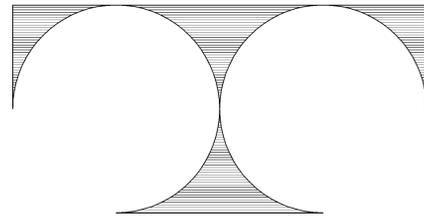


PROJECT :

WATERLOO RIVERWALK APARTMENTS  
16 Unit Buildings - # 1, 2, 3, 4 & 5

MADISON STREET  
WATERLOO, WISCONSIN

ARCHITECT :



TDI ASSOCIATES, INC.

ARCHITECTS, ENGINEERS, PLANNERS

N8 W22350 JOHNSON DRIVE - SUITE B4  
WAUKESHA, WI 53186  
(262) 409-2530

DEVELOPER :

HAWTHORNE & STONE DEVELOPMENT

1601 GASNER WAY., SUITE 200  
MADISON, WI 53719

DRAWING INDEX :

T-1 TITLE SHEET

- A1.0 BLDG #1 - FOUNDATION PLAN
- A1.1 BLDG 2&3 - FOUNDATION PLAN
- A1.2 OVERALL FLOOR PLANS
- A1.3 FIRST FLR PLAN
- A1.4 BLDG #3 TYPE 'A' UNITS & DETAILS  
& THROUGH-PENETRATION FIRESTOP SYSTEM
- A1.5 SECOND FLR PLAN
- A2.1 ELEVATIONS AND ROOF PLAN
- A3.1 SECTIONS / DETAILS
- A3.2 SHEAR WALL PLAN & SECTIONS

FOUNDATION NOTES

1. THE SOIL BEARING PRESSURE WAS PRESUMED TO BE A MIN. OF 2000 P.S.F. IF THE SOIL ENCOUNTERED DOES NOT INDICATE A MIN. SOIL BEARING PRESSURE OF 2000 PSF NOTIFY THE ARCHITECT AT 262/409-2530.
2. IF ANY EXISTING SERVICE LINES, UTILITIES, AND UTILITY STRUCTURES WHICH ARE TO REMAIN IN SERVICE ARE UNCOVERED OR ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE SAFEGUARDED, PROTECTED FROM DAMAGE AND SUPPORTED IF NECESSARY.
3. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN THE EVENT ANY EXISTING UTILITIES, UTILITY STRUCTURES OR ANY OBSTRUCTION INTERFERES WITH THE PROPER INSTALLATION OF THE FOUNDATION WORK.
4. THE CONTRACTOR SHALL REMOVE AT HIS EXPENSE FROM THE SITE, ALL TOPSOIL, UNSUITABLE, AND OBSTRUCTIONS AS REQUIRED BY THE TESTING LABORATORY AND REPLACE IT WITH COMPACTED (98% MODIFIED PROCTOR) GRANULAR FILL.
5. IN AREAS WHERE THE BEARING CAPACITY OF SOIL AT DESIGN ELEVATION IS LESS THAN THE DESIGN BEARING CAPACITY, THE CONTRACTOR SHALL REMOVE THE UNSUITABLE MATERIAL AND REPLACE IT WITH THE ENGINEERED FILL UP TO THE DESIGN ELEVATION.
6. FILL SHALL BE GRANULAR AND COMPACTED TO A MINIMUM OF 98% MAXIMUM DENSITY (ASTM D1557-10, MODIFIED PROCTOR).
7. THE SOIL BEARING CAPACITY AT EACH FOOTING SHALL BE CHECKED AND APPROVED BY THE TESTING LABORATORY.
8. CONCRETE FOR ANY FOOTING SHALL NOT BE POURED ON FROZEN GROUND OR WHEN WATER IS PRESENT.
9. THE CONTRACTOR SHALL PROVIDE WELL POINTS TO ADEQUATELY LOWER THE GROUND WATER LEVEL AND MAINTAIN THEM AS LONG AS THEY ARE REQUIRED DURING CONSTRUCTION.
10. PROVIDE 3" CLEAR COVER AROUND ALL STEEL REINFORCING IN FOUNDATION.

DESIGN LOADS

1. CONCRETE:  $F_c = 3,000$  P.S.I. - FOOTINGS & INTERIOR SLAB ON GRADE  
 $F_c = 4,000$  P.S.I. - WALLS & EXTERIOR SLAB ON GRADE
2. REINFORCING STEEL:  $F_y = 60,000$  P.S.I. - STEEL REBAR  
 $F_y = 80,000$  P.S.I. - STEEL WIRE WELDED MESH
3. STRUCTURAL STEEL:  $F_y = 36,000$  P.S.I. - CHANNELS, ANGLES, PIPE COLUMNS & MISC.  
 $F_y = 46,000$  P.S.I. - TUBULAR SECTIONS  
 $F_y = 50,000$  P.S.I. - WIDE FLANGE MEMBERS
4. SOIL BEARING DESIGN PRESSURE: 2,000 P.S.F.
5. DESIGN LOADS: ROOF  
WIND LOAD 10 P.S.F.  
LIVE LOAD 20 P.S.F.  
DEAD LOAD 15 P.S.F.  
GROUND SNOW LOAD 30 P.S.F.  
TOP CHORD \_\_\_\_\_  
BOTTOM CHORD \_\_\_\_\_  
SNOW LOAD \_\_\_\_\_ P.S.F.
6. DESIGN LOADS: SECOND FLOOR  
WIND LOAD 14.4 P.S.F.  
LIVE LOAD 40 P.S.F.  
DEAD LOAD 29 P.S.F.  
TOP CHORD \_\_\_\_\_  
BOTTOM CHORD \_\_\_\_\_
7. SEISMIC DESIGN CATEGORY = A
8. WIND LOAD FACTORS  
EXPOSURE 'B'  
WIND SPEED = 90 MPH.
9. SITE SOIL CLASS = D
6. IMPORTANCE FACTOR = 1.0  
SEISMIC FACTOR = 1.0  
SNOW FACTOR = 1.0  
WIND FACTOR = 1.0
- SNOW LOAD FACTORS  
 $C_e = 1.0$   
 $C_t = 1.1$  TYPICAL  
 $C_s = 1.0$
- DESIGN LOADS: FIRST FLOOR  
LIVE LOAD 40 P.S.F.  
DEAD LOAD SLAB ON GRADE  
WIND LOAD 14.4 P.S.F.
- RAILING OR GUARDRAIL  
CONCENTRATED LOAD = 200# @ top rail

BUILDING CODE INFORMATION

OCCUPANCY R-2 = RESIDENTIAL

TYPE V B CONSTRUCTION  
STRUCTURAL FRAME = 0 HR  
BEARING WALL (EXTERIOR) = 0 HR  
BEARING WALL (INTERIOR) = 0 HR  
NON-BEARING WALL (EXTERIOR) = 0 HR (> 10 FT)  
NON-BEARING WALL (INTERIOR) = 0 HR (any code approved material)

FIRE PARTITION WALL CONSTRUCTION = 1 HR (PER IBC 708.3)  
FLOOR CONSTRUCTION = 1 HR (PER IBC 710.3)  
ROOF CONSTRUCTION = 0 HR

IBC 420.2 REQUIRED DWELLING UNIT AND BATHROOM SEPARATION - WALLS AND FLOORS SEPARATING DWELLING UNITS IN THE SAME BUILDING SHALL BE FIRE PARTITIONS OR HORIZONTAL ASSEMBLIES AS REQUIRED BY SECTIONS 709 & 712

IBC 709.3 FIRE RESISTANCE RATING - THE FIRE RESISTANCE RATING OF THE DWELLING UNIT FIRE PARTITION WALLS SHALL BE 1 HOUR

IBC 712.3 FIRE RESISTANCE RATING - THE FIRE RESISTANCE RATINGS OF THE DWELLING UNIT HORIZONTAL ASSEMBLIES SHALL BE 1 HOUR

ABBREVIATIONS

ALUM	ALUMINUM	FOUND	FOUNDATION	OSB	ORIENTED STRAND BOARD
BATT	BATTERY	FTG	FOOTING	FL#SH	POLE # SHELF
BI FLD	BI FOLD	CL	CLOSET	PT	PRESSURE-TREATED
BLK'G	BLOCKING	CLG	CEILING	R	RISER
CL	CLOSET	CONC.	CONCRETE	REF	REFRIGERATOR
CLG	CEILING	CONT.	CONTINUOUS	RES	RESILIENT
CONC.	CONCRETE	GWB	GYPSUM WALL BOARD	SECT	SECTION
CONT.	CONTINUOUS	HDR	HEADER	SH	SHELF
DIA	DIAMETER	HGT	HEIGHT	T & B	TOP & BOTTOM
DM	DISHWASHER	HM	HOLLOW METAL	T.O.	TOP OF
E.L.	ELEVATION	INSUL	INSULATION	TYP	TYPICAL
EXT	EXTERIOR	LVL	LAMINATED VENEER LUMBER	UNEX	UNEXCAVATED
E.L.	ELEVATION	MIL	MILLIMETER	W/	WITH
F.C.	FIRE CODE	MIN	MINIMUM	WD	WOOD
FIN	FINISHED	ON C	ON CENTER	WMD	WELDED WIRE MESH
FLR	FLOOR	OVRDR	OVERHEAD DOOR		

SYMBOL KEY

⊞	SINGLE POLE SWITCH	□	FLOUORESCENT TUBE FIXTURE
⊞	3-WAY SWITCH	TV	CABLE TV OUTLET
⊞	DUPLEX OUTLET	□	INTERCOM
⊞	220 OUTLET	<	TELEPHONE JACK
⊞	ELECTRIC DOOR OPENER	⊞	THERMOSTAT
⊞	DUPLEX GFI OUTLET	☒	PHONE JUNCTION BOX
⊞	DUPLEX WATER PROOF OUTLET	☒	FIRE ALARM PULL STATION
⊞	MOTOR CONNECTION	☒	FIRE ALARM HORN W/STROBE
☒	RECESSED LIGHT FIXTURE	☒	SMOKE DETECTOR
☒	CEILING MOUNTED LIGHT FIXTURE	☒	FIRE DEPARTMENT ALARM PANEL
☒	WALL MOUNTED LIGHT FIXTURE	♿	HANDICAP ACCESSIBLE
☒	HIGH-PRES. SODIUM FIXTURE - C.L.G. MNT.	☒	EXHAUST FAN
☒	HIGH-PRES. SODIUM FIXTURE - WALL MNT.	☒	FANLIGHT

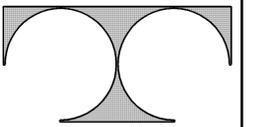


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1-800-242-8511  
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TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

GENERAL NOTES

1. THE ARCHITECT/ENGINEER MAINTAINS NO RESPONSIBILITY FOR THE GENERAL CONTRACTOR, SUBCONTRACTORS, OR THOSE WORKING IN SUCH CAPACITIES, FOR THE METHODS USED, OR LACK THEREOF, IN THE EXECUTION OF THE WORK AND SAFETY PROCEDURES AND PRECAUTIONS TAKEN AT THE PROJECT SITE.
2. CONTRACTORS SHALL ASSUME FULL RESPONSIBILITY - UNRELIEVED BY REVIEW OF SHOP DRAWINGS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS - FOR DIMENSIONS TO BE CONFIRMED AND CORRELATED ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS OR SETS OF DRAWINGS, FOR FABRICATION PROCESSES AND CONSTRUCTION TECHNIQUES (INCLUDING EXCAVATION, SHORING AND SCAFFOLDING, BRACING, ERECTION, FORMWORK, ETC.) FOR COORDINATION OF THE VARIOUS TRADES, FOR SAFE CONDITIONS ON THE JOB SITE AND FOR THE PROTECTION OF THE PEOPLE AND PROPERTY AT THE JOB SITE.
3. VARIATIONS IN FIELD CONDITIONS RELATIVE TO THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER. WORK SHALL NOT PROGRESS UNTIL WRITTEN PERMISSION FROM THE ENGINEER IS OBTAINED.
4. THE INFORMATION CONTAINED ON THE DRAWINGS IS IN ITSELF INCOMPLETE, AND VOID UNLESS USED IN CONJUNCTION WITH ALL THE SPECIFICATIONS, TRADE PRACTICES, OR APPLICABLE STANDARDS, CODES, ETC. INCORPORATED THEREIN BY REFERENCE, OF WHICH THE CONTRACTOR CERTIFIES KNOWLEDGE BY SIGNING THE CONTRACT.
5. ARCHITECT/ENGINEER'S REVIEW OF DRAWINGS PREPARED BY THE CONTRACTORS, SUPPLIERS, ETC. ARE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT. CONSTRUCTION SHALL NOT START WITHOUT SAID REVIEW AND ONLY SHOP DRAWINGS STAMPED BY THE ARCHITECT/ENGINEER WILL BE ALLOWED AT THE JOB SITE.
6. DRAWINGS ARE NOT TO BE USED FOR SHOP DETAILING OR FOR CONSTRUCTION UNLESS SPECIFICALLY STAMPED BY THE ARCHITECT/ENGINEER ON THE DRAWINGS "FOR DETAILING" OR "FOR CONSTRUCTION". THESE DRAWINGS ARE NOT TO BE REPRODUCED FOR THE PURPOSE OF USING THEM AS SHOP DRAWINGS.
7. UNLESS NOTED OTHERWISE, ALL DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE.
8. ALL DIMENSIONS ON STRUCTURAL DRAWINGS ARE TO BE CHECKED BY THE CONTRACTOR AGAINST ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR CORRECTING AND CORRELATING ALL DIMENSIONS ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS AND TRADES.
9. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, SLEEVES, EQUIPMENT PADS, DEPRESSIONS, CURBS, FLOOR FINISHES, INSERTS, AND OTHER EMBEDDED ITEMS.
10. UNLESS OTHERWISE SHOWN OR NOTED, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND THE PLACEMENT OF ANY INSERTS, HANGERS, PIPE SLEEVES, HOLES OR ANCHOR BOLTS THAT ARE REQUIRED BY THE MECHANICAL OR ELECTRICAL EQUIPMENT.
11. THE CONTRACTOR SHALL COMPLY WITH THE LATEST OCCUPATIONAL SAFETY HEALTH ACT REQUIREMENTS.
12. ALL CONSTRUCTION SHALL BE PERFORMED IN STRICT CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL BUILDING CODES.



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WATERLOO RIVERWALK APARTMENTS  
HAWTHORNE & STONE DEVELOPMENT  
16 UNIT BUILDING

MADISON STREET  
WATERLOO, WISCONSIN

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Sheet Title  
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Revisions

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Date: 03-05-15

Job No.: 15189.001

Drawn By: -

Sheet No.

T1.0

**WATERLOO RIVERWALK APARTMENTS  
HAWTHORNE & STONE DEVELOPMENT  
16 UNIT BUILDING**

MADISON STREET  
WATERLOO, WISCONSIN

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Sheet Title  
**FOUNDATION PLAN**

Revisions

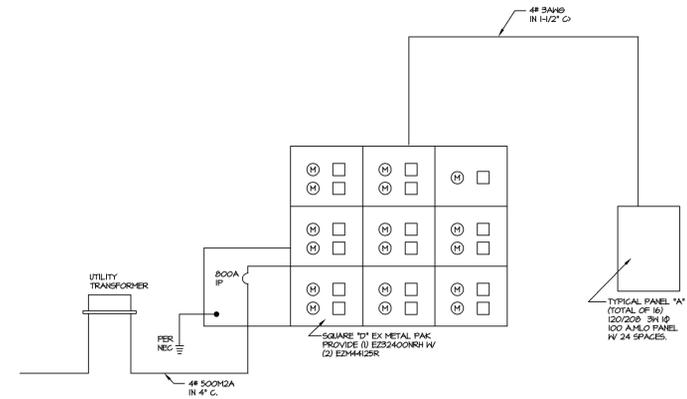
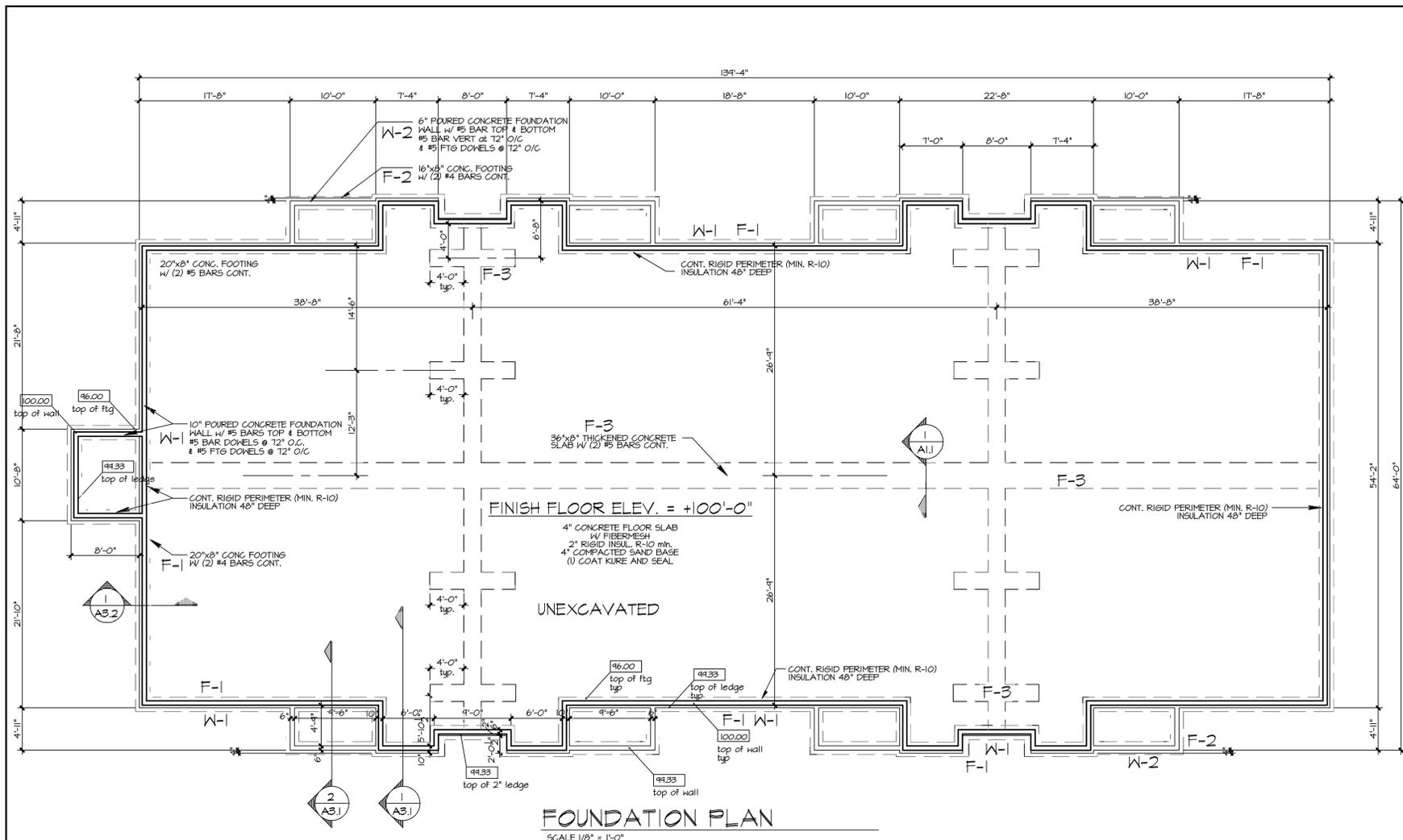
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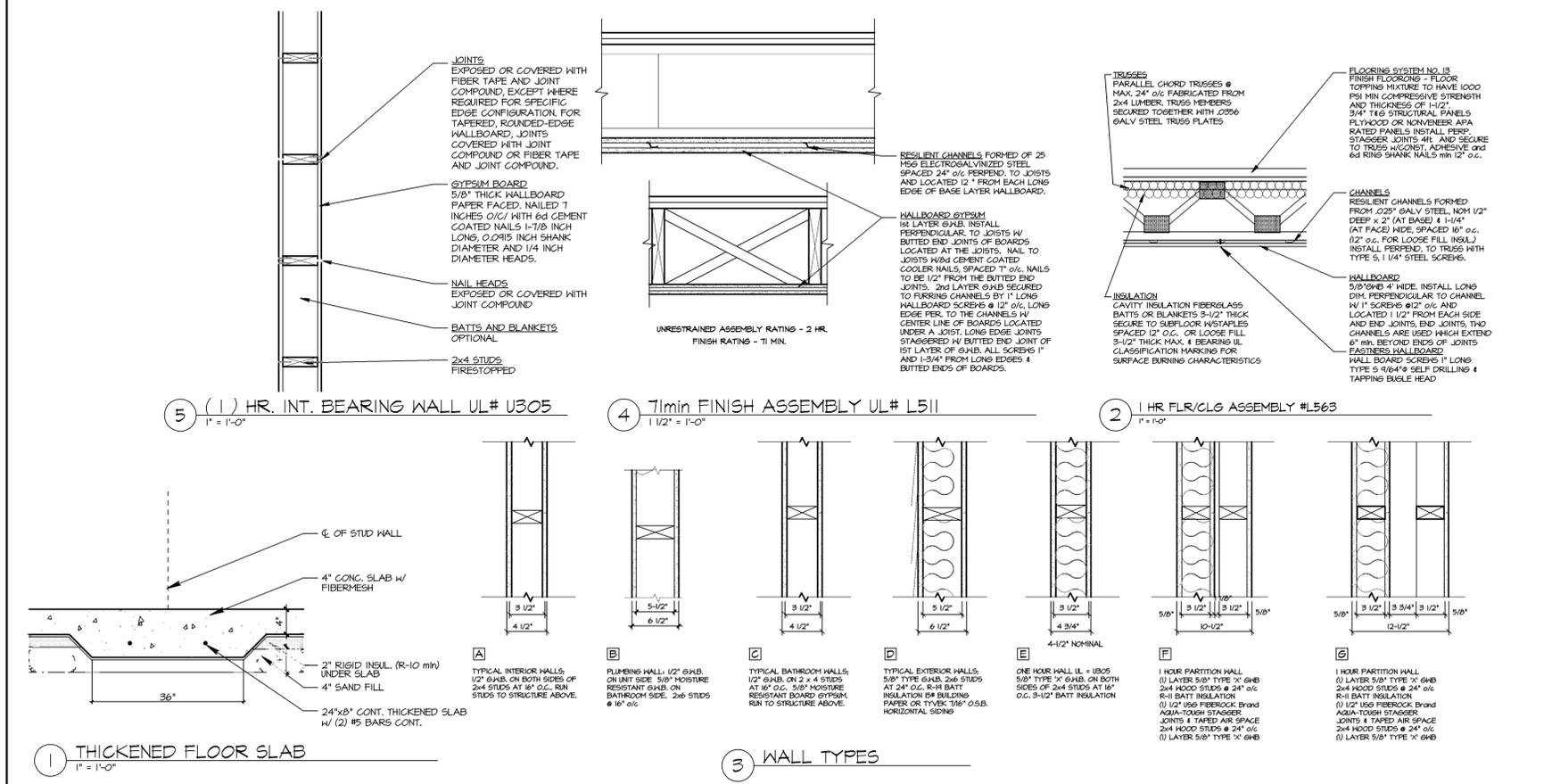
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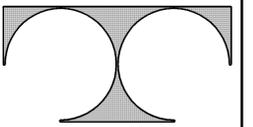


POWER DISTRIBUTION RISER DIAGRAM FOR ELECTRICIAN REFERENCE ONLY

CONNECTION	FASTENING(S)	LOCATION
1. Jolt to sill or girder	3 - Ad common 3 - 3/8\"/>	
2. Bridging to joist	2 - Ad common 2 - 3/8\"/>	
3. 176\"/>		
4. Hider than 176\"/>		
5. 2\"/>		
6. Sole plate to joist or blocking	1 Ad at 18\"/>	
Sole plate to joist or blocking at braced wall panel	3 - Ad at 18\"/>	
7. Top plate to stud	2 - Ad common 3 - 3/8\"/>	
8. Stud to sole plate	2 - Ad common 4 - 3/8\"/>	
9. Double studs	1 Ad at 24\"/>	
10. Double top plates	2 - Ad at 18\"/>	
Double top plates	6 - Ad common 12 - 3/8\"/>	
11. Blocking between joists or rafters to top plate	3 - Ad common 3 - 3/8\"/>	
12. Rim joist to top plate	1 Ad at 6\"/>	
13. Top plates, laps and intersections	2 - Ad common 3 - 3/8\"/>	
14. Continuous header, two pieces	1 Ad common 16\"/>	
15. Ceiling joists to plate	3 - Ad common 3 - 3/8\"/>	
16. Continuous header to stud	4 - Ad common	
17. Ceiling joists, tops over partitions (See Section 2508.10.4), Table 2508.10.4	3 - Ad common minimum, Table 2508.10.4 4 - 3/8\"/>	
18. Ceiling joists to parallel rafters (See Section 2508.10.4), Table 2508.10.4	3 - Ad common minimum, Table 2508.10.4 4 - 3/8\"/>	
19. Rafter to plate (See Section 2508.10.4), Table 2508.10.4	3 - Ad common 3 - 3/8\"/>	
20. 2\"/>		
21. 1\"/>		
22. Hider than 1\"/>		
23. Build-up corner studs	1 Ad common 3 - 3/8\"/>	
24. Build-up girder and beams	2 Ad common 3/2\"/>	
25. 2\"/>		
26. Collar tie to rafter	3 - 1/4\"/>	
27. Jack rafter to hp	3 - 1/4\"/>	
28. Roof rafter to 2-ty ridge beam	2 - Ad common 3 - 3/8\"/>	
29. Joist to band joist	3 - Ad common 3 - 3/8\"/>	
30. Ledger strip	3 - Ad common 4 - 3/8\"/>	
31. Hood structural panels and particleboard, 5/8\"/>		
32. Panel siding (to framing)	1/2\"/>	
33. Fiberboard sheathing(s)	1/2\"/>	
35. Interior paneling	1/4\"/>	



For Sta. 1 inch = 25.4 mm.  
a. Common or bow rolls are permitted to be used except where otherwise stated.  
b. Nails spaced at 6 inches on center at edges, 12 inches at intermediate supports except 6 inches at supports where spans are 40 inches or more. For nailing wood structural panels and particleboard diaphragms and shear walls, refer to Section 2505. Note for wall sheathing or sheathing on common box or casing.  
c. Common.  
d. Common.  
e. Corrosion-resistant alloy or coating only.  
f. Fasteners spaced 3 inches on center at exterior edges and 6 inches on center at intermediate supports.  
g. Corrosion-resistant roofing nails with 1/16 inch diameter head and 1/2 inch length for 1/2 inch sheathing and 3/4 inch length for 5/8 inch sheathing.  
h. Coating of finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.  
i. Panel supports at 24 inches. Coating of finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.  
j. For roof sheathing applications, fasteners spaced 4 inches on center at edges, 12 inches at intermediate supports.  
k. Staples shall have a minimum crown of 1/16 inch.  
l. For wall sheathing applications, fasteners spaced 4 inches on center at edges, 12 inches at intermediate supports.  
m. Fasteners spaced 4 inches on center at edges, 6 inches at intermediate supports for ceiling and wall sheathing and 3 inches on center at edges, 6 inches at intermediate supports for roof sheathing.



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**WATERLOO RIVERWALK APARTMENTS  
HANTHORNE & STONE DEVELOPMENT  
16 UNIT BUILDING**

MADISON STREET  
WATERLOO, WISCONSIN

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Sheet Title  
**OVERALL  
FLOOR PLANS**

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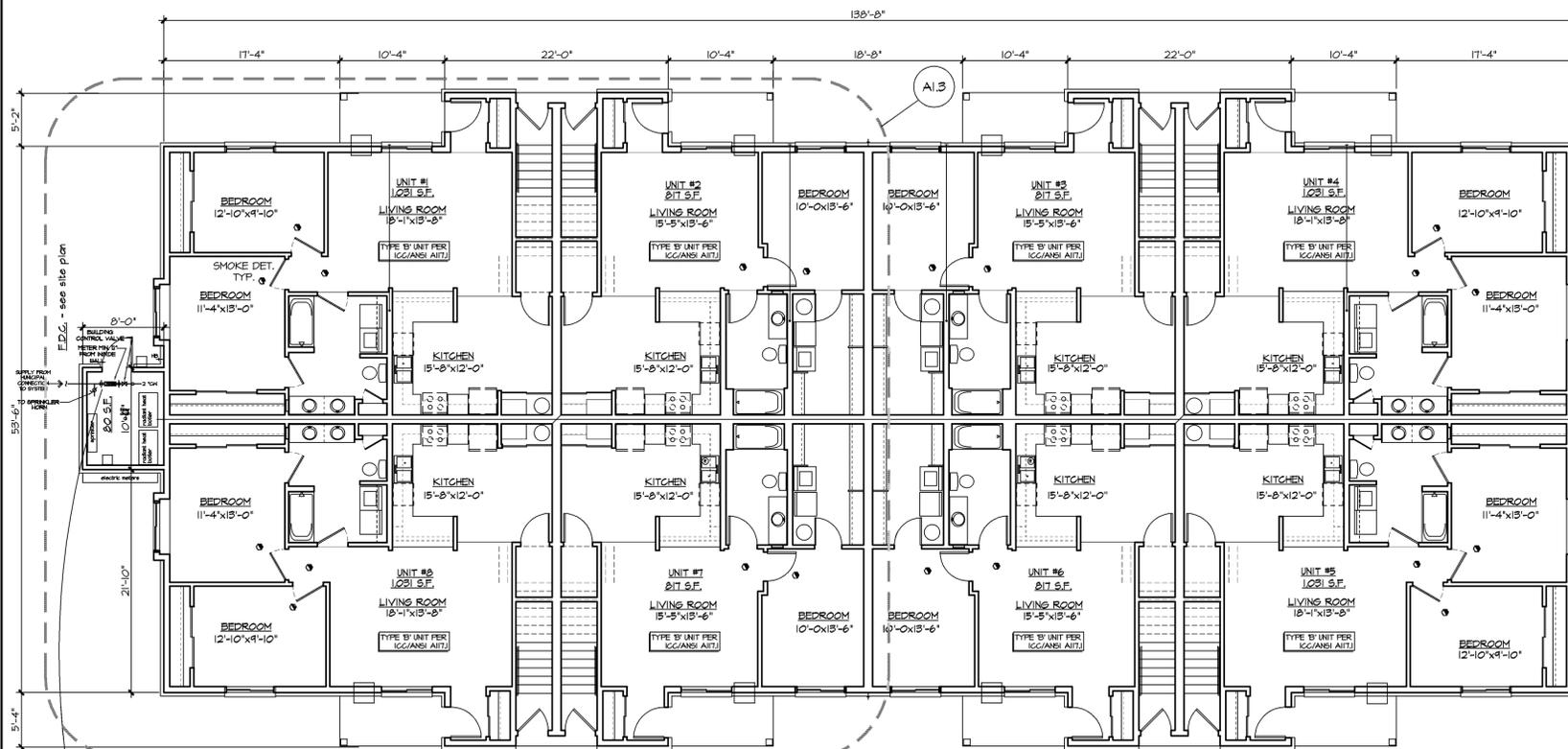
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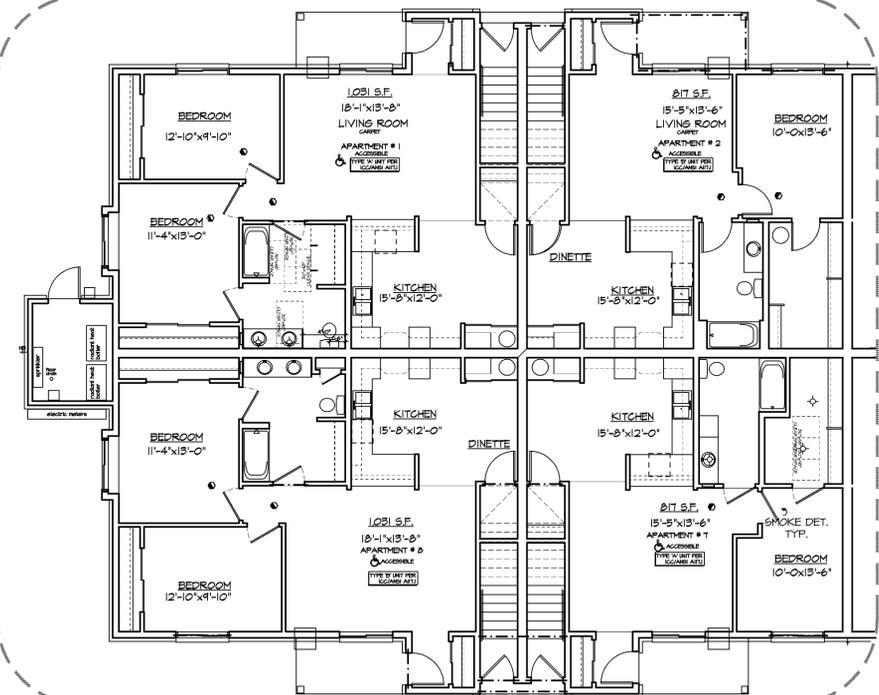
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Sheet No.

**A1.2**

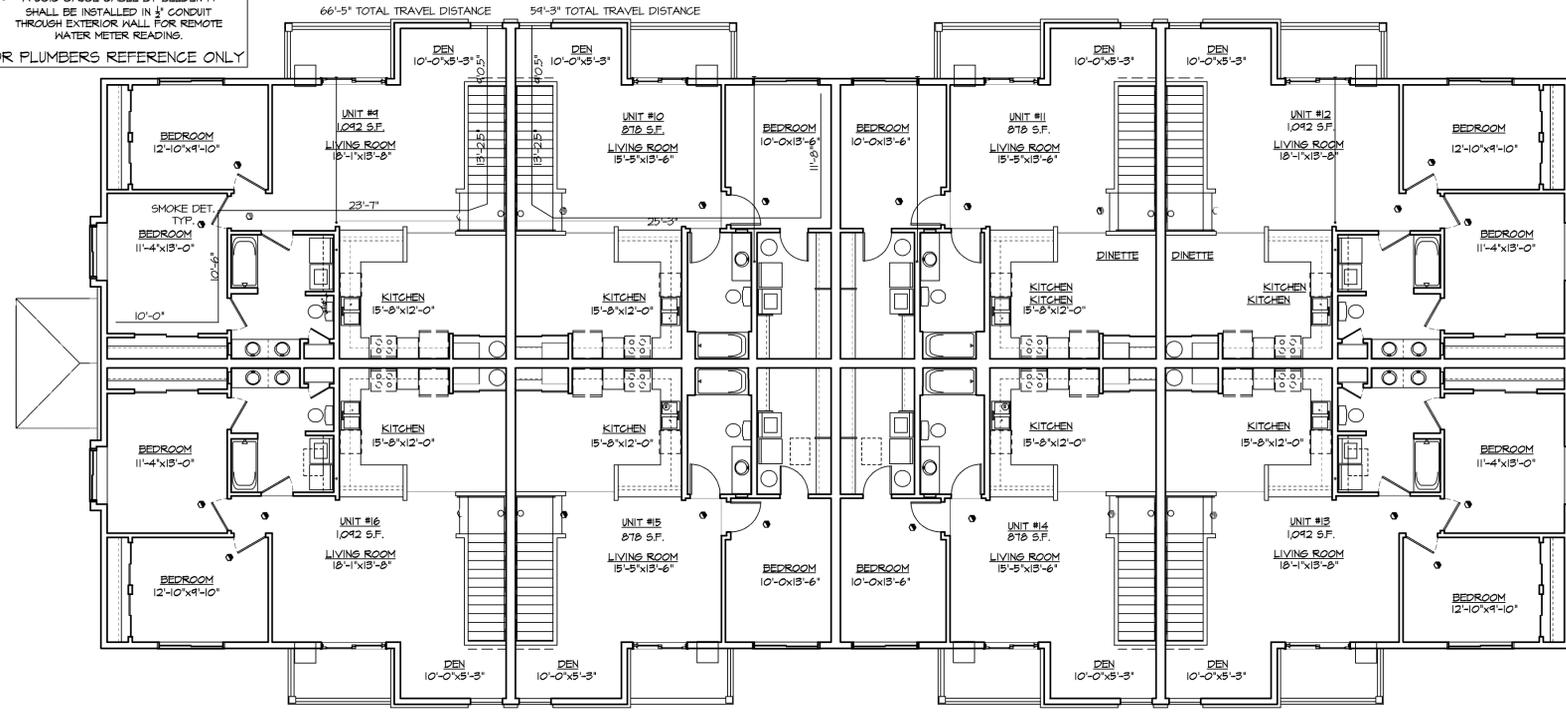


TYPE VB CONSTRUCTION WITH NFPA 13R SPRINKLER  
**FIRST FLOOR PLAN TYPICAL**  
SCALE: 1/8" = 1'-0"  
1,401 square ft.

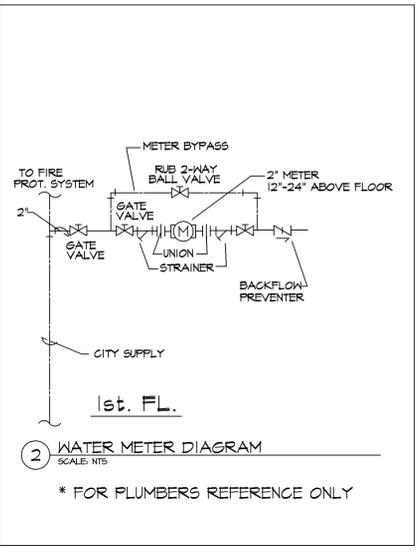


TYPE VB CONSTRUCTION WITH NFPA 13R SPRINKLER  
**TYPE 'A' FIRST FLOOR PLAN - ADA BUILDING ONLY**  
SCALE: 1/8" = 1'-0"

- 2" DOMESTIC WATER METER BYPASS WITH RUB TWO WAY VALVE WITH LOCKING HANDLE
  - METER TO HAVE GATE VALVE ON THE INLET AND OUTLET PIPE.
  - A 3/8" GAUGE CABLE BY BELDEN#11 SHALL BE INSTALLED IN 1" CONDUIT THROUGH EXTERIOR HALL FOR REMOTE WATER METER READING.
- \* FOR PLUMBERS REFERENCE ONLY



TYPE VB CONSTRUCTION WITH NFPA 13R SPRINKLER  
**SECOND FLOOR PLAN TYPICAL**  
SCALE: 1/8" = 1'-0"  
1,881 square ft.



**WATER METER DIAGRAM**  
SCALE: NTS  
\* FOR PLUMBERS REFERENCE ONLY

**NOTE:**  
IECC 303.1.1 - A THERMAL RESISTANCE (R) IDENTIFICATION MARK SHALL BE APPLIED BY THE MANUFACTURER TO EACH PIECE OF BUILDING ENVELOPE INSULATION 12" OR GREATER IN WIDTH. THE EXTERIOR WALLS ARE INDICATED TO HAVE R-21 BATT FIBERGLASS INSULATION.

IECC 303.1.1 - THE INSULATION INSTALLER SHALL PROVIDE A SIGNED AND DATED CERTIFICATION FOR THE INSULATION INSTALLED IN EACH ELEMENT OF THE BUILDING ENVELOPE, LISTING THE TYPE OF INSULATION INSTALLATIONS IN ROOF/CEILINGS, THE MANUFACTURER AND THE R VALUE. FOR BLOWN-IN OR SPRAYED INSULATION, THE INSTALLER SHALL ALSO PROVIDE THE INITIAL INSTALLED THICKNESS, THE SETTLED THICKNESS, THE COVERAGE AREA, AND THE NUMBER OF BAGS INSTALLED.

IECC 303.1.1.1 - THE BLOWN-IN OR SPRAYED INSULATION INSTALLER SHALL PROVIDE IDENTIFICATION MARKERS THAT ARE LABELED IN INCHES OR MILLIMETERS INSTALLED AT LEAST ONE FOR EVERY 300 SQUARE FEET THROUGHOUT THE ATTIC SPACE. THE MARKERS SHALL BE AFFIXED TO THE TRUSSES OR JOISTS AND MARKED WITH THE MINIMUM INITIAL INSTALLED THICKNESS AND THE MINIMUM SETTLED THICKNESS WITH THE NUMBERS A MINIMUM OF 1" IN HEIGHT. EACH MARKER SHALL FACE THE ATTIC ACCESS OPENING. THE THICKNESS OF THE INSTALLED INSULATION SHALL MEET OR EXCEED THE MINIMUM INSTALLED THICKNESS SHOWN ON THE MARKER.

IECC 404.1 - PROVIDE A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED FIXTURES IN LOW RISE RESIDENTIAL BUILDINGS WITH HIGH-EFFICACY LAMPS. INCANDESCENT BULBS ARE NOT RECOGNIZED AS HIGH-EFFICACY LAMPS.

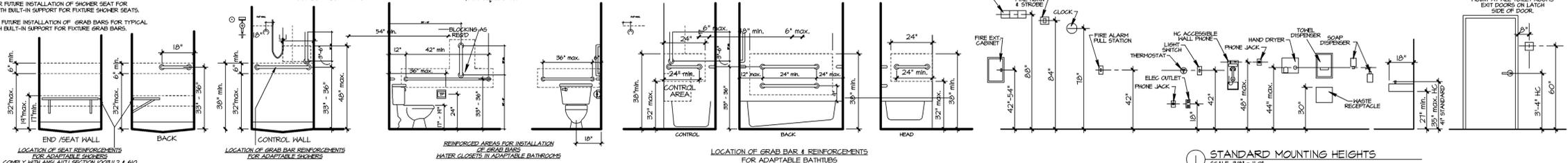
NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE INSTALLATION OF SHOWER SEAT FOR TYPICAL CONFIGURATIONS. PLUMBER TO SUPPLY TUBGRABBER FIXTURES WITH BUILT-IN SUPPORT FOR FIXTURE SHOWER SEATS.

NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE INSTALLATION OF GRAB BARS FOR TYPICAL CONFIGURATIONS. PLUMBER TO SUPPLY TUBGRABBER FIXTURES WITH BUILT-IN SUPPORT FOR FIXTURE GRAB BARS.

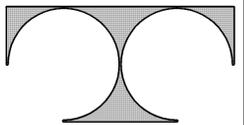
**ACCESSIBILITY GUIDELINES**

LIGHT SWITCHES, ELECTRICAL OUTLETS, ELECTRIC SERVICE PANELS, THERMOSTATS, TRU-HALL A/C UNITS AND ENVIRONMENTAL CONTROLS SHALL BE LOCATED NO HIGHER THAN 48" AND NO LOWER THAN 15" INCHES ABOVE THE FLOOR. IF THE REACH IS OVER AN OBSTRUCTION (FOR EXAMPLE, KITCHEN CABINETS BETWEEN 20 AND 25 INCHES IN DEPTH), THE MAXIMUM HEIGHT IS REDUCED TO 44 INCHES FOR FORWARD APPROACH OR 46 INCHES FOR SIDE APPROACH, PROVIDED THE OBSTRUCTION IS NO MORE THAN 24 INCHES IN DEPTH.)

REINFORCED BATHROOM HALLS TO ALLOW LATER INSTALLATION OF GRAB BARS AROUND THE TOILET, TUB, SHOWER & SHOWER SEAT WHEN THESE FACILITIES ARE PROVIDED. REINFORCEMENT FOR GRAB BARS MAY BE PROVIDED BY PLYWOOD OR WOOD BLOCKING.



**STANDARD MOUNTING HEIGHTS**  
SCALE: 3/8" = 1'-0"



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MADISON STREET  
WATERLOO, WISCONSIN

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Sheet Title  
**FIRST FLR PLAN**

Revisions

Issued Date:

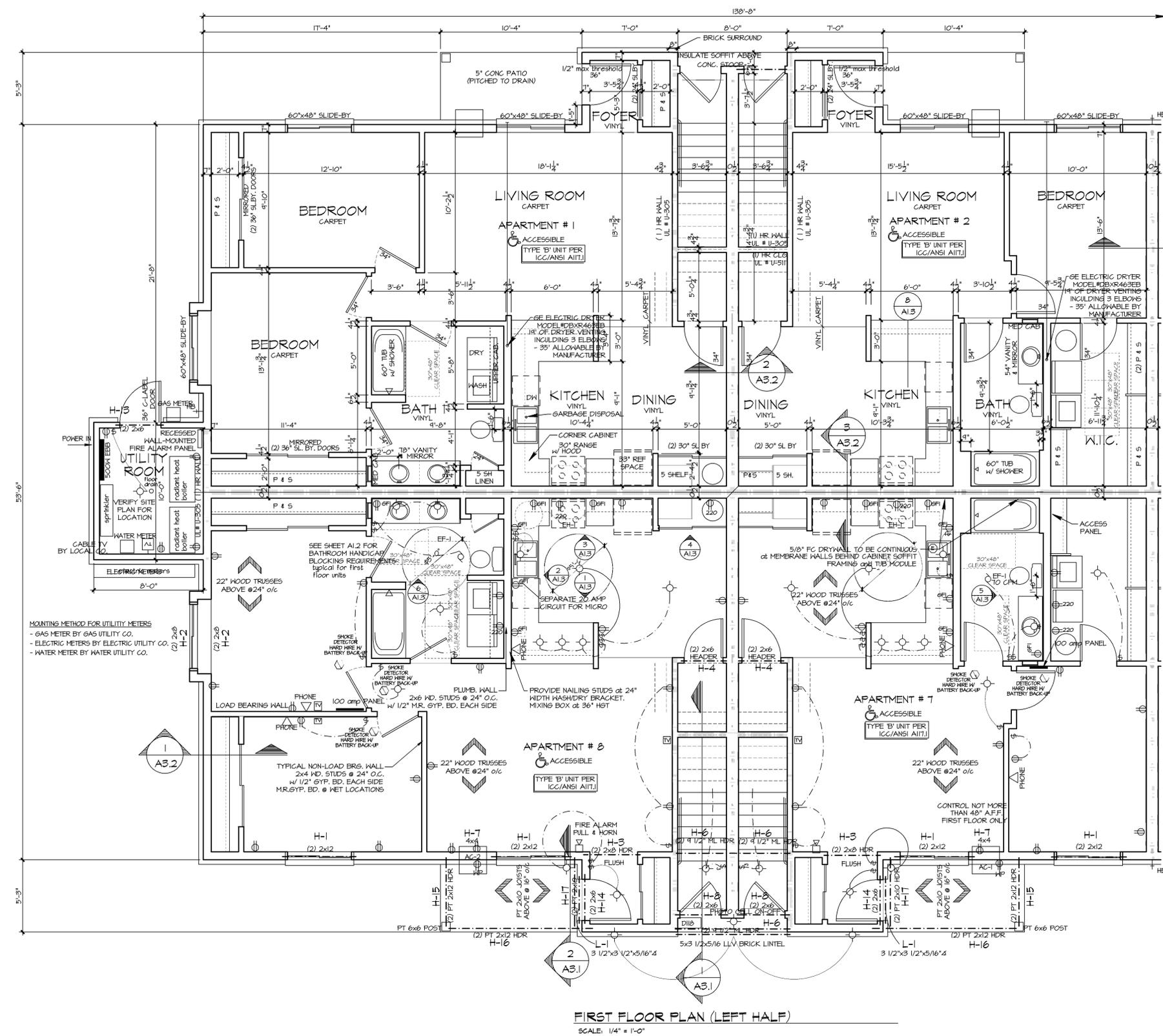
Date: **03-05-15**

Job No.: **15189.001**

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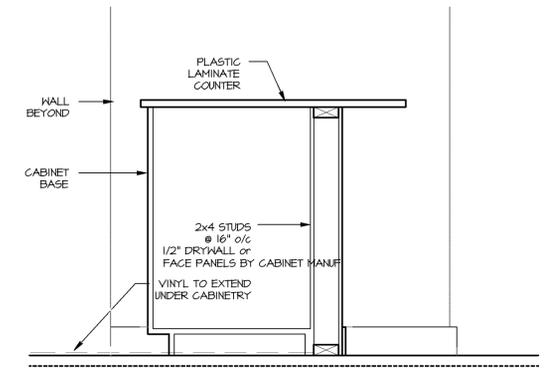
**A1.3**



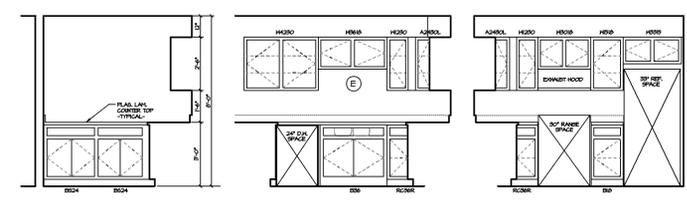
**FIRST FLOOR PLAN (LEFT HALF)**  
SCALE: 1/4" = 1'-0"

Room	Room Area	Items	Glass Size	Glass Area	Operable Area	4% Ventilation Requirement
Living Room First Floor Corner	247.7 s.f.	Window	60"x48"	20 s.f.	10 s.f.	9.9 s.f.
FFC Bedroom #1	126.2 s.f.	Window	60"x48"	20 s.f.	10 s.f.	5.0 s.f.
FFC Bedroom #2	147.1 s.f.	Window	60"x48"	20 s.f.	10 s.f.	5.9 s.f.
Living Room First Floor Mid	214.8 s.f.	Window	60"x48"	20 s.f.	10 s.f.	8.6 s.f.
Bedroom #1 First Floor Mid	132.6 s.f.	Window	60"x48"	20 s.f.	10 s.f.	5.30 s.f.

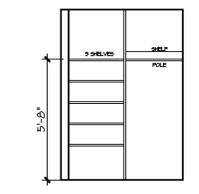
**NOTE:**  
CLOTHES DRYER EXHAUST DUCTS SHALL MEET LISTED REQUIREMENTS WHICH INCLUDE, BUT ARE NOT LIMITED TO, VERTICAL CLEANOUTS, REQUIRED METAL DUCTS, LIMITED DUCT LENGTHS, REQUIRED LABEL OR TAG ADDRESSING, EQUIVALENT LENGTH OF DUCT LOCATED WITHIN 6 FT OF THE DUCT CONNECTION, MINIMUM DUCT SIZE, SHIELD PLATE INSTALLATION, AND PROHIBITION OF SCREWS TO CONNECT DUCT SECTIONS. CLOTHES DRYER EXHAUST DUCTS SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS AND SHALL CONVEY MOISTURE AND PRODUCTS OF COMBUSTION OUTSIDE THE BUILDING.



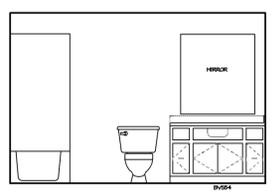
**SNACK COUNTER SECTION**  
SCALE: 1" = 1'-0"



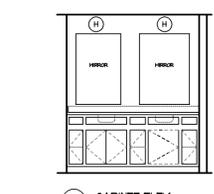
**1 CABINET ELEV.** SCALE: 1/4" = 1'-0"  
**2 CABINET ELEV.** SCALE: 1/4" = 1'-0"  
**3 CABINET ELEV.** SCALE: 1/4" = 1'-0"



**4 PANTRY CLOSET ELEV.** SCALE: 1/4" = 1'-0"



**5 CABINET ELEV.** SCALE: 1/4" = 1'-0"



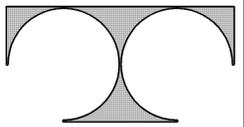
**6 CABINET ELEV.** SCALE: 1/4" = 1'-0"

**EQUIPMENT SPECIFICATIONS:**

- EF-1 BROAN MODEL 619 EXHAUST FAN TO CFM.
- RC-1 BROAN MODEL 642 WALL CAP.
- BH-1 BROAN MODEL 16000 SERIES EXHAUST HOOD.
- MICRO TEC SYSTEM III FILTER, 200 CFM, 120-1-60
- AC-1 THROUGH THE WALL AIR CONDITIONING UNIT, FEEDERS, GE WITH BUILT-IN THERMOSTAT 240-1-60, 11.5 MBH CAPACITY.
- AC-2 SAME AS AC-1 EXCEPT 14.2 MBH CAPACITY.

**NOTES & SPECIFICATIONS:**

- EXTEND 4" Ø DRYER VENT TO EXTERIOR WALL. CONNECT 4" Ø VENT INTO ONE BROAN MODEL 642 WALL CAP.
- VERIFY ALL EBB, AC, AND EF UNIT LOCATIONS AT JOB SITE.
- INSTALL ENTIRE SYSTEM TO COMPLY WITH ALL STATE AND LOCAL CODES.



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16 UNIT BUILDING  
MADISON STREET  
WATERLOO, WISCONSIN

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Sheet Title  
TYPE 'A' UNIT  
PLAN & DETAILS  
BLDG #3

Revisions

Issued Date:

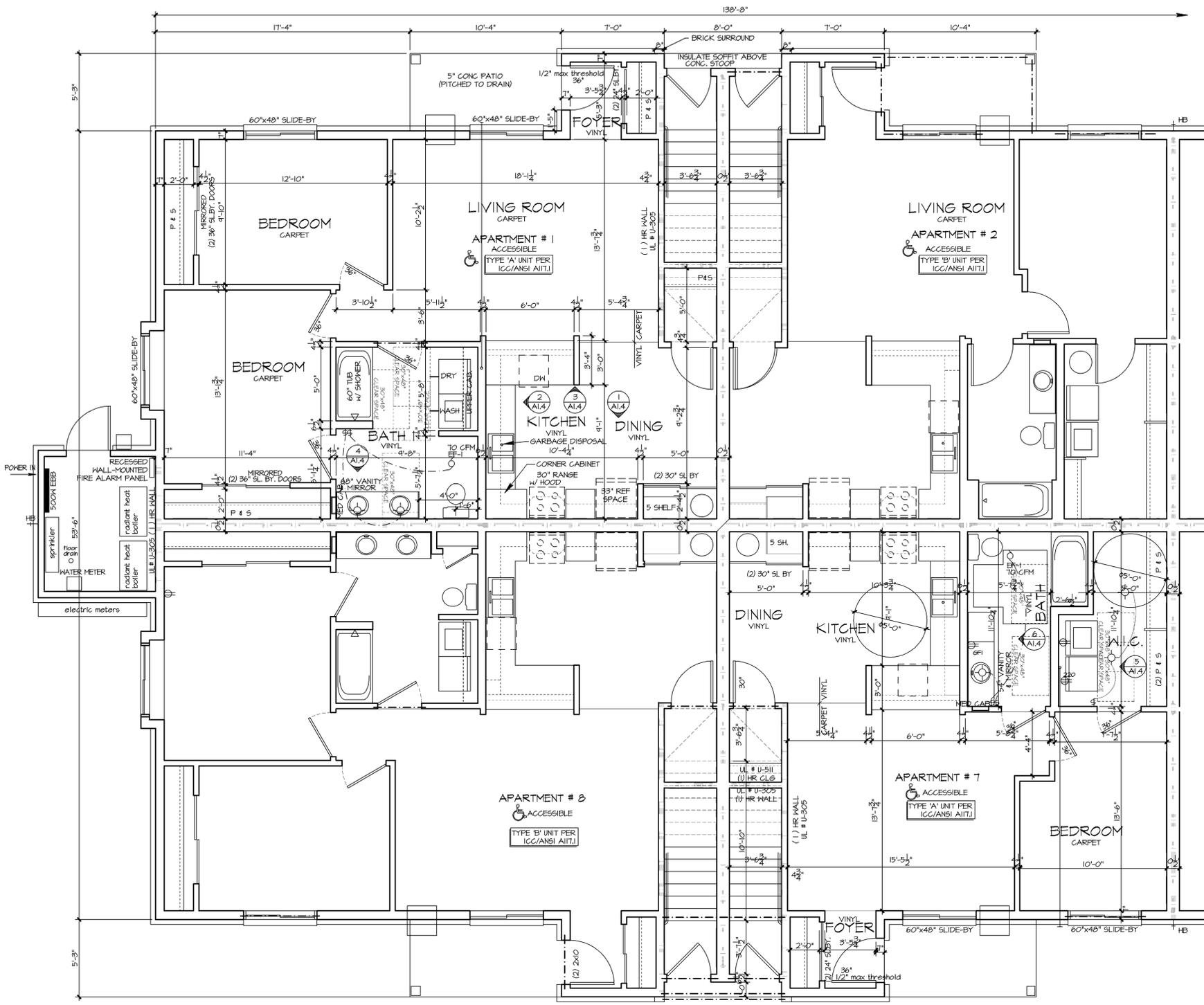
Date: 03-05-15

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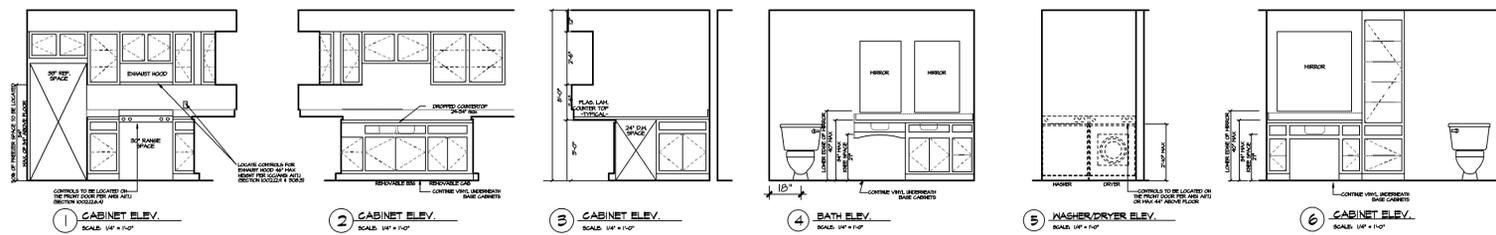
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Sheet No.

A1.4



TYPE 'A' FIRST FLOOR PLAN BLDG #3 - LEFT HALF  
SCALE: 1/4" = 1'-0"



ACCESSIBILITY - TYPE A UNITS

ANSI 1111 SECTION 1002.15 HINDOCS  
WHERE OPERABLE HINDOCS ARE PROVIDED, AT LEAST ONE HINDOCH IN EACH SLEEPING, LIVING OR DINING SPACE SHALL HAVE OPERABLE PARTS COMPLYING WITH SECTION 1002.15.

ANSI 1111 SECTION 302.4  
OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAXIMUM LEVER HARDWARE TYPICAL TO ALL DOORS.

ANSI 1111 SECTION 602.2 CONTROLS  
SHOWER OR BATH/TUB/SHOWER FACILITIES SHALL DELIVER WATER THAT IS THERMAL SHOCK PROTECTED TO 120 DEGREES MAXIMUM. IN TRANSFER-TYPE UNITS, THE CONTROLS/PAGES/ETS AND SHOWER UNIT SHALL BE ON THE SIDE HALL, 36" MIN. 48" MAX. ABOVE SHOWER FLOOR.

ANSI 1111 SECTION 602.6 SHOWER UNIT  
A SHOWER SPRAY UNIT SHALL BE PROVIDED, WITH A HOSE 5' LONG MINIMUM THAT CAN BE USED AS A FIXED SHOWER HEAD AND AS A HAND-HELD SHOWER. IN TRANSFER-TYPE SHOWERS, THE CONTROLS SHALL BE ON THE CONTROL HALL WITHIN 5' OF THE CENTERLINE.

ANSI 1111 SECTION 1002.14 STORAGE FACILITIES  
A PORTION OF THE STORAGE AREA OF EACH STORAGE FACILITY SHALL ACCOMMODATE A FORWARD REACH OR SIDE REACH COMPLYING WITH SECTION 306.

ONLINE CERTIFICATIONS DIRECTORY

System No. F-C-2351  
XHEZ.F-C-2351  
Through-penetration Firestop Systems

Page Bottom

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

Through-penetration Firestop Systems

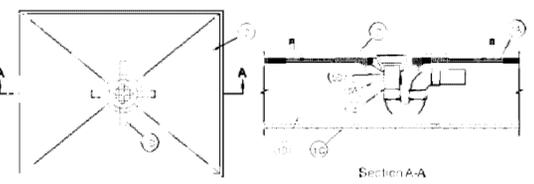
See General Information for Through-penetration Firestop Systems

System No. F-C-2351

January 12, 2009

F Rating - 1 Hr

T Rating - 1 Hr



1. Floor-Ceiling Assembly - The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L8000 Designs in the UL Fire Resistance Directory, as summarized below:

- A. Flooring System - Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Material\* as specified in the individual Floor-Ceiling Design. Max diam of opening is 6 in. (152 mm).
- B. Wood Joists - Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members\* with bridging as required and with ends firestopped.
- C. Gypsum Board\* - Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design.

2. Plastic Plumbing Fixtures - Shower Base Receptor - One-piece molded nonmetallic shower base receptor with stainless steel drain plate. Shower base receptor to be installed in accordance with the manufacturer's instructions.

http://tdiassociates.com/gi-bin/xy/TemplateUSEXIT/FRAME/showpage.html?name=XHEZ.F-C-2351&conshorfile=Through-penetration+Firestop+Systems&... 1/2

2/20/2014

XHEZ.F-C-2351 - Through-penetration Firestop Systems

FILE:REDI USA LLC - Model 3160L, 3160R, 37NE0, 3737, 4837, 4837AF/A, 4837/B or 4848

3. Tile - (Not Shown) - Ceramic or stone tile applied to shower pan floor with epoxy adhesive in accordance with shower base receptor installation instructions.

4. Nonmetallic Pipe - Nom 2 in. (51 mm) diam Schedule 40 solid or cellular core PVC pipe solvent-welded into drain in the bottom of the shower base receptor and centered in the floor opening.

5. Firestop System - The details of the firestop system shall be as follows:

A. Fill, Void or Cavity Materials\* - Wrap Strip - Nom 1/8 in. (3.2 mm) thick intumescent material supplied in 2 in. (51 mm) wide strip. Strip a layer of wrap strip tightly wrapped around nonmetallic pipe (item 4) with a butted seam and with the top edge of the wrap strip abutting the nub of the shower drain. Wrap strip layer temporarily held in position using tape.

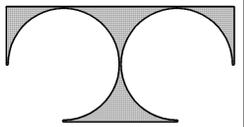
3M COMPANY 3M FIRE PROTECTION PRODUCTS - Ultra GS

B. Steel Collar - Nom 2 in. (51 mm) deep collar with 1-1/4 in. (32 mm) wide by 2 in. (51 mm) long anchor tabs and tabs to retain wrap strip layer. Coils of precut 0.016 in. (0.41 mm) thick (28 gauge) galv steel sheet available from wrap strip manufacturer. Steel collar, with anchor tabs bent outward 90 deg, wrapped tightly around wrap strip with min 1 in. (25 mm) overlap at seam. Anchor tabs to be pressed tightly against nub of shower drain and collar to be compressed around wrap strip using a min 1/2 in. (13 mm) wide stainless steel clamp at the collar midlength. Collar to be secured to underside of flooring system with steel screws with min 1-1/4 in. (32 mm) diam steel washers in conjunction with steel extension straps. Anchor tab extension straps to be fabricated from min 0.022 in. (0.6 mm) thick galv steel. Taper straps from 1/4 in. (6 mm) wide to 1 in. (25 mm) wide with sufficient length to allow 1-1/2 to 2 in. (38 to 51 mm) lap over floor. Straps secured to collar by inserting min 1 in. (25 mm) length of 1/4 in. (6 mm) wide end into hole on mounting tab and bending 180 degrees. Min of two anchor screws, diametrically opposed, are required.

\*Bearing the UL Classification Mark

XHEZ.F-C-2351  
THROUGH-PENETRATION FIRESTOP SYSTEM





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MADISON STREET  
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Sheet Title  
**EXTERIOR ELEVATIONS & ROOF PLAN**

Revisions

3/24/04- Elevations updates to match windows on floor plan.

Issued Date:

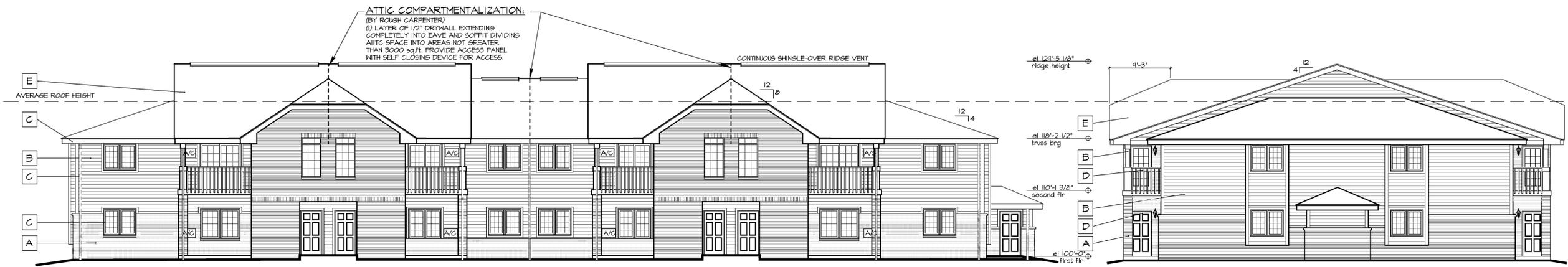
Date: **03-05-15**

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**A2.1b**



**FRONT/REAR ELEVATION - 16 UNIT BUILDING**

SCALE 1/8" = 1'-0"

**SIDE ELEVATION - 16 UNIT BUILDING**

SCALE 1/8" = 1'-0"

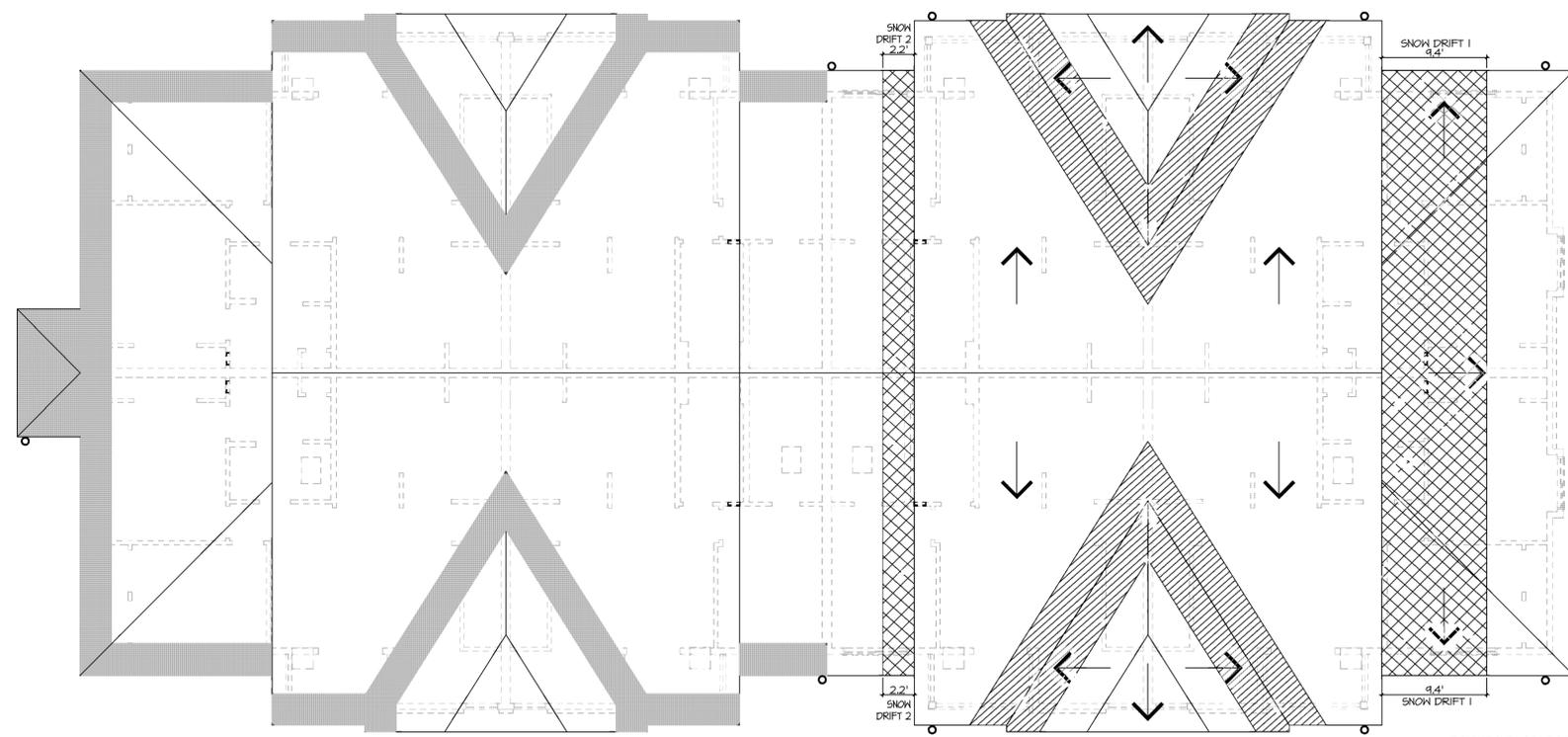


**FRONT/REAR ELEVATION - 16 UNIT BUILDING**

SCALE 1/8" = 1'-0"

**SIDE ELEVATION - 16 UNIT BUILDING**

SCALE 1/8" = 1'-0"

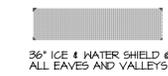


**ROOF PLAN - SNOW LOADING/ ICE & WATER SHIELD PROTECTION**

SCALE 1/8" = 1'-0"

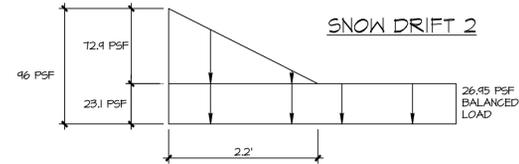
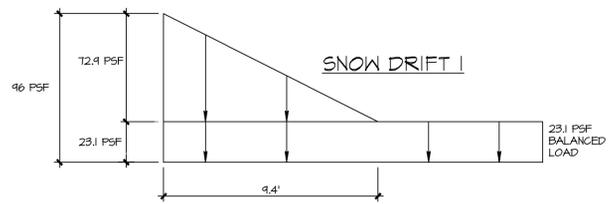
**ICE & WATER SHIELD**

PROVIDE ICE & WATER SHIELD MINIMUM 2 FEET BEYOND INTERIOR PLANE OF EXTERIOR WALL.



**SNOW LOADS**

TYPICAL BALANCED UNIFORM SNOW LOAD 26.95 PSF



Exterior Material Key	
A	BRICK Color : Cherokee Sapelo
B	SIDING : LP SmartSide Color : Navajo Beige
C	TRIM : LP SmartSide Color : Desert Sand
D	PAINT : Entry Doors Color : Dark Brown Sherwin-Williams SW-6069 : French Roast or equal
E	SHINGLES : Dimensional Color : Driftwood