

Rogue Architecture Project No. 2023.16

June 4th, 2022 – REV. #0

CODE ANALYSIS

Project Name: **Aquaponics – Walsenburg, CO**

Location: 2714 County Road 616
Walsenburg, CO 81089

Jurisdiction: **City of Walsenburg – Building Department**
525 S. Albert Avenue
Walsenburg, CO 81089

Huerfano County Fire Protection District
310 Main Street
Walsenburg, CO 81089

Architect: **Rogue Architecture, Inc.**
Steven Levesque, AIA: Architect of Record

Applicable Codes: 2015 International Building Code (IBC)
(W/ Amendments) 2015 International Fuel and Gas Code (IFGC)
2015 International Fire Code (IFC)
2015 International Mechanical Code (IMC)
2015 International Plumbing Code (IPC)
2015 International Energy Conservation Code (IECC)
2020 National Electrical Code (NEC)
2009 International Code Council (ICC-ANSI A117.1)

Existing Code Analysis

Provided by: Rogue Architecture
Dated: 03.31.2017
Applicable Codes: 2015 IBC w/ Appendix 'C'

Chapter 3 – Use and Occupancy Classification (IBC)

Section 302 - Classification

302.1	2-Business	Group B (Accessory Use)
302.1	10-Utility	Group U

Section 304 – Business – Group B

304.1 – Office Space

Section 312 – Utility – Group U

312.1 – Agricultural Building (Aquaculture)
Livestock Shelter
Tanks

Chapter 5 – General Building Heights and Areas (IBC)

Construction Type V-B (Non-Sprinklered)

Refer to Chapter 6

Proposed Building Area:

Existing Head House (Group B)	4,100 GSF
Existing Head House (Group U)	4,972 GSF
Proposed Fish House (Group U)	9,315 GSF
Existing Green House (Group U)	27,216 GSF
Total Floor Area	45,603 GSF

Table 503 – Allowable Building Heights and Areas – Type V-B (Non-Sprinklered)

Group U

Tabular Area	5,500 SF
Tabular Height	40'-0" / 1 Story

Group B

Tabular Area	9,000 SF
Tabular Height	40'-0" / 2 Story

Section 508 – Mixed-Use Occupancy

508.2 – Accessory Occupancies

- 508.2.1 - Occupancy Classification Section 302.1
- 508.2.2 – Allowable Building Height Section 504
- 508.2.3 – Allowable Building Area
10% of aggregate area & Max. Tabular NS area.

Proposed: Group B - 4,100 SF In Compliance

508.2.4 – Separation of Occupancies

Not required between main and accessory occupancies

Appendix C: Group U – Agricultural Buildings

Section C101 – General

C101.1 Scope

1. Livestock shelters or buildings.
4. Storage of equipment and machinery used exclusively in agriculture.
5. Horticultural structures, including detached production greenhouses and crop protection shelters.

Section C102 – Allowable Height and Area

Table C102.1 – Basic Allowable Area for a Group U, One Story in Height and Maximum Height of Such Occupancy.

Group U	Construction Type V-B
Tabular Area	12,000 SF
Tabular Height	40'-0" / 2 Stories
 C102.2 - One Story Unlimited Area	
Unlimited Area	60'-0" wide perimeter yards surrounding building

Section C103.1 – Mixed Occupancies

Mixed Occupancies protected in accordance with Section 508

Chapter 6 – Types of Construction (IBC)

Section 602 – Construction Classification

602. – Type V-B

Table 601 – Fire-Resistance Rating Requirements for Building Elements (Hours)

<u>Building Elements</u>	<u>Construction Type V-B</u>
Primary Structural Frame	0 hrs
Bearing Walls	
Exterior	0 hrs
Interior	0 hrs
Non-bearing Walls and Partitions	
Exterior	0 hrs
Interior	0 hrs
Floor Construction	0 hrs
Roof Construction	0 hrs

Chapter 8 – Interior Finishes (IBC)

Table 803.11 – Interior Wall and Ceiling Finish Requirements by Occupancy

Sprinklered	Exit Passageways	Corridors	Rooms
Group	A	A	B
B			
U	No Restrictions		

Chapter 9 – Fire Protection Systems (IBC & IFC)

Section 903 Automatic Sprinklers Systems

Figure 903.2 Summary of Occupancy Related Automatic Sprinkler Thresholds

Group B	
Proposed Total B	4,100 sf – Not Required
Group U	Unlimited
Appendix C	C102.2 – 60' Open Space
	Not Required

Chapter 10 – Means of Egress (IBC)

Section 1004 – Occupant Load

Table 1004.1.2 – Maximum floor area allowances per occupant

Occupant Load Refer to Egress Diagram **Sheet G1.0**

Section 1005 – Means of Egress Sizing

1005.3 – Minimum Required Egress Width	
Stair Width	0.3" / occupant
Other Egress Components	0.2" / occupant

Section 1009 – Accessible Means of Egress

1009.1 – Accessible Means of Egress	In Compliance
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Section 1016 – Exit Access

Table 1017.2 – Exit Access Travel Distance

B Occupancy NS	200'
U Occupancy NS	300'

Appendix C – Group U – Agricultural Buildings

Section C104 – Exits

C104.1 Exit Facilities Per Chapters 10 and 11

Exceptions

- | | |
|-------------------------|------------|
| 1. Max. Travel Distance | 300' |
| 2. One Exit Req. per | 15,000 sf. |

Section 1020 – Corridors

Table 1020.1 – Corridor Fire-Resistance Rating

U Occupancy – NS w/ Occ Load < 30 Occ	0 hr.
Occupancy – NS w/ Occ Load > 30 Occ	1 hr.

Chapter 11 – Accessibility (ICC•ANSI A117.1)

Section 1103 – Scoping Requirements

1103.2 – General Exceptions

1103.2.2 – Employee work areas	Limits per 907.5.2.3.1, 1009 and 1104.3.1
1103.2.7 – Limited access spaces	Non occupiable spaces
1103.2.9 – Equipment spaces	

Section 1104 – Accessible Route

In Compliance

Section 1106 – Parking and Passenger Loading Facilities

Table 1106.1 – Accessible Parking Spaces

Total Parking Spaces:	28
Required Mins No. of Accessible Spaces	2 (2 Provided)

Chapter 29 – Plumbing Systems (IBC)

Table 2902.1 – Minimum Number of Required Plumbing Fixtures

Group B – 40 Occupants (20 Male / 20 Female)

Group U – No requirements

Required Use Group	Water Closets	Lavatories	DFs	Other
B	1/25 (first 50) 1/50 Afterwards	1/40 (first 80) 1/80 Afterwards	1	Svc Sink

Provided - Existing Use Group	Water Closets	Lavatories	DFs	SSs
B	2	2	1 @ Break Room	1

Anticipated Occupancy per staffing plan accounts for 5 occupants

END OF CODE ANALYSIS