

Construction in Sterile Processing

The Journey



Objectives

- Plan, budget and submit capital request documentation
- Identify and plan all construction required for execution
- Share and explain the role and impact on the CSSD team during phased construction



In the Beginning

- Tell the story
- Justification Documentation
 - Expanded Value Proposition for >2M Project
- Schematic Design
- Construction Design
 - MEP
 - ICRA
 - DAP



August 27, 2015

		Age if a
Department	Capital Item Requested	Replacement
System CSSD	Sterilizers X 5	21, 24, 24, 24, 30, 36 years (Life expectancy 15 years)
System CSSD	Clean Steam Generator X 3	NEW
System CSSD	Work Stations X 15 New and Retrofit 3 Existing Tables	25 years PLUS

Documentation

- **When should I contact Corporate Finance regarding an upcoming capital project?**
- **Do I need to complete a value proposition?** Yes, if the project is over \$250,000 of combined capital and onetime expense a value proposition narrative and pro forma financial analysis are required.
- **Who is responsible for creating the value proposition?**
- **Who is responsible for creating the pro forma?**
- **How long will it take my capital project to be approved?** Timelines vary, depending on the project complexity, quality / completeness of the value prop and pro forma, status of SME reviews, and other factors.

The Process Continues

Expanded Value Proposition

- **Corporate System CSSD (CPC) Sterilizer Equipment Replacement (Pool 1) As of November 21, 2016**
 - Sterilizer Equipment Replacement and Remodel
 - Value Proposition
 - June 2017
- The total request is for \$4.37M, including \$4.3M in capital and \$0.07M in one-time expenses. \$120,000 in capital construction design has been previously approved and funded. The new capital (\$4.176M) includes \$1.440M for medical equipment, \$2.401M for construction, and a contingency of \$335K. 5-31-17
- **RESOLUTION OF THE FINANCE COMMITTEE OF THE BOARD OF DIRECTORS OF ON JUNE 12, 2017**

Construction Acronyms

- SD
- CD
- MEP
- ICRA
- FFE
- DAP

The “SD”

Project I.D.	Schematic Design Estimate		Date:	17-Nov-16
Entity/Dept:	70210-7502		By:	
Project:	EAST BLDG CPC Sterilizer & Department Upgrades			
	Architectural / mechanical / electrical design fee, infection prevention measures, premium time for construction outages and multiple phases of construction, wall reconfigurations, ceiling / lighting / wall / floor / finishes, linen storage relocations, HVAC equipment and ducting upgrades, utility metering upgrades, water heater replacement, architectural / electrical / mechanical modifications for fit up and removals of owner purchased equipment. Owner purchased equipment includes steam sterilizers, additional RO/DI system, clean steam generators and storage / tasking fixtures.			

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Must Consider...

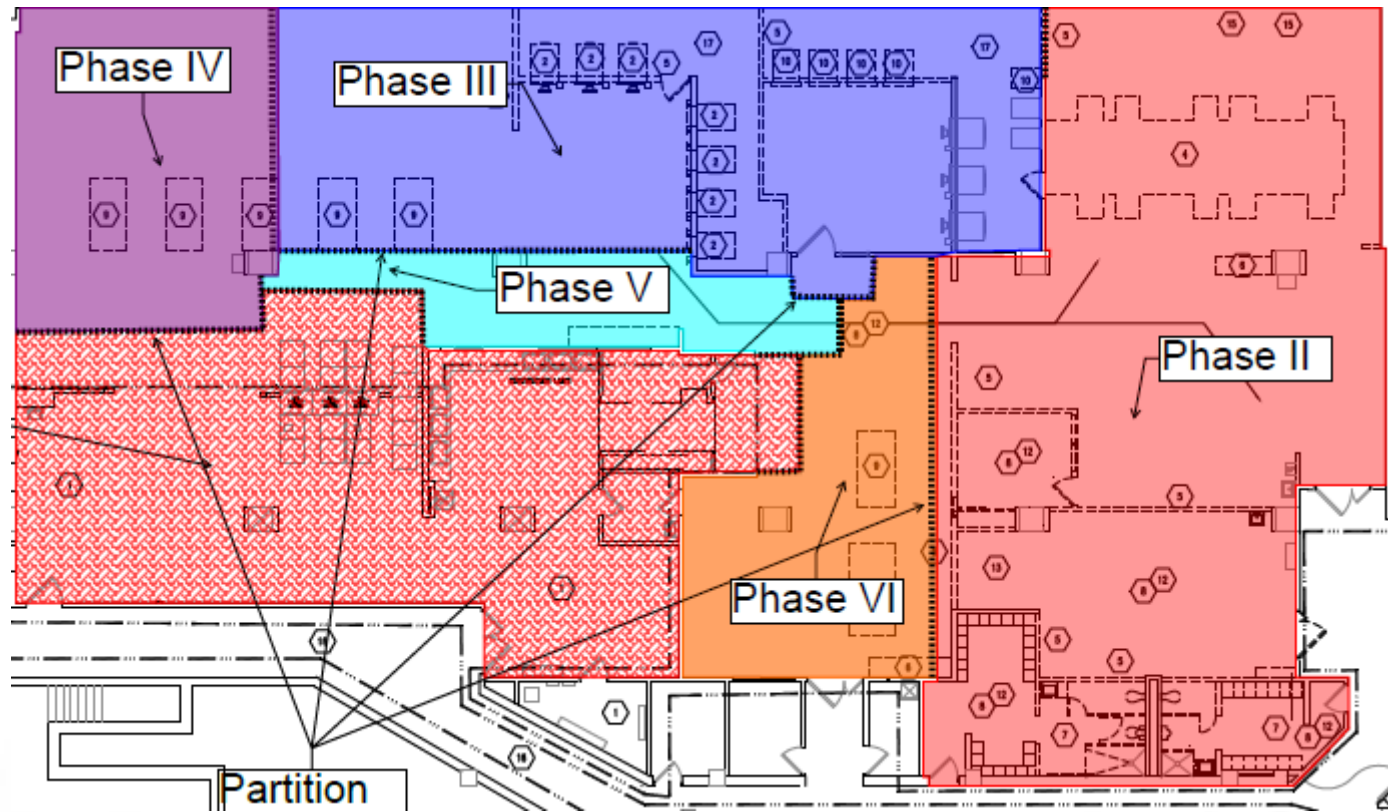
- Must meet current building codes
- Meet current industry standards and recommendations
 - AAMI
 - AORN
 - State requirements
 - Infection Prevention

Steam Sterilization Summary							
	Sterilized Items		Loads			Average Per Load	
Month, 2016	Containers	Peel Pack	Containers	Peel Packs	Total	Containers	Peel Packs
Jan	8,779	25,882	704	425	1,129	12.5	60.9
Feb	8,534	26,524	681	442	1,123	12.5	60.0
Mar	8,539	27,382	690	446	1,136	12.4	61.4
Apr	8,326	26,858	666	419	1,085	12.5	64.1
May	8,751	25,953	699	424	1,123	12.5	61.2
Jun	9,075	29,096	737	448	1,185	12.3	64.9
Jul	8,023	26,887	634	427	1,061	12.7	63.0
Aug	9,307	28,639	741	438	1,179	12.6	65.4
Sep	8,684	27,995	690	422	1,112	12.6	66.3
Oct	9,406	28,813	750	448	1,198	12.5	64.3
Nov, 2015	8,943	26,575	701	461	1,162	12.8	57.6
Dec, 2015	9,830	29,717	754	367	1,121	13.0	81.0
Monthly Average:	8,850	27,527	704	431	1,135	13	64
Projections, # Per Load							
Peel Packs:	100						
Containers:	20						
Current numbers of what were based on new numbers of items per load							

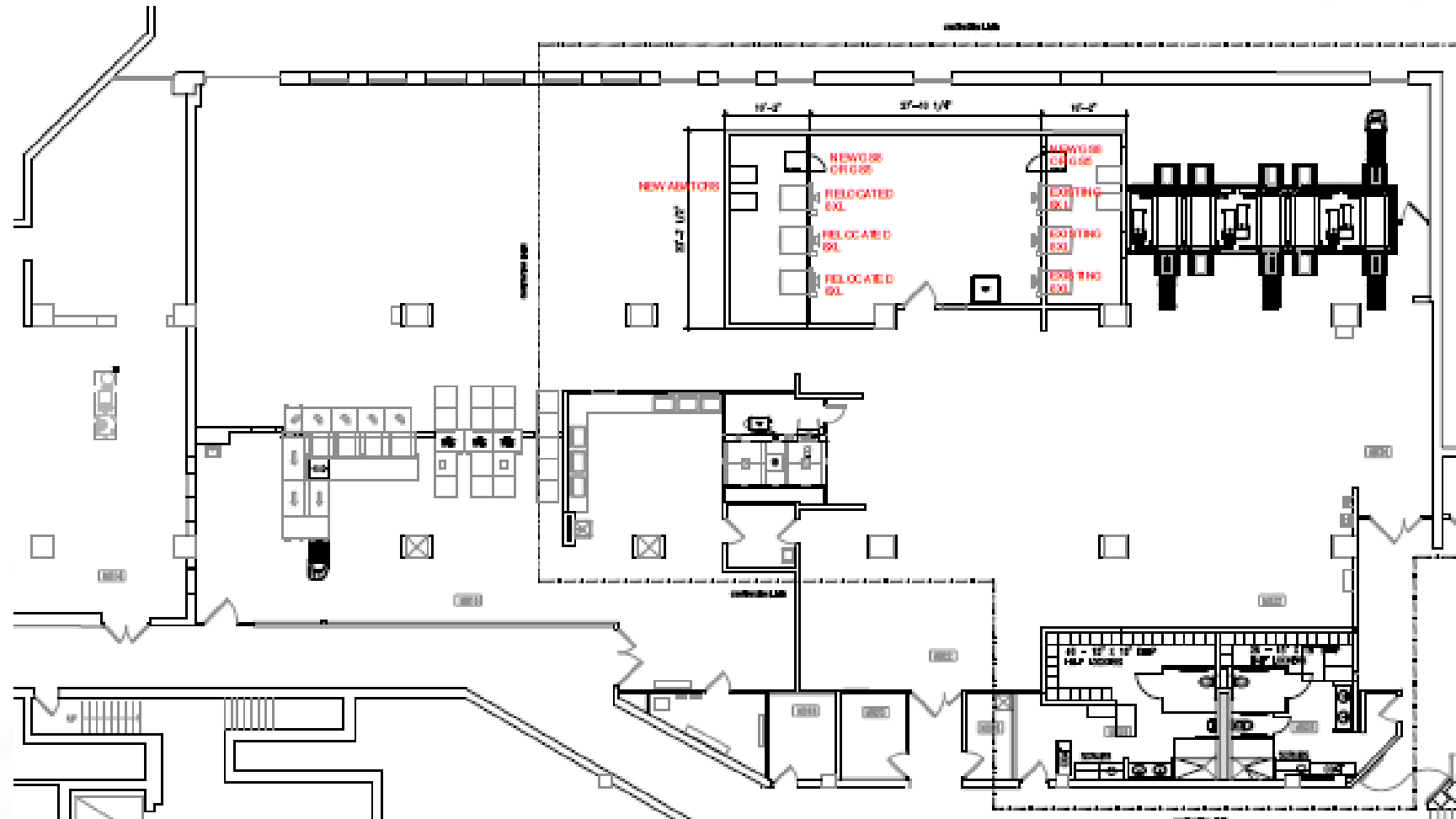
Instrument Volume 2017—Surgical Sets

Sum of Tally	Column Labels												
Row Labels	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
Site Ancillary	72	48	64	70	87	106	72	87	81	70	84	61	902
Site CSSD	1328	1179	1513	1376	1454	1546	1373	1496	1295	1382	1479	1585	17006
Site CSSD	551	410	486	565	559	641	592	573	577	515	617	665	6751
Site CSSD	226	147	289	313	346	331	294	264	279	301	290	394	3474
Site CSSD	339	287	388	258	344	257	368	345	311	308	333	343	3881
Site CSSD	1364	1121	1317	1291	1424	1489	1262	1317	1518	1545	1610	1474	16732
Site CSSD	2467	1764	2278	2302	2438	2363	2374	2571	2175	2492	2681	2351	28256
Site CSSD	2596	2244	3101	2944	3019	3043	2832	3290	2856	3200	3470	3187	35782
Site CSSD	390	388	515	413	531	427	435	509	467	516	607	529	5727
Grand Total	9333	7588	9951	9532	10202	10203	9602	10452	9559	10329	11171	10589	118511

Phasing



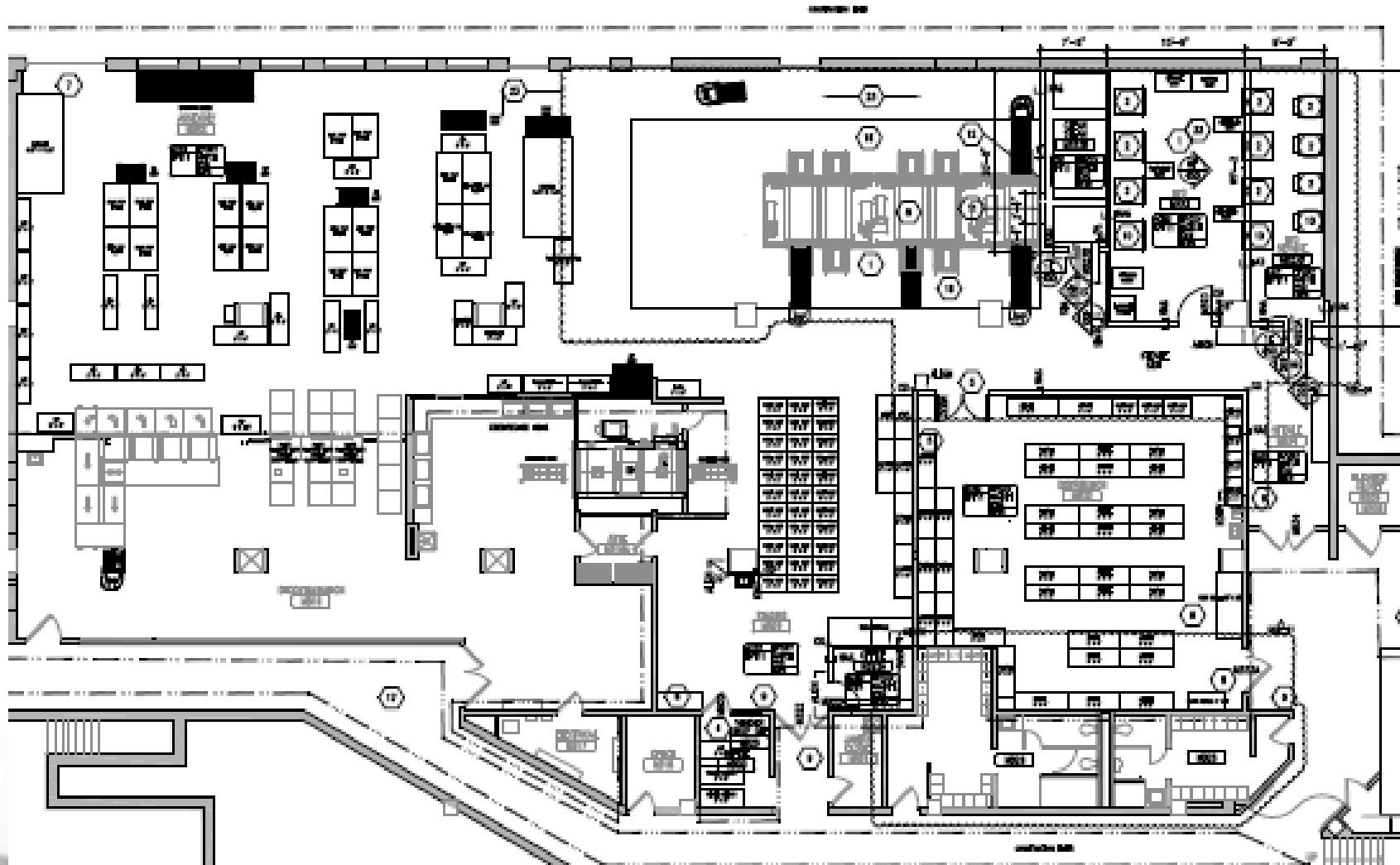
October 1, 2015





We Thought We Had our Ducks in a Row!





**We begin
construction in
our work area
August 28, 2017**

Task Name	Duration	Start	Finish	Jun 11, '17	Jul 16, '17	Aug 20, '17	Sep 24, '17	Oct 29, '17	Dec 3, '17	Jan 7, '18	Feb 11, '18	Mar 18, '18	Apr 22, '18
1	LATP#1 - Linen Room Upgrades	1 day	Wed 6/21/17	Wed 6/21/17									
2	Facilities Vacates Space	13 days	Thu 6/22/17	Mon 7/10/17									
3	Mortenson Completes Scope (Phase I - Linen Room)	7 wks	Tue 7/11/17	Mon 8/28/17									
4	Fairview releases funds for Permits - LATP#2	6 wks	Thu 6/22/17	Wed 8/2/17									
5	Fairview releases funds for additional long lead items - LATP#3	5 days	Thu 8/3/17	Wed 8/9/17									
6	Fairview Full NTP on Project	10 days	Thu 8/10/17	Wed 8/23/17									
7	Fairview Release Belimed and RoloMat's	1 day	Thu 8/24/17	Thu 8/24/17									
8	Belimed Procurement	8 wks	Fri 8/25/17	Thu 10/19/17									
9	RotoMat Procurement	16 wks	Fri 8/25/17	Thu 12/14/17									
10	Mortenson Start Phase 2	1 day	Mon 8/28/17	Mon 8/28/17									
11	Partitions Up, Negative Air, Site Secure	1 day	Mon 8/28/17	Mon 8/28/17									
12	Ceiling Demo, Temp Lighting	5 days	Mon 8/28/17	Fri 9/1/17									
13	Wall Demo, MEP Demo	5 days	Tue 9/5/17	Mon 9/11/17									
14	MMC Layout for Slab Cut	1 day	Mon 9/11/17	Mon 9/11/17									
15	GPR	1 day	Tue 9/12/17	Tue 9/12/17									
16	RFI/Pit Delay	3 days	Wed 9/13/17	Fri 9/15/17									
17	Sawcut	2 days	Mon 9/18/17	Tue 9/19/17									
18	Demo Slab	2 days	Tue 9/19/17	Wed 9/20/17									
19	Dig Trench - South Side	3 days	Thu 9/21/17	Mon 9/25/17									
20	In Slab Plumbing - South Side	4 days	Tue 9/26/17	Fri 9/29/17									
21	Plumbing Inspection - South Side	1 day	Mon 10/2/17	Mon 10/2/17									
22	Backfill - South Side	2 days	Tue 10/3/17	Wed 10/4/17									
23	Pour Back Slab - South Side	1 day	Thu 10/5/17	Thu 10/5/17									
24	Dig Trench - NE Side	2 days	Fri 10/6/17	Mon 10/9/17									
25	In Slab Plumbing - NE Side	2 days	Tue 10/10/17	Wed 10/11/17									
26	Plumbing Inspection - NE Side	1 day	Thu 10/12/17	Thu 10/12/17									
27	Backfill - NE Side	2 days	Fri 10/13/17	Mon 10/16/17									
28	Pour Back Slab - NE Side	1 day	Tue 10/17/17	Tue 10/17/17									

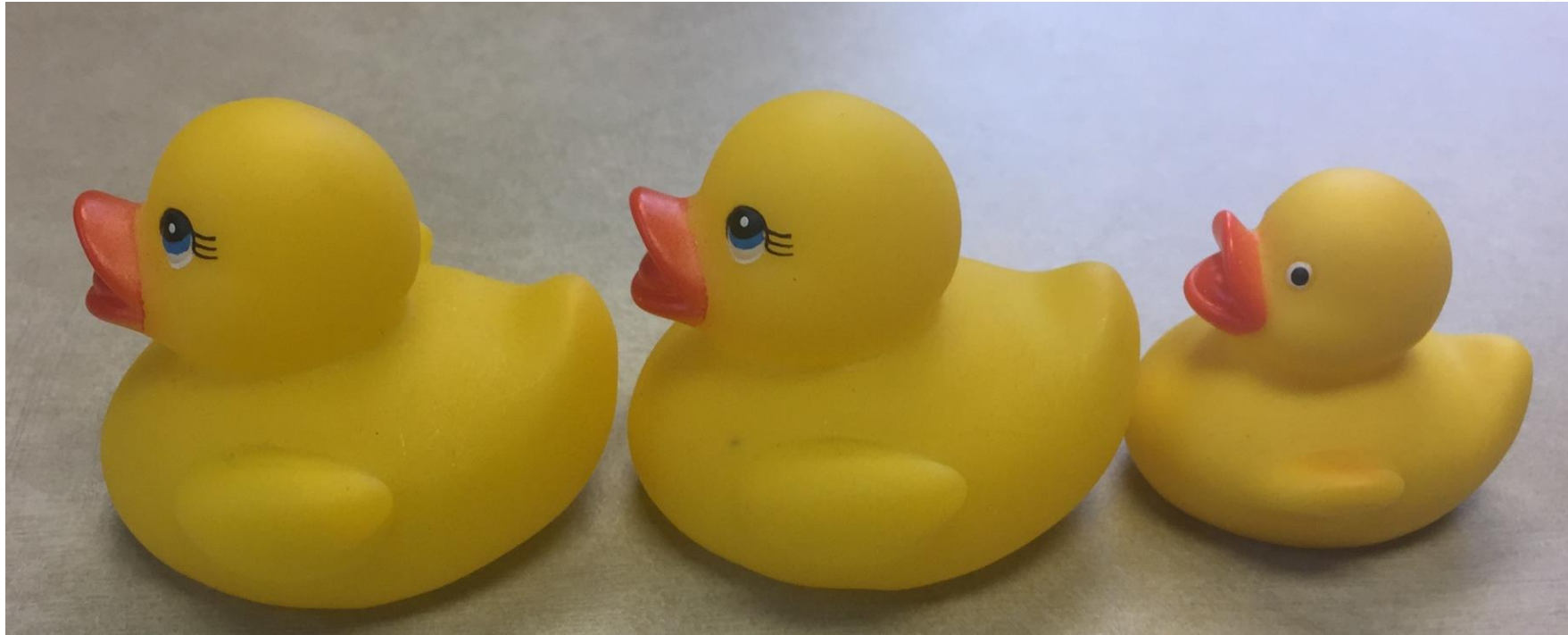
What Are Our IT Needs With Additional Work Stations?

Computers

Printers

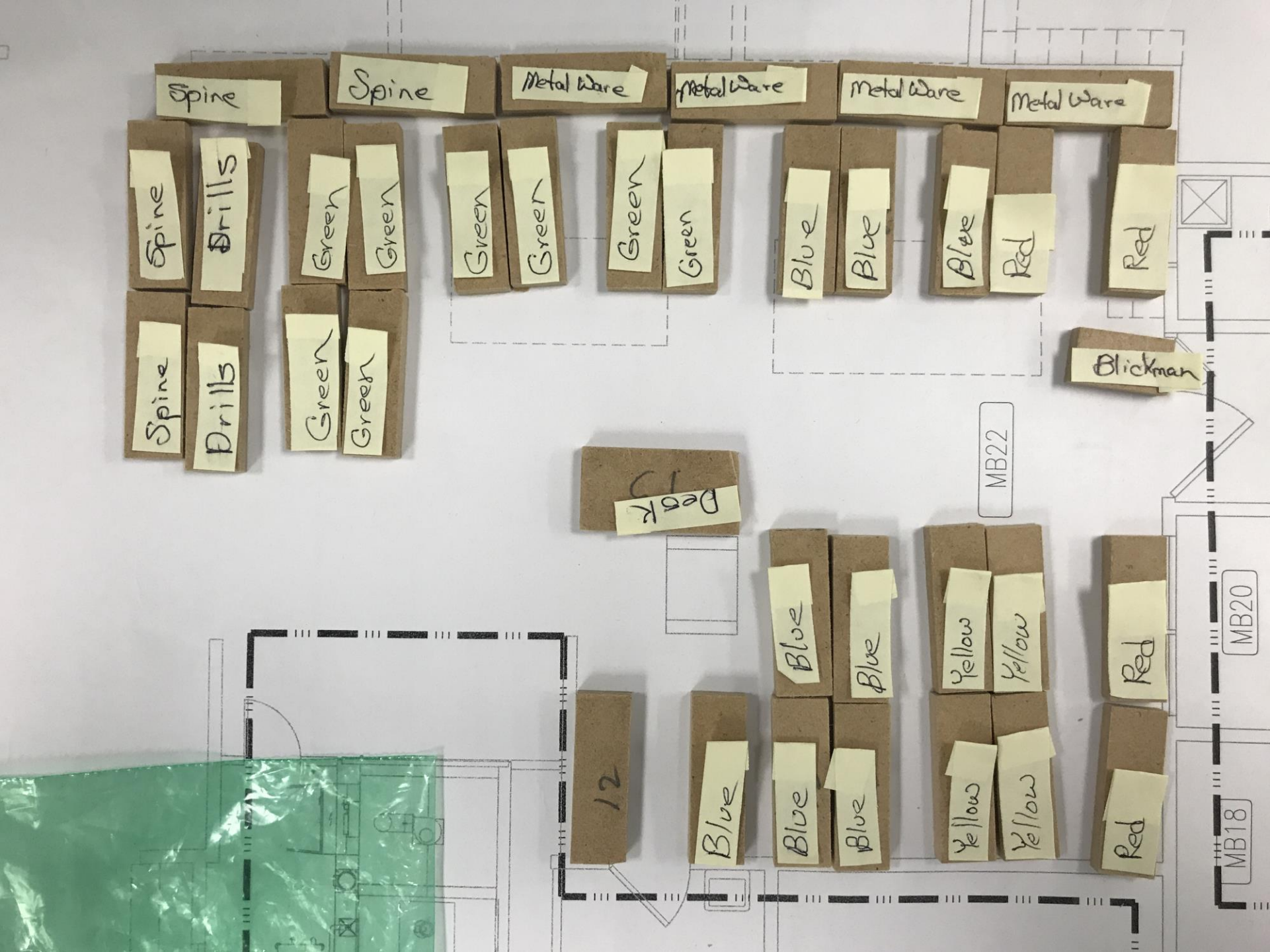
New Monitors

Once We Got Our Ducks in a Row...

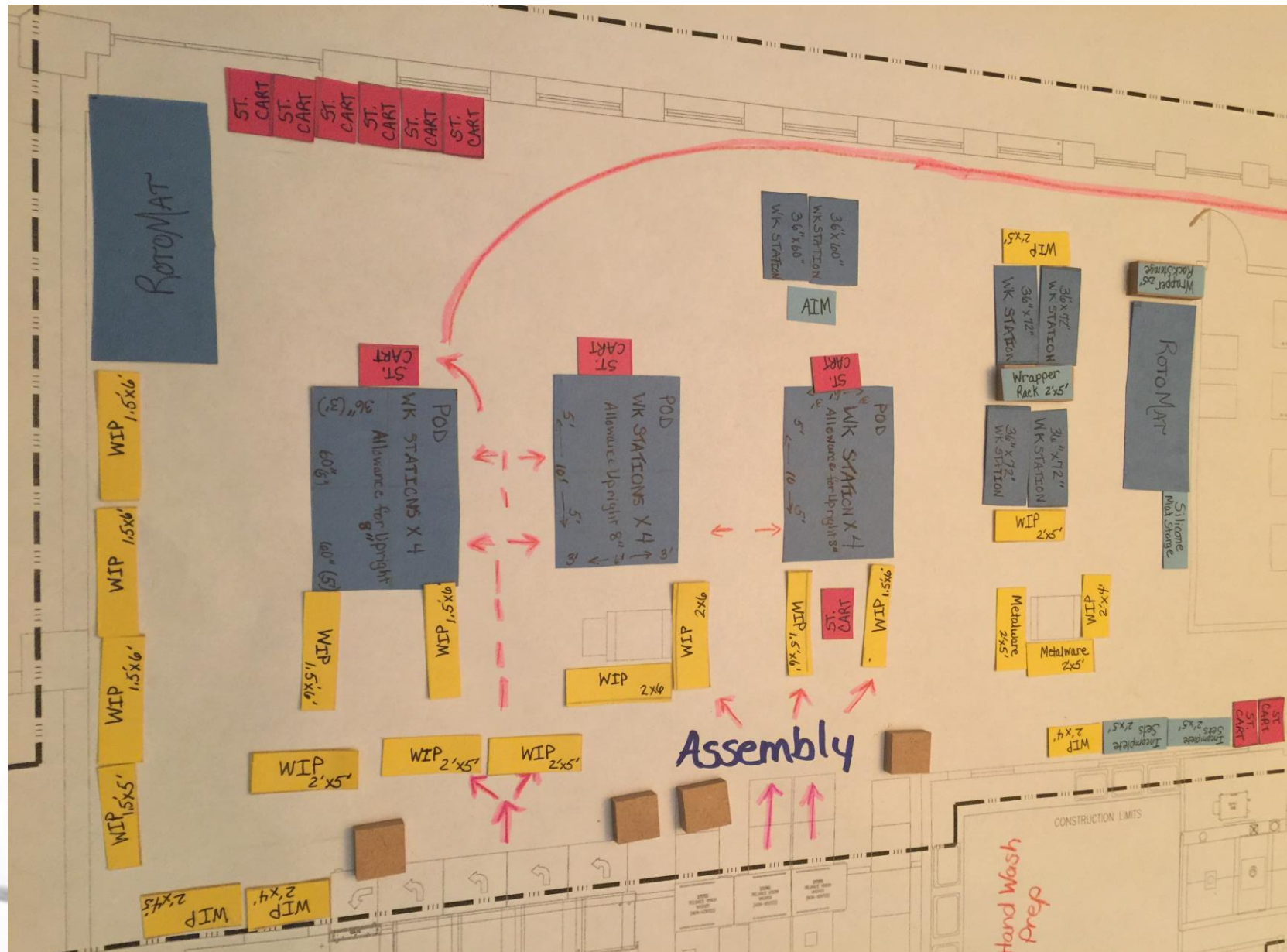




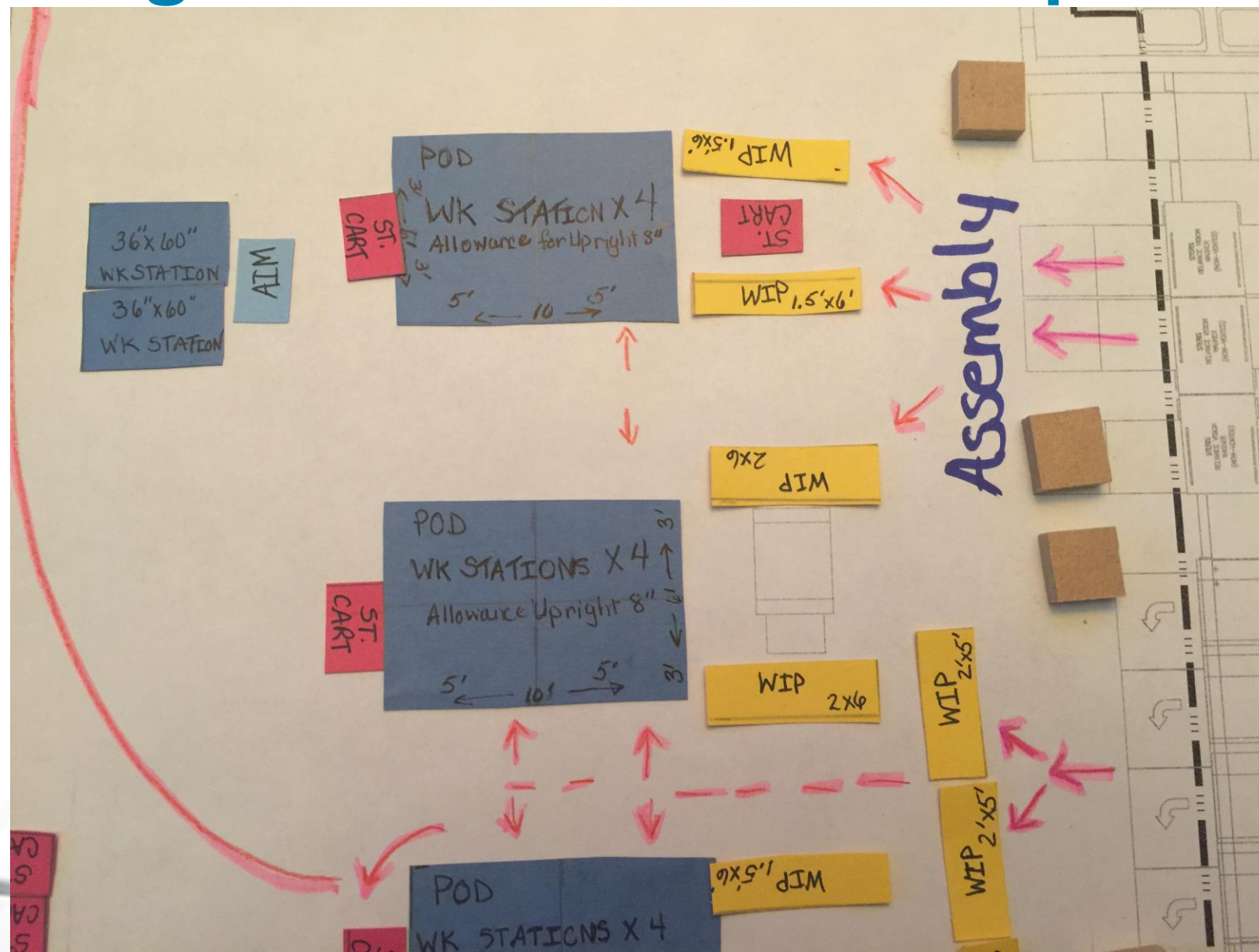
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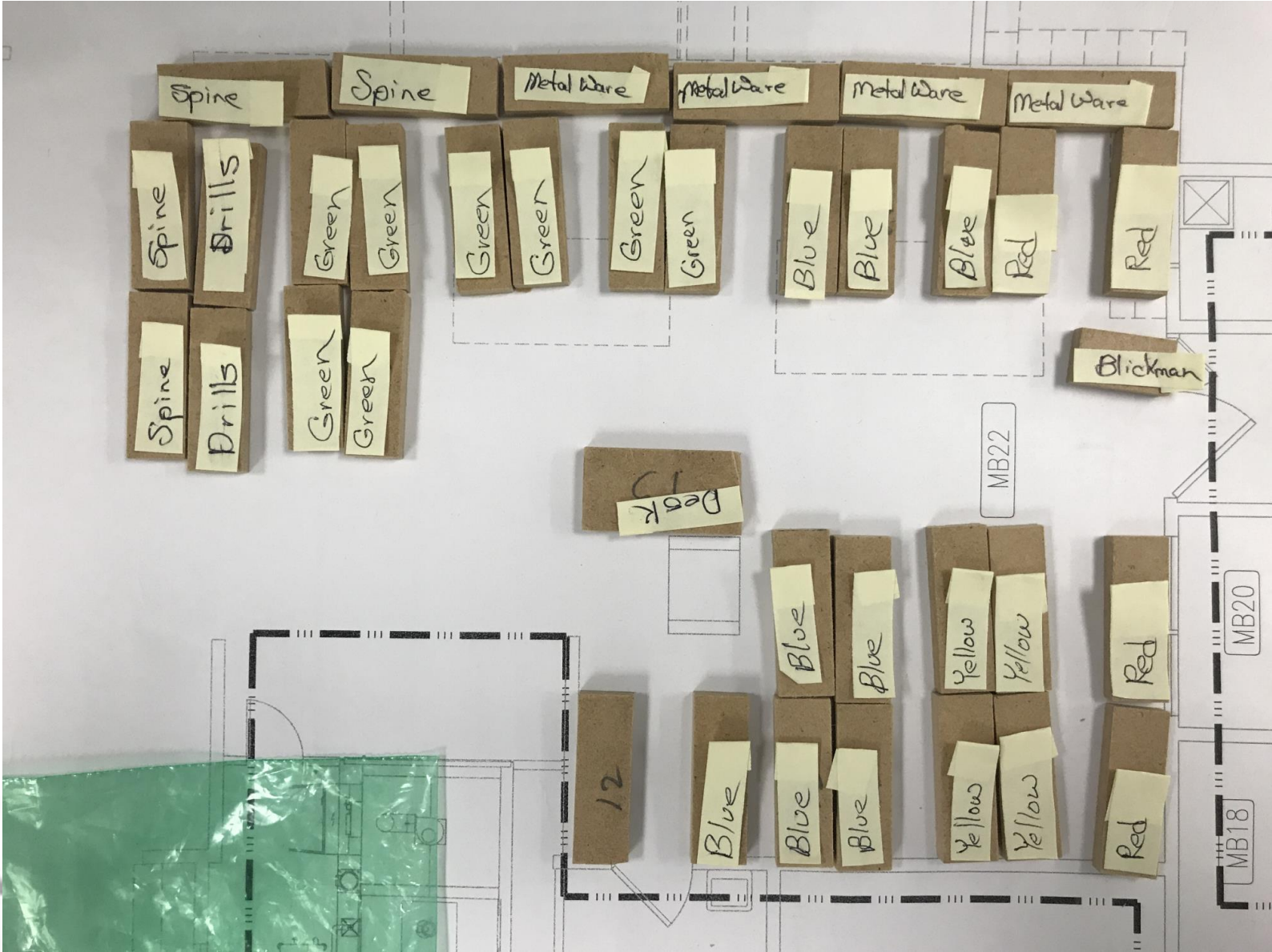
Work Flow-What Will it Look Like

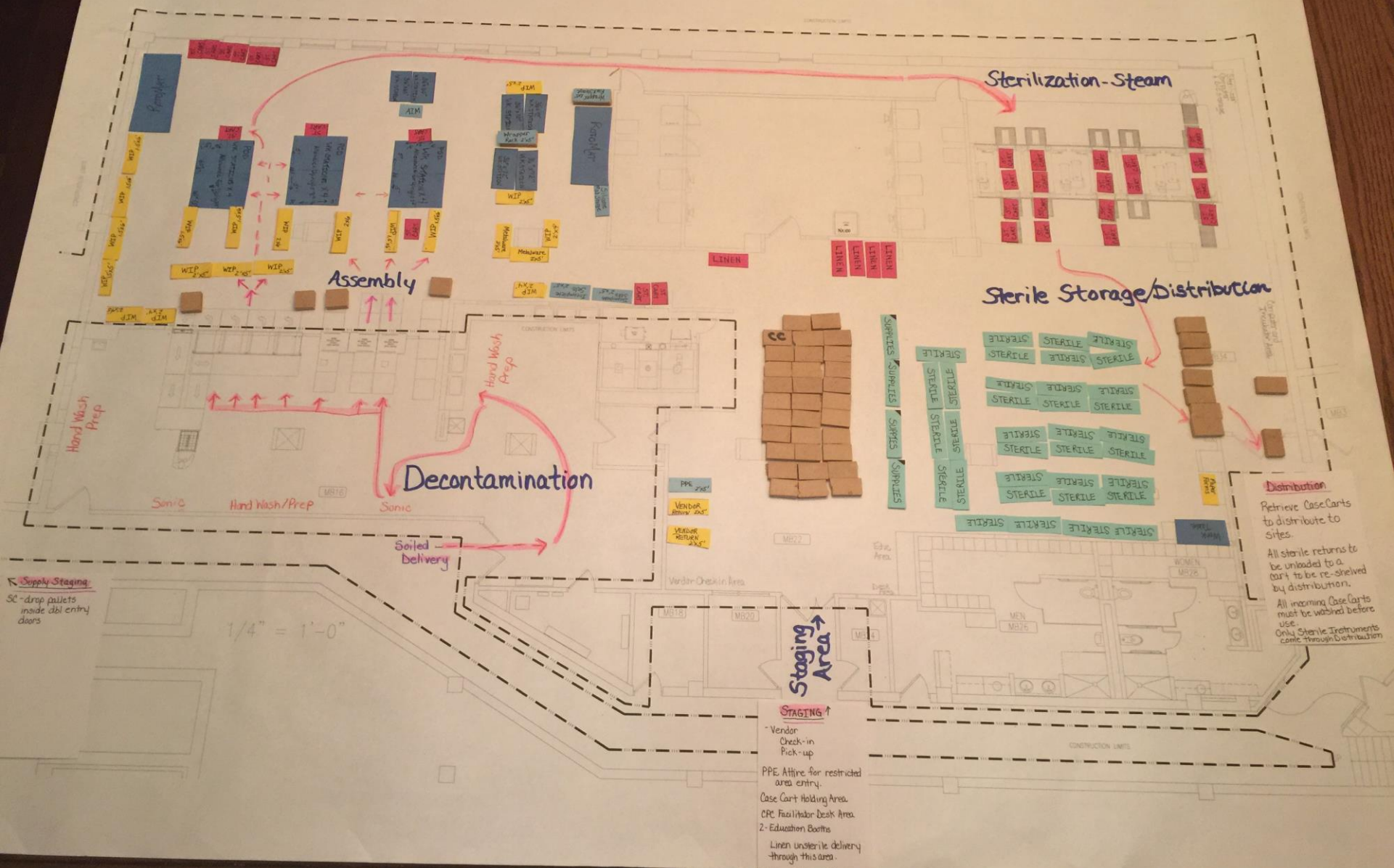


Sharing with Our Team For Their Input



Working Together to Design Our Plan





Plumbing





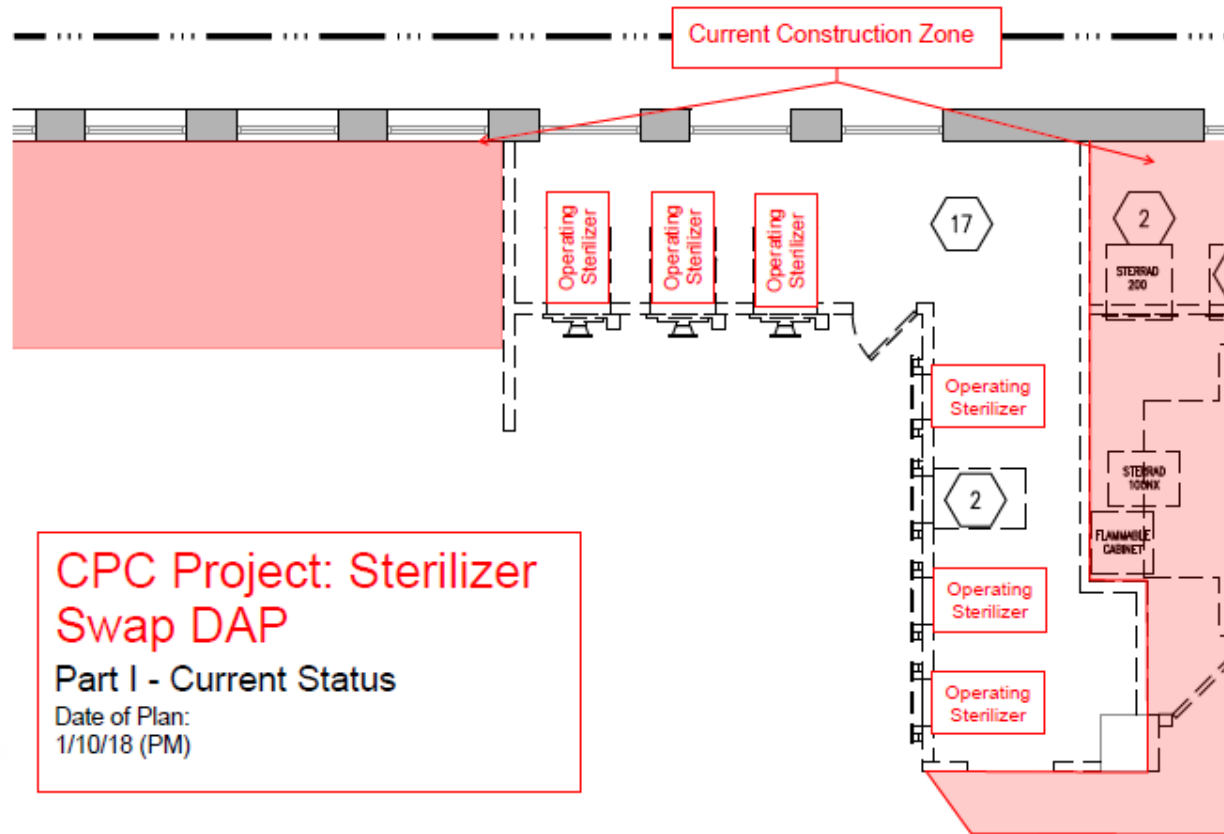








Phase 2



SATURDAY 1/13/18 @ 12:00PM

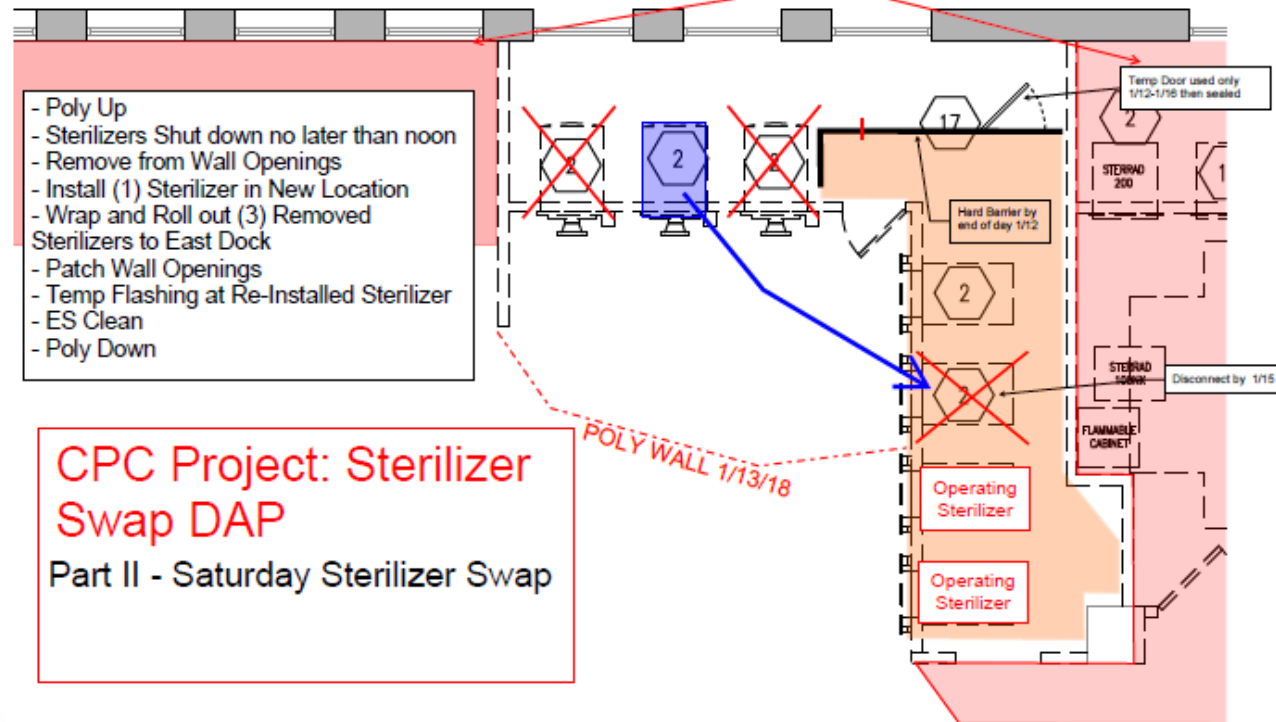
Plan B: These activities shift to Sunday 11pm at time of steam outage.

Current Construction Zone

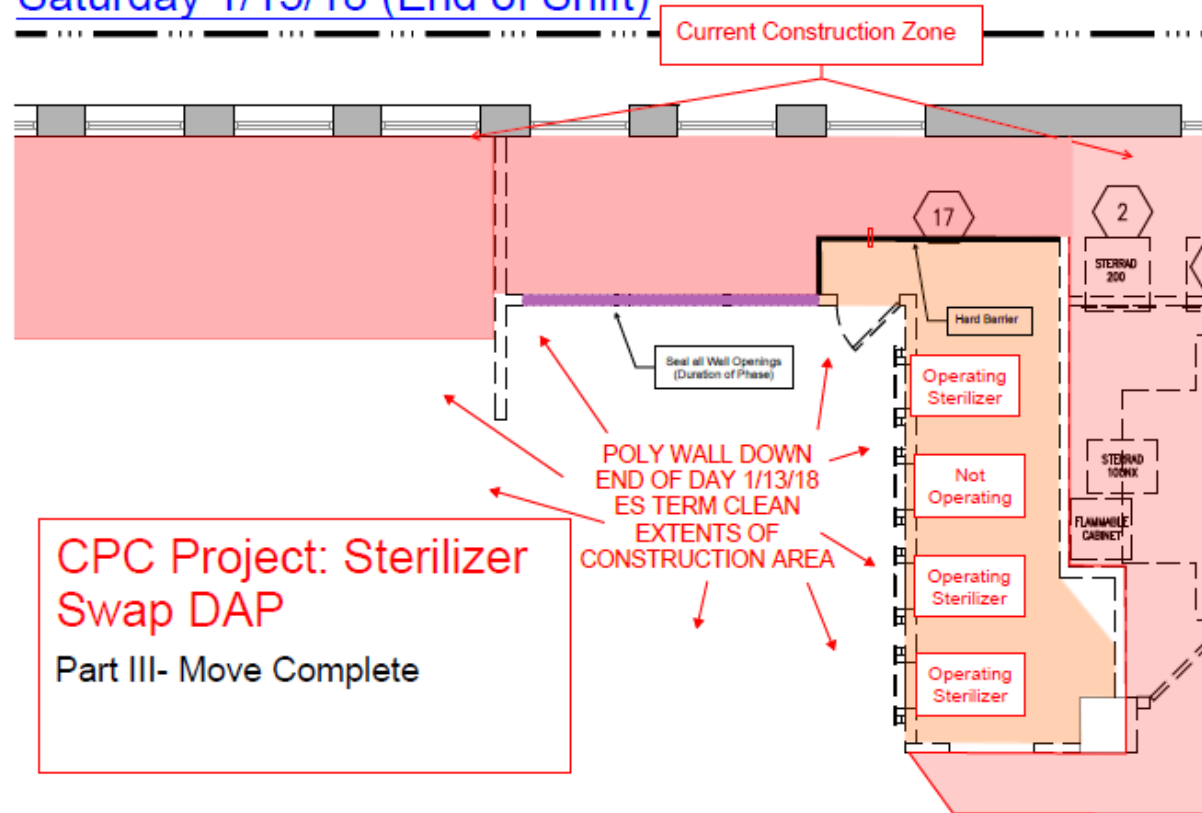
- Poly Up
- Sterilizers Shut down no later than noon
- Remove from Wall Openings
- Install (1) Sterilizer in New Location
- Wrap and Roll out (3) Removed Sterilizers to East Dock
- Patch Wall Openings
- Temp Flashing at Re-Installed Sterilizer
- ES Clean
- Poly Down

CPC Project: Sterilizer Swap DAP
Part II - Saturday Sterilizer Swap

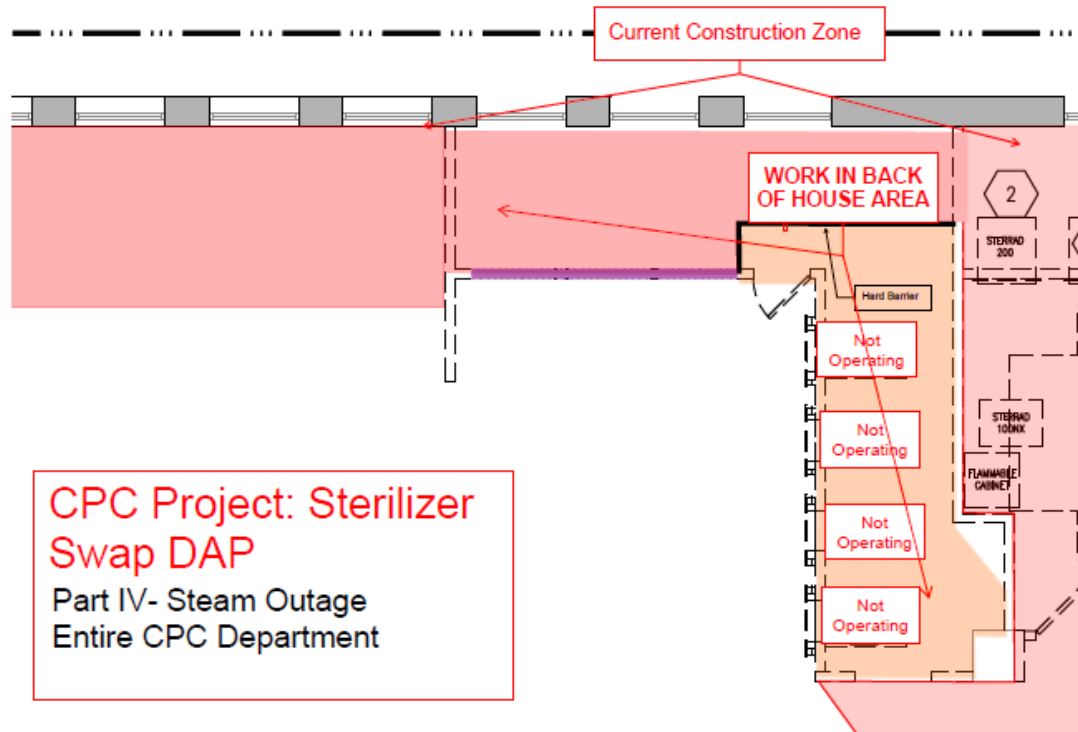
POLY WALL 1/13/18



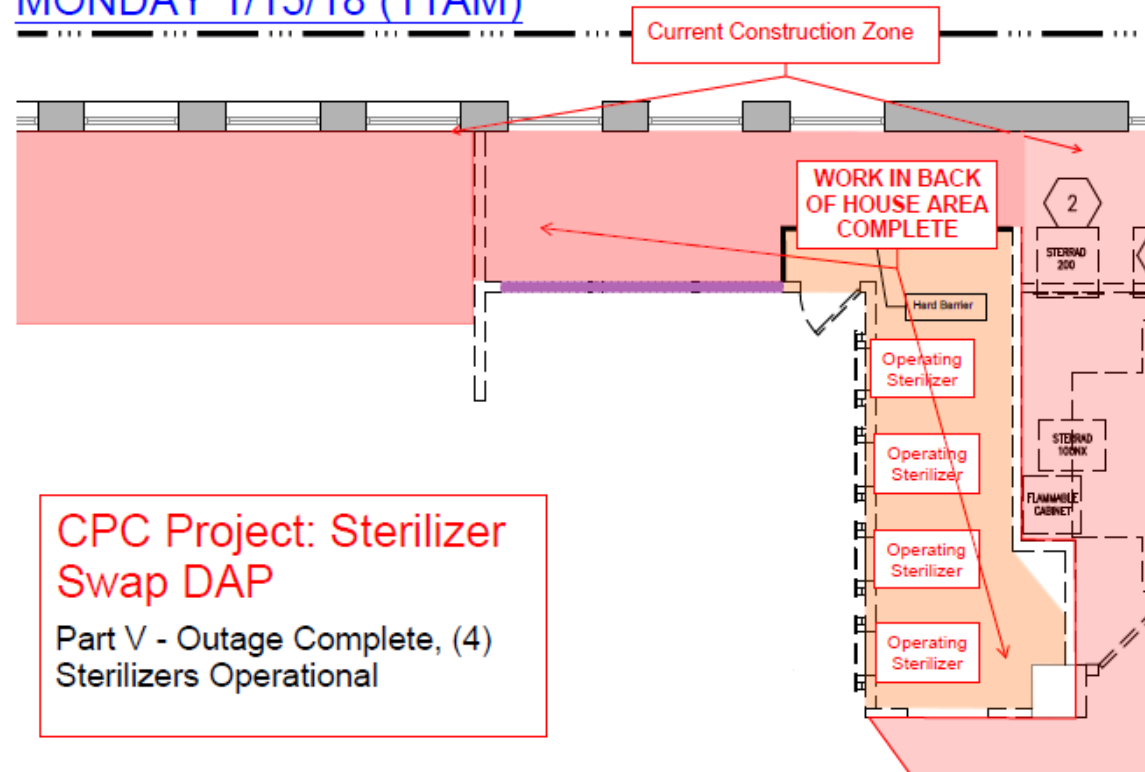
Saturday 1/13/18 (End of Shift)



Sunday 1/14/18 (Steam Outage 11pm-4am)



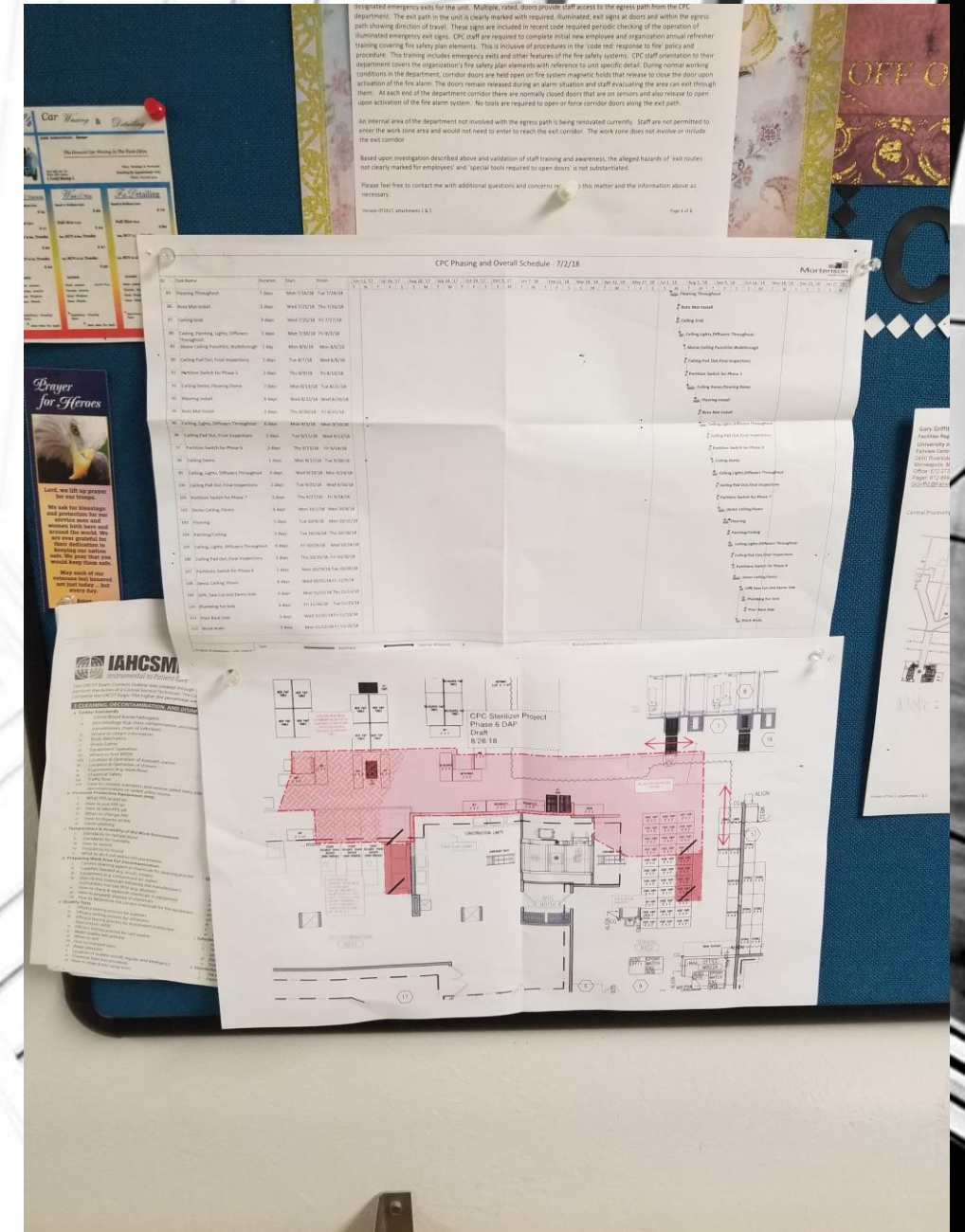
MONDAY 1/15/18 (11AM)



Impact on the CSSD team during phased construction



- **Weekly meetings with construction team.**
- **Daily huddles with front line staff.**
- **Earplugs and various discussion on upcoming effects to our flow.**
- **Lead meetings bi weekly on upcoming phases.**
- **Posting of construction & phasing schedule.**



Previous Sterile Storage Area



New Sterile Storage Area

- Better use of space.
- Separate space



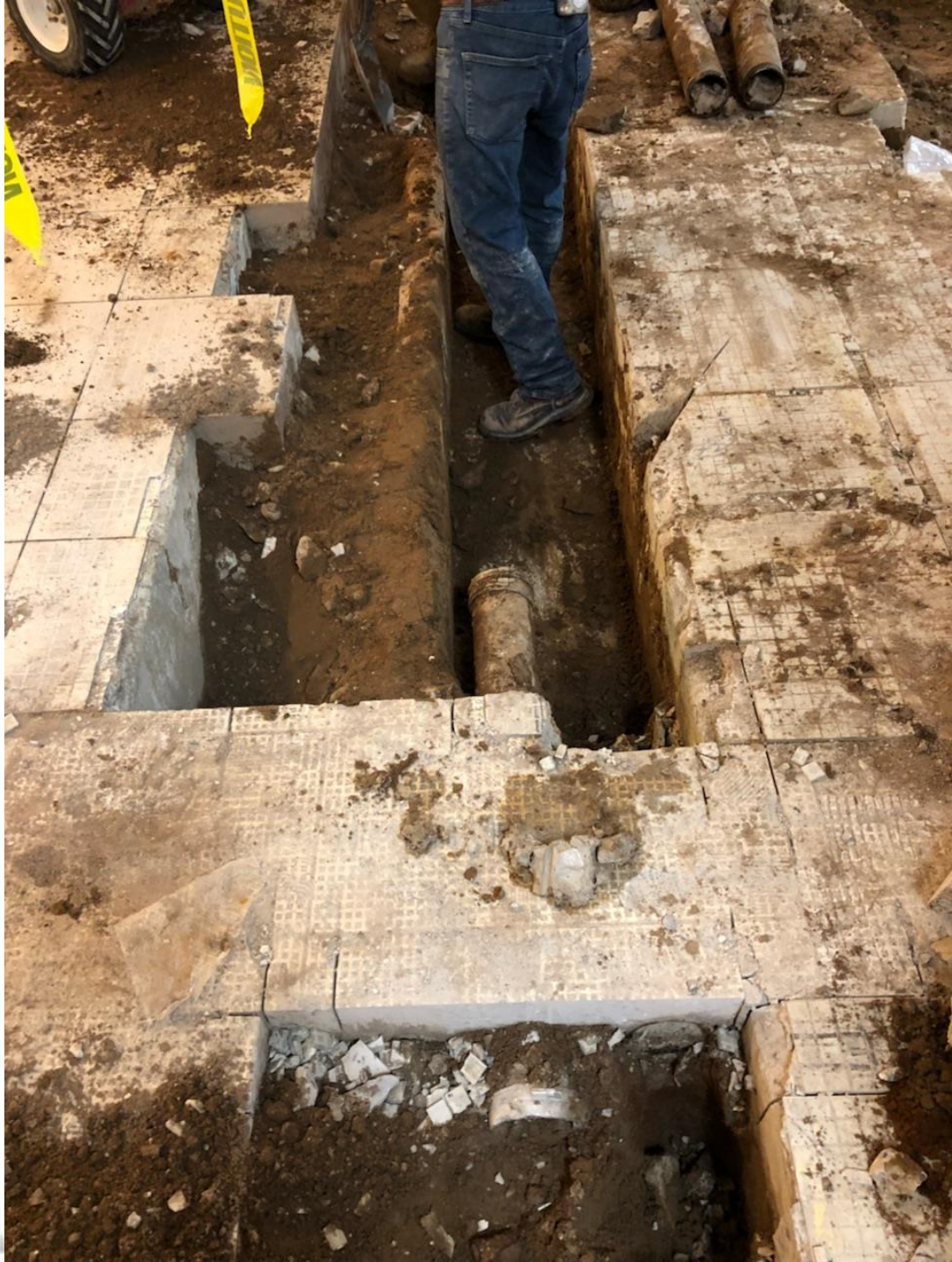
- Flow designed from dirty to clean to sterile and out to sites.

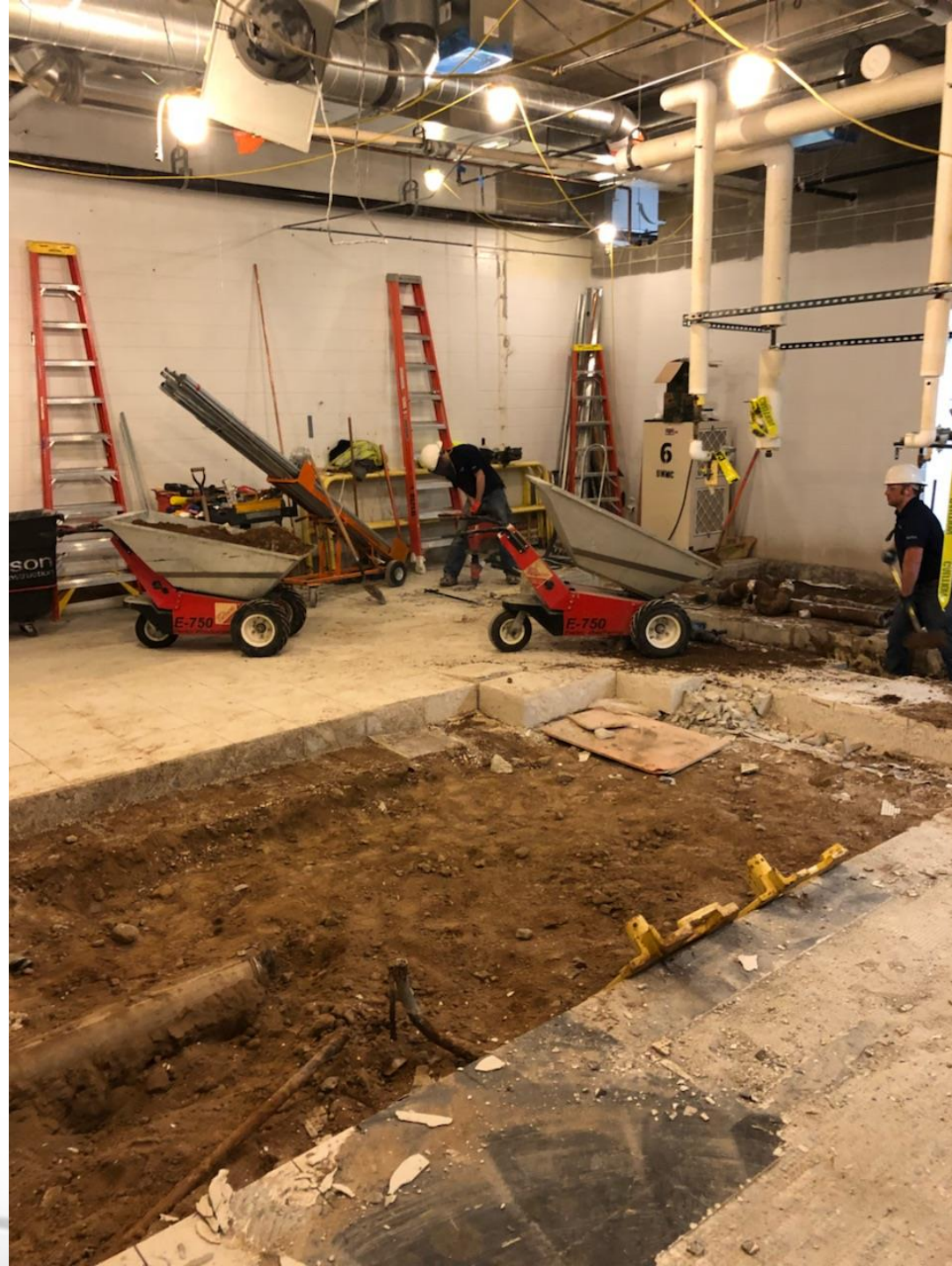


Previous Sterilization Area



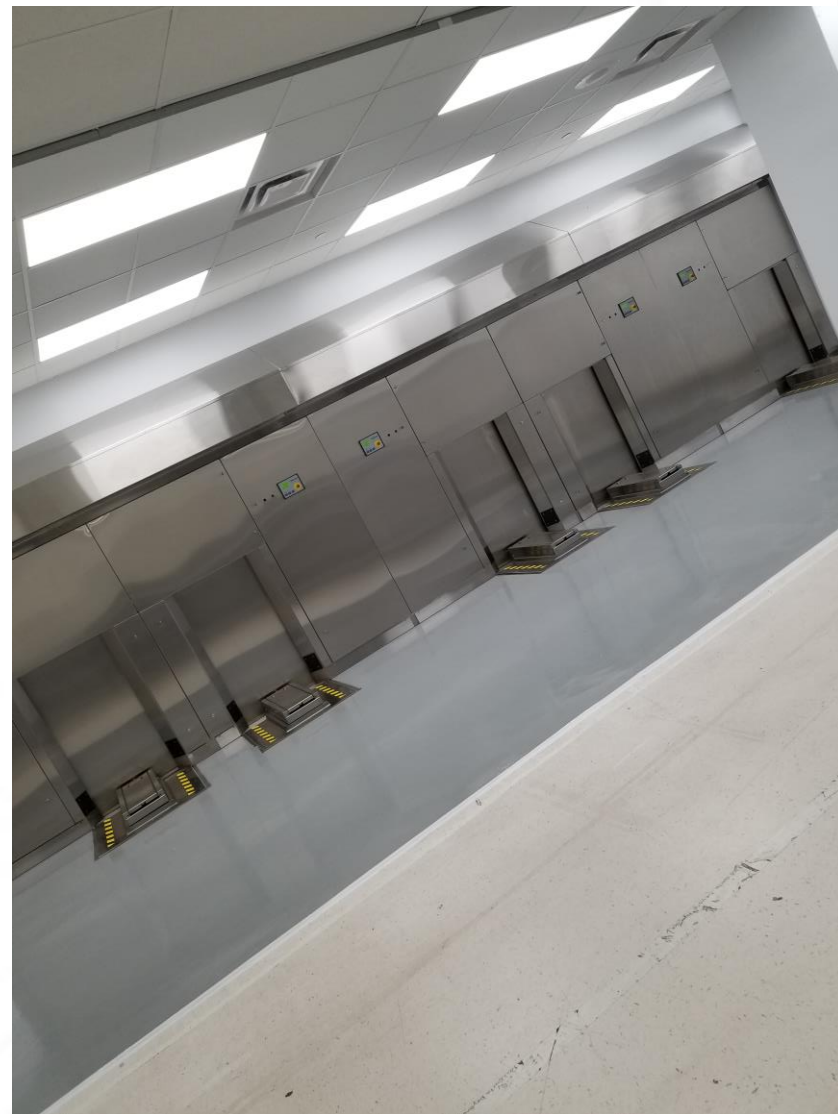












Constant Change in the Department



Previous Assembly Area



New Assembly Area



- Work stations/pods
- Air drops
- Standardized work stations



Moving workstations/computers



Hanel Rotomat



Storage System

Many Details to Consider



Phasing Photos




WORK
Together
AND
HELP
Each other



Phasing Struggles

Working in Very Close Quarters





All washers went down at once...

- We needed to come together as a System



Back-ups and Problem Solving



SOLVE
COLLABORATION
PROBLEM
COLLABORATE
SOLUTION
TOGETHER

AGREE NIGHT NEW MAY BEST
COLLABORATIVE APPROACH ONE
PROCESS
DEFINE
DIFFERENT SAME SOLUTIONS
POSSIBLE
QUESTIONS CRITERIA CAUSES
FIX STRONGLY STAGE QUALITY
IDENTIFY PROBLEMS LEADING

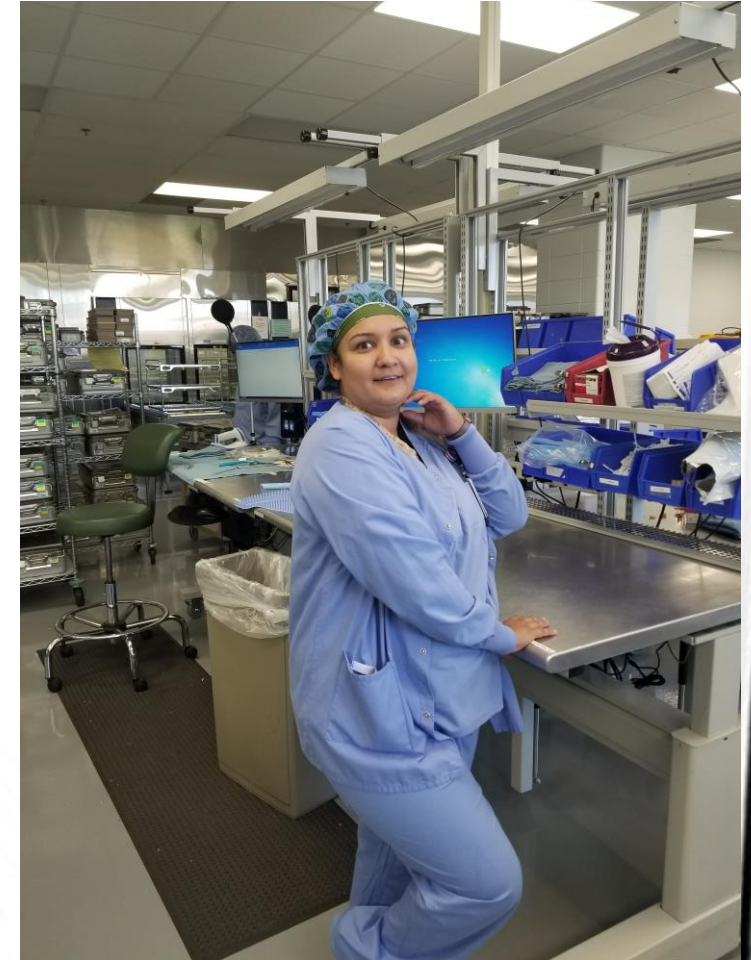


Working Together To Get Our Patients What They Need



TEAM





AMAZING STAFF

QUESTIONS?