ADDENDUM 1
TO THE CONTRACT PROVISIONS AND CONTRACT PLANS

FOR

NORTHSHORE UTILITY DISTRICT
BUILDING "A" IMPROVEMENTS

G&O #18601

ISSUED THIS DATE: WEDNESDAY, MARCH 15, 2023

BID SUBMITTAL: 3:00 P.M. (LOCAL TIME) ON TUESDAY, MARCH 28, 2023
NORTHSHORE UTILITY DISTRICT
6830 NE 185th STREET
KENMORE, WASHINGTON 98028

Bidder shall acknowledge receipt of this Addendum on Page Prop-2 of the Proposal.

TO PROSPECTIVE BIDDERS:

The attention of all prospective bidders on the above project is directed to the following additions and modifications to the Contract Provisions and Contract Plans.

I. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE CALL FOR BIDS

ITEM 1:

Page CFB 2, CALL FOR BIDS

REVISE the first paragraph as shown below (added text is italicized, deleted text is shown as strike out):

> "The Engineer's construction cost estimate is *$3,500,000.00* ~~$4,444,444.00~~ to $3,750,000.00 including sales tax."

II. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE ENGINEERING SPECIFICATIONS

ITEM 1:

On the second page of the Engineering Specifications Table of Contents

Under Division 7, **ADD** the following:

"07410	Metal Roof and Wall Panels	07410-1
07420	Exterior Insulation and Finish System	07420-1"

Under Division 15, **ADD** the following:

"15300 Fire Protection System..... 15300-1"

ITEM 2:

Page 01520-1, Specification Section 01520-2.2, OWNER'S TEMPORARY STAFF FIELD OFFICES

REVISE the first sentence of the first paragraph as shown below (added text is italicized, deleted text is shown as strike out):

"Contractor shall provide *three (3)* ~~two (2)~~ additional field office trailers to allow for relocation of District staff during the course of construction."

ITEM 3:

Page 01520-1, Specification Section 01520-2.2, OWNER'S TEMPORARY STAFF FIELD OFFICES

INSERT the new item into the numbered list:

"3. One 10′ x 30′ minimum office trailer with two work space offices and a central open area for a total of three occupants."

ITEM 4:

Page 01520-1, Specification Section 01520-2.3, OWNER'S TEMPORARY INTERIOR WORK SPACES

REVISE the fourth paragraph as shown below (added text is italicized, deleted text is shown as strike out):

"The District will *utilize existing furnishings from the building for the temporary work spaces and* will provide for the necessary communications associated with the temporary offices and works spaces."

ITEM 5:

ADD the attached New Specification Section 07410 – Metal Roof and Wall Panels.

ITEM 6:

ADD the attached New Specification Section 07420 – Exterior Insulation and Finish System.

ITEM 7:

Page 12356-2, Specification Section 12356-1.6, QUALITY ASSURANCE

ADD the following paragraph to the end of this Section:

"B. QUALITY CERTIFICATION

Casework manufacturer shall be a member in good standing of the Architectural Woodwork Institute (AWI), or other industry recognized certification body. All shop drawings and installed products shall include designated labels as required by the certification program."

ITEM 8:

Page 12356-6, Specification Section 12356-2.5, CABINET HARDWARE

ADD the following paragraph to the end of this Section:

"I. WALL SHELVING STANDARDS

Knape and Vogt 255 Series pilaster standards with 256 Series support clips. Colors/finishes as selected from manufacturer's standards."

ITEM 9:

ADD the attached New Specification Section 15300 – Fire Protection System.

ITEM 10:

Page 15400-4, Specification Section 15400-2.5, PIPING SPECIALTIES

ADD the following paragraph to the end of this Section:

"E. WATER HAMMER ARRESTORS

Water hammer arrestors shall be in-line copper cylinders with permanently sealed polypropylene piston pre-charged to 60 psi. Arrestors shall be listed by IAPMO, ASSE 1010 approved, ANSI A112.26.1M approved, and PDI WH201 approved and certified. Arrestors shall be Watts LF15M2 Series, or equal."

III. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE CONTRACT PLANS

ITEM 1:

SHEET C-5, CONTRACTOR STAGING AREAS

DELETE Sheet C-5 in its entirety and **REPLACE** with the attached revised Sheet C-5.

ITEM 2:

SHEET A-2, EXISTING FLOOR PLAN

DELETE Sheet A-2 in its entirety and **REPLACE** with the attached revised Sheet A-2.

IV. PRE-BID MEETING

ITEM 1:

For informational purposes herein only, and as stated in the Call for Bids, Bidders are reminded of the upcoming pre-bid walk through that is being conducted in pre-scheduled time slots on Saturday, March 18th. To schedule a time slot, please contact the District Project Manager, Brandon Humphrey, at bhumphrey@nud.net or (425) 375-9253 (cell).

SECTION 07410

METAL ROOF AND WALL PANELS

PART 1 GENERAL

1.1 SCOPE

The work specified in this Section includes, but is not necessarily limited to, furnishing and installing of all metal roofing, siding, metal fascia, gutters, downspouts, and accessories as indicated on the Plans and specified herein.

1.2 RELATED WORK SPECIFIED ELSEWHERE

Section	Item
01300	Submittals

1.3 SUBMITTALS

Submit in accordance with Section 01300 and as specified herein.

A. PRODUCT DATA

Submit manufacturer's technical product data, installation instructions, and recommendations for Metal Roof and Wall Panels used. Include data substantiating that materials comply with requirements.

B. SAMPLES

Prior to ordering products, submit manufacturer's standard color samples for Owner's selection.

C. SHOP DRAWINGS

Show panel layout, trim installation, panel attachment, curbs, flashing, gutters and downspouts.

D. WARRANTY

1. Manufacturer's Product Warranty for Weathertightness and Finish

Manufacturer's 20 Year Standard Full System Weathertightness Limited Warranty utilizing Manufacturer's inspection and certification serves and based on installation by Manufacturer certified contractor. Warranty shall cover the complete roof

system including roofing, flashing, curbs, penetrations, etc.

Manufacturer's 40 Year Dura Tech 5000/Dura Tech mx coated metal panels coating performance warranty, as available for specified installation and environmental conditions.

2. Contractor's Warranty

Warrant panels, flashings, sealants, fasteners, and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for 2 years following project substantial completion date.

FM rated panel we have under FM4470 testing and ASTM E2140 Static Pressure Head Test.

1.4 QUALITY ASSURANCE

A. INSTALLER'S QUALIFICATIONS

Installation of panels and accessories by installers with a minimum of 5-years documented experience in metal panel projects of this nature.

B. MANUFACTURER'S QUALIFICATIONS

Manufacturer shall have a minimum of 10-years experience supplying metal roofing/siding to the region where the work is to be done.

C. REGULATORY AGENCY REQUIREMENTS

Comply with IBC and local Building Code requirements if more stringent than those specified.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

Protect panels against damage and discoloration. Handle panels with non-marring slings and do not bend panels. Store panels above ground, with one end elevated for drainage. Protect panels against standing water and condensation between adjacent surfaces. If panels become wet, immediately separate sheets, wipe dry and allow to air dry. Remove any strippable film prior to installation and do not allow too remain on panels in extreme cold, heat or in direct sunlight.

PART 2 PRODUCTS

2.1 APPROVED MANUFACTURER

AEP SPAN, or approved equal.

Panel Designations:

Roofs: Interlocking, standing, mechanically seamed panels with a net coverage of 16 inches, panel surface striations, and 2 pencil ribs. AEP Span "Span-Lok *hp*", or equal.

2.2 MATERIALS

A. PANELS

1. Base Metal

   Steel conforming to ASTM A924/ASTM A792 Grade 40 or ASTM A446 Grade C, thickness 22 gauge.

2. Coatings

   Protective coatings conform to ASTM A525 G90 or ASTM A924/ASTM A792, AZ50.

3. Finish

   Exterior finish includes a 0.2 mil thick corrosion-resistant primer and a 0.8 mil thick finish coat of Polyvinylidene Fluoride (PVF_2), full 70 percent Kynar 500®/Hylar 5000® for a total 1.0 mil dry film thickness.

4. Color

   Manufacturer's standard selection of not less than 12 colors.

B. PERFORMANCE CRITERIA

1. Wind Uplift: Class 90 per UL 580.

   a. Panel system shall be ASTM E1592 tested under the supervision of an ANSI or ISO/IEC accredited laboratory and the laboratory shall issue the test report.

b. Deflection Limits: Withstand wind loads with deflections no greater than 1/180 of the span.

2. FM Rating: Class 1-90 according to FM Approvals Standard 4471.

3. Air Infiltration: Tested in accordance with ASTM E1680.

   a. 0.022 cfm per linear foot of joint at static test pressure differential of 12.00 psf.

4. Water Infiltration Under Static Pressure: Tested with sidelap sealant per ASTM E1646.

   a. No leakage through panel joints at 15.00 psf.

5. Water Penetration: No leakage through panel sideseams and endlaps after six hours when tested according to ASTM E2140 at a static water pressure head of 6.00 inches.

6. Thermal Movements: Accommodate thermal movement without buckling, joint opening, overstressing components, failure of connections, or other detrimental effects, through the following temperature changes:

   a. 120 degrees F, ambient.

   b. 180 degrees F, material surface.

C. ACCESSORIES

1. Fasteners

   Per manufacturer's recommendations.

2. Sealant

   a. Gunnable Grade Caulking: Single component Urethane Caulk.

   b. Tape Sealant: Butyl.

3. Profile Closures

   Neoprene or polyethylene foam, die-cut or formed to panel configuration.

4. Flashing

   Material, gauge, and finish to match panels. Do not use lead or copper.

D. GUTTERS AND DOWNSPOUTS

Provide gutters and downspouts shall be formed from flat sheets of same material as roof panels. Gutters are to be continuous and seamless. Downspouts anchorage shall conform with SMACNA requirements. Fasteners shall be same material and finish as panel, with soft neoprene washers. Downspouts are to be rectangular.

E. FABRICATION

Unless otherwise shown on the Plans or specified herein, fabricate panels in continuous one-piece lengths and fabricate flashings and accessories in longest practical lengths.

Roofing panels shall be factory formed. Field formed panels are not acceptable.

2.3 EQUIPMENT ROOF CURBS

Curbs shall be constructed using a minimum of 14-gauge galvanized steel, with fully mitered and welded corners, integral base plates, internally reinforced and factory insulated with 1-1/2-inch-thick fiberglass insulation. Curbs shall be of the standard "floating" type to accommodate the thermal expansion movement of the metal roofing.

All curbs shall have a fully welded water diverter (cricket). Curb shall be constructed to match slope of roof and provide a level top surface for mounting equipment. Curb shall be constructed to have fixed or loose rib caps to match roofing manufacturer's rib configurations. Curbs shall be factory coated with corrosion resistive coating. The color shall be selected by Owner. Size of curbs, and required options shall be coordinated by curb manufacturer, and Contractor prior to fabrication.

Metal roof curbs shall be manufactured by Roof Products, Inc. or equal.

PART 3 EXECUTION

3.1 EXAMINATION

Contractor shall inspect installed work of other trades and verify that such work is complete to a point where this work may continue. Verify that installation can be performed in accordance with approved shop drawings and manufacturer's instructions.

3.2 PREPARATION

A. FIELD MEASUREMENTS

Verify prior to installation. If field measurements differ from Plan dimensions, notify Engineer prior to fabrication.

B. PROTECTION

Treat, or isolate with protective material, any contacting surfaces of dissimilar materials to prevent electrolytic corrosion, comply with Section 09900. Require workmen who will be walking on roofing panels to wear clean, soft-soled shoes that will not pick up stones or other abrasive material, which could cause damage and discoloration.

C. SURFACE PREPARATION

Clean and dry surfaces prior to applying sealant.

3.3 INSTALLATION

A. PANELS

1. Follow metal panel manufacturer's directions and printed instructions.

2. Install roof panel seams vertically.

3. Install wall panel seams: vertically.

4. Lap panels away from prevailing wind direction.

5. Do not stretch or compress panel side-lap interlocks.

6. Secure panels without warp or deflection.

B. ALLOWABLE ERECTION TOLERANCE

Maximum Alignment Variation: 1/4 inch in 40 feet.

C. CURBS

Install per Manufacturer's requirements.

D. FLASHING

1. Follow manufacturer's directions and Engineer-approved shop drawings.

2. Overlap roof panels at least 6 inches.

3. Install flashings to allow for thermal movement.

4. Remove any strippable protective film, if used, immediately preceding flashing installation.

E. CUTTING AND FITTING

1. Provide neat, square and true. Torch cutting is prohibited where cut is exposed to final view.

2. Openings 6 inches and larger in any direction: Shop fabricate and reinforce to maintain original load capacity.

3. Where necessary to saw cut panels, debur and treat with galvanic paint coating to match factory color.

3.4 CLEANUP AND CLOSEOUT

A. PANEL DAMAGE AND FINISH SCRATCHES

Do not apply touch-up paint to damaged paint areas that involve minor scratches. Panels or flashings that have severe paint and/or substrate damage shall be replaced as directed by the Engineer.

B. CLEANING AND REPAIRING

At completion of each day's work and at work completion, sweep panels, flashing and gutters clean. Do not allow fasteners, cuttings, filings, or scraps to accumulate. Remove debris from project site upon work completion, or sooner, if directed by the Owner.

***** END OF SECTION *****

SECTION 07420

EXTERIOR INSULATION AND FINISH SYSTEM

PART 1 GENERAL

1.1 SCOPE

The work specified in this Section includes furnishing and installing the exterior insulation and finish system as indicated on the Plans and as specified herein.

1.2 RELATED WORK SPECIFIED ELSEWHERE

Section	Item
01300	Submittals
07210	Batt and Rigid Insulation
07900	Caulking and Sealants

1.3 REFERENCES

This Section references the latest revisions of the following documents:

Reference	Title
ASTM E2134	Standard Test Method for Evaluating the Tensile-Adhesion Performance of an Exterior Insulation and Finish System (EIFS)
ASTM E2430	Standard Specification For Expanded Polystyrene (“EPS”) Thermal Insulation Boards For Use In Exterior Insulation and Finish Systems (“EIFS”)
ASTM E2485	Standard Test Method for Freeze/Thaw Resistance of Exterior Insulation and Finish Systems (EIFS) and Water Resistive Barrier Coatings
ASTM E2486	Standard Test Method for Impact Resistance of Class PB and PI Exterior Insulation and Finish Systems (EIFS)
ASTME2568	Standard Specification for Exterior Insulation and Finish Systems

1.4 DELIVERY, STORAGE AND HANDLING

Deliver all Exterior Insulation and Finish System components and materials to the job site in the original, unopened packages with labels intact.

Inspect all Exterior Insulation and Finish System components and materials upon arrival for physical damage, freezing or overheating. Do not use questionable materials.

Store all Exterior Insulation and Finish System components and materials at the jobsite in a cool, dry location, out of direct sunlight, protected from weather and other sources of damage. Maintain minimum and maximum storage temperature as stated in the product data sheets or specifications for the materials selected.

Protect all products from inclement weather and direct sunlight

1.5 SITE CONDITIONS

Do not apply wet materials during inclement weather unless appropriate protection is provided. Protect materials from inclement weather until they are completely dry.

Verify the minimum air and wall surface temperatures at the time of application as required by the system manufacturer. Maintain these temperatures with adequate air ventilation and circulation for a minimum of 24 hours to 48 hours or as required by the system manufacturer.

1.6 WARRANTY

A. MANUFACTURER'S WARRANTY

Provide manufacturer's standard 10-year limited material repair and replacement warranty.

B. CONTRACTOR WARRANTY

Provide warranty on all materials and workmanship to remain watertight and weatherproof for 2 years following project substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

Dryvit Systems, Inc., Parex USA, Inc., or equal.

All components of the Exterior Insulation and Finish System shall be supplied or obtained from one manufacturer or its authorized distributors.

2.2 DESCRIPTION

A. SYSTEM DESCRIPTION

1. An Exterior Insulation and Finish System (EIFS); consisting of:

   a. Fluid-applied flashing at all rough openings
   b. Continuous vertical ribbon panel adhesive
   c. Rigid foam insulation board
   d. Base Coat
   e. Reinforcing Mesh
   f. Top Coat

B. MATERIALS

1. Flashing

   Flashing shall be a fluid-applied polymer with polyester reinforcing mesh or a polyethylene film tape with rubberized asphalt adhesive. Flashing tape shall be used in conjunction with a surface conditioner.

2. Adhesives

   Adhesive shall be a fiber-reinforced, dry mix, polymer-modified, cementitious adhesive.

3. Insulation Board

   Insulation shall be rigid expanded polystyrene board in conformance with ASTM E2430. R-value and/or thickness shall be as shown on the Plans.

4. Base Coat

   Base coat shall be a fiber-reinforced, dry mix, polymer-modified, cementitious adhesive.

5. Reinforcing Mesh

Reinforcing mesh shall be an open-weave, glass fiber fabric with a minimum weight of 6.0 ounces per square yard and a minimum tensile strength of 200 pounds per inch.

6. Top Coat

Finish coat texture shall be selected to match the existing Influent Pump Station building. Finish coat shall be a water-based, 100-percent acrylic coating.

C. FINISH

The existing modified wall panels shall be patched and field painted after the manufacturer's recommended drying time for the exterior insulation finish system. Where modifications affect only a portion of a wall surface, the entire wall surface up to the next adjacent building joint, shall be painted. Field painting shall be done in accordance with Section 09900 of these Specifications.

PART 3 EXECUTION

3.1 EXAMINATION

Verify all project site conditions to be in compliance with the manufacturer's requirements. Examine all substrates prior to installation of the exterior insulation finish system. Substrate shall be of a type approved by manufacturer and shall be free of dust, dirt, laitance, efflorescence, and other harmful contaminants.

Sealants and backer rod to be installed, where required, in accordance with the sealant manufacturer's specifications and published literature, and using the sealant manufacturer's recommended primers.

Any discrepancies that are found preventing proper installation of the finish system materials shall be remedied. Do not proceed with the work until all conditions are satisfactory.

3.2 APPLICATION

A. GENERAL

Installation shall conform to this specification and manufacturer's written instructions.

B. INSULATION BOARD

1. Install back-wrap mesh or edge-wrap mesh at system terminations.

2. Apply adhesive to back of insulation boards with a notched trowel, with ribbons of adhesive oriented in a vertical direction.

3. Install insulation board without gaps in a running bond pattern and interlocked at corners.

4. Rasp irregularities off insulation board after adhesive has dried a minimum of 24 hours.

C. BASE COAT

Apply base coat and fully embed reinforcing mesh in base coat; include diagonal mesh patches at corners of openings and reinforcing mesh patches at joints of track sections.

D. PRIMER

Apply primer to base coat after drying.

E. FINISH COAT

Apply finish coat to match specified finish type and texture. Do not apply finish coat to surfaces to receive sealant. Keep finish out of sealant joint gaps.

3.3 CLEANUP

Remove and dispose of finish system materials from job site. Clean surfaces and work area of foreign materials resulting from material installation.

3.4 PROTECTION

Provide protection of installed materials from water infiltration into or behind them. Provide protection of installed materials from dust, dirt, precipitation, and freezing during installation, and continuous high humidity until fully cured and dry.

Clean exposed surfaces using materials and methods recommended by the manufacturer of the material or product being cleaned. Remove and replace work that cannot be cleaned to the satisfaction of the Project Designer/Owner.

***** END OF SECTION *****

SECTION 15300

FIRE PROTECTION SYSTEM

PART 1 GENERAL

1.1 SCOPE

The work specified in this Section includes designing, detailing, fabricating, furnishing, delivering, storing, installing, and testing of modifications to an existing fire alarm and sprinkler system as specified herein.

The system shall be by an entity specializing in the design, coordination, procurement, and installation of equipment associated with the protection of buildings utilized for commercial and industrial purposes, herein referred to as the Fire Alarm and Sprinkler System Contractor. The fire alarm and sprinkler system modifications shall be provided complete with any and all equipment, appurtenances, and accessories required for a complete and workable system.

1.2 RELATED WORK SPECIFIED ELSEWHERE

Section	Item
01300	Submittals
Division 16	Electrical

1.3 QUALITY ASSURANCE

All equipment and materials covered by this Specification shall be designed, fabricated, manufactured, installed and tested in accordance with all currently approved or accepted provisions of the Codes listed herein, including Occupational Safety and Health Act (OSHA) and all federal, state, or city codes, laws or ordinances of the place of installation of work:

A. National Fire Protection Association (NFPA 13, 14, 24, and 70)

B. Underwriters' Laboratories (UL)

C. American National Standards Institute (ANSI)

D. American Water Works Association (AWWA)

E. American Society of Testing Materials (ASTM)

F. International Building Code (IBC)

G. International Fire Code (IFC)

H. All applicable federal, state and county ordinances

I. Local Fire Marshal or Authority Having Jurisdiction

The Fire Alarm and Sprinkler System Contractor shall coordinate their modifications design and install the systems so that no interferences exist between the fire alarm piping or conduit and equipment and systems designed and installed by others.

The Fire Alarm and Sprinkler System Contractor shall be duly licensed in the State of Washington and regularly engaged in the installation of fire protection systems. All drawings shall be completed by a professional located in the State of Washington and by a professional with minimum of 10 years of design and installation experience for fire protection systems of similar size and scope.

The fire alarm system and security system shall be provided by Western States Fire Protection Co. (Redmond), Columbia Fire (Seattle), Allied Fire & Security (Kent), or equal.

1.4 DEFINITIONS

A. LISTED

Use of the word "listed" for fire protection equipment, components, etc., in this Section shall mean listed by UL and approved for fire protection.

B. APPROVED OR APPROVAL

Use of the word "approved" or "approval" in this Section shall require the approval or acceptance from the authorities having jurisdiction and the District.

1.5 PERMITS, CERTIFICATES, AND FEES

The Fire Alarm and Sprinkler System Contractor shall be responsible for obtaining all permits, certificates, fees, and other approvals required to satisfactorily complete the scope of work described herein and shall forward copies of all permits and Certificates of Inspection to the General Contractor who shall immediately submit them to the Owner.

A Fire Alarm system permit will be required through the Authority Having Jurisdiction (AHJ). The Fire Alarm system Contractor shall obtain all approvals or acceptance of AHJ and must pay all associated costs. Any ordering of

material, fabrication or installation initiated prior to receiving approval from the Owner or the AHJ to proceed shall be entirely at the Fire Alarm and Sprinkler System Contractor's risk.

Any additional permits, inspections, or approvals will be the responsibility of the Contractor, in coordination with the Fire Alarm and Sprinkler System Contractor.

1.6 SUBMITTALS

Submittals shall be provided in accordance with Section 01300 of this Specification. In addition to the minimum requirements listed in Section 01300, the Contractor shall provide the following information, which shall be prepared by a qualified professional with expertise in fire alarm and security system design.

A. SYSTEM DESIGN

1. As-builting of existing system as required for design of modifications.

2. Proposed system equipment shop drawings.

3. Proposed system floor plan and piping plans.

4. Proposed system wiring diagram.

5. Specifications and technical information for all components of each system to be supplied.

B. SYSTEM CONSTRUCTION

1. Construction floor plan and piping plans.

2. Bill of materials.

3. Location of alarm initiating and notification appliances.

4. Alarm control and trouble signaling equipment.

5. Annunciation.

6. Power connections.

7. Battery calculations (if applicable).

8. Conductor type and size.

9. All technical information for the equipment to be installed including wiring diagrams and/or manufacturer's literature, troubleshooting and/or repair information, maintenance information.

10. Installation details including mounting height, orientation, and required materials.

11. The interface of fire safety control functions.

C. SYSTEM COMPLETION AND TESTING

1. Record drawings as required in Section 01720 of this Specification

2. Final wiring diagrams

3. Operation and maintenance manuals

4. Software programming materials as necessary

5. Complete testing and analysis report

PART 2 PRODUCTS

2.1 FIRE ALARM SYSTEM

A. GENERAL

The fire alarm system shall utilize new, high-quality materials suitable for installation in a commercial/industrial application.

The information below is provided as the minimum requirement for a complete fire alarm system. It is the responsibility of the Fire Alarm and Sprinkler System Contractor to provide any additional equipment, accessories, or appurtenances that would be required for a complete and workable system as described herein.

The design shall include a list of the required size of all conduit between the fire indicator panel and the individual alarm devices.

The design shall also include a list of the required size of all conductors between the fire indicator panel and the individual alarm devices.

B. FIRE ALARM AND SIGNAL DEVICES

1. Heat Detectors

The fire alarm system shall include heat detectors that will alert occupants in the event of a fire. The detectors will also send an alarm signal to the field indicator panel, which will in turn notify the Owner and the appropriate authorities that a fire alarm has been activated.

The detectors shall be low-profile design, and shall utilize both "rate-of-rise" and temperature set point sensing processes. The devices shall be compatible with the field control panel and all other components provided with the fire alarm system design and shall include at least two Form C dry contacts.

Detectors shall be provided with accessory back boxes required for surface mounting to the building walls/roofing. Back boxes shall include punch outs for direct conduit connection.

2. Audible/Visual Combination Device

The fire alarm system shall include audible-visual strobe devices. Strobe devices shall provide both a visual and audible indication that a fire alarm signal has been triggered.

Strobe devices shall provide field adjustable candela values up to 110 candelas. Horn and strobe devices shall be synchronized to operate in unison should one system receive an alarm signal. Audible tone style and volume shall be field selectable. The strobe device shall be tamperproof and shall be provided with mounting bracket for surface mounting. Mounting bracket shall include punch outs for direct conduit connection. Strobes shall be die-cast metal housing, and shall be painted red according to the manufacturer's standard coating procedures.

Exterior strobe devices shall be suitable for outdoor installation, and shall be provided with weatherproof, water tight enclosures that will maintain the full function of the visual and audible alarm signals. All conduit and/or back plate connection locations shall be gasketed to protect against moisture damage. Specialized mounting accessories for any weatherproof enclosures shall also be provided.

Equipment shall be UL listed and must include a 3-year warranty. The strobe devices shall be compatible with the fire indicator control panel specified herein.

3. Manual Pull Stations

The fire alarm system shall include fire alarm manual pull stations. At a minimum, manual pull stations shall be provided as shown on the Plans. Additional stations, as required for fire alarm system approval, shall also be provided. Pull stations shall be provided such that any individual may trigger a fire alarm. If a manual pull station is triggered, the audible/visual strobe devices shall be enabled, and a signal shall be sent to the existing master fire alarm panel.

Pull stations shall be field-programmable, addressable, and shall be the double-action PUSH-PULL type. Stations shall be provided with back boxes and gaskets as required for surface mounting, and shall be suitable for indoor applications. Stations shall be die-cast metal housing, and shall be painted red according to the manufacturer's standard coating procedures. Back boxes shall contain at least two punch outs for direct conduit connection.

Equipment shall be UL listed and shall be provided with a 3-year warranty. The manual pull stations shall be compatible with the fire indicator control panel specified herein.

4. Intercommunication Devices

The design shall include any and all intercommunication devices or modules required for communication between fire alarm equipment and the fire indicator panel. Additional intercommunication equipment shall be specifically called out in during the design and submittal period. Design shall include cellular-based communication for all dial-out features.

C. CONDUIT AND CONDUCTORS

All conductors between devices, and between devices and the field indicator panel shall be in conduit. All conduits and conduit bodies in the Chemical Room shall be PVC-40.

While the Fire Alarm and Sprinkler System Contractor will provide design for the conduits and conductors, the intent for the project is that the General Contractor shall provide and install the conduits and conductors

specified by the Fire Alarm and Sprinkler System Contractor in accordance with the approved and permitted design. See Part 3 of this Section for additional information regarding installation.

2.2 FIRE SPRINKLER SYSTEM

A. PIPE AND FITTINGS

Schedule 40 ASTM A53 black steel pipe with 125 psi, UL-rated ASTM A47 malleable iron or ASTM A536 ductile iron fittings and grooved joint couplings, chlorinated butyl gaskets, ASTM A183 nuts and bolts; Central, Victaulic, Gruvlock or equal.

B. SPRINKLER HEADS

Sprinkler heads shall be UL listed institutional type pendent 1/2-inch male thread, bronze finish, ordinary temperature rating, Grinnell Universal model A, or approved. Provide head style as appropriate for installation locations and guards where required by code.

PART 3 EXECUTION

3.1 DELIVERY, STORAGE, AND HANDLING

All equipment shall be completely factory assembled, crated or boxed and delivered to protect against damage during shipment.

All exposed components shall be covered and sealed with shrink-wrap to prevent the entrance of moisture. Finished iron or steel surfaces not painted shall be properly protected to prevent rust and corrosion.

All equipment delivered to the site shall be stored in accordance with the manufacturer's recommendations.

3.2 INSTALLATION

Installation shall be as shown on the approved submittal documents and shall be in strict accordance with the equipment manufacturer's recommendations. Installation shall also be in accordance with current "best practices" of the industry. Installation of piping, cable and conduit for each system shall be coordinated with other trades to ensure adequate space for piping placement. System installers and Contractors shall thoroughly review plans, specifications and shop drawings of other trades to coordinate work, and any conflicts that arise as a result of the proposed system equipment placement shall be brought to the attention of the Engineer.

Conduit installation and pulling of conductors shall be by the electrical contractor performing the work on the rest of the project. Terminations shall be by those with all certifications required for fire and security installations.

Piping installation shall be in accordance with NFPA 13 to include hangers, supports and seismic bracing. Piping shall be installed straight, true, and plumb. Hangers, flexible connectors and earthquake bracing shall be in compliance with NFPA 13 and the AHJ.

Provide fire proofing of penetrations as required by the Building Codes and the AHJ.

Install accurately cut steel piping to measurements established at the jobsite, free of fins and burrs. Install using full pipe length; random pipe lengths joined by couplings will not be accepted. Clean all piping before placing in position and maintain in a clean condition. Work into place without springing or forcing. Support pipe from structural members only. For pipe joints, provide full; cut threads. Apply pipe compound on male threads only. Connect joints so that not more than three threads on the pipe remain exposed.

Install drips and drains where necessary to discharge to standard interior floor drains or sinks, to standpipe drains or to sumps. Do not direct connect to any of the sewer systems. Install drain valves at low points of all piping to permit complete drainage of the system without disconnection of any piping.

Provide chrome-plated escutcheon plates at exposed pipe penetrations of ceilings, floors and walls.

3.3 CLEANUP

At the completion of each portion of work, all waste material, rubbish, equipment, and surplus material shall be removed from the site. The Fire Alarm and Sprinkler System Contractor is responsible for the daily clean up of their work.

3.4 SYSTEM TESTING

A. FIRE SYSTEM OPERATIONAL TESTING

Contractor shall perform thorough operational testing of all equipment in order to verify that all equipment is fully operational and has been installed correctly. A checklist of all equipment, whether or not this equipment was tested, and whether or not the equipment successfully completed the operational testing phase shall be provided. Once testing is completed, provide written certification to the Engineer that all equipment

has successfully passed the operational testing within five working days of test completion.

B. FIRE SYSTEM ACCEPTANCE TESTING

The Contractor shall perform final acceptance testing of all fire protection system equipment in the presence of the Owner, and if desired, the Engineer. Acceptance testing shall verify that the fire protection equipment components are able to operate as complete, workable systems and will provide their necessary function(s). The Contractor shall be responsible for providing all personnel, lifts, tools, testing devices, radios, and all other equipment that may be necessary to complete the testing procedures. After completion of the acceptance testing, all noted deficiencies shall be remedied within 72 hours. Depending on the number of deficiencies noted, the Owner may request additional acceptance testing. All associated costs incurred as a result of additional acceptance testing shall be the responsibility of the Contractor.

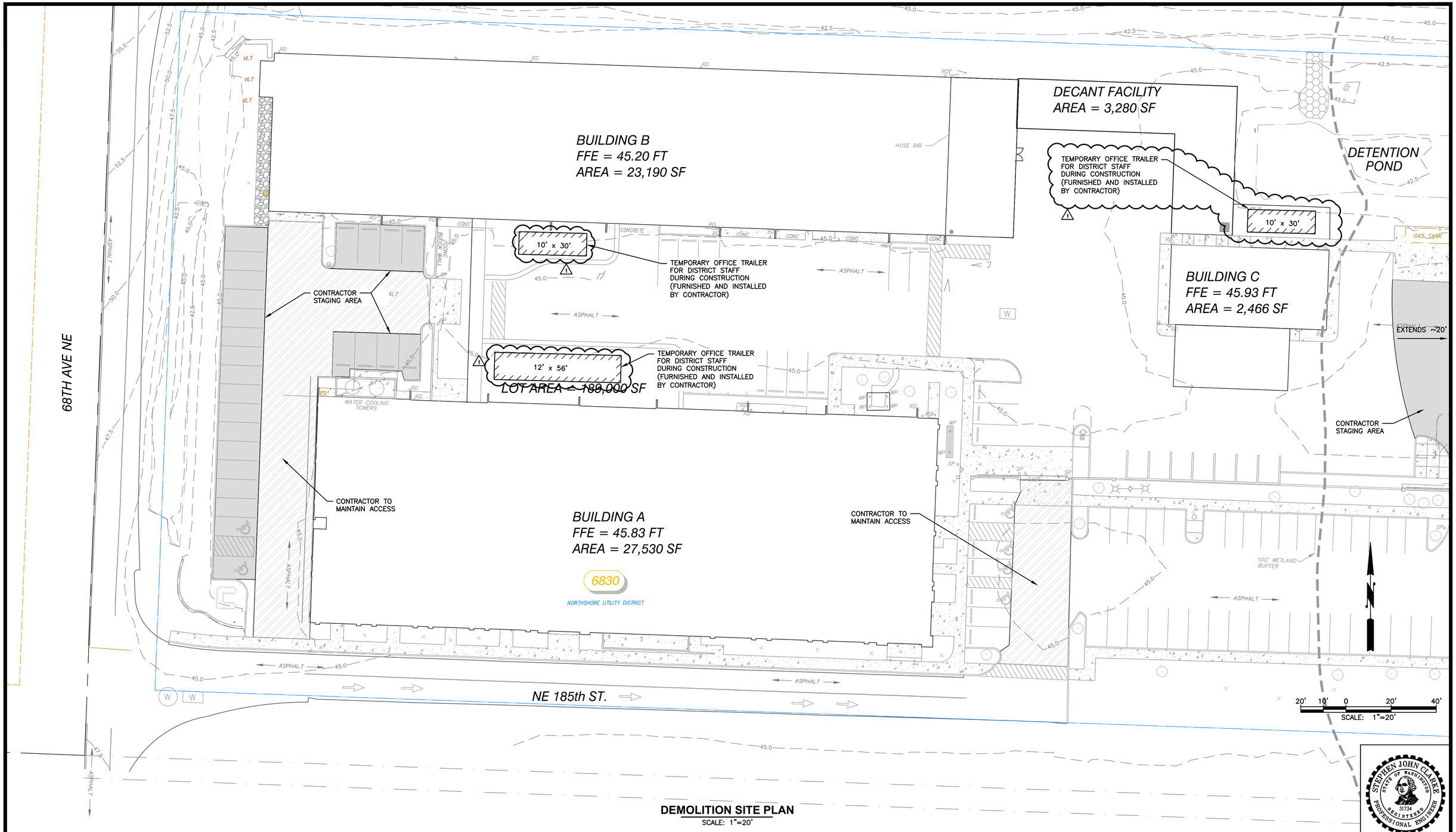
3.5 TRAINING

Training shall be provided by factory trained representatives from the fire alarm system manufacturer. Training shall cover the operation, maintenance, and troubleshooting of each type of device provided. At a minimum, training shall include arming, disarming, activation, resetting of zones or equipment, and basic operational functions for the typical regular use of the respective equipment.

3.6 MANUFACTURER'S SERVICES

The services of a factory-trained representative of the fire protection equipment manufacturer shall be provided by the Contractor. Services shall include 8 hours on-site (over multiple visits) for each system for the supervision of equipment startup, testing and instruction of the Owner's personnel in the operation and maintenance of the equipment. A minimum of one trip shall be for installation inspection, certification and testing; and a minimum of one trip shall be for startup and training. Instruction and training of the Owner's personnel shall not take place until startup is completed and the equipment is fully operational and shall be at a time and location agreed to by the Owner. The cost of these services shall be included in the bid price.

***** END OF SECTION *****



DEMOLITION SITE PLAN
SCALE: 1"=20'

NO	BY	APPD	REVISION	DATE
1	AMP	AMP	ADDENDUM 1	MAR 2023

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

Gray & Osborne, Inc
CONSULTING ENGINEERS

DESIGNED BY	MTM
DRAWN BY	BS
CHECKED BY	MTM
APPROVAL	EBD
DATE	MAR. 2023

NORTHSHORE UTILITY DISTRICT
6830 NE 185th St.
Kenmore, WA 98028-2684
P.O. Box 82489
Kenmore, WA 98028-2684
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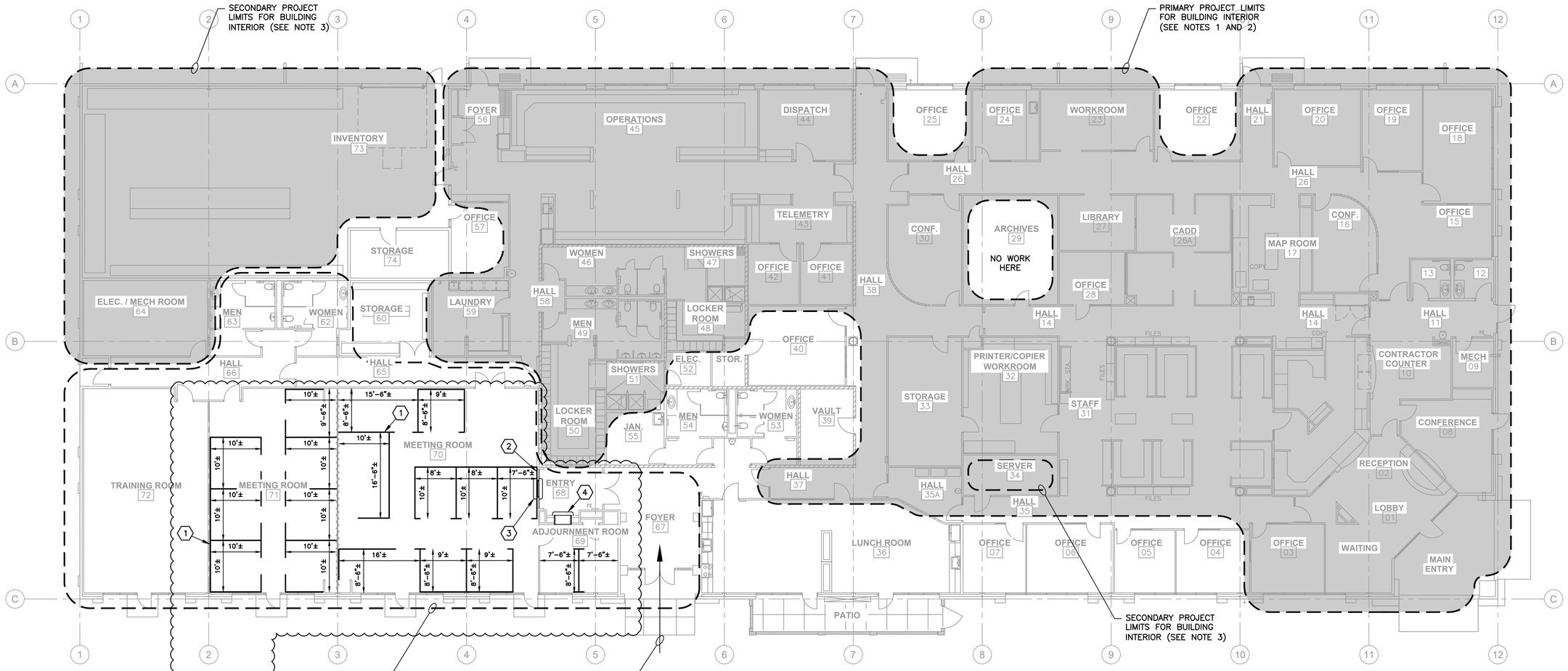
CONTRACT 2023-01
BUILDING "A" IMPROVEMENTS

CONTRACTOR STAGING AREAS AND TEMPORARY OFFICE TRAILERS

SHEET
C-5
OF 14

STEPHEN JOHN CLARKE
STATE OF WASHINGTON
31734
REGISTERED
PROFESSIONAL ENGINEER



#	TEMPORARY WORK SPACES NOTES
1	TYPICAL TEMPORARY WORK SPACE WALLS SHALL BE NOMINALLY 5–FEET HIGH
2	8–FOOT HIGH FRAMED DIVIDER WALL; FRICTION FIT AGAINST ADJACENT WALLS WITH COMPRESSED SILL SEALER GASKETS
3	DUTCH DOOR WITH MELAMINE, OR EQUAL, SHELF
4	CUT AND FRAME 3–FOOT BY 3–FOOT PASSTHRU IN EXISTING WALL, TRIM OUT WITH FINISHED MELAMINE, OR EQUAL, AND PROVIDE PLEXIGLAS PANEL OVER 90% OF OPENING

1

EXISTING FLOOR PLAN

SCALE: 3/32"=1'-0"

NOTES:

1. OWNER WILL VACATE THE PRIMARY PROJECT LIMITS DURING CONSTRUCTION AND TEMPORARILY RELOCATE STAFF, EQUIPMENT, AND FURNISHINGS TO MEETING ROOMS 70 AND 71, AND TO THE OUTSIDE TEMPORARY OFFICE TRAILERS.
2. CONTRACTOR SHALL BE RESPONSIBLE TO DESIGN, LAYOUT, AND FURNISH THE TEMPORARY OFFICE AND WORKSPACES IN MEETING ROOMS 70 AND 71 PER SPECIFICATION 01520.
3. FOR WORK ELEMENTS THAT NEED TO OCCUR OUTSIDE OF THE PRIMARY PROJECT LIMITS; CONTRACTOR ACCESS TO NON–VACATED OFFICES AND SPACES WILL BE ACCOMMODATED BY THE OWNER DURING THE PROJECT, CONTRACTOR SHALL COORDINATE W/ THE OWNER FOR ACCESS AT LEAST ONE WEEK IN ADVANCE.
4. INVENTORY ROOM, ELEC/MECH ROOM, AND SERVER ROOM WILL REMAIN OCCUPIED AND ACTIVE BY OWNER DURING CONSTRUCTION; FOR WORK ELEMENTS IN THESE AREAS, CONTRACTOR SHALL COORDINATE WITH THE OWNER AT LEAST 4 WEEKS IN ADVANCE.

AARON M. PEASE — STATE OF WASHINGTON — 40276 — REGISTERED PROFESSIONAL ENGINEER

NO	BY	APPD	REVISION	DATE
1	AMP	AMP	ADDENDUM 1	MAR 2023

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

Gray & Osborne, Inc CONSULTING ENGINEERS
GABBERT ARCHITECTS PLANNERS

DESIGNED BY	ASD
DRAWN BY	ASD
CHECKED BY	AMP
APPROVAL	EBD
DATE	MAR. 2023

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CONTRACT 2023-01
BUILDING "A" IMPROVEMENTS

1 **EXISTING FLOOR PLAN AND TEMPORARY WORK SPACE**

SHEET
A-2
OF 24