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October 24, 2007

Yellow Springs Senior Center
Xenia Avenue.
Yellow Springs, Oh

Attn: Bill Bebko
Re: Study for Expansion

Bill,

Per your request and authorization, we have completed the following feasibility study for a possible expansion to your existing facility. We have visited the facility and used the existing partial drawings for this study.

The western portion of the building (approx. 2160 sf) is a two-story masonry building with offices and activity areas on the first floor and two apartments on the second floor. The rear (eastern) section of the building is a one-story concrete block and wood structure build in 1993. This structure has a gambrel truss roof design and also has an enclosed stairway to the two apartments above the original building.

From today's Ohio Building Code standpoint, the structure would be classified as a mixed-use B/A3/R2
(Business, Assembly, Residential). When the addition was built, the building was classified as 5B construction (combustible) wood walls and roof. The current building code would require III B construction (non-combustible) walls with wood roof.

The most restrictive use (R2) would limit the building to 7000 sf per floor. With the current building footprint at 3750 sf, the proposed second floor addition would not exceed allowable areas.

With the expansion requiring IIIB construction, the east and south walls of the first floor Community Room would have to be upgraded to 2-hour status.

You have expressed an interest in seeing a second floor added over the Community Room (1584 sf). You have indicated you would prefer this area be clear span, free of any interior columns.

The drawings indicate an 8" x 16" existing footing on the rear addition. With an assumed soil bearing capacity of 2000 #psf,, the footer will support approximately 1755 # psf. An assumed bearing wall of an expanded two-story structure would have to support approximately 2800 #psf. In order for the existing footing to support the proposed building, all the subsurface would have to be verified by testing to confirm a minimum of 3500 #psf . Access to the building perimeter with a testing rig may make testing unfeasible.