

**Building History / Project Summary**

Building at 1309 Tower Avenue was constructed as a department store in 1900, an operated as such through 1977. Building then changed use and functioned as a restaurant and bar occupying the grade level floor. Building is currently vacant. With this interior renovation, the grade level floor will be used for retail tenant space with office space on the intermediate floor level above. No change of use or defined work area for basement or upper level. The only item of exterior work will be to replace the storefront assembly of the Alley Entry door.

\* Original mezzanine for office functions within the department store. No longer meets IBC definition of a mezzanine  
 \*\* Upper level (original second story) has been unoccupied since 1977

**CODE SUMMARY:**

Off We Pop Building Renovation, 1309 Tower Av., Superior WI 54880  
 City of Superior, Douglas County  
 IECC Climate Zone: 7  
 Occupancy Group: M (retail); B (office); S-1 (storage)  
 Construction Type: III-B, adding Sprinkler system - NFPA 13 complete building  
 3 stories, 33 feet height; 7,000 SF footprint (50' x 142'); 16,178 SF Building Area  
 SPS 366 Alteration Level 2 / Change of Occupancy (partial, from most recent use as A-2)  
 Review for: Building only (HVAC submitted separately)

**APPLICABLE CODES:**  
 2018 Wisconsin Administrative Code, SPS 361.366  
 2015 International Building Code (IBC)  
 2015 International Existing Building Code (IEBC)  
 2015 International Energy Conservation Code (IECC)  
 ICC / ANSI A117.1 Accessible and Usable Buildings and Facilities

**SPS 362, IEBC Criteria**

Occupancy Classification, Ch. 3  
**Basement:** Occupancy Group S-1 (no change) Retail storage, 7,000 SF Building area.  
**Grade Level (exit discharge):** Occupancy Group M, Retail, 7,000 SF Building area.  
**Office Level:** Occupancy Group B, Office space, 2,178 SF Building area.  
 \*Original mezzanine, since 1978 intermediate floor level no longer meets the IBC definition within the grade level space  
**Upper Level:** Unoccupied (no change), assigned Group S-1 for egress calculation, 7,000 SF Building area  
 \*\*Original second story

Construction Type, Ch. 8 Type III-B: Non-combustible Exterior Bearing Walls of 2-hour rating and the exterior building elements are of any material permitted by code. *2-hour rated assembly Design Source: IBC, Table 721.1(2) Item 1-1-1*

504 Building Height: Actual Building Height is 33 feet with 3 stories above Grade Plane (includes intermediate level)  
 \*Table 504.3 Allowable Building Heights is 33 feet above Grade Plane for Occ. Class B, M, S with Type III-B approved  
 Table 504.4 Allowable Stories Above Grade Plane is 3 for Occ. Class M & S-1 with Type III-B approved (4 stories for Occ. Class B)

508 Building Area: Actual Building Area is 16,068 SF, not including Basement

\*Table 508.2 Type III-B, multi-story assemblies: B = 57,000 SF; M = 77,500 SF; S = 52,500

508 Mixed Use and Occupancy 508.4 Separated occupancies, Table 508.4 Fire-resistance rating required

0 hours, No requirement between B, M, and S-1 occupancies

Separate as Separated Occupancies with fire separation requirement between B, M, and S-1

**IBC Chapter 10 Means of Egress**

1004 Occupant Load (Table 1004.1.2) Max floor area per occupant

100 GSF Business areas, 60 GSF Mercantile, 300 GSF related Storage, stock, shipping areas.  
 See plans for occupant load listed for spaces and each floor level (building total = 170).

1005 Means of Egress sizing: Egress capacity factors (1005.3 sprinklered) per occupant: 0.27 stairways; 0.15 other components.

Egress capacity of the most restrictive egress stair or component exceeds 170, the # of occ. for entire building.

1017 Exit Access Travel Distance, (Table 1017.2) with Sprinkler system shall not exceed 250' for Occupancy M & S-1, 300' for B, refer to plan sheet summary per level.

**Minimum Plumbing Facilities IBC ch 29**

Determined by number of occupants for each designated occupancy divided by the correlating fixture ratio

WC Lav

Group M: 107 occ / 500 Lav 107 occ / 750

Group B: 19 occ / 25 Lav 19 occ / 40

Group S: 44 occ / 100 Lav 44 occ / 100

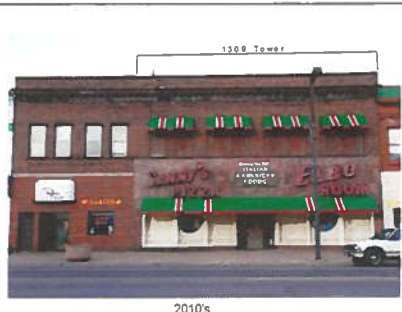
1.42 1.06

Two Under-sink accessible washrooms provided, each with WC and Lav.

Service sink provided in adjacent Mechanical room

Accessible drinking fountain adjacent to Alley Entry

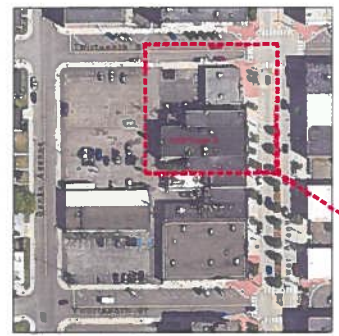
See sheet 2 for criteria related to the International Existing Building Code (SPS 366)



2010's



Superior Wisconsin, 1940's



Location Plan  
 Superior Wisconsin  
 Scale: 0, 50, 100, 200

- SHEET INDEX**
- 1 Site Plan, Code Summary, Aerial / Exterior views
  - 2 IEBC Criteria, Notes, Schedules, Enlarged Plans
  - 3 Grade Level and Office Level Floor Plans
  - 4 Basement and Upper Level Floor Plans
  - 5 Building Section

# Off We Pop Building Renovation

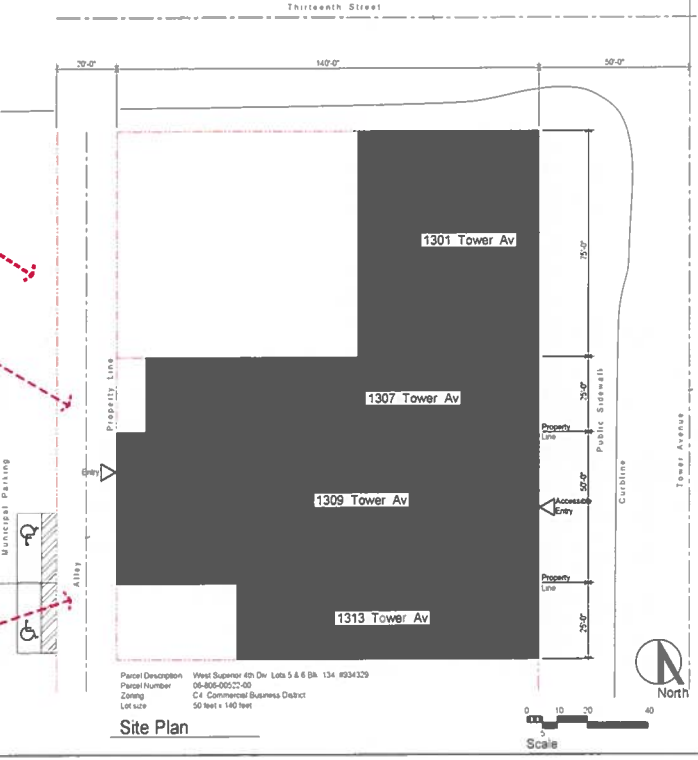
1309 Tower Avenue  
 Superior, Wisconsin  
 54880



View looking toward NW building corner



View looking toward SW building corner



Parcel Description: West Superior 4th Div. Lots 5 & 6 Bl. 134 #934329  
 Parcel Number: 06-868-00527-00  
 Zoning: C4 Commercial Business District  
 Lot Size: 50 feet x 140 feet

Site Plan

Scale: 0, 10, 20, 40  
 North

Conditionally  
**APPROVED**  
 DEPT. OF SAFETY AND PROFESSIONAL  
 SERVICES  
 DIVISION OF INDUSTRY SERVICES  
 Ryan Hauer

SEE CORRESPONDENCE

Alteration  
 CB-022500226-PRB  
 02/13/2025

**1Architect LLC**  
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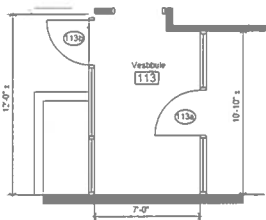


Jon E. Lintula  
 WI Architect 0212-5

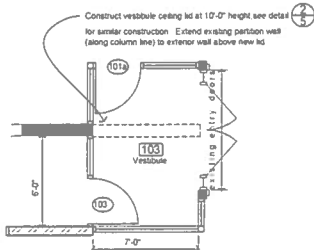
Owner:  
**Off We Pop LLC**  
 1215 N 17th Street  
 Superior, WI 54880  
 offwepopllc@gmail.com (218) 600-7175

Issue / Date:  
 WI Review / 1-20-2025

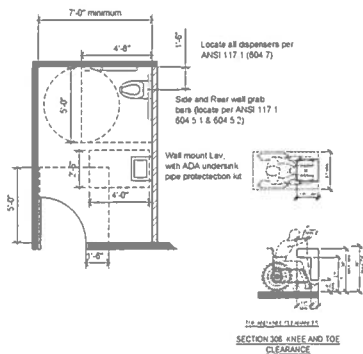
Project:  
**Off We Pop Building Renovation**  
 1309 Tower Avenue  
 Superior, WI 54880



Replacement Vestibule at Alley Entry  
(Exterior / Interior Aluminum Storefront)



Replacement Vestibule at Tower Av Entry  
(Interior Aluminum Storefront)



Washroom Layout Criteria



Door Schedule

Number	Door Type	Hardware	Notes
101a	A	5	
101b	B	2	
101c	C	3	6'-0" X 7'-0"
103	A	4	
105a	B	2	
105b	B	2	
109a	B	2	
109b	B	2	
111	B	2	
113a	A	4	
113b	A	5	
115	B	1	
117	B	1	
119	B	2	
203	B	2	
205	B	2	
207	B	2	
209	B	2	
1-A	D	6	3'-4" wide
1-B	D	6	
2-C	D	6	
2-D	D	6	

Door Types

- All doors 3'-0" wide x 7'-0" high unless noted otherwise
- A Glazed Aluminum (storefront)
- B Solid-core wood
- C ceiling overhead
- D Door and frame assembly (S) rating 20 minutes. UL 10C

Hardware (select Features only)

- 1 -thumb turn lever lockset
- 2 -Office function lockset
- 3 -lock to secure open / closed positions
- 4 -pushbutton-closer
- 5 -pushbutton-lockset with interior exit peddle-closer
- 6 -lever lockset

All finished hardware to be ICC / ANSI 117.1 accessibility compliant

General Project Notes

- 1 Patched, repaired or replaced wall and ceiling finishes materials to meet ASTM E84 or UL 723 Class C or better with a Flame Spread Index not exceeding 200 and a Smoke Development Index of 0-450
- 2 Specific Finish requirements (IBC Ch 8)
- 3 Floors and 4" min. wall base at Washrooms - smooth, hard nonabsorbent surface
- 4 Wall surfaces within 2 feet of service sink, lavs and toilets (to a height of 2 1/2 feet) - smooth, hard and nonabsorbent and not adversely affected by moisture
- 5 All glazing elements to be ANSI Z97.1 Class A
- 6 Alley Exterior Entry / Storefront - maximum permitted U values per IECC 0.29 for fixed glass 0.77 doors. No required SHGC value due to shading projections of building

SPS 366, IEBC Work Area compliance method chapters 7-4, with Change of Occupancy chapter 10

Basement 6,440 SF Gross floor area, 2,000 SF building area 0 SF Work area.

Retains S-1 Occupancy, 22 occupants.

Includes all Owner elective work items: added sprinkler, complete coverage, add fire extinguishers, emergency egress lighting, and exit signage

Grade Level 6,415 SF Gross floor area: IEBC Alteration Level 2, 1,648 SF work area, 24% reconfigured space

Change of occupancy: from most recent use A-2 back to M (Retail), 107 occupants.

Office Level (original office Mezzanine of department store) 1,823 SF Gross floor area, 2,066 SF building area

IEBC Alteration Level 2, Work area 765 SF of reconfigured space, 38% of building area

Change of occupancy: from most recent use S-1 back to exclusive B (offices), 19 occupants.

Upper Level (original Second story) 6,440 SF Gross floor area 0 SF Work area

Unoccupied since 1977, designated as S-1 occupancy for egress calculation (22 occ). To remain unoccupied

Incidental and Owner elective work items: added sprinkler, complete coverage add fire extinguishers, emergency egress lighting, and exit signage

IEBC Chapter 10 Change of Occupancy --- 1001.2.2.1 Partial change of occupancy 6-1003-1006 ---

IEBC 1012: Change of Occupancy Classification

1012.1.1.2 Change of occupancy classification with separation --- IBC 508.4 Separated occupancies. Buildings or portions of buildings that comply with the provisions of this section shall be considered as separated occupancies --- IBC Table 508.4-Fire-resistance rating required: 0 hours. No requirement between B, M, and S-1 occupancies

Portions of buildings changing to M, B, or occupancies must comply with requirements of IEBC chapter 9

1012.2 Fire protection systems

Note: IBC 903.2 fire area thresholds: former A-2 occupancy 5,000 SF (903.2.1); New M, 12,000 SF (IBC 903.2.2)

1012.2.1 Fire Sprinkler system

Building owner is providing NFPA 13 system for complete building coverage

1012.2.2 Fire Alarm and Detection system --- 904.2 Fire Alarm and Detection systems --- IBC 907

Note: Required (907.2.2 Group B, 907.7 Group M)

1012.3 Interior Finish --- IBC 803.11 Interior finish requirements based on Group: B, M, S sprinklered

Class C wall and ceiling finish for corridors and enclosures for exit access stairways, rooms and enclosed spaces

1012.4 Means of Egress Hazard Categories (Table 1012.4)

Existing: A-2 (Haz Cat 2) & S-1 (Haz Cat 3); Proposed: M & B (Haz Cat 3), S-1 (Haz Cat 3)

Equal or lower hazard for change of occupancy

1012.4.2 --- Section 905 --- Section 905.1 --- Section 905 --- 805.5 Erection --- IBC 1020.1

Former fire resistance for provision B, M, B occupancies --- 0 hours walls (exit enclosure)

1012.4.3 Egress Capacity

Exterior egress capacity occupant load specified in the IBC for the new occupancies (refer to floor plans)

1012.4.4 Handrails --- 805.9

Building owner is providing an IBC compliant handrail on at least one side of each existing building stair

1012.4.5 Guards --- 805.11 --- IBC 1015

Existing guards at Office Level to be replaced by IBC compliant guards

1012.5 Height and Area Hazard Categories

Existing: A-2 (Haz Cat 2) & S-1 (Haz Cat 3); Proposed: M & S-1 (Haz Cat 3), B (Haz Cat 4)

1012.5.2 equal or lower hazard category: height and area of existing building deemed acceptable

1012.5.3 Exterior wall fire-resistance ratings

Existing: A (Haz Cat 3); S-1 (Haz Cat 2); Proposed: M & S-1 (Haz Cat 2), B (Haz Cat 3)

1012.6.1 Exterior wall rating for change of occupancy to a higher hazard category

Exception: allows 2-hour ratings for B, M, & S

1016.6.3 Opening protectives

Exception 3 permits sprinkler substitution for opening protection

1012.7 Enclosures of vertical shafts --- 1012.7.1 Min Requirements --- IBC atrium option --- IBC 404.6 Enclosure of atriums

Exception 3, a fire barrier is not required between the atrium and the adjoining spaces of any three floors of the atrium provided such spaces are accounted for in the design of the smoke control system --- 404.5 Smoke control

Exception: smoke control is not required for atriums that connect only two stories

Floor levels having defined work area. Office Level is an intermediate floor level between the floor and ceiling of the Grade Level and partially open to that level. Stair openings communicating between these levels are not enclosed

Related code references:

IBC Exit Access Stairways --- 1019.3 (1) may atmospherically communicate between two stories

IEBC 903.1 --- 802.7.1 Existing vertical openings

Exceptions 1, 5.2, 9.2, 6.13 Enclosure not required when vertical opening does not exceed three stories and protected throughout by an approved automatic sprinkler system

Stairs serving floor levels with 0 SF work area. Stairs accessing the basement from the grade level and the stairs accessing the upper level from the office level are each provided with doors and enclosures to provide smoke-light construction (related reference: general intent of IEBC 803.2.3 but not triggered due to > 50% work area)

1012.7.2 Stairways & 1012.7.3 Other vertical shafts: no applicable

Change of occupancy is to an equal or lower hazard category (Table 1012.4)

Note: Existing inactive Elevator Shaft - shaft is eliminated by providing a horizontal fire-rated assembly at each story penetrated. Selected assembly provides a 2-hour rating. Design source ICC-ES ESR-5050

1012.8 Accessibility --- 1012.8.1 Partial change in occupancy --- 705, 806 and 906

705.1.1 Entrances: Alley entrance door is being retained, however a exterior door landing onto alley extends a 7% slope and is therefore not accessible. Existing Tower Avenue entrance is fully accessible and directional signage complies with IBC 1111 will be provided.

705.1.9 Toilet rooms: Building alteration provides for fully accessible toilet rooms

705.2 Alterations affecting an area containing a primary function --- exception 1

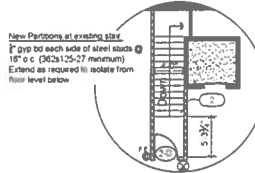
An accessible route (per ICC/ANSI 117.1) is not provided to the Office Level (1,823 SF). Although an accessible stair is being constructed at the location of an existing stair. Adding an elevator or lift to provide the accessible route would exceed 20% of the cost of alteration affects that area.

Energy Conservation IEBC 706, 811 908 Alterations shall conform to IECC as they relate to new construction only

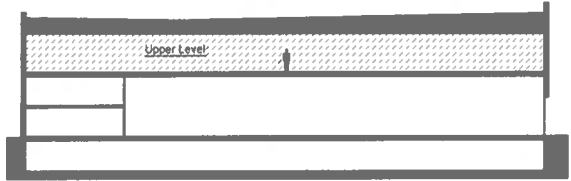
IECC CA02.4 Vertical Penetration (climate zone 7) rated 0.29 U max; Entrance doors 0.77 U max.

No requirement for SHGC when projection factor is 0.2 or greater (PF=0.35, 3050)

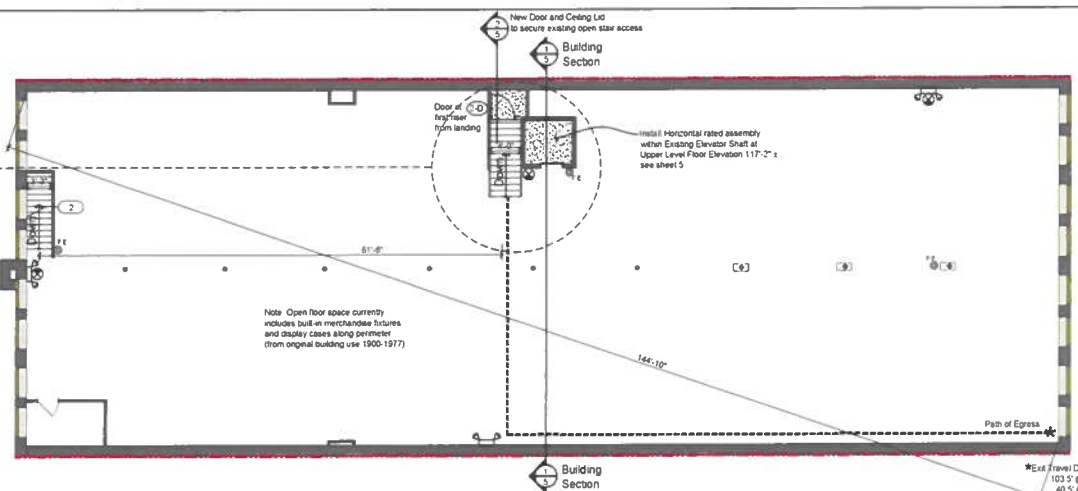




Required Construction if  
 Upper Level is activated  
 for occupancy



Floor Level Diagram  
 (schematic building section relative to Floor Plan)



117'-2" ±

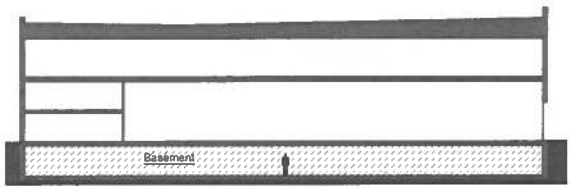
**Upper Floor Level - remains unoccupied**

Floor level contains no permanent workstations  
 Designated as Group S-1 Occupancy (no change), 22 Total occupants  
 6,440 SF Gross Floor Area 7,000 SF Building Area  
 IEBC defined Work Area = 0 SF, incidental items only  
 Sprinkler system added, NFPA 13 throughout

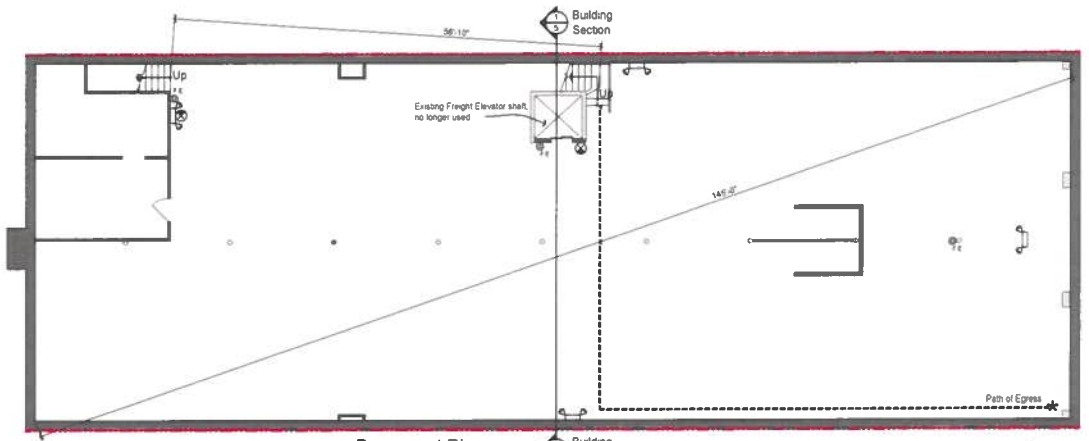


\*Exit Travel Distance  
 103'-5" @ this Level to stair as shown  
 40'-5" @ stair (equival length)  
 76' @ Grade Level to E. Exit. Exit door  
 222 feet total

Two Exits provided from this Floor Level



Floor Level Diagram  
 (schematic building section relative to Floor Plan)



90'-8 1/2" ±

**Basement Plan**

Floor level contains no permanent workstations  
 Group S-1 Occupancy (no change), 22 Total occupants  
 6,440 SF Gross Floor Area 7,000 SF Building Area  
 IEBC defined Work Area = 0 SF, incidental items only  
 Sprinkler system added, NFPA 13 throughout



\*Exit Travel Distance  
 101'  
 10' @ this Level to stair as shown  
 16' @ stair (equival length)  
 63' @ Grade Level to W. Exit. Exit door  
 200 feet total

Two Exits provided from this Floor Level

