



PEACH COUNTY HEALTH DEPARTMENT IMPROVEMENTS
503 Bluebird Boulevard
Fort Valley, Georgia
BTBB #2020-27

July 30, 2021

ADDENDUM NUMBER ONE

Bidders are advised that bidding documents on the above named project are amended as follows:

SPECIFICATIONS

1. Delete Section B, Bid Form, in its entirety and replace with the attached revised Section B, Bid Form, which specifies the number of days for contract completion and the dollar amount for liquidated damages for unexcused work delays.
2. Add the attached specification Section 08710, Finish Hardware, to the Project Manual.
3. Section 09650, Resilient Flooring:
 - a. Par. 2.1.A.: Add J&J Flooring Classics as an approved product for LVT subject to the requirements of the specifications and drawings.
4. Section 15400, Plumbing: Delete this section in its entirety and replace with the attached revised Section 15400, Plumbing.

DRAWINGS

1. Add the attached new drawing Sht. A1.0, Demolition Plan, dated 7/28/2021.

Mechanical and Plumbing Drawings: Note that “Clouds” are provided on drawings for convenience to the contractor only! “Clouds” are without Force and effect on the contract documents.

2. Sht. M0.1: Delete drawing sheet dated 7/12/21 in its entirety, and replace with attached clouded revisions Sheet M0.1, dated 7/28/21.
3. Sht. M1.1: Delete drawing sheet dated 7/12/21 in its entirety, and replace with the attached clouded revisions Sheet M1.1, dated 7/28/21.
4. Sht. M2.2: At “Typical Vertical AHU Installation”, at note referencing condensate drain to hub drain, change note which states “Extend to local hub drain” to “Terminate as indicated on drawings”.
5. Sht. M2.3: Delete drawing sheet dated 7/12/21 in its entirety, and replace with the attached clouded revisions Sheet M2.3, dated 7/28/21.

6. Sht. M3.3: Delete drawing sheet dated 7/12/21 in its entirety, and replace with the attached clouded revisions Sheet M3.3, dated 7/28/21. Sht. P1.1: Delete drawing sheet dated 7/12/21 in its entirety, and replace with the attached clouded revisions Sheet P1.1, dated 7/28/21.
7. Sht. P2.2:
 - a. At Water Heater Schematic, add the following to the hot water pipe from the water heater to the thermostatic mixing valve: “140 Degrees F.”.
 - b. At Gas Appliance Gas Piping Connection Detail, omit indicated coupling and referenced note which states the following: “provide approved coupling to attach new pipe to existing pipe where properly sized piping exists. Field verify.”
8. Sht. P3.1: Delete drawing sheet dated 7/12/21 in its entirety, and replace with the attached clouded revisions Sheet P3.1, dated 7/28/21.

END OF ADDENDUM

SECTION B
BID FORM

PROJECT: Peach County Health Department Improvements
503 Bluebird Boulevard
Fort Valley, Georgia
DATE: Thursday, August 12, 2021
TIME: 10:00 A.M.
PLACE: Peach County Offices
213 Persons Street
Fort Valley, Georgia 31030

Proposal of _____

(hereinafter called Bidder) organized and existing under the laws of the State of Georgia, doing business as a _____*

To Peach County, Georgia, hereinafter called "Owner".

Gentlemen:

The Bidder, in compliance with your invitation for bids for the **PEACH COUNTY HEALTH DEPARTMENT IMPROVEMENTS** in Fort Valley, Georgia, having carefully examined the Specifications entitled "Peach County Health Department Improvements", and the Drawings similarly entitled, all dated July 12, 2021, related documents, and the site of the proposed Work, and being familiar with all of the conditions surrounding this project, including the availability of materials and labor, hereby bid to furnish all labor, materials, and supplies, and to complete the project in accordance with the Contract Documents, within the time set forth herein, and at the prices stated hereinafter. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this proposal is a part.

Bidder acknowledges receipt of the following addenda (list each addendum number and date of each addendum):

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

*Insert a corporation, a partnership, or an individual as applicable.

AMOUNTS: Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

PROPOSAL: The Bidder agrees to perform all of the work described in the Specifications and shown on the Plans (inclusive of all materials, labor, equipment, and other necessary provisions) for the sum set forth below:

ITEM NO. 1: SITE WORK, INCLUDING GENERAL CONDITIONS, OVERHEAD & PROFIT,
THE SUM OF:

_____ \$ _____
Amount in Words

ITEM NO. 2: STRUCTURE & FINISHES, EXCEPT FOR WORK IN ITEMS 1, 3, 4, and 5,
THE SUM OF:

_____ \$ _____
Amount in Words

ITEM NO. 3: PLUMBING, INCLUDING GENERAL CONTRACTOR'S OVERHEAD & PROFIT,
THE SUM OF:

_____ \$ _____
Amount in Words

ITEM NO. 4: HVAC WORK, INCLUDING GENERAL CONTRACTOR'S OVERHEAD &
PROFIT, THE SUM OF:

_____ \$ _____
Amount in Words

ITEM NO. 5: ELECTRICAL WORK, INCLUDING GENERAL CONTRACTOR'S OVERHEAD &
PROFIT, THE SUM OF:

_____ \$ _____
Amount in Words

**TOTAL BASE PROPOSAL FOR THE PEACH COUNTY HEALTH DEPARTMENT
IMPROVEMENTS, FORT VALLEY, GEORGIA - ITEMS 1, 2, 3, 4, and 5, THE SUM OF:**

_____ \$ _____
Amount in Words

Bidder hereby agrees to commence actual physical work on site, with an adequate force and equipment under this contract within ten (10) calendar days of a date to be specified in a written order from the Owner and to fully complete all Work within two hundred (200) consecutive calendar days from and including said date.

Liquidated Damages: If the work is not completed within the time stipulated, including any extensions of time for excusable delays, the Contractor shall pay to the Owner liquidated damages in the amount of five hundred dollars (\$500.00) for each working day of delay. Refer to Section G of these specifications.

IF AN ADDITION OR DEDUCTION IS LISTED, IT MUST BE PLACED INSIDE THE SEALED ENVELOPE.

The Bidder agrees that this bid may not be revoked or withdrawn after the time set for the opening of bids but shall remain open for acceptance for a period of sixty (60) calendar days following such time.

Enclosed herewith is a Bid Bond in the amount of five-percent (5%) of the total base bid. We agree that the above stated amount is the proper measure of liquidated damages that the Owner will sustain by failure of the undersigned to execute the Contract and to furnish the Performance Bond and the Payment Bond.

If this bid is accepted within sixty (60) days after the date set for the opening of bids and the bidder fails to execute the Contract within ten (10) days after written notice of such acceptance or fails to furnish both a Performance Bond and a Payment Bond, the obligation of the bond will remain in full force and affect and the money payable thereon shall be paid into the funds of the Owner as liquidated damages for such failure; otherwise, the obligation of the bond will be null and void.

The bidder hereby certifies they have not, nor has any member of the firm(s) or corporation(s), either directly or indirectly, entered into any agreement, participated in any collusion, nor otherwise taken any action in restraint of free competitive bidding in connection with this submitted bid.

Respectfully Submitted,

Authorized Signature: _____

Typed Signature: _____ Title: _____

Company Name: _____

Company Address: _____

Telephone Number: _____ Dated: _____

BIDDER QUALIFICATION FORM

Company Name: _____

Address: _____

When Organized: _____ Where Incorporated: _____

How many years have you engaged in business under the present firm name? _____

Credit available for this contract? _____

Contracts now in hand? _____

Has bidder ever refused to execute a contract at the original bid amount? _____

Has bidder ever been declared in default on a contract? _____

Comments:

Company Name: _____

Authorized By (typed name): _____

Authorized Signature: _____

Title: _____ Date: _____

References

Following is a reference list of contracts that are similar to this project:

<u>NAME OF PROJECT/DATE</u>	<u>LOCATION</u>	<u>CONTACT</u>	<u>PHONE #</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _____, 201____

My Commission Expires: _____

Notary Public

[NOTARY SEAL]

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of **Peach County, Georgia**, has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Peach County Health Department Improvements

Name of Project

Peach County, Georgia

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 202__ in _____(city), _____(state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE _____ DAY OF _____, 202__.

NOTARY PUBLIC

My Commission Expires:

SECTION 08710
FINISH HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Door Hardware, including electric hardware.
2. Storefront and entrance door hardware.

B. Specific Omissions: Hardware for the following is specified or indicated elsewhere:

1. Windows
2. Toilet accessories, including grab bars

1.2 RELATED SECTIONS

A. Section 07900, Sealants and Caulking

B. Section 08111, Pre-Hung Apartment Entry Doors

C. Section 08216, Pre-Hung Interior Doors

1.3 REFERENCES (use date of standard in effect as of Bid date):

A. American National Standards Institute – ANSI 156.18 – Materials and Finishes.

B. ICC/ANSI A117.1 – Specifications for making buildings and facilities usable by physically handicapped people.

C. ADAAG – Americans with Disabilities Act Accessibility Guidelines

D. BHMA – Builders Hardware Manufacturers Association

E. DHI – Door and Hardware Institute

F. Federal Fair Housing Amendments Act

G. NFPA – National Fire Protection Association

1. NFPA 80 – Fire Doors and Windows
2. NFPA 101 – Life Safety Code
3. NFPA 105 – Smoke and Draft Control Door Assemblies
4. NFPA 252 – Fire Tests of Door Assemblies

H. UFAS – Uniform Federal Accessibility Standards

I. UL – Underwriters Laboratories

1. UL10B – Fire Tests of Door Assemblies as amended to incorporate positive pressure testing.

- 2. UL 305 – Panic Hardware
- J. WHI – Warnock Hersey Incorporated
- K. Local applicable codes
- L. SDI – Steel Door Institute
- M. AWI – Architectural Woodwork Institute
- N. NAAMM – National Association of Architectural Metal Manufacturers

1.4 SUBMITTALS & SUBSTITUTIONS

A. SUBMITTALS: Submit schedule per Section 01300. Organize vertically formatted schedule into “Hardware Sets” with index of doors and headings, indicating complete designations of every item required for each door or opening. Include following information:

- 1. Type, style, function, size, quantity and finish of hardware items. Use BHMA Finish codes per ANSI A156.18.
- 2. Name, part number and manufacturer of each item.
- 3. Fastenings and other pertinent information.
- 4. Location of hardware set coordinated with floor plans and door schedule.
- 5. Explanation of abbreviations, symbols, and codes contained in schedule.
- 6. Mounting locations for hardware.
- 7. Door and frame sizes, materials and degrees of swing. List of manufacturers used and their nearest representative with address and phone number. Catalog cuts.
- 8. Manufacturer’s technical data and installation instructions for electronic hardware.
- 9. Date of jobsite visit.

B. Bid and submit manufacturer’s updated/improved item if scheduled item is discontinued.

C. Make substitution requests in accordance with Division 1. Include product data and indicate benefit to the Project. Furnish operating samples on request.

1. Items listed with no substitute manufacturers have been requested by Owner to meet existing standard.

D. Furnish as-built/as-installed schedule with closeout documents, including keying schedule, wiring/riser diagrams, manufacturers’ installation, adjustment and maintenance information, and supplier’s final inspection report.

1.5 QUALITY ASSURANCE:

A. Qualifications:

1. Hardware Supplier: direct factory contract supplier who employs a certified architectural hardware consultant (AHC), available at reasonable times during course Work for project hardware consultation to Owner, Architect and Contractor.

a. Responsible for detailing, scheduling and ordering of finish hardware.

B. Hardware: New, free of defects, blemishes and excessive play. Obtain each kind of hardware (latch and locksets, exit devices, hinges and closers) from one manufacturer.

C. Exit Doors: Operable from inside with single motion without the use of a key or special knowledge or effort.

D. Fire-Rated Openings: NFPA 80 compliant. Hardware UL10C / UBC Standard 7-2 (positive pressure) compliant for given type/size opening and degree of label. Provide proper latching hardware, non-flaming door closers, approved-bearing hinges, and resilient seals. Coordinate with wood door section for required intumescent seals. Furnish openings complete.

1. Note: Scheduled resilient seals may exceed selected door manufacturer's requirements.

E. Furnish hardware items required to complete the work in accordance with specified performance level and design intent, complying with manufacturers' instructions.

1. Where scheduled item is now obsolete, bid and furnish manufacturer's updated item at no additional cost to the project.

F. Pre-Installation Meetings: Initiate and conduct with supplier, installer and related trades, coordinate materials and techniques, and sequence complex hardware items and systems installation. Include manufacturers' representatives of locks, panic hardware and door closers in the meetings. Convene at least one week prior to commencement of related work.

1.6 DELIVERY, STORAGE AND HANDLING:

A. Delivery: coordinate delivery to appropriate locations (shop or field).

1. Permanent keys and cores: secured delivery direct to Owner's representative.

B. Acceptance at Site: Items individually packaged in manufacturers' original containers, complete with proper fasteners and related pieces. Clearly mark packages to indicate contents, locations in hardware schedule and door numbers.

C. Storage: Provide securely locked storage area for hardware, protect from moisture, sunlight, paint, chemicals, dust, excessive heat and cold, etc.

1.7 PROJECT CONDITIONS:

A. Where exact types of hardware specified are not adaptable to finished shape or size of members requiring hardware, provide suitable types having as nearly as practical as the same operation and quality as type specified, subject to Architect's approval.

B. Prior to submittal, carefully inspect existing conditions to verify finish hardware required to complete Work, including sizes, quantities, existing hardware scheduled for re-use, and sill condition material. If conflict between the specified/scheduled hardware and existing conditions, submit request for direction from Architect. Include date of jobsite visit in the submittal.

1. Submittals prepared without thorough jobsite visit by qualified hardware expert will be rejected as non-compliant.

1.8 SEQUENCING AND COORDINATION:

A. Coordinate with concrete.

B. Reinforce walls for wall-mounted hardware, including wall stops and stainless steel guard rails.

C. Coordinate finish floor materials and floor-mounted hardware.

D. Conduit and raceways as needed for electrical, electronic and electro-pneumatic hardware items. Fire/life-safety system interfacing. Point-to-point wiring diagrams plus riser diagrams to related trades.

E. Furnish manufacturer templates to door and frame fabricators.

1. Ensure proper reinforcement in metal doors and frames to support machine screws for panic hardware and door closers.

F. Use hardware consultant to check Shop Drawings for doors and entrances to confirm that adequate provisions will be made for proper hardware installation.

1. Confirm that wood door manufacturers furnish necessary UBC Standard 7-2 compliant seal packages.

1.9 WARRANTY:

A. Part of respective manufacturers' regular terms of sale. Provide manufacturers' warranties:

- | | | |
|----|-----------------|--------------|
| 1. | Locksets: | Three years. |
| 2. | Other Hardware: | One year. |

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

A. Listed acceptable alternate manufacturers: submit for review products with equivalent function and features of scheduled products.

<u>ITEM:</u>	<u>MANUFACTURER:</u>	<u>ACCEPTABLE SUB:</u>
Key System	Schlage	
Locks	Schlage	Falcon
Door Closers	Doormerica	LCN, Hager
Stops & Holders	Ives	Rockwood, Hager

2.2 LOCKSETS, LATCHSETS, DEADBOLTS:

A. Locks:

1. Residential Duty Tubular Locks and Latches: As scheduled

a. Three piece assembly and screw post for easy installation.

b. Lock Series and Design Schlage "F" Series ELAN Design or Falcon

W Series DANE Small Rose Option as reflected in the hardware sets.

2. Certifications: ANSI/BHMA A152.2 2011 Grade 2.

B. Deadbolts:

1. Medium duty commercial, heavy duty residential.

a. Certification: ANSI / BHMA A156.2 2011 Grade 2

b. Backset: Dual Backset Latches 2-3/8 or 2-3/4

c. Locks Series and Design: Schlage "F" Series x ELAN

2.3 DOOR CLOSERS:

A. Door Closers heavy duty commercial as scheduled.

1. Non Handed, with separate adjustable general speed, latch speed and back check. Heat treated pinion and steel piston, cast aluminum body with 10 year warranty.

2. Certifications: ANSI/BHMA A156.4, Grade 1.

2.4 OTHER HARDWARE

A. Door Stops: Provide stops to protect walls, casework or other hardware.

1. Unless otherwise noted in Hardware Sets, provide wall type with appropriate fasteners. Where wall type cannot be used, provide floor type. If neither can be used, provide overhead type.

B. Fasteners: Generally, exposed screws to be Phillips or Robertson drive. Pinned TORX drive at high security areas. Flat head sleeve anchors (FHSL) may be slotted drive. Sheet metal and wood screws: full-thread. Sleeve nuts: full length to prevent door compression.

2.5 FINISH:

A. Generally BHMA 626 Satin Chromium: Areas using BHMA 626 to have push-plates, pulls and protection plates of BHMA 630, Satin Stainless Steel, unless otherwise noted.

B. Aluminum items: Match predominant adjacent material. Seals to coordinate with frame color.

2.6 KEYING REQUIREMENTS:

A. Key System: All cylinders to be keyed to Schlage Master Key for Peach County Health Department per Owner's keying requirements.

B. Key Cylinders: Furnish 6-pin solid brass construction.

C. Cylinders/cores: keyed at factory of lock manufacturer where permanent records are maintained. Locksets and cylinders same manufacturer.

D. Permanent keys: use secured shipment direct from point of origination to Owner.

1. For estimate: 6 keys per change combination, 5 master keys per group, 5 grand-master keys.

PART 3 - EXECUTION

3.1 ACCEPTABLE INSTALLERS:

A. Experienced craftsperson with a resume of successful projects. Can readily differentiate between number 2 and number 3 phillips-drive screws and screwdrivers. Can readily differentiate between #10-24 machine screws and drywall screws, and can explain correct usages of these items.

3.2 PREPARATION:

A. Ensure that walls and frames are square and plumb before hardware installation.

B. Locate hardware per SDI-100 and applicable building, fire, life-safety, accessibility, and security codes.

1. Notify Architect of any code conflicts before ordering material.

2. Locate levers, key cylinders, t-turn pieces, touchbars and other operable portions of latching hardware between 30 inches to 44 inches above the finished floor, per CBC Section 1133B.2.5.1.

3.3 INSTALLATION

A. Install hardware per manufacturer's instructions and recommendations. Do not install surface-mounted items until finishes have been completed on substrate. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate for proper installation and operation. Remove and reinstall or replace work deemed defective by Architect.

1. Use manufacturers' fasteners furnished with hardware items or submit Request for Substitution with Architect.

2. Replace fasteners damaged by power-driven tools.

B. Locate floor stops no more than 4 inches from walls and not within paths of travel. See paragraph 2.2 regarding hinge widths, door should be well clear of point of wall reveal. Point of door contact no closer to the hinge edge than half the door width. Where situation is questionable or difficult, contact Architect for direction.

C. Drill pilot holes for fasteners in wood doors and/or frames.

D. Lubricate and adjust existing hardware scheduled to remain. Carefully remove and give to Owner items not scheduled for reuse.

3.4 ADJUSTING

A. Adjust and check for proper operation and function. Replace units, which cannot be adjusted to operate freely and smoothly.

1. Hardware damaged by improper installation or adjustment methods to be repaired or replaced to Owner's satisfaction.

2. Adjust doors to fully latch with no more than 1 pound of pressure.

B. Inspection: Use hardware supplier. Include supplier's report with closeout documents.

C. Follow-up inspection: Installer to provide letter of agreement to Owner that approximately 6 months after substantial completion, installer will visit Project with representatives of the manufacturers of the locking devices and door closers to accomplish following:

1. Re-adjust hardware.

2. Evaluate maintenance procedures and recommend changes or additions, and instruct Owner's personnel.

3. Identify items that have deteriorated or failed.

4. Submit written report identifying problems and likely future problems.

3.5 PROTECTION/CLEANING:

A. Cover installed hardware, protect from paint, cleaning agents, weathering, carts/barrows, etc. Remove covering materials and clean hardware just prior to substantial completion.

B. Clean adjacent wall, frame and door surfaces soiled from installation/reinstallation process.

3.6 SCHEDULE OF FINISH HARDWARE:

Hardware Set # 1

Door # 1A

Each Pr. Doors shall have:

01 ea.	SW100 DUAL Swing Door Power Operator	BESAM
01 ea.	Push Plate Lazerpoint RF Package	BESAM
	4 ½" sq. PTO w/Wheelchair Logo	BESAM
01 ea.	DM62 Magna Lock	SECURITRON
01 ea.	BPS 12/24-1 Dual Voltage Linear Power Supply	SECURITRON
01 ea.	4293 Wall Prox Keypad Card Reader	SARGENT
25 ea.	PCH-P30 HID ProxCard II Blank White Card	SARGENT

Note: Balance of hdwe. furnished & installed by ALSF Supplier

Hardware Set # 2

Door # 51B

Each Sgl. Door shall have:

01 ea.	SW100 SGL. Swing Door Power Operator	BESAM
01 ea.	Push Plate Lazerpoint RF Package	BESAM
	4 ½" sq. PTO w/Wheelchair Logo	BESAM
01 ea.	M62 Magna Lock	SECURITRON
01 ea.	BPS 12/24-1 Dual Voltage Linear Power Supply	SECURITRON
01 ea.	4293 Wall Prox Keypad Card Reader	SARGENT
25 ea.	PCH-P30 HID ProxCard II Blank White Card	SARGENT

Note: Balance of hdwe. furnished & installed by ALSF Supplier

Hardware Set # 3

Door # 2D, 3D, 9D, 12EX, 20H, 26EX, 30EX, 36EX, 38D, 42D,

Each Sgl. Door shall have:

03 ea.	Hinge	DHRC158 3.5" x 3.5" x 26D	DOORMERICA
01 ea.	Privacy Lock	F40 ELAN x 26D	SCHLAGE
01 ea.	Stop	409 x 32D Wall Stop	ROCKWOOD

Hardware Set # 4

Door # 4EX, 5D, 6H, 7EX, 10EX, 13EX, 15EX, 16EX, 18EX, 22G, 23EX, 24EX, 25EX, 28EX, 33EX, 37D, 41EX, 43EX, 44EX, 45D, 46D, 48D, 49D, 50D

Each Sgl. Door shall have:

03 ea.	Hinge	DHRC158 3.5" x 3.5" x 26D	DOORMERICA
01 ea.	Entry Lock	F51 ELAN x 26D	SCHLAGE
01 ea.	Stop	409 x 32D Wall Stop	ROCKWOOD

Hardware Set # 5

Door # 8H,11EX, 14EX,17EX, 29EX, 32EX, 34EX, 35EX, 39EX, 40EX,

Each Sgl. Door shall have:

03 ea.	Hinge	DHRC158 3.5" x 3.5" x 26D	DOORMERICA
01 ea.	Passage Lock	F10 ELAN x 26D	SCHLAGE
01 ea.	Stop	409 x 32D Wall Stop	ROCKWOOD

Hardware Set # 6

Door # 19F, 27F, 47E

Each Pr. Doors shall have:

06 ea.	Hinge	DHRC158 3.5" x 3.5" x 26D	DOORMERICA
01 ea.	Entry Lock	F51 ELAN x 26D	SCHLAGE
02 ea.	Flushbolt	281D x 26D Slide FlushBolt	HAGER
01 ea.	Dustproof Strike	DPS280 x 26D	DOORMERICA

Hardware Set # 7

Door # 21B

Each Sgl. Door shall have:

03 ea.	Hinge	FBB179 - 4.5" x 4.5" x 32D NRP	DOORMERICA
01 ea.	Closer	DC40XPBF x ALUM	DOORMERICA
01 ea.	Exit Device	EDR701 x 32D	DOORMERICA
01 ea.	Lever Trim	ETL x 26D	DOORMERICA
01 ea.	Kickplate	K1050 x 32D	ROCKWOOD
01 ea.	W. Seal	S88D x	PEMKO
01 ea.	Threshold	2005AV	PEMKO
01 ea.	Door Sweep	315CN	PEMKO
01 ea.	Rain Drip Cap	346C	PEMKO

Hardware Set # 8

Door # 31C

Each Sgl. Door shall have:

03 ea.	Hinge	FBB179 - 4.5" x 4.5" x 32D NRP	DOORMERICA
01 ea.	Closer	DC40XPBF x ALUM	DOORMERICA
01 ea.	Entry Lock	LSV53 x 26D	DOORMERICA
01 ea.	Latch Guard	320CL x 32D	ROCKWOOD
01 ea.	W. Seal	S88D x	PEMKO
01 ea.	Threshold	2005AV	PEMKO
01 ea.	Door Sweep	315CN	PEMKO
01 ea.	Rain Drip Cap	346C	PEMKO

END OF SECTION

SECTION 15400
PLUMBING

PART 1 - GENERAL

1.1 INCLUDES BUT NOT LIMITED TO:

A. Scope of work includes providing soil, waste and vent piping system and domestic water piping system, providing connections to all equipment and fixtures requiring plumbing, including all material and labor necessary to make the connections. Provide all items, material, equipment and incidentals necessary and required for the complete work, including excavation and backfill for piping.

B. All items and equipment which is in direct contact with potable water shall be lead free per the Federal Lead Free Law as of January 2014.

1.2 SERVICE CONNECTIONS

A. Domestic Water: As indicated on plans.

B. Sanitary: As indicated on plans.

C. Check water and sewer connections to existing utilities prior to commencing work in building. Any discrepancies between locations and elevations and those shown shall be immediately called to the attention of the Architect. Connect sewer and water main as indicated.

PART 2 - PRODUCTS

2.1 PIPING

A. Unless otherwise indicated, Soil, waste and vent piping shall be schedule 40 PVC pipe and fittings as manufactured by Charlotte Plastic Company. Pipe shall comply with ASTM D 2466-78. Fittings shall be made in compliance with ASTM-D2564-70. Equivalent manufacturers shall be National or Silver Line

B. Water piping:

1. Above floor: Shall be schedule 40 CPVC CTS with schedule 40 solvent weld fittings. All pipe and fittings and joining methods shall comply with ASTM requirements. Provide factory transition fittings as required to make connection between dissimilar piping.

2. Below slab: Shall be Type "K" hard drawn copper tubing with wrought copper or brass fittings to 5'-0" outside building. Provide factory protective cover to 12" minimum above slab.

a. 1" and smaller: Soft temper Type "K" copper tubing.

b. 1-1/4" -3": Hard drawn copper tubing, Type "K".

3. Domestic water piping underground, outside building shall be schedule 40 PVC pressure pipe with deep socket ends. Joints shall be solvent weld as recommended by pipe manufacturer.

C. T & P relief drain piping:

1. Above floor: Shall be type "L" or "M" hard drawn copper tubing with wrought copper or brass sweat type fittings.

D. Pipe and fittings in contact with earth shall be wrapped with Tapecoat 20 corrosion preventative tape. Lap wraps 1/2".

E. Space between pipes and between pipe and building structure shall be sufficient to allow for insulation and floor and ceiling plates.

2.2 JOINTS

A. Hub and spigot joints shall be made by using one-piece elastomeric compression type gasket made of neoprene. Gaskets shall be marked ASTM C564 and the "CI" symbol of the soil pipe institute. Gaskets shall completely fill the hub.

B. Joints in copper tubing shall be made with 95/5 solder. Solder shall not contain lead. NO 50/50 solder shall be permitted on this project.

C. Joints in PVC piping shall be cemented according to manufacturer's recommendations.

D. Threaded pipe joints shall be made using commercial grade oil based pipe dope on male threads only. Ream out ends and remove burrs.

E. Joints in no-hub cast iron or for connecting PVC to cast iron pipe shall be with heavy duty no-hub coupling by Huskey SD-400 or equivalent by Clamp-All or M-G Couplings.

2.3 VALVES AND FITTINGS

A. Gate valves in water piping shall be 125 psi rating, solid wedge discs. Install stem above horizontal. Gate valves shall be Nibco T-113-LF. Valves shall be FPT, lead free type.

B. Ball valves shall be 125 psi rating, full port. Nibco T-585-80-LF. Valves shall be FPT, lead free type.

C. Check valves shall be bronze, 125 psi, swing type and shall be Nibco T-413-Y-LF. Valves shall be FPT, lead free type.

D. Face plates or escutcheons shall be stamped from steel, chrome plated, with concealed hinge and catch. Provide where exposed pipe passes through walls, floors or ceiling.

E. Unions shall have galvanized, malleable iron, ground joint, bronze seat, 150 psi rated and shall be Nibco Wrought copper up to 1" and Cast Brass for 1-1/4" and over. Lead free. Provide at connections to all equipment.

F. Lawn faucets and interior hose bibbs. Refer to plumbing fixture schedule on drawings.

G. Individual fixture stops shall be Kohler 7600 series or equivalent by McGuire, Eljer, T & S, EBC or Chicago.

H. Traps for sinks and floor drains shall be "P" type. Enclosed traps for sinks shall be chromium plated brass with cleanouts, sized for sink outlets and not reduced in size. Traps for floor drains at toilet rooms shall be provided with taps for trap primer.

I. Equal valves by Crane, Jenkins, Hammond or Stockham are acceptable.

J. Equal lawn faucets and hydrants by Chicago, T & S, Smith, Josam, Zurn are acceptable.

K. Service box shall be plastic with cast iron lid with top marked "Water" as manufactured by DFW, Carson Brooks, or NDS.

L. Trap primer: Coordinate with plumbing fixture schedule.

2.4 FLOOR DRAINS

A. Floor drains: Coordinate with plumbing fixture schedule. Provide with trap with tap for primer connection at toilet rooms if trap primer is used instead of trap guards.

B. Floor drains shall be provided where shown and equal floor drains as manufactured by Smith or Zurn will be acceptable.

2.5 CLEANOUTS

A. Coordinate with plumbing fixture schedule.

B. Cleanouts shall be provided where shown, and they shall be accessible, and equal cleanouts by Wade, Blakes, Jonespec, J.R. Smith or Zurn are acceptable.

2.6 SLEEVES, HANGERS AND SUPPORTS

A. Refer to section 15140, Supports Anchors & Seals.

2.7 FLASHING

A. Vent stacks passing through roof shall be flashed with flashing which is suitable for and compatible with existing roof. Coordinate with Architectural documents.

2.8 SHOCK ABSORBERS

A. Shall be provided for all plumbing fixtures which are equipped with flush valves and other types of quick closing valves. Precision Plumbing Products Water Hammer Arrestor. Size as follows:

Fixture Units	Size
1-11	1/2"
12-32	3/4"
33-60	1"

PART 3 - EXECUTION

3.1 INSTALLATION

A. Water piping shall be run above ceiling except where otherwise indicated on drawings or in specifications. All water piping shall be insulated, except cold water where installed at least 6" underground or inside interior walls. Piping shall be supported as specified in Section 15140. Each fixture, hose bibb and lawn faucet shall have cutoff valve or stop. Pipe joints for galvanized pipe shall be reamed free of burrs and shall be made up with a commercial grade of oil based pipe dope on male threads only. Provide drain valves at low points. System shall be free from leaks, and any leak that occurs within one year from date of final acceptance by Architect shall be repaired at no cost to Owner. Galvanized steel or copper water pipe in contact with earth shall be wrapped with Tapecoat 20 installed as recommended by tapecoat manufacturer.

B. Soil, waste or vent piping shall be graded 1/8" per foot if sized larger than 3 inches and if size is 3 inches or less grade shall be not less than 1/4" per foot. Ninety degree turns shall be made with Y and 1/8 bends. Pipe shall be supported by pipe hangers spaced as indicated in Section 15140.

C. Escutcheons shall be installed where pipe exposed to view passes through walls, floors or ceiling, and shall fit around exterior of insulation, if pipe is insulated.

D. Install trap primer piping below slab from trap primer to floor drain. Piping shall be Type "K" soft copper with no joints below slab except where connected to floor drain. Install trap primers as recommended by trap primer manufacturer.

E. Install shock absorbers above ceiling as indicated and as recommended by shock absorber manufacturer and as required to ensure accessibility from ceiling tile removal.

3.2 TESTS

A. Test shall be held in presence of the plumbing inspector who shall have been notified 48 hours in advance. Tests shall not be scheduled until system is ready to receive tests.

B. Water piping shall be given a hydrostatic test of 100 psi for 4 hours before insulating pipe. Test all newly installed domestic water piping.

C. Sewer and vent piping within building shall be given a water test with a head of not less than 12 feet above highest fixture connection. Water shall remain in system for 4 hours before start of test. No tests shall be performed during rainy weather or during freezing weather. Test all newly installed sewer piping.

D. Before final inspection, Contractor shall furnish Architect with 3 notarized copies of the following completed Test Reports:

1. Test #1: All new lavatory and sink aerators have been cleaned.
2. Test #2: All water piping has been disinfected as described.
3. Test #3: All new drinking fountains and been adjusted for proper flow.

E. Cracked fittings or material at new fixtures shall be replaced.

F. Leaks shall be repaired.

3.3 DISINFECTION

A. Domestic water pipe shall be disinfected by introducing an HTH solution into system holding 50 ppm of available chlorine in system for 6 hours before flushing and returning to service. Send sample to Local Health Department for testing. System shall not be accepted until written letter of approval by the Local Health Department is submitted to the Architect. Disinfect all new domestic water piping.

3.4 FLUSHING OF PIPES

A. The sanitary piping system shall be rodded and high pressure washed to remove any foreign matter from the pipes. Flush all sewer piping, new and existing to nearest manhole.

3.5 PIPING IDENTIFICATION

A. Refer to Section 15190.

END OF SECTION