

PROJECT:	
LOCATION:	

DESCRIPTION:	
GROSS SF:	

PREPARED BY:

ITEM		Yes/No/ Unknown	REMARKS	
EXISTING CONDITIONS ANALYSIS	1.1 Field measure affected spaces, noting construction to remain	<input type="checkbox"/>		
	1.2 Update Columbia base drawing(s) with field measurements	<input type="checkbox"/>		
	1.3 Survey HVAC, plumbing/fire protection/electrical/fire alarm system	<input type="checkbox"/>		
	1.4 Obtain pre-construction air and water balancing readings	<input type="checkbox"/>		
	1.5 Obtain electrical panel metering	<input type="checkbox"/>		
	1.6 Regulatory Due Diligence:			
	1.6.1 Change in floor max. occupancy	<input type="checkbox"/>		
	1.6.2 Change of use	<input type="checkbox"/>		
	1.6.3 C of O	<input type="checkbox"/>		
	1.6.4 Fire alarm base building approval	<input type="checkbox"/>		
1.7 Confirm with EHS if FDNY Lab Permit for affected space(s) exist		<input type="checkbox"/>		
PROGRAMMING PHASE	2.1 Confirm anticipated number and roles of lab occupants	<input type="checkbox"/>		
	2.2 Obtain/prepare an equipment list (see CU standard form)	<input type="checkbox"/>		
	2.3 Confirm required functional adjacencies of program elements	<input type="checkbox"/>		
	2.4 Confirm type and quantity of hazardous materials to be utilized	<input type="checkbox"/>		
	2.5 Confirm environmental requirements:			
	2.5.1 Required temperature range and stability	<input type="checkbox"/>		
	2.5.2 Required relative humidity range and stability	<input type="checkbox"/>		
	2.5.3 Chilled water required year-around	<input type="checkbox"/>		
	2.5.4 Lab equipment chilled water required	<input type="checkbox"/>		
	2.5.5 Required Acoustical/vibration criteria	<input type="checkbox"/>		
	2.5.6 Special lighting requirements	<input type="checkbox"/>		
	2.5.7 Need for compressed air, other lab gases	<input type="checkbox"/>		
	2.5.8 Need for cryogenic gases/liquids	<input type="checkbox"/>		
	2.5.9 Need for special laboratory exhaust (fume hoods, snorkel, etc.)	<input type="checkbox"/>		
2.5.10 Need for pure (RO/DI) water	<input type="checkbox"/>			
2.5.11 Other special requirements (i.e. RF/EM Shielding)	<input type="checkbox"/>			
2.6 Determine if lab will be approved for animal or human subjects		<input type="checkbox"/>		
2.7 Begin preparation of lab equipment list		<input type="checkbox"/>		
3.1 Develop alternative conceptual architectural design plans		<input type="checkbox"/>		
3.2 Determine accessibility requirements		<input type="checkbox"/>		
3.3 Determine sustainability goals		<input type="checkbox"/>		
3.4 Prepare/review with CU list of pros/cons for each alternative		<input type="checkbox"/>		
3.5 Develop lab equipment list		<input type="checkbox"/>		

ITEM		Yes/No/ Unknown	REMARKS
CONCEPT DESIGN PHASE	3.6 Meet with EH&S to review requirements	<input type="checkbox"/>	
	3.7 Prepare/review with CU Operations MEP/FP systems implications:		
	3.7.1 Redundancy requirements	<input type="checkbox"/>	
	3.7.2 LEED/Energy Efficiency goals	<input type="checkbox"/>	
	3.7.3 Normal vs Backup vs Emergency power requirements	<input type="checkbox"/>	
	3.7.4 CUIT requirements	<input type="checkbox"/>	
	3.7.5 Existing fire alarm system		
	· FDNY or Local Municipality approval	<input type="checkbox"/>	
	· Capacity	<input type="checkbox"/>	
	3.7.6 Building Automation System		
	· Commercial vs Industrial	<input type="checkbox"/>	
	· Minimum BMS points to be connected to BMS	<input type="checkbox"/>	
	· Lab equipment integration	<input type="checkbox"/>	
	3.7.7 Cooling source capacity/interface	<input type="checkbox"/>	
	3.7.8 Heating source capacity/interface	<input type="checkbox"/>	
	3.7.9 Ventilation and exhaust air requirements		
	· Intake locations	<input type="checkbox"/>	
	· Exhaust locations	<input type="checkbox"/>	
	3.7.10 HVAC filtration requirements	<input type="checkbox"/>	
	3.7.11 MER requirements		
· HVAC	<input type="checkbox"/>		
· Electrical	<input type="checkbox"/>		
· IT	<input type="checkbox"/>		
SCHEMATIC DESIGN	4.1 Develop selected architectural plan		
	4.1.1 Show User's lab equipment correlated with equipment list	<input type="checkbox"/>	
	4.1.2 Identify egress routes; wall ratings; lab unit limits	<input type="checkbox"/>	
	4.1.3 Show and label sinks, fume hoods, and other built-in equipment	<input type="checkbox"/>	
	4.1.4 Conduct a full review/page turn of the Schematic Design documents	<input type="checkbox"/>	
	ensuring that the end-user has properly visualized the design; utilizing 3D modeling if necessary.		
	4.1.5 Obtain User's SD approval of architectural plan layout	<input type="checkbox"/>	
	4.2 develop lab equipment list	<input type="checkbox"/>	
	4.3 Prepare demolition and reflected ceiling plans	<input type="checkbox"/>	
	4.4 Prepare MEP/FP plans showing new equipment and distribution	<input type="checkbox"/>	
	4.5 Identify location of tie-ins to existing MEP/FP systems	<input type="checkbox"/>	
4.6 Prepare MEP/FP systems basis of design report	<input type="checkbox"/>		
4.7 Review SD MEP/FP documents with Operations; obtain approval	<input type="checkbox"/>		

ITEM	Yes/No/ Unknown	REMARKS
5.1 Finalize selected architectural plan, demolition, and ceiling plans	<input type="checkbox"/>	
5.2 Draw elevations and sections and details	<input type="checkbox"/>	
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5.4 Conduct a full review of all lab components that the end-user will	<input type="checkbox"/>	
interact with i.e., light switch locations (heights), gas outlet locations		
(heights), millwork review, HVAC controls, etc.		
5.5 Obtain User's approval of architectural plan layout	<input type="checkbox"/>	
5.6 Update and finalize equipment list	<input type="checkbox"/>	
5.7 Confirm with Operations:		
5.7.1 Cooling source capacity/interface	<input type="checkbox"/>	
5.7.2 Heating source capacity/interface	<input type="checkbox"/>	
5.7.3 Lab equipment chilled water capacity	<input type="checkbox"/>	
5.7.4 Electrical normal/backup/emergency power capacity	<input type="checkbox"/>	
5.7.5 Fire alarm system capacity	<input type="checkbox"/>	
5.7.6 HVAC sequence of operations; obtain approval	<input type="checkbox"/>	
5.7.7 BMS interface	<input type="checkbox"/>	
5.7.8 Fire Alarm interface	<input type="checkbox"/>	
5.7.9 Fire Alarm sequence of operations obtain approval	<input type="checkbox"/>	
5.7.10 Lighting control zoning/sequence of operations	<input type="checkbox"/>	
5.7.11 Acoustical requirements	<input type="checkbox"/>	
5.7.12 Ventilation and exhaust air requirements	<input type="checkbox"/>	
5.7.13 MEP equipment manufacturers	<input type="checkbox"/>	
5.7.14 HVAC filtration requirements	<input type="checkbox"/>	
5.8 Review maintenance expectations and responsibilities	<input type="checkbox"/>	
5.9 Establish path of equipment ingress and maintenance clearances	<input type="checkbox"/>	
5.10 Comply with EHS Requirements:		
5.10.1 Oxygen sensors specified for storage of over 60 gallons of	<input type="checkbox"/>	
cryogenic gases		
5.10.2 Compressed gas cylinder restraints located as needed	<input type="checkbox"/>	
(e.g., within closets)		
5.10.3 If required, magnetic field shielding is specified and detailed	<input type="checkbox"/>	
5.10.4 If required, radiofrequency shielding is specified and detailed		
5.10.5 Recommendations from vibration/acoustical analysis incorporated	<input type="checkbox"/>	
in design		
5.10.6 Interlocks for Class IV lasers are specified	<input type="checkbox"/>	
5.10.7 Silver recovery for chemical darkroom processors specified	<input type="checkbox"/>	
5.10.8 Biological safety cabinets specified as part of the project are	<input type="checkbox"/>	
CU approved		

CONSTRUCTION DOCUMENTS

ITEM	Yes/No/ Unknown	REMARKS
5.10.9 If controlled substances will be used, a DEA lockbox is specified	<input type="checkbox"/>	