

TO: Justin LaFountain, CZEO, Planner II/Salem Town Planner

FROM: Arborio Brothers, LLC
Meghan A. Hope, Alter & Pearson, LLC
Corey Garro, P.E. and Kevin R. Johnson, P.L.A., ASLA, Close, Jensen & Miller, P.C.

DATE: September 22, 2020

RE: Application SE 1-20-10: 142 East Haddam Road – Response to Comments

Comments from the Salem Planning and Zoning Commission at its Meeting on August 25, 2020

1. Please provide the plan for fuel and oil leaks that may occur with the equipment planned to be parked at the Site. *The Applicant will have multiple spill kits on-site and employees are trained to look for spills and clean as necessary. The fuel tank and secondary containment system have been revised. The Applicant is proposing to install a 925-gallon, single wall steel tank with a secondary steel containment system that can hold 1137 gallons (which is a volume 23% greater than the fuel tank). The secondary containment system has sides to prevent rain or snow from entering the system. See attached photo of fuel tank with secondary containment system.*
2. As the aesthetic from the road is very important to Salem residents, how is the Applicant landscaping the Site to create screening from the road. *Based on the barn aesthetic of the building, the Applicant has elected to keep the existing wood fence along the street. The proposed landscaping will enhance this feature by adding 4 Honeylocust Trees and 8 Japanese Black Pine Trees along the frontage of the property on either side of the existing wood fence. The landscaping is in groups to achieve a natural design appearance. This design plan balances the need to create a streetscape with buffering, while also allowing visibility into the Site for security purposes.*
3. How many and what type of trucks will be regularly parked at the Site. *Approximately 11 trucks will be parked on Site. The types of trucks typically on the Site are as follows: mini excavator, backhoe loader, skid steer, trailer, box truck and dump truck (5 cubic yard).*
4. What is the frequency of activity for the Site. *The frequency of activity would be at the beginning and end of the work day. Employees would arrive on Site in their personal vehicles, obtain a work vehicle and leave to the job Site. At the end of the shift, the work vehicles and employees would return to the Site and the employees would then depart the Site in their personal vehicles.*
5. What are the proposed traffic impacts. *Proposed traffic impacts on the state highway are negligible. As noted above, the frequency of activity at the Site is at the beginning and end of each shift (typically 7 AM and 3:30 PM). There is approximately 52 feet of*

driveway length between the gate and the gutter line of East Haddam Road, providing adequate queuing space off the road for vehicles entering or exiting the Site.

6. Please provide a lighting plan and indicate the height and type of fixtures proposed. *The Applicant is proposing the installation of two LED lights in the parking lot with a mounting height of 17 feet (see Photometric Plan on Sheet 6 of 7). A cut sheet of the proposed fixture, pole and bracket can be found on Sheet 7 of 7 of the revised plan set dated 9/15/20. Additionally, the existing light mounted to the utility pole in front of the building will remain.*
7. Will vehicles be registered in Salem to provide tax revenue to Salem. *Yes, the vehicles parked on the Site will be registered in Salem providing a personal property tax revenue.*
8. What type of fencing will be used for security and for screening. *Based on the barn aesthetic of the building, the Applicant has elected to keep the existing wood fence along the street. The proposed landscaping will enhance this feature by adding 4 Honeylocust Trees and 8 Japanese Black Pine Trees along the frontage of the property on either side of the existing wood fence. The landscaping is in groups to achieve a natural design appearance. This design plan balances the need to create a streetscape with buffering, while also allowing visibility into the Site for security purposes. The entire building and parking area will be enclosed with an 8' chain link fence with gate.*
9. If the facility is in Salem will Salem get priority for service. *The priority of jobs is decided by Eversource, and the jobs must be completed in the order provided by Eversource.*
10. What impact on this facility will occur if Senator Blumenthal's proposal to break-up CL&P is adopted. *If a proposal to break-up CL&P is adopted the Applicant would have more than one contract, instead of one contract.*
11. We are obliged to agree to reimburse the town for the cost of its town's consulting engineer review of CJM plan. *The executed Agreement to Pay Consulting Fees and check was submitted to the Town on 9/11/2020.*
12. Can we provide some perspective on what the building will look like such as an elevation drawing. *Attached please find existing building elevations and proposed building elevations. The Applicant is proposing to remove the front overhang of the building, enclose the breezeway with front and rear doors, add double swinging barn doors to the front of the building, add windows and paint the building a barn red color. The Applicant is no longer proposing to raise the roof; therefore, the existing roof will remain.*
13. Need Health District sign-off before hearing. *Deep Test Hole Data/Soil Descriptions and Percolation Test Data were performed on August 11, 2020 and the results appear on Sheet 3 of 7 of the revised plan set dated 9/15/20. A subsurface investigation of the existing septic system was completed on August 11, 2020 and September 10, 2020. The existing septic system can handle the effective leaching area for the proposed use. See attached Site Septic Evaluation prepared by Close, Jensen & Miller dated September 11, 2020. Additionally, in accordance with Section 19-13-B100a of the Public Health Code,*

the plan includes a design plan/sketch to demonstrate that the Site contains a code complying area that can accommodate a sewer disposal system, should the existing system fail, see Sheet 4 of 7 of the revised plan set dated 9/15/20. The plans show that the 75-foot separating distance around the well is not impacted by the potential septic repair area.

Memo for Justin LaFountain dated September 8, 2020

Action Items

1. Accessible parking spaces are not noted on the plans. While 12 parking spaces for vehicles are provided, no ADA spaces are noted. An ADA accessible space should be provided, unless this site meets an exemption that I am unaware of. ***A paved handicap parking space and access route from the parking space to the building has been added to the revised plan Sheet 4 of 7 dated 9/15/20.***
2. The narrative notes that the existing building overhang will be removed, however the site plan notes that it will remain. This should be clarified and reconciled. ***The site plan has been revised to show that the existing overhang will be removed.***
3. The applicant should review Section 25: Groundwater Protection Regulations, with particular attention to Sections 25.3 and 25.4 and provide documentation noting how these sections are met by this plan. ***In accordance with Section 25.3, the Applicant has redesigned the leaching trenches and the plan now utilizes two rain garden basins in accordance with Section 25.4 to treat the runoff and allow clean water infiltration into the ground.***
4. Per Section 11A.4.16 of the Regulations, a signature block must be provided on the plans. It should state “Approved by the Salem Planning and Zoning Commission on (date)” and include a space for a signature by the Chairman or Secretary of the Commission. ***The signature block has been added to all plan sheets in the revised plan set dated 9/15/20.***
5. Any proposed landscaping details should be included, noting the type of plantings. ***Proposed landscaping and a plant schedule have been added to the revised plan set including 4 Honeylocust Trees and 8 Japanese Black Pine Trees along the frontage of the property. The landscaping has been clumped into groups so that it has a natural appearance while allowing visibility into the Site which meets the security concerns of the Applicant.***
6. Construction details of the fencing should be included. ***A chain link fence detail has been added to the revised plan set, see Sheet 7 of 7 dated 9/15/20.***
7. The Erosion and Sedimentation Control Plan should have the following statement added: “Erosion and Sediment Control Plan certified by vote of the Salem Planning and Zoning Commission on (date)” and include a space for the chairman or secretary. ***The note has been added to the revised plans, see Sheet 5 of 7 dated 9/15/20.***

Memo prepared by Robert A. DeLuca, P.E. of CLA Engineers, Inc. dated September 16, 2020

1. Provide evidence of Health Department approval of septic system and well reuse. *Deep Test Hole Data/Soil Descriptions and Percolation Test Data were performed on August 11, 2020 and the results appear on Sheet 3 of 7 of the revised plan set dated 9/15/20. A subsurface investigation of the existing septic system was completed on August 11, 2020 and September 10, 2020. The existing septic system can handle the effective leaching area for the proposed use. See attached Site Septic Evaluation prepared by Close, Jensen & Miller dated September 11, 2020. Additionally, in accordance with Section 19-13-B100a of the Public Health Code, the plan includes a design plan/sketch to demonstrate that the Site contains a code complying area that can accommodate a sewer disposal system, should the existing system fail, see Sheet 4 of 7 of the revised plan set dated 9/15/20. The plans show that the 75-foot separating distance around the well is not impacted by the potential septic repair area.*
2. Provide evidence of CT DOT approval of Encroachment Permit for change of use. *Within the DOT right-of-way the Applicant is slightly expanding the current driveway to achieve a 24-foot-wide driveway width. The Applicant will be adding 13.5 s.f. of pavement on the north side of the existing driveway and 7 s.f. of pavement on the south side of the existing driveway. It is the Applicant's understanding that this is classified as the reconstruction of a minor commercial driveway. The Applicant has a call into the DOT to confirm the need for an encroachment permit is not required for the change of use.*
3. Per Section 10.8 of zoning regulations, a paved handicap parking space should be provided near entrance to building. *A paved handicap parking space and access route from the parking space to the building has been added to the revised plan Sheet 4 of 7 dated 9/15/20.*
4. The applicant has indicated that the gravel surface will be proposed as compacted millings in lieu of gravel. The plan should be modified accordingly. *The revised plans dated 9/15/20 have been revised to show "proposed bituminous millings."*
5. The applicant should demonstrate that proposed infiltration trenches collecting stormwater from travel surfaces will meet stormwater quality standards per CT DEP Stormwater Quality Manual. The proposed infiltration trenches have been revised to rain gardens. *Attached please find a response to this comment prepared by Cory Garro, P.E. of Close, Jensen & Miller, P.C. demonstrating compliance with the CT DEEP Stormwater Quality Manual.*
6. The applicant should comment on the storage capacity of the fuel tank containment pad proposed. *The fuel tank and secondary containment system have been revised. The Applicant is proposing to install a 925-gallon, single wall steel tank with a secondary steel containment system that can hold 1137 gallons (which is a volume 23% greater than the fuel tank). The secondary containment system has sides to prevent rain or snow from entering the system. See attached photo of fuel tank with secondary containment*

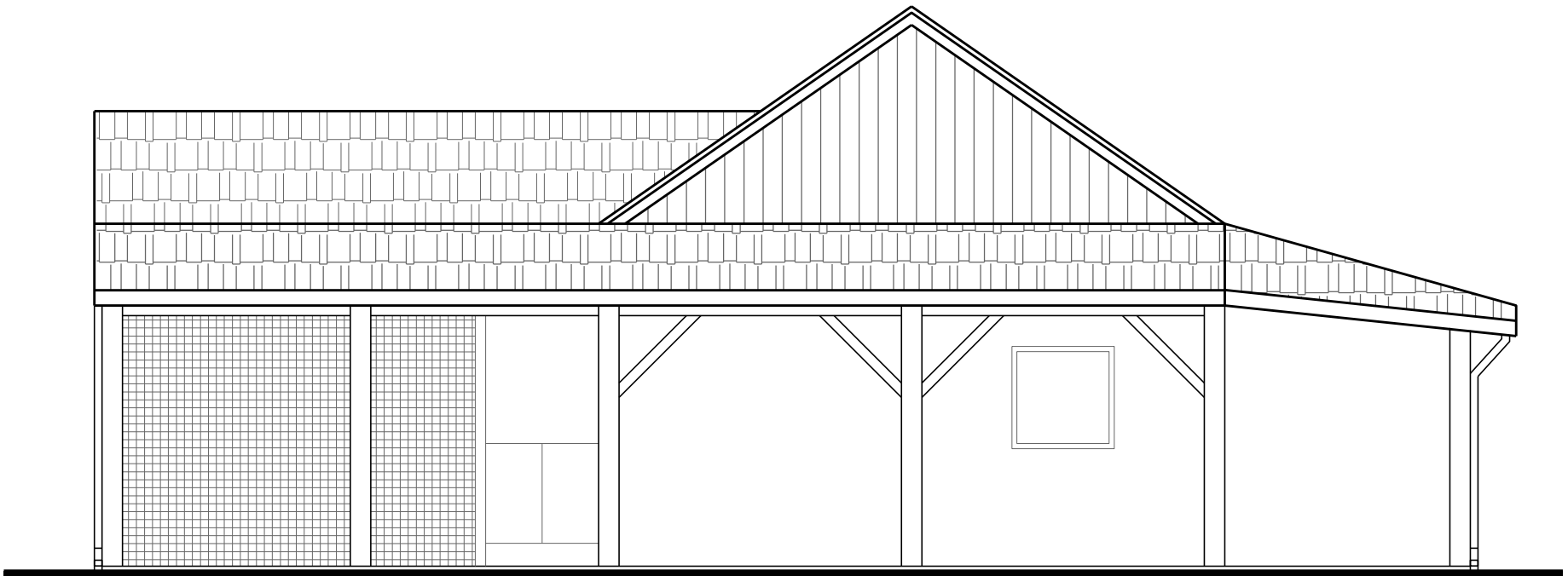
system.

Memo prepared by Building Department dated September 21, 2020

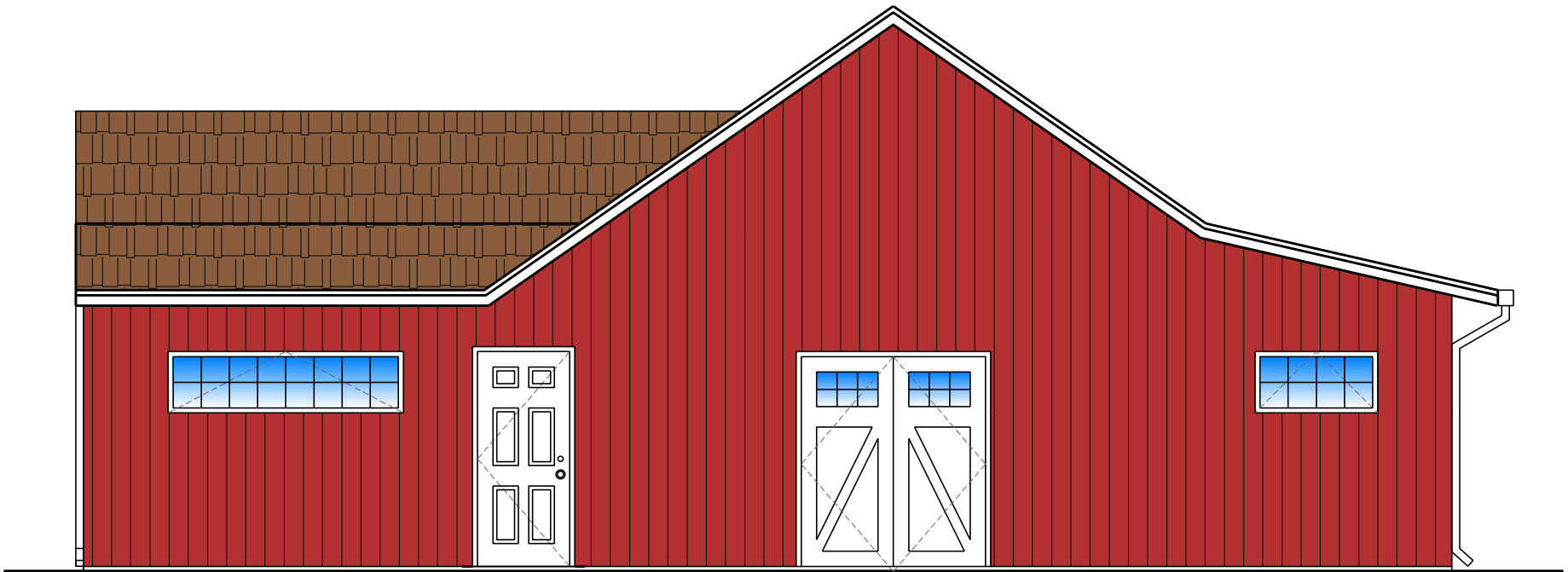
1. If there will be an office with an employee or any onsite employees, an accessible parking space is required. If an accessible parking space is required, an accessible route is also required. *A paved handicap parking space and access route from the parking space to the building has been added to the revised plan Sheet 4 of 7 dated 9/15/20.*

Comments Received from Fire Marshal on September 22, 2020

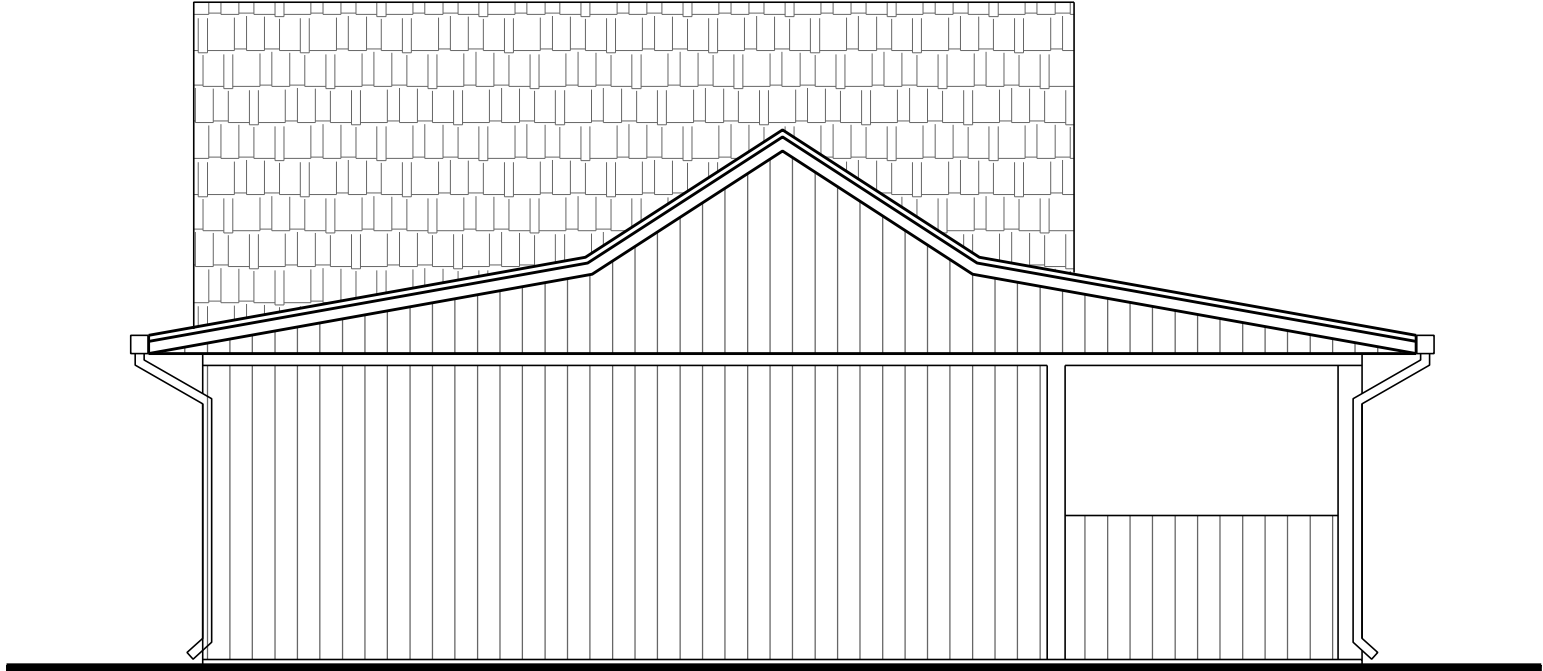
1. Needs details/explanations on the use of the building. *The Applicant no longer is proposing to raise the roof of the building and therefore vehicles will not be repaired on Site. Any vehicles repairs will be handled at the Applicant's other facilities in West Hartford or Cromwell. The Applicant is not proposing to build any interior rooms in the building. The building will be use to store materials needed for jobs. There will a table and a desk for reviewing plans. The existing bathroom will remain.*
2. 1,000-gallon diesel fuel tank must be protected from the elements. *The fuel tank and secondary containment system have been revised. The Applicant is proposing to install a 925-gallon, single wall steel tank with a secondary steel containment system that can hold 1137 gallons (which is a volume 23% greater than the fuel tank). The secondary containment system has sides to prevent rain or snow from entering the system. See attached photo of fuel tank with secondary containment system.*



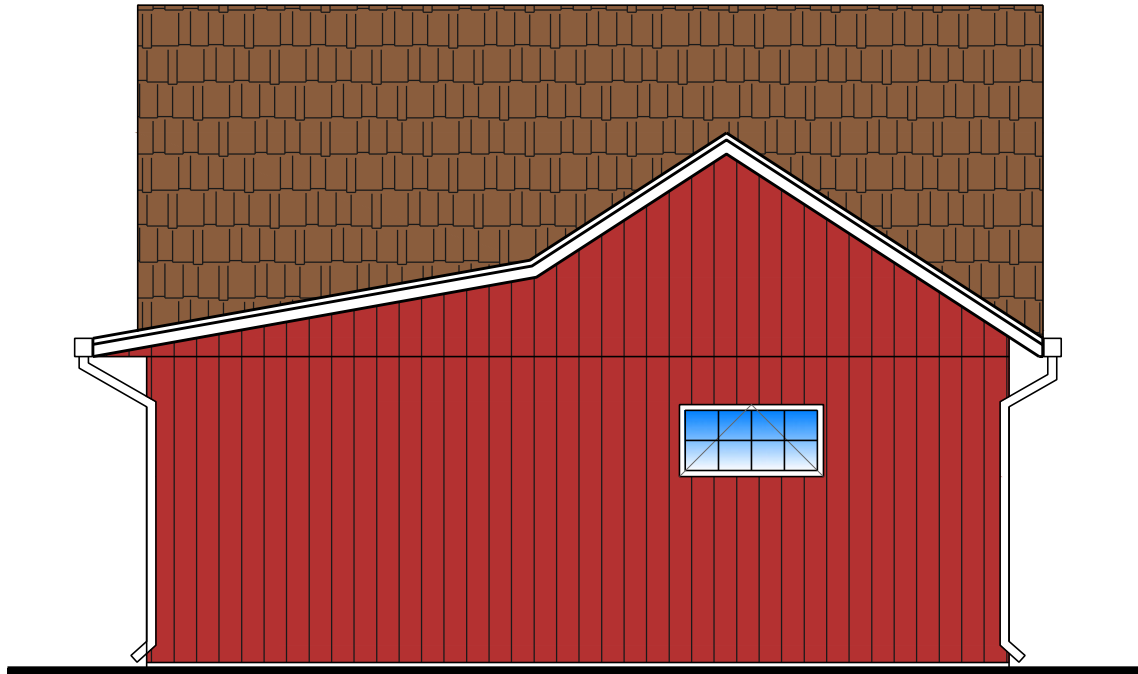
EXISTING FRONT ELEVATION



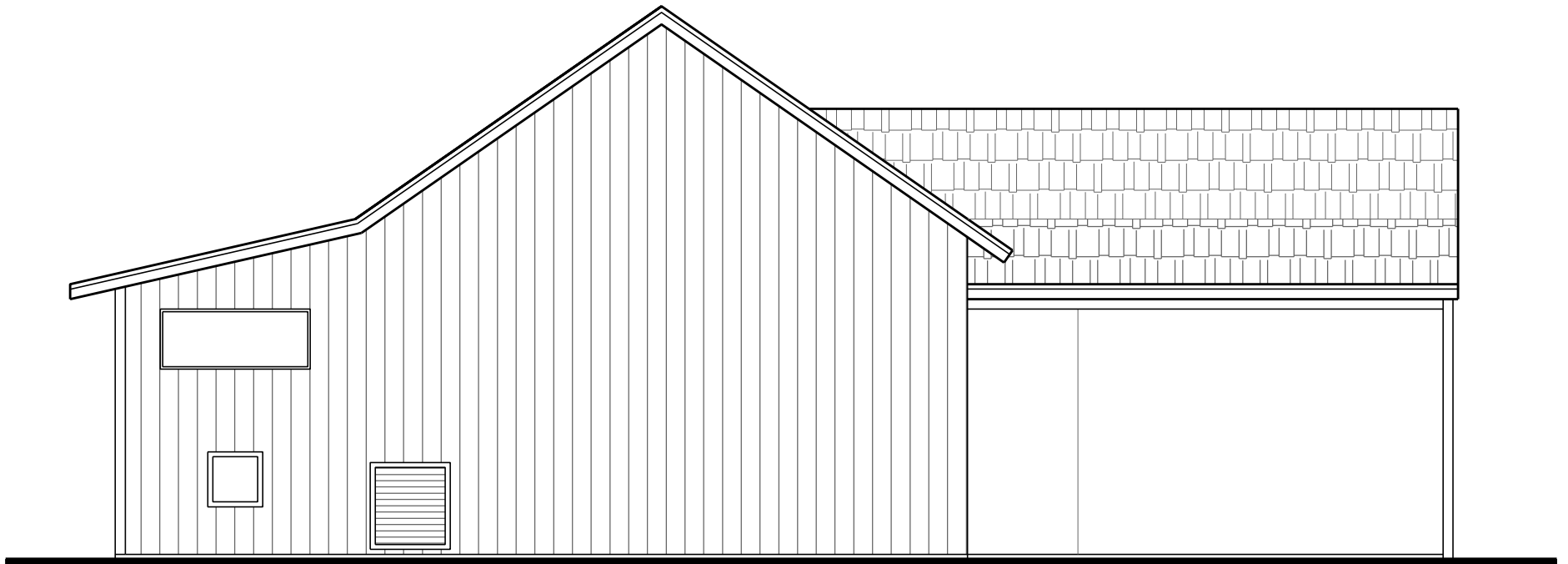
PROPOSED FRONT ELEVATION



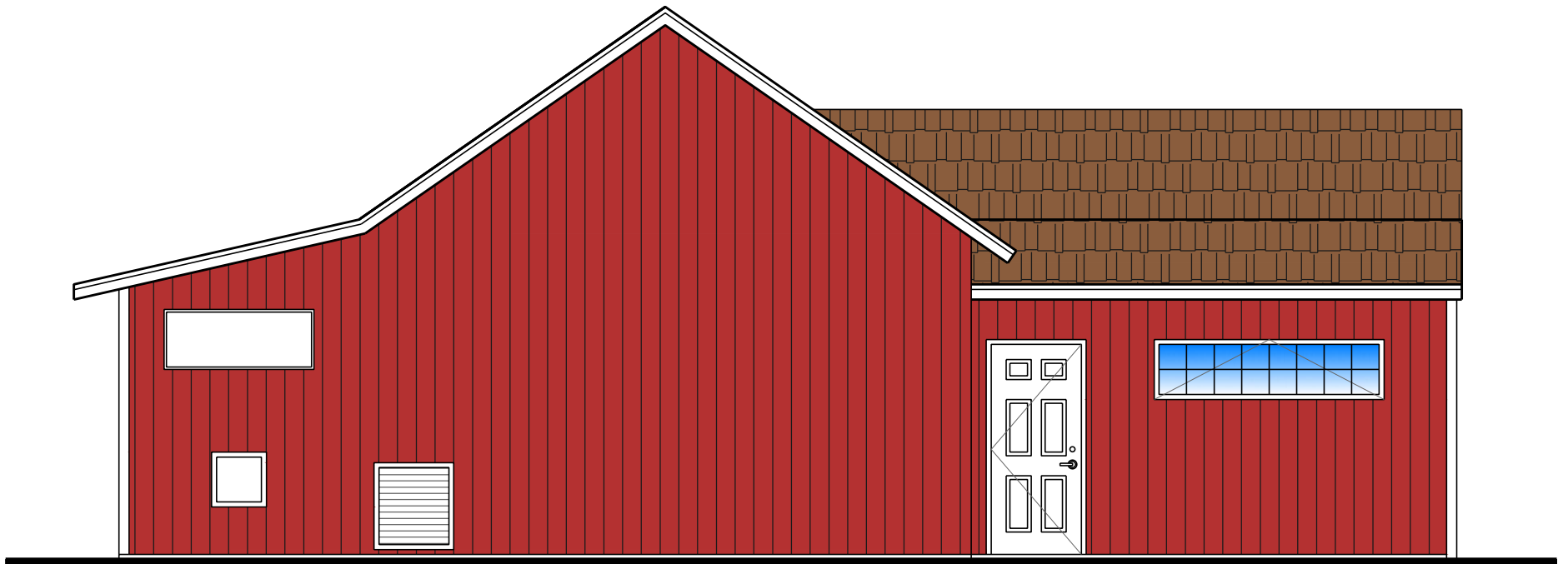
EXISTING LEFT SIDE ELEVATION



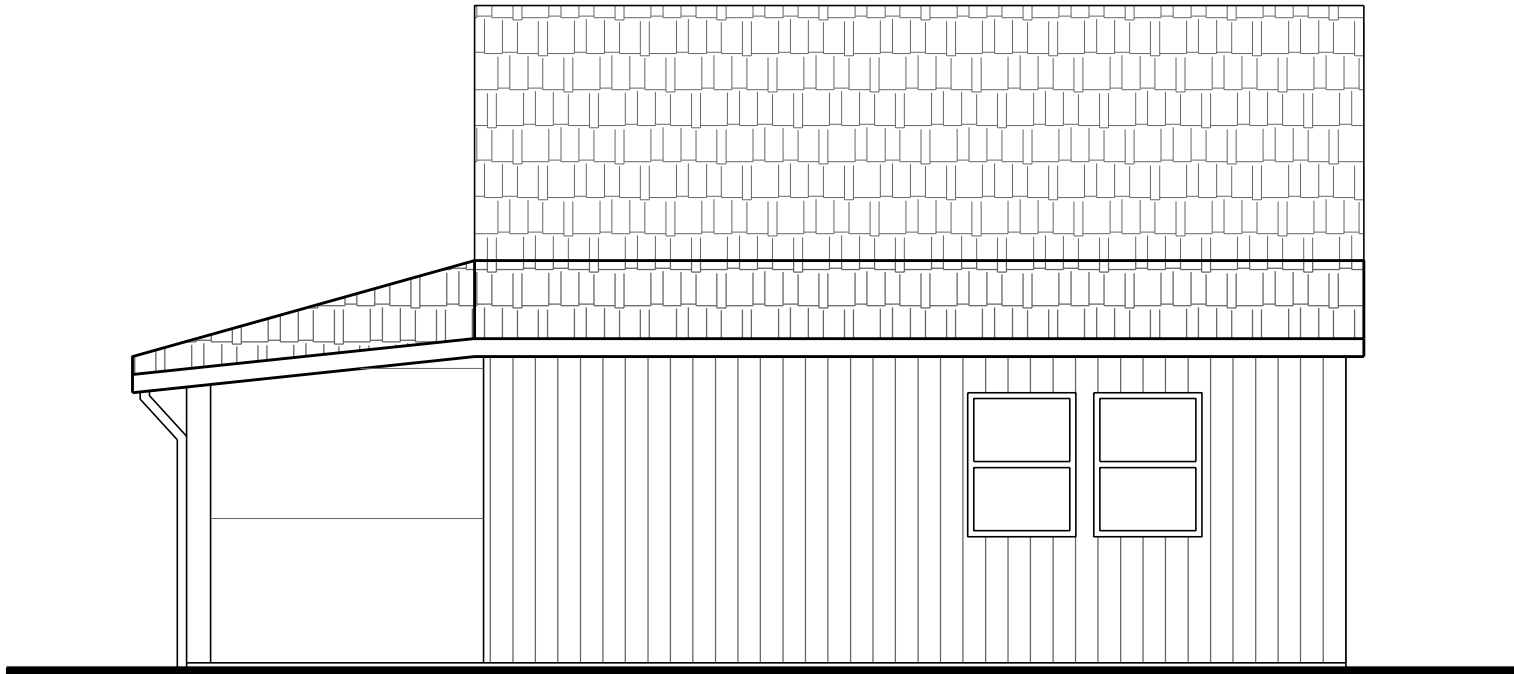
PROPOSED LEFT SIDE ELEVATION



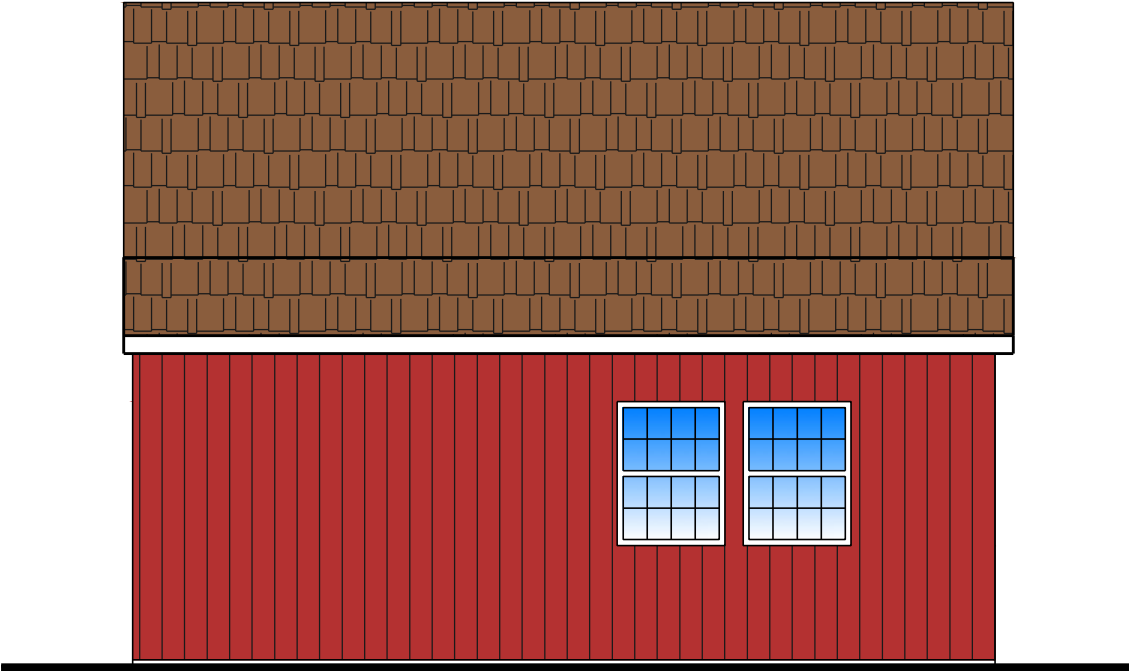
EXISTING REAR ELEVATION



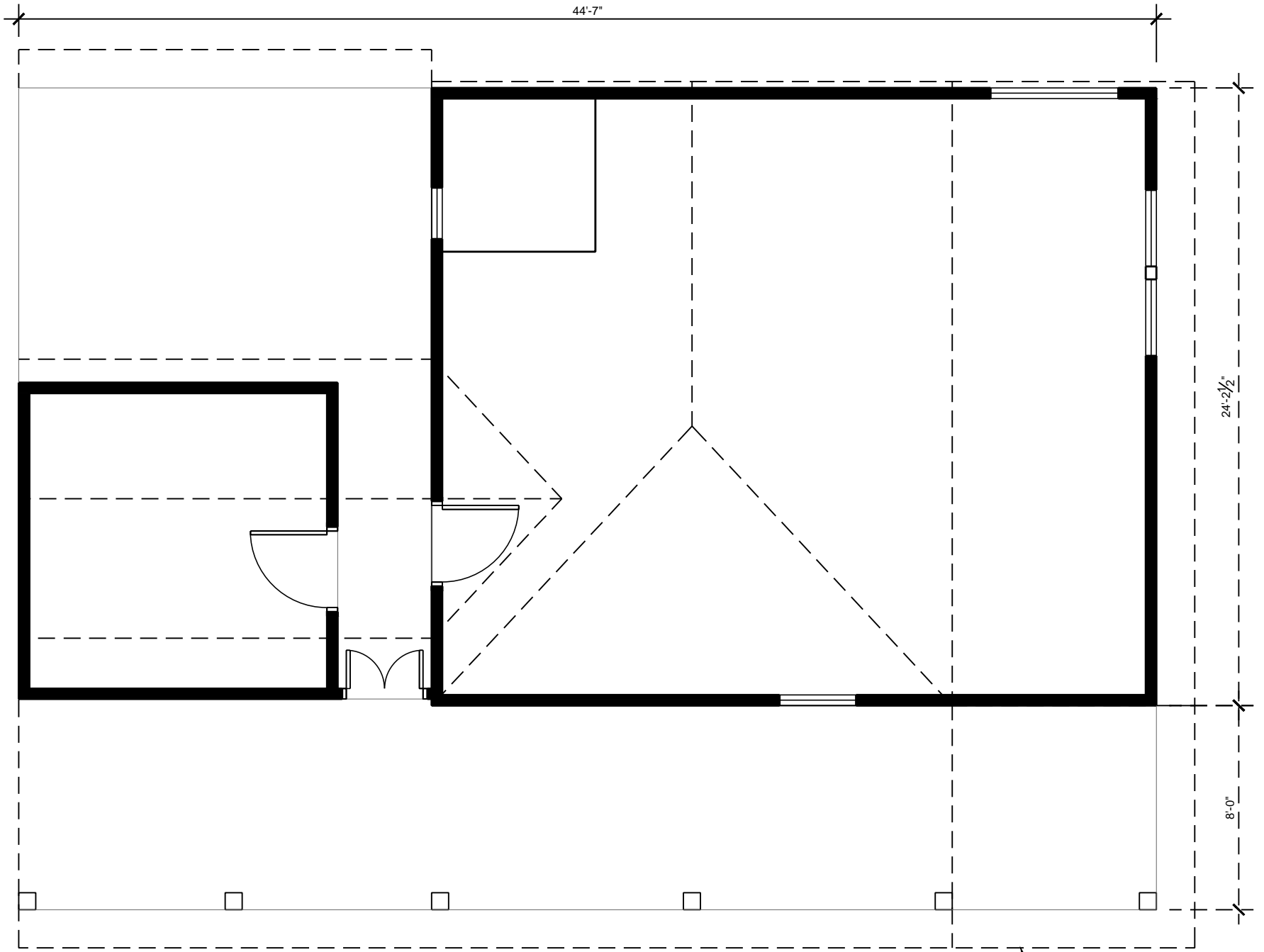
PROPOSED REAR ELEVATION



EXISTING RIGHT SIDE ELEVATION

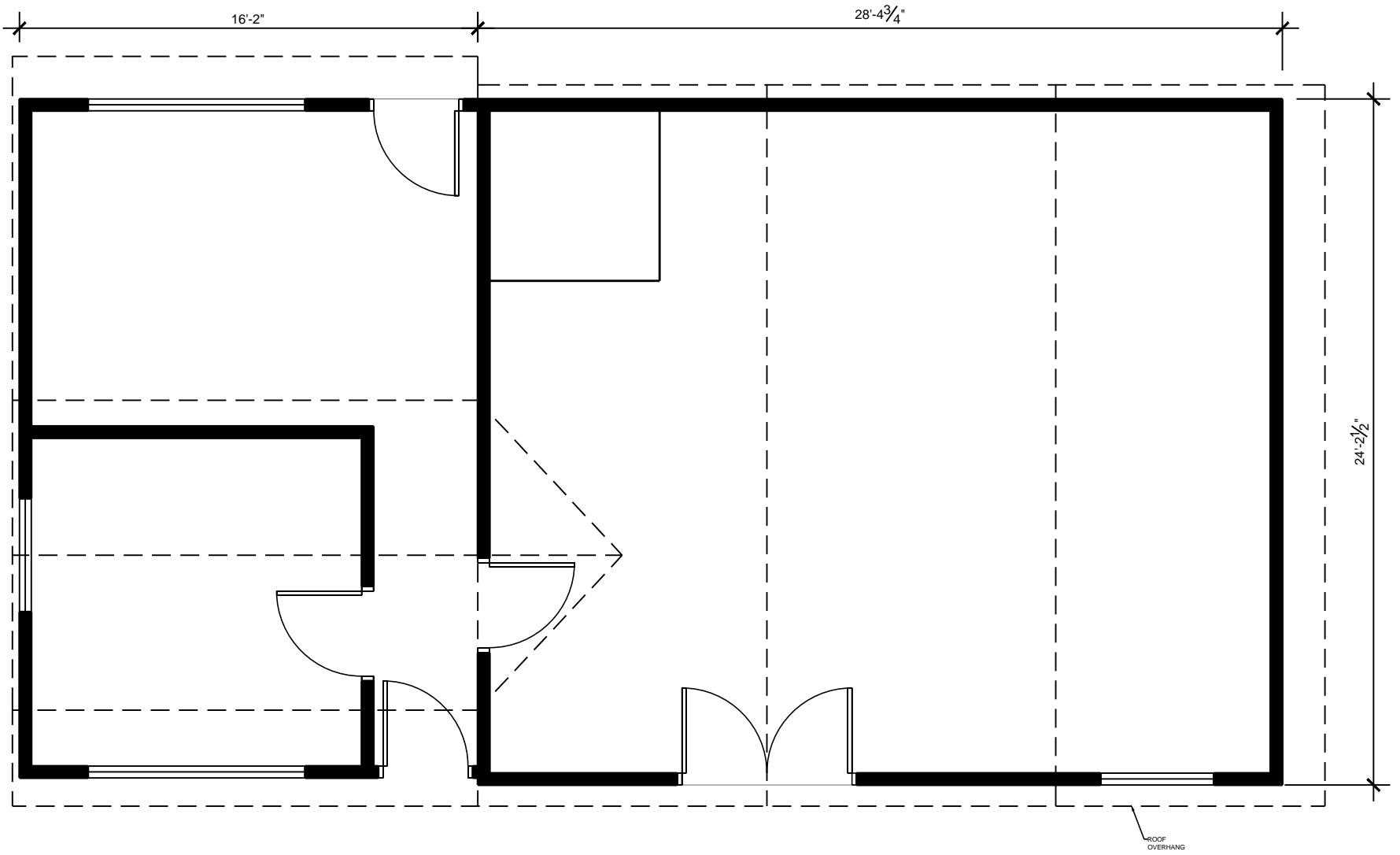


PROPOSED RIGHT SIDE ELEVATION



EXISTING FLOOR PLAN

ROOF OVERHANG



PROPOSED FLOOR PLAN

Proposed 925-gallon Fuel Tank with Secondary Containment



Arborio Construction
142 East Haddam Road
Salem, CT
Site Septic System Evaluation

Existing

From field measurements, the existing septic system consists of a 1,000-gal tank and 2 leaching pits. The leaching pits consist of round concrete chambers surrounded by stone. The outer diameter of the excavation area measures 13.66 feet for each area and the depth below the inlet pipe to each chamber is 5.2 feet.

The Effective Leaching Area (ELA) for each area is determined by the equation $ELA = D \times 3.14 \times \text{depth}$, where D is the diameter of the excavated area and depth is the distance from incoming pipe to bottom of chamber.

The ELA for each area is: $ELA = 13.66 \times 3.14 \times 5.2 = 223 \text{ SF}$. For the 2 pits the ELA is: $2 \times 223 = 446 \text{ SF}$

Proposed

The commercial site will be used to store vehicles and equipment, house a small office and break room. 10 parking spaces are being proposed. Although it is unlikely that 10 employees will be on site at any one time, for purposes of evaluating the site septic system, it is assumed that 10 employees will be on site for the entire day.

For office use, sewage flow generated per employee is 20 gpd. Assuming 10 employees, the daily flow is 200 gpd.

The required ELA for buildings with non-problematic sewage is based on design flow and application rates for areas of special concern (perc. rate slower than 1" per 30 minutes), the application rate for this site is 0.70.

Based on this, the ELA is: $200/0.70 = 286 \text{ SF}$

Conclusion

The required ELA for proposed use is 286 SF. The existing ELA is 446 SF. The existing system will handle the proposed sewage flows.

September 17, 2020

Proposed Motor Truck Terminal

Arborio Brothers, LLC

142 East Haddam Road

Salem, Connecticut

Stormwater Quality Measures

In order to meet the requirements of the 2004 CT Stormwater Quality Manual, the proposed stone trenches have been redesigned as rain gardens to provide treatment for the first 1" of stormwater runoff. Once treated by a special soil mixture at the bottom of the rain gardens, the filtered, clean stormwater will infiltrate into the surrounding soils.

The proposed grading on the site will direct stormwater runoff from traffic areas to two locations, where the Water Quality Volume (WQV) will be captured and treated.

$$WQV = 1''(R)(A)/12$$

$$R = 0.05 + 0.009(I)$$

I = % impervious

A = Total Area

Area 1 – Southwest corner of site; 0.11 Ac (0.065 AC impervious, 0.046 Ac pervious)

$$I = 0.065/0.11 = 59\%$$

$$R = 0.05 + 0.009(59) = 0.58$$

$$WQV = 1(0.58)(0.11)/12$$

$$WQV = 0.0053 \text{ Ac-Ft or approximately } 230 \text{ Cubic Feet}$$

Area 2 – Northwest corner of site; 0.71 Ac (0.45 Ac impervious, 0.26 Ac pervious)

$$I = 0.45/0.71 = 63.3\%$$

$$R = 0.05 + 0.009(63.3) = 0.62$$

$$WQF = 1(0.62)(0.71)/12$$

$$WQF = 0.0366 \text{ Ac – Ft or approximately } 1,594 \text{ Cubic Feet}$$

Rain gardens on the plan have been sized to meet the minimum size volumes as noted above.