OUTLINE SPECIFICATION Project: Cross Insurance Location: Portland, Maine Date: 08/26/16

Section 01010 – Summary of Work

- a. Renovation of existing 1 story space (2,975 sq. ft.) for general office space including general office space, conference areas, reception, storage, break room and new toileting facilities.
- b. The General Contractor shall provide design build services for all mechanical/plumbing and electrical portions of the project
- c. The General Contractor shall be responsible for obtaining any and all required permits to construct the project.

Section 01300 - Submittals

- a. Construction Schedule The Contractor shall provide, at the beginning of the project, a detailed construction schedule.
- b. Shop drawings Detailed shop drawings (including; drawings, product data, and samples) shall be provided for review as required. A minimum of four (4) copies shall be submitted for review. Digital submittals are allowable in pdf format.

Section 01500 – Temporary Facilities

- a. Sanitary Facilities Existing toileting facilities are present in the building and may be used by the Contractor and their forces.
- Heat The Contractor shall provide and maintain any temporary heating equipment as may be required. The interior of building shall have a temporary of approx. 60 deg. F for spackling of GWB, installation of wood finishes, installation of carpet and interior decoration. Existing heat and air shall be maintained to existing building tenant throughout course of project.
- c. Temporary stairs, ladders, ramps, hoists, scaffolding Provide and maintain all necessary means of access as above listed or as required for proper execution of the work. Such work shall comply with the requirements of applicable Federal, State and Local laws and requirements.
- d. Pumping Provide labor and equipment as necessary to keep all portions of the excavations free from water. If conditions so dictate, provide a well point system to maintain excavations free from water.
- e. Demolition/Debris removal It is the responsibility of the Contractor to make all required arrangements for the legal disposal of all debris generated from this project. The Contractor shall keep the building and site clean at all times and maintain safe access to and from the site for current building tenants.

Section 01700 - Project Closeout

- a. Clean up The Contractor shall provide a thoroughly cleaned facility at the conclusion of the project. Use only cleaning materials and methods recommended by the manufacturer of the surface material to be cleaned.
- b. Transmission of extra material The Contractor shall transfer extra material, i.e. flooring tiles, ceiling tiles, paint, etc... as define in the specifications.
- c. Maintenance data and instructional manuals The Contractor shall transfer all required maintenance and instruction manuals.

- d. Guarantees and Warrantees The Contractor shall transfer all required guarantees and warrantees.
- e. Final Inspection A final inspection shall be performed at the conclusion of the project by the Owner and the Architect. The issuance of the Certificate of Substantial completion and final payments shall be subject to the completion of the items generated during the final inspection.

Section 02060 - Selective Demolition and Alterations

- a. Materials Ownership Except for items or materials indicted to be reused or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.
- b. Utility Services Maintain existing utilities to remain in service and protect them against damage during selective demolition operations.
- c. Repair Materials Use materials identical to existing materials or whose installed performance equals or surpasses that of the existing materials.
- d. Selective Demolition Demolish and remove existing construction only to the extent required by new construction and/or as indicated.
- e. Patching and Repairs Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.
- f. Cleaning Sweep clean the building broom clean and change filters on air handling equipment on completion of the selective demolition operation.

Section 03300 - Cast in Place Concrete

- a. Reinforcing Steel 60,000 psi new billit steel conforming to ASTM A-615 and ASTM A-305 deformations.
- b. Concrete 3000 psi for footings & foundations. 3500 psi for slabs.
- C. Concrete Aggregates Shall conform to ASTM C-33. Fine aggregates shall consist of hard, tough and preferably siliceous material, clean, free from mineral or other coatings, soft particles, clay, loam or other deleterious matter. Course Aggregate shall consist of crushed stone or gravel, having clean, hard durable, uncoated particles, free from deleterious matter.
- d. Rapid setting floor slab trench patching material Rapid set concrete mix, CTS Cement Manufacturing (800) 929-3030. Pre-blended hydraulic cement, sand, and 3/8 inch stone, with rapid curing for placement of flooring materials with 24 hours. Job site blended material consisting of 1 part CTS hydraulic cement, 2 parts coarse washed aggregate 3/8 to 3/4 inch size, and 2 parts fine aggregate mortar sand will be permitted.
- e. Vapor retarder 10 mil polyethylene.

Section 06100 – Rough Carpentry

- a. Lumber Standards Furnish lumber manufactured to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review.
- b. Light Framing 2 inch to 4 inch thickness Provide SPF No. 2 grade or better

Section 06200 - Finish Carpentry

- a. Quality Standard AWI quality standard "Architectural Woodwork Quality Standards" of the Architectural Woodwork Institute for grades of interior architectural woodwork, construction, finishes, and other requirements.
- b. Softwood Trim Species: Eastern white pine (NELMA). Grade: Select. Texture: Surfaced (smooth). Solid lumber stock.

- c. Hardwood Trim Species for transparent finish: Maple, plain sawn selected for compatible grain and color. Species for painted finish: Poplar, plain sawn. Texture: Surfaced (smooth). Solid lumber stock.
- d. Wood Molding Patterns Provide stock moldings made to patterns indicated. Transparent finish N Grade. Moldings for painted finish P Grade.

Section 06400 - Architectural Woodwork/Casework

- a. Hardwood Maple, plain sawn for compatible grain and color. Smooth surface texture. Solid lumber stock for transparent finish.
- b. Hardwood Plywood and Face Veneers HPVA HP-1, 7 ply core, no voids. Maple: Grade A, plain sliced, book matched.
- c. Plastic Laminate Tops Plastic laminate sheet, Pionite G48, .048 inch thickness or equal complying with NEMA LD 3, bonded with fully waterproof glue specified to both sides of 1 inch thick particle board. Provide ³/₄ inch thick hardwood faced plywood substrate for entire top where sinks occur.
- d. Solid Surface Tops Solid surface tops shall be ½" solid material with rounded edges as indicated on the drawings. Solid surface material shall be Corian or equal. Color shall be as selected, from manufacturer's full range of colors, by the Architect.
- e. Cabinet Hardware Hinges: 5 knuckle hinges complying with BHMA 156.9, grade 1, with antifriction bearings and rounded tips. Provide 2 for doors less than 48 inches, 3 for doors up to 62 inches and 4 for doors greater than 62 inches. Drawer Slides: Grass or MEPLA, telescoping full extension ball bearing slide, 100 pound capacity. Door and Drawer Pulls: Ives and Stanley 1 5/16 inch projection by 4 inches screw hole spacing. Shelf Standards: By Knape and Vogt No. 255 nickel finish, 5/8 inch wide by 3/16 inch high standards and No. 256 series nickel finish brackets. Door catches: Adjustable nylon roller spring catch or duel, self-aligning, permanent magnet catch. Provide 2 catches on doors more than 48 inches high. Plastic Grommets: Round wire management grommets by Outwater Plastics, Woodridge, NJ (800-631-8375). Color by Architect.

Section 07200 - Insulation

- a. Sound Attenuation Insulation Unfaced mineral fiber "formaldehyde free" blanket/batt insulation per ASTM C 665. Insulation to be provided by Certainteed, Owens Corning, Johns Manville or equal.
- b. Unfaced Building Insulation ASTM C 665, Type I (blankets without membrane facing) consisting of fibers manufactured from glass "formaldehyde free"; with maximum flame spread and smoke developed indices of 25 and 50, respectively; passing ASTM E 136 for combustion characteristics. CertainTeed, Owens Corning, Johns Manville or equal.

Section 07841 – Through Pentration Firestop Systems

- a. This section includes through penetration fire stop systems for penetrations through fire resistance rated assemblies at floors, ceilings, walls/partitions, smoke barriers and construction enclosing compartmentalized areas.
- b. Provide through penetration fire stop systems that are produced and installed to resist the spread of fire according to requirements indicated, resist passage of smoke and other gases, and maintain original fire resistance rating of assembly penetrated. Provide through penetration fire stop systems with F-ratings and T-ratings as determined per ASTM E 814.
- c. Provide Products by one of the following: Bio Fireshield, W.R. Grace & Co., Hilti Construction Chemicals, Isolatek International, Nelson Firestop Products, Specified Technologies, and 3M Fire Protection Products.
- d. Fill Materials:

Cast in Place Firestop Devices – Factory assembled devices for use in cast in place concrete floors and consisting of an outer metallic sleeve lined with an intumescent strip, a radial

extended flange attached to one end of the sleeve for fastening to concrete formwork, and a neoprene gasket. CP 680 Cast in Place Firestop Device; Hilti Construction Chemicals, Inc.

Latex Sealants – single component latex formulations that after cured do not re-emulsify during exposure to moisture. FlameSafe FS 900 Sealant by W.R. Grace or Equal.

Firestop Devices – Factory assembled collars formed from galvanized steel and lined with intumescent material sized to fit specified diameter of penetrant. FlameSafe FSWS Series FlameSafe devices by W.R. Grace or equal.

Intumescent Composite Sheets – Rigid panels consisting of a aluminum foil faced elastomeric sheet bonded to a galvanized steel sheet. CS-195 Composite Sheet, 3M Fire Protection Products or equal.

Intumescent Putties – Nonhardening dielectric, water resistant putties containing no solvents, inorganic fibers, or silicone compounds. FlameSafe FSP 1000 Putty and FSP 1077 Putty Pads by W.R. Grace or equal.

Intumescent Wrap Strips with Foil – Single component intumescent elastomeric sheets with aluminum foil on one side. Fire Barrier FS-195+ Wrap Strip by 3M Fire Protection Products or equal.

Intumescent Wrap Strips – Single component intumescent elastomeric sheets. Biostop Wrap Strip by Bio Fireshield or equal.

Mortars – Prepackaged, dry mixes consisting of a blend of inorganic binders, hydraulic cement, fillers, and lightweight aggregate formulated for mixing with water at Project site to form a nonshrinking, homogeneous mortar. FlameSafe Mortar Safe by W.R. Grace & Co. or equal.

Pillows/Bags – Reusable, heat expanding pillows/bags consisting of glass fiber cloth cases filled with a combination of mineral fiber, water insoluble expansion agents and fire retardant additives. FlameSafe Bags and FlameSafe Pillows by W.R. Grace & Co. or equal.

Silicone Foams – Multicomponent, silicone based liquid elastomers that, when mixed, expand and cure in place to produce a flexible, nonshrinking foam. Fire Barrier 2001 Silicone RTV Foam by 3M Fire Protection Products or equal.

Silicone Sealants – Moisture curing, single component, silicone based neutral curing elastomeric of grades indicated below. Grade for horizontal surfaces – pourable (self leveling) – Biotherm 200SL Firestop Sealant by Bio FireShield or equal. Grade for vertical surfaces – nonsag formulation – Biotherm 100 Firestop by Bio FireShield or equal.

Section 07842 - Fire Resistive Joint Systems

- a. This section includes fire resistive joint systems for floor to wall joints, head of wall joints, wall to wall joints and wall to adjacent structures joints.
- b. Provide fire resistive joint systems that are produced and installed to resist the spread of fire according to requirements indicated, resist passage of smoke and other gases, and maintain original fire resistance rating of assembly in which fire resistive joint systems are installed.
- c. Joint Systems in and between Fire Resistance Rated Construction: Provide systems with assembly ratings equaling or exceeding the fire resistance ratings of construction that they join, and with movement capabilities indicated as determined by UL 2079.
- d. For fire resistive systems exposed to view, provide products with flame spread and smoke developed indexes of less than 25 and 450, respectively, as determined per ASTM E 84.

Provide products by one of the following: A/D Fire Protection Systems Inc., W.R. Grace & Co., Hilti Inc., Johns Manville, Nelson Firestop Products, NUCO Inc., RectorSeal Corp., Specified Technologies Inc., 3M Fire Protection Products Division, Tremco Sealant/Weatherproofing Division, USG Corp.

Section 07900 – Joint Sealants

- a. General Purpose Exterior Sealant (non masonry) Polyurethane ASTM C920, Type S, Grade NS, Class 25, single component. Sonolastic NP-1 by Sonneborne or equal.
- b. General Purpose Exterior Sealant masonry) Polyurethane ASTM C920, Type M, Grade NS, Class 25, two component. Sonolastic NP-2 by Sonneborne or equal.
- c. General Purpose Interior Sealant Acrylic emulsion latex ASTM C834, single component, paintable. Tremco Acrylic Latex or equal.
- d. General Purpose Interior Sealant (toilet fixtures, counters) Acrylic emulsion latex ASTM C920, uses M and A, single component, mildew resistant. Sanitary 1700 by GE Silicones or equal.

Section 08100 – Doors and Frames

- a. Steel Doors Provide (Grade II) 1 3/4 inch thick doors manufactured from 18 gauge galvanized cold rolled steel face sheets by Ceco, Curries, Steelcraft or equal. Provide 14 gauge channels at top and bottom of doors. Provide 12 gauge reinforcement welded within the door for closer attachment. Doors shall bonderized and have one coat of baked on prime coat of paint.
- b. Metal Frames Welded frames shall be 16 gauge, cold rolled prime quality galvanized steel. Frames shall be bonderized and have baked-on prime coat of paint. Provide 3 anchors per jamb consisting of 3 wall anchors and 1 floor anchor. Provide 3 door silencers on strike jambs of single doors and 2 silencers on head of double door frames.
- c. Wood Doors Provide 1 3/4 inch thick solid core wood doors by Algoma, Eggers, Marshfield Door or equal. Doors shall be 5 ply construction with type I adhesive for core construction and veneer plies. Facing shall be "A" grade rotary cut, natural maple for transparent finish.
- d. Wood Frames Grade: Custom for opaque finish. Material: Solid hardwood maple. Construction: Single Rabbet. Comply with AWI Section 900.
- e. Glazing Beads For metal door beads shall be cold rolled sheet steel, 18 gauge minimum, mitered and welded corners with countersunk mounting holes and Shop primed finish. For wood door beads shall be solid wood of same species as door facing and mitered corners.

Section 08400 - Aluminum Storefront

a. Doors and Framing – Provide 451 T Thermal Framing system by Kawneer or equivalent by Tubelite.

Section 08710 – Finish Hardware

- a. Hinges Standard weight average frequency FBB line by Stanley or equal by McKinney or Bommer. Solid brass or bronze, five knuckle, flush ball bearing design. Provide 3 hinges for each door leaf.
- b. Locksets Heavy Duty Cylinder Locksets. 10 line series by Sargent with LNL levers, or equal.
- c. Exit Devices 8800 series rim devices by Sargent. Lever design shall match lock trim.
- d. Door Closers Door closers shall have sully hydraulic, full rack and pinion action. Cylinder body shall be 1 ½ in. diameter heat treated pinion shall be 11/16 in. diameter. All closers shall solid forged steel main arms and forged forearms for parallel arm closers. Closers shall be by Sargent or LCN.
- e. Door Stops Provide Ives 436B and 438B dome type floor stops or equal by Rockwood or Glynn Johnson.

- f. Push Plates Push plates shall be 4 in. x 16 in. x .050 in. thickness stainless steel. Rockwood 70 Series or equal.
- g. Door Pulls Door pulls shall be 1 in. x 10 in. Type A: Rockwood BF111, Burns BF26C or Quality BF163-10". Type B: Rockwood 157, Burns 39C or Quality 521.
- h. Protective Plates Kick plates shall be 8 in. high by 1 ½ in. less door width. Plates shall by .050 thickness, stainless steel, bevel 4 edges, screws shall be oval head counter sunk.
- i. Threshold Flat extruded aluminum threshold, ¹/₂ in. high with beveled edges and corrugated surfaces. Set thresholds in a full bed of sealant.
- j. Weatherstripping As required for exterior doors.
- k. Silencers Provide silencers on all metal and wood frames. Silencers shall be Ives 20/21, Glynn Johnson 64/65, or Rockwood 608/609.
- 1. Keying Per instructions by Owner.
- m. Key Cabinet Furnish 1 Aristocrat wall cabinet as manufactured by Telkee, Inc., Key Control Systems, Lund or equal. Cabinet shall be sufficient to accommodate all locks related to this project (2 keys per lockset), with an allowance for expansion of not less than 50%.
- n. Finishes All items shall be furnished in Polished Brass finish.

Section 08800 - Glazing

- a. Tempered Safety Glass ASTM C1048 fully tempered, Condition A uncoated, Type 1 transparent flat, Class 1 clear, Quality q3 glazing select conforming to ANSI Z97.1, 1/4 inch thick.
- b. Low E insulated glass units: Uncoated insulating glass units complying with ASTM E 773 and E 774; double pane with glass elastomer edge seal; inner and outer panes of 1/4 inch glass; total unit thickness of 1 inch minimum.
 - 1. Interspace Content: Argon.
 - 2. Outdoor Lite: Class 1 (tinted to match existing) float glass.
 - a. Kind FT fully tempered.
 - 3. Indoor Lite: Class 1 (clear) float glass.
 - a. Kind FT fully tempered.
 - 4. Low-E Coating: Sputtered coated on third surface.
 - 5. Winter U-Value: 0.28.

Section 09250 – Gypsum Board Assemblies

- Steel Framing for Walls and Partitions Steel framing and furring shall be by Dietrich Industries, Marino/Ware or equal. Provide steel framing members complying with ASTM A 653, G 40 (ASTM A 653M, Z 90) hot dipped galvanized coating.
- b. Steel Studs and Runners ASTM C 645 with flange edges of studs bent back 90 degrees and doubled to form 3/16 inch wide min. lip. Thickness shall be 25 gauge for studs less than 3 5/8 inches deep, 22 gauge for studs 3 5/8 inches deep and 20 gauge for studs 6 inches deep.
- c. Steel Furring Channels ASTM C 645, hat shaped, 25 gauge with a depth of 7/8 inches.
- d. Gypsum Board and Related Products Shall be provided by Domtar, U.S. Gypsum Co., Georgia Pacific Corp., National Gypsum Co. or equal.
- e. Gypsum Wallboard ASTM C 36 type "X" for 5/8 inch thickness with tapered edges.
- f. Water Resistant Gypsum Board (MR) ASTM C 630/C 630M for 5/8 inch thickness with tapered edges. Install at Bathrooms, Toilet Rooms, Janitor's Closets, Trash Rooms and wherever else indicated.
- g. Corner Bead 1 1/4 inch x 1 1/4 inch galvanized steel external corner with 1/8 inch nose bead.
- h. Casing Bead 30 gauge galvanized steel channel-type casing with 1/16 inch nose bead ground and knurled flange for joint compound finishing.
- i. Control Joint One piece control joint formed with V-shaped slot and removable strip covering slot opening.

- j. Joint Treatment Materials Provide joint treatment material complying with ASTM C 475 and the recommendations of both the manufacturers of the sheet products and of joint treatment materials for each application indicated.
- k. Acoustical Sealants Acoustical Sealant for exposed & concealed joints: Pecora Corp. AC-20 FTR or equal by U.S. Gypsum Co. Acoustical Sealant for concealed joints: Ohio Sealants Inc. Pro-Series SC-175 rubber base sound sealant, Pecora Corp. AIS-919 or equal by Tremco Inc.

Section 09510 - Acoustical Panel Ceilings

- a. Acoustical Tiles Acoustical tile ceilings shall be provided by Armstrong, USG Industries or equal. Ceiling tiles shall 24 inch x 24 inch x 5/8 inch, mineral wool fiber, white vinyl paint, fissured surface with revealed angled tegular edge. The tiles shall be the equivalent to Armstrong's Cortega with an STC range 35 to 39 and NRC range .50 to .60.
- b. Metal Suspension System The metal suspension system shall be equal to the Prelude 15/16 inch Exposed Tee System (7300 series) by Armstrong, the 1200 System by Chicago Metallic Corp., or the DX 24 System by USG Interiors.

Section 09680 - Carpet

- a. Carpeting Carpet shall be Impulse II Carpet Tile by J & J. Solution & yarn dyed nylon, graphic loop carpet. Match existing carpeting.
- b. Primer Non staining type as recommended by the Carpet manufacturer.
- c. Trowelable Underlayments and Patching Compounds Latex modified, Portland cement based formulation provided or approved by carpet manufacturer for applications indicated. Gypsum base not acceptable.
- d. Adhesives Water resistant, mildew resistant, non staining type to suit products and sub floor conditions indicated and to comply with flammability requirements for installed carpet as recommended by the Carpet manufacturer.

Section 09900 - Painting

- a. VOC Compliance for Paints and Coatings: Provide the manufacturer's formulation for the products specified below that are VOC compliant with the State of Maine Dept. of Environmental Regulation "Chapter 151 – Architectural and Industrial Maintenance Coatings".
- b. Gypsum Board Eggshell (Flat at Ceilings), Acrylic Enamel Finish: 2 finish coats over a primer. Primer – Sherwin Williams ProMar 200 Zero VOC Latex Primer; 1.3 mils DFT. Finish coats – ProMar 200 Zero Latex Paint; 3.2 mils DFT.
- c. Natural Finish Wood Waterborne, Satin-Varnish Finish: 3 finish coats. Finish coats Sherwin Williams Minwax Polycrylic.
- Painted Finish Wood Semigloss, Acrylic Enamel Finish: 2 finish coats over a primer. Primer – Sherwin Williams Sherwin Williams ProMar 200 Zero VOC Latex Primer; 1.3 mils DFT. Finish Coats – Sherwin Williams ProMar 200 Zero VOC Latex Semi-gloss Paint; 3.0 mils DFT.
- e. Ferrous Metal Semigloss, Acrylic Enamel Finish: 2 coats over a rust inhibitive primer. Primer – Sherwin Williams Galvite HS, B50WZ30; 3.5 DFT. Finish coats – Sherwin Williams Duration Exterior Gloss Latex Coating; 5.6 mils DFT.
- f. Ferrous and Zinc Coated Metal Semigloss, Acrylic Enamel Finish: 2 finish coats over a primer. Primer – Sherwin Williams Galvite HS Paint B50WZ30; 3.5 mils DFT. Finish coats – Sherwin Williams ProMar 200 Interior latex Semi-Gloss B31-2200 Series; 3.0 mils DFT.
- g. Telecommunication and Electrical Backboards Flat Intumescent Finish: 2 finish coats over a primer. Primer – Moore Pristine EcoSpec Interior Latex Primer Sealer 231; 0.8 mils DFT. Finish coats – Moore M59 220 Latex Fire Retardant Coating.

Section 10522 – Fire Extinguishers, Cabinets and Accessories

a. Cabinets – Provide cabinets by Larsen's Manuf., J.L. Industries, Potter Roemer Inc., Lyon Metal Products, or Croker Standard.

Cabinet – Model 2409-6R in non-rated walls, Model FS 2409-6R in rated walls; semi recessed design with 2 ¹/₂ inch rolled edge trim, capable of being installed in a rough wall opening depth of no more than 4 ¹/₄ inch and able to hold the supplied extinguisher. The door shall be Horizontal Duo Panel, ¹/₂ inch thick hollow metal design, pull handle, self-adjusting roller catch, continuous piano hinge permitting door to open 180 degrees and 1/8 inch thick glass panel. Glass shall be fully tempered float glass.

b. Extinguishers – Provide extinguishers by Amerex, Potter Roemer Inc., Kidde, or Larsen's Manuf. Multipurpose dry chemical type in steel containers, UL rated with monoammonium phosphate based dry chemical in enameled steel container. Provide 4-A:60-B:C, 10 lb units for all fire extinguisher cabinets. Provide 4-A:60-B:C, 10 lb bracket mounted units in Mechanical Rooms.

Section 15400 – Plumbing (Design Build by Contractor)

Section 15600 – Mechanical (Design Build by Contractor)

Section 16000 – Electrical (Design Build by Contractor)

END