

WEINMAN #1: FRAMING STATION ANALYSIS

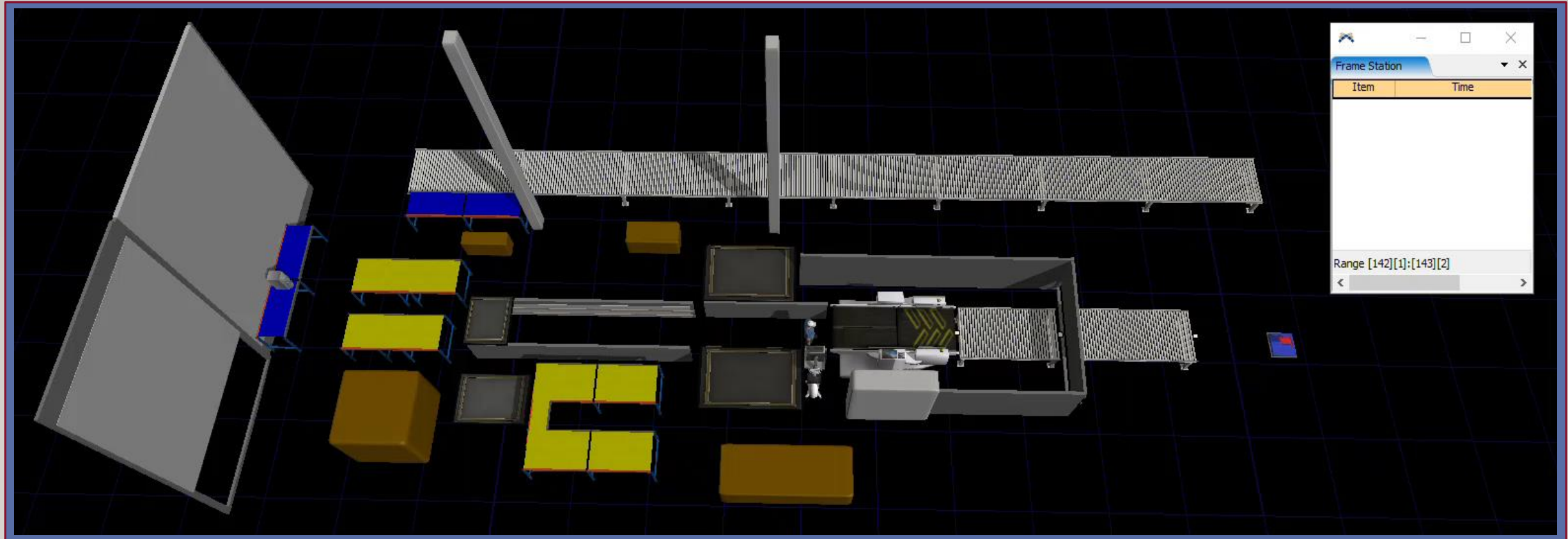


**DOES THE FRAMING STATION
PRODUCE 2000 BD FT PER HOUR,
AFTER REMOVING BOTTLENECKS?**

Results....



The Current Process Present at the Framing Station



Assumptions:

- Remove bottlenecks before and after the framing station
- Results are based on the framing station running without unexpected stops for a 10-hour shift

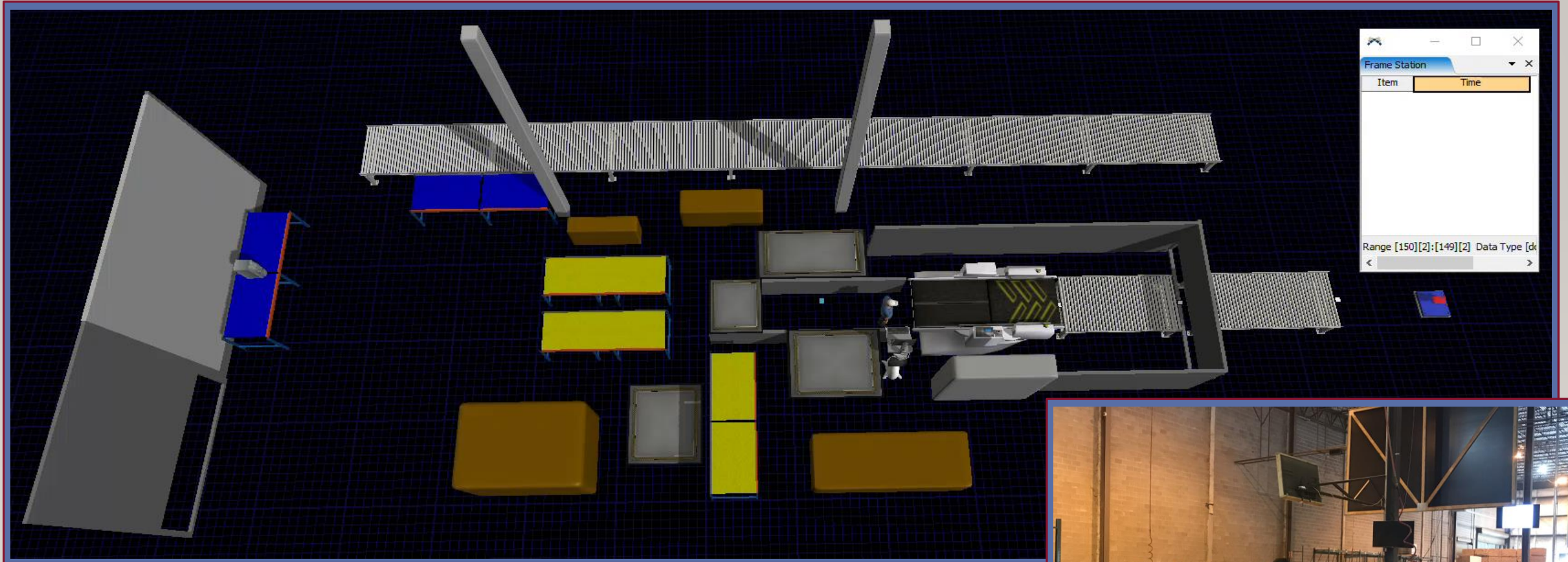
Results (per 10-hour shift):

- 142 wall panels produced
 - Avg Bd ft per wall panel: 131.6 (06/21 – 06/24 on ShopNet)
 - $142 * 131.6 = 18,687.2$ Bd ft
- 1,868.7 Bd ft/ hr

Process Conditions:

- Requires ≈95 ft in length
- Requires framer to climb over panel components
- No excess storage

Proposed Framing Station Process I



Results (per 10-hour shift):

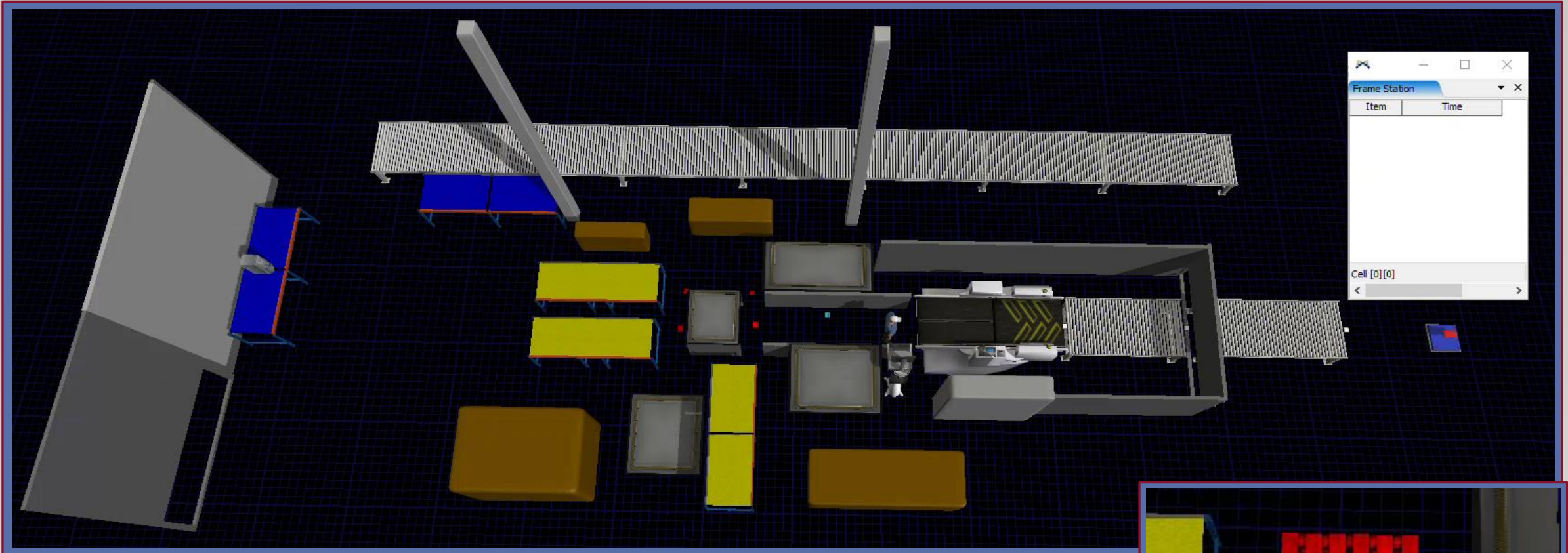
- 150 wall panels produced
- $150 * 131.6 = 19,740$ Bd ft
→ **1,974 Bd ft/ hr**

Changes:

- Rollers from CB station to framing station 44ft → 24ft (any comb. of rollers)
- Redesign Sub-CB station to account for less space
- Requires ≈ 72 ft in length
- Storage increase



Proposed Framing Station Process II

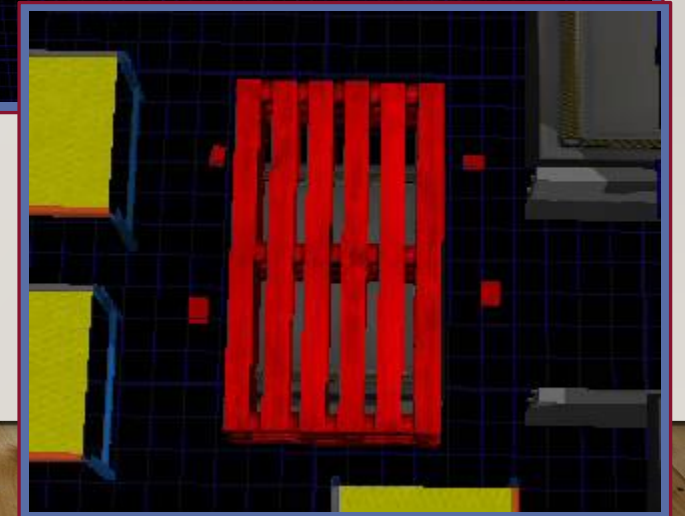


Results (per 10-hour shift):

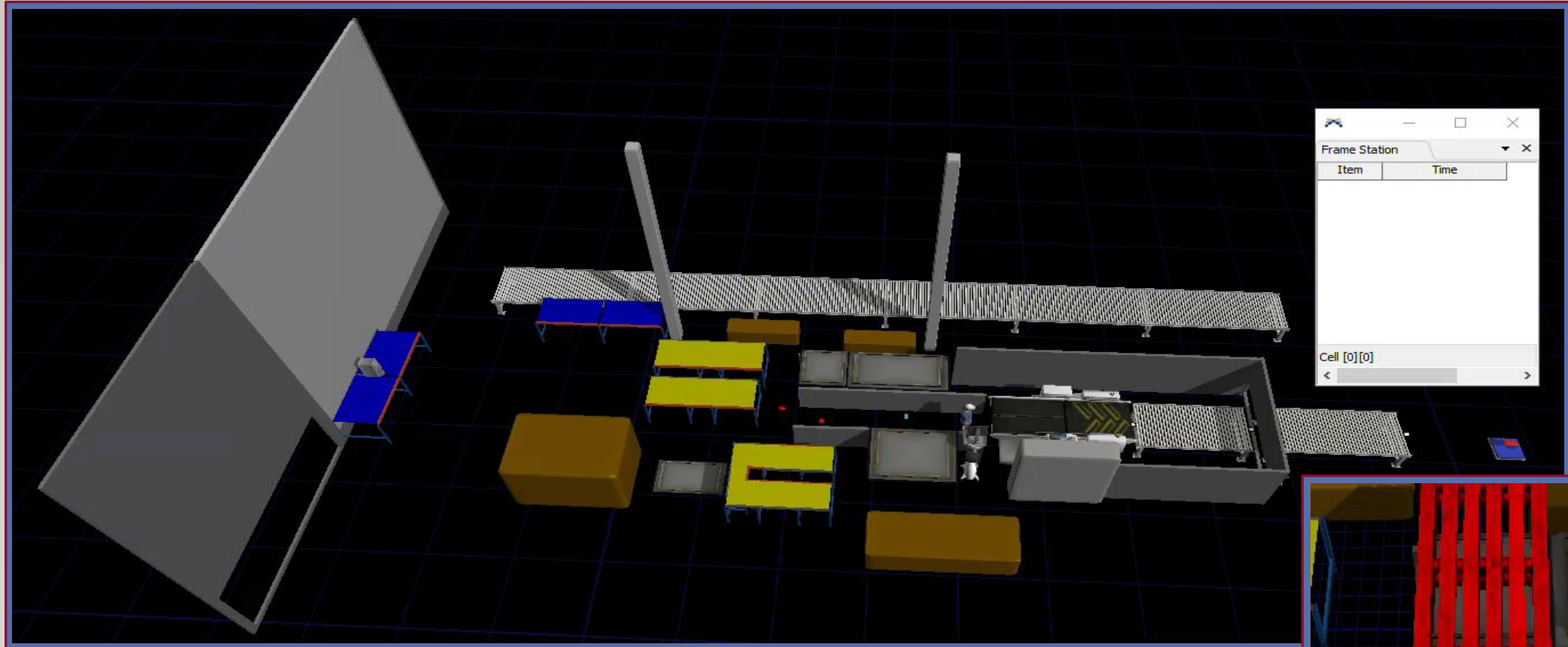
- 152 wall panels produced
 - $152 * 131.6 = 20,003.2$ Bd ft
- 2,000 Bd ft/ hr

Changes:

- Rollers from CB station to framing station 44ft → 27ft (6ft roller | 3ft gap | 18ft roller)
- Framer pathing, see video to the right
- Redesign Sub-CB station to account for less space
- Requires ≈75 ft in length
- Storage increase



Proposed Framing Station Process III

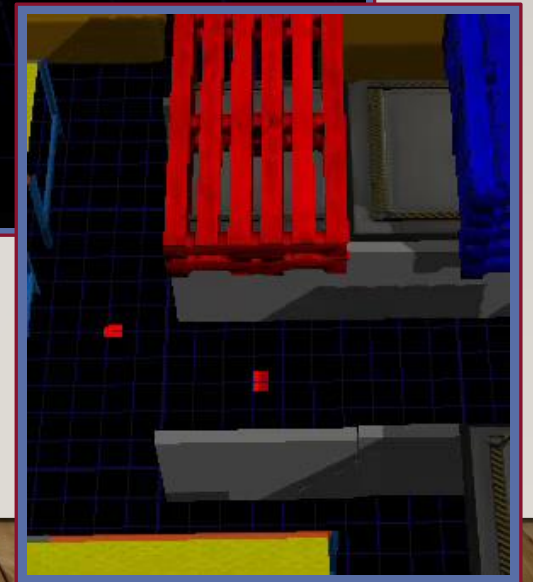


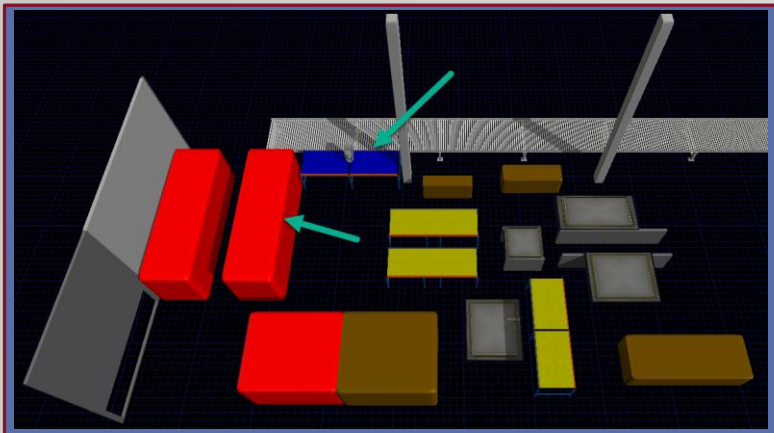
Results (per 10-hour shift):

- 148 wall panels produced
 - $148 * 131.6 = 19,476$ Bd ft
- 1,950 Bd ft/ hr

Changes:

- Rollers from CB station to framing station 44ft → 24ft (any comb. of rollers)
- Framers pathing, see video to the right
- CB station is pushed up to align with moved queue
- Requires ≈ 72 ft in length
- Storage increase





Storage Option I

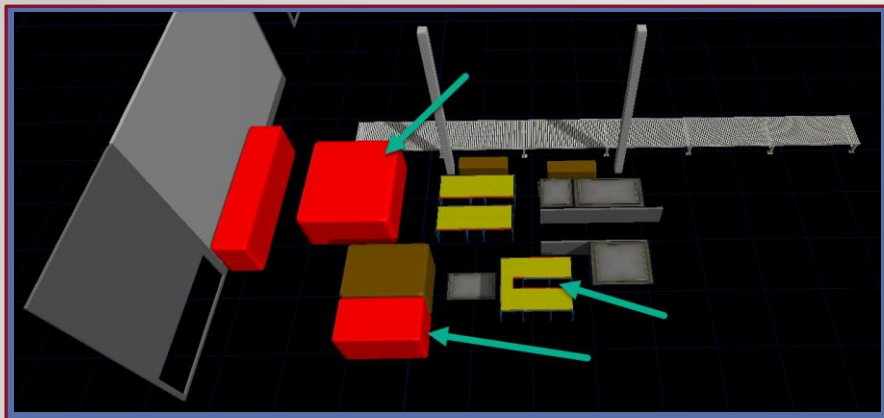


$$23' * 7' = 161 \text{ ft}^2$$

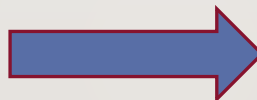
$$23' * 7' = 161 \text{ ft}^2$$

$$10' * 13' = 130 \text{ ft}^2$$

452 ft² in additional Storage



Storage Option II

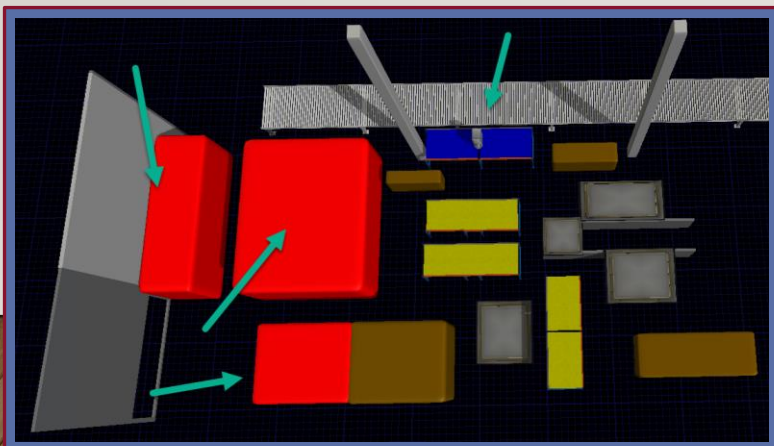


$$17' * 15' = 255 \text{ ft}^2$$

$$23' * 7' = 161 \text{ ft}^2$$

$$10' * 13' = 130 \text{ ft}^2$$

546 ft² in additional Storage



Storage Option III



$$17' * 22' = 374 \text{ ft}^2$$

$$23' * 7' = 161 \text{ ft}^2$$

$$10' * 13' = 130 \text{ ft}^2$$

665 ft² in additional Storage

Proposed Framing Station Process III

Process	Bd ft per hr.	Length (ft)	Amount of Change Required	Storage Options	Extra Storage (ft^2)
Current	1860	95 ft	None	Current	0 ft^2
Option I	1975	72 ft	<ul style="list-style-type: none">- Reduce length between CB and Framing station 44ft → 24ft- Redesign Sub-CB Station (optional)- Framer climbs over component	Option I	452 ft^2
Option 2	2000	75 ft	<ul style="list-style-type: none">- Reduce length between CB and Framing station 44ft → 27ft (6-8 ft table required)- Redesign Sub-CB Station (optional)- Changed framer pathing (Training)	Option II	546 ft^2
Option 3	1950	72 ft	<ul style="list-style-type: none">- Reduce length between CB and Framing station 44ft → 24ft- Redesign Sub-CB Station (optional)- Changed framer pathing and CB drop location (Training)	Option III	665 ft^2