



Facilities – Prop A Bond Programs
San Francisco Unified School District
135 Van Ness Avenue, San Francisco, CA 94102

DESCRIPTION OF WORK FOR
INFORMAL BID PROPOSAL

DATE: September 7, 2017

RE: Interior Doors Retrofit for the following location(s):
Visitation Valley Middle School, 450 Raymond Avenue, San Francisco, CA 94134

SCOPE OF WORK:

The contractor shall furnish labor and material to retrofit two (2) interior doors:

1. Door C193 – Reverse opening/closing direction of the door of current installation. Remove and re-install all existing hardware, i.e. hinges, locks, latches & cylinders, closers and strikes or provide new material if necessary so the door shall swing open into the corridor and patch existing holes. The panic hardware shall be on the auditorium side. The operation of the door shall be similar to Door C191A
2. Door 112A – Provide new lockset with 10 keys which are keyed to the District keying schedule. The lockset shall be Schlage, Vandal Storeroom Lock, ND96PD RHO.

as described in the attached LCA Architects, Drawing A2.01 and Specification Section 08710-5 to 12.

Contractors License Classification: In accordance with the provisions of California Public Contract Code § 3300, the District requires that Bidders possess the following classification(s) of California Contractors License at the time that the Bid Proposals are opened: **Class B, General Building Contractor**. Any Bidder not so duly and properly licensed shall be subject to all penalties imposed by law.

ADDITIONAL NOTES:

- (1) All equipment and clean-up required by contractor.
- (2) A work plan and schedule must be presented after selection. Dates and times for work must be coordinated and approved with SFUSD Project Manager or Construction Manager.
- (3) Prevailing wages are required on all SFUSD projects and are required at the request of the SFUSD.

PRE-PROPOSAL MEETING DATE:

Monday, September 11, 2017 @ 2:30 pm. in front of main entrance of Visitation Valley Middle School, 450 Raymond Avenue, San Francisco, CA 94134

DATE PROPOSAL DUE:

Wednesday, September 13, 2017 @ 1:00 pm. Proposals can be received via hand, email, or fax.

SCHEDULE OF WORK:

If the proposal is accepted and approved by the District, the contractor is expected to start the work on Thursday, September 14, 2017 and complete the work by Friday, September 15, 2017.

CONTACT:

William Chow, SFUSD Senior Project Manager, e-mail: choww@sfusd.edu, P (415) 241-6152 ext. 1555, F (415) 241-6148
Facilities - Proposition A – Bond Programs
135 Van Ness Avenue, Room 207A, San Francisco, CA 94102

- ~~B. Attendance: Architect, Construction Manager, Contractor, Security Contractor, Hardware Supplier, Installer, Key District Personnel, and Project Inspector.~~
- ~~C. Agenda: Review hardware schedule, products, installation procedures and coordination required with related work. Review District's keying standards.~~

PART 2 - PRODUCTS

2.01 MANUFACTURERS

<u>Item</u>	<u>Manufacturer</u>	<u>Acceptable Substitutes</u>
A. Hinges	Ives	Hager, Stanley, McKinney
B. Locks, Latches & Cylinders	Schlage	None, matches existing
C. Exit Devices	Von Duprin	None, matches existing
D. Closers	LCN	None, matches existing
E. Push, Pulls & Protection Plates	Ives	Trimco, BBW, Hager
F. Flush Bolts	Ives	Trimco, BBW, Hager
G. Dust Proof Strikes	Ives	Trimco, BBW, Hager
H. Coordinators	Ives	Trimco, BBW, Hager
I. Stops	Ives	Trimco, BBW, Hager
J. Overhead Stops	Glynn-Johnson	Or Approved Equal
K. Thresholds	National Guard	Pemko, Reese
L. Seals & Bottoms	National Guard	Pemko, Reese

2.02 MATERIALS

- A. Hinges: Exterior out-swinging door butts shall be non-ferrous material and shall have stainless steel hinge pins. All doors to have non-rising pins.
 - 1. Hinges shall be sized in accordance with the following:
 - a. Height:
 - 1) Doors up to 41" wide: 4-1/2" inches.
 - 2) Doors 42" to 48" wide: 5 inches.
 - b. Width: Sufficient to clear frame and trim when door swings 180 degrees.
 - c. Number of Hinges: Furnish 3 hinges per leaf to 7'-5" in height. Add one for each additional 2 feet in height.
 - 2. Furnish non-removable pins (NRP) at all exterior out-swing doors and interior key lock doors with reverse bevels.

- B. Floor Closers: Shall be equipped with compression springs, cam and roller operating mechanism and a one piece spindle-cam for maximum operating performance and longevity.
- C. Pivots: High strength forgings and castings with precision bearings for smooth operation. Positive locking vertical adjustment mechanism to allow installer to precisely position the door and balance the load.
- D. Continuous Hinges: As manufactured by Ives, an Allegion Company. UL rated as required.
- E. Heavy Duty Cylindrical Locks and Latches: Schlage "ND" Series as scheduled with "Rhodes" design, fastened with through-bolts and threaded chassis hubs.
 - 1. Locksets to comply with ANSI A156.2, Series 4000, Grade 1; tested to exceed 3,000,000 cycles. Locksets shall meet ANSI A117.1, Accessible Code.
 - 2. Chassis: One piece modular assembly and multi-functional allowing function interchange without disassembly of lockset.
 - 3. Spindle shall be deep-draw manufactured not stamped. Spindle and spring cage to be one-piece integrated assembly.
 - 4. Anti-rotation plate to be interlocking to the lock chassis. Lock design utilizing bit-tabs are not acceptable.
 - 5. Lever Trim: Accessible design, bi-directional, independent assemblies.
 - 6. Locks shall be of such construction that when locked, the door may be opened from within by using lever and without the use of a key or special knowledge.
 - 7. Thru-bolts to secure anti-rotation plate without sheer line. Fully threaded thru-bolts are not acceptable.
 - 8. Spring cage to have double compression springs. Manufacturers utilizing torsion springs are not acceptable.
 - 9. Latchbolt to be steel with minimum ½" throw deadlatch on keyed and exterior functions; ¾" throw anti-friction latchbolt on pairs of doors.
 - 10. Strikes: ANSI curved lip, 1-1/4" x 4-7/8", with 1" deep dust box (K510-066). Lips shall be of sufficient length to clear trim and protect clothing.

-OR-

- F. Extra Heavy duty Commercial Mortise Locks: Schlage "L" Series as scheduled with "06" Style Lever and "A" Style Rose.
 - 1. Locksets to comply with ANSI A156.13, Series 1000, Operational Grade 1 and Security Grade 1 with all standard trims. Locksets shall also comply with UL10C Positive Pressure requirements
 - 2. Lock case shall be manufactured with heavy 12 gauge steel with fully wrapped design. Lock cases with exposed edges are not acceptable. Lock case shall be multi-functional allowing transformation to a different function without opening lock case.
 - 3. Latchbolt shall have ¾" throw and be non-handed, field reversible without opening the lock case. Solid latchbolts and / or plastic anti-friction devices are not acceptable.
 - 4. The deadbolt, when used, shall be 1" throw stainless steel with a ¾" internal engagement when fully extended.
 - 5. All trim shall be through-bolted with the spring cages supporting the trim attached to the lock cases to prevent torquing.
 - 6. Levers to have independent rotation in both directions. Exterior lever assembly to be one-piece design attached by threaded bushing. Interior lever assembly shall be attached by screwless shank
 - 7. Thru-bolt lever assemblies through the door for positive interlock. Locks using a through the door spindle for attachment are not acceptable. Spindles shall be independent, designed to "break-away" at a maximum of 75psi torque.

8. Hand of lock chassis to be changeable by simply moving one screw from one side to the case to the other and pulling and reversing the latchbolt.
 9. Cylinders to be secured by a cast stainless steel, dual retainer. Locks utilizing screws and / or stamped retainers are not acceptable.
- G. Deadlocks: Rotating cylinder trim rings of attack-resistant design. Mounting plates and actuator shields of plated cold-rolled steel. Mounting screws of ¼" diameter steel and protected by drill-resistant ball bearings. Steel alloy deadbolt with hardened steel roller. Strike alloy deadbolt with reinforcer and two 3" long screws. ANSI A156.5, 2001 Grade 1 certified.
- H. Exit devices: Von Duprin as scheduled.
1. Provide certificate by independent testing laboratory that device has completed over 1,000,000 cycles and can still meet ANSI/BHMA A156.3 - 2001 standards.
 2. Provide exit devices UL certified to meet maximum 5 pound requirements according to the California Building Code section 11B-309.4, and UL listed for Panic Exterior Fire Exit Hardware.
 3. All internal parts shall be of cold-rolled steel with zinc dichromate coating.
 4. Mechanism case shall have an average thickness of .140".
 5. Compression spring engineering.
 6. Non-handed basic device design with center case interchangeable with all functions.
 7. All devices shall have quiet return fluid dampeners.
 8. All latchbolts shall be deadlocking with ¾" throw and have a self-lubricating coating to reduce friction and wear.
 9. Device shall bear UL label for fire and or panic as may be required.
 10. All surface strikes shall be roller type and utilize a plate underneath to prevent movement.
 11. Lever Trim: "Breakaway" design, forged brass or bronze escutcheon with a minimum of .130" thickness, match lockset lever design.
 12. Removable Mullions: Removable with single turn of building key. Securely reinstalled without need for key.
 13. Furnish glass bead kits for vision lites where required.
 14. All Exit Devices to be sex-bolted to the doors.
 15. Panic Hardware shall comply with CBC Section 1008.1.9 and shall be mounted between 30" and 44" above the finished floor surface. The unlatching force shall not exceed 15 lbs. applied in the direction of travel.
- I. Closers: LCN as scheduled. Place closers inside building, stairs, room, etc.
1. Door closer cylinders shall be of high strength cast iron construction with double heat treated pinion shaft to provide low wear operating capabilities of internal parts throughout the life of the installation. All door closers shall be tested to ANSI/BHMA A156.4 test requirements by a BHMA certified testing laboratory. A written certification showing successful completion of a minimum of 10,000,000 cycles must be provided.
 2. All door closers shall be fully hydraulic and have full rack and pinion action with a shaft diameter of a minimum of 1 1/16 inch and piston diameter of 1 inch to ensure longevity and durability under all closer applications.
 3. All parallel arm closers shall incorporate one piece solid forged steel arms with bronze bushings. 1-9/16" steel stud shoulder bolts, shall be incorporated in regular arms, hold-open arms, arms with hold open and stop built in. All other closers to have forged steel main arms for strength, durability, and aesthetics for versatility of trim accommodation, high strength and long life.
 4. All parallel arm closers so detailed shall provide advanced backcheck for doors subject to severe abuse or extreme wind conditions. This advanced backcheck shall be located to begin cushioning the opening swing of the door at approximately 45 degrees. The

- intensity of the backcheck shall be fully adjustable by tamper resistant non-critical screw valve.
5. Closers shall be installed to permit doors to swing 180 degrees.
 6. All closers shall utilize a stable fluid withstanding temperature range of 120 degrees F. to -30 degrees F. without requiring seasonal adjustment of closer speed to properly close the door.
 7. Provide the manufactures drop plates, brackets and spacers as required at narrow head rails and special frame conditions. NO wood plates or spacers will be allowed.
 8. Maximum effort to operate closers shall not exceed 5 lbs., such pull or push effort being applied at right angles to hinged doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, the maximum effort to operate the closer may be increased but shall not exceed 15 lbs. when specifically approved by fire marshal. All closers shall be adjusted to operate with the minimum amount of opening force and still close and latch the door. These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. Door from open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.
 9. Provide sex-bolted or through bolt mounting for all door closers.
- J. Flush Bolts & Dust Proof Strikes: Automatic Flush Bolts shall be of the low operating force design. Utilize the top bolt only model for interior doors where applicable and as permitted by testing procedures.
1. Manual flush bolts only permitted on storage or mechanical openings as scheduled.
 2. Provide dust proof strikes at openings using bottom bolts.
- K. Door Stops:
1. Unless otherwise noted in Hardware Sets, provide floor type with appropriate fasteners. Where wall type cannot be used, provide floor type. If neither can be used, provide overhead type.
 2. Do not install floor stops more than four (4) inches from the face of the wall or partition (CBC Section 11B-307).
 3. Overhead stops shall be made of stainless steel and non-plastic mechanisms and finished metal end caps. Field-changeable hold-open, friction and stop-only functions.
- L. Protection Plates: Fabricate either kick, armor, or mop plates with four beveled edges. Provide kick plates 10" high and 2" LDW. Sizes of armor and mop plates shall be listed in the Hardware Schedule. Furnish with machine or wood screws of bronze or stainless to match other hardware.
- M. Thresholds: As Scheduled and per details.
1. Thresholds shall not exceed 1/2" in height, with a beveled surface of 1:2 maximum slope.
 2. Set thresholds in a full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements in Division 7 "Thermal and Moisture Protection".
 3. Use ¼" fasteners, red-head flat-head sleeve anchors (SS/FHSL).
 4. Thresholds shall comply with CBC Section 11B-404.2.5.
- N. Seals: Provide silicone gasket at all rated and exterior doors.
1. Fire-rated Doors, Resilient Seals: UL10C Classified complies with NFPA 80 & NFPA 252. Coordinate with selected door manufacturers' and selected frame manufacturers' requirements.

2. Fire-rated Doors, Intumescent Seals: Furnished by selected door manufacturer. Furnish fire-labeled opening assembly complete and in full compliance with UL10C Classified complies with NFPA 80 & NFPA 252. Where required, intumescent seals vary in requirement by door type and door manufacture -- careful coordination required.
 3. Smoke & Draft Control Doors, Provide UL10C Classified complies with NFPA 80 & NFPA 252 for use on "S" labeled Positive Pressure door assemblies.
- O. Door Shoes & Door Top Caps: Provide door shoes at all exterior wood doors and top caps at all exterior out-swing doors.
- P. Silencers: Furnish silencers for interior hollow metal frames, 3 for single doors, 2 for pairs of doors. Omit where sound or light seals occurs, or for fire-resistive-rated door assemblies.

2.03 KEYING

- A. Furnish a Schlage masterkey system as directed by the owner or architect. Key system to be approved by the District Lock Shop Supervisor.
Contact:
SFUSD Buildings and Grounds
Lock Shop Supervisor phone 415-695-5590
- B. A detailed keying schedule is to be prepared by the owner and/or architect in consultation with a representative of Allegion or an Authorized Key Center or Authorized Security Center. Each keyed cylinder on every keyed lock is to be listed separately showing the door #, key group (in BHMA terminology), cylinder type, finish and location on the door. Keying schedules shall be approved by the District Lock Shop Supervisor.
- C. The General Contractor shall be responsible in providing the District cut keys for all new locksets installed at the following rooms: entry doors, classrooms, offices, lounges, corridors, multi-purpose rooms, and staff restrooms/lounges and work rooms.
- D. Furnish all cylinders in the Schlage conventional style except the exit device cylinders which will be supplied in Schlage Full Size Interchangeable Core (FSIC). Pack change keys independently (PKI). Envelopes shall have respective door identification numbers. Stamp keys "Do Not Duplicate" and tag. In addition to above keys, provide (50) blank keys to the District Lock Shop Supervisor. Any extra keys requested by the school administration, beyond the stated number of blank keys, will be provided by the District Lock Shop.
1. The contractor will not issue master keys. Only the shop supervisor will have that authority.
 2. All leftover hardware must be returned to the SFUSD Lock Shop. Hardware may not be salvaged by anyone other than SFUSD Lock Shop Staff.
- E. Furnish construction keying for doors requiring locking during construction.
1. For FSIC systems provide 23-030-ICX Full Size Construction Cores
 2. For FSIC systems provide ten 48-101-ICX Construction Keys
 3. For FSIC systems provide three 48-056-ICX Control Keys (const.)
 4. For FSIC systems provide three control keys for installing the permanent cores (49-056 for "Classic" keyways, 48-052-XP for "Classic Primus") (49-003 for "Everest Conventional", 48-005-XP for "Everest Primus")

-OR-

- F. Furnish construction keying for doors requiring locking during construction.

1. For "Split Key" Construction Cylinders (non-IC cylinders) specify "CK" for each keyed cylinder.
2. Provide ten Construction Keys (48-104 "Classic", 48-008 "Everest")
3. Provide two Extractor Tools (35-057)

G. Furnish mechanical keys as follows:

1. Furnish 3 cut change keys for each different change key code.
2. Furnish 3 cut masterkeys for each different masterkey set.
3. Furnish 3 cut control keys cut to the top masterkey for permanent I/C cylinders.
4. Furnish 1 cut control key cut to each SKD combination.

2.04 FINISHES

- A. Generally to be satin chrome US26D (626 on bronze and 652 on steel) unless otherwise noted.
- B. Furnish push plates, pull plates and kick or armor plates in satin stainless steel US32D (630) unless otherwise noted.
- C. Door closers shall be powder-coated to match other hardware, unless otherwise noted.
- D. Aluminum items to be finished anodized aluminum except thresholds which can be furnished as standard mill finish.

2.05 FASTENERS

- A. Screws for strikes, face plates and similar items shall be flat head, countersunk type, provide machine screws for metal and standard wood screws for wood.
- B. Screws for butt hinges shall be flathead, countersunk, full-thread type.
- C. Fastening of closer bases or closer shoes to doors shall be by means of sex bolts and spray painted to match closer finish.
- D. Provide expansion anchors for attaching hardware items to concrete or masonry.
- E. All exposed fasteners shall have a phillips head.
- F. Finish of exposed screws to match surface finish of hardware or other adjacent work.
- G. All Exit Devices and Lock Protectors shall be fastened to the door by the means of sex bolts or through bolts.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Verify that doors and frames are square and plumb and ready to receive work and dimensions are as instructed by the manufacturer.
- B. Beginning of installation means acceptance of existing conditions.

- C. Fire-Rated Door Assembly Inspection: Upon completion of the installation, all fire door assemblies shall be inspected to confirm proper operation of the closing device and latching device and that only the manufacturer's furnished fasteners are used for installation and that it meets all criteria of a fire door assembly per NFPA 80 (Standard for Fire Doors and Other Opening Protectives) 2013 Edition. A written record shall be maintained and transmitted to the Owner to be made available to the Authority Having Jurisdiction (AHJ). The inspection of the swinging fire doors shall be performed by a certified FDAI (Fire Door Assembly Inspector) with knowledge and understanding of the operating components of the type of door being subjected to the inspection. The record shall list each fire door assembly throughout the project and include each door number, an itemized list of hardware set components at each door opening, and each door location in the facility.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and requirements of DHI.
- B. Use the templates provided by hardware item manufacturer.
- C. Mounting heights for hardware shall be as recommended by the Door and Hardware Institute. Operating hardware will to be located between 30" and 44" AFF.
- D. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- E. Drill and countersink units that are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- F. Set thresholds for exterior doors in full bed of butyl-rubber sealant.
- G. If hand of door is changed during construction, make necessary changes in hardware at no additional cost.
- H. Hardware Installer shall coordinate with security contractor to route cable to connect electrified locks, panic hardware and fire exit hardware to power transfers or electric hinges at the time these items are installed so as to avoid disassembly and reinstallation of hardware.
- I. Hardware Installer shall also be present with the security contractor when the power is turned on for the testing of the electronic hardware applications. Installer shall make adjustments to solenoids, latches, vertical rods and closers to insure proper and secure operation.
- J. All wiring for electro-mechanical hardware mounted on the door shall be connected through the power transfer and terminated in the interface junction box specified for in the Electrical Section.
- K. Conductors shall be minimum 18 gage stranded, multicolored. A minimum 12 in. loop of conductors shall be coiled in the interface junction box. Each conductor shall be permanently marked with its function.
- L. If a power supply is specified in the hardware sets, all conductors shall be terminated in the power supply. Make all connections required for proper operation between the power supply and the electro-mechanical hardware. Provide the proper size conductors as specified in the manufacturer's technical documentation.

3.03 ADJUST AND CLEAN

- A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.
- B. Clean adjacent surface soiled by hardware installation.
- C. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy, return to that work area and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- D. Instruct Owner's Personnel in proper adjustment and maintenance of hardware finishes, during the final adjustment of hardware.
- ~~E. Continued Maintenance Service: Approximately six months after the completion of the project, the Contractor accompanied by the Architectural Hardware Consultant, shall return to the project and re-adjust every item of hardware to restore proper functions of doors and hardware. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.~~

3.04 HARDWARE LOCATIONS

- A. Conform to CCR, Title 24, Part 2; and ADAAG; and the drawings for access-compliant positioning requirements for the disabled.

3.05 FIELD QUALITY CONTROL

- A. Hardware supplier is responsible for providing the services of an Architectural Hardware Consultant (AHC) or a proprietary product technician to inspect installation and certify that hardware and its installation have been furnished and installed in accordance with manufacturers' instructions and as specified herein.

3.06 SCHEDULE

- A. The items listed in the following schedule shall conform to the requirements of the foregoing specifications.
- B. The Door Schedule on the Drawings indicates which hardware set is used with each door.

Manufacturers Abbreviations (Mfr.)

GLY	=	Glynn-Johnson Corporation	Overhead Door Stops
IVE	=	Ives	Hinges, Pivots, Bolts, Coordinators, Dust Proof Strikes, Push Pull & Kick Plates, Door Stops & Silencers
LCN	=	LCN	Door Closers
NGP	=	National Guard Products	Thresholds, Gasketing & Weather-stripping
SCH	=	Schlage Lock Company	Locks, Latches & Cylinders
VON	=	Von Duprin	Exit Devices