410 Central Ave #506
Great Falls, MT 59401
406.453.0001
bsparkarch.com

Addendum #2

Date Jan 18, 2024

BSPARK PROJECT NO.: 22045

PROJECT TITLE: **Great Falls Police Department Evidence Expansion**
112 1st Street South
Great Falls, MT

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated, 12 Dec. 2023 as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of 2 pages, and includes 8 attachments as outlined herein, for a total of 68 pages.

A. CHANGES TO PRIOR ADDENDUM

1. None

B. CHANGES TO BIDDING REQUIREMENTS

1. **REPLACE:** Prevailing Wage Rates with updated rates, attached.
2. CLARIFICATION: Bid Form, 5.01 Base Bid, Item #2 - This contingency is only used as directed and approved by the Owner's Representative. If not used in full or in part, is a savings to the contract.

C. CHANGES TO AGREEMENT AND OTHER CONTRACT FORMS:

1. None

D. CHANGES TO THE CONDITIONS OF THE CONTRACT

1. None.

E. CHANGES TO SPECIFICATIONS

1. **REPLACE**: Section 08 7100 Door Hardware with section attached.
2. **REPLACE**: Section 03 3511 Concrete Floor Finishes with section attached.

F. CHANGES TO DRAWINGS

1. We are sending the following drawing sheets for replacement and outlining here the changes per sheet. We will issue a full revised set of drawings to the Builder's Exchange once the addendum is finalized.
2. ARCHITECTURAL
    a. G.001 - added note on U-value for roof light per City comment
    b. G.002 - noted rated wall at existing building and updated some code references

410 Central Ave #506
Great Falls, MT 59401
406.453.0001
bsparkarch.com

c. G.003 - updated generic Accessibility measurements for reference and made to fit ICC A117.1 per City comment.
d. A102 - Added rain leader extensions per City comment
e. A104 - Mechanical screen detail callout and reference.
f. A105 - updated exterior wall type information. Minor adjustments.
g. A106 - minor modification to toilet room configurations to accommodate A117.1 requirements
h. A401 - added stair tread detail and minor adjustments
i. A504 - removed reference to re-roof details and added mechanical screen detail.
j. A601 - removed reference to Door Hardware Schedule as it is part of spec section included herein. Made minor adjustments to door and frames indicated.
k. I201 - updated interior elevations to indicated specified items.
l. I202 - pdated elevations.

3. STRUCTURAL
   a. S1.6 - 7/16 OSB sheathing clarification
   b. S3.0 - shear wall clarification
   c. S4.0 - holddown clarification

G. PRIOR APPROVALS

1. **NOTE ON PRIOR APPROVALS:** Products from the following manufacturers have been reviewed as being equal to the specified items. The Contractor and supplier shall be responsible for fit, function, capacities and all other requirements in the contract documents for these products. Individual products must still meet the requirements in the plans and specifications and will be reviewed during the submittal process.

2. ROOF HATCH:

1. Manufacturer/Product submitted by DuPree Building Specialties is approved per attached Substitution Request Form.

3. **LIGHTING**:

1. Manufacturers submitted by **Illumination Systems** are approved per attached Substitution Request Form.
2. Manufacturers submitted by **MH Lighting** are approved per attached Substitution Request Form.

H. ADDITIONAL ITEMS

1. Structural plans call out 18 gauge studs. **CHANGE** all studs to be **16 gauge**
2. Shearwall section calling out 7/16 OSB, other locations call out 3/4. **CHANGE** to **7/16 OSB** directly attached to studs.

MONTANA
PREVAILING WAGE RATES FOR BUILDING CONSTRUCTION SERVICES 2024

Effective: Effective January 13,2024

Greg Gianforte, Governor
State of Montana

Sarah Swanson, Commissioner
Department of Labor & Industry

To obtain copies of prevailing wage rate schedules, or for information relating to public works projects and payment of prevailing wage rates, visit ERD at erd.dli.mt.gov/labor-standards or contact:

Employment Standards Division
Montana Department of Labor and Industry
P. O. Box 8011
Helena, MT 59601
Phone 406-444-6543

The department welcomes questions, comments, and suggestions from the public. In addition, we'll do our best to provide information in an accessible format, upon request, in compliance with the Americans with Disabilities Act.

MONTANA PREVAILING WAGE REQUIREMENTS

The Commissioner of the Department of Labor and Industry, in accordance with Sections 18-2-401 and 18-2-402 of the Montana Code Annotated (MCA), has determined the standard prevailing rate of wages for the occupations listed in this publication.

The wages specified herein control the prevailing rate of wages for the purposes of Section 18-2-401, et seq., MCA. It is required each employer pay (as a minimum) the rate of wages, including fringe benefits, travel allowance, zone pay and per diem applicable to the district in which the work is being performed as provided in the attached wage determinations.

All Montana Prevailing Wage Rates are available on the internet at https://erd.dli.mt.gov/labor-standards/state-prevailing-wage-rates or by contacting the department at (406) 444-6543.

In addition, this publication provides general information concerning compliance with Montana's Prevailing Wage Law and the payment of prevailing wages. For detailed compliance information relating to public works contracts and payment of prevailing wage rates, please consult the regulations on the internet at erd.dli.mt.gov/labor-standards or contact the department at (406) 444-6543.

SARAH SWANSON
Commissioner
Department of Labor and Industry
State of Montana

TABLE OF CONTENTS

MONTANA PREVAILING WAGE REQUIREMENTS:

WAGE RATES:

A. Date of Publication Efffective January 13, 2024

B. Definition of Building Construction

For the purposes of Prevailing Wage, the Commissioner of Labor and Industry has determined that building construction occupations are defined to be those performed by a person engaged in a recognized trade or craft, or any skilled, semi-skilled, or unskilled manual labor related to the construction, alteration, or repair of a public building or facility, and does not include engineering, superintendence, management, office or clerical work.

The Administrative Rules of Montana (ARM), 24.17.501(2) – 2(a), states *"Building construction projects generally are the constructions of sheltered enclosures with walk-in access for housing persons, machinery, equipment, or supplies. It includes all construction of such structures, incidental installation of utilities and equipment, both above and below grade level, as well as incidental grading, utilities and paving.*

Examples of building construction include, but are not limited to, alterations and additions to buildings, apartment buildings (5 stories and above), arenas (closed), auditoriums, automobile parking garages, banks and financial buildings, barracks, churches, city halls, civic centers, commercial buildings, court houses, detention facilities, dormitories, farm buildings, fire stations, hospitals, hotels, industrial buildings, institutional buildings, libraries, mausoleums, motels, museums, nursing and convalescent facilities, office buildings, out-patient clinics, passenger and freight terminal buildings, police stations, post offices, power plants, prefabricated buildings, remodeling buildings, renovating buildings, repairing buildings, restaurants, schools, service stations, shopping centers, stores, subway stations, theaters, warehouses, water and sewage treatment plants (buildings only), etc."

C. Definition of Public Works Contract

Section 18-2-401(11)(a), MCA defines "public works contract" as *"…a contract for construction services let by the state, county, municipality, school district, or political subdivision or for nonconstruction services let by the state, county, municipality, or political subdivision in which the total cost of the contract is in excess of $25,000…"*.

D. Prevailing Wage Schedule

This publication covers only Building Construction occupations and rates. These rates will remain in effect until superseded by a more current publication. Current prevailing wage rate schedules for Heavy Construction, Highway Construction, and Nonconstruction Services occupations can be found on the internet at https://erd.dli.mt.gov/labor-standards/state-prevailing-wage-rates/ or by contacting the department at (406) 444-6543.

E. Rates to Use for Projects

ARM, 24.17.127(1)(c), states *"The wage rates applicable to a particular public works project are those in effect at the time the bid specifications are advertised."*

F. Wage Rate Adjustments for Multiyear Contracts

Section 18-2-417, MCA states:

"(1) Any public works contract that by the terms of the original contract calls for more than 30 months to fully perform must include a provision to adjust, as provided in subsection (2), the standard prevailing rate of wages to be paid to the workers performing the contract.

(2) The standard prevailing rate of wages paid to workers under a contract subject to this section must be adjusted 12 months after the date of the award of the public works contract. The amount of the adjustment must be a 3% increase. The adjustment must be made and applied every 12 months for the term of the contract.

(3) Any increase in the standard rate of prevailing wages for workers under this section is the sole responsibility of the contractor and any subcontractors and not the contracting agency."

G. Fringe Benefits

Section 18-2-412, MCA states:

"(1) To fulfill the obligation…a contractor or subcontractor may:

(a) pay the amount of fringe benefits and the basic hourly rate of pay that is part of the standard prevailing rate of wages directly to the worker or employee in cash;

(b) make an irrevocable contribution to a trustee or a third person pursuant to a fringe benefit fund, plan, or program that meets the requirements of the Employee Retirement Income Security Act of 1974 or that is a bona fide program approved by the U. S. department of labor; or

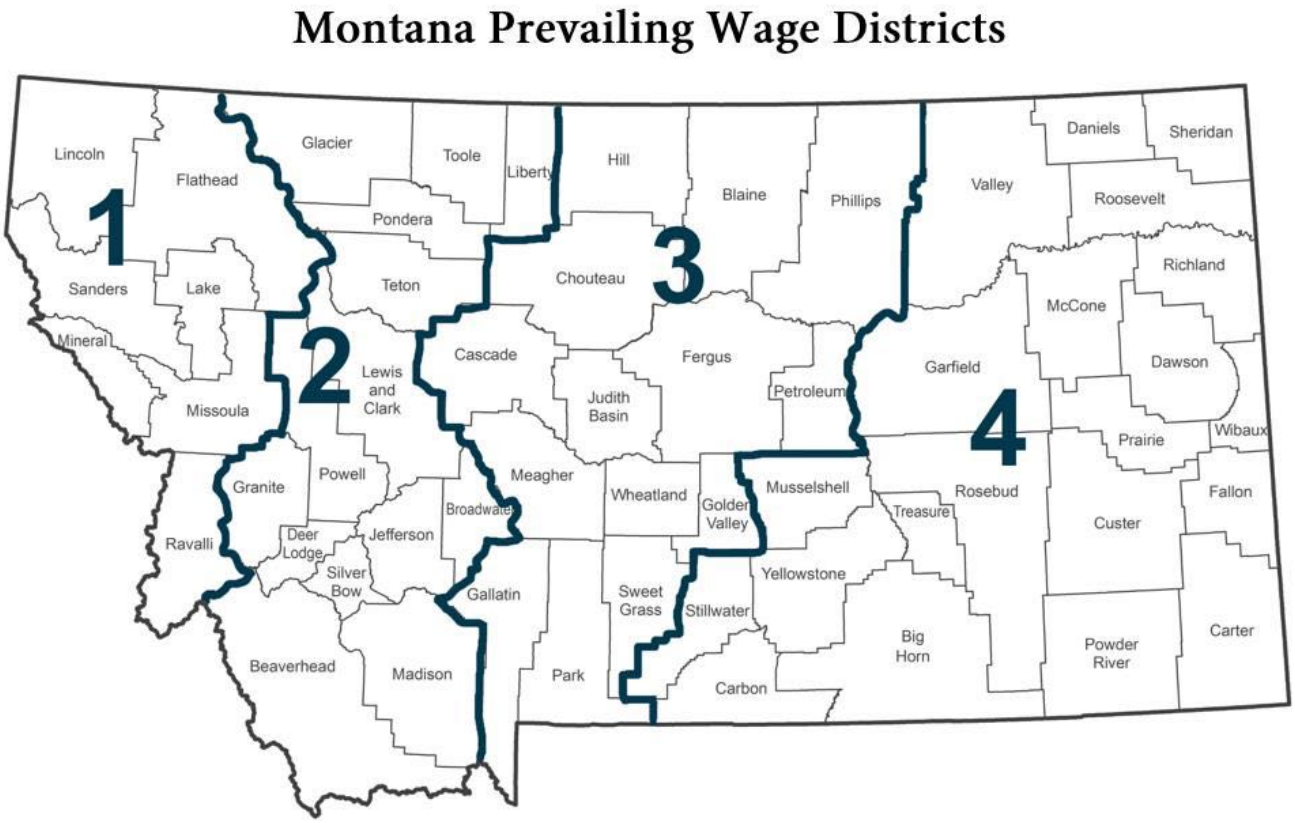
(c) make payments using any combination of methods set forth in subsections (1)(a) and (1)(b) so that the aggregate of payments and contributions is not less than the standard prevailing rate of wages, including fringe benefits and travel allowances, applicable to the district for the particular type of work being performed.

(2) The fringe benefit fund, plan, or program described in subsection (1)(b) must provide benefits to workers or employees for health care, pensions on retirement or death, life insurance, disability and sickness insurance, or bona fide programs that meet the requirements of the Employee Retirement Income Security Act of 1974 or that are approved by the U. S. department of labor."

Fringe benefits are paid for all hours worked (straight time and overtime hours). However, fringe benefits are not to be considered a part of the hourly rate of pay for calculating overtime, unless there is a collectively bargained agreement in effect that specifies otherwise.

H. Prevailing Wage Districts

Montana counties are aggregated into 4 districts for the purpose of prevailing wage. The prevailing wage districts are composed of the following counties:



I. Dispatch City

ARM, 24.17.103(11), defines dispatch city as *"...the courthouse in the city from the following list which is closest to the center of the job: Billings, Bozeman, Butte, Great Falls, Helena, Kalispell, Miles City, Missoula and Sidney."* A dispatch city shall be considered the point of origin only for jobs within the counties identified in that district (as shown below):

District 1 – Kalispell and Missoula: includes Flathead, Lake, Lincoln, Mineral, Missoula, Ravalli, and Sanders;
District 2 – Butte and Helena: includes Beaverhead, Broadwater, Deer Lodge, Glacier, Granite, Jefferson, Lewis and Clark, Liberty, Madison, Pondera, Powell, Silver Bow, Teton, and Toole;
District 3 – Bozeman and Great Falls: includes Blaine, Cascade, Chouteau, Fergus, Gallatin, Golden Valley, Hill, Judith Basin, Meagher, Park, Petroleum, Phillips, Sweet Grass, and Wheatland;
District 4 – Billings, Miles City and Sidney: includes Big Horn, Carbon, Carter, Custer, Daniels, Dawson, Fallon, Garfield, McCone, Musselshell, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Treasure, Valley, Wibaux, and Yellowstone.

J. Zone Pay

Zone pay is not travel pay. ARM, 24.17.103(24), defines zone pay as *"...an amount added to the base pay; the combined sum then becomes the new base wage rate to be paid for all hours worked on the project. Zone pay must be determined by measuring the road miles one way over the shortest practical maintained route from the dispatch city to the center of the job."* See section I above for a list of dispatch cities.

K. Computing Travel Benefits

ARM, 24.17.103(22), states *" 'Travel pay,' also referred to as 'travel allowance,' is and must be paid for travel both to and from the job site, except those with special provisions listed under the classification. The rate is determined by measuring the road miles one direction over the shortest practical maintained route from the dispatch city or the employee's home, whichever is closer, to the center of the job."* See section I above for a list of dispatch cities.

L. Per Diem

ARM, 24.17.103(19), states *" 'Per diem' typically covers costs associated with board and lodging expenses. Per diem is paid when an employee is required to work at a location outside the daily commuting distance and is required to stay at that location overnight or longer."*

M. Apprentices

Wage rates for apprentices registered in approved federal or state apprenticeship programs are contained in those programs. Additionally, Section 18-2-416(2), MCA states *"...The full amount of any applicable fringe benefits must be paid to the apprentice while the apprentice is working on the public works contract."* Apprentices not registered in approved federal or state apprenticeship programs will be paid the appropriate journey level prevailing wage rate when working on a public works contract.

N. Posting Notice of Prevailing Wages

Section 18-2-406, MCA provides that contractors, subcontractors and employers who are *"...performing work or providing construction services under public works contracts, as provided in this part, shall post in a prominent and accessible site on the project or staging area, not later than the first day of work and continuing for the entire duration of the project, a legible statement of all wages and fringe benefits to be paid to the employees."*

O. Employment Preference

Sections 18-2-403 and 18-2-409, MCA requires contractors to give preference to the employment of bona fide Montana residents in the performance of work on public works contracts.

P. Projects of a Mixed Nature

Section 18-2-408, MCA states:

"(1) The contracting agency shall determine, based on the preponderance of labor hours to be worked, whether the public works construction services project is classified as a highway construction project, a heavy construction project, or a building construction project.

(2) Once the project has been classified, employees in each trade classification who are working on that project must be paid at the rate for that project classification"

Q. Occupations Definitions

You can find definitions for these occupations on the following Bureau of Labor Statistics website:
http://www.bls.gov/oes/current/oes_stru.htm

R. Welder Rates

Welders receive the rate prescribed for the craft performing an operation to which welding is incidental.

S. Foreman Rates

Rates are no longer set for foremen. However, if a foreman performs journey level work, the foreman must be paid at least the journey level rate.

WAGE RATES

BOILERMAKERS

No Rate Established

Duties Include:
Construct, assemble, maintain, and repair stationary steam boilers, boiler house auxiliaries, process vessels, and pressure vessels.

↑ Back to Table of Contents

BRICK, BLOCK, AND STONE MASONS

	Wage	Benefit
District 1	$33.11	$17.39
District 2	$33.11	$17.39
District 3	$33.11	$17.39
District 4	$33.11	$17.39

Travel:
All Districts
0-70 mi. free zone
>70-90 mi. $60.00/day
>90 mi. $80.00/day

↑ Back to Table of Contents

CARPENTERS

	Wage	Benefit
District 1	$30.06	$11.48
District 2	$27.50	$14.07
District 3	$30.78	$11.28
District 4	$31.39	$11.74

Zone Pay:
All Districts
0-30 mi. free zone
>30-60 mi. base pay + $4.00/hr.
>60 mi. base pay + $6.00/hr.

Duties Include:
Install roll and batt insulation, and hardwood floors.

↑ Back to Table of Contents

CARPET INSTALLERS

No Rate Established

Duties Include:
Lay and install carpet from rolls or blocks on floors. Install padding and trim flooring materials.

↑ Back to Table of Contents

CEMENT MASONS AND CONCRETE FINISHERS

	Wage	Benefit
District 1	$30.55	$6.74
District 2	$29.45	$5.87
District 3	$30.75	$6.51
District 4	$30.00	$7.40

Duties Include:
Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, or curbs. Align forms for sidewalks, curbs, or gutters.

Travel and Per Diem:
All Districts
No travel or per diem established.

↑ Back to Table of Contents

CONSTRUCTION EQUIPMENT OPERATORS GROUP 1

	Wage	Benefit
District 1	$31.51	$16.68
District 2	$30.61	$16.68
District 3	$30.86	$16.68
District 4	$30.86	$16.68

This group includes but is not limited to:
Air Compressor; Auto Fine Grader; Belt Finishing; Boring Machine (Small); Cement Silo; Crane, A-Frame Truck Crane; Crusher Conveyor; DW-10, 15, and 20 Tractor Roller; Farm Tractor; Forklift; Form Grader; Front-End Loader, under 1 cu. yd; Oiler, Herman Nelson Heater; Mucking Machine; Oiler, All Except Cranes/Shovels; Pumpman.

Travel Pay
District 1
0-45 mi. free zone
>45-85 mi. $60.00/day
>85 mi. $90.00/day

Zone Pay
District 2
0-30 mi. free zone
>30-60 mi. base pay + $3.50/hr.
>60 mi. base pay + $5.50/hr.

Districts 3 and 4
0-30 mi. free zone
>30-60 mi. base pay + $3.05/hr.
>60 mi. base pay + $4.85/hr.

↑ Back to Table of Contents

CONSTRUCTION EQUIPMENT OPERATORS GROUP 2

	Wage	Benefit
District 1	$27.85	$ 7.57
District 2	$30.60	$11.06
District 3	$29.60	$10.03
District 4	$31.58	$11.20

This group includes but is not limited to:
Air Doctor; Backhoe\Excavator\Shovel, up to and incl. 3 cu. yds; Bit Grinder; Bitunimous Paving Travel Plant; Boring Machine, Large; Broom, Self-Propelled; Concrete Travel Batcher; Concrete Float & Spreader; Concrete Bucket Dispatcher; Concrete Finish Machine; Concrete Conveyor; Distributor; Dozer, Rubber-Tired, Push, & Side Boom; Elevating Grader\Gradall; Field Equipment Serviceman; Front-End Loader, 1 cu. yd up to and incl. 5 cu. yds; Grade Setter; Heavy Duty Drills, All Types; Hoist\Tugger, All; Hydralift Forklifts & Similar; Industrial Locomotive; Motor Patrol (except finish); Mountain Skidder; Oiler, Cranes\Shovels; Pavement Breaker, EMSCO; Power Saw, Self-Propelled; Pugmill; Pumpcrete\Grout Machine; Punch Truck; Roller, other than Asphalt; Roller, Sheepsfoot (Self-Propelled); Roller, 25 tons and over; Ross Carrier; Rotomill, under 6 ft; Trenching Machine; Washing /Screening Plant.

Travel Pay
District 1
0-45 mi. free zone
>45-85 mi. $60.00/day
>85 mi. $90.00/day

Zone Pay
District 2
0-30 mi. free zone
>30-60 mi. base pay + $3.50/hr.
>60 mi. base pay + $5.50/hr.

Districts 3 and 4
0-30 mi. free zone
>30-60 mi. base pay + $3.05/hr.
>60 mi. base pay + $4.85/hr.

↑ Back to Table of Contents

CONSTRUCTION EQUIPMENT OPERATORS GROUP 3

	Wage	Benefit
District 1	$30.07	$12.82
District 2	$32.83	$16.68
District 3	$32.31	$10.70
District 4	$29.36	$11.27

This group includes but is not limited to:
Asphalt Paving Machine; Asphalt Screed; Backhoe\Excavator\Shovel, over 3 cu. yds; Cableway Highline; Concrete Batch Plant; Concrete Curing Machine; Concrete Pump; Cranes, Creter; Cranes, Electric Overhead; Cranes, 24 tons and under; Curb Machine\Slip Form Paver; Finish Dozer; Front-End Loader, over 5 cu. yds; Mechanic\Welder; Pioneer Dozer; Roller Asphalt (Breakdown & Finish); Rotomill, over 6 ft; Scraper, Single, Twin, or Pulling Belly-Dump; YO-YO Cat Haul Truck, Articulating Trucks, Vac Truck.

Travel Pay
District 1
0-45 mi. free zone
>45-85 mi. $60.00/day
>85 mi. $90.00/day

Zone Pay
Districts 2 - 4
0-30 mi. free zone
>30-60 mi. base pay + $3.50/hr.
>60 mi. base pay + $5.50/hr.

↑ Back to Table of Contents

CONSTRUCTION EQUIPMENT OPERATORS GROUP 4

	Wage	Benefit
District 1	$34.05	$16.68
District 2	$29.05	$12.85
District 3	$30.90	$13.50
District 4	$33.92	$16.68

This group includes but is not limited to:
Asphalt\Hot Plant Operator; Cranes, 25 tons up to and incl. 44 tons; Crusher Operator; Finish Motor Patrol; Finish Scraper.

Travel Pay
District 1
0-45 mi. free zone
>45-85 mi. $60.00/day
>85 mi. $90.00/day

Zone Pay
Districts 2 - 4
0-30 mi. free zone
>30-60 mi. base pay + $3.50/hr.
>60 mi. base pay + $5.50/hr.

↑ Back to Table of Contents

CONSTRUCTION EQUIPMENT OPERATORS GROUP 5

	Wage	Benefit
District 1	$35.05	$16.68
District 2	$30.78	$15.32
District 3	$29.05	$15.38
District 4	$35.02	$16.68

This group includes but is not limited to:
Cranes, 45 tons up to and incl. 74 tons.

Travel Pay
District 1
0-45 mi. free zone
>45-85 mi. $60.00/day
>85 mi. $90.00/day

Zone Pay
Districts 2 - 4
0-30 mi. free zone
>30-60 mi. base pay + $3.50/hr.
>60 mi. base pay + $5.50/hr.

↑ Back to Table of Contents

CONSTRUCTION EQUIPMENT OPERATORS GROUP 6

	Wage	Benefit
District 1	$36.11	$16.68
District 2	$36.11	$16.68
District 3	$36.11	$16.68
District 4	$36.11	$16.86

This group includes but is not limited to:
Cranes, 75 tons up to and incl. 149 tons; Cranes, Whirley (All).

Zone Pay:
All Districts
0-30 mi. free zone
>30-60 mi. base pay + $3.50/hr.
>60 mi. base pay + $5.50/hr.

↑ Back to Table of Contents

CONSTRUCTION EQUIPMENT OPERATORS GROUP 7

	Wage	Benefit
District 1	$37.21	$16.68
District 2	$37.21	$16.68
District 3	$37.21	$16.68
District 4	$37.21	$16.68

This group includes but is not limited to:
Cranes, 150 tons up to and incl. 250 tons; Cranes, over 250 tons—add $1.00 for every 100 tons over 250 tons; Crane, Tower (All); Crane Stiff-Leg or Derrick; Helicopter Hoist.

Zone Pay:
All Districts
0-30 mi. free zone
>30-60 mi. base pay + $3.50/hr.
>60 mi. base pay + $5.50/hr.

↑ Back to Table of Contents

CONSTRUCTION LABORERS GROUP 1/FLAG PERSON FOR TRAFFIC CONTROL

	Wage	Benefit
District 1	$24.55	$12.00
District 2	$24.55	$12.00
District 3	$24.55	$12.00
District 4	$24.55	$12.00

Zone Pay:
All Districts
0-15 mi. free zone
>15-30 mi. base pay + $0.65/hr.
>30-50 mi. base pay + $0.85/hr.
>50 mi. base pay + $1.25/hr.

↑ Back to Table of Contents

CONSTRUCTION LABORERS GROUP 2

	Wage	Benefit
District 1	$26.23	$12.00
District 2	$27.25	$12.00
District 3	$26.29	$ 8.91
District 4	$27.25	$12.00

This group includes but is not limited to:
General Labor; Asbestos Removal; Burning Bar; Bucket Man; Carpenter Tender; Caisson Worker; Cement Mason Tender; Cement Handler (dry); Chuck Tender; Choker Setter; Concrete Worker; Curb Machine-lay Down; Crusher and Batch Worker; Heater Tender; Fence Erector; Landscape Laborer; Landscaper; Lawn Sprinkler Installer; Pipe Wrapper; Pot Tender;
Powderman Tender; Rail and Truck Loaders and Unloaders; Riprapper; Sign Erection; Guardrail and Jersey Rail; Spike Driver; Stake Jumper; Signalman; Tail Hoseman; Tool Checker and Houseman and Traffic Control Worker.

Zone Pay:
All Districts
0-15 mi. free zone
>15-30 mi. base pay + $0.65/hr.
>30-50 mi. base pay + $0.85/hr.
>50 mi. base pay + $1.25/hr.

↑ Back to Table of Contents

CONSTRUCTION LABORERS GROUP 3

	Wage	Benefit
District 1	$25.55	$12.00
District 2	$25.55	$12.00
District 3	$25.55	$12.00
District 4	$25.55	$12.00

This group includes but is not limited to:
Concrete Vibrator; Dumpman (Grademan); Equipment Handler; Geotextile and Liners; High-Pressure Nozzleman; Jackhammer (Pavement Breaker) Non-Riding Rollers; Pipelayer; Posthole Digger (Power); Power Driven Wheelbarrow; Rigger; Sandblaster; Sod Cutter-Power and Tamper.

Zone Pay:
All Districts
0-15 mi. free zone
>15-30 mi. base pay + $0.65/hr.
>30-50 mi. base pay + $0.85/hr.
>50 mi. base pay + $1.25/hr.

↑ Back to Table of Contents

CONSTRUCTION LABORERS GROUP 4

	Wage	Benefit
District 1	$25.60	$12.00
District 2	$26.27	$12.00
District 3	$26.41	$12.00
District 4	$25.60	$12.00

This group includes but is not limited to:
Hod Carrier***; Water Well Laborer; Blaster; Wagon Driller; Asphalt Raker; Cutting Torch; Grade Setter; High-Scaler; Power Saws (Faller & Concrete) Powderman; Rock & Core Drill; Track or Truck Mounted Wagon Drill and Welder incl. Air Arc.

Zone Pay:
All Districts
0-15 mi. free zone
>15-30 mi. base pay + $0.65/hr.
>30-50 mi. base pay + $0.85/hr.
>50 mi. base pay + $1.25/hr.

***Hod Carriers will receive the same amount of travel and/or subsistence pay as bricklayers when requested to travel.

↑ Back to Table of Contents

DRYWALL APPLICATORS

	Wage	Benefit
District 1	$31.24	$14.07
District 2	$31.24	$14.07
District 3	$31.24	$14.07
District 4	$31.24	$14.07

Duties Include:
Drywall and ceiling tile installation.

Zone Pay:
All Districts
0-30 mi. free zone
>30-60 mi. base pay + $4.00/hr.
>60 mi. base pay + $6.00/hr.

↑ Back to Table of Contents

ELECTRICIANS: INCLUDING BUILDING AUTOMATION CONTROL

	Wage	Benefit
District 1	$34.15	$15.38
District 2	$33.90	$17.75
District 3	$34.43	$16.40
District 4	$38.86	$16.73

Duties Include:
Electrical wiring; equipment and fixtures; street lights; electrical control systems. Installation and/or adjusting of building automation controls also during testing and balancing, commissioning and retro-commissioning.

Travel:
District 1

No mileage due when traveling in employer's vehicle.

The following travel allowance is applicable when traveling in employee's vehicle:

0-15 mi. free zone
>15-45 mi. $0.585/mi. in excess of the free zone.
>45 mi. $75.00/day

Districts 2 & 3
No mileage due when traveling in employer's vehicle.

The following travel allowance is applicable when traveling in employee's vehicle:

0-08 mi. free zone
>08-50 mi. current federal mileage rate/mi. in excess of the free zone.
>50 mi. $71.57/day

District 4
No mileage due when traveling in employer's vehicle.

The following travel allowance is applicable when traveling in employee's vehicle:

0-18 mi. free zone
>18-60 mi. federal mileage rate/mi.

Per Diem
District 4
>60 mi. $80.00/day
Per Diem in Big Sky and West Yellowstone $125/day.

↑ Back to Table of Contents

ELEVATOR CONSTRUCTORS

	Wage	Benefit
District 1	$62.25	$45.24
District 2	$62.25	$45.24
District 3	$62.25	$45.24
District 4	$62.25	$45.24

Travel:
All Districts
0-15 mi. free zone
>15-25 mi. $49.73/day
>25-35 mi. $99.45/day
>35 mi. $112.90/day

Special Provision:
.93/mile when added to amounts above if using employee vehicle.

↑ Back to Table of Contents

FLOOR LAYERS

No Rate Established

Apply blocks, strips, or sheets of shock-absorbing, sound-deadening, or decorative coverings to floors.

↑ Back to Table of Contents

GLAZIERS

	Wage	Benefit
District 1	$24.78	$4.33
District 2	$23.28	$5.66
District 3	$23.75	$4.41
District 4	$22.97	$4.37

Travel and Per Diem:
All Districts
No travel or per diem established.

↑ Back to Table of Contents

HEATING AND AIR CONDITIONING

	Wage	Benefit
District 1	$33.00	$20.73
District 2	$33.00	$20.73
District 3	$33.00	$20.73
District 4	$33.30	$20.73

Duties Include:
Testing and balancing, commissioning and retro-commissioning of all air-handling equipment and duct work.

All Districts
0-45 mi. free zone
>45 mi.
- $0.25/mi. in employer vehicle.
- $0.65/mi. in employee vehicle.

Per Diem:
All Districts
$85/day

↑ Back to Table of Contents

INSULATION WORKERS - MECHANICAL (HEAT AND FROST)

	Wage	Benefit
District 1	$40.56	$21.99
District 2	$40.56	$21.99
District 3	$40.56	$21.99
District 4	$37.34	$21.99

Duties Include:
Insulate pipes, ductwork or other mechanical systems.

Travel:
0-30 mi. free zone
>30-40 mi. $25.00/day
>40-50 mi. $35.00/day
>50-60 mi. $45.00/day
>60 mi. $130.00/day plus
- $0.56/mi. if transportation is not provided.
- $0.20/mi. if in company vehicle.

↑ Back to Table of Contents

IRONWORKERS – REINFORCING IRON AND REBAR WORKERS

	Wage	Benefit
District 1	$33.95	$25.59
District 2	$33.95	$24.50
District 3	$33.95	$24.50
District 4	$33.95	$24.50

Duties Include:
Structural steel erection; assemble prefabricated metal buildings; cut, bend, tie, and place rebar; energy producing windmill type towers; metal bleacher seating; handrail fabrication and ornamental steel.

Travel:
All Districts
0-45 mi. free zone
>45-85 mi. $100.00/day
>85 mi. $150.00/day

↑ Back to Table of Contents

IRONWORKERS – STRUCTURAL IRON AND STEEL WORKERS

	Wage	Benefit
District 1	$33.95	$24.50
District 2	$33.95	$24.50
District 3	$33.95	$24.50
District 4	$33.95	$24.50

Duties Include:
Structural steel erection; assemble prefabricated metal buildings; cut, bend, tie, and place rebar; energy producing windmill type towers; metal bleacher seating; handrail fabrication and ornamental steel.

Travel:
All Districts
0-45 mi. free zone
>45-85 mi. $100.00/day
>85 mi. $150.00/day

↑ Back to Table of Contents

MILLWRIGHTS

	Wage	Benefit
District 1	$40.49	$18.84
District 2	$40.49	$18.84
District 3	$40.49	$18.84
District 4	$40.49	$18.84

Zone Pay:
All Districts
0-30 mi. free zone
>30-60 mi. base pay + $4.00/hr.
>60 mi. base pay + $6.00/hr.

↑ Back to Table of Contents

PAINTERS: INCLUDING PAPERHANGERS

	Wage	Benefit
District 1	$30.00	$12.81
District 2	$21.28	$12.81
District 3	$25.55	$12.81
District 4	$30.30	$12.81

Travel and Per Diem:
All Districts
No travel or per diem established.

↑ Back to Table of Contents

PILE BUCKS

	Wage	Benefit
District 1	$34.50	$14.07
District 2	$34.50	$14.07
District 3	$34.50	$14.07
District 4	$34.50	$14.07

Duties Include:
Set up crane; set up hammer; weld tips on piles; set leads; insure piles are driven straight with the use of level or plum bob. Give direction to crane operator as to speed and direction of swing. Cut piles to grade.

Zone Pay:
All Districts
0-30 mi. free zone
>30-60 mi. base pay + $4.00/hr.
>60 mi. base pay + $6.00/hr.

↑ Back to Table of Contents

PILOT CAR DRIVERS

No Rate Established

↑ Back to Table of Contents

PLASTERERS

No Rate Established

Duties Include:
All materials beyond the substrate, such as a moisture barrier, any type of drainage installation between the moisture barrier and insulation or EPS board, the attachment of the EPS board, installation of fiberglass mesh embedded in the base coat, any water-resistant coat that is applied on top of the insulation to serve as a weather barrier, and the application of the finish coat.

↑ Back to Table of Contents

PLUMBERS, PIPEFITTERS, AND STEAMFITTERS

	Wage	Benefit
District 1	$37.63	$16.26
District 2	$37.90	$16.45
District 3	$37.90	$16.45
District 4	$36.71	$20.31

Duties Include:
Assemble, install, alter, and repair pipe-lines or pipe systems that carry water, steam, air, other liquids or gases. Testing of piping systems, commissioning and retro-commissioning. Workers in this occupation may also install heating and cooling equipment and mechanical control systems.

Travel:
Disrict 1
0-30 mi. free zone
>30-50 mi. $35.00/day
>50-75 mi. $45.00/day
>75 mi. $100.00/day

Special Provision
If transportation is not provided, mileage at $0.35/mi. for one trip out and one trip back is added to the amounts above. However, if the employee is traveling more than 75 miles/day, only subsistence at the rate of $85.00/day is required.

Districts 2 & 3
0-45 mi. free zone
>45 mi.

- $0.00/mi. in employer vehicle.
- $0.65/mi. in employee vehicle.

Special Provision:
At the contractors' option, mileage for one trip out and one trip back per week may be paid plus subsistence at the rate of $135.00/day.

District 4
0-70 free zone
>70 mi.

- On jobs when employees do not work consecutive days: $0.55/mi. if employer doesn't provide transportation. Not to exceed two trips.
- On jobs when employees work any number of consecutive days: $110.00/day.

↑ Back to Table of Contents

ROOFERS

	Wage	Benefit
District 1	$31.47	$13.26
District 2	$31.47	$13.26
District 3	$29.83	$ 9.20
District 4	$24.42	$ 9.06

Duties Include:
Metal roofing, covers roofs, walls and foundations with water proofing, insulation and vapor barriers in addition to metal flashings. Roofing includes shingles, low slope membranes, metal roofs, insulation, spray foam, coatings and vapor barriers. Wall coverings include metal panels, insulated metal panels and other waterproofing or rain screen systems. Foundation systems include waterproofing and insulation. Excludes prefabricated metal buildings.

Travel:
District 1
0-50 mi. free zone
>50 mi.
- $0.00/mi. in employer vehicle.
- $0.35/mi. in employee vehicle.

District 2 and 3
0-35 mi. free zone
>35 mi.
- $0.00/mi. in employer vehicle.
- $0.40/mi. in employee vehicle.

District 4
0-50 mi. free zone
>50 mi.
- $0.00/mi. in employer vehicle.
- $0.35/mi. in employee vehicle.

Per Diem:
District 1
$84.00/day

District 2 and 3
Employer pays for room + $30.00/day.

District 4
Employer pays for room + $25.00/day.

↑ Back to Table of Contents

SHEET METAL WORKERS

	Wage	Benefit
District 1	$33.00	$20.73
District 2	$33.00	$20.73
District 3	$33.00	$20.73
District 4	$33.00	$20.73

Duties Include:
Testing and balancing, commissioning and retro-commissioning of all air-handling equipment and duct work. Manufacture, fabrication, assembling, installation, dismantling, and alteration of all HVAC systems, air conveyer systems, and exhaust systems. All lagging over insulation and all duct lining.

All Districts
0-45 mi. free zone
>45 mi.
- $0.25/mi. in employer vehicle.
- $0.65/mi. in employee vehicle.

Per Diem:
All Districts
$85/day

↑ Back to Table of Contents

SOLAR PHOTOVOLTAIC INSTALLERS

	Wage	Benefit
District 1	$32.75	$17.75
District 2	$32.75	$17.75
District 3	$33.90	$16.40
District 4	$33.70	$16.40

Travel:

Districts 1, 2 and 3
No mileage due when traveling in employer's vehicle.

The following travel allowance is applicable when traveling in employee's vehicle:

0-08 mi. free zone
>08-50 mi. federal mileage rate/mi. in excess of the free zone.
>50 mi. $60.57/day

District 4
No mileage due when traveling in employer's vehicle.

The following travel allowance is applicable when traveling in employee's vehicle:

0-18 mi. free zone
>18-60 mi. federal mileage rate/mi.
>60 mi. $75.00/day

↑ Back to Table of Contents

SPRINKLER FITTERS

	Wage	Benefit
District 1	$37.66	$23.68
District 2	$39.06	$25.39
District 3	$39.06	$25.39
District 4	$39.06	$25.39

Duties Include:
Duties Include but not limited to any and all fire protection systems: Installation, dismantling, inspection, testing, maintenance, repairs, adjustments, and corrections of all fire protection and fire control systems, including both overhead and underground water mains, all piping, fire hydrants, standpipes, air lines, tanks, and pumps used in connection with sprinkler and alarm systems.

Travel
All Districts

The following travel allowance is applicable when traveling in employee's vehicle.

0-60 mi. free zone
>60-80 mi. $19.00/day
>80-100 mi. $29.00/day
>100 mi. $105.00/day + the IRS rate per mile and $8.92 for every 15 miles traveled for one trip out and one trip back

No travel allowance required when in employer's vehicle except when staying the night.

↑ Back to Table of Contents

TAPERS

No Rate Established

Travel and Per Diem:
All Districts
No travel or per diem established.

↑ Back to Table of Contents

TELECOMMUNICATIONS EQUIPMENT INSTALLERS

	Wage	Benefit
District 1	$32.36	$9.73
District 2	$23.33	$7.03
District 3	$24.17	$8.12
District 4	$23.93	$2.32

Duties Include:
Install voice; sound; vision and data systems. This occupation includes burglar alarms, fire alarms, fiber optic systems, and video systems for security or entertainment

Travel:
All Districts
The federal mileage rate/mi. in effect when travel occurs if using own vehicle.

Per Diem:
All Districts
Employer pays for meals and lodging up to $75.00/day. When jobsite is located in Big Sky, West Yellowstone, and Gardiner, lodging and meals will be provided by the employer for all actual and reasonable expenses incurred.

↑ Back to Table of Contents

TERRAZZO WORKERS AND FINISHERS

No Rate Established

Duties Include:
Finish work on hard tile, marble, and wood tile to floors, ceilings, and roof decks

↑ Back to Table of Contents

TILE AND STONE SETTERS

	Wage	Benefit
District 1	$22.94	$3.74
District 2	$22.94	$3.74
District 3	$22.94	$3.74
District 4	$22.94	$3.74

Duties Include:
Apply hard tile, stone, and comparable materials to walls, floors, ceilings, countertops, and roof decks.

Travel and Per Diem
No travel or per diem established.

↑ Back to Table of Contents

TRUCK DRIVERS

Pilot Car Driver **No Rate Established**

	Wage	Benefit
District 1	$23.42	$ 5.30
District 2	$25.00	$ 5.50
District 3	$31.06	$10.16
District 4	$30.60	$ 9.93

Truck drivers include but are not limited to:
Combination Truck & Concrete Mixer; Distributor Driver; Dry Batch Trucks; DumpTrucks & Similar Equipment; Flat Trucks; Lowboys, Four-Wheel Trailers, Float Semitrailer; Powder Truck Driver (Bulk Unloader Type); Servicemen; Service Truck Drivers, Fuel Truck Drivers, Tiremen; Trucks with Power Equipment; Truck Mechanic; Water Tank Drivers, Petroleum Product Drivers.

↑ Back to Table of Contents

Zone Pay:
All Districts
No zone pay established.

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Other doors to the extent indicated.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Cylinders specified for doors in other sections.

C. Related Sections:

1. Division 08 Section “Hollow Metal Doors and Frames”.
2. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:

1. ANSI/BHMA Certified Product Standards - A156 Series.
2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
3. ANSI/UL 294 - Access Control System Units.
4. UL 305 - Panic Hardware.

5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

    a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
    b. Complete (risers, point-to-point) access control system block wiring diagrams.

c. Wiring instructions for each electronic component scheduled herein.

2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

E. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

1.4 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).

C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.

2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.

C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 BUTT HINGES

A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:

a. Two Hinges: For doors with heights up to 60 inches.
b. Three Hinges: For doors with heights 61 to 90 inches.
c. Four Hinges: For doors with heights 91 to 120 inches.

d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following:

a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

5. Manufacturers:

a. Ives (IV) - 5BB Series, 5 knuckle.
b. McKinney (MK) - TA/T4A Series, 5 knuckle.

2.2 CONTINUOUS HINGES

A. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge. with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Manufacturers:.

a. Ives (IV).
b. Pemko (PE).

2.3 POWER TRANSFER DEVICES

A. Electrified Quick Connect Transfer Hinges: Provide electrified transfer hinges with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets with a 1-year warranty. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

a. Ives (IV) - Connect.
b. McKinney (MK) - QC (# wires) Option.

B. Electrified Quick Connect Continuous Geared Transfer Hinges: Provide electrified transfer continuous geared hinges with a removable service panel cutout accessible without de-mounting door from the frame. Furnish with Molex™ standardized plug connectors with sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

a. Ives (IV) - Connect.
b. Pemko (PE) - SER-QC (# wires) Option.

C. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Provide one each of the following tools as part of the base bid contract:

a. McKinney (MK) - Electrical Connecting Kit: QC-R001.
b. McKinney (MK) - Connector Hand Tool: QC-R003.

2. Manufacturers:

a. McKinney (MK) - QC-C Series.
b. Schlage (SC) - Connect.

2.4 DOOR OPERATING TRIM

A. Flush Bolts and Surface Bolts: Provide products conforming to ANSI/BHMA A156.3 and A156.16, Grade 1.

1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
2. Furnish dust proof strikes for bottom bolts.
3. Surface bolts to be minimum 8” in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
5. Manufacturers:

a. Ives (IV).

b. Rockwood (RO).

B. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Pulls, where applicable, shall be provided with a 10” clearance from the finished floor on the push side to accommodate wheelchair accessibility.
5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
6. Manufacturers:

a. Ives (IV).
b. Rockwood (RO).

2.5 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:

1. Threaded mortise cylinders with rings and cams to suit hardware application.
2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
4. Tubular deadlocks and other auxiliary locks.
5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
6. Keyway: Match Facility Standard.

C. Keying System: Each type of lock and cylinders to be factory keyed.

1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. Existing System: Field verify and key cylinders to match Owner's existing system.

D. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)

2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

E. Construction Keying: Provide construction master keyed cylinders.

F. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.6 KEY CONTROL

A. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.

1. Manufacturers:

a. Lund Equipment (LU).
b. MMF Industries (MM).
c. Telkee (TK).

2.7 MORTISE LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): Provide ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed mortise locksets. Listed manufacturers shall meet all features and functionality as specified herein.

1. Manufacturers:

a. Corbin Russwin Hardware (RU) - ML2000 Series.
b. Sargent Manufacturing (SA) - 8200 Series.
c. Schlage (SC) - L9000 Series.

2.8 CYLINDRICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed.

1. Provide locksets with functions and features as follows:

a. Meets ANSI/BHMA A156.41 for single motion egress.
b. Meets UL and CUL Standard 10C Positive Pressure, Fire Test of Door Assemblies with levers that meet A117.1 Accessibility Code.
c. Meets Florida Building Code FL2998 and UL Certification Directory ZHEM.R21744 for latching hardware for hurricane requirements.

d. Meets UL Certification Directory ZHLL.R21744 for products used in windstorm rated assemblies.
e. Extended cycle test: Locks to have been cycle tested in ordinance with ANSI/BHMA 156.13 requirements to 20 million cycles or greater.
f. Exceeds ANSI/BHMA A156.2 requirements by 2.6 times for 3,100 in-lb. abusive locked lever torque with no entry while maintaining egress.
g. Exceeds ANSI/BHMA A156.2 requirements by 8 times for 1,600 lbs. offset lever pull with no entry for protection against attacks.
h. Exceeds ANSI/BHMA A156.3 requirements by 2 times for latch retraction with 100 lb. preload while maintaining operation in warped doors.
i. Exceeds ANSI/BHMA A156.3 requirements by 20 times for no access with minimum 100 vertical impacts for protection against vandalism attempts.
j. Independent return springs allow lock to exceed ANSI/BHMA A156.2 Grade 1 cycle requirements without lever sag.
k. Ten-year limited warranty for mechanical functions.

2. Electromechanical locksets shall have the following features and functionality:

a. Universal Molex plug-in connectors that have standardized color-coded wiring and are field configurable in fail safe or fail secure and operate from 12vdc to 24vdc regulated.
b. EcoFlex or equivalent technology that reduces energy consumption up to 92% as certified by GreenCircle.
c. Options to be available for request-to-exit or enter signaling, latchbolt and deadbolt monitoring.
d. Two-year limited warranty on electrified functions.

3. Manufacturers:

a. Corbin Russwin Hardware (RU) - CLX3300 Series.
b. Sargent Manufacturing (SA) - 10X Line.
c. Schlage (SC) - ND Series.

2.9 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.10 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. Exit devices shall have a five-year warranty.
2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.
4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2” wide stiles.
9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.

1. Manufacturers:

a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
b. Sargent Manufacturing (SA) - 80 Series.
c. Von Duprin (VD) - 35A/98 XP Series.

2.11 ELECTROMECHANICAL EXIT DEVICES

A. Electromechanical Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices subject to same compliance standards and requirements as mechanical exit devices. Electrified exit devices to be of type and design as specified below and in the hardware sets.

1. Energy Efficient Design: Provide devices which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.
2. Where conventional power supplies are not sufficient, include any specific controllers required to provide the proper inrush current.
3. Motorized Electric Latch Retraction: Devices with an electric latch retraction feature must use motors which have a maximum current draw of 600mA. Solenoid driven latch retraction is not acceptable.
4. Manufacturers:

a. Corbin Russwin Hardware (RU) - ED5000 Series.
b. Sargent Manufacturing (SA) - 80 Series.
c. Von Duprin (VD) - 35A/98 XP Series.

2.12 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring

power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.

1. Heavy duty surface mounted door closers shall have a 30-year warranty.
2. Manufacturers:

    a. Corbin Russwin Hardware (RU) - DC6000 Series.
    b. LCN Closers (LC) - 4040 Series.
    c. Norton Rixson (NO) - 7500 Series.
    d. Sargent Manufacturing (SA) - 351 Series.

2.13 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16” above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer’s catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:

    a. Stainless Steel: 300 grade, 050-inch thick.

5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:

    a. Ives (IV).
    b. Rockwood (RO).

2.14 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Manufacturers:

    a. Ives (IV).
    b. Rockwood (RO).

C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Manufacturers:

    a. Norton Rixson (RF).
    b. Rockwood (RO).
    c. Sargent Manufacturing (SA).

2.15 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Manufacturers:

1. Pemko (PE).
2. Reese Enterprises, Inc. (RE).

2.16 ELECTRONIC ACCESSORIES

A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Manufacturers:

    a. Security Door Controls (SD) - DPS Series.
    b. Securitron (SU) - DPS Series.

B. Switching Power Supplies: Provide power supplies with either single or dual voltage configurations at 12 or 24VDC. Power supplies shall have battery backup function with an integrated battery charging circuit and shall provide capability for power distribution, direct lock control and Fire Alarm Interface (FAI) through add on modules. Power supplies shall be expandable up to 16 individually protected outputs. Output modules shall provide individually protected, continuous outputs and/or individually protected, relay controlled outputs.

1. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
2. Manufacturers:

    a. Securitron (SU) - AQD Series.

C. Intelligent Switching Power Supplies: Provide power supplies with single, dual or multi-voltage configurations at 12 and/or 24VDC. Power Supply shall have battery backup function with an integrated battery charging circuit. The power supply shall have a standard, integrated Fire Alarm Interface (FAI). The power supply shall provide capability for secondary voltage, power distribution, direct lock control and network monitoring through add on modules. The power supply shall be expandable up to 16 individually protected outputs. Output modules shall provide individually protected, continuous outputs and/or individually protected, relay controlled outputs. Network modules shall provide remote monitoring functions such as status reporting, fault reporting and information logging.

1. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
2. Manufacturers:

    a. Securitron (SU) - AQL Series.

2.17 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.18 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."

4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection (Punch Report): Reference Division 01 Sections “Closeout Procedures”. Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

B. Manufacturer’s Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. RO - Rockwood
4. SA - SARGENT
5. RF - Rixson
6. SU - Securitron

Hardware Sets

Set: 1.0

Doors: 101A

2	Continuous Hinge	CFM SLF-HD1 SER		PE	087100	
1	Concealed Vert Rod Exit, Nightlatch	LC 55 56 AD8610 106 x 862	US32D	SA	087100	
1	Concealed Vert Rod Exit, Dummy	55 56 AD8610 862	US32D	SA	087100	
1	Mortise Cylinder	Match Owner Existing	US32D	SA	087100	
2	Surface Closer	351 CPS	EN	SA	087100	

1	Gasketing	by door mfg.			
2	Sweep	57AV		PE 087100	
1	Threshold	253x3AFG FHSL14SS		PE 087100	
2	Frame Harness	QC-C1500P (as required)		MK 087100	⚡
2	Door Harness	QC-C__P (as required)		MK 087100	⚡
2	Position Switch	DPS-M-BK		SU 087100	⚡
1	Power Supply	AQL Series (as required)		SU 087100	⚡
1	Card Reader	provided by access control.			

Notes: Operational Narrative:
1. Doors normally closed and secure.
2. Authorized access by card reader retracting exit device latch for predetermined time limit. Exit device latch can be electrically held retracted for open access.
3. Egress free for immediate exit.
4. REX switch in push rail allows authorized exit without alarm condition.
5. Door position switch monitor open/closed status.
6. Exit device latch releases (fail secure) in event of power loss. Keyed cylinder override for emergency access.

Furnish all brackets/spacers and plates necessary for a complete and proper installation of hardware items listed.

Set: 2.0

Doors: 106A, 118A

1	Hinge, Full Mortise, Hvy Wt	T4A3386-QC	US32D	MK 087100	⚡
2	Hinge, Full Mortise, Hvy Wt	T4A3386xNRP	US32D	MK 087100	
1	Rim Exit Device, Storeroom	LC 55 56 8804 862	US32D	SA 087100	⚡
1	Mortise Cylinder	Match Owner Existing	US32D	SA 087100	
1	Surface Closer	351 CPS	EN	SA 087100	
1	Kick Plate	K1050 10"	US32D	RO 087100	
1	Gasketing	S44BL		PE 087100	
1	Sweep	57AV		PE 087100	
1	Threshold	253x3AFG FHSL14SS		PE 087100	
1	Frame Harness	QC-C1500P (as required)		MK 087100	⚡
1	Door Harness	QC-C__P (as required)		MK 087100	⚡
1	Position Switch	DPS-M-BK		SU 087100	⚡
1	Power Supply	AQL Series (as required)		SU 087100	⚡
1	Card Reader	provided by access control.			

Notes: Operational Narrative:
1. Doors normally closed and secure.
2. Authorized access by card reader retracting exit device latch for predetermined time limit. Exit device latch can be electrically held retracted for open access.
3. Egress free for immediate exit.
4. REX switch in push rail allows authorized exit without alarm condition.
5. Door position switch monitor open/closed status.
6. Exit device latch releases (fail secure) in event of power loss. Keyed cylinder override for emergency access.

Set: 3.0

Doors: 106C

3	Hinge	T4A3786	US26D	MK	087100
1	Rim Exit Device, Passage	12 8815 ETL	US32D	SA	087100
1	Surface Closer	351 P10	EN	SA	087100
1	Kick Plate	K1050 10"	US32D	RO	087100
1	Stop	406/409/441H (as required)	US32D	RO	087100
1	Gasketing	S44BL		PE	087100

Set: 4.0

Doors: 101B

2	Hinge	T4A3786	US26D	MK	087100
1	Electric Hinge	T4A3786-QC	US26D	MK	087100
1	Rim Exit Device, Storeroom	LC 55 56 8804 862	US32D	SA	087100
1	Mortise Cylinder	Match Owner Existing	US32D	SA	087100
1	Surface Closer	351 P10	EN	SA	087100
1	Kick Plate	K1050 10"	US32D	RO	087100
1	Stop	406/409/441H (as required)	US32D	RO	087100
1	Gasketing	S44BL		PE	087100
1	Frame Harness	QC-C1500P (as required)		MK	087100
1	Door Harness	QC-C__P (as required)		MK	087100
1	Position Switch	DPS-M-BK		SU	087100
1	Power Supply	AQL Series (as required)		SU	087100
1	Card Reader	provided by access control.			

Notes: Operational Narrative:
1. Doors normally closed and secure.
2. Authorized access by card reader retracting exit device latch for predetermined time limit. Exit device

latch can be electrically held retracted for open access.
3. Egress free for immediate exit.
4. REX switch in push rail allows authorized exit without alarm condition.
5. Door position switch monitor open/closed status.
6. Exit device latch releases (fail secure) in event of power loss. Keyed cylinder override for emergency access.

Set: 5.0

Doors: 108, 109

2	Hinge	T4A3786	US26D	MK 087100	
1	Electric Hinge	T4A3786-QC	US26D	MK 087100	⚡
1	Fail Secure Lock	RX 10XG71 LL	US26D	SA 087100	⚡
1	Surface Closer	351 UO	EN	SA 087100	
1	Kick Plate	K1050 10"	US32D	RO 087100	
1	Stop	406/409/441H (as required)	US32D	RO 087100	
3	Silencer	608		RO 087100	
1	Frame Harness	QC-C1500P (as required)		MK 087100	⚡
1	Door Harness	QC-C__P (as required)		MK 087100	⚡
1	Position Switch	DPS-M-BK		SU 087100	⚡
1	Power Supply	provided by access control.			
1	Card Reader	provided by access control.			

Notes: Operational Narrative:
1. Door normally closed and secure.
2. Authorized access by card reader unlocking lever trim for a predetermined time limit.
3. Egress free for immediate exit.
4. Lock REX switch allows authorized exit without alarm condition.
5. Integral door position switch monitors open/closed/latched status.
6. Lever remains locked (fail secure) in event of power loss. Keyed cylinder override for emergency access.

Set: 6.0

Doors: 106B, 118E

2	Hinge	T4A3786	US26D	MK 087100	
1	Electric Hinge	T4A3786-QC	US26D	MK 087100	⚡
1	Fail Secure Lock	RX 10XG71 LL	US26D	SA 087100	⚡
1	Surface Closer	351 P10	EN	SA 087100	
1	Kick Plate	K1050 10"	US32D	RO 087100	

1	Stop	406/409/441H (as required)	US32D	RO 087100	
1	Gasketing	S44BL		PE 087100	
1	Threshold	271A (or per details)		PE 087100	
3	Silencer	608		RO 087100	
1	Frame Harness	QC-C1500P (as required)		MK 087100	⚡
1	Door Harness	QC-C__P (as required)		MK 087100	⚡
1	Position Switch	DPS-M-BK		SU 087100	⚡
1	Power Supply	provided by access control.			
1	Card Reader	provided by access control.			

Notes: Operational Narrative:
1. Door normally closed and secure.
2. Authorized access by card reader unlocking lever trim for a predetermined time limit.
3. Egress free for immediate exit.
4. Lock REX switch allows authorized exit without alarm condition.
5. Integral door position switch monitors open/closed/latched status.
6. Lever remains locked (fail secure) in event of power loss. Keyed cylinder override for emergency access.

Set: 7.0

Doors: 103, 114, 115

2	Hinge	T4A3786	US26D	MK 087100	
1	Electric Hinge	T4A3786-QC	US26D	MK 087100	⚡
1	Fail Secure Lock	RX 10XG71 LL	US26D	SA 087100	⚡
1	Surface Closer	351 CPS	EN	SA 087100	
1	Kick Plate	K1050 10"	US32D	RO 087100	
3	Silencer	608		RO 087100	
1	Frame Harness	QC-C1500P (as required)		MK 087100	⚡
1	Door Harness	QC-C__P (as required)		MK 087100	⚡
1	Position Switch	DPS-M-BK		SU 087100	⚡
1	Power Supply	provided by access control.			
1	Card Reader	provided by access control.			

Notes: Operational Narrative:
1. Door normally closed and secure.
2. Authorized access by card reader unlocking lever trim for a predetermined time limit.
3. Egress free for immediate exit.
4. Lock REX switch allows authorized exit without alarm condition.
5. Integral door position switch monitors open/closed/latched status.
6. Lever remains locked (fail secure) in event of power loss. Keyed cylinder override for emergency access.

Set: 8.0

Doors: 105

1	Electric Hinge	T4A3786-QC	US26D	MK 087100	⚡
3	Hinge, Full Mortise, Hvy Wt	T4A3786 NRP	US26D	MK 087100	
1	Surface Bolt	630-8	US26D	RO 087100	
1	Fail Secure Lock	RX 10XG71 LL	US26D	SA 087100	⚡
1	Surf Overhead Stop	10-X36	689	RF 087100	
4	Silencer	608		RO 087100	
1	Frame Harness	QC-C1500P (as required)		MK 087100	⚡
1	Door Harness	QC-C__P (as required)		MK 087100	⚡
1	Position Switch	DPS-M-BK		SU 087100	⚡
1	Power Supply	provided by access control.			
1	Card Reader	provided by access control.			

Notes: Operational Narrative:
1. Door normally closed and secure.
2. Authorized access by card reader unlocking lever trim for a predetermined time limit.
3. Egress free for immediate exit.
4. Lock REX switch allows authorized exit without alarm condition.
5. Integral door position switch monitors open/closed/latched status.
6. Lever remains locked (fail secure) in event of power loss. Keyed cylinder override for emergency access.

Set: 9.0

Doors: 113, 120

6	Hinge	TA2714	US26D	MK 087100
1	Dust Proof Strike	570	US26D	RO 087100
2	Flush Bolt	555/557 (as required)	US26D	RO 087100
1	Storeroom/Closet Lock	10XG04 LL	US26D	SA 087100
2	Stop	406/409/441H (as required)	US32D	RO 087100
2	Silencer	608		RO 087100

Set: 10.0

Doors: 111, 119, 201

3	Hinge	TA2714	US26D	MK 087100
1	Storeroom/Closet Lock	10XG04 LL	US26D	SA 087100
1	Kick Plate	K1050 10"	US32D	RO 087100

1	Stop	406/409/441H (as required)	US32D	RO	087100
3	Silencer	608		RO	087100

Set: 11.0

Doors: 104A

3	Hinge, Full Mortise	TA2714 NRP	US26D	MK	087100
1	Storeroom/Closet Lock	10XG04 LL	US26D	SA	087100
1	Surface Closer	351 P10	EN	SA	087100
1	Kick Plate	K1050 10"	US32D	RO	087100
1	Stop	406/409/441H (as required)	US32D	RO	087100
1	Gasketing	S44BL		PE	087100

Set: 12.0

Doors: 104B

3	Hinge, Full Mortise	TA2714 NRP	US26D	MK	087100
1	Utility/Asylum/Institutional Lock	10XG17 LL	US26D	SA	087100
1	Surface Closer	351 P10	EN	SA	087100
1	Kick Plate	K1050 10"	US32D	RO	087100
1	Stop	406/409/441H (as required)	US32D	RO	087100
1	Gasketing	S44BL		PE	087100

Set: 13.0

Doors: 110, 112

3	Hinge	TA2714	US26D	MK	087100
1	Privacy Lock	V21 8265 LNL	US26D	SA	087100
1	Surface Closer	351 UO	EN	SA	087100
1	Kick Plate	K1050 10"	US32D	RO	087100
1	Mop Plate	K1050 4"	US32D	RO	087100
1	Stop	406/409/441H (as required)	US32D	RO	087100
1	Gasketing	S44BL		PE	087100
1	Coat Hook	RM801	US26D	RO	087100

Set: 14.0

Doors: 117

3	Hinge	TA2714	US26D	MK	087100
1	Passage Latch	10XU15 LL	US26D	SA	087100

1	Surface Closer	351 P10	EN	SA	087100
1	Kick Plate	K1050 10"	US32D	RO	087100
1	Stop	406/409/441H (as required)	US32D	RO	087100
3	Silencer	608		RO	087100

Set: 15.0

Doors: 118B, 118C, 118D

1	Hardware	by door mfg.

END OF SECTION 087100

SECTION 03 3511
CONCRETE FLOOR FINISHES

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Manufacturer's published data on each finishing product, including information on compatibility of different products and limitations.

B. Product Data: Manufacturer's published data and installation instructions for concrete polishing system and finishing products, including manufacturer's installation instructions, information on compatibility of different products, and limitations.

C. Maintenance Data: Provide data on maintenance and renewal of applied finishes.

D. Specimen Warranty: Manufacturer warranty.

1.02 QUALITY ASSURANCE

A. For slabs indicated to receive concrete polishing system, do not proceed with concrete polishing unless manufacturer's representative and specialized equipment is present for every day of placement.

1.03 FIELD CONDITIONS

A. Maintain light level equivalent to a minimum 200 W light source at 8 feet (2.5 m) above the floor surface over each 20 foot (6 m) square area of floor being finished.

1.04 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Correct defective work within a two-year period commencing on the Date of Substantial Completion.

C. Finish Warranty: Provide five-year manufacturer warranty against excessive degradation of finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.01 CONCRETE FLOOR FINISH APPLICATIONS

A. Unless otherwise indicated, all concrete floors are to be finished using liquid densifier/hardener.

B. Clear Coating:

2.02 DENSIFIERS AND HARDENERS

A. Liquid Densifier and Hardener: Penetrating chemical compound that reacts with concrete, filling the pores, hardening, and dustproofing.

2.03 COATINGS

A. Low Gloss Clear Coating: Transparent, nonyellowing, acrylic polymer-based coating.
   1. Composition: Solvent-based.

PART 3 EXECUTION

3.01 GENERAL

A. Apply materials in accordance with manufacturer's instructions.

3.02 COATING APPLICATION

A. Verify that surface is free of previous coatings, sealers, curing compounds, water repellents, laitance, efflorescence, fats, oils, grease, wax, soluble salts, residues from cleaning agents, and other impediments to adhesion.

B. Clean and fill control joints

C. Using diamond resin pads under a floor grinder, hone the surface to 200 grit (to remove any visible scratches, etc.)

D. Verify that water vapor emission from concrete and relative humidity in concrete are within limits established by coating manufacturer.

E. Protect adjacent non-coated areas from drips, overflow, and overspray; immediately remove excess material.

F. Apply coatings in accordance with manufacturer's instructions, matching approved mock-ups for sealing and workmanship.

END OF SECTION 03 3511

SUBSTITUTION REQUEST
(During the Bidding/Negotiating Stage)

Project: GREAT FALLS POLICE DEPT. - EVIDENCE ROOM

Substitution Request Number: _____

To: B SPARK ARCH. GREAT FALLS, MT

From: DUFREE BLDG. SPEC.

Date: 1/16/24

A/E Project Number: _____

Re: _____

Contract For: _____

Specification Title: ROOF ACCESSORIES

Description: ROOF WATCH

Section: 077200 Page: _____

Article/Paragraph: _____

Proposed Substitution: BABCOCK-DAVIS 9300 73RD AVE. NO. BROOKLYN PARK, MN

Manufacturer: Address: Phone: 1-800-412-3726

Trade Name: THERMAL MAX R20+ ROOF WATCH Model No.: RWBRUTA48X48SIT

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: CARL ROSE

Signed by: Carl W. Rose

Firm: DUFREE BLDG. SPEC.

Address: P.O. BOX 22036 BILLINGS, MT 59104

Telephone: (406) 655-3555

A/E's REVIEW AND ACTION

- [X] Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- [ ] Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- [ ] Substitution rejected - Use specified materials.
- [ ] Substitution Request received too late - Use specified materials.

Signed by: _____ Date: 1/18/24

Supporting Data Attached: [X] Drawings [X] Product Data [ ] Samples [ ] Tests [ ] Reports [ ] _____

Form Version: January 2013
CSI Form 1.5C

SUBSTITUTION REQUEST
(During the Bidding/Negotiating Stage)

Project: Great Falls Police Department Evidence Room Expansion

Substitution Request Number: ONE

From: Illumination Systems

To: Morrison-Maierle

Date: 01/08/2024

A/E Project Number: 22045

Re: Lighting Submittals for Prior Approval

Contract For:

Specification Title: LED Lighting

Description: LED Lighting and Controls

Section: 265110 Page: 1-11

Article/Paragraph:

Proposed Substitution: Please see submittal sent 01/05/2024

Manufacturer: Address: Phone:

Trade Name: Model No.:

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Carrie Joyce Parr

Signed by: Carrie Joyce Parr

Firm: Illumination Systems

Address: 2817 2nd Avenue N Suite 206, Billings MT 59101

Telephone: 303.725.5891

A/E's REVIEW AND ACTION

☒ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Date: 01/18/2024

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

Form Version: January 2013
CSI Form 1.5C

SUBSTITUTION REQUEST

(During the Bidding/Negotiating Stage)

Project: Great Falls Police Department - Evidence Room Expansion

Substitution Request Number: ONE

From: MH Lighting

To: BSPARK Architecture

Date: 1-18-2024

410 Central Ave #506, Great Falls, MT 59401

A/E Project Number: 22045

Re:

Contract For:

Specification Title: Lighting and Electrical

Description:

Section: 260 000 Page:

Article/Paragraph:

Proposed Substitution: See attached

Manufacturer: See attached Address: See attached Phone:

Trade Name: See attached Model No.: See attached

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Katie Smith

Signed by: Katie A, Smith

Firm: MH Lighting

Address: 1184 North 15th Avenue, Suite 4
Bozeman, MT 59715

Telephone: 406.500.7950

A/E's REVIEW AND ACTION

[X] Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
[ ] Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
[ ] Substitution rejected - Use specified materials.
[ ] Substitution Request received too late - Use specified materials.

Signed by: Date: 1/18/24

Supporting Data Attached: [ ] Drawings [X] Product Data [ ] Samples [ ] Tests [ ] Reports [ ]

PROJECT ADDRESS

112 1st Street South
Great Falls, MT 59401

LEGAL DESCRIPTION

S11, T20 N, R03 E, IN SENE, GT FALLS POLICE DEPT.
BROADWATER BAY BUSINESS PARK ADDI, S11, T20 N, R03 E, BLOCK 012, Lot 001, LOT 1 & IN SESENE MK 22.

SCOPE OF WORK

THE PROJECT COMPRISES AN ADDITION TO THE SOUTH END OF THE EXISTING POLICE DEPARTMENT BUILDING.

THE BUILDING WILL EXIST INDEPENDENT OF THE EXISTING BUILDING BUT WILL HAVE CONNECTIONS FOR ACCESS.

THE WORK COMPRISES ALL TRADES AND DISCIPLINES, INCLUDING SITE/CIVIL/LIMITED UTILITY WORK, INCLUDING SITE LIGHTING, CONCRETE FOUNDATIONS, SLABS, WALKS AND CURBS, ASPHALT PAVING AND LANDSCAPING. THE BUILDING IS STEEL-FRAMED CONSTRUCTION WITH BAR-JOIST UPPER FLOOR FRAMING WITH CONCRETE SLAB, STEEL STAIRS AND METAL STUD PARTITIONS.

EXTERIOR FINISHES ARE MASONRY AND PRE-FINISHED METAL PANELS OVER CONTINUOUS INSULATION. MECHANICAL, ELECTRICAL PLUMBING, AND IT/SECURITY WORK IS INCLUDED.

FINISHES INCLUDE LIMITED AREAS OF SUSPENDED ACOUSTICAL PANEL CEILINGS/ LIGHTING WITH THE REMAINING BEING PAINTED EXPOSED STRUCTURE/SYSTEMS.

ZONING REQUIREMENTS

ZONE	**PLI | PUBLIC LANDS AND INSTITUTIONAL**
ALLOWABLE USES PROPOSED USE	**CIVIL USE/ PUBLIC SAFETY FACILITY.** **NO CHANGE TO USE PROPOSED.**
PARKING REQUIREMENTS:	**OFFICE, BUSINESS AND PROFESSIONAL.** **1 PER 300 SQUARE FEET OF GROSS FLOOR AREA.** **8,130 SF GFA /300=27.1 SPACES**
PARKING PROVIDED:	**37 SPACES, INCLUDING 1 ACCESSIBLE SPACE.**
LANDSCAPING REQUIREMENTS:	**RE: LANDSCAPE DWGS.**

ENERGY CODE ANALYSIS

1

CLIMATE ZONE: **6B**

OPAQUE THERMAL ENVELOPE MINIMUM REQUIREMENTS

TABLE C402.1.3 | R-VALUE METHOD

ELEMENT:

ELEMENT	REQUIRED	PROVIDED
ROOF | INSULATION ENTIRELY ABOVE THE ROOF DECK.	R-30ci	**R-30ci MIN**
WALLS, ABOVE GRADE | METAL FRAMED.	R-13+R-12.5ci	**R-13+R-12.5 ci MIN**
SLAB-ON-GRADE FLOORS | UNHEATED SLABS.	R-20 FOR 24" BELOW	**R-20 FOR 24" BELOW MIN**

TABLE C402.1.4 | U-VALUE METHOD

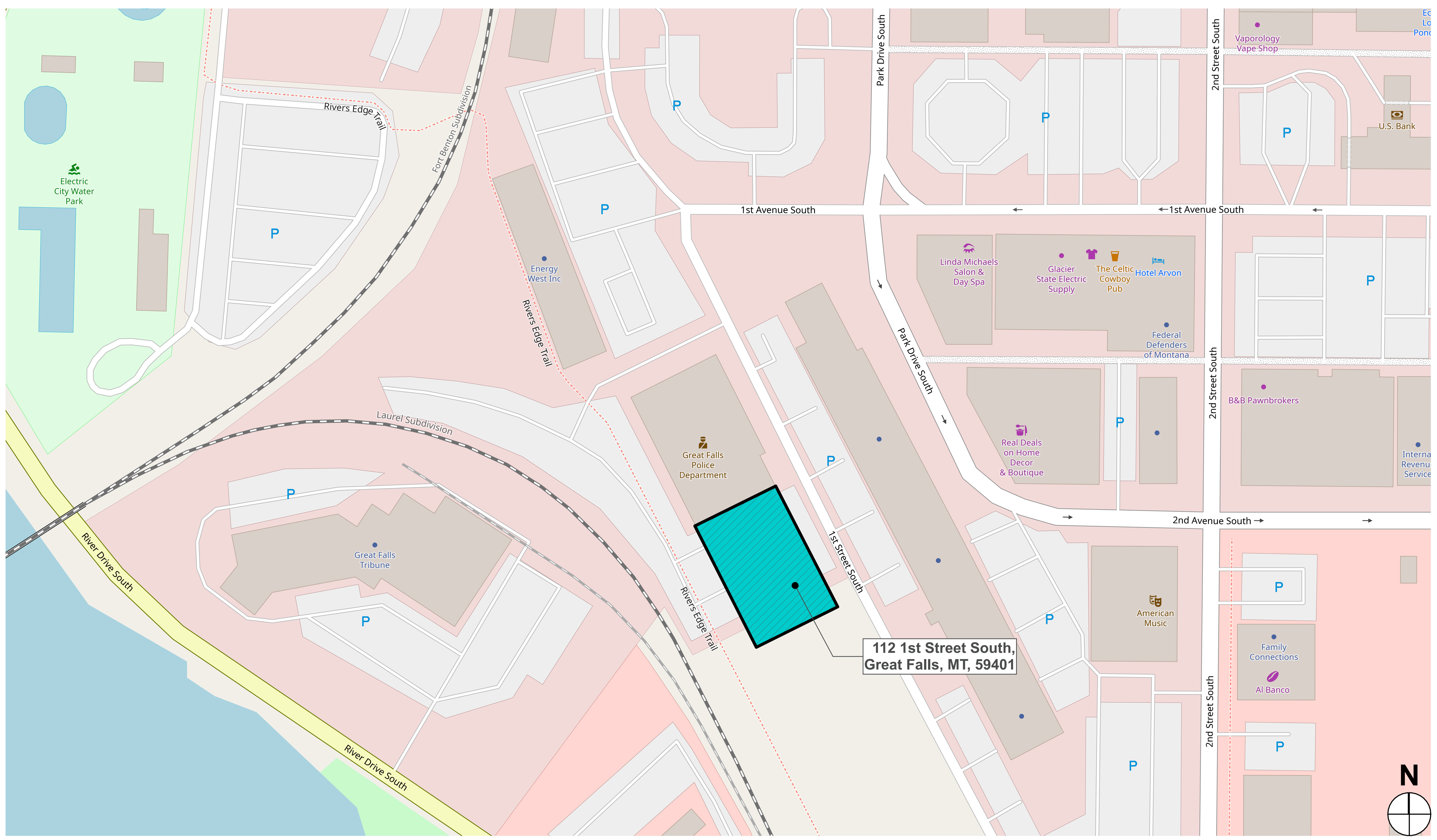
ELEMENT	REQUIRED	PROVIDED
NON-SWINGING DOOR	U-0.31	U-0.31 MAX
SWINGING DOOR	U-0.37	U-0.37 MAX

TABLE C402.4 | BUILDING ENVELOPE FENESTRATION

ELEMENT	REQUIRED	PROVIDED
FIXED FENESTRATION	U-0.34	U-0.34 MAX
OPERABLE FENESTRATION	U-0.42	U-0.42 MAX
ENTRANCE DOORS	U-0.63	U-0.63 MAX
SKYLIGHTS	U-0.50	U-0.50 MAX

SHEET INDEX

.	SHEET NAME	P+C	1	3	4
General					
G.000	Cover Sheet	X	X		
G.001	Project Information & Code Plan	X	X		
G.002	Code Plan	X	X		
G.003	Accessibility Requierments	X	X		
Civil					
C1.0	Civil Notes,Abbreviations & Legend	X			
C2.0	Ex.Conditions, Demolition, and Survey Data	X			
C3.0	Site Layout Plan	X			
C4.0	Site Gardening Plan	X			
C5.0	Site Utility Plan	X			
C6.0	Details	X			
C6.1	Details	X			
Landscape					
L1.0	Landscape Plan, Notes and Schedule	X			
L1.1	Landscape Details	X			
L2.0	Irrigation Plan , Notes, and Schedule	X			
L2.1	Irrigation Details	X			
Site plan					
AS.101	Site Plan	X			
Demolition					
AD.101	Demolition Plan | Main Level	X			
Architectural					
A101	Architectural Information & General Notes	X			
A102	Main Level Plan	X	X		
A103	Upper Level Plan	X			
A104	Roof Plan	X	X		
A105	Critical Dimension Plan | Main & Upper Level	X	X		
A106	RCP Plan | Main & Upper Level	X	X		
A201	Exterior Elevation	X			
A301	Building Sections	X			
A302	Building Sections	X			
A303	Wall Sections	X			
A304	Wall Sections	X			
A305	Wall Sections	X			
A401	Enlarged Plan	X	X		
A501	Exterior Details	X			
A502	Exterior Details	X			
A503	Exterior Details	X			
A504	Roof Details	X	X		
A601	Door & Hardware Schedules	X	X		
Interiors					
I.101	Finish Plan | Main Level	X			
I.201	Interior Elevations	X			
I.202	Interior Elevations	X			
I501	Interior Details	X			
Structural					
S1.0	General Structural Notes	X			
S1.1	General Structural Notes	X			
S1.2	General Structural Notes	X			
S1.3	General Structural Notes	X			
S1.4	Typical Details	X			
S1.5	Typical Details	X			
S1.6	Typical Details	X	X		
S2.0	Foundation Plan	X			
S3.0	Main Floor Framing Plan	X	X		
S4.0	Lower Roof/Second Floor Framing plan	X	X		
S4.1	Garage Roof Framing Plan	X			
S4.2	Roof Framing Plan	X			
S4.3	Snow Drift Plan	X			
S5.0	Building Sections	X			
S6.0	Foundation Details	X	X		
S7.0	Framing Sections and Details	X			
S7.1	Framing Sections and Details	X			
Mechanical					
M0.1	Mechanical Legend & Notes	X			
M0.2	Mechanical Schedules	X			
M0.3	Mechanical Details	X			
M1.1	Mechanical Floor Plan-Main Level	X			
M1.2	Mechanical Floor Plan- Upper Level	X			
M1.3	Mechanical Floor Plan-Roof	X			
M1.4	Mechanical Control Floor Plan -Main Level	X			
M1.5	Mechanical Axonometrics	X			
MS1.0	Mechanical Structural Coordination	X			
Plumbing					
P0.1	Plumbing Legend & Notes	X			
P0.2	Plumbing Schedules	X			
P0.3	Plumbing Details	X			
P1.0	Plumbing Underslab-Main Level	X			
P1.1	Plumbing DWV-Main Level	X			
P1.2	Plumbing DWV-Upper Level	X			
P1.3	Plumbing -Roof	X			
P2.1	Plumbing Domestic-Main Level	X			
P2.2	Plumbing Domestic-Upper Level	X			
P3.1	Plumbing-Existing Main Level	X			
Electrical					
E0.1	Symbols & Abbreviations	X			
E0.2	Electrical Schedules	X			
E0.3	Electrical Details	X			
E1.0	Electrical Site Plan	X			
E1.1	Electrical Power Plan-Main Level	X			
E1.2	Electrical Power Plan-Upper Level	X			
E1.3	Electrical Power Plan-Roof	X			
E2.1	Electrical Lighting Plan -Main Level	X			
E2.2	Electrical Lighting Plan-Upper Level	X			
E3.0	Electrical Photometric Plan	X			
ICT					
T0.1	Symbols & Abbreviations	X			
T0.2	ICT Details	X			
T0.3	ICT Details	X			
TD1.1	Demo-Main level	X			
T1.0	ICT Site Plan	X			
T1.1	Structured Cabling-Main Level	X			
T1.2	Structured Cabling-Upper Level	X			
T1.3	Security-Main Level	X			
T1.4	Security-Upper Level	X			



1 **Vicinity Map**
NOT TO SCALE

Itzel Bazan; 1/19/24, 10:42 AM

BSPARK ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406.453.0001 f. 406.760.1788
www.bsparkarch.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: **ib** APPROVED BY: **kb**

SHEET TITLE
Project Information & Code Plan

SHEET NUMBER
G.001

CODE PLAN LEGEND

- 1 HOUR FIRE-RATED WALL/PARTITION
- 2 HOUR FIRE-WALL PER IEBC 1102.2 (1)
- 2 HOUR FIRE-RATED WALL/PARTITION
- 3 HOUR FIRE-RATED WALL/PARTITION
- COMMON PATH OF TRAVEL
- EXIT ACCESS
- 4 — EXIT ACCESS
- 10 — EXIT DISCHARGE

TABLE 1017.2 | 200' MAX EXIT ACCESS TRAVEL DISTANCE

1. 100'-0" TRAVEL DISTANCE < 200'.
2. 75'-0" TRAVEL DISTANCE < 200'.
3. 92'-0" TRAVEL DISTANCE < 200'.
4. 98'-0" TRAVEL DISTANCE < 200'.

MINIMUM PLUMBING FIXTURES (PER MONTANA CODES ANNOTATED & TABLE 2902.1)

TYPE OF OCCUPANCY	OCC
BUSINESS	13 OCC
STORAGE	18 OCC
TOTAL	**31 OCC**

	WC		LAVATORIES		DF	SERVICE SINK
	M	F	M	F		
REQUIRED	1	1	1	1	1	1
PROVIDED	**1**	**1**	**1**	**1**	**1**	**1**

MEANS OF EGRESS

OCC. LOAD FACTOR:

TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

MECH/STORAGE	2,549 SQ.FT./300 GSF	8 OCCUPANTS
	TOTAL FIRST LEVEL	**8 OCCUPANTS**
BUSINESS/OFFICE	2,200 SQ.FT./150 GSF	13 OCCUPANTS
PARKING GARAGE	927 SQ.FT./200 GSF	4 OCCUPANTS
MECH/STORAGE	1,953 SQ.FT./300 GSF	6 OCCUPANTS
	TOTAL GROUND LEVEL	**23 OCCUPANTS**
	TOTAL	**31 OCCUPANTS**

MEANS OF EGRESS

REQUIRED EGRESS WIDTH (PER IBC 1005.3)
31 OCC X 0.2"/OCC= 36" MIN
TWO EXIT REQUIRED

PROVIDED EGRESS WIDTH (PER IBC 1005.3)
THREE EXITS PROVIDED
DOOR 101 A =72" CLEAR WIDTH
DOOR 106 A =36" CLEAR WIDTH
DOOR 118 A =36" CLEAR WIDTH

STAIRWAY MINIMUM WIDTH(PER IBC 1011.2)
EXCEPTION:
STAIRWAYS SERVING AN OCCUPANT LOAD LESS THAN 50 SHALL HAVE A WITH OF NOT LESS THAN **36".**

TABLE 1006.3.3 MIN. NUMBER OF EXITS OR ACCESS TO EXITS PER STORY
1-500 OCCUPANTS = **2 EXITS**
THREE EXITS PROVIDED

TWO EXITS & EXIT ACCESS DOORWAY CONFIGURATION - 1/2 LENGTH OF MAX. DIAGONAL. (PER IBC 1007.1.1)

CODE ANALYSIS

APPLICABLE CODES AND STANDARDS
2021 INTERNATIONAL BUILDING CODE - IBC
2021 INTERNATIONAL RESIDENTIAL CODE - IRC
2021 INTERNATIONAL MECHANICAL CODE - IMC
2021 INTERNATIONAL FUEL GAS CODE - IFGC
2021 INTERNATIONAL EXISTING BUILDING CODE - IEBC
2021 UNIFORM PLUMBING CODE - UPC
2020 NATIONAL ELECTRICAL CODE - NEC (NFPA 70)
2021 INTERNATIONAL ENERGY CONSERVATION CODE - IECC
2021 INTERNATIONAL FIRE CODE - IFC
2017 ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
ADMINISTRATIVE RULES OF MONTANA
OFFICIAL CODE OF THE CITY OF GREAT FALLS
GOVERNING AUTHORITY
CITY OF GREAT FALLS, MONTANA
(1)

EXISTING BUILDING:

OCCUPANCY GROUP:	(E) POLICE DEPARTMENT BUILDING NON-SEPARATED MIXED USE: S-1 AND B.
CONSTRUCTION TYPE:	(E) **III B NON-SPRINKLERED**
(E) BLDG AREA:	MAIN LEVEL: (E) ± 22,678 SF SECOND LEVEL: (E) ± 10,154 SF **TOTAL:**(E) ± **32,832 SF**
(E) BLDG HEIGHT:	**(E)±30'** (E)**2 STORIES**

PROPOSED ADDITION

OCCUPANCY GROUP:	EVIDENCE STORAGE NON-SEPARATED MIXED USE: S-1 AND B. **S-1 IS THE MOST RESTRICTIVE OCCUPANCY.**
CONSTRUCTION TYPE:	**III B NON-SPRINKLERED**
ALLOWABLE AREA:	17,500 SF ALLOWABLE AREA (TABLE 506.2)
AREA LIMITATIONS:	IEBC 1102.2. FIRE WALL SEPARATION IS REQUIRED BETWEEN EXISTING BUILDING AND THE ADDITION.
PROPOSED BLDG AREA:	GROUND LEVEL: 5,340 SF SECOND LEVEL: 2,790 SF **TOTAL: 8,130 SF**
ALLOWABLE BLDG HEIGHT:	55'-0" (TABLE 504.3) 3 STORIES (TABLE 504.4)
PROPOSED BLDG HEIGHT:	**25'-6"** **2 STORIES**
FIRE SEPARATION:	TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES **S-1 | B : NO SEPARATION REQUIRED.**

903.2.9 GROUP S-1.

AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT ALL BUILDINGS CONTAINING A GROUP S-1 OCCUPANCY WHERE ONE OF THE FOLLOWING CONDITIONS EXISTS:

1. A GROUP S-1 FIRE AREA EXCEEDS 12,000 SQUARE FEET (1115 M2). **NA**
2. A GROUP S-1 FIRE AREA IS LOCATED MORE THAN THREE STORIES ABOVE GRADE PLANE. **NA**
3. THE COMBINED AREA OF ALL GROUP S-1 FIRE AREAS ON ALL FLOORS, INCLUDING ANY MEZZANINES, EXCEEDS 24,000 SQUARE FEET (2230 M2). **NA**
4. A GROUP S-1 FIRE AREA USED FOR THE STORAGE OF COMMERCIAL MOTOR VEHICLES WHERE THE FIRE AREA EXCEEDS 5,000 SQUARE FEET (464 M2). **NA**

NONE OF THE ITEMS LISTED ABOVE TRIGGERS THE REQUIREMENT FOR THE INSTALLATION OF AN AUTOMATIC FIRE SPRINKLER SYSTEM.

FIRE-RESISTIVE REQUIREMENTS (TABLE 601 & 705.5)

STRUCTURAL FRAME:	NO REQUIREMENTS.
BEARING WALLS | EXTERIOR:	2 HOURS LESS THAN 5 FEET. 1 HOUR GREATER THAN 5 FEET BUT LESS THAN 10 FEET. 0 HOUR GREATER THAN OR EQUAL TO 10 FEET.
BEARING WALLS | INTERIOR:	NO REQUIREMENTS.
NONBEARING WALLS | EXTERIOR:	2 HOUR LESS THAN 5 FEET. 1 HOUR GREATER THAN 5 FEET BUT LESS THAN 10 FEET. 0 HOUR GREATER THAN OR EQUAL TO 10 FEET.
NONBEARING WALLS | INTERIOR:	NO REQUIREMENTS.
FLOOR CONSTRUCTION:	NO REQUIREMENTS.
ROOF CONSTRUCTION:	NO REQUIREMENTS.
CORRIDOR WALLS:	1 HOUR PER TABLE 1020.1.

INTERIOR EXIT STAIRWAYS AND RAMPS(1023):
ENCLOSURES SHALL HAVE A FIRE RESISTANCE OF 1 HOUR WHERE CONNECTING LESS THAN FOUR STORIES.

EXCEPTIONS:
1. EXIT ACCESS STAIRWAYS AND RAMPS THAT SERVE OR ATMOSPHERICALLY COMMUNICATE BETWEEN ONLY TWO ADJACENT STORIES. SUCH INTERCONNECTED STORIES SHALL NOT BE OPEN TO OTHER STORIES.

ELEVATOR, DUMBWAITER, AND OTHER HOISTWAYS(713.13.6):
ENCLOSURES SHALL BE CONSTRUCTED AS FIRE BARRIERS AND HAVE A FIRE RESISTANCE OF 1 HOUR WHERE CONNECTING LESS THAN FOUR STORIES.

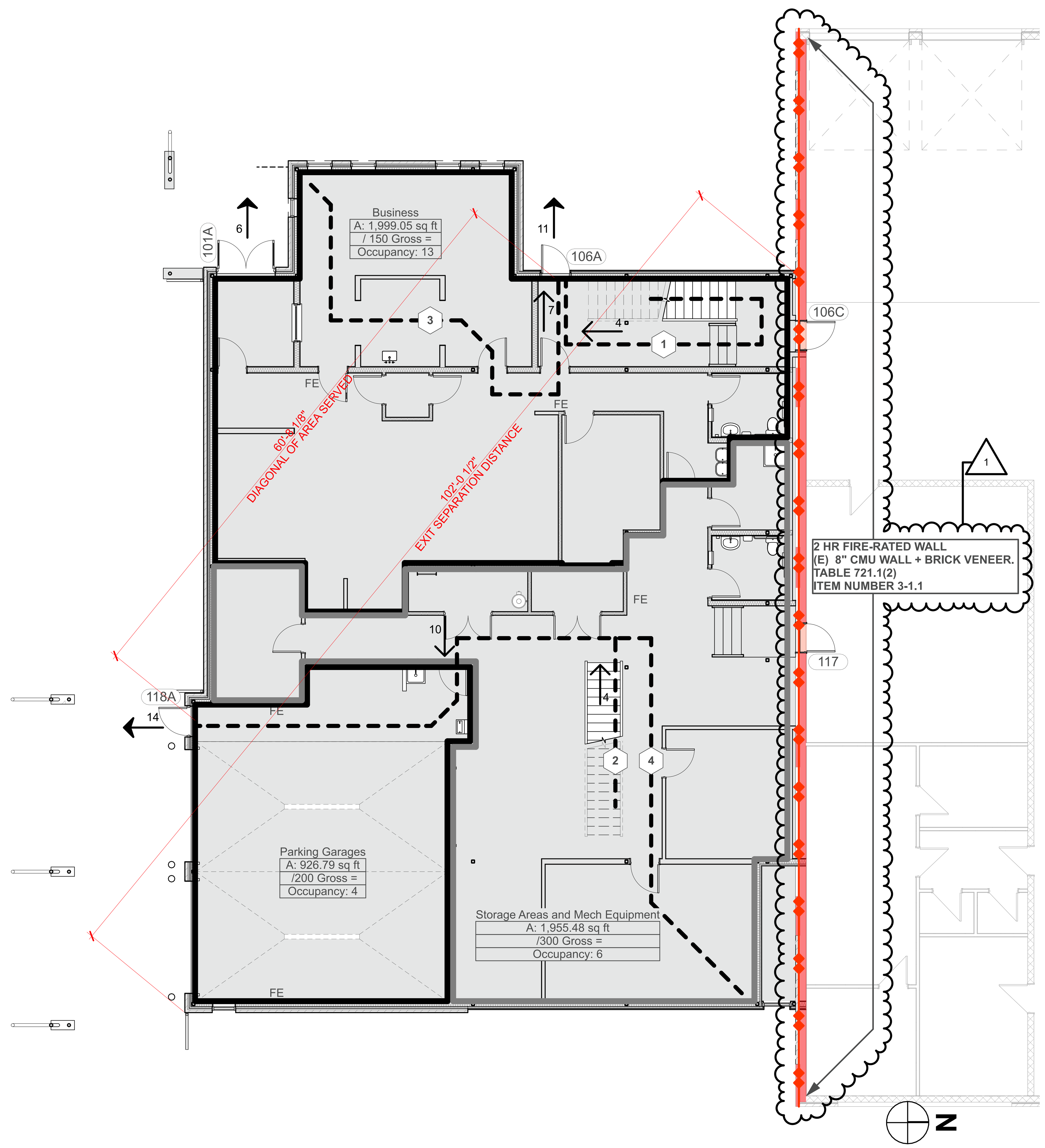
OPENING FIRE PROTECTION ASSEMBLIES (TABLE 716.1)

DOORS AND FIRE SHUTTERS:
3/4 HOUR, WHERE EXTERIOR WALLS ARE REQUIRED TO BE 1 HOUR.
1 1/2 HOURS, WHERE EXTERIOR WALLS ARE REQUIRED TO BE 2 HOURS.
1 HOUR WHERE FIRE BARRIERS ARE REQUIRED TO BE 1 HOUR.
1 1/2 HOURS WHERE FIRE BARRIERS ARE REQUIRED TO BE GREATER THAN 1 HOUR.
1 1/2 HOURS FOR INTERIOR EXIT STAIRWAYS, ENCLOSURE SHAFTS, AND INTERIOR EXIT RAMPS. WHERE FIRE BARRIERS ARE REQUIRED TO BE 2 HOURS.
1 HOUR FOR INTERIOR EXIT STAIRWAYS, ENCLOSURE SHAFTS, AND INTERIOR EXIT RAMPS. WHERE FIRE BARRIERS ARE REQUIRED TO BE 1 HOUR.

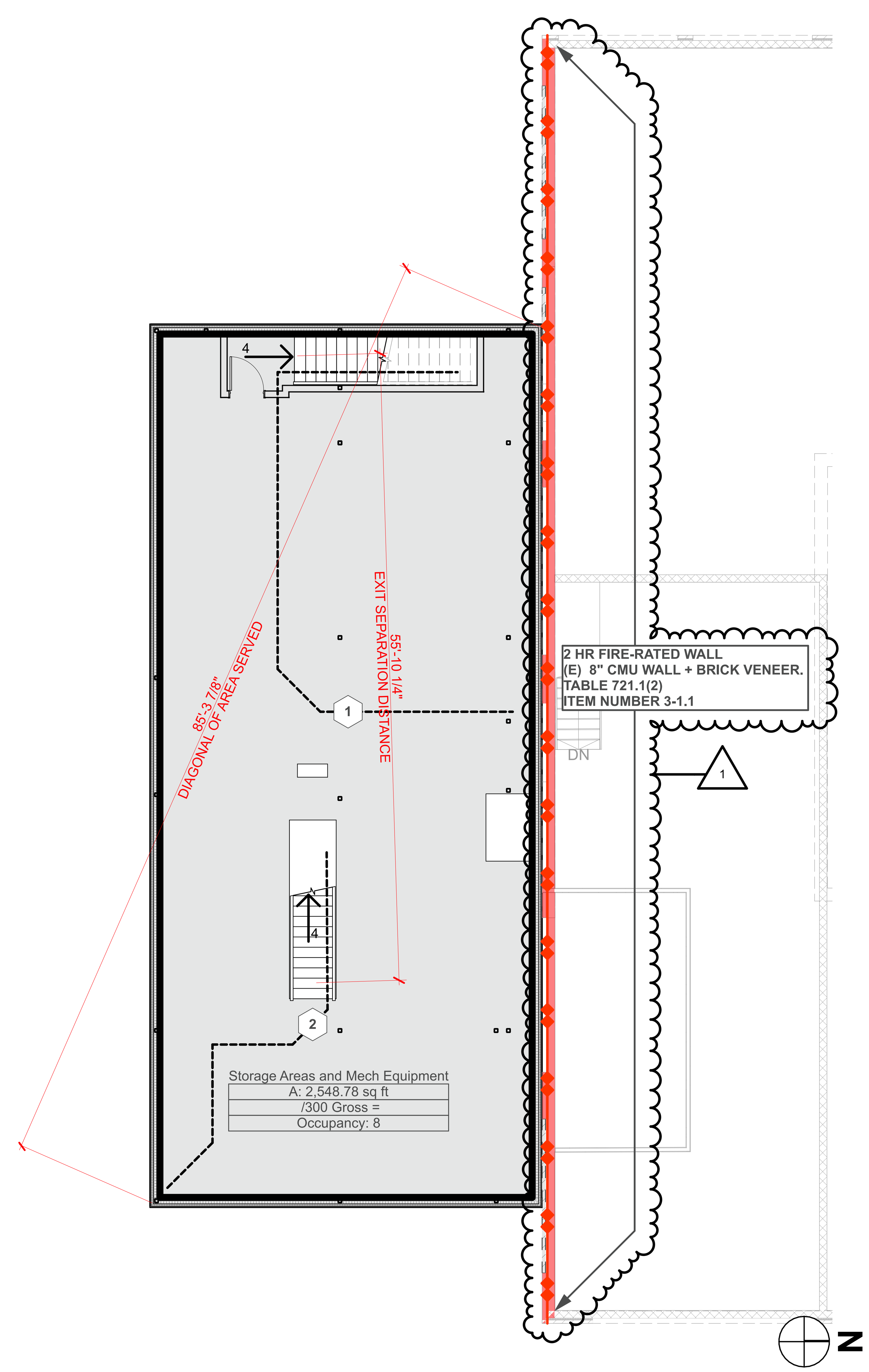
WINDOW ASSEMBLIES:
1 1/2 HOURS, WHERE EXTERIOR WALLS ARE REQUIRED TO BE 1 HOUR
3/4 HOUR, WHERE EXTERIOR WALLS ARE REQUIRED TO BE 1 HOUR

EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION.

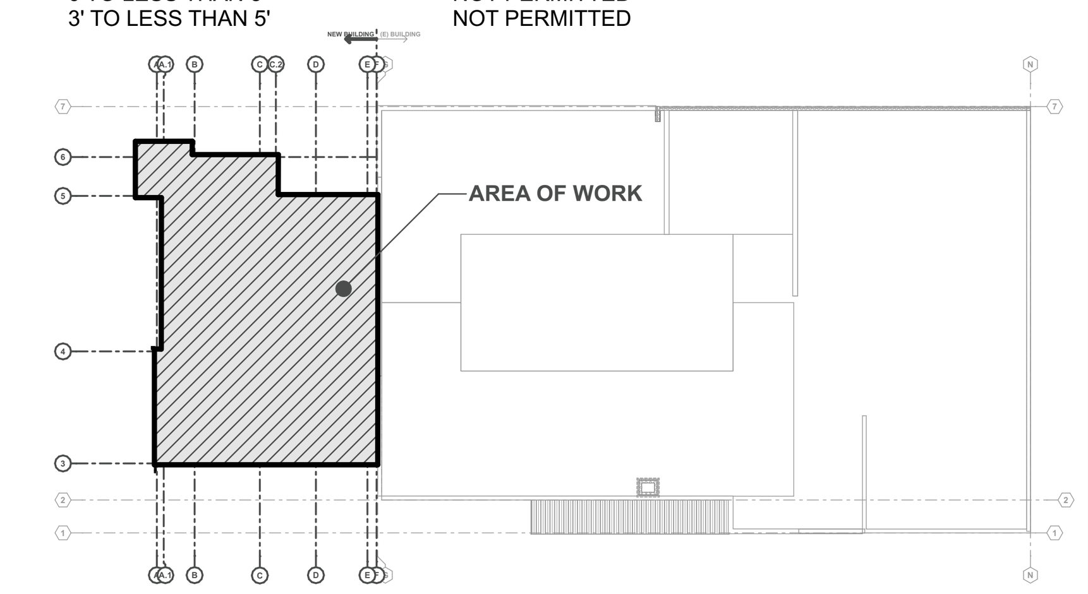
0 TO LESS THAN 3'	NOT PERMITTED
3' TO LESS THAN 5'	NOT PERMITTED



1 **Code Plan | Main Floor**
SCALE: 1/8" = 1'-0"



2 **Code Plan | Upper Level**
SCALE: 1/8" = 1'-0"



KEY Plan

BSPARK ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406.453.0001 f. 406.760.1788
www.bsparkarch.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

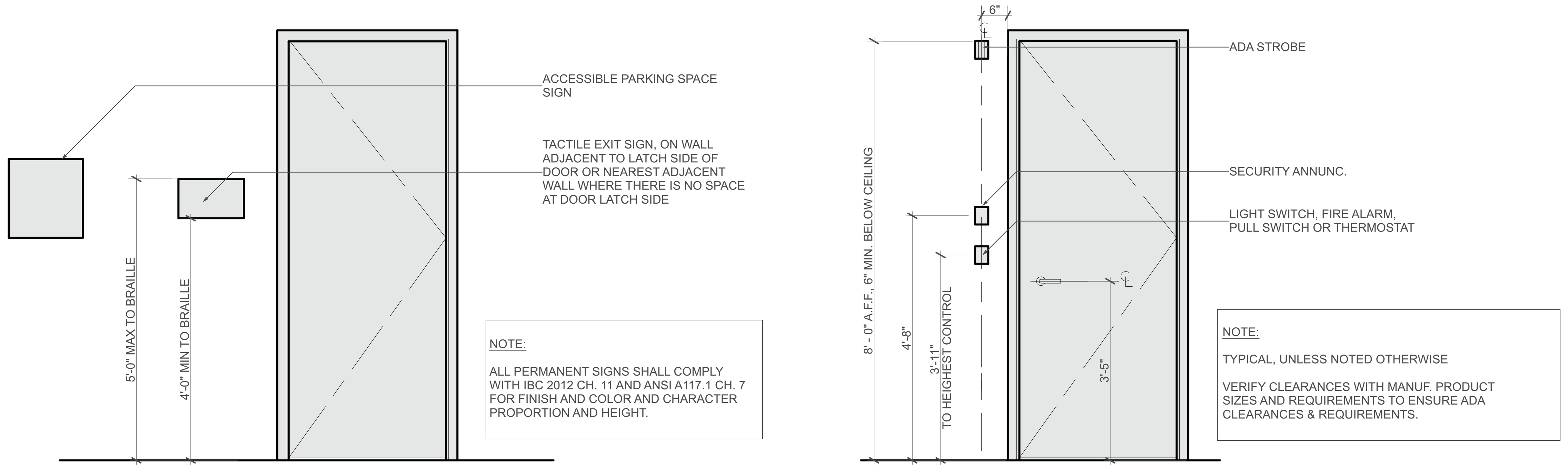
SHEET ISSUE DATE:
01.19.2024

DRAWN BY: **ib** APPROVED BY: **kb**

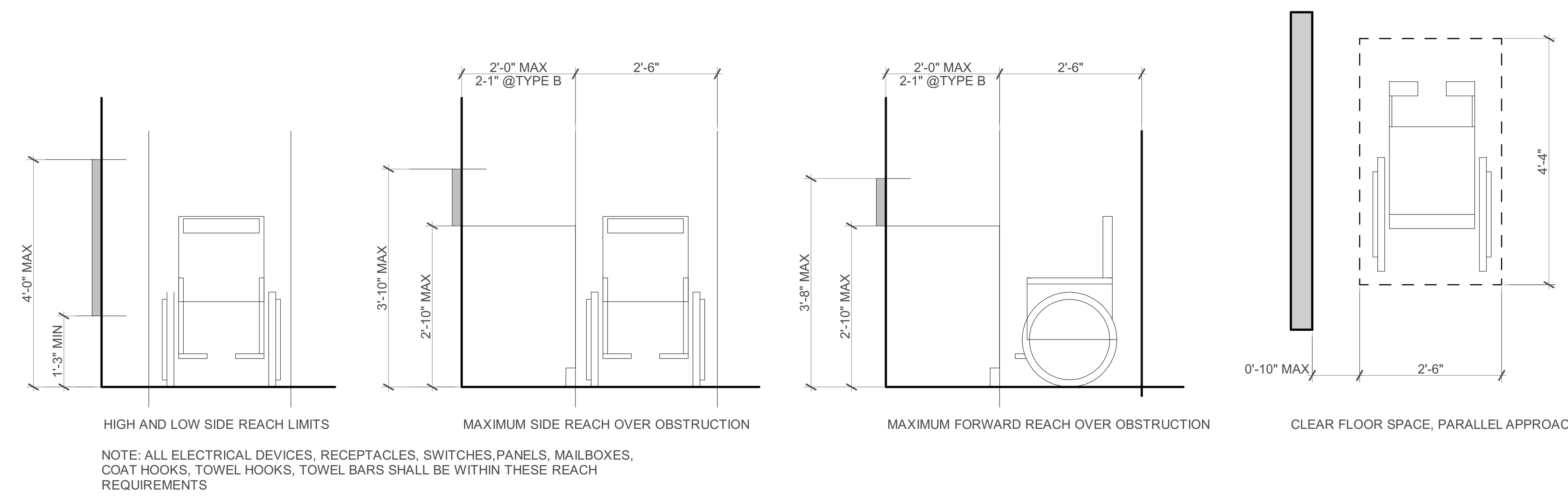
SHEET TITLE
Code Plan

SHEET NUMBER
G.002

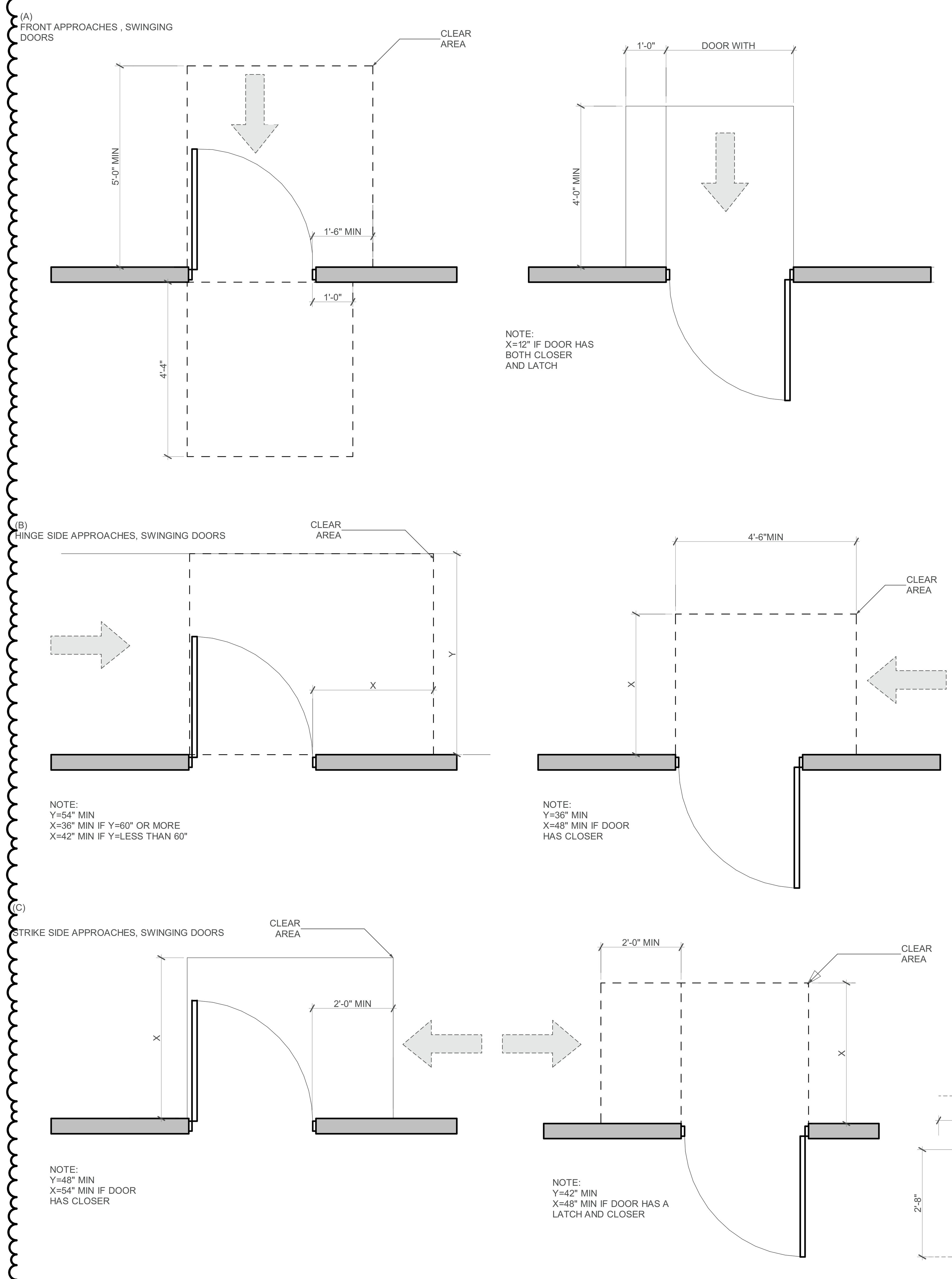
ICC A117.1-2017 REQUIREMENTS



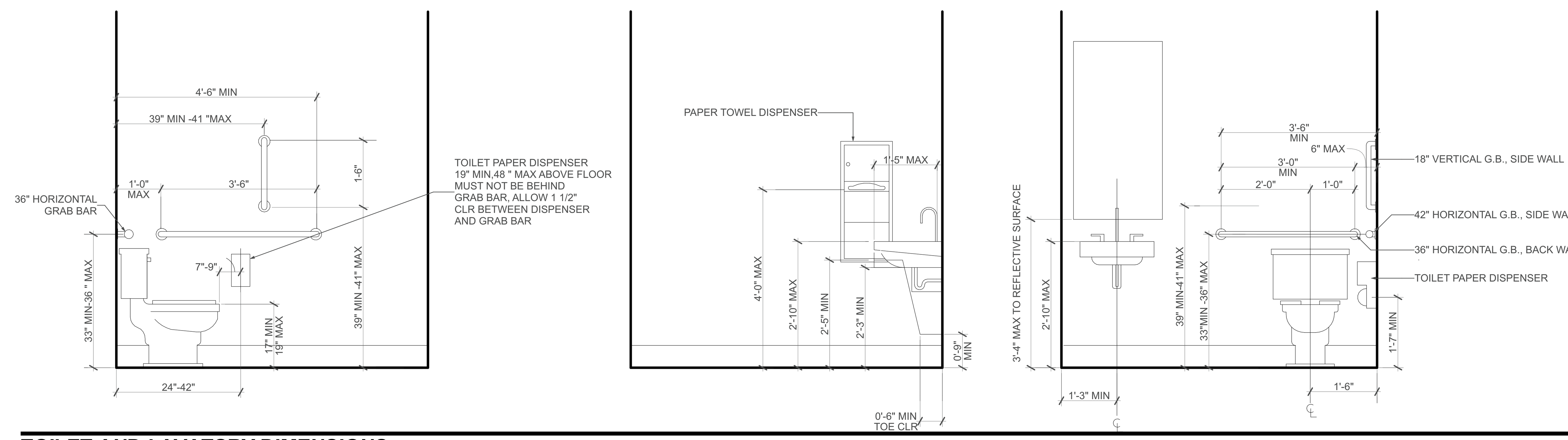
TYPICAL ELEVATIONS



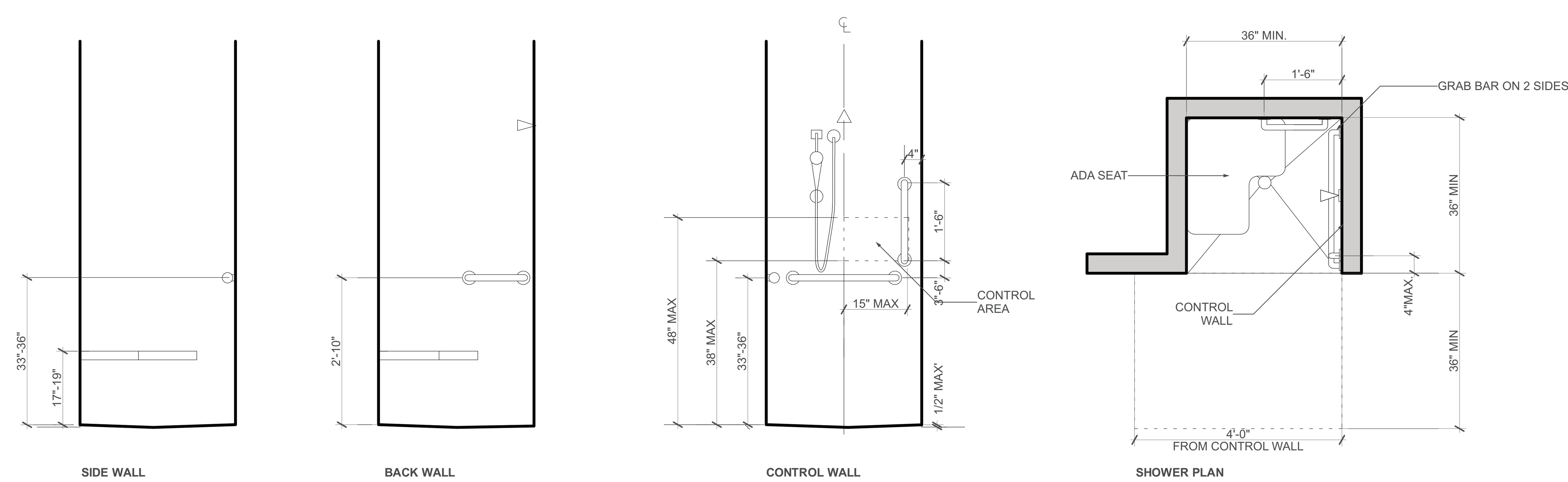
REACH REQUIREMENTS



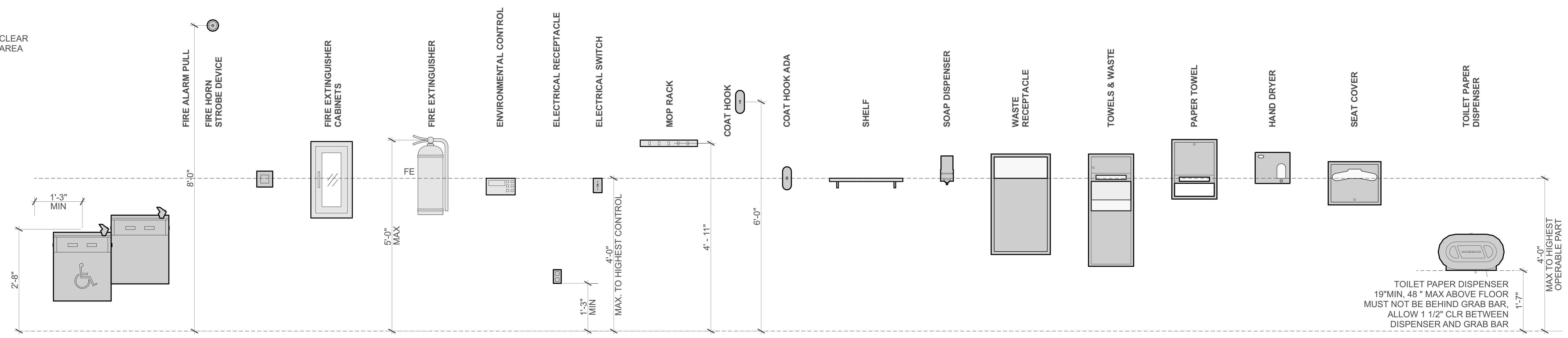
DOOR REQUIREMENTS



TOILET AND LAVATORY DIMENSIONS



TRANSFER-TYPE SHOWER DIMENSIONS



TYPICAL PUBLIC ACCESSORY MOUNTING

BSPARK ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406.453.0001 f. 406.760.1788
www.bsparkarch.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

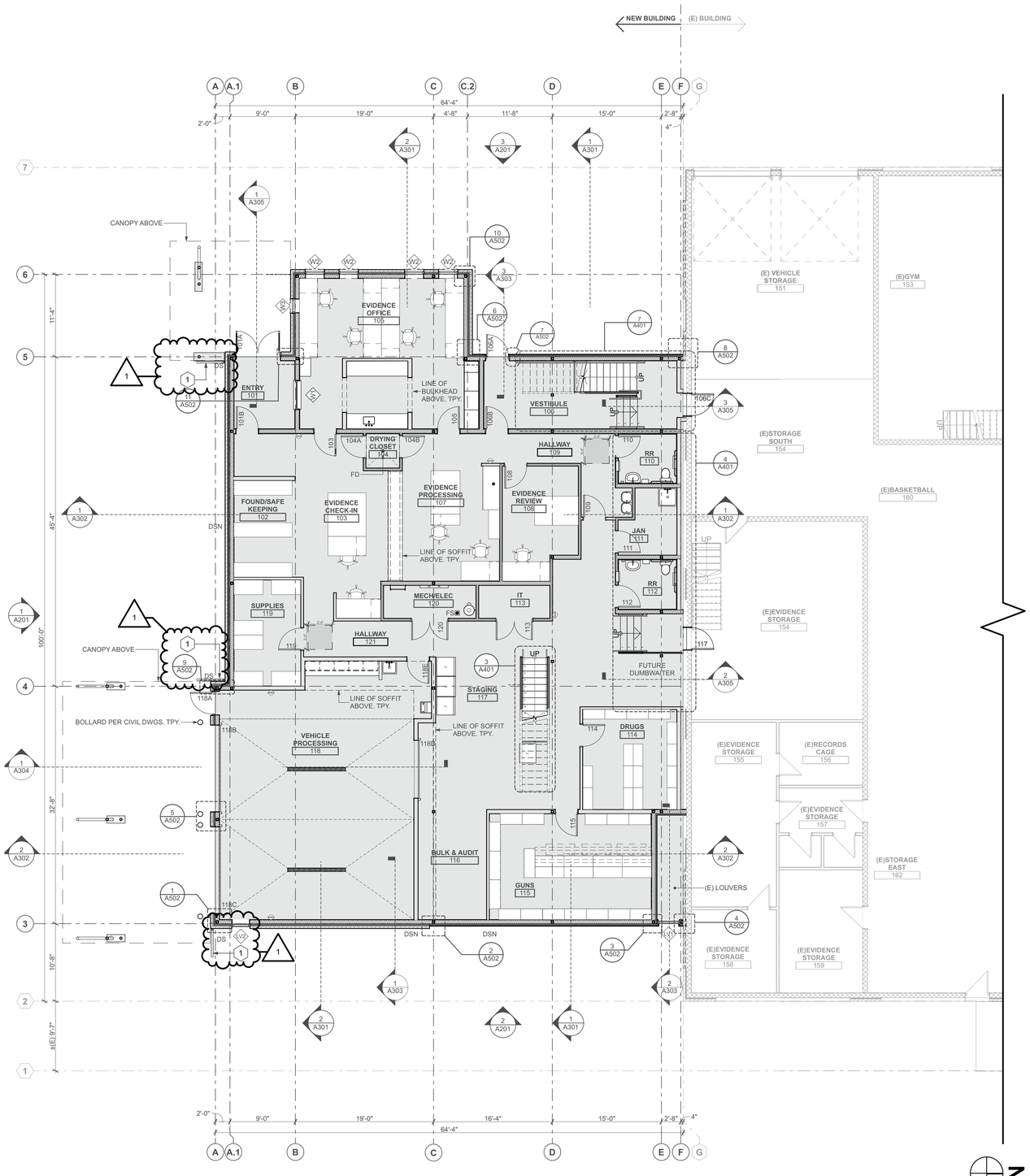
PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: kb APPROVED BY: kb

SHEET TITLE
Accessibility Requierments

SHEET NUMBER
G.003



1 Construction Plan | Main Level

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

0 4' 8' 16'

FLOOR PLAN NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED OTHERWISE.
2. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE LOCATED 4.5" FROM THE FINISHED WALL OR PARTITION TO OUTSIDE FACE OF FINISHED JAMB.
3. G.C RESPONSIBLE FOR VERIFYING ALL DIMENSIONS. NOTIFY ARCHITECT OF ANY CONDITIONS NOT MATCHING THE DESIGN INTENT OF THE DRAWINGS.
4. G.C RESPONSIBLE FOR VERIFYING OWNER PROVIDED EQUIPMENT & LOCATING BLOCKING IN WALLS.
5. ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL BUILDING CODES, REGULATIONS ORDINANCES, AND STANDARDS.
6. CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING IN WALLS FOR SUPPORT OF ALL EQUIPMENT, SHELVING, ACCESSORIES, AND OTHER DEVICES REQUIRED.
7. DRAWINGS SHALL NOT BE SCALED. WRITTEN DIMENSIONS SHALL BE FOLLOWED.
8. G.C. SHALL COORDINATE ALL NECESSARY INSPECTIONS BY AUTHORITIES HAVING JURISDICTION PRIOR TO CONCEALMENT OF WORK TO BE INSPECTED BY OTHER TRADES.
9. A SET OF BUILDING PLANS AND SPECIFICATIONS APPROVED BY AUTHORITIES HAVING JURISDICTION AND MARKED "FIELD COPY" SHALL BE KEPT ON THE PROJECT DURING CONSTRUCTION UNTIL FINAL INSPECTION AND APPROVAL HAS BEEN MADE.
10. PROTECT WOOD AND WOOD BASED PRODUCTS FROM DECAY AND TERMITES AS REQUIRED BY CODE.
11. FOR AREAS ADJACENT TO CONSTRUCTION AND FOR ALL ELEMENTS TO REMAIN, CONTRACTOR SHALL PROVIDE PROTECTION FROM DAMAGE AND DEBRIS.

FLOOR PLAN LEGEND

NEW CONSTRUCTION

NEW DOOR AS SCHEDULED

108B

EXISTING CONSTRUCTION TO REMAIN

EXISTING DOOR TO REMAIN

108B

FS FLOOR SINK

FD FLOOR DRAIN

EX EXTINGUISHER. INSTALL PER SECTION 906 OF THE 2021 IFC AND NFPA 10.

1 DSN RAINWATER OVERFLOW DOWNSPOUT NOZZLE WITH SCREEN

DS DOWNSPOUT

FLOOR PLAN KEYNOTES

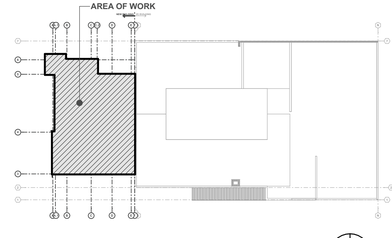
1 ENSURE THAT THE DOWNSPOUTS DISCHARGE AT LEAST 6' AWAY FROM THE BUILDING. INSTALL DOWNSPOUT EXTENSIONS OR SPLASH BLOCKS.

BSPARK ARCHITECTURE
410 Central Ave, Suite 505, Great Falls, MT 59401
t. 406.452.0001 f. 406.727.1068
www.bsparkpc.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045



KEY Plan

N

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
1	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

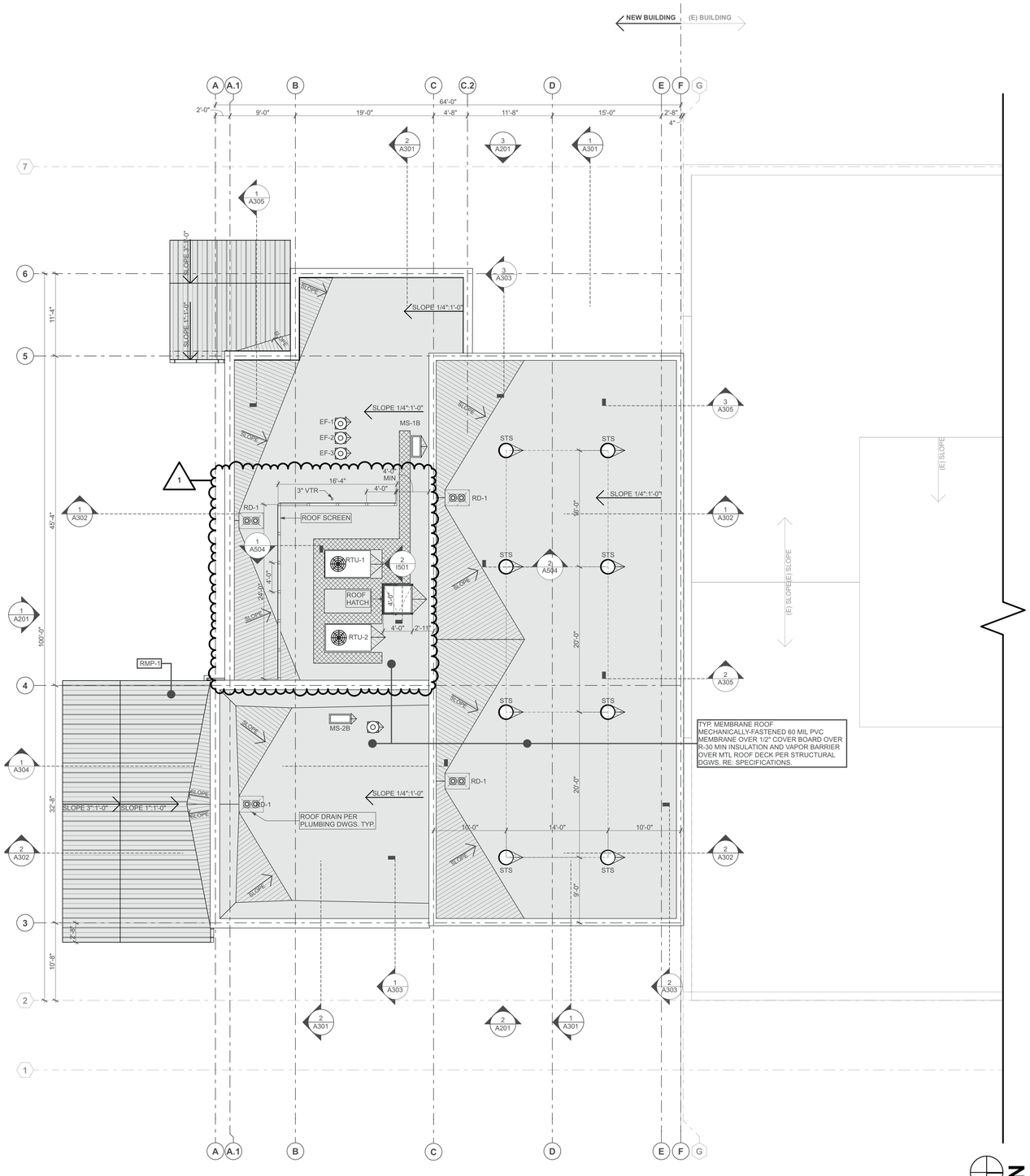
PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: ib APPROVED BY: kb

SHEET TITLE
Main Level Plan

SHEET NUMBER
A102



1 Construction Plan | Roof

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

0 4' 8' 16'

ROOF PLAN NOTES

1. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF ROOFTOP EQUIPMENT AND CURBS.
2. ENSURE EQUIPMENT CURBS OVERHANG JOISTS BELOW EQUALLY ON EACH SIDE AND CENTER EQUIPMENT ACCORDINGLY.
3. SEALANT POCKETS & PITCH POCKETS ARE NOT ACCEPTABLE FOR ANY PENETRATION.
4. ROOF DETAILS (RE:) ARE PROVIDED TO INDICATE DESIGN INTENT ONLY. ALL ROOFING DETAILS ARE TO BE APPROVED BY THE ROOFING MFR. FOR USE WITH THIS PROJECT TO COMPLY WITH A 20-YEAR WARRANTY. DETAILS BY THE ARCHITECT DO NOT OVERRIDE THE INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.

ROOF PLAN LEGEND

RMP-1 | MECHANICAL LOCK STANDING SEAM ROOF PANEL 1.5"
MFR: WESTERN STATES METAL ROOFING.
COLOR: GRAY ZINC MATTE.

CRICKET (TAPERED INSULATION)

WALKWAY MAT

SLOPE OF INSULATION

SLOPE OF STRUCTURE

ROOF DRAIN WITH OVERFLOW

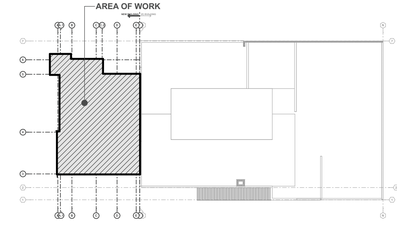
STS — SUN TUNNEL SKYLIGHT. TYP.

BSPARK ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406-452-0001 f. 406-761-1068
www.bsparkarch.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045



KEY Plan

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
1	12/27/23	Building Permit Set
1	1/19/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: **lb** APPROVED BY: **kb**

SHEET TITLE
Roof Plan

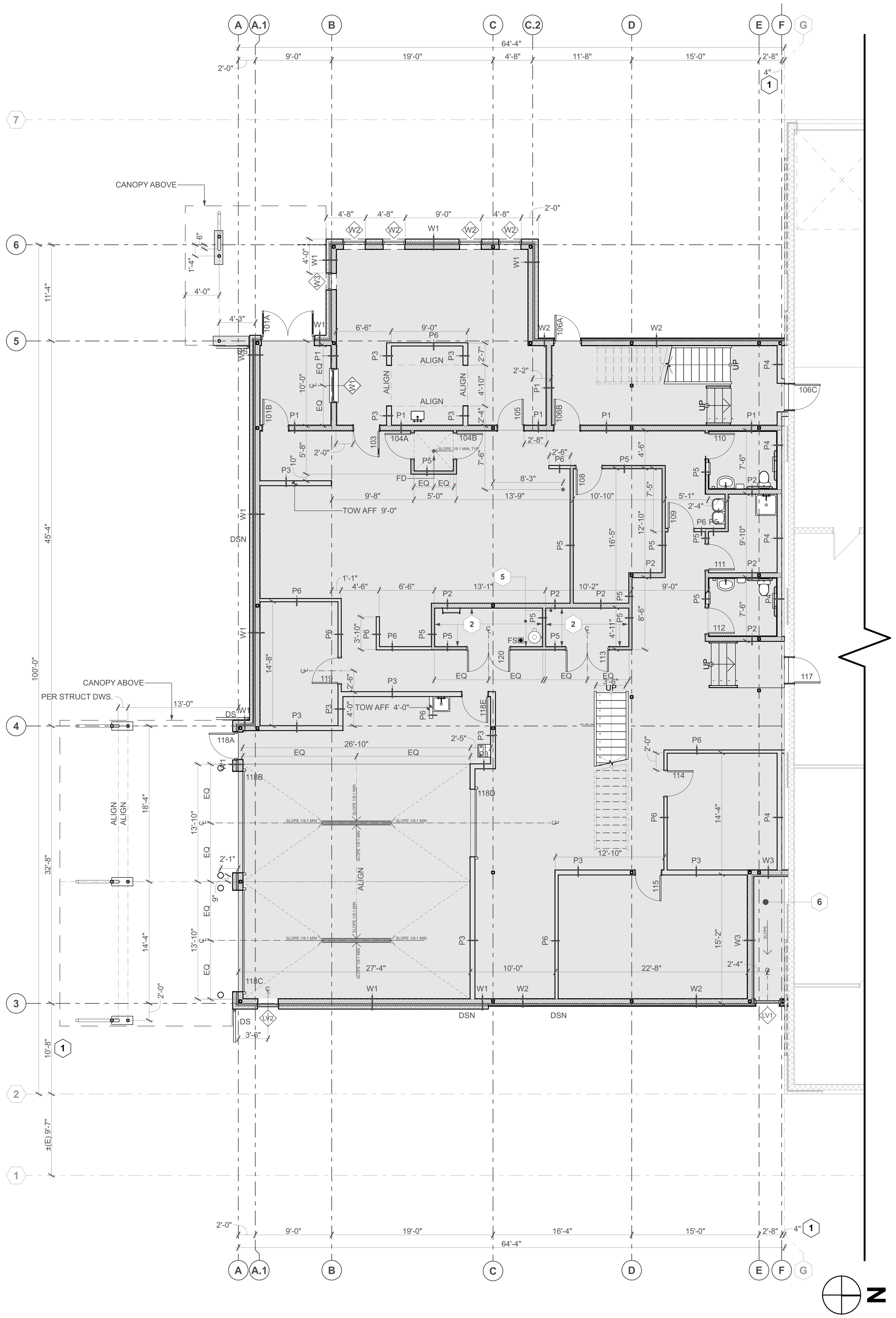
SHEET NUMBER
A104

CRITICAL DIMENSION PLAN KEYNOTES

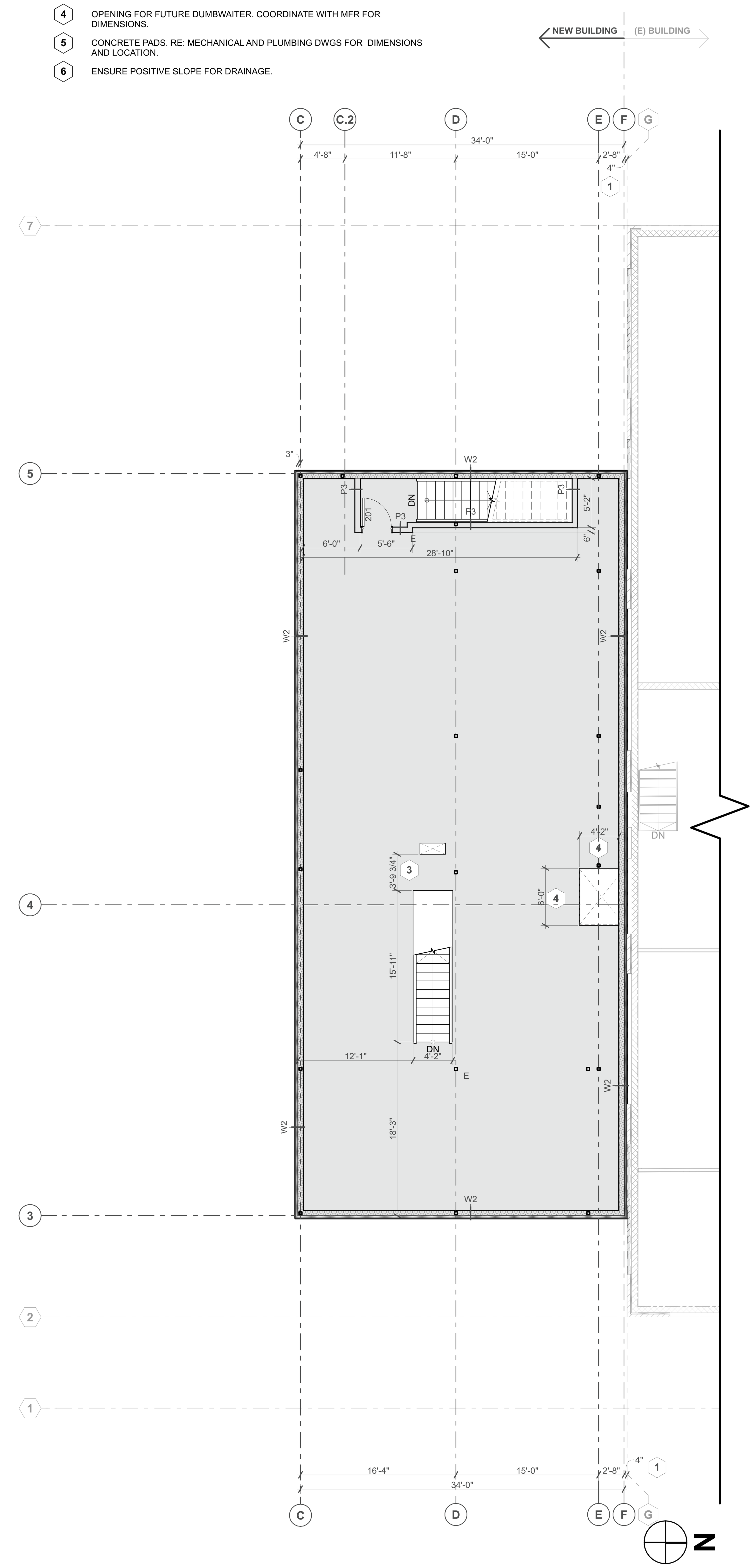
1. DIMENSION TO FINISH FACE OF (E) WALL.
2. INSTALL A LAYER ½" PLYWOOD.
3. OPENING FOR MECH DUCT WORK. RE: MECHANICAL AND PLUMBING DWGS FOR DIMENSIONS AND LOCATION.
4. OPENING FOR FUTURE DUMBWAITER. COORDINATE WITH MFR FOR DIMENSIONS.
5. CONCRETE PADS. RE: MECHANICAL AND PLUMBING DWGS FOR DIMENSIONS AND LOCATION.
6. ENSURE POSITIVE SLOPE FOR DRAINAGE.

CRITICAL DIMENSION PLAN NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD UNLESS OTHERWISE NOTED. CLEAR DIMENSIONS (NOTED AS "CLR.") ARE MEASURED TO FACE OF FINISH. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.

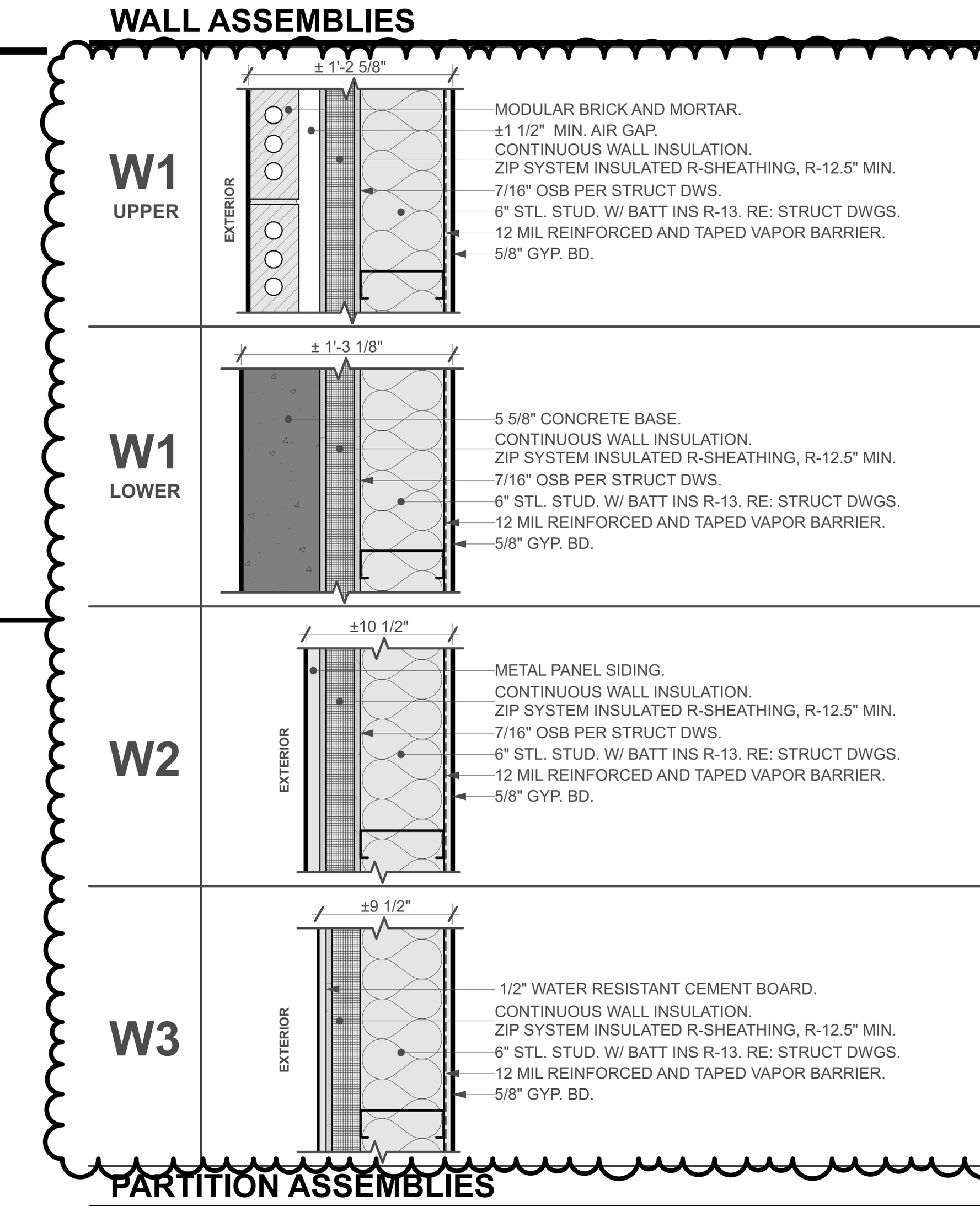


1 Critical Dimension Plan | Main Level
SCALE: 1/8" = 1'-0"

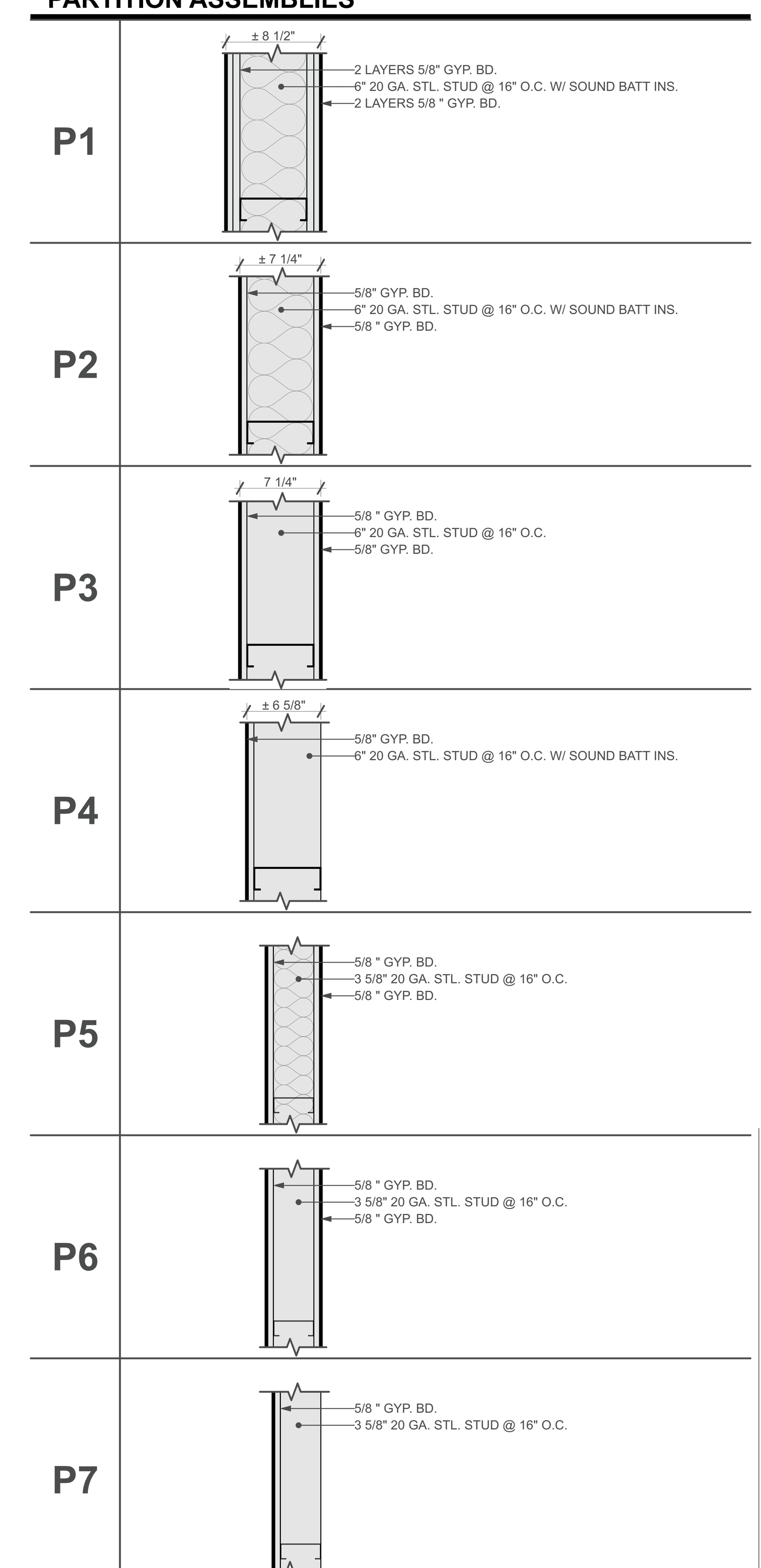


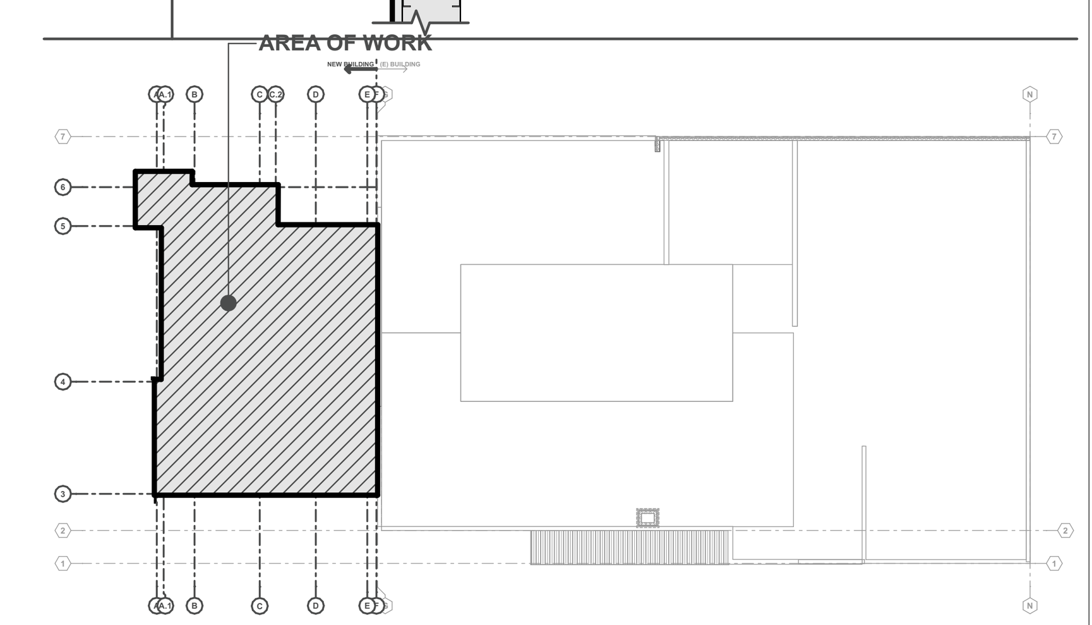
2 Critical Dimension Plan | Upper Level
SCALE: 1/8" = 1'-0"

WALL ASSEMBLIES



PARTITION ASSEMBLIES





KEY Plan

ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406.453.0001 f. 406.760.1788
www.bsparkarch.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: ib APPROVED BY: kb

SHEET TITLE
Critical Dimension Plan | Main & Upper Level

SHEET NUMBER
A105

REFLECTED CEILING PLAN NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD UNLESS OTHERWISE NOTED. CLEAR DIMENSIONS (NOTED AS "CLR.") ARE MEASURED TO FACE OF FINISH. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.
2. EMERGENCY LIGHTING SHALL REMAIN FUNCTIONAL DURING AND AFTER CONSTRUCTION.
3. COORDINATE WITH MECHANICAL AND ELECTRICAL DWGS FOR FIXTURES TYPES AND LOCATIONS.
4. ALL CEILING GRIDS ARE CENTERED ON ROOM OR CORRIDOR, UNO.
5. LIGHT FIXTURES, GRILLERS, HEAT AND SMOKE DETECTORS, SPEAKERS, SPRINKLERS, ETC. SHALL BE LOCATED IN CENTER OF THE PANEL UN LESS OTHERWISE INDICATED.
6. REFER #LayID(ref) FOR CEILING FINISHES.

REFLECTED CEILING PLAN LEGEND

2X4 SUSPENDED LAY-IN ACOUSTIC TILE CEILING.

MP-2 **METAL PANEL | 12" T-GROOVE PANEL.**
MRF WESTERN STATES METAL ROOFING.
COLOR: GRAY ZINC MATTE.
NOTES: NO REVEAL.

SUPPLY DIFFUSER

RETURN DIFFUSER

2X4 LED LAY-IN FIXTURE

2X2 LED LAY-IN FIXTURE

"L" SHAPED LINEAR SUSPENDED FIXTURE

LINEAR PENDANT MOUNT FIXTURE

4" RECESSED LED LIGHT FIXTURE

6" RECESSED LED LIGHT FIXTURE

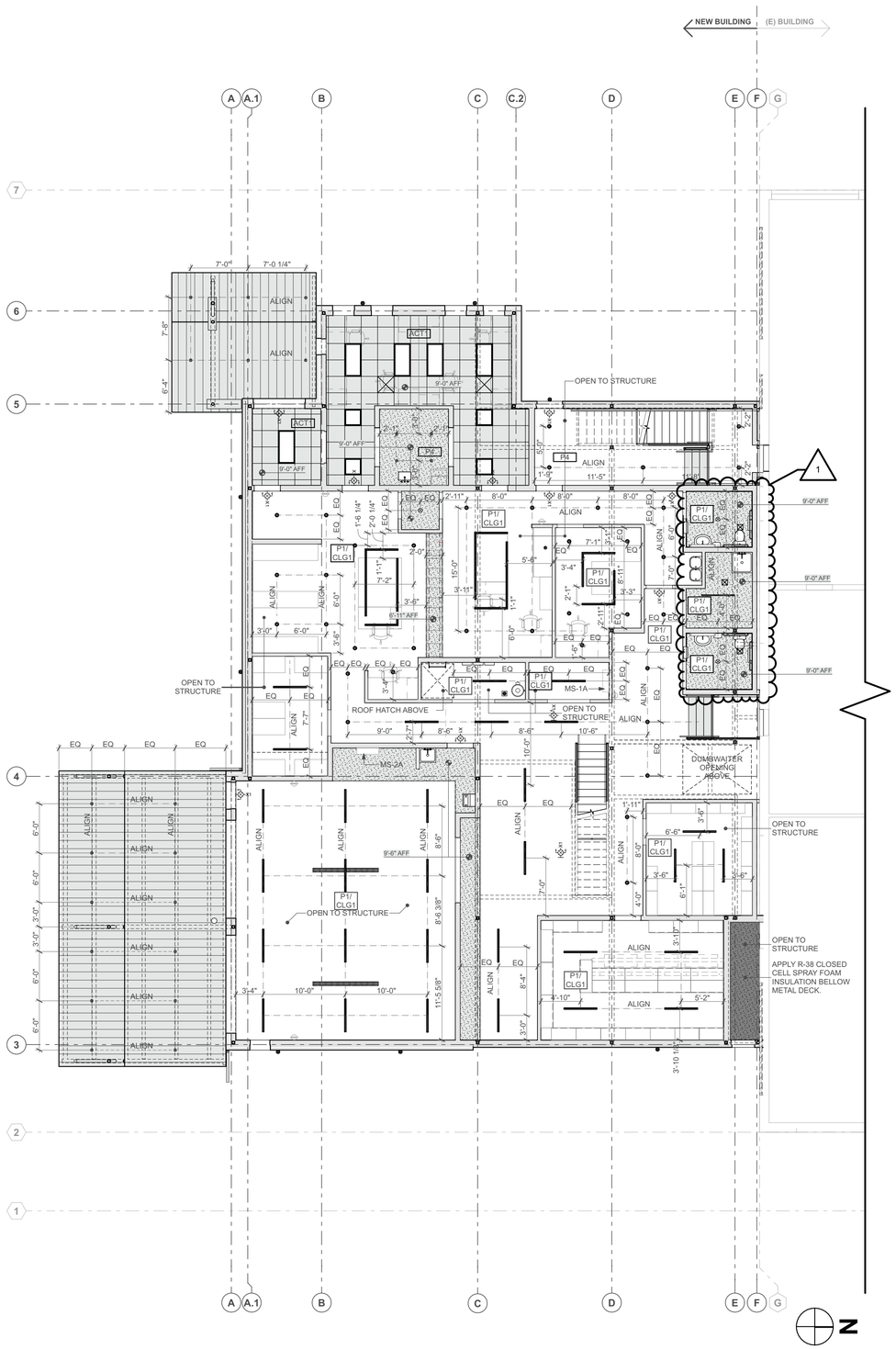
WALL MOUNT LED FIXTURE

6" SUSPENDED PENDANT DOWNLIGHT.

EXIT SIGN

WALL MOUNTED LIGHT FIXTURE

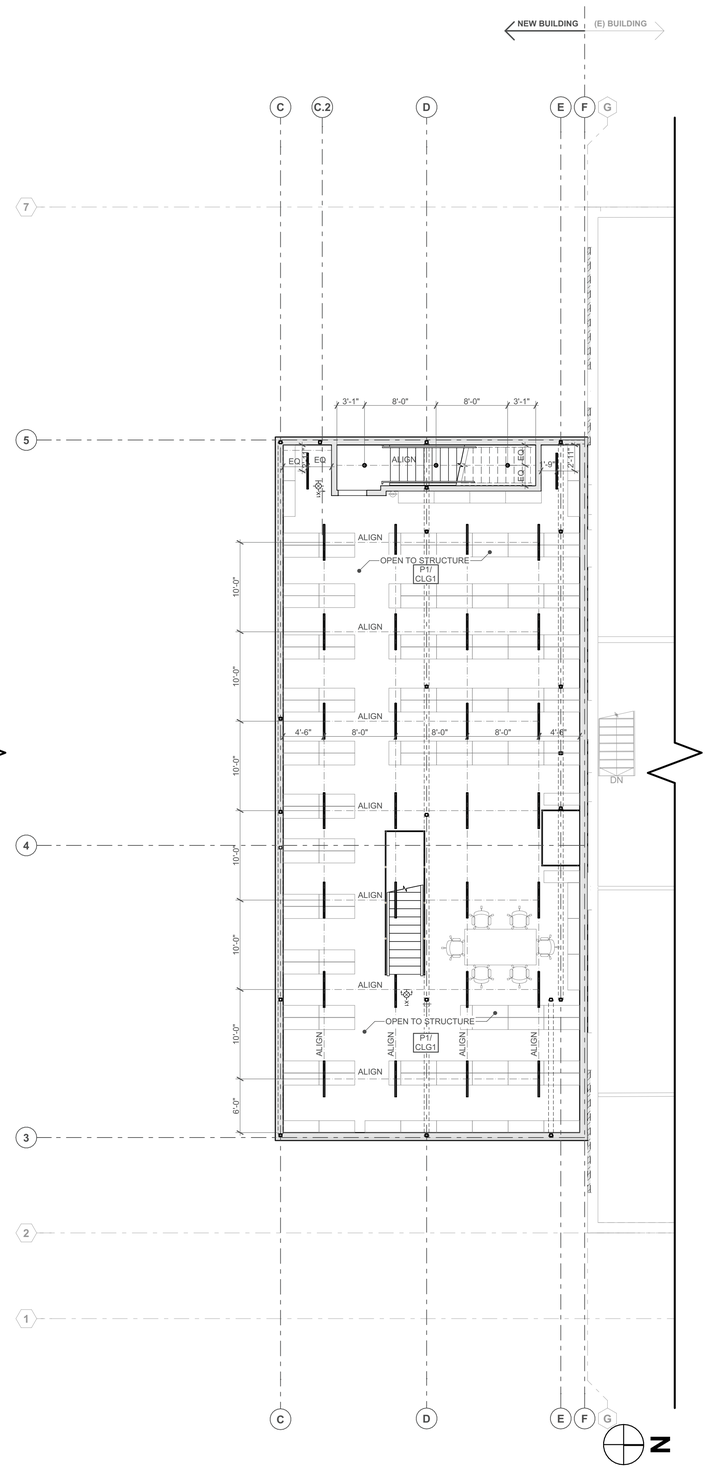
1



1 RCP Plan | Main Level

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

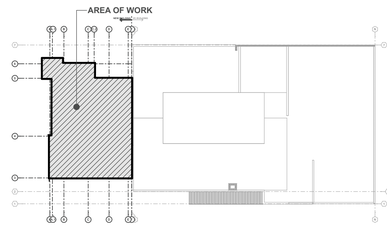
0 4' 8' 16'



2 RCP Plan | Upper Level

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

0 4' 8' 16'



KEY Plan

N

BSPARK ARCHITECTURE
410 Central Ave, Suite 505, Great Falls, MT 59401
t. 406.452.0001 f. 406.727.1088
www.bsparkproject.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
1	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

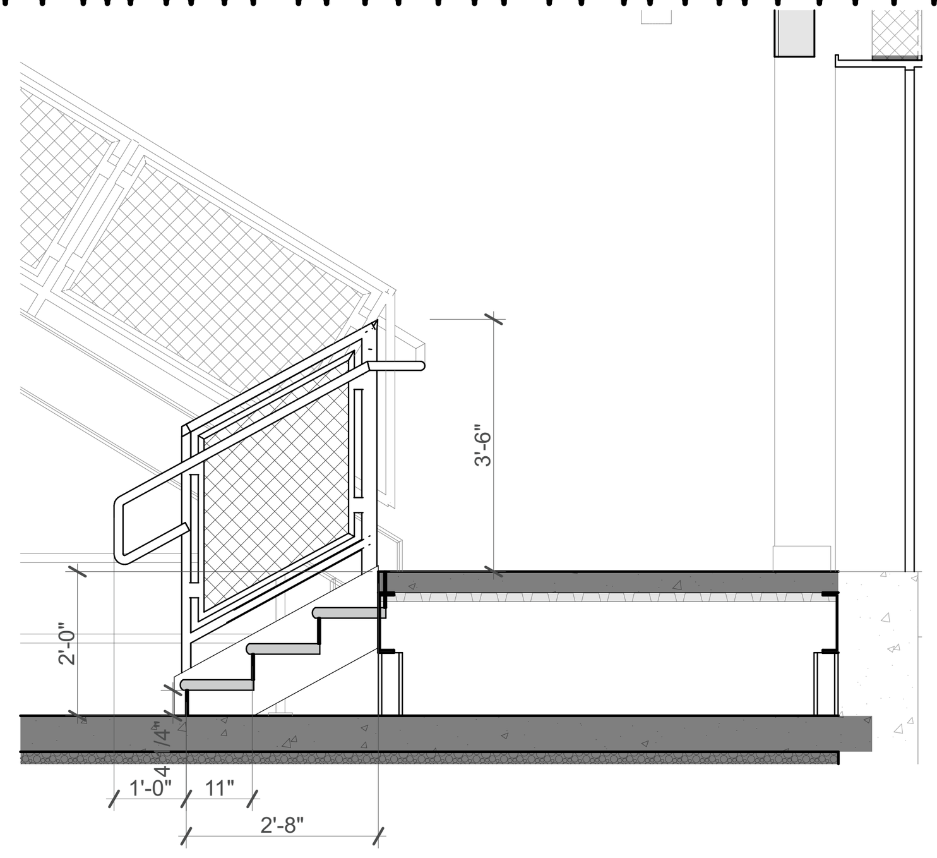
PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

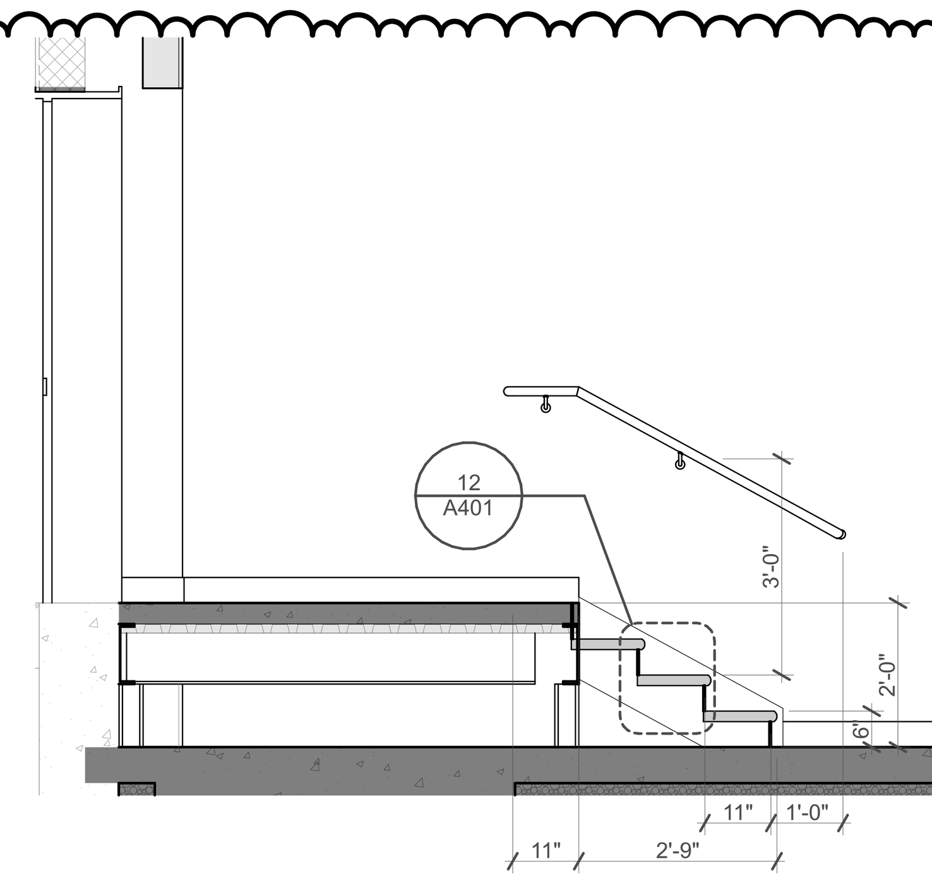
DRAWN BY: **lb** APPROVED BY: **kb**

SHEET TITLE
RCP Plan | Main & Upper Level

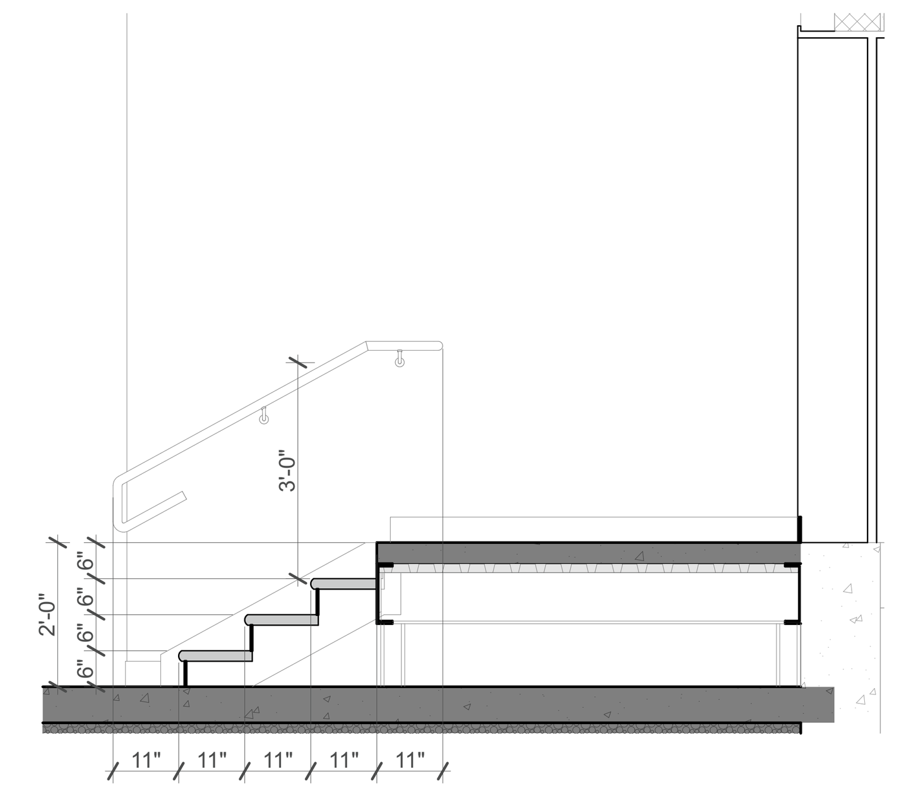
SHEET NUMBER
A106



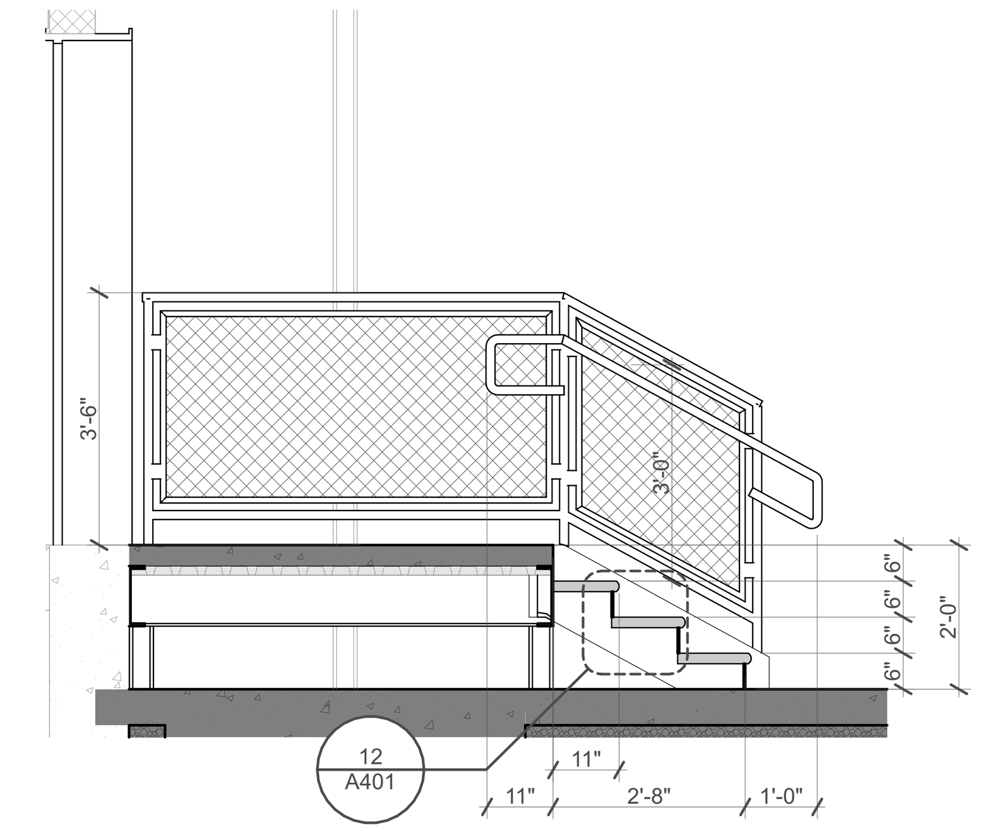
8 **Stairs W @ Vestibule 106**
SCALE: 3/8" = 1'-0"



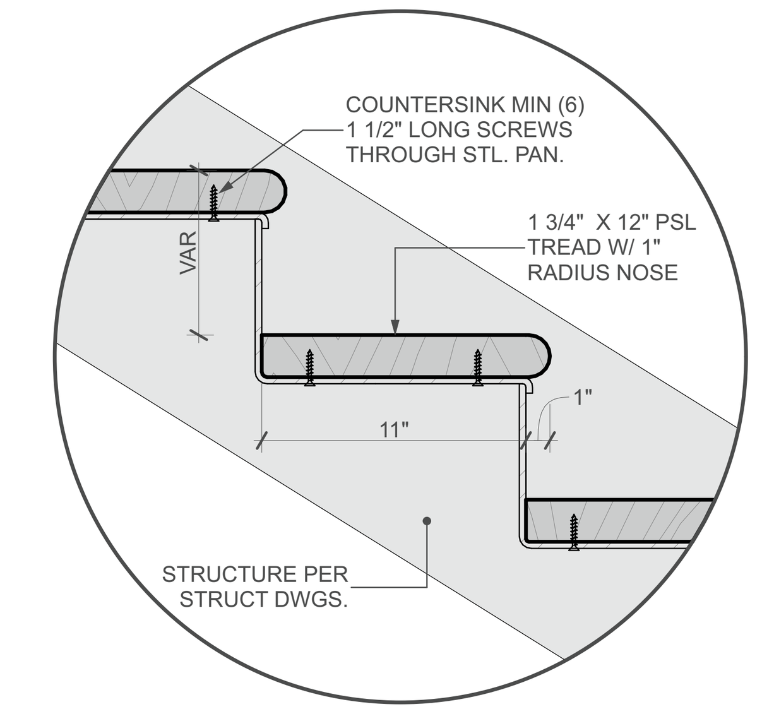
9 **Stairs E @ Vestibule 106**
SCALE: 3/8" = 1'-0"



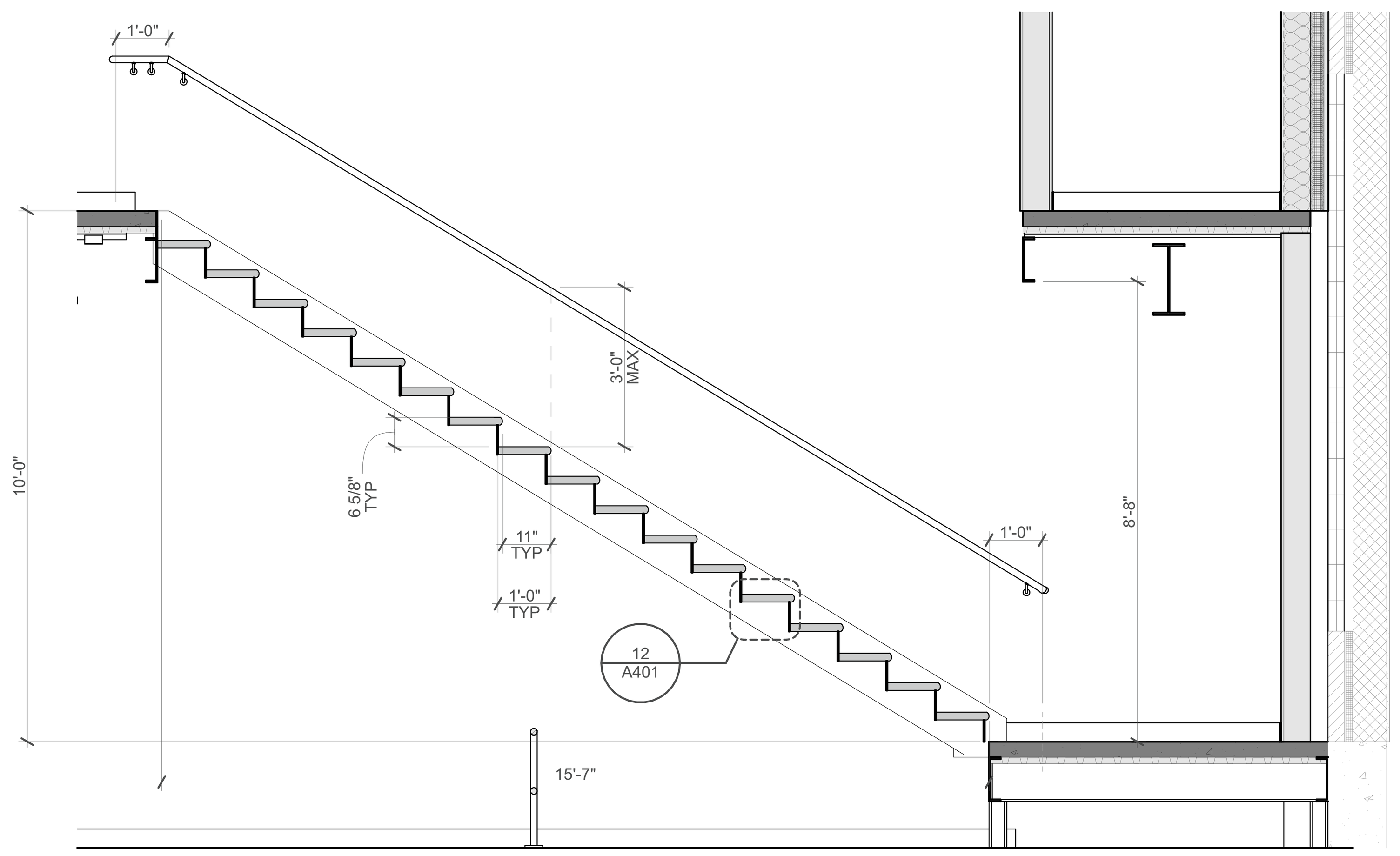
10 **Stairs W @ Hallway**
SCALE: 3/8" = 1'-0"



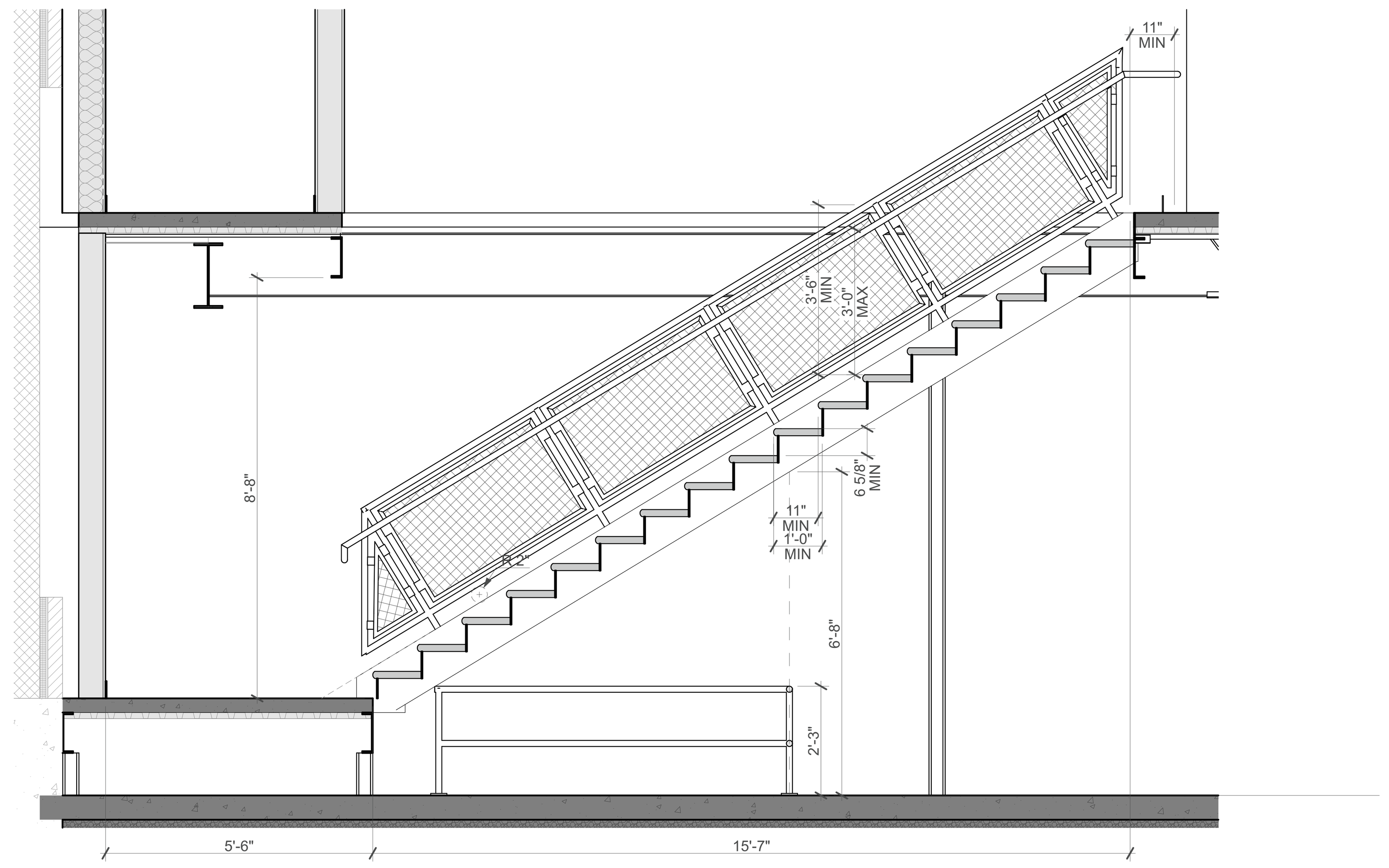
11 **Stairs E @ Hallway**
SCALE: 3/8" = 1'-0"



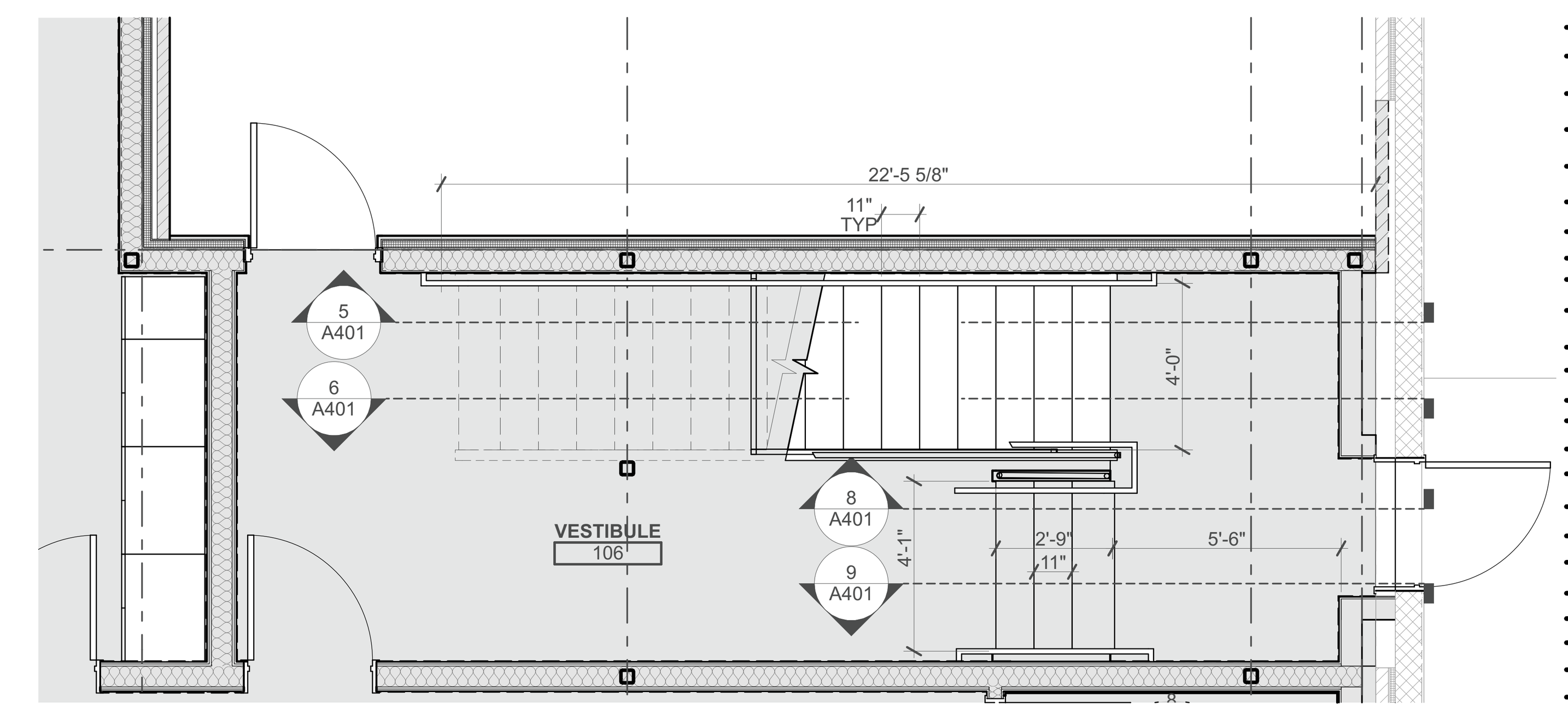
12 **Tread Detail**
SCALE: 1 1/2"= 1'-0"



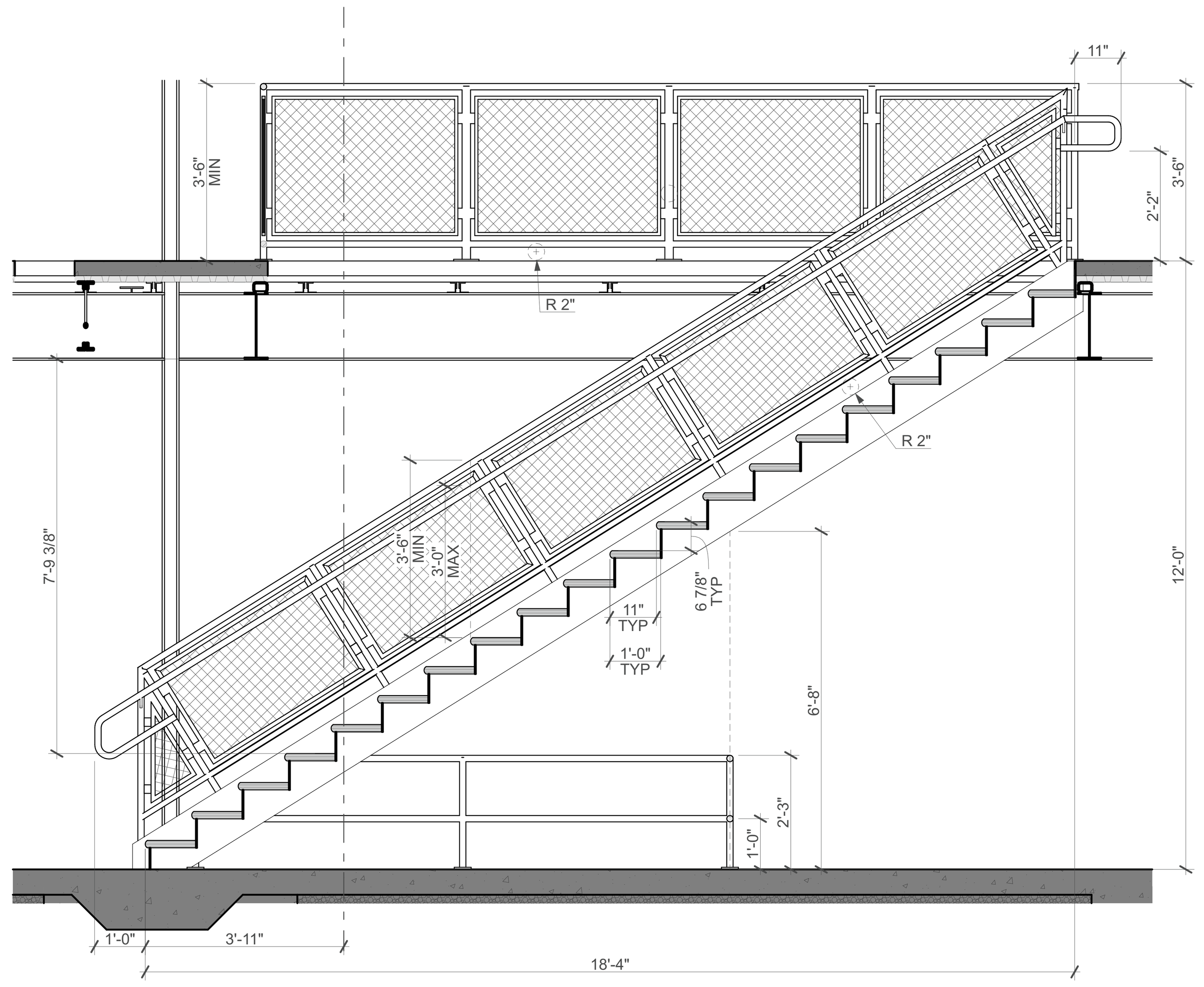
5 **Stairs W @ Vestibule 106**
SCALE: 3/8" = 1'-0"



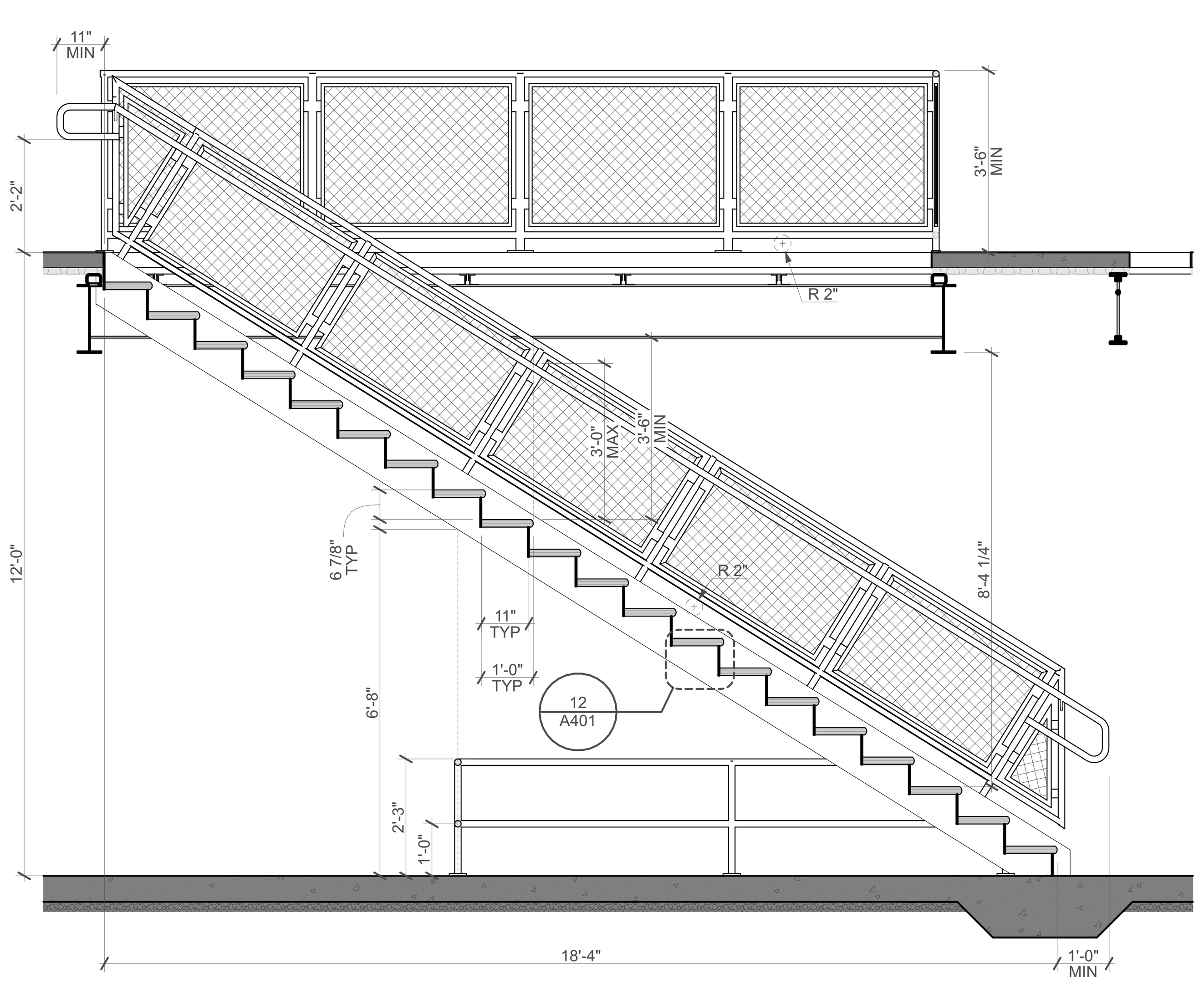
6 **Stairs E @ Vestibule 106**
SCALE: 3/8" = 1'-0"



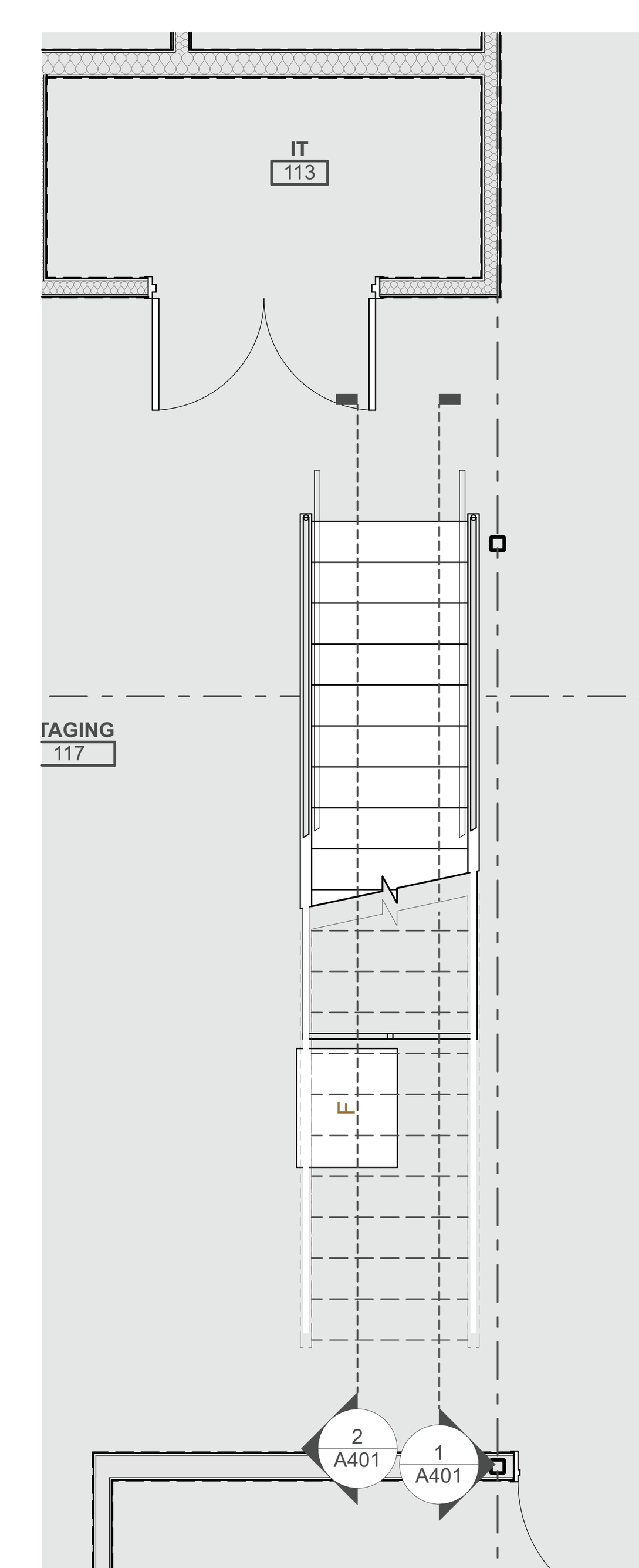
7 **Stairs @ Vestibule 106**
SCALE: 1/4" = 1'-0"



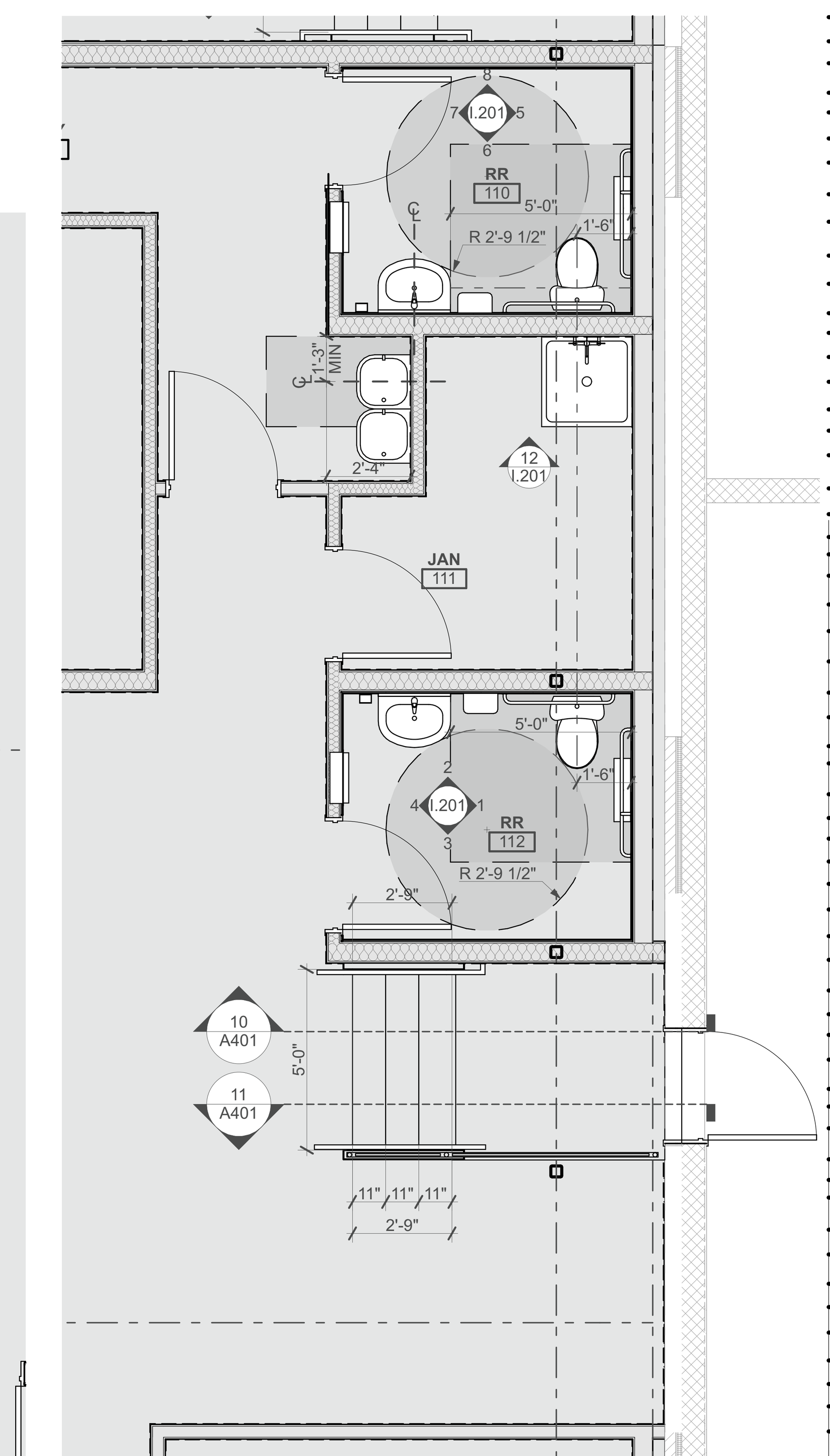
1 **Stairs N @ Hallway**
SCALE: 3/8" = 1'-0"



2 **Stairs S @ Hallway**
SCALE: 3/8" = 1'-0"



3 **Stairs @ Hallway**
SCALE: 1/4" = 1'-0"



4 **RR & Stairs @ (E) Building**
SCALE: 1/4" = 1'-0"

BSPARK ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406.453.0001 f. 406.760.1788

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: lb APPROVED BY: kb

SHEET TITLE
Enlarged Plan

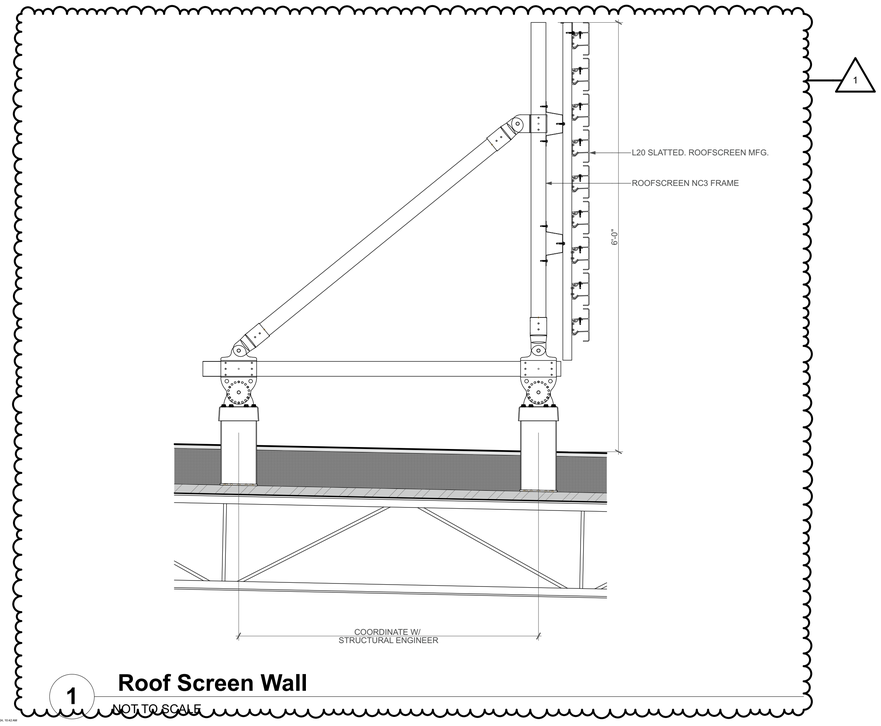
SHEET NUMBER
A401

BSPARK
ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406.452.0001 f. 406.727.1788
www.bsparkarch.com

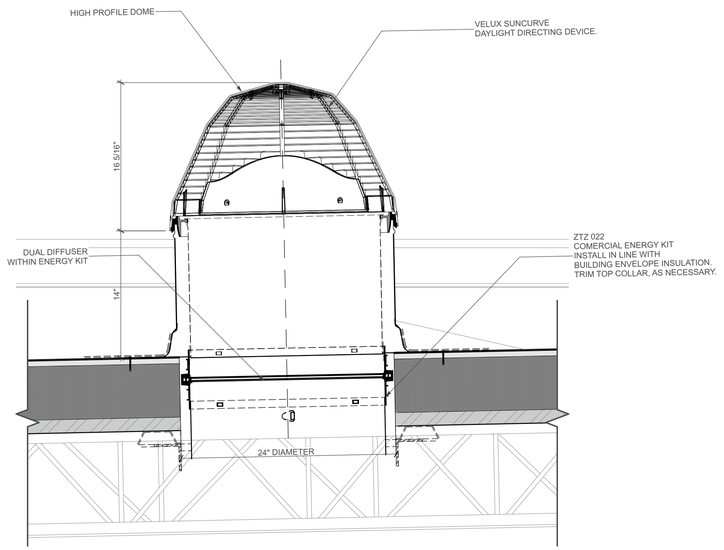
GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045



1 Roof Screen Wall
NOT TO SCALE



2 Sun Tunnel Skylight.
NOT TO SCALE

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
1	12/27/23	Building Permit Set
2	1/18/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: **lb** APPROVED BY: **kb**

SHEET TITLE
Roof Details

SHEET NUMBER
A504

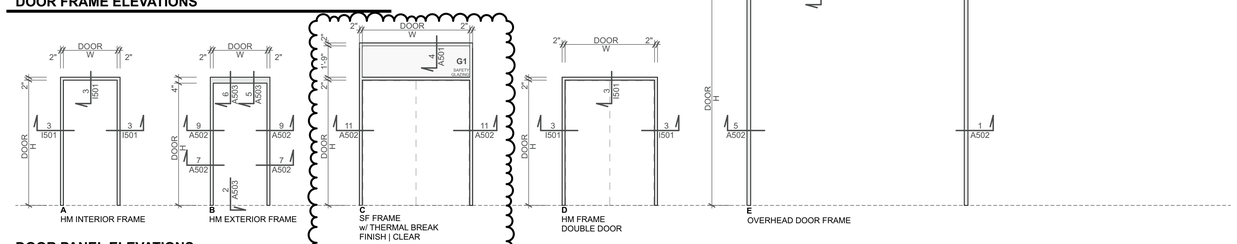
DOOR SCHEDULE

ID	STATUS	W X H	DOOR				FRAME				FR	HRW	NOTES
			TYPE	MAT	FIN	GLAZ	TYPE	MAT	FIN	GLAZ			
101A	New	6'-0"×7'-0"	C	ALUM	CLEAR	G1	C	ALUM	CLEAR	G1		HW.01	3
101B	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.04	3
103	New	3'-0"×7'-0"	B	HM	PT	G2	A	HM	PT	--		HW.07	
104A	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	-		HW.11	
104B	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.12	
105	New	3'-0"×7'-0"	G	HM	PT	--	A	HM	PT	--		HW.08	
106A	New	3'-0"×7'-0"	A	HM	PT	--	B	HM	PT	--		HW.02	3
106B	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.06	
106C	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	-	1 ½"	HW.03	
108	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.05	
109	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.05	
110	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	-		HW.13	
111	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	-		HW.10	
112	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.13	
113	New	5'-0"×7'-0"	D	HM	PT	--	D	HM	PT	--		HW.09	
114	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	-		HW.07	
115	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.07	
117	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	-	1 ½"	HW.14	
118A	New	3'-0"×7'-0"	A	HM	PT	--	B	HM	PT	--		HW.02	3
118B	New	12'-0"×12'-0"	F	BRW	STEEL	G1	E	MFR	MFR	--		HW.15	
118C	New	12'-0"×12'-0"	F	BRW	STEEL	G1	E	MFR	MFR	--		HW.15	
118D	New	8'-0"×8'-0"	E	BRW	STEEL	--	E	BRW	STEE	--		HW.15	
118E	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.06	
119	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.10	
120	New	5'-0"×7'-0"	D	HM	PT	--	D	HM	PT	--		HW.09	
201	New	3'-0"×7'-0"	A	HM	PT	--	A	HM	PT	--		HW.10	

NOTES

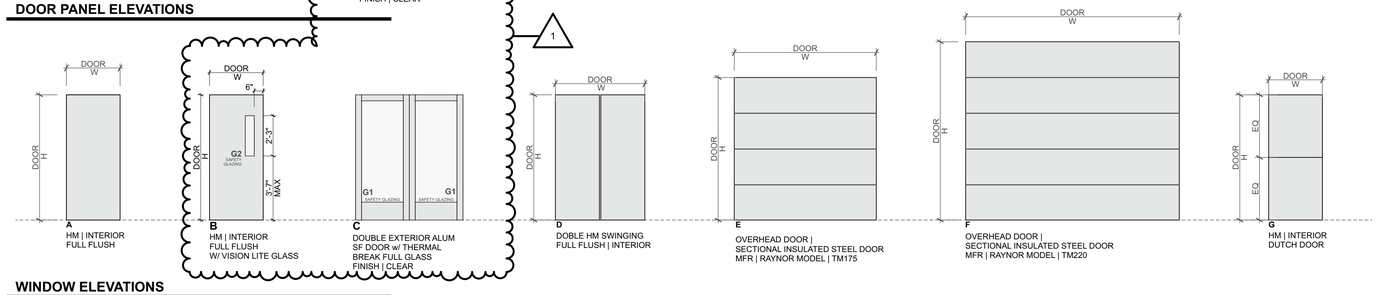
1. REFURBISH DOOR AND FRAME FINISHES.
2. VERIFY (E) DOOR HARDWARE IS WORKING ACCORDINGLY.
3. "DOORS TO REMAIN UNLOCKED DURING BUSINESS HOURS" TO BE POSTED WITH 1" LETTERS.

DOOR FRAME ELEVATIONS



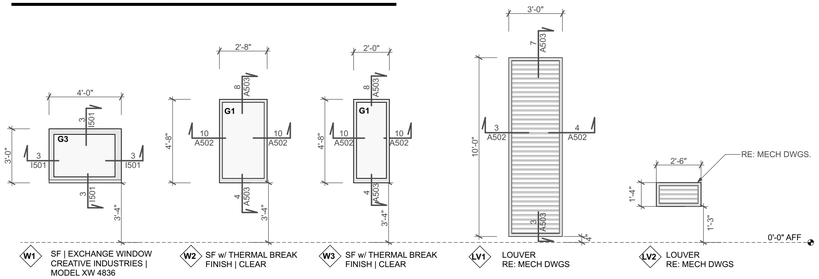
A HM INTERIOR FRAME
B HM EXTERIOR FRAME
C SF FRAME w/ THERMAL BREAK FINISH | CLEAR
D HM FRAME DOUBLE DOOR
E OVERHEAD DOOR FRAME

DOOR PANEL ELEVATIONS



A HM | INTERIOR FULL FLUSH
B HM | INTERIOR FULL FLUSH W/ VISION LITE GLASS
C DOUBLE EXTERIOR ALUM SF DOOR w/ THERMAL BREAK FULL GLASS FINISH | CLEAR
D DOBLE HM SWINGING FULL FLUSH | INTERIOR
E OVERHEAD DOOR | SECTIONAL INSULATED STEEL DOOR MFR | RAYNOR MODEL | TM175
F OVERHEAD DOOR | SECTIONAL INSULATED STEEL DOOR MFR | RAYNOR MODEL | TM220
G HM | INTERIOR DUTCH DOOR

WINDOW ELEVATIONS



W1 SF | EXCHANGE WINDOW CREATIVE INDUSTRIES | MODEL XW 4836
W2 SF w/ THERMAL BREAK FINISH | CLEAR
W3 SF w/ THERMAL BREAK FINISH | CLEAR
LV1 LOUVER RE: MECH DWGS
LV2 LOUVER RE: MECH DWGS

GLASS TYPE

G1 MANUFACTURER'S STANDARD TEMPERED GLAZING TO MEET ENERGY CODE REQUIREMENTS.

G2 1/4" TEMPERED GLASS.

G3 1 1/4" LEVEL 1 BULLET RESISTANT GLASS

NOTES:
1. RE: G.001 | ENERGY CODE ANALYSIS FOR U-VALUES FOR WINDOWS, SKYLIGHTS, AND EXTERIOR DOORS.
2. PROVIDE SAFETY GLAZING PER SECTION 2406 | SAFETY GLAZING.

DOOR SCHEDULE | GENERAL NOTES

1. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
2. ALL DOOR HARDWARE SHALL BE ADA COMPLIANT. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE.
3. MAXIMUM EFFORT TO OPERATE EXTERIOR OR INTERIOR DOORS WITH CLOSERS SHALL NOT EXCEED 5 POUNDS AND 15 PONDS FOR FIRE-RATED DOORS.
4. INSTALLATION OF ALL FRAMES TO BE PER MANUFACTURER'S SPECIFICATIONS.
5. FRAMES SHALL HAVE THREE SILENCERS PER STRIKE JAMB OR TWO PER HEAD ON DOUBLE DOOR OPENINGS.
6. REINFORCE FRAMES FOR HARDWARE PER MANUFACTURER'S RECOMMENDATIONS.
7. ALL WOOD DOORS SHALL BE SOLID CORE OAK VENEER. CLEAR FINISH.
8. ALL DOORS SHALL BE 1 3/4" THICK U.N.O.

ABBREVIATIONS

ALUM	ALUMINUM
ANOD	ANODIZED
ASF	ALUMINUM STOREFRONT
HM	HOLLOW METAL
OH	OVERHEAD DOOR
STL	STEEL
WD	WOOD
MED	MATCH EXISTING DOOR SIZE
MEF	MATCH EXISTING FINISH
VIF	VERIFY IN FIELD
ST	STAIN
PT	PAINT
PR	PAIR

DOOR HARDWARE SETS

1. DOOR HARDWARE PER SPECIFICATIONS.

BSPARK ARCHITECTURE
410 Central Ave, Suite 505, Great Falls, MT 59401
t. 406-452-0001 f. 406-727-1088
www.bsparkarch.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
1	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

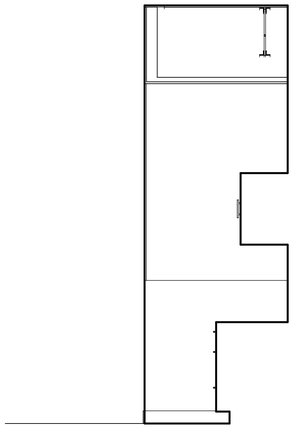
SHEET ISSUE DATE:
01.19.2024

DRAWN BY: **ib** APPROVED BY: **kb**

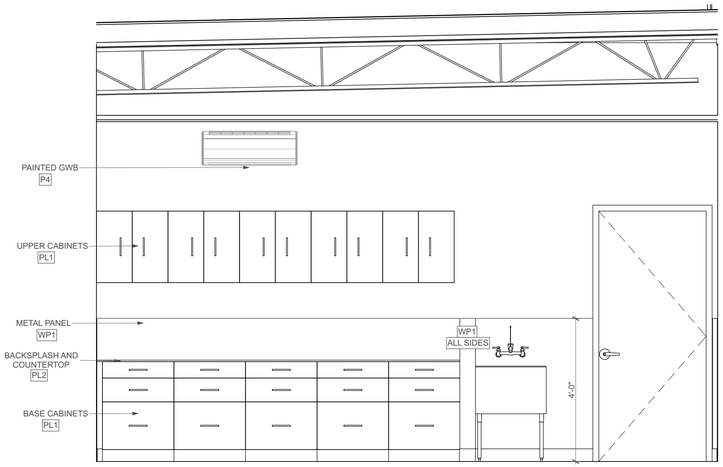
SHEET TITLE
Door & Hardware Schedules

SHEET NUMBER
A601

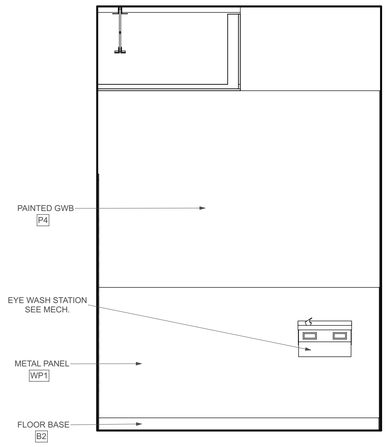
Izai Bazan; 1/19/24, 10:42 AM



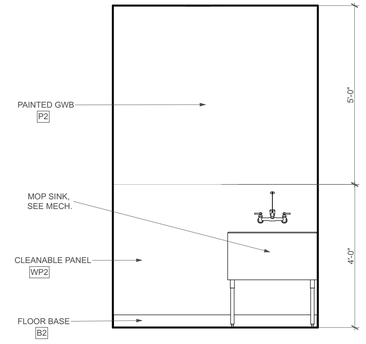
9 VE PROCESSING
SCALE: 1/2" = 1'-0"



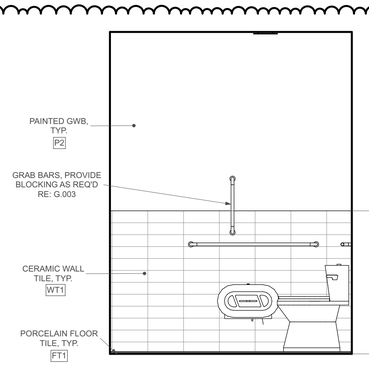
10 VE PROCESSING
SCALE: 1/2" = 1'-0"



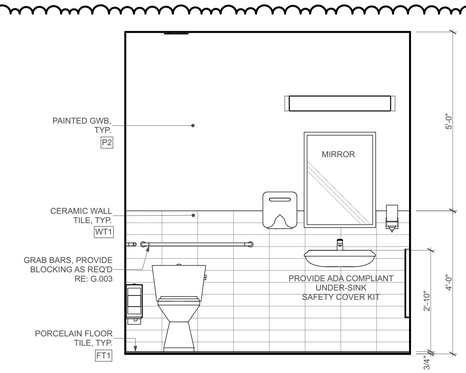
11 VE PROCESSING
SCALE: 1/2" = 1'-0"



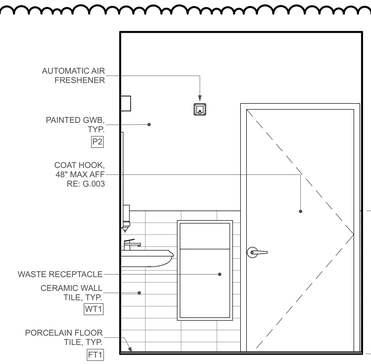
12 Jan 111
SCALE: 1/2" = 1'-0"



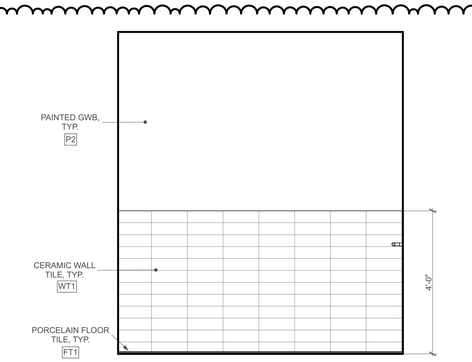
5 RR 110 | N
SCALE: 1/2" = 1'-0"



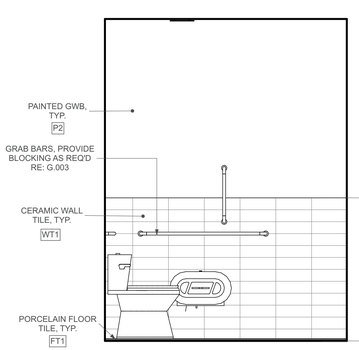
6 RR 110 | E
SCALE: 1/2" = 1'-0"



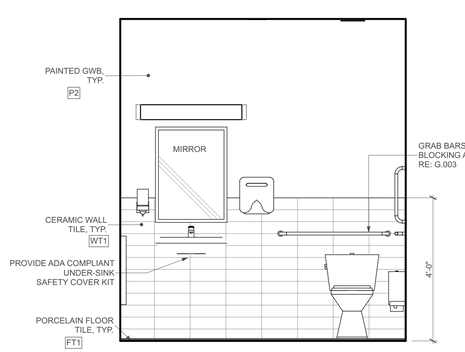
7 RR 110 | S
SCALE: 1/2" = 1'-0"



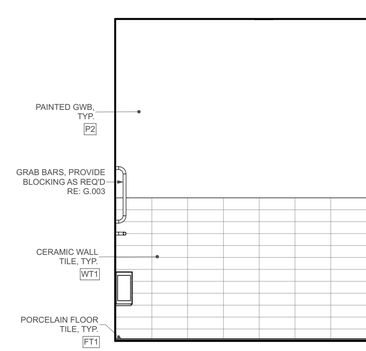
8 RR 110 | W
SCALE: 1/2" = 1'-0"



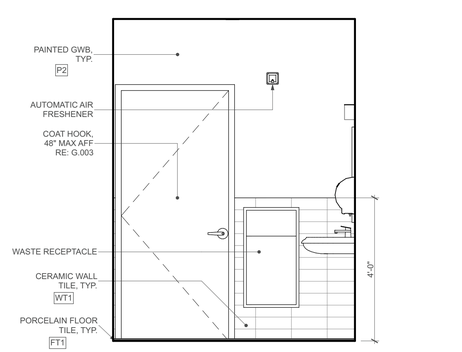
1 RR 112 | N
SCALE: 1/2" = 1'-0"



2 RR 112 | W
SCALE: 1/2" = 1'-0"



3 RR 112 | E
SCALE: 1/2" = 1'-0"



4 RR 112 | S
SCALE: 1/2" = 1'-0"

1

BSPARK ARCHITECTURE
410 Central Ave, Suite 506, Great Falls, MT 59401
t. 406.452.0001 f. 406.761.1788
www.bsparkproject.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
1	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

PHASE:
BUILDING PERMIT SET

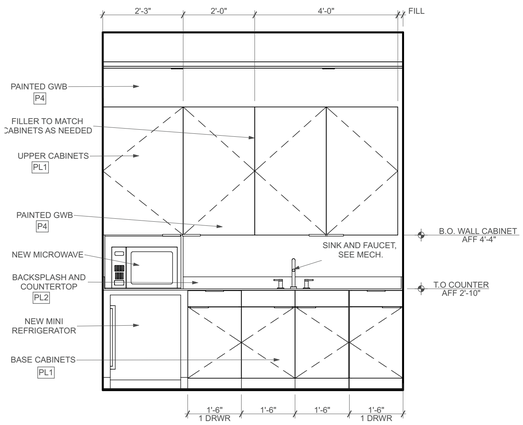
SHEET ISSUE DATE:
01.19.2024

DRAWN BY: **ib** APPROVED BY: **kb**

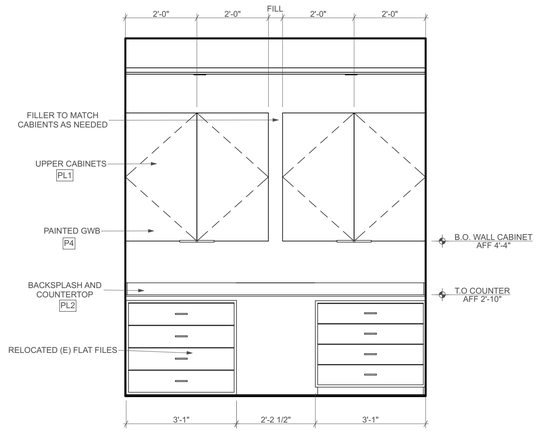
SHEET TITLE
Interior Elevations

SHEET NUMBER
I.201

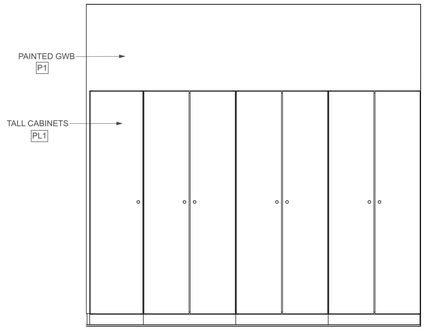
Kurt Bowen, 1/18/24, 10:42 AM



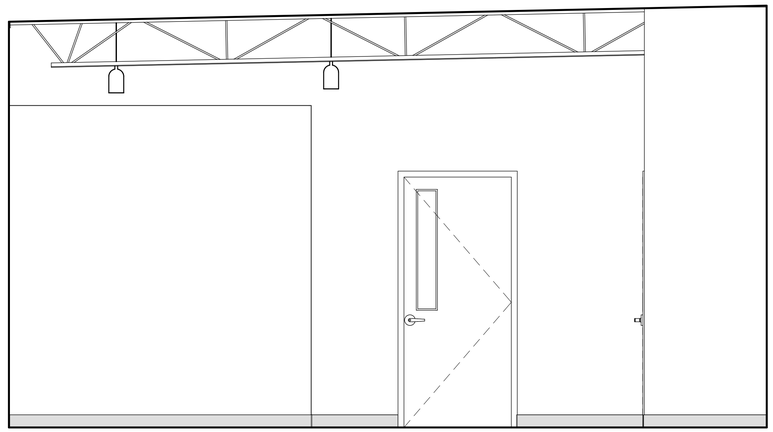
5 **E OFFICE 105**
SCALE: 1/2" = 1'-0"



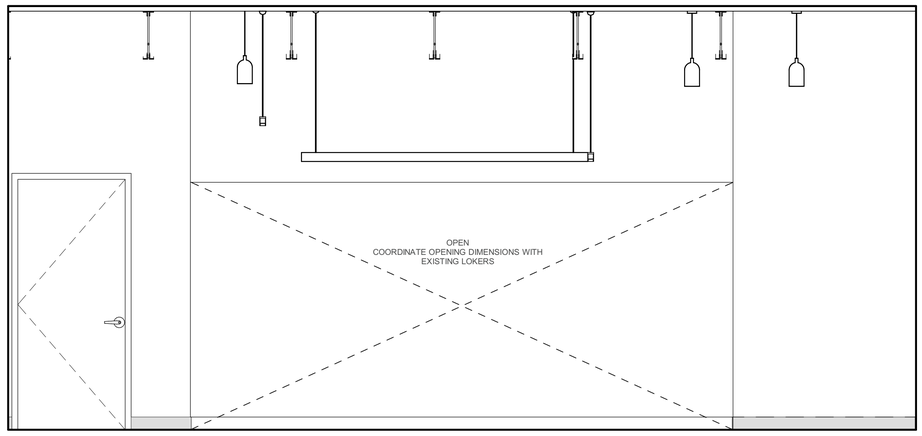
6 **E OFFICE 105**
SCALE: 1/2" = 1'-0"



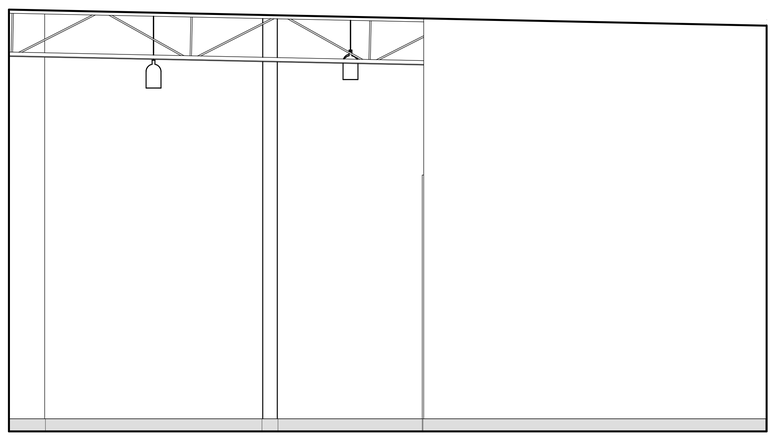
7 **STORAGE CABINETS @ EVIDENCE OFFICE**
SCALE: 1/2" = 1'-0"



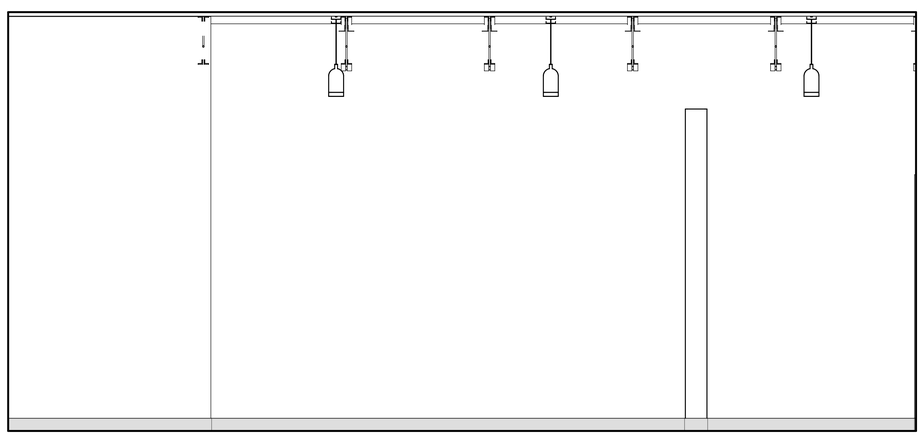
3 **E CHECK-IN 103**
SCALE: 1/2" = 1'-0"



4 **E CHECK-IN 103**
SCALE: 1/2" = 1'-0"



1 **E CHECK-IN 103**
SCALE: 1/2" = 1'-0"



2 **E CHECK-IN 103**
SCALE: 1/2" = 1'-0"

BSPARK ARCHITECTURE
410 Central Ave, Suite 505, Great Falls, MT 59401
t. 406-452-0001 f. 406-727-1088
www.bsparkarch.com

GFPD | EVIDENCE ROOM EXPANSION

ADDRESS:
112 1st Street South,
Great Falls, MT, 59401

PROJECT NUMBER:
22045

LICENSED ARCHITECT
KEITH BALLANTYNE
2268
FORT BENTON
MT
STATE OF MONTANA

REVISIONS:

	DATE	ISSUANCE
1	12/27/23	Building Permit Set
1	1/18/24	ADDENDUM 2

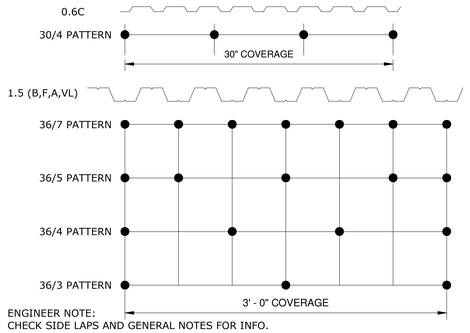
PHASE:
BUILDING PERMIT SET

SHEET ISSUE DATE:
01.19.2024

DRAWN BY: **lb** APPROVED BY: **kb**

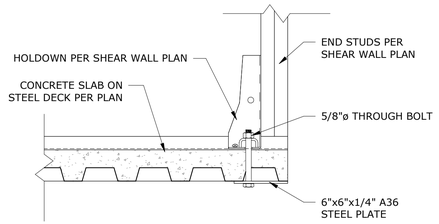
SHEET TITLE:
Interior Elevations

SHEET NUMBER:
I.202

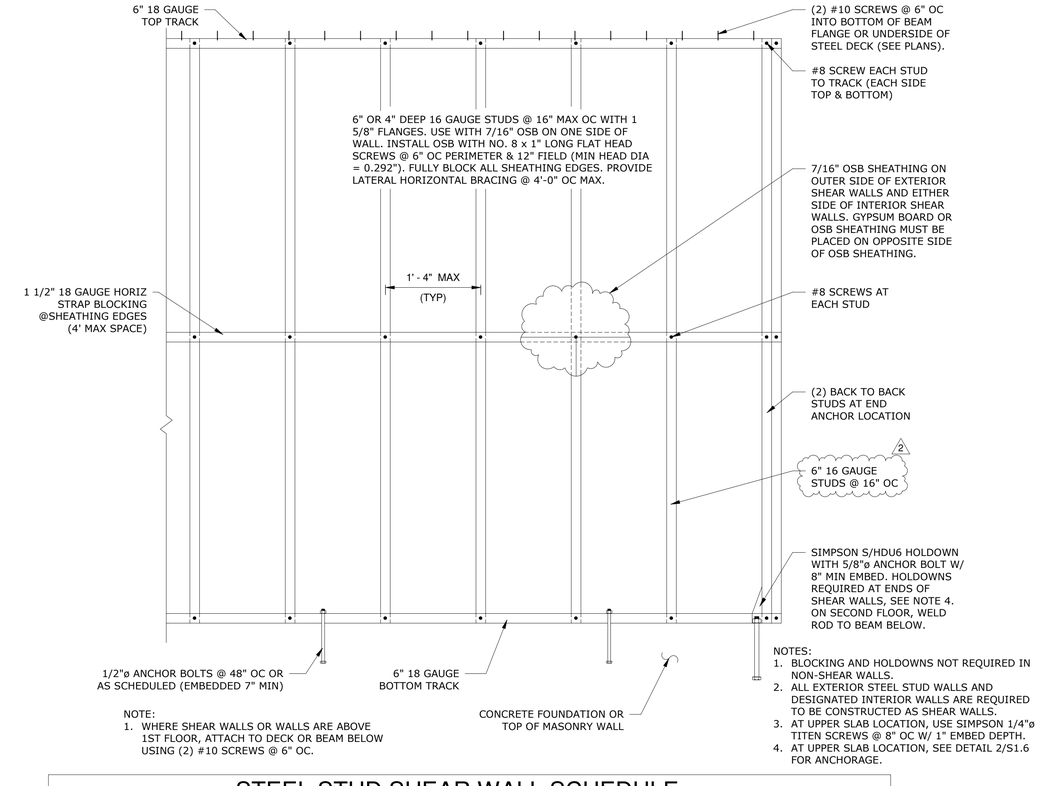


TYPICAL FASTENER LAYOUT

1 TYPICAL METAL DECK FASTENING
NTS



2 HOLDOWN ANCHORS IN UPPER SLAB
NTS



NOTE:
1. WHERE SHEAR WALLS OR WALLS ARE ABOVE 1ST FLOOR, ATTACH TO DECK OR BEAM BELOW USING (2) #10 SCREWS @ 6" OC.

NOTES:
1. BLOCKING AND HOLDOWNS NOT REQUIRED IN NON-SHEAR WALLS.
2. ALL EXTERIOR STEEL STUD WALLS AND DESIGNATED INTERIOR WALLS ARE REQUIRED TO BE CONSTRUCTED AS SHEAR WALLS.
3. AT UPPER SLAB LOCATION, USE SIMPSON 1/4"ø TITEN SCREWS @ 8" OC W/ 1" EMBED DEPTH.
4. AT UPPER SLAB LOCATION, SEE DETAIL 2/S1.6 FOR ANCHORAGE.

STEEL STUD SHEAR WALL SCHEDULE

MARK	APA RATED PLYWOOD/OSB SHEATHING	SCREW SIZE	EDGE SCREW SPACING	FIELD SCREW SPACING	SILL PLATE CONN. TO FOUNDATION	FRAMING SIZE	TRACK SIZE
SW1	7/16" ONE SIDE	#8	6" OC	12" OC	5/8" A.B. @ 48" OC	6"x 1 5/8" x 16 GAUGE	6"x 1 1/4" x 18 GAUGE

TDH 11259

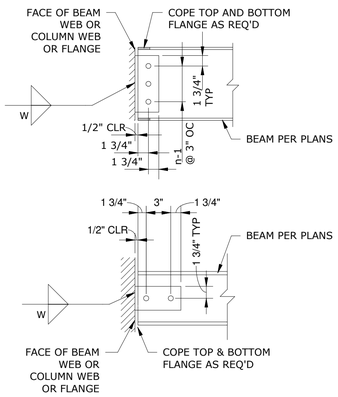
NOTES:
1. USE 4'x8' WOOD STRUCTURAL FIRE RATED PANELS.
2. FIELD FASTENERS SHALL BE 12" OC AND STUD SPACING SHALL BE NO GREATER THAN 16" OC.
3. SCREWS SHALL BE #8 x 1" FLAT HEAD SELF DRILLING.
4. USE 3"x3"x0.229" PLATE WASHERS WITH ALL ANCHOR BOLTS (2021 IBC CHAPTER 23) AND 7" MINIMUM EMBEDMENT.
5. ASSEMBLE SHEAR WALL ACCORDING TO DETAIL ABOVE.

BEAM SHEAR TAB SCHEDULE

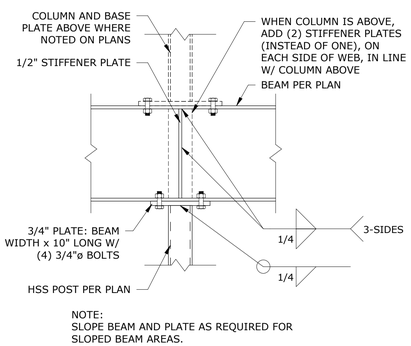
SIZE OF BEAM	SHEAR TAB THICKNESS	FILLET WELD SIZE, W	NO. OF BOLTS, n	LRFD CAPACITY
W6	1/4"	3/16"	2 (HORIZ)	5.2 K
W8 - W10 C8 - C10	5/16"	1/4"	2	21.1 K
W12 - W14 C12 - C15	5/16"	1/4"	3	36.6 K
W16 - W18	3/8"	5/16"	4	60.2 K
W21	3/8"	5/16"	5	105 K
W24[2]	1/2"	3/8"	6	136 K
W27[2]	1/2"	3/8"	7	161 K
W30[2]	1/2"	3/8"	8	185 K

TDH 5514
TDH 11507

NOTES:
1. ALL BOLTS SHALL BE 7/8" DIA. A325-N, UNO.
2. W24 BEAMS AND LARGER MUST USE SHORT SLOTTED HOLES.
3. CONTRACTOR OPTION TO PROVIDE SHORT SLOTTED HOLES ON BEAMS WITH SHOP APPLIED CAMBER, UNO.

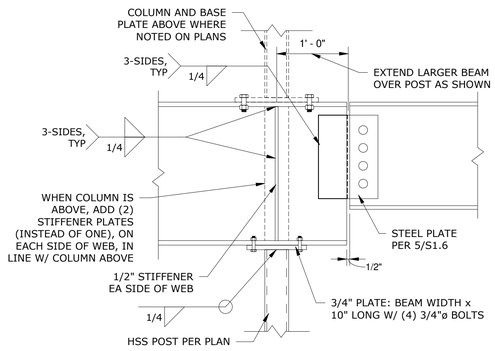


5 BEAM SHEAR TAB SCHEDULE
NTS

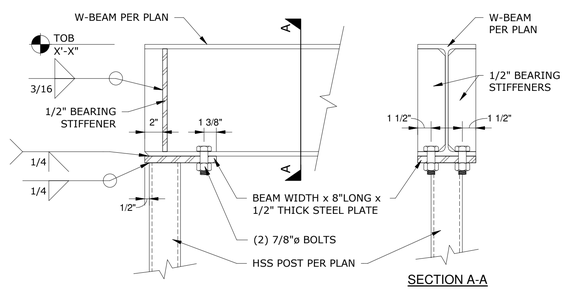


NOTE:
SLOPE BEAM AND PLATE AS REQUIRED FOR SLOPED BEAM AREAS.

9 BEAM TO COLUMN CONNECTION
NTS



10 BEAM SPLICE DETAIL
NTS



7 TYPICAL STEEL STUD SHEAR WALL SCHEDULE
NTS

11 STEEL END BEAM TO STEEL COLUMN DETAIL
NTS

BSPARK ARCHITECTURE
410 Central Ave., Suite 150, Great Falls, MT 59401
t. 406.791.7148 f. 406.760.1788
www.bsparkarch.com

GFPD Evidence Room Expansion

ADDRESS:
112 1st Street South
GREAT FALLS, MT 59401

PROJECT NUMBER:
22045

TD&H Engineering
tdhengineering.com

MONTANA
ROONEY R. BLAKE
No. 19168PE
REGISTERED PROFESSIONAL ENGINEER

REVISIONS:

	DATE	ISSUANCE
2	1/18/24	ADDENDUM 2

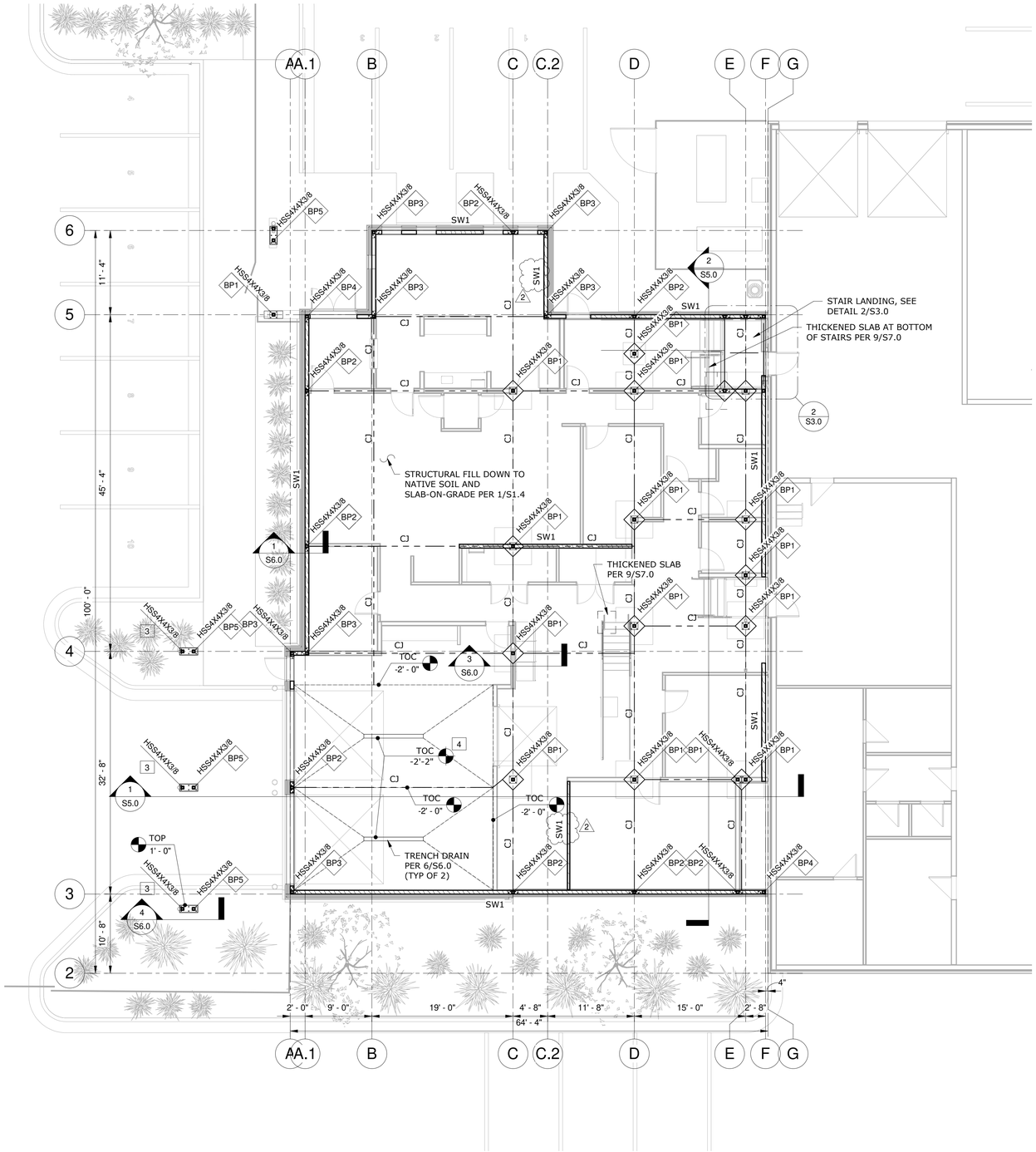
PHASE:
Building Permit Set

SHEET ISSUE DATE:
10.27.2023

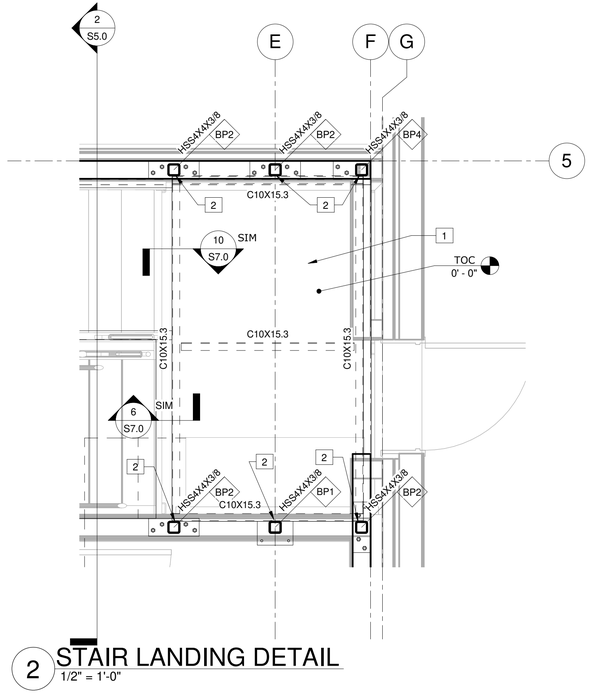
DRAWN BY: RLT APPROVED BY: RRB

SHEET TITLE
TYPICAL DETAILS

SHEET NUMBER
S1.6



1 MAIN FLOOR PLAN
1/8" = 1'-0"



2 STAIR LANDING DETAIL
1/2" = 1'-0"

FLAG NOTES

1. 18 GA 1.5VL-36 COMPOSITE STEEL DECK W/ 3 1/2" CONCRETE TOPPING (5" TOTAL THICKNESS) PER DETAIL 10/S1.5
2. FIELD WELD FACE OF CHANNEL TO HSS FACE WITH 1/4" FILLET WELD (6" MIN LENGTH) EACH SIDE OF COLUMN.
3. DIAGONAL COLUMN
4. ELEVATION OF SLAB AROUND DRAIN PERIMETER

GENERAL NOTES

1. BEAM TO BEAM CONNECTIONS PER 5, 9, 10 & 11 ON S1.6
2. ALL CFS EXTERIOR WALLS SHALL BE CONSTRUCTED USING SHEAR WALL CONSTRUCTION PER DETAIL 7/S1.6.
3. CONSTRUCT CONTROL JOINTS IN SLAB @ MAXIMUM 15' OCEW, SEE LAYOUT ON PLAN.

LEGEND

- BP# — BASE PLATE, SEE DETAIL 2/S6.0
- XXXX — STEEL COLUMN CALLOUT
- SW# — SHEAR WALL, SEE SCHEDULE 7/S1.6
- SLAB CONTROL JOINT (CJ)

BSPARK ARCHITECTURE
410 Central Ave, Suite 150, Great Falls, MT 59401
t: 406.791.7148 | 406.760.1788
www.bsparkarch.com

GFPD Evidence Room Expansion

ADDRESS:
112 1st Street South
GREAT FALLS, MT 59401

PROJECT NUMBER:
22045

TD&H Engineering
tdhengineering.com

MONTANA
RODNEY R. BLAKE
No. 19168PE
REGISTERED PROFESSIONAL ENGINEER

REVISIONS:

	DATE	ISSUANCE
2	1/18/24	ADDENDUM 2

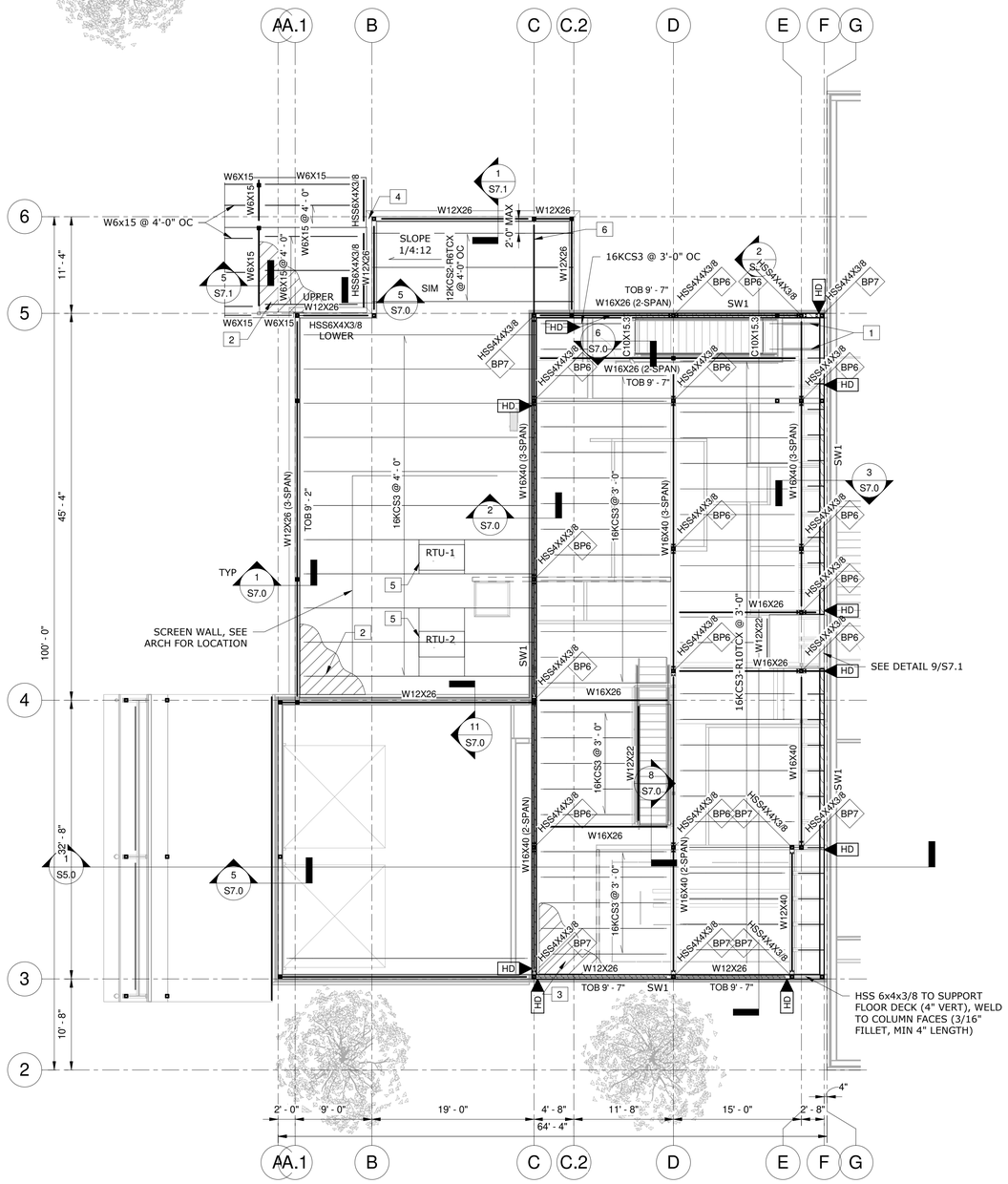
PHASE:
Building Permit Set

SHEET ISSUE DATE:
10.27.2023

DRAWN BY: RLT APPROVED BY: RRB

SHEET TITLE
MAIN FLOOR FRAMING PLAN

SHEET NUMBER
S3.0



1 LOWER ROOF / SECOND FLOOR FRAMING PLAN

1/8" = 1'-0"

FLAG NOTES

1. HSS 3 1/2"x2 1/2"x3/8" (SHORT SIDE VERTICAL), MAXIMUM 3'-0" OC SPACING. ATTACH TO STAIR PLATFORM @ STEP EDGE AND ON TOP OF BEAM.
2. 20 GA 1.5B-36 STEEL DECK
3. 18 GA 1.5VL-36 COMPOSITE STEEL DECK W/ 3 1/2" CONCRETE TOPPING (5" TOTAL THICKNESS) PER 10/S1.5
4. ATTACH HSS BEAM TO INTERIOR HSS POST USING HSS6x4x3/8 SIM TO 5/S7.0
5. FRAME AROUND MECHANICAL UNITS, LOCATION PER MECH. SUPPORT MECHANICAL EQUIPMENT ON ROOF PER DETAILS 3 & 4 ON S7.1.
6. WELD HSS 6x4 PER DETAIL 2/S7.0 ON TOP OF BEAM FOR JOIST BEARING.

GENERAL NOTES

1. BEAM TO BEAM CONNECTIONS PER 5, 9, 10 & 11 ON S1.6
2. JOIST MANUFACTURER SHALL INDEPENDENTLY DESIGN AND VERIFY JOIST SIZES CONSIDERING ALL CODE REQUIRED LOADS (DEAD, LIVE, SNOW, SNOWDRIFT, MECHANICAL EQUIPMENT, ETC).
3. BEAMS DESIGNATED AS MULTIPLE SPAN BEAMS SHALL HAVE COLUMN TO BEAM CONNECTIONS PER 10 & 11 ON S1.6. AT MULTISPAN BEAM COLUMN LOCATIONS, BRACE BOTTOM FLANGE OF BEAM TO NEAREST TOP FLANGE OF JOIST PER 3/S7.1
4. STEEL DECK AROUND THE ENTIRED PERIMETER SHALL BE SUPPORTED USING HSS ON TOP OF BEAM, SIM TO DETAILS 1, 2 OR 3 ON S7.0 AND 1/S7.1.
5. TOP OF BEAM = 9'-4 1/2", UNDER SECOND FLOOR UNO. FOR OTHER ELEVATIONS, SEE SECTIONS.
6. AT ALL COLUMN LOCATIONS WHERE A BEAM HAS MULTIPLE SPANS (MORE THAN ONE SPAN), PROVIDE AN ANGLE BRACING FROM THE BOTTOM FLANGE OF THE BEAM TO THE NEAREST JOIST TOP CHORD PER DETAIL 6/S7.1.

LEGEND

- BP# — BASE PLATE, SEE DETAIL 2/S6.0
- XXXX — STEEL COLUMN CALLOUT
- SW# (SHEAR WALL LABEL) — SHEAR WALL, SEE SCHEDULE 7/S1.6
- 2 HD — HOLDOWN, SEE SCHEDULE 7/S1.6

BSPARK ARCHITECTURE
410 Central Ave, Suite 150, Great Falls, MT 59401
t. 406.791.7148 | 406.760.1788
www.bsparkarch.com

GFPD Evidence Room Expansion

ADDRESS:
112 1st Street South
GREAT FALLS, MT 59401

PROJECT NUMBER:
22045

TD&H Engineering
tdhengineering.com

MONTANA — ROONEY A. BAKE — 13168PE — REGISTERED PROFESSIONAL ENGINEER

REVISIONS:

	DATE	ISSUANCE
2	1/18/24	ADDENDUM 2

PHASE:
Building Permit Set

SHEET ISSUE DATE:
10.27.2023

DRAWN BY: **RLT** APPROVED BY: **RRB**

SHEET TITLE
LOWER ROOF / SECOND FLOOR FRAMING PLAN

SHEET NUMBER
S4.0