

March 3, 2022

Mr. Cody Jackson
The Welding Machine, LLC
62 Judi Lee Road
Lillington, NC 27456

RE: Residential Garage – *Review of Plans and Recommendations*
MCA #2202

Dear Mr. Jackson:

McGee Consulting Associates, Inc. (MCA) was asked to review whether the Residential Garage plans prepared by you meet the requirements of the current North Carolina Building Code (2018 NCBC).

MCA determined that the columns and footings will need to support a load of 3,800 lbs based on the proposed layout. The HSS3x3x1/4 columns will support a load of 20,460 lbs, so the columns will sufficiently support the actual loads. The 18"x18"x14" footings will support a load of 4,500 lbs based on nominal 2,000 psf bearing capacity soil recommended in the 2018 NCBC, so the footings will support the actual loads.

MCA analyzed the proposed beams and determined that the beams have sufficient strength to support the loads, but the beams will over-deflect under the code prescribed loads. MCA has determined the beams must be an HSS4x3x1/4. See the attached sketch for beam size adjustments.

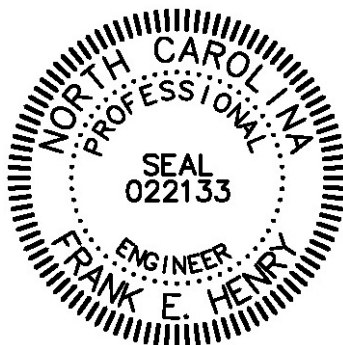
MCA approves of the overall design intent with the above-mentioned adjustments. No resubmission of the plans to MCA will be required.

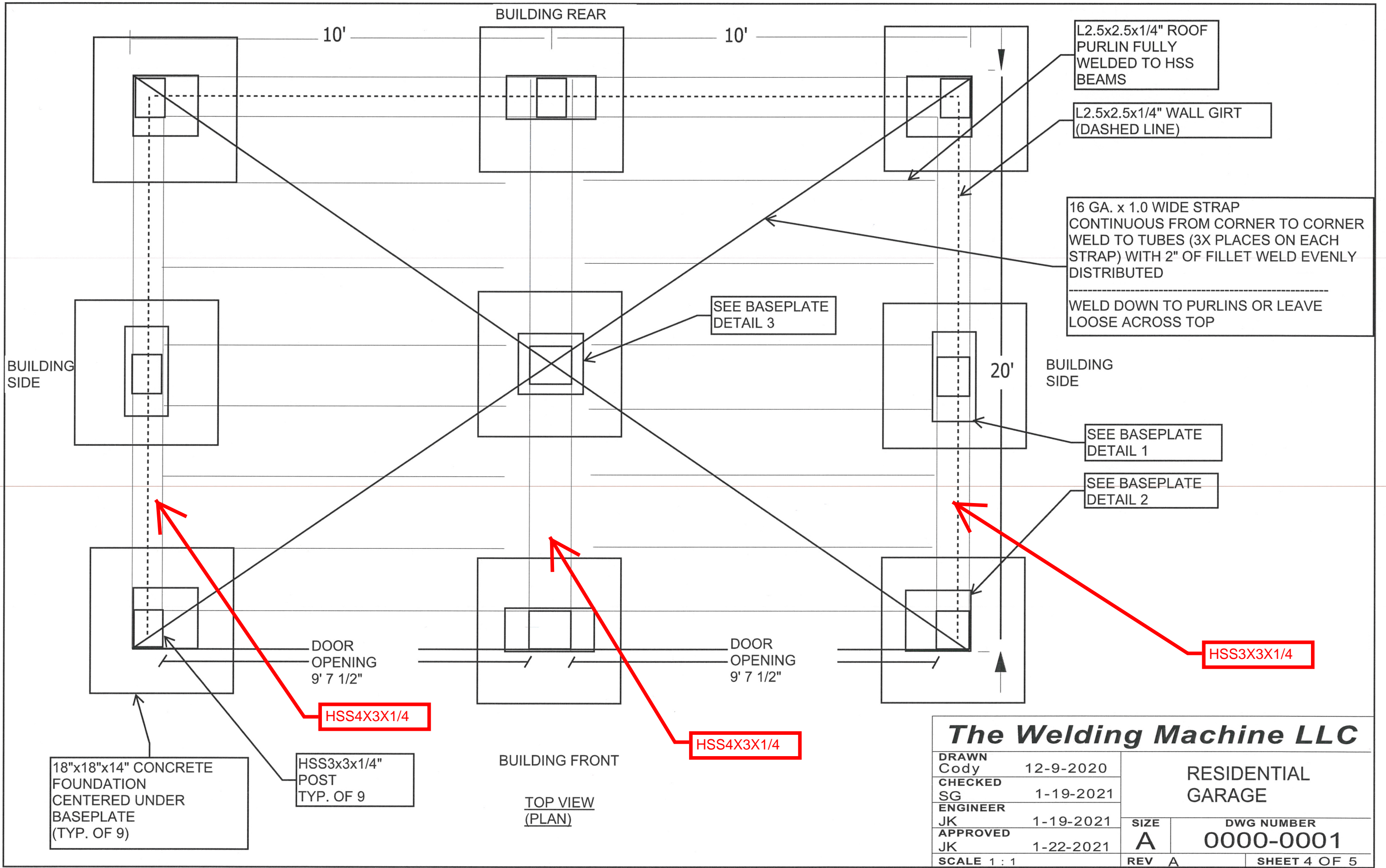
Please review this information and let me know if there are any questions or concerns.

Cordially,



Frank E. Henry, PE
MCA COA #C-2716





L2.5x2.5x1/4" ROOF PURLIN FULLY WELDED TO HSS BEAMS

L2.5x2.5x1/4" WALL GIRT (DASHED LINE)

16 GA. x 1.0 WIDE STRAP CONTINUOUS FROM CORNER TO CORNER WELD TO TUBES (3X PLACES ON EACH STRAP) WITH 2" OF FILLET WELD EVENLY DISTRIBUTED

WELD DOWN TO PURLINS OR LEAVE LOOSE ACROSS TOP

SEE BASEPLATE DETAIL 3

SEE BASEPLATE DETAIL 1

SEE BASEPLATE DETAIL 2

HSS3X3X1/4

HSS4X3X1/4

HSS4X3X1/4

18"x18"x14" CONCRETE FOUNDATION CENTERED UNDER BASEPLATE (TYP. OF 9)

HSS3x3x1/4" POST TYP. OF 9

DOOR OPENING 9' 7 1/2"

DOOR OPENING 9' 7 1/2"

The Welding Machine LLC

DRAWN	Cody	12-9-2020
CHECKED	SG	1-19-2021
ENGINEER	JK	1-19-2021
APPROVED	JK	1-22-2021
SCALE	1 : 1	

RESIDENTIAL GARAGE		SIZE	A	DWG NUMBER
				0000-0001
REV	A	SHEET 4 OF 5		

BUILDING FRONT

TOP VIEW (PLAN)

BUILDING SIDE

BUILDING SIDE

BUILDING REAR

10'

10'

20'