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Moorhead Area Public Schools
Grades 5-6 Addition at Horizon Campus
Moorhead, MN

Project No. 15-024
Date: May 9, 2016

ADDENDUM NUMBER 1

BID DATE & TIME: **Tuesday, May 17, 2016 at 2:30 pm local time**
Probstfield Center for Education – Board Room
2410 – 14th Street South
Moorhead, Minnesota

The following additions, clarifications, deletions and/or changes shall be made to the SPECIFICATIONS:

Section 08 3613 – Sectional Doors

1. 1.01, A; Omit the words 'manually and' from sentence.
2. 2.02, E; 1/2 inch clear glazing shall be 'safety' type.
3. 2.03, B, 3; glazed lights shall be 'safety' type.
4. 2.03, D. Glazing; Omit paragraph.
5. 3.08 Schedule:
    a. Paragraph F. 425T.2 – Tickets; Change operation to electric in lieu of Counterbalance manual.
    b. Paragraph G. 425.3 – Tickets; Change operation to electric in lieu of Counterbalance manual.

Section 08 7100 – Door Hardware

1. Omit entire section and replace with attached revised section.

See attached Mechanical specifications revisions.

See attached Electrical Specifications revisions.

The following materials and/or equipment have been accepted as APPROVED EQUALS:
(Note: see Electrical and Mechanical portion of Addendum for additional approved equals).

Section	Specified Product	Approved Equal
08 3613, 2.01, A – Sectional Doors	Clopay Corporation, Ideal Door Garage Doors, Overhead Door, Raynor Garage Doors	C.H.I. Overhead Doors: www.chiohd.com

The following additions, deletions and/or changes shall be made to the DRAWINGS:

Sheet A3.10 – First Floor Plan - Area "A"

1. Door S5B – Change door swing to LH in lieu of LHR.
2. Door S5C – Change door swing to RH in lieu of RHR.

Sheet A3.11 – First Floor Plan - Area "B"

1. Door S5D – Change door swing to RH in lieu of RHR.
2. Door S5E – Change door swing to LH in lieu of LHR.

Sheet A3.14 – First Level Floor Plan - Area "E"

1. Door 420.4 – Change door swing to LHR in lieu of RHR.
2. Door 422.5 – Change door swing to LH in lieu of RHR.

Sheet A3.80 – Door & Hollow Metal Frame Schedule

1. Omit Door type 'ST-A' as indicated on the attached revised sheet.
2. Add door hardware groups as indicated on the attached revised sheet.
3. Door 408.1 - Omit 'Surf. Vert. Rod Top Only' from the remarks column.
4. Door 408.2 - Omit 'Surf. Vert. Rod Top Only' from the remarks column.
5. Door 409.3 - Omit 'Surf. Vert. Rod Top Only' from the remarks column.
6. Overhead & Coiling Door Type Schedule – Revise vision panel quantity as indicated on the attached revised sheet.

Sheet A3.81 – Door & Hollow Metal Frame Schedule

1. Add Door C-2 as indicated on the attached revised sheet.
2. Add door hardware groups as indicated on the attached revised sheet.
3. Door 400C.2 – Change door rating to '60 min'.
4. Door S5B – Change door rating to '45 min'.
5. Door S5C – Change door rating to '45 min'.
6. Door S5D – Change door rating to '45 min'.
7. Door S5E – Change door rating to '45 min'.

See attached Mechanical drawing revisions.

See attached Electrical drawing revisions.

END OF ADDENDUM NUMBER 1

SECTION 08 7100

DOOR HARDWARES

PART 1 - GENERAL

1.1 CONDITIONS

A. Conditions of the contract (General and Supplementary Conditions) and Division One General Requirements, govern the work of this section.

B. This section includes all material, and related service necessary to furnish all finish hardware indicated on the drawings, or specified herein.

C. Furnish UL listed hardware for all labeled and 20 min. openings in conformance with the requirements for the class of opening scheduled. Underwriters' requirements shall have precedence over specification where conflicts exist.

D. All work shall be in accordance with all applicable state and local building codes. Code requirements shall have precedence over this specification where conflicts exist.

1.2 WORK INCLUDED

A. This section includes the following:

1. Furnish door hardware aluminum doors specified herein, listed in the hardware schedule, and/or required by the drawings.
2. Thresholds and Weather-stripping (Aluminum frame seals to be provided by aluminum door supplier)
3. Complete hardware for interior and exterior Aluminum doors, including cylinders, to be specified by this Section (08 7100), but supplied by Section 08 4113 Aluminum-Framed Entrances and Storefronts. Cylinders for the Aluminum door hardware to be provided by Section 08 4113.
4. Electro-Mechanical Devices
5. Many openings will be controlled by manual switches provided by the Moorhead Area Public Schools. Coordinate the locations and wiring with Dan Markert, Technology Director with MAPS 218-284-3345.
6. Access Control components and or systems specified within this section.

B. Where items of hardware are not definitely or correctly specified and is required for the intended service, such omission, error or other discrepancy should be directed to the Architect prior to the bid date for clarification by addendum. Otherwise furnish such items in the type and quantity established by this specification for the appropriate service intended.

1.3 RELATED WORK IN OTHER SECTIONS

A. This section includes coordination with related work in the following sections:

1. Division 6 Section "Finish Carpentry".
2. Division 6 Section "Cabinet Hardware"
3. Division 8 Section "Hollow Metal Doors and Frames".
4. Division 8 Section "Wood Doors"
5. Division 8 Section "Aluminum Entrances and Storefronts"
6. Division 28 Sections "Electrical".

1.4 REFERENCES

A. Publications of agencies and organizations listed below form a part of this specification section to the extent referenced.

1. DHI - Recommended Locations for Builders' Hardware.
2. NFPA 80 - Standards for Fire Doors and Windows.
3. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures.
4. UL - Building Material Directory.
5. DHI - Door and Hardware Institute

6. WHI - Warnock Hersey
7. BHMA - Builders Hardware Manufacturers Association
8. IBC 2006 - International Building Code 2006 Edition (as amended by local building code)

1.5 SUBMITTALS

A. Within ten days after award of contract, submit detailed hardware schedule in quantities as required by Division 1 - General Conditions.

B. Schedule format shall be consistent with recommendations for a vertical format as set forth in the Door & Hardware Institute's (DHI) publication "Sequence and Format for the Hardware Schedule". Hardware sets shall be consolidated to group multiple door openings which share similar hardware requirements. Schedule shall include the following information:

1. Door number, location, size, handing, and rating.
2. Door and frame material, handing.
3. Degree of swing.
4. Manufacturer
5. Product name and catalog number
6. Function, type and style
7. Size and finish of each item
8. Mounting heights
9. Explanation of abbreviations, symbols, etc.
10. Numerical door index, indicating the hardware set/ group number for each door.

C. When universal type door closers are to be provided, the schedule shall indicate the application method to be used for installation at each door: (regular arm, parallel arm, or top jamb).

D. The schedule will be prepared under the direct supervision of a certified Architectural Hardware Consultant (AHC) employed by the hardware distributor. The hardware schedule shall be signed and embossed with the DHI certification seal of the supervising AHC. The supervising AHC shall attend any meetings related to the project when requested by the architect.

E. Check the specified hardware for suitability and adaptability to the details and surrounding conditions.

F. Review drawings from related trades as required to verify compatibility with specified hardware. Indicate unsuitable or in compatible items, and proposed substitutions in the hardware schedule.

G. Provide documentation for all hardware to be furnished on labeled fire doors indicating compliance with positive pressure fire testing UL 10C.

H. Furnish manufacturers' catalog data for each item of hardware in quantities as required by Division 1 - General Conditions.

I. Submit a sample of each type of hardware requested by the architect. Samples shall be of the same finish, style, and function as specified herein. Tag each sample with its permanent location so that it may be used in the final work.

J. Furnish with first submittal, a list of required lead times for all hardware items.

K. After final approved schedule is returned, transmit corrected copies for distribution and field use in quantities as required by Division 1 - General Conditions.

L. Furnish approved hardware schedules, template lists, and pertinent templates as requested by related trades.

M. Furnish necessary diagrams, schematics, voltage and amperage requirements for all electro-mechanical devices or systems as required by related trades. Wiring diagrams shall be opening specific and include both a riser diagram and point to point diagram showing all wiring terminations.

N. After receipt of approved hardware schedule, Hardware supplier shall initiate a meeting including the owner's representative to determine keying requirements. Upon completion of the initial key

meeting, hardware supplier shall prepare a proposed key schedule with symbols and abbreviations as set forth in the door and hardware institute's publication "Keying Procedures, Systems, and Nomenclature". Submit copies of owner approved key schedule for review and field use in quantities as required by Division 1 - General Conditions. Wiring diagrams shall be included in final submittals transmitted for distribution and field use.

1.6 QUALITY ASSURANCE

A. Manufacturers and model numbers listed are to establish a standard of function and quality. Similar items by approved manufacturers that are equal in design, function, and quality, may be considered for prior approval of the architect, provided the required data and physical samples are submitted for approval as set forth in Division One General Requirements.

B. Obtain each type of hardware (hinges, latch & locksets, exit devices, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.

C. All hardware items shall be manufactured no earlier than 6 months prior to delivery to site.

D. Hardware supplier shall be factory trained and certified by the manufacture to provide and support all computer managed locks and system components.

E. Installation of hardware shall be installed or directly supervised and inspected by a skilled installer certified by the manufacturer of locksets, door closers, and exit devices used on the project, or with not less than 3 years' experience in successful completion of projects similar in size and scope.

F. Provide hardware for all labeled fire doors, which complies with positive pressure fire testing UL 10C.

G. Comply with all applicable provisions of the standards referenced within section 1.4 of this specification.

H. Hardware supplier shall participate when reasonably requested to meet with the contractor and or architect to inspect any claim for incorrect or non-functioning materials; following such inspection, the hardware supplier shall provide a written statement documenting the cause and proposed remedy of any unresolved items.

1.7 DELIVERY, STORAGE AND HANDLING

A. Hardware supplier shall deliver hardware to the job site unless otherwise specified.

B. All hardware shall be delivered in manufacturers' original cartons and shall be clearly marked with set and door number.

C. Coordinate with contractor prior to hardware delivery and recommend secure storage and protection against loss and damage at job site.

D. Contractor shall receive all hardware and provide secure and proper protection of all hardware items to avoid delays caused by lost or damaged hardware. Contractor shall report shortages to the Architect and hardware supplier immediately after receipt of material at the job site.

E. Coordinate with related trades under the direction of the contractor for delivery of hardware items necessary for factory installation.

1.8 PRE-INSTALLATION MEETING

A. Schedule a hardware pre-installation meeting on site to review and discuss the installation of continuous hinges, locksets, door closers, exit devices, overhead stops, and electromechanical door hardware.

B. Meeting attendees shall be notified 7 days in advance and shall include: Architect, Contractor, Door Hardware Installers (including low voltage hardware), Manufacturers representatives for above hardware items, and any other effected subcontractors or suppliers.

C. All attendees shall be prepared to distribute installation manuals, hardware schedules, templates, and physical hardware samples.

1.9 WARRANTY

A. All hardware items shall be warranted against defects in material and workmanship as set forth in Division One General Requirements.

B. Repair, replace, or otherwise correct deficient materials and workmanship without additional cost to owner.

PART 2 - PRODUCTS

2.1 FASTENERS

A. All exposed fasteners shall be Phillips head or as otherwise specified, and shall match the finish of the adjacent hardware. All fasteners ex-posed to the weather shall be non-ferrous or stainless steel. Furnish correct fasteners to accommodate surrounding conditions.

B. Where torx tamper resistant fasteners have been specified for a specific hardware group, provide torx head fasteners with center pin on ALL exposed fasteners.

C. Coordinate required reinforcements for doors and frames. Seek approval of the architect prior to furnishing through-bolts. Furnish through-bolts as required for materials not readily reinforced.

2.2 BUTT HINGES

A. Acceptable manufacturers and respective catalog numbers:

	Ives	Hager	McKinney
1. Standard Weight, Plain Bearing	5PB1	1279	T2714
2. Standard Weight, Ball Bearing	5BB1	BB1279	TB2714
3. Standard Weight, Ball Bearing, Non-Ferrous	5BB1	BB1191	TB2314
4. Heavy Weight, Ball Bearing	5BB1HW	BB1168	T4B3786
5. Heavy Weight, Ball Bearing, Non-Ferrous	5BB1HW	BB1199	T4B3386

B. Unless otherwise specified, furnish the following hinge quantities for each door leaf.
   1. 3 hinges for doors up to 90 inches.
   2. 1 additional hinge for every 30 inch on doors over 90 inches.
   3. 4 hinges for Dutch door applications.

C. Unless otherwise specified, top and bottom hinges shall be located as specified in division 8 Section "Hollow Metal Doors and Frames". Intermediate hinges shall be located equidistant from others.

D. Unless otherwise specified, furnish hinge weight and type as follows:
   1. Standard weight: plain bearing hinge 5PB1 for interior openings through 36 inches wide without a door closer.
   2. Standard weight: ball bearing hinge 5BB1 for interior opening over 36 through 40 inches wide without a door closer, and for interior openings through 40 inches wide with a door closer.
   3. Heavyweight: 4 ball bearing hinge 5BB1HW for interior openings over 40 inches wide, and for all vestibule doors.
   4. Heavyweight: 4 ball bearing hinge 5BB1HWss for exterior openings unless otherwise listed in groups.

E. Unless otherwise specified, furnish hinges for exterior doors, fabricated from brass, bronze, or stainless steel. Unless otherwise specified, hinges for interior doors may be fabricated from steel.

F. Unless otherwise specified, furnish hinges in the following sizes:
   1. 5" x 5" 2-1/4" thick doors
   2. 4-1/2" x 4-1/2" 1-3/4" thick doors
   3. 3-1/2" x 3-1/2" 1-3/8" thick doors

G. Furnish hinges with sufficient width to accommodate trim and allow for 180-degree swing.

H. Unless otherwise specified, furnish hinges with flat button tips with non-rising pins at interior doors, non-removable loose pins (NRP) at exterior and out-swinging interior doors.

I. Unless otherwise specified, furnish all hinges to template standards.

2.3 CONTINUOUS PIN AND BARREL HINGES

A. Acceptable manufacturers and respective catalog numbers:

	Ives	Marker	McKinney
1. Edge Mount Pin & Barrel Stainless Steel Continuous Hinge	700 Series	300 Series	300 Series

B. Continuous hinges shall be full height pin and barrel type hinge providing full height door support up to 600 lbs. Edge mount (unless noted otherwise).

C. Construct hinges of heavy-duty 14-gauge material. The stainless internal pin shall have a diameter of 0.25 and the exterior barrel diameter of 0.438.

D. Hinge shall be non-handed with symmetrical template hole pattern and factory drilled. Hinge must accept a minimum of 21 fasteners on the door and 21 fasteners on the frame.

E. Each knuckle to be 2 inch, including split nylon bearing at each separation for quiet, smooth, self-lubricating operation.

F. Hinge to be able to carry Warnock Hersey Int. or UL for fire rated doors and frames up to 3 hours.

G. Provide machine screws for doors which have been reinforced to accept machine screws.

H. Note: Fire label for doors and frames should be placed on the header and top rail of fire rated doors and frames.

2.4 POWER TRANSFERS

A. Acceptable manufacturers and respective catalog numbers:

	Von Duprin
1. Concealed Two Wire	EPT-2
2. Concealed Ten Wire	EPT-10

B. Concealed power transfers shall be concealed in the door and frame when the door is closed.

C. Concealed power transfers shall have a steel tube to protect wires from being cut.

D. Concealed power transfers with spring tubes shall be rejected.

E. Concealed power transfers shall be supplied with a mud box to house all terminations.

2.5 EXIT DEVICES

A. Acceptable manufacturers and respective catalog numbers:

	Von Duprin	No Substitution
1. Wide Stile, Push Pad	98 / 99 Series	
2. Wide Stile, Electric Latch Retraction	QEL 98 / 99 Series	
3. Lever Trim	996 Series	
4. Pull Trim	990 Series	

B. Obtain exit devices from a single manufacturer, although several may be indicated as offering products complying with requirements.

C. All exit devices shall be equipped with a sound-dampening feature to reduce touch pad return noise.

D. On full glass doors there shall be no exposed fasteners on the back of the mechanism visible through the glass.

E. All exit devices shall be provided with flush end caps to reduce potential damage from impact.

F. All exit devices shall be provided with dead-locking latch bolts to insure security.

G. All exit devices shall be U.L. listed for accident hazard. Exit device for use on fire doors shall also be U.L. listed for fire exit hardware.

H. Provide optional strikes, special length rods, and adapter plates to accommodate door and frame conditions. Provide narrow style series devices in lieu of wide stile series devices where optional strikes will not accommodate door and frame conditions.

I. Coordinate with related trades to insure adequate clearance and reinforcement is provided in doors and frames. Provide thru bolts as required.

J. Refer to hardware groups for exit device applications utilizing the option of: "less bottom latch and floor strike" (LBL)

K. All exit devices shall be provided with optional trim designs to match other lever and pull designs used on the project.

L. Unless specific exit device dogging options are noted within hardware sets, provide dogging options as follows:

1. Fire Rated devices: Dogging not permitted.
2. Non-Rated Exit Only functions not equipped with outside trim or pull: Less Dogging.
3. Non-Rated Classroom functions: Less Dogging.
4. Non-Rated devices utilizing electric latch retraction or electrified outside trim: Less Dogging.
5. All Other Non-Rated devices: Cylinder Dogging utilizing interchangeable core cylinders. Cylinder keyway shall match locksets furnished on this project.

M. Provide glass bead kits as required to accommodate door conditions. Screws shall not be visible through full glass doors.

N. Where specified, provide compatible keyed mullions with cylinder for pairs of doors.

O. Provide reinforced crossbars for all traditional style exit devices applied to doors over 36" wide.

2.6 LOCKS AND LATCHES

A. Acceptable manufacturers and respective catalog numbers:

	Best	No Substitution
1. Grade 1 Cylindrical	9K Series 15D	

B. Unless otherwise specified, all locks and latches to have:

1. 2-3/4" Backset
2. 1/2" minimum throw latchbolt
3. 1" throw deadbolt
4. 6 pin cylinders
5. ANSI A115.2 strikes

C. Provide guarded latch bolts for all locksets, and latch bolts with sufficient throw to maintain fire rating of both single and paired door assemblies.

D. Length of strike lip shall be sufficient to clear surrounding trim.

E. Provide wrought boxes for strikes at inactive doors, wood frames, and metal frames without integral mortar covers.

2.7 PULLS, PUSH BARS, PUSH/PULL PLATES

A. Acceptable manufacturers and respective catalog numbers:

	Burns	Hager	Ives
1. Straight Pull (1" dia., 10" ctc)	26C	4J	8103EZ-0
2. Straight Pull (3/4" dia., 8" ctc)	25B	3G	8102-8
3. Offset Door Pull (1" dia., 10" ctc)	39C	12J	8190-0
4. Pull / Push-Bar (1" dia., 10" ctc Pull)	422 x 26C	153	9103EZ-0
5. Offset Pull / Push-Bar (1" dia., 10" ctc Pull)	422 x 39C	157	9190-0
6. Push Plate (.050 4"X 16")	54	30S 4 x 16	8200 4 x 16
7. Push Plate (.050 6"X 16")	56	30S 6 x 16	8200 6" X 16"
8. Pull Plate (1" dia., 10" ctc - .050" X 4" X 16")	5426C	34J 4 x 16	8303EZ-0 4" X 16"

A. Adjust dimensions of push plates to accommodate stile and rail dimensions, lite and louver cutouts, and adjacent hardware. Where required by adjacent hardware, push plates shall be factory drilled for cylinders or other mortised hardware. All push plates shall be beveled 4 sides and counter sunk.

B. Where possible, provide back-to-back, and concealed mounting for pulls and push bars. Push bar length shall be 3" less door width, or center of stile to center of stile for stile & rail or full glass doors.

2.8 CLOSERS

A. Acceptable manufacturers and respective catalog numbers:

LCN	No Substitution
1. 4011 /4111 EDA	

B. Obtain door closers from a single manufacturer, although several may be indicated as offering products complying with requirements.

C. Provide extra heavy duty arm (EDA / HD) when closer is to be installed using parallel arm mounting.

D. Closers shall use high strength cast iron cylinders, forged main arms, and 1 piece forged steel pistons.

E. Closers shall utilize a stable fluid withstanding temperature range of +120deg F to -30deg F without seasonal adjustment of closer speed to properly close the door. Closers for fire-rated doors shall be provided with temperature stabilizing fluid that complies with standards UL10C.

F. Unless otherwise specified, all door closers shall have full covers and separate adjusting valves for sweeps, latch, and backcheck.

G. Provide closers for all labeled doors. Provide closer series and type consistent with other closers for similar doors specified elsewhere on the project.

H. Provide closers with adjustable spring power. Size closers to insure exterior and fire rated doors will consistently close and latch doors under existing conditions. Size all other door closers to allow for reduced opening force not to exceed 5 lbs.

I. Install closers on the room side of corridor doors, stair side of stairways and interior side of exterior doors.

J. Closers shall be furnished complete with all mounting brackets and cover plates as required by door and frame conditions, and by adjacent hardware.

K. Door closers shall be provided with a powder coat finish to provide superior protection against the effects of weathering. Powder coat finish shall successfully pass a 100 hour salt spray test.

2.9 LOW ENERGY ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

A. Acceptable manufacturers and respective catalog numbers:

	LCN	BESAM
1. Electro-Hydraulic Operator	4640	PowerSwing

B. Where low kinetic energy, as defined by ANSI/BHMA Standard A156.19, power operators are indicated for doors required to be accessible to the disabled, provide electrically powered operators complying with the ADA for opening force and time to close standards.

C. The closing action shall be controlled by modern type cast iron door closer cylinder filled with a flat viscosity fluid, stable from +120F to -30F that would require no seasonal adjustments. The closer shall have field adjustable spring power; have two independent closing speed adjustment valves, and hydraulic back-check.

D. Full closing force shall be provided when the power or assist cycle ends.

E. All power operator systems shall include the following features and functions:
   1. Provisions for separate conduits to carry high and low voltage wiring in compliance with the National Electrical Code, section 725-31.
   2. The operator will be designed with an electronically controlled mechanical clutching mechanism to prevent damage to the operator if the system is actuated while the door is latched or if the door is forced closed during the opening cycle.
   3. All covers, mounting plates and arm systems shall be powder coated and successfully pass a minimum of 100 hours testing as outlined in ANSI/BHMA Standard A156.18.
   4. UL listed for use on labeled doors.
   5. All operators shall be non-handed with spring power over a range of at least four sizes; either 1 through 4 or 2 through 5.
   6. The power operator shall incorporate microprocessor controlled digital controls including: factory default memory settings, on-board diagnostics, non-volatile memory, and integrated delay and relay for controlling door release devices.
   7. Provisions in the control box or module shall provide control {inputs and outputs) for; electric strike delay, auxiliary contacts, sequential operation, fire alarms systems, actuators, swing side sensors, and stop side sensors.
   8. Wall mounted actuators shall consist of a 4-1/2 inch diameter stainless steel touch plate with a blue filled handicapped symbol. Switches shall be weather resistant and mount on a single gang electrical box furnished by Division 16.

F. All electrically powered operators shall include the following features or functions:
   1. When an obstruction or resistance to the opening swing is encountered, the operator will pause at that point, then attempt to continue opening the door. If the obstruction or resistance remains, the operator will again pause the door.
   2. Easily accessible main power and maintain hold open switches will be provided on the operator.
   3. An electronically controlled clutch to provide adjustable opening force.
   4. A microprocessor to control all motor and clutch functions.
   5. An on-board power supply capable of delivering both 12V and 24V outputs up to a maximum of 1.0 ampere combined load.
   6. All input and output power wiring shall be protected by slow blow fuses. These fuses shall be easily replaceable without special tools or component replacement.
   7. If electrical failure occurs, the unit shall operate as a standard door closer.

G. Power Operators shall be warranted by the manufacture to be free from defects in material and workmanship for a period of two years.

2.10 KICK PLATES AND MOP PLATES

A. Furnish protective plates as specified in hardware groups.

B. Where specified, provide 10" kick plates, 34" armor plates, and 4" mop plates. Unless otherwise specified, metal protective plates shall be .050" thick; plastic plates shall be 1/8" thick.

C. Protective plates shall be 2" less door width, or 1" less door width at pairs. All protective plates shall be beveled 4 sides and counter sunk. Protection plates over 16" shall not be provided for labeled doors unless specifically approved by door manufacturers listing.

D. Where specified, provide surface mounted door edges. Edges shall butt to protective plates. Provide edges with cutouts as required adjacent hardware.

E. Adjust dimensions of protection plates to accommodate stile and rail dimensions, lite and louver cutouts, and adjacent hardware. Where required by adjacent hardware, protection plates shall be factory drilled for cylinders or other mortised hardware.

2.11 OVERHEAD STOPS

A. Acceptable manufacturers and respective catalog numbers:

	Glynn-Johnson	Rixson	Sargent
1. Heavy Duty Surface Mount	GJ900 Series	9 Series	590
2. Heavy Duty Concealed Mount	GJ100 Series	1 Series	690

B. Overhead stops (including slide block and end caps) shall be fabricated from metal.

C. Unless otherwise specified, furnish GJ900 series overhead stop for hollow metal or 1-3/4” solid core doors equipped with regular arm surface type closers that swing more than 140 degrees before striking a wall, for hollow metal or 1-3/4” solid core doors that open against equipment, casework, sidelights, or other objects that would make wall bumpers inappropriate, and as specified in hardware groups.

D. Furnish sex bolt attachments for wood and mineral core doors unless doors are supplied with proper reinforcing blocks.

E. Provide special stop only (“SE” suffix) overhead stops when used in conjunction with electronic hold open closers.

F. Do not provide holder function for labeled doors.

2.12 WALL STOPS AND HOLDERS

A. Acceptable manufacturers and respective catalog numbers:

	Ives	Hager	Burns
1. Wrought Convex Wall Bumper	WS406CVX	232W	570
2. Wrought Concave Wall Bumper	WS406CCV	236W	575

B. Furnish a stop or holder for all doors. Furnish floor stops or hinge pin stops only where specifically specified.

C. Where wall stops are not applicable, furnish overhead stops.

D. Do not provide holder function for labeled doors.

2.13 WEATHERSTRIP, GASKETING

A. Acceptable manufacturers and respective catalog numbers:

	Zero	Pemko	NGP	Reese
1. Weatherstrip	429	2891_PK	700NA	755
2. Adhesive Gasket	188	S88	5050	797
3. Mullion Seal/Silencer	8780	5110	5100N	
4. Meeting Edge Seals	8193	18041	9605	959
5. Sweeps	8192	18061_NB	B606	964
6. Sweep w/ drip	8198	345_N	C627	354

7.	Drip Cap	142	346	16	R201

B. Where specified in the hardware groups, furnish the above products unless otherwise detailed in groups.

C. Provide weatherstripping all exterior doors and where specified.

D. Provide intumescent and other required edge sealing systems as required by individual fire door listings to comply with positive pressure standards UL 10C.

E. Provide Zero 188 smoke gaskets at all fire rated doors and smoke and draft control assemblies.

F. Provide gasketing for all meeting edges on pairs of fire doors. Gasketing shall be compatible with astragal design provided by door supplier as required for specific fire door listings.

2.14 SOUND SEALS

A. Acceptable manufacturers and respective catalog numbers:

		Zero	Pemko	NGP	Reese
1.	Perimeter Sound Seals (used with Cylindrical Lock & Exit Devices)	475A	29310AV	172V	779A
2.	Mullion Seal/Silencer	8780	5110	5100N	
3.	Automatic Door bottom (HD Concealed with Magnet used to hold seal up)	369A	******	******	******

B. Where specified in the hardware groups, furnish the above products unless otherwise detailed in groups.

C. Provide intumescent and other required edge sealing systems as required by individual fire door listings to comply with positive pressure standards UL 10C.

2.15 THRESHOLDS

A. Acceptable manufacturers and respective catalog numbers:

	Zero	Pemko	NGP	Reese
1. Saddle Thresholds	8655	171	425	S205

B. Hardware supplier shall verify all finish floor conditions and coordinate proper threshold as required to insure a smooth transition between threshold and interior floor finish.

C. Threshold Types:

1. Unless otherwise specified, provide saddle threshold similar to Zero 8655 for all exterior openings with an interior floor finish less than or equal to 1/4" in height.
2. Unless otherwise specified, provide half saddle threshold similar to Zero 1674 for all exterior openings with an interior floor finish greater than 1/4" in height. Threshold height shall match thickness of interior floor finish.

2.16 POWER SUPPLIES

A. Provide quantities and types as specified in hardware sets. Shared power supplies will not be accepted without prior approval from the owner.

B. All power supplies shall have the following features:

1. 12/24 VDC Output, field selectable.
2. Class 2 Rated power limited output.
3. Universal 120-240 VAC input.
4. Low voltage DC, regulated and filtered.
5. Polarized connector for distribution boards.
6. Fused primary input.
7. AC input and DC output monitoring circuit w/LED indicators.
8. Cover mounted AC Input indication.
9. Tested and certified to meet UL294.
10. NEMA 1 enclosure.
11. Hinged cover w/lock down screws.

12. High voltage protective cover.

C. All power supplies shall incorporate fused distribution boards.

D. All electro-mechanical systems requiring fail safe circuits shall be capable of interfacing with the fire alarm system to cut power to appropriate system components. Unless already provided in another system component, all power supplies utilized in fail safe circuits shall include an integral relay which when connected to the N/C fire alarm contact will cut power to all openings connected to the individual power supply. Power supply, unless otherwise specified, will automatically reset itself when fire alarm relay returns to normal state following a fire alarm.

2.17 FINISHES AND BASE MATERIALS

A. Unless otherwise indicated in the hardware groups or herein, hardware finishes shall be applied over base metals as specified in the following finish schedule:

	HARDWARE ITEM	BHMA FINISH AND BASE MATERIAL
1.	Butt Hinges: Exterior, or Non-Ferrous	630 (US32D - Satin Stainless Steel)
2.	Butt Hinges: Interior	652 (US26D - Satin Chromium)
3.	Continuous Hinges	630 (US32D - Satin Stainless Steel)
4.	Flush Bolts	626 (US26D - Satin Chromium)
5.	Exit Devices	626 (US26D - Satin Chromium)
6.	Locks and Latches	626 (US26D - Satin Chromium)
7.	Pulls and Push Plates/Bars	630 (US32D - Satin Stainless Steel)
8.	Coordinators	600 (Prime painted or mill alum.)
9.	Closers	689 (Powder Coat Aluminum)
10.	Protective Plates	630 (US32D - Satin Stainless Steel)
11.	Overhead Stops	630 (US32D - Satin Stainless Steel)
12.	Wall Stops and Holders	630 (US32D - Satin Stainless Steel)
13.	Thresholds	628 (Mill Aluminum)
14.	Weather-strip, Sweeps Drip Caps	Aluminum Anodized
15.	Miscellaneous	626 (US26D - Satin Chromium)

2.18 KEYING

A. Acceptable manufacturers and respective catalog numbers:

1. Best No Substitution

B. Provide all locks and cylinder housings as required to accommodate owners existing Best master key system.

C. Permanent cores and keys shall be provided by Tom Hall, Superior Locksmithing 218-233-1771.

D. The owner shall install the cores. At the contractor’s request, the owner shall install a limited number of temporary cores during construction with the appropriate cost charged to the contractor.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Prior to installation of hardware, installer shall examine door frame installation to insure frames have been set square and plumb. Installer shall examine doors, door frames, and adjacent wall, floor, and ceiling for conditions, which would adversely affect proper operation and function of door assemblies. Do not proceed with hardware installation until such deficiencies have been corrected.

3.2 INSTALLATION

A. Before hardware installation, general contractor/construction manager shall coordinate a hardware installation seminar with a 1 week notice to all parties involved. The seminar is to be conducted on the installation of hardware, specifically of locksets, closers, exit devices, continuous hinges and overhead stops. Manufacturer's representative of the above products to

present seminar. Seminar to be held at the job site and attended by installers of hardware (including low voltage hardware) for aluminum, hollow metal and wood doors. Training to include use of installation manuals, hardware schedule, templates and physical products samples.

B. Install all hardware in accordance with the approved hardware schedule and manufacturers instructions for installation and adjustment.

C. Set units level, plumb and true to the line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

D. Drill and countersink units which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accord with industry standards.

E. Drill appropriate size pilot holes for all hardware attached to wood doors and frames.

F. Shim doors as required to maintain proper operating clearance between door and frame.

G. Unless otherwise specified, locate all hardware in accordance with the recommended locations for builders hardware for standard doors and frames as published by the Door and Hardware Institute.

H. Use only fasteners supplied by or approved by the manufacturer for each respective item of hardware.

I. Mortise and cut to close tolerance and conceal evidence of cutting in the finished work.

J. Conceal push and pull bar fasteners where possible. Do not install through bolts through push plates.

K. Install hardware on UL labeled openings in accordance with manufacturer's requirements to maintain the label.

L. Apply self-adhesive gasketing on frame stop at head & latch side and on rabbet of frame at hinge side.

M. Install hardware in accordance with supplemental "S" label instructions on all fire rated openings.

N. Install wall stops to contact lever handles or pulls. Do not mount wall stops on casework, or equipment.

O. Where necessary, adjust doors and hardware as required to eliminate binding between strike and latchbolt. Doors should not rattle.

P. Overhead stops used in conjunction with electrified hold open closers shall be templated and installed to coincide with engagement of closer hold open position.

Q. Install door closers on corridor side of lobby doors, room side of corridor doors, and stair side of stairways.

R. Adjust spring power of door closers to the minimum force required to insure exterior and fire rated doors will consistently close and latch doors under existing conditions. Adjust all other door closers to insure opening force does not to exceed 5 lbs.

S. Adjust "sweep", "latch", & "back check" valves on all door closers to properly control door throughout the opening and closing cycle. Adjust total closing speed as required to comply with all applicable state and local building codes.

T. Install "hardware compatible" (bar stock) type weatherstripping continuously for an uninterrupted seal. Adjust templating for parallel arm door closers, exit devices, etc., as required to accommodate weatherstripping.

U. Unless otherwise specified or detailed, install thresholds with the bevel in vertical alignment with the outside door face. Notch and closely fit thresholds to frame profile. Set thresholds in full bed of sealant.

V. Compress sweep during installation as recommended by sweep manufacturer to facilitate a water resistant seal.

W. Deliver to the owner 1 complete set of installation and adjustment instructions, and tools as furnished with the hardware.

3.3 FIELD QUALITY CONTROL

A. After installation has been completed, the hardware supplier and manufacturers representative for locksets, door closers, exit devices, and overhead stops shall check the project and verify compliance with installation instructions, adjustment of all hardware items, and proper application according to the approved hardware schedule. Hardware supplier shall submit a list of all hardware that has not been installed correctly.

B. After installation has been completed, the hardware supplier and manufacturers representative shall meet with the owner to explain the functions, uses, adjustment, and maintenance of each item of hardware. Hardware supplier shall provide the owner with a copy of all wiring diagrams. Wiring diagrams shall be opening specific and include both a riser diagram and point to point diagram showing all wiring terminations.

3.4 ADJUSTMENT AND CLEANING

A. At final completion, and when H.V.A.C. equipment is in operation, installer shall make final adjustments to and verify proper operation of all door closers and other items of hardware. . Lubricate moving parts with type lubrication recommended by the manufacturer.

B. All hardware shall be left clean and in good operation. Hardware found to be disfigured, defective, or inoperative shall be repaired or replaced.

3.5 HARDWARE SCHEDULE

A. The following schedule of hardware groups are intended to describe opening function. The hardware supplier is cautioned to refer to the preamble of this specification for a complete description of all materials and services to be furnished under this section.

HW SET #: 01

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	PANIC HARDWARE	LD-98-DT	VON
1	EA	ELECTRIC STRIKE	9600 W/LBM	HES
	EA	POWER SUPPLY	SHARED WITH HWSET #02	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	
	EA	BALANCE OF HARDWARE	TO REMAIN	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD. NO OUTSIDE CYLINDER.

HW SET #: 02

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	PANIC HARDWARE	LD-98-NL	VON
1	EA	ELECTRIC STRIKE	9600 W/LBM	HES
1	EA	POWER SUPPLY	PS904-(2) 4RL SHARED WITH HWSET #01	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	
	EA	BALANCE OF HARDWARE	TO REMAIN	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED.

HW SET #: 03

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	ELEC PANIC HARDWARE	QELA-98-NL	VON
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	
	EA	BALANCE OF HARDWARE	TO REMAIN	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED.

HW SET #: 04

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	ELEC PANIC HARDWARE	QELA-98-DT	VON
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	
	EA	BALANCE OF HARDWARE	TO REMAIN	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD. NO OUTSIDE CYLINDER.

HW SET #: 05

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU- TCM	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	WALL STOP	WS406	IVE
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-4RL	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 06

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	OH STOP	100S	GLY
1	EA	SURFACE CLOSER	4021	LCN
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-4RL	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 07

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	LOCK GUARD	LG	IVE
1	EA	OH STOP	100S	GLY
1	EA	SURFACE CLOSER	4021	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	B/O
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-4RL	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 08

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700	IVE
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	PUSH BAR	9100	IVE
1	EA	OH STOP	100S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN

PUSH/PULL

HW SET #: 09

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700	IVE
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	PUSH BAR	9100	IVE
1	EA	OH STOP	100S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	ACTUATOR, WALL MOUNT	8310-853	LCN

PUSH/PULL

HW SET #: 10

QTY		DESCRIPTION	CATALOG NUMBER	MFR
2	EA	CONT. HINGE	700	IVE
2	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
2	EA	PUSH BAR	9100	IVE
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	WALL STOP	WS406	IVE

HW SET #: 11

QTY		DESCRIPTION	CATALOG NUMBER	MFR
2	EA	CONT. HINGE	700	IVE
2	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
2	EA	PUSH BAR	9100	IVE
2	EA	OH STOP	100S	GLY
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN

HW SET #: 12

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	QELA-98-DT	VON
1	EA	OH STOP	100S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD. NO OUTSIDE CYLINDER.

HW SET #: 13

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	QELA-98-DT	VON
1	EA	OH STOP	100S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	B/O
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD. NO OUTSIDE CYLINDER.

HW SET #: 14

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	RX-ALK-98-EO	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	OH STOP	100S	GLY
1	EA	SURFACE CLOSER	4021	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	ZER
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	POWER SUPPLY	PS902	VON
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD, EXIT ONLY. UNAUTHORIZED EGRESS WILL SOUND ALARM.

HW SET #: 15

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	QELA-98-NL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	OH STOP	100S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	ACTUATOR, WALL MOUNT	8310-853	LCN
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED. VALID CREDENTIAL WILL MOMENTARILY UNLOCK THE DOOR. DOOR RE-LOCKS WHEN CARD READER TIMES OUT. INTERIOR ACTUATOR ALWAYS ACTIVE TO RETRACT LATCH AND OPEN DOOR. EXTERIOR ACTUATOR ONLY ACTIVE WHEN THE DOOR IS UNLOCKED BY CARD READER.

HW SET #: 16

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	QELA-98-NL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	OH STOP	100S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	ACTUATOR, WALL MOUNT	8310-853	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	B/O
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCH-BOLT RETRACTED INSIDE BY DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED. VALID CREDENTIAL WILL MOMENTARILY UNLOCK THE DOOR. DOOR RE-LOCKS WHEN CARD READER TIMES OUT. INTERIOR ACTUATOR ALWAYS ACTIVE TO RETRACT LATCH AND OPEN DOOR. EXTERIOR ACTUATOR ONLY ACTIVE WHEN THE DOOR IS UNLOCKED BY CARD READER.

HW SET #: 17

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700	IVE
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	KEYED REMOVABLE MULLION	KR4954	VON
1	EA	PANIC HARDWARE	LD-98-DT	VON
1	EA	ELEC PANIC HARDWARE	QELA-98-NL	VON
2	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	OH STOP	100S	GLY
2	EA	SURFACE CLOSER	4021	LCN
1	EA	MULLION SEAL	8780	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. A VALID CREDENTIAL WILL UNLOCK THE DOOR.

HW SET #: 18

QTY		DESCRIPTION	CATALOG NUMBER	MFR
2	EA	CONT. HINGE	700	IVE
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	KEYED REMOVABLE MULLION	KR4954	VON
1	EA	PANIC HARDWARE	LD-98-DT	VON
1	EA	ELEC PANIC HARDWARE	QELA-98-NL	VON
2	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	OH STOP	100S	GLY
2	EA	SURFACE CLOSER	4021	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	ZER
1	EA	MULLION SEAL	8780	ZER
2	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. A VALID CREDENTIAL WILL UNLOCK THE DOOR.

HW SET #: 19

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700	IVE
1	EA	ENTRY	9K37AB	BES
1	EA	WALL STOP	WS406	IVE

FUNCTION: (F04) ENTRY LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS MADE INOPERATIVE BY KEY OUTSIDE OR BY TURNING INSIDE THUMBTURN. WHEN OUTSIDE IS LOCKED, LATCHBOLT IS RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER REMAINS LOCKED UNTIL THUMBTURN IS RETURNED TO VERTICAL OR UNLOCKED BY KEY. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 20

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700	IVE
1	EA	INTRUDER	9K37AB	BES
1	EA	OH STOP	90S	GLY

FUNCTION: (F04) ENTRY LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS MADE INOPERATIVE BY KEY OUTSIDE OR BY TURNING INSIDE THUMBTURN. WHEN OUTSIDE IS LOCKED, LATCHBOLT IS RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER REMAINS LOCKED UNTIL THUMBTURN IS RETURNED TO VERTICAL OR UNLOCKED BY KEY. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 21

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC EXIT HARDWARE	QELA-98NL	VON
1	EA	6 PIN CYLINDER	AS REQUIRED	BES
1	EA	SURFACE CLOSER	4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	CARD READER	BY OWNER	
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED BY EXIT DEVICE PUSH PAD OR BY KEY OUTSIDE. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. VALID CREDENTIAL WILL MOMENTARILY UNLOCK THE DOOR.

HW SET #: 22

Qty		Description	Catalog Number	Mfr
	EA	ALL HARDWARE BY	DOOR SUPPLIER	B/O

HW SET #: 23

Qty		Description	Catalog Number	Mfr
1	EA	CYLINDER	AS REQUIRED	BES

HW SET #: 24

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM	9K37R	BES
1	EA	WALL STOP	WS406	IVE

FUNCTION: CLASSROOM LOCK
OUTSIDE LEVER LOCKED AND UNLOCKED BY KEY. INSIDE LEVER ALWAYS UNLOCKED.

HW SET #: 25

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM	9K37R	BES
1	EA	WALL STOP	WS406	IVE

FUNCTION: CLASSROOM LOCK
OUTSIDE LEVER LOCKED AND UNLOCKED BY KEY. INSIDE LEVER ALWAYS UNLOCKED.

HW SET #: 26

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	INTRUDER	9K37IN	BES
1	EA	WALL STOP	WS406	IVE

FUNCTION: INTRUDER LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY FROM EITHER SIDE. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 26.A

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	INTRUDER	9K37IN	BES
1	EA	WALL STOP	WS406	IVE
1	EA	HEAD SEAL	429	ZER
1	SET	JAMB SEALS	475AA	ZER
1	EA	DOOR BOTTOM	369A	ZER

FUNCTION: INTRUDER LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY FROM EITHER SIDE. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 27

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	INTRUDER	9K37IN	BES
1	EA	OH STOP	90S	GLY

FUNCTION: INTRUDER LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY FROM EITHER SIDE. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 28

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	WALL STOP	WS406	IVE

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 28.A

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	WALL STOP	WS406	IVE
1	EA	HEAD SEAL	429	ZER
1	SET	JAMB SEALS	475AA	ZER
1	EA	DOOR BOTTOM	369A	ZER

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 29

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	OH STOP	90S	GLY

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 30

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	MANUAL FLUSH BOLT	MANUAL	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM	9K37D	BES
2	EA	WALL STOP	WS406	IVE

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 31

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	MANUAL FLUSH BOLT	MANUAL	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM	9K37D	BES
2	EA	OH STOP	90S	GLY

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 32

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	MANUAL FLUSH BOLT	MANUAL	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4111 SCUSH	LCN

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 33

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	MANUAL FLUSH BOLT	MANUAL	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM	9K37D	BES
2	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 33.A

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	MANUAL FLUSH BOLT	MANUAL	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM	9K37D	BES
2	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	HEAD SEAL	429	ZER
1	SET	JAMB SEALS	475AA	ZER
1	EA	DOOR BOTTOM	369A	ZER

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 34

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	HOTEL GUEST ROOM	45H7H VIN	BES
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE

FUNCTION: HOTEL LOCK WITH “OCCUPIED” INDICATOR
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS FIXED. DEADBOLT THROWN OR RETRACTED BY INSIDE THUMBTURN. WHEN DEADBOLT IS THROWN, “OCCUPIED” PLATE IS DISPLAYED AND ALL KEYS BECOME INOPERATIVE EXCEPT EMERGENCY KEYS. TURNING INSIDE LEVER SIMULTANEOUSLY RETRACTS BOTH DEADBOLT AND LATCHBOLT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 35

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PRIVACY	45HLT VIN	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE

FUNCTION: PRIVACY LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY INSIDE THUMBTURN. TURNING INSIDE LEVER OR CLOSING DOOR UNLOCKS OUTSIDE LEVER. TO UNLOCK FROM OUTSIDE, REMOVE EMERGENCY BUTTON, INSERT EMERGENCY TURN (FURNISHED) IN ACCESS HOLE AND ROTATE. OUTSIDE DISPLAYS "OCCUPIED" OR "VACANT" PLATE.

HW SET #: 36

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	HOTEL GUEST ROOM	45H7H VIN	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE

FUNCTION: HOTEL LOCK WITH “OCCUPIED” INDICATOR
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS FIXED. DEADBOLT THROWN OR RETRACTED BY INSIDE THUMBTURN. WHEN DEADBOLT IS THROWN, “OCCUPIED” PLATE IS DISPLAYED AND ALL KEYS BECOME INOPERATIVE EXCEPT EMERGENCY KEYS. TURNING INSIDE LEVER SIMULTANEOUSLY RETRACTS BOTH DEADBOLT AND LATCHBOLT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 37

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PRIVACY	45HLT VIN	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	SET	SEALS	188S	ZER

FUNCTION: PRIVACY LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY INSIDE THUMBTURN. TURNING INSIDE LEVER OR CLOSING DOOR UNLOCKS OUTSIDE LEVER. TO UNLOCK FROM OUTSIDE, REMOVE EMERGENCY BUTTON, INSERT EMERGENCY TURN (FURNISHED) IN ACCESS HOLE AND ROTATE. OUTSIDE DISPLAYS "OCCUPIED" OR "VACANT" PLATE.

HW SET #: 38

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PRIVACY	45HLT VIN	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE

FUNCTION: PRIVACY LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY INSIDE THUMBTURN. TURNING INSIDE LEVER OR CLOSING DOOR UNLOCKS OUTSIDE LEVER. TO UNLOCK FROM OUTSIDE, REMOVE EMERGENCY BUTTON, INSERT EMERGENCY TURN (FURNISHED) IN ACCESS HOLE AND ROTATE. OUTSIDE DISPLAYS "OCCUPIED" OR "VACANT" PLATE.

HW SET #: 39

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	HOTEL GUEST ROOM	45H7H VIN	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE

FUNCTION: HOTEL LOCK WITH “OCCUPIED” INDICATOR
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS FIXED. DEADBOLT THROWN OR RETRACTED BY INSIDE THUMBTURN. WHEN DEADBOLT IS THROWN, “OCCUPIED” PLATE IS DISPLAYED AND ALL KEYS BECOME INOPERATIVE EXCEPT EMERGENCY KEYS. TURNING INSIDE LEVER SIMULTANEOUSLY RETRACTS BOTH DEADBOLT AND LATCHBOLT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 40

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM	9K37R	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE

FUNCTION: CLASSROOM LOCK
OUTSIDE LEVER LOCKED AND UNLOCKED BY KEY. INSIDE LEVER ALWAYS UNLOCKED.

HW SET #: 41

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM	9K37R	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	SET	SEALS	188S	ZER
1	EA	N/C F/A CONTACT	BY F/A CONTRACTOR	

FUNCTION: CLASSROOM LOCK
OUTSIDE LEVER LOCKED AND UNLOCKED BY KEY. INSIDE LEVER ALWAYS UNLOCKED.

HW SET #: 42

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM	9K37R	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE

FUNCTION: CLASSROOM LOCK
OUTSIDE LEVER LOCKED AND UNLOCKED BY KEY. INSIDE LEVER ALWAYS UNLOCKED.

HW SET #: 43

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	INTRUDER	9K37IN	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE

FUNCTION: INTRUDER LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY FROM EITHER SIDE. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 44

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	INTRUDER	9K37IN	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE

FUNCTION: INTRUDER LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY FROM EITHER SIDE. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 45

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	SET	SEALS	188S	ZER

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 46

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	SET	SEALS	188S	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	N/C FA CONTACT	BY FA CONTRACTOR	
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 47

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 47.A

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	SET	SEALS	188S	ZER

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 48

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	SET	SEALS	188S	ZER

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 49

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 50

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	SET	SEALS	188S	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 51

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 52

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	SET	SEALS	188S	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 53

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.
FIELD VERIFY EXISTING OPENINGS PREPS FOR PROPER HARDWARE SELECTION.

HW SET #: 54

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	SET	SEALS	188S	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 55

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	WEATHERSTRIPPING	429	ZER
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 56

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	LOCK GUARD	LG	IVE
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	SEALS	188S	ZER
1	EA	DOOR SWEEP	39	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	DOOR POSITION SWITCH	1076W	SEN

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 57

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	EA	2X CYL. DEADBOLT EU	47HW7TWEU	BES
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
2	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
BOTH LEVERS CONTINUOUSLY LOCKED UNTIL UNLOCKED BY KEY OR ELECTRIC CURRENT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT.
PRESENTATION OF VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.

HW SET #: 58

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	SET	AUTO FLUSH BOLT	AUTOMATIC	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	INTRUDER	9K37IN	BES
1	EA	COORDINATOR	COR X FL	IVE
1	EA	OH STOP	90S	GLY
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE

FUNCTION: INTRUDER LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY FROM EITHER SIDE. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 58.A

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	SET	AUTO FLUSH BOLT	AUTOMATIC	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	INTRUDER	9K37IN	BES
1	EA	COORDINATOR	COR X FL	IVE
1	EA	OH STOP	90S	GLY
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	EA	HEAD SEAL	429	ZER
1	SET	JAMB SEALS	475AA	ZER
2	EA	DOOR BOTTOM	369A	ZER
1	EA	MULLION SEAL	8780	ZER

FUNCTION: INTRUDER LOCK
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY FROM EITHER SIDE. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 59

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	SET	AUTO FLUSH BOLT	AUTOMATIC	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	COORDINATOR	COR X FL	IVE
2	EA	SURFACE CLOSER	4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	MEETING STILE SEAL	S771	PEM
1	SET	SEALS	188S	ZER

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 60

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	SET	AUTO FLUSH BOLT	AUTOMATIC	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM	9K37D	BES
1	EA	COORDINATOR	COR X FL	IVE
2	EA	SURFACE CLOSER	4111 SCUSH	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
1	EA	MEETING STILE SEAL	S771	PEM
1	SET	SEALS	188S	ZER

FUNCTION: STOREROOM LOCK
LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET #: 61

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2	VON
1	SET	AUTO FLUSH BOLT	AUTOMATIC	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	EU STOREROOM LOCK	9K37DEU-TCM	BES
1	EA	COORDINATOR	COR X FL	IVE
2	EA	SURFACE CLOSER	4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	MEETING STILE SEAL	S771	PEM
1	SET	SEALS	188S	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	POWER SUPPLY	BY OWNER	SCE
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

HW SET #: 62

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PANIC HARDWARE	98-L-BE	VON
1	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE

FUNCTION: (ANSI/BHMA 14) LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. ENTRANCE BY LEVER, ALWAYS ACTIVE, NO CYLINDER.

HW SET #: 63

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PANIC HARDWARE	LD-98-EO	VON
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	WEATHERSTRIPPING	429	ZER
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	DOOR POSITION SWITCH	1076W	SEN

FUNCTION: (ANSI/BHMA 01) EXIT ONLY. LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. NO EXTERIOR TRIM OR BLANK ESCUTCHEON.

HW SET #: 64

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PANIC HARDWARE	CDSI-98-L	VON
2	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	SURFACE CLOSER	4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE

FUNCTION: (ANSI/BHMA 08) LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. ENTRANCE BY LEVER. KEY LOCKS OR UNLOCKS LEVER.

HW SET #: 64.A

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PANIC HARDWARE	CDSI-98-L	VON
2	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	SURFACE CLOSER	4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	EA	HEAD SEAL	429	ZER
1	SET	JAMB SEALS	475AA	ZER
1	EA	DOOR BOTTOM	369A	ZER

FUNCTION: (ANSI/BHMA 08) LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. ENTRANCE BY LEVER. KEY LOCKS OR UNLOCKS LEVER.

HW SET #: 65

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	FIRE EXIT HARDWARE	98-L-F-2SI	VON
2	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	SURFACE CLOSER	4111 EDA	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	WALL STOP	WS406	IVE
1	SET	SEALS	188S	ZER

FUNCTION: (ANSI/BHMA 08) LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. ENTRANCE BY LEVER. KEY LOCKS OR UNLOCKS LEVER.

HW SET #: 66

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	PANIC HARDWARE	LD-98-L	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	WEATHERSTRIPPING	429	ZER
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
1	EA	DOOR POSITION SWITCH	1076W	SEN

FUNCTION: (ANSI/BHMA 03) LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. ENTRANCE BY TRIM WHEN LATCH IS RELEASED BY KEY. KEY ONLY REMOVABLE WHEN LOCKED.

HW SET #: 67

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	FIRE EXIT HARDWARE	98-L-NL-F	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
1	EA	SURFACE CLOSER	4111 SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B4E	IVE
1	SET	SEALS	188S	ZER

FUNCTION: (ANSI/BHMA 03) LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. ENTRANCE BY TRIM WHEN LATCH IS RELEASED BY KEY. KEY ONLY REMOVABLE WHEN LOCKED.

HW SET #: 68

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	KEYED REMOVABLE MULLION	KR4954	VON
2	EA	PANIC HARDWARE	LD-98-EO	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4111 SCUSH	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	WEATHERSTRIPPING	429	ZER
1	SET	MEETING EDGE SEALS	8193	ZER
1	EA	MULLION SEAL	8780	ZER
2	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	8655	ZER
2	EA	DOOR POSITION SWITCH	1076W	SEN

FUNCTION: (ANSI/BHMA 01) EXIT ONLY. LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. NO EXTERIOR TRIM OR BLANK ESCUTCHEON.

HW SET #: 69

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	FIRE EXIT HARDWARE	9850-WDC-L-F-LBL	VON
2	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	MEETING STILE SEAL	S771	PEM
1	SET	SEALS	188S	ZER
1	EA	N/C FA CONTACT	BY FA CONTRACTOR	

FUNCTION: LATCHBOLT RETRACTED BY EXIT DEVICE PUSH PAD OR BY KEY OUTSIDE. KEY LOCKS AND UNLOCKS LEVER.

HW SET #: 70

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-DT-LBL	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-NL-LBL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	POWER SUPPLY	BY OWNER	VON
1	EA	N/C FA CONTACT	BY FA CONTRACTOR	
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED BY EXIT DEVICE PUSH PAD OR BY KEY OUTSIDE. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. VALID CREDENTIAL WILL MOMENTARILY UNLOCK THE DOOR.

HW SET #: 71

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC FIRE EXIT HARDWARE	QELA-9850-WDC-L-DT-F-LBL	VON
1	EA	ELEC FIRE EXIT HARDWARE	QELA-9850-WDC-L-NL-F-LBL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	MEETING STILE SEAL	S771	PEM
1	SET	SEALS	188S	ZER
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	POWER SUPPLY	BY OWNER	VON
1	EA	N/C FA CONTACT	BY FA CONTRACTOR	
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED BY EXIT DEVICE PUSH PAD OR BY KEY OUTSIDE. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. VALID CREDENTIAL WILL MOMENTARILY UNLOCK THE DOOR.

HW SET #: 72

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-DT-LBL	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-NL-LBL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	WALL STOP	WS406	IVE
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	POWER SUPPLY	BY OWNER	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED BY EXIT DEVICE PUSH PAD OR BY KEY OUTSIDE. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. VALID CREDENTIAL WILL MOMENTARILY UNLOCK THE DOOR.

HW SET #: 73

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	POWER TRANSFER	EPT2	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-DT-LBL	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-NL-LBL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
1	EA	FIRE/LIFE HOLDER	4040SEH	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
1	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	CARD READER	BY SECURITY SUPPLIER	
1	EA	POWER SUPPLY	BY OWNER	VON
1	EA	N/C FA CONTACT	BY FA CONTRACTOR	
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED BY EXIT DEVICE PUSH PAD OR BY KEY OUTSIDE. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. VALID CREDENTIAL WILL MOMENTARILY UNLOCK THE DOOR.

HW SET #: 74

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	FIRE EXIT HARDWARE	9850-WDC-L-F-LBL	VON
2	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	MEETING STILE SEAL	S771	PEM
1	SET	SEALS	188S	ZER
1	EA	N/C FA CONTACT	BY FA CONTRACTOR	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. KEY LOCKS AND UNLOCKS LEVER.

HW SET #: 75

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
1	EA	FIRE EXIT HARDWARE	9849-EO-F-LBL	VON
1	EA	FIRE EXIT HARDWARE	9849-NL-F-LBL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 (BY DIVISION 26)	LCN
1	EA	MEETING STILE SEAL	S771	PEM
1	SET	SEALS	188S	ZER
1	EA	N/C FA CONTACT	BY FA CONTRACTOR	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOORS LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED.

HW SET #: 76

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	POWER TRANSFER	EPT10	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-DT-LBL	VON
1	EA	ELEC PANIC HARDWARE	QELA-9850-WDC-L-NL-LBL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	WALL STOP	WS406	IVE
1	EA	CARD READER	BY SECURITY SUPPLIER	
2	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOORS LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. ELECTRIC LATCH RETRACTION CONTROLLED BY CARD READER.

HW SET #: 76.A

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	POWER TRANSFER	EPT10	VON
1	EA	ELEC PANIC HARDWARE	QELA-9849-L-DT-LBL	VON
1	EA	ELEC PANIC HARDWARE	QELA-9849-L-NL-LBL	VON
1	EA	CYLINDER HOUSING	AS REQUIRED	BES
2	EA	SURFACE CLOSER	4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	WALL STOP	WS406	IVE
1	EA	CARD READER	BY SECURITY SUPPLIER	
2	EA	DOOR POSITION SWITCH	1076W	SEN
1	EA	POWER SUPPLY	BY OWNER	VON
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOORS LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. ELECTRIC LATCH RETRACTION CONTROLLED BY CARD READER.

HW SET #: 77

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	PUSH PLATE	8200 6" X 16"	IVE
2	EA	PULL PLATE	8302 10" 4" X 16"	IVE
2	EA	SURFACE CLOSER	4011/4111 EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	WALL STOP	WS406	IVE

PUSH PULL

HW SET #: 78

Qty		Description	Catalog Number	Mfr
	EA	HINGE	AS REQUIRED	IVE
2	EA	PUSH PLATE	8200 6" X 16"	IVE
2	EA	PULL PLATE	8302 10" 4" X 16"	IVE
2	EA	SURFACE CLOSER	4111 HEDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B4E	IVE
2	EA	WALL STOP	WS406	IVE

PUSH PULL

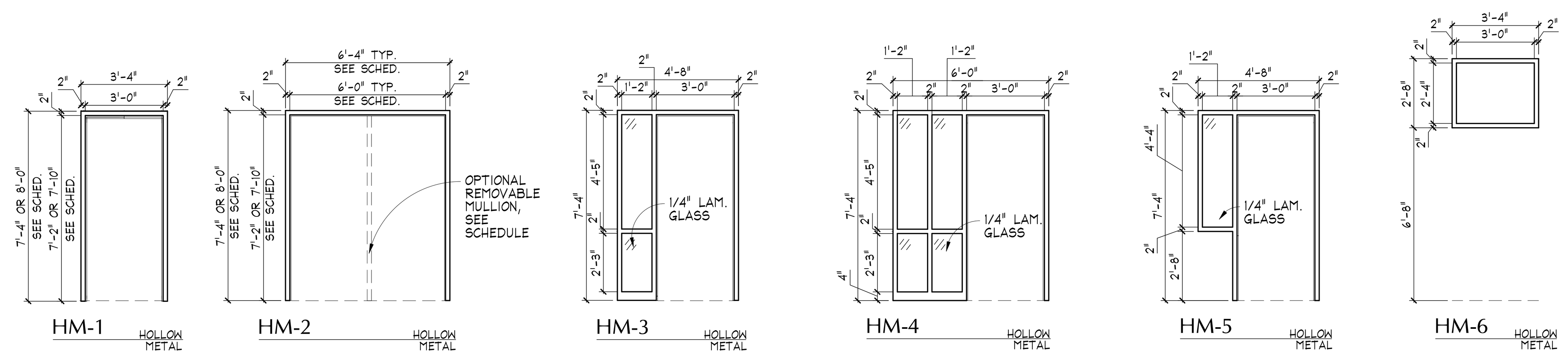
END OF SECTION

DOOR SCHEDULE

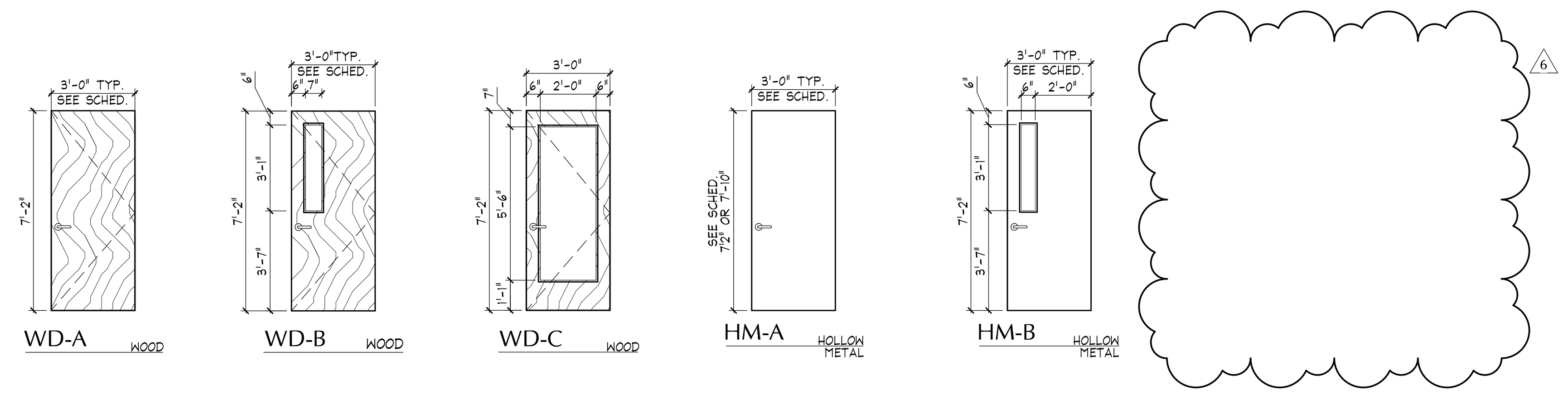
AREA	DOOR NUMBER	PANEL COUNT	PANEL SPECIFICATIONS WIDTH	HEIGHT	TYPE	GLASS	RATING	FRAME SPECIFICATIONS TYPE	GLASS	DEPTH	HEAD	JAMB	ELECTRICAL SPECIFICATIONS MAG. H. O.	E.A.C.	REMOVABLE MULLION	HARDWARE GROUP	REMARKS
G	99A.2	1	7'-1 1/2"	6'-8"	CD-B	–	–	–	–	0"	9/A3.81	8/A3.81	–	–	–	–	
G	99B	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
G	99C	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
G	99D	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
E	114	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	64	
E	119	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	27/A3.81	26/A3.81	–	–	–	40	
E	123	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	27/A3.81	26/A3.81	–	–	–	40	
G	127	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	53	
G	127A.1	1	3'-0"	7'-2"	EX.	–	–	EX.	–	0"	–	–	–	E.A.C.	–	53	PROVIDE NEW HARDWARE AT EXISTING DOORS
G	128.2	1	3'-0"	7'-2"	EX.	–	–	EX.	–	0"	–	–	–	E.A.C.	–	53	PROVIDE NEW HARDWARE AT EXISTING DOORS
G	128B	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	–	–	–	E.A.C.	–	49	NEW DOOR AT EXISTING LOCATION
G	128C	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
G	128E	1	3'-0"	7'-2"	WD-A	–	–	HM-4	1/4" LAM.	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
D	400C.1	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	51	
D	400C.2	1	3'-0"	7'-2"	HM-A	–	60 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	45	
D	400F	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	38	OCCUPANCY INDICATOR
D	401.1	1	3'-6"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	49	
D	401.2	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	40	
D	401.3	1	5'-4"	7'-4"	OH-C	1/4" LAM.	–	–	–	0"	7/A3.81	6/A3.81	–	–	–	–	
D	401.4	1	18'-0"	7'-4"	OH-B	1/4" LAM.	–	–	–	0"	7/A3.81	6/A3.81	–	–	–	–	
D	401.5	1	5'-4"	7'-4"	OH-C	1/4" LAM.	–	–	–	0"	7/A3.81	6/A3.81	–	–	–	–	
D	401A	1	3'-0"	7'-2"	–	–	–	–	–	0"	–	–	–	–	–	22	COOLER DOOR, FRAME AND HARDWARE BY 11E
D	401B	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	24	
D	401D	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	36	
D	401E	1	4'-8"	3'-9"	CD-B	–	–	–	–	0"	15/A3.81	14/A3.81	–	–	–	–	
D	402.1	2	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	76	
D	402.2	2	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	76	
D	402.3	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	1'-0 3/4"	1/A3.81	1/A3.81	–	–	–	62	
D	402A	2	3'-0"	7'-2"	WD-A	–	–	HM-2	–	1'-0 3/4"	1/A3.81	1/A3.81	–	–	–	31	
D	402M	1	3'-0"	7'-2"	HM-A	–	90 MIN.	HM-1	–	5 3/4"	20/A3.81	21/A3.81	–	–	–	56	
D	403	2	3'-0"	7'-2"	WD-A	–	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	30	
D	404.1	1	3'-0"	7'-2"	WD-A	–	–	HM-5	1/4" LAM.	1'-0 3/4"	1/A3.81	1/A3.81	–	–	–	26	
D	404.2	1	3'-0"	7'-2"	WD-A	–	–	HM-5	1/4" LAM.	1'-0 3/4"	1/A3.81	1/A3.81	–	–	–	26	
D	404.3	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	53	
D	405.1	2	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	76	

6

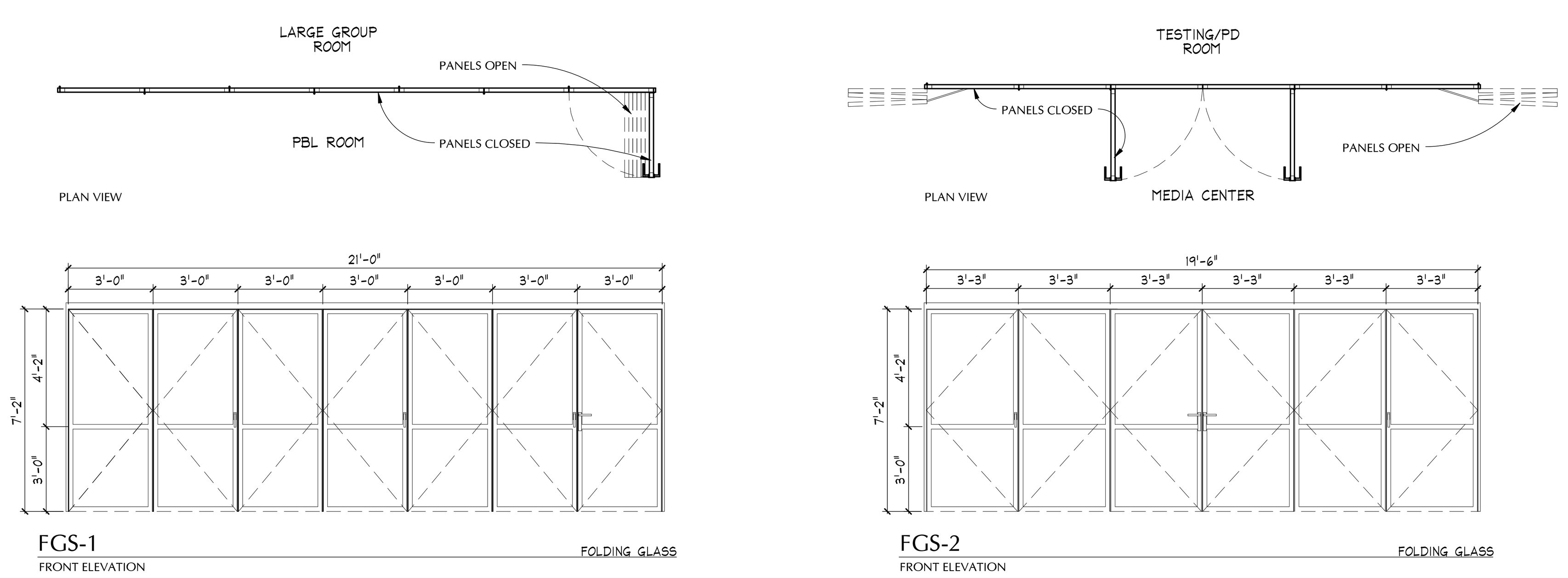
HOLLOW METAL DOOR FRAME TYPES



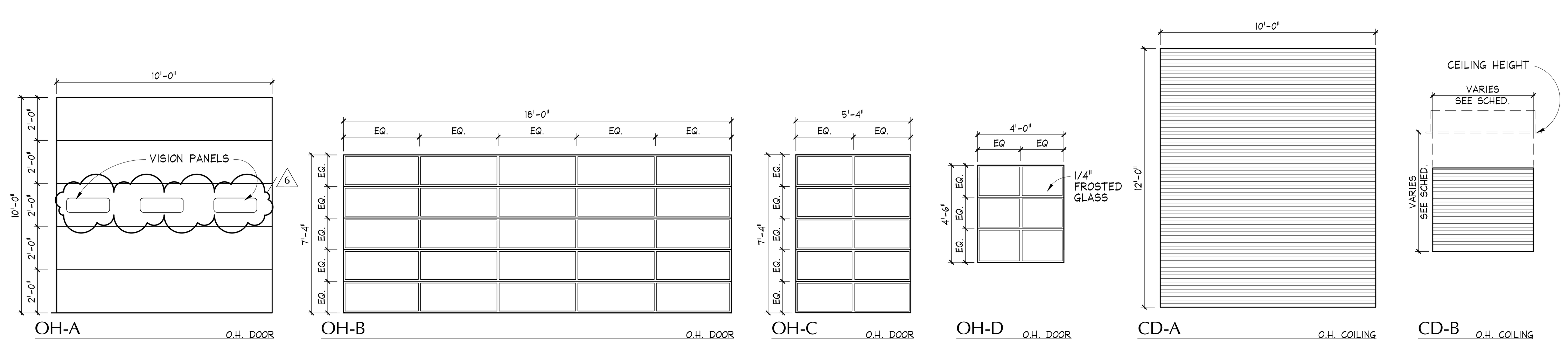
DOOR TYPES



FOLDING GLASS DOOR STOREFRONTS



OVERHEAD & COILING DOOR TYPES



DOOR SCHEDULE (CONT.)

AREA	DOOR NUMBER	PANEL COUNT	PANEL SPECIFICATIONS WIDTH	HEIGHT	TYPE	GLASS	RATING	FRAME SPECIFICATIONS TYPE	GLASS	DEPTH	HEAD	JAMB	ELECTRICAL SPECIFICATIONS MAG. H. O.	E.A.C.	REMOVABLE MULLION	HARDWARE GROUP	REMARKS
D	405.2	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	1'-0 3/4"	1/A3.81	1/A3.81	–	–	–	62	
D	405.3	2	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	76	
D	405A	2	3'-0"	7'-2"	WD-A	–	–	HM-2	–	1'-0 3/4"	1/A3.81	1/A3.81	–	–	–	31	
F	406.1	1	3'-0"	7'-2"	HM-A	–	45 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	67	
F	406.2	1	3'-0"	7'-2"	HM-A	–	–	HM-1	–	8 3/4"	17/A3.81	16/A3.81	–	–	–	66	
F	407.1	1	3'-0"	7'-2"	HM-A	–	45 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	67	
F	407.2	1	3'-0"	7'-2"	HM-A	–	–	HM-1	–	8 3/4"	17/A3.81	16/A3.81	–	–	–	66	
F	408.1	2	3'-0"	7'-2"	HM-A	–	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	76.A	
F	408.2	2	3'-0"	7'-2"	HM-A	–	90 MIN.	HM-2	–	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	–	–	75	
F	409.1	1	10'-0"	10'-0"	OH-A	1/2" INSUL.	–	–	–	0"	19/A3.81	18/A3.81	–	–	–	–	
F	409.2	1	3'-0"	7'-2"	HM-A	–	–	HM-1	–	8 3/4"	17/A3.81	16/A3.81	–	E.A.C.	–	55	
F	409.3	2	3'-0"	7'-2"	HM-A	–	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	76.A	
F	410	1	3'-0"	7'-2"	HM-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	27	
D	411	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	26.A	ACOUSTICAL TREATMENT
D	411A	2	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	77	
D	412.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	64.A	ACOUSTICAL TREATMENT
D	413.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	64.A	ACOUSTICAL TREATMENT
D	414.1	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	27	
D	414.2	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	27	
D	415	2	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	58.A	ACOUSTICAL TREATMENT
D	415A	2	3'-0"	7'-2"	WD-A	–	90 MIN.	HM-2	–	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	–	–	74	
D	416.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	64.A	ACOUSTICAL TREATMENT
E	417.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	64	
E	417A.1	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	24	
E	417A.2	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	24	
E	417B.1	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	25	
E	417B.2	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	25	
E	418.1	2	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-2	–	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.	–	61	
E	418.2	1	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-1	–	5 3/4"	2/A3.81	2/A3.81	–	E.A.C.	–	50	
E	418.3	1	10'-0"	12'-0"	CD-A	–	60 MIN.	–	–	0"	13/A3.81	12/A3.81	–	–	–	–	
E	418.4	2	3'-0"	7'-2"	HM-A	–	45 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	–	–	59	
E	418C	1	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.	–	46	
E	419	1	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	37	
E	420.1	1	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	52	
E	420.2	1	10'-0"	10'-0"	OH-A	1/2" INSUL.	–	–	–	0"	19/A3.81	18/A3.81	–	–	–	–	
E	420.3	1	3'-0"	7'-10"	HM-A	–	–	HM-1	–	8 3/4"	17/A3.81	16/A3.81	–	E.A.C.	–	55	
E	420.4	1	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-1	–	5 3/4"	2/A3.81	2/A3.81	–	E.A.C.	–	54	
E	420.5	1	10'-0"	12'-0"	CD-A	–	60 MIN.	–	–	0"	13/A3.81	12/A3.81	–	–	–	–	
E	421.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	45 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	65	
E	422.1	2	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-2	–	8 3/4"	3/A3.81	3/A3.81	MAG. H.O.	E.A.C.	–	71	
E	422.2	2	3'-0"	7'-2"	WD-A	–	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	77	
E	422.3	2	3'-0"	7'-2"	WD-A	–	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	77	
E	422.4	2	3'-0"	7'-10"	HM-A	–	–	HM-2	–	8 3/4"	17/A3.81	16/A3.81	–	–	REMOVABLE	68	
E	422.5	1	3'-0"	7'-2"	HM-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81 (SIM)	5/A3.81 (SIM)	–	E.A.C.	–	49	
E	422A	1	3'-0"	7'-2"	HM-A	–	45 MIN.	HM-1	–	5 3/4"	2/A3.81	2/A3.81	–	–	–	48	
E	422B	1	3'-0"	7'-2"	HM-A	–	45 MIN.	HM-1	–	5 3/4"	2/A3.81	2/A3.81	–	–	–	48	
E	423	2	3'-0"	7'-2"	WD-A	–	45 MIN.	HM-2	–	8 3/4"	3/A3.81	3/A3.81	MAG. H.O.	–	–	69	
E	423A	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	28	
E	423B	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	29	
E	423C	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	28	
E	423D	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	28	
E-T	423E	1	3'-0"	7'-2"	HM-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	27	
E-T	423H	1	3'-0"	7'-2"	HM-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	28	
E-C	423J	1	3'-0"	7'-2"	HM-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	28.A	ACOUSTICAL TREATMENT
E-C	423M	2	3'-0"	7'-2"	HM-A	–	–	HM-2	–	8 1/4"	5/A3.81	5/A3.81	–	–	–	33.A	ACOUSTICAL TREATMENT
E	424	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	51	
E	425	2	3'-6"	7'-2"	WD-B	1/4" LAM.	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	72	
E	425B	1	3'-0"	7'-2"	WD-A	–	90 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	–	–	41	
E	425C.1	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	49	
E	425C.2	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	49	
E	425G	1	3'-0"	7'-2"	WD-A	–	90 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	–	–	41	
E	425T.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	51	
E	425T.2	1	4'-0"	4'-6"	OH-D	1/4" FROSTED	–	–	–	0"	11/A3.81	10/A3.81	–	–	–	–	
E	425T.3	1	4'-0"	4'-6"	OH-D	1/4" FROSTED	–	–	–	0"	11/A3.81	10/A3.81	–	–	–	–	
E	426	2	3'-0"	7'-2"	HM-A	–	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	31	
E	427	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	38	OCCUPANCY INDICATOR
C	500A.1	1	3'-0"	7'-2"	WD-A	–	90 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	52	
C	500A.3	1	8'-0"	8'-2"	CD-B	–	–	–	–	0"	1/A3.82	2/A3.82	–	–	–	–	
C	500B	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	35	
C	500C	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	500D	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	5 3/4"	5/A3.81	5/A3.81	–	–	–	43	
C	500E.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	27	
C	500E.2	1	3'-0"	7'-2"	WD-A	–	90 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	54	
C	500F	1	3'-0"	7'-2"	WD-A	–	60 MIN.	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	E.A.C.	–	54	
C	500G	1	3'-0"	7'-2"	WD-A	–	–	HM-3	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	500H	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	36	OCCUPANCY INDICATOR
C	500J	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	36	OCCUPANCY INDICATOR
C	500K	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	36	OCCUPANCY INDICATOR
C	500L.1	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	44	
C	500L.2	1	3'-0"	7'-2"	WD-A	–	90 MIN.	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	52	
C	500M	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	500N	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	500P	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	500Q	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	500R	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	500S.1	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	5 3/4"	5/A3.81	5/A3.81	–	E.A.C.	–	57	E.A.C. ON BOTH SIDES OF DOOR
B	501	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	502	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	503	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	504	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	505	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	506	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	507	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	508	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	E.A.C.	–	49	OCCUPANCY INDICATOR
B	509.1	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	26	
B	509.2	1	21'-0"	7'-2"	FGS-1	1/4" LAM.	–	–	–	0"	25/A3.81	24/A3.81	–	–	–	23	
B	512	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	26	
B	515	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	49	
B	516	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	39	
B	517	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	47	
B	518	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	–	–	–	26	
B	519	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	–	–	–	26	
B	520	2	3'-0"	7'-2"	WD-A	–	–	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–		32	
B	521	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	49	
B	522	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	39	OCCUPANCY INDICATOR
B	523	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	39	OCCUPANCY INDICATOR
B	524	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	49	
B	527	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	26	
B	529	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	530	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	531	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	532	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	533	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	534	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	535	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
B	536	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	E.A.C.	–	49	
B	537.1	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	2/A3.81	–	–	–	26	
B	537.2	1	21'-0"	7'-2"	FGS-1	1/4" LAM.	–	–	–	0"	25/A3.81	24/A3.81	–	–	–	23	
B	550	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	–	–	–	44	
C	551	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	7 1/4"	4/A3.81	4/A3.81	–	–	–	26	
C	552	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	553	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
C	553C	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	26	
C	554	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
C	554C	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	26	
C	555.1	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	5 3/4"	2/A3.81	2/A3.81	–	–	–	26	
C	555.2	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	7 1/4"	5/A3.81	5/A3.81	–	–	–	27	
C	556.1	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	5 3/4"	5/A3.81	5/A3.81	–	–	–	26	
C	556.2	1	3'-0"	7'-2"	WD-A	1/4" LAM.	–	HM-1	–	8 1/4"	5/A3.81	5/A3.81	–	–	–	26	
C	556A	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 1/4"	5/A3.81	5/A3.81	–	–	–	36	OCCUPANCY INDICATOR
C	556B	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.81	–	–	–	34	OCCUPANCY INDICATOR
C	556C	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	5 3/4"	5/A3.81	5/A3.12	–	–	–	36	OCCUPANCY INDICATOR
C	557.1	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	5 3/4"	2/A3.81	2/A3.81	–	–	–	26	
C	557.2	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	5 3/4"	5/A3.81	5/A3.81	–	–	–	27	
C	558	1	3'-0"	7'-2"	WD-B	1/4" LAM.	–	HM-1	–	5 3/4"	2/A3.81	2/A3.81	–	E.A.C.	–	49	
C	558M	2	3'-2"	7'-2"	WD-A	–	90 MIN.	HM-2	–	8 3/4"	1/A3.81	1/A3.81	–	–	–	60	
A	559	1	3'-0"	7'-2"	WD-A	–	–	HM-1	–	8 3/4"	1/A3.81	1/A3.81	–	E.A.C.	–	49	
A	560	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
A	561	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
A	562	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
A	563	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	
A	564	1	3'-0"	7'-2"	WD-A	–	–	HM-3	1/8" LAM.	9 1/2"	4/A3.81	4/A3.81	–	–	–	26	

6

ZERR BERG ARCHITECTS

510 NORTH 4TH AVENUE FARGO, ND 58102-4821
701-280-0187 - FAX 701-280-9021

gehrtz CONSTRUCTION SERVICES

ABBREVIATIONS:

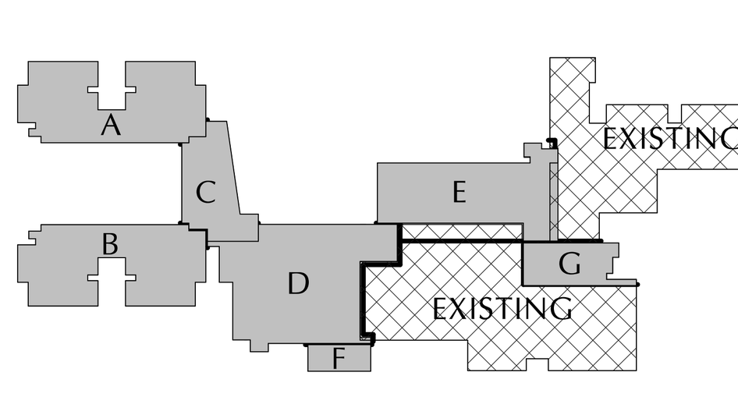
OPERATOR: LOW ENERGY DOOR OPERATOR
INDICATES IF AN AUTOMATIC LOW ENERGY DOOR OPERATOR WILL BE PROVIDED. SEE FLOOR PLAN AND PLAN NOTES FOR PUSH BUTTON, OPERATOR, AND ACTIVE LEAF LOCATIONS.

E.A.C.: ELECTRONIC ACCESS CONTROL
INDICATES THAT A CARD READER SYSTEM SHALL BE PROVIDED, AND THE DOOR, FRAME & HARDWARE SHALL BE ABLE TO ACCEPT IT UNDER THE PROJECT SCOPE.

D.P.S.: DOOR POSITION SWITCH
INDICATES IF A DOOR POSITION SWITCH SHALL BE PROVIDED.

MAG.H.O.: MAGNETIC HOLD OPEN
INDICATES IF A MAGNETIC HOLD OPEN SHALL BE PROVIDED.

Revision Schedule		
6	05-09-2016	BG2. ADD. 1



KEY PLAN
NTS
NORTH

BID GROUP II

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.
Print Name: Timothy L. Zerr

Signature:

Date: 4-25-2016 Registration No. 16864

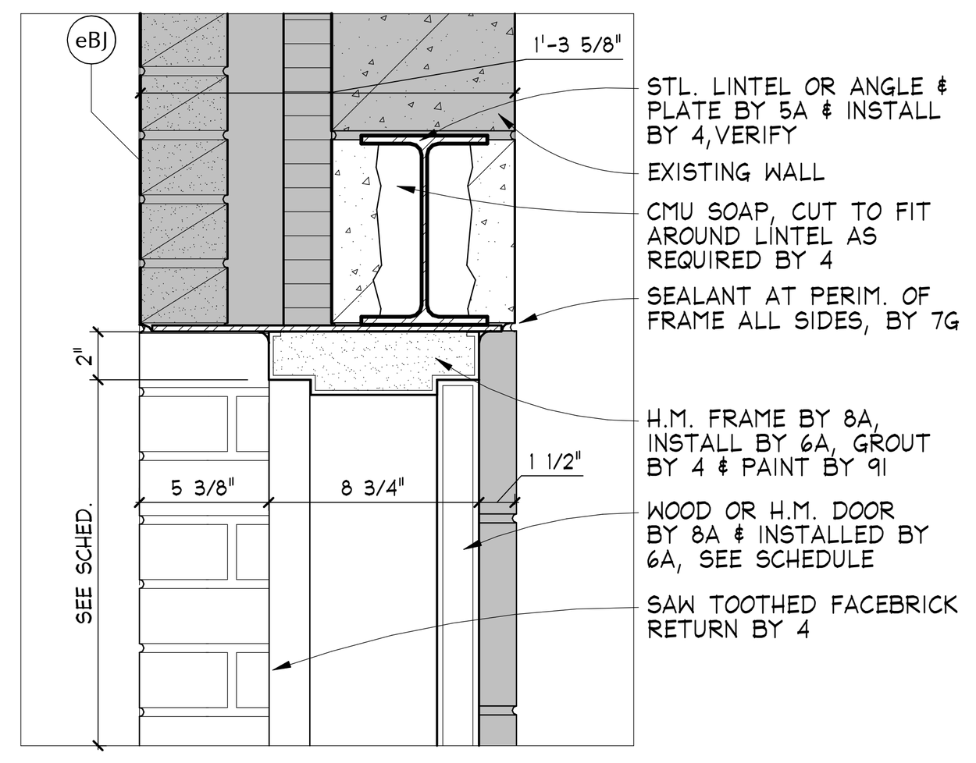
MOORHEAD AREA PUBLIC SCHOOLS

MAPS
GRADES 5-6
ADDITION AT
HORIZON CAMPUS
3601 12th AVE. S. MOORHEAD, MN

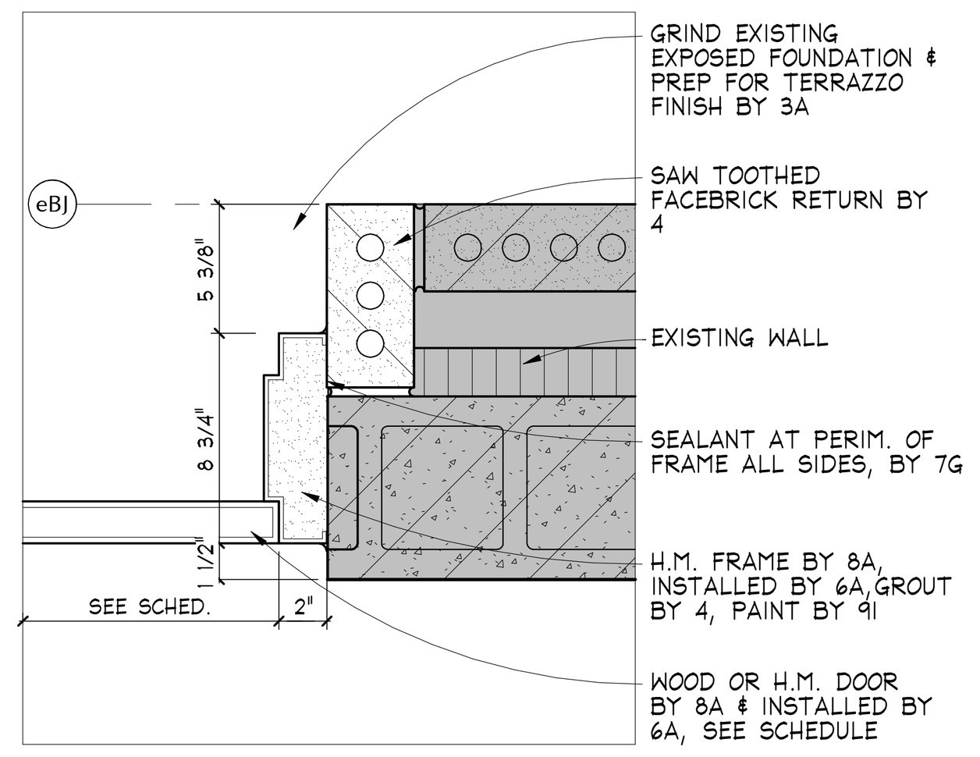
DOOR & HOLLOW METAL FRAME SCHEDULE

Project No.: 15-024
Date: 4-25-2016

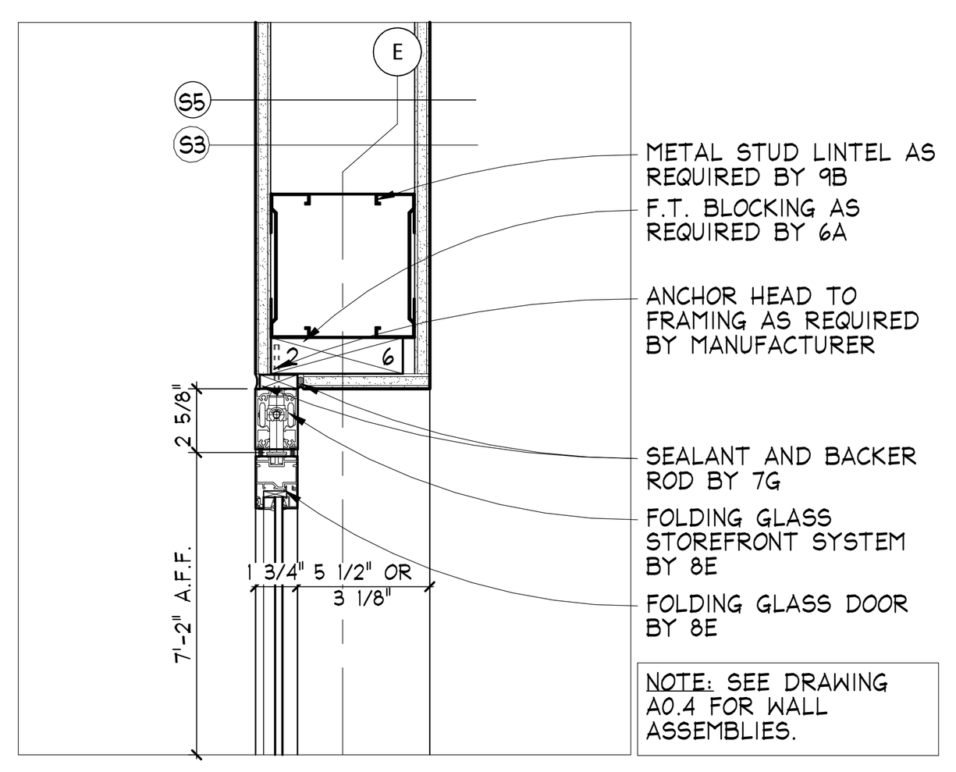
A3.80



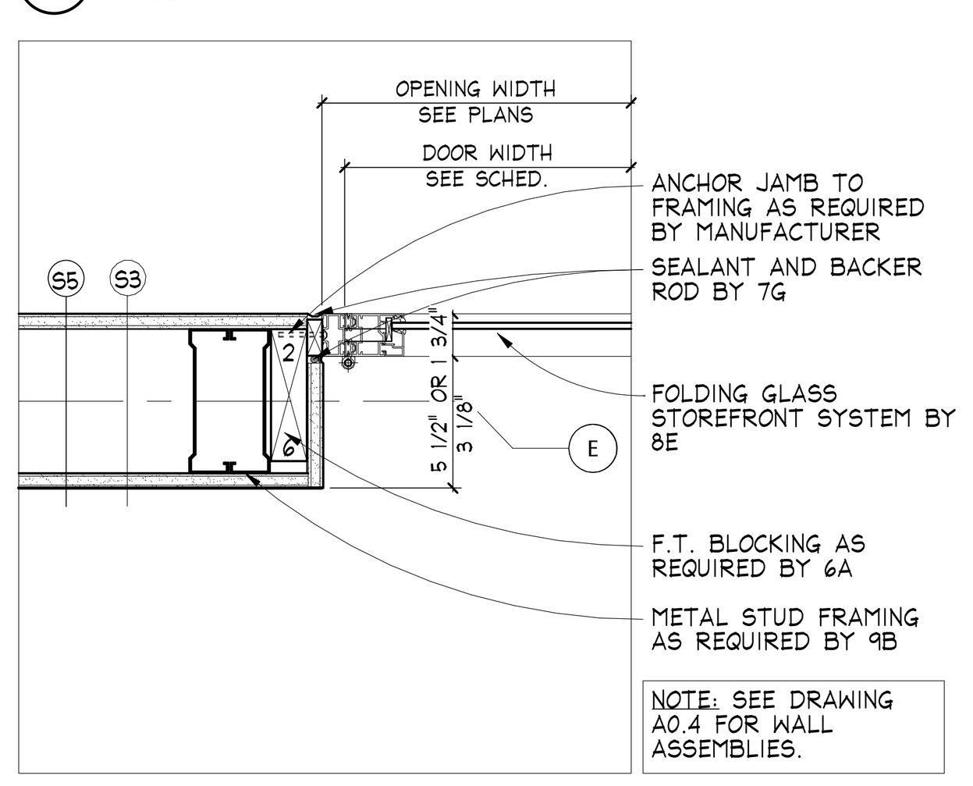
27 HM DOOR HEAD @ EXISTING WALL
SCALE: 1 1/2" = 1'-0"



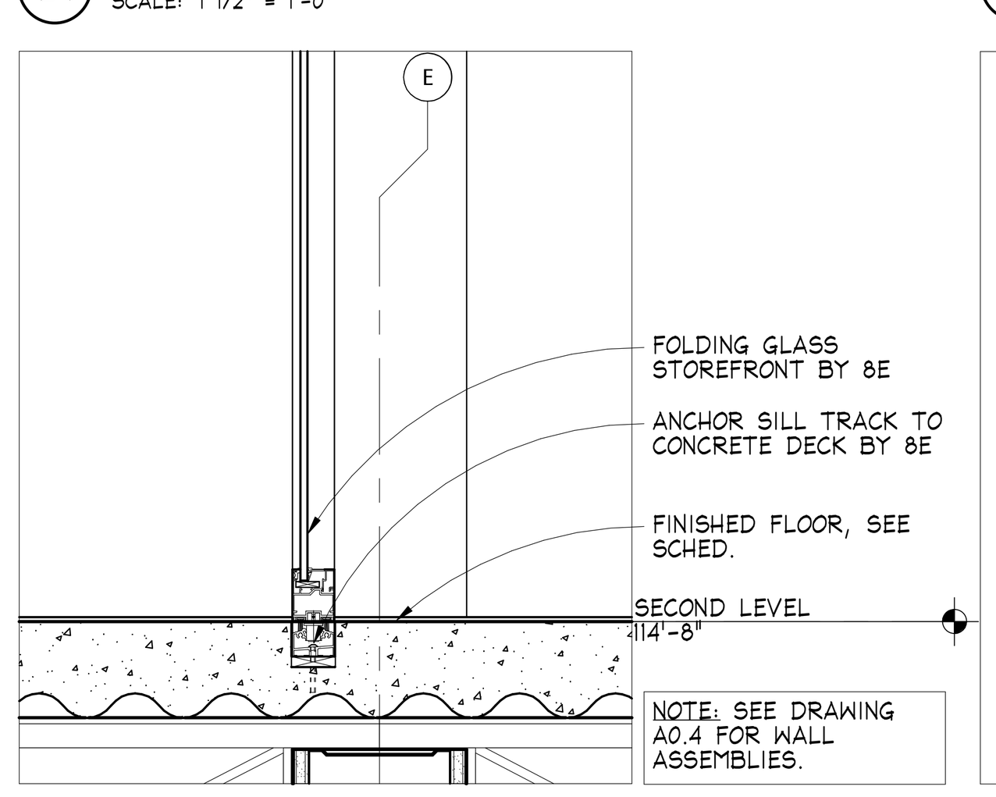
26 HM JAMB @ EXISTING WALL
SCALE: 1 1/2" = 1'-0"



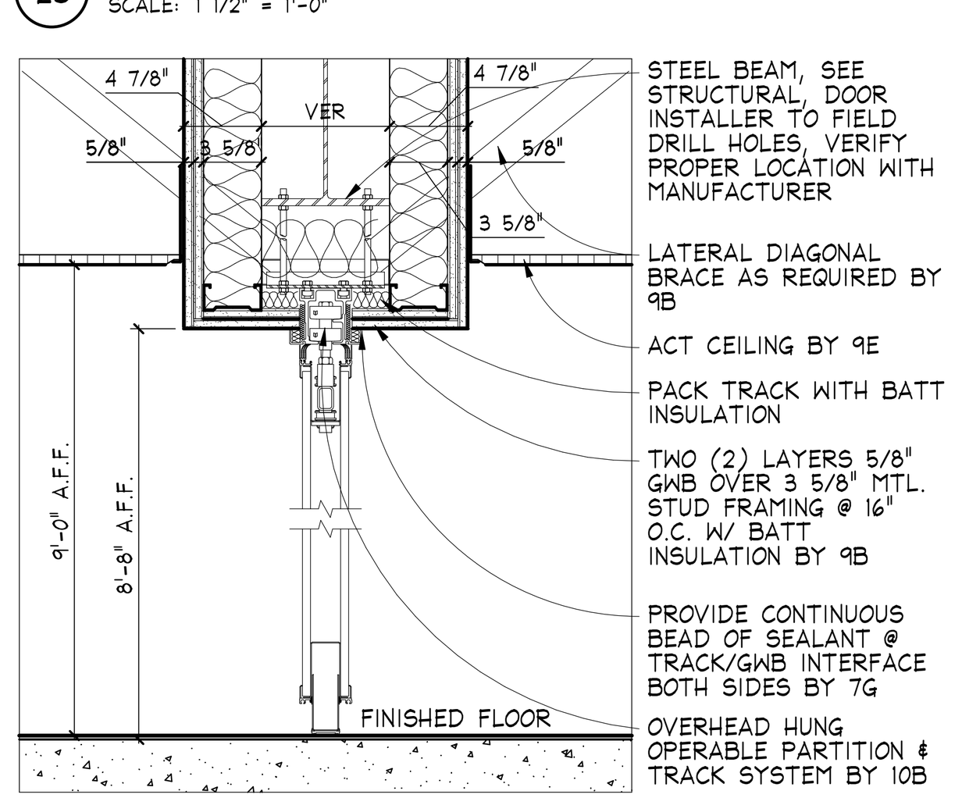
25 HEAD @ FOLDING GLASS DOOR
SCALE: 1 1/2" = 1'-0"



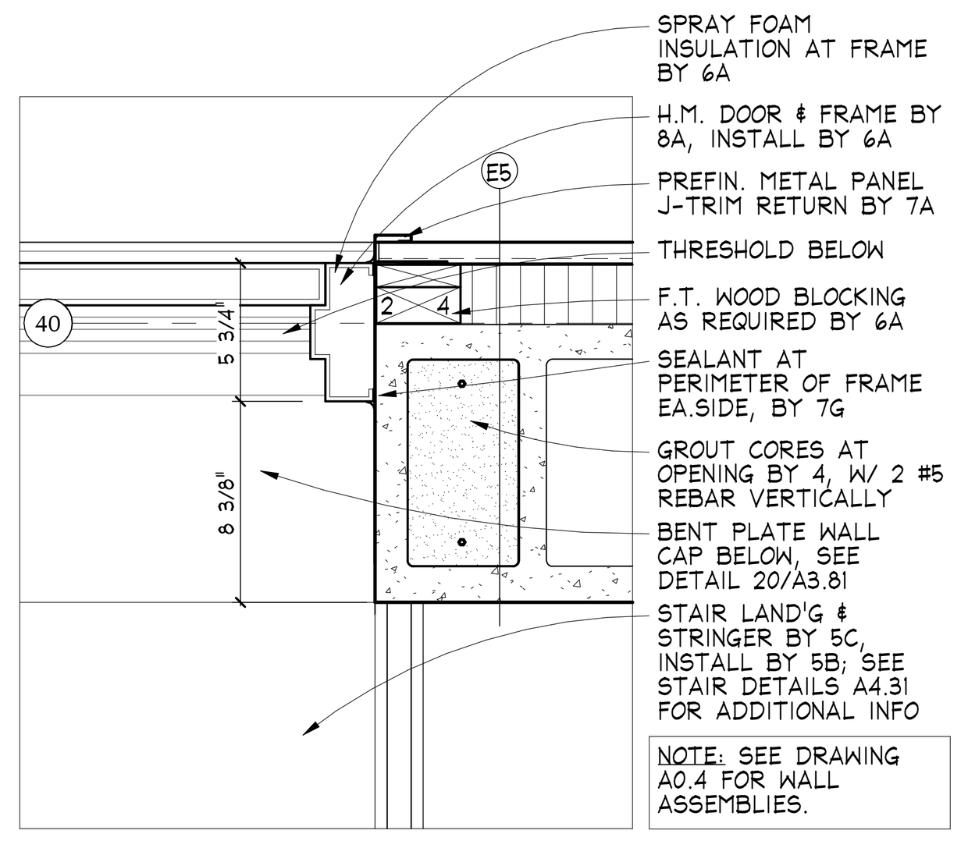
24 JAMB DETAIL @ FOLDING GLASS DOOR
SCALE: 1 1/2" = 1'-0"



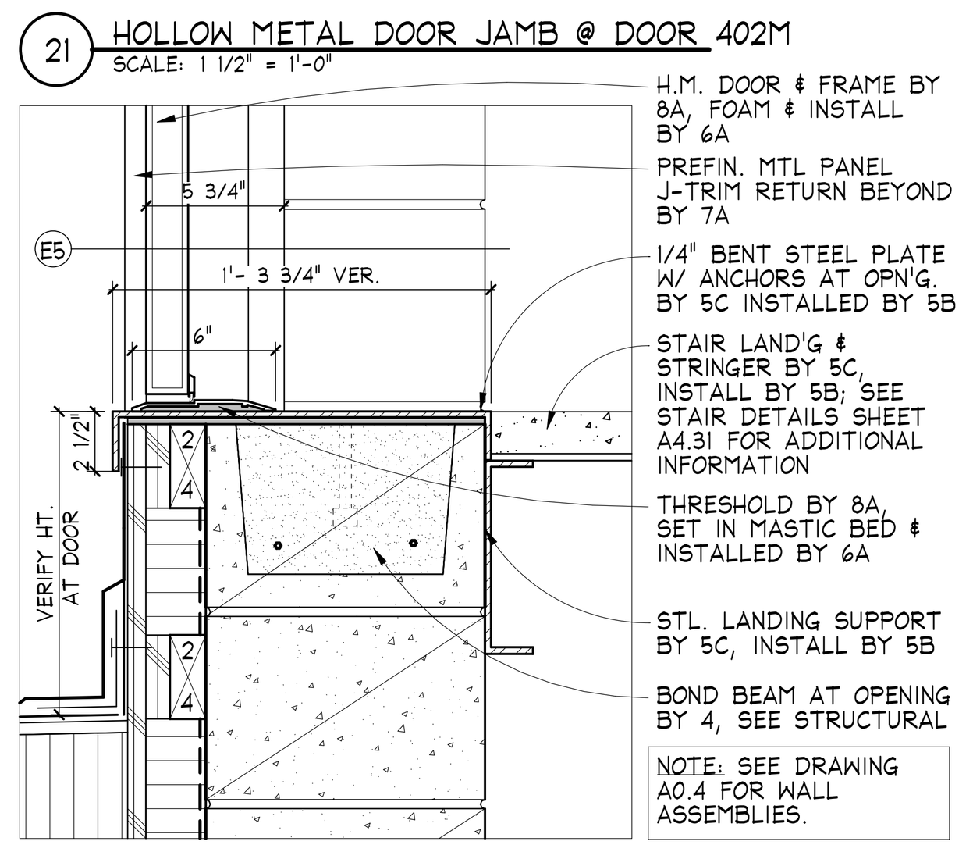
23 FLUSH SILL @ FOLDING GLASS DOOR
SCALE: 1 1/2" = 1'-0"



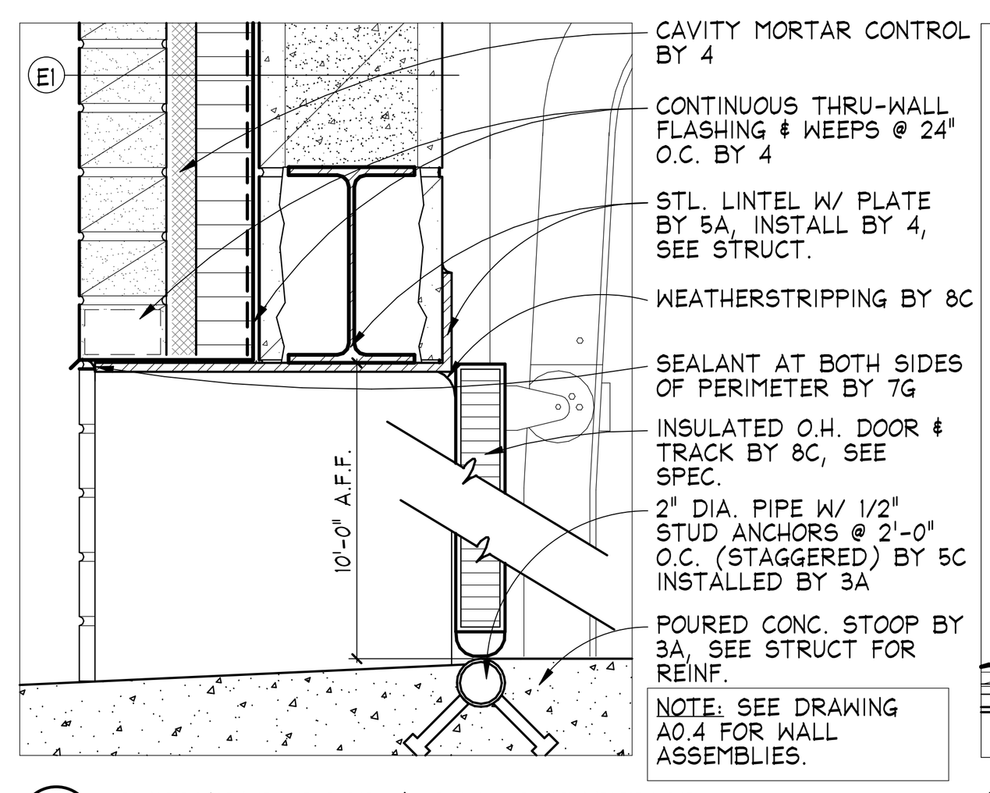
22 MOVABLE PARTITION TRACK HEAD
SCALE: 1" = 1'-0"



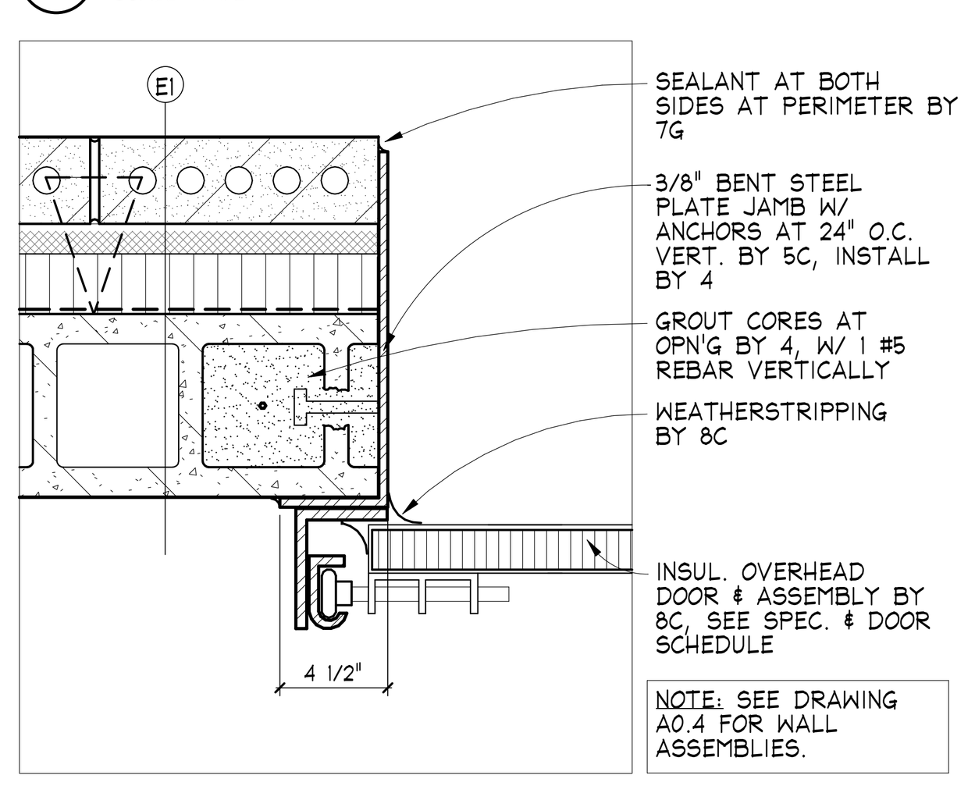
21 HOLLOW METAL DOOR JAMB @ DOOR 402M
SCALE: 1 1/2" = 1'-0"



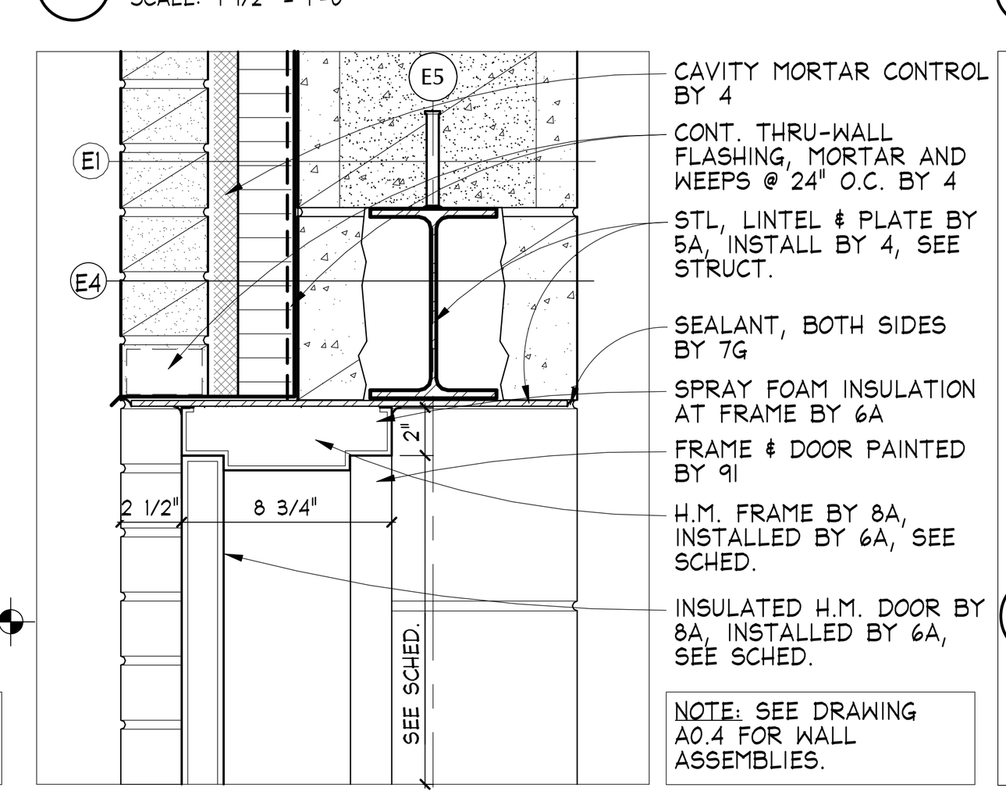
20 HOLLOW METAL DR. THRESHOLD @ DOOR 402M
SCALE: 1 1/2" = 1'-0"



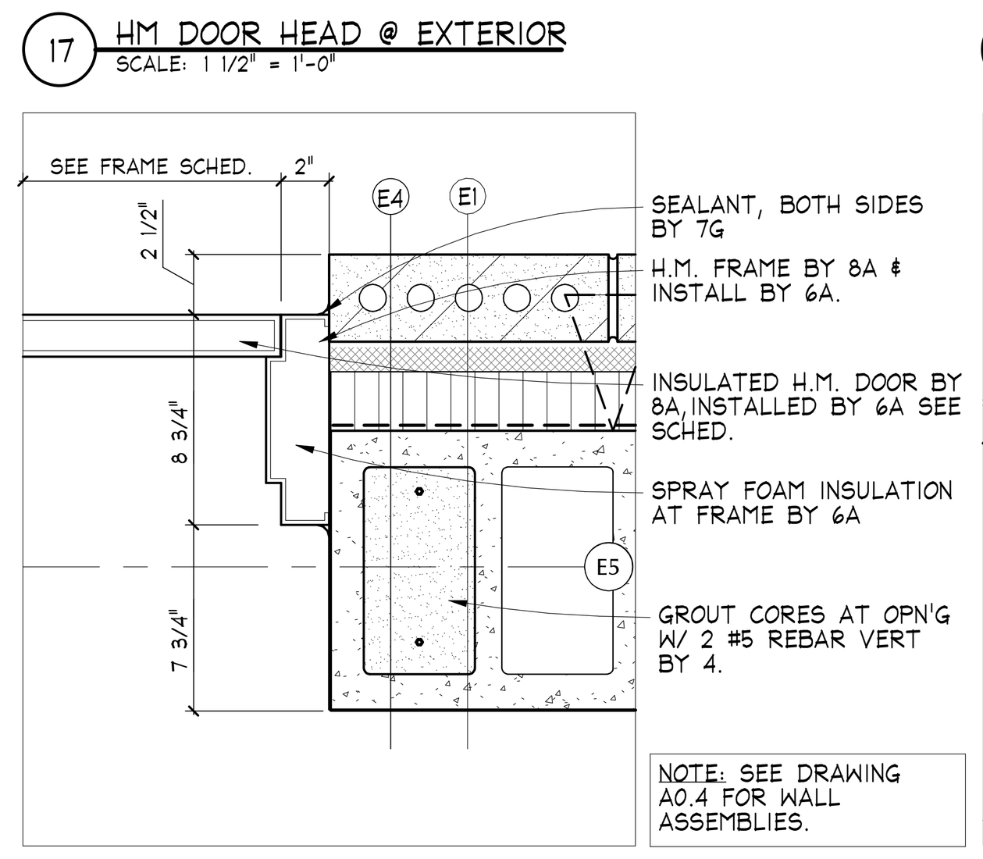
19 OVERHEAD DOOR & SILL @ EXTERIOR
SCALE: 1 1/2" = 1'-0"



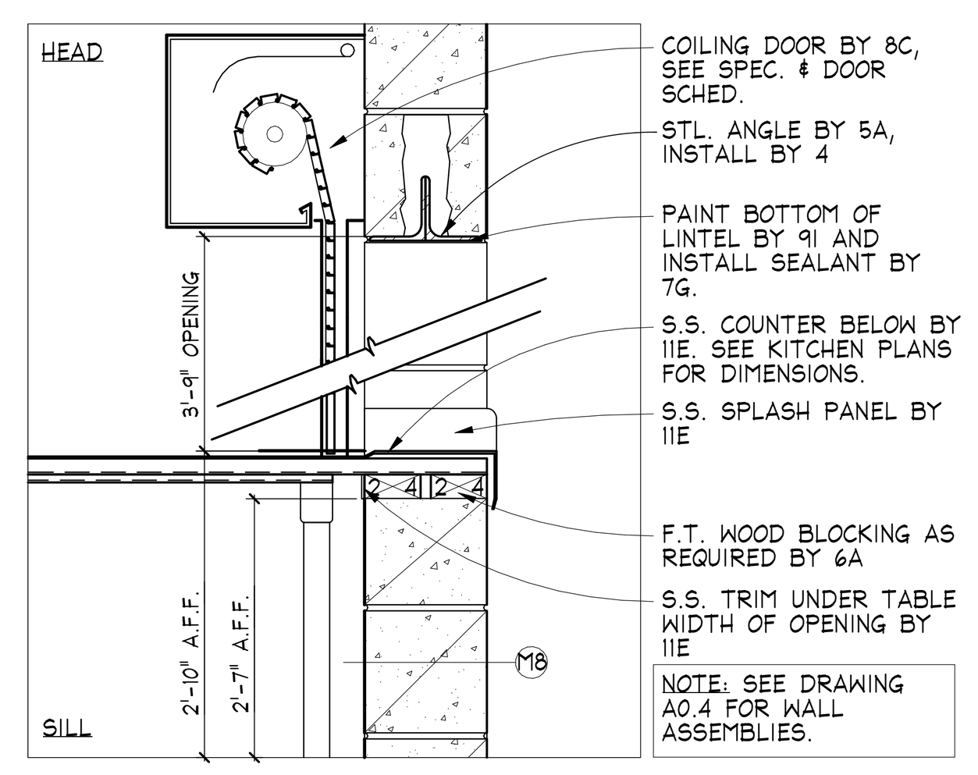
18 OVERHEAD DOOR JAMB @ EXTERIOR
SCALE: 1 1/2" = 1'-0"



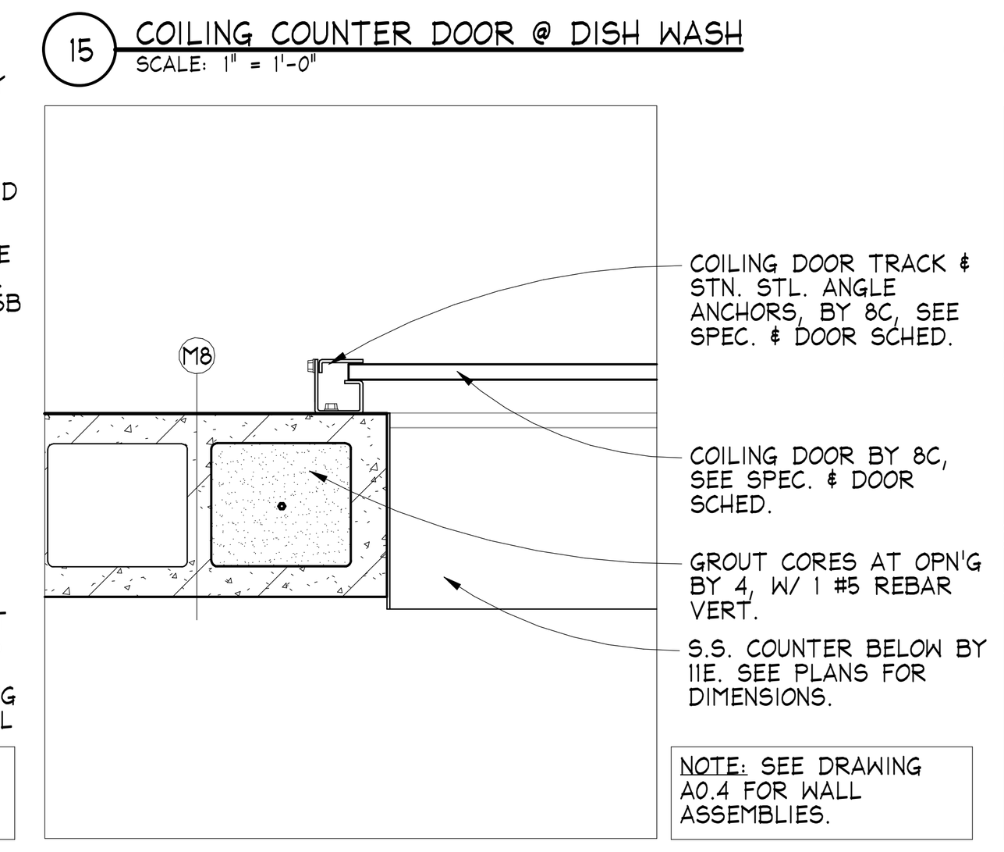
17 HM DOOR HEAD @ EXTERIOR
SCALE: 1 1/2" = 1'-0"



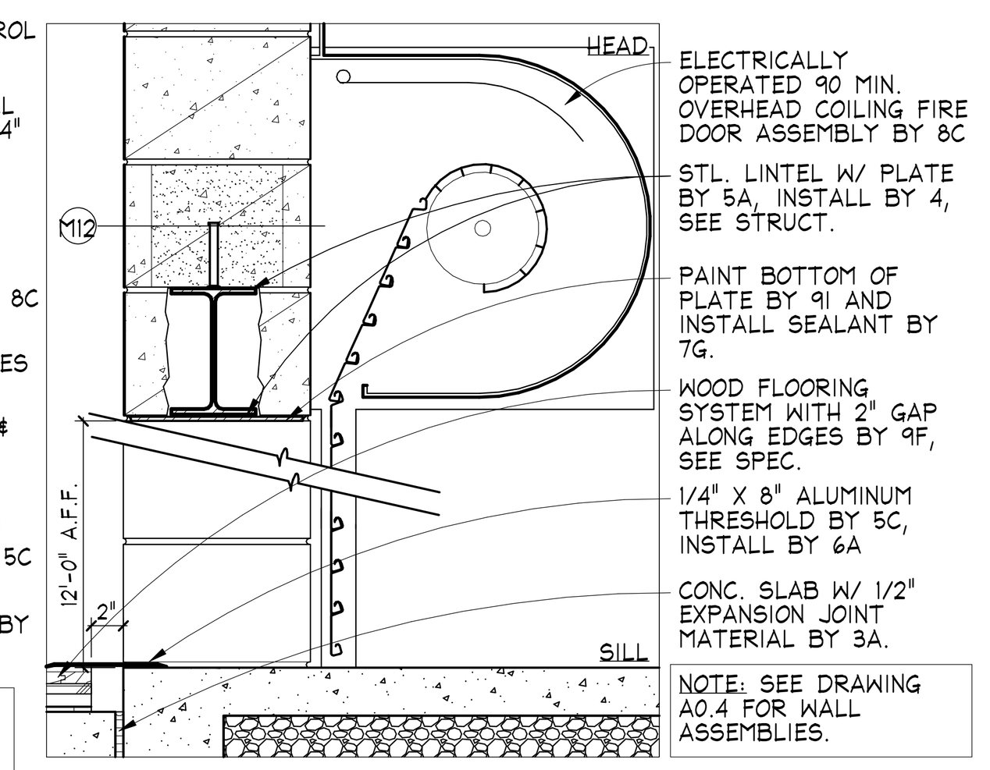
16 HM DOOR JAMB @ EXTERIOR
SCALE: 1 1/2" = 1'-0"



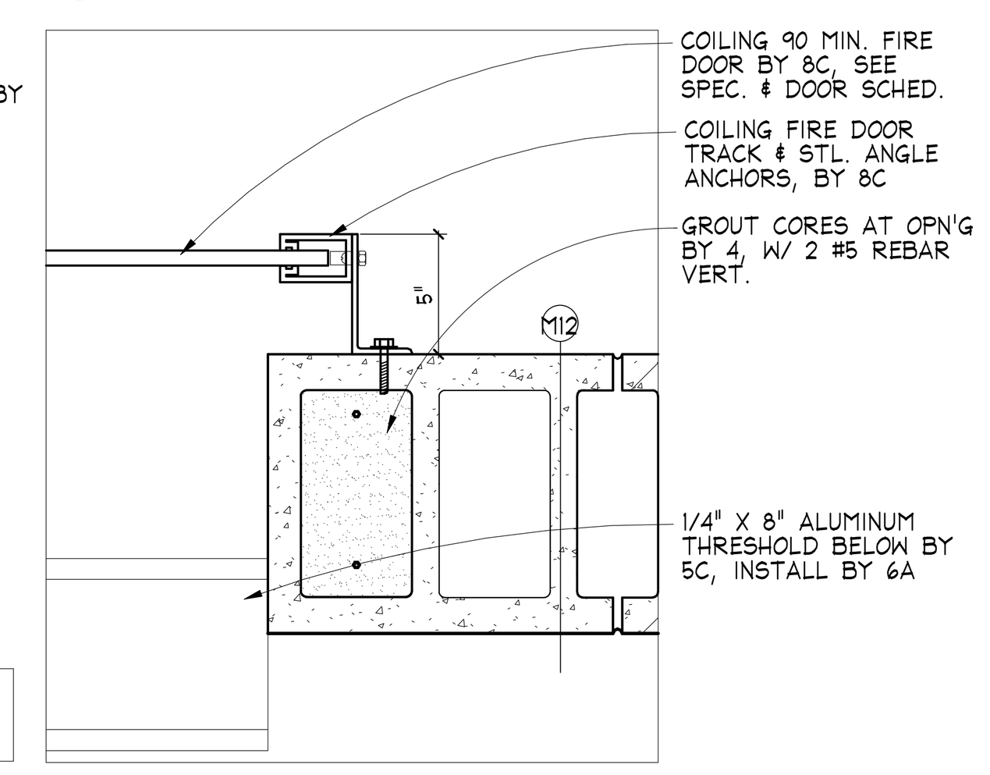
15 COILING COUNTER DOOR @ DISH WASH
SCALE: 1" = 1'-0"



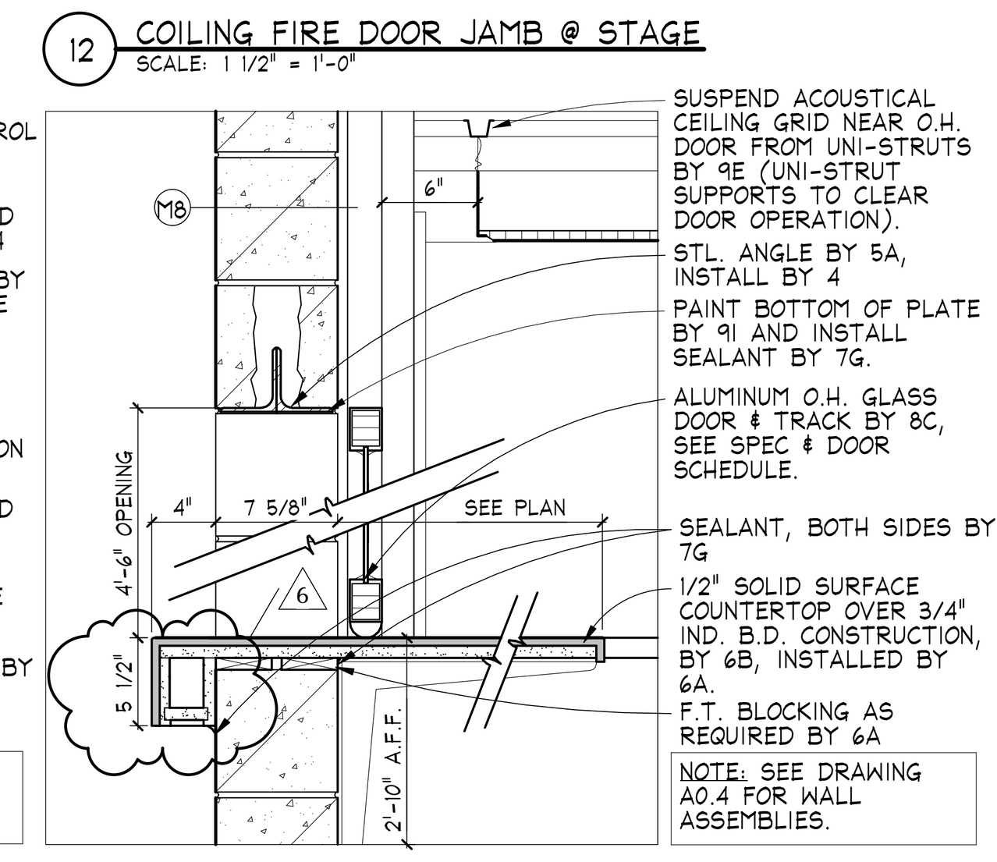
14 COILING DOOR JAMB @ DISH WASH
SCALE: 1 1/2" = 1'-0"



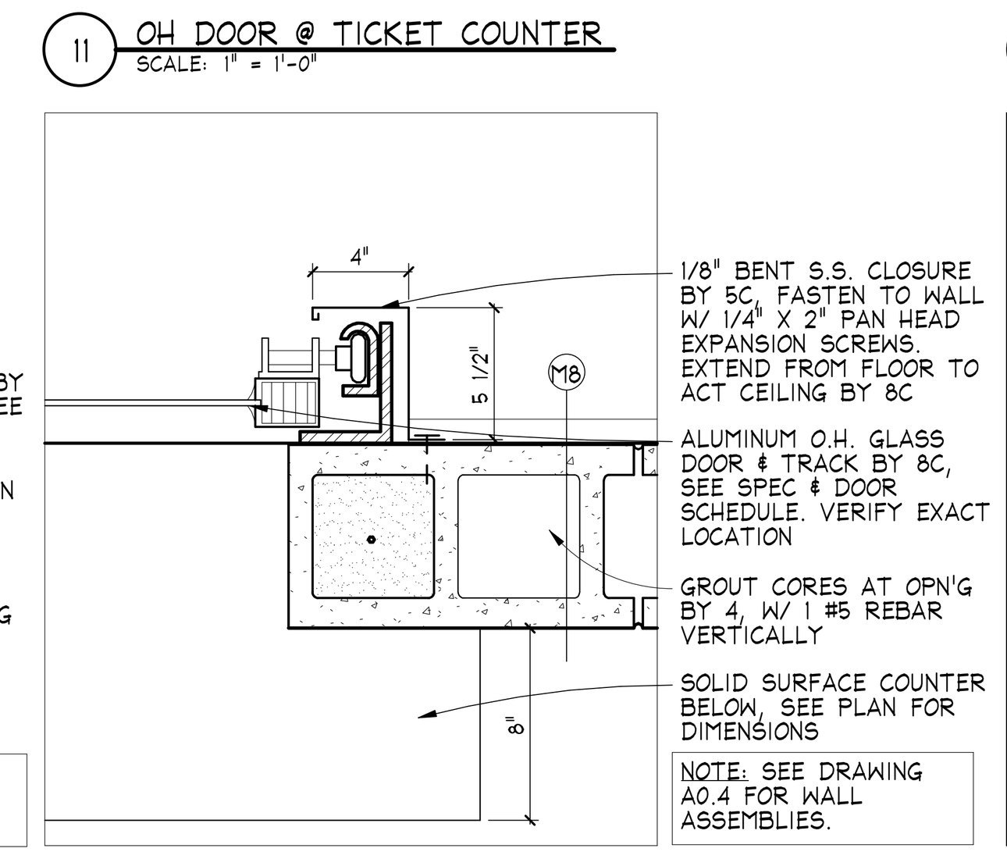
13 COILING FIRE DOOR HEAD & SILL @ STAGE
SCALE: 1" = 1'-0"



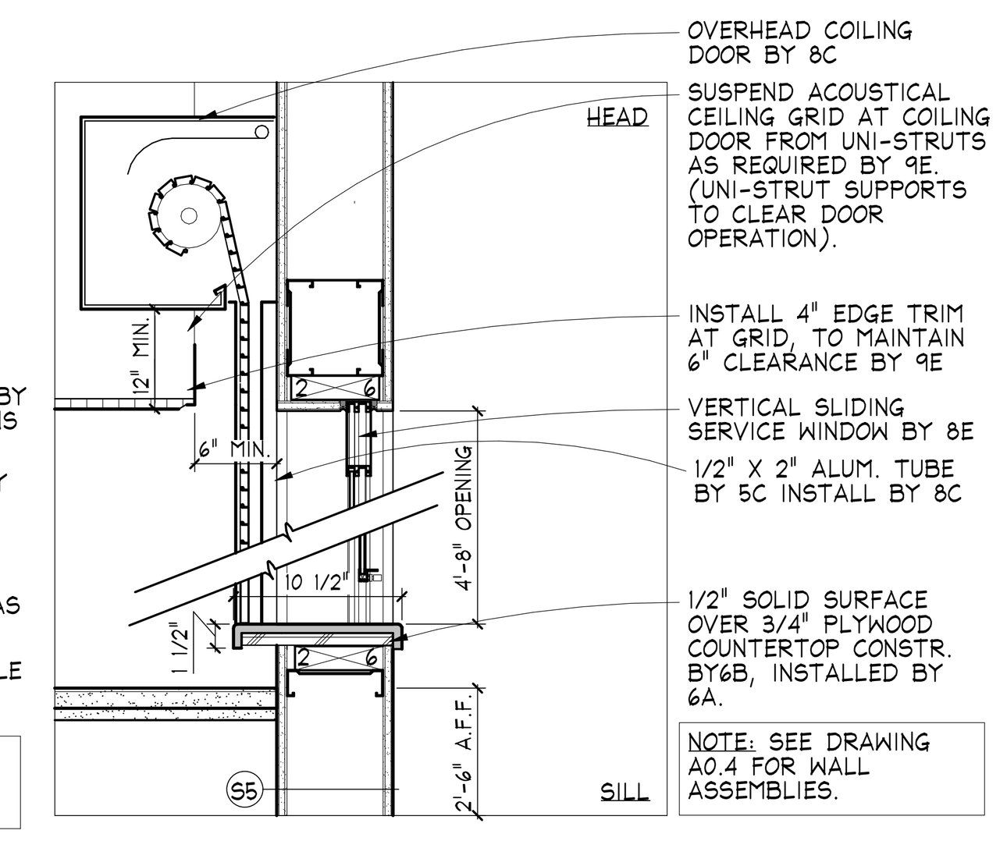
12 COILING FIRE DOOR JAMB @ STAGE
SCALE: 1 1/2" = 1'-0"



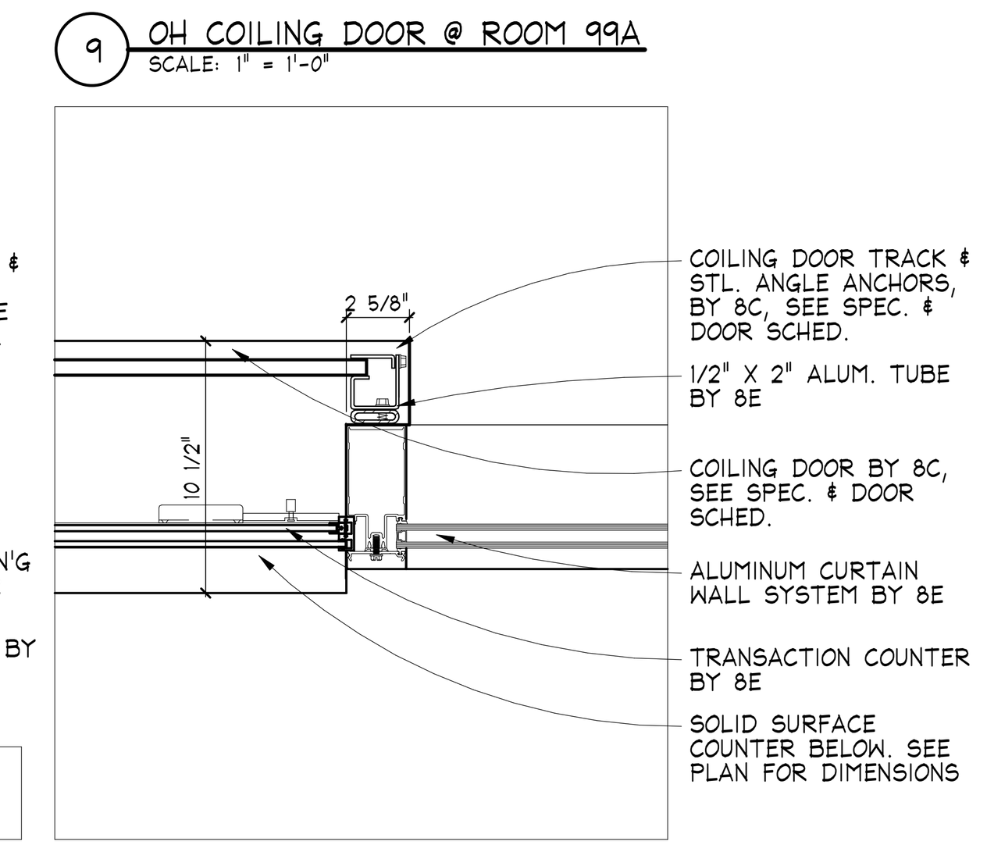
11 OH DOOR @ TICKET COUNTER
SCALE: 1" = 1'-0"



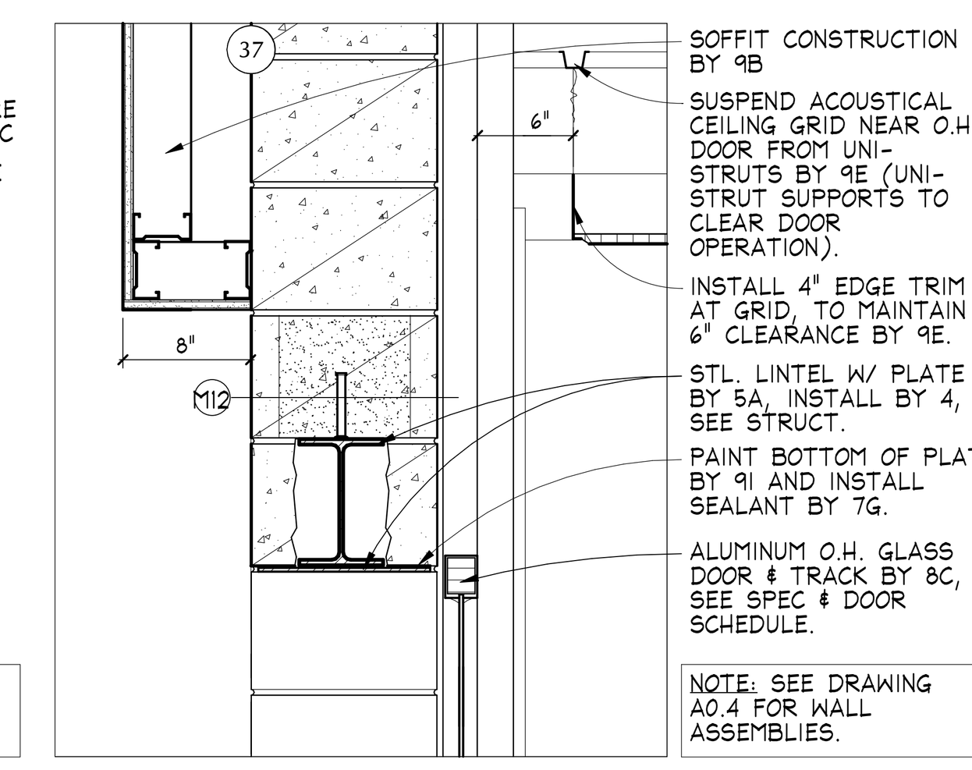
10 OH DOOR JAMB @ TICKET COUNTER
SCALE: 1 1/2" = 1'-0"



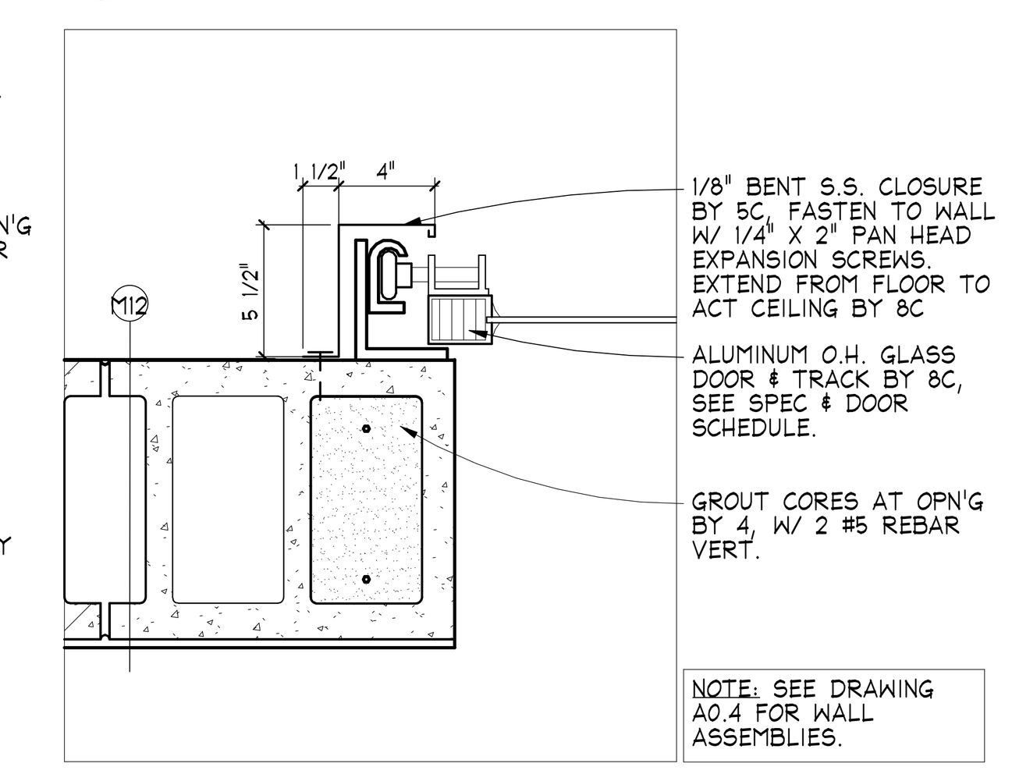
9 OH COILING DOOR @ ROOM 99A
SCALE: 1" = 1'-0"



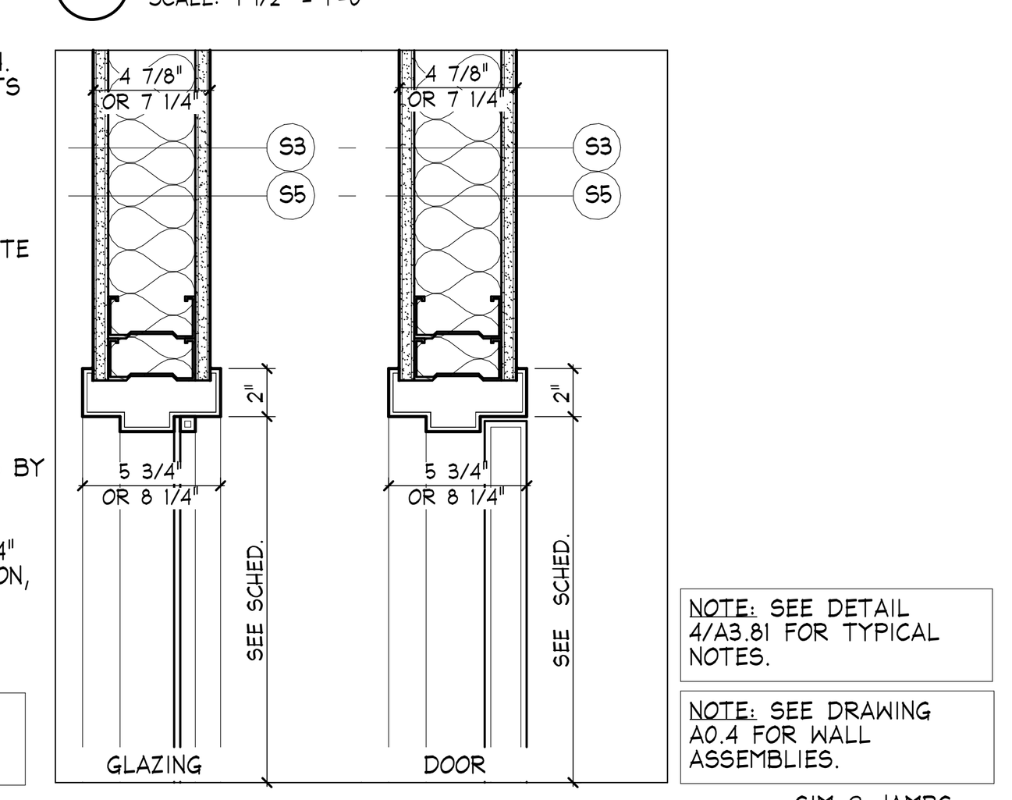
8 COILING DOOR JAMB @ ROOM 99A
SCALE: 1 1/2" = 1'-0"



7 O.H. DOOR @ SERVING
SCALE: 1" = 1'-0"

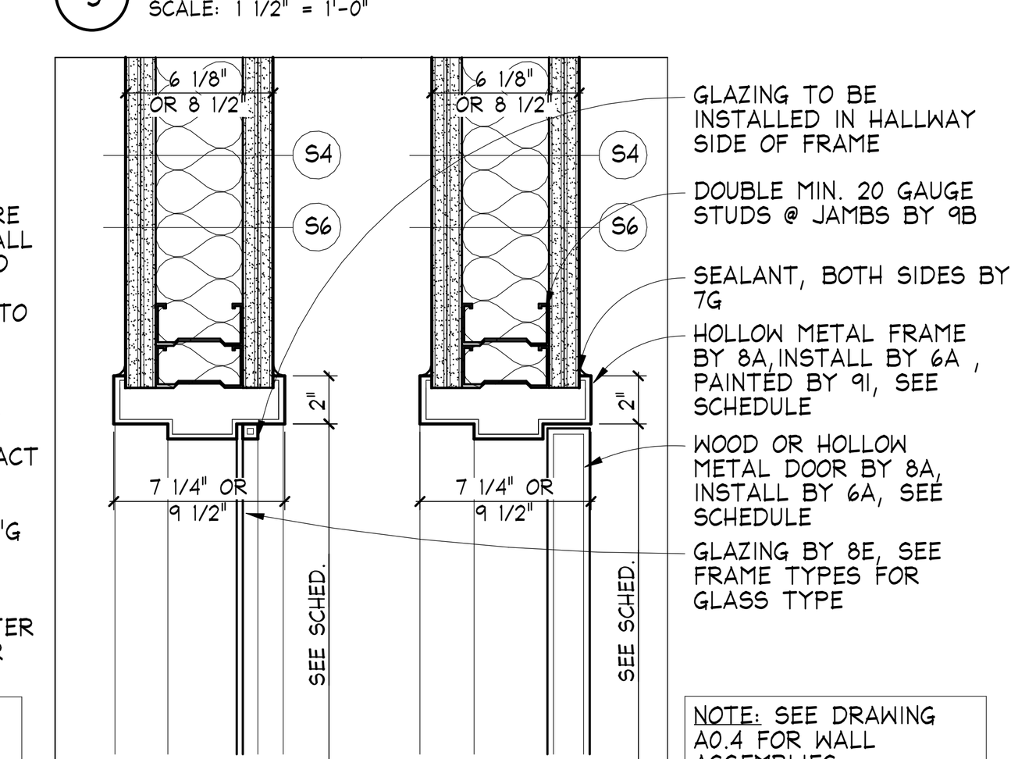


6 O.H. DOOR JAMB @ SERVING
SCALE: 1 1/2" = 1'-0"



SIM @ JAMBS

5 HM FRAME HEAD @ ONE LAYER GWB
SCALE: 1 1/2" = 1'-0"



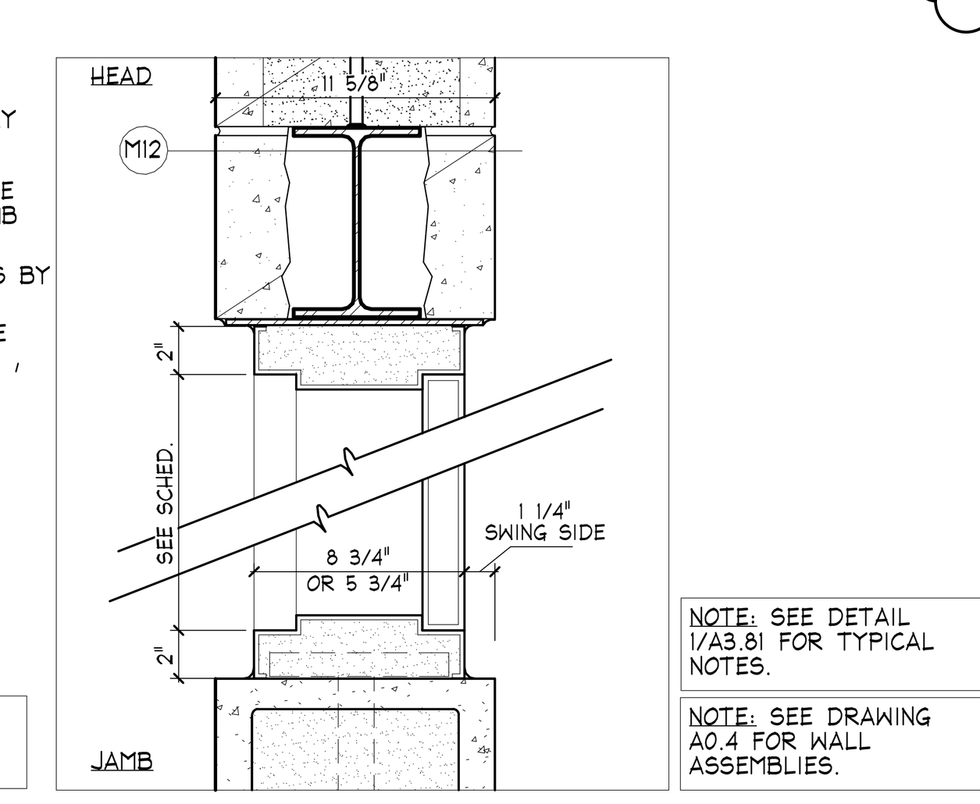
SIM @ JAMBS

4 HM FRAME HEAD @ TWO LAYERS GWB
SCALE: 1 1/2" = 1'-0"

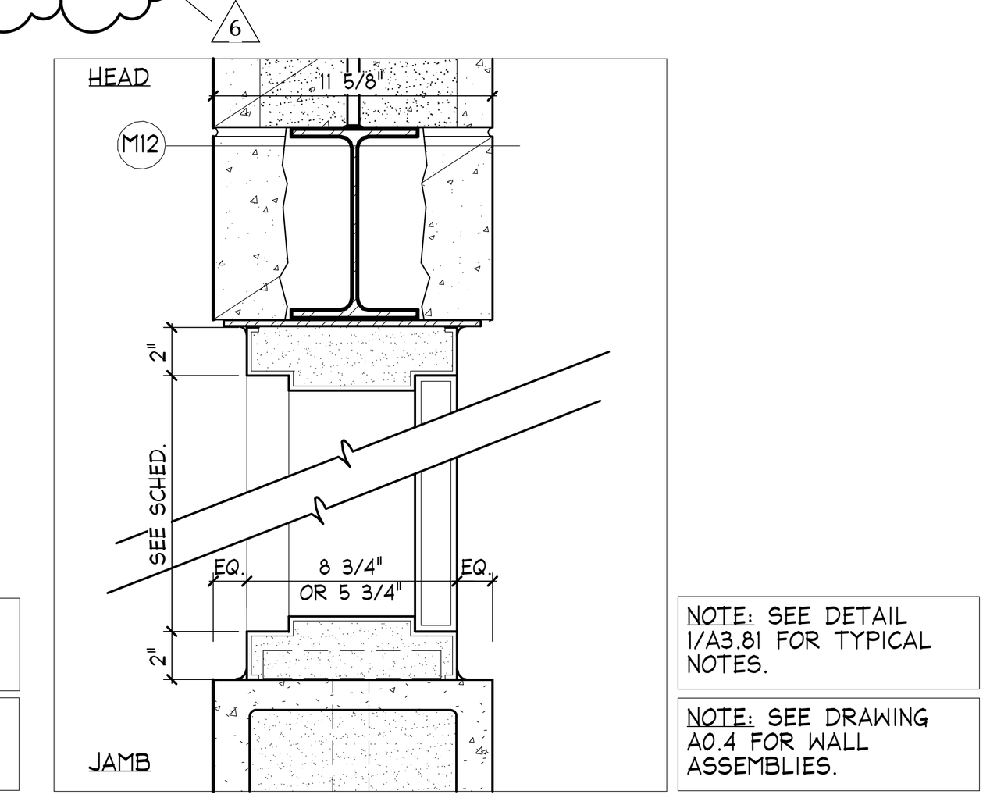
DOOR SCHEDULE (CONT.)

AREA	DOOR NUMBER	PANEL COUNT	PANEL SPECIFICATIONS WIDTH	HEIGHT	TYPE	GLASS	RATING	FRAME SPECIFICATIONS TYPE	GLASS	DEPTH	HEAD	JAMB	ELECTRICAL SPECIFICATIONS MAG. H. O.	E.A.C.	REMOVABLE MULLION	HARDWARE GROUP	REMARKS
A	565	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	566	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	567	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	5/A3.81	5/A3.81	-	E.A.C.	-	49	
A	568.1	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A	568.2	1	21'-0"	7'-2"	FGS-1	1/4" LAM.	-	-	-	0"	23/A3.81	24/A3.81	-	-	-	23	
A	571	1	3'-0"	7'-2"	WD-B	1/4" LAM.	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A	574	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
A	575	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
A	576	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	47	
A	577	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A	578	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A	579	2	3'-0"	7'-2"	WD-A	-	-	HM-2	-	8 3/4"	1/A3.81	1/A3.81	-	-		32	
A	580	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
A	581	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
A	582	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
A	583	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
A	586	1	3'-0"	7'-2"	WD-B	1/4" LAM.	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A	588	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	589	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	590	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	591	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	592	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	593	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	594	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A	595	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	5/A3.81	5/A3.81	-	E.A.C.	-	49	
A	596.1	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A	596.2	1	21'-0"	7'-2"	FGS-1	1/4" LAM.	-	-	-	0"	25/A3.81	24/A3.81	-	-	-	23	
B-2	601	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	602	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	603	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	604	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	605	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	606	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	607	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	608	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	5/A3.81	5/A3.81	-	E.A.C.	-	49	
B-2	609.1	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
B-2	609.2	1	21'-0"	7'-2"	FGS-1	1/4" LAM.	-	-	-	0"	25/A3.81	24/A3.81	-	-	-	23	
B-2	612	1	3'-0"	7'-2"	WD-B	1/4" LAM.	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
B-2	615	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
B-2	616	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
B-2	617	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	47	
B-2	618	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
B-2	619	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
B-2	620	2	3'-0"	7'-2"	WD-A	-	-	HM-2	-	8 3/4"	1/A3.81	1/A3.81	-	-		32	
B-2	621	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
B-2	622	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
B-2	623	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	
B-2	624	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
B-2	627	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
B-2	629	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	630	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	631	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	632	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	633	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	634	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	635	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
B-2	636	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	5/A3.81	5/A3.81	-	E.A.C.	-	49	
B-2	637.1	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
B-2	637.2	1	20'-0"	7'-2"	FGS-1	1/4" LAM.	-	-	-	0"	25/A3.81	24/A3.81	-	-	-	23	
C-2	650D	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	2/A3.81	2/A3.81	-	E.A.C.	-	53	
C-2	650E.1	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	2/A3.81	2/A3.81	-	E.A.C.	-	49	
C-2	650E.2	1	19'-6"	7'-2"	FGS-2	1/4" LAM.	-	-	-	0"	25/A3.81	24/A3.81	-	-	-	23	
D-2	651	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	51	
B-2	652	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
C-2	653	1	3'-0"	7'-2"	WD-B	1/4" LAM.	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	43	
A-2	660	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	661	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	662	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	663	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	664	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	665	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	666	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	667	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	5/A3.81	5/A3.81	-	E.A.C.	-	49	
A-2	668.1	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A-2	668.2	1	20'-0"	7'-2"	FGS-1	1/4" LAM.	-	-	-	0"	25/A3.81	24/A3.81	-	-	-	23	
A-2	671	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A-2	674	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
A-2	675	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
A-2	676	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	47	
A-2	677	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A-2	678	1	3'-0"	7'-2"	WD-B	1/4" LAM.	-	HM-3	1/4" LAM.	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A-2	679	2	3'-0"	7'-2"	WD-A	-	-	HM-2	-	8 3/4"	1/A3.81	1/A3.81	-	-		32	
A-2	680	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
A-2	681	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
A-2	682	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	39	OCCUPANCY INDICATOR
A-2	683	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
A-2	686	1	3'-0"	7'-2"	WD-B	1/4" LAM.	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A-2	688	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	689	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	690	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	691	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	692	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	693	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	694	1	3'-0"	7'-2"	WD-A	-	-	HM-3	1/4" LAM.	9 1/2"	4/A3.81	4/A3.81	-	-	-	26	
A-2	695	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	5 3/4"	5/A3.81	5/A3.81	-	E.A.C.	-	49	
A-2	696.1	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	26	
A-2	696.2	1	20'-0"	7'-2"	FGS-1	1/4" LAM.	-	-	-	0"	25/A3.81	24/A3.81	-	-	-	23	
D	H4.1.1	2	3'-6"	7'-2"	WD-A	-	-	HM-2	-	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		70	
D	H4.1.2	2	3'-6"	7'-2"	WD-A	-	90 MIN.	HM-2	-	1'-0 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
D	H4.3	2	3'-6"	7'-2"	WD-A	-	90 MIN.	HM-2	-	1'-0 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
E	H4.8.1	2	3'-6"	7'-2"	WD-A	-	90 MIN.	HM-2	-	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	-		69	
E	H4.8.2	2	3'-6"	7'-2"	WD-A	-	-	HM-2	-	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		73	
E	H4.9.1	2	3'-0"	7'-2"	WD-A	-	90 MIN.	HM-2	-	1'-0 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
E	H4.9.2	2	3'-0"	7'-2"	WD-A	-	-	HM-2	-	8 3/4"	1/A3.81	1/A3.81	-	-		78	
E	H4.10.1	2	3'-0"	7'-2"	WD-A	-	90 MIN.	HM-2	-	1'-0 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
E	H4.10.2	2	3'-0"	7'-2"	WD-A	-	-	HM-2	-	8 3/4"	1/A3.81	1/A3.81	-	-		78	
B	H5.2	2	3'-6"	7'-2"	WD-A	-	90 MIN.	HM-2	-	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
C	H5.3	2	3'-6"	7'-2"	WD-A	-	90 MIN.	HM-2	-	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
C	H5.9	1	3'-0"	7'-2"	WD-A	-	90 MIN.	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	50	
B-2	H6.2	2	3'-6"	7'-2"	WD-A	-	90 MIN.	HM-2	-	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
C-2	H6.3	2	3'-6"	7'-2"	WD-A	-	90 MIN.	HM-2	-	8 3/4"	1/A3.81	1/A3.81	MAG. H.O.	E.A.C.		71	
D	S4A	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	-	-	42	
E	S4E	1	3'-0"	7'-2"	WD-A	-	-	HM-1	-	8 3/4"	1/A3.81	1/A3.81	-	E.A.C.	-	49	
A	S5B	1	3'-0"	7'-2"	WD-A	-	45 MIN.	HM-1	-	4 3/4"	1/A3.81	1/A3.81	-	-	-	47.A	
A	S5C	1	3'-0"	7'-2"	WD-A	-	45 MIN.	HM-1	-	4 3/4"	1/A3.81	1/A3.81	-	-	-	47.A	
B	S5D	1	3'-0"	7'-2"	WD-A	-	45 MIN.	HM-1	-	4 3/4"	1/A3.81	1/A3.81	-	-	-	47.A	
B	S5E	1	3'-0"	7'-2"	WD-A	-	45 MIN.	HM-1	-	4 3/4"	1/A3.81	1/A3.81	-	-	-	47.A	

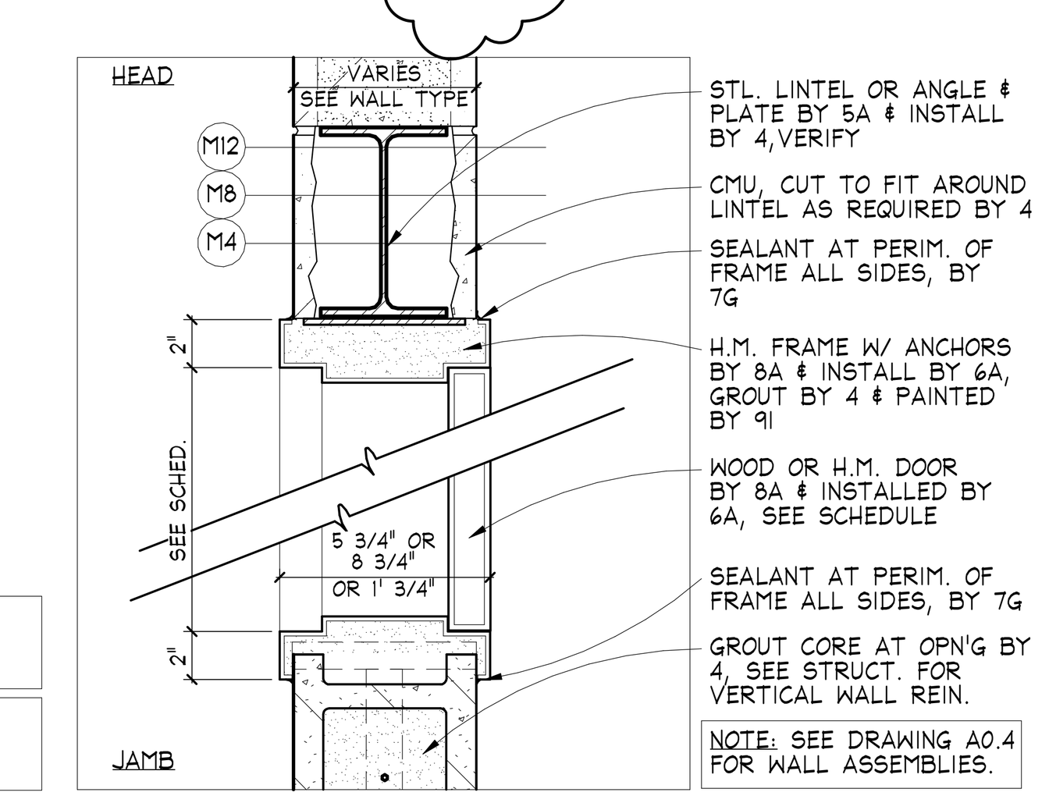
6



3 HM DOOR & FRAME HEAD/JAMB @ CMU
SCALE: 1 1/2" = 1'-0"



2 HM DOOR & FRAME HEAD/JAMB @ CMU
SCALE: 1 1/2" = 1'-0"



1 HM DOOR & FRAME HEAD/JAMB @ CMU
SCALE: 1 1/2" = 1'-0"

ZERR BERG ARCHITECTS
510 NORTH 4TH AVENUE FARGO, ND 58102-4821
701-280-0187 - FAX 701-280-9021

gehrtz CONSTRUCTION SERVICES

ABBREVIATIONS:

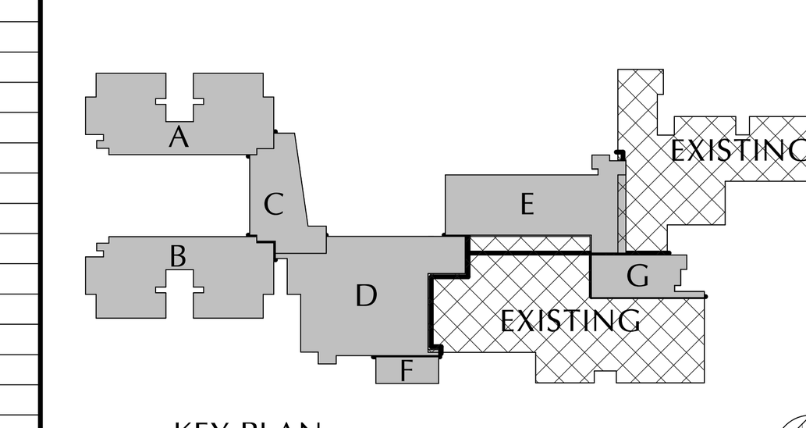
OPERATOR: LOW ENERGY DOOR OPERATOR
INDICATES IF AN AUTOMATIC LOW ENERGY DOOR OPERATOR WILL BE PROVIDED. SEE FLOOR PLAN AND PLAN NOTES FOR PUSH BUTTON, OPERATOR, AND ACTIVE LEAF LOCATIONS.

E.A.C.: ELECTRONIC ACCESS CONTROL
INDICATES THAT A CARD READER SYSTEM SHALL BE PROVIDED, AND THE DOOR, FRAME & HARDWARE SHALL BE ABLE TO ACCEPT IT UNDER THE PROJECT SCOPE.

D.P.S.: DOOR POSITION SWITCH
INDICATES IF A DOOR POSITION SWITCH SHALL BE PROVIDED.

MAG.H.O.: MAGNETIC HOLD OPEN
INDICATES IF A MAGNETIC HOLD OPEN SHALL BE PROVIDED.

Revision Schedule		
6	05-09-2016	BG2. ADD. 1



KEY PLAN
NTS
NORTH

BID GROUP II

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.
Print Name: Timothy L. Zerr

Signature:

Date: 4-25-2016 Registration No. 16864

MOORHEAD AREA PUBLIC SCHOOLS
MAPS
GRADES 5-6
ADDITION AT
HORIZON CAMPUS
3601 12th AVE. S. MOORHEAD, MN

DOOR & HOLLOW METAL FRAME SCHEDULE & DETAILS

Project No.: 15-024
Date: 4-25-2016

A3.81

OBERMILLER NELSON
ENGINEERING

ADDENDUM – M01

Date	5/9/2016
Project #	2015226
Project Name	MAPS Grades 5-6 Addition at Horizon
Project Location	3601 12th Ave. S., Moorhead, Minnesota

NOTICE TO BIDDERS: This Addendum is prepared to supplement information presented in the Drawings and Project Manual for the above referenced project. All additions, changes, omissions and conditions listed herein shall become an integral part of the Contract Documents.

DRAWINGS

ITEM NO. 1 Water and irrigation meter

A. The existing 3" water meter in existing mechanical room 021 shall be removed and a new 5" water meter and 3" irrigation meter shall be provided. The meters shall connect in to the existing 6" water main in the room. A new 4" hard cold water line shall run through the existing building to the domestic booster pump (DWP-1) in the new boiler room 406. The existing 3" CW line serving the existing building shall connect back in downstream of the new water meter. The new 3" irrigation line shall route from the existing mechanical room 021 to the new boiler room 406 and connect in to new irrigation booster pump furnished by the irrigation contractor and installed by the plumbing contractor. An RPZ shall be installed upstream of the irrigation booster pump. A location along the exterior south wall of boiler room 406 shall be coordinated for the connection to the irrigation system.

ITEM NO. 2 Fire Protection Riser

A. The existing fire protection riser in existing mechanical room 021 shall be modified for the addition of three (3) new zones to serve the new addition. The three new zones shall route from the existing mechanical room 021, through the existing building, and in to the new addition.

ITEM NO. 3 Existing Building Relief Fans

A. Two (2) exhaust fans shall be provided over the existing commons/cafeteria space 002. The exhaust fans shall be situated above the gypsum ceiling on the west-most 20ft of the room. The exhaust fans shall penetrate the existing roof and tee in to the ceiling space. Bell mouth openings shall be provided at each end of the tees. All ductwork shall be provided with lining for sound dampening. The exhaust fans shall be connected to new VFDs placed in the existing adjacent second floor mechanical room 273. The exhaust fans shall modulate and be controlled by a building pressure sensor placed within the existing building. A schedule for the exhaust fans can be seen below:

FAN SCHEDULE

UNIT NO.	MANUFACTURER & MODEL NO.	TYPE	CFM	ESP (IN WC)	MOTOR				DISC BY	FAN RPM	DRIVE	CONT.		
					HP	VOLT	PH	VFD				SONES	BY	NOTES
EF-8	GB-540	RM	24,000	0.5	5	460	3	Y	MC	1725	B	18.3	DDC	1,3
EF-9	GB-540	RM	24,000	0.5	5	460	3	Y	MC	1725	B	18.3	DDC	1,3

RM ROOF MOUNTED
DISC DISCONNECT
MC MECHANICAL CONTRACTOR
EC ELECTRICAL CONTRACTOR

NOTES:

1. PROVIDE SELF ACTING BACKDRAFT DAMPER, BIRDSCREEN, AND UNIT MOUNTED DISCONNECT SWITCH
2. PROVIDE VARIABLE SPEED ECM MOTOR
3. MANUFACTURER REFERENCED: GREENHECK

DDC CONTROL TO BE ON BUILDING DIRECT DIGITAL CONTROL

ITEM NO. 4 Sheet M3.12

A. Rooms 99A, 99B, 99C, and 99D shall Light Hazard type fire protection.

ITEM NO. 5 Sheet M3.15

A. In accordance with IFC 2015 905.3.4, class III wet fire protection standpipe systems shall be provided at each end of the stage room 422.
B. All patterned regions on this sheet shall be of the Fire Protection Light Hazard type, except for the scene shop which will remain as Fire Protection Ordinary Hazard (Group 2).

ITEM NO. 6 Sheet M3.25

A. The Stage room 422 shall be Fire Protection type Ordinary Hazard (Group 2) in lieu of Light Hazard.

ITEM NO. 7 Sheet M5.25, view 2

A. All ductwork in the auditorium shall be an equivalent size of rectangular Koolduct in lieu of the round ducts shown on plan.

ITEM NO. 8 Kitchen natural gas line

A. The natural gas line routed to the kitchen shall be 2” in size. The gas line shall route to all required equipment provided by the food service contractor. If no equipment requires natural gas at this time, the gas line shall be stubbed in to the space and capped for a future connection.

ITEM NO. 9 The following schedule shall be added in the contract documents:

TERMINAL COIL SCHEDULE

UNIT NO.	CFM	TYPE	MAX FV	MAX APD	EAT	LAT	SIZE L" x H"	TOTAL MBH	EWT	LWT	GPM	MAX WPD	NOTES
TC-1	8100	W	477	0.13	55	100.9	51 x 48	401.4	160	130	29.7	0.4	1
TC-2	8100	W	477	0.13	55	100.9	51 x 48	401.4	160	130	29.7	0.4	1
TC-3	905	W	604	0.30	55	81.3	18 x 12	25.7	160	130	1.9	0.4	1
TC-4	175	W	394	0.30	55	83.6	8 x 8	5.4	160	130	0.4	0.4	1
TC-5	250	W	450	0.30	55	80.0	10 x 8	6.8	160	130	0.5	0.4	1
TC-6	250	W	450	0.30	55	80.0	10 x 8	6.8	160	130	0.5	0.4	1
TC-7	825	W	660	0.30	55	86.9	18 x 10	28.4	160	130	2.1	0.4	1
TC-8	225	W	405	0.30	55	99.5	10 x 8	10.8	160	130	0.8	0.4	1
TC-9	175	W	394	0.30	55	97.9	8 x 8	8.1	160	130	0.6	0.4	1
TC-10	300	W	540	0.30	55	100.9	10 x 8	14.9	160	130	1.1	0.4	1

W WATER W/ 50% EG

NOTES:
1. CAPACITY BASED ON 50% ETHYLENE GLYCOL AND WATER SOLUTION

SPECIFICATIONS

ITEM NO. 10 220400 – Plumbing Systems

A. 2.25 – Soil, waste and vents within the building
   1. Delete the following sentences from paragraph C : “Couplings 1-1/2” through 4” shall use four stainless steel clamps in series. Couplings 5” and larger shall use six stainless steel clamps in series. Couplings shall be anaco-Husky SD-4000, Mission HW or approved equal.”

PRIOR APPROVALS

Section	Description of Equipment	Approved Manufacturer
23 0800	VAV Air Terminals	Carrier
22 0400	Eyewash Stations	Stingray

END OF ADDENDUM

May 9th, 2016

Jim Cole
Zerr Berg Architects
510 4th Ave. N.
Fargo, ND 58102

RE: Horizon Middle School Addition
Addendum No. 1 – Electrical Items
MBN Project No. 15-214

Please include the following items in the next addendum issued for the project:

General Items:

1. Wiring for an antenna booster system will be provided in the electrical contract, antennas and boosters shall be installed by the Owner. Trunkline cabling will be ½" heliax cable equal to Commscope HL4RPV Series plenum rated cable, cabled in trunk and tap topology. The contractor shall provide 3-way taps and terminations compatible with antenna trunk/tap wiring as required. New trunklines for two antenna zones will originate in the existing building MDF (Server Room 150). See attached reference drawing for locations of antennas and taps. Antenna wiring to be installed and terminated by the Division 27-5125 installer, coordinate with the Owner prior to installation of cable to determine the exact location of the antenna equipment.

2. Fire alarm supplier to add addressable modules for monitoring (3) additional fire sprinkler zones in the existing building fire riser room. Connect to tamper and flow alarms as required.

3. Doors with door position monitoring will be connected to the Owner's card access system, use minimum #18/2 in ¾" conduit to nearest IT room for connection to card access equipment. Door position switches provided by Division 08.

4. Rms. 99C, 99D, 128C, 404, 410, 423E, 500C, 500N, 500P, 500Q, 500R, 550, 552, 558, 650B and 653 – Add (1) line voltage occupancy sensor in each room for control of 50% of the room power receptacles. Controlled receptacles to be a different color than the uncontrolled devices and a color selection for the devices will be made during shop drawing review.

5. Note: Labeling and programming for data, fire alarm and lighting control systems is to be done as directed by the owner. Lighting control programming is to be done using descriptors as directed by the owner. Bid document fixture types are not to be used for description of loads controlled.

Changes to the Specifications:

Section 26 55 00 – Theatrical Lighting Control

1. Clarify that the stage manager touchscreen controller is to be located in rack AVIC located as shown on sheet E4.14 Provide 19" rack mounted panel as necessary for installation in the rack.

Changes to the Drawings:

SHEET E0.01

1. Luminaire Schedule – Add fixture Type 'CC1'. Fixture 'CC1' to be Rab Lighting – ALED5T52, 52 watt, 4000K, silver finish – No Substitutions. Pole top fixtures to be installed in existing poles. Provide adapter as required for mounting on existing pole.
2. Luminaire schedule – For fixture Type 'P' provide a $700 allowance – distributor net.
3. Luminaire Schedule – Add fixture Type 'Y'. Fixture Type 'Y' to be equal to Shaper 605 series, LED wall fixture, 49" wide, 4000 lumens, 2700K, dimming driver, 277V, natural aluminum finish, white acrylic lens.
4. Luminaire Schedule – Fixture Type 'T' – A quantity of (20) of this type fixture are to be provided with the 9500 lumen package as described in another item in this addendum. See sheet E2.24 – Item #4.
5. Luminaire Schedule – Fixture Type 'V' is to have DMX control with dimming to 0%.
6. Luminaire Schedule – Fixture Type 'R' – Revise the series to ISC series.

SHEET E0.03

1. Add (6) strand outside plant fiber optic cable to monument sign, see Plan Note #3 for location and Section 27-1010 for fiber requirements.

SHEET E1.01

1. See attached drawing E2.15/R1 for additional demolition work required.

SHEET E2.12

1. Rm. 500H – Provide "IN USE" ceiling mounted light outside of this room. "IN USE" light to be the same fixture as the Type 'E' exit lights.
2. At storage room north of Rm. 558 add (1) line voltage occupancy sensor.

SHEET E2.13

1. Add (1) Type 'R1' fixture on south exterior wall between vestibule V4.1 and Mechanical Room 406 at 14'-0". Circuit to same circuit as the 'R1' fixtures on the exterior wall of area 'F'.

SHEET E2.14

1. At homerun H2E-2 for the exterior wall mounted fixtures add "Provide #10 conductors throughout entire circuit".
2. Rm. 423 – Revise the exit lights from Type 'E' to Type 'E2'.
3. Rms. 418 and 420 – Revise the fixture types from Type 'F' to Type 'T'.
4. Plan Notes – Revise the detail referenced in note #6 to read "See detail E2.14/R1 and E2.14/R2". In addition to the GVA LED lighting shown in these details provide an additional 100 feet of the LED lighting including installation to be circuited back to the theater lighting controls. Locations will be provided in a future detail for the back of the theater and in the theater lobby.

5. Rm. 423 – Add (2) low voltage lighting control switches to be located at the (2) entry doors on the south side of the stage and add (2) switches to be added in the auditorium entry inside Rm. H4.9 and inside Rm. H4.10.

SHEET E2.15

1. At Area 'F' lighting plan add homerun to panel LRP1A – Relay 3.
2. Rm. 114 – Revise the existing ceiling fixture switching as shown on attached plans E2.15/R1 and E2.15/R2.

SHEET E2.22

1. At west exterior wall of the media center provide (2) Type 'R' fixtures above the windows, centered on the exterior wall 48' apart. Circuit to H2A-11 as shown on sheet E2.21.
2. Rm. 650 – Provide lighting control system daylight sensor(s) for this room to provide dimming of the fixtures based on room ambient light level.

SHEET E2.23

1. At north exterior wall add (3) Type 'R1' fixtures mounted at 14' above finished grade. Fixtures to be circuited to H2E-2 as shown on Sheet E2.14. Fixtures to be 66' apart evenly spaces on the wall.
2. Rm. 400 - Provide lighting control system daylight sensor(s) for this room to provide dimming of the fixtures based on room ambient light level.

SHEET E2.24

1. Second Floor Plan – Area E – Lighting - Revise the (12) fixtures shown at the stage area mounted below the catwalk from Type 'F' to Type 'T'.
2. At the catwalk lighting plan revise all the Type 'F' fixtures to Type 'T' fixtures except in Mechanical Room 423M.
3. At the catwalk lighting plan delete the (12) recessed downlights shown.
4. Second Floor Plan – Area E – Lighting – Add (8) additional Type T fixtures to be mounted on the underside of the catwalk at the stage. The (20) Type T fixtures mounted to the underside of the catwalk at the stage are to be provided with the 9500 Lumen package.

SHEET E3.12

1. Rm. 556B – Add homerun for washer receptacle to panel L1H. Circuit to spare 20/1 breaker.
2. Rm. 556B – Add homerun for dryer receptacle to panel L1H. Circuit to 30/2 breaker. Provide #10 conductors. Receptacle to be Nema 14-30.
3. Hall H5.2 – The homerun shown should be ran to a spare 20/1 breaker in Panel L1H.
4. Rm. 556 – At the printer alcove provide a duplex receptacle with homerun to a spare 20/1 breaker in Panel L1H.

SHEET E3.13

1. Rm. 416 – Add (4) floorboxes in this room with (4) duplex receptacles in each.
2. Rm. 415A – At the printer location the homerun shown should be ran to spare 20/1 breaker in Panel L1B.
3. Rm. 411,414 and 415 – Provide 120 volt connection to Humidifier H-1, H-2 and H-3 1.9KW each. Provide homerun to (3) 20/1 spare breakers in Panel L1B. Provide connection to associated humidistats.

SHEET E3.14

1. Rm. 425 - Add 120V connection for wireless clock on south wall, verify exact location with owner prior to installation. Connect to nearest available 120V circuit.
2. Rm. 425T - Add 120V connection for wireless clock in the ticket booth above door, connect to nearest available 120V circuit.
3. Rm. 422 – Add a 400 amp company switch. Provide 400 amp company switch with cam type outlets equal to Powergate by Lex Products, 65,000 AIC main breaker, 400 amp, 3-phase, 120/208 volt, (6) 16 series cam-type devices – black–hot, blue-hot, red-hot, (2) white-neutral, green-ground. Black powder coat finish. 400 amp company switch to be located near where the 200 amp company switch is shown.
4. Rm. 422 – Near the location of the company switches provide a L14-50 receptacle for show power. Provide a homerun to Panel LT2 with #8 conductors.
5. Rm. 425 – Add 120 volt connection to powered window shades at 8 windows. Provide homerun to spare breaker in Panel L1G. Provide connection to associated controls.
6. Rm. 425T - Provide 120 volt connection to overhead door and associated controls. Circuit to L2G-27.
7. Vestibule V4.4 – Add 120 volt connection to (2) power door operators and associated push plates. Provide homerun to spare 20/1 breaker in panel L2G.

SHEET E3.15

1. Rm. 114 – On the east wall in the north east corner provide a 14-30 receptacle for owner provided washer/dryer. Provide homerun with #10 conductors to Panel LT2. Provide (1) 30/2 breaker in lieu of (2) 20/1 spares.
2. Rm. 406 – Add connection to EF-7 at roof. Provide connection to spare 20/1 breaker in Panel L1B.

SHEET E3.22

1. Revise Plan Note 1 to read “Provide 120 volt connection to circuit L1J-10 on floor below.

SHEET E3.24

1. Rm. 423F – At the control console location add 10 foot length of Wiremold plugstrip equal to the AL3300 series with duplex receptacles 12 inches on center. Provide homerun to spare 20/1 breaker in panel L2G.
2. Rm. 423M – Add 120 volt connection to BEF-15. Circuit to L2G-19. See the mechanical plans for the locations of BEF-14 and BEF-15.

SHEET E4.10

1. Add Type P speaker horn at 11’6” AFF , on northeast exterior corner of building adjacent to security camera. Connect to class call system for paging and tone announcements, see Section 27-5150.

SHEET E4.12

1. Reception 500A: Add microphone jack and audio input on north wall below counter for emergency microphone and background music connections to the IP Class Call system. See Section 27-5150, Paragraph 2.11 for microphone requirements.
2. Door 500S.1: Add card reader on corridor side of door, door shall be controlled by card reader on either side of door.
3. Add wiring for door position monitoring and control of electric locks to all exterior Vestibule doors in Vestibule V5.1A. Door position switch wiring within the vestibule may be connected in series to a single alarm monitoring address on the card access

system. Card reader shall control the adjacent door, other doors controlled by timer, pushbutton, or lockdown.

4. Add wiring/conduit for door position monitoring and control of electric locks at Doors V5.1.10, V5.1-11, V5.1.12. Door position switch wiring may be connected in series to a single alarm monitoring address on the card access system. Card reader shall control the adjacent door, other doors controlled by timer or lockdown pushbutton.
5. Reception 500A: provide wiring/conduit to close coiling door upon signal from lockdown pushbuttons.
6. The exterior blue light location outside of the entry is to be connected to the interior blue light system. This device is to be weatherproof type.
7. Rm. 556 – At the printer alcove provide a data outlet with (2) drops.

SHEET E4.13

1. Rooms 411, 412, 413, 415 and 416:
    a. Production Intercom stations shall be located in the local sound system rack in each room in lieu of wall mounted near door as shown on the drawings. Provide 19" rack panel for installation in each rack.
    b. Provide (2) recording microphones in ceiling of each room, connected to local sound system, see detail 5/E7.2 and Section 27-5125 for additional requirements.
2. Add wiring/conduit for door position monitoring and control of electric locks to all exterior doors in Vestibule V4.1. Card reader shall control the adjacent leaf, other doors controlled by timer or lockdown pushbutton.
3. Add wiring/conduit for door position monitoring at exterior doors of Rooms 412, 413, and 416.
4. Vestibule V4.1 doors V4.1.8, V4.1.9, V4.1.10 : Add wiring/conduit for control of electric locks on these doors. Doors controlled by timer or lockdown.
5. Rm. 416 – At the four floor boxes added on the power plan provide (4) data outlets in each. Provide a 1 inch conduit from each box to the corridor for data cabling. Provide an additional 1 inch conduit between each box so all the boxes are connected together. Provide a 1 inch conduit from one of the floor boxes to the teachers floor box.
6. Rm. 415A – At the double doors to Hall H4.4 provide fire alarm system magnetic door holds and a fire alarm system smoke detector on each side of the doors.
7. Hall H4.1 – At door H4.1.2 add a fire alarm system smoke detector on each side of the doors.

SHEET E4.14

1. Add card readers and associated wiring/conduit at the following doors:
    a. 425T.1, H4.9.1, H4.10.1, 424, S4E, H4.8.2, 422.1, 418.C, 418.1, 418.2, 420.1, 420.3, 420.4, V4.3.1., 422.5, 425C.1, 425C.2.
2. Ticket Booth: provide wiring/conduit to close coiling door upon signal from lockdown pushbuttons.
3. Add wiring for IP video surveillance cameras:
    a. Northeast corner of Scene Shop 420 adjacent to Door 420.3.
    b. South wall of Scene Shop 420 adjacent to wireless access point.
    c. Southwest corner of Storage 418.
    d. (2) camera locations in art room corridor, centrally located near door into Room 420.
    e. In east/west corridor near the south double doors 423 into the auditorium.
    f. (2) locations on the west end of the east/west corridor.

g. Center of Lobby 425 in acoustic ceiling cloud.
h. South end of Lobby 425, above doors into PE Storage 426.
i. (2) locations in ceiling of Connecting Link 428, approximately centered in area.

4. Add wiring/conduit for door position monitoring at Doors 422.4, 417.2 and 421.2.
5. Add wiring/conduit for door position monitoring and control of electric locks to all exterior Vestibule doors in Vestibule V4.4. Add exterior card reader and associated wiring/conduit to control Door V4.4.4. Card reader shall control the adjacent leaf, other doors controlled by timer or lockdown pushbuttons.
6. Add wiring and conduit to monitor overhead door 420.2.
7. Lobby 425:
    a. Add RG-6 jack and data jack at 10' AFF for bulletin board monitor on west wall, centered between doors H4.9.1 and 425G
    b. Add RG-6 jack and data jack at 10' AFF for bulletin board monitor on west west wall centered between doors 425B and H4.10.1.
    c. Add RG-6 jack and data jack at 8' AFF for bulletin board monitor on north wall of Ticket Booth, adjacent to ticket booth door.
    d. Add RG-6 jack and data jack at 8'AFF for bulletin board monitor on west wall of Ticket Booth.
    e. Add data outlet with (2) jacks on west wall centered between doors 425B and H4.10.1.
    f. Revise data outlet shown on west wall to (2) jacks in lieu of (1).
    g. Add (2) data jacks to each of (3) floorboxes to be installed in lobby floor. Provide 1" conduit from each floorbox to accessible ceiling for data cabling.
    h. Add wireless access point cabling in acoustical ceiling cloud, approximately centered on Lobby.
    i. Add wireless clock with 4" display on south wall, verify exact location with owner prior to installation.
    j. Add wireless clock with 2.5" display in the ticket booth above door.
8. Add Type P speaker horn on exterior of building at 11'6" AFF, adjacent to overhead door in Room 420. Connect to class call system for paging and tone announcements, see Section 27-5150.
9. Rm. H4.10 – Add fire alarm system magnetic door holds to the double doors to Lobby 425. Add (1) fire alarm system smoke detector wall mounted at 9'-0" AFF centered on doors on the lobby side and (1) ceiling mounted smoke detector on the room side.
10. Rms. 425B and 425G – Add fire alarm system magnetic door holds at the entry door from Lobby 425. Add (1) fire alarm smoke detector wall mounted at 9'-0" AFF centered between the (2) doors and (1) ceiling mounted smoke detector in each of the (2) rooms.
11. Rm. H4.9 – Add fire alarm magnetic door holds to the double doors to Lobby 425. Add (1) fire alarm smoke detector wall mounted at 9'-0" AFF centered on door on the lobby side and (1) ceiling mounted on the room side.

SHEET E4.15

1. Add card readers and associated wiring/conduit at the following doors:
    a. 127A.1, 128A.1, V1.1.1.
2. Add wiring/conduit for door position monitoring and control of electric locks at Doors V1.1.2, V1.1.3, V1.1.4, V1.1.5.
3. Add wiring/conduit for control of electric locks at Doors V1.1.7, V1.1.8, V1.1.9, V1.1.10.

4. Add wiring/conduit for door position monitoring at overhead door in Receiving 409, exterior doors of Rooms 406 and 407.
5. Reception 99A: provide wiring/conduit to close coiling door upon signal from lockdown pushbuttons.
6. Rm. 408 – At door 408.2 add fire alarm magnetic door holds and fire alarm smoke detector on each side of the doors.

SHEET E4.24

1. House Catwalks 423K: Add microphone outlet with (2) XLR jacks on the north catwalk and on the south catwalk, adjacent to the data outlet. Route cabling in ¾" conduit to patch panels in Rack AV1A.

SHEET E5.1

1. Verify exact height for drop cords with the owner. Cords to be 7'-0" to 7'-6" AFF.
2. Rm. 401C – The receptacle shown at the washer/dryer location is to be a 14-30R. Provide homerun to panel LK2 with #10 conductors. Provide a 30/2 breaker in lieu of (2) 20/1 spares.

SHEET E6.1

1. The feeder to the company switch panel is to have 2 neutral conductors. Provide feeder 200N as shown with one additional neutral switch.
2. Existing site buildings electrical riser diagram – Existing panel LS2 is to be disconnected, removed and replaced. See new panel LS2 schedule attached. Reconnect all existing circuits which are still in use.
3. Feeder Schedule – For feeder number 200N delete the "2" from the number of parallel sets column.
4. Add a 400N feeder with (2) neutral conductors from Panel LDP2 to 400 amp company switch.

SHEET E8.01

1. Panel L1H – Revise panel to 54 circuit panel. Provide (1) 30/2 breaker and (10) 20/1 spare breakers.

SHEET E8.04

1. Panel LDP2 – Revise the breaker for circuits 19,21,23 from 1000A to 100A. Add one 200/3 breaker for 200 amp company switch feeder. Add one 400/3 breaker for 400 amp company switch feeder.
2. Panel LT2 – Revise (2) 20/1 spare breakers to (1) 50/2.

SHEET E8.05

1. Low Voltage Relay Schedule – DMX – Add 1 additional spare U.L. 924 relay.
2. Low Voltage Relay Schedule – DMX – spare relays 21-24 are to be dimmed LED spares and 25-28 are to be switched LED spares.

SHEET E9.01

1. Revise wireless access point locations as follows
    a. Room 137: Relocate to small corridor between Room 137 and Room 140.
    b. Delete WAP cabling in Room 138, 139, 167,168,186, and 187.
    c. Add WAP cabling in Tech Office 152, Conference Room 130A, Admin 128C, Conference Room 128A, south wall of Cafetorium 111 opposite of Orchestra

108, west wall of Cafetorium 111 near doors into Kitchen 113, east wall of Cafetorium 111 near double doors, Maintenance Office 112B, Weight Room 124, Step 114, north wall of Storage 120A on corridor side, north wall of Storage 125A on corridor side, north wall of Storage 126A on corridor side.

2. Existing data closets located in the following rooms: Server Room 150, Electrical 179A, Theater Storage 109, Electrical Room 112E.

SHEET E9.02

1. Revise wireless access point locations as follows:
    a. Delete WAP cabling in Room 268, 277, 287, 278, 288, 368, 377, 378, 387, 388.
    b. Add WAP cabling in Media Center 250, adjacent to south wall of Computer Lab 251.
2. Existing data closets are located in the following rooms: Electrical 213, Electrical 279A, Electrical 379A.

Changes to the Specifications:

Section 27-5125 *Sound Reinforcement and AV Systems*

1. Paragraph 2.02.N House Mixing Console: Revise quantity to (2) GLD 112 Series Digital Mixers with Dante expansion cards.
2. Add (2) Allen and Heath AR84 Series expanders, install in auditorium rack AV1A.
3. Paragraph 2.02.O.6: Delete all Countrymen WCEC headsets.
4. Paragraph 2.03.H –
    a. Portable Mix Case: Add (2) additional wireless microphone systems in portable rack, matching the lecture wireless system described in Paragraph 2.03.J.
    b. Revise case to Gator Case GRR-6PL Series rolling rack with integral power, delete reference to Lowell power strip in item #7.
    c. Install portable mixer in Paragraph 2.03.G in the portable mix case.
5. Paragraph 2.03.I – Theatrical System Wireless Microphone – delete this paragraph, theatrical equipment is described in Paragraph 2.02.O.
6. Paragraph 2.02.R.6: Provide desktop stand for the control booth touchscreen, touchscreen shall be located at the sound and lighting control desk location in lieu of mounting in the equipment rack.
7. Paragraph 2.02.Y: Mic stands shall include microphone clips sized to hold the Sennheiser handheld microphones described in this section.

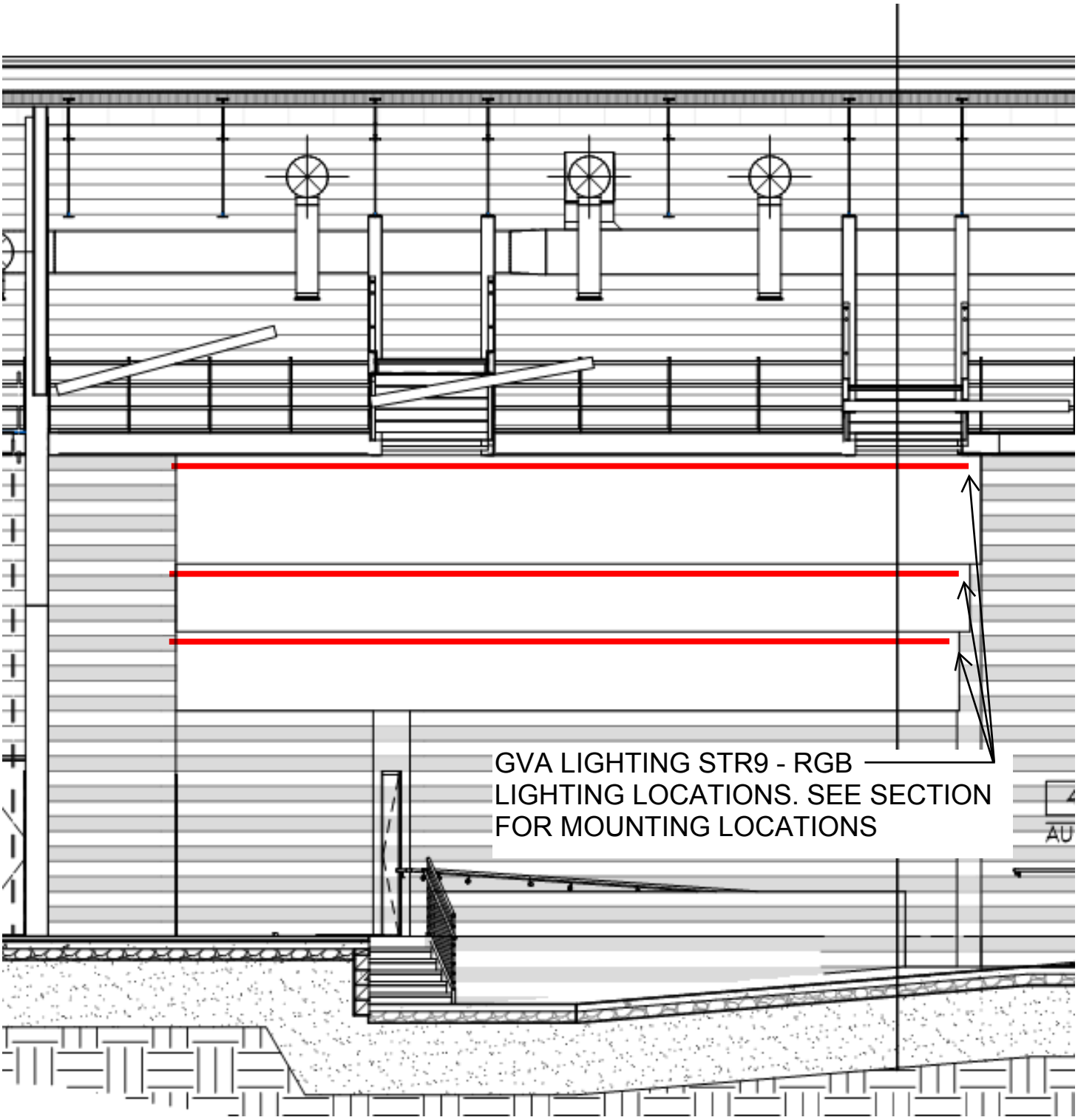
APPROVALS

Section 26 5100 – Interior Lighting and Section 26 5600 Exterior Lighting

Type	Manufacturer	Series
A and A1	Lithonia	2BLT
B	Lithonia	2GTL
B1	Lithonia	2SRT
C	Lithonia	2GTL

D & D1	Lithonia	LDN6
D2 & D3	Indy	L8
E & E1	Evenlite	CCDS
E2	Evenlite	SOV
E3	Lithonia	LV
F & F1	Lithonia	2EJ
Type	Manufacturer	Series
G	Peerless	VMM
H	Coronet	VPLED
J	Peerless	BRM
K	Peerless	BRW
L	Lithonia	2VTL
M	Lithonia	IBH
R	Lithonia	WSR
T	Lithonia	ZL1D
U	Juno	LMS
AA1 – AA8	Lithonia	DSX
BB1	Lithonia	MRP

END OF ADDENDUM NO. 1



1 LED ACCENT LIGHTING DETAIL

SCALE: 1/8" = 1'-0"

MBN ENGINEERING
MECHANICAL * ELECTRICAL * CIVIL
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SUITE 200
FARGO, ND 58102
PHONE: 701.478.6336
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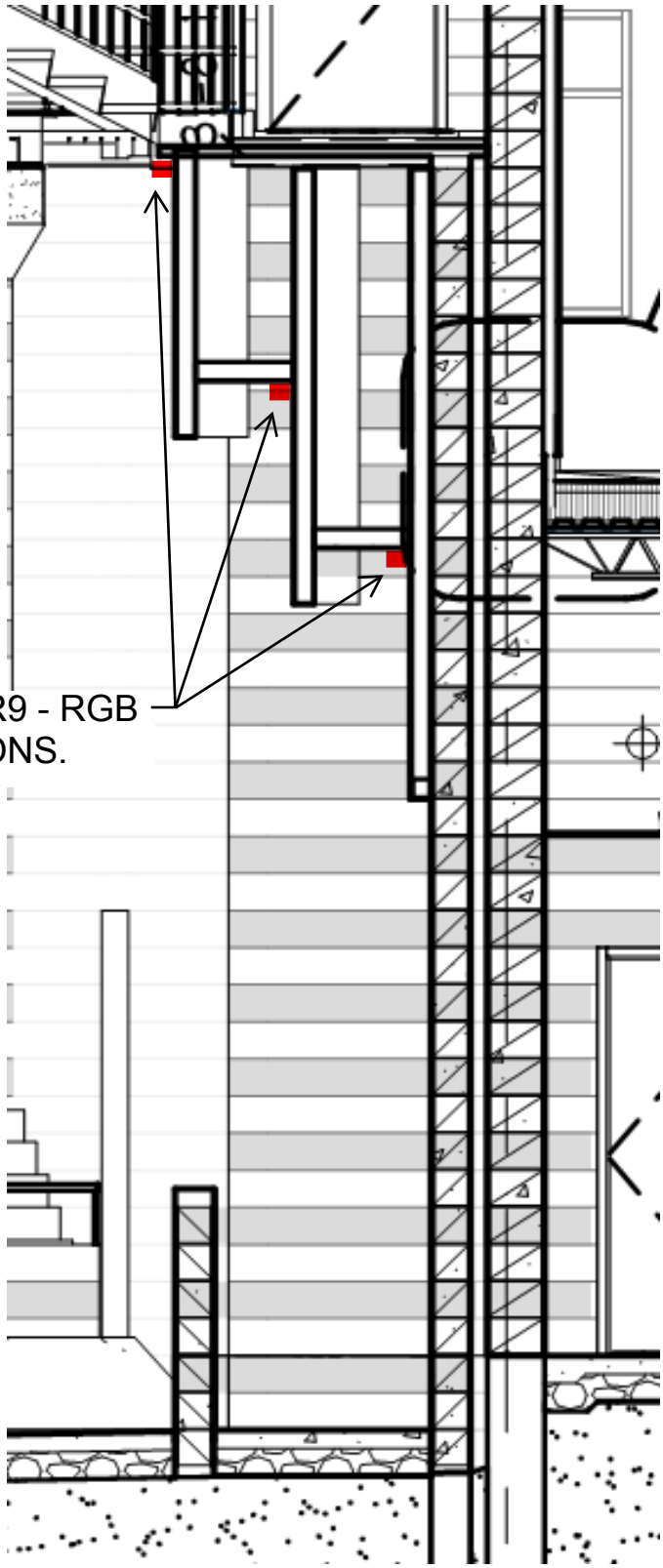
MAPS GRADES 5-6
ADDITION AT HORIZON CAMPUS

MOORHEAD, MINNESOTA

MBN JOB #: 15-214
REVISION DATE: 5-5-16

R1

E2.14



GVA LIGHTING STR9 - RGB
LIGHTING LOCATIONS.

1 LED ACCENT LIGHTING DETAIL
SCALE: 1/8" = 1'-0"

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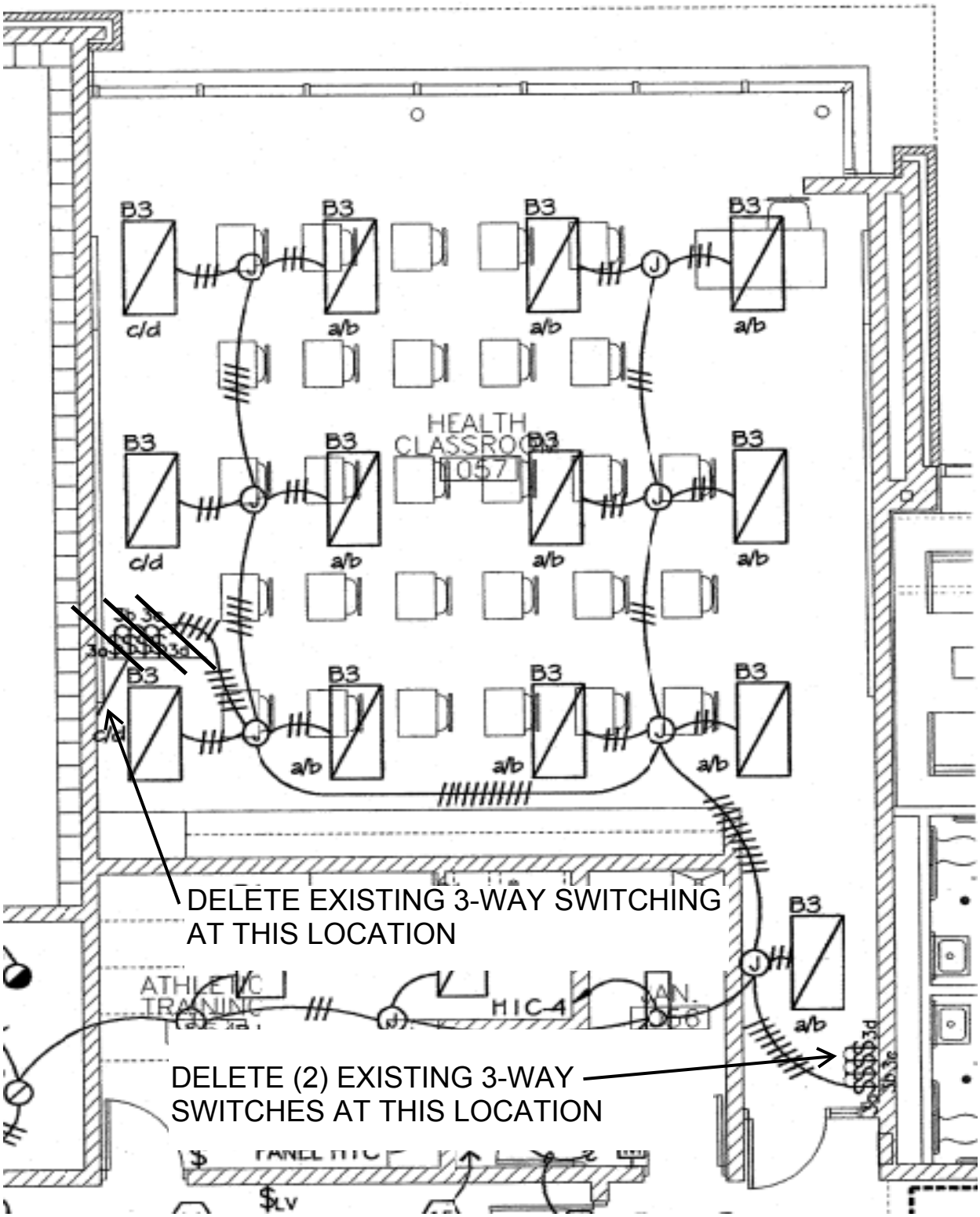
SUITE 200
FARGO, ND 58102
PHONE: 701.478.6336
FAX: 701.478.6340

MAPS GRADES 5-6
ADDITION AT HORIZON CAMPUS
MOORHEAD, MINNESOTA

MBN JOB #: 15-214
REVISION DATE: 5-5-16

R1
E2.14



1 ELECTRICAL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

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ADDITION AT HORIZON CAMPUS

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MBN JOB #: 15-214
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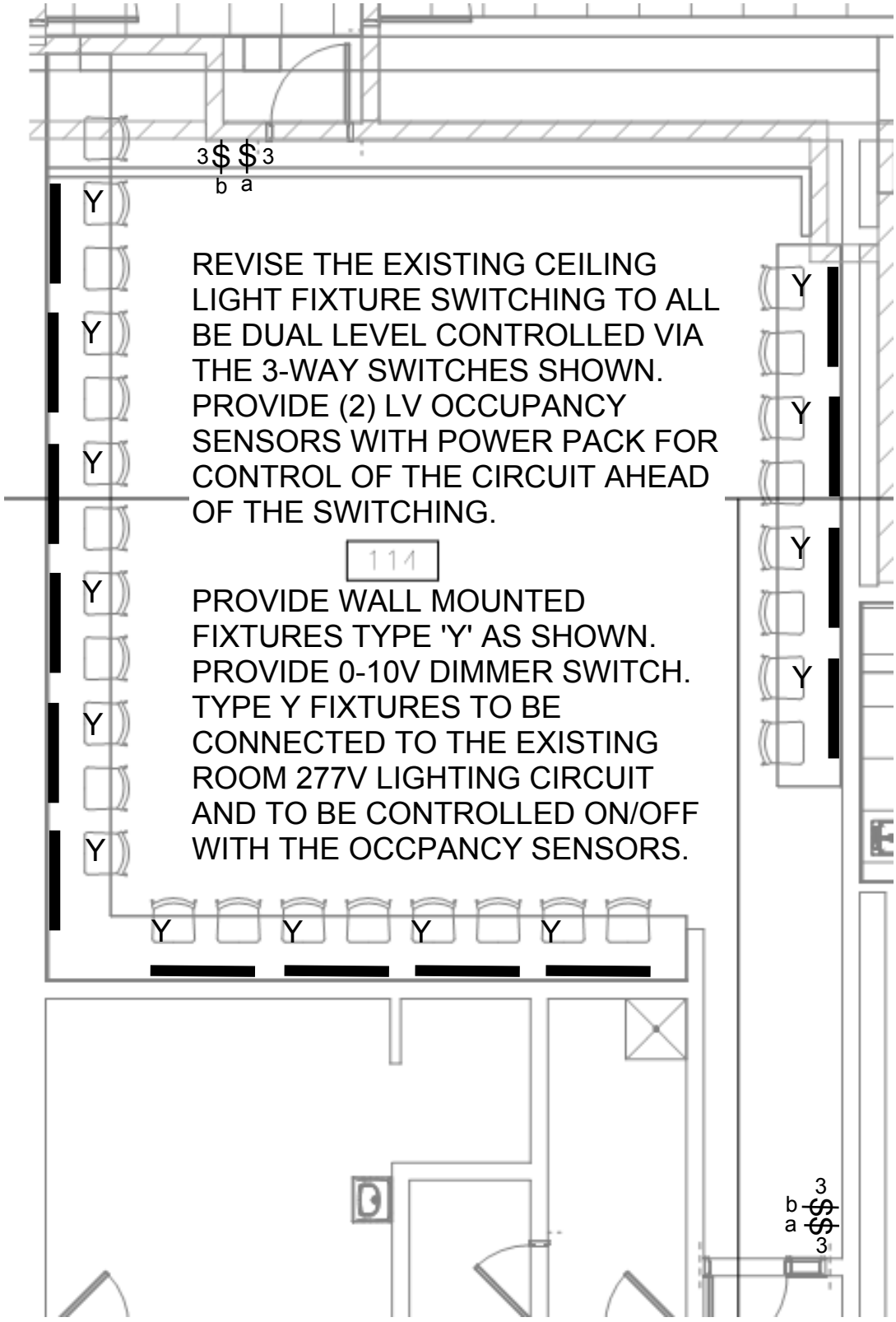
R1

E2.15



1 RM. 114 - LIGHTING PLAN

SCALE: 1/8" = 1'-0"

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R1

E2.15