

Area Increase for Frontage

$I_f = 100(F/P - 25)W/30$

W = 30
F = 551
P = 571
NS = 9,500
I_f = 75%

I_f = Area increase due to frontage
F = Building perimeter that fronts on public way or accessible open space having 20' minimum width
P = Perimeter of entire building
W = Minimum width of public way or accessible open space

Total Allowable Area - 1st Floor

$A_1 = A_2 + (A_1/100) + (A_1/100)$

A₁ = 28,500
A₂ = 35,625 SF

A₁ = Total Allowable Area
A₂ = Area from Table 506.2
Actual 1st Floor Area from Sheet 1: 13,659
Allowable building area conforms

Total Allowable Area - 2nd Floor

$A_2 = A_3 + (A_2/100) + (A_2/100)$

A₂ = 28,500
A₃ = 35,625 SF

A₂ = Total Allowable Area
A₃ = Area from Table 506.2
Actual 2nd Floor Area from Sheet 1: 5,844
Allowable building area conforms

Total Allowable Area - 3rd Floor

$A_3 = A_4 + (A_3/100) + (A_3/100)$

A₃ = 28,500
A₄ = 35,625 SF

A₃ = Total Allowable Area
A₄ = Area from Table 506.2
Actual 3rd Floor Area from Sheet 1: 11,221
Allowable building area conforms

Table 506.2 - Allowable Building Areas, per floor:

Use	Area	NS
A-1	28,500	9,500
A-2	28,500	9,500
R-1	69,000	23,000
R-2	48,000	16,000
S-1	52,500	17,500
S-2	78,000	26,000

Section 903.2: Sprinkler system will be required as follows:
A-2: Fire area exceeds 5,000 s.f. OR occupant load 100 or more OR other than level of exit discharge
A-3: Fire area exceeds 12,000 s.f. OR occupant load 300 or more OR other than level of exit discharge
B: Not Required
R-1: Required through out entire building
R-2: Fire area exceeds 12,000 s.f. OR area exceeds 5,000 s.f. is used for the storage of commercial motor vehicles
S-2: Not Required

2020 Building Code of New York State Miscellaneous Code Information

Use Groups (code section 302): A-2, A-3, B, R-1, S-1, S-2

Occupancy Classification (code section 508.3): Mixed Use Nonseparated

Incidental Uses (code section 509): None

Construction Classification (code section 602): IIB

Code Areas / Occupant Loads

2020 Building Code of New York State
Building Areas (per code section 503.1)
Used for Building Size Calculations
* See Allowable Building Area Worksheet

First Floor Net (exclusive of exterior walls): 12,640
Second Floor Net (exclusive of exterior walls): 4,355
Third Floor Net (exclusive of exterior walls): 10,585
Total Building Net Area S.F.: 27,580

Gross/Net Floor Areas (per code section 1004 & Table 1004.5)
Used for means of egress occupancy calculations

Floor	Room	Area	S.F. Per Occupant	Occupant Load
First Floor	Apparatus Bay	6116 sf (g)	200 gross	31
	Office Spaces	167 sf (g)	150 gross	2
	Bank Rooms	508 sf (g)	50 gross	11
	Day Room	578 sf (g)	15 net	39
	Storage/Mechanical	2229 sf (g)	300 gross	8
	Exercise Room	1044 sf (g)	50 gross	21
	Locker Rooms	149 sf (g)	50 gross	3
	Storage/Mechanical	1768 sf (g)	300 gross	6
	Mezzanine (adds to bay)	2207 sf (g)	300 gross	8
	Third Floor	Office Spaces	1450 sf (g)	150 gross
Storage/Mechanical	920 sf (g)	300 gross	4	
Members Room	1083 sf (g)	15 net	71	
Meeting/Training	3076 sf (g)	15 net	205	
Kitchen	944 sf (g)	200 gross	5	
Total First Floor Occupants				115
Total Second Floor Occupants				14
Total Third Floor Occupants				286
Total Occupants				415

Overall Building Size (inclusive of exterior walls)
Used for zoning footprint and materials estimates

First Floor Gross: 13,659
Second Floor Gross: 5,044
Third Floor Gross: 11,221
Total Overall Gross Building Size S.F.: 29,924

2020 Building Code of New York State

See Code Table 2903.1

OCCUPANCY USE*	POPULATION	WC'S MEN	WC'S WOMEN	LAVS	FOUNTAINS	DRINKING URINALS (PC Sec. 424)	SERVICE SINK	UNISEX LAV	UNISEX WC	SHOWER MEN	SHOWER WOMEN
1ST FLOOR ROOMS											
Apparatus Bay	S-2	31	0.16	0.16	0.31	0.03	0.08	1.00			
Office Spaces	B	2	0.04	0.04	0.05	0.02	0.02				
Bank Rooms	R-1	11	0.55	0.55	1.10	0.11	0.28				
Day Room	A-2	39	0.26	0.26	0.20	0.08	0.17			0.69	0.69
Storage/Mechanical	S-2	8	0.04	0.04	0.08	0.01	0.02				
Exercise Room	B	21	0.42	0.42	0.51	0.21	0.21				
Locker Rooms	B	3	0.06	0.06	0.08	0.03	0.03				
SUBTOTAL 1ST FLOOR											
		115	1.51	1.51	2.34	0.49	0.81	1.00	0.00	0.00	0.69
2ND FLOOR ROOMS											
Storage/Mechanical	S-2	6	0.03	0.03	0.06	0.01	0.02				
Mezzanine (adds to bay)	S-2	8	0.04	0.04	0.08	0.01	0.02				
SUBTOTAL 2ND FLOOR											
		14	0.07	0.07	0.14	0.01	0.04	0.00	0.00	0.00	0.00
3RD FLOOR ROOMS											
Office Spaces	B	1	0.02	0.02	0.03	0.01	0.01	1.00			
Storage/Mechanical	S-2	4	0.02	0.02	0.04	0.00	0.01				
Members Room	A-2	71	0.47	0.47	0.36	0.14	0.32				
Meeting/Training	A-3	205	0.82	1.58	1.03	0.41	0.55				
Kitchen	A-2	5	0.03	0.03	0.03	0.01	0.02				
SUBTOTAL 3RD FLOOR											
		26	1.37	2.12	1.47	0.58	0.91	1.00	0.00	0.00	0.00
TOTAL OF FIXTURES REQUIRED											
		415	3	4	4	2	1	2	0	0	1
TOTAL OF FIXTURES PROVIDED											
		4	4	9	4	3	2	1	1	2	1

* Occupancy, Accessory Use or Use Group (NOTE ALLOWABLE CHOICES A-2, A-3, B, R-1, S-1, S-2)

CODE PLAN LEGEND

EXIT CAPACITY:
 GO: ACTUAL NUMBER OF OCCUPANTS USING DOOR OR STAIR
 CO: MAXIMUM ALLOWABLE EGRESS CAPACITY OF DOOR OR STAIR

ROOM OCCUPANCY LOAD:
 495 = AREA IN SQUARE FEET
 100 = ACTUAL OCCUPANT LOAD PER ROOM
 OCC = OCCUPANT LOAD FACTOR

→ PATH OF TRAVEL / DISTANCE TO EXIT
 ← DIRECTION OF TRAVEL

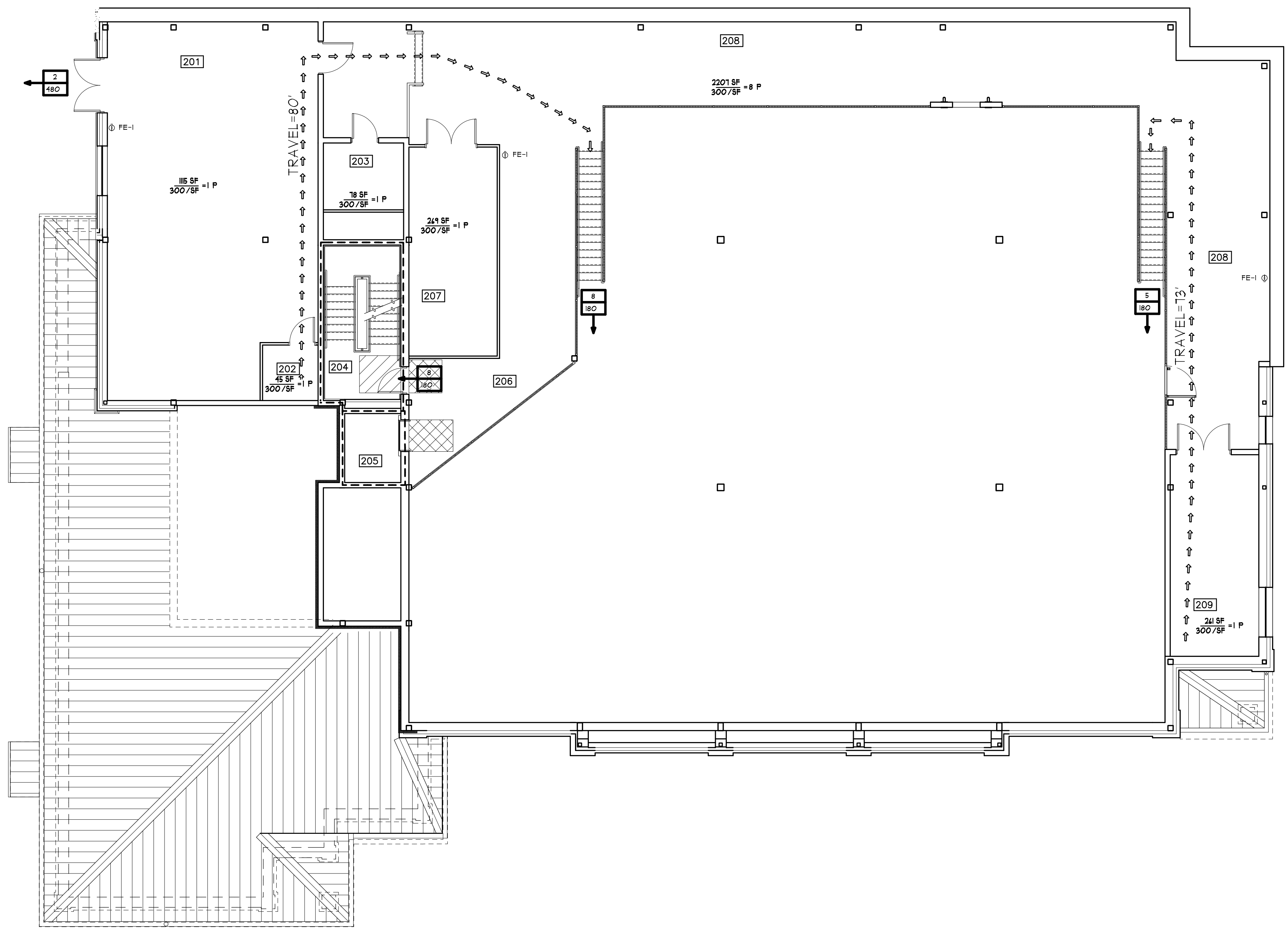
SEPARATIONS ARE DESIGNATED AS FOLLOWS:
 --- 1 HOUR FIRE-RESISTANCE RATED FIRE BARRIER OR FIRE PARTITION
 1/2 HOUR FIRE-RESISTANCE RATED FIRE BARRIER OR FIRE PARTITION
 [Hatched] 1 HOUR FIRE-RESISTANCE RATED FLOOR/CEILING ASSEMBLY ABOVE
 [Hatched] FIRE RESISTANCE ASSEMBLY ABOVE 2 1/2 DESIGN NO. 1601

[Hatched] DOOR CLEARANCE FLOOR AREAS

NOTE: AT ALL LOCATIONS OF RATED WALLS, PROVIDE SIGNS ABOVE THE CEILING AT 50 FEET ON CENTER STATING "FIRE AND/OR SMOKE BARRIER PROTECT ALL OPENINGS - 1 PROVIDE HOUR RATING REQUIRED"

2nd FLOOR ROOM LEGEND

NO.	NAME	NO.	NAME
201	BOILER/ELEC ROOM	206	MEZZANINE
202	ELEVATOR MACHINE ROOM	207	MECHANICAL 1
203	SERVER	208	MEZZANINE
204	STAR	209	MECHANICAL 2
205	ELEVATOR		



MA

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NEW STATION FOR PUTNAM VALLEY FIRE STATION #1

OSCAWANA LAKE ROAD
PUTNAM VALLEY, NEW YORK

REVISION HISTORY

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

2ND FLOOR CODE PLAN

SCALE: 1/8" = 1'-0"
 DUG BY: PFS/JDA
 DUG DATE: 8/14/2020
 STATUS: BID DRAWINGS

A021

PLOT TIME: 10:55 AM

2nd FLOOR CODE PLAN
 SCALE: 1/8" = 1'-0"

NORTH

BUILDING AREA	S.F.
1st FLOOR	13,659
MEZZANINE (included in 2nd Floor S.F.)	2,201
2nd FLOOR	5,044
3rd FLOOR	11,221
TOTAL	29,924