



ADDENDUM

03

Lancaster Township Police Department
Renovations & Addition
Lancaster, PA

Date of Addendum: 17 September, 2024
Marotta/Main Architects Project No.: 24-LT-01

The original Project Manuals and Drawings dated 28 August, 2024 for the project noted above, are amended as noted in this Addendum No. 03.

Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Bid Form.

This Addendum consists of 2 Pages and all attachments listed.

CLARIFICATIONS

- 03.01 For the new overhead door EXOH-1 – this is a new door per the specification section 08 36 13 Sectional Doors, not a coiling type door as depicted in drawings.

VOLUME 1 – LEGAL SPECIFICATIONS

- 03.02 Refer to Specification Section INDEX, ADD 08 71 00 DOOR HARDWARE, ADDENDUM 03 15 pages, ADD 05 52 13 PIPE AND TUBE RAILING, ADDENDUM 03, 9 PAGES to the Index.

VOLUME 2 – TECHNICAL SPECIFICATIONS

- 03.03 Refer to Specification Section 05 52 13 PIPE AND TUBE RAILING, ADDENDUM 03, ADD this section to the technical specs.
- 03.04 Refer to Specification Section 08 71 00 DOOR HARDWARE, ADD this section to the technical specs.
- 03.05 Refer to Specifications Section 12 35 40 MANUFACTURED PLASTIC-LAMINATE-FACED CASEWORK, DELETE 1.7.B and DELETE 1.8.A. AWI and FCS certification not required.

END OF ADDENDUM 03

Respectfully Submitted,

Connie King, AIA, ALEP, GGB

Principal Architect
Marotta/Main Architects, Inc.

Attachments:

05 52 13 PIPE AND TUBE RAILING, ADDENDUM 03

08 71 00 DOOR HARDWARE, ADDENDUM 03

SECTION 05 52 13 - PIPE AND TUBE RAILINGS, ADDENDUM 03

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Steel pipe and tube railings.
 - 2. Aluminum railings.
- B. Related Requirements:
 - 1. Section 05 51 13 "Metal Pan Stairs" for steel tube railings associated with metal pan stairs.

1.3 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- C. Schedule installation so wall attachments are made only to completed walls. Do not support railings temporarily by any means that do not satisfy structural performance requirements.

1.4 ACTION SUBMITTALS

- A. Product Data: For the following:
 - 1. Manufacturer's product lines of mechanically connected railings.
 - 2. Railing brackets.
 - 3. Grout, anchoring cement, and paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each type of exposed finish required.
 - 1. Sections of each distinctly different linear railing member, including handrails, top rails, posts, and balusters.
 - 2. Fittings and brackets.
 - 3. Assembled Sample of railing system, made from full-size components, including top rail, post, handrail, and infill. Sample need not be full height.
 - a. Show method of connecting and finishing members at intersections.

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- D. Delegated-Design Submittal: For railings, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For testing agency.
- B. Welding certificates.
- C. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers certifying that shop primers are compatible with topcoats.
- D. Product Test Reports: For pipe and tube railings, for tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.
- E. Evaluation Reports: For post-installed anchors, from ICC-ES.

1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
 - 2. ASW D1.2/D1.2M, "Structural Welding Code – Aluminum."
- B. Product Options: Information on Drawings and in Specifications establishes requirements for system's aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods including structural analysis, preconstruction testing, field testing, and in-service performance.
 - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- C. Mock-ups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
 - 1. Build mockups for each form and finish of railing consisting of two posts, top rail, infill area, and anchorage system components that are full height and are not less than 24 inches (600 mm) in length.
- D. Pre-Installation Conference: Conduct conference at Project site.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

1.8 FIELD CONDITIONS

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

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PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Steel Pipe and Tube Railings:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Julius Blum & Co., Inc.
 - b. Pisor Industries, Inc.
 - c. Wagner, R & B, Inc.

B. Source Limitations: Obtain each type of railing from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design railings, including attachment to building construction.

B. Structural Performance: Railings, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Handrails and Top Rails of Guards:

- a. Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.
- b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
- c. Uniform and concentrated loads need not be assumed to act concurrently.

2. Infill of Guards:

- a. Concentrated load of 50 lbf (0.22 kN) applied horizontally on an area of 1 sq. ft. (0.093 sq. m).
- b. Infill load and other loads need not be assumed to act concurrently.

C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C, material surfaces).

2.3 METALS, GENERAL

A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.

B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.

1. Provide type of bracket with flange tapped for concealed anchorage to threaded hanger bolt predrilled hole for exposed bolt anchorage and that provides 1-1/2-inch (38-mm) clearance from inside face of handrail to finished wall surface.

2.4 STEEL AND IRON

A. Tubing: ASTM A 500 (cold formed).

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- B. Pipe: ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
 - 1. Provide galvanized finish for exterior installations and where indicated.
- C. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- D. Woven-Wire Mesh: Intermediate-crimp, square pattern, 2-inch (50-mm) woven-wire mesh, made from 0.135-inch (3.5 mm) nominal diameter wire complying with ASTM A 510 (ASTM A 510M).

2.5 ALUMINUM RAILINGS

- A. Source Limitations: Obtain each type of railing from single source from single manufacturer.
- B. Aluminum, General: Provide alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than the strength and durability properties of alloy and temper designated below for each aluminum form required.
- C. Tubing: ASTM B221 (ASTM B221M), Alloy 6063-T5/T52.
- D. Pipe: ASTM B429/B429M, Alloy 6063-T6.
 - 1. Provide Standard Weight (Schedule 40) pipe unless otherwise indicated.
- E. Drawn Seamless Tubing: ASTM B210/B210M, Alloy 6063-T832.
- F. Plate and Sheet: ASTM B209 (ASTM B209M), Alloy 6061-T6.
- G. Die and Hand Forgings: ASTM B247 (ASTM B247M), Alloy 6061-T6.
- H. Castings: ASTM B26/B26M, Alloy A356.0-T6.

2.6 FASTENERS

- A. General: Provide the following:
 - 1. Hot-Dip Galvanized Railings: Type 304 stainless-steel or hot-dip zinc-coated steel fasteners complying with ASTM A 153/A 153M or ASTM F 2329 for zinc coating.
 - 2. Stainless-Steel Components: Type 304 stainless-steel fasteners.
 - 3. Uncoated Steel Components: Plated-steel fasteners complying with ASTM B 633, Class Fe/Zn 25 for electrodeposited zinc coating where concealed; Type 304 stainless-steel fasteners where exposed.
 - 4. Dissimilar Metals: Type 304 stainless-steel fasteners.
- B. Fasteners for Anchoring Railings to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction indicated and capable of withstanding design loads.
- C. Fasteners for Interconnecting Railing Components:
 - 1. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless otherwise indicated.
- D. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors capable of sustaining, without failure, a load equal to 6 times the load imposed when installed in unit masonry and 4 times the load imposed when installed in concrete, as determined by testing according to ASTM E 488/E 488M, conducted by a qualified independent testing agency.

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1. Material for Interior Locations: Carbon-steel components zinc-plated to comply with ASTM B 633 or ASTM F 1941 (ASTM F 1941M), Class Fe/Zn 5, unless otherwise indicated.
 2. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy Group 1 (A1) stainless-steel bolts, ASTM F 593 (ASTM F 738M), and nuts, ASTM F 594 (ASTM F 836M).
- E. Provide concealed fasteners for interconnecting railing components and for attaching railings to other work unless otherwise indicated or (exposed fasteners are the standard fastening method for railings indicated).
1. Provide tamper-resistant square or hex socket flat-head machine screws for exposed fasteners unless otherwise indicated.
- F. Anchors, General: Anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.

2.7 MISCELLANEOUS MATERIALS

- A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
1. For aluminum railings, provide type and alloy as recommended by producer of metal to be welded and as required for color match, strength and compatibility in fabricated items.
- B. Low-Emitting Materials: Paints and coatings shall comply with the testing and product requirements of the California Department of Public Health's (formerly, the California Department of Health Services) "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- C. Etching Cleaner for Galvanized Metal: Complying with MPI#25.
- D. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- E. Shop Primers: Provide primers that comply with Section 09 91 13 "Exterior Painting," Section 09 91 23 "Interior Painting."
- F. Intermediate Coats and Topcoats: Provide products that comply with Section 09 91 13 "Exterior Painting," "Section 09 91 23 "Interior Painting."
- G. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.
- H. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- I. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.
1. Water-Resistant Product: At exterior locations and where indicated provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

2.8 FABRICATION

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.

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- B. Shop assemble railings to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.
- C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch (1 mm) unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form work true to line and level with accurate angles and surfaces.
- E. Fabricate connections that are exposed to weather in a manner that excludes water. Provide weep holes where water may accumulate.
- F. Cut, reinforce, drill, and tap as indicated to receive finish hardware, screws, and similar items.
- G. Connections: Fabricate railings with welded connections unless otherwise indicated.
- H. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove flux immediately.
 - 4. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
- I. Welded Connections for Aluminum Pipe: Fabricate railings to interconnect members with concealed internal welds that eliminate surface grinding, using manufacturer's standard system of sleeve and socket fittings.
- J. Form Changes in Direction as Follows:
 - 1. By bending or by inserting prefabricated elbow fittings.
 - 2. By flush bends or by inserting prefabricated flush-elbow fittings.
 - 3. By bending to smallest radius that will not result in distortion of railing member.
- K. For changes in direction made by bending, use jigs to produce uniform curvature for each repetitive configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- L. Close exposed ends of railing members with prefabricated end fittings.
- M. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Close ends of returns unless clearance between end of rail and wall is 1/4 inch (6 mm) or less.
- N. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.
 - 1. At brackets and fittings fastened to plaster or gypsum board partitions, provide crush-resistant fillers or other means to transfer loads through wall finishes to structural supports and prevent bracket or fitting rotation and crushing of substrate.
- O. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work. Fabricate anchorage devices capable of withstanding loads imposed by railings. Coordinate anchorage devices with supporting structure.
- P. Make up wire-rope assemblies in the shop to field-measured dimensions with fittings machine swaged. Minimize amount of turnbuckle take-up used for dimensional adjustment so maximum amount is available

for tensioning wire ropes. Tag wire-rope assemblies and fittings to identify installation locations and orientations for coordinated installation.

- Q. For railing posts set in concrete, provide steel sleeves not less than 6 inches (150 mm) long with inside dimensions not less than 1/2 inch (13 mm) greater than outside dimensions of post, with metal plate forming bottom closure.
- R. Toe Boards: Where indicated, provide toe boards at railings around openings and at edge of open-sided floors and platforms. Fabricate to dimensions and details indicated.

2.9 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipment.
- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. Provide exposed fasteners with finish matching appearance, including color and texture, of railings.

2.10 STEEL AND IRON FINISHES

- A. Galvanized Railings:
 - 1. Hot-dip galvanize steel railings, including hardware, after fabrication.
 - 2. Comply with ASTM A 123/A 123M for hot-dip galvanized railings.
 - 3. Comply with ASTM A 153/A 153M for hot-dip galvanized hardware.
 - 4. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.
 - 5. Fill vent and drain holes that are exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.
- B. For galvanized railings, provide hot-dip galvanized fittings, brackets, fasteners, sleeves, and other ferrous components.
- C. Preparing Galvanized Railings for Shop Priming: After galvanizing, thoroughly clean railings of grease, dirt, oil, flux, and other foreign matter, and treat with etching cleaner.
- D. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with requirements indicated below:
 - 1. Exterior Railings: SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
 - 2. Railings Indicated to Receive Zinc-Rich Primer: SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
 - 3. Railings Indicated to Receive Primers Specified in Section 099600 "High-Performance Coatings": SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
 - 4. Other Railings: SSPC-SP 3, "Power Tool Cleaning."
- E. Primer Application: Apply shop primer to prepared surfaces of railings unless otherwise indicated. Comply with requirements in SSPC-PA 1, "Shop, Field, and Maintenance Painting of Steel," for shop painting. Primer need not be applied to surfaces to be embedded in concrete or masonry.
 - 1. Shop prime uncoated railings with universal shop primer unless zinc-rich primer is indicated.

F. Field-Painted Finish

1. Color: As selected by Architect from manufacturer's full range.

G. High-Performance Coating: Apply epoxy intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.

1. Color: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine plaster and gypsum board assemblies, where reinforced to receive anchors, to verify that locations of concealed reinforcements are clearly marked for Installer. Locate reinforcements and mark locations if not already done.

3.2 INSTALLATION, GENERAL

- A. Fit exposed connections together to form tight, hairline joints.
- B. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
1. Do not weld, cut, or abrade surfaces of railing components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
 2. Set posts plumb within a tolerance of 1/16 inch in 3 feet (2 mm in 1 m).
 3. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet (6 mm in 3.5 m).
- C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.
1. Coat, with a heavy coat of bituminous paint, concealed surfaces of aluminum that are in contact with grout, concrete, masonry, wood, or dissimilar metals.
- D. Adjust railings before anchoring to ensure matching alignment at abutting joints.
- E. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

3.3 RAILING CONNECTIONS

- A. Welded Connections: Use fully welded joints for permanently connecting railing components. Comply with requirements for welded connections in "Fabrication" Article whether welding is performed in the shop or in the field.
- B. Expansion Joints: Install expansion joints at locations indicated but not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2 inches (50 mm) beyond joint on either side, fasten internal sleeve securely to one side, and locate joint within 6 inches (150 mm) of post.

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3.4 ANCHORING POSTS

- A. Use metal sleeves preset and anchored into concrete for installing posts. After posts are inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions.
- B. Cover anchorage joint with flange of same metal as post, welded to post after placing anchoring material.
- C. Anchor posts to metal surfaces with oval flanges, angle type, or floor type as required by conditions, connected to posts and to metal supporting members as follows:
 - 1. For stainless steel railings, weld flanges to post and bolt to metal supporting surfaces.

3.5 ATTACHING RAILINGS

- A. Anchor railing ends at walls with round flanges anchored to wall construction and welded to railing ends.
- B. Anchor railing ends to metal surfaces with flanges bolted to metal surfaces and welded to railing ends.
- C. Attach railings to wall with wall brackets, except where end flanges are used. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads.
- D. Secure wall brackets and railing end flanges to building construction as follows:
 - 1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
 - 2. For hollow masonry anchorage, use toggle bolts.
 - 3. For steel-framed partitions, use toggle bolts installed through flanges of steel framing or through concealed steel reinforcements.

3.6 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting to comply with SSPC-PA 1 requirements for touching up shop-painted surfaces.
 - 1. Apply by brush or spray to provide a minimum 2.0-mil (0.05-mm) dry film thickness.
- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas, and repair galvanizing to comply with ASTM A 780/A 780M.
- C. Clean aluminum and stainless steel by washing thoroughly with clean water and soap, rinsing with clean water, and wiping dry.

3.7 PROTECTION

- A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.

END OF SECTION 05 52 13

SECTION 08 71 00 - DOOR HARDWARE – ADDENDUM 03

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

- 1. Hardware for swinging Hollow Metal Door Openings.

B. Related Sections:

- 1. Section 01 25 13 – Product Substitution Procedures
- 2. Section 06 20 00 – Finish Carpentry
- 3. Section 08 11 13 – Hollow Metal Doors and Frames

1.3 REFERENCES

A. Use the following references to properly detail, schedule, furnish and install finish hardware items.

- 1. NFPA 80 – Standard for Fire Doors and Other Opening Protectives (2007)
- 2. DHI Installation Guide for Doors and Hardware (1984)
- 3. DHI Sequence and Format for the Hardware Schedule (1996)
- 4. ANSI/BHMA A156.4 – Door Controls – Closers (2013)
- 5. ANSI/BHMA A156.2 – Bored and preassembled Locks and Latches (2011)
- 6. ANSI/BHMA A156.13 – Mortise Locks and Latches Series 1000 (2012)
- 7. ANSI/BHMA A156.18 – Materials and Finishes (2012)

1.4 SUBMITTALS

A. Schedule:

- 1. Provide submittals in accordance with 01 33 00 – Submittal Procedures.
- 2. Provide hardware schedule in vertical format on 8-1/2-inch by 11-inch paper or electronic format. Conform to DHI publication Sequence and Format for Hardware Schedule using Architect's door numbers and hardware set numbers.
- 3. Provide elevation drawings for openings with electrical hardware and access control devices with each hardware schedule. Include illustration of opening, operational description, electrified hardware components, legend, approximate mounting location and size of enclosures, size and quantity of conductors, facility name and date.

- B. Product Data: Provide one set of manufacturer's catalog and technical data for each hardware item used, highlighting design, function, fasteners, accessories, and options to facilitate review with each hardware schedule submitted.

- C. Templates: Provide two sets of manufacturer's templating information for mortised and template hardware upon receipt of approved hardware schedule to the door and frame supplier(s). Include requirements for internal reinforcements required for surface mounted hardware.

D. Wiring Diagrams:

- 1. Three sets point-to-point diagrams specially developed for each opening that requires electrical hardware, with hardware delivery to jobsite. Reference elevation drawings submitted with hardware schedule using Architect's opening numbers.

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2. Three sets riser diagrams for openings requiring power supplies or access control. Include placement of power supplies, distance of wire runs from power supply, cable quantity and number and gauges of wires.
- E. Keying Schedule: Arrange meeting with Owner, Architect and finish hardware supplier to determine keying requirements immediately upon receipt of finish hardware schedule.

1.5 CLOSEOUT SUBMITTALS

- A. Furnish operations and maintenance manual in accordance with Section 01 78 28 – Operations and Maintenance Data and as follows:
 1. Furnish one copy of manual at date of Substantial Completion in a 2-1/2-inch thick binder labeled with project information, date and name and contact information for the hardware supplier.
 2. Include in manual:
 - a. Copy of approved hardware schedule, including door numbers and locations.
 - b. Copy of approved keying schedule.
 - c. Catalog data for each product.
 - d. As-installed "wiring diagrams" for each opening connected to power.
 - e. Parts list for locksets, exit devices, and door closers.
 - f. Installation templates and instructions.
 - g. Warranty information.
 - h. Name, address, and phone number of local representatives for each manufacturer.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Extra Materials:
 1. Screws and Fasteners: Two of each screw and fastener required for general maintenance of hinges, locks, closers, exit devices, and sealing systems.
 2. Deliver to Owner remaining finish hardware fasteners and special installation tools upon completion of Project.

1.7 QUALITY ASSURANCE

- A. Supplier:
 1. Furnish hardware from recognized supplier who has warehousing facility within 100 miles of project location, and who has actively supplied hardware for similar projects in the vicinity for a minimum of five years.
 2. Supplier shall employ an Architectural Hardware Consultant (AHC), as certified by Door and Hardware Institute, on staff full time to administer and supervise project.
- B. Installer: Install hardware using installers who have actively installed commercial door hardware for a minimum of five years, and are familiar with hardware installation of type required on this Project.
- C. Pre-Installation Meeting:
 1. Prior to installation of hardware, arrange for manufacturer's representatives of locksets, door closers, and exit devices to hold a jobsite meeting to instruct the installing personnel on the proper installation of their products.
 2. Send a letter of compliance, indicating when this meeting was held, and who was in attendance, to the Architect and Owner.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Delivery:

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1. Jointly check in hardware, upon delivery to jobsite, against approved hardware schedule with hardware supplier. Record shortage or damage and replace or repair as necessary.
2. Deliver hardware to be installed during fabrication of doors and frames, to manufacturer.

B. Storage:

1. Store hardware in a secure, dry, temperature controlled room on shelving to protect against loss, theft and damage.
2. Store items too long for shelving on pallet, off the floor.

C. Marking and Packaging:

1. Deliver hardware to jobsite in manufacturer's original packaging marked to correspond with approved hardware schedule with Architect's door numbers and hardware sets.
2. Mark all locksets, exit devices, cylinders, auxiliary hardware and key switches with keyset symbol.
3. Replace any wet or damaged packaging with new.

1.9 WARRANTY

A. Furnish warranties in accordance with Section 01 78 36 – Warranties. Extended or limited warranties shall be as follows:

1. Furnish minimum ten year factory warranty on door closers, against defects in material and workmanship, from date of substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. The following manufacturers' were used in the hardware sets.

1. Butt Hinges	Stanley	ST
2. Locks and Latchsets	Best	BE
3. Cylinders and Cores	Best	BE
4. Surface Closers	Best	BE
5. Exit Devices	PHI	PR
6. Overhead Stop/Holders	ABH	AB
7. Door Pulls	Trimco	TR
8. Flushbolts	Trimco	TR
9. Protection Plates	Trimco	TR
10. Wall/Floor Stops	Trimco	TR
11. Thresholds and Gasketing	National Guard	NA
12. Silencers	Trimco	TR

B. Submit requests for substitution in accordance with Section 01 25 13 Product Substitution requirements and as follows:

1. Provide catalog data with product information highlighted or bubbled to facilitate review. Product must meet or exceed level or design intended and/or function established by specified products.

2.2 MATERIALS

A. Screws and Fasteners:

1. Provide manufacturer's recommended fasteners of proper type, material and finish.
2. Provide self-tapping screws for sweeps and stop applied weatherstripping.
3. Utilize through-bolts for the attachment of door closers and exit devices on non-reinforced doors only. Finish: match door face.
4. Exposed screw heads: phillips type.

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C. Hinges:

1. Type:

- a. Five-knuckle, full mortise, ball bearing.
- b. Furnish heavy weight hinges on heavy doors and doors expected to have high frequency use.

2. Quantity:

- a. One pair of hinges for all doors up to 5 feet high. Furnish one additional hinge for every 2'-6" in height or fraction thereof.

3. Size:

- a. For 1-3/4-inch thick doors up to 3 feet wide: 4 1/2-inches high
- b. For 1-3/4-inch thick doors over 3 feet wide: 5-inches high
- c. For all doors over 1-3/4-inches thick: 5-inches high
- d. Size in width shall minimally clear door trim.

4. Application:

- a. NRP (non-removable pin) at exterior doors and reverse bevel doors with locking hardware.
- b. Electric hinges: have sufficient number of concealed wires to accommodate electrical function of hardware. Furnish junction box and mortar shield.

5. Acceptable manufacturers and types:

Type	Stanley	Hager
Standard Weight	FBF179	BB1279
Heavy Weight	FBF168	BB1168
Heavy Weight	FBF199	BB1199

D. Door Bolts:

1. Flushbolts:

- a. Automatic Flushbolts: One pair at fire rated doors, and occupied rooms required for egress.
- b. Acceptable manufacturers and types:

Bolt/Door Type	Trimco	Burns	ABH
Automatic Metal	3810	7842	1860

E. Locksets:

1. Cylindrical Locks:

- a. Conform to ANSI/BHMA A156.2, Series 4000 Operational Grade 1.
- b. Latchbolt with appropriate throw for fire rated doors and pairs of doors in accordance with manufacturers listing.
- c. Lock functions as specified in hardware schedule.
- d. Lever design: 15D
- e. Backset: 2-3/4-inch
- f. Strike single door: ANSI 4-7/8-inch with proper lip length to minimally clear trim.
- g. Strike pair of doors: flat lip strike sized to fit flush with face of door.
- h. Furnish wrought strike box.
- i. Acceptable manufacturers and types:

Best
9K Series

2. Mortise Locks:

- a. Conform to ANSI/BHMA A156.13, Series 1000 Operational Grade 1.
- b. Latchbolt with appropriate throw for fire rated doors and pairs of doors in accordance with manufacturers listing.
- c. Lock functions as specified in hardware schedule.
- d. Electrical functions as specified in hardware schedule, 24VDC.
- e. Lever design: 15H
- f. Backset: 2-3/4-inch
- g. Strike single door: ANSI 4-7/8-inch with proper lip length to minimally clear trim.
- h. Strike pair of doors: flat lip strike sized to fit flush with face of door.
- i. Furnish wrought strike box.
- j. Acceptable manufacturers and types:

Best
45H Series

3. Cylinders:

- a. Provide mortise and rim cylinders and cores from same manufacturer as locksets, for all locksets, exit devices, cylinder dogging, key switches and auxiliary hardware.
- b. Appropriate cam and blocking rings for proper installation

F. Keys & Keying

1. Cylinders: 7-pin, interchangeable core and keyed into a BEST factory registered Masterkey System or equal.
2. Provide construction cores and keys during construction period. Construction control and operating keys and cores are not part of permanent keying system or furnished on same keyway (or key section) as permanent keying system.
3. Permanent Keys and Cores: Prepare permanent cores and keys in accordance with keying schedule. Provide Masterkeys and other Security Keys.
4. Furnish keys in the following quantities:
 - a. 4 each Masterkeys per new Masterkey set.
 - b. 2 each Change keys each keyed core.
 - c. 6 each Construction Masterkeys.
 - d. 2 each Construction Control keys.
 - e. 2 each Control keys.
5. Install permanent cores in locksets.
6. Return construction cores to Hardware Supplier.

G. Exit Devices:

1. UL-listed for fire at fire door assemblies, and UL listed for panic at non-rated door assemblies.
2. Size exit devices to proper door width and height.
3. Stainless Steel deadlocking 3/4 -inch throw latch bolt.
4. LBR (less bottom rod) where scheduled to eliminate use of floor mounted strikes.
5. Cylinders for exit devices with cylinder dogging or locking trim.
6. Electrical functions as scheduled in sets. Provide power supply and power transfer from same manufacturer as electrified exit device.
7. Strike: as recommended by manufacturer.
8. Lever design: To match lockset trim.
9. Acceptable manufacturers and types:

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Precision	Von Duprin
Apex 2000 Series	98 Series

H. Surface Door Closers:

1. Conform to ANSI/BHMA A156.4 Grade 1.
2. Heavy duty high silicon aluminum alloy or cast iron body closers.
3. Furnish manufacturers recommended size, arms and configuration for door and frame application required.
4. Furnish brackets, spacers, support shoes, and plates for complete and proper installation.
5. Acceptable manufacturers and types:

Best	LCN
EHD9000 Series	4040XP Series

I. Overhead Door Stop:

1. Provide overhead stop or overhead stop/holder for interior doors as specified. Provide overhead stop for interior doors and at any door that swings more than 140 degrees before striking a wall, open against equipment, casework, sidelights, and/or where conditions do not allow a wall stop or a floor stop presents a tripping hazard.
2. Where overhead holders are specified provide friction type at doors without a closer and positive type at doors with a closer.
3. Acceptable manufacturers:

ABH	Glynn Johnson
9020 Series	90 Series
1020 Series	100 Series

J. Door Trim:

1. Provide push plates 6 inches wide x 16 inches high x 0.050 inch thick and beveled 4 edges. Where width of door stile prevents use of 6 inches wide plate, adjust width to fit.
2. Provide pull plates 4 inches wide x 16 inches high x 0.050 inch thick, beveled 4 edges, and prepped for pull. Where width of door stile prevents use of 4 inches wide plate, adjust width to fit.
3. Acceptable manufacturers:

Type	Trimco	Burns	Rockwood
Pull Plate	1014-3B	5421B	126 x 70C
Push Plate	1001-9	56	75E

K. Protection Plates:

1. Where bottom rail allows, furnish 10-inch high kick plates and 10-inch high mop plates.
2. Material: 0.050-inch thick stainless steel plates with four beveled edges.
3. Countersink screw heads at wood doors.
4. Width: 2-inch less door width on stop (push) side and 1-inch less door width on face (pull) side.
5. Acceptable manufacturer and types:

Trimco	Burns	Rockwood
K0050	KP	K1050

L. Door Stops:

1. Convex, cast, wall stops.
2. Furnish fastener suitable for wall condition.
3. Provide wedge type stop for doors with push/pulls.
4. Where wall stops are inappropriate provide universal dome type floor stops.
5. Acceptable manufacturers and types:

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Type	Trimco	Burns	Rockwood
Wall Stop	1270CX	560	400
Wedge Stop	1298	526	487
Floor Stop	1211	521	441H

M. Electric Strikes:

1. Acceptable manufacturer's and type:

Best Access System	RCI	
BES-F2164	F2164	

N. Door Position Switch:

1. Provide magnetic switch, concealed three-quarter inch round, Single Pole Double Throw (SPDT) .250mA@ 30VDC for door status monitoring.
2. Acceptable manufacturer's and type:

Dorma	Sentrol	Securitron
MC-4	1076C	DPS

O. Thresholds and Gasketing:

1. Thresholds:
 - a. Returned closed ends at openings where threshold extends beyond frame face.
 - b. Bumper threshold with silicone insert where scheduled.
 - c. Acceptable manufacturers and types:

National Guard	Zero	Reese
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2. Gasketing:
 - a. Rigid jamb weatherstrip with replaceable neoprene insert.
 - b. Include self-adhesive two-sided tape in addition to manufacturer's standard fastener.
 - c. Meeting-stile gasketing required at exterior pairs of doors and doors in smoke partitions.
 - d. TPE adhesive fire/smoke gasketing at fire and smoke "S" labeled openings
 - e. Door sweep with neoprene insert for exterior out-swing doors.
 - f. Acceptable manufacturers:

National Guard	Zero	Reese
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P. Silencers:

1. Grey rubber silencers with injector tool.
2. Three silencers at single doors and two silencers at pairs.
3. Acceptable manufacturers and types:

Trimco	Rockwood	Burns
1229A	608	500

2.3 KEY CONTROL

- A. Key cabinet: wall mounted with one hook for each lock or cylinder plus twenty extra hooks.
 1. One non-removable security tag and one snap-on link duplicate tag per hook.
 2. Furnish tools, instructions sheets and accessories required to complete installation.
 3. Owner/Owner's representative will place keys in cabinet and complete index card furnished with key system.

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4. Acceptable manufacturers:

Lund	Telkee	MMF
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2.4 FINISHES

A. Conform to ANSI/BHMA A156.18.

1. Butt Hinges	630	Stainless Steel
2. Locks and Latches	626	Satin Chrome
3. Exit Devices	630	Satin Stainless Steel
4. Door Closers	689	Spray Painted Aluminum
5. Pull Plates	630	Satin Stainless Steel
6. Protection Plates	630	Satin Stainless Steel
7. Stops and Holders	630	Satin Stainless Steel
8. Thresholds/Gasket	AL	Anodized Mil Finished Aluminum

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify doors and frames are plumb, square, level and true and free from defects that would prevent proper installation of finish hardware.
- B. Verify power is run to doors requiring electrified hardware.
- C. Wash down masonry walls and complete painting and staining of doors and frames prior to installation of hardware.
- D. Complete finish flooring at doorways.
- E. Correct conditions that inhibit a proper installation before continuing with work.

3.2 INSTALLATION

- A. Install hardware in compliance with the DHI publication, Installation Guide for Doors and Hardware.
- B. Drill and countersink items not factory prepared for fasteners.
- C. Mount closers on room-side of corridor doors, inside of exterior doors, and stair-side of stairway doors. Use necessary arms, brackets, spacers and plates to accommodate auxiliary hardware and special applications.
- D. Install fire door assemblies to maintain clearances at door edge to frame and meeting edge of pairs of doors in compliance with NFPA 80, providing 1/8-inch clearance at the hinge edge, lock edge, head and between pairs. Provide maximum 3/4-inch undercut at door bottom. Where panic thresholds are used, undercut door to allow 1/8-inch clearance between door and threshold.
- E. Trim, cut, and notch thresholds and saddles neatly to minimally fit the profile of the door frame. Set thresholds in bed of mastic sealant, forming tight seal between threshold and surface to which set.
- F. Use only fasteners furnished by manufacturer for installation as recommended by manufacturer.
- G. Install blocking material for all wall mounted door stops at height appropriate to contact door trim.
- H. Install weather-strip prior to installation of door closers and exit devices. Do not cut or notch weather-strip.
- I. Locate electric hinges at second hinge from bottom of frame.
- J. Termination of wiring: Ensure wiring is in place and is connected for proper operation of hardware.

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3.3 FIELD QUALITY CONTROL

- A. Verify doors open and close smoothly without rubbing or catching and have positive latching where scheduled. Verify fire rated doors are installed with clearances in compliance with NFPA 80.
- B. Test electrified hold open devices tied into fire alarm system to confirm release upon activation of fire alarm. Test electrified hardware and access control to verify systems operate as directed in mode of operation. Where hardware is found to be inoperable, repair or replace with new.

3.4 ADJUSTING AND CLEANING

- A. Upon substantial completion, make final adjustments to door closers and other items of hardware after balance of heating and ventilating equipment to ensure doors close and latch properly.
- B. Clean and polish all exposed hardware surfaces in accordance with manufacturer's recommended procedures.
- C. Clean or repair pencil or tool marks from adjacent surfaces damaged or soiled by work of this Section.
- D. Recycle cardboard boxes and paper products used in packaging and transport of finish hardware.

3.5 PROTECTION

- A. Remove hardware prior to painting or finishing door and frame. Wrap or mask exposed hardware that cannot be removed until date of substantial completion to avoid exposure to paint, solvents, and abuse.
- B. Repair or replace hardware damaged during construction at least two weeks prior to date of substantial completion.

3.6 SCHEDULES

- A. Should items of hardware not definitely specified be required for completion of the Work, furnish such items of type and quality comparable to adjacent hardware and appropriate for service required.
- B. Where items of hardware aren't definitely or correctly specified, are required for completion of the Work, a written statement of such omission, error, or other discrepancy to Architect, prior to date specified for receipt of bids for clarification by addendum; or, furnish such items in the type and quality established by this specification, and appropriate to the service intended.

Manufacturer List

Code	Name
AB	ABH Manufacturing Inc.
BE	Best Access Systems
BY	By Related Section
NA	National Guard
PR	BEST Precision Exit Devices
ST	BEST Hinges and Sliding
TR	Trimco

Finish List

Code	Description
26D	Satin Chrome
626	Satin Chromium Plated
630	Satin Stainless Steel

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689	Aluminum Painted
AL	Aluminum
GREY	Grey
US32D	Stainless Steel, Dull

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Hardware Sets

Set #01 – Ext Sally Port – Card Access DE

Doors: 211

1	Continuous Hinge	662HD UL EPT PREP	AL	ST
1	Exit Device	DE E2103 x 4908A FSE	626	PR
1	Rim Cylinder	12E-72 PATD	626	BE
1	Mortise Cylinder	1E-74 PATD	626	BE
1	Closer	EHD9016 SDS	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Power Transfer	EPT-5		PR
1	Door Position Switch	DPS BY OWNER'S SECURITY VENDOR		BY
2	Card Reader	CARD READER BY SECURITY VENDOR		BY
1	Wiring Diagram	WIRING DIAGRAM FURNISHED BY HWDE. SUPPLIER		BY
1	Power Supply	PS161-6		PR
1	Drip Cap	16 A - 4" ODW		NA
1	Gasketing	700 NA @ Head & Jambs		NA
1	Door Sweep	1015 V		NA
1	Saddle Threshold	896N 1/4-20 SSMS/EA SIA	AL	NA

NOTE: Operation: Door normally closed and locked. Presentation of valid credential to card reader from either side allows authorized entry. Mechanical key override. All wiring and conduit by electrical contractor. Delayed Egress: Depressing exit device touchpad for longer than nuisance period starts a 15 second alarmed delay. After 15 seconds, exit device releases allowing egress. Once alarm has been initiated reset is done by mechanical key at the exit device.

Upon loss of power event or building fire alarm system activation door will remain closed and locked and immediate egress is allowed.

Wiring from Power Supply to Exit Device by EC.

Coordinate with electrical, fire alarm, and security.

Set #02 - Ext Entry – Card Access

Doors: 100

1	Continuous Hinge	662HD UL EPT PREP"	AL	ST
1	Continuous Hinge	662HD UL "	AL	ST
1	Exit Device	2801 LD	630	PR
1	Exit Device	C MLR 2803 X 4903A LD	630	PR
1	Rim Cylinder	12E-72 PATD	626	BE
2	Closer	EHD9016 SDS	AL	BE
2	Kick Plate	K0050 10" x 1" LDW B4E-Heavy CSK	630	TR
1	Power Transfer	EPT-12C		PR
1	Card Reader	CARD READER BY SECURITY VENDOR		BY
1	Wiring Diagram	WIRING DIAGRAM FURNISHED BY HWDE. SUPPLIER		BY
1	Harness	WH-6E		ST
1	Harness	WH-192P		ST
1	Harness	WH-XXP (Length as Req'd)		ST
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
2	Door Position Switch	DPS BY OWNER'S SECURITY VENDOR		BY
1	Request To Exit Switch	RTE BY OWNER'S SECURITY VENDOR AS REQD		BY
1	Power Transfer	EPT-12C	630	PR
1	Drip Cap	16 A - 4" ODW		NA
1	Gasketing	700 NA @ Head & Jambs		NA
2	Door Sweep	1015 V		NA
1	Saddle Threshold	896N 1/4-20 SSMS/EA SIA	AL	NA
1	Meeting Stile Seals	9605A SET	AL	NA

NOTE: Operation: Open Hours: Active Leaf scheduled to be unlocked during stated hours. Locked Hours: Door closed and locked. Presentation of valid credential to card reader allows authorized entry through active leaf. Mechanical key override. Egress always allowed. All wiring and conduit by electrical contractor.

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Coordinate wiring and installation with EC / GC / Security contractor. In the event of power loss door remains locked and latched.

Set #03 – Exterior – Card Access

Doors: 200

1	Continuous Hinge	662HD UL	AL	ST
1	Exit Device	2103 LD x 4903A	630	PR
1	Rim Cylinder	12E-72 PATD	626	BE
1	Electric Strike	0162LM	630	RC
1	Closer	EHD9016 SDS	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Card Reader	CARD READER BY SECURITY VENDOR		BY
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
1	Door Position Switch	DPS BY OWNER'S SECURITY VENDOR		BY
1	Request To Exit Switch	RTE BY OWNER'S SECURITY VENDOR AS REQD		BY
1	Wiring Diagram	WIRING DIAGRAM FURNISHED BY HWDE. SUPPLIER		BY
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
1	Drip Cap	16 A - 4" ODW		NA
1	Gasketing	700 NA @ Head & Jambs		NA
1	Door Sweep	1015 V		NA
1	Saddle Threshold	896N 1/4-20 SSMS/EA SIA	AL	NA

NOTE: Operation: Open Hours: Door scheduled to be unlocked during stated hours. Locked Hours: Door closed and locked. Presentation of valid credential to card reader allows authorized entry. Mechanical key override. Egress always allowed. All wiring and conduit by electrical contractor. Coordinate wiring and installation with EC / GC / Security contractor. In the event of power loss door remains locked and latched.

Set #04 - Server, Secure Evidence, Patrol – Card Access

Doors: 101, 104, 212

3	Butt Hinge	FBB179 4.5" x 4.5" NRP	26D	ST
1	Storeroom Lockset	9K3-7D15D STD S3	626	BE
1	Closer	EHD9106 SPA	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Wall Bumper	1270CX	626	TR
1	Electric Strike	BES-F2164 x F2LM		BE
3	Silencer	1229A	GREY	TR
1	Card Reader	CARD READER BY SECURITY VENDOR		BY
1	Request To Exit Switch	RTE BY OWNER'S SECURITY VENDOR AS REQD		BY
1	Wiring Diagram	WIRING DIAGRAM FURNISHED BY HWDE. SUPPLIER		BY
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
1	Door Position Switch	DPS BY OWNER'S SECURITY VENDOR		BY

NOTE: Operation: Door normally closed and locked. Presentation of valid credential to card reader allows authorized entry. Mechanical key override. Free egress at all times. All wiring and conduit by electrical contractor. Coordinate wiring and installation with EC / GC / Security contractor. In the event of power loss door remains locked and latched.

Set #05 – Toilet, Womens Locker Rm

Doors: 109, 213, 216

3	Butt Hinge	FBB179 4.5" x 4.5"	26D	ST
1	Privacy Set	45H-OLT15H VIB	626	BE
1	Closer	EHD9016 AF90 (REG MOUNT)	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Mop Plate	KM050 10" x 1" LDW B4E-Heavy CSK	630	TR
1	Wall Bumper	1270CX	626	TR
1	Gasketing	2525 B @ Head & Jambs		NA

Set #06 - Shower

Doors: 112

3	Butt Hinge	FBB191 4.5" x 4.5"	32D	ST
1	Privacy Set	45H-OLT15H VIB	630	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR

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1	Mop Plate	KM050 10" x 1" LDW B4E-Heavy CSK	630	TR
1	Wall Bumper	1270CX	626	TR
1	Gasketing	5020C @ Head & Jambs		NA
Set #07 - Conference				
Doors: 205				
3	Butt Hinge	FB179 4.5" x 4.5"	26D	ST
1	Passage Set	9K3-0N15D S3	626	BE
1	Overhead Stop	9020 Series x AJB (Pull Side)	US32D	AB
1	Gasketing	5020C @ Head & Jambs		NA
Set #08 - Custodial				
Doors: 215				
3	Butt Hinge	FB179 4.5" x 4.5" NRP	26D	ST
1	Classroom Lockset	9K3-7R15D STD S3	626	BE
1	Closer	EHD9016 AF90P (PA MOUNT)	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Wall Bumper	1270CX	626	TR
3	Silencer	1229A	GREY	TR
Set #09 - Office				
Doors: 204, 208, 214				
3	Butt Hinge	FB179 4.5" x 4.5"	26D	ST
1	Office Lockset	9K3-7AB15D STD S3	626	BE
1	Wall Bumper	1270CV	626	TR
1	Gasketing	5020C @ Head & Jambs		NA
Set #10 - Office				
Doors: 202				
3	Butt Hinge	FB179 4.5" x 4.5"	26D	ST
1	Office Lockset	9K3-7AB15D STD S3	626	BE
1	Overhead Stop	9020 Series x AJB (Pull Side)	630	AB
1	Gasketing	5020C @ Head & Jambs		NA
Set #11 – Sec Drug Evidence, Armory				
Doors: 102, 108				
3	Butt Hinge	FB179 4.5" x 4.5"	26D	ST
1	Storeroom Lockset	9K3-7D15D STD S3	626	BE
1	Closer	EHD9016 AF90 (REG MOUNT)	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Wall Bumper	1270CX	626	TR
3	Silencer	1229A	GREY	TR
Set #12 – Records, Mechanical				
Doors: 105, 106				
3	Butt Hinge	FB179 4.5" x 4.5 NRP"	26D	ST
1	Storeroom Lockset	9K3-7D15D STD S3	626	BE
1	Closer	EHD9016 SDS	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
3	Silencer	1229A	GREY	TR
SET #13 – Mens Locker Room				
Doors: 111				
3	Hinges	FB179 4 1/2 X 4 1/2	US26D	ST
1	Push Plate	1001-9	630	TR
1	Pull Plate	1014-3B	630	TR
1	Closer	EHD9016 IS	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E CSK	630	TR
1	Mop Plate	KM050 10" x 1" LDW B4E-Heavy CSK	630	TR
3	Door Silencers	1229A	GREY	TR

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Set #14 – Patrol

Doors: 206

3	Butt Hinge	FBB179 4.5" x 4.5"	26D	ST
1	Passage Set	9K3-0N15D S3	626	BE
1	Closer	EHD9016 AF90 (REG MOUNT)	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E CSK	630	TR
1	Wall Bumper	1270CX	626	TR
1	Gasketing	5020C @ Head & Jambs		NA

Set #15 – Stair

Doors: A-ST1

3	Butt Hinge	FBB179 4.5" x 4.5"	26D	ST
1	Exit Device	2114 x 4914A	630	PR
1	Closer	EHD9016 SDS	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Gasketing	5020C @ Head & Jambs		NA

Set #16 –Entry Vest, Booking - Card Access

Doors: 200

3	Butt Hinge	FBB168 4.5" x 4.5" NRP	26D	ST
1	Exit Device	2103 LD x 4903A	630	PR
1	Rim Cylinder	12E-72 PATD	626	BE
1	Electric Strike	0162LM	630	RC
1	Closer	EHD9016 SPA	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK	630	TR
1	Card Reader	CARD READER BY SECURITY VENDOR		BY
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
1	Door Position Switch	DPS BY OWNER'S SECURITY VENDOR		BY
1	Request To Exit Switch	RTE BY OWNER'S SECURITY VENDOR AS REQD		BY
1	Wiring Diagram	WIRING DIAGRAM FURNISHED BY HWDE. SUPPLIER		BY
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
1	Wall Bumper	1270CX	626	TR
1	Gasketing	5020C @ Head & Jambs		NA

NOTE: Operation: Door closed and locked. Presentation of valid credential (or Remote Release @ Door 201) to card reader allows authorized entry. Mechanical key override. Egress always allowed. All wiring and conduit by electrical contractor. Coordinate wiring and installation with EC / GC / Security contractor. In the event of power loss door remains locked and latched.

Set #17 –Sallyport - Card Access

Doors: 200

3	Butt Hinge	FBB168 4.5" x 4.5" NRP TORX	26D	ST
1	Exit Device	2103 LD x 4903A SEC	630	PR
1	Rim Cylinder	12E-72 PATD	626	BE
1	Electric Strike	0162LM SEC	630	RC
1	Closer	EHD9016 SDS TX90	AL	BE
1	Kick Plate	K0050 10" x 2" LDW B4E-Heavy CSK TORX	630	TR
1	Card Reader	CARD READER BY SECURITY VENDOR		BY
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
1	Door Position Switch	DPS BY OWNER'S SECURITY VENDOR		BY
1	Request To Exit Switch	RTE BY OWNER'S SECURITY VENDOR AS REQD		BY
1	Wiring Diagram	WIRING DIAGRAM FURNISHED BY HWDE. SUPPLIER		BY
1	Power Supply	POWER SUPPLY BY SECURITY VENDOR		BY
1	Gasketing	ANTI-LIG 5050C @ Head & Jambs		NA
1	Threshold	513 1/4-20 SSMS/EA SIA SPANNER		NA
1	Door Sweep	C607A		NA

NOTE: Operation: Door closed and locked. Presentation of valid credential to card reader allows authorized entry. Mechanical key override. Egress always allowed. All wiring and conduit by electrical contractor. Coordinate wiring and installation with EC / GC / Security contractor. In the event of power loss door remains locked and latched.

24-LT-01 LANCASTER TOWNSHIP POLICE DEPARTMENT ADDITIONS & RENOVATIONS

Set #18 - Overhead Door - Card Access

Doors:

1	Cylinder	12E / 1E PATD as Req'd	626	BE
1	Card Access + Remote Release			

Set #19 – Juvenile Holding (cannot unlock from inside by prisoner, under constant supervision)

Doors: 209

3	Butt Hinge	CB179 4.5" x 4.5" NRP	26D	ST
1	Storeroom Lockset	9K3-7D15D STD S3 SH	626	BE
	NOTE: Key Side Is Room Side			
1	Closer	EHD9016 SDS TX90	AL	BE
1	Gasketing	ANTI-LIG 5050C @ Head & Jambs		NA

Set #20- Attic Stock

Doors: MISC

1	Privacy Set	45H-0LT15H VIB	626	BE
1	Storeroom Lockset	9K3-7D15D STD S3	626	BE
2	Office Lockset	9K3-7AB15D STD S3	626	BE
1	Exit Device	2103 X 4903A LD	630	PR
1	Exit Device	2201 LBR LD	630	PR
2	Electric Strike	BES-F2164 x F2LM		BE
1	Closer	EHD9016 SDS	AL	BE
1	Closer	EHD9016 AF90	AL	BE