

P20422 - Build & Test Prep Review Agenda >

- **Introduce Team**

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|--------------------|--------------------|-------------------------------------|
| ○ Nicholas Balcomb | Major: ISE | Role: Project Co-Manager |
| ○ Elizabeth Maeder | Major: BME | Role: Communications |
| ○ Tara Marshall | Major: MECE | Role: Facilitator/Purchasing |
| ○ Grant Pearce | Major: MECE | Role: Lead Engineer |
| ○ Samantha Porten | Major: ISE | Role: Project Co-Manager |

- **Progress Map**

MSD I



MSD II



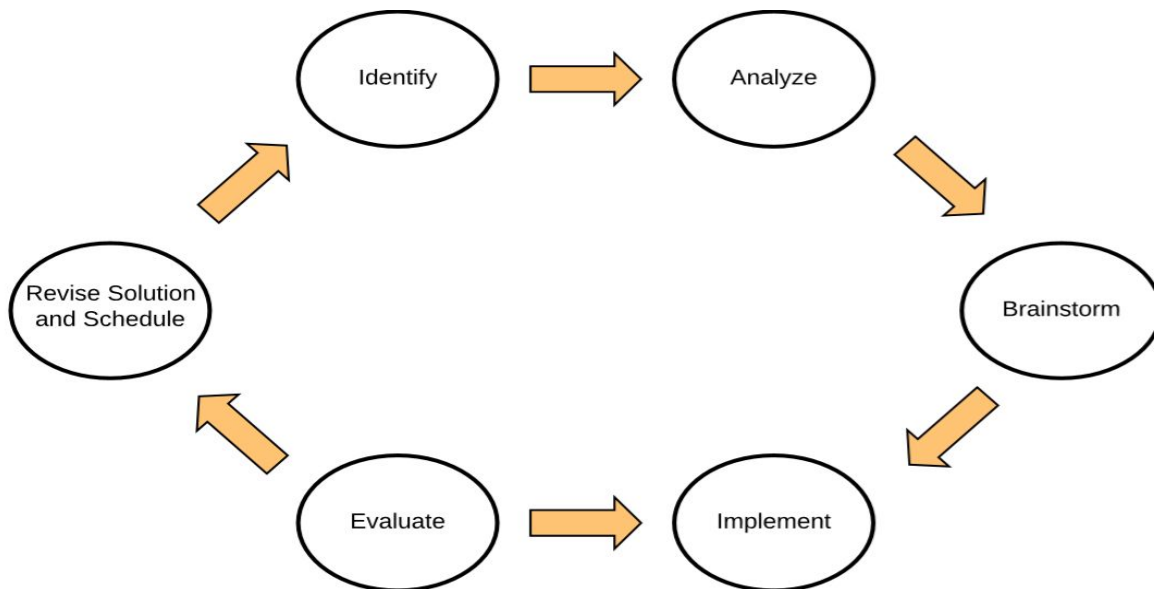
- **Design recap**



- **Test Plans**

Engineering Requirements	Units	Preferred	Test Plan	Owner	Standard
Composter must fit in shed 10x12x10 ft ³	feet ³	Down	Tape measure dimensions	Tara	OSHA
Composter fits through 36x80 in ²	inches ²	Down	Tape measure dimensions	Tara	ISO
Composter must weigh under 35lbs when empty	lbs	Down	Weigh mass on large scale	Tara/Grant	NIOSH
Feeding area varies between 3ft & 6ft (Scalable)	feet ²	Range	Tape measure dimenions	Tara/Grant	N/A
Total cost less than \$400 for lot sizes of 40	dollars	Down	Blance book under \$400	Tara/Grant	N/A
100% of parts are easily sourced from common retailers	percent	Up	Keep record of parts	Tara	N/A
100% of inorganic materials to exit system separate from frass	percent	Up	Composting trail results	Liz	FDA/EPA
Total capacity of composter greater than 5 gallons	gallons	Up	Tape measure dimensions	Tara	N/A
The opening must be greater than 28 inches ²	inches	Up	Tape measure dimensions	Tara	N/A
Number of larvee accommodated is greater than 500,000	larvae population	Up	Composting trail results	Liz	N/A
Feeding depth is maximum 3 inches deep	inches	Up	Tape measure dimensions	Tara	N/A
50% of larvae egress to the preputation area	percent	Up	Composting trail results	Liz/Sam	FDA
The absorbant coefficient must be greater than 10 ⁵ CM ⁻¹	centimeters	Up	Spectrometer results	Liz/Sam	N/A
Pre-pupae area can hold 10% of larvae population	percent	Up	Composting trail results	Liz/Sam	FDA
Less than 1% of larvae excape per day	percent	Down	Composting trail results	Liz/Sam	EPA
Less than .1% of the bug population are house fly and other species contamination	percent	Down	Composting trail results	Liz/Sam	FDA/EPA
Less than 1% of all larvae are removed when removing frass/food from compost	percent	Down	Composting trail results	Liz/Sam	FDA/EPA
Keep internal composter temperature between 23 to 30 C	celsius	Target	Themoeter results	Liz	N/A
Keep internal moisture between 50% and 70%	percent	Target	Moist-o-meter results	Liz	N/A
Materials withstand normal composter use for 5 or more years	years	Up	Material anaylsis results	Grant	N/A
Process 10lbs or more food waste a day	lbs	Up	Composting trail results	Everyone	N/A
75% of pre-pupae can be easily removed to be transported to fly breeding area	percent	Up	Composting trail results	Liz/Sam	EPA
95% of excess liquid in composter drains	percent	Up	Composting trail results	Liz/Sam	N/A
Removal of frass/food residue displaces <1% feeding larvae	percent	Down	Composting trail results	Liz/Sam	N/A
<5% of frass/foods spills/leaks out of composter	percent	Down	Composting trail results	Sam	OSHA
99% of leachate and frass/food residues removed within 5 minutes	percent	Down	Composting trail results	Liz/Sam	N/A
Spine compression force while operating is under 764 pounds (NIOSH)	pounds	Down	Ergonomics results	Nick	NIOSH
Composter is easily operated by 1 person	people	Down	Composting trail results	Everyone	NIOSH
Maintenance can be performed by at least 2 people	people	Down	Composting trail results	Everyone	OSHA
Distance between RIT Garden Entrance and Composter Shed <10 feet	feet	Down	Tape measure dimensions	Tara	OSHA

- **Order Summary**
- **Risks Assessments**
- **Problem tracking**

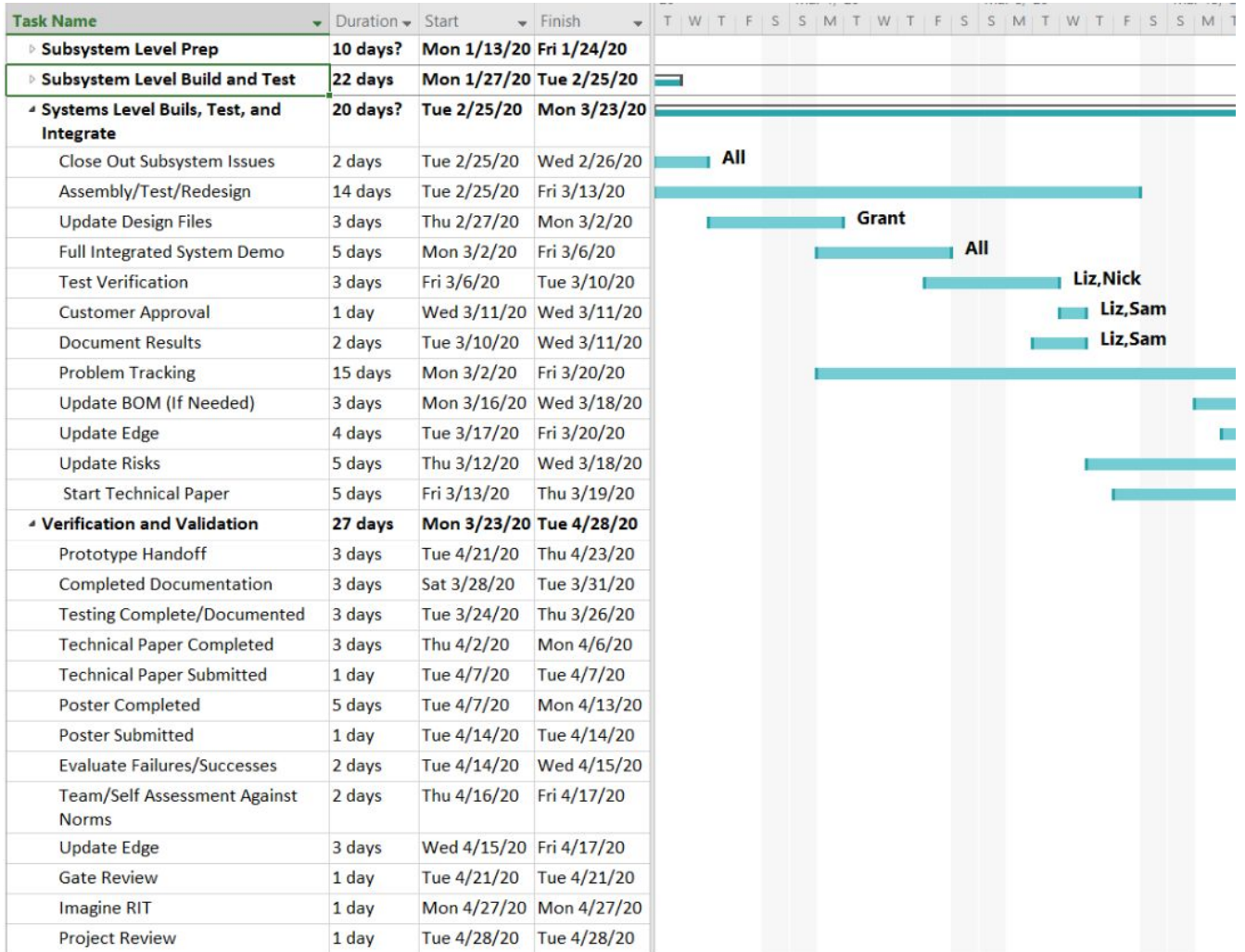


- **Revised Schedule**

Build & Test Prep and Subsystem Build & Test

Task Name	Duration	Start	Finish	12, '20							Jan 19, '20							Jan 26, '20						
				M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W				
MSD II BSF TEAM	77 days?	Mon 1/13/20	Tue 4/28/20																					
Subsystem Level Prep	10 days?	Mon 1/13/20	Fri 1/24/20																					
MSD I Post Martem	1 day	Mon 1/13/20	Mon 1/13/20																					
MSD II Project Plan Revision	1 day	Tue 1/14/20	Tue 1/14/20																					
Complete Purchases	9 days	Tue 1/14/20	Fri 1/24/20																					
Test Plan Revisions	2 days	Thu 1/16/20	Fri 1/17/20																					
Test Bench Setup	3 days	Mon 1/20/20	Wed 1/22/20																					
Track Problems	6 days	Wed 1/15/20	Wed 1/22/20																					
Update BOM	2 days	Wed 1/22/20	Thu 1/23/20																					
Update Risks	3 days	Tue 1/21/20	Thu 1/23/20																					
Update Edge	4 days	Tue 1/21/20	Fri 1/24/20																					
Subsystem Level Build and Test	22 days	Mon 1/27/20	Tue 2/25/20																					
Waiting For Parts	14 days	Mon 1/27/20	Thu 2/13/20																					
Hopper Build	7 days	Thu 2/13/20	Fri 2/21/20																					
Revolving Door Build	6 days	Thu 2/13/20	Thu 2/20/20																					
Removal Build	5 days	Thu 2/13/20	Wed 2/19/20																					
Frame Build	5 days	Thu 2/13/20	Wed 2/19/20																					
Enclosure Build	2 days	Thu 2/13/20	Fri 2/14/20																					
Test Verification	2 days	Sat 2/22/20	Mon 2/24/20																					
Document Test Results	2 days	Sat 2/22/20	Mon 2/24/20																					
Problem Tracking	16 days	Tue 2/4/20	Tue 2/25/20																					
Update Risks	2 days	Mon 2/17/20	Tue 2/18/20																					
Update Edge	3 days	Wed 2/19/20	Fri 2/21/20																					
Update BOM (If Needed)	4 days	Thu 2/13/20	Tue 2/18/20																					

Integrated System Build & Test and Customer Handoff & FPD



- Questions