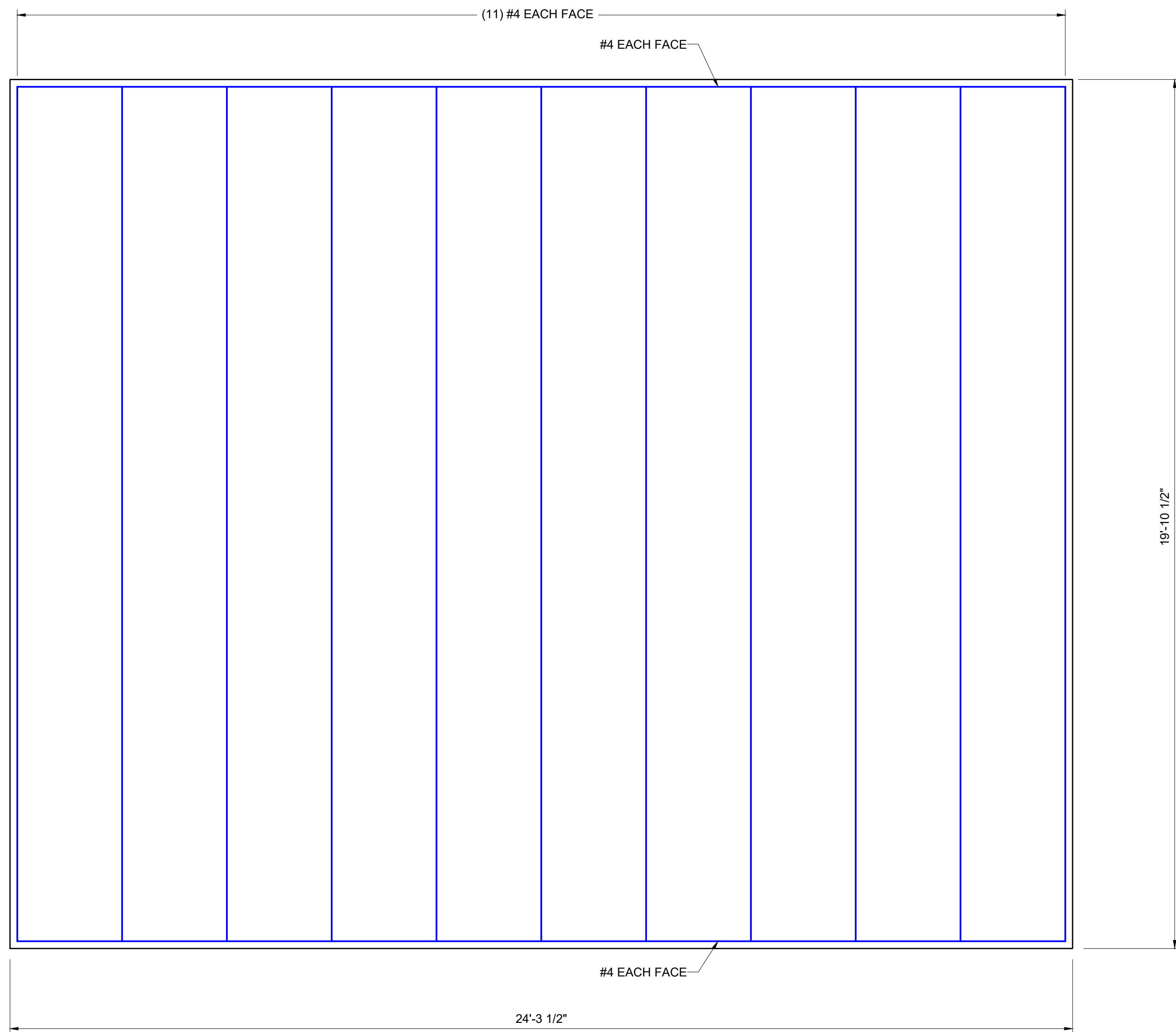
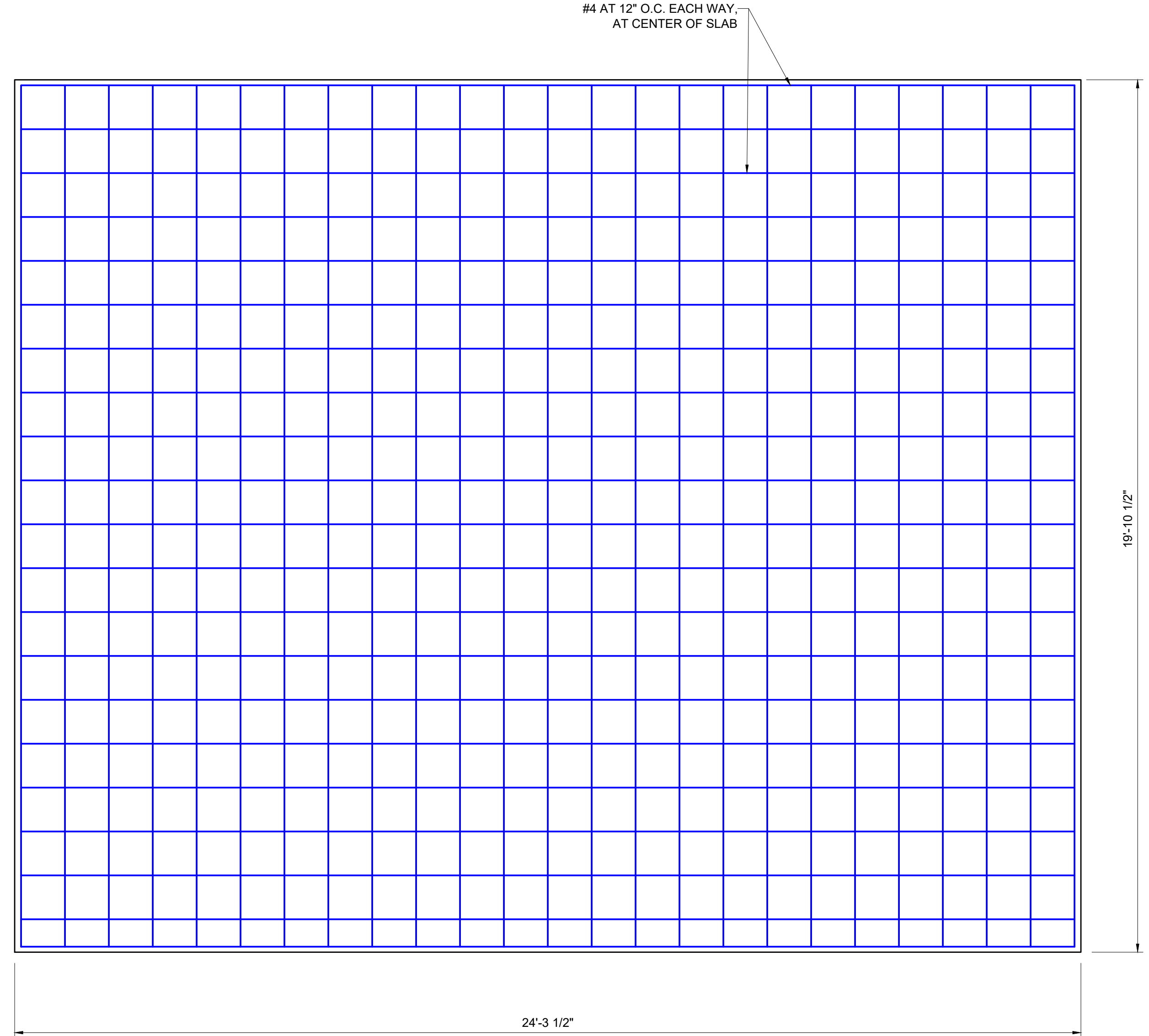


G:\Projects 18\14-18-0042 ISS Panels\14 Tilt-up Panel Comparison\0-Project Summary\CAD\SHEETS\5.dwg - 11/25/2020 3:08 PM



TIPS REINFORCING
SCALE: 1/2" = 1'-0"



ORIGINAL PANEL REINFORCING
SCALE: 1/2" = 1'-0"

TIPS
2-3/4" EXTERIOR CONCRETE WYTHER (COMPOSITE)
4" EPS INSULATION
2" INTERIOR CONCRETE WYTHER (COMPOSITE)
8-3/4" TOTAL THICKNESS

INSULATED PANEL
2" EXTERIOR CONCRETE WYTHER (NON-COMPOSITE)
2-1/2" RIGID INSULATION
5-1/2" INTERIOR CONCRETE WYTHER (NON-COMPOSITE)
10" TOTAL THICKNESS

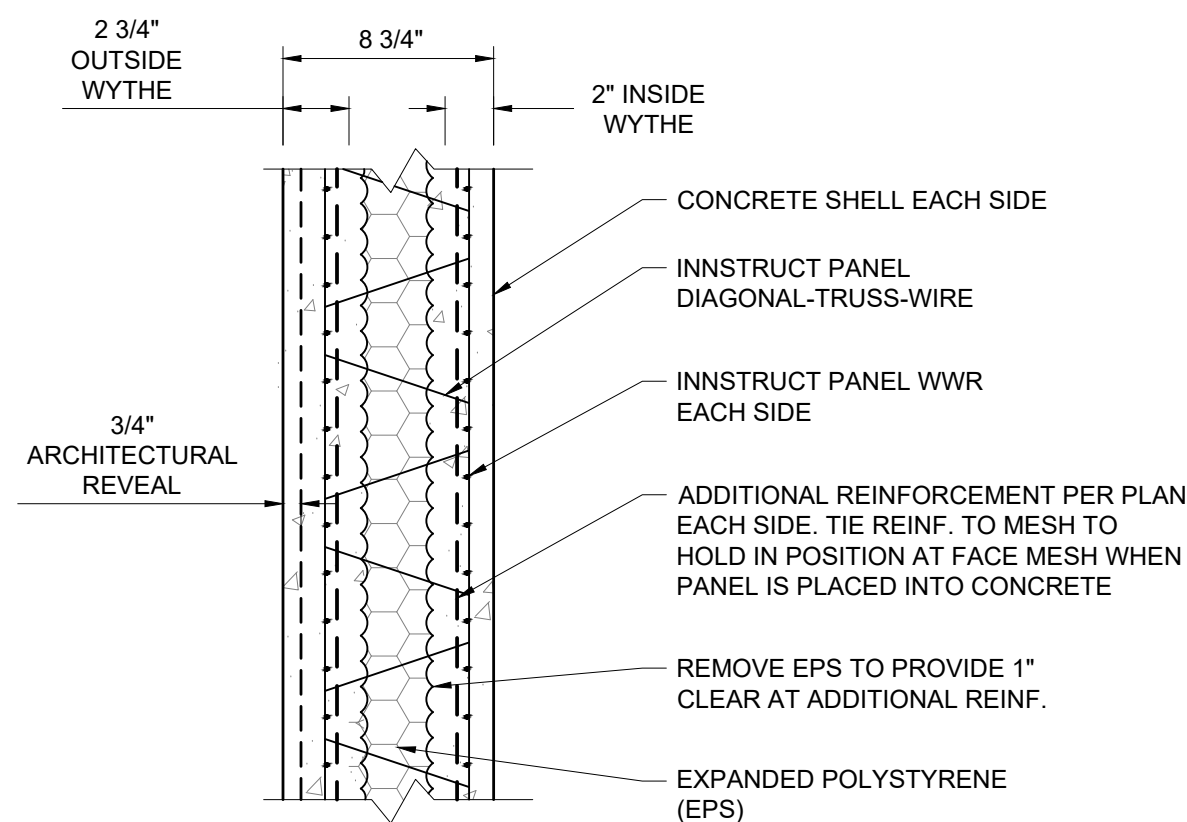
LIMITATION OF COMPARISON:
ORIGINAL PANEL DRAWINGS ARE BASED ON PROJECT PLANS

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

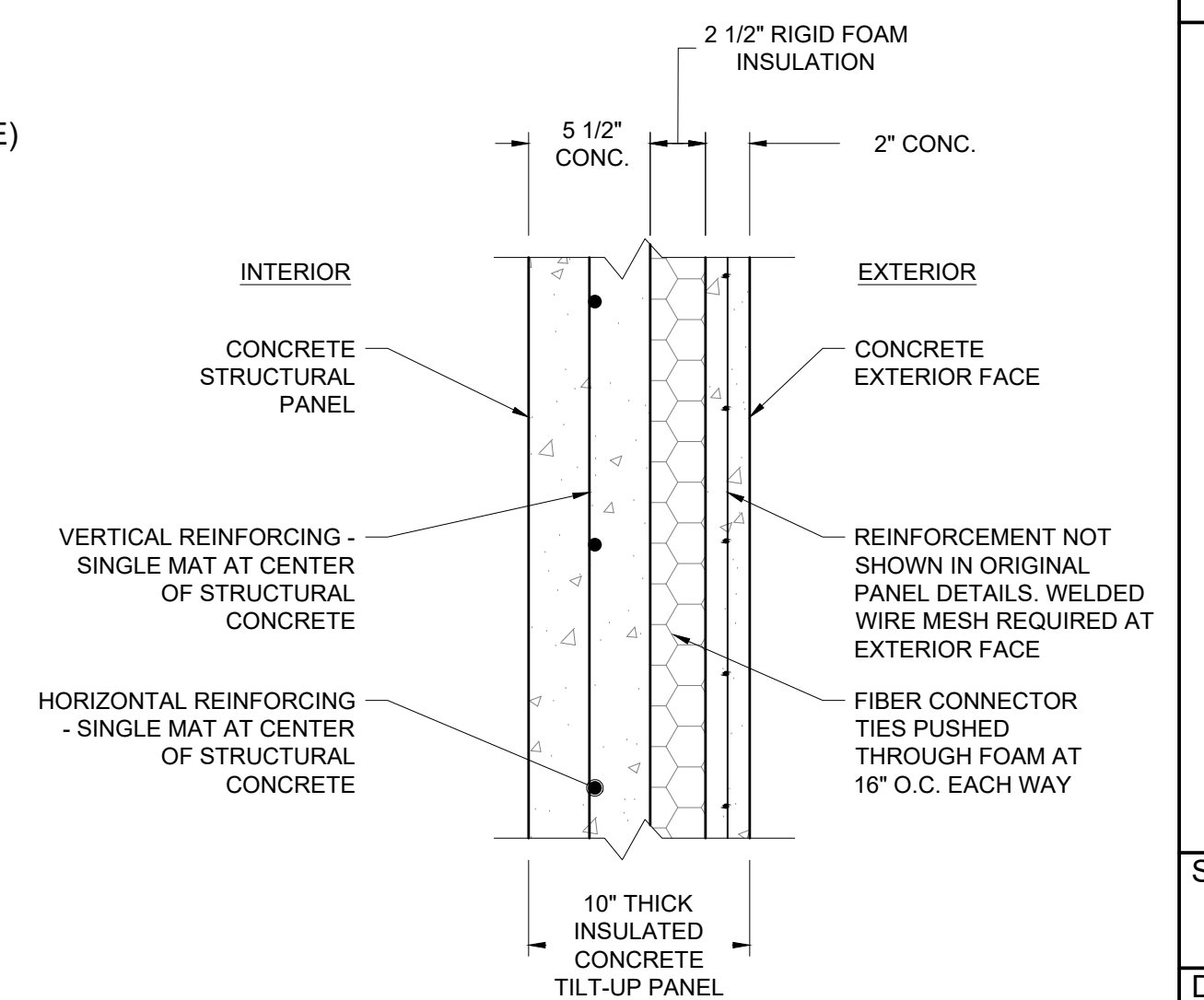
BAR SIZE LEGEND:

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

TIE BAR - - - - (SIZE PER COLOR)



TYPICAL TIPS SECTION
SCALE: 1" = 1'-0"



TYPICAL INSULATED PANEL DETAIL
SCALE: 1" = 1'-0"

PROJECT NO. 5	DRAWN	DESIGNED	APPROVED	DATE
INNOVATIVE STRUCTURAL SOLUTIONS				
PROJECT 5A				
TIPS COMPARISON				
SHEET NO:				
DATE: NOVEMBER 2020				
PAGE NO:				

FORSGREN
Associates, Inc.

95 WEST 100 SOUTH, STE. 115, LOGAN, UT 84321
PH: 435.227.0333 FAX: 435.227.0334

PRELIMINARY DRAWING NOT FOR CONSTRUCTION

NO. _____ REVISIONS _____ BY _____ DATE _____

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INNSTRUCT | Total Integrated Panel System (TIPS)

Basic Design Comparison and Material Displacement Estimate

Project: **5A**
 Panel Description: S1 no openings
 Total Wall Square Feet: 10,800
 Total Panels in Project: 18

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

Panel Configuration:
 10 Number of Similar Panels in Project
 19.83 Height (ft)
 24.25 Width (ft)
 - Area of Openings (ft²)
 481 Panel Area (ft²)
 150 Concrete Weight (lbs./ft³)



Original Design Configuration:

2	Architectural Wythe (in)
2.5	Insulation (in)
7.25	Structural Wythe (in)
9.25	Concrete Thickness (in)
11.75	Total Thickness (in)
17.1	R-value Materials Only

Innstruct | TIPS Design Configuration:

2.75	Outside Wythe (in)
4	Insulation (in)
2.25	Inside Wythe (in)
5	Concrete Thickness (in)
9	Total Thickness (in)
22.5	R-value Materials Only

Design Comparison | Material Displacement:

Original Design

Material	Amount	Units
Concrete	14	cubic yds
Reinforcement	1,073	lbs.
Panel Weight	56,674	lbs.

TIPS Design

Amount	Units	% Reduced
7	cubic yds	46%
309	lbs.	71%
30,364	lbs.	46%

INNOVATIVE STRUCTURAL SOLUTIONS

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BETTER PANEL | LESS EFFORT | MORE PROFIT