

ADDENDUM

002

Date: April 12, 2018
Attn: Project Bidders
Project Name: SUNY Purchase Hub – Café Addition and Renovation
Project Address: 735 Anderson Hill Road
Purchase, NY 10577
PZD Project Number: 1517347
SUNY Project Number: SU031918

The following information shall amend the Construction Documents for the project listed above.

GENERAL COMMENTS:

- See attached list of Pre-Bid walkthrough attendance and provided business cards.
- Note: Asbestos abatement is to be completed by others prior to start of construction by others.
- Note: FFE is to be provided by others, GC is to coordinate MEP with FFE items.
- Note: Basement Heights are provided within drawings. GC to coordinate final ceiling with mechanical equipment and architect where ceiling heights conflict.
- Note: Window sizes where window film is to be applied: Pizza area, 21'-0" x 11'-10" (+/-). Storage (115) window size is 21'-5" x 11'-10" (+/-)
- Note: The structural drawing from Addendum 1. See drawing below.
- Note: See attached "Addendum No. 2 List" and drawings from Innovative Engineering Services, Inc. for MEP comments.
- 4" sprinkler main in corridor 002 is shown, Contractor is responsible for all distribution and branch piping from the main. There isn't any existing sprinkler piping in the building.
- The existing pneumatic controls are to be reused as part of this project.

DRAWING COMMENTS:

G000, Sheet Index

- CHANGE, Title sheet has been reissued with addendum dates.

AD101, Detail 1

- CLARIFICATION: Note has been revised regarding existing storefront panel that is to be removed to accommodate new door.

A102, Detail 2

- ADD: Notes have been added for additional clarification.

A103, Coded Note 7

- CLARIFICATION: Coded note 7 has been revised.
- ADD: Coded note 8 has been added.

A201, Detail 1

- CLARIFICATION: Soffit heights have been revised.
- CLARIFICATION: Sloped ceiling height note has been revised

A202, Detail 7

- ADD: A Note has been added to detail 7.

A501, Door Schedule

- CLARIFICATION: Door schedule has been revised.

A502, Frame E and F

- Clarification: Height of storefront has been revised.

A503, Frame I

- Clarification: Frame I has been resized.

A505, Detail S5

- Change: Detail title has changed.

A700, Add

- ADD: Drawing A700 has been added for reference of final college room numbers.

A701, Add

- ADD: Drawing A701 has been added for reference of final college room numbers.

V112, Detail 1

- CHANGE: Soffit heights have been revised.

PROJECT MANUAL COMMENTS

087100 – Door Hardware

- Change: Door hardware spec to be replaced with attached.

End of Architectural Addendum #2

Please feel free to contact me should you have any questions.
Sincerely,

Phase Zero Design INC

Christopher T. Milliard
Associate/Project Manager



INNOVATIVE ENGINEERING
SERVICES, LLC
AN INTEGRATED ENGINEERING + DESIGN FIRM

Addendum No. 2 List

Date: April 12, 2018

SUNY Purchase The Hub 17163

Electrical

DE101	First Floor Electrical Demolition Plan
E100	Basement Power Plan
E102	First Floor Power Plan
E103	First Floor Lighting Plan
E201	Electrical Schedules
E202	Electrical Schedules
E205	Electrical Notes, Legends, and Details

Plumbing

DP100	Basement Plumbing Demolition Plan
DP101	First Floor Plumbing Demolition Plan

Specifications

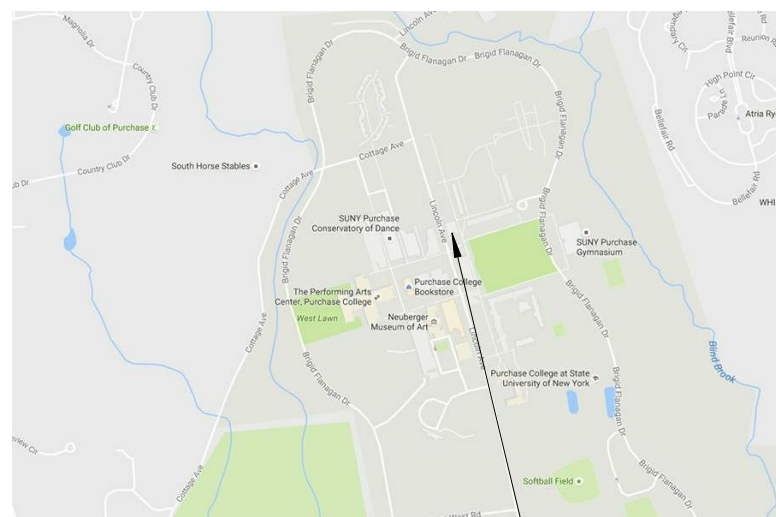
SUNY PURCHASE COLLEGE

CAFE ADDITION AND RENOVATION

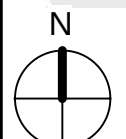
735 ANDERSON HILL RD
PURCHASE, NY 10577



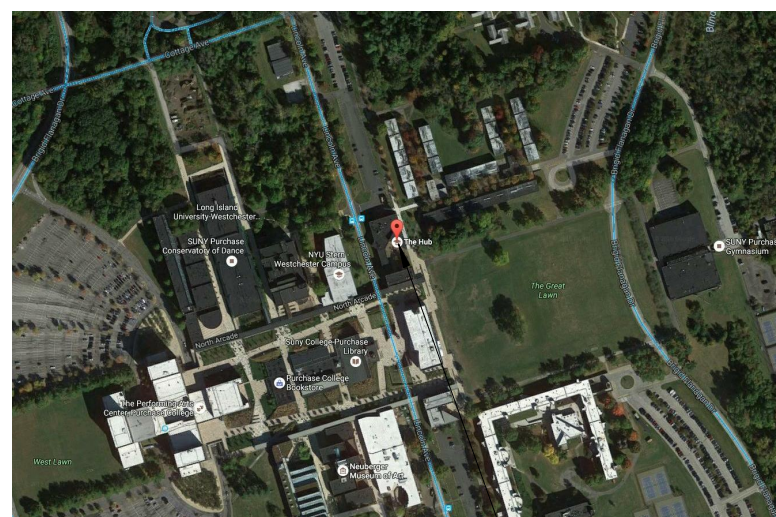
ISSUED FOR: ADDENDUM 2, 04.12.2018



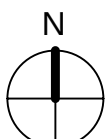
SUNY PURCHASE COLLEGE
735 ANDERSON HILL RD
PURCHASE, NY 10577



LOCUS PLAN



PROJECT LOCATION
THE HUB AT PURCHASE COLLEGE



KEY PLAN

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF A NEW ADDITION TO THE STUDENT DINING COMMONS.

THE PROJECT CONSISTS OF THE FOLLOWING WORK:

- LIMITED LOCAL DEMOLITION ONLY AS NEEDED FOR NEW CONSTRUCTION.
- EXISTING DINING SPACE (BUILDING ENVELOPE AND TENANT DEMISING WALLS)
- EXISTING/ MODIFIED ROOF PER NEW HVAC
- EXISTING/ MODIFIED FIRE PROTECTION
- NEW INTERIOR PARTITIONS AND DOORS
- NEW SPECIALTY EQUIPMENT & CONNECTIONS
- NEW PLUMBING AND FLOOR PENETRATIONS
- NEW AIR HANDLING UNITS AND DISTRIBUTION
- NEW ELECTRICAL DISTRIBUTION

PROJECT DESCRIPTION

OWNER

SUNY PURCHASE COLLEGE
735 ANDERSON HILL RD
PURCHASE, NY 10577

ARCHITECT

PHASE ZERO DESIGN
8 WILCOX STREET
SIMSBURY, CT 06070
T: 860.264.1624
PROJECT MANAGER: CHRIS MILLIARD
E-MAIL: cmilliard@phasezerodesign.com

CIVIL ENGINEER

DOUCET & ASSOCIATES
136 WEST ST. #103
NORTHAMPTON, MA, 01060
T: 413.208.2349
CONTACT: LARRY RUSIECKI
E-MAIL: lrusiecki@doucetengineers.com

PROJECT TEAM

MEP ENGINEER

INNOVATIVE ENGINEERING SERVICES
33 NORTH PLAINS INDUSTRIAL ROAD
WALLINGFORD, CT, 06492
T: 732.280.5623
CONTACT: PETER PYCELA
E-MAIL: ppycela@iesllc.biz

STRUCTURAL ENGINEER

SZEWCAK ASSOCIATES STRUCTURAL ENGINEERS
200 FISHER DRIVE
AVON, CT, 06001
T: 860.677.4570
CONTACT: RICH SZEWCAK
E-MAIL: richard@szewczakassociates.com

DESIGN CONSULTANT

VISION BUILDERS
305 FOSTER AVE, SUITE 100
CHARLOTTE, NC 28203
T: 704.405.3106
CONTACT: KEITH FENNELLY
E-MAIL: keith@visionbuildersusa.com

SHEET INDEX

ISSUED FOR: ISSUE DATE:

GENERAL			
G000	TITLE SHEET	ADDENDUM 2	04.12.2018
G001	GENERAL NOTES	ADDENDUM 1	3.30.2018
G002	GENERAL NOTES	BID	02.16.2018
G003	ADA STANDARDS, SYMBOLS & ABBREVIATIONS	BID	02.16.2018
G004	CODE DATA	BID	02.16.2018
G100	CODE PLAN & ANALYSIS BASEMENT	BID	02.16.2018
G101	CODE PLAN & ANALYSIS FIRST FLOOR	BID	02.16.2018
G102	CODE PLAN & ANALYSIS SECOND AND THIRD FLOOR	BID	02.16.2018
CIVIL SITE & LANDSCAPING			
C1	COVER SHEET	ADDENDUM 1	3.30.2018
C2	LEGEND & GENERAL NOTES	ADDENDUM 1	3.30.2018
C3	SITE LAYOUT & MATERIALS PLAN	ADDENDUM 1	3.30.2018
C4	SITE GRADING PLAN	ADDENDUM 1	3.30.2018
C5a	SITE UTILITIES PLAN	ADDENDUM 1	3.30.2018
C5b	SITE UTILITIES PLAN	ADDENDUM 1	3.30.2018
C6	SITE DEMOLITION & EROSION CONTROL	ADDENDUM 1	3.30.2018
C7	SITE DETAILS	ADDENDUM 1	3.30.2018
C8	SITE DETAILS	BID	02.16.2018
TS105	TOPOGRAPHIC SURVEY	BID	02.16.2018
ARCHITECTURAL			
AD100	BASEMENT DEMOLITION PLAN	ADDENDUM 1	3.30.2018
AD101	FIRST FLOOR DEMOLITION PLAN	ADDENDUM 2	04.12.2018
AD200	BASEMENT CEILING DEMOLITION PLAN	BID	02.16.2018
AD201	FIRST FLOOR CEILING DEMOLITION PLAN	BID	02.16.2018
A100	BASEMENT CONSTRUCTION FLOOR PLAN	BID	02.16.2018
A101	FIRST FLOOR CONSTRUCTION PLAN	ADDENDUM 1	3.30.2018
A102	ENLARGED PLANS & PLAN DETAILS	ADDENDUM 1	3.30.2018
A103	ROOF PLAN	ADDENDUM 1	3.30.2018
A200	BASEMENT REFLECTED CEILING PLAN	ADDENDUM 1	3.30.2018
A201	FIRST FLOOR REFLECTED CEILING PLAN	ADDENDUM 2	04.12.2018
A202	CEILING DETAILS I	BID	02.16.2018
A203	CEILING DETAILS II	BID	02.16.2018
A301	EXTERIOR ELEVATIONS	BID	02.16.2018
A401	BUILDING SECTIONS	BID	02.16.2018
A402	WALL SECTIONS	BID	02.16.2018
A403	WALL SECTIONS	BID	02.16.2018
A404	WALL SECTIONS	BID	02.16.2018
A405	SECTION DETAILS	BID	02.16.2018
A501	DOOR SCHEDULE	ADDENDUM 2	04.12.2018
A502	ALUMINUM FRAME ELEVATIONS I	ADDENDUM 2	04.12.2018
A503	ALUMINUM FRAME ELEVATIONS II	ADDENDUM 2	04.12.2018
A504	ALUMINUM FRAME DETAILS I	BID	02.16.2018
A505	ALUMINUM FRAME DETAILS II	ADDENDUM 2	04.12.2018
A601	MISCELLANEOUS DETAILS I	BID	02.16.2018
A700	BASEMENT ROOM NUMBER REFERENCE PLAN	ADDENDUM 2	04.12.2018
A701	FIRST FLOOR ROOM NUMBER REFERENCE PLAN	ADDENDUM 2	04.12.2018
INTERIOR DESIGN			
V100	GENERAL ARRANGEMENT PLAN - BASEMENT	BID	02.16.2018
V101	FLOOR FINISHES PLAN - BASEMENT	BID	02.16.2018
V102	REFLECTED CEILING PLAN - BASEMENT	ADDENDUM 1	3.30.2018
V110	GENERAL ARRANGEMENT PLAN - FIRST FLOOR	BID	02.16.2018
V111	FLOOR FINISHES PLAN - FIRST FLOOR	BID	02.16.2018
V112	REFLECTED CEILING PLAN - FIRST FLOOR	ADDENDUM 2	04.12.2018
V113	FURNITURE PLAN	BID	02.16.2018
V114	MILLWORK PLAN	ADDENDUM 1	3.30.2018
V210	MILLWORK SECTIONS	ADDENDUM 1	3.30.2018
V211	MILLWORK SECTIONS II	ADDENDUM 1	3.30.2018
V212	MILLWORK SECTIONS III	ADDENDUM 1	3.30.2018
V300	INTERIOR ELEVATIONS I	ADDENDUM 1	3.30.2018
V301	INTERIOR ELEVATIONS II	ADDENDUM 1	3.30.2018
V310	INTERIOR ELEVATIONS III	ADDENDUM 1	3.30.2018
V311	INTERIOR ELEVATIONS IV	ADDENDUM 1	3.30.2018
V312	INTERIOR ELEVATIONS V	ADDENDUM 1	3.30.2018
V313	INTERIOR ELEVATIONS VI	ADDENDUM 1	3.30.2018
V314	INTERIOR ELEVATIONS VII	ADDENDUM 1	3.30.2018
V315	INTERIOR ELEVATIONS AND DETAILS VIII	ADDENDUM 1	3.30.2018
V316	INTERIOR ELEVATIONS IX	ADDENDUM 1	3.30.2018
V317	INTERIOR ELEVATIONS X	ADDENDUM 1	3.30.2018
V318	INTERIOR ELEVATIONS XI	ADDENDUM 1	3.30.2018
V319	INTERIOR ELEVATIONS XII	ADDENDUM 1	3.30.2018
V320	INTERIOR ELEVATIONS XIII	ADDENDUM 1	3.30.2018
FOOD SERVICE			
Q001	EXISTING EQUIPMENT PLAN	BID	02.16.2018
Q010	EQUIPMENT DEMO PLAN	BID	02.16.2018
Q100	BASEMENT EQUIPMENT LAYOUT	BID	02.16.2018
Q101	EQUIPMENT LAYOUT - OVERALL LAYOUT	BID	02.16.2018
Q111	FOOD SERVICE EQUIPMENT - ENLARGED AREAS	BID	02.16.2018
Q200	BASEMENT ELECTRICAL CONNECTION LAYOUT	BID	02.16.2018
Q210	ELECTRICAL CONNECTION LAYOUT	BID	02.16.2018
Q211	FS ELECTRICAL ROUGH IN PLAN ENLARGED	BID	02.16.2018
Q300	BASEMENT PLUMBING CONNECTION LAYOUT	BID	02.16.2018
Q310	PLUMBING CONNECTION LAYOUT	BID	02.16.2018
Q311	PLUMBING CONNECTION ENLARGED	BID	02.16.2018
Q312	PLUMBING CONNECTION ENLARGED	BID	02.16.2018
Q313	PLUMBING CONNECTION SCHEDULE	BID	02.16.2018
Q400	SPECIAL CONDITIONS PLAN	BID	02.16.2018
Q500	EXHAUST HOOD DETAILS	BID	02.16.2018
Q501	EXHAUST HOOD DETAILS	BID	02.16.2018
Q502	EXHAUST HOOD DETAILS	BID	02.16.2018
Q503	EXHAUST HOOD DETAILS	BID	02.16.2018
Q504	EXHAUST HOOD DETAILS	BID	02.16.2018
Q505	EXHAUST HOOD DETAILS	BID	02.16.2018
Q506	WALKIN BOX DETAILS	BID	02.16.2018
Q507	WALKIN BOX DETAILS	BID	02.16.2018
Q508	WALKIN BOX DETAILS	BID	02.16.2018
Q600	FOOD SERVICE EQUIPMENT SCHEDULE	BID	02.16.2018
STRUCTURAL			
S001	GENERAL NOTES AND TYPICAL DETAILS	BID	02.16.2018
S101	DINING LEVEL FRAMING AND FOUNDATION PLAN	BID	02.16.2018

SHEET INDEX

ISSUED FOR: ISSUE DATE:

S102	ROOF FRAMING PLAN	BID	02.16.2018
S201	FOUNDATION SECTIONS	BID	02.16.2018
S202	STRUCTURAL SECTIONS	BID	02.16.2018
S203	FOUNDATION SECTIONS & COLUMN SCHEDULE	BID	02.16.2018
FIRE PROTECTION			
FP100	BASEMENT FIRE PROTECTION PLAN	BID	02.16.2018
FP101	FIRST FLOOR FIRE PROTECTION PLAN	BID	02.16.2018
FP200	FIRE PROTECTION DETAILS	BID	02.16.2018
FP201	FIRE PROTECTION NOTES, LEGENDS, & SCHEDULES	BID	02.16.2018
PLUMBING			
DP100	BASEMENT PLUMBING DEMOLITION PLAN	ADDENDUM 2	04.12.2018
DP101	FIRST FLOOR PLUMBING DEMOLITION PLAN	ADDENDUM 2	04.12.2018
P100	BASEMENT WASTE & STORM PLUMBING PLAN	BID	02.16.2018
P100.1	BASEMENT DOMESTIC WATER PLUMBING PLAN	BID	02.16.2018
P101	FIRST FLOOR PLUMBING PLAN	BID	02.16.2018
P101.1	ENLARGED FIRST FLOOR PLUMBING PLAN	BID	02.16.2018
P101.2	FOOD SERVICE PLUMBING SCHEDULE	BID	02.16.2018
P102	ROOF PLUMBING PLAN	BID	02.16.2018
P200	PLUMBING DETAILS	BID	02.16.2018
P201	PLUMBING DETAILS	BID	02.16.2018
P202	PLUMBING DETAILS	BID	02.16.2018
P203	PLUMBING NOTES, LEGENDS, AND SCHEDULE	BID	02.16.2018
MECHANICAL			
DM100	BASEMENT MECHANICAL DEMOLITION PLAN	BID	02.16.2018
DM101	FIRST FLOOR MECHANICAL DEMOLITION PLAN	BID	02.16.2018
DM102	ROOF MECHANICAL DEMOLITION PLAN	BID	02.16.2018
M100	BASEMENT MECHANICAL PLAN	BID	02.16.2018
M101	DINING LEVEL MECHANICAL PLAN	ADDENDUM 1	3.30.2018
M102	ROOF MECHANICAL PLAN	ADDENDUM 1	3.30.2018
M200	MECHANICAL DETAILS	ADDENDUM 1	3.30.2018
M201	MECHANICAL NOTES, LEGENDS, AND SCHEDULES	ADDENDUM 1	3.30.2018
M202	MECHANICAL DETAILS	BID	02.16.2018
M203	MECHANICAL NOTES, LEGENDS, AND SCHEDULE	BID	02.16.2018
M204	MECHANICAL NOTES, LEGENDS, AND SCHEDULES	ADDENDUM 1	3.30.2018
ELECTRICAL			
DE100	BASEMENT ELECTRICAL DEMOLITION PLAN	ADDENDUM 1	3.30.2018
DE101	FIRST FLOOR ELECTRICAL DEMOLITION PLAN	ADDENDUM 2	04.12.2018
DE102	ROOF ELECTRICAL DEMOLITION PLAN	BID	02.16.2018
DE103	DEMOLITION ONE-LINE RISER AND NOTES	BID	02.16.2018
E100	BASEMENT POWER PLAN	ADDENDUM 2	04.12.2018
E101	BASEMENT LIGHTING PLAN	ADDENDUM 1	3.30.2018
E102	FIRST FLOOR POWER PLAN	ADDENDUM 2	04.12.2018
E103	FIRST FLOOR LIGHTING PLAN	ADDENDUM 2	04.12.2018
E104	ROOF ELECTRICAL PLAN	ADDENDUM 1	02.16.2018
E105	BASEMENT ELECTRICAL LOCATION PLAN	BID	02.16.2018
E106	BASEMENT LOW VOLTAGE PATHWAY PLAN	ADDENDUM 1	3.30.2018
E107	FIRST FLOOR LOW VOLTAGE PATHWAY PLAN	ADDENDUM 1	3.30.2018
E200	ONE-LINE RISER DIAGRAM	BID	02.16.2018
E201	ELECTRICAL SCHEDULES	ADDENDUM 2	04.12.2018
E202	ELECTRICAL SCHEDULES	ADDENDUM 2	04.12.2018
E203	ELECTRICAL DETAILS AND SCHEDULES	BID	02.16.2018
E204	ELECTRICAL LOW VOLTAGE DETAILS	ADDENDUM 1	3.30.2018
E205	ELECTRICAL NOTES, LEGENDS, AND DETAILS	ADDENDUM 2	04.12.2018

8 WILCOX STREET
SIMSBURY, CONNECTICUT 06070
PHONE: (860) 264-1624
FAX: (860) 264-1628
www.phasezerodesign.com

CLIENT:

chartwells
where hungry minds gather

www.chartwellshighered.com

OWNER:

Purchase College
STATE UNIVERSITY OF NEW YORK

www.purchase.edu

CONSULTANT:

SUNY PURCHASE COLLEGE

CAFE ADDITION AND RENOVATION

735 ANDERSON HILL RD
PURCHASE, NY 10577

PROJECT:

REVISIONS		
NO.	DATE	DESCRIPTION
1	03.30.2018	ADDENDUM 1
2	04.12.2018	ADDENDUM 2

SEAL:

ISSUED FOR: ADDENDUM 2

ISSUED DATE: 04.12.2018

DRAWN BY: JW

CHECKED BY: CM

PROJECT NUMBER: 1517347

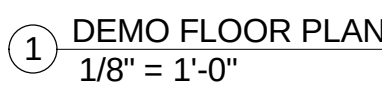
Copyright (c) by Phase Zero Design Corp. All Rights Reserved.

DRAWING NAME:

TITLE SHEET

DRAWING NO.

G000



1. THE G.C. IS TO FIELD VERIFY ALL DIMENSIONS USING THE CONSTRUCTION DOCUMENTS. IF ANY DISCREPANCIES EXISTING, G.C. TO MARK UP DRAWINGS THAT REFLECT THE ACTUAL CONDITION, FORWARD THEM TO THE ARCHITECT WITHIN (3) DAYS OF THE DISCOVERY OF THE DISCREPANCY.

2. THE G.C. IS TO VERIFY THE EXISTING CONDITIONS OF THE SPACING INCLUDING BUT NOT LIMITED TO SLAB CONDITION AND ANY ISSUES THAT MAY AFFECT NEW FLOOR FINISHES. IF ANY ISSUES EXIST, CONTACT ARCHITECT.

3. DEMOLITION SHALL TAKE PLACE OUTSIDE OF THE SCOPE OF WORK WITHOUT THE APPROVAL OF THE OWNER.

4. THE DEMOLITION IS TO BE PROPERLY SUPPORTED DURING DEMOLITION, COORDINATE ALL WORK WITH STRUCTURAL DRAWINGS.

5. PATCH AND REPAIR EXISTING ROOF SYSTEM WHERE DEMOLITION IS TO OCCUR TO MAINTAIN WATER TIGHTNESS OF THE EXISTING ROOF.

6. G.C. IS REFER TO Q410 EQUIPMENT DEMO LAYOUT FOR ADDITIONAL DEMOLITION NOTES.

7. G.C. TO REFER STRUCTURAL DRAWINGS AND MEP DRAWINGS FOR ADDITIONAL DEMOLITION NOTES.

DEMO SCHEDULE	
1	DEMOLISH PORTION OF EXISTING WALL CONSTRUCTION.
2	DEMOLISH EXISTING STOREFRONT SYSTEM.
3	REMOVE EXISTING DOOR AND FRAME.
4	REMOVE EXISTING FLOOR FINISH AND WALL BASE.
5	REMOVE EXISTING COLUMN ENCLOSURE.
6	REMOVE EXISTING PORTION OF SLAB FLOOR. GC TO COORDINATE W/ MEP AND STRUCTURAL DRAWINGS.
7	EXISTING WINDOW TO REMAIN, PROTECT AS NEEDED DURING DEMOLITION.
8	REMOVE EXISTING MILLWORK AND ALL ASSOCIATED EQUIPMENT AND UTILITIES.
9	REMOVE EXISTING COOLERS IN THEIR ENTIRETY. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.

CAFE ADDITION AND RENOVATION

735 ANDERSON HILL RD
PURCHASE, NY 10577

[illegible]

SEAL

ISSUED FOR: ADDENDUM 2

ISSUED DATE: 04.12.2018

DRAWN BY: JW

CHECKED BY: CM

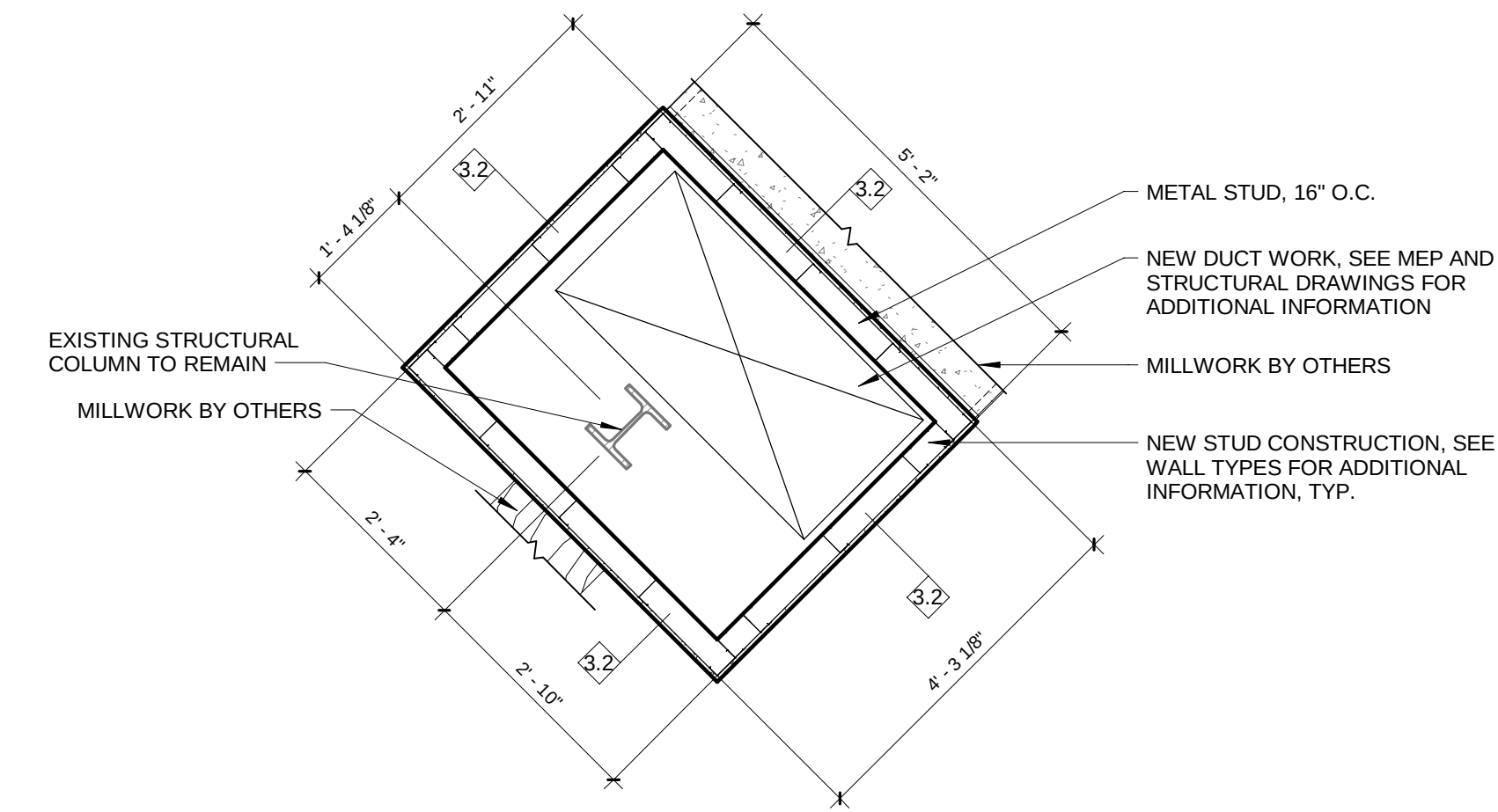
PROJECT NUMBER: 1517347

DRAWING NAME:

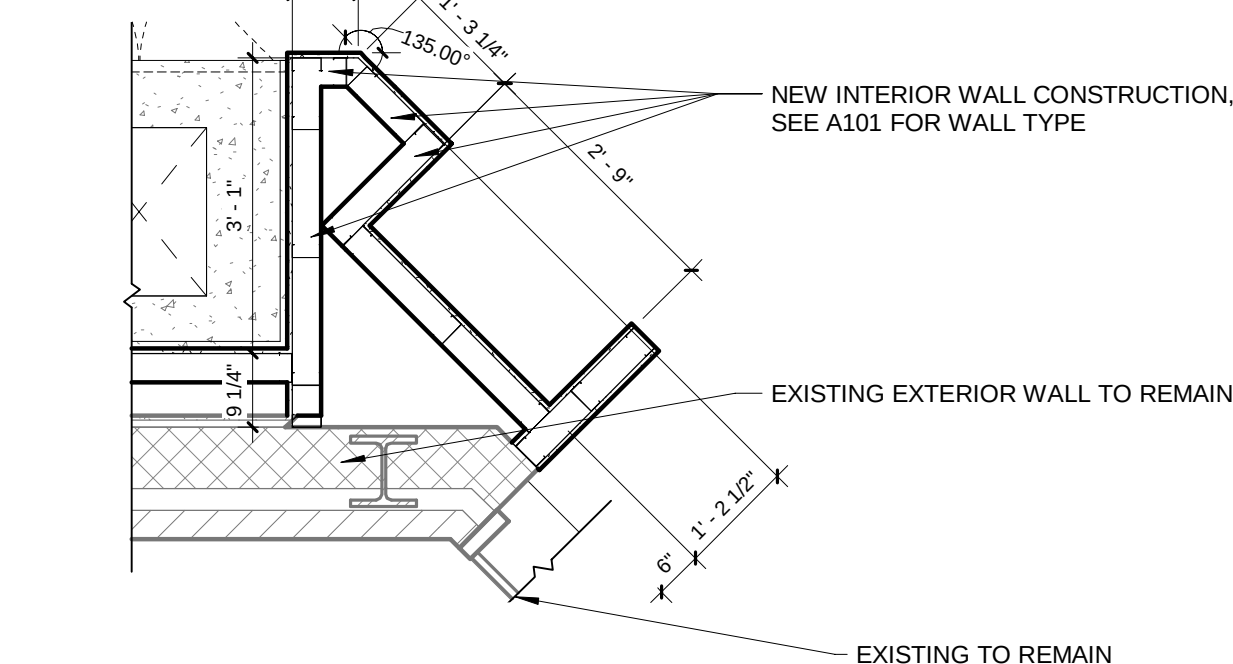
FIRST FLOOR
DEMOLITION PLAN

DRAWING NO.

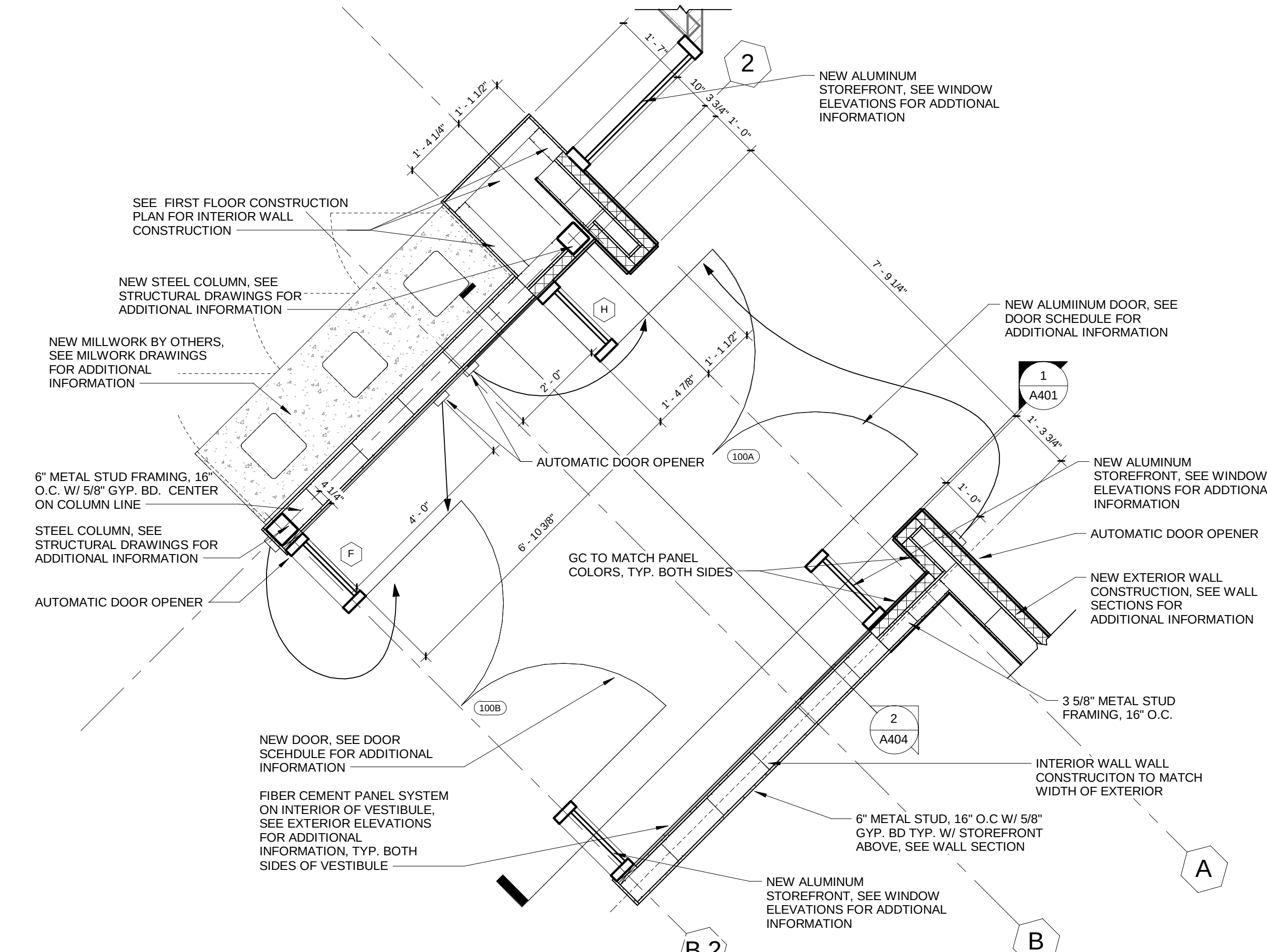
AD101



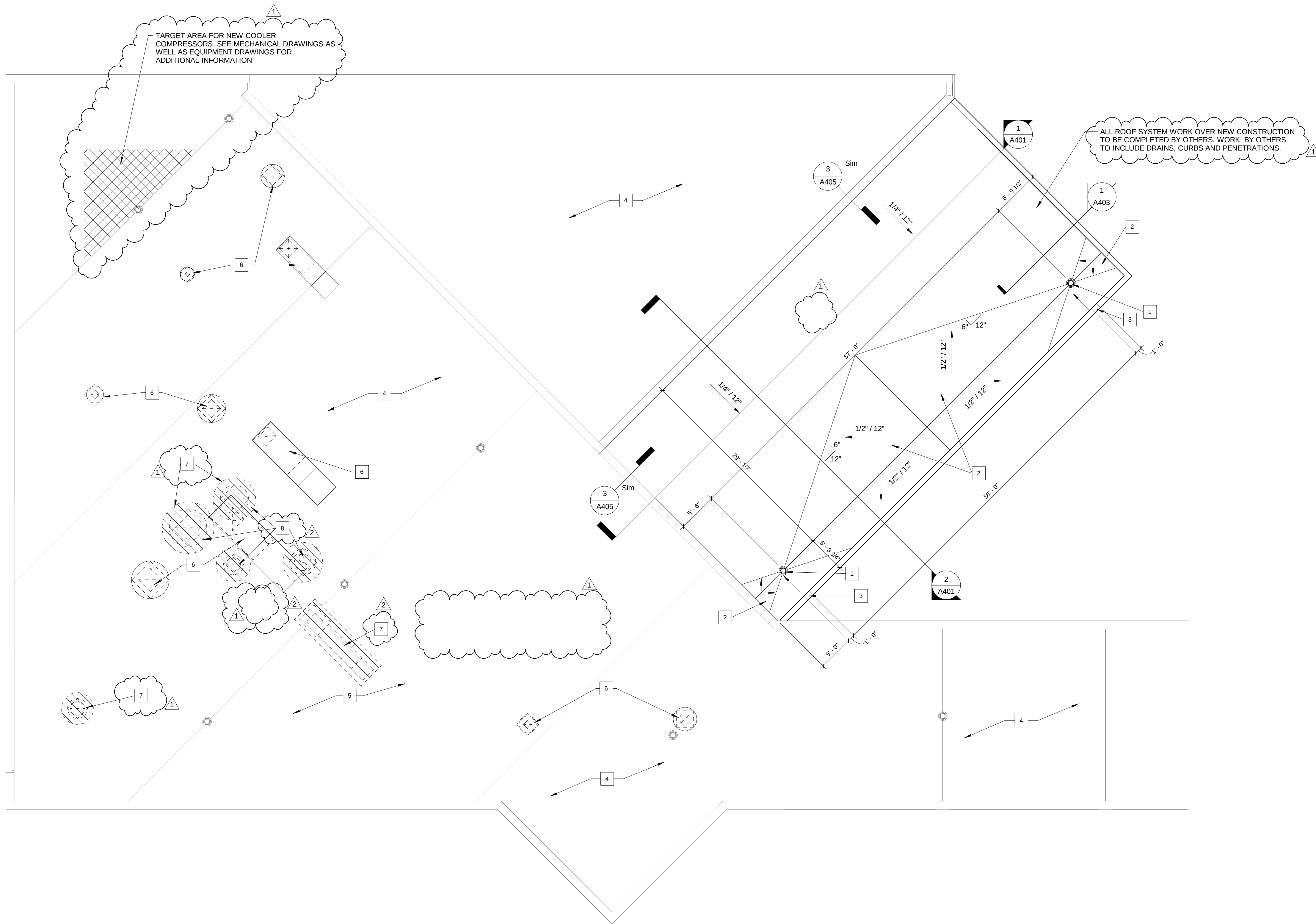
8 PLAN DETAIL
1/2" = 1'-0"



④ PLAN DETAIL
1/2" = 1'-0"



1 ENLARGED VESTIBULE PLAN
1/2" = 1'-0"



PLAN NOTES - ROOF PLAN

- | | |
|---|---|
| 1 | NEW STORM DRAIN, GC TO COORDINATE WITH ROOFING CONTRACTOR. SEE DETAIL 6602 FOR ADDITIONAL INFORMATION. |
| 2 | NEW CRICKET AT 1/2:12. |
| 3 | NEW THRU WALL ROOF SCUPPER, ALIGN BOTTOM OF SCUPPER W/ TOP OF ROOF MEMBRANE AT EACH LOCATION TO BE INSTALLED. SCUPPER PER ROOF FASCIA MANUFACTURER. |
| 4 | EXISTING ROOF SYSTEM TO REMAIN. GC TO PATCH AND REPAIR AS NEEDED. |
| 5 | SELECT ROOF EQUIPMENT DEMOLITION. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. |
| 6 | NEW ROOF EQUIPMENT. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. |
| 7 | TO REMOVE EXISTING EQUIPMENT FROM EXISTING CURB AND CAP WITH A GALVANIZED METAL CAP. |
| 8 | REMOVE EXISTING EQUIPMENT AND CURB WITHIN ENTIRE DECK. GC TO FABRIC CURB, REFERENCE MECHANICAL DRAWINGS AND PROVIDE NEW METAL DECK, INSULATION AND INSURFING ROOF SYSTEM TO MATCH EXISTING. |

GENERAL ROOFING NOTES:

1. ALL ROOF CRICKETS SHALL BE CONSTRUCTED WITH 1/2" TAPERED INSULATION.
2. GC SHALL VERIFY ALL ROOF CONSTRUCTION PRIOR TO INSTALLATION.
3. PROVIDE TAPERED INSULATION CRICKETS AT UPSLOPE SIDE OF ALL ROOF CURBS PER ROOFING MFG'S RECOMMENDATIONS.
4. FLASH ALL ROOF CURBS, PENETRATIONS, ETC. PER ROOFING MANUFACTURER RECOMMENDATIONS - REFER TO COORDINATE WITH MECHANICAL AND PLUMBING PLANS AND FLASH ALL PENETRATIONS AS REQUIRED.
5. SEE MECHANICAL DRAWINGS AND EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
6. PROVIDE ALL FLASHING, SCUPPERS, AND DRAINAGE FOR GC'S ROOF SYSTEM N.I.C. SHALL BE B.U.R. FLASHING, SCUPPERS & CURBS. GC SHALL COORDINATE ROOF DRAINS AND SCHEDULE WITH OWNERS ROOFING CONTRACTOR.

- TARGET AREA FOR NEW COOLER COMPRESSORS, SEE MECHANICAL DRAWINGS AS WELL AS EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION

ALL ROOF SYSTEM WORK OVER NEW CONSTRUCTION
TO BE COMPLETED BY OTHERS, WORK BY OTHERS
TO INCLUDE DRAINS, CURBS AND PENETRATIONS.

ARCHITECT:



8 WILCOX STREET
SIMSBURY, CONNECTICUT 06070
PHONE: (860) 264-1624
FAX: (860) 264-1628
www.phasezerodesign.com

CLIENT:



www.chartwellshighered.com

OWNER:



STATE UNIVERSITY OF NEW
www.purchase.edu

CONSULTANT:

SUNY PURCHASE COLLEGE

CAFE ADDITION AND RENOVATION

735 ANDERSON HILL RD
PURCHASE, NY 10577

[illegible]

SEAL

ISSUED FOR: ADDENDUM 2

ISSUED DATE: 04.12.2018

DRAWN BY: JW

CHECKED BY: CM

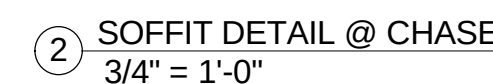
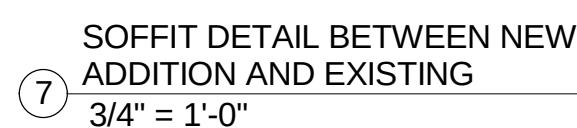
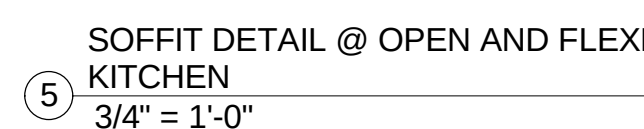
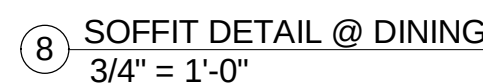
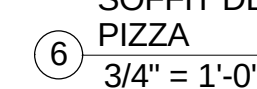
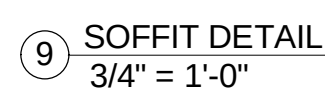
PROJECT NUMBER: 1517347

DRAWING NAME:

ROOF PLAN

DRAWING NO.

A103



DOOR SCHEDULE NOTES:

X = NEW ITEM, REPLACE EXISTING ITEMS WHERE NOTED AT EXISTING CONDITIONS
EX = EXISTING ITEM TO REMAIN, GC SHALL VERIFY ALL EXISTING CONDITIONS AND
CONFIRM WORKING ORDER

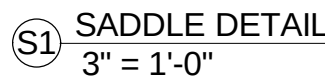
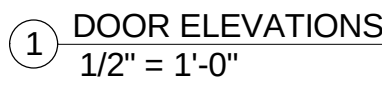
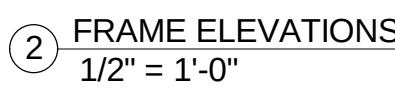
T = TEMPERED GLAZING
TI = TEMPERED & INSULATED GLAZING
S = SAFETY / FIRE GLASS

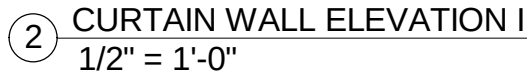
WHERE NOTED WITH TOP & BOTTOM BOLTS, BOLTS SHALL BE PROVIDED ON INACTIVE
LEAF WITH DUMMY LEVER AND ACTIVE LEAF LATCHING INTO INACTIVE DOOR.

SUNY PURCHASE COLLEGE

CAFE ADDITION AND RENOVATION

735 ANDERSON HILL RD
PURCHASE, NY 10577

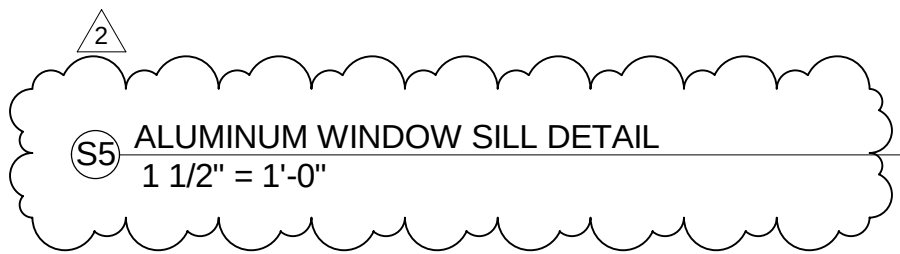


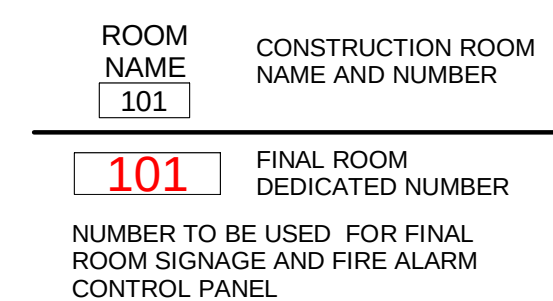


[illegible]

DRAWING NAME:

DRAWING NO.



[illegible]

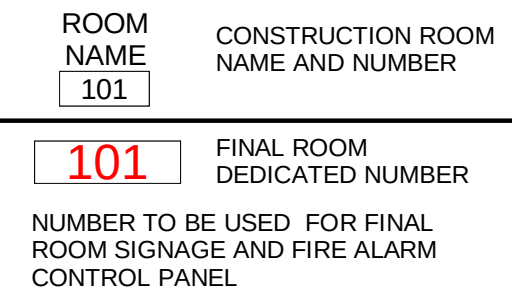
[illegible]AL:

PROJECT NUMBER: 1517347

Copyright (c) by Phase Zero Design Corp. All Rights Reserved.

DRAWING NO.

A701



① **DIMENSION PLAN**
1/8" = 1'-0"

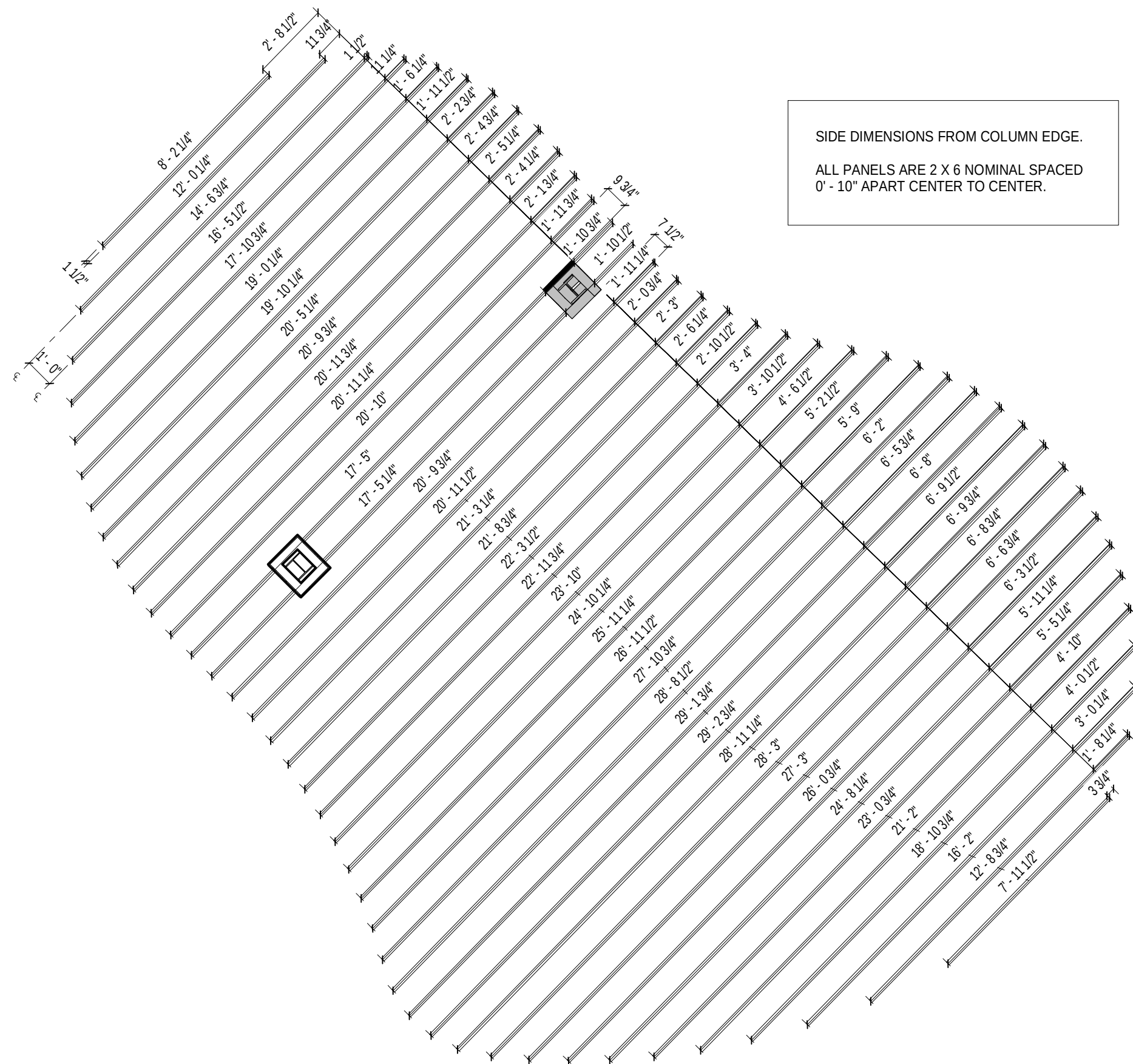
LIGHT FIXTURE SCHEDULE			
SYMBOL	TYPE	MANUFACTURER	MODEL
	PENDANT LIGHT	PABLO STUDIO	PBL-SWELL-STRING-3-MIXED-SUSP-BLACK
	PENDANT LIGHT	LIGHTYEAR	LTY-CARAVAGGIO-CAR300-BLACK WITH RED CORD
	PENDANT LIGHT	TECHLIGHTING	POWELL PENDANT: TD-SO-S-CF-SATIN NICKLE/WHITE INTERIOR
	WALL LIGHT	BARN LIGHT ELECTRIC	THE DISTRICT GOOSENECK LIGHT, BLACK 16"D
	PENDANT LIGHT	TECHLIGHTING	THE DISTRICT GOOSENECK LIGHT, WHITE 14"D
	DOWNLIGHT	NORA LIGHTING	NTS-733CL / NHR-150
	2' x 4' LAY-IN FLUORESCENT LIGHT FIXTURE	SEE SPEC	
	2' x 2' LAY-IN FLUORESCENT LIGHT FIXTURE	SEE SPEC	
	4' LINEAR LIGHT FIXTURE	SEE SPEC	
	4' LINEAR INDUSTRIAL LIGHT FIXTURE	SEE SPEC	
	6' EXTERIOR GRADE CAN LIGHT	SEE SPEC	

CEILING SCHEDULE	
TYPE	DESCRIPTION
CLG-01	ARMSTRONG "FINE FISSURED" SQUARE LAY-IN MEDIUM TEXTURE TILES W/ GRID, SYSTEM, COLOR - WHITE (WH)
CLG-02	ARMSTRONG "HEALTHZONE ULTIMA" SQUARE LAY-IN FINE TEXTURE TILES W/ GRID, SYSTEM, COLOR - WHITE (WH)
CLG-03	NEW GYP. BD. SOFFIT, FINISH AS SPECIFIED.
CLG-04	NEW CEMENT BD. SOFFIT, FINISH AS SPECIFIED.

NOTE:
FIELD LIGHTING QUANTITY AND SPACING SHOULD BE DETERMINED BY A/E OF RECORD.

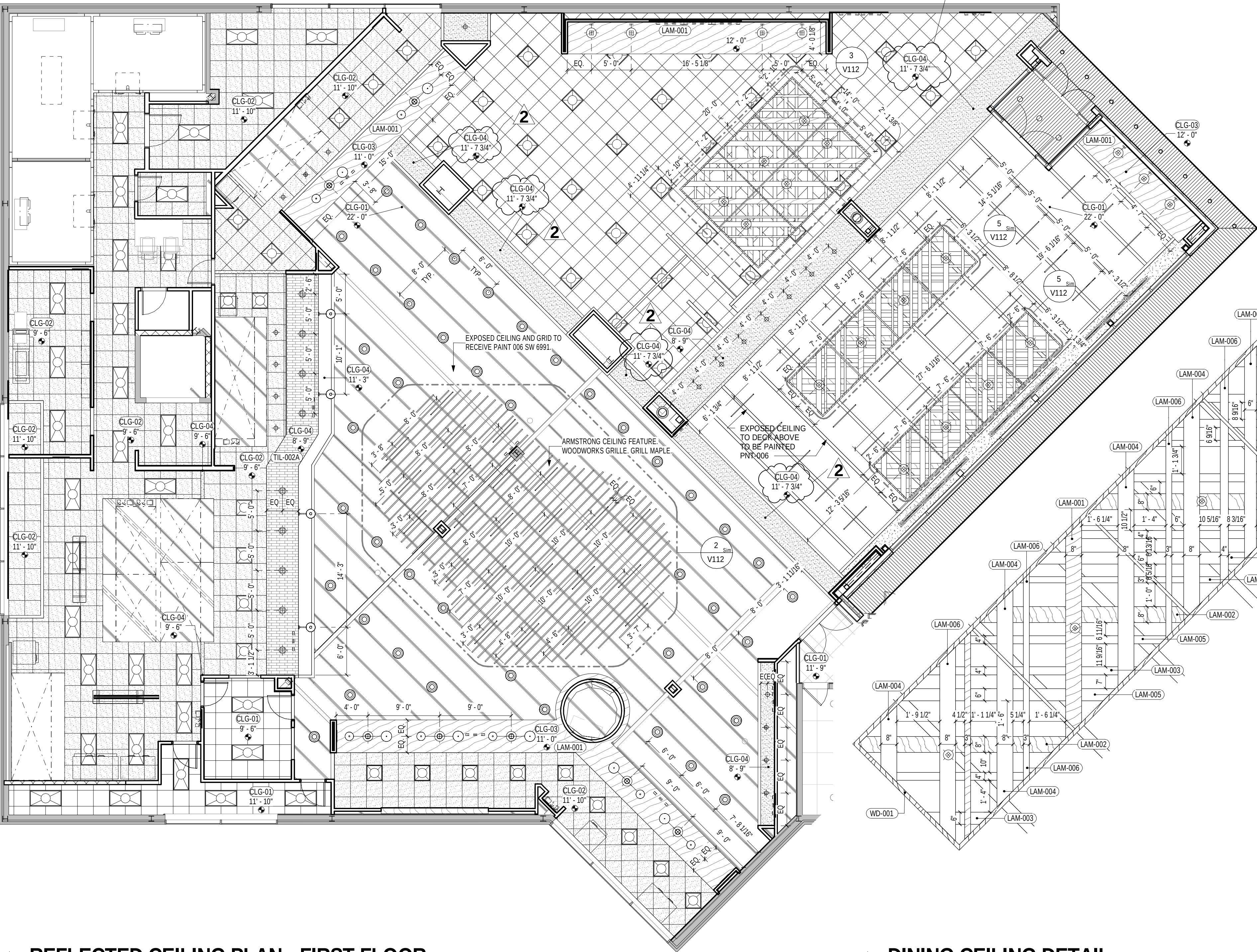
REFLECTED CEILING PLAN - GENERAL NOTES

- REFERENCE ARCHITECTURAL REFLECTED CEILING DRAWINGS FOR CONSTRUCTION LAYOUT OF SOFFITS AND TILE CEILINGS.
- SEE EQUIPMENT DRAWINGS FOR ADDITIONAL EQUIPMENT DRAWINGS (EQUIPMENT TO BE PROVIDED BY OTHERS).
- SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
- DRAWINGS V102 AND V112 ARE TO BE REFERENCED FOR CEILING FINISH AND LIGHT FIXTURES ONLY.
- ALL ACT TILE CEILINGS ARE TO BE CENTERED WITH IN ROOM UNLESS OTHERWISE NOTED. SEE A200 AND A201 FOR ADDITIONAL INFORMATION.
- 3/V112 AND 5/V112 DETAILS ON V112 ARE FOR FINISH AND INTERMEDIATE MEMBER LOCATIONS ONLY. SEE A203 FOR CONSTRUCTION DETAILS.



CEILING FEATURE DETAIL

1/4" = 1'-0"



REFLECTED CEILING PLAN - FIRST FLOOR

1/8" = 1'-0"

DINING CEILING DETAIL

3/8" = 1'-0"

LOUNGE CEILING DETAIL

3/8" = 1'-0"

REVISIONS	
NO.	DATE
2	DATE 2
DESCRIPTION	
ADDENDUM 2	

ISSUED FOR: BID
ISSUED DATE: 02/16/2018
DRAWN BY: JW
CHECKED BY: CM
PROJECT NUMBER: CW-0205.4
Copyright (c) by Phase Zero Design Corp. All Rights Reserved.
DRAWING NAME:

ISSUED FOR: BID
ISSUED DATE: 02/16/2018
DRAWN BY: JW
CHECKED BY: CM
PROJECT NUMBER: CW-0205.4
Copyright (c) by Phase Zero Design Corp. All Rights Reserved.
DRAWING NAME:

REFLECTED CEILING PLAN - FIRST FLOOR

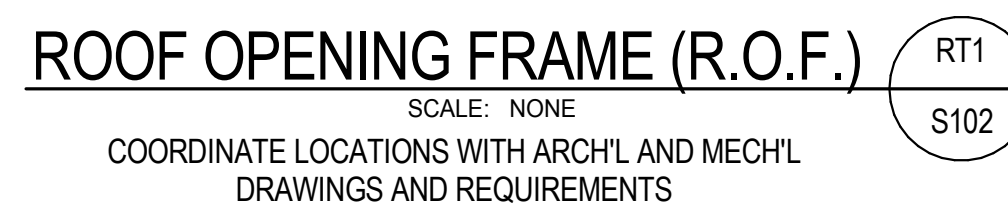
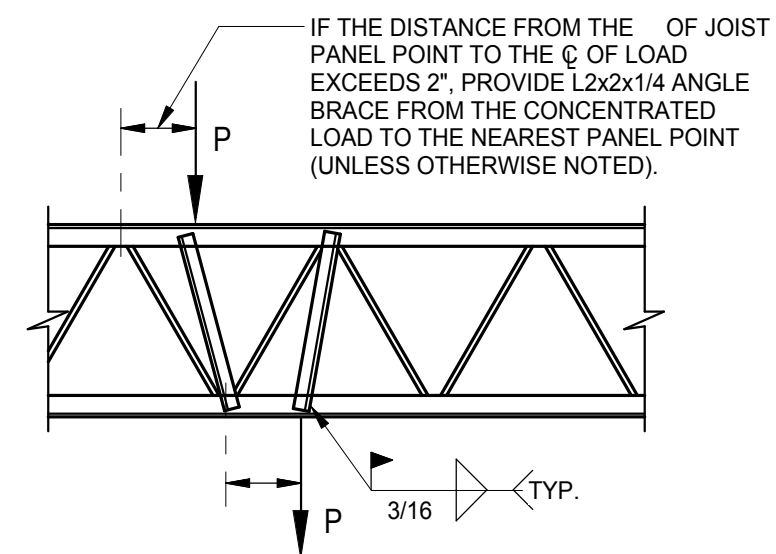
DRAWING NO.

V112

[illegible]

ISSUED FOR: BID
ISSUED DATE: 2/16/2018
DRAWN BY: JWZ
CHECKED BY: RMS
PROJECT NUMBER: 1416244
Copyright (c) by Phase Zero Design Corp. All Rights Reserved.
DRAWING NAME:

S102



8.

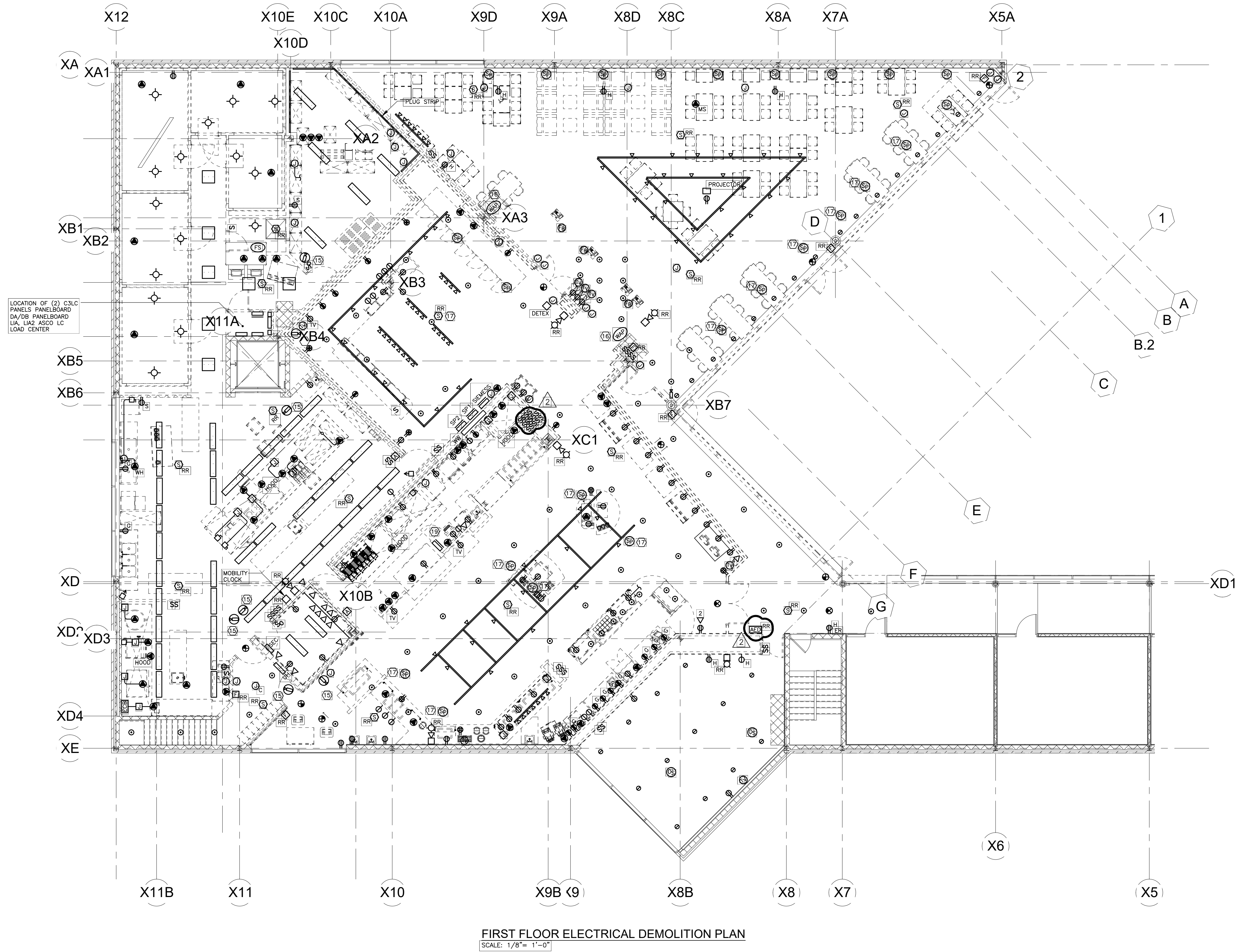
*

 INDICATES NEW STEEL SUPPORT COLUMN - SEE COLUMN SCHEDULE AND DETAILS ON DRAWING S-203 FOR ADDITIONAL REQUIREMENTS.
9. TOP OF EXISTING STEEL ELEVATION VARIES - VERIFY ALL EXISTING STEEL ELEVATION IN FIELD PRIOR TO PROCEEDING WITH NEW WORK.
10. TOP OF NEW STEEL ELEVATION SHALL MATCH EXISTING STEEL ELEVATION FOR ALL NEW ROOF STEEL FRAMING INTO EXISTING ROOF STEEL - UNLESS OTHERWISE NOTED THIS (+) OR (-) INDICATING DISTANCE ABOVE OR BELOW TOP OF EXISTING ROOF STEEL ELEVATION - TYPICAL.
11. SUPPORT OF NEW MECHANICAL ROOF TOP UNITS ON EXISTING ROOF FRAMING SYSTEM IS NOT PERMITTED UNLESS NEW STEEL SUPPORT FRAME IS PROVIDED BETWEEN EXISTING ROOF FRAMING SUPPORT MEMBERS. NEW SUPPORT FRAMING SHALL BE MINIMUM L5x3 1/2"x5/16" WELDED ANGLE FRAME - UNLESS OTHERWISE NOTED.
12. PROVIDE TWO L2"x2"x3/16" ADDITIONAL WEB MEMBERS FROM TOP CHORD TO BOTTOM CHORD PANEL POINTS OF JOIST WHERE CONCENTRATED LOADS FALL BETWEEN TOP CHORD PANEL POINTS - VERIFY ALL CONDITIONS IN FIELD - TYPICAL.
13. SUPPORT OF NEW KITCHEN HOOD ON EXISTING ROOF FRAMING SYSTEM IS NOT PERMITTED UNLESS NEW STEEL SUPPORT FRAME IS PROVIDED BETWEEN EXISTING ROOF FRAMING SUPPORT MEMBERS. NEW SUPPORT FRAMING SHALL BE MINIMUM L3"x3"x1/4" WELDED ANGLE FRAME - UNLESS OTHERWISE NOTED.

[illegible]

DRAWING NO.

DE101



CAFE ADDITION AND RENOVATION

PURCHASE, NY 10577

[illegible]

REAL:

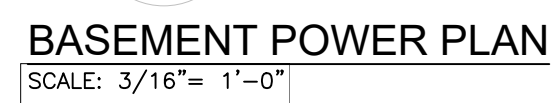
Copyright (c) by Phase Zero Design Corp. All Rights Reserved.

DRAWING NAME:

BASEMENT POWER PLAN

DRAWING NO.

E100



CAFE ADDITION AND RENOVATION

PURCHASE, NY 10577

[illegible]

REAL

ISSUED FOR: BID
ISSUED DATE: 02.16.2018
DRAWN BY: IES
CHECKED BY: IES
PROJECT NUMBER: 1416244

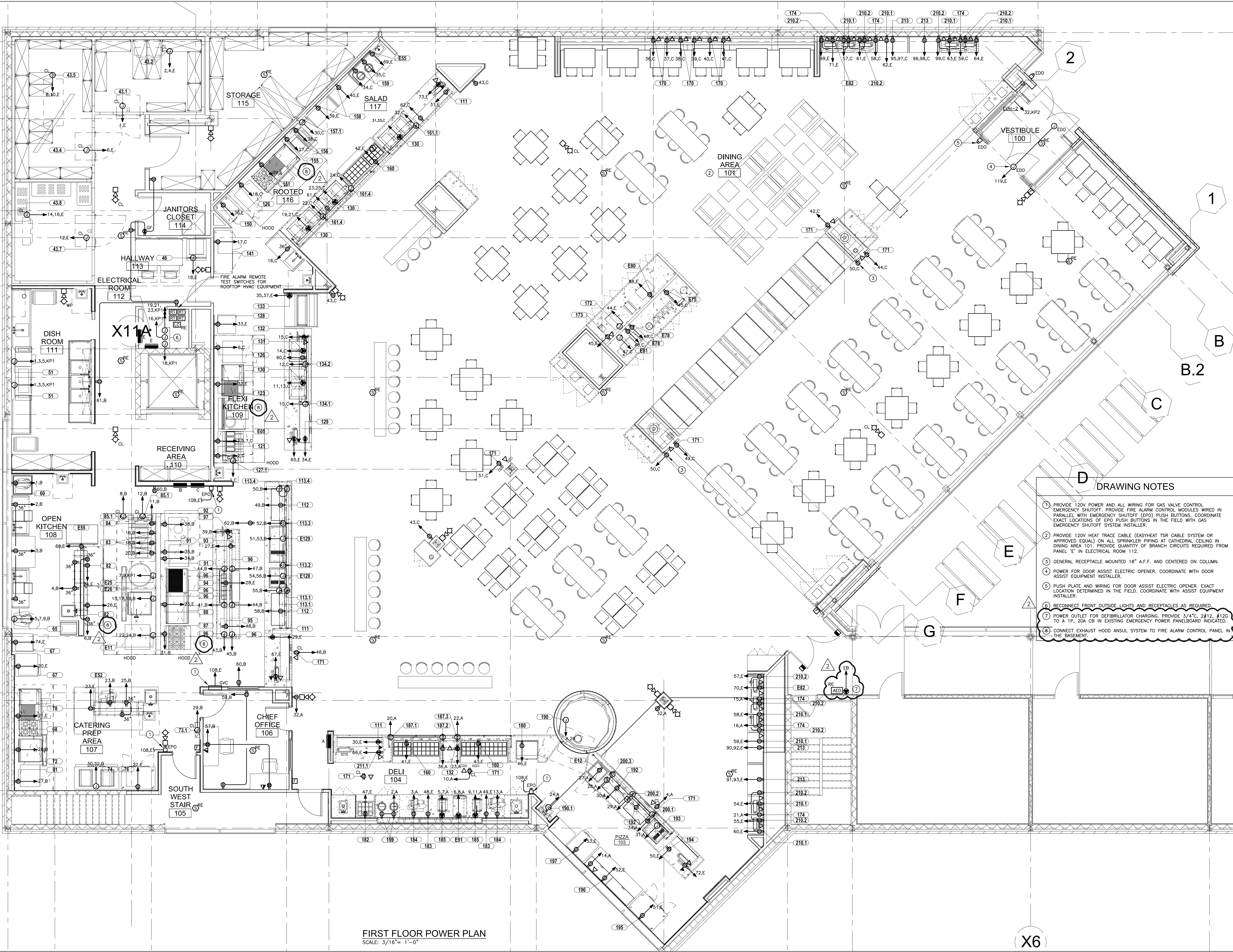
Copyright (c) by Phase Zero Design Corp. All Rights Reserved.

DRAWING NAME:

FIRST FLOOR POWER PLAN

RAWING NO.

E102



FIRST FLOOR POWER PLAN
SCALE: 3/16" = 1'-0"

X6

[illegible]

REAL:

GAUGING NO.	
-------------	--

E103



- ① TO "CAFE SWITCH BANK" FOR CONTROL.
- ② TO "KITCHEN SWITCH BANK" FOR CONTROL.
- ③ KITCHEN SWITCH BANK.
- ④ CAFE SWITCH BANK.
- ⑤ DOWN TO BASEMENT STAIRS.
- ⑥ WIRE TO EXISTING LIGHTING BRANCH CIRCUIT IN THE CORRIDOR.
- ⑦ WIRE TO EXISTING LIGHTING BRANCH CIRCUIT IN STAIRCASE.
- ⑧ 3/4" C, 2#12, #12G TO 1P, 20A CIRCUIT BREAKER IN PANELBOARD INDICATED. TYPICAL.
- ⑨ 3/4" C, 2#12, #12G TO LIFE SAFETY BRANCH CIRCUIT FEED THROUGH TO EACH EPC DEVICE.
- ⑩ 3/4" C, 2#12, #12G. CONNECT TO EACH EXIT SIGN. TYPICAL.

G:\IES Projects\2017 Projects\Team P\P\17163 SUNY Purchase The Hub\Contract Documents\17163-E201.dwg Plotted by ptorello on Apr 12, 2018 - 3:10pm

PANEL 'E'															
(EMERGENCY PANEL)															
SECTION 1															
RATING: 208Y/120V, 3ø, 4W															
MAIN BUS: ☒ CU ☐ AL 400A MAIN BUS															
MAIN DEVICE: MLO WITH FEED THRU LUGS															
MOUNTING: ☐ FLUSH ☒ SURFACE															
TRIM: ☐ SINGLE DOOR ☒ DOOR-IN-DOOR															
INTERRUPTING RATING: 22KAC															
CKT. NO.	CT. BKR.	TRIP AMPS	POLES	DESCRIPTION	WIRE & CONDUIT	KVA	A	B	C	KVA	WIRE & CONDUIT	DESCRIPTION	CT. BKR.	TRIP AMPS	CKT. NO.
1	20	1		ITEM NO. 43.1	REFER TO SCHEDULE	0.6	•			0.1	REFER TO SCHEDULE	ITEM NO. 43.2	2	20	2
3	30	3		ITEM NO. 43.3	REFER TO SCHEDULE	1.8	•	•		0.1	=	=	=	=	4
5	=	=		=	=	1.8	•	•	•	0.6	REFER TO SCHEDULE	ITEM NO. 43.4	1	20	6
7	=	=		=	=	1.8	•			0.2	REFER TO SCHEDULE	ITEM NO. 43.5	2	20	8
9	30	3		ITEM NO. 43.6	REFER TO SCHEDULE	1.8	•	•		0.2	=	=	=	=	10
11	=	=		=	=	1.8	•			0.6	REFER TO SCHEDULE	ITEM NO. 43.7	1	20	12
13	=	=		=	=	1.8	•	•	•	0.1	REFER TO SCHEDULE	ITEM NO. 43.8	2	20	14
15	30	3		ITEM NO. 43.9	REFER TO SCHEDULE	1.8	•	•		0.1	=	=	=	=	16
17	=	=		=	=	1.8	•	•	•	1.8	REFER TO SCHEDULE	ITEM NO. 46	1	20	18
19	=	=		=	=	1.8	•			1.2	REFER TO SCHEDULE	ITEM NO. 67	1	20	20
21	20	1		ITEM NO. 68	REFER TO SCHEDULE	0.8	•	•		0.8	REFER TO SCHEDULE	ITEM NO. 76	1	20	22
23	20	1		ITEM NO. 78	REFER TO SCHEDULE	0.9	•	•	•	0.8	REFER TO SCHEDULE	ITEM NO. 82	1	20	24
25	20	1		ITEM NO. 88	REFER TO SCHEDULE	0.9	•			0.8	REFER TO SCHEDULE	ITEM NO. 82	1	20	26
27	20	1		ITEM NO. 93	REFER TO SCHEDULE	0.9	•	•		0.9	REFER TO SCHEDULE	ITEM NO. 94	1	20	28
29	20	1		ITEM NO. 111	REFER TO SCHEDULE	1.8	•	•	•	1.8	REFER TO SCHEDULE	ITEM NO. 111	1	20	30
31	20	=		ITEM NO. 111	REFER TO SCHEDULE	1.8	•			1.8	REFER TO SCHEDULE	ITEM NO. 123	1	20	32
33	20	1		ITEM NO. 128	REFER TO SCHEDULE	0.8	•	•		1.8	REFER TO SCHEDULE	ITEM NO. 129	1	20	34
35	20	2		ITEM NO. 133	REFER TO SCHEDULE	1.2	•	•		0.8	REFER TO SCHEDULE	ITEM NO. 150	1	20	36
37	=	=		=	=	1.2	•			0.8	REFER TO SCHEDULE	ITEM NO. 151	1	20	38
39	20	1		ITEM NO. 158	REFER TO SCHEDULE	1.9	•	•		1.9	REFER TO SCHEDULE	ITEM NO. 158	1	20	40
41	20	1		ITEM NO. 160	REFER TO SCHEDULE	0.9	•	•	•	0.9	REFER TO SCHEDULE	ITEM NO. 160	1	20	42
43	20	1		ITEM NO. 160	REFER TO SCHEDULE	1.0	•			1.0	REFER TO SCHEDULE	ITEM NO. 172	1	20	44
45	20	1		ITEM NO. 173	REFER TO SCHEDULE	0.7	•	•		0.7	REFER TO SCHEDULE	ITEM NO. 180	1	20	46
47	20	1		ITEM NO. 182	REFER TO SCHEDULE	0.9	•	•	•	0.9	REFER TO SCHEDULE	ITEM NO. 183	1	20	48
49	20	1		ITEM NO. 183	REFER TO SCHEDULE	1.4	•			1.4	REFER TO SCHEDULE	ITEM NO. 194	1	20	50
51	20	1		ITEM NO. 195	REFER TO SCHEDULE	1.7	•	•		1.7	REFER TO SCHEDULE	ITEM NO. 196	1	20	52
53	20	1		ITEM NO. 197	REFER TO SCHEDULE	1.2	•	•	•	1.2	REFER TO SCHEDULE	ITEM NO. 210.1	1	20	54
55	20	1		ITEM NO. 210.2	REFER TO SCHEDULE	1.2	•			1.2	REFER TO SCHEDULE	ITEM NO. 210.2	1	20	56
57	20	1		ITEM NO. 210.2	REFER TO SCHEDULE	1.8	•	•		1.2	REFER TO SCHEDULE	ITEM NO. 210.1	1	20	58
59	20	1		ITEM NO. 210.1	REFER TO SCHEDULE	1.2	•	•	•	1.2	REFER TO SCHEDULE	ITEM NO. 210.1	1	20	60
61	20	1		ITEM NO. 210.1	REFER TO SCHEDULE	1.2	•	•		1.2	REFER TO SCHEDULE	ITEM NO. 210.1	1	20	62
63	20	1		ITEM NO. 210.1	REFER TO SCHEDULE	1.2	•	•		1.2	REFER TO SCHEDULE	ITEM NO. 210.1	1	20	64
65	20	1		RECEPTACLES	3/4"C, 2ø12, ø12ø	1.2	•	•	•	1.2	REFER TO SCHEDULE	ITEM NO. 211.1	1	20	66
67	20	1		ITEM NO. 211.1	REFER TO SCHEDULE	1.2	•			0.6	REFER TO SCHEDULE	ITEM NO. E55	1	20	68
69	20	1		ITEM NO. E55	REFER TO SCHEDULE	1.2	•	•		1.2	REFER TO SCHEDULE	ITEM NO. E82	1	20	70
71	20	1		ITEM NO. E82	REFER TO SCHEDULE	1.2	•	•	•	1.2	3/4"C, 2ø12, ø12ø	RECEPTACLES	1	20	72
TOTALS PER PHASE							19.7	20.4	21.7						
TOTALS SECTION 1							61.8								
TOTAL SECTION 2							63.8								
GRAND TOTAL (2-SECT.)							125.6								

PANEL 'E'														
(EMERGENCY PANEL)														
SECTION 2														
RATING: 208Y/120V, 3ø, 4W														
MAIN BUS: ☒ CU ☐ AL 400A MAIN BUS														
MAIN DEVICE: MLO														
MOUNTING: ☐ FLUSH ☒ SURFACE														
TRIM: ☐ SINGLE DOOR ☒ DOOR-IN-DOOR														
INTERRUPTING RATING: 22KAC														
CKT. NO.	TRIP AMPS	CT. BKR. POLES	DESCRIPTION	WIRE & CONDUIT	KVA	A	B	C	KVA	WIRE & CONDUIT	DESCRIPTION	CT. BKR. POLES	TRIP AMPS	CKT. NO.
73	20	1	ITEM NO. E127	REFER TO SCHEDULE	1.2	•			1.2	REFER TO SCHEDULE	ITEM NO. 67	1	20	74
75	20	1	ITEM NO. 10.1	REFER TO SCHEDULE	0.6		•		1.2	REFER TO SCHEDULE	ITEM NO. 10.4	1	20	76
77	20	2	ITEM NO. 10.2	REFER TO SCHEDULE	0.2			•	0.2	REFER TO SCHEDULE	ITEM NO. 10.5	2	20	78
79	=	=	=	=	0.2				0.2	=	=	=	=	80
81	50	3	ITEM NO. 10.3	REFER TO SCHEDULE	3.2		•	•	3.9	REFER TO SCHEDULE	ITEM NO. 10.6	3	60	82
83	=	=	=	=	3.2				3.9	=	=	=	=	84
85	=	=	=	=	3.2				3.9	=	=	=	=	86
87	20	2	ITEM NO. 10.2	REFER TO SCHEDULE	0.2		•		0.3	REFER TO SCHEDULE	ITEM NO. E80	1	20	88
89	=	=	=	=	0.2				1.3	REFER TO SCHEDULE	ITEM NO. 213	2	20	90
91	20	2	ITEM NO. 213	REFER TO SCHEDULE	1.3	•			1.3	=	=	=	=	92
93	=	=	=	=	1.3		•		1.8	REFER TO SCHEDULE	ITEM NO. 210.2	1	20	94
95	20	2	ITEM NO. 213	REFER TO SCHEDULE	1.3		•	•	1.3	REFER TO SCHEDULE	ITEM NO. 213	2	20	96
97	=	=	=	=	1.3				1.3	=	=	=	=	98
99	20	1	ITEM NO. 210.2	REFER TO SCHEDULE	1.2	•	•		0.8	3/4"ø, 2ø12, ø12ø	LIGHTING	1	20	100
101	20	1	LIGHTING	3/4"ø, 2ø12, ø12ø	0.2	•			1.0	3/4"ø, 2ø12, ø12ø	LIGHTING	1	20	102
103	20	1	LIGHTING	3/4"ø, 2ø12, ø12ø	1.3	•			1.3	3/4"ø, 2ø12, ø12ø	LIGHTING	1	20	104
105	20	1	LIGHTING	3/4"ø, 2ø12, ø12ø	1.1	•			1.3	3/4"ø, 2ø12, ø12ø	LIGHTING	1	20	106
107	20	1	LIGHTING	3/4"ø, 2ø12, ø12ø	1.4	•			0.4	3/4"ø, 2ø12, ø12ø	GAS EPO SYSTEM	1	20	108
109	20	1	HEAT TRACE	3/4"ø, 2ø12, ø12ø	1.8	•			1.8	3/4"ø, 2ø12, ø12ø	HEAT TRACE	1	20	110
111	20	1	HEAT TRACE	3/4"ø, 2ø12, ø12ø	1.8	•			1.8	3/4"ø, 2ø12, ø12ø	HEAT TRACE	1	20	112
113	20	1	HEAT TRACE	3/4"ø, 2ø12, ø12ø	1.8	•			1.8	3/4"ø, 2ø12, ø12ø	HEAT TRACE	1	20	114
115	20	1	HEAT TRACE	3/4"ø, 2ø12, ø12ø	1.8	•			1.8	3/4"ø, 2ø12, ø12ø	HEAT TRACE	1	20	116
117	20	1	LIGHTING - EXTERIOR	3/4"ø, 2ø12, ø12ø	0.4	•			0.2	3/4"ø, 2ø12, ø12ø	LIGHTING - VEST.	1	20	118
119	20	1	LIGHTING	3/4"ø, 2ø12, ø12ø	1.0	•			0.0	=	SPARE	1	20	120
121	20	1	SPARE	=	0.0	•			0.0	=	SPARE	1	20	122
123	20	1	SPARE	=	0.0	•			0.0	=	SPARE	1	20	124
125	20	1	SPARE	=	0.0	•			0.0	=	SPARE	1	20	126
TOTALS PER PHASE						24.9	20.9	20.2						
GRAND TOTAL					66.0									

<

RATING: 208Y/120V, 3 PHASE, 4 WIRE									
MAIN BUS: ☒ CU ☐ AL 1200A MAIN BUS									
MAIN DEVICE: 1000A MCB									
INTERRUPTING RATING: FIELD VERIFY									
PANEL KP1 (EXISTING)									
LOCATION: BASEMENT ELECTRICAL ROOM									
MOUNTING: ☐ FLUSH ☒ SURFACE									
TRIM: ☒ SINGLE DOOR ☐ DOOR-IN-DOOR									
CKT. NO.	CKT. BKR. TRIP AMPS	POLES	DESCRIPTION	WIRE & CONDUIT	KVA	A	B	C	CKT. NO.
1	150	3	ITEM NO. 51	REFER TO SCHEDULE	13.0				2
3					13.0				4
5					13.0				6
7	100	2	ITEM NO. E25	REFER TO SCHEDULE	7.4				8
9					7.4				10
11					12.8				12
13	300	3	PANEL B	REFER TO RISER	17.0				14
15					21.1				16
17					25.9				18
19	20	1	FRONT OUTSIDE LIGHTS	3/4" 2#12, #12G	1.0				20
21	20	1	FRONT OUTSIDE LIGHTS	3/4" 2#12, #12G	1.0				22
23	20	1	FRONT OUTSIDE LIGHTS	3/4" 2#12, #12G	1.0				24
25	20	1			0.0				26
27	20	1			0.0				28
29	20	1			0.0				30
31	20	1			0.0				32
33	20	1			0.0				34
35	20	1			0.0				36
37	20	1			0.0				38
39	20	1			0.0				40
41	20	1			0.0				42
TOTALS PER PHASE					167.2	69.3	71.6		
GRAND TOTAL (CONNECTED)					208.1				

RATING: 208Y/120V, 3 PHASE, 4 WIRE									
MAIN BUS: ☒ CU ☐ AL 1200A MAIN BUS									
MAIN DEVICE: MLO									
INTERRUPTING RATING: FIELD VERIFY									
PANEL KP2 (EXISTING)									
LOCATION: BASEMENT ELECTRICAL ROOM									
MOUNTING: ☐ FLUSH ☒ SURFACE									
TRIM: ☒ SINGLE DOOR ☐ DOOR-IN-DOOR									
CKT. NO.	CKT. BKR. TRIP AMPS	POLES	DESCRIPTION	WIRE & CONDUIT	KVA	A	B	C	CKT. NO.
1	300	3	PANEL C	REFER TO RISER	24.1				2
3					18.2				4
5					23.2				6
7	20	3			0.0				8
9					0.0				10
11					0.0				12
13	20	3			0.0				14
15					0.0				16
17					0.0				18
19	20	3			0.0				20
21					0.0				22
23					0.0				24
25	20	3			0.0				26
27					0.0				28
29					0.0				30
31	20	1	EUH-2	3/4" 2#12, #12G	1.5				32
33	20	1			0.0				34
35	20	1			0.0				36
37	20	3			0.0				38
39					0.0				40
41					0.0				42
43	30	1			0.0				44
45					0.0				46
TOTALS PER PHASE					25.6	18.2	23.2		
GRAND TOTAL (CONNECTED)					67.0				

RATING: 208Y/120V, 3 PHASE, 4 WIRE									
MAIN BUS: ☒ CU ☐ AL 1200A MAIN BUS									
MAIN DEVICE: MLO									
INTERRUPTING RATING: FIELD VERIFY									
PANEL KP3 (EXISTING)									
LOCATION: BASEMENT ELECTRICAL ROOM									
MOUNTING: ☐ FLUSH ☒ SURFACE									
TRIM: ☒ SINGLE DOOR ☐ DOOR-IN-DOOR									
CKT. NO.	CKT. BKR. TRIP AMPS	POLES	DESCRIPTION	WIRE & CONDUIT	KVA	A	B	C	CKT. NO.
1	50	3	MAU-1-4	1" 3#6, #10G	3.1				2
3					3.1				4
5					3.1				6
7	35	3	MAU-6	1" 3#6, #10G	2.1				8
9					2.1				10
11					2.1				12
13	50	3	KEF-1-4	1" 3#6, #10G	3.1				14
15					3.1				16
17					3.1				18
19	20	3	KEF-6	1" 3#12, #12G	1.3				20
21					1.3				22
23					1.3				24
25	15	3	KEF-8	3/4" 3#12, #12G	0.2				26
27					0.2				28
29					0.2				30
31	20	2	EUH-1	3/4" 2#12, #12G	1.1				32
33					1.1				34
35	20	2			0.0				36
37					0.0				38
39	20	2			0.0				40
41					0.0				42
43	20	2			0.0				44
45					0.0				46
TOTALS PER PHASE					15.7	15.7	14.6		
GRAND TOTAL (CONNECTED)					46.0				

PANELBOARD NOTES:
A REMOVE EXISTING CIRCUIT BREAKER(S) AND PROVIDE INDICATED CIRCUIT BREAKER, BUSSING AND MOUNTING HARDWARE AS REQUIRED.

FOODSERVICE ELECTRICAL SCHEDULE - FIRST LEVEL														
ITEM NO	QTY	DESCRIPTION	AMPS	WATTS	HP	VOLTS	PHASE	CYCLE	CONN TYPE	NEMA	ELEC AFF	CONDUIT AND WIRE		
43.1	1	COOLER LIGHT AND WINDOW HEATER	5.00			120	1	60	DIRECT		102"	3/4" 2#12, #12G		
43.2	1	EVAPORATOR COIL, COOLER	1.00			208	1	60	DIRECT		120"	3/4" 2#12, #12G		
43.3	1	CONDENSING UNIT, COOLER	14.40		1	208	3	60	DIRECT		18"	3/4" 2#12, #12G		
43.4	1	COOLER LIGHT AND WINDOW HEATER	5.00			120	1	60	DIRECT		102"	3/4" 2#12, #12G		
43.5	1	EVAPORATOR COIL	1.40			208	1	60	DIRECT		120"	3/4" 2#12, #12G		
43.6	1	CONDENSING UNIT, COOLER	14.40		1	208	3	60	DIRECT		18"	3/4" 2#12, #12G		
43.7	1	COOLER LIGHT AND WINDOW HEATER	5.00			120	1	60	DIRECT		102"	3/4" 2#12, #12G		
43.8	1	EVAPORATOR COIL, COOLER	1.00			208	1	60	DIRECT		120"	3/4" 2#12, #12G		
43.9	1	CONDENSING UNIT, COOLER	14.40		1	208	3	60	DIRECT		18"	3/4" 2#12, #12G		
46	1	MODULAR CUBELET ICE MACHINE - AIR-COOLED	15.20			120	1	60	DIRECT		60"	3/4" 2#12, #12G		
51	1	DISHWASHER, CONVEYOR TYPE	108.00		3.3	208	3	60			48"	2" 3#1/2, #6G		
60	1	MIXER, 20 QT	8.00			120	1	60	CORD & PLUG	5-15P	48"	3/4" 2#12, #12G		
65	1	30QT MIXER	2.80			208	3	60	DIRECT		18"	3/4" 2#12, #12G		
66	1	HOT HOLDING CABINET	18.70			120	1	60	CORD & PLUG	5-20P	48"	3/4" 2#12, #12G		
67	2	REFRIGERATOR, ROLL-IN	9.60			120	1	60	CORD & PLUG	5-15P	48"	3/4" 2#12, #12G		
68	1	GRIDDLE STAND, REFRIGERATOR	6.10			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
72	1	TILT SKILLET, GAS	1.80			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
73	1	EXHAUST HOOD	15.00			120	1	60	DIRECT		104"	3/4" 2#12, #12G		
74	1	HOT CABINET, ROLL-IN	14.50			120/208	1	60	DIRECT		90"	3/4" 2#12, #12G		
76	1	REFRIGERATOR, REACH-IN	6.50			120	1	60	CORD & PLUG	5-15P	48"	3/4" 2#12, #12G		
78	1	WORKTOP REFRIGERATOR	7.60		1/4	120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
82	2	REFRIGERATOR, WORKTOP	6.60			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
83	3	FRYER	6.10			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
84	1	FRYER DUMP STATION	6.30			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
85	4	EXHAUST HOOD	15.00			120	1	60	DIRECT		104"	3/4" 2#12, #12G		
87	1	36" OPEN-TOP BURNER RANGE - CONVECTION - OVEN BASE	5.90	708	1/2	120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
88	1	GRIDDLE STAND, REFRIGERATOR	7.50			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
91	2	OVEN-STEAMER, COMBINATION, GAS, DOUBLE STACK	15.00			120	1	60	CORD & PLUG	5-15P	48"	3/4" 2#12, #12G		
91	2	OVEN-STEAMER, COMBINATION, GAS, DOUBLE STACK - 2ND CONN	15.00			120	1	60	CORD & PLUG	5-15P	48"	3/4" 2#12, #12G		
92	1	ROTISSERIE, VERTICAL, GAS	1.30			120	1	60	CORD & PLUG	5-15P	36"	3/4" 2#12, #12G		
93	1	REFRIGERATOR, UNDERCOUNTER	7.30			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
94	1	REFRIGERATED SANDWICH UNIT	7.30		1/5	120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
95	1	CABINET, MOBILE, WARMING & HOLDING	7.50			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
96	6	HEAT LAMP	5.00			120	1	60	DIRECT		18"	3/4" 2#12, #12G		
97	1	ONS SCREEN - WALL MOUNT	10.00			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		
111	3	REFRIGERATED CASE	15.02			120	1	60	CORD & PLUG	5-20P	18"	3/4" 2#12, #12G		
112	2	HEATED SHELF, DROP-IN	8.30			120	1	60	CORD & PLUG	5-15P	18"	3/4" 2#12, #12G		</

[illegible]

EAL:

ISSUED FOR: BID

ISSUED DATE: 02.16.2018

DRAWN BY: IES

CHECKED BY: IES

PROJECT NUMBER: 1416244

Copyright (c) by Phase Zero Design Corp. All Rights Reserved.

DRAWING NAME:

BASEMENT

PLUMBING

DEMOLITION PLAN

DEMOLITION PLAN

DRAWING NO.

DD100

DP100

DI 100



- 1) CONTRACTOR SHALL VERIFY EXISTING STORM WATER PIPING INTO PIT, NOTIFY ARCHITECT AND ENGINEER OF FINDINGS AND PROCEED TO INTERCONNECT ALL STORM PIPING IN PIT TO ONE STORM MAIN EXITING PIT.
- 2) CONTRACTOR SHALL REMOVE EXISTING HOUSE TRAP AND CLEANOUT WYE IN PIT AND REPLACE WITH NEW CONTINUOUS SANITARY PIPING EXITING THE BUILDING.
- 3) CONTRACTOR SHALL PROVIDE NEW 4" FLOOR CLEANOUT AND CONNECT TO EXISTING SANITARY PIPING BELOW GRADE.
- 4) EXISTING SANITARY AND STORM RISERS IN AIR SHFT TO REMAIN.
- 5) CONTRACTOR SHALL REMOVE ALL EXISTING SANITARY PIPING FROM RISER BACK TO THEIR FUTURE, CAP EXISTING RISER BELOW GRADE.
- 6) EXISTING HOT WATER, COLD WATER, AND HOT WATER RETURN MAINS SHALL REMAIN, PROVIDE NEW ISOLATION VALVES AND CAPS FOR FUTURE CONNECTIONS. REFER TO DRAWING P100 FOR CONTINUATION.
- 7) CONTRACTOR SHALL REMOVE ALL EXISTING SANITARY PIPING TO 4" RISER ABOVE CEILING. EXISTING SANITARY RISER SHALL REMAIN FOR FUTURE CONNECTION. REFER TO DRAWING P100 FOR CONTINUATION.
- 8) CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND REMOVE FLOOR DRAINING SANITARY PIPING FROM EXISTING HOUSE TRAP SERVING THE FIRST FLOOR ABOVE. CONTRACTOR SHALL REMOVE ALL ABANDONED PIPING ABOVE CEILING BACK TO MAINS AND CAP OFF. CONTRACTOR SHALL DOCUMENT ALL EXISTING CONDITIONS AND PROVIDE INFORMATION TO ARCHITECT AND ENGINEER. ALL STORM PIPING FROM ROOF ABOVE SHALL REMAIN AND BE DOCUMENTED AND PROVIDED TO THE ARCHITECT AND ENGINEER.
- 9) CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING PLUMBING SERVICES UP TO FIRST FLOOR ABOVE AND CAP AT MAINS ON BASEMENT LEVEL. CONTRACTOR SHALL REROUT 4" VENT PIPING ON BASEMENT LEVEL UP TO FIRST FLOOR ABOVE.
- 10) CONTRACTOR SHALL REMOVE EXISTING SANITARY PIPING ABOVE AND BELOW SLAB BETWEEN BROKEN PIPING BELOW FLOOR, CAP SANITARY BELOW SLAB.
- 11) CONTRACTOR SHALL REPAIR EXISTING BROKEN SANITARY PIPING BELOW SLAB. FIELD VERIFY EXISTING CONDITIONS.



SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Commercial door hardware for the following:
 - a. Swinging doors.
 - b. Other doors to the extent indicated.
 - 2. Cylinders for doors specified in other Sections.
 - 3. Electrified door hardware.
- B. Related Sections include the following:
 - 1. Division 08 Section "Hollow Metal Doors and Frames" for astragals provided as part of fire-rated labeled assemblies.
 - 2. Division 08 Section "Access Doors and Frames" for access door hardware, except cylinders.
 - 3. Division 08 Section "Aluminum-Framed Entrances and Storefronts" for entrance door hardware to the extent not specified in this section.
 - 4. Division 26 Sections for connections to electrical power system and for low-voltage wiring work.
 - 5. Division 28 Section "Access Control" for access control devices installed at door openings and provided as part of a security access system.
 - 6. Division 28 Section "Intrusion Detection" for detection devices installed at door openings and provided as part of an intrusion detection system.
 - 7. Division 28 Section "Fire Detection and Alarm" for connections to building fire alarm system.

1.3 SUBMITTALS

- A. Product Data: Include construction and installation details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Details of electrified door hardware, indicating the following:
 - 1. Wiring Diagrams: Power, signal, and control wiring. Include the following:
 - a. System schematic.
 - b. Point-to-point wiring diagram.
 - c. Riser diagram.
 - d. Elevation of each door.

2. Detail interface between electrified door hardware and fire alarm, access control, and/or security systems. Coordinate installation details for electrified door hardware with approved shop drawings for these systems.
 3. Operation Narrative: Describe the operation of doors controlled by electrified door hardware.
- C. Samples for Verification: For exposed door hardware of each type, in specified finish, full size. Tag with full description for coordination with the door hardware sets. Submit Samples before, or concurrent with, submission of the final door hardware sets.
1. Samples will be returned to Contractor. Units that are acceptable and remain undamaged through submittal, review, and field comparison process may, after final check of operation, be incorporated into the Work, within limitations of keying requirements.
- D. Product Certificates: For electrified door hardware, signed by product manufacturer.
1. Certify that door hardware approved for use on types and sizes of labeled fire doors complies with listed fire door assemblies.
- E. Qualification Data: For Architectural Hardware Consultant.
- F. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for locks, latches, delayed-egress locks, and closers.
- G. Maintenance Data: For each type of door hardware to include in maintenance manuals. Include the following:
1. Final hardware schedule, as-built.
 2. Keying schedule.
 3. Product cut sheets for each item installed.
 4. Parts list and numbers for each item installed.
 5. Maintenance information for each item installed.
 6. Name, address and phone number of local representative of each item installed.
- H. Warranty: Special warranty specified in this Section.
- I. Other Action Submittals:
1. Door Hardware Sets: Prepared by or under the supervision of the Architectural Hardware Consultant, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final door hardware sets with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - a. Format: Use same scheduling sequence and format and use same door numbers as in the Contract Documents.
 - b. Content: Include the following information:
 - 1) Identification number, location, hand, fire rating, and material of each door and frame.
 - 2) Type, style, function, size, quantity, and finish of each door hardware item. Include description and function of each lockset and exit device.
 - 3) Complete designations of every item required for each door or opening including name and manufacturer.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.

- 6) Explanation of abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for door hardware.
 - 8) Door and frame sizes and materials.
 - 9) Description of each electrified door hardware function, including location, sequence of operation, and interface with other building control systems.
 - a) Sequence of Operation: Include description of component functions that occur in the following situations: authorized person wants to enter; authorized person wants to exit; unauthorized person wants to enter; unauthorized person wants to exit.
 - 10) List of related door devices specified in other Sections for each door and frame.
 - 11) Name, address and phone number of local representative of each item installed.
- c. Submittal Sequence: Submit the final door hardware sets at earliest possible date, particularly where approval of the door hardware sets must precede fabrication of other work that is critical in Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the door hardware sets.
2. Keying Schedule: Prepared by or under the supervision of Architectural Hardware Consultant and following Keying Conference, detailing Owner's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations.

1.4 QUALITY ASSURANCE

- A. Comply with State University Construction Fund for door hardware requirements in addition to those specified herein.
- B. Installer Qualifications: An employer of workers trained and approved by lock manufacturer.
1. Installer's responsibilities include supplying and installing door hardware, and providing a qualified Architectural Hardware Consultant available during the course of the Work to consult with Contractor, Architect, and Owner about door hardware and keying.
 2. Installer shall have warehousing facilities in Project's vicinity.
 3. Scheduling Responsibility: Preparation of door hardware and keying schedules.
 4. Engineering Responsibility: Preparation of data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
- C. Architectural Hardware Consultant Qualifications: A person who is currently certified by DHI as an Architectural Hardware Consultant and who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project.
1. Electrified Door Hardware Consultant Qualifications: A qualified Architectural Hardware Consultant who is experienced in providing consulting services for electrified door hardware installations.
- D. Source Limitations: Obtain each type and variety of door hardware from a single manufacturer, unless otherwise indicated.
1. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated. Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.

- E. Fire-Rated Door Assemblies: Where fire-rated door assemblies are indicated, provide door hardware rated for use in assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C, unless otherwise indicated.
- F. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- G. Regulatory Requirements: Comply with applicable provisions in ICC/ANSI A117.1 and 2010 ADA Standards.
 - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.
 - 2. Comply with the following maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf applied perpendicular to door.
 - b. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 - 3. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch high.
 - 4. Adjust door closer sweep periods so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.
- H. Keying Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." In addition to Owner, Owner's Representative, Contractor, and Architect, conference participants shall also include Installer's Architectural Hardware Consultant and Owner's security consultant. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including, but not limited to, the following:
 - 1. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2. Preliminary key system schematic diagram.
 - 3. Requirements for key control system.
 - 4. Address for delivery of keys.
- I. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." In addition to Owner, Owner's Representative, Contractor, and Architect, a representative of each major hardware category shall be present to instruct installers on the proper installation and adjustment of door hardware. Review methods and procedures related to installation of door hardware including, but not limited to, the following:
 - 1. Inspect and discuss electrical roughing-in and other preparatory work performed by other trades.
 - 2. Review sequence of operation for each type of electrified door hardware.
 - 3. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review required testing, inspecting, and certifying procedures.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.

- B. Tag each item or package separately with identification related to the final door hardware sets, and include basic installation instructions, templates, and necessary fasteners with each item or package.
 - 1. Each item to be individually packaged in manufacturer's original container.
- C. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.6 COORDINATION

- A. Templates: Distribute door hardware templates for doors, frames, and other work specified to be factory prepared for installing door hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- B. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.**
- C. Electrical System Roughing-in: Coordinate layout and installation of electrified door hardware with connections to power supplies, fire alarm system and detection devices, access control system, and/or security systems.
- D. Existing Openings: Where new hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide for proper operation.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including excessive deflection, cracking, or breakage.
 - b. Faulty operation of operators and door hardware.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.
 - 2. Warranty Period: One year from date of Substantial Completion, except as follows:
 - a. Exit Devices: Three years from date of Substantial Completion.
 - b. Manual Closers: 10 years from date of Substantial Completion.
 - c. Hinges: Lifetime.

1.8 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish two complete sets of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware. Furnish two extra fasteners of each type and finish installed.
- B. Maintenance Service: Beginning at Substantial Completion, provide six months' full maintenance by skilled employees of door hardware Installer. Include quarterly preventive maintenance, repair or

replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door hardware operation. Provide parts and supplies same as those used in the manufacture and installation of original products.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in this Section **and door hardware schedule indicated on the drawings.**
 - 1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated.
 - 2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
- B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware are indicated in Part 3 "Door Hardware Sets" Article. Products are identified by descriptive titles corresponding to requirements specified in Part 2.
- C. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.

2.2 HINGES

- A. Hinges: BHMA A156.1. Provide template-produced hinges for hinges installed on hollow-metal frames.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Hager Companies.
 - b. McKinney Products Company; an ASSA ABLOY Group company.
 - c. Stanley Commercial Hardware.
 - 2. Mounting: Full mortise (butts).
 - 3. Bearing Material: Ball bearing.
 - 4. Grade: Grade 1 (heavy weight).
 - 5. Base and Pin Metal:
 - a. Exterior Hinges: Stainless steel with stainless-steel pin.
 - b. Interior Hinges: Steel with steel pin.
 - c. Hinges for Fire-Rated Assemblies: Steel with steel pin.
 - 6. Pins: Non-rising loose, unless otherwise indicated.
 - a. Outswinging Exterior Doors: Nonremovable.
 - b. Outswinging Corridor Doors with Locks: Nonremovable.
 - 7. Tips: Flat button.

8. Corners: Square.
9. **Electric Feature: Concealed electric through wires with monitor where indicated within Door Schedule.**

B. Quantity: Provide the following, unless otherwise indicated:

1. Three Hinges: For doors with heights 61 to 90 inches.
2. Four Hinges: For doors with heights 91 to 120 inches.
3. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

C. Fasteners: Comply with the following:

1. Machine Screws: For metal doors and frames. Install into drilled and tapped holes.
2. Wood Screws: For wood doors and frames.
3. Threaded-to-the-Head Wood Screws: For fire-rated wood doors.
4. Screws: Phillips flat-head. Finish screw heads to match surface of hinges.

2.3 CONTINUOUS HINGES

A. Provide continuous hinges at all exterior doors.

B. Continuous, Gear-Type Hinges: Extruded-aluminum, pinless, geared hinge leaves; joined by a continuous extruded-aluminum channel cap; with concealed, self-lubricating thrust bearings.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Bommer Industries, Inc.
 - b. Hager Companies; Hager-Roton.
 - c. McKinney Products Company; an ASSA ABLOY Group company.
 - d. Pemko Manufacturing Co.
2. Grade: Grade 1-150.
3. Mounting: Full surface, with removable continuous caps over fasteners.
4. Electric Option: Coordinate with security requirements.
5. **Electric Feature: Concealed electric through wires with monitor where indicated within Door Schedule.**

2.4 MECHANICAL LOCKS AND LATCHES

A. Mortise Locks: Stamped steel case with steel or brass parts; BHMA A156.13, Grade 1, Series 1000, heavy-duty.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Best Access Systems, Div. of The Stanley Works; Series 45H.
 - b. Corbin Russwin Architectural Hardware, an ASSA ABLOY Group company; Series ML2000.
 - c. SARGENT Manufacturing Company, an ASSA ABLOY Group company; Series 8200.

- d. Schlage Commercial Lock Division, an Allegion Company; Series L.
- B. Lock Functions: As indicated in door hardware schedule.
- C. Lock Throw: Comply with testing requirements for length of bolts required for labeled fire doors, and as follows:
 - 1. Mortise Locks: Minimum 3/4-inch latchbolt throw.
- D. Lock Backset: 2-3/4 inches.
- E. Lock Trim:
 - 1. Levers: Solid brass, bronze or stainless steel; cast or forged and through-bolted with a 2-piece spindle.
 - a. Provide tactile warning at hazardous locations.
 - 2. Escutcheons (Roses): Wrought.
 - 3. Dummy Trim: Match lever lock trim and escutcheons.
 - 4. Lockset Designs: Provide design indicated or, if sets are provided by another manufacturer, provide designs that match those designated.
- F. Strikes: Manufacturer's standard strike with strike box for each latchbolt or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, and as follows:
 - 1. Strikes for Mortise Locks and Latches: BHMA A156.13.
 - 2. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
 - 3. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
 - 4. Aluminum-Frame Strike Box: Manufacturer's special strike box fabricated for aluminum framing.
 - 5. Rabbet Front and Strike: Provide on locksets for rabbeted meeting stiles.
- G. **Electrified Mortise Lock Set (as scheduled): Types and functions indicated as follows:**
 - 1. **Request-for-Exit Function: Signal initiated when push bar is actuated.**
 - 2. **Electric Latch Retraction: Remote signal activates continuous-duty solenoid that retracts latch.**
 - 3. **Power supplies: Furnished by Door Hardware supplier; installed by the Security Contractor.**
 - 4. **Harness connector per Security Contractors requirements.**
 - 5. **Configured for fail secure operation.**

2.5 AUTOMATIC AND SELF-LATCHING FLUSH BOLTS

- A. Automatic and Self-Latching Flush Bolts: BHMA A156.16; minimum 3/4-inch throw; designed for mortising into door edge.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Glynn-Johnson.
 - b. Hager Companies.
 - c. IVES Hardware.

d. Trimco.

- B. Automatic Flush Bolts: Grade 1, fabricated from steel and brass components, with spring-activated bolts that automatically retract when active leaf is opened and that automatically engage when active door depresses bolt trigger; listed and labeled for fire-rated doors. Provide brass or stainless-steel cover plate, top and bottom dustproof strikes, guides, guide supports, wear plates, and shims.
- C. Dustproof Strikes: Locking type, Grade 1, polished wrought brass, with 3/4-inch- diameter, spring-tension plunger.

2.6 EXIT DEVICES AND AUXILIARY ITEMS

- A. Exit Devices and Auxiliary Items: BHMA A156.3.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company; 5000 Series.
 - b. Precision Hardware, Inc.; 1100/D-1200 Series.
 - c. SARGENT Manufacturing Company; an ASSA ABLOY Group company; 80 Series.
 - d. Von Duprin; an Allegion Company; 98/99 Series.
 - B. Panic Exit Devices: Listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing according to UL 305.
 - C. Fire Exit Devices: Devices complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252.
 - D. Fire-Exit Removable Mullions: Provide removable mullions for use with fire exit devices complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252. Mullions shall be used only with exit devices for which they have been tested.
 - E. Outside Trim: Lever with cylinder; material, design and finish to match locksets, unless otherwise indicated.
 - 1. Provide forged or cast escutcheon plates.
 - 2. Provide knurled outside lever where scheduled.
 - F. Provide the following types of exit devices as scheduled:
 - 1. Rim Exit Devices:
 - a. Type: BHMA A156.3, Type 1, rim.
 - b. Actuating Bar: Push pad.
 - c. Material: Brass, Bronze, Stainless steel or Aluminum.
 - 2. Push Pad: Extend push pad a minimum of one-half of the door width. Provide flush mounted end cap with two-point attachment to the door.
 - 3. Provide the following for each device:
 - a. Nylon bearings and stainless steel springs.
 - b. Security dead latching feature.

- c. Spacers as required for flush mounting of mechanism case.
 - d. Glass bead kits for mounting of hardware on glass doors.
4. Provide all non-fire-rated exit devices with cylinder dogging, except at locations indicated with electric latch retraction or request-for-exit function.

G. Electrified Exit Device Options (as scheduled): Types and functions indicated as follows:

- 1. **Request-for-Exit Function: Signal initiated when push bar is actuated.**
- 2. **Electric Latch Retraction: Remote signal activates continuous-duty solenoid that retracts latch.**
- 3. **Power supplies: Furnished by Door Hardware supplier; installed by the Security Contractor.**
- 4. **Harness connector per Security Contractors requirements.**
- 5. **Configured for fail secure operation.**

2.7 LOCK CYLINDERS

- A. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver.
- 1. All locksets and cylinders shall be keyed into the existing Campus Master Key System for this project. Allow for 100% expansion. For the protection of the Campus, all cylinders shall be keyed at the factory where permanent records shall be established and maintained.
- B. Cylinders: BHMA A156.5, Grade 1, manufacturer's standard tumbler type, constructed from brass, or bronze, stainless steel, or nickel silver, complying with the following:
- 1. Number of Pins: Seven (7).
 - 2. Bored-Lock Type: Cylinders with tailpieces to suit locks.
 - a. High-Security Grade: BHMA A156.5, Grade 1A, listed and labeled as complying with pick- and drill-resistant testing requirements in UL-437 (SuffixA).
 - 3. Proprietary product to match Campus standard as follows:
 - a. Best Access Systems; Premium Series. (no substitution).
- C. Construction Keying: During construction, all new locksets shall be construction master keyed. Provide temporary construction cores. The Contractor shall receive ten (10) construction master keys. Under no circumstance shall the Contractor receive any permanent building master keys or change keys unless authorized by the Campus Representative.
- 1. All construction cores will be returned to General Contractor once Campus has received and installed final cores.
- D. Permanent Cores: All permanent cores and keys shall be requested directly by the Campus to the manufacturer. The Contractor shall be responsible for all payments to the manufacturer and shall supply the Campus with all necessary information (account number, etc.), in order for the Campus to order final cores and keys.

2.8 KEYING

- A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, Appendix A. Incorporate decisions made in keying conference, and as follows:
1. Master Key System: Cylinders are operated by a change key and a master key.
 2. Existing System: Re-key Campus' existing master key system into new keying system.
 3. Keyed Alike: Key all cylinders to same change key.
 4. All master keys shall be identified with a registry number, and shall **not** be stamped with MASTER or letter M.
- B. Keys: Nickel silver.
1. Quantity: In addition to two extra key blanks for each lock, provide the following:
 - a. Cylinder Change Keys: Three.
 - b. Master Keys: Two.
 2. All keying shall be thoroughly checked with the Campus Representative. Final keying requirements shall be submitted in writing, for final approval by the Campus Representative.

2.9 OPERATING TRIM

- A. Operating Trim: BHMA A156.6; stainless steel.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Burns Manufacturing Incorporated.
 - b. Hager Companies.
 - c. IVES Hardware; an Ingersoll-Rand Company.
 - d. Rockwood Manufacturing Company.
 - e. Trimco.
- B. Flat Push Plates: 0.050 inch thick, 4 inches wide by 16 inches high; with square corners and beveled edges, secured with exposed screws.
- C. Straight Pull-Plate Door Pulls: 0.050-inch- thick plate, 4 inches wide by 16 inches high, with square corners and beveled edges; with minimum clearance of 1-1/2 inches from face of door; fastened at 8 inches o.c.
1. Type: 3/4-inch constant-diameter pull.
 2. Mounting: Surface applied with concealed fasteners.
 3. Overall Pull Length: 9 inches.

2.10 ACCESSORIES FOR PAIRS OF DOORS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Hager Companies.
 2. National Guard Products.
 3. Pemko Manufacturing Co.

4. Reese Enterprises.

- B. Coordinators: BHMA A156.3; consisting of active-leaf, hold-open lever and inactive-leaf release trigger; fabricated from steel with nylon-coated strike plates; with built-in, adjustable safety release; and with internal override.
- C. Flat Overlapping Astragals: BHMA A156.22; flat zinc-plated steel metal bar, surface mounted on face of door with screws; minimum 1/8 inch thick by 2 inches wide by full height of door.

2.11 SURFACE CLOSERS

- A. Surface Closers: BHMA A156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. LCN Closers; an Allegion Company; 4000 Series.
 - b. Norton Door Controls; an ASSA ABLOY Group company; PR7500/PR7700.
 - c. SARGENT Manufacturing Company; an ASSA ABLOY Group company; 351 Series.
- B. Surface Closer with Cover: Grade 1; Modern Type with mechanism enclosed in cover.
 - 1. Mounting: Parallel arm, unless otherwise indicated.
 - 2. Type: Regular arm, heavy-duty.
 - a. Provide delayed action closing where indicated.
 - 3. Backcheck: Adjustable, effective between 60 and 85 degrees of door opening.
 - a. Where indicated, closer must operate at 180 degree opening.
 - 4. Provide all drop plate brackets, shims and angle brackets as required to complete installation of closers on doors and frames.

2.12 MECHANICAL STOPS AND HOLDERS

- A. Wall- and Floor-Mounted Stops: BHMA A156.16; polished cast brass, bronze, or aluminum base metal.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Burns Manufacturing Incorporated.
 - b. Glynn-Johnson.
 - c. Hager Companies.
 - d. IVES Hardware.
 - e. Rockwood Manufacturing Company.
 - f. Trimco.

2. Provide wall stops for doors unless floor or other type stops are scheduled or indicated. Do not mount floor stops where they will impede traffic. Where floor or wall stops are not appropriate, provide overhead holders.

- B. Wall Bumpers: Grade 1; with rubber bumper; 2-1/2-inch diameter, minimum 3/4-inch projection from wall; with backplate for concealed fastener installation; with concave bumper configuration.
- C. Dome-Type Floor Stop: Grade 1; with minimum 1-inch- high bumper for doors without threshold and 1-3/8-inch- high bumper for doors with threshold; provide with extruded aluminum riser for carpet installations.

2.13 OVERHEAD STOPS AND HOLDERS

- A. Overhead Stops and Holders: BHMA A156.8.

2.14 DOOR GASKETING

- A. Door Gasketing: BHMA A156.22; air leakage not to exceed 0.50 cfm per foot of crack length for gasketing other than for smoke control, as tested according to ASTM E 283; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Hager Companies.
 - b. National Guard Products.
 - c. Pemko Manufacturing Co.
 - d. Reese Enterprises.

2.15 THRESHOLDS

- A. Thresholds: BHMA A156.21; fabricated to full width of opening indicated.
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Hager Companies.
 - b. National Guard Products.
 - c. Pemko Manufacturing Co.
 - d. Reese Enterprises.
- B. Saddle Thresholds:
 1. Type: Fluted top.
 2. Base Metal: Aluminum.

2.16 METAL PROTECTIVE TRIM UNITS

- A. Metal Protective Trim Units: BHMA A156.6; fabricated from 0.050-inch- thick stainless steel; with manufacturer's standard machine or self-tapping screw fasteners.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. Burns Manufacturing Incorporated.
- b. Hager Companies.
- c. IVES Hardware; an Ingersoll-Rand Company.
- d. Rockwood Manufacturing Company.
- e. Trimco.

B. Armor Plates: 36 inches high by door width, with allowance for frame stops.

C. Kick Plates: 12 inches high by door width, with allowance for frame stops.

D. Mop Plates: 6 inches high by 1 inch less than door width.

2.17 AUXILIARY DOOR HARDWARE

- A. Silencers for Metal Door Frames: Grade 1; neoprene or rubber; minimum diameter 1/2 inch; fabricated for drilled-in application to frame.

2.18 AUXILIARY ELECTRIFIED DOOR HARDWARE

- A. Boxed Power Supplies: Modular unit in NEMA ICS 6, Type 4 enclosure; filtered and regulated; voltage rating and type matching requirements of door hardware served; and listed and labeled for use with fire alarm systems.
- B. Door and Frame Transfer Devices: Steel housing for mortise in hinge stile of door, with flexible tube for wiring bundle; accommodating doors that swing open to 120 degrees.

2.19 FABRICATION

- A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rated labels and as otherwise approved by Architect.

1. Manufacturer's identification is permitted on rim of lock cylinders only.

- B. Base Metals: Produce door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18. Do not furnish manufacturer's standard materials or forming methods if different from specified standard.

- C. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.

1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where

bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.

2. Fire-Rated Applications:
 - a. Wood or Machine Screws: For the following:
 - 1) Hinges mortised to doors or frames; use threaded-to-the-head wood screws for wood doors and frames.
 - 2) Strike plates to frames.
 - 3) Closers to doors and frames.
 - b. Steel Through Bolts: For the following unless door blocking is provided:
 - 1) Surface hinges to doors.
 - 2) Closers to doors and frames.
 - 3) Surface-mounted exit devices.
3. Spacers or Sex Bolts: For through bolting of hollow-metal doors.
4. Fasteners for Wood Doors: Comply with requirements in DHI WDHS.2, "Recommended Fasteners for Wood Doors."
5. Gasketing Fasteners: Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.

2.20 FINISHES

- A. Standard: BHMA A156.18, as indicated in door hardware sets.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
- B. Wood Doors: Comply with DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."

3.3 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights indicated on Drawings, and in accordance with the **New York** State Building Code, the 2010 ADA Standards and ICC/ANSI A117.1.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 09 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
 - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- C. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- D. Lock Cylinders: Install construction cores to secure building and areas during construction period.
 - 1. Replace construction cores with permanent cores as indicated in keying schedule.
 - 2. Furnish permanent cores to Owner for installation.
- E. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings. Verify location with Architect.
 - 1. Configuration: Provide one power supply for each door opening.
- F. Thresholds: Set thresholds for exterior doors in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- G. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- H. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- I. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

- J. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.4 FIELD QUALITY CONTROL

- A. Independent Architectural Hardware Consultant: Owner will engage a qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
 - 1. Independent Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 - 1. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 2. Door Closers: Unless otherwise required by authorities having jurisdiction, adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.
- B. Occupancy Adjustment: Approximately three months after date of Substantial Completion, Installer's Architectural Hardware Consultant shall examine and readjust, including adjusting operating forces, each item of door hardware as necessary to ensure function of doors, door hardware, and electrified door hardware.

3.6 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

3.7 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 087100