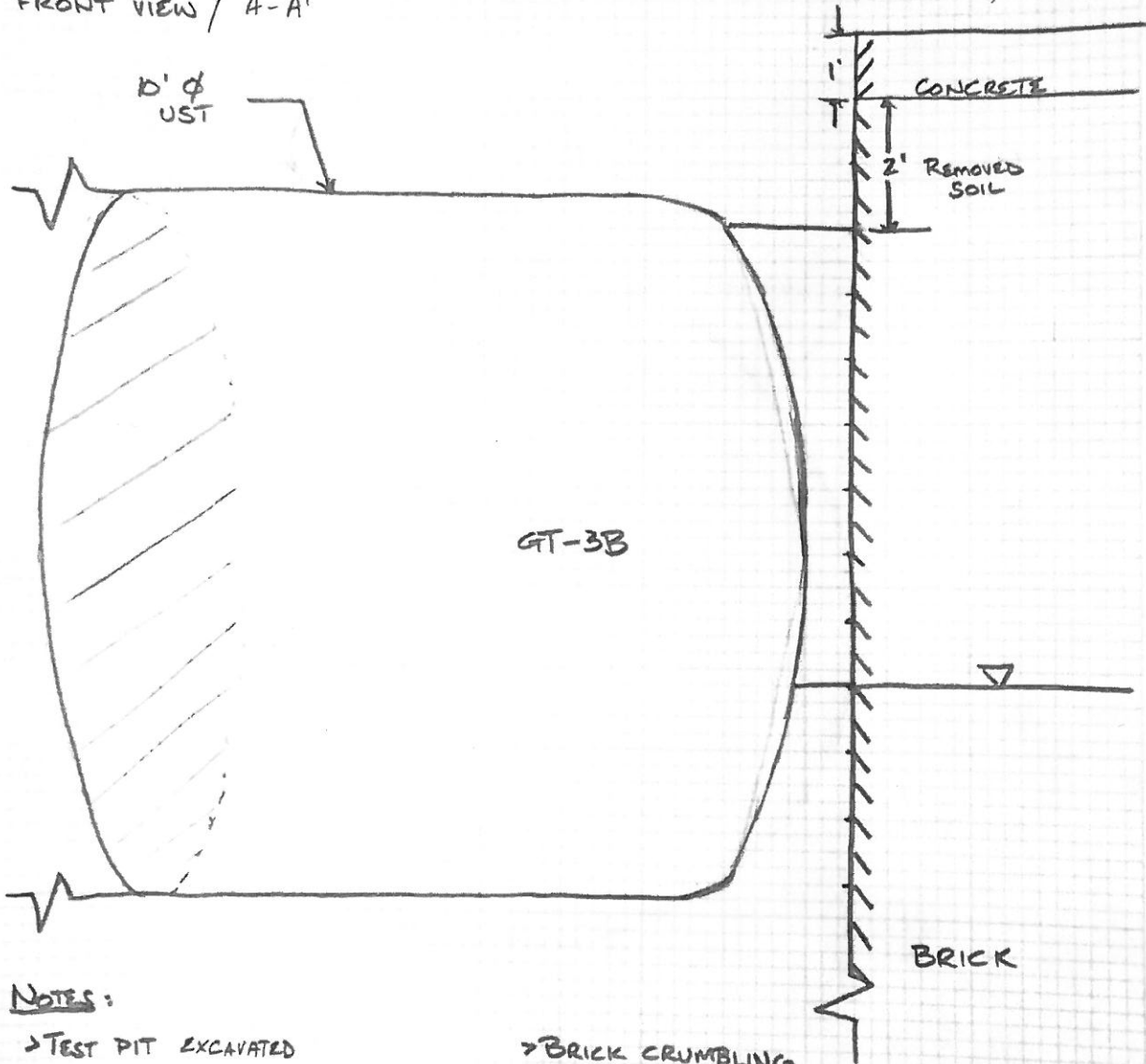
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

DESCRIPTION TEST PIT EXCAVATED ALONG THE EAST GARAGE WALL ON 10/19/15

EAST WALL

1 box = 1/4" SCALE

FRONT VIEW / A-A'



NOTES:

- > TEST PIT EXCAVATED TO 10.5' BELOW CONCRETE SURFACE (10/19/15)
- > COULD NOT FIND FOOTING; WALL EXT. BELOW 10.5' BELOW CONCRETE
- > WATER LEVEL AT 9.0 FT BELOW CONCRETE
- > SOIL EXCAVATED TO APPROX 2 FT BELOW CONCRETE

- > BRICK CRUMBLING BELOW 9 FT BELOW CONCRETE
- > COMPARTMENT WALL BETWEEN GT-3B AND GT-3A SHOWN

CLIENT / PROJECT PARAGON PAINT- RAWP

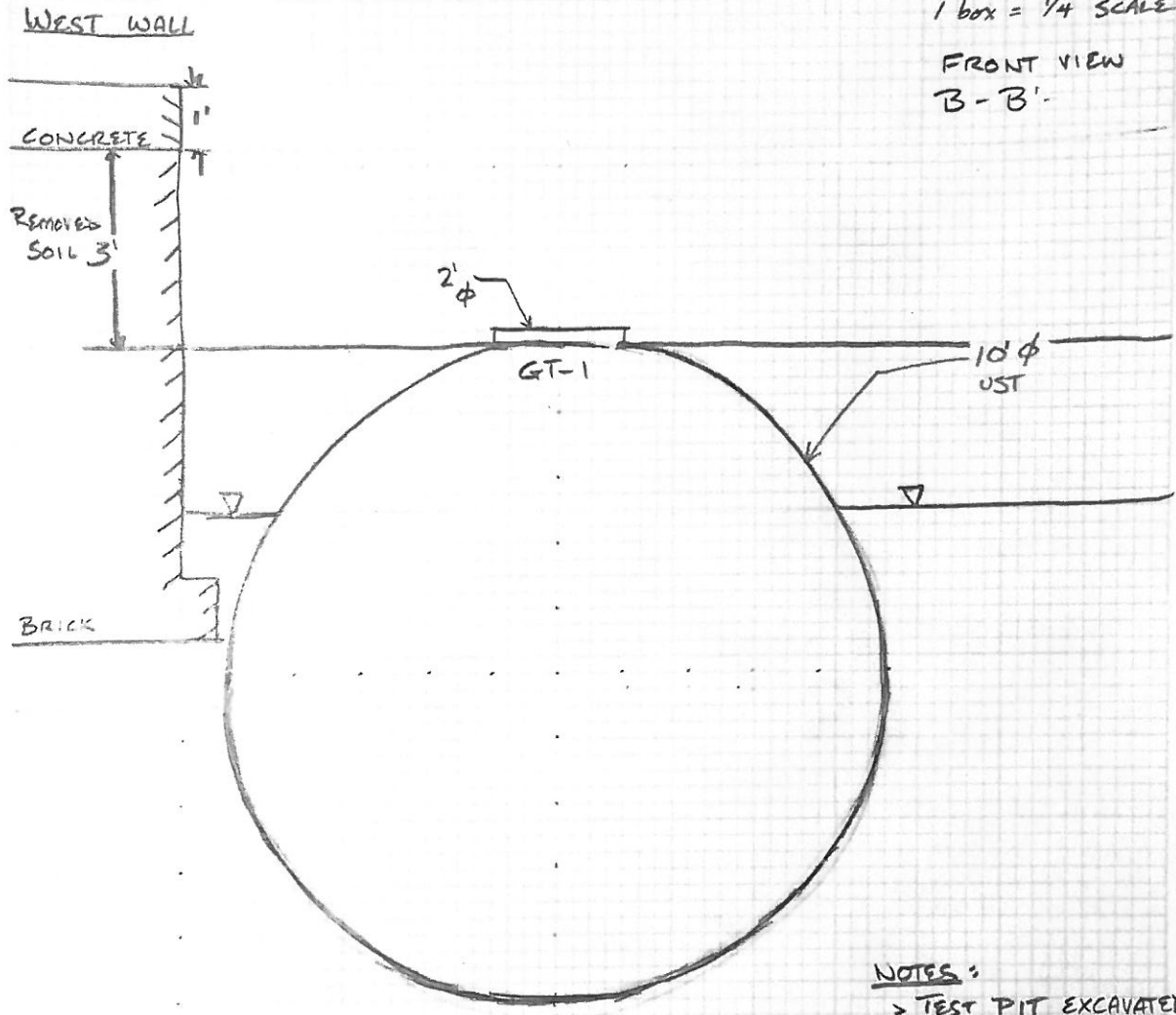
PAGE 3 OF 3

BY J. KENDROT DATE 10/26/15

PROJECT NO. \_\_\_\_\_

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

DESCRIPTION TEST PIT EXCAVATED ALONG THE WEST GARAGE WALL ON 10/14/15



1 box = 1/4' SCALE  
FRONT VIEW  
B-B'

- NOTES:
- > TEST PIT EXCAVATED TO FOOTING DEPTH; WAS NOT ADV. FURTHER (10/14/15)
  - > FOOTING ON THE WEST WALL AT APPROX. 7.5 FT BELOW CONCRETE SURFACE
  - > WATER LEVEL AT APPROX. 6.5 FT BELOW CONCRETE SURFACE
  - > SOIL BENEATH THE CONC SURFACE AT 3' BELOW