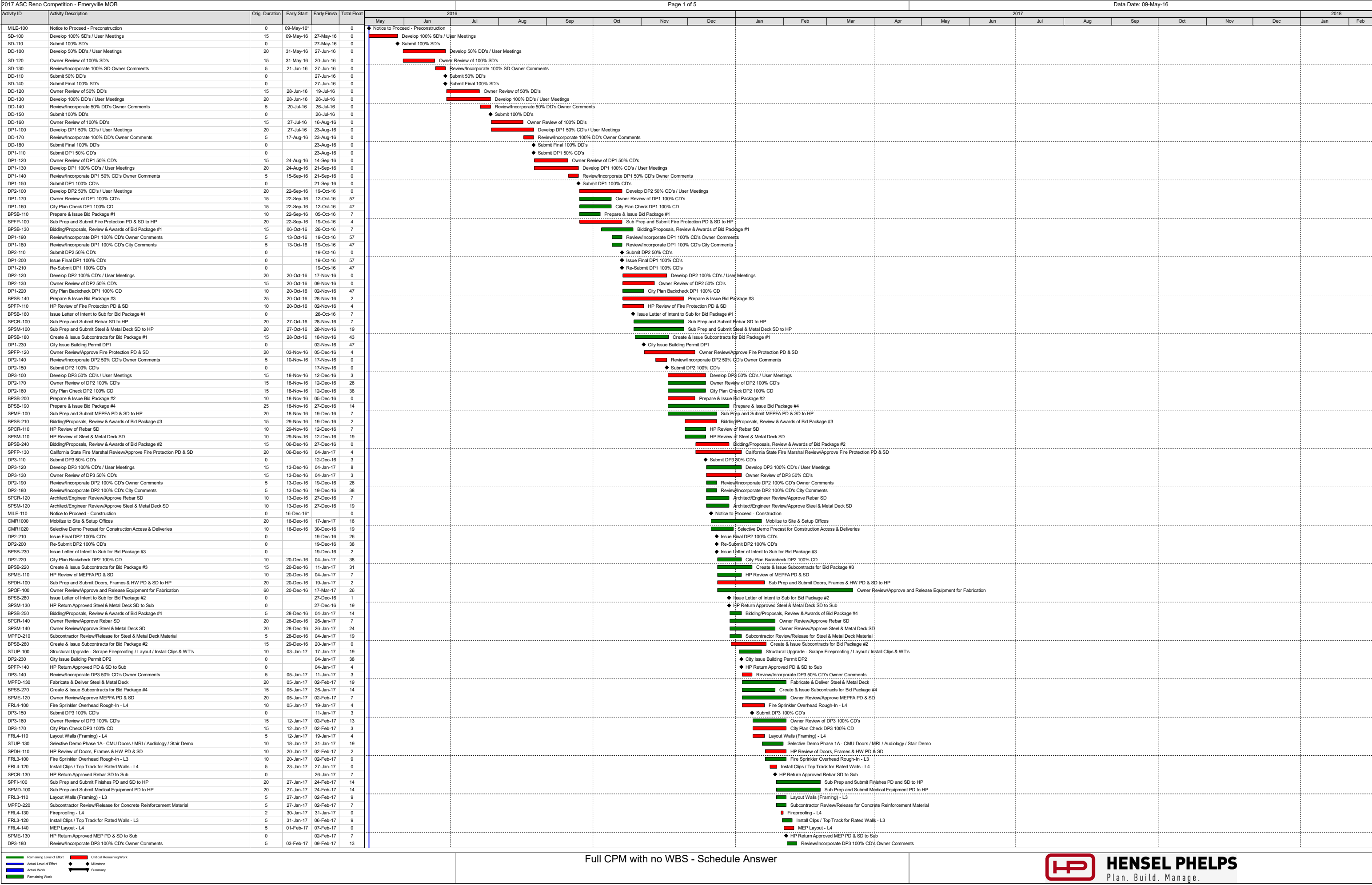




2017 ASC Reno Competition - Emeryville MOB						Page 2 of 5												Data Date: 09-May-16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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DP3-190	Review/Incorporate DP3 100% CD's City Comments		5	03-Feb-17	09-Feb-17	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

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FRL2-260	Main Ductwork Insulation - L4		15	30-May-17	19-Jun-17	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</

2017 ASC Reno Competition - Emeryville MOB						Page 4 of 5												Data Date: 09-May-16																
Activity ID	Activity Description	Orig.	Duration	Early Start	Early Finish	Total Float	2016												2017												2018			
							May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb						
FINL3-200	Remaining MEP Device & Trim - L3		10	28-Sep-17	11-Oct-17	0																												
FINL4-220	Flooring - L4		10	28-Sep-17	11-Oct-17	0																												
FINL4-230	Ceramic Tile - L4		10	28-Sep-17	11-Oct-17	0																												
FINL2-170	Ceiling Tile - L2		10	28-Sep-17	11-Oct-17	0																												
LVCX-110	Set/Install Security Cabinets & Telephone/Data Racks		20	28-Sep-17	25-Oct-17	28																												
HBIN-190	MEP Ceiling Devices & Fixtures - Hoist Bay		5	28-Sep-17	04-Oct-17	30																												
FINL1-140	MEP Ceiling Devices & Fixtures - L1		5	02-Oct-17	06-Oct-17	10																												
ELCX-140	Final Equipment Connections/Terminations & Energize Equipment Level 1		5	02-Oct-17	06-Oct-17	12																												
HBIN-210	Ceiling Tiles (Levels 3 & 1) - Hoist Bay		2	05-Oct-17	06-Oct-17	30																												
FINL1-150	Medical Equipment (Pre-Floor) - L1		3	09-Oct-17	11-Oct-17	20																												
FINL1-160	Above Grid Ceiling Closure Work to Complete & Inspection - L1		3	09-Oct-17	11-Oct-17	10																												
MDCX-130	Energize & Startup CT & MRI		1	09-Oct-17	09-Oct-17	12																												
ELCX-150	Program Lighting System		5	09-Oct-17	13-Oct-17	30																												
MCCX-160	Final Equipment Connections/Terminations, Energize & Startup AHU for Level 1		5	09-Oct-17	13-Oct-17	13																												
HBIN-220	Flooring - Hoist Bay		5	09-Oct-17	13-Oct-17	30																												
MDCX-140	Prefunctional Testing		5	10-Oct-17	16-Oct-17	12																												
FINL3-230	Energize Lights And Receptacles - L3		1	11-Oct-17	11-Oct-17	42																												
FINL3-210	Flooring - L3		10	12-Oct-17	25-Oct-17	0																												
FINL3-220	Ceramic Tile - L3		10	12-Oct-17	25-Oct-17	0																												
FINL4-250	Doors & Hardware - L4		7	12-Oct-17	20-Oct-17	6																												
FINL4-260	Bldg Specialties - L4		10	12-Oct-17	25-Oct-17	22																												
FINL4-270	Wall Protection - L4		5	12-Oct-17	18-Oct-17	27																												
FINL2-190	Casework & Countertops - L2		10	12-Oct-17	25-Oct-17	0																												
FINL2-150	Medical Equipment (Pre-Floor) - L2		7	12-Oct-17	20-Oct-17	3																												
FINL2-200	Remaining MEP Device & Trim - L2		10	12-Oct-17	25-Oct-17	0																												
FINL1-170	Ceiling Tile - L1		5	12-Oct-17	18-Oct-17	10																												
SPE-120	Install All Signage - Signage, Parking & Exterior		25	12-Oct-17	16-Nov-17	7																												
MCCX-150	Test and Balance Air Level 3 & 4		5	12-Oct-17	18-Oct-17	25																												
FINL1-180	Startup Air On Floor - L1		0		13-Oct-17	13																												
ELCX-160	Prefunctional Testing		5	16-Oct-17	20-Oct-17	30																												
MCCX-170	Program System		5	16-Oct-17	20-Oct-17	33																												
HBIN-240	Doors & Hardware - Hoist Bay		5	16-Oct-17	20-Oct-17	30																												
MDCX-150	Owner Functional Testing & Sign-Off		5	17-Oct-17	23-Oct-17	34																												
FINL4-280	Medical Equipment (Post Floor) - L4		7	23-Oct-17	31-Oct-17	39																												
FINL4-290	Owner Furniture - L4		5	23-Oct-17	27-Oct-17	53																												
ELCX-170	Owner Functional Testing & Sign-Off		5	23-Oct-17	27-Oct-17	30																												
HBIN-230	Install Medical Equipment (Level 2) - Hoist Bay		5	23-Oct-17	27-Oct-17	30																												
FINL2-230	Energize Lights And Receptacles - L2		1	25-Oct-17	25-Oct-17	32																												
FINMR-230	Energize Lights And Receptacles - MRIC T		1	25-Oct-17	25-Oct-17	32																												
FINL3-240	Doors & Hardware - L3		7	26-Oct-17	03-Nov-17	3																												
FINL3-250	Bldg Specialties - L3		10	26-Oct-17	08-Nov-17	12																												
FINL3-260	Wall Protection - L3		5	26-Oct-17	01-Nov-17	17																												
FINL2-210	Flooring - L2		10	26-Oct-17	08-Nov-17	0																												
FINL2-220	Ceramic Tile - L2																																	

2017 ASC Reno Competition - Emeryville MOB						Page 5 of 5												Data Date: 09-May-16											
Activity ID	Activity Description	Orig. Duration	Early Start	Early Finish	Total Float	2016												2017											
						May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		
COPW-100	Substantial Completion - Project Wide	0		15-Dec-17	0																								
PLL1-140	Resolve Punch List - L1	15	18-Dec-17	09-Jan-18	11																								
PLL3-160	Final Punch List Back Check Walk - L3	1	21-Dec-17	21-Dec-17	23																								
PLPH-150	Final Clean - Signage, Parking & Exterior	5	21-Dec-17	28-Dec-17	18																								
PLL2-150	Final Clean - L2	5	29-Dec-17	05-Jan-18	13																								
PLPH-160	Final Punch List Back Check Walk - Signage, Parking & Exterior	1	29-Dec-17	29-Dec-17	18																								
ICM-150	Finishes Complete	0		02-Jan-18*	0																								
PLL1-150	Final Clean - L1	5	03-Jan-18	09-Jan-18	11																								
LVCX-160	Owner Functional Testing & Sign-Off	3	08-Jan-18	10-Jan-18	14																								
FACX-160	Fire Marshal Testing & Inspection	5	08-Jan-18	12-Jan-18	10																								
PLL2-160	Final Punch List Back Check Walk - L2	1	08-Jan-18	08-Jan-18	13																								
PLL1-160	Final Punch List Back Check Walk - L1	1	10-Jan-18	10-Jan-18	11																								
FACX-170	Fire Marshal Final Inspection & Sign-Off	1	12-Jan-18	12-Jan-18	10																								
CMR1150	Demobilize Site	10	12-Jan-18	26-Jan-18	10																								
COPW-110	Final Completion Turnover - Project Wide	0		26-Jan-18	10																								
MILE-130	Final Completion / Certificate of Occupancy	0		09-Feb-18*	0																								

◆ Substantial Completion - Project Wide

■ Resolve Punch List - L1

■ Final Punch List Back Check Walk - L3

■ Final Clean - Signage, Parking & Exterior

■ Final Clean - L2

■ Final Punch List Back Check Walk - L1

◆ Finishes Complete

■ Final Clean - L1

■ Owner Functional Testing

■ Fire Marshal Testing & Inspection

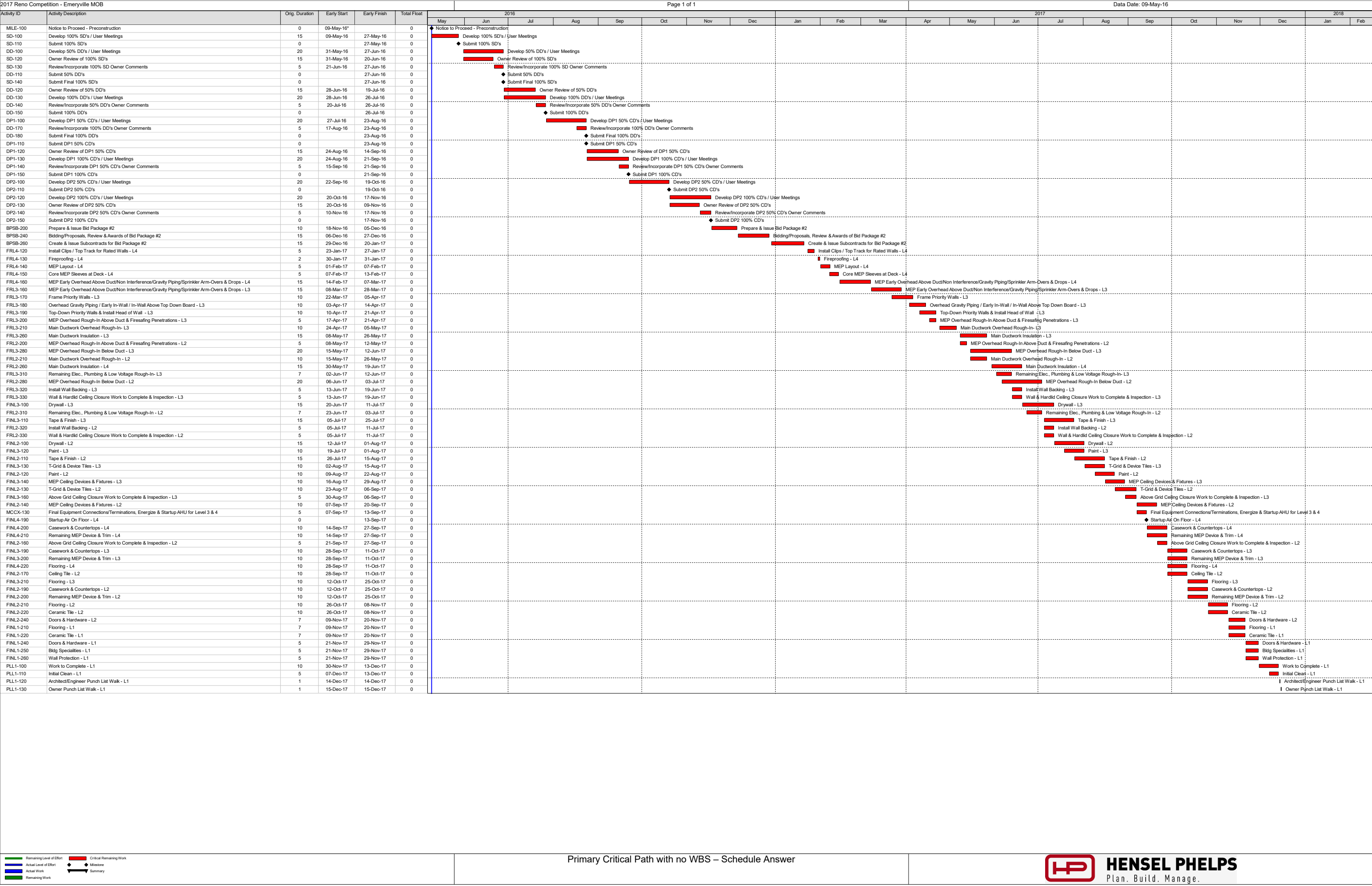
■ Final Punch List Back Check Walk - L2

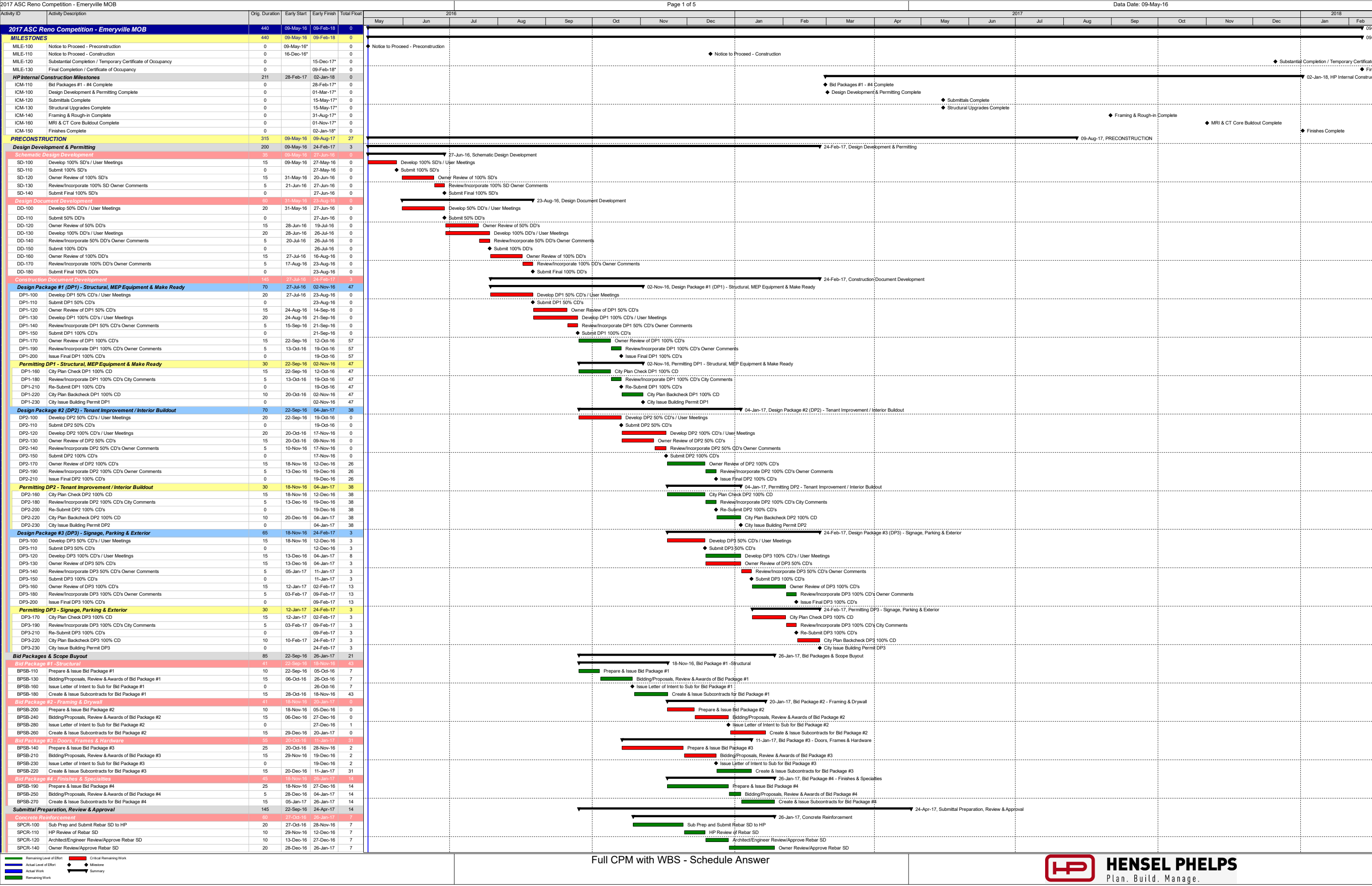
■ Final Punch List Back Check Walk - L1

■ Fire Marshal Final Inspection & Sign-Off

■ Demobilize Site

◆ Final Completion / Certificate of Occupancy





2017 ASC Reno Competition - Emeryville MOB		Page 1 of 1		Data Date: 09-May-16		
Activity ID	Activity Description	Orig. Duration	Early Start	Early Finish	Total Float	
2017 ASC Reno Competition - Emeryville MOB		440	09-May-16	09-Feb-18	0	
MILESTONES		440	09-May-16	09-Feb-18	0	
HP Internal Construction Milestones		211	28-Feb-17	02-Jan-18	0	
PRECONSTRUCTION		315	09-May-16	09-Aug-17	27	
Design Development & Permitting		200	09-May-16	24-Feb-17	3	
Schematic Design Development		35	09-May-16	27-Jun-16	0	
Design Document Development		60	31-May-16	23-Aug-16	0	
Construction Document Development		145	27-Jul-16	24-Feb-17	3	
Design Package #1 (DP1) - Structural, MEP Equipment & Make Ready		70	27-Jul-16	02-Nov-16	47	
Permitting DP1 - Structural, MEP Equipment & Make Ready		30	22-Sep-16	02-Nov-16	47	
Design Package #2 (DP2) - Tenant Improvement / Interior Buildout		70	22-Sep-16	04-Jan-17	38	
Permitting DP2 - Tenant Improvement / Interior Buildout		30	18-Nov-16	04-Jan-17	38	
Design Package #3 (DP3) - Signage, Parking & Exterior		65	18-Nov-16	24-Feb-17	3	
Permitting DP3 - Signage, Parking & Exterior		30	12-Jan-17	24-Feb-17	3	
Bid Packages & Scope Buyout		85	22-Sep-16	26-Jan-17	21	
Bid Package #1 -Structural		41	22-Sep-16	18-Nov-16	43	
Bid Package #2 - Framing & Drywall		41	18-Nov-16	20-Jan-17	0	
Bid Package #3 - Doors, Frames & Hardware		55	20-Oct-16	11-Jan-17	31	
Bid Package #4 - Finishes & Specialties		45	18-Nov-16	26-Jan-17	14	
Submittal Preparation, Review & Approval		145	22-Sep-16	24-Apr-17	14	
Concrete Reinforcement		60	27-Oct-16	26-Jan-17	7	
Steel & Metal Decking		60	27-Oct-16	26-Jan-17	24	
Fire Protection		70	22-Sep-16	04-Jan-17	4	
Mechanical, Electrical, Plumbing & Fire Alarm (MEPFA)		70	18-Nov-16	03-Mar-17	39	
Doors, Frames & Hardware		60	20-Dec-16	17-Mar-17	2	
Medical Equipment		60	27-Jan-17	24-Apr-17	14	
Finishes (Casework, Paint, Flooring, Ceilings & Specialties)		60	27-Jan-17	24-Apr-17	14	
Material Procurement		160	20-Dec-16	09-Aug-17	27	
Structural		35	28-Dec-16	16-Feb-17	9	
Medical Equipment		65	25-Apr-17	26-Jul-17	37	
Doors, Frames & Hardware		30	20-Mar-17	01-May-17	2	
Owner Furnished Equipment		160	20-Dec-16	09-Aug-17	26	
CONSTRUCTION		277	16-Dec-16	26-Jan-18	10	
Mobilizations, Make Ready & Access Zone		277	16-Dec-16	26-Jan-18	10	
Hoist Bay		52	16-Aug-17	27-Oct-17	30	
Exterior		7	16-Aug-17	24-Aug-17	34	
Interior		50	18-Aug-17	27-Oct-17	30	
Structural Upgrades		83	03-Jan-17	02-May-17	8	
Framing & Rough-In		151	05-Jan-17	10-Aug-17	10	
Level 4		102	05-Jan-17	01-Jun-17	2	
Level 3		104	20-Jan-17	19-Jun-17	0	
Level 2		109	03-Feb-17	11-Jul-17	6	
MRI & CT Core		39	20-Apr-17	14-Jun-17	24	
Level 1 (w/ Basement)		121	17-Feb-17	10-Aug-17	10	
FINISHES		129	02-Jun-17	06-Dec-17	28	
Level 4		106	02-Jun-17	31-Oct-17	51	
Level 3		104	20-Jun-17	15-Nov-17	41	
Level 2		117	15-Jun-17	01-Dec-17	31	
MRI & CT Core		93	15-Jun-17	25-Oct-17	55	
Remaining MRI & CT Core Buildout After Equipment Placement		20	16-Aug-17	13-Sep-17	24	
Level 1 (w/ Basement)		80	11-Aug-17	06-Dec-17	28	
Signage, Parking & Exterior		63	18-Aug-17	16-Nov-17	7	
Punch List & Completion		61	26-Oct-17	26-Jan-18	10	
Punch List		50	26-Oct-17	10-Jan-18	11	
Level 4		28	26-Oct-17	07-Dec-17	33	
Level 3		28	09-Nov-17	21-Dec-17	23	
Level 2		28	28-Nov-17	08-Jan-18	13	
Level 1 (w/ Basement)		28	30-Nov-17	10-Jan-18	11	
Signage, Parking & Exterior		28	17-Nov-17	29-Dec-17	18	
Completion		27	15-Dec-17	26-Jan-18	10	
Equipment/Systems Startup, Testing & Commissioning		175	03-May-17	12-Jan-18	19	
Medical		50	14-Aug-17	23-Oct-17	34	
Electrical & Lighting		125	03-May-17	27-Oct-17	30	
Mechanical		158	03-May-17	18-Dec-17	36	
Plumbing & Medical Gas		61	20-Sep-17	18-Dec-17	31	
Low Voltage, Telephone & Data		165	15-May-17	10-Jan-18	14	
Fire Protection & Fire Alarm		78	20-Sep-17	12-Jan-18	10	

2017 ASC Reno Competition – Emeryville MOB
Schedule Focus Item Questions Response

- i. What date did you receive the NTP for Preconstruction?
 - a. May 9, 2016
- ii. What date will you complete all of the structural (steel, deck infills, roof pads, etc.) upgrades?
 - a. May 2, 2017
- iii. What is the earliest date you will be able to set the MRI and CT Equipment?
 - a. August 14, 2017
- iv. For each floor, what is the earliest date you can startup the Air Handler Unit, and what date can you run conditioned air in the space?
 - a. Level 4 – Startup AHU and run air on September 13, 2017
 - b. Level 3 – Startup AHU and run air on September 13, 2017
 - c. Level 2 – Startup AHU and run air on September 27, 2017
 - d. Level 1 – Startup AHU and run air on October 13, 2017
- v. For each floor, what is the earliest date that permanent lights and receptacles can be utilized and energized?
 - a. Level 4 – September 27, 2017
 - b. Level 3 – October 11, 2017
 - c. Level 2 – October 25, 2017
 - d. Level 1 – November 1, 2017
- vi. Provide the list of activities on the anticipated rain day calendar and a short explanation as to why each of those activities are on the calendar.
 - a. Caulk Exterior – Hoist Bay
 - i. Cannot caulk in the rain
 - b. F/R/P Concrete – Roof
 - i. Cannot place concrete in the rain
- vii. Explain your Primary Critical Path and why are these activities on the Critical Path.
 - a. Ultimately, the Primary Critical Path will go through the activities driving and impacting the Substantial Completion date. These activities will most likely be the scopes of work tied to the Owner Punch Walk of the spaces, as it is a requirement of Substantial Completion.

In this project, the Primary Critical Path starts with the Design Development phase through submitting the 100% Design Package #2 CD's to allow the Bid Package for Framing & Drywall to start. This is not unusual, since the framing activities kick start a lot of other construction activities on the project (i.e. fireproofing and MEP work). As the early framing work and fireproofing on Level 4 completes, the early overhead MEP rough-in activities become the Primary Critical Path due to its longer duration and crew ties down through Levels 3 and 2 wall and ceiling close-in activities. The wall and ceiling close-in activities are critical due to its predecessor tie to drywall, the first scope of work to start off the finishes.

The drywall activities on Levels 3 and 2 are the Primary Critical Path down through the flooring activities as they are crew tied to the flooring activities on Level 1. The flooring activity on Level 1 also has another Primary Critical Path from Level 4 due to the startup of air activity being a predecessor to flooring. However, the path leads to the Level 1 flooring activity, which then has a direct path through the remaining finishes to the Level 1 Punch List activities that lead to the Owner Punch List Walk that achieves Substantial Completion on December 15, 2017.

Once Substantial Completion is achieved, although there are no critical path activities (activities with a total float of 5 days or less), there is a longest path to the Final Completion Milestone. It goes through the Fire Marshal Testing & Inspection to achieve final sign-off and our Certificate of Occupancy, which is tied to demobilization of the site and onto Final Completion.