

REQUEST FOR PROPOSAL

Project Title: Cooley Laboratory Renovation
Location: Montana State University

PPA No.: 10-0023
RFP No.: 42
Date: 04/24/12

To: Dick Anderson Construction
4498 Jackrabbit Lane
Bozeman, MT 59718

Attention: Platisha

From: Cecilia Vaniman, Project Manager
Cooley Lab Renovation
Montana State University

Attention: _____

In order to expedite the Work and avoid or minimize delays in the Work the following proposal is requested. Please return a response by: 05/01/12

Date Sent: 04/24/12
Date Received: _____

RFP Stairs and Landings flooring

Reference Drawings: A1.0 through A1.9

Reference Specifications: 096519 & 09650 Resilient Tile Flooring

Provide Pricing For the following (2) Options - Colors from @Standard color palette

Option A:

- Provide Bamboo Surface Texture Rubber Stair Treads and Risers with integral wide contrasting solid rubber color insert at the treads.
- Provide Rubber base at all landings.

Areas of Stairwell 000, 001, 100, 101, 200, 201, 300, 301, 400, & 401

Option B:

- Provide Bamboo Surface Texture Rubber Floor tile for landings.
- Provide Bamboo Surface Texture Rubber Stair Treads with integral wide contrasting solid rubber color insert and Risers:
- Provide Rubber base at all landings.
- Provide Rubber Stringer

Areas of Stairwell 000, 001, 100, 101, 200, 201, 300, 301, 400, & 401

Attachment: 096519 Resilient Tile Flooring – 09650- Resilient Flooring

This RFP is for pricing purposes only. The contractor shall not proceed with the scope of work described within until pricing is approved by the owner in writing.

Distribution: Owner Architect Engineer
 Agency Contractor Other

RUBBER STAIR TREADS

1. PROPRIETARY PRODUCT/MANUFACTURER

1.1. **Proprietary Product:** Resilient Rubber Stair Treads A.D.A., Visually-Impaired, and California Title 24 Compliant

1.2. **Manufacturer:**

Johnsonite, Inc.	Phone	(800) 899-8916
16910 Munn Road		(440) 543-8916
Chagrin Falls, Ohio 44023	Tech:	Ext 9297
Web: www.johnsonite.com	Samples:	Ext 9299
Email: info@johnsonite.com	Fax:	(440) 543-8920

1.3. **Proprietary Product Description:**

1.3.1. **Construction:** Johnsonite Rubber Stair Treads are manufactured from a homogeneous composition of 100% synthetic rubber, high quality additives, and colorants to meet the performance requirements of ASTM F-2169 Standard Specification for Resilient Stair Treads, Type TS, Class 1 and 2, Group 1 and 2. All Johnsonite Stair Treads are available with a 2" (5.08 cm) wide strip of contrasting color to comply with A.D.A., Visually-Impaired, and California Title 24 requirements. Standard formulation exceeds ASTM E 648 Class 1 Flammability requirements.

Johnsonite Rubber Stair Treads are designed for interior applications only and not recommended for environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials. (i.e.: commercial kitchens)

1.3.2. **Styles:**

- **RTR-RD & VIRTR-RD** (Visually Impaired) - Roundel Round Raised Disk Pattern Rubber Stair Tread with Integrated Riser, 20" (51 cm) overall length, 2" (5.08 cm) hinged, square nose configuration, .210" (5.33 mm) to .153" (3.89 mm) tapered 13" (33 cm) tread depth with 7" (17.8 cm) integral riser
 - VIRTR-RD** with 2" (5.0 cm) wide contrasting color grit tape insert
 - VIRTRS-RD** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - VIRTRP-RD** with 2" (5.0 cm) wide contrasting marbled rubber color insert strip
- **RTR-SQ & VIRTR-SQ** (Visually Impaired) - Roundel Square Raised Disk Pattern Rubber Stair Treads with Integrated Riser, 2" (5.08 cm) hinged, square nose configuration, .210" (5.33 mm) to .153" (3.89 mm) tapered 13" (33 cm) tread depth with 7" (17.8 cm) integral riser
 - VIRTR-SQ** with 2" (5.0 cm) wide contrasting color grit tape insert
 - VIRTRS-SQ** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - VIRTRP-SQ** with 2" (5.0 cm) wide contrasting

marbled rubber color insert strip

- **HTR & VIHTR** (Visually Impaired) - Hammered Surface Texture Rubber Stair Tread with Integrated Riser, 2" (5.08 cm) hinged, square nose configuration, .210" (5.33 mm) to .153" (3.89 mm) tapered 13" (33 cm) tread depth with 7" (17.8 cm) integral riser

VIHTR with 2" (5.0 cm) wide contrasting color grit tape insert.

VIHTRS with 2" (5.0 cm) wide contrasting solid rubber color insert strip

VIHTRP with 2" (5.0 cm) wide contrasting marbled rubber color insert strip

- **BMTR & VBMTR** (Visually Impaired) - Bamboo Surface Texture Rubber Stair Tread with Integrated Riser, 2" (5.08 cm) hinged, square nose configuration, .210" (5.33 mm) to .153" (3.89 mm) tapered 13" (33 cm) tread depth with 7" (17.8 cm) integral riser

VBMTR with 2" (5.0 cm) wide contrasting color grit tape insert

VBMTRS with 2" (5.0 cm) wide contrasting solid rubber color insert strip

VBMTRP with 2" (5.0 cm) wide contrasting marbled rubber color insert strip

- **CUTR & VICUTR** (Visually Impaired) - Cubis Surface Texture Rubber Stair Tread with Integrated Riser, 2" (5.08 cm) hinged, square nose configuration, .210" (5.33 mm) to .153" (3.89 mm) tapered 13" (33 cm) tread depth with 7" (17.8 cm) integral riser

VICUTR with 2" (5.0 cm) wide contrasting color grit tape insert.

VICUTRS with 2" (5.0 cm) wide contrasting solid rubber color insert strip

VICUTRP with 2" (5.0 cm) wide contrasting marbled rubber color insert strip

- **CFLTR & VICFLTR** (Visually Impaired) - Fast Lane Surface Texture Rubber Stair Tread with Integrated Riser, 2" (5.08 cm) hinged, square nose configuration, .210" (5.33 mm) to .153" (3.89 mm) tapered 13" (33 cm) tread depth with 7" (17.8 cm) integral riser

VICFLTR with 2" (5.0 cm) wide contrasting color grit tape insert.

VICFLTRS with 2" (5.0 cm) wide contrasting solid rubber color insert strip

VICFLTRP with 2" (5.0 cm) wide contrasting marbled rubber color insert strip

RUBBER STAIR TREADS

- **HMT & VIHMT** (Visually Impaired) - Roundel Hammered Pattern Rubber Stair Tread, 2" (5.08 cm) hinged square nose configuration, .210" (5.33 mm) to .113" (2.87 mm) tapered 12-1/4" (31.12 cm) tread depth
 - **VIHMT** with 2" (5.0 cm) wide contrasting color grit tape insert
 - **VIHMTS** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - **VIHMTP** with 2" (5.0 cm) wide contrasting marbled rubber color insert strip
 - **HMTD & VIHMTD** (Visually Impaired) - Roundel Hammered Pattern Rubber Stair Tread, 2" (5.08 cm) hinged square nose configuration, .210" (5.33 mm) to .113" (2.87 mm) tapered 14" (35.6 cm) tread depth
 - **VIHMTD** with 2" (5.0 cm) wide contrasting color grit tape insert
 - **VIHMTDS** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - **VIHMTP** with 2" (5.0 cm) wide contrasting marbled rubber color insert strip
 - **RH-RD & VIRH-RD** (Visually Impaired) - Roundel Round Raised Disk Pattern Rubber Stair Tread, 2" (5.08 cm) hinged square nose configuration, .210" (5.33 mm) to .113" (2.87 mm) tapered 12-1/4" (31.12 cm) tread depth
 - **VIRH-RD** with 2" (5.0 cm) wide contrasting color grit tape insert
 - **VIRHS-RD** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - **VIRHP-RD** with 2" (5.0 cm) wide contrasting marbled rubber color insert strip
 - **RH-SQ & VIRH-SQ** (Visually Impaired) - Roundel Square Raised Disk Pattern Rubber Stair Treads, 2" (5.08 cm) hinged square nose configuration, .210" (5.33 mm) to .113" (2.87 mm) tapered 12-1/4" (31.12 cm) tread depth
 - **VIRH-SQ** with 2" (5.0 cm) wide contrasting color grit tape insert
 - **VIRHS-SQ** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - **VIRHP-SQ** with 2" (5.0 cm) wide contrasting marbled rubber color insert strip
 - **CN - (Sq & Rd)** Heavy Duty Diamond Rubber Stair Treads, 2" (5.08 cm) square nose or round nose configuration [designed for 3/4" (19 mm) stair nose radius], tapered from 0.240" (6.1 mm) to 0.140" (3.6 mm), 13" (33.02 cm) tread depth.
 - **VICN** with 2" (5.0 cm) wide contrasting color grit tape insert.
 - **VICNS** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - **VICNP** with 2" (5.0 cm) wide contrasting marbled rubber color insert strip
 - **CNTR & VICNTR** (Visually Impaired) - Heavy Duty Diamond Rubber Stair Treads with Integrated Riser, 2" (5.08 cm) hinged, square nose configuration, 0.240" (6.1 mm) to 0.125" (3.2 mm) taper, 13" (33 cm) tread depth with 7" (17.8 cm) integral riser
 - **VICNTR** with 2" (5.0 cm) wide contrasting color grit tape insert.
 - **VICNTRS** with 2" (5.0 cm) wide contrasting solid rubber color insert strip
 - **VICNTRP** with 2" (5.0 cm) wide contrasting marbled rubber color insert strip
 - **GS** Heavy Duty Smooth Rubber Stair Treads, Square nose configuration 1-7/8" (4.76 cm), 1/4" (6.35 mm) to 1/8" (3.17mm) tapered 13-1/4" (33.66 cm) tread depth
 - **G** Heavy Duty Smooth Safe-T-Grip Rubber Stair Treads, Square nose configuration 1-7/8" (4.76 cm), 1/4" (6.35 mm) to 1/8" (3.17mm) tapered 13-1/4" (33.66 cm) tread depth, with two 1" wide grit tape inserts
 - **VIG** Visually Impaired Heavy Duty Smooth Stair Treads, Square nose configuration 1-7/8" (4.76 cm), 1/4" (6.35 mm) to 1/8" (3.17mm) tapered 13-1/4" (33.66 cm) tread depth, with a 2" (5.0 cm) wide contrasting color grit tape or solid color rubber insert.
 - **S** Service Weight Rubber Stair Treads, Square nose configuration is 1-5/8" (4.66 cm) with a hinge, 3/16" (4.76 mm) to 1/8" (3.17 mm) tapered 13-1/4" (33.66cm) tread depth. [Available with a Visually Impaired (**VIS**) 2" (5.0 cm) wide contrasting color grit tape or solid color rubber insert.]
 - **SG** Sur-Grip Rubber Stair Treads Square nose configuration 1-5/8" (4.66 cm), 1-5/16" (3.33 cm) diameter 1/4" (6.35 mm) to 1/8" (3.17 mm) tapered 12-1/4" (31.12 cm) tread depth [Available with a Visually Impaired (**VISG**) 2" (5.0 cm) wide contrasting color grit tape or solid color rubber insert.]
 - **SA** Service Weight Safe-T-Grip Rubber Stair Treads 1-5/8" (4.66 cm) square nose configuration, 3/16" (4.76 mm) to 1/8" (3.17 mm) tapered 13-1/4" (33.66 cm) tread depth, Two 1" (2.5 cm) wide grit tape inserts.
- 1.3.3. **Physical Characteristics:**
 Lengths: 3', 3-1/2', 4', 4-1/2', 5', and 6' (.91 m, 1.07 m, 1.22 m, 1.37 m, 1.52 m, and 1.83 m) [Note: All VIRH-RD Series also available in 7 ft. (2.13 m) and 8 ft. (2.44 m) lengths] [Note: All VIRTR-RD and SQ. pattern also available in 7 ft. (2.13 m), 8 ft. (2.44 m), and 9 ft. (2.74 m) lengths]

RUBBER STAIR TREADS**2. PRODUCT PERFORMANCE AND TECHNICAL DATA**

- **Tensile Strength:** ASTM D 412 - 1200 psi
- **Hardness:** ASTM D 2240 - Not less than 85 Shore A
- **Abrasion Resistance:** ASTM D 3389 – less than 1 gram weight loss
- **Slip Resistance:** ASTM D 2047 – Meets or Exceeds a static coefficient of friction of 0.8
- **Fire Resistance:**
 - ASTM E 648/NFPA 253 (Critical Radiant Flux): Class 1
 - ASTM E 662/NFPA 258 (Smoke Density), less than 450

3. INSTALLATION

The installation of Johnsonite Rubber Stair Treads should not begin until the work of all other trades has been completed, especially overhead trades. Areas to receive stair treads shall be clean, fully enclosed, weathertight, and maintained at a uniform temperature of at least 70°F for 24 hours before, during, and after the installation is completed. The stair treads and adhesives shall be conditioned in the same manner. Stair steps shall be smooth, flat, permanently dry, clean and free of all foreign material, such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt, and old adhesive residue. Stair Treads may be installed on any smooth, dry interior step. Do not install on exterior steps subject to weather. Stair shape shall conform closely to stair tread contour, especially where the flat part of the tread joins the nosing. An epoxy caulking nose filler shall be applied to ensure a tight fit and eliminate any open spaces between the step edge and stair tread nosing. Stair treads shall be trimmed to within 1/16" of the riser and stringer to allow for expansion. Adhesives shall be applied per Johnsonite's instructions. The stair tread and nosing portion of the stair tread shall be bonded directly to the step surface. **Do not overlap the nosing over resilient riser material.** Stair treads shall be rolled, with a J-hand roller, after installation, to ensure proper bonding.

3.1. Adhesives:

Johnsonite 965 Flooring & Tread Adhesive

Porous Substrates: 1/16" square-notched trowel

(Approximately 125 sq ft /gal)

Non-Porous Substrates: 1/16" V-notched trowel

(Approximately 145 sq ft /gal)

Important: This adhesive is substrate porosity sensitive. Determine if the substrate is porous or non-porous prior to application of the adhesive and installation of the flooring products and follow the appropriate instructions.

Johnsonite 945 Contact Bond Adhesive

Application: Brush or roller

Coverage: Approx. 360 sq ft/gal

Johnsonite 930 Two-Part Epoxy Caulking Compound

Application - Gun, knife, or 13-1/2 ounce cartridge (Use

Johnsonite 530 dual-cartridge dispenser gun with cartridge)

Coverage: Approx. 250 linear ft/gal or 50 linear with a 1/4" diameter bead per 13-1/2 ounce cartridge

4. AVAILABILITY AND COST

Available through authorized Johnsonite distributors nationwide.

5. WARRANTY

Limited 1 year warranty against defects in manufacturing and workmanship. For complete details, contact Johnsonite or an authorized Johnsonite distributor.

6. MAINTENANCE

72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer's requirements. Refer to Johnsonite Rubber Floor Tile and Rubber Stair Tread Maintenance Instructions for complete maintenance details.

7. TECHNICAL SERVICES

Samples: Submittal samples for verification and approval available upon request from Johnsonite. Samples shall be submitted in compliance with the requirements of the Contract Documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.johnsonite.com or contact Johnsonite at 1-800-899-8916.

Roundel® & CityScape™ Rubber Floor Tile**1. PROPRIETARY PRODUCT/MANUFACTURER**

1.1 **Proprietary Product:** Resilient Rubber Floor Tiles - A.D.A. Compliant

1.2 **Manufacturer:**

Johnsonite, Inc.,
16910 Munn Road
Chagrin Falls, Ohio 44023
Phone: (800) 899-8916
(440) 543-8916
Fax: (440) 543-8920
Tech: Ext 297
Samples: Ext 299
Web: www.johnsonite.com
E-mail: info@johnsonite.com

1.3 Proprietary Product Description

1.3.1 **Construction:** Johnsonite Rubber Floor Tiles are manufactured from a homogeneous composition of 100% synthetic rubber, high quality additives, and colorants to meet the performance requirements of ASTM F 1344, Class 1-A and 1-B Standard Specification for Rubber Floor Tile.

Johnsonite Rubber Floor Tiles are designed for interior applications only and not recommended for environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials (e.g.: commercial kitchens). Johnsonite rubber floor tiles require the use of chair pads in work station and similar high use caster wheel environments. Johnsonite rubber floor tiles are not warranted against cuts or lack of protection under caster wheels.

1.3.2 **Styles:**

RT-Rd - Roundel Round Raised Disk Pattern Rubber Tile, .125" (3.17 mm) and .155" (4.00 mm) thicknesses, Specify RTSP for speckled tile. (Not available in 12" x 12")

RT-Sq - Roundel Square Raised Disk Pattern Rubber Tile, .125" (3.17 mm) and .155" (4.00 mm) thicknesses, specify RTSP for speckled tile. (Not available in 12" x 12")

RET - Roundel Smooth Accent Rubber Tile, .100" (2.54 mm) and .130" (3.30 mm) thicknesses

C-Smooth - Smooth Surface Rubber Landing Tile, .125" (3.17 mm) thickness

C-Diamond - Diamond Surface Rubber Landing Tile, .187" (4.76 mm) thickness

FRT - Flagstone (Slate Surface) Rubber Floor Tile, .125" (3.17 mm) thickness, specify FRTSP for speckled tile

HRT - Hammered Surface Rubber Floor Tile, .125" (3.17 mm) thickness, specify HRTSP for speckled tile

CSH - Hammered Surface, Speckled Rubber Floor Tile, 2 mm (.079") thickness, 12" x 12" (30.5 cm x 30.5 cm), 52 tiles per

carton (52 sq. ft.) (4.8 sq. m.), 24" x 24" (61 cm x 61 cm), 12 tiles per carton 48 sq. ft. (4.4 sq m)

WRT - Weathered (Grained Surface) Rubber Floor Tile, .125" (3.17 mm) thickness, Specify WRTSP for speckled tile

BMRT-Bamboo Rubber Floor Tile, .125" (3.17 mm) thickness, (Not available in 12" x 12")

CBMRT - Chopped Bamboo Rubber Floor Tile, .125" (3.17 mm) thickness (Not available in 12" x 12")

CRT - Cubis Rubber Floor Tile, .125" (3.17 mm) thickness (Not available in 12" x 12")

ART - Artistic Square Rubber Floor Tile, .125" (3.17 mm) thickness (Not available in 12" x 12")

PRT - Pebbles Rubber Floor Tile, .125" (3.17 mm) thickness (Not available in 12" x 12")

CFL - Circulinity Fast Lane™ Rubber Tiles, .125" (3.17 mm) thickness (Not available in 12" x 12")

CRB - Circulinity Round-A-Bout™ Rubber Tiles, .125" (3.17 mm) thickness (Not available in 12" x 12")

CTR - Circulinity Tricycle™ Rubber Tiles, .125" (3.17 mm) thickness (Not available in 12" x 12")

CTT - Circulinity Tic-Tac-Toe™ Rubber Tiles, .125" (3.17 mm) thickness (Not available in 12" x 12")

CEF - Circulinity Effervescent™ Rubber Tiles, .125" (3.17 mm) thickness (Not available in 12" x 12")

1.3.3 Physical Characteristics:**Tile Size and Packaging:**

- 24" x 24" (61 cm x 61 cm), .125" and .100" thick— 8 tiles per carton [32 ft² (2.9 m²)]
- 24" x 24" (61 cm x 61 cm), .155" and .130" thick – 6 tiles per carton [24 ft² (2.2 m²)]
- 12" x 12" (30.5 cm x 30.5 cm), 40 tiles per carton 40 ft² (3.7 m²)

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

2.1 **Tensile Strength:** ASTM D 412 > 1200 PSI

2.2 **Hardness:** ASTM D 2240 – Not less than 85 Shore A

2.3 **Abrasion Resistance:** ASTM D 3389 <1.0 gm weight loss

2.4 **Slip Resistance:** ASTM D 2047 – Meets or Exceeds a static coefficient of friction of 0.8

2.5 **Color Heat Stability:** ASTM F 1514 < 8.0 ΔE

2.6 **Acoustical:** ASTM E- 492 Impact Insulation Class – 40 IIC (Test performed with 1/8" thick tiles)

2.7 **Static Load Limit:** ASTM F 970 – Passes at 250 PSI

2.8 **Fire Resistance:**

2.8.1 ASTM E 648/NFPA 253 (Critical Radiant Flux), Class 1

2.8.2 ASTM E 662/NFPA 258 (Smoke Density), less than 450

2.9 **Chemical Resistance:** ASTM F 925, Passed - 5% Acetic acid, 70% Isopropyl alcohol, Sodium hydroxide solution (5% NaOH), Hydrochloric acid solution (5% HCl), Sulfuric acid solution (5% H₂SO₄), Household ammonia solution (5% NH₄OH), Household bleach (5.25% NaOCl), Disinfectant cleaner (5% active phenol)

3. INSTALLATION

3.1 The installation of Johnsonite Rubber Floor Tiles should not begin until the work of all other trades has been completed, especially overhead trades. The areas to receive flooring materials shall be clean and fully enclosed. The area should be maintained at a minimum of 65° F and a maximum of 75° F for 48 hours before the installation, during the installation and for 48 hours after the installation is completed. The flooring materials and adhesives shall be conditioned in the same manner. Wood floors should be double construction with a minimum thickness of 1 inch. Material selection shall be made utilizing ASTM F 1482, Standard Guide to Wood Underlayments Available or Use under Resilient Floors. "Particle or chipboard" type underlayments are not acceptable. The floor must be rigid, free of movement and have at least 18" of well ventilated air space below. Concrete shall be prepared utilizing ASTM F 710, Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring. Floors shall be smooth, flat, permanently dry, clean and free of all foreign material such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt, and old adhesive residue. Floor covering shall not be installed over expansion joints. It is essential that moisture tests be taken on all concrete floors regardless of age and grade level. The test shall be in accordance with ASTM F-1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. One test should be conducted for every 1000 sq. ft. of flooring and the results not exceed 3 lbs. per 1000 sq. ft. in 24 hours. If the test results exceed the limitations, the installation must not proceed until the problem has been corrected. The flooring shall be dry laid and inspected by the installer, under normal, occupied lighting conditions, to ensure proper color and fit prior to final adhesive installation.

3.2 Adhesives:

3.2.1 Johnsonite #965 Flooring & Tread Adhesive

- Porous Substrates: 1/16" square-notched trowel (Approximately 125 sq ft /gal)
- Non-Porous Substrates: 1/16" V-notched trowel (Approximately 145 sq ft /gal)

Important: This adhesive is substrate porosity sensitive. Determine if the substrate is porous or non-porous prior to application of the adhesive and installation of the flooring products and follow the appropriate instructions.

3.2.2 Johnsonite #996 Two-Part Epoxy Adhesive

Application: 1/16" square notched trowel
(Approximately 150 sq. ft/gal)

3.2.3 Johnsonite #975 Two-Part Urethane Adhesive

Application: 1/16" square notched trowel
(Approximately 150 sq. ft/gal)

3.3 **Installation Manual:** Refer to Johnsonite Rubber Tile Installation Instructions for complete installation details.

4. AVAILABILITY AND COST

4.1 Available through authorized Johnsonite distributors nationwide.

5. WARRANTY

5.1 Limited 5 year warranty for 2 mm and .125" (3.17 mm) rubber tiles and limited 10 year warranty for .155" (4 mm) rubber tiles. For complete details, contact Johnsonite or an authorized Johnsonite distributor.

6. MAINTENANCE

6.1 72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer's requirements. Refer to Johnsonite Rubber Tile Maintenance Instructions for complete maintenance details.

7. TECHNICAL SERVICES

7.1 **Samples:** Submittal samples for verification and approval available upon request from Johnsonite. Samples shall be submitted in compliance with the requirements of the Contract Documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

7.2 For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.johnsonite.com or contact Johnsonite at 1-800-899-8916.

Stringers and Risers

1. PROPRIETARY PRODUCT/MANUFACTURER

Proprietary Product: Resilient Stair Stringers and Risers

1.1 Manufacturer:

Johnsonite, Inc.,
16910 Munn Road
Chagrin Falls, Ohio 44023
Phone: (800) 899-8916
(440) 543-8916
Fax: (440) 543-8920
Tech: Ext 297
Samples: Ext 299
Web: www.johnsonite.com
E-mail: info@johnsonite.com

1.2 **Construction:** Johnsonite Rubber Stringers and Risers are manufactured from a proprietary thermoplastic rubber formulation designed specifically to meet the performance and dimensional requirements of ASTM F-1861, Type TP, Group 1 (solid) Standard Specification for Resilient Wall Base. Johnsonite Vinyl Stringers and Risers are formulated from a homogeneous polyvinyl chloride composition combined with high quality additives and colorants designed specifically to meet the performance and dimensional requirements of ASTM F-1861-98, Type TV, Group 1 (solid) Standard Specification for Resilient Wall Base.

1.3 Physical Characteristics:

Rubber Stringers (**RS**):

Size: 10" (25.4 cm) high x 6' (1.83 m) long
Thickness: .080" (2.03 mm) or .125" (3.17 mm)

Vinyl Stringers (**VS**):

Size: 10" (25.4 cm) high x 50' (15.24 m) long
Thickness: .080" (2.03 mm)

Rubber Risers (**RR**):

Sizes: 6" (15.24 cm) high x 4' (1.22 m) long
6" (15.24 cm) high x 100' (30.48 m) long
7" (17.78 cm) high x 4' (1.22 m) long
7" (17.78 cm) high x 5' (1.52 m) long
7" (17.78 cm) high x 6' (1.83 m) long
7" (17.78 cm) high x 50' (15.24 m) long
Thickness: .125" (3.17 mm)

Vinyl Risers (**VR**):

Sizes: 6" (15.24 cm) high x 4' (1.22 m) long
6" (15.24 cm) high x 120' (36.58 m) long
7" (17.78 cm) high x 4' (1.22 m) long
7" (17.78 cm) high x 50' (15.24 m) long
Thickness: .080" (2.03 mm)

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

2.1 **Hardness:** ASTM D 2240 - Not less than 85 Shore A

2.2 **Flexibility:** Will not crack, break, or show any signs of fatigue when bent around a 1/4" (6.35 mm) diameter cylinder.

2.3 Meets or exceeds the performance requirements for resistance to heat/light aging, chemicals, and dimensional stability when tested to the methods, as described, in ASTM F-1861.

2.4 **Fire Resistance:** ASTM E 84/NFPA 255 (Flame/Smoke) - Class B, < 450 Smoke

3. INSTALLATION

3.1 The installation of Johnsonite Stair Stringers and Risers should not begin until the work of all other trades has been completed, especially overhead trades. Areas to receive stair stringers and risers shall be clean, fully enclosed, weathertight, and maintained at a uniform temperature of at least 65° F for 24 hours before, during, and after the installation is completed. The stair stringers, risers and adhesives shall be conditioned in the same manner. Stair step and adjacent surfaces shall be smooth, flat, level, permanently dry, clean and free of all foreign material, such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt, and old adhesive residue. Stair stringers and risers may be installed on any smooth, dry interior surface. Do not install on exterior surfaces subject to weather. Stringers and risers shall be trimmed to fit the contour of the stair step. Risers shall be trimmed to abut the bottom of the stair tread or nosing. **Do not overlap nosing of stair tread or stair nosing over resilient riser material.** Adhesives shall be uniformly applied per Johnsonite's recommendations. Stair stringers and risers shall be rolled, with a J-hand roller, after installation, to ensure proper bonding.

3.2 Adhesives:

Porous surfaces:

Johnsonite **#960 Acrylic Cove Base Adhesive**

Application: 1/8" square notch trowel

Coverage: approximately 160 sq ft/gallon of 6" riser;
approximately 100 sq ft/gallon of 10" stringer

Non-porous surfaces:

Johnsonite **#945 Contact Bond Adhesive**

Application - Brush or roller

Coverage - approximately 360 sq ft/gallon

3.3 **Installation Manual:** Refer to Johnsonite Stair Tread, Nosing, Riser, and Stringer Installation Instructions for complete installation details.

4. AVAILABILITY AND COST

4.1 Available through authorized Johnsonite distributors nationwide.

5. WARRANTY

5.1 Limited 1 year warranty. For complete details, contact Johnsonite or an authorized Johnsonite distributor.

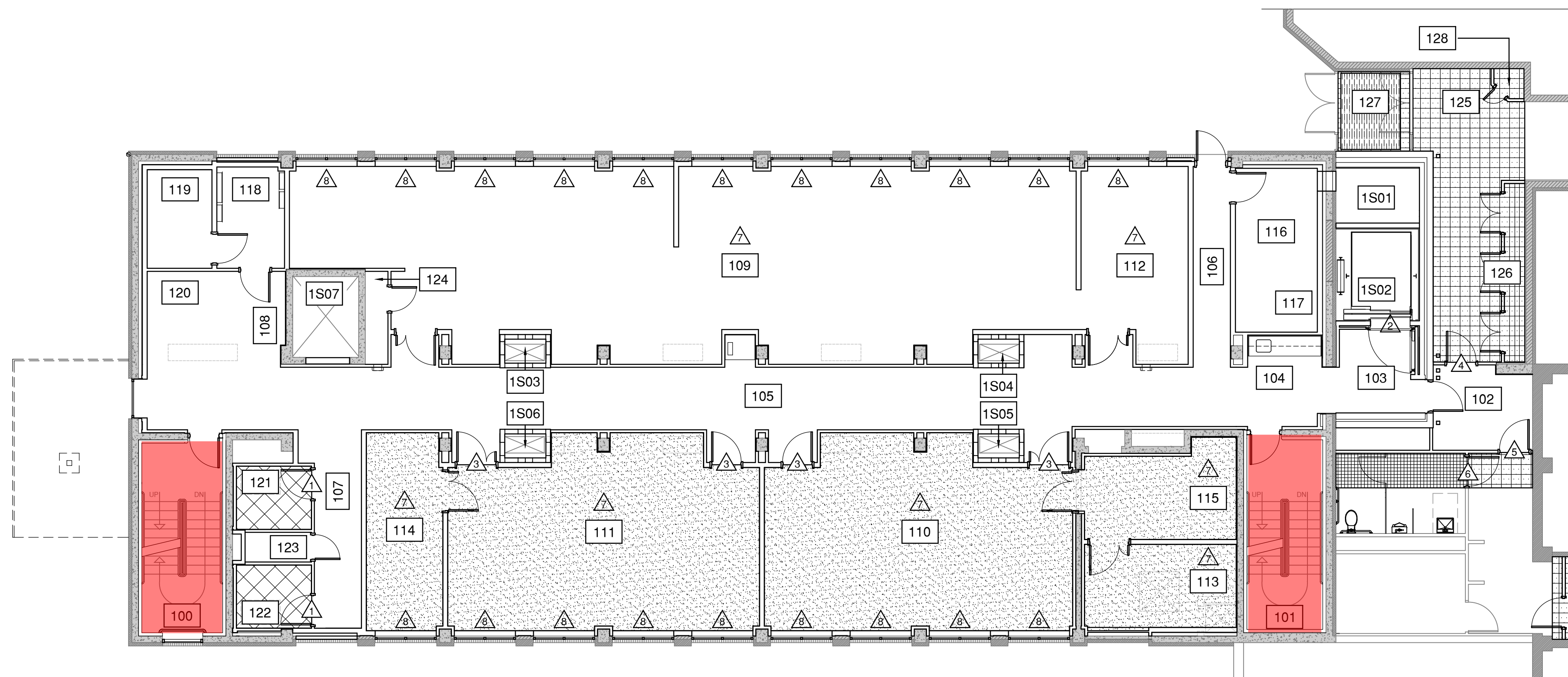
6. MAINTENANCE

6.1 Refer to Johnsonite Stair Tread, Nosing, Riser, and Stringer Installation Instructions for complete maintenance details.

7. TECHNICAL SERVICES

7.1 Samples: Submittal samples for verification and approval available upon request from Johnsonite. Samples shall be submitted in compliance with the requirements of the Contract Documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

7.2 For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.johnsonite.com or contact Johnsonite at 1-800-899-8916.



PLAN FLOOR 1: BASE BID FINISHES

SCALE: 1/8"=1'-0"

INDEX - BASE BID

- 18X18 PORCELAIN TILE
- 12X12 VINYL COMPOSITION TILE - REPLACE VCT AS REQUIRED IN THIS AREA, MATCH EXISTING
- SHEET VINYL - EXTEND UP WALLS AS BASE
- RESTROOM TILE - MATCH EXISTING
- ENTRANCE FLOOR MAT & FRAME
- SEALED CONCRETE

KEY NOTES

- 1. TRANSITION RAMP - SEE 1/A&B.3
- 2. ELEVATOR EDGE - SEE 3/A&B.3
- 3. TRANSITION EDGE - SEE 5/A&B.3
- 4. TRANSITION EDGE - SEE 7/A&B.3
- 5. TRANSITION EDGE - SEE 9/A&B.3
- 6. TRANSITION EDGE - SIMILAR 11/A&B.4
- 7. SHEET METAL BACKING STRIPS ON ALL STUD WALLS PER 7/A&B.0
- 8. [N] HORIZONTAL LOUVER BLINDS - 6'-2" WIDE BY 5'-6" HIGH - SITE CONFIRM EXACT REQUIRED DIMENSIONS

FLOOR-1

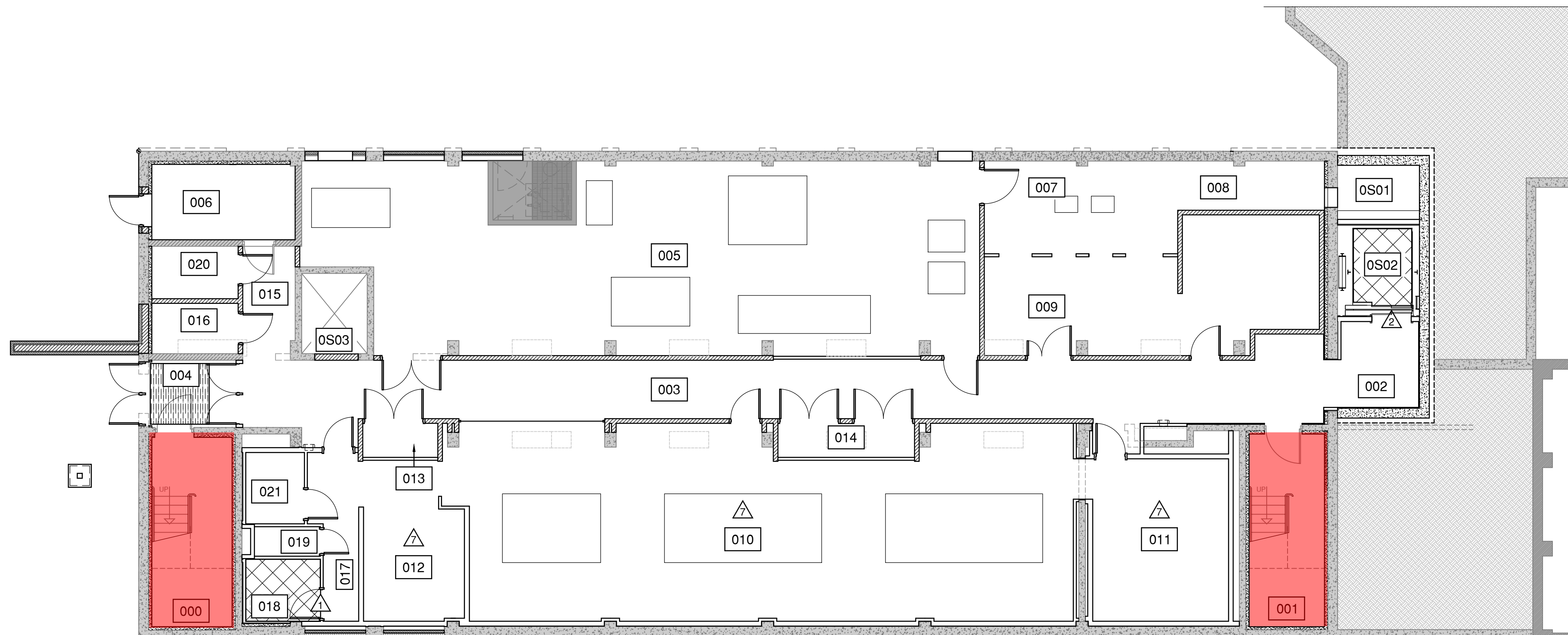
- ROOM
- 100 [E] EXIT STAIR
 - 101 [E] EXIT STAIR
 - 102 [E] A.R.C. ACCESS
 - 103 [N] ELEVATOR VESTIBULE
 - 104 [N] COLLISION-COFFEE CABINET
 - 105 [N] CORRIDOR
 - 106 [N] CORRIDOR
 - 107 [N] CORRIDOR
 - 108 [N] CORRIDOR
 - 109 [N] LABORATORY
 - 110 [N] LABORATORY
 - 111 [N] LABORATORY
 - 112 [N] LABORATORY
 - 113 [N] TISSUE CULTURE
 - 114 [N] TISSUE CULTURE
 - 115 [N] COMMON EQUIPMENT
 - 116 [N] 2-4 DEG C COLD ROOM
 - 117 [N] COLD ROOM VESTIBULE
 - 118 [N] ELECTRICAL
 - 119 [N] INFORMATION TECHNOLOGY
 - 120 [N] COLLISION
 - 121 [N] WOMEN
 - 122 [N] MEN
 - 123 [N] PLUMBING CHASE
 - 124 [N] LABORATORY SUPPORT CHASE
 - 125 [E] CORRIDOR
 - 126 [N] STORAGE
 - 127 [E] VESTIBULE
 - 128 [N] CLOSET
 - 1S01 [N] EXTERIOR M/E SHAFT
 - 1S02 [N] ELEVATOR SHAFT
 - 1S03 [N] SHAFT ENCLOSURE
 - 1S04 [N] SHAFT ENCLOSURE
 - 1S05 [N] SHAFT ENCLOSURE
 - 1S06 [N] SHAFT ENCLOSURE
 - 1S07 [E] ELEVATOR SHAFT ENCLOSURE

FLOOR-BASEMENT

- ROOM
- 000 [E] EXIT STAIR
 - 001 [E] EXIT STAIR
 - 002 [N] ELEVATOR VESTIBULE
 - 003 [E] CORRIDOR
 - 004 [N] EXIT VESTIBULE
 - 005 [N] MECHANICAL
 - 006 [E] TRANSFORMER VAULT
 - 007 [N] STEAM CHASE
 - 008 [N] AUTOCLAVE REPAIR
 - 009 [N] AUTOCLAVE
 - 010 [N] IMAGING
 - 011 [N] LABORATORY
 - 012 [N] LABORATORY
 - 013 [N] IMAGING CLOSET
 - 014 [N] IMAGING CLOSET
 - 015 [N] HALLWAY
 - 016 [N] CUSTODIAL
 - 017 [N] HALLWAY-VESTIBULE
 - 018 [N] TOILET
 - 019 [N] PLUMBING CHASE
 - 020 [N] INFORMATION TECHNOLOGY
 - 021 [N] LASER DARK ROOM
 - OS01 [N] EXTERIOR M/E SHAFT
 - OS02 [N] ELEVATOR SHAFT
 - OS03 [E] ELEVATOR SHAFT ENCLOSURE

ROOM NAME & SIGNS

- A. ALL ROOM NUMBERING INDICATED ON THE DRAWINGS IS FOR CONSTRUCTION REFERENCE ONLY. SPECIFICATION SECTION 10431 "SIGNS" IDENTIFIES OWNER'S FINAL ROOM NUMBERS AND SIGN TYPES.
- B. REFERENCE SPECIFICATION SECTION 10431 FOR OWNER'S ROOM & SIGN SCHEDULE
- C. REFERENCE DRAWING SHEETS A9.9 & A9.10 FOR SIGN SIZE AND TEXT.
- D. CONTRACTOR SHALL USE OWNER'S ROOM NUMBERS ON ALL FINAL REQUIRED LABELING

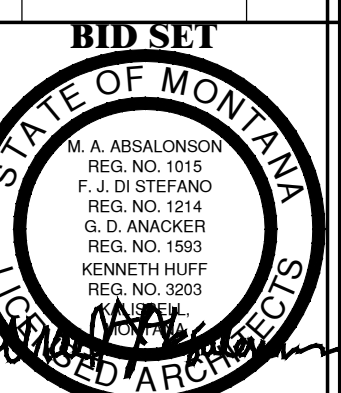


PLAN FLOOR BASEMENT: BASE BID FINISHES

SCALE: 1/8"=1'-0"



DRAWN BY:	MK
CHECKED BY:	MA
APPROVED BY:	MA
REV DESCRIPTION	DATE
NH SDD	07.23.2010
NH CD	12.01.2010
NH FINAL	03.14.2011



M.S.U. PPA 10-0023
 ADG 10-020

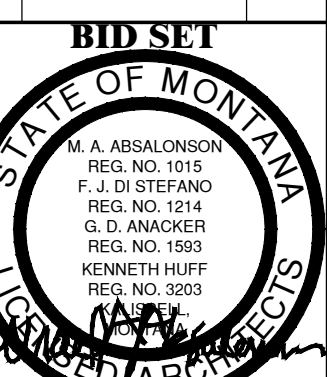
BASE BID FINISHES B-1

A1.12

March 14, 2011



DRAWN BY:	MK
CHECKED BY:	MA
APPROVED BY:	MA
REV/DESCRIPTION	DATE
NH	SD/DD
NH	CD
NH	FINAL



M.S.U. PPA 10-0023
 ADG 10-020

BASE BID
 FINISHES 2-3

A1.13

March 14, 2011

INDEX - BASE BID

- 18X18 PORCELAIN TILE
- 19 1/2" X 19 1/2" CARPET TILE
- SHEET VINYL
- SEALED CONCRETE

KEY NOTES

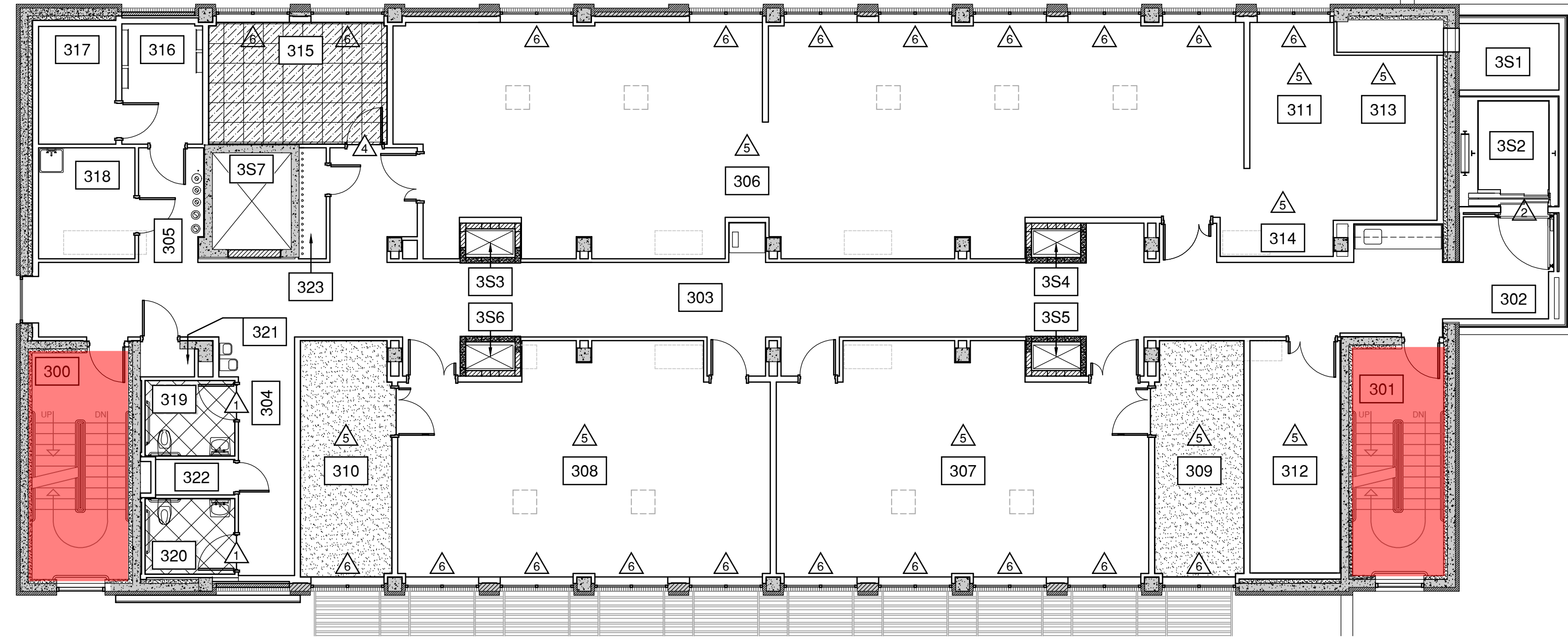
- 1. TRANSITION RAMP - SEE 1/A&B.3
- 2. ELEVATOR EDGE - SEE 3/A&B.3
- 3. TRANSITION EDGE - SEE 11/A&B.3
- 4. TRANSITION EDGE - SEE 13/A&B.3
- 5. PLACE SHEET METAL BLOCKING STRIPS ON ALL STUD WALLS PER 7/A&B.0
- 6. [N] HORIZONTAL LOUVER BLINDS - 6'-2" WIDE BY 5'-6" HIGH - SITE CONFIRM EXACT REQUIRED DIMENSIONS

FLOOR-3

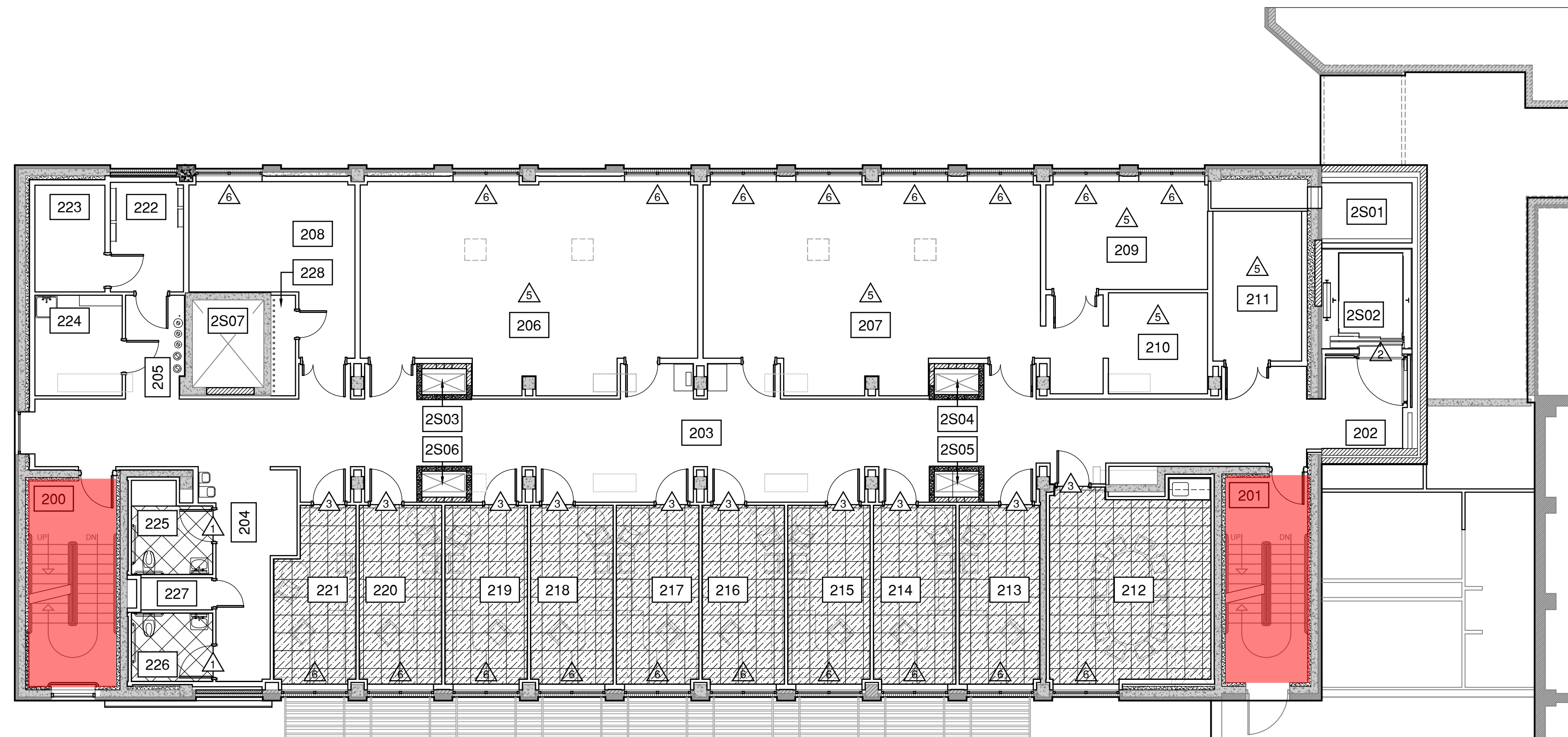
- | ROOM | DESCRIPTION |
|------|------------------------------|
| 300 | [E] EXIT STAIR |
| 301 | [E] EXIT STAIR |
| 302 | [N] ELEVATOR VESTIBULE |
| 303 | [N] CORRIDOR |
| 304 | [N] CORRIDOR |
| 305 | [N] CORRIDOR |
| 306 | [N] LABORATORY |
| 307 | [N] LABORATORY |
| 308 | [N] LABORATORY |
| 309 | [N] TISSUE CULTURE |
| 310 | [N] TISSUE CULTURE |
| 311 | [N] COMMON EQUIPMENT |
| 312 | [N] COMMON EQUIPMENT |
| 313 | [N] 2-4 DEG C COLD ROOM |
| 314 | [N] COMMON EQUIPMENT |
| 315 | [N] OFFICE |
| 316 | [N] ELECTRICAL |
| 317 | [N] INFORMATION TECHNOLOGY |
| 318 | [N] CUSTODIAL |
| 319 | [N] WOMEN |
| 320 | [N] MEN |
| 321 | [N] GENERAL STORAGE |
| 322 | [N] PLUMBING CHASE |
| 323 | [N] LABORATORY SUPPORT CHASE |
| 3S1 | [N] M/E SHAFT |
| 3S2 | [N] ELEVATOR SHAFT |
| 3S3 | [N] SHAFT ENCLOSURE |
| 3S4 | [N] SHAFT ENCLOSURE |
| 3S5 | [N] SHAFT ENCLOSURE |
| 3S6 | [N] SHAFT ENCLOSURE |
| 3S7 | [E] ELEVATOR SHAFT ENCLOSURE |

FLOOR-2

- | ROOM | DESCRIPTION |
|------|---------------------------------|
| 200 | [E] EXIT STAIR |
| 201 | [E] EXIT STAIR |
| 202 | [N] ELEVATOR VESTIBULE |
| 203 | [N] CORRIDOR |
| 204 | [N] CORRIDOR |
| 205 | [N] CORRIDOR |
| 206 | [N] BIOINFORMATICS |
| 207 | [N] GENOMICS |
| 208 | [N] BIOINFORMATICS SERVERS |
| 209 | [N] NEXT GEN SEQUENCING |
| 210 | [N] LASER DISSECTION MICROSCOPE |
| 211 | [N] COMMON EQUIPMENT |
| 212 | [N] CONFERENCE |
| 213 | [N] OFFICE |
| 214 | [N] OFFICE |
| 215 | [N] OFFICE |
| 216 | [N] OFFICE |
| 217 | [N] OFFICE |
| 218 | [N] OFFICE |
| 219 | [N] OFFICE |
| 220 | [N] OFFICE |
| 221 | [N] OFFICE |
| 222 | [N] ELECTRICAL |
| 223 | [N] INFORMATION TECHNOLOGY |
| 224 | [N] CUSTODIAL |
| 225 | [N] WOMEN |
| 226 | [N] MEN |
| 227 | [N] PLUMBING CHASE |
| 228 | [N] LABORATORY SUPPORT CHASE |
| 2S01 | [N] M/E SHAFT |
| 2S02 | [N] ELEVATOR SHAFT |
| 2S03 | [N] SHAFT ENCLOSURE |
| 2S04 | [N] SHAFT ENCLOSURE |
| 2S05 | [N] SHAFT ENCLOSURE |
| 2S06 | [N] SHAFT ENCLOSURE |
| 2S07 | [E] ELEVATOR SHAFT ENCLOSURE |



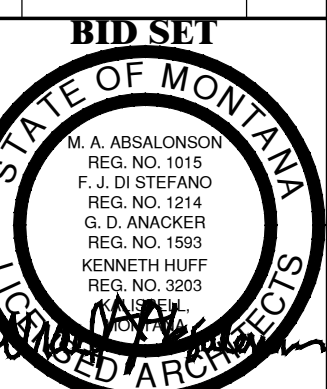
PLAN FLOOR 3: BASE BID FINISHES
 SCALE: 1/8"=1'-0"



PLAN FLOOR 2: BASE BID FINISHES
 SCALE: 1/8"=1'-0"



DRAWN BY:	MK	
CHECKED BY:	MA	
APPROVED BY:	MA	
REV	DESCRIPTION	DATE
NH	SD/DD	07-23-2010
NH	CD	12-01-2010
NH	FINAL	03-14-2011



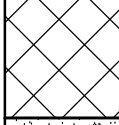


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 ADG 10-020

BASE BID
 FINISHES 4-5

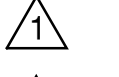


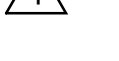
A1.14

March 14, 2011

INDEX - BASE BID

-  18X18 PORCELAIN TILE
-  SHEET VINYL
-  SEALED CONCRETE

KEY NOTES

-  TRANSITION RAMP - SEE 1/A&B.3
-  ELEVATOR EDGE - SEE 3/A&B.3
-  PLACE SHEET METAL BLOCKING STRIPS ON ALL STUD WALLS PER 7/A&B.0
-  [N] HORIZONTAL LOUVER BLINDS - 6'-2" WIDE BY 5'-6" HIGH - SITE CONFIRM EXACT REQUIRED DIMENSIONS

FLOOR 4

- ROOM
- 400 [E] EXIT STAIR
 - 401 [E] EXIT STAIR
 - 402 [N] ELEVATOR VESTIBULE
 - 403 [N] CORRIDOR
 - 404 [N] CORRIDOR
 - 405 [N] CORRIDOR
 - 406 [N] LABORATORY
 - 407 [N] LABORATORY
 - 408 [N] LABORATORY
 - 409 [N] TISSUE CULTURE
 - 410 [N] TISSUE CULTURE
 - 411 [N] COMMON EQUIPMENT
 - 412 [N] COMMON EQUIPMENT
 - 413 [N] 2-4 DEG C COLD ROOM
 - 414 [N] COMMON EQUIPMENT
 - 415 [N] ELECTRICAL
 - 416 [N] INFORMATION TECHNOLOGY
 - 417 [N] COLLISION
 - 418 [N] WOMEN
 - 419 [N] MEN
 - 420 [N] GENERAL STORAGE
 - 421 [N] PLUMBING CHASE
 - 422 [N] LABORATORY SUPPORT CHASE
 - 4S1 [N] M/E SHAFT
 - 4S2 [N] ELEVATOR SHAFT
 - 4S3 [N] SHAFT ENCLOSURE
 - 4S4 [N] SHAFT ENCLOSURE
 - 4S5 [N] SHAFT ENCLOSURE
 - 4S6 [N] SHAFT ENCLOSURE
 - 4S7 [E] MECHANICAL SHAFT ENCLOSURE

FLOOR 5

- ROOM
- 500 [N] EXIT STAIR
 - 501 [N] EXIT STAIR
 - 502 [N] ELEVATOR VESTIBULE
 - 503 [N] MECHANICAL ROOM
 - 504 [N] ELEVATOR CONTROLS
 - 505 [N] MECHANICAL PLENUM
 - 506 [N] CUSTODIAL
 - 5S01 [N] M/E SHAFT
 - 5S02 [N] ELEVATOR SHAFT

Option A:

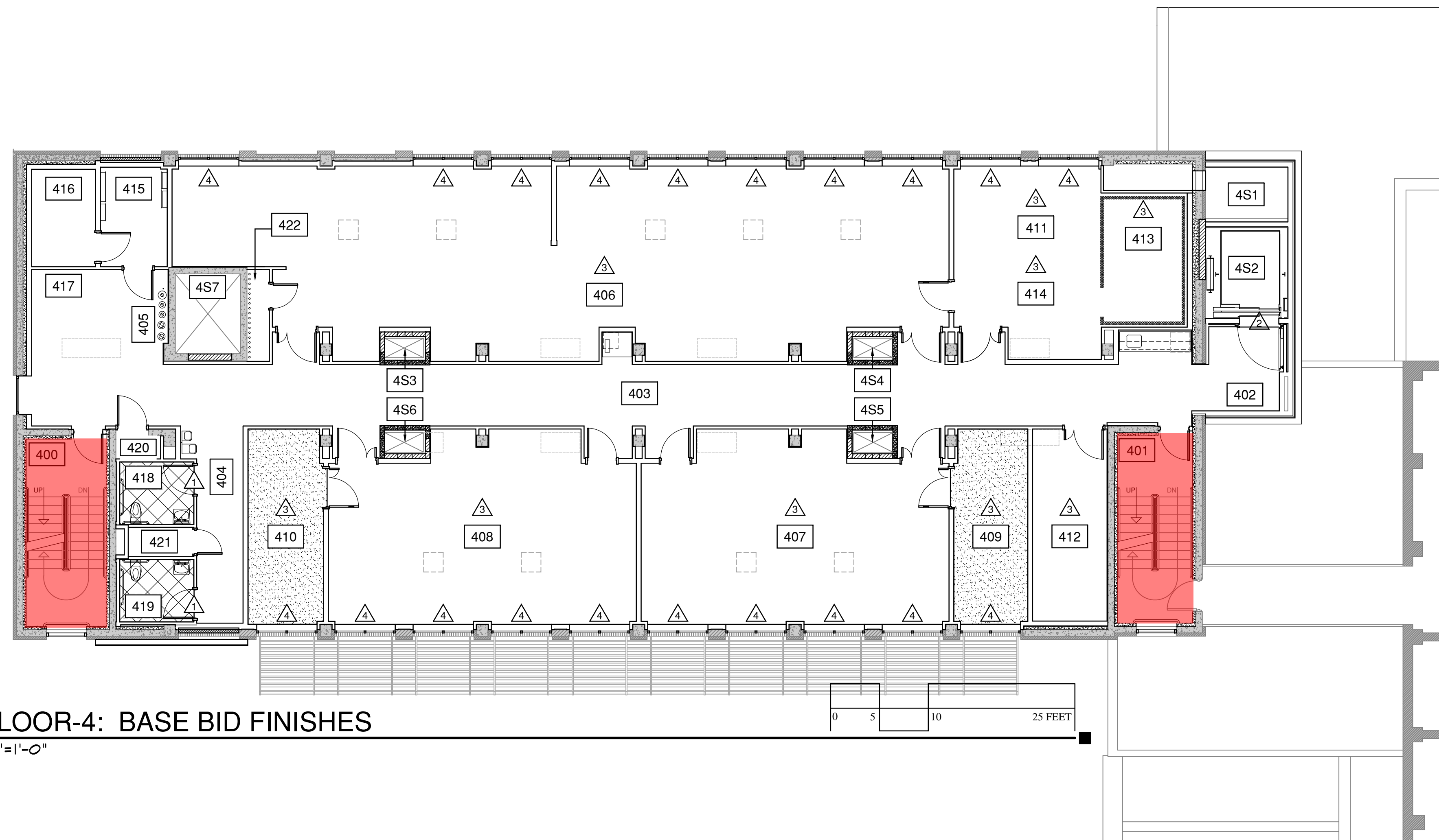
- Provide Bamboo Surface Texture Rubber Stair Treads and Risers with integral wide contrasting solid rubber color insert at treads.
-

Areas of Stairwell 000, 001, 100, 101, 200, 201, 300, 301, 400, & 401

Option B:

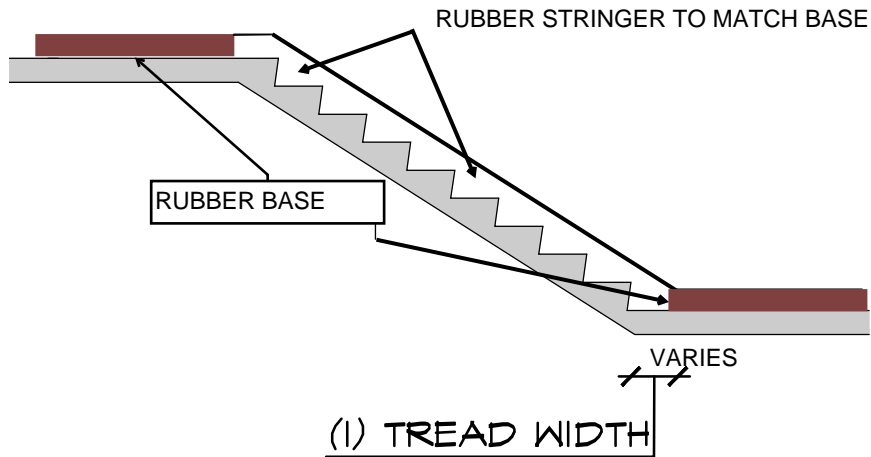
- Provide Bamboo Surface Texture Rubber Floor tile for landings.
-
-

Areas of Stairwell 000, 001, 100, 101, 200, 201, 300, 301, 400, & 401



PLAN FLOOR-4: BASE BID FINISHES

SCALE: 1/8"=1'-0"



1

STRINGER DETAIL

SCALE 1/4" = 1'-0"