



ENGINEERING & ENVIRONMENTAL SCIENCE COMPANY

3008 ANDERSON DRIVE, SUITE 102

RALEIGH, NC 27609

(919) 781-7798

August 14, 2023

Mr. Tim Hawkins
Carolina Commercial
P.O. Box 130
Sanford, NC 27331

Re: Below Slab Sewer Line Modification
Senters
27669 Hwy 125
Scotland Neck, NC

Dear Mr. Hawkins:

Due to grade conflicts, a portion of the 6-inch dia. sewer line was reduced to a 4-inch dia. line. The attached shows the location of the reduction. The pipe slopes at $\frac{1}{4}$ inch/ft. or 2.08%.

Eleven (11) bathrooms are connected to this portion of the line. Each bathroom has one toilet, one sink and one shower. Per Table 709.1 in the *NC 2018 Plumbing Code*, the bathroom group with a toilet (greater than 1.6 gal/flush), a sink and a shower have an Unit Fixture of 6. Total Unit Fixtures for 11 bathrooms is 66.

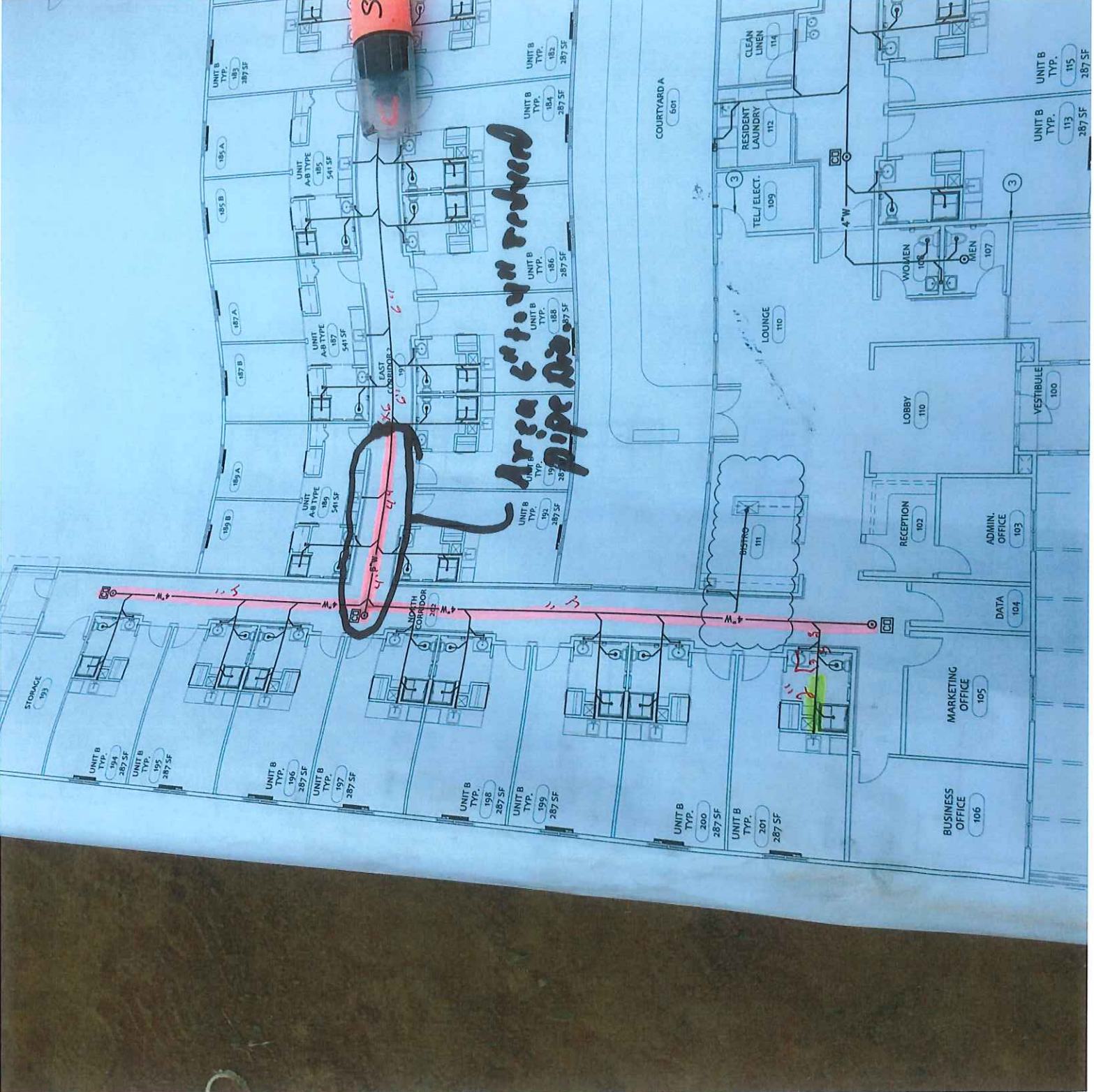
Based on Table 710.1(1) in the *NC 2018 Plumbing Code*, a 4-inch dia. sewer line can handle up to 216 Unit Fixtures for a pipe slope $\frac{1}{4}$ inch/ft. The modification does not detrimentally impact the sewer drainage and meets the *NC 2018 Plumbing Code*.

We appreciate serving you on this project. Please contact us if you have any questions.

Sincerely,


T. Patrick Shillington, P. E.
President





Area 6" x 4" reduced
Pipe Dia.

