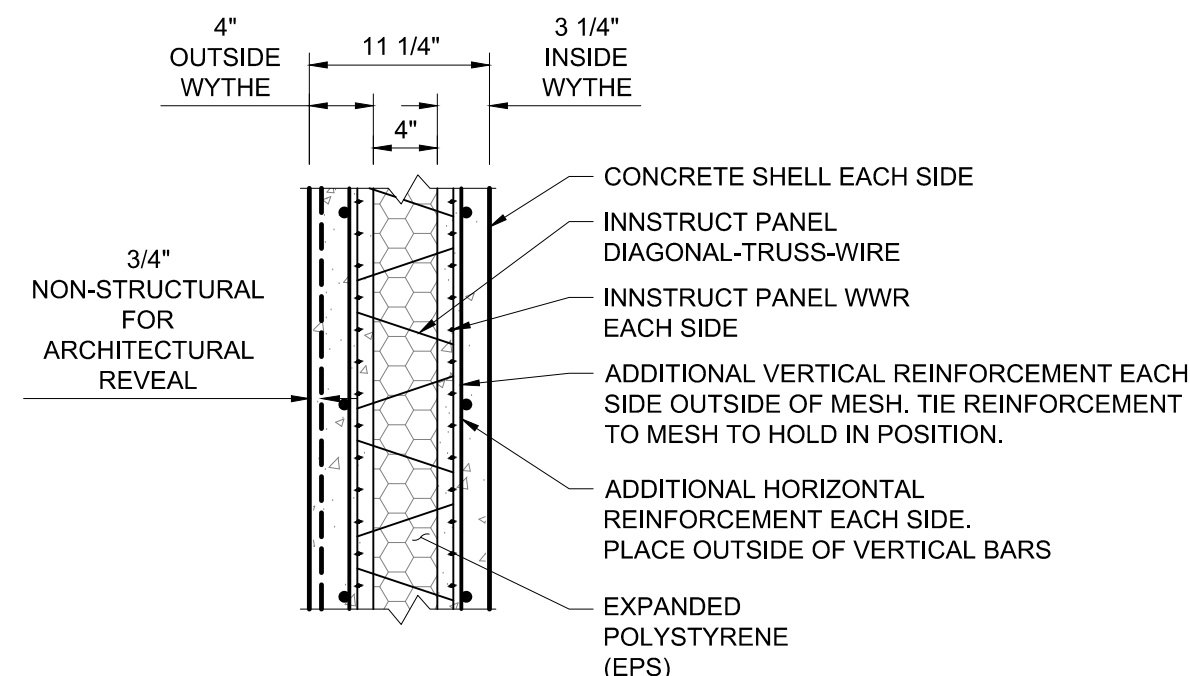
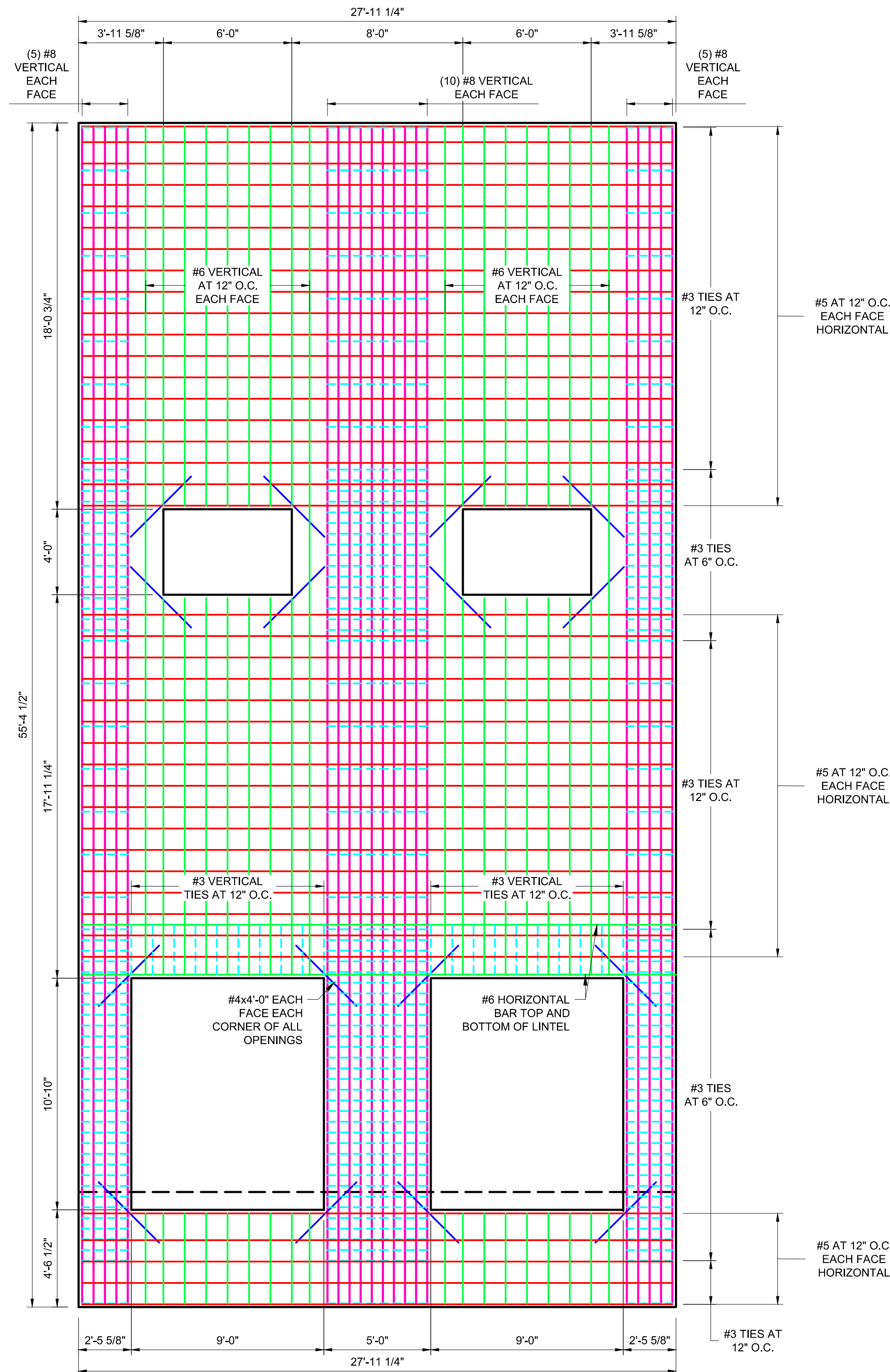


TIPS REINFORCING
3/8" = 1'-0"

- TIPS**
 4" EXTERIOR CONCRETE WYTBE (COMPOSITE)
 4" EPS INSULATION
 3-1/4" INTERIOR CONCRETE WYTBE (COMPOSITE)
 11-1/4" TOTAL THICKNESS

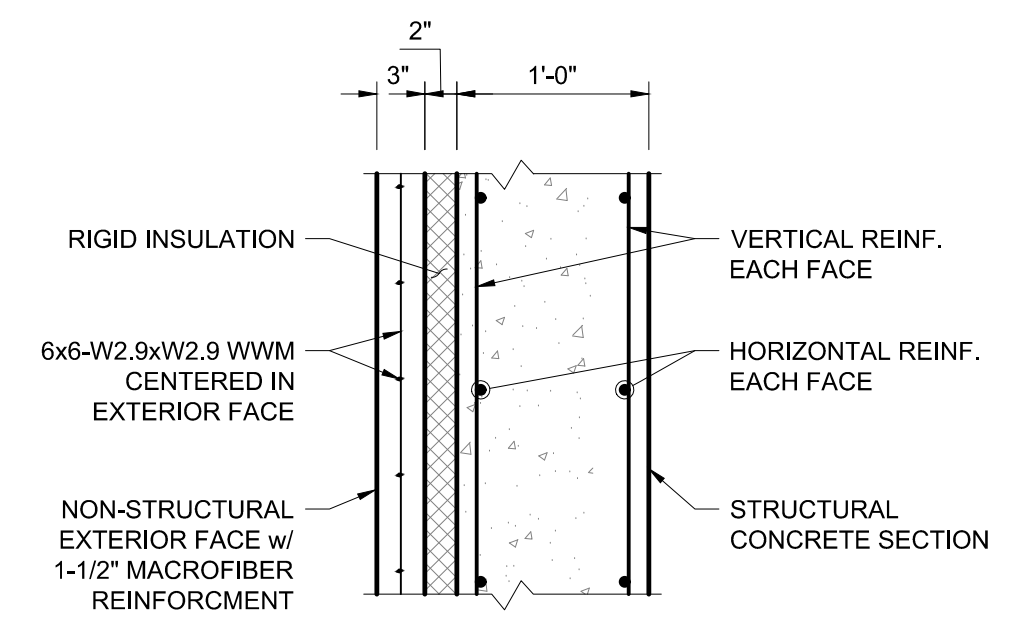


TYPICAL INNSTRUCT PANEL
SCALE: NTS



ORIGINAL PANEL REINFORCING
3/8" = 1'-0"

- SOLID CONCRETE SECTION**
 12" STRUCTURAL INTERIOR CONCRETE
 2" RIGID INSULATION INSULATION
 3" NON-STRUCTURAL EXTERIOR CONCRETE FACE
 17" TOTAL PANEL THICKNESS



SOLID CONCRETE PANEL SECTION
SCALE: NTS

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)

| NO. | REVISIONS | BY | DATE |
|-----|-----------|----|------|
| | | | |

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

| | |
|-------------|----|
| PROJECT NO. | 10 |
| DRAWN | |
| DESIGNED | |
| APPROVED | |
| QA/QC | |

INNOVATIVE STRUCTURAL SOLUTIONS

PROJECT 10A
TIPS COMPARISON

SHEET NO:

DATE: NOVEMBER 2020
PAGE NO:

INNSTRUCT | Total Integrated Panel System (TIPS)

Basic Design Comparison and Material Displacement Estimate

Project: **10A**
 Panel Description: S100 2 - Dock doors, 2 - Windows
 Total Wall Square Feet: 264,920
 Total Panels in Project: 171

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

Panel Configuration: 98 Number of Similar Panels in Project
 55.33 Height (ft)
 28.00 Width (ft)
 242 Area of Openings (ft²) 2 dock doors, 2 windows
 1,307 Panel Area (ft²)
 150 Concrete Weight (lbs./ft³)



Original Design Configuration:

| | |
|------|--------------------------|
| 3 | Architectural Wythe (in) |
| 2 | Insulation (in) |
| 12 | Structural Wythe (in) |
| 15 | Concrete Thickness (in) |
| 17 | Total Thickness (in) |
| 17.5 | R-value Materials Only |

Innstruct | TIPS Design Configuration:

| | |
|-------|-------------------------|
| 4 | Outside Wythe (in) |
| 4 | Insulation (in) |
| 3.25 | Inside Wythe (in) |
| 7.25 | Concrete Thickness (in) |
| 11.25 | Total Thickness (in) |
| 23.6 | R-value Materials Only |

Design Comparison | Material Displacement:

Original Design

| Material | Amount | Units |
|---------------|---------|-----------|
| Concrete | 61 | cubic yds |
| Reinforcement | 11,027 | lbs. |
| Panel Weight | 256,135 | lbs. |

TIPS Design

| Amount | Units | % Reduced |
|---------|-----------|------------|
| 29 | cubic yds | 52% |
| 3,850 | lbs. | 65% |
| 122,319 | lbs. | 52% |

INNOVATIVE STRUCTURAL SOLUTIONS

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

BETTER PANEL | LESS EFFORT | MORE PROFIT