FIRE DEPARTMENT NOTES:

1. The location of the fire alarm control panel should be at the main entrance.
2. Submit SHOP drawings & SPECIFICATIONS for the Fire Protection Systems for approval prior to installation. Sprinkler systems must be installed in accordance with applicable NFPA standards.
3. PORTABLE fire extinguishers (Not less than 2-A:10 B:C) must be provided within 75 feet of travel distance from any point in the building.
4. A sodium or potassium bicarbonate dry chemical fire extinguisher at least 40B must be installed within 30 ft. of commercial cooking systems.
5. Complete plans and specifications for fire alarm systems shall be submitted for review and approval prior to system installation.
6. Fire Alarm Systems shall meet the approval of the fire department as to installation and location and shall be subject to such periodic tests as required by the chief.

TOILET ROOMS SHALL CONFORM TO ALL ACCESSIBILITY REQUIREMENTS OF THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

A. Water closet seat height - 1'-5" to 1'-7" A.F.F.
B. Center line of water closet - 1'-6" from side wall.
C. Grab bar behind water closet - 3'-0" long, 2'-6" to 3'-0" A.F.F.
D. Grab bar AT SIDE OF WATER CLOSET - 3'-6" LONG, 2'-9" TO 3'-0" A.F.F.
E. Grab bar DIAMETER - 1-1/4" TO 1-1/2".
F. Space between wall and grab bar - 1-1/2".
G. Toilet paper dispenser - 2'-0" max. from rear wall. 1'-7" min. A.F.F.
H. Knee clearance at lavatory - space 2'-9" min. HEIGHT, 8" min. DEPTH.
I. Lavatory depth - 1'-9" min.
J. Lavatory hot water and drain pipes insulated exposed.
K. Lavatory rim surface - 2'-10" max. A.F.F.
L. Mirror bottom edge - 3'-4" max. A.F.F.
M. International symbol of accessibility shall be mounted on the exterior of the toilet room door.

HANDICAPPED REQUIREMENTS

1. UNIFORM FEDERAL ACCESSIBILITY STANDARDS as related to commercial construction.

2. Primary entrances to the building will be usable by individuals in wheelchairs. Thresholds will not exceed 1/2" in height.

3. Hand activated door opening hardware will be centered between 2'-6" and 3'-8" above the floor. Latching and locking doors that are hand activated and which are in the path of travel, will be operable with a single effort by lever type hardware designed to provide passage without requiring the ability to grasp the opening hardware. Locked exit doors will operate as above in egress direction.

CONTROL

4. Maximum effort to operate door will not exceed 8.5 pounds for exterior doors and 5 pounds for interior doors, such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, this maximum effort to operate the door may be increased not to exceed 15 pounds.

TOILET

5. The height of accessible water closets shall be a minimum of 1'-5" and a maximum of 1'-7" measured to the top of the toilet seat. Flush controls shall be operable by an oscillating handle with a maximum operating force of 5 lbs. or by a remote low voltage button. The handle or button shall be located so that it is operable without requiring excessive body movement.

URINALS

6. Where urinals are provided, at least one elongated rim at a maximum of 1-1/4" above the floor is required. Flush controls shall be hand operated and shall be mounted no more than 3'-6" above the floor.

LAVATORIES

7. Lavatories shall be mounted with a clearance of at least 2'-9" from the floor to the bottom of the apron with knee clearance under the front lip extending a minimum of 1'-8" in width with 8" minimum depth at the top. Toe clearance shall be the same width and shall be a minimum of 1-1/4" deep from the front of the lavatory. Hot water and drain pipes under lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories.

TOILET FACILITIES

8. Multiple accommodation toilet facilities shall have the following:

A clear space measured from the floor to a height of 1'-3" above the floor, within the sanitary facility room of sufficient size to inscribe a circle with a diameter not less than 5'-0", or a clear space 4'-8" by 5'-3" in size. Doors other than the door to the handicapped toilet compartment in any position may encroach into this space by not more than 12".

A water closet fixture located in a compartment shall provide a 2'-4" wide clear from a fixture or a 2'-8" wide clear space from a wall at one side of the water closet and a 4'-0" long clear space in front of the water closet if the compartment has an end opening door (facing the water closet). A 5'-0" minimum length clear space shall be provided in a compartment with the door located at the side. Grab bars shall not project more than 3" into the clear spaces as specified above.

A water closet compartment shall be equipped with a door that has an automatic closing device, shall have a clear unobstructed opening width of 2'-8" when located at the end and 2'-10" when located at the side with the door positioned at an angle of 90 degrees from its closed position. Except for door opening widths and door swings, a clear unobstructed access not less than 3'-0" shall be provided to water closet compartments designed for use by the handicapped and the space immediately in front of a water closet compartment shall be not less than 4'-0" as measured at right angles to compartment door in its closed position.

9. HANDRAILS & GRAB BARS.

a. Handrails: The structural strength of handrails, fasteners and mounting devices, shall be capable of withstanding a thrust of 250 lbs. applied in any direction. Handrails shall not rotate in their mountings.

b. Grab Bars: The structural strength of grab bars, fasteners, and mounting devices shall be capable of supporting a steady for force 250 lbs. applied in any direction. Grab bars shall rotate in their mountings.

10. CONTROL AND OPERATING MECHANISMS.

Operable controls and operating mechanisms shall meet all NASI standards regarding clear floor space, height and operation by one hand with a minimum force of 5 lbs.

11. ALARMS

a. Audible Alarms: Audible emergency alarms shall produce a sound that exceeds the prevailing equivalent sound level in the room or space by least 15 decibels or exceeds any maximum sound level with a duration of 30 seconds by five decibels, whichever is louder. Sound levels for alarm signals shall not exceed 120 decibels.

b. Visual Alarms: Visual alarms shall be flashing lights arranged to flash in conjunction with the audible emergency alarms. The visual system may consist of flashing exit lights or other light fixtures that are located in such a manner that in emergency mode would serve to indicate evacuation routes. The flashing frequency of visual alarms shall be approximately one Hertz. Specialized systems using advanced technology may be substituted if equivalent protection is provided to disabled users of the building or facility. The specifications in this subsection do not prelude the use of zoned or coded alarm systems. In zoned systems, whenever an audible signal sounds in an area, the visual alarm(s) within the same area shall flash.

c. Auxiliary Alarms: Provisions for audible and visual devices are required in dwelling units having emergency warning devices and in dwelling units that are located in buildings having an emergency alarm system. The devices shall be connected to the buildings emergency system or there shall be a standard 110-volt electrical receptacle into which an alarm unit can be connected to be activated by the building alarm system. Instructions for use of the auxiliary alarm connections shall be provided. Care should be taken to locate the auxiliary alarms to insure that they will be effective when in emergency mode. To be effective, visual devices must be located and oriented so that they will spread signals and reflections throughout a space or raise the overall light level sharply.

12. TABLES, WORK SURFACES, AND SEATING.

a. General. If tables or work surfaces are provided, an appropriate number, but never less than one, should comply with this subsection.

b. Seating. If seating spaces for persons in wheelchairs are provided at tables, counters, or work surfaces, clear floor space of 2'-6" x4'-0" shall be provided. Such clear floor space shall not overlap knee space by more than 1'-1".

c. Knee Clearances. Accessible seating for wheelchair users at tables, counters, and work surfaces shall have knee spaces at least 1'-3" high, 2'-6" wide, and 1'-1" deep.

d. Height of Work Surfaces. The tops of tables and work surfaces shall be from 2'-4" to 2'-10" from the floor or ground surface.

13. SIGNAGE

a. General. Signs at all toilet rooms shall comply with this paragraph. Elevator control and jamb signage shall comply with paragraphs G & H of this section. All other signage that provides emergency information or general circulation directions, or identifies rooms and spaces should also comply with this paragraph where reasonable.

b. Character Proportion. Letters and numbers on signs should have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10, utilizing an upper-case "X" for measurement.

c. Color Contrast. Characters and symbols shall contrast with their background; lighted colored characters on dark backgrounds generally provide the greatest readability and are preferred.

d. Tactile Characters and Symbols. Characters, symbols, or pictographs on signs required to be tactile, shall be raised 1/32" minimum. Letters and numbers shall be sans serif characters; shall be at least 5/8" high, but should be no higher than 2", and shall be proportioned in accordance with subparagraph B of this paragraph.

NOTE: Braille characters may be used in addition to standard alphabet characters and numbers but may not be used exclusively. If used, Braille characters shall be placed to the left of standard characters. Raised borders around raised characters are discouraged.

e. Mounting Height and Location. Tactile signage used for room identification shall be mounted on the wall on the latch (strike) side of doors at a height of between 4'-0" and 5'-6" above the floor or ground surface.

f. Symbols of Accessibility. If accessible facilities are identified, then the international symbol of accessibility shall be used.

g. Raised Characters on Hoist-way Entrances. all elevator Hoist-way entrances shall have raised floor designations provided on both jambs. The centerline of the characters shall be 5'-0" from the floor. Such characters shall be 2" to 102mm high. Applied plates are acceptable if they are permanently fixed to the jambs.

h. Car Controls. Elevator control panels shall have the following features:

1. All control buttons shall be at least 3/4" in their smallest dimension. They may be raised, flush, or recessed.

2. All control buttons shall be designated by raised standard alphabet characters for letters, Arabic characters for numerals, or standard symbols as required in ANSI/ASME A17.1a. Raised characters and symbols shall comply with paragraph d. The call button for the main entry floor shall be designated by a raised star at the left of the floor designation. All raised designations for control buttons shall be placed immediately to the left of the button to which they apply.

Applied plates, permanently attached, are acceptable means to provide raised control designations. Floor buttons shall be provided with visual indicators to show when each call is registered. The visual indicators shall be extinguished when each call is answered.

3. No floor buttons shall be higher than 4'-6" above the car floor for side (parallel) approach and 4'-0" for frontal approach. The minimum space necessary for a side approach to a control device is 4'-6". Emergency controls, including the emergency alarm and emergency stop, shall be grouped at the bottom of the panel and shall have their centerline no less than 889mm above the floor.

Controls shall be located on a front wall if cars have center opening doors, and at either the side wall or at the front wall next to the door if cars have side opening doors.

FIRE PROTECTION NOTES

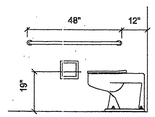
***BUILDING SHALL BE SPRINKLERED PER NFPA CODE

***ALL SMOKE DETECTORS SHALL BE HARDWIRED AND INTERCONNECTED.

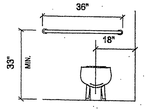
(FD) 1 HR. FIRE RATED DOOR AND FRAME

ACCESSIBILITY STANDARDS

HANDICAPPED TOILET GUIDELINES



Toilet (elevation)



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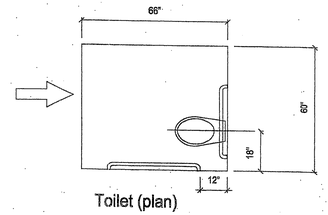
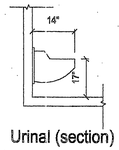
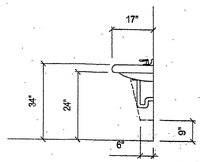


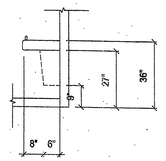
Toilet (plan)



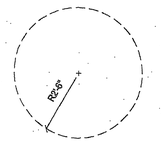
Urinal (section)



Lavatory (section)



E.W.C. (section)



Wheelchair (clearance radius)

PARTITION SCHEDULE

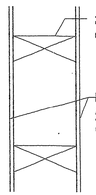
EXISTING 8" MASONRY WALL

NEW 1 HR. FIRE RATED PARTITION WALL - U.L. #U305 SEE PARTITION SCHEDULE FOR DETAILS

NEW METAL FRAMED STUD WALL W/ 1/2" GYP BD. -PTD.

WALL PARTITION

U.L. U305



NOTE:
EXTND. WALL TO CEILING PROVIDE FIRE RATED CAULKING TO SEAL JOINT

NOTES FOR DOORS:

1. **PANIC HARDWARE SHALL HALE THE ACTIVATING MEMBER MOUNTED NOT LESS THAN 30" NOR MORE THAN 44" ABOVE FINISH FLOOR.**
2. **MANUALLY OPERATED EDGE- OR SURFACE-MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED. WHEN EXIT DOORS ARE USED IN PAIRS AND APPROVED AUTOMATIC FLUSH BOLTS SHALL HAVE NO DOOR KNOB OR SURFACE MOUNTED HARDWARE. THE UNLATCHING OF ANY LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION IBC SECTION 1003.3.1.8**
3. **EXIT DOORS SHALL BE OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. IBC SEC. 1003.3.1.8 EXPECTATIONS: 1. IN GROUP A-3, AND B OCCUPANCIES, KEY LOCKING HARDWARE MAY BE USED ON THE MAIN EXIT WHEN THE MAIN CONSISTS OF A SINGLE DOOR OR PAIR OF DOORS IF THERE IS A READILY VISIBLE, DURABLE SIGN ON OR ADJACENT TO THE DOOR STATING THIS DOOR TO BE REMAIN UNLOCKED DURING BUSINESS HOURS. THE SIGN SHALL BE IN LETTERS NOT LESS THAN 1 INCH HIGH ON A CONTRASTING BACKGROUND. WHEN UNLOCKED, THE SINGLE DOOR OR BOTH LEAVES OF A PAIR OF DOORS MUST BE FREE TO SWING WITHOUT OPERATION OF ANY LATCHING DEVICE. THE USE OF THIS EXCEPTION MAY BE REVOKED BY THE BUILDING OFFICIAL FOR DUE CAUSE.**
4. **DOOR HANDLES SHALL BE LEVER TYPE, PUSH/PULL OR EQUIVALENT. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2' LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR INTERIOR DOORS.**
5. **DOOR HANDLES SHALL BE LEVER TYPE, PUSH/PULL OR EQUIVALENT MAXIMUM EFFORT TO OPERATE DOORS SHALL BE EXCEED 8 LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR INTERIOR DOORS.**
6. **A MINIMUM 24" EXTERIOR STRIKE SIDE CLEARANCE SHALL BE MAINTAINED FOR SINGLE PRIMARY ENTRANCE DOORS; 18" ON THE INTERIOR STRIKE SIDE CLEARANCE; 12" ON THE PUSH SIDE CLEARANCE IF DOOR HAS CLOSER A LATCH. DOOR AND GATE CLEARANCE SHALL BE DIMENSION ON PLANS TO REFLECT THE REUIRED CLEARANCE.**

STATE OF MARYLAND — FREDERICK BEDELL — No. 14621 — REGISTERED PROFESSIONAL ENGINEER

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#3	OCTOBER 31,2007

SHEET NO.

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