PALMER engineering company
PECGA, LLC dba Palmer Engineering Company

May 21, 2015

Bruce Hamler Water Treatment Facility
PO Box 1711
Rome, GA 30162-1711

Attn: Wayne Stanley

Re: Bruce Hamler Water Treatment Facility
Rome, GA
PEC Project No. F15049

Dear Mr. Stanley,

At your request, I met you at the referenced address on May 5, 2015. The purpose for the visit was to review concerns you have for the movement of the brick in the building walls. The building is a two-story concrete, brick and steel water treatment and office building. The exterior walls are twelve inch thick brick. Most of these walls are built up of three thicknesses of four inch by eight inch brick bonded together by turning one row of brick perpendicular to the rest. The oldest portion of the building was built in the 1930s. An addition was constructed in the 1950s. While there are some cracks here and there, the structure is doing quite well for the most part, especially for an eighty year old building.

There are two areas that currently need attention. These two areas are clouded on the accompanying sketch. The first one is a stair-step section that has moved out of plane from the rest of the wall in the original portion of the building. The second area is the end wall of the addition where the outside course does not have bond brick tying the outside course to the two inside courses.

The first area is a corner of the initial portion of the building on the first level. It appears as water got into the wall, froze and caused some of the brick to be pushed out plane from the rest of the wall. This area is currently stable but unsightly. I recommend removing these brick that have moved out of plane, drilling and epoxying #3 dowels , 24" long, twelve inches into the existing brick. Drill these into the mortar joints in pairs on twelve inch centers vertically. Re-install the brick and cast stone, bonding them together as were the original brick and install truss type horizontal wall reinforcing (Dur-o-wal) on twelve inch centers.

In the second area, the wall appears to be moving out, away from the rest of the building. This wall provides vertical support for the framed floor. The gap that opened in the floor between the tile and the wall should be monitored. If the gap opens again, indicating continued movement, I recommend further review, but probably piers would need to be added and it could be necessary to reconstruct at least portions of the wall. At this point, I recommend bolting an angle L4x4x3/8 to provide additional support for the slab. See the sketch for a detail.

The small cracks in the brick should be sealed to keep out moisture as should the cracked cast stone. Water must be kept from getting into the walls. Some moisture will be naturally absorbed into the brick but this does not need to be addressed at this point.

We at Palmer Engineering Company appreciate the opportunity to be of service with the project. Please do not hesitate to give me a call at (404)281-0705 if there are any questions regarding this information or a way I can be helpful.

Very truly yours,

PALMER ENGINEERING COMPANY

W. F. Palmer, Jr. PE

GEORGIA REGISTERED No. 10287 PROFESSIONAL ENGINEER W.F. PALMER, JR.

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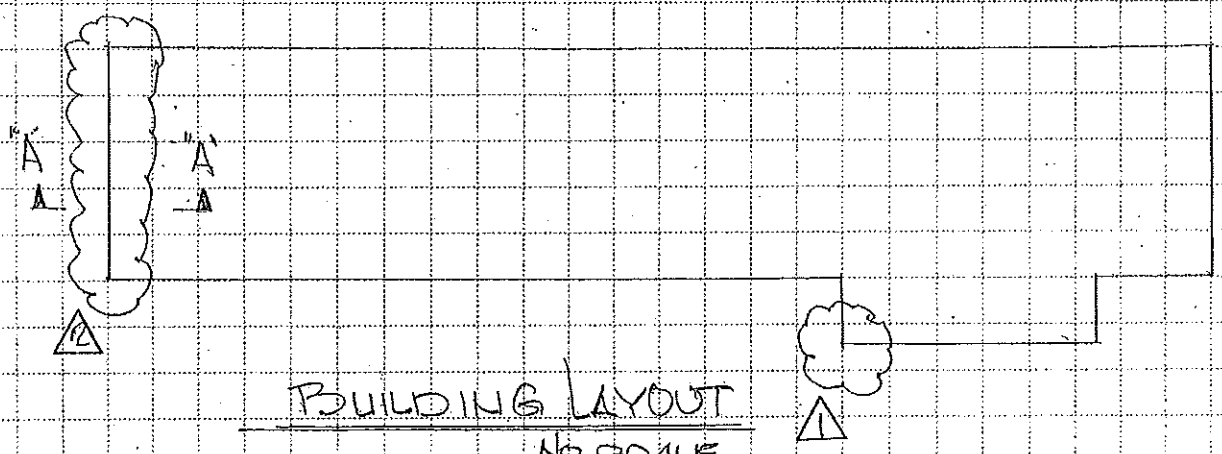
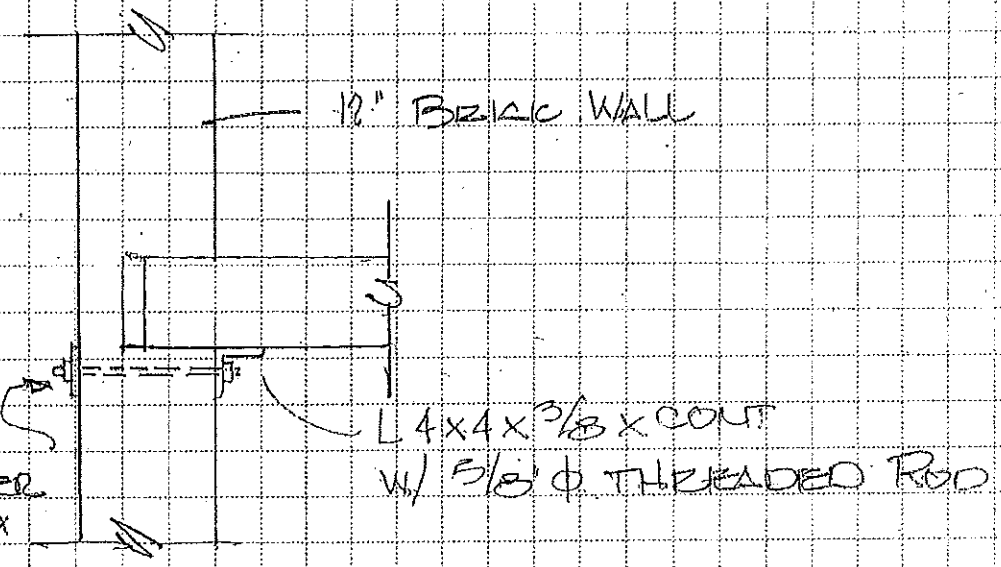
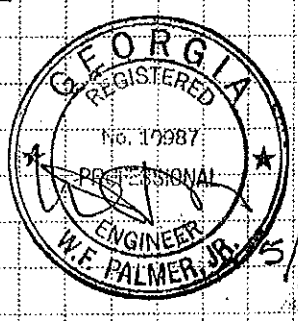
Project BRUCE HAMLER WATER TREATMENT FAC
Project no. F15049
Sheet no. 1 of 1
Calculated by LWP Date 5/21/15



BUILDING LAYOUT
NO SCALE



SECTION 'A-A'
3/4" = 1'-0



5/21/15