

13. ROOM DATA SHEETS

Program of Spaces - Net Area

Room #	Room Name	Room NSF	Qty	Total NSF
<u>Injection</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
Injection Total Net Square Feet:				17,693
<u>Lab Office Buildings</u>				
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

Room #	Room Name	Room NSF	Qty	Total NSF
LOB5-105A	Conference Room	220	2	440
LOB5-106	Lobby & Interaction Space	150	4	600
LOB5-107	Break Room / Kitchen	240	2	480
LOB5-108	Ship-Receive & Storage	960	1	960
LOB5-109	Toilet / Shower	250	2	500
LOB5-110	Electrical / Data	153	1	153
LOB5-111	Janitor Closet	63	1	63
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

Operations 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	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

RF 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

Ring Building

RB-101	Accelerator Tunnel	37,300	1	37,300
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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
RB-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

Ring Building Total Net Square Feet: 219,888

Service Buildings

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 Buildings Total Net Square Feet: 48,130

NSLS-II Net Square Feet: 355,483

ROOM DATA SHEET

Room Name: Booster Ring Tunnel

Room Number: BR-101

Functional Area: Injection

Ground Level

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 6,688 NSF x 1 Rooms Req'd. = 6,688 Total Net Square Feet

Function: House the Booster ring

Occupancy Class: B

General Notes: Radiation shielding required for tunnel walls and roof. Shielded doors or labyrinths required for entry.

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: Minimize differential settlement

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Concrete

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 78 F +/- 1.8 F Cooling 78 F +/- 1.8 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC None EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: Labyrinth entry required

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Trench drain around perimeter

Eyewash / Safety Shower _____

Plumbing Notes: Trench to have holding sump to allow testing prior to discharge to Sanitary Sewer.

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen Possible replacement for compress Process Cooling Water - Cu Cu / Al by ASD

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Surface Mount

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Low Voltage Switch

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>20</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: Lighting, life safety

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: HSSD

ROOM DATA SHEET

Room Name: Linac Room

Room Number: BR-102

Functional Area: Injection

Ground Level

Space Type:

Accelerator

SPACE REQUIREMENT:

Allocated Space : 1,715 NSF x 1 Rooms Req'd. = 1,715 Total Net Square Feet

Function: House the Linac

Occupancy Class: B

General Notes: Radiation shielding required for tunnel walls and roof. Shielded doors or labyrinths required for entry.

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: Minimize differential settlement

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Concrete

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC None EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: Labyrinth entry required

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu Cu / Al by ASD

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Low Voltage Switch

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Booster Service Building - East

Room Number: BR-103

Functional Area: Injection

Ground Level

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 6,102 NSF x 1 Rooms Req'd. = 6,102 Total Net Square Feet

Function: House support functions for the Booster Ring

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 72 F +/- 1 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Klystron Gallery

Room Number: BR-104

Functional Area: Injection

Ground Level

Space Type:

Accelerator

SPACE REQUIREMENT:

Allocated Space : 1,620 NSF x 1 Rooms Req'd. = 1,620 Total Net Square Feet

Function: House klystrons and support equipment for the Linac

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. 17'-0" clear

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 72 F +/- 1 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu Cu / Al by ASD

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Low Voltage Switch

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Booster Service Building - West

Room Number: BR-105

Functional Area: Injection

Ground Level

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 1,568 NSF x 1 Rooms Req'd. = 1,568 Total Net Square Feet

Function: Support functions and HVAC for the Booster Ring

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating _____

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating _____

Room Pressure _____ Vibration Criteria _____

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Private Office

Room Number: LOB1-101

Functional Area: Lab Office Buildings

Ground Level

Space Type: Office

SPACE REQUIREMENT:

Allocated Space : 110 NSF x 48 Rooms Req'd. = 5,280 Total Net Square Feet

Function: Enclosed private office space

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Painted Gypsum Board

Floors: Carpet Tile

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 35-40 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person

General Exhaust:

Chemical Exhaust:

Recirc / Single Pass Airflow Recirculated

Heat Exhaust:

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C

Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air

DI Water

Nitrogen

Process Cooling Water - Cu

Liquid Nitrogen

Process Cooling Water - Al

Other

Chemical Drain

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30-50 (50 at work surface)

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>3</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Open Office Space

Room Number: LOB1-102

Functional Area: Lab Office Buildings

Ground Level

Space Type: Office

SPACE REQUIREMENT:

Allocated Space : _____ 90 NSF x _____ 24 Rooms Req'd. = 2,160 Total Net Square Feet

Function: Cubicle space

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Movable Partition

Floors: Carpet Tile

Ceilings: No Ceiling

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 35-40 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30-50 (50 at work surface)

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
3	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Laboratory - Wet

Room Number: LOB1-103

Functional Area: Lab Office Buildings

Ground Level

Space Type: Laboratory

SPACE REQUIREMENT:

Allocated Space : 480 NSF x 2 Rooms Req'd. = 960 Total Net Square Feet
Function: General Purpose Wet Laboratory
Occupancy Class: B
General Notes: Laboratory equals two laboratory modules, each 240 SF.

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None
Structural Notes: _____

FINISHES:

Walls: Epoxy Painted Floors: Linoleum Sheet
Ceilings: Acoustic Ceiling Tile Clg. Ht. 12'-0"
Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating
Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating
Room Pressure Negative Vibration Criteria None
Acoustic Noise Level NC 45-50 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood chemical storage cabinet below.
 Casework Toxic / Hazardous Materials Fume Hood cabinet
Special Requirements Notes: Two labs per LOB require Fume Hoods. One Hood per LOB to have HEPA filtration

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System
Fire Protection Notes: _____

HVAC:

Air Changes / Hr 100 % General Exhaust: Room Exhaust Chemical Exhaust: Fume Hood
Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU
HVAC Notes: One fume hood with HEPA filtration on exhaust. Second to have capability to add HEPA filtration in the future.

PLUMBING:

Domestic Water H/C Floor / Trench Drain _____
 Eyewash / Safety Shower _____
Plumbing Notes: _____

PROCESS PIPING:

Compressed Air Lab Bench DI Water _____
 Nitrogen Lab Bench Process Cooling Water - Cu _____
 Liquid Nitrogen _____ Process Cooling Water - Al _____
 Other _____ Chemical Drain _____
Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant
Lighting Lamp Type: Fluorescent
Lighting Direction: Direct/Indirect
Light Switching: Low Voltage Switch
Lighting Level (FC): 50-75 (75 at work surface)
Ground: _____
Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>2</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Raceway</u>

Clean Power: _____
UPS: _____
Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____
 PA System _____
 Gas Leak Detection _____
 Liquid Leak Detection _____
Telecom Notes: _____
 Data Connections: _____
 Access Control: _____
 CCTV: _____
 Fire Detection Type: Photoelectric Smoke Detectors

ROOM DATA SHEET

Room Name: Laboratory - Dry

Room Number: LOB1-103A

Functional Area: Lab Office Buildings

Ground Level

Space Type: Laboratory

SPACE REQUIREMENT:

Allocated Space : 480 NSF x 4 Rooms Req'd. = 1,920 Total Net Square Feet
Function: General Purpose Dry laboratory
Occupancy Class: B
General Notes: Laboratory equals two laboratory modules, each 240 SF.

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load psf Vibration Requirements: None
Structural Notes:

FINISHES:

Walls: Paint Floors: Linoleum Sheet
Ceilings: Acoustic Ceiling Tile Clg. Ht. 12'-0"
Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating
Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating
Room Pressure Negative Vibration Criteria None
Acoustic Noise Level NC 45-50 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood
 Casework Toxic / Hazardous Materials
Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System
Fire Protection Notes:

HVAC:

Air Changes / Hr 100 % General Exhaust: Room Exhaust Chemical Exhaust:
Recirc / Single Pass Airflow Single Pass Heat Exhaust: Smoke Exhaust: by AHU
HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain
 Eyewash / Safety Shower
Plumbing Notes:

PROCESS PIPING:

Compressed Air Lab Bench DI Water
 Nitrogen Lab Bench Process Cooling Water - Cu
 Liquid Nitrogen Process Cooling Water - Al
 Other Chemical Drain
Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant
Lighting Lamp Type: Fluorescent
Lighting Direction: Direct/Indirect
Light Switching: Low Voltage Switch
Lighting Level (FC): 50-75 (75 at work surface)
Ground:
Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>2</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Raceway</u>

Clean Power:
UPS:
Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice Data Connections:
 PA System Access Control:
 Gas Leak Detection CCTV:
 Liquid Leak Detection Fire Detection Type: Photoelectric Smoke Detectors
Telecom Notes:

ROOM DATA SHEET

Room Name: Storage

Room Number: LOB1-104

Functional Area: Lab Office Buildings

Ground Level

Space Type: Lab Support

SPACE REQUIREMENT:

Allocated Space : _____ 110 NSF x _____ 1 Rooms Req'd. = _____ 110 Total Net Square Feet

Function: Storage for Laboratory Equipment

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Vinyl Tile

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 72 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
4	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Conference Room

Room Number: LOB1-105

Functional Area: Lab Office Buildings

Ground Level

Space Type: Interaction Area

SPACE REQUIREMENT:

Allocated Space : 560 NSF x 2 Rooms Req'd. = 1,120 Total Net Square Feet

Function: Conference Room

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Wall Coverings

Floors: Carpet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC 30 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct/Indirect

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Conference Room

Room Number: LOB1-105A

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Interaction Area

SPACE REQUIREMENT:

Allocated Space : 220 NSF x 2 Rooms Req'd. = 440 Total Net Square Feet

Function: Conference / Meeting Room

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Wall Coverings

Floors: Carpet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC 30 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct/Indirect

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Lobby & Interaction Space

Room Number: LOB1-106

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Interaction Area

SPACE REQUIREMENT:

Allocated Space : 150 NSF x 4 Rooms Req'd. = 600 Total Net Square Feet

Function: LOB Entrance

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Carpet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 12'-0"

Finishes Notes: Lobby floors to be ceramic tile.

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C Drinking Fountain Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Break Room / Kitchen

Room Number: LOB1-107

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Interaction Area

SPACE REQUIREMENT:

Allocated Space : _____ 240 NSF x _____ 2 Rooms Req'd. = _____ 480 Total Net Square Feet

Function: Seating and space for refrigerator, microwave, sink

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Linoleum Sheet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 72 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC 40 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C to sink Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
7	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Ship-Receive & Storage

Room Number: LOB1-108

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 960 NSF x 1 Rooms Req'd. = 960 Total Net Square Feet

Function: Shipping / Receiving loading platform and storage.

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint Floors: Sealed Concrete

Ceilings: No Ceiling Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 75 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 45-50 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____ Fume Hood _____

Casework _____ Toxic / Hazardous Materials _____

Special Requirements Notes: Overhead door

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: _____ Preaction System _____

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculation Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: Air curtain at overhead door.

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen to Dewar fill station. Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>11</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Toilet / Shower Room Number: LOB1-109

Functional Area: Lab Office Buildings Ground Level Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 250 NSF x 2 Rooms Req'd. = 500 Total Net Square Feet
Function: Restroom & shower
Occupancy Class: B
General Notes:

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load psf Vibration Requirements: None
Structural Notes:

FINISHES:

Walls: Paint Floors: Vinyl Tile
Ceilings: Acoustic Ceiling Tile Clg. Ht. 9'-0"
Finishes Notes:

ROOM ENVIRONMENT:

Temperature F +/- F Cooling F +/- F Heating
Humidity RH +/- RH Cooling RH +/- RH Heating
Room Pressure Negative Vibration Criteria None
Acoustic Noise Level NC 40 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood
 Casework Toxic / Hazardous Materials
Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System
Fire Protection Notes:

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:
Recirc / Single Pass Airflow Single Pass Heat Exhaust: Smoke Exhaust: by AHU
HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain Provide floor drains to sanitary waste.
 Eyewash / Safety Shower
Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water
 Nitrogen Process Cooling Water - Cu
 Liquid Nitrogen Process Cooling Water - Al
 Other Chemical Drain
Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Surface Mount
Lighting Lamp Type: Fluorescent
Lighting Direction: Direct
Light Switching: Occupancy Sensor
Lighting Level (FC): 15
Ground:
Electrical Notes:

Power Outlets:					
No.	Voltage	Phase	Type	Location	
1	120 v	1 ph	Normal	Wall	
0					

Clean Power:
UPS:
Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice Data Connections:
 PA System Access Control:
 Gas Leak Detection CCTV:
 Liquid Leak Detection Fire Detection Type:
Telecom Notes:

ROOM DATA SHEET

Room Name: Electrical / Data

Room Number: LOB1-110

Functional Area: Lab Office Buildings

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 153 NSF x 1 Rooms Req'd. = 153 Total Net Square Feet

Function:

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Movable Partition

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes:

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes:

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Janitor Closet

Room Number: LOB1-111

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 63 NSF x _____ 1 Rooms Req'd. = _____ 63 Total Net Square Feet

Function: Maintenance space

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Paint Floors: Sealed Concrete

Ceilings: Acoustic Ceiling Tile Clg. Ht. 8'-0"

Finishes Notes:

ROOM ENVIRONMENT:

Temperature _____ 0 F +/- _____ 0 F Cooling _____ 0 F +/- _____ 0 F Heating

Humidity _____ 0 RH +/- _____ 0 RH Cooling _____ 0 RH +/- _____ 0 RH Heating

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC None EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C

Floor / Trench Drain

Provide floor drains to sanitary waste.

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air

DI Water

Nitrogen

Process Cooling Water - Cu

Liquid Nitrogen

Process Cooling Water - Al

Other

Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
1	120 v	1 ph	Normal	Wall
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes:

ROOM DATA SHEET

Room Name: Access Corridor Interface

Room Number: LOB1-112

Functional Area: Lab Office Buildings

Ground Level

Space Type: Circulation

SPACE REQUIREMENT:

Allocated Space : 2,090 NSF x 1 Rooms Req'd. = 2,090 Total Net Square Feet

Function: Extension of the Access Corridor into LOB

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint Floors: Sealed Concrete

Ceilings: No Ceiling Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 75 F +/- 1 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 55 or Better EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____ Fume Hood _____
 Casework _____ Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: _____ Preaction System _____

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Low Voltage Switch

Lighting Level (FC): 50

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Machine Shop

Room Number: LOB1-113

Functional Area: Lab Office Buildings

Ground Level

Space Type: Lab Support

SPACE REQUIREMENT:

Allocated Space : 270 NSF x 1 Rooms Req'd. = 270 Total Net Square Feet

Function: Machine shop

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 12'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person

General Exhaust: _____

Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated

Heat Exhaust: _____

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____

Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____

DI Water _____

Nitrogen _____

Process Cooling Water - Cu _____

Liquid Nitrogen _____

Process Cooling Water - Al _____

Other _____

Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 50-75

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>2</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: _____

Telecom Notes: _____

ROOM DATA SHEET

Room Name: LOB #4 Shell

Room Number: LOB4-101

Functional Area: Lab Office Buildings

Ground Level

Space Type:

SPACE REQUIREMENT:

Allocated Space : 16,146 NSF x 1 Rooms Req'd. = 16,146 Total Net Square Feet

Function: Shelled space for future build-out of Lab Office Building

Occupancy Class:

General Notes:

STRUCTURAL DATA:

Floor Live Load: psf Floor Capacity Load psf Vibration Requirements:

Structural Notes:

FINISHES:

Walls: Floors: Concrete

Ceilings: No Ceiling Clg. Ht.

Finishes Notes: Unfinished space

ROOM ENVIRONMENT:

Temperature 0 F +/- 0 F Cooling 0 F +/- 0 F Heating

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating

Room Pressure Vibration Criteria

Acoustic Noise Level NC EMI Criteria

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood

Casework Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System

Fire Protection Notes: Sprinklers to be installed.

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Heat Exhaust: Smoke Exhaust:

HVAC Notes: Freeze protection only.

PLUMBING:

Domestic Water H/C Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes: Stub up for future plumbing in labs and toilets.

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes: Process piping to be added when space fit-up

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): <10

Ground:

Electrical Notes: Exit lights and minimal lighting in space.

Power Outlets:

No.	Voltage	Phase	Type	Location
0				
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice Data Connections:

PA System Temporary speakers Access Control:

Gas Leak Detection CCTV:

Liquid Leak Detection Fire Detection Type:

Telecom Notes:

ROOM DATA SHEET

Room Name: Private Office

Room Number: LOB5-101

Functional Area: Lab Office Buildings

Ground Level

Space Type: Office

SPACE REQUIREMENT:

Allocated Space : 110 NSF x 48 Rooms Req'd. = 5,280 Total Net Square Feet

Function: Enclosed private office space

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Painted Gypsum Board

Floors: Carpet Tile

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria _____

Acoustic Noise Level NC 35-40 EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30-50 (50 at work surface)

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>3</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Flexible Office Space

Room Number: **LOB5-102**

Functional Area: Lab Office Buildings

Ground Level

Space Type: Office

SPACE REQUIREMENT:

Allocated Space : _____ 90 NSF x _____ 24 Rooms Req'd. = **2,160** Total Net Square Feet

Function: Cubicle space

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Movable Partition

Floors: Carpet Tile

Ceilings: No Ceiling

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 72 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Positive Vibration Criteria _____

Acoustic Noise Level NC 35-40 EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person

General Exhaust:

Chemical Exhaust:

Recirc / Single Pass Airflow Recirculated

Heat Exhaust:

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C

Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air

DI Water

Nitrogen

Process Cooling Water - Cu

Liquid Nitrogen

Process Cooling Water - Al

Other

Chemical Drain

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30-50 (50 at work surface)

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
3	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type: Photoelectric Smoke Detectors

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Laboratory - Wet

Room Number: LOB5-103

Functional Area: Lab Office Buildings

Ground Level

Space Type: Laboratory

SPACE REQUIREMENT:

Allocated Space : 480 NSF x 2 Rooms Req'd. = 960 Total Net Square Feet

Function: General Purpose Wet Laboratory

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Epoxy Painted Floors: Linoleum Sheet

Ceilings: Acoustic Ceiling Tile Clg. Ht. 12'-0"

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Negative Vibration Criteria

Acoustic Noise Level NC 45-50 EMI Criteria

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood Chemical storage cabinet below

Casework Toxic / Hazardous Materials Fume Hood cabinet

Special Requirements Notes: Two labs per LOB require Fume Hoods. One Hood per LOB to have HEPA filtration

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr 100% General Exhaust: Room Exhaust Chemical Exhaust: Fume Hood

Recirc / Single Pass Airflow Single Pass Heat Exhaust: Smoke Exhaust: by AHU

HVAC Notes: One fume hood with HEPA filtration on exhaust. Second to have capability to add HEPA filtration in the future.

PLUMBING:

Domestic Water H/C Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air Lab Bench DI Water

Nitrogen Lab Bench Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct/Indirect

Light Switching: Low Voltage Switch

Lighting Level (FC): 50-75 (75 at work surface)

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
2	120 v	1 ph	Normal	Wall
0	120 v	1 ph	Normal	Raceway

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

PA System

Gas Leak Detection

Liquid Leak Detection

Telecom Notes:

Data Connections:

Access Control:

CCTV:

Fire Detection Type: Photoelectric Smoke Detectors

ROOM DATA SHEET

Room Name: Laboratory - Dry

Room Number: **LOB5-103A**

Functional Area: Lab Office Buildings

Ground Level

Space Type: Laboratory

SPACE REQUIREMENT:

Allocated Space : 480 NSF x 4 Rooms Req'd. = 1,920 Total Net Square Feet

Function: General Purpose Dry laboratory

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Linoleum Sheet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 12'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Negative Vibration Criteria _____

Acoustic Noise Level NC 45-50 EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 100% General Exhaust: Room Exhaust Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air Lab Bench DI Water _____

Nitrogen Lab Bench Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct/Indirect

Light Switching: Low Voltage Switch

Lighting Level (FC): 50-75 (75 at work surface)

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>2</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Raceway</u>

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Storage

Room Number: LOB5-104

Functional Area: Lab Office Buildings

Ground Level

Space Type: Lab Support

SPACE REQUIREMENT:

Allocated Space : _____ 110 NSF x _____ 1 Rooms Req'd. = _____ 110 Total Net Square Feet

Function: Storage for Laboratory Equipment

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Painted Gypsum Board

Floors: Vinyl Tile

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 72 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Negative Vibration Criteria _____

Acoustic Noise Level NC 40-45 EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
4	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Conference Room

Room Number: LOB5-105

Functional Area: Lab Office Buildings

Ground Level

Space Type: Interaction Area

SPACE REQUIREMENT:

Allocated Space : 560 NSF x 2 Rooms Req'd. = 1,120 Total Net Square Feet

Function: Conference Room

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Wall Coverings

Floors: Carpet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral

Vibration Criteria _____

Acoustic Noise Level NC 30

EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person

General Exhaust: _____

Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated

Heat Exhaust: _____

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____

Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____

DI Water _____

Nitrogen _____

Process Cooling Water - Cu _____

Liquid Nitrogen _____

Process Cooling Water - Al _____

Other _____

Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct/Indirect

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: _____

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Conference Room

Room Number: LOB5-105A

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Interaction Area

SPACE REQUIREMENT:

Allocated Space : 220 NSF x 2 Rooms Req'd. = 440 Total Net Square Feet

Function: Conference / Meeting Room

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Wall Coverings

Floors: Carpet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria _____

Acoustic Noise Level NC 30 EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct/Indirect

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Lobby & Interaction Space

Room Number: LOB5-106

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Interaction Area

SPACE REQUIREMENT:

Allocated Space : 150 NSF x 4 Rooms Req'd. = 600 Total Net Square Feet

Function: LOB Entrance

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Carpet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 12'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria _____

Acoustic Noise Level NC 40-45 EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Break Room / Kitchen

Room Number: LOB5-107

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Interaction Area

SPACE REQUIREMENT:

Allocated Space : _____ 240 NSF x _____ 2 Rooms Req'd. = _____ 480 Total Net Square Feet

Function: Seating and space for refrigerator, microwave, sink

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Linoleum Sheet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 10'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 72 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Negative

Vibration Criteria _____

Acoustic Noise Level NC 40

EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: Overhead door

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
7	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Ship-Receive & Storage

Room Number: **LOB5-108**

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 960 NSF x 1 Rooms Req'd. = **960** Total Net Square Feet

Function: Shipping / Receiving loading platform and storage.

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- 5 F Cooling _____ 72 F +/- 5 F Heating

Humidity _____ 50 RH +/- 10 RH Cooling _____ 30 RH +/- 10 RH Heating

Room Pressure Positive

Vibration Criteria _____

Acoustic Noise Level NC 45-50

EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____

DI Water _____

Nitrogen _____

Process Cooling Water - Cu _____

Liquid Nitrogen to Dewar fill station.

Process Cooling Water - Al _____

Other _____

Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
11	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: _____

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Toilet / Shower Room Number: LOB5-109

Functional Area: Lab Office Buildings Ground Level Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 250 NSF x 2 Rooms Req'd. = 500 Total Net Square Feet
Function: Restroom & shower
Occupancy Class: B
General Notes:

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load psf Vibration Requirements: None
Structural Notes:

FINISHES:

Walls: Paint Floors: Vinyl Tile
Ceilings: Acoustic Ceiling Tile Clg. Ht. 9'-0"
Finishes Notes:

ROOM ENVIRONMENT:

Temperature 0 F +/- 0 F Cooling 0 F +/- 0 F Heating
Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating
Room Pressure Negative Vibration Criteria
Acoustic Noise Level NC 40 EMI Criteria

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood
 Casework Toxic / Hazardous Materials
Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System
Fire Protection Notes:

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:
Recirc / Single Pass Airflow Single Pass Heat Exhaust: Smoke Exhaust: by AHU
HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain Provide floor drains to sanitary waste.
 Eyewash / Safety Shower
Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water
 Nitrogen Process Cooling Water - Cu
 Liquid Nitrogen Process Cooling Water - Al
 Other Chemical Drain
Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Surface Mount
Lighting Lamp Type: Fluorescent
Lighting Direction: Direct
Light Switching: Occupancy Sensor
Lighting Level (FC): 15
Ground:
Electrical Notes:

Power Outlets:					
No.	Voltage	Phase	Type	Location	
1	120 v	1 ph	Normal	Wall	
0					

Clean Power:
UPS:
Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice Data Connections:
 PA System Access Control:
 Gas Leak Detection CCTV:
 Liquid Leak Detection Fire Detection Type:
Telecom Notes:

ROOM DATA SHEET

Room Name: Electrical / Data

Room Number: **LOB5-110**

Functional Area: Lab Office Buildings

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 153 NSF x 1 Rooms Req'd. = 153 Total Net Square Feet

Function:

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Recirculated Heat Exhaust: Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
4	120 v	1 ph	Normal	Wall
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

PA System

Gas Leak Detection

Liquid Leak Detection

Telecom Notes:

Data Connections:

Access Control:

CCTV:

Fire Detection Type:

ROOM DATA SHEET

Room Name: Janitor Closet

Room Number: LOB5-111

Functional Area: Lab Office Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 63 NSF x _____ 1 Rooms Req'd. = _____ 63 Total Net Square Feet

Function: Maintenance space

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 8'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ F +/- _____ F Cooling _____ F +/- _____ F Heating _____ F +/- _____ F

Humidity _____ 0 RH +/- _____ 0 RH Cooling _____ 0 RH +/- _____ 0 RH Heating _____ 0 RH +/- _____ 0 RH

Room Pressure Negative

Vibration Criteria _____

Acoustic Noise Level NC None

EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____

General Exhaust: _____

Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass

Heat Exhaust: _____

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C

Floor / Trench Drain

Provide floor drains to sanitary waste.

Eyewash / Safety Shower

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air

DI Water

Nitrogen

Process Cooling Water - Cu

Liquid Nitrogen

Process Cooling Water - Al

Other

Chemical Drain

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
1	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections: _____

PA System

Access Control: _____

Gas Leak Detection

CCTV: _____

Liquid Leak Detection

Fire Detection Type: _____

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Access Corridor Interface

Room Number: **LOB5-112**

Functional Area: Lab Office Buildings

Ground Level

Space Type: Circulation

SPACE REQUIREMENT:

Allocated Space : 2,090 NSF x 1 Rooms Req'd. = 2,090 Total Net Square Feet

Function: Extension of the Access Corridor into LOB

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: _____ Floors: _____

Ceilings: _____ Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 72 F +/- 1 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive Vibration Criteria _____

Acoustic Noise Level NC 55 or Better EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____ Fume Hood _____

Casework _____ Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: _____ Preaction System _____

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Low Voltage Switch

Lighting Level (FC): 50

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Machine Shop

Room Number: LOB5-113

Functional Area: Lab Office Buildings

Ground Level

Space Type: Lab Support

SPACE REQUIREMENT:

Allocated Space : 270 NSF x 1 Rooms Req'd. = 270 Total Net Square Feet

Function: Machine shop

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 12'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Negative Vibration Criteria _____

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person

General Exhaust: _____

Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated

Heat Exhaust: _____

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____

Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____

DI Water _____

Nitrogen _____

Process Cooling Water - Cu _____

Liquid Nitrogen _____

Process Cooling Water - Al _____

Other _____

Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 50-75

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>2</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: _____

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Control Conference Room

Room Number: OPS-103

Functional Area: Operations Center

Level 2

Space Type: Laboratory

SPACE REQUIREMENT:

Allocated Space : _____ 676 NSF x _____ 1 Rooms Req'd. = _____ 676 Total Net Square Feet

Function: Meeting space for control room operators

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Wall Coverings _____ Floors: Carpet Tile

Ceilings: Acoustic Ceiling Tile _____ Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 72 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Positive _____ Vibration Criteria None

Acoustic Noise Level NC 30 _____ EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____ Fume Hood _____
 Casework _____ Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: _____ Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ 20 CFM/Person _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow _____ Recirculated _____ Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer _____

Lighting Lamp Type: Fluorescent _____

Lighting Direction: Direct/Indirect _____

Light Switching: Occupancy Sensor _____

Lighting Level (FC): 30 _____

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
4	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Control Room

Room Number: OPS-104

Functional Area: Operations Center

Level 2

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 1,547 NSF x 1 Rooms Req'd. = 1,547 Total Net Square Feet

Function: House control panels for storage ring.

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Raised Floor

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 35-40 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Indirect

Light Switching: Low Voltage Switch

Lighting Level (FC): 30-50

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
8	120 v	1	Normal	Wall
16	120 v	1 ph	Emergency	Floor

Clean Power: _____

UPS: 30 kVA for Control & Computer Rooms

Emergency Power: Floor receptacles for control stations

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Computer Room

Room Number: OPS-105

Functional Area: Operations Center

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 976 NSF x 1 Rooms Req'd. = **976** Total Net Square Feet

Function: House computers for storage ring control and monitoring

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Raised Floor

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 72 F +/- 5 F Cooling _____ 72 F +/- 5 F Heating

Humidity _____ 50 RH +/- 10 RH Cooling _____ 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 45-50 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct/Indirect

Light Switching: Occupancy Sensor

Lighting Level (FC): 50

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
4	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: 30 kVA for Control & Computer Rooms

Emergency Power: for computers

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes: _____

ROOM DATA SHEET

Room Name: 2nd Floor Toilet & Shower

Room Number: OPS-106

Functional Area: Operations Center

Level 2

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 76 NSF x _____ 2 Rooms Req'd. = _____ 152 Total Net Square Feet

Function: _____

Occupancy Class: B _____

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None _____

Structural Notes: _____

FINISHES:

Walls: Paint _____

Floors: Vinyl Tile _____

Ceilings: Acoustic Ceiling Tile _____

Clg. Ht. 9'-0" _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ F +/- _____ F Cooling _____ F +/- _____ F Heating _____

Humidity _____ RH +/- _____ RH Cooling _____ RH +/- _____ RH Heating _____

Room Pressure Negative _____ Vibration Criteria None _____

Acoustic Noise Level NC None _____ EMI Criteria None _____

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer _____

Lighting Lamp Type: Fluorescent _____

Lighting Direction: Direct _____

Light Switching: Occupancy Sensor _____

Lighting Level (FC): 10-15 (30 at sink) _____

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
1	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: Photoelectric Smoke Detectors

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Entrance Lobby & Vestibule

Room Number: OPS-107

Functional Area: Operations Center

Ground Level

Space Type: Circulation

SPACE REQUIREMENT:

Allocated Space : 2,415 NSF x 1 Rooms Req'd. = 2,415 Total Net Square Feet

Function: Main entrance to NSLS-II and area for social gatherings

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint Floors: Ceramic Tile

Ceilings: No Ceiling Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____ Fume Hood _____
 Casework _____ Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 20 CFM/Person General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C Drinking Fountain Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>2</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Bridge & Viewing Gallery

Room Number: OPS-108

Functional Area: Operations Center

Level 2

Space Type: Circulation

SPACE REQUIREMENT:

Allocated Space : 1,450 NSF x 1 Rooms Req'd. = 1,450 Total Net Square Feet

Function: Viewing area of Experimental Hall for tours.
Access to the Tunnel Mezzanine and Control Room

Occupancy Class: B

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Paint Floors: Vinyl Tile

Ceilings: No Ceiling Clg. Ht.

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood
 Casework Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Recirculated Heat Exhaust: Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
0	120 v	1 ph	Normal	Wall
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

PA System

Gas Leak Detection

Liquid Leak Detection

Telecom Notes:

Data Connections:

Access Control:

CCTV:

Fire Detection Type:

ROOM DATA SHEET

Room Name: Unisex Toilet

Room Number: OPS-109

Functional Area: Operations Center

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 78 NSF x 1 Rooms Req'd. = 78 Total Net Square Feet

Function: Restroom

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Paint

Floors: Vinyl Tile

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes:

ROOM ENVIRONMENT:

Temperature _____ F +/- _____ F Cooling _____ F +/- _____ F Heating _____ F

Humidity _____ RH +/- _____ RH Cooling _____ RH +/- _____ RH Heating _____ RH

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC None EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes: Toilet and sink in each room

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Surface Mount

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 10-15 (30 at sink)

Ground: _____

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
1	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes:

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Break Room / Kitchenette

Room Number: OPS-110

Functional Area: Operations Center

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 512 NSF x _____ 1 Rooms Req'd. = _____ 512 Total Net Square Feet

Function: Space to store and prepare personal meals

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Linoleum Sheet

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 72 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework Counter & cabinets

Toxic / Hazardous Materials

Special Requirements Notes: Provide sink; space for refrigerator, microwave, vending machines.

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C

Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower

Plumbing Notes: Kitchen sink

PROCESS PIPING:

Compressed Air

DI Water

Nitrogen

Process Cooling Water - Cu

Liquid Nitrogen

Process Cooling Water - Al

Other

Chemical Drain

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
7	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections: _____

PA System

Access Control: _____

Gas Leak Detection

CCTV: _____

Liquid Leak Detection

Fire Detection Type: _____

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Telecom Room

Room Number: OPS-111

Functional Area: Operations Center

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 409 NSF x 1 Rooms Req'd. = 409 Total Net Square Feet

Function: Electrical equipment room

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 78 F +/- 5 F Cooling 72 F +/- 5 F Heating _____

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating _____

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC 45-50 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>8</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Switchgear Room

Room Number: OPS-118

Functional Area: Operations Center

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 655 NSF x 1 Rooms Req'd. = 655 Total Net Square Feet

Function:

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC 45-50 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Recirculated Heat Exhaust: Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes:

ROOM DATA SHEET

Room Name: Men's Locker Room

Room Number: OPS-120

Functional Area: Operations Center

Level 2

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 128 NSF x 1 Rooms Req'd. = 128 Total Net Square Feet

Function:

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Paint

Floors: Vinyl Tile

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes:

ROOM ENVIRONMENT:

Temperature _____ F +/- _____ F Cooling _____ F +/- _____ F Heating _____ F

Humidity _____ RH +/- _____ RH Cooling _____ RH +/- _____ RH Heating _____ RH

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes:

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Surface Mount

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 10-15

Ground: _____

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
1	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: _____

Telecom Notes:

ROOM DATA SHEET

Room Name: Women's Locker Room

Room Number: OPS-121

Functional Area: Operations Center

Level 2

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 126 NSF x 1 Rooms Req'd. = 126 Total Net Square Feet

Function:

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes:

FINISHES:

Walls: Paint

Floors: Vinyl Tile

Ceilings: Acoustic Ceiling Tile

Clg. Ht. 9'-0"

Finishes Notes:

ROOM ENVIRONMENT:

Temperature _____ F +/- _____ F Cooling _____ F +/- _____ F Heating _____ F

Humidity _____ RH +/- _____ RH Cooling _____ RH +/- _____ RH Heating _____ RH

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes:

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes:

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Surface Mount

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 10-15

Ground: _____

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
1	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: _____

Telecom Notes:

ROOM DATA SHEET

Room Name: Storage Room Number: OPS-122

Functional Area: Operations Center Level 2 Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 108 NSF x 1 Rooms Req'd. = 108 Total Net Square Feet
Function:
Occupancy Class: B
General Notes:

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load psf Vibration Requirements: None
Structural Notes:

FINISHES:

Walls: Paint Floors: Sealed Concrete
Ceilings: Acoustic Ceiling Tile Clg. Ht. 9'-0"
Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 72 F +/- 5 F Heating
Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating
Room Pressure Neutral Vibration Criteria None
Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood
 Casework Toxic / Hazardous Materials
Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System
Fire Protection Notes:

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:
Recirc / Single Pass Airflow Recirculated Heat Exhaust: Smoke Exhaust: by AHU
HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain
 Eyewash / Safety Shower
Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water
 Nitrogen Process Cooling Water - Cu
 Liquid Nitrogen Process Cooling Water - Al
 Other Chemical Drain
Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant
Lighting Lamp Type: Fluorescent
Lighting Direction: Direct
Light Switching: Occupancy Sensor
Lighting Level (FC): 15
Ground:
Electrical Notes:

Power Outlets:					
No.	Voltage	Phase	Type	Location	
4	120 v	1 ph	Normal	Wall	
0					

Clean Power:
UPS:
Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice Data Connections:
 PA System Access Control:
 Gas Leak Detection CCTV:
 Liquid Leak Detection Fire Detection Type:
Telecom Notes:

ROOM DATA SHEET

Room Name: Accelerator Tunnel

Room Number: **RB-101**

Functional Area: Ring Building

Ground Level

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 37,300 NSF x 1 Rooms Req'd. = 37,300 Total Net Square Feet

Function: Houses the Storage Ring

Occupancy Class: B

General Notes: Radiation shielding required for tunnel walls and roof. Shielded doors required for entry. Equipment entry from infield

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load 3000 psf Vibration Requirements: R = 25nm Power Spectral Density

Structural Notes: Minimize differential settlement

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: Concrete

Clg. Ht. 9'-0"

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 78 F +/- 0.18 F Cooling 78 F +/- 0.18 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria R<25 nm PSD

Acoustic Noise Level NC None EMI Criteria No specific criteria established

SPECIAL REQUIREMENTS:

Storage Cabinet _____ Fume Hood _____

Casework _____ Toxic / Hazardous Materials _____

Special Requirements Notes: Shield doors required at ratchet wall for each beamline. Labyrinth entry require elsewhere.

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: _____ Preaction System _____

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Trench drain around perimeter

Eyewash / Safety Shower _____

Plumbing Notes: Trench drain to have holding sump to allow testing

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen Possible replacement for compress Process Cooling Water - Cu Cu / Al by ASD

Liquid Nitrogen TBD Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: Process Cooling Water and Process Chilled Water provided by ASD and coordinated by CFD.

ELECTRICAL:

Lighting Fixture Type: Surface Mount

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: Accelerator power fed from tunnel mezzanine thru tunnel roof.

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>0</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: Lighting, life safety

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection In Trench Drain

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: HSSD

ROOM DATA SHEET

Room Name: Experimental Hall

Room Number: RB-102A

Functional Area: Ring Building

Ground Level

Space Type: Laboratory

SPACE REQUIREMENT:

Allocated Space : 94,235 NSF x 1 Rooms Req'd. = 94,235 Total Net Square Feet

Function: House Beamlines and experimental hutches

Occupancy Class: B

General Notes: Occupants will be stationed in the LOBs although they will spend substantial time in the Experimental Hall. The Hall

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load 2000 psf Vibration Requirements: 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 acoustical treatment.

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 75 F +/- 1 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive Vibration Criteria VC-E

Acoustic Noise Level NC 55 or lower EMI Criteria No specific criteria established

SPECIAL REQUIREMENTS:

Storage Cabinet _____ Fume Hood _____
 Casework _____ Toxic / Hazardous Materials unknown type

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: _____ Preaction System _____

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: Hutch Exhaust

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower Distributed

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air At tunnel mezzanine DI Water _____

Nitrogen At tunnel mezzanine Process Cooling Water - Cu Cu only/ by EF

Liquid Nitrogen At tunnel mezzanine Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Metal Halide

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: Instrument Reference Ground

Electrical Notes: Each panelboard for beamlines is served by a 75kVA transformer. Panelboards mounted on tunnel mezzanine.

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>60</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: HSSD

ROOM DATA SHEET

Room Name: Access Corridor

Room Number: **RB-102B**

Functional Area: Ring Building

Ground Level

Space Type:

Circulation

SPACE REQUIREMENT:

Allocated Space : 33,018 NSF x 1 Rooms Req'd. = **33,018** Total Net Square Feet

Function: Corridor around the outside of the Experimental Hall

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Pre-insulated Building Wall Panel

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 75 F +/- 1 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Positive Vibration Criteria VC-E

Acoustic Noise Level NC 55 or lower EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____

General Exhaust:

Chemical Exhaust:

Recirc / Single Pass Airflow Recirculated

Heat Exhaust:

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C

Floor / Trench Drain

Trench drain around perimeter

Eyewash / Safety Shower

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air

DI Water

Nitrogen

Process Cooling Water - Cu

Liquid Nitrogen

Process Cooling Water - Al

Other

Chemical Drain

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Low Voltage Switch

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
60	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type: HSSD

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Tunnel Mezzanine

Room Number: **RB-103**

Functional Area: Ring Building

Mezzanine

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 50,950 NSF x 1 Rooms Req'd. = 50,950 Total Net Square Feet

Function: Space for Electrical Gear supporting storage ring.

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Pre-insulated Building Wall Panel

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 75 F +/- 5 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive

Vibration Criteria None

Acoustic Noise Level NC 55 or lower

EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____

General Exhaust: _____

Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated

Heat Exhaust: _____

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____

Floor / Trench Drain Floor drains

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____

DI Water _____

Nitrogen _____

Process Cooling Water - Cu _____

Liquid Nitrogen _____

Process Cooling Water - Al by ASD

Other _____

Chemical Drain _____

Piping Notes: Chilled Water supply and return for power supply cooling is required.

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Low Voltage Switch

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>60</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: HSSD

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Loading Dock

Room Number: **RB-104**

Functional Area: Ring Building

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 2,060 NSF x 1 Rooms Req'd. = 2,060 Total Net Square Feet

Function: Loading Dock for NSLS-II facility

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Pre-insulated Building Wall Panel

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 75 F +/- 5 F Heating

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating

Room Pressure Positive

Vibration Criteria None

Acoustic Noise Level NC None

EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>8</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

Data Connections: _____

PA System _____

Access Control: _____

Gas Leak Detection _____

CCTV: _____

Liquid Leak Detection _____

Fire Detection Type: _____

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Hazardous Materials Storage

Room Number: **RB-105**

Functional Area: Ring Building

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : _____ 450 NSF x _____ 1 Rooms Req'd. = _____ 450 Total Net Square Feet

Function: Receipt and storage of hazardous materials

Occupancy Class: H-6

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Pre-insulated Building Wall Panel

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature _____ 75 F +/- _____ 5 F Cooling _____ 75 F +/- _____ 5 F Heating

Humidity _____ 50 RH +/- _____ 10 RH Cooling _____ 30 RH +/- _____ 10 RH Heating

Room Pressure Negative Vibration Criteria None

Acoustic Noise Level NC 45-50 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____

General Exhaust:

Chemical Exhaust:

Recirc / Single Pass Airflow Single Pass

Heat Exhaust:

Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C

Floor / Trench Drain

Eyewash / Safety Shower

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air

DI Water

Nitrogen

Process Cooling Water - Cu

Liquid Nitrogen

Process Cooling Water - Al

Other

Chemical Drain

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: Wall outlets for standard power to be suitable for flammable / hazardous environment.

Power Outlets:

No.	Voltage	Phase	Type	Location
0	120 v	1 ph	Normal	Wall
0				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes: _____

ROOM DATA SHEET

Room Name: Stock Room

Room Number: **RB-106**

Functional Area: Ring Building

Ground Level

Space Type: Building Support

SPACE REQUIREMENT:

Allocated Space : 1,618 NSF x 1 Rooms Req'd. = 1,618 Total Net Square Feet

Function: Receiving and storage for non-hazardous materials.

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 125 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Pre-insulated Building Wall Panel

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 75 F +/- 5 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive

Vibration Criteria None

Acoustic Noise Level NC 40-45

EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Grille Room Number: **RB-107**

Functional Area: Ring Building Ground Level Space Type: Interaction Area

SPACE REQUIREMENT:

Allocated Space : 257 NSF x 1 Rooms Req'd. = 257 Total Net Square Feet
Function:
Occupancy Class: B
General Notes:

STRUCTURAL DATA:

Floor Live Load: 100 psf Floor Capacity Load _____ psf Vibration Requirements: None
Structural Notes:

FINISHES:

Walls: Pre-insulated Building Wall Panel Floors: Linoleum Sheet
Ceilings: Acoustic Ceiling Tile Clg. Ht. 9'-0"
Finishes Notes:

ROOM ENVIRONMENT:

Temperature 75 F +/- 5 F Cooling 75 F +/- 5 F Heating
Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating
Room Pressure Negative Vibration Criteria None
Acoustic Noise Level NC 40-45 EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood
 Casework Toxic / Hazardous Materials
Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System
Fire Protection Notes:

HVAC:

Air Changes / Hr General Exhaust: Chemical Exhaust:
Recirc / Single Pass Airflow Recirculated Heat Exhaust: Smoke Exhaust: by AHU
HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain Provide floor drains to sanitary waste.
 Eyewash / Safety Shower
Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water
 Nitrogen Process Cooling Water - Cu
 Liquid Nitrogen Process Cooling Water - Al
 Other Chemical Drain
Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Recessed Troffer
Lighting Lamp Type: Fluorescent
Lighting Direction: Direct
Light Switching: Occupancy Sensor
Lighting Level (FC): 30
Ground:
Electrical Notes:

Power Outlets:					
No.	Voltage	Phase	Type	Location	
<u>8</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>	
<u>0</u>					

Clean Power:
UPS:
Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice Data Connections:
 PA System Access Control:
 Gas Leak Detection CCTV:
 Liquid Leak Detection Fire Detection Type:
Telecom Notes:

ROOM DATA SHEET

Room Name: RF Cavity Room

Room Number: RF-101

Functional Area: RF Building

Ground Level

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 9,756 NSF x 1 Rooms Req'd. = 9,756 Total Net Square Feet

Function: Location of RF cavities and support

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. 20'-0" clear

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 72 F +/- 1 F Heating

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC None EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>12</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: RF Test

Room Number: RF-102

Functional Area: RF Building

Ground Level

Space Type: Accelerator

SPACE REQUIREMENT:

Allocated Space : 426 NSF x 1 Rooms Req'd. = 426 Total Net Square Feet

Function: RF Test

Occupancy Class: B

General Notes: Radiation shielding required for walls and roof. Labyrinth for entrance to be provided.

STRUCTURAL DATA:

Floor Live Load: 350 psf Floor Capacity Load _____ psf Vibration Requirements: None

Structural Notes: _____

FINISHES:

Walls: Paint

Floors: Sealed Concrete

Ceilings: No Ceiling

Clg. Ht. 20'-0" clear

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 75 F +/- 1 F Cooling 75 F +/- 1 F Heating _____

Humidity 50 RH +/- 10 RH Cooling 30 RH +/- 10 RH Heating _____

Room Pressure Positive Vibration Criteria None

Acoustic Noise Level NC None EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: Labyrinth entry required

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr _____ General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Recirculated Heat Exhaust: _____ Smoke Exhaust: by AHU

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain _____

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Dimmer

Lighting Level (FC): 30

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>4</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Service Building #1

Room Number: SB-101

Functional Area: Service Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : 9,626 NSF x 1 Rooms Req'd. = 9,626 Total Net Square Feet

Function: Mechanical and Electrical room

Occupancy Class: B

General Notes: _____

STRUCTURAL DATA:

Floor Live Load: 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: No Ceiling

Clg. Ht. _____

Finishes Notes: _____

ROOM ENVIRONMENT:

Temperature 78 F +/- 5 F Cooling 78 F +/- 5 F Heating

Humidity _____ RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet _____

Fume Hood _____

Casework _____

Toxic / Hazardous Materials _____

Special Requirements Notes: _____

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes: _____

HVAC:

Air Changes / Hr 6-10 AC/Hr General Exhaust: _____ Chemical Exhaust: _____

Recirc / Single Pass Airflow Single Pass Heat Exhaust: Summer Ventilatio Smoke Exhaust: Yes

HVAC Notes: _____

PLUMBING:

Domestic Water H/C _____ Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower _____

Plumbing Notes: _____

PROCESS PIPING:

Compressed Air _____ DI Water _____

Nitrogen _____ Process Cooling Water - Cu _____

Liquid Nitrogen _____ Process Cooling Water - Al _____

Other _____ Chemical Drain _____

Piping Notes: _____

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground: _____

Electrical Notes: _____

Power Outlets:

No.	Voltage	Phase	Type	Location
<u>24</u>	<u>120 v</u>	<u>1 ph</u>	<u>Normal</u>	<u>Wall</u>
<u>0</u>				

Clean Power: _____

UPS: _____

Emergency Power: _____

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice _____

PA System _____

Gas Leak Detection _____

Liquid Leak Detection _____

Telecom Notes: _____

Data Connections: _____

Access Control: _____

CCTV: _____

Fire Detection Type: _____

ROOM DATA SHEET

Room Name: Service Building #2

Room Number: SB-102

Functional Area: Service Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : 9,626 NSF x 1 Rooms Req'd. = 9,626 Total Net Square Feet

Function: Mechanical and Electrical room

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 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: No Ceiling Clg. Ht.

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 78 F +/- 5 F Cooling 78 F +/- 5 F Heating

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet Fume Hood
 Casework Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group Wet System: Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr 6-10 AC/Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Single Pass Heat Exhaust: Summer Ventilatio Smoke Exhaust: Yes

HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
24	120 v	1 ph	Normal	Wall
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

PA System

Gas Leak Detection

Liquid Leak Detection

Telecom Notes:

Data Connections:

Access Control:

CCTV:

Fire Detection Type:

ROOM DATA SHEET

Room Name: Service Building #3

Room Number: SB-103

Functional Area: Service Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : 9,626 NSF x 1 Rooms Req'd. = 9,626 Total Net Square Feet

Function: Mechanical and Electrical room

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 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: No Ceiling

Clg. Ht.

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 78 F +/- 5 F Cooling 78 F +/- 5 F Heating

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Ordinary Hazard Group

Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr 6-10 AC/Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Single Pass Heat Exhaust: Summer Ventilatio Smoke Exhaust: Yes

HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
24	120 v	1 ph	Normal	Wall
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes:

ROOM DATA SHEET

Room Name: Service Building #4

Room Number: SB-104

Functional Area: Service Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : 9,626 NSF x 1 Rooms Req'd. = 9,626 Total Net Square Feet

Function: Mechanical and Electrical Room

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 350/150 psf Floor Capacity Load psf Vibration Requirements: None

Structural Notes: 350 psf ground floor ; 150 psf second floor

FINISHES:

Walls:

Floors:

Ceilings:

Clg. Ht.

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 78 F +/- 5 F Cooling 78 F +/- 5 F Heating

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr 6-10 AC/Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Single Pass Heat Exhaust: Summer Ventilatio Smoke Exhaust: Yes

HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
24	120 v	1 ph	Normal	Wall
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes:

ROOM DATA SHEET

Room Name: Service Building #5

Room Number: SB-105

Functional Area: Service Buildings

Ground Level

Space Type:

Building Support

SPACE REQUIREMENT:

Allocated Space : 9,626 NSF x 1 Rooms Req'd. = 9,626 Total Net Square Feet

Function: Mechanical and Electrical Room

Occupancy Class: B

General Notes:

STRUCTURAL DATA:

Floor Live Load: 350/150 psf Floor Capacity Load psf Vibration Requirements: None

Structural Notes: 350 psf ground floor ; 150 psf second floor

FINISHES:

Walls:

Floors:

Ceilings:

Clg. Ht.

Finishes Notes:

ROOM ENVIRONMENT:

Temperature 78 F +/- 5 F Cooling 78 F +/- 5 F Heating

Humidity 0 RH +/- 0 RH Cooling 0 RH +/- 0 RH Heating

Room Pressure Neutral Vibration Criteria None

Acoustic Noise Level NC Per ACGIH TLVs EMI Criteria None

SPECIAL REQUIREMENTS:

Storage Cabinet

Fume Hood

Casework

Toxic / Hazardous Materials

Special Requirements Notes:

FIRE PROTECTION:

Hazard Classification: Wet System:

Preaction System

Fire Protection Notes:

HVAC:

Air Changes / Hr 6-10 AC/Hr General Exhaust: Chemical Exhaust:

Recirc / Single Pass Airflow Single Pass Heat Exhaust: Summer Ventilatio Smoke Exhaust: Yes

HVAC Notes:

PLUMBING:

Domestic Water H/C Floor / Trench Drain Provide floor drains to sanitary waste.

Eyewash / Safety Shower

Plumbing Notes:

PROCESS PIPING:

Compressed Air DI Water

Nitrogen Process Cooling Water - Cu

Liquid Nitrogen Process Cooling Water - Al

Other Chemical Drain

Piping Notes:

ELECTRICAL:

Lighting Fixture Type: Pendant

Lighting Lamp Type: Fluorescent

Lighting Direction: Direct

Light Switching: Occupancy Sensor

Lighting Level (FC): 15

Ground:

Electrical Notes:

Power Outlets:

No.	Voltage	Phase	Type	Location
24	120 v	1 ph	Normal	Wall
0				

Clean Power:

UPS:

Emergency Power:

TELECOMMUNICATION AND SPECIAL SYSTEMS:

Phone / Voice

Data Connections:

PA System

Access Control:

Gas Leak Detection

CCTV:

Liquid Leak Detection

Fire Detection Type:

Telecom Notes:



LEED-NC

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

Yes ? No

5 7 2 Sustainable Sites 14 Points

Y			Prereq 1	Construction Activity Pollution Prevention	Required
Y			Credit 1	Site Selection	1
		N	Credit 2	Development Density & Community Connectivity	1
		N	Credit 3	Brownfield Redevelopment	1
Y			Credit 4.1	Alternative Transportation, Public Transportation Access	1
Y			Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
Y			Credit 4.3	Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles	1
	?		Credit 4.4	Alternative Transportation, Parking Capacity	1
	?		Credit 5.1	Site Development, Protect or Restore Habitat	1
Y			Credit 5.2	Site Development, Maximize Open Space	1
	?		Credit 6.1	Stormwater Design, Quantity Control	1
	?		Credit 6.2	Stormwater Design, Quality Control	1
	?		Credit 7.1	Heat Island Effect, Non-Roof	1
	?		Credit 7.2	Heat Island Effect, Roof	1
	?		Credit 8	Light Pollution Reduction	1

Yes ? No

3 2 Water Efficiency 5 Points

Y			Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
Y			Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
	?		Credit 2	Innovative Wastewater Technologies	1
Y			Credit 3.1	Water Use Reduction, 20% Reduction	1
	?		Credit 3.2	Water Use Reduction, 30% Reduction	1

Yes ? No

3 1 13 Energy & Atmosphere 17 Points

Y			Prereq 1	Fundamental Commissioning of the Building Energy Systems	Required
Y			Prereq 2	Minimum Energy Performance	Required
Y			Prereq 3	Fundamental Refrigerant Management	Required
				Optimize Energy Performance	New
				Buildings Existing BuildingRenovations Points	
				10.5% 3.5% 1	
				14% 7% 2	
				17.5% 10.5% 3	
1	1	8	Credit 1	21% 14% 4	1 to 10
				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	
			Credit 2	% Renewable Energy Points	1 to 3
				2.5% 1	
				7.5% 2	
				12.5% 3	
Y			Credit 3	Enhanced Commissioning	1
Y			Credit 4	Enhanced Refrigerant Management	1
		N	Credit 5	Measurement & Verification	1
				Green Power	
		N	Credit 6	Provide at least 35% of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract	1

Yes ? No

7 **6** **Materials & Resources** **13 Points**

Y			Prereq 1	Storage & Collection of Recyclables	Required
		N	Credit 1.1	Building Reuse , Maintain 75% of Existing Walls, Floors & Roof	1
		N	Credit 1.2	Building Reuse , Maintain 100% of Existing Walls, Floors & Roof	1
		N	Credit 1.3	Building Reuse , Maintain 50% of Interior Non-Structural Elements	1
Y			Credit 2.1	Construction Waste Management , Divert 50% from Disposal	1
Y			Credit 2.2	Construction Waste Management , Divert 75% from Disposal	1
		N	Credit 3.1	Materials Reuse , 5%	1
		N	Credit 3.2	Materials Reuse , 10%	1
Y			Credit 4.1	Recycled Content , 10% (post-consumer + ½ pre-consumer)	1
Y			Credit 4.2	Recycled Content , 20% (post-consumer + ½ pre-consumer)	1
Y			Credit 5.1	Regional Materials , 10% Extracted, Processed & Manufactured Regic	1
Y			Credit 5.2	Regional Materials , 20% Extracted, Processed & Manufactured Regic	1
		N	Credit 6	Rapidly Renewable Materials	1
Y			Credit 7	Certified Wood	1

Yes ? No

6 **7** **2** **Indoor Environmental Quality** **15 Points**

Y			Prereq 1	Minimum IAQ Performance	Required
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required
Y			Credit 1	Outdoor Air Delivery Monitoring	1
		N	Credit 2	Increased Ventilation	1
Y			Credit 3.1	Construction IAQ Management Plan , During Construction	1
Y			Credit 3.2	Construction IAQ Management Plan , Before Occupancy	1
Y			Credit 4.1	Low-Emitting Materials , Adhesives & Sealants	1
Y			Credit 4.2	Low-Emitting Materials , Paints & Coatings	1
Y			Credit 4.3	Low-Emitting Materials , Carpet Systems	1
		N	Credit 4.4	Low-Emitting Materials , Composite Wood & Agrifiber Products	1
		?	Credit 5	Indoor Chemical & Pollutant Source Control	1
		?	Credit 6.1	Controllability of Systems , Lighting	1
		?	Credit 6.2	Controllability of Systems , Thermal Comfort	1
		?	Credit 7.1	Thermal Comfort , Design	1
		?	Credit 7.2	Thermal Comfort , Verification	1
		?	Credit 8.1	Daylight & Views , Daylight 75% of Spaces	1
		?	Credit 8.2	Daylight & Views , Views for 90% of Spaces	1

Yes ? No

4 **1** **Innovation & Design Process** **5 Points**

Y			Credit 1.1	Innovation in Design : Recycled Content 30%	1
Y			Credit 1.2	Innovation in Design : Green Cleaning	1
Y			Credit 1.3	Innovation in Design : Sustainable Site Maintenance	1
		?	Credit 1.4	Innovation in Design : Provide Specific Title	1
Y			Credit 2	LEED® Accredited Professional	1

Yes ? No

28 **18** **23** **Project Totals (pre-certification estimates)** **69 Points**

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