# **Program of Spaces - Net Area**

Room #	Room Name	Room NSF	Qty	Total NSF
<u>ection</u>				
BR-101	Booster Ring Tunnel	6,688	1	6,688
BR-102	Linac Room	1,715	1	1,715
BR-103	Booster Service Building - East	6,102	1	6,102
BR-104	Klystron Gallery	1,620	1	1,620
BR-105	Booster Service Building - Wes	1,568	1	1,568
	Ir	uare Feet:	17,693	
b Office Build	lings			
LOB1-101	Private Office	110	48	5,280
LOB1-102	Open Office Space	90	24	2,160
LOB1-103	Laboratory - Wet	480	2	960
LOB1-103A	Laboratory - Dry	480	4	1,920
LOB1-104	Storage	110	1	110
LOB1-105	Conference Room	560	2	1,120
LOB1-105A	Conference Room	220	2	440
LOB1-106	Lobby & Interaction Space	150	4	600
LOB1-107	Break Room / Kitchen	240	2	480
LOB1-108	Ship-Receive & Storage	960	1	960
LOB1-109	Toilet / Shower	250	2	500
LOB1-110	Electrical / Data	153	1	153
LOB1-111	Janitor Closet	63	1	63
LOB1-112	Access Corridor Interface	2,090	1	2,090
LOB1-113	Machine Shop	270	1	270
LOB4-101	LOB #4 Shell	16,146	1	16,146
LOB5-101	Private Office	110	48	5,280
LOB5-102	Flexible Office Space	90	24	2,160
LOB5-103	Laboratory - Wet	480	2	960
LOB5-103A	Laboratory - Dry	480	4	1,920
LOB5-104	Storage	110	1	110
LOB5-105	Conference Room	560	2	1,120

L085-106         Lobby & Interaction Space         150         4         600           L085-107         Break Room / Kitchen         240         2         480           L085-108         Ship-Receive & Storage         960         1         960           L085-109         Toilet / Shower         250         2         500           L085-110         Electrical / Data         153         1         153           L085-111         Janitor Closet         63         1         63           L085-112         Access Corridor Interface         2,090         1         2,090           L085-113         Machine Shop         270         1         2,415           OPS-103         Control Conference Room         1,547         1         1,547           OPS-106         2nd Floor To	Room #	Room Name	Room NSF	Qty	Total NSF
LOB5-107         Break Room / Kitchen         240         2         480           LOB5-108         Ship-Receive & Storage         960         1         960           LOB5-109         Toilet / Shower         250         2         500           LOB5-100         Electrical / Data         153         1         153           LOB5-110         Electrical / Data         153         1         2090           LOB5-112         Access Corridor Interface         2,090         1         2,090           LOB5-113         Machine Shop         270         1         2,70           LOB5-113         Machine Shop         270         1         2,70           LOB5-113         Machine Shop         270         1         2,70           LOB5-113         Machine Shop         2,70         1         2,70           LoB5-113         Machine Shop         2,70         1         2,70           LOB5-114         Control Conference Room         676         1         6,76           OPS-103         Control Room         1,547         1         1,547           OPS-104         Control Room         9,76         1         9,750           OPS-105         Computer Room	LOB5-105A	Conference Room	220	2	440
LOB5-108         Ship-Receive & Storage         960         1         960           LOB5-109         Toilet / Shower         250         2         500           LOB5-110         Electrical / Data         153         1         153           LOB5-110         Janitor Closet         63         1         63           LOB5-112         Access Corridor Interface         2,090         1         2,090           LOB5-113         Machine Shop         270         1         2,095           LOB5-113         Machine Shop         270         1         676           OPS-104         Control Conference Room         676         1         676           OPS-105         Computer Room         1,547         1         1,547           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibu	LOB5-106	Lobby & Interaction Space	150	4	600
L0B5-109         Toilet / Shower         250         2         500           L0B5-110         Electrical / Data         153         1         153           L0B5-111         Janitor Closet         63         1         63           L0B5-112         Access Corridor Interface         2,090         1         2,090           L0B5-113         Machine Shop         270         1         2,095           erations Center         500         500         500         500         500           OPS-103         Control Conference Room         676         1         976         15         507           OPS-104         Control Room         1,547         1         1,547         1         1,547           OPS-105         Computer Room         976         1         1,450         1         1,450           OPS-104         Bridge & Viewing Gallery	LOB5-107	Break Room / Kitchen	240	2	480
L0B5-110         Electrical / Data         153         1         153           L0B5-111         Janitor Closet         63         1         63           L0B5-112         Access Corridor Interface         2,090         1         2,090           L0B5-113         Machine Shop         270         1         2,090           L0B5-103         Control Conference Room         676         1         676           OPS-104         Control Room         1,547         1         1,547           OPS-105         Computer Room         976         1         9,76           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         128           OPS-110         Break Room / Kitchenet	LOB5-108	Ship-Receive & Storage	960	1	960
LOB5-111         Janitor Closet         63         1         63           LOB5-112         Access Corridor Interface         2,090         1         2,090           LOB5-113         Machine Shop         270         1         2,090           LOB5-113         Machine Shop         270         1         2,090           LOB5-113         Machine Shop         270         1         2,090           Lab Office Buildings Total Net Square Feet:         50,358           erations Center         50<	LOB5-109	Toilet / Shower	250	2	500
LOB5-112         Access Corridor Interface         2,090         1         2,090           LOB5-113         Machine Shop         270         1         270           Lab Office Buildings Total Net Square Feet:         50,358           erations Center         0PS-103         Control Conference Room         676         1         676           OPS-103         Control Room         1,547         1         1,547           OPS-104         Control Room         976         1         976           OPS-105         Computer Room         976         1         2,415           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibule         2,415         1         1,450           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         78           OPS-110         Break Room / Kitchenette         512         1         512           OPS-110         Break Room / Kitchenette         512         1         126           OPS-120         Men's Locker Room         128         1         126           OPS-121	LOB5-110	Electrical / Data	153	1	153
LOB5-113       Machine Shop       270       1       270         Lab Office Buildings Total Net Square Feet:       50,358         erations Center       0PS-103       Control Conference Room       676       1       676         OPS-103       Control Room       1,547       1       1,547         OPS-104       Control Room       976       1       976         OPS-105       Computer Room       976       1       976         OPS-106       2nd Floor Toilet & Shower       76       2       152         OPS-107       Entrance Lobby & Vestibule       2,415       1       2,415         OPS-108       Bridge & Viewing Gallery       1,450       1       1,450         OPS-109       Unisex Toilet       78       1       78         OPS-110       Break Room / Kitchenette       512       1       512         OPS-111       Telecom Room       409       1       409         OPS-120       Men's Locker Room       128       1       126         OPS-121       Women's Locker Room       126       1       126         OPS-122       Storage       108       1       108         OPS-123       Ref and       9,756 </td <td>LOB5-111</td> <td>Janitor Closet</td> <td>63</td> <td>1</td> <td>63</td>	LOB5-111	Janitor Closet	63	1	63
Lab Office Buildings Total Net Square Feet:         50,358           erations Center         OPS-103         Control Conference Room         676         1         676           OPS-103         Control Room         1,547         1         1,547           OPS-105         Computer Room         976         1         976           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibule         2,415         1         2,415           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         78           OPS-110         Break Room / Kitchenette         512         1         512           OPS-110         Break Room / Kitchenette         512         1         512           OPS-111         Telecom Room         409         1         409           OPS-120         Men's Locker Room         128         1         128           OPS-121         Women's Locker Room         126         1         108           OPS-122         Storage         108         1         108           PILIOING         RF Cavity Roo	LOB5-112	Access Corridor Interface	2,090	1	2,090
erations Center         OPS-103         Control Conference Room         676         1         676           OPS-104         Control Room         1,547         1         1,547           OPS-105         Computer Room         976         1         976           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibule         2,415         1         2,415           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         78           OPS-110         Break Room / Kitchenette         512         1         512           OPS-111         Telecom Room         409         1         405           OPS-120         Men's Locker Room         128         1         128           OPS-121         Women's Locker Room         126         1         126           OPS-122         Storage         108         1         108           Deperations Center Total Net Square Feet:         9,756         1         9,756           RF-101         RF Cavity Room         9,756         1         9,756           RF Fuil	LOB5-113	Machine Shop	270	1	270
OPS-103         Control Conference Room         676         1         676           OPS-104         Control Room         1,547         1         1,547           OPS-105         Computer Room         976         1         976           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibule         2,415         1         2,415           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         78           OPS-110         Break Room / Kitchenette         512         1         512           OPS-110         Break Room         655         1         655           OPS-120         Men's Locker Room         128         1         128           OPS-121         Women's Locker Room         126         1         106           OPS-122         Storage         108         1         108           DPS-121         Women's Locker Room         126         1         108           OPS-122         Storage         108         1         108           RF-101         RF Cavity Room         <		Lab Office B	uildings Total Net Sq	uare Feet:	50,358
OPS-104         Control Room         1,547         1         1,547           OPS-105         Computer Room         976         1         976           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibule         2,415         1         2,415           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         78           OPS-110         Break Room / Kitchenette         512         1         512           OPS-111         Telecom Room         409         1         409           OPS-118         Switchgear Room         655         1         655           OPS-120         Men's Locker Room         128         1         128           OPS-121         Women's Locker Room         126         1         108           OPS-122         Storage         108         1         108           Building         RF Cavity Room         9,756         1         9,756           RF-101         RF Test         426         1         426            10,182         1	perations Cent	er			
OPS-105         Computer Room         976         1         976           OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibule         2,415         1         2,415           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         78           OPS-110         Break Room / Kitchenette         512         1         512           OPS-110         Break Room / Kitchenette         512         1         655           OPS-111         Telecom Room         409         1         409           OPS-120         Men's Locker Room         128         1         128           OPS-121         Women's Locker Room         126         1         108           OPS-122         Storage         108         1         108           OPS-122         Storage         108         1         108           OPS-122         RF Cavity Room         9,756         1         9,756           RF-101         RF Cavity Room         9,756         1         426           RF Building Total Net Square Feet:	OPS-103	Control Conference Room	676	1	676
OPS-106         2nd Floor Toilet & Shower         76         2         152           OPS-107         Entrance Lobby & Vestibule         2,415         1         2,415         2,415         1         2,415         1         2,415         1         2,415         1         2,415         0         1         1,450         1         1,450         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1         1,450         0         1	OPS-104	Control Room	1,547	1	1,547
OPS-107         Entrance Lobby & Vestibule         2,415         1         2,415           OPS-108         Bridge & Viewing Gallery         1,450         1         1,450           OPS-109         Unisex Toilet         78         1         78           OPS-109         Break Room / Kitchenette         512         1         512           OPS-110         Break Room / Kitchenette         512         1         655           OPS-111         Telecom Room         409         1         409           OPS-118         Switchgear Room         655         1         655           OPS-120         Men's Locker Room         128         1         128           OPS-121         Women's Locker Room         126         1         126           OPS-122         Storage         108         1         108           Operations Center Total Net Square Feet: 9,232           Building         RF-101         RF Cavity Room         9,756         1         9,756           RF-102         RF Test         426         1         426         1         426           RF Building Total Net Square Feet: 10,182           g Building         Building         10,182         10,182 </td <td>OPS-105</td> <td>Computer Room</td> <td>976</td> <td>1</td> <td>976</td>	OPS-105	Computer Room	976	1	976
OPS-108       Bridge & Viewing Gallery       1,450       1       1,450         OPS-109       Unisex Toilet       78       1       78         OPS-109       Break Room / Kitchenette       512       1       512         OPS-110       Break Room / Kitchenette       512       1       512         OPS-111       Telecom Room       409       1       409         OPS-118       Switchgear Room       655       1       655         OPS-120       Men's Locker Room       128       1       128         OPS-121       Women's Locker Room       126       1       126         OPS-122       Storage       108       1       108         Operations Center Total Net Square Feet:       9,232         Building       RF-101       RF Cavity Room       9,756       1       9,756         RF 102       RF Test       426       1       426       426       426       1       426         RF Building Total Net Square Feet:       10,182         g Building       Storage       10,182       10,182       10,182	OPS-106	2nd Floor Toilet & Shower	76	2	152
OPS-109       Unisex Toilet       78       1       78         OPS-110       Break Room / Kitchenette       512       1       512         OPS-111       Telecom Room       409       1       409         OPS-118       Switchgear Room       655       1       655         OPS-120       Men's Locker Room       128       1       128         OPS-121       Women's Locker Room       126       1       126         OPS-122       Storage       108       1       108         Operations Center Total Net Square Feet:       9,232         Building         RF-101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426         RF Building Total Net Square Feet:       10,182         g Building       Integrations Center Square Feet:       10,182	OPS-107	Entrance Lobby & Vestibule	2,415	1	2,415
OPS-110       Break Room / Kitchenette       512       1       512         OPS-111       Telecom Room       409       1       409         OPS-118       Switchgear Room       655       1       655         OPS-120       Men's Locker Room       128       1       128         OPS-121       Women's Locker Room       126       1       126         OPS-122       Storage       108       1       108         Operations Center Total Net Square Feet:       9,232         Building       RF 101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426       426         RF Building Total Net Square Feet:       10,182         g Building       Storage       10,182       10,182	OPS-108	Bridge & Viewing Gallery	1,450	1	1,450
OPS-111       Telecom Room       409       1       409         OPS-118       Switchgear Room       655       1       655         OPS-120       Men's Locker Room       128       1       128         OPS-121       Women's Locker Room       126       1       126         OPS-122       Storage       108       1       108         Operations Center Total Net Square Feet:       9,232         Building       RF-101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426       426       1       426         RF Building Total Net Square Feet:       10,182       10	OPS-109	Unisex Toilet	78	1	78
OPS-118       Switchgear Room       655       1       655         OPS-120       Men's Locker Room       128       1       128         OPS-121       Women's Locker Room       126       1       126         OPS-122       Storage       108       1       108         Operations Center Total Net Square Feet:       9,232         Building       RF-101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426       1       426         RF Building Total Net Square Feet:       10,182         g Building       RF Building Total Net Square Feet:       10,182	OPS-110	Break Room / Kitchenette	512	1	512
OPS-120       Men's Locker Room       128       1       128         OPS-121       Women's Locker Room       126       1       126         OPS-122       Storage       108       1       108         Operations Center Total Net Square Feet:       9,232         Building       RF-101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426         RF Building Total Net Square Feet:       10,182         g Building       Image: State	OPS-111	Telecom Room	409	1	409
OPS-121Women's Locker Room1261126OPS-122Storage1081108Operations Center Total Net Square Feet:9,232BuildingRF Cavity Room9,75619,756RF-102RF Test4261426RF Building Total Net Square Feet:10,182g Building	OPS-118	Switchgear Room	655	1	655
OPS-122Storage1081108Operations Center Total Net Square Feet:9,232BuildingParticular Stream9,75619,756RF-101RF Cavity Room9,75619,756RF-102RF Test4261426RF Building Total Net Square Feet:10,182g BuildingStorageStorage1	OPS-120	Men's Locker Room	128	1	128
Operations Center Total Net Square Feet:       9,232         Building       9,756       1       9,756         RF-101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426         RF Building Total Net Square Feet:       10,182         g Building       1       1       1	OPS-121	Women's Locker Room	126	1	126
Building         RF-101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426         RF Building Total Net Square Feet: 10,182         g Building	OPS-122	Storage	108	1	108
RF-101       RF Cavity Room       9,756       1       9,756         RF-102       RF Test       426       1       426 <b>RF Building Total Net Square Feet:</b> 10,182         g Building		Operation	s Center Total Net Sq	uare Feet:	9,232
RF-102 RF Test 426 1 426 RF Building Total Net Square Feet: 10,182 g Building	F Building				
RF Building Total Net Square Feet: 10,182	RF-101	RF Cavity Room	9,756	1	9,756
g Building	RF-102	RF Test	426	1	426
		RF	Building Total Net Sq	uare Feet:	10,182
RB-101         Accelerator Tunnel         37,300         1         37,300	ng Building				
	RB-101	Accelerator Tunnel	37,300	1	37,300

Room #	Room Name	Room NSF	Qty	Total NSF
RB-102A	Experimental Hall	94,235	1	94,235
RB-102B	Access Corridor	33,018	1	33,018
RB-103	Tunnel Mezzanine	50,950	1	50,950
B-104	Loading Dock	2,060	1	2,060
RB-105	Hazardous Materials Storage	450	1	450
RB-106	Stock Room	1,618	1	1,618
RB-107	Grille	257	1	257
	uare Feet:	219,888		
rice Building	<u>s</u>			
SB-101	Service Building #1	9,626	1	9,626
SB-102	Service Building #2	9,626	1	9,626
SB-103	Service Building #3	9,626	1	9,626
SB-104	Service Building #4	9,626	1	9,626
SB-105	Service Building #5	9,626	1	9,626
	Service I	Buildings Total Net Sq	uare Feet:	48,130

Room Name:	Booste	r Ring Tunnel				Roo	oom Number:		BR-101	
Functional Area:	Injectio	n		Gro	ound Leve	l Spa	се Туре:		Accelerator	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT	House the Booster ring B Radiation shielding required for	6,688			Rooms Req			Total Net Sq ed for entry.	uare Feet
STRUCTURAL E Floor Live Load:	350	psf Floor Capacity Load	<u>p</u>	sf	Vibratio	n Requireme	ents: None			
Structural Notes:	Minimize	e differential settlement								
FINISHES: Walls:	Paint				Floors	:: <u>S</u>	ealed Conc	rete		
Ceilings: Finishes Notes:	Concre	ete			Clg. H	t. <u>9</u>	'-0"			_
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	NC	78         F +/-         1.8         F           50         RH +/-         10         RH           Neutral		ration I Crite	Criteria eria	30_ RH +/-   	<u>1.8</u> F <u>10</u> RH one one		ating ating	
<ul> <li>Storage Cabinet</li> <li>Casework</li> </ul>					_ Fume H _ Toxic / I	lood Hazardous M	laterials			
Special Requirements		Labyrinth entry required								
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordin	ary Hazard Group	Wet System	1:			Preaction S	Syste	m	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow		General Ext Heat Exhau				Chemin Smoke		xhaust: aust: _by AH	IU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Trench to have holding sump	to allow testi		loor / Tren or to disch			ain ai	round perimet	er
PROCESS PIPIN	IG:									
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>		Possible replacement for compr	resse ✓	Proc	ess Coolin	g Water - Cu g Water - Al	Cu / Al by	y ASI	)	
ELECTRICAL: Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Flue Dire	face Mount orescent ect v Voltage Switch			Power Outl No. 20 0 Clean Pow JPS: Emergency	Voltage 120 v er:	1 ph	Type Norn ng, lif		Location Wall
TELECOMMUNI         ✓       Phone / Voice         □       PA System         □       Gas Leak Detection         □       Liquid Leak Detection         Telecom Notes:       1		N AND SPECIAL SYSTEM	AS:		Data Conr Access Co CCTV: Fire Detec	ontrol:	HSSD			

Room Name:	Linac Room		Room Number:	BR-102
Functional Area:	Injection	Ground Level	Space Type:	Accelerator
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	House the Linac B	NSF x Roor	ns Reqd. = <b>1,715</b>	
STRUCTURAL I Floor Live Load:	DATA:         350         psf         Floor Capacity Load	psf Vibration Rec	quirements: None	
Structural Notes:	Minimize differential settlement	<b>I</b>		
FINISHES: Walls:	Paint	Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	Concrete	Clg. Ht.	9'-0"	
ROOM ENVIROI Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Positive         NOne         None         None			ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirement</li> </ul>		Fume Hood Toxic / Hazar	dous Materials	
FIRE PROTECT Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		General Exhaust: Heat Exhaust:	Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	ain	
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	IG:	<ul> <li>□ DI Water</li> <li>☑ Process Cooling Wat</li> <li>□ Process Cooling Wat</li> <li>□ Chemical Drain</li> </ul>		)
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	: Pendant Fluorescent Direct Low Voltage Switch 30		tage Phase Type 20 v <u>1 ph Norn</u> 	
Electrical Notes:				
TELECOMMUNI         ✓       Phone / Voice         ✓       PA System         □       Gas Leak Detection         □       Liquid Leak Detection         Telecom Notes:       Telecom Notes:		IS: ✓ Data Connection ✓ Access Control: CCTV: Fire Detection T		

Room Name:	Booster Service Buildin	ng - East			Roor	Room Number:		BR-103	
Functional Area:	Injection		Ground	Level	Spac	е Туре:		Accelerator	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		unctions for the Boos	5,102 NSF x ster Ring	_1_ Roo	oms Reqo	d. =6,	102	Total Net Squ	uare Feet
STRUCTURAL	ATA:								
Floor Live Load:	350 psf Floor	Capacity Load	psfV	ibration Re	equiremer	nts: None			
Structural Notes:									
FINISHES: Walls:	Paint		_	Floors:	Se	ealed Conc	rete		
Ceilings: Finishes Notes:	No Ceiling			Clg. Ht.					
<b>ROOM ENVIRO</b>	IMENT:								
Temperature Humidity Room Pressure Acoustic Noise Level	Neutral NC Per ACGIH TLVs	/- <u>10</u> RH Coo	-	30	F +/ RH +/ <u>Noi</u>	<u>10</u> RH ne	Hea Hea	-	
SPECIAL REQU	REMENTS:								
Storage Cabinet Casework Special Requirements									
FIRE PROTECT Hazard Classification Fire Protection Notes	Ordinary Hazard Group	o     ✔ Wet S	System:			Preaction \$	Syster	n	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	hirflow Recirculated		ral Exhaust: Exhaust:			Chemi Smoke		-	U
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			✔ Floor	/ Trench D	Prain	Provide fl	oor dr	ains to sanita	ry waste.
PROCESS PIPIN	G:								
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>				Cooling W					
ELECTRICAL:			Pow	er Outlets:					
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 30		Clea UPS	lo. Vo 0 1 0 n Power:	bltage 20 v	Phase 1 ph	Type Norm	al	Location Wall
	CATION AND SPECI								
<ul> <li>✓ Phone / Voice</li> <li>✓ PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>	n	AL STSIEMS:		a Connecti ess Contro FV: Detection	bl:				

Room Name:	Klystron Gallery			Roo	m Numbei	r: BR-104	
Functional Area:	Injection		Ground Lev	el <b>Spa</b> o	се Туре:	Accelerate	or
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		1, rons and support equipme	620 NSF x <u>1</u> nt for the Linac	_ Rooms Req	d. =,	620 Total Net S	Square Feet
STRUCTURAL D		oor Capacity Load	psf Vibrati	on Requireme	unte: Nono		
Structural Notes:							
FINISHES: Walls:	Paint		Floor	s: S	ealed Conci	rete	
Ceilings: Finishes Notes:	No Ceiling		Clg.	Ht. <u>1</u>	7'-0" clear		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQUI	NC Per ACGIH	RH +/- 10 RH Cooli	•	<u>30</u> RH +/N	<u>1</u> F <u>10</u> RH one	Heating Heating	
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>			Fume	Hood Hazardous M	laterials		
FIRE PROTECTION Hazard Classification: Fire Protection Notes:	Ordinary Hazard G	roup 🗹 Wet Sy	ystem:		Preaction S	System	
HVAC: Air Changes / Hr Recirc / Single Pass A HVAC Notes:	irflow Recirculat		al Exhaust:		Chemic Smoke	cal Exhaust: Exhaust:by /	AHU
PLUMBING: □ Domestic Water H, ✓ Eyewash / Safety S Plumbing Notes:			Floor / Tre	nch Drain			
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	G:		<ul> <li>□ DI Water</li> <li>✓ Process Cooli</li> <li>□ Process Cooli</li> <li>□ Chemical Drai</li> </ul>	ng Water - Al	Cu / Al by	/ ASD	
ELECTRICAL:			Power Ou	tlets:			
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Low Voltage Swi 30	ich	No. 0 Clean Pow UPS: Emergeno			Type Normal	Location Wall
TELECOMMUNIC	CATION AND SPI	ECIAL SYSTEMS:					
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detectio</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>	n		Access C	nections: control: ction Type:			

Room Name:	Booster S	ervice Building - V	Nest	Room Number:				er:	BR-105		
Functional Area:	Injection				Gro	und Leve	l Spa	се Туре:		Accelerator	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		upport functions an	d HVAC for	1,56 the Boc			Rooms Rec	ıd. =	1,568	Total Net Sq	uare Feet
STRUCTURAL I	DATA:										
Floor Live Load:	<u>350 pst</u>	f Floor Capa	city Load		psf	Vibratio	n Requireme	ents: Non	е		
Structural Notes:											
FINISHES: Walls:	Paint					Floors	: _	Sealed Con	crete		
Ceilings: Finishes Notes:	No Ceiling	)				Clg. H	t				
ROOM ENVIRO	NMENT:										
Temperature Humidity Room Pressure Acoustic Noise Level		75_F+/ 0_RH+/ er ACGIH TLVs	-			Criteria	72 F +/- 0 RH +/-			ating ating	
SPECIAL REQU	IREMENT	S:									
Storage Cabinet       Image: Fume Hood         Casework       Image: Toxic / Hazardous Materials         Special Requirements Notes:       Image: Toxic / Hazardous Materials											
FIRE PROTECT Hazard Classification Fire Protection Notes	n: Ordinary	Hazard Group	<b>⊻</b> v	Vet Syst	em:			Preaction	Syste	m	
HVAC: Air Changes / Hr Recirc / Single Pass HVAC Notes:	Air Changes / Hr       General Exhaust:       Chemical Exhaust:         Recirc / Single Pass Airflow       Recirculated       Heat Exhaust:       Smoke Exhaust:       by AHU										
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:					<b>F</b>	oor / Trend	ch Drain	Provide	floor d	rains to sanita	iry waste.
PROCESS PIPI	NG:										
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>					Proc	ess Cooling	g Water - Cu g Water - Al	·			
ELECTRICAL:					F	Power Outl	ets:				
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	Fluore: Direct				- - (	No. 0 0 Clean Powe JPS: Emergency	Voltage 120 v er:	Phase 1 ph	Type Norn		Location Wall
Electrical Notes:											
TELECOMMUNI Phone / Voice PA System Gas Leak Detecti Liquid Leak Detect Telecom Notes:	on	AND SPECIAL S	SYSTEM	S:		Data Conn Access Co CCTV: Fire Detec	ontrol:				

Room Name:	Private Office		Room Number:	LOB1-101				
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Office				
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Enclosed private office space B	110_ NSF x48_ Roor	ms Reqd. = <b>5,280</b>	Total Net Square Feet				
STRUCTURAL D Floor Live Load:	DATA: 100 psf Floor Capacity Load	psf Vibration Rec	quirements: None					
Structural Notes:								
FINISHES: Walls:	Painted Gypsum Board	Floors:	Carpet Tile					
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	9'-0"					
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Positive         35-40         10         RH	Cooling72 F Cooling30 R Vibration Criteria EMI Criteria		ating ating				
Storage Cabinet Casework Special Requirements		Fume Hood	rdous Materials					
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	Wet System:	Preaction Syste	m				
HVAC:         Air Changes / Hr       20 CFM/Person       General Exhaust:       Chemical Exhaust:         Recirc / Single Pass Airflow       Recirculated       Heat Exhaust:       Smoke Exhaust:       by AHU         HVAC Notes:       Smoke Exhaust:       Smoke Exhaust:       by AHU								
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	ain					
PROCESS PIPIN         Compressed Air         Nitrogen         Liquid Nitrogen         Other         Piping Notes:	IG: 	DI Water Process Cooling Wat Process Cooling Wat Process Cooling Wat Chemical Drain						
ELECTRICAL:		Power Outlets:						
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Recessed Troffer Fluorescent Direct Occupancy Sensor 30-50 (50 at work surface)		tage Phase Type 20 v <u>1 ph Norr</u> 					
TELECOMMUNI	CATION AND SPECIAL SYSTEM	IS:						
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		Data Connectio     Access Control:     CCTV:     Fire Detection T						

<b>ROOM DATA SHEET</b>	EET
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Room Name:	Open Offic	e Space				Roo	m Numbe	r:	LOB1-102	
Functional Area:	Lab Office	Buildings		Gr	ound Leve	Space	се Туре:		Office	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		ubicle space		<u>90</u> NS	F x <u>24</u>	Rooms Req	d. =	,160_	Total Net Squ	uare Feet
STRUCTURAL D				f			n (n. Ninger			
Floor Live Load: Structural Notes:	<u>100 psf</u>	Floor Capacity	y Load	psf	Vibratio	n Requireme	nts: None	)		
FINISHES: Walls:	Movable P	artition			Floors	: C	arpet Tile			
Ceilings: Finishes Notes:	No Ceiling			_	Clg. H	t. <u>1</u>	0'-0"			_
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	NC 35-	50 RH +/- 1 sitive 40	5 F Cooli 0 RH Cooli	ng	n Criteria		<u>5</u> F <u>10</u> RH one one		ating ating	
Storage Cabinet     Casework     Special Requirements	s Notes:			_	Fume H	ood Hazardous M	laterials			
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary	Hazard Group	✔ Wet Sy	stem:			Preaction	Syster	n	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		20 CFM/Person Recirculated		al Exhaus xhaust:	t:		Chemi		khaust: aust: by AH	U
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:					Floor / Trend	ch Drain				
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: 			Pro	Vater cess Cooling cess Cooling emical Drain	g Water - Cu g Water - Al				
ELECTRICAL:					Power Outle	ets:				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Fluores Direct Occupa	ed Troffer cent ancy Sensor 50 at work surface)			No. 3 O Clean Powe UPS: Emergency	Voltage 120 v er:	Phase 1 ph	Type Norm	nal	Location Wall
TELECOMMUNI	CATION A	ND SPECIAL SY	STEMS:							
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>					Data Conn Access Co CCTV: Fire Detec	ntrol:				

Room Name:	Laboratory - Wet		Room Number:	LOB1-103	
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Laboratory	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	General Purpose Wet Laborator	·	ooms Reqd. =960	Total Net Square Feet	
STRUCTURAL E	1		Requirements: <u>None</u>		
Structural Notes: FINISHES: Walls:	Epoxy Painted	Floors:	Linoleum Sheet		
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	12'-0"		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Nc         45-50         45-50         45-50	<b>.</b>		ating ating	
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>		✓ Fume Hoo ✓ Toxic / Ha Fume Hoods. One Hood per L	zardous Materials Fume	ical storage cabinet below. Hood cabinet	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	Wet System:	Preaction Syste	m	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass	General Exhaust: <u>Room Exha</u> Heat Exhaust: tration on exhaust. Secono to	Smoke Exh		
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench	Drain		
PROCESS PIPIN     ✓ Compressed Air     ✓ Nitrogen     Liquid Nitrogen     Other     Piping Notes:	IG: Lab Bench Lab Bench	<ul> <li>✓ DI Water</li> <li>✓ Process Cooling V</li> <li>✓ Process Cooling V</li> <li>✓ Chemical Drain</li> </ul>			
ELECTRICAL:		Power Outlets	s.		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	: Pendant Fluorescent Direct/Indirect Low Voltage Switch 50-75 (75 at work surface)		Voltage Phase Type 120 v 1 ph Norn 120 v 1 ph Norn	nal Wall	
Electrical Notes:					
TELECOMMUNI         ✓       Phone / Voice         □       PA System         □       Gas Leak Detection         □       Liquid Leak Detection         Telecom Notes:       1		S: ✓ Data Connec ✓ Access Cont CCTV: ✓ Fire Detectio	rol:	Smoke Detectors	

Room Name:	Laboratory - Dry	, R			m Number:	LOB1-103A	
Functional Area:	Lab Office Buildings		Ground Lev	el <b>Spa</b>	се Туре:	Laboratory	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	General Purpose B			_ Rooms Req	ıd. = <b>1,92</b> (	_ Total Net Square Feet	
STRUCTURAL D	ATA:	apacity Load		on Requireme	ents: None		
Structural Notes:							
FINISHES: Walls:	Paint		Floo	rs: L	inoleum Sheet		
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg.	Ht. <u>1</u>	2'-0"		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-           Negative         NC	5 F Coolin 10 RH Coolin	-	No		eating eating	
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	Notes:		Fume	Hood ′ Hazardous M	laterials		
FIRE PROTECTI Hazard Classification: Fire Protection Notes	Ordinary Hazard Group	✓ Wet Sys	stem:		Preaction Sys	tem	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	100 % Single Pass	✔ General	Exhaust: <u>Room E</u> haust:	xhaust	Chemical		
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			[] Floor / Tre	nch Drain			
PROCESS PIPIN     ✓ Compressed Air     ✓ Nitrogen     Liquid Nitrogen     Other     Piping Notes:	G: Lab Bench Lab Bench		DI Water Process Cooli Process Cooli Chemical Dra	ng Water - Al	·		
ELECTRICAL:			Power Ou	tlets:			
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct/Indirect Low Voltage Switch 50-75 (75 at work surf	ace)	No. 2 0 Clean Por UPS: Emergeno		<u> </u>	e Location rmal Wall rmal Raceway	
TELECOMMUNI	CATION AND SPECIA	L SYSTEMS:					
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			Access C	nnections: Control: ection Type:	Photoelectri	c Smoke Detectors	

Room Name:	Storage		Room Number:	LOB1-104
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Lab Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Storage for Laboratory Equipment B	<u>110</u> NSF x <u>1</u> Room	oms Reqd. =110	Total Net Square Feet
<b>STRUCTURAL D</b> Floor Live Load:	DATA:           125         psf           Floor Capacity Load		quirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Vinyl Tile	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F         Co           50         RH +/-         10         RH         Co           NC         40-45         Co         Co         Co	ooling <u>72</u> F ooling <u>30</u> F Vibration Criteria EMI Criteria		ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood Toxic / Hazar	rdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🗹 Wet	t System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		neral Exhaust: at Exhaust:	☐ Chemical E ✓ Smoke Exh	xhaust: aust:by AHU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dr	rain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:	DI Water Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 30	No. Vol	ltage Phase Type 20 v <u>1 ph Norn</u> 	
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		Data Connectio Access Control CCTV: Fire Detection 1	:	

Room Name:	Conference Room			Room Number:	LOB1-105
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Conference Room B	560	)_ NSF x _ 2_ Roo	ms Reqd. = <b>1,12(</b>	_ Total Net Square Feet
STRUCTURAL D	ATA: 100 psf Floor Capacity L	_oad	psf Vibration Re	quirements: None	
Structural Notes: FINISHES: Walls:	Wall Coverings		Floors:	Carpet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	10'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5           50         RH +/-         10           Nc         30         30	RH Cooling V	ibration Criteria MI Criteria		eating eating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	Notes:		<ul><li>Fume Hood</li><li>Toxic / Haza</li></ul>	rdous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes	Ordinary Hazard Group	✓ Wet Syste	m:	Preaction Sys	tem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	20 CFM/Person Airflow Recirculated	General E		Chemical ✓ Smoke E>	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			_ [] Floor / Trench Dr	rain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	G:		DI Water Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Recessed Troffer Fluorescent Direct/Indirect Occupancy Sensor 30		No. Vo		be Location rmal Wall
	CATION AND SPECIAL SYS	TEMQ			
Phone / Voice PA System Gas Leak Detection Liquid Leak Detect Telecom Notes:	n		Data Connectio Access Control CCTV: Fire Detection	:	

Room Name:	Conference Room		Room Number:	LOB1-105A
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Conference / Meeting Room B	220_ NSF x Roor	ms Reqd. =440	Total Net Square Feet
STRUCTURAL D Floor Live Load:	DATA:           100         psf         Floor Capacity Load	psf Vibration Rec	quirements: None	
Structural Notes:				
FINISHES: Walls:	Wall Coverings	Floors:	Carpet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	10'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Nc         30         30	Cooling <u>72</u> F Cooling <u>30</u> R Vibration Criteria EMI Criteria		ating ating
Storage Cabinet     Casework     Special Requirements	s Notes:	Fume Hood Toxic / Hazar	dous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass A HVAC Notes:	Nieflaus Designedete d	General Exhaust: Heat Exhaust:	Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety = Plumbing Notes:		Floor / Trench Dra	ain	
PROCESS PIPIN	IG:			
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:		DI Water  Process Cooling Wat  Process Cooling Wat  Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Recessed Troffer Fluorescent Direct/Indirect Occupancy Sensor 30	No. Vol	tage Phase Type 20 v <u>1 ph Norr</u> 	
TELECOMMUNIC         ✓         Phone / Voice         PA System         Gas Leak Detection         Liquid Leak Detect         Telecom Notes:		S: Data Connectio Access Control: CCTV: Fire Detection T		

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ĸ	O	U	IVI	υ	Α	IA	S	Η	E	E	

Room Name:	Lobby & Interaction Space		Room Number:	LOB1-106
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: LOB Entrance B	<u>150_</u> NSF x4_ Room	ns Reqd. =600	Total Net Square Feet
<b>STRUCTURAL </b> Floor Live Load:	DATA:	psfVibration Requ	uirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Carpet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile Lobby floors to be ceramic tile.	Clg. Ht.	12'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Positive         40-45         10         RH	Cooling <u>72</u> F Cooling <u>30</u> RH Vibration Criteria EMI Criteria		ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood Toxic / Hazard	lous Materials	
FIRE PROTECT Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	A influence Descionante de la Companya de la Compan	General Exhaust: Heat Exhaust:	Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	in	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:	DI Water Process Cooling Wate Process Cooling Wate Cooling Wate Cooling Wate		
ELECTRICAL: Lighting Fixture Type	Recessed Troffer	Power Outlets: No. Volta	0 ,1	
Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Direct Occupancy Sensor 30	0       Clean Power:       UPS:       Emergency Powe		тки <u>VVdII</u>
TELECOMMUNI         ✓       Phone / Voice         ✓       PA System         Gas Leak Detection         Liquid Leak Detector         Telecom Notes:		IS:		

Room Name:	Break Room / Kitchen		Room Number:	LOB1-107
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Seating and space for refrigerator, m B	_240_ NSF x _ 2_ Roor icrowave, sink	ns Reqd. = <b>480</b>	Total Net Square Feet
STRUCTURAL D Floor Live Load:	100     psf     Floor Capacity Load	psfVibration Rec	quirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Linoleum Sheet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	10'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F         Coordinate           50         RH +/-         10         RH         Coordinate           NC         40	-		ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	Notes:	Fume Hood Toxic / Hazar	dous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group Vet S	System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass A HVAC Notes:		ral Exhaust: Exhaust:	Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety H Plumbing Notes:		✓ Floor / Trench Dra	ain Provide floor d	rains to sanitary waste.
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:	DI Water Process Cooling Wat Process Cooling Wat Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC):	Recessed Troffer Fluorescent Direct Occupancy Sensor 30	No. Vol 7 12 0 Clean Power: UPS:	tage Phase Type 20 v <u>1 ph Norr</u>	
Ground: Electrical Notes:		Emergency Pow	er:	
▼ Phone / Voice         ▼ PA System         □ Gas Leak Detection         □ Liquid Leak Detect         Telecom Notes:		<ul> <li>Data Connectio</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection T</li> </ul>		

Room Name:	Ship-Receive & Storage		Room Number:	LOB1-108			
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Building Support			
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		<u>960</u> NSF x <u>1</u> Rooms Reqd. = <u>960</u> Total Net Square F Shipping / Receiving loading platform and storage. B 					
STRUCTURAL E	DATA: 125 psf Floor Capacity Load	psf Vibration Req	uirements: None				
Structural Notes:							
FINISHES: Walls:	Paint	Floors:	Sealed Concrete				
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.					
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU Storage Cabinet Casework	75     F +/-     5     F     Cool       50     RH +/-     10     RH     Cool       NC     45-50	ling 30 R Vibration Criteria EMI Criteria		ating ating			
Special Requirements							
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🗹 Wet S	ystem:	Preaction Syste	m			
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		al Exhaust: Exhaust:	☐ Chemical E ✓ Smoke Exh				
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	in				
PROCESS PIPIN         ✓ Compressed Air         ○ Nitrogen         ✓ Liquid Nitrogen         ○ Other         Piping Notes:	to Dewar fill station.	<ul> <li>DI Water</li> <li>Process Cooling Wate</li> <li>Process Cooling Wate</li> <li>Chemical Drain</li> </ul>					
ELECTRICAL:		Power Outlets:					
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 30	No. Volt	0 v 1 ph Norr				
TELECOMMUNI ✓ Phone / Voice ✓ PA System	CATION AND SPECIAL SYSTEMS:	<ul> <li>Data Connectior</li> <li>Access Control:</li> </ul>	ns:				
Gas Leak Detection Liquid Leak Detection Telecom Notes:		<ul> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type</li> </ul>	ype:				

Room Name:	Toilet / Shower			Room Number:	LOB1-109
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Restroom & shower B	25	0_ NSF x _ 2_ Roo	oms Reqd. =500	_ Total Net Square Feet
STRUCTURAL E	DATA: 100 psf Floor Capacity L	₋oad	psf Vibration Re	equirements: None	
Structural Notes:			·	-	
FINISHES: Walls:	Paint		Floors:	Vinyl Tile	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	F +/-           RH +/-           NC	RH Cooling			leating leating
Storage Cabinet Casework Special Requirements			<ul> <li>Fume Hood</li> <li>Toxic / Haza</li> </ul>	ardous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet Syste	em:	Preaction System	tem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass	✓ General E ☐ Heat Exh		Chemical ✓ Smoke Ex	Exhaust:
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			_ ✔ Floor / Trench D	Drain Provide floor	drains to sanitary waste.
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:		DI Water Process Cooling W Process Cooling W Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Surface Mount Fluorescent Direct Occupancy Sensor 15				be Location rmal Wall
TELECOMMUNI         Phone / Voice         PA System         Gas Leak Detection         Liquid Leak Detector         Telecom Notes:		TEMS:	<ul> <li>Data Connecti</li> <li>Access Contro</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	bl:	

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	-	-					-			_	

Room Name:	Electrical / Data			Room Number:	LOB1-110
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	<u>B</u>		153_NSF xRoc	oms Reqd. = <b>15</b>	3 Total Net Square Feet
STRUCTURAL D	DATA:				
Floor Live Load:	125 psf Floor Ca	bacity Load	Vibration Re	quirements: None	
Structural Notes:					
FINISHES: Walls:	Movable Partition		Floors:	Sealed Concret	e
Ceilings:	No Ceiling		Clg. Ht.		
Finishes Notes:					
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-           Neutral         NC	<u>5</u> F Coolin <u>10</u> RH Coolin	-		leating leating
Storage Cabinet			Fume Hood		
				ardous Materials	
Special Requirements	s Notes:				
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	✔ Wet Sy	stem:	Preaction Sys	stem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated	Genera	I Exhaust: khaust:	Chemical	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			Floor / Trench D	rain	
PROCESS PIPIN	G:				
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:			<ul> <li>DI Water</li> <li>Process Cooling Water</li> <li>Process Cooling Water</li> <li>Chemical Drain</li> </ul>		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	Pendant Fluorescent Direct Occupancy Sensor 30		No. Vo		pe Location prmal Wall
Electrical Notes:			Emorgeney 1 0v		
	CATION AND SPECIAL	SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			<ul> <li>Data Connection</li> <li>Access Contro</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	l:	

Room Name:	Janitor Closet		Room Number:	LOB1-111
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Maintenance space B	63_NSF x1_Roo	ms Reqd. =63	_ Total Net Square Feet
STRUCTURAL I Floor Live Load:	DATA: 100 psf Floor Capacity Load	psf Vibration Re	quirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	8'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	0         F +/-         0         F           0         RH +/-         0         RH           NC         None			ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood	rdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	A: # D	General Exhaust: Heat Exhaust:	└── Chemical E	-
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Di	rain Provide floor d	rains to sanitary waste.
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: 	DI Water  Process Cooling Wa  Process Cooling Wa  Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 15	No. Vo	Ver:	
▼ Phone / Voice         □ PA System         □ Gas Leak Detection         □ Liquid Leak Detection         Telecom Notes:		S: Data Connection Access Control CCTV: Fire Detection	: 	

Room Name:	Access Corridor Interface	Roo	m Number:	LOB1-112
Functional Area:	Lab Office Buildings	Ground Level Space	се Туре:	Circulation
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT:2,090 Extension of the Access Corridor into LOB B	NSF x <u>1</u> Rooms Req	d. = <b>2,090</b>	Total Net Square Feet
STRUCTURAL D	DATA:			
Floor Live Load:	125 psf Floor Capacity Load p	sf Vibration Requireme	ents: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors: S	ealed Concrete	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         1         F         Cooling           50         RH +/-         10         RH         Cooling         Cooling           Positive         Vib         S5 or Better         EM	ation Criteria		ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	<ul> <li>Fume Hood</li> <li>Toxic / Hazardous M</li> </ul>	laterials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🗹 Wet System	n: 🗆	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated Heat Exhau		☐ Chemical E ✔ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Eloor / Trench Drain		
PROCESS PIPIN	IG:			
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:		DI Water Process Cooling Water - Cu Process Cooling Water - Al Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type:	Fluorescent	No. Voltage	Phase Type 1 ph Norr	
Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Direct Low Voltage Switch 50	Clean Power: UPS: Emergency Power:		
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		<ul> <li>Data Connections:</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>		

Room Name:	Machine Shop			Room Number:	LOB1-113
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Lab Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Machine shop B	2	70_ NSF x _ 1_ Roo	ms Reqd. =270	_ Total Net Square Feet
STRUCTURAL E		acity Load	psf Vibration Re	quirements: None	
Structural Notes:		p-		-	
FINISHES: Walls:	Paint		Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	12'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-           Negative           NC         Per ACGIH TLVs		-		eating eating
Storage Cabinet Casework Special Requirements			Fume Hood	rdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet Sys	tem:	Preaction Syst	em
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	20 CFM/Person Airflow Recirculated	General	-	☐ Chemical ✓ Smoke Ex	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			Floor / Trench Di	rain	
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	IG: 		DI Water  Process Cooling Wa  Process Cooling Wa  Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 50-75				e Location mal Wall
TELECOMMUNI	CATION AND SPECIAL	SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>	 		<ul> <li>Data Connection</li> <li>Access Control</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	:	

Room Name:	LOB #4	l Shell		Room Number:	LOB4-101
Functional Area:	Lab Off	fice Buildings	Ground Level	Space Type:	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT	Shelled space for future build-ou		ooms Reqd. = <b>16,146</b>	_ Total Net Square Feet
<b>STRUCTURAL I</b> Floor Live Load:		psf Floor Capacity Load	_psfVibration R	Requirements:	
Structural Notes:					
FINISHES: Walls:			Floors:	Concrete	
Ceilings: Finishes Notes:	No Ceil Unfinisl	ling hed space	Clg. Ht.		
<b>ROOM ENVIRO</b>	NMENT:	:			
Temperature Humidity Room Pressure Acoustic Noise Level					eating eating
SPECIAL REQU	IREMEN	NTS:			
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirement</li> </ul>	s Notes:		Fume Hood	d zardous Materials	
FIRE PROTECT Hazard Classification Fire Protection Notes	: Ordina	ary Hazard Group	Vet System:	Preaction Syste	em
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow		General Exhaust:	Chemical E	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Stub up for future plumbing in la	Floor / Trench I	Drain	
PROCESS PIPIN	NG:				
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:		Process piping to be added when	DI Water     DI Water     Process Cooling W     Process Cooling W     Chemical Drain     space fit-up		
ELECTRICAL:			Power Outlets		
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching:	Fluc Dire	ndant prescent ect cupancy Sensor		<u>-</u> /oltage Phase Type 	Execution
Lighting Level (FC): Ground:	<10		UPS: Emergency Po	ower:	
Electrical Notes:	Exit	t lights and minimal lighting in space	ce.		
	CATION	NAND SPECIAL SYSTEMS	S:		
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detection</li> </ul>	on	emporary speakers	Data Connect     Access Contr     CCTV:     Fire Detection	rol:	

Room Name:	Private Office		Room Number:	LOB5-101
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Office
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Enclosed private office space B	<u>110</u> NSF x <u>48</u> Rooi	ms Reqd. = <b>5,280</b>	Total Net Square Feet
STRUCTURAL D	DATA: 100 psf Floor Capacity Load	psf Vibration Red	quirements: None	
Structural Notes:		<b>i</b>		
FINISHES: Walls:	Painted Gypsum Board	Floors:	Carpet Tile	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Positive         35-40         10         RH			ating ating
Storage Cabinet Casework Special Requirements		Fume Hood Toxic / Hazar	rdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	20 CFM/Person     Image: CFM/Person       Airflow     Recirculated     Image: CFM/Person	General Exhaust: Heat Exhaust:	Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dr.	ain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:	DI Water Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Recessed Troffer Fluorescent Direct Occupancy Sensor 30-50 (50 at work surface)		tage Phase Type 20 v <u>1 ph Norn</u> 	
TELECOMMUNI	CATION AND SPECIAL SYSTEM	MS:		
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		Data Connectio     Access Control:     CCTV:     Fire Detection T		

Room Name:	Flexible Office Space	Roo	m Number:	LOB5-102
Functional Area:	Lab Office Buildings	Ground Level Space	се Туре:	Office
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Cubicle space B	90 NSF x 24 Rooms Req	d. = <b>2,160</b>	Total Net Square Feet
STRUCTURAL D	DATA: 100 psf Floor Capacity Load	psf Vibration Requireme	ents: None	
Structural Notes:				
FINISHES: Walls:	Movable Partition	Floors: C	arpet Tile	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht1	0'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level	75         F +/-         5         F         Co           50         RH +/-         10         RH         Co           Positive         35-40         Co         Co         Co	boling <u>72</u> F +/- boling <u>30</u> RH +/- Vibration Criteria EMI Criteria		ating ating
SPECIAL REQU		Fume Hood Toxic / Hazardous M	laterials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass # HVAC Notes:		eral Exhaust: t Exhaust:	<ul><li>☐ Chemical E</li><li>✓ Smoke Exh</li></ul>	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Drain		
PROCESS PIPIN         Compressed Air         Nitrogen         Liquid Nitrogen         Other         Piping Notes:	IG:	DI Water Process Cooling Water - Cu Process Cooling Water - Al Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction:	Recessed Troffer Fluorescent Direct	No. Voltage	Phase Type 1 ph Norn	
Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Occupancy Sensor 30-50 (50 at work surface)	Clean Power: UPS: Emergency Power:		
TELECOMMUNIO         ✓       Phone / Voice         □       PA System         □       Gas Leak Detection         □       Liquid Leak Detection         Telecom Notes:       Page 100 - 2		<ul> <li>Data Connections:</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>	Photoelectric	Smoke Detectors

Room Name:	Laboratory - Wet			Room Number:	LOB5-103
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Laboratory
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: General Purpose V B	/et Laboratory	_ NSF x _ 2 _ Roo	oms Reqd. =96	D_ Total Net Square Feet
<b>STRUCTURAL E</b> Floor Live Load:		pacity Load	psf Vibration Re	equirements: <u>None</u>	
Structural Notes:					
FINISHES: Walls:	Epoxy Painted		Floors:	Linoleum Sheet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	12'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-           Negative           NC         45-50	10 RH Cooling Vi			leating leating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	·	OB require Fume Hoo			emical storage cabinet below ne Hood cabinet n
FIRE PROTECTI Hazard Classification Fire Protection Notes	ON: Ordinary Hazard Group	✔ Wet System	m:	Preaction Sys	tem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	-	Heat Exha		Smoke Ex	Exhaust: Fume Hood haust: by AHU PA filtration in the iuture.
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			_ [] Floor / Trench D	rain	
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>✓ Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	G: Lab Bench Lab Bench		DI Water Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct/Indirect Low Voltage Switch 50-75 (75 at work surfac	e)	21	20 v 1 ph No	be Location rmal Wall rmal Raceway
TELECOMMUNI	CATION AND SPECIAL	SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>	n		<ul> <li>Data Connection</li> <li>Access Control</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	l:	c Smoke Detectors

Room Name:	Laboratory - Dry		Room Number:	LOB5-103A
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Laboratory
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: General Purpose Dry laboratory B	480NSF x4Roor	ms Reqd. = <b>1,920</b>	Total Net Square Feet
STRUCTURAL E	DATA:         350 psf         Floor Capacity Load	psf Vibration Rec	quirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Linoleum Sheet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	12'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Negative         45-50	-		ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood Toxic / Hazar	dous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🗹 V	Vet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		General Exhaust: Room Exhaust leat Exhaust:	t Chemical E ✔ Smoke Exh	
PLUMBING: ☐ Domestic Water H ✓ Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	ain	
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>✓ Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	IG: Lab Bench Lab Bench	DI Water Process Cooling Wat Process Cooling Wat Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct/Indirect Low Voltage Switch 50-75 (75 at work surface)	212	tage Phase Type 20 v <u>1 ph Norr</u> 20 v <u>1 ph Norr</u> er:	nal Wall
	CATION AND SPECIAL SYSTEMS	S:		
Phone / Voice PA System Gas Leak Detection Liquid Leak Detection Telecom Notes:		Data Connection CCTV: Fire Detection T		

Room Name:	Storage		Room Number:	LOB5-104
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Lab Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Storage for Laboratory Equipr	<u>110</u> NSF x <u>1</u> Roo nent	oms Reqd. =110	Total Net Square Feet
<b>STRUCTURAL E</b> Floor Live Load:	DATA: <u>125 psf</u> Floor Capacity Load	psfVibration Re	quirements: None	
Structural Notes:				
FINISHES: Walls:	Painted Gypsum Board	Floors:	Vinyl Tile	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Negative         40-45         10         RH			ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood Toxic / Haza	rdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated	General Exhaust: Heat Exhaust:	☐ Chemical E ✓ Smoke Exh	xhaust: aust:by AHU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dr	rain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: 	DI Water Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 30	No. Vo	ver:	
TELECOMMUNI	CATION AND SPECIAL SYSTE	MS:		
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		Data Connection     Access Control     CCTV:     Fire Detection	:	

Room Name:	Conference Room			Room Number:	LOB5-105
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Conference Room B	560	0_ NSF x _ 2_ Roo	ms Reqd. = <b>1,120</b>	_ Total Net Square Feet
STRUCTURAL D Floor Live Load:		ty Load	psf Vibration Re	quirements: None	
Structural Notes:					
FINISHES: Walls:	Wall Coverings		Floors:	Carpet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	10-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-           Neutral	10 RH Cooling V			eating eating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	Notes:		Fume Hood Toxic / Haza	rdous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	✓ Wet Syste	em:	Preaction System	em
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	20 CFM/Person Recirculated	General E	-	Chemical E	
PLUMBING: Domestic Water H Eyewash / Safety H Plumbing Notes:			_ [] Floor / Trench Di 	rain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	G:		DI Water Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC):	Recessed Troffer Fluorescent Direct/Indirect Occupancy Sensor 30		4 1: 0 Clean Power: UPS:	Itage Phase Typ 20 v 1 ph Nor	
Ground: Electrical Notes:			Emergency Pow		
		(STEMS:	<ul> <li>✓ Data Connectio</li> <li>△ Access Control</li> <li>○ CCTV:</li> <li>○ Fire Detection <sup>-</sup></li> </ul>	:	

Room Name:	Conference Room		Room Number:	LOB5-105A
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Conference / Meeting Room B	220_NSF xRoom	ms Reqd. =440	Total Net Square Feet
<b>STRUCTURAL D</b> Floor Live Load:	PATA:         Image: Floor Capacity Load	psfVibration Red	quirements: None	
Structural Notes:				
FINISHES: Walls:	Wall Coverings	Floors:	Carpet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	10'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         RH           Nc         30         30         30			ating ating
Storage Cabinet Casework Special Requirements	Notes:	Fume Hood Toxic / Hazar	rdous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass # HVAC Notes:		General Exhaust:	Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dr	ain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	G:	DI Water Process Cooling Wa Process Cooling Wa Cooling Wa Cooling Wa		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	Recessed Troffer Fluorescent Direct/Indirect Occupancy Sensor 30	No. Vo	Itage         Phase         Type           20 v         1 ph         Norm	
Electrical Notes:				
TELECOMMUNI     Phone / Voice     PA System     Gas Leak Detectic     Liquid Leak Detect     Telecom Notes:		IS:	:	

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Room Name:	Lobby & Interaction Space		Room Number:	LOB5-106
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: LOB Entrance B	<u>150</u> _NSF x4_ Roo	oms Reqd. =600	Total Net Square Feet
STRUCTURAL I Floor Live Load:	DATA: 100 psf Floor Capacity Lo	ad psf Vibration Re	quirements: None	
Structural Notes:	P	·		
FINISHES: Walls:	Paint	Floors:	Carpet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	12'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         F           Positive         40-45         F         F	<b>o</b>		ating ating
Storage Cabinet Casework Special Requirement		Fume Hood Toxic / Haza	Irdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	20 CFM/Person Airflow Recirculated	General Exhaust:	☐ Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dr	rain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: 	DI Water  Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type Lighting Lamp Type:	Fluorescent	No. Vo	ltage Phase Type 20 v <u>1 ph Norn</u>	
Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Direct Occupancy Sensor 30	0 Clean Power: UPS: Emergency Pow	ver:	
TELECOMMUNI         ✓       Phone / Voice         ✓       PA System         □       Gas Leak Detection         □       Liquid Leak Detection         Telecom Notes:       Telecom Notes:		EMS:	: 	

Room Name:	Break Room / Kitchen		Room Number:	LOB5-107
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Interaction Area
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Seating and space for refrigerator, r B	240 NSF x 2 Roo nicrowave, sink	ms Reqd. = <b>480</b>	Total Net Square Feet
STRUCTURAL D	DATA:       100     psf       Floor Capacity Load	psfVibration Red	quirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Linoleum Sheet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	10'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F         Co           50         RH +/-         10         RH         Co           Nc         40	-		ating ating
Storage Cabinet Casework Special Requirements		Fume Hood     Toxic / Haza	rdous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass # HVAC Notes:		eral Exhaust: t Exhaust:	Chemical E ✔ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dr	rain Provide floor d	rains to sanitary waste.
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:	DI Water Process Cooling Wa Process Cooling Wa Crocess Cooling Wa Crocess Cooling Wa		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	Recessed Troffer Fluorescent Direct Occupancy Sensor 30	-	Itage Phase Type 20 v <u>1 ph Norr</u> 	
Electrical Notes:				
<ul> <li>▼ Phone / Voice</li> <li>▼ PA System</li> <li>□ Gas Leak Detection</li> <li>□ Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		<ul> <li>✓ Data Connectio</li> <li>△ Access Control</li> <li>○ CCTV:</li> <li>○ Fire Detection 1</li> </ul>	:	

Room Name:	Ship-Receive & Storage		Room Number:	LOB5-108
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Shipping / Receiving loading platfo	<u>960</u> NSF x <u>1</u> Roor orm and storage.	ms Reqd. = <b>960</b>	Total Net Square Feet
STRUCTURAL I				
Floor Live Load:	125 psf Floor Capacity Load	psfVibration Rec	quirements: None	
Structural Notes: FINISHES: Walls:	- Paint	Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.		
ROOM ENVIROI Temperature Humidity Room Pressure Acoustic Noise Level	75         F +/-         5         F         C           50         RH +/-         10         RH         C           Positive         45-50         10         RH         C			ating ating
SPECIAL REQU  Storage Cabinet  Casework  Special Requirement	s Notes:	Fume Hood Toxic / Hazar	rdous Materials	
FIRE PROTECT Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	et System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Al-dama Desired at a d	eneral Exhaust: at Exhaust:	Chemical E ✓ Smoke Exh	-
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	ain	
PROCESS PIPIN     ✓ Compressed Air     Nitrogen     ✓ Liquid Nitrogen     Other     Piping Notes:	to Dewar fill station.	DI Water Process Cooling Wat Process Cooling Wat Cooling Wat Cooling Wat Cooling Wat		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 30	No. Vol	tage Phase Type 20 v <u>1 ph Norr</u> 	
▼ Phone / Voice         ▼ Phone / Voice         ▼ PA System         □ Gas Leak Detection         □ Liquid Leak Detector         Telecom Notes:		Data Connectio     ✓ Access Control:     CCTV:     Fire Detection T		

Room Name:	Toilet / Shower			Room Number:	LOB5-109
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Restroom & shower B	250	0_ NSF x _ 2_ Roc	oms Reqd. = <b>500</b>	_ Total Net Square Feet
STRUCTURAL E Floor Live Load:	DATA: 100 psf Floor Capacity L	oad	psf Vibration Re	quirements: None	
Structural Notes:					
FINISHES: Walls:	Paint		Floors:	Vinyl Tile	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	0         F +/-         0           0         RH +/-         0           NC         40	RH Cooling			eating eating
Storage Cabinet Casework Special Requirements			Fume Hood     Toxic / Haza	ardous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group	✓ Wet Syste	em:	Preaction System	em
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass	✓ General E Heat Exhance		☐ Chemical E	Exhaust: haust:by AHU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			_ ✔ Floor / Trench D	rain Provide floor o	drains to sanitary waste.
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:		DI Water Process Cooling Wa Process Cooling Wa Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Surface Mount Fluorescent Direct Occupancy Sensor 15			oltage         Phase         Typ           20 v         1 ph         Nor	
TELECOMMUNI	CATION AND SPECIAL SYST	TEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			<ul> <li>Data Connection</li> <li>Access Contro</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	I:	

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Room Name:	Electrical / Data			Room Number:	LOB5-110
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: 	1	53_NSF x _ 1_ Roo	oms Reqd. = <b>15</b> 3	3_ Total Net Square Feet
STRUCTURAL D	DATA:				
Floor Live Load:	125 psf Floor Ca	apacity Load	vibration Re	equirements: None	
Structural Notes:					
FINISHES: Walls:	Paint		Floors:	Sealed Concrete	9
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-           Neutral         NC	5 F Coolin 10 RH Coolin			leating leating
Storage Cabinet     Casework     Special Requirements	Notes:		Fume Hood Toxic / Haza	ardous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	✓ Wet Sys	stem:	Preaction Sys	tem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated	General	Exhaust: haust:	Chemical Smoke Ex	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			Floor / Trench D	rain	
PROCESS PIPIN	G:				
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:			<ul> <li>DI Water</li> <li>Process Cooling Water</li> <li>Process Cooling Water</li> <li>Chemical Drain</li> </ul>		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 30		No. Vo		be Location rmal Wall
TELECOMMUNI	CATION AND SPECIA	L SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			<ul> <li>Data Connecti</li> <li>Access Contro</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	l:	

Room Name:	Janitor Closet			Room Number:	LOB5-111
Functional Area:	Lab Office Buildings		Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Maintenance space B	(	3 <u>8 NSF x 1</u> Roo	ms Reqd. =63	Total Net Square Feet
STRUCTURAL D	DATA:				
Floor Live Load:	100 psf Floor Capacity	y Load	psf Vibration Re	quirements: None	
Structural Notes:					
FINISHES: Walls:	Paint		Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	8'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	0         F +/-           0         RH +/-           NC         None	0 RH Cooling			eating eating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:		Fume Hood	rdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group	✔ Wet Sys	iem:	Preaction Syst	iem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass			Chemical ✓ Smoke Ex	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			✔ Floor / Trench Dr 	rain Provide floor	drains to sanitary waste.
PROCESS PIPIN	IG:				
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:			DI Water Process Cooling Wa Process Cooling Wa Control Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 15		No. Vo		e Location rmal Wall
TELECOMMUNI	CATION AND SPECIAL SY	STEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			Data Connection Access Control CCTV: Fire Detection	:	

Room Name:	Access Corridor Interface	Roor	n Number:	LOB5-112		
Functional Area:	Lab Office Buildings	Ground Level Space	е Туре:	Circulation		
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: 2,090 Extension of the Access Corridor into LOB 	NSF x <u>1</u> Rooms Reqo	d. = <b>2,090</b>	Total Net Square Feet		
STRUCTURAL D						
Floor Live Load:	<u>125 psf</u> Floor Capacity Load <u>F</u>	Vibration Requiremen	nts: None			
Structural Notes: FINISHES: Walls:		Floors:				
Ceilings: Finishes Notes:		Clg. Ht.				
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         1         F         Cooling           50         RH +/-         10         RH         Cooling           Positive         Vib         Vib         Vib           NC         55 or Better         EM	72 F +/ 30 RH +/ oration Criteria Il Criteria		ating ating		
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>		Fume Hood Toxic / Hazardous Ma	aterials			
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🔽 Wet System	n: 🗌	Preaction Syste	m		
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow       Recirculated       Heat Exhaust:       Image: Chemical Exhaust:       Image: Dynamical Exhaust:         Airflow       Recirculated       Image: Heat Exhaust:       Image: Dynamical Exhaust:       Image: Dynamical Exhaust:					
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		☐ Floor / Trench Drain				
PROCESS PIPIN	IG:					
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>		DI Water Process Cooling Water - Cu Process Cooling Water - Al Chemical Drain				
ELECTRICAL:		Power Outlets:				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction:	: Pendant Fluorescent Direct	No. Voltage	Phase Type 1 ph Norr			
Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Low Voltage Switch 50	Clean Power: UPS: Emergency Power:				
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:					
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>	on	<ul> <li>Data Connections:</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>				

Room Name:	Machine Shop		Room Number:	LOB5-113
Functional Area:	Lab Office Buildings	Ground Level	Space Type:	Lab Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Machine shop B	270_NSF x1_ Room	ms Reqd. =270	_ Total Net Square Feet
STRUCTURAL E	DATA: 125 psf Floor Capacity Loa	ad psf Vibration Red	quirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	12'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         R           Negative         NC         Per ACGIH TLVs         10	•		ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood	rdous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet System:	Preaction Syste	9m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		General Exhaust: Heat Exhaust:	Chemical E ✓ Smoke Exh	
PLUMBING: ☐ Domestic Water H ✓ Eyewash / Safety Plumbing Notes:		Floor / Trench Dr	ain	
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	IG: 	DI Water  Process Cooling Wa  Process Cooling Wa  Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 50-75		tage Phase Type 20 v <u>1 ph Norr</u> 	
TELECOMMUNI	CATION AND SPECIAL SYSTE	EMS:		
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		Data Connectio Control CCTV: Fire Detection		

Room Name:	Control Conference Room		Room Number:	OPS-103		
Functional Area:	Operations Center	Level 2	Space Type:	Laboratory		
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Meeting space for control room operators B		s Reqd. = 676	_ Total Net Square Feet		
STRUCTURAL D	DATA:					
Floor Live Load:	100 psf Floor Capacity Load	psf Vibration Requi	irements: None			
Structural Notes:						
FINISHES: Walls:	Wall Coverings	Floors:	Carpet Tile			
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	9'-0"			
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F         Cooling           50         RH +/-         10         RH         Cooling           Positive         V         V         K         K         K         K           NC         30         E         K	72_F+ 30_RH ibration Criteria MI Criteria		ating ating		
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood Toxic / Hazardo	ous Materials			
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group 🗹 Wet Syste	em:	Preaction Syste	m		
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:						
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		_ [] Floor / Trench Drair 	n			
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: [ [ [ [	DI Water Process Cooling Water Process Cooling Water Chemical Drain				
ELECTRICAL:		Power Outlets:				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Recessed Troffer Fluorescent Direct/Indirect Occupancy Sensor 30	No. Volta 4 120 0 Clean Power: UPS: Emergency Power	v 1 ph Norr			
	CATION AND SPECIAL SYSTEMS:					
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		<ul> <li>Data Connections</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type</li> </ul>				

Room Name:	Control Room			Roor	n Numbe	r: (	OPS-104	
Functional Area:	Operations Center		Level 2	Spac	е Туре:	A	Accelerator	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: House control panels f		NSF x <u>1</u> R	Rooms Requ	d. = <b>1</b> ,	<b>,547</b> _⊺	Րotal Net Squ	are Feet
STRUCTURAL D	ATA:							
Floor Live Load:	100 psf Floor Capaci	ty Load psf	Vibration	Requireme	nts: None	1		
Structural Notes:								
FINISHES: Walls:	Paint		Floors:	Ra	aised Floor			
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	9'-	-0"			_
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-           Positive           NC         35-40			2_ F +/ RH +/ <u>No</u>	ne	Heati Heati	0	
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	Notes:		Fume Hoo Toxic / Ha	od azardous Ma	aterials			
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	✓ Wet System:			Preaction \$	System		
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	20 CFM/Person Airflow Recirculated							U
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			] Floor / Trench	Drain				
PROCESS PIPIN	G:							
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>			DI Water Process Cooling Process Cooling Chemical Drain					
ELECTRICAL:			Power Outlet	<u>s:</u>				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction:	Recessed Troffer Fluorescent Indirect			Voltage 120 v 120 v	Phase 1 1 ph	Type Norma Emerg		Location Wall Floor
Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Low Voltage Switch 30-50		Clean Power UPS: Emergency P	:	30 k∖	/A for C		nputer Rooms
TELECOMMUNIC         ✓       Phone / Voice         ✓       PA System         Gas Leak Detection         Liquid Leak Detect         Telecom Notes:		/STEMS:	<ul> <li>Data Conne</li> <li>Access Cont</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	trol:				

Room Name:	Computer Room		Roc	om Number:	OPS-105			
Functional Area:	Operations Center	Groun	d Level Spa	се Туре:	Building Support			
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		976_ NSF x orage ring control and monit	1 Rooms Rec oring	qd. = <b>976</b>	_ Total Net Square Feet			
STRUCTURAL	DATA:							
Floor Live Load:	125 psf Floor Capacit	y Loadpsf	Vibration Requirem	ents: None				
Structural Notes:								
FINISHES: Walls:	Paint		Floors:	Raised Floor				
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.     9'-0"						
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	72         F +/-           50         RH +/-           Positive	5 F Cooling 10 RH Cooling Vibration Cr EMI Criteria			eating eating			
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:		Fume Hood Toxic / Hazardous M	Materials				
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet System:		Preaction Syste	em			
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	20 CFM/Person Airflow Recirculated	General Exhaust:		☐ Chemical E ☑ Smoke Ext	-			
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floo	r / Trench Drain					
PROCESS PIPIN	IG:							
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>			er S Cooling Water - Co S Cooling Water - Al al Drain					
ELECTRICAL:		Ροι	ver Outlets:					
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct/Indirect Occupancy Sensor 50	Cle	No. Voltage 4 120 v 0 an Power:	Phase Type 1 ph Nor 30 kVA fo for compu	r Control & Computer Rooms			
TELECOMMUNI	CATION AND SPECIAL S	STEMS:						
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		Da ✓ Ac ✓ CC	ta Connections: cess Control: CTV: e Detection Type:					

<b>ROOM DATA SHEET</b>	R	0	0	Μ	D	<b>A</b> 1	۲A	S	Η	E	E1	
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Room Name:	2nd Floor Toilet & Shower			Room Numbe	er: OPS-10	06
Functional Area:	Operations Center		Level 2	Space Type:	Building	y Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	<u>B</u>		76_ NSF x _ 2_ F	Rooms Reqd. =	152 Total Ne	t Square Feet
STRUCTURAL D	DATA:					
Floor Live Load:	100 psf Floor Capacit	y Load	psf Vibration	Requirements: None	9	
Structural Notes:						
FINISHES: Walls:	Paint		Floors:	Vinyl Tile		
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	9'-0"		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	F +/-           RH +/-           NC		-	_ F +/ F _ RH +/ RH _ <u>None</u> 	Heating Heating	
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:		Fume Ho	od azardous Materials		
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group	✓ Wet Sys	tem:	Preaction	System	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass	☑ General □ Heat Ex	-		ical Exhaust: e Exhaust:	y AHU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			✔ Floor / Trench	Drain Provide f	loor drains to sa	anitary waste.
PROCESS PIPIN	IG:					
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:			<ul> <li>DI Water</li> <li>Process Cooling</li> <li>Process Cooling</li> <li>Chemical Drain</li> </ul>			
ELECTRICAL:			Power Outlet	S:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Recessed Troffer Fluorescent Direct Occupancy Sensor 10-15 (30 at sink)			Voltage         Phase           120 v         1 ph           :	Type Normal	Location Wall
TELECOMMUNI	CATION AND SPECIAL S	STEMS:				
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detection</li> <li>Telecom Notes:</li> </ul>			<ul> <li>Data Conne</li> <li>Access Con</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	trol:	ectric Smoke De	etectors

Room Name:	Entrano	ce Lobby & Vestibule				Roor	n Numbe	er:	OPS-107	
Functional Area:	Operat	tions Center		Groun	d Level	Spac	е Туре:		Circulation	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT	Main entrance to NSLS-II and ar         B	2,415 rea for sc			Rooms Reqo	d. =2	2,415	Total Net So	juare Feet
STRUCTURAL D	DATA:	L								
Floor Live Load:	100	psf Floor Capacity Load		psf	Vibration	Requireme	nts: None	e		
Structural Notes:										
FINISHES: Walls:	Paint				Floors:	C	eramic Tile	)		
Ceilings: Finishes Notes:	No Cei	iling			Clg. Ht.					
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	NC	75         F +/-         5         F           50         RH +/-         10         RH           Positive         40-45         10         10		ibration Cri MI Criteria	3 iteria	2_F+/ 0_RH+/ <u>No</u> No	ne		ating	
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:				Fume Ho Toxic / Ha	od azardous M	aterials			
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordin	nary Hazard Group	Vet Syste	em:			Preaction	Syster	n	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow		General E Teat Exha				☐ Chem ✔ Smok		khaust: aust: by Al	łU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Drinking Fountain		_ [] Floor	r / Trencł	n Drain				
PROCESS PIPIN	IG:									
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>					Cooling Cooling	Water - Cu Water - Al				
ELECTRICAL:				Pow	ver Outle	ts.				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Flue	cessed Troffer orescent ect cupancy Sensor		Clea	No. 2 0 an Power	Voltage 120 v	Phase 1 ph	Type Norm	al	Location Wall
TELECOMMUNI	CATION	N AND SPECIAL SYSTEM	S:							
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detectio</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>					ta Conne cess Con CTV: e Detecti					

Room Name:	Bridge & Viewing Gallery	-	Room Number:	OPS-108
Functional Area:	Operations Center	Level 2	Space Type:	Circulation
SPACE REQUIR Allocated Space : Function: Occupancy Class: STRUCTURAL D Floor Live Load: Structural Natasi	1,4 Viewing area of Experimental Hall for to Access to the Tunnel Mezzanine and C B	ours. control Room	Rooms Reqd. = <b>1,45</b> Requirements:None	0 Total Net Square Feet
Structural Notes:				
Walls: Ceilings: Finishes Notes:	Paint No Ceiling	Floors: Clg. Ht.	Vinyl Tile	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQUI	75         F +/-         5         F         Coolin           50         RH +/-         10         RH         Coolin           NC         40-45			leating leating
Storage Cabinet     Casework     Special Requirements		_ Fume Ho _ Toxic / Ha	od azardous Materials	
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group 🗹 Wet Sys	stem:	Preaction Sys	tem
HVAC: Air Changes / Hr Recirc / Single Pass A HVAC Notes:		Exhaust: haust:	Chemical ✓ Smoke E	
PLUMBING: Domestic Water H Eyewash / Safety S Plumbing Notes:		[] Floor / Trench	ı Drain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:	<ul> <li>DI Water</li> <li>Process Cooling</li> <li>Process Cooling</li> <li>Chemical Drain</li> </ul>		
ELECTRICAL: Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 30	Power Outlet No. 0 Clean Power UPS: Emergency F	Voltage         Phase         Ty           120 v         1 ph         No           :	pe Location ormal Wall
TELECOMMUNIC         ✓       Phone / Voice         □       PA System         □       Gas Leak Detectic         □       Liquid Leak Detectic         Telecom Notes:		<ul> <li>✓ Data Conne</li> <li>△ Access Con</li> <li>○ CCTV:</li> <li>○ Fire Detection</li> </ul>	trol:	

Room Name:	Unisex T	oilet						Roo	m Numb	er:	OPS-109	
Functional Area:	Operation	ns Center				Gro	ound Leve	Spa	ce Type:		Building Su	ıpport
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	_	Restroom 3			7	7 <u>8</u> NSI	- x <u>1</u>	Rooms Req	d. =	78	Total Net So	uare Feet
<b>STRUCTURAL </b> Floor Live Load:		sfF	loor Capac	city Load	-	psf	Vibratio	n Requireme	ents: <u>Non</u>	e		
Structural Notes:												
FINISHES: Walls:	Paint						Floors	s: _V	inyl Tile			
Ceilings: Finishes Notes:	Acoustic	Ceiling Tile	)				Clg. H	lt. <u>9</u>	'-0"			
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	NC N	legative lone	= +/ RH +/		-	-	Criteria	No	F RH Dine Dine		ating ating	
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:					[	Fume F	lood Hazardous N	laterials			
FIRE PROTECT Hazard Classification Fire Protection Notes	: Ordinar	y Hazard G	Group		Wet Syst	tem:			Preaction	Syste	m	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow	Single Pa	SS		General Heat Exf						xhaust: aust: by Al	łU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:	Shower	Toilet and	sink in ead	ch room		🗹 F	loor / Tren	ch Drain	Provide	floor d	rains to sanita	ary waste.
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: 					Proc	ess Coolin	g Water - Cu g Water - Al				
ELECTRICAL:							Power Out	ets:				
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	Fluore Direct Occup	ce Mount escent t pancy Sens 6 (30 at sink					No. 1 0 Clean Pow JPS: Emergency		Phase 1 ph	Type Norn		Location Wall
Electrical Notes:												
TELECOMMUNI         Phone / Voice         PA System         Gas Leak Detection         Liquid Leak Detector         Telecom Notes:	on	AND SPI	ECIAL S	SYSTEM	IS:		Data Conr Access Co CCTV: Fire Detec	ontrol:				

Room Name:	Break Room / Kitchenette	Roo	m Number:	OPS-110
Functional Area:	Operations Center	Ground Level Spa	се Туре:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT:512_ Space to store and prepare personal meals B		qd. = <b>512</b>	Total Net Square Feet
STRUCTURAL D	DATA:			
Floor Live Load:	100 psf Floor Capacity Load p	Vibration Requireme	ents: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors: L	inoleum Sheet	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht. 9	)'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQUE	75         F +/-         5         F         Cooling           50         RH +/-         10         RH         Cooling         Cooling           Nc         40-45         EM         Vib			ating ating
<ul> <li>☐ Storage Cabinet</li> <li>✓ Casework</li> <li>Special Requirements</li> </ul>	Counter & cabinets	Fume Hood Toxic / Hazardous N icrowave, vending machines		
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group 🗹 Wet System	ı:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass A HVAC Notes:	Airflow Single Pass ☐ Heat Exhau		☐ Chemical E ✔ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety S Plumbing Notes:		Floor / Trench Drain	Provide floor d	rains to sanitary waste.
PROCESS PIPIN	IG:			
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:		DI Water Process Cooling Water - Cu Process Cooling Water - Al Chemical Drain	I	
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Recessed Troffer Fluorescent Direct Occupancy Sensor 30	No. Voltage 7 120 v 0 Clean Power: UPS: Emergency Power:	Phase Type <u>1 ph</u> Norm	
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		<ul> <li>Data Connections:</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>		

Room Name:	Telecom Room		Room Number:	OPS-111
Functional Area:	Operations Center	Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Electrical equipment room B	409_NSF x _1_ Room	ns Reqd. =409	Total Net Square Feet
<b>STRUCTURAL D</b> Floor Live Load:	DATA:           125         psf         Floor Capacity Load	psfVibration Req	uirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	78         F +/-         5         F         Cd           0         RH +/-         0         RH         Cd           NC         45-50         Cd         Cd         Cd			ating ating
Storage Cabinet Casework Special Requirements		Fume Hood Toxic / Hazar	dous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group	t System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		neral Exhaust:at Exhaust:	☐ Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	ain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:	DI Water Process Cooling Wat Process Cooling Wat Crocess Cooling Wat Crocess Cooling Wat		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 15	No. Volt	0 v 1 ph Norn	
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		Data Connection CCTV: Fire Detection T		

Room Name:	Switchgear Room			Room Number:	OPS-118
Functional Area:	Operations Center		Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	<u>B</u>	6	55_ NSF x _ 1_ Ro	oms Reqd. =6	55 Total Net Square Feet
STRUCTURAL E	DATA:           125         psf         Floor Capacity	/ Load	psf Vibration Re	equirements: None	
Structural Notes:				-	
FINISHES: Walls:	Paint		Floors:	Sealed Concre	te
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-           50         RH +/-         1           Neutral         1           NC         45-50				Heating Heating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:		Fume Hood	ardous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet Sys	tem:	Preaction Sy	stem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated	_	Exhaust: naust:	☐ Chemica ✓ Smoke E	al Exhaust: Exhaust:by AHU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			Floor / Trench D	Drain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: 		DI Water  Process Cooling W  Process Cooling W  Chemical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 15		No. V	oltage Phase T 120 v <u>1 ph N</u>	ype Location lormal Wall
	CATION AND SPECIAL SY	STEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			<ul> <li>Data Connecti</li> <li>Access Contro</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	DI:	

Room Name:	Men's Locker Room			Room Numbe	r: OPS-120	
Functional Area:	Operations Center		Level 2	Space Type:	Building Su	upport
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: 	12	28_NSF x _ 1_	Rooms Reqd. =	128 Total Net Sc	juare Feet
STRUCTURAL D	DATA:					
Floor Live Load:	100 psf Floor Capacity	Load	psf Vibration	Requirements: None		
Structural Notes:						
FINISHES: Walls:	Paint		Floors:	Vinyl Tile		
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht	. <u>9'-0"</u>		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	F +/-           RH +/-           NC           40-45	_ RH Cooling		F +/ F RH +/ RH _ <u>None</u> None	Heating Heating	
Storage Cabinet Casework Special Requirements			Fume Ho     Toxic / H	ood azardous Materials		
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet Syst	em:		System	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass	_			cal Exhaust: e Exhaust:by Al	HU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			Floor / Trenc	h Drain Provide fl	oor drains to sanita	ary waste.
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other	IG:		DI Water  Process Cooling Process Cooling Chemical Drain			
Piping Notes:						
ELECTRICAL: Lighting Fixture Type: Lighting Lamp Type: Lighting Direction:	Surface Mount Fluorescent Direct		Power Outle No. 		Type Normal	Location Wall
Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Occupancy Sensor 10-15		Clean Powe UPS: Emergency			
TELECOMMUNI         Phone / Voice         PA System         Gas Leak Detection         Liquid Leak Detector         Telecom Notes:		STEMS:	Data Conne Access Cor CCTV: Fire Detecti	ntrol:		

Room Name:	Women's Locker Room		Ro	om Number:	OPS-121
Functional Area:	Operations Center	L	evel 2 Sp	асе Туре:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: 	<u>    126    N</u>	SF x <u>1</u> Rooms Re	eqd. = <b>126</b>	Total Net Square Feet
STRUCTURAL D	DATA:				
Floor Live Load:	100 psf Floor Capacity	Load psf	Vibration Requirem	nents: None	
Structural Notes:					
FINISHES: Walls:	Paint		Floors:	Vinyl Tile	
Ceilings: Finishes Notes:	Acoustic Ceiling Tile		Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	F +/-           RH +/-           NC           40-45	_ RH Cooling	on Criteria RH +/-		eating eating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:		<ul> <li>Fume Hood</li> <li>Toxic / Hazardous</li> </ul>	Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group	✓ Wet System:	C	Preaction Syst	em
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass	_ ✔ General Exhau _ □ Heat Exhaust:	st:	☐ Chemical ✔ Smoke Ex	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		<b>V</b>	Floor / Trench Drain	Provide floor	drains to sanitary waste.
PROCESS PIPIN	IG:				
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:		Pr	Water ocess Cooling Water - C ocess Cooling Water - A emical Drain		
ELECTRICAL:			Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Surface Mount Fluorescent Direct Occupancy Sensor 10-15		No. Voltage <u>1</u> 120 v <u>0</u> Clean Power: UPS: Emergency Power:	Phase Typ 1 ph Nor 	rmal Location Wall
TELECOMMUNI	CATION AND SPECIAL SY	STEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			<ul> <li>Data Connections:</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>		

Room Name:	Storage		Room Number:	OPS-122
Functional Area:	Operations Center	Level 2	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT:	108_ NSF x	1 Rooms Reqd. = <b>10</b>	8 Total Net Square Feet
STRUCTURAL I Floor Live Load:	DATA: 125 psf Floor Capacity Loa	ıd psf Vib	ration Requirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	FI	oors: Sealed Concrete	ə
Ceilings: Finishes Notes:	Acoustic Ceiling Tile	C	lg. Ht9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F           50         RH +/-         10         R           Neutral         NC         40-45         10	Cooling H Cooling Uibration Criter EMI Criteria	30 RH +/- 10 RH H	leating leating
Storage Cabinet Casework Special Requirements	s Notes:		ne Hood iic / Hazardous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	☑ Wet System:	Preaction Sys	tem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated [	General Exhaust:	Chemical ✓ Smoke E	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / T	French Drain	
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG:		ooling Water - Cu ooling Water - Al Drain	
ELECTRICAL:		Power	Outlets:	
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	: Pendant Fluorescent Direct Occupancy Sensor 15	No.           4           0           Clean           UPS:	Voltage Phase Ty 120 v 1 ph No	pe Location prmal Wall
TELECOMMUNI         Phone / Voice         PA System         Gas Leak Detection         Liquid Leak Detector         Telecom Notes:		Data 0 Acces CCTV	Connections: s Control: : etection Type:	

Room Name:	Accelerator Tunnel		Room Number:	RB-101
Functional Area:	Ring Building	Ground Level	Space Type:	Accelerator
SPACE REQUIRI Allocated Space : Function: Occupancy Class: General Notes:		37,300 NSF x 1 Roc		Total Net Square Feet
STRUCTURAL D	ATA:			
Floor Live Load:	350         psf         Floor Capacity Load         300	00 psf Vibration Re	equirements: R = 25nm	Power Spectral Density
Structural Notes:	Minimize differential settlement			
FINISHES: Walls:	Paint	Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	Concrete	Clg. Ht.	9'-0"	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQUI	78         F +/-         0.18         F         Co           50         RH +/-         10         RH         Co           Positive         None         Co         Co         Co	•		ating ating established
Storage Cabinet     Casework     Special Requirements			ardous Materials	where
FIRE PROTECTION Hazard Classification: Fire Protection Notes:	DN:	: System:	Preaction Syste	
HVAC: Air Changes / Hr Recirc / Single Pass A HVAC Notes:	Designed at a d	neral Exhaust: nt Exhaust:	☐ Chemical E ✓ Smoke Exh	
PLUMBING: Domestic Water H/ Eyewash / Safety S Plumbing Notes:		Floor / Trench D	rain <u>Trench drain a</u>	round perimeter
PROCESS PIPIN	G:			
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	Possible replacement for compresse TBD Process Cooling Water and Process	Process Cooling Wa	ater - Al	
<b>ELECTRICAL:</b> Lighting Fixture Type: Lighting Lamp Type: Lighting Direction:	Surface Mount Fluorescent Direct		oltage Phase Type 20 v <u>1 ph Norn</u>	
Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Occupancy Sensor 30 Accelerator power fed from tunnel mezz	Clean Power: UPS: Emergency Pov	wer: Lighting, lit	fe safety
TELECOMMUNIC	ATION AND SPECIAL SYSTEMS:	Data Connection	ons:	
PA System Gas Leak Detection		Access Contro	-	
Liquid Leak Detect Telecom Notes:	on In Trench Drain	Fire Detection	Type: HSSD	

Room Name:	Experimental Hall		Room Number:	RB-102A
Functional Area:	Ring Building	Ground Level	Space Type:	Laboratory
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: 94,23 House Beamlines and experimental huto B Occupants will be stationed in the LOBs	ches	·	Total Net Square Feet
STRUCTURAL E	DATA:         350       psf         Floor Capacity Load       2000	psf Vibration Req	uirements: VC-E	
Structural Notes:	Minimize differential settlement			
FINISHES: Walls:	Pre-insulated Building Wall Panel	Floors:	Sealed Concrete	
Ceilings:	No Ceiling	Clg. Ht.		
Finishes Notes:	Painted steel roof joists. Under side of roof to have	ve acoustical treatment.		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level	75         F +/-         1         F         Cooling           50         RH +/-         10         RH         Cooling           Positive         NC         55 or lower         NE         State			ating ating established
SPECIAL REQU Storage Cabinet Casework Special Requirements	s Notes:	☐ Fume Hood ✓ Toxic / Hazard	dous Materials unkno	own type
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🗹 Wet Syst	em:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated Heat Exh	-	<ul> <li>✓ Chemical E</li> <li>✓ Smoke Exh</li> </ul>	xhaust: Hutch Exhaust aust: by AHU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	in	
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>✓ Nitrogen</li> <li>✓ Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	At tunnel mezzanine	<ul> <li>DI Water</li> <li>Process Cooling Wate</li> <li>Process Cooling Wate</li> <li>Chemical Drain</li> </ul>		F
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC):	Metal Halide Direct Occupancy Sensor 30	No. Volta 60 120 0 Clean Power: UPS:	0 v 1 ph Norr	
Ground: Electrical Notes:	Instrument Reference Ground Each panelboard for beamlines is served by a	Emergency Powe a 75kVA transformer. Pan		unnel mezzanine.
Phone / Voice PA System Gas Leak Detection Liquid Leak Detection Telecom Notes:		<ul> <li>Data Connection</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type</li> </ul>		

Room Name:	Access Corridor			Roor	n Number	RB-102B	
Functional Area:	Ring Building		Ground Level	Spac	е Туре:	Circulation	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		33,0 e outside of the Expe	18 NSF x <u>1</u> primental Hall	Rooms Reqo	d. = <u>33,0</u>	018 Total Net So	quare Feet
STRUCTURAL D	ATA:						
Floor Live Load:		pacity Load	psf Vibratior	n Requireme	nts: None		
Structural Notes:	·						
FINISHES: Walls:	Pre-insulated Building Wal	l Panel	Floors	Se	ealed Concre	ete	
Ceilings: Finishes Notes:	No Ceiling		Clg. Ht	i			
<b>ROOM ENVIRON</b>	IMENT:						
Temperature Humidity Room Pressure Acoustic Noise Level	75         F +/-           50         RH +/-           Positive         NC           55 or lower         S5	<u>    1 F    Coolin</u> <u>   10   RH   Coolin</u>		75 F +/ 30 RH +/   No	-E	Heating Heating	
SPECIAL REQU	REMENTS:						
Storage Cabinet Casework Special Requirements			Fume He Toxic / H	ood łazardous Ma	aterials		
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group	✓ Wet Sys	stem:		Preaction S	ystem	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated		Exhaust: haust:		Chemic	al Exhaust: Exhaust:by A	HU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			Floor / Trenc	h Drain	Trench dra	in around perimit	er
PROCESS PIPIN	G:						
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:			<ul> <li>DI Water</li> <li>Process Cooling</li> <li>Process Cooling</li> <li>Chemical Drain</li> </ul>				
ELECTRICAL:			Power Outle	ote.			
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Low Voltage Switch 30		No. 60 0 Clean Powe UPS: Emergency	Voltage 120 v		Гуре Normal	Location Wall
TELECOMMUNI	CATION AND SPECIA	L SYSTEMS:					
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detectio</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			<ul> <li>□ Data Conn</li> <li>✓ Access Co</li> <li>□ CCTV:</li> <li>✓ Fire Detect</li> </ul>	ntrol:	HSSD		

Room Name:	Tunnel Mezzanine	Roo	m Number:	RB-103
Functional Area:	Ring Building	Mezzanine Spa	се Туре:	Accelerator
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		950_NSF x _1_Rooms Rec torage ring.	qd. = <b>50,950</b>	Total Net Square Feet
STRUCTURAL D	DATA:			
Floor Live Load:	350 psf Floor Capacity Load	psf Vibration Requireme	ents: None	
Structural Notes:				
FINISHES: Walls:	Pre-insulated Building Wall Panel	Floors: S	Sealed Concrete	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level	75         F +/-         5         F         Cooli           50         RH +/-         10         RH         Cooli           Positive	ing <u>30</u> RH +/- Vibration Criteria N		ating ating
	IREMENTS:	_		
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood Toxic / Hazardous N	laterials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	· Ordinary Hazard Group	/stem:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		al Exhaust:	☐ Chemical E ✔ Smoke Exh	-
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		✓ Floor / Trench Drain	Floor drains	
PROCESS PIPIN	IG:			
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	Chilled Water supply and return for pov	<ul> <li>DI Water</li> <li>Process Cooling Water - Cu</li> <li>Process Cooling Water - Al</li> <li>Chemical Drain</li> <li>wer supply cooling is required.</li> </ul>	by ASD	
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Low Voltage Switch 30	No. Voltage 60 120 v 0 Clean Power: UPS: Emergency Power:	Phase Type <u>1 ph</u> Norr	
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		<ul> <li>Data Connections:</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>	HSSD	

Room Name:	Loading Dock		Room Number:	RB-104
Functional Area:	Ring Building	Ground Level	Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Loading Dock for NSLS B	2,060 NSF x1 Ro II facility	ooms Reqd. = <b>2,060</b>	Total Net Square Feet
STRUCTURAL I Floor Live Load:		Load psf Vibration R	equirements: None	
Structural Notes:				
FINISHES: Walls:	Pre-insulated Building Wall Pane	el Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.		
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level	75         F +/-           0         RH +/-           Positive           NC         None			ating ating
SPECIAL REQU Storage Cabinet Casework Special Requirement		Fume Hood	d	
FIRE PROTECT Hazard Classification Fire Protection Notes	: Ordinary Hazard Group	✔ Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculated	General Exhaust:	Chemical E	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench E	Drain	
PROCESS PIPIN     ✓ Compressed Air     Nitrogen     Liquid Nitrogen     Other     Piping Notes:	IG: 	DI Water DI Water Process Cooling W Process Cooling W Chemical Drain		
ELECTRICAL:		Power Outlets:	:	
Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	Pendant Fluorescent Direct Occupancy Sensor 30	No. V	/oltage Phase Type 120 v 1 ph Norr	
Electrical Notes:				
▼       Phone / Voice         ✓       PA System         □       Gas Leak Detection         □       Liquid Leak Detection		STEMS:	ol:	

Room Name:	Hazardous Materials Storage	Ro	Room Number:		
Functional Area:	Ring Building	Ground Level Sp	расе Туре:	Building Support	
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: Receipt and storage of hazardous materia H-6		eqd. =450	Total Net Square Feet	
STRUCTURAL D Floor Live Load:		psf Vibration Require	ments: None		
Structural Notes:					
FINISHES: Walls:	Pre-insulated Building Wall Panel	Floors:	Sealed Concrete		
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.			
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         5         F         Cooling           50         RH +/-         10         RH         Cooling           Negative         V         V           NC         45-50         E	ibration Criteria		ating ating	
Storage Cabinet     Casework     Special Requirements		☐ Fume Hood ✔ Toxic / Hazardous	Materials		
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard Group 🗹 Wet Syste	em:	Preaction Syste	m	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Single Pass	-	Chemical E		
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		_ [] Floor / Trench Drain 			
PROCESS PIPIN Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: [ [ [ [	DI Water Process Cooling Water - Process Cooling Water - Chemical Drain			
ELECTRICAL:		Power Outlets:			
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC):	Pendant Fluorescent Direct Occupancy Sensor 30	No. Voltage 0 120 v 0 Clean Power: UPS:	Phase Type 1 ph Norr		
Ground: Electrical Notes:	Wall outlets for standard power to be suitable f	Emergency Power:	nvironment.		
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:				
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detection</li> <li>Telecom Notes:</li> </ul>		<ul> <li>Data Connections:</li> <li>Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>			

Room Name:	Stock Room					Rooi	m Numbe	ər:	RB-106	
Functional Area:	Ring Building			Gro	und Leve	Spac	e Type:		Building Su	pport
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		g and storage for non-ha	1,618 azardous			Rooms Req	d. =1	, <u>618</u>	Total Net Sq	uare Feet
STRUCTURAL D	DATA: 125 psf	Floor Capacity Load		psf	Vibratio	n Requireme	nte: Non			
Structural Notes:				<u></u>	VIDIALIOI	ritequireme		<u> </u>		
FINISHES: Walls:	Pre-insulated Buil	ding Wall Panel			Floors	: <u>S</u>	ealed Con	crete		
Ceilings: Finishes Notes:	No Ceiling				Clg. H	t				
ROOM ENVIRON Temperature Humidity	75 50		Cooling Cooling	h	;	30 RH +/-		Heat Heat	0	
Room Pressure Acoustic Noise Level	NC 40-45			bration MI Crite			ne ne			
SPECIAL REQU	IREMENTS:									
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:				] Fume H ] Toxic / ŀ	ood Iazardous M	aterials			
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard	Group 🗹 W	/et Syste	m:			Preaction	System	1	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recircu		eneral Ex eat Exha				Cherr Cherr	nical Ex le Exha		U
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:				_ [] FI	oor / Trenc	ch Drain				
PROCESS PIPIN	IG:									
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:				Proce	ss Cooling	g Water - Cu g Water - Al				
ELECTRICAL:				P	ower Outle	ate:				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching:	Fluorescent Direct Occupancy Se			C	No. 4 0 lean Powe	Voltage 120 v	Phase 1 ph	Type Norma	al	Location Wall
Lighting Level (FC): Ground: Electrical Notes:	30				PS: mergency	Power:				
	CATION AND S	PECIAL SYSTEMS	S:							
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>					Data Conn Access Co CCTV: Fire Detect	ntrol:				

Functional Area:       Ring Building       Ground Level       Space Type:       Interaction Area         SPACE REQUIREMENT:	Room Name:	Grille			Room Number:	RB-107
Allocated Space :      27       NSF x _ 1       Rooms Reqd. =257       Total Net Square Feet         Prunction:	Functional Area:	Ring Building		Ground Level	Space Type:	Interaction Area
Floor Live Load:       100       pd'       Floor Capacity Load       pd'       Vibration Requirements:       None         Structural Notes:	Allocated Space : Function: Occupancy Class:		2	257_NSF x _ 1_Ro	oms Reqd. =25	7 Total Net Square Feet
Structural Notes:       Pre-insulated Building Wall Panel       Floors:       Linoleum Sheet         Ceilings:       Acoustic Ceiling Tile       Clg. Ht.       9-0°         Finishes Notes:       Pre-insulated Building Wall Panel       Clg. Ht.       9-0°         Finishes Notes:       Pre-insulated Building Wall Panel       Clg. Ht.       9-0°         Finishes Notes:       Prepriative       75, F +/.       5, F       F         Cooling       20, RH +/.       10, RH       Preciae Mathematic Mone       None         Acoustic Noise Level NC       40-45       EMI Criteria       None         Storage Cablinet			ipacity I oad	psf Vibration R	equirements: None	
Walls:       Pre-insulated Building Wall Panel       Floors:       Linoleum Sheet         Cellings:       Acoustic Ceiling Tile       Clg. HL       9:0'         Finishes Notes:		<u> </u>				
Finishes Notes:         ROOM ENVIRONMENT:         Temperature       75       F+/.       5       F       Heating         Humidity       50       RH+/.       10       RH       Heating         Room Pressure       Nose       Vibration Criteria       None         SPECIAL REQUIREMENTS:       Singer Cabinet		Pre-insulated Building Wal	Panel	Floors:	Linoleum Sheet	
Temperature       75       F+/-       10       PH         Humidity       50       RH +/-       10       RH       Cooling       30       RH +/-       10       RH       RH       None         Accostic Noise Leval NC       40-45       EMI Criteria       None       None       Secure       Secure       None       Secure       None       Secure       <	-	Acoustic Ceiling Tile		Clg. Ht.	9'-0"	
□ Casework       □ Toxic / HazardOus Materials         Special Requirements Notes:	Temperature Humidity Room Pressure Acoustic Noise Level	75         F +/-           50         RH +/-           Nc         40-45		ng <u>30</u> Vibration Criteria	RH +/- 10 RH H None	•
Hazard Classification:       Ordinary Hazard Group       ✓ Wet System:       Preaction System         Fire Protection Notes:       HVAC:       Champes / Hr       Chemical Exhaust:       Chemical Exhaust:         Air Changes / Hr       ✓ General Exhaust:       ✓ Chemical Exhaust:       ✓ Chemical Exhaust:       by AHU         HVAC Notes:       ✓ Smoke Exhaust:       ✓ Smoke Exhaust:       by AHU         PLUMBING:       ✓ Domestic Water H/C       ✓ Floor / Trench Drain       Provide floor drains to sanitary waste.         Eyewash / Safety Shower       Plumbing Notes:       ✓       Plootestic Water - Cu	Casework	s Notes:				
Air Changes / Hr Recirculated General Exhaust: Chemical Exhaust: Chemical Exhaust: Smoke Exhaust: by AHU	Hazard Classification	: Ordinary Hazard Group	✔ Wet Sy	stem:	Preaction Sys	stem
✓ Domestic Water H/C       ✓ Floor / Trench Drain       Provide floor drains to sanitary waste.         Eyewash / Safety Shower	Air Changes / Hr Recirc / Single Pass /	Airflow Recirculated		-		
Compressed Air       DI Water         Nitrogen       Process Cooling Water - Cu         Liquid Nitrogen       Process Cooling Water - Al         Other       Chemical Drain         Piping Notes:       Chemical Drain         ELECTRICAL:       Power Outlets:         Lighting Fixture Type:       Recessed Troffer         Lighting Direction:       Direct         Direct       0         Lighting Level (FC):       30         Ground:       Emergency Power:         Electrical Notes:       Emergency Power:         Phone / Voice       Data Connections:         PA System       Data Connections:	Domestic Water H Eyewash / Safety			Floor / Trench E	Drain Provide floor	r drains to sanitary waste.
Lighting Fixture Type:       Recessed Troffer       No.       Voltage       Phase       Type       Location         Lighting Lamp Type:       Fluorescent       8       120 v       1 ph       Normal       Wall         Lighting Direction:       Direct       0       0       0       0       0       0         Light Switching:       Occupancy Sensor       Clean Power:       0	<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> </ul>	IG:		Process Cooling W		
Lighting Lamp Type:       Fluorescent       8       120 v       1 ph       Normal       Wall         Lighting Direction:       Direct       0       0       0       0         Light Switching:       Occupancy Sensor       Clean Power:       0       0       0       0         Lighting Level (FC):       30       UPS:       0	ELECTRICAL:			Power Outlets:		
Phone / Voice     Data Connections:       PA System     Access Control:	Lighting Fixture Type Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground:	Fluorescent Direct Occupancy Sensor		No. V 8 0 Clean Power: UPS:	oltage Phase Ty 120 v <u>1 ph No</u>	•
Liquid Leak Detection     Fire Detection Type:     Telecom Notes:	<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detection</li> </ul>	 	L SYSTEMS:	Access Contro	ol:	

Room Name:	RF Cavity Room			Room Number:	RF-101
Functional Area:	RF Building		Ground Level	Space Type:	Accelerator
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		9,75 RF cavities and support	6_ NSF x _ 1_ Ro	ooms Reqd. = <b>9,7</b>	56 Total Net Square Feet
STRUCTURAL D	DATA:				
Floor Live Load:	350 psf Fl	oor Capacity Load	psf Vibration R	Requirements: None	
Structural Notes:					
FINISHES: Walls:	Paint		Floors:	Sealed Concre	te
Ceilings: Finishes Notes:	No Ceiling		Clg. Ht.	20'-0" clear	
			70	F+/- 1 F	Haating
Temperature Humidity Room Pressure Acoustic Noise Level	Neutral	H +/- <u>10</u> RH Cooling			Heating Heating
SPECIAL REQU					
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>			Fume Hoo Toxic / Haz	d zardous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	Ordinary Hazard G	roup 🔽 Wet Syst	em:	Preaction Sy	stem
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow Recirculat	ed General I		Chemica	al Exhaust: Exhaust:by AHU
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:			Floor / Trench	Drain	
PROCESS PIPIN	IG:				
Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:			DI Water Process Cooling V Process Cooling V Chemical Drain		
ELECTRICAL:			Power Outlets	:	
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sens 30	or		/oltage Phase T 120 v 1 ph N	ype Location lormal Wall
TELECOMMUNI	CATION AND SPE	CIAL SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>			<ul> <li>Data Connec</li> <li>Access Contr</li> <li>CCTV:</li> <li>Fire Detection</li> </ul>	ol:	

Room Name:	RF Test		Room Number:	RF-102
Functional Area:	RF Building	Ground Level	Space Type:	Accelerator
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	RF Test B	426_NSF x1_Room		Total Net Square Feet
STRUCTURAL D	DATA:	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Floor Live Load:	350 psf Floor Capacity Load	<u>psf</u> Vibration Req	uirements: None	
Structural Notes:				
FINISHES: Walls:	Paint	Floors:	Sealed Concrete	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht.	20'-0" clear	
ROOM ENVIRON	MENT:			
Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	75         F +/-         1         F           50         RH +/-         10         RH           Positive         NOne         None         None	-		ating ating
Storage Cabinet		Fume Hood	dous Materials	
Special Requirements				
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	Ordinary Hazard Group	Wet System:	Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass # HVAC Notes:	Virflaur De aineurlate al	General Exhaust: Heat Exhaust:	☐ Chemical E ☑ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		Floor / Trench Dra	ain	
PROCESS PIPIN	IG:			
<ul> <li>Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>		DI Water  Process Cooling Wat  Process Cooling Wat  Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Dimmer 30	No. Volt	er:	
TELECOMMUNI	CATION AND SPECIAL SYSTEM	IS:		
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detection</li> <li>Telecom Notes:</li> </ul>		Data Connection CCTV: Fire Detection T		

Room Name:	Service Building #1	Room Number:	SB-101
Functional Area:	Service Buildings	Ground Level Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		9,626_NSF x _1_ Rooms Reqd. = <b>9,626</b> _	Total Net Square Feet
<b>STRUCTURAL D</b> Floor Live Load:	JATA:	psfVibration Requirements:None	
Structural Notes:	350 psf ground floor ; 150 psf second floor		
FINISHES: Walls:	Paint	Floors: Sealed Concrete	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	78         F +/-         5         F         Cool           RH +/-         0         RH         Cool         Cool           NC         Per ACGIH TLVs         Cool         Cool         Cool		ating ating
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	Fume Hood     Toxic / Hazardous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🗹 Wet S	System:  Preaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:		ral Exhaust: ☐ Chemical E Exhaust: Summer Ventilatio ☑ Smoke Exh	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		✓ Floor / Trench Drain Provide floor d	rains to sanitary waste.
<ul> <li>PROCESS PIPIN</li> <li>✓ Compressed Air</li> <li>Nitrogen</li> <li>Liquid Nitrogen</li> <li>Other</li> <li>Piping Notes:</li> </ul>	IG:	DI Water  Process Cooling Water - Cu  Process Cooling Water - Al  Chemical Drain	
ELECTRICAL: Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 15	Power Outlets:         No.       Voltage       Phase       Type         24       120 v       1 ph       Norm         0	
TELECOMMUNIC         ✓       Phone / Voice         ✓       PA System         □       Gas Leak Detection         □       Liquid Leak Detection         Telecom Notes:       Telecom Notes:		Data Connections:   Access Control:   CCTV:   Fire Detection Type:	

Room Name:	Service Building #2	Room Number:	SB-102
Functional Area:	Service Buildings	Ground Level Space Type:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: 	26_NSF x _ 1_ Rooms Reqd. = <b>9,626</b>	Total Net Square Feet
STRUCTURAL E Floor Live Load:	DATA:     350/150 psf     Floor Capacity Load	psf Vibration Requirements: None	
Structural Notes:	350 psf ground floor ; 150 psf second floor		
FINISHES: Walls:	Paint	Floors: Sealed Concrete	
Ceilings: Finishes Notes:	No Ceiling	Clg. Ht	
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level	78     F +/-     5     F     Cooling       0     RH +/-     0     RH     Cooling       Neutral     NC     Per ACGIH TLVs     Image: Cooling transmission of the second seco		ating ating
SPECIAL REQU Storage Cabinet Casework Special Requirements		Fume Hood     Toxic / Hazardous Materials	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordinary Hazard Group 🔽 Wet Syst	em: Dreaction Syste	m
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	6-10 AC/Hr ☐ General Airflow Single Pass ✔ Heat Ext		
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		✓ Floor / Trench Drain Provide floor d	rains to sanitary waste.
PROCESS PIPIN     ✓ Compressed Air     Nitrogen     Liquid Nitrogen     Other     Piping Notes:	IG:	DI Water  Process Cooling Water - Cu  Process Cooling Water - Al  Chemical Drain	
ELECTRICAL:	Dendert	Power Outlets:	
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	: Pendant Fluorescent Direct Occupancy Sensor 15	No.       Voltage       Phase       Type         24       120 v       1 ph       Norr         0	
TELECOMMUNIC         ✓       Phone / Voice         ✓       PA System         Gas Leak Detection         Liquid Leak Detector         Telecom Notes:		<ul> <li>✓ Data Connections:</li> <li>✓ Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>	

Room Name:	Service	Building #3					Roc	m Numbe	er:	SB-103	
Functional Area:	Service	Buildings			Gro	ound Leve	el Spa	се Туре:		Building Su	pport
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT	Mechanical and Elec	ctrical room	9,62	:6 NS	= x <u>1</u>	Rooms Red	qd. =	9,626	Total Net Sq	uare Feet
STRUCTURAL D	DATA: 350/150	psf Floor Capa	acity I oad		psf	Vibratio	n Requirem	ents: Non	e		
Structural Notes:		ground floor ; 150 psf s		r							
FINISHES: Walls:	Paint					Floors	s: S	Sealed Con	crete		
Ceilings: Finishes Notes:	No Cei	ling				Clg. H	lt				
ROOM ENVIRON Temperature Humidity Room Pressure Acoustic Noise Level SPECIAL REQU	NC	78         F +/-	<u>5</u> F 0 RH		)	Criteria		5 F 0 RH one one		ating ating	
Storage Cabinet Casework Special Requirements					[	Fume H	lood Hazardous N	<i>l</i> aterials			
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Ordina	ary Hazard Group		Net Syst	em:			Preaction	Syste	m	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow	6-10 AC/Hr Single Pass		General I Heat Exh			Ventilatio	☐ Chem ✔ Smok		xhaust: aust: Yes	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:					F	loor / Tren	ch Drain	Provide f	floor d	rains to sanita	ry waste.
PROCESS PIPIN     ✓ Compressed Air     Nitrogen     Liquid Nitrogen     Other     Piping Notes:	IG:				Proc		g Water - Cu g Water - Al	J			
ELECTRICAL:						Power Out	ets:				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Fluc Dire	dant prescent ect supancy Sensor				No. 24 0 Clean Pow UPS: Emergency		Phase 1 ph	Type Norm		Location Wall
TELECOMMUNI	CATION	AND SPECIAL	SYSTEM	S:							
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>	on					Data Con Access Co CCTV: Fire Detec					

Room Name:	Service B	Building #4					Roo	m Numbe	er:	SB-104	
Functional Area:	Service B	Buildings			Gro	ound Leve	el Spa	се Туре:		Building Su	pport
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:		Vechanical and Elec	trical Roor	9,62 n	26 NS	F x <u>1</u>	Rooms Req	id. =9	,626	Total Net Sq	uare Feet
STRUCTURAL D	<b>DATA:</b> 350/150 ps	f Floor Capa	city Load		psf	Vibratio	n Requireme	ents: None	9		
Structural Notes:	350 psf gro	ound floor ; 150 psf s	econd floc	or							
FINISHES: Walls:						Floors	S:				
Ceilings: Finishes Notes:						Clg. H	lt				
ROOM ENVIRON Temperature Humidity Room Pressure	_	78_F+/ 0_RH+/ eutral		Cooling Cooling	-		<u>78</u> F +/- 0 RH +/-	5 F 0 RH		ating ating	
Acoustic Noise Level		er ACGIH TLVs		-	EMI Crite	eria	<u>_N</u>	one			
SPECIAL REQU	s Notes:	S:			[	Fume H	lood Hazardous M	laterials			
FIRE PROTECTI Hazard Classification: Fire Protection Notes:	:			Wet Syst	tem:			Preaction	Syste	m	
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	Airflow	6-10 AC/Hr Single Pass		General Heat Exh			Ventilatio	<ul><li>☐ Chem</li><li>✓ Smok</li></ul>		xhaust: aust: Yes	
PLUMBING: Domestic Water H Eyewash / Safety H Plumbing Notes:					🖌 F	ioor / Tren	ch Drain	Provide f	loor di	rains to sanita	ry waste.
PROCESS PIPIN ✓ Compressed Air Nitrogen Liquid Nitrogen Other Piping Notes:	IG: 				Proc	ess Coolin	g Water - Cu g Water - Al				
ELECTRICAL:						Power Out	ets:				
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Fluore Direct	escent			-	No. 24 0 Clean Pow UPS: Emergency	Voltage 120 v er:	Phase 1 ph	Type Norm		Location Wall
TELECOMMUNI	CATION	AND SPECIAL	SYSTEM	IS:							
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detectic</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>	on					Data Con Access Co CCTV: Fire Detec					

Room Name:	Service Building #5	Room Nu	mber:	SB-105
Functional Area:	Service Buildings	Ground Level Space Ty	pe:	Building Support
SPACE REQUIR Allocated Space : Function: Occupancy Class: General Notes:	EMENT: 9,626 B 	NSF x <u>1</u> Rooms Reqd. = _	9,626	Total Net Square Feet
STRUCTURAL D Floor Live Load:		vibration Requirements:	None	
Structural Notes:	350 psf ground floor ; 150 psf second floor			
FINISHES: Walls:		Floors:		
Ceilings: Finishes Notes:		Clg. Ht.		
<b>ROOM ENVIRON</b>	NMENT:			
Temperature Humidity Room Pressure Acoustic Noise Level	78         F +/-         5         F         Cooling           0         RH +/-         0         RH         Cooling           Neutral         Vit		F Heat RH Heat	0
SPECIAL REQU	IREMENTS:			
<ul> <li>Storage Cabinet</li> <li>Casework</li> <li>Special Requirements</li> </ul>	s Notes:	<ul> <li>Fume Hood</li> <li>Toxic / Hazardous Materia</li> </ul>	s	
FIRE PROTECTI Hazard Classification Fire Protection Notes	: Wet System	n: 🗌 Pread	ction System	1
HVAC: Air Changes / Hr Recirc / Single Pass / HVAC Notes:	6-10 AC/Hr General Ex Airflow Single Pass ✓ Heat Exhau		chemical Exi imoke Exha	
PLUMBING: Domestic Water H Eyewash / Safety Plumbing Notes:		► Floor / Trench Drain Prov	ride floor dra	ains to sanitary waste.
PROCESS PIPIN         ✓ Compressed Air         Nitrogen         Liquid Nitrogen         Other         Piping Notes:	IG: [ [ [ [	DI Water Process Cooling Water - Cu Process Cooling Water - Al Chemical Drain		
ELECTRICAL:		Power Outlets:		
Lighting Fixture Type: Lighting Lamp Type: Lighting Direction: Light Switching: Lighting Level (FC): Ground: Electrical Notes:	Pendant Fluorescent Direct Occupancy Sensor 15	No. Voltage Pha 24 120 v 1 p 0 Clean Power: UPS: Emergency Power:		Location al Wall
TELECOMMUNI	CATION AND SPECIAL SYSTEMS:			
<ul> <li>Phone / Voice</li> <li>PA System</li> <li>Gas Leak Detection</li> <li>Liquid Leak Detect</li> <li>Telecom Notes:</li> </ul>		<ul> <li>✓ Data Connections:</li> <li>✓ Access Control:</li> <li>CCTV:</li> <li>Fire Detection Type:</li> </ul>		



# LEED-NC Version 2.2 Registered Project Checklist BNL NSLS II Design Case

Yes ? No

5	7	2	Sustai	nable Sites	14 Points
Y	1		Prereq 1	Construction Activity Pollution Prevention	Required
Y			Credit 1	Site Selection	1
		Ν	Credit 2	Development Density & Community Connectivity	1
		N	Credit 3	Brownfield Redevelopment	1
Υ				Alternative Transportation, Public Transportation Access	1
Ŷ				Alternative Transportation, Bicycle Storage & Changing Rooms	1
Ŷ				Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles	1
· ·	?			Alternative Transportation, Parking Capacity	1
	?			Site Development, Protect of Restore Habitat	1
Y				Site Development, Maximize Open Space	1
	?			Stormwater Design, Quantity Control	1
	?			Stormwater Design, Quality Control	1
	?			Heat Island Effect, Non-Roof	1
	?			Heat Island Effect, Roof	1
	?		Credit 8	Light Pollution Reduction	1
Yes	?	No	0.00m 0		
3	2		Water	Efficiency	5 Points
Υ			Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
Υ			Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
	?		Credit 2	Innovative Wastewater Technologies	1
Υ			Credit 3.1	Water Use Reduction, 20% Reduction	1
	?		Credit 3.2	Water Use Reduction, 30% Reduction	1
Yes	?	No			
3	1	13	Energy	y & Atmosphere	17 Points
3 Y	1	13	Energy Prereq 1	y & Atmosphere Fundamental Commissioning of the Building Energy Systems	<b>17</b> Points Required
3 Y Y	1	13			
3 Y Y Y	1	13	Prereq 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management	Required
3 Y Y Y	1	13	Prereq 1 Prereq 2	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management Optimize Energy Performance New	Required Required
3 Y Y Y	1	13	Prereq 1 Prereq 2	Fundamental Commissioning of the Building Energy Systems         Minimum Energy Performance         Fundamental Refrigerant Management         Optimize Energy Performance         New         Buildings Existing BuildingRenovations	Required Required
3 Y Y Y	1	13	Prereq 1 Prereq 2	Fundamental Commissioning of the Building Energy Systems         Minimum Energy Performance       Fundamental Refrigerant Management         Optimize Energy Performance       New         Buildings Existing BuildingRenovations       Points         10.5%       3.5%       1	Required Required
3 Y Y	1	13	Prereq 1 Prereq 2	Fundamental Commissioning of the Building Energy Systems         Minimum Energy Performance       Fundamental Refrigerant Management         Optimize Energy Performance       New         Buildings Existing BuildingRenovations       Points         10.5%       3.5%       1         14%       7%       2	Required Required
Y Y Y	1		Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy Systems         Minimum Energy Performance       Fundamental Refrigerant Management         Optimize Energy Performance       New         Buildings Existing BuildingRenovations       Points         10.5%       3.5%       1         14%       7%       2	Required Required Required
3 Y Y Y	1	8	Prereq 1 Prereq 2	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints10.5%3.5%114%7%217.5%10.5%321%14%424.5%17.5%5	Required Required
Y Y Y	1		Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints10.5%3.5%114%7%217.5%10.5%321%14%424.5%17.5%528%21%6	Required Required Required
Y Y Y	1		Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints10.5%3.5%114%7%217.5%10.5%321%14%424.5%17.5%528%21%631.5%24.5%7	Required Required Required
Y Y Y	1		Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints10.5%3.5%114%7%217.5%10.5%321%14%424.5%17.5%528%21%631.5%24.5%735%28%8	Required Required Required
Y Y Y	1		Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing Building RenovationsPoints $10.5\%$ $3.5\%$ 1 $14\%$ $7\%$ 2 $17.5\%$ $10.5\%$ 3 $21\%$ $14\%$ 4 $24.5\%$ $17.5\%$ 5 $28\%$ $21\%$ 6 $31.5\%$ $24.5\%$ 7 $35\%$ $28\%$ 8 $38.5\%$ $31.5\%$ 9 $42\%$ $35\%$ 10	Required Required Required
Y Y Y	1		Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing Building RenovationsPoints $10.5\%$ $3.5\%$ 1 $14\%$ $7\%$ 2 $17.5\%$ $10.5\%$ $3$ $21\%$ $14\%$ $4$ $24.5\%$ $17.5\%$ $5$ $28\%$ $21\%$ $6$ $31.5\%$ $24.5\%$ $7$ $35\%$ $28\%$ $8$ $38.5\%$ $31.5\%$ $9$ $42\%$ $35\%$ $10$ On-Site Renewable Energy	Required Required Required
Y Y Y	1	8	Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy Systems         Minimum Energy Performance       New         Fundamental Refrigerant Management       New         Optimize Energy Performance       New         Buildings Existing Building Renovations       Points         10.5%       3.5%       1         14%       7%       2         17.5%       10.5%       3         21%       14%       4         24.5%       17.5%       5         28%       21%       6         31.5%       24.5%       7         35%       28%       8         38.5%       31.5%       9         42%       35%       10         On-Site Renewable Energy       % Renewable       Energy Points	Required Required Required
Y Y Y	1		Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing Building RenovationsPoints $10.5\%$ $3.5\%$ 1 $14\%$ $7\%$ 2 $17.5\%$ $10.5\%$ $3$ $21\%$ $14\%$ $4$ $24.5\%$ $17.5\%$ $5$ $28\%$ $21\%$ $6$ $31.5\%$ $24.5\%$ $7$ $35\%$ $28\%$ $8$ $38.5\%$ $31.5\%$ $9$ $42\%$ $35\%$ $10$ On-Site Renewable Energy	Required Required Required
Y Y 1	1	8	Prereq 1 Prereq 2 Prereq 3 Credit 1	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints $10.5\%$ $3.5\%$ 1 $14\%$ $7\%$ 2 $17.5\%$ $10.5\%$ $3$ $21\%$ $10.5\%$ $3$ $21\%$ $14\%$ $4$ $24.5\%$ $17.5\%$ $5$ $28\%$ $21\%$ $6$ $31.5\%$ $24.5\%$ $7$ $35\%$ $28\%$ $8$ $38.5\%$ $31.5\%$ $9$ $42\%$ $35\%$ $10$ On-Site Renewable Energy $\%$ RenewableEnergy Points $2.5\%$ $1$ $7.5\%$ $2$ $12.5\%$ $3$	Required Required 1 to 10
Y Y 1	1	8	Prereq 1 Prereq 2 Prereq 3 Credit 1 Credit 2 Credit 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints $10.5\%$ $3.5\%$ 1 $14\%$ $7\%$ 2 $17.5\%$ $10.5\%$ $3$ $21\%$ $14\%$ $4$ $24.5\%$ $17.5\%$ $5$ $28\%$ $21\%$ $6$ $31.5\%$ $24.5\%$ $7$ $35\%$ $28\%$ $8$ $38.5\%$ $31.5\%$ $9$ $42\%$ $35\%$ $10$ On-Site Renewable Energy $\%$ RenewableEnergy Points $2.5\%$ $1$ $7.5\%$ $2$ $12.5\%$ $3$ Enhanced Commissioning	Required Required 1 to 10 1 to 3
Y Y 1	1	8	Prereq 1 Prereq 2 Prereq 3 Credit 1 Credit 2 Credit 2 Credit 3 Credit 4	Fundamental Commissioning of the Building Energy Systems         Minimum Energy Performance         Fundamental Refrigerant Management         Optimize Energy Performance       New         Buildings Existing Building Renovations       Points       New         10.5%       3.5%       1       14%       7%       2         17.5%       10.5%       3       21%       14%       4         24.5%       17.5%       5       28%       21%       6         31.5%       24.5%       7       35%       28%       8         38.5%       31.5%       9       42%       35%       10         On-Site Renewable Energy         % Renewable       Energy Points       2.5%       1         7.5%       2       12.5%       3         Enhanced Commissioning         Enhanced Refrigerant Management	Required Required 1 to 10 1 to 3 1 to 3 1
Y Y 1	1	8	Prereq 1 Prereq 2 Prereq 3 Credit 1 Credit 2 Credit 3	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints $10.5\%$ $3.5\%$ 1 $14\%$ $7\%$ 2 $17.5\%$ $10.5\%$ $3$ $21\%$ $14\%$ $4$ $24.5\%$ $17.5\%$ $5$ $28\%$ $21\%$ $6$ $31.5\%$ $24.5\%$ $7$ $35\%$ $28\%$ $8$ $38.5\%$ $31.5\%$ $9$ $42\%$ $35\%$ $10$ On-Site Renewable Energy $\%$ RenewableEnergy Points $2.5\%$ $1$ $7.5\%$ $2$ $12.5\%$ $3$ Enhanced Commissioning	Required Required 1 to 10 1 to 3
Y Y Y 1	1	8	Prereq 1 Prereq 2 Prereq 3 Credit 1 Credit 1 Credit 2 Credit 3 Credit 4 Credit 5	Fundamental Commissioning of the Building Energy Systems         Minimum Energy Performance         Fundamental Refrigerant Management         Optimize Energy Performance       New         Buildings Existing Building Renovations       Points       New         10.5%       3.5%       1       14%       7%       2         17.5%       10.5%       3       21%       14%       4         24.5%       17.5%       5       28%       21%       6         31.5%       24.5%       7       35%       28%       8         38.5%       31.5%       9       42%       35%       10         On-Site Renewable Energy         % Renewable       Energy Points       2.5%       1         7.5%       2       12.5%       3         Enhanced Commissioning         Enhanced Refrigerant Management	Required Required 1 to 10 1 to 3 1 to 3 1
Y Y Y 1	1	8	Prereq 1 Prereq 2 Prereq 3 Credit 1 Credit 2 Credit 2 Credit 3 Credit 4	Fundamental Commissioning of the Building Energy SystemsMinimum Energy PerformanceFundamental Refrigerant ManagementOptimize Energy PerformanceNewBuildings Existing BuildingRenovationsPoints10.5%3.5%114%7%217.5%10.5%321%14%424.5%17.5%528%21%631.5%28%838.5%31.5%942%35%10On-Site Renewable Energy% RenewableEnergy Points2.5%17.5%2.5%3Enhanced CommissioningEnhanced Refrigerant ManagementMeasurement & Verif	Required Required 1 to 10 1 to 3 1 to 3 1

Yes ? I	No		
7	6 Mate	rials & Resources	13 Points
Y	Prereq	1 Storage & Collection of Recyclables	Required
		1 Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	. 1
		2 <b>Building Reuse</b> , Maintain 100% of Existing Walls, Floors & Roof	1
		<sup>3</sup> Building Reuse, Maintain 50% of Interior Non-Structural Elements	1
Y		1 <b>Construction Waste Management</b> , Divert 50% from Disposal	1
Y		2.2 <b>Construction Waste Management</b> , Divert 75% from Disposal	1
		1 Materials Reuse, 5%	1
		.2 Materials Reuse, 10%	1
Y		1 Recycled Content, 10% (post-consumer + ½ pre-consumer)	1
Υ		2 <b>Recycled Content</b> , 20% (post-consumer + ½ pre-consumer)	1
Υ		1 Regional Materials, 10% Extracted, Processed & Manufactured Regic	1
Υ		2 Regional Materials, 20% Extracted, Processed & Manufactured Regic	1
	N Credit 6		1
Y	Credit 7		1
	No		
6 7	2 Indo	or Environmental Quality	15 Points
			<b>D</b> · · ·
Y	Prereq		Required
Y	Prereq		Required
Y	Credit 1		1
	N Credit 2		1
Y Y		1 Construction IAQ Management Plan, During Construction	1
Y		22 Construction IAQ Management Plan, Before Occupancy	1
Y		Low-Emitting Materials, Adhesives & Sealants	1
Y		2 Low-Emitting Materials, Paints & Coatings	1
		.3 Low-Emitting Materials, Carpet Systems	1
?	N Credit 4 Credit 5	4 Low-Emitting Materials, Composite Wood & Agrifiber Products Indoor Chemical & Pollutant Source Control	1
?			1
?		<ul> <li>Controllability of Systems, Lighting</li> <li>Controllability of Systems, Thermal Comfort</li> </ul>	1
?		1 Thermal Comfort, Design	1
?		<sup>12</sup> Thermal Comfort, Verification	1
2		1 Daylight & Views, Daylight 75% of Spaces	1
2		12 Daylight & Views, Daylight 75% of Spaces	1
Yes ?	No	- Daynyn a views, views for 5070 01 Opaces	I
4 1		vation & Design Process	5 Points
T		1 Innovation in Design: Recycled Content 30%	1
Y Y		.2 Innovation in Design: Green Cleaning	1
Y ?		<ul> <li>Innovation in Design: Sustainable Site Maintenance</li> <li>Innovation in Design: Brouide Specific Title</li> </ul>	1
		4 Innovation in Design: Provide Specific Title	1
Y	Credit 2	LEED <sup>®</sup> Accredited Professional	1
Yes ? I	No		
28 18 2	23 Proje	ect Totals (pre-certification estimates)	69 Points
	Certifie	d 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points	

Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points