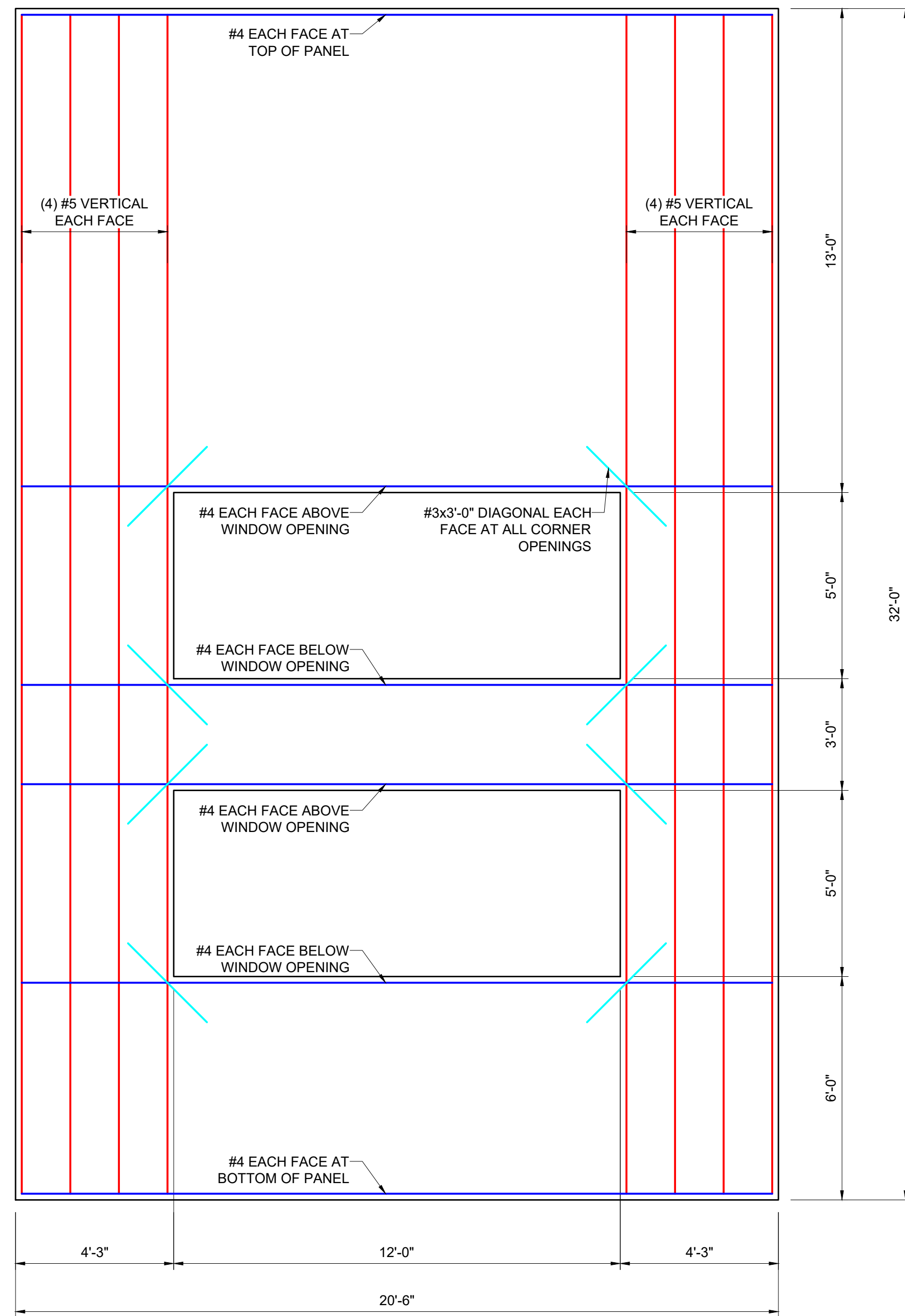


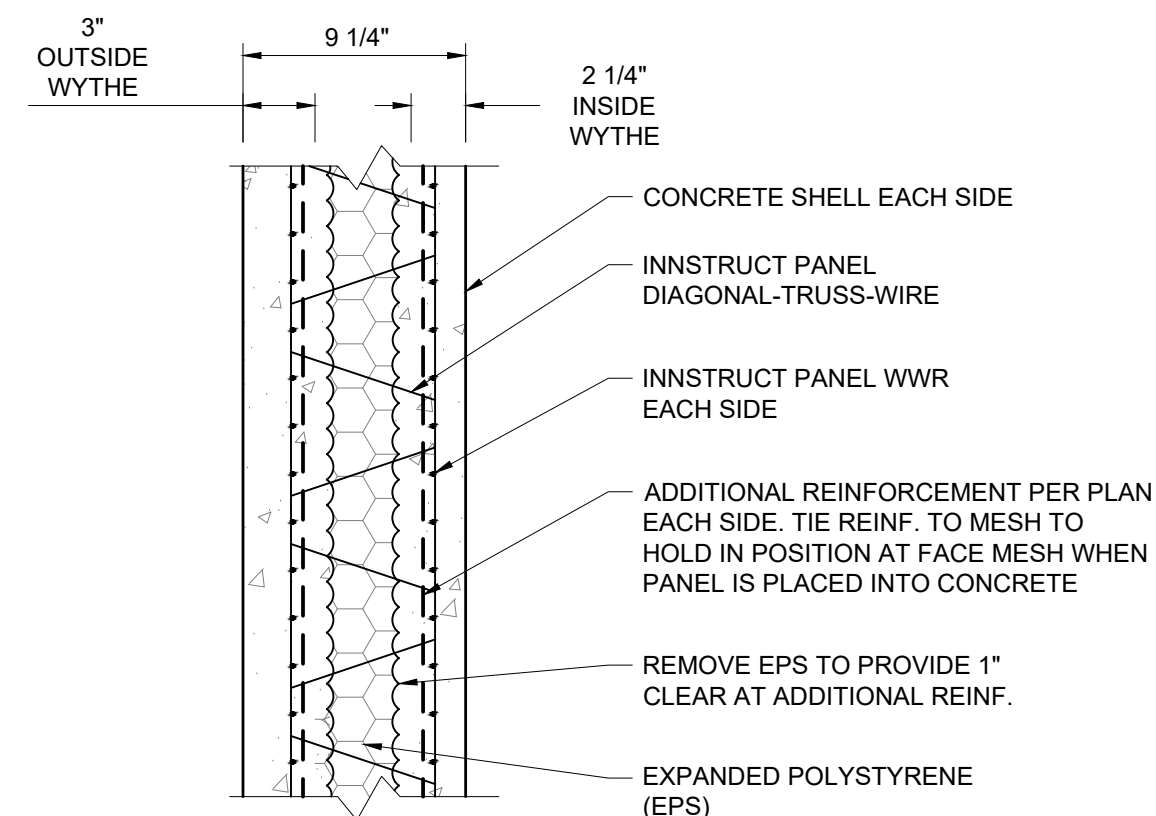
G:\Projects 18\14-18-0042 (SS Panels)\4 Tilt-up Panel Comparison\0-Project Summary\CAD\SHEETS\3.dwg - 11/25/2020 3:05 PM



TIPS REINFORCING

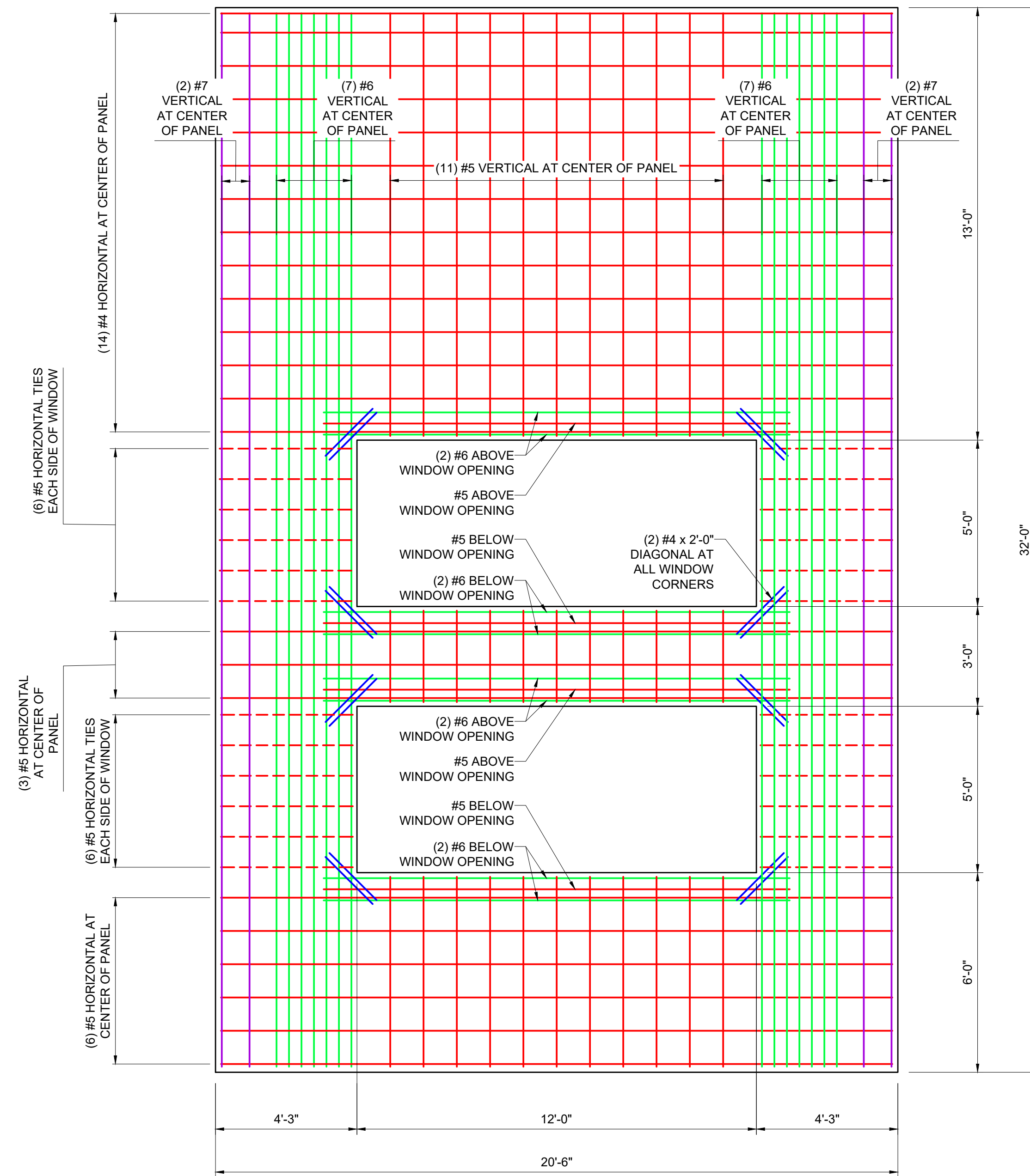
SCALE: 3/8" = 1'-0"

- TIPS**
 3" EXTERIOR CONCRETE WYTHE (COMPOSITE)
 4" EPS INSULATION
 2.25" INTERIOR CONCRETE WYTHE (COMPOSITE)
 9.25" TOTAL THICKNESS



TYPICAL TIPS SECTION

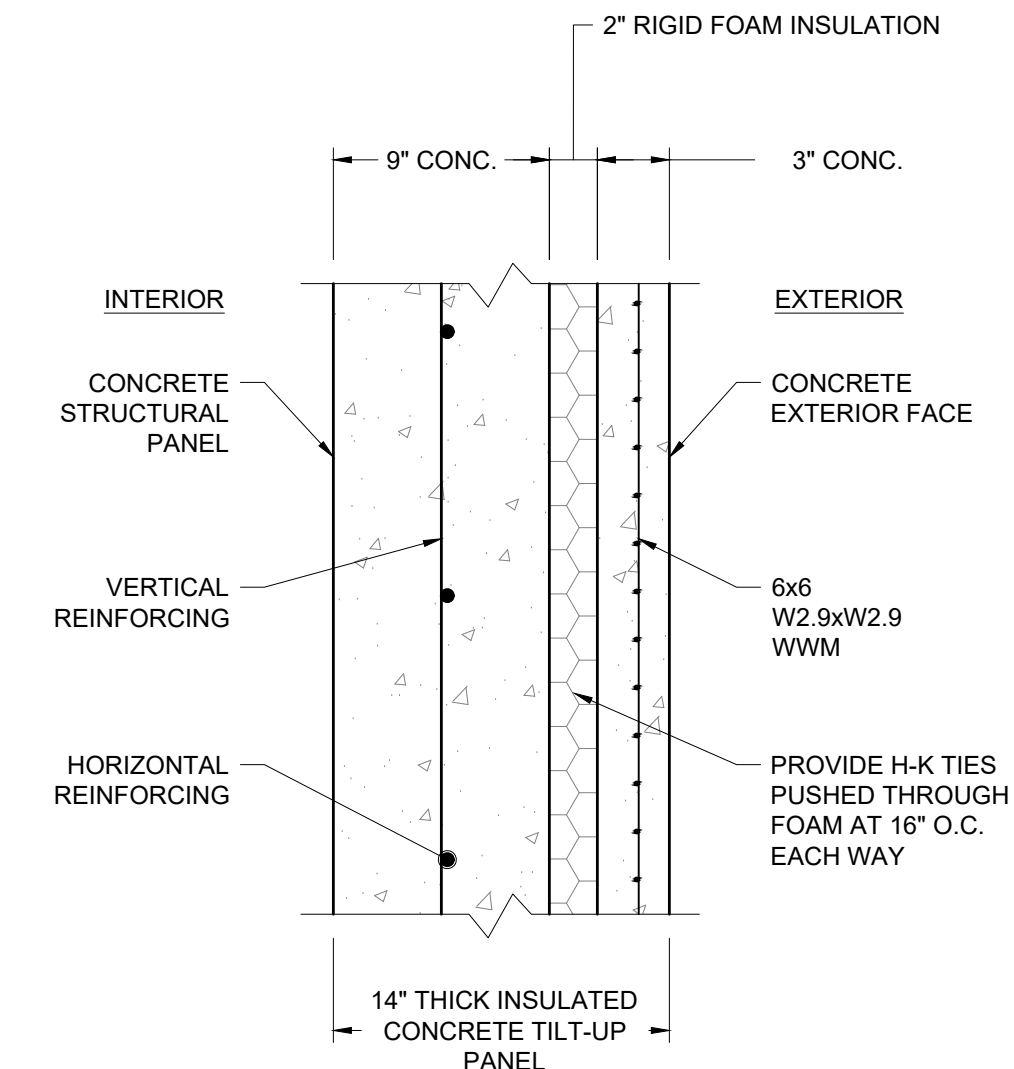
SCALE: 1" = 1'-0"



ORIGINAL PANEL REINFORCING

SCALE: 3/8" = 1'-0"

- INSULATED PANEL**
 3" EXTERIOR CONCRETE WYTHE (NON-COMPOSITE)
 2" RIGID INSULATION
 9" INTERIOR CONCRETE WYTHE (NON-COMPOSITE)
 14" TOTAL THICKNESS



TYPICAL INSULATED PANEL DETAIL

SCALE: 1" = 1'-0"

LIMITATION OF COMPARISON:
 ORIGINAL PANEL DRAWINGS ARE BASED ON
 PROJECT PLANS

TIPS COMPARISON DRAWINGS ARE PRELIMINARY
 AND ARE SUBJECT TO CHANGE BASED ON FINAL
 DESIGN.

BAR SIZE LEGEND:

- #3 - CYAN
- #4 - BLUE
- #5 - RED
- #6 - GREEN
- #7 - PURPLE
- #8 - PINK

TIE BAR - - - - (SIZE PER COLOR)

NOTE:
 NO FOAM IS PROVIDED FOR 14" WIDE STRIP
 ALONG PERIMETER. PANEL IS COMPOSED
 OF 14" WHERE FOAM IS NOT PROVIDED

FORSGREN <i>Associates, Inc.</i>	NO. _____	REVISIONS	BY	DATE	This document or any part thereof in detail or design shall be the property of Forsgren Associates, Inc. and shall not be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the written authorization of Forsgren Associates, Inc.		
PRELIMINARY DRAWING NOT FOR CONSTRUCTION	PROJECT NO. 3			DRAWN	DESIGNED	APPROVED	DATE
INNOVATIVE STRUCTURAL SOLUTIONS	PROJECT 3A						
TIPS COMPARISON							SHEET NO. _____
DATE: NOVEMBER 2020							PAGE NO. _____

INNSTRUCT | Total Integrated Panel System (TIPS)

Basic Design Comparison and Material Displacement Estimate

Project: **3A**
 Panel Description: S1 windows
 Total Wall Square Feet: 11,070
 Total Panels in Project: 26

Prepared by: Kim D. Blackburn
 Date: 1/1/2021

Panel Configuration:
 12 Number of Similar Panels in Project
 32.00 Height (ft)
 20.50 Width (ft)
 120 Area of Openings (ft²) 2 openings
 536 Panel Area (ft²)
 150 Concrete Weight (lbs./ft³)



Original Design Configuration:

3	Architectural Wythe (in)
2	Insulation (in)
9.25	Structural Wythe (in)
12.25	Concrete Thickness (in)
14.25	Total Thickness (in)
16.1	R-value Materials Only

Innstruct | TIPS Design Configuration:

3	Outside Wythe (in)
4	Insulation (in)
2.25	Inside Wythe (in)
5.25	Concrete Thickness (in)
9.25	Total Thickness (in)
22.6	R-value Materials Only

Design Comparison | Material Displacement:

Original Design

Material	Amount	Units
Concrete	20	cubic yds
Reinforcement	2,117	lbs.
Panel Weight	84,192	lbs.

TIPS Design

Amount	Units	% Reduced
9	cubic yds	57%
607	lbs.	71%
35,782	lbs.	57%

INNOVATIVE STRUCTURAL SOLUTIONS

375 East 400 North - Morgan, Utah 84050 | www.innstruct.com

BETTER PANEL | LESS EFFORT | MORE PROFIT