MAISON DOUCET HENNESSY HOUSE BATHURST, NEW BRUNSWICK

Architectural Description and Proposed Restoration

Presented to:

AMDHHA Inc. 375 St. Peter Avenue Bathurst (NB) E2A 2Y4

Prepared by:



January 15, 2012



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AMDHHA Inc. 375 St. Peter Avenue Bathurst (NB) E2A 2Y4

Attention: Mr. Michael Hennessy

Subject: Architectural Description and Proposed Restoration Maison Doucet Hennessy House – Bathurst (NB)

We are pleased to present our Architectural Description and our Proposed Restoration of the Maison Doucet Hennessy House.

Our report also includes the architectural survey of the house showing the actual condition of the house and a proposed interior layout based on previous discussions with some members of the Association. This proposed approach is subject to many factors as mentioned in our report and is reflected in our attached Estimate of Probable Restoration Cost.

We appreciate the opportunity to assist your Association with our expertise and we trust that this report is acceptable. However, please do not hesitate to call at your convenience should you have any questions and/or concerns.

Yours truly,

Jacques Boucher, AANB, MIRAC President
Jacques Boucher Architecte Ltée

Encloses

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STATEMENT OF SIGNIFICIANCE:

The Doucet Hennessy House is located near a major interception in Bathurst and is significant for its association with two families in the community for over 200 years. These families – the Doucet (also called Doucette) and the Hennessy – have already established the Doucet Hennessy Association, a non-profit organisation whose goal is to "protect, preserve and restore" the Doucet Hennessy House.

The Doucet Hennessy House has teased and intrigued historians and architects for years. All who examine the house state that the Doucet Hennessy House is a very interesting house and marvel at how much of the house is intact after nearly one and a half centuries.

Ultimately, many would like to see the property open to the community and to visitors in a manner that will honour its builders by telling the story of Charles Doucet and their significant contribution to the growth and success of Bathurst throughout the 19th and the 20th centuries.

WHAT WERE THE ORIGINAL CONFIGURATION AND ARCHITECTURAL DESIGN OF THE PRESENT STRUCTURE?

In general, the early Acadian house was a rather simple affair – rectangular in shape, one or two rooms deep, one and a half stories high, and usually containing no more than three rooms total on the ground floor. The house sat close to the ground or were raised a half-story to allow for air circulation around and under the building. The floor plan was simple too; no interior halls or stairways cluttered the space.

So, further to the Dendroarcheological Analysis done in 2010, the standing original structure of the house was built in 1858 with large cedar beams for the sill and main-cross beams, while spruce was used for the framing of the one and a half stories first building. However, two small cross-beams in the basement was dated to 1808 and 1811 which lets us think that those pieces may have come from a first house built by Charles Doucet in 1808 as suspected by the families and which may explain the image from the King Survey in 1837 showing a hand drawn house of similar proportions with the words ''Charles Doucette'' written beneath.

Also, it's possible that the actual stone foundation of the house was erected in 1808 to construct a building, but without an historic structure report, it is difficult to date those stone walls.



ARCHITECTURAL DESCRIPTION AND PROPOSED RESTORATION

Even if we cannot prove that a previous house was built in 1808, documentary evidence places the actual house in this location from the middle of the 19th century (circa 1858) which received a major addition/renovation at a later date. These actual addition/renovations created the final plan that exists today and which we can describe as below:

DATE OF CONSTRUCTION

TYPE OF CONSTRUCTION

1808 to 1811

Period 1 – It appears that a one and a half stories house was built on a field stone foundation of 40' x 28' and demolished in 1858 in order to build the actual first portion of the Doucet Hennessy House. An historic structural report shall be done in order to confirm this hypothesis.

1858 to 1859

Period 2 – Following the above hypothesis, extension of the period 1- field stone foundation by 18" in height with brick. Construction of a one and a half storey house using cedar sills and cedar cross-beams. Those wood sills has been dated 1858 by a dentrochronology analysis, with two cross-beams dated 1808 and 1811. Evidence in the attic of the 1858 roof frame's profile showing an 8/10 pitch roof.

Between 1859 and 1914

Period 3 – Major renovations and an addition to the 1858 first house. The original house received a second floor with a large open attic and a new mansard roof. An addition to the house was also done at the same time on a new granite stone foundation (with a small crawl space) using the same roof line as the new mansard roof. See attached cross-sections of the house. Presence of birch's bark underneath the cedar shingles and evidence that the exterior corner boards was extended up to the new roof line. These elements indicate that the exterior wood trims on the front portion of the house may have belonged to the first construction in 1858. Also, the birch's bark remained in place even if the wood shingles may have been replaced at a later date.

1914

The house was bought by the Hennessy family.





IF SIGNIFICANTLY DIFFERENT FROM THE PRESENT FORM, SHOULD PART OF THE BUILDING BE RESTORED TO THE ORIGINAL STATE?

As previously stated above, the original house dated 1858 was a one and a half stories house with probably one or two rooms and a large open space. As the mission is to maintain, restore and perverse the historic Doucet Hennessy House, we believe that the entire house should be restored in a manner that the users and especially the visitors will recognize and appreciate the two (2) periods and even the three (3) construction periods. Those construction periods could be easily demonstrated using reduce models, drawings, photographs, archives and documentations. In our opinion, the front portion of the house where the two first construction periods occurred should be restored to reflect the years following the period 2 - major addition and renovation and the remaining of the house could be restored to accommodate the community and users. In other words, the ground level of the front portion of the house should receive a meticulous survey with great attention to details in order to restore this area as close as possible to the 1858 condition. In regards to the rest of the house, we believe that the interior could be restored with less authenticity, but using the same type of details such as windows, moulding, etc.

WHAT ELEMENTS SHOULD BE MAINTAINED AND RESTORED VERSUS ELEMENTS THAT SHOULD BE REPLACED AND/OR RECREATED?

Again if the mission is to maintain, restore and preserve the historic Doucet Hennessy House, some major decisions should be made. First of all, the limitation in regard to the access for the users, the community and especially the visitors should be established. As proposed in the previous question, should we limit the visitors to the ground floor of the original house with no access to the second floor, the rear addition and the basement? Secondly, could we invest a substantial amount of money and keep the actual foundation in place? How should we heat the restored building and do we need air conditioning for the summer season? How will the funding agencies react if the tourists are limited to a few rooms and the remaining rooms would be used as a community centre? Will the restoration be done in a few phases or only one project?

For sure, the house could be restored on the **actual foundations**, but this approach will have some consequences. Even if these foundations are in place for over 100 years, some movements are still possible which could damage any new interior finish especially plaster and door openings. Also, if the existing foundation stays in place, it will be almost impossible to insulate the basement and the crawl space which will have an effect on the heating costs. In our opinion, the house should be raised in order to provide a **new reinforced concrete foundation** and the house can then be levelled at the same time. Also a brick veneer (for the original portion) and granite stone veneer (for the addition) can be applied outside in order to reflect the original foundation work. By doing this approach, the basement can be insulated, heated and be used as service and/or storage spaces. A detailed proposed cross-section of a new reinforced concrete foundation is attached if this approach is considered.

Finally, the **attic** must be looked at seriously. First the head room underneath the braces is too low to provide any workable use of the space and the house must be insulated. Also, if the intention is to use the attic space for storage, the floor will have to be reinforced to meet the NBC's requirements and a secure access stairway must be provided. On the other hand, if we consider this attic as a not heated/used space, the above ceiling of the second floor can be easily insulated as any residential house by laying loose insulation on the attic floor. Also, by redoing the interior ceiling of the second floor, a continuous vapour barrier can be applied to the entire house. In our opinion, this is the most logic and economic way to approach the attic.

WHAT ARE THE COSTS ASSOCIATED WITH PERSERVING AND RESTORING THE BUILDING?

The cost associated with the preservation and restoration of the house will depend on many factors. Our preliminary cost estimate is attached to this report and is presented to show the cost of each intervention that is necessary or desirable, depending on the funding available. For example, if the restoration is done as a one phase project, then a new foundation can be looked at. However, if the funding is spread out on many phases, then the restoration will have to be done a different way.

WHAT PART OF THE BUILDING CAN BE USED FOR ADMINISTRATION PURPOSES; INTERPRETIVE/DISPLAY PURPOSES?

A proposed layout is attached to this report and a written suggestion is described below.

WHAT ARE THE COSTS ASSOCIATED WITH BRINGING THE BUILDING UP TO PROPER BUILDING CODES?

If all restorations proposed in this report are provided, the only items required to bring the house up to proper building code will be to provide the optional modifications proposed in the estimation cost, such as construct a new reinforced concrete insulated foundation, upgrade the actual wood windows and add some type of ventilation to the house which is already part of our estimated costs.

CREATING A PRELIMINARY CIRCULATION PLAN FOR TOURISTS/BUILDING USERS?

Proposed access/parking/entrances:

As shown on the attached site plan, the only access to the site and the proposed parking lot are from St-Anne Street. Then, from the proposed parking lot, concrete sidewalks should direct the visitors to the front entrance of the house and give access to the side entrance where a ramp is proposed. Also, this side entrance can be used by the community who may rent the **Activity Room**, while the house is closed to the public. This Activity Room has access to the **Kitchen** as well as the **Barrier-Free Washroom** even if the house is closed during weekends or after opening hours. A service door is also located in the Kitchen for delivery or catering services. These above doors (main and side entrances) should remain in place since they are part of the exterior architectural aspect of the house, except maybe for the Kitchen service door which has been probably added for convenience purposes on a later date. Removing this service door will not affect the aspect of the house either the building national code's requirements.

Proposed tourist/users circulation using the main entrance:

The visitors as well as users shall enter by a **restored porch** located in the front part of the house, facing St. Peters Avenue. This porch which is related to the second period of the house shall be kept as an air lock to the house and act as a vestibule. Once inside the house, the visitors will discover the **restored wooden stairs** and immediately be welcome thru the reception desk located in the room on their right. This Reception Room (**where a fireplace mantel shall be added as the original one**) shall be arranged as a living room with chairs and sofa, but also be used as an administration office with an old type desk. This approach will give a feeling of living space to the visitors where they could sit and ask questions in regards to the house.

MAISON DOUCET HENNESSY HOUSE

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The space behind the Reception Room should be kept as an **Archive Room** where the administration staff could store all the files, fax machine, photocopier and other technical items away from the visitors. Also, this Archive Room could be accessed by all the users from the lockable door located in the main corridor of the house.

Then the visitors could have access to an **Exhibition Room** located on the other side of the **Main Entry** which, as the Reception Area, should be restored as an open living space where a **reduce model** of the Doucet Hennessy House could be exposed, complete with artefact showcases and posters relating the history of the house. The reduce model can also show all the construction periods of the house including cross-sections of the two stage foundations, chimney bases and the attic/space framing details.

The remaining **Office Room** located inside the first portion of the house should be entirely restored as the remaining of the 1858 house and can be used as a private office and/or a future extension of any development which may occur in the tourist's interests. Also, if this happens, the door opening between the proposed Exhibition Room and this Office could then be used.

Use of the remaining of the house:

At this stage, a decision must be made if the visitors should limit there visit here or be free to visit the remaining of the house. **The original 1858 house was only one and a half stories with probably a small stair in the center of the space**. Even the existing partitions' including the two fireplaces has been added at a later date. So, in our opinion, the remaining of the house should be restricted to the community and be used as offices, studios and meeting rooms as shown on the attached restored floor layouts.

Proposed ventilation and heating system:

Given the historic nature of this building, it would be preferable to utilize a means of providing HVAC systems that will have minimal impact on the historic significance and aesthetics of the building. Any such systems should have their distribution systems concealed within the building fabric so as to be hidden from view.

To achieve these objectives, while maintaining an energy-efficient and cost-effective option, it is proposed that two air-to-air split system heat pumps be utilized for heating and cooling. One system would serve the ground floor, with distribution ductwork located in the crawl-space below. The second unit would serve the upper level, with ductwork located in the attic. All ductwork would be insulated to minimize energy loss to the otherwise unheated space. Each unit would be equipped with an electric heating coil to supplement the heat pump during periods when the outdoor temperature is too low to permit efficient operation of the unit. Outdoor condensing units would be positioned to be easily concealed either by a fence or shrubs and plants.

Ventilation would be provided with the use of two energy recovery ventilators (ERV's), one for each level. Exhaust air would be drawn from washrooms and storage/archive rooms, while supply air would be distributed via the heat pump distribution ductwork.

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Proposed electrical and security/fire alarm system:

Electrical work should include a new underground service and a new utility meter base and verify if existing service entrance panel is adequate, and replace if required including new breakers. Restoration should include new interior and exterior lighting and receptacles complete with new branch wiring as well as telephone/data in offices and workspaces. Combination security/fire alarm system with keyboard, fire and intrusion detectors should also be provided. The proposed new mechanical HVAC system should be coordinated with existing and new baseboard heaters.

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ESTIMATE OF PROBABLE RESTORATION COST		January 15, 2012
<u>Proposed work</u>	Cost (Optional)	<u>Cost</u> (Necessary)
1 - Site work including access driveway, parking,	(opnomi)	(1,00000001)
sidewalks, drainage, signage and landscaping:		\$85,000.00
2 - Raising of existing house, demolition of existing stone		·
foundation and construction of new concrete foundation		
c/w brick and stone veneers and concrete floor slabs:	\$75,000.00	
3 - Removal and replacement of existing cedar shingles		
including skirt and corner boards and wooden trims:	\$62,000.00	
4 - Removal and replacements on all 21 windows:	\$42,000.00	
5 - Removal and replacement of all exterior doors/frames		\$6,000.00
6 - Construction of a new exterior front porch and steps:		\$15,000.00
7 - Replacement of existing roof shingles by cedar shingles:		\$47,700.00
8 - Restoration of existing 5 dormers c/w all eaves and trims:		\$20,000.00
9 - Construction of three (3) faux chimneys and supports:		\$10,000.00
10 - Construction of new fire escape exterior stair and ramps:		\$12,000.00
11 - Interior demolition, new insulation, vapor barrier, new drywall		
finish, insulation in attic space and new window casing and trims:		\$175,000.00
12 - New ceiling on main floor c/w vapor barrier on second floor:		\$15,000.00
13 - Replacement of existing stair by the original or a new one:		\$30,000.00
14 - New interior partitions c/w new doors and frames:		\$48,300.00
15 - New wood floors on ground and second level:		\$65,000.00
16 - Reproduction of two fire place mantels c/w accessories:		\$16,000.00
17 - Reproduction of architectural features for the front		
portion of the house (original interior finish - visitors area):		\$40,000.00
18 - Interpretation materials (reduce model and others)		\$35,000.00
19 - Furnitures and miscellaneous items:		\$50,000.00
20 - Plumbing work:		\$20,000.00
21 - Ventilation and heating work:		\$55,000.00
22 - Electrical work including security system:	\$8,000.00	<u>\$55,000.00</u>
Sub-total:	\$187,000.00	\$800,000.00
Contingency (15%):	\$28,050.00	\$120,000.00
Professional Services (15.0 %):	\$28,050.00	\$120,000.00
Expenses (Administation ans Supervision):	\$5,000.00	\$50,000.00
Total (before taxes):	\$248,100.00	\$1,090,000.00
HST (13%)	\$32,253.00	\$141,700.00

Grand total:

\$280,353.00

\$1,231,700.00

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Exterior window frame of the front portion of the house.



Evidence of the pitch roof framing of the first house in 1858.



Evidence that both roofs has been built at the same time. No trace of shingle nails.

MAISON DOUCET HENNESSY HOUSE ARCHITECTURAL DESCRIPTION AND PROPOSED RESTORATION









Front porch of the house facing St. Peter Avenue. Main doorway with panel door surrounded by a rectangular glass transom and sidelights. A new porch should be constructed to act as an air lock and a vestibule. Barrier free access should be provided by a ramp located at the side entrance.

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Dormers located in the mansard roof have an appearance of solidity and strength and give a great feeling of height due to the roofline which effectively adds a full storey to the structure. The actual wooden boards attached to both side of the roof edges should be removed when the asphalt shingles will be replaced with cedar shingles.





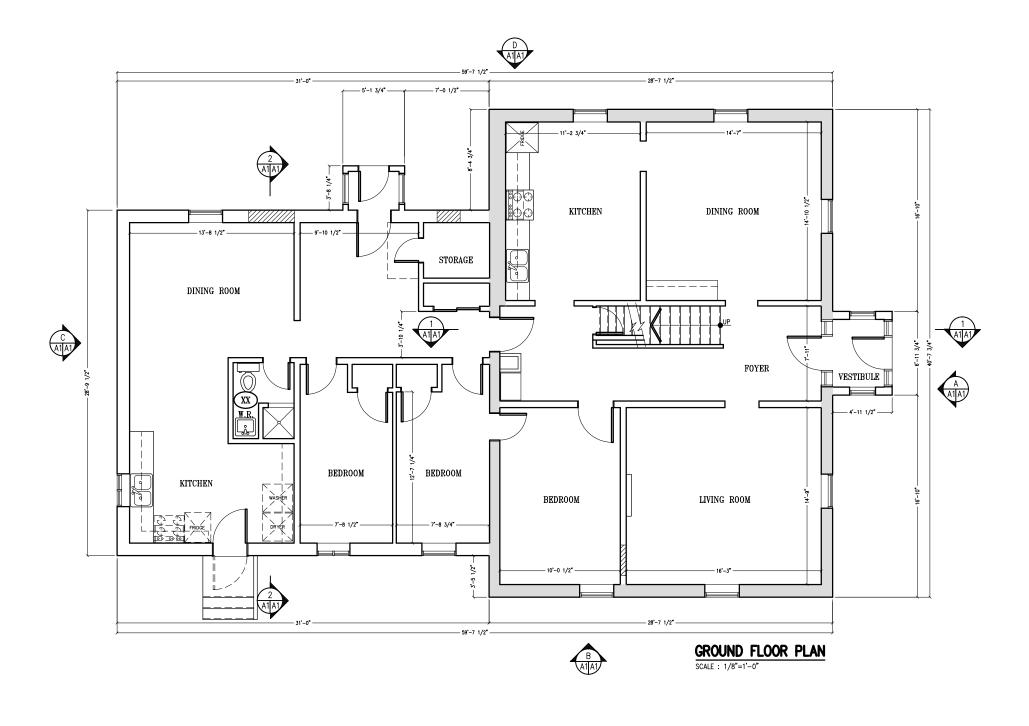
Actual interior partitions made of wood studs with laths and plaster on both side as well as the ceiling. The new partitions could be made of drywall and covered with thin plaster finish.

MAISON DOUCET HENNESSY HOUSE

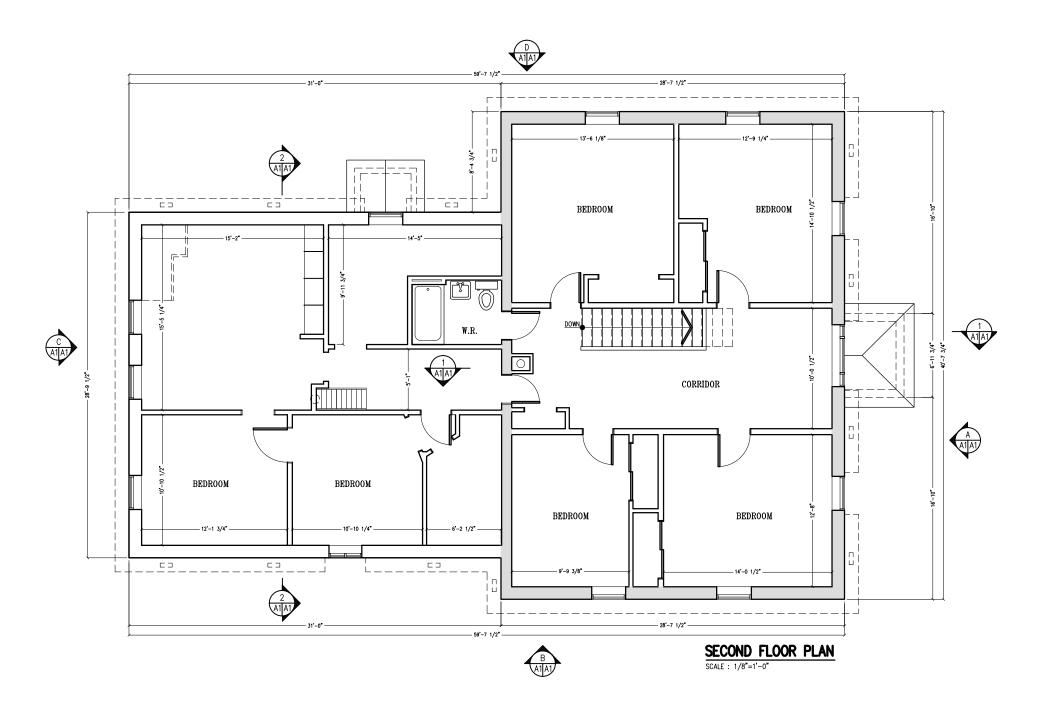
ARCHITECTURAL DESCRIPTION AND PROPOSED RESTORATION



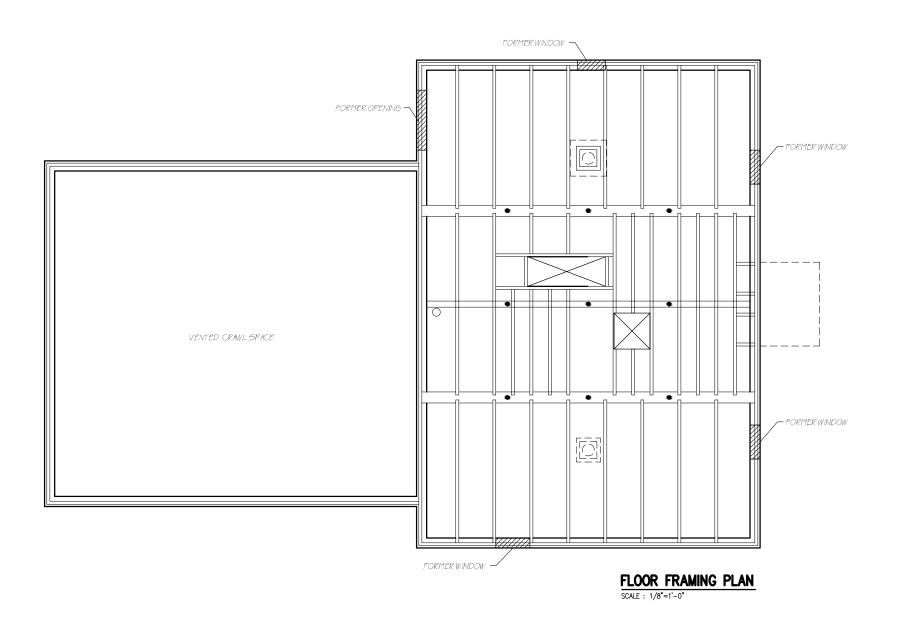
Photographs of the basement showing the field stone foundation (circa 1808) and the brick extension (circa 1858) with the cedar beams and cross-beams. Old chimney brick base and actual electrical panels. This basement as well as the crawl space located underneath the addition will have to be cleaned or replaced by a new reinforced concrete foundation as suggested and detailed in the report..



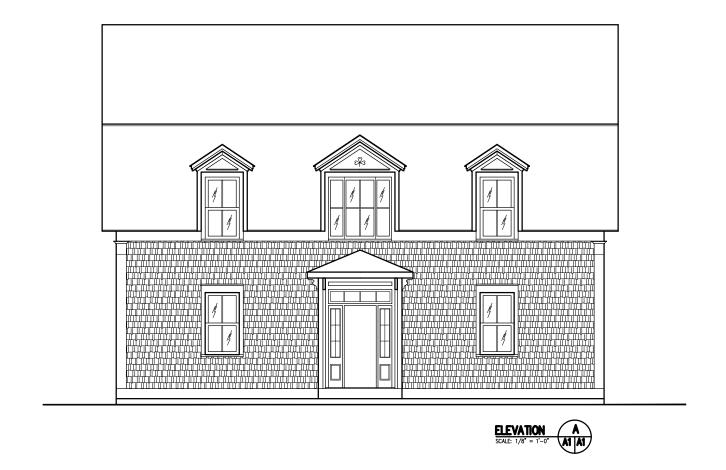
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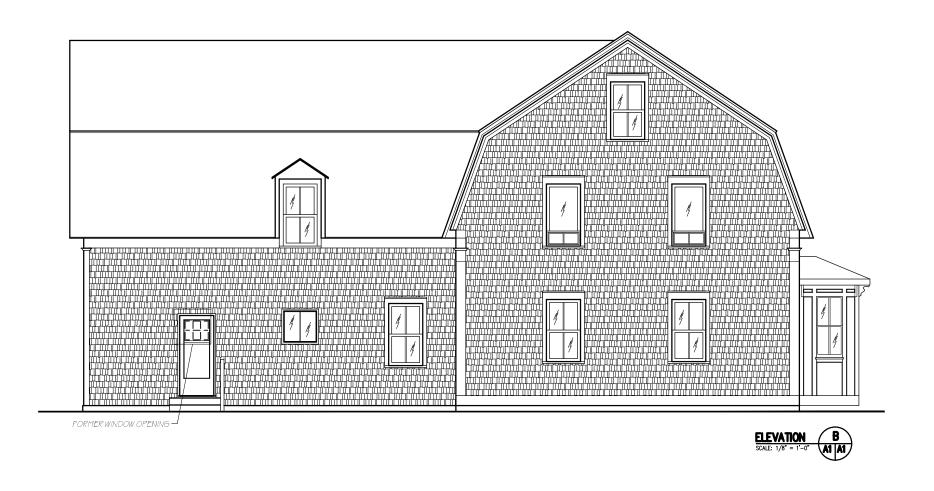
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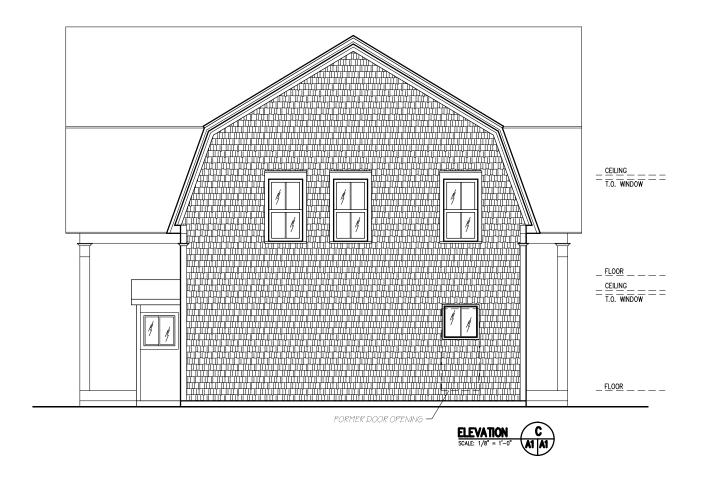
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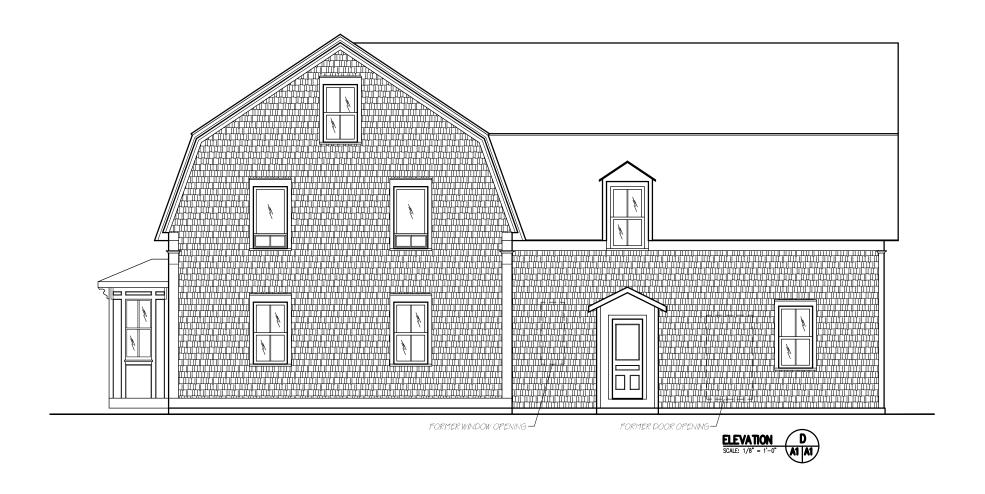
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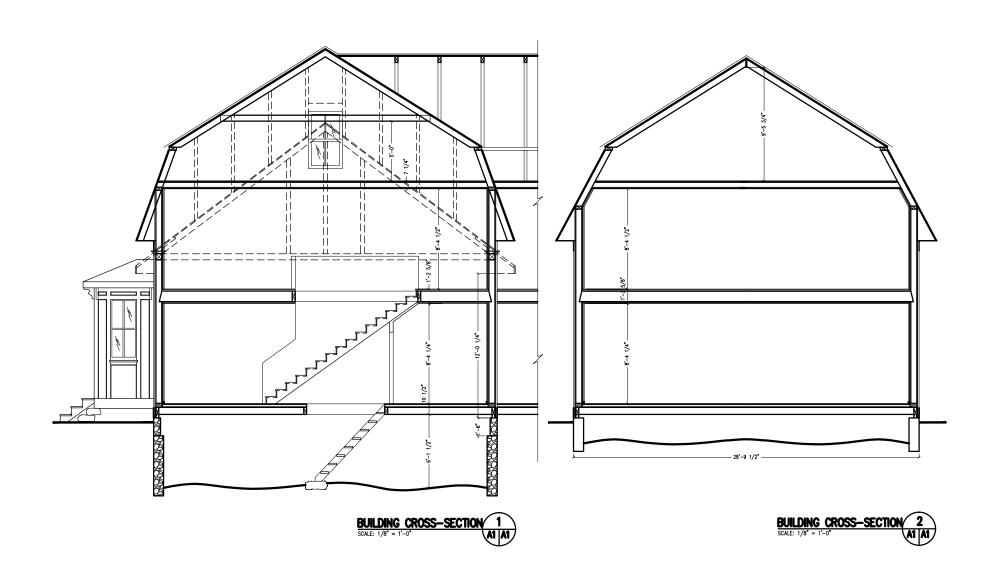
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