

Ricardo



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Date: Wednesday, May 29, 2019 4:03 PM
To: Jessica Hau
Subject: Preliminary Foundation: 20190521_FARMERSVILLEHS_30X20X18

Project No: 20190521_FARMERSVILLEHS_30X20X18

#4 Rebar
18 on Center Rebar

As requested, preliminary foundation design information for the above referenced project follows.

Concrete spread footings are proposed for use on the project.

The following information is based on foundations for typical buildings; engineering design will be required for final size, reinforcing etc.

- At all rigid frame column locations without a portal frame preliminary info follows:
 - Prelim. footing size: 3 ft. square x 1.5 ft. deep
 - Reinforcing: (7) #4's each way at top and bottom
 - Anchor bolts: (4) ASTM F1554, Gd 36, heavy hex anchor bolts with 24 in. embedment each rigid frame column
 - Thrust angle: 3x3x1/4 x 6" long
 - Hairpins: #5 with 9 ft. legs

preliminary foundation information assumed the following:

- A minimum floor slab thickness of 4" will be provided with a minimum of #4 bars at 18 in. on center, each way. (Slab design shall be by Others.)
- A minimum continuous perimeter footing, 12 in. wide by 18 in. deep with a minimum of (1) #4 continuous bar at top and bottom will be provided. (Footing is continuous around the perimeter of the building.)
- A thickened slab will be provided at the hairpins. (Min. of 8 in. wide x 7" deep, extending 4" past the end of each hairpin leg.)

preliminary foundation design information provided is also based on the following:

technical (Foundation design) Discussion:

Assuming the Authority Having Jurisdiction (AHJ) will waive the requirement for a geotechnical report, the following presumptive soil values from the 2016 California Building Code were assumed.

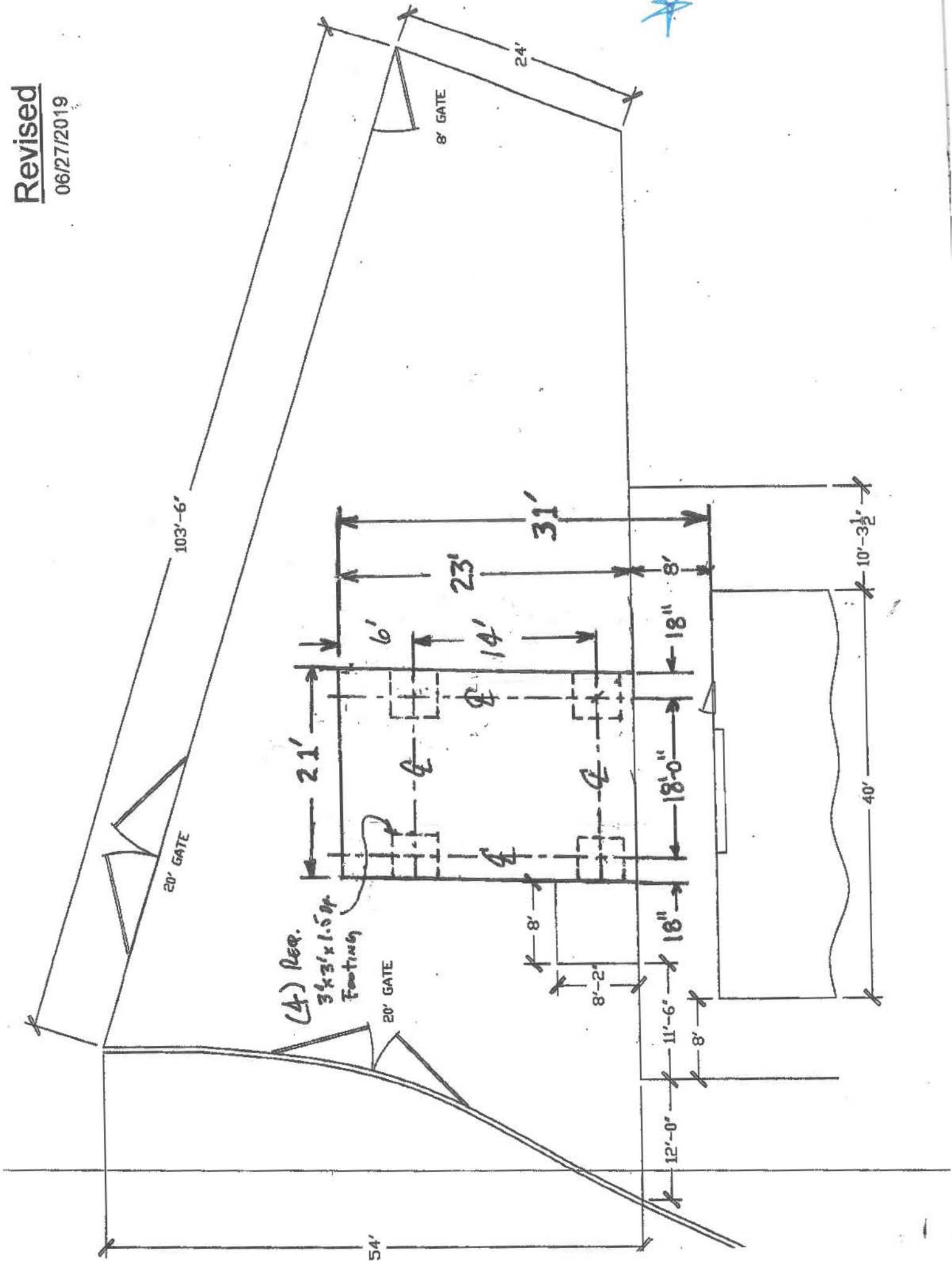
- From CBC Table 1806.2:
 - Vertical Foundation Pressure 1,500 psf.
 - Lateral Bearing Pressure, 100 psf/ft
 - Soil/Concrete coefficient of friction for sliding resistance, 0.25
 - A building sliding check was not performed and was assumed to not be required.
 - Preliminary information is based on the assumption there is no expansive soil at the project site. (Expansive soil will require foundation design to be by Others.)
- A minimum uplift safety factor of 1.67 was assumed.

Foundation design may change if the AHJ requires any parameters to be different than those assumed and used in preliminary design.

Foundation design, and parameters used in the design, are subject to change at the time of final design. Plans and methods of construction will not be covered / included in the design.

Revised

06/27/2019



6/11/79

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