



Memorandum

Date: April 5, 2019
To: James Martin
Company: The Sunshine Mill Winery
Project: Wall Opening Evaluation
The Sunshine Mill, The Dalles, OR
Project No.: 190612
C: Dave Peden
From: Steve Hawk

Dear James:

As part of your conversion of The Sunshine Mill's silos and mill building into event space, you would like to create openings in some of the walls as shown on the attached photographs. The lateral force resisting systems of the structures will not be reduced by more than 10% after creating these new openings, so they are acceptable per the 2014 Oregon Structural Specialty Code Section 3404.4 Exception as described below:

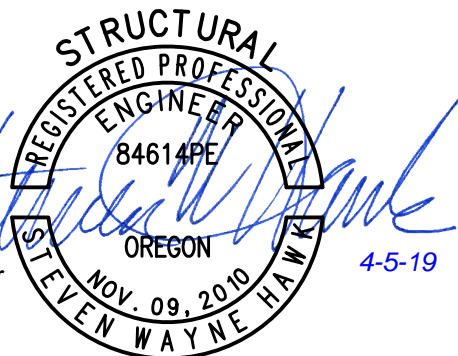
3404.4 Existing structural elements carrying lateral load.
Except as permitted by Section 3404.5, where the *alteration* increases design lateral loads in accordance with Section 1609 or 1613, or where the *alteration* results in a structural irregularity as defined in ASCE 7, or where the *alteration* decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609 and 1613.

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *alteration* considered is no more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces per Sections 1609 and 1613. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces, and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

Respectfully Submitted,

COFFMAN ENGINEERS, INC

Steven W. Hawk, PE, SE
Senior Discipline Structural Engineer



SWANSON MILL WINERY

OPEN DAILY AT NOON

HAND DELIVERY ONLY

CERTIFIED
BOTTLED GOODS

THE DALLES, OREGON

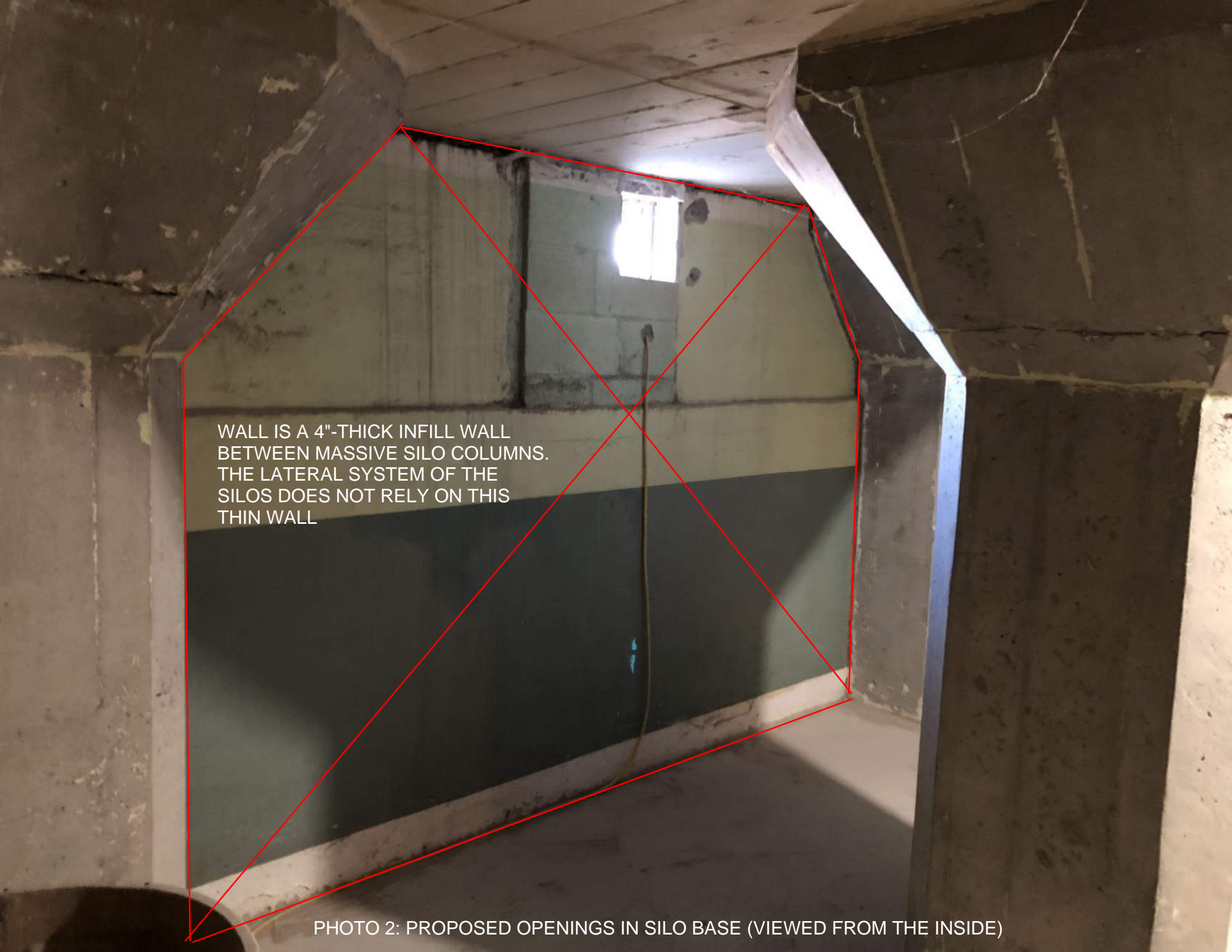
EAST FACE OF MILL BUILDING

SHEAR WALL
"PIERS" TO
REMAIN
BETWEEN
OPENINGS

PROPOSED
OPENING, TYP

THIS OPENING PROPOSED
TO EXTEND BELOW
GRADE AS A NEW
BASEMENT ENTRANCE

PHOTO 1: PROPOSED OPENINGS IN MILL BUILDING

A photograph showing the interior of a silo base. A red 'X' is drawn over a light-colored, textured wall. The wall is situated between two massive, dark concrete columns. A small, bright light source is visible in the upper center, casting a beam of light. The floor is dark and appears to be made of concrete or metal. The overall atmosphere is dimly lit and industrial.

WALL IS A 4"-THICK INFILL WALL
BETWEEN MASSIVE SILO COLUMNS.
THE LATERAL SYSTEM OF THE
SILOS DOES NOT RELY ON THIS
THIN WALL

PHOTO 2: PROPOSED OPENINGS IN SILO BASE (VIEWED FROM THE INSIDE)



PHOTO 3: PROPOSED OPENINGS IN SILO WALL