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Item No. 3
Halifax Regional Council
June 20, 2023

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed

Cathie O'Toole, Chief Administrative Officer

DATE: June 13, 2023

SUBJECT: Restoration and Preservation of Fleming Cottage

INFORMATION REPORT

ORIGIN

February 9, 2021, motion of Regional Council, item number 12.2 moved by Councillor Cleary and seconded by Councillor Mason

THAT Halifax Regional Council request a staff report on developing a plan to restore and preserve Sir Sandford Fleming Cottage, a registered heritage property owned by the municipality and situated in Sir Sandford Fleming Park.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, S.N.S. 2008, c. 39

79A(1) Subject to subsections (2) to (4), the Municipality may only spend money for municipal purposes if;
(a) the expenditure is included in the Municipality's operating budget or capital budget or is otherwise authorized by the Municipality;

...

Heritage Property Act, R.S.N.S. 1989, c. 199

2 The purpose of this Act is to provide for the identification, designation, preservation, conservation, protection and rehabilitation of buildings, public-building interiors, structures, streetscapes, cultural landscapes, areas and districts of historic, architectural or cultural value, in both urban and rural areas, and to encourage their continued use.

21 (2) Municipal heritage property... shall be and shall be deemed to be property acquired for a city, town or municipal purpose...

BACKGROUND

Sir Sandford Fleming Cottage, used as a summer residence by the Fleming family, was originally built in the early 1870's after Sir Sandford Fleming acquired a 300-acre parcel of land following his relocation from Ottawa to Halifax as Director of the Canadian Pacific Railway. Fleming is best known for his role as engineer of Canada's first railways, and the invention and promotion of standard time. Following the construction of the cottage, the property was further developed to include a barn, gazebo, extensive gardens and walking paths. Multiple additions have been completed since the original development and at present only the cottage (with additions) and barn remain. In 1908, Fleming deeded 100 acres in trust to the City of Halifax, creating a portion of what is now called Sir Sandford Fleming Park. Sir Sandford Fleming died in 1915 while spending the summer residing at the cottage.

The cottage was registered as a municipal heritage property under the *Heritage Property Act* by Halifax City Council on April 11, 1985. Character defining elements include the architectural elements and materials making up the exterior façades with the main interior feature of the cottage being the stone fireplace found in the east addition, completed after the original construction. Sandford Fleming Barn and the Dingle Tower are two other registered heritage buildings located on the same property that were registered separately. The Barn's proximity to and association with the cottage is considered pertinent to its heritage value.

In 2016, Dumarsq Architect Ltd (SPDA) was engaged by HRM to provide a restoration plan for the cottage, barn and surrounding grounds including potential future utilization of the site. The Dumarsq report recommended returning the cottage to the state the house would have been in when Fleming owned it in the late 1800s which would include the removal of the east addition. Other recommendations included leaving the front porch, despite it likely not being part of the original structure, and to keep the barn structure intact with no alterations.

Following the Dumarsq report, some building repairs were made to the structure as required, but the overall recommendations were not completed to bring it back to its original state. Currently the cottage is in fair condition with no issues from the outside elements.

DISCUSSION

In 2022 Facility Design and Construction completed another assessment and feasibility report of the cottage completed again by Dumarsq Architect Ltd (SPDA) (Attachment A). SPDA looked at three different approaches to the cottage: Preservation, rehabilitation, and restoration, along with a possible relocation within Sir Sandford Fleming Park.

Preservation

This approach keeps the original building and east addition, but no part of the building would be considered accessible. This would not allow for any type of public use or service. This is the lowest cost approach and could be used if the budget is not large enough to accommodate the accessibility renovations. This approach could also be considered the first phase in a full rehabilitation or restoration of the cottage.

Rehabilitation

This approach would keep the east addition and make the entire first floor accessible and result in the most available public space. This approach is considered the most appropriate approach for projects where heritage values related to the context of the historic place dominate, as is the case with Fleming Cottage. It is also considered most appropriate when alterations are required to accommodate new or existing uses. This approach would increase the public usability of the cottage.

This approach is supported by the Friends of Fleming, a non-profit group that encourages and supports preservation, enhancement and celebration of the park and Sir Sandford Fleming's legacy. The Friends of Fleming met with HRM staff to view the interior of the cottage in July 2021 and at that time asked HRM to not remove the east addition in order to maintain more usable space on the first floor.

Restoration

This approach would remove the east addition, essentially returning the cottage to the state it would have been in when Fleming owned it in the late 1800s. This would leave a much smaller footprint than preservation or rehabilitation and limit future uses compared to a rehabilitation approach. Some character defining elements would be lost with this approach.

Relocation

Given the close proximity to Dingle Road and lack of parking at the cottage, relocation has been discussed. Relocation is not typically a preferred option for heritage buildings as it may separate a building from its historical context. However, there is an argument to be made to relocate the cottage to a more central location in the park where it can be used more often. The ironstone foundation walls would not be moved with the building if the cottage were relocated.

The assessment indicates the following costs:

Approach	Cost
Preservation	\$201,000
Rehabilitation	\$369,000
Restoration	\$334,800

These costs do not include HST, allowance for inflation or relocation costs.

Any of the above-noted options that affect the character defining elements of the building would require input from heritage planning staff and an evaluation under the *Standards and Guidelines for the Conservation of Historic Places in Canada*. These Standards call for an approach that involves minimal intervention. Following this evaluation, heritage planning staff would provide a report and recommendation to the heritage advisory committee and Regional Council for consideration and approval of a substantial alteration.

Use of the Cottage

While a variety of uses may suit the site and site usage is yet to be confirmed, there is demand for space to support the municipality's Adventure Earth Centres which has a location in Fleming Park. This would be a use compatible with both the historic context and current municipal priorities and needs.

It is consistent with a request, from 2020, from the Friends of Fleming, who indicated they wished to see the cottage brought back to its original state though with accessibility, mechanical, and structural systems upgrades with a view to finding a use for the cottage such as a coffee or ice cream shop, interpretive centre, artist-in-residents program, other not for profit use, or to satisfy internal HRM needs, and provide a practical service to the park and park users.

Next Steps

Given the wider range of possible uses of the cottage associated with rehabilitation as compared to preservation alone or restoration, staff intend to continue to make necessary repairs and maintenance until a rehabilitation project can be advanced. With the high level of demands on the HRM's capital program, this is not expected in the near term. That said, as part of the Washroom and Drinking Fountain Strategy, Sir Sandford Fleming Park is scheduled for a washroom renovation to allow for gender neutral and accessibility upgrades in 2025/26 or 2026/27. Staff will consider the opportunity to rehabilitate the cottage by combining the cottage rehabilitation capital project and the washroom upgrade, either at the current location or at another location within the park. This would include consideration of risks involved with relocation of the cottage. As noted above, this option, if feasible, would be considered a substantial alteration and would require further evaluation and Regional Council approval.

FINANCIAL IMPLICATIONS

The estimated cost for rehabilitation is \$369,000 as of 2022. This is not currently part of the capital plan. With inflation, costs are expected to increase and will depend on market factors at the time rehabilitation is advanced. Repairs from the condition assessment report will require Capital funding and will be advanced for Council consideration through the Capital Budget process.

COMMUNITY ENGAGEMENT

Staff have engaged with the community group, the Friends of Fleming Park, on the state of the cottage and potential repairs and future uses.

ATTACHMENTS

Attachment A: Fleming Cottage Assessment and Feasibility Report.

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Ray Walsh Director Parks, Parks & Recreation 902-490-6591

Fleming Cottage

Assessment and Feasibility Report

June 2022

Prepared by S.P. Dumaresq Architect Ltd. for HRM

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HALIFAX



Fleming Cottage

Assessment and Feasibility Report

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1. Introduction

1.1 A Brief History of the Cottage

Fleming Cottage is a municipally registered heritage house. It is of Victorian wood-frame construction and sits on Dingle Road in what is now Sir Sandford Fleming Park. While architecturally simple, the cottage's heritage value lies in its association with its owner, Sir Sandford Fleming, and the cottage serves as an important link to Fleming's history and life in Halifax.

Sir Sandford Fleming was born in Scotland in 1827. Upon immigrating to Canada, Fleming trained and worked as a surveyor for various railway lines. In 1863, Fleming headed the plans for the Intercolonial Railway to connect the provinces of Nova Scotia, New Brunswick, and Upper and Lower Canada. Fleming later held the position of Engineer in Chief for the Canadian Pacific Railway, a significant position within Canadian history. In addition to these already impressive accomplishments, Fleming was the Chancellor of Queens' University for 35 years, designed Canada's first postage stamp, and was known internationally for establishing Universal Standard Time.

In 1869, Fleming moved from Halifax to Ottawa, but bought a substantial house on South Street near the Northwest Arm. Fleming also purchased 300 acres of land near Halifax in 1870 and 1871 to serve as a summer retreat. These lands stretched from the village of Jollimore (then called Arm Village) to the War Department lands at Melville Cove, an area which is now largely encompassed by Sir Sandford Fleming Park. This municipal park contains three other heritage properties connected to Fleming: St. Augustine's Church (1896), a similarly constructed barn (1870), and the Dingle Tower (1912). Fleming donated the land the church occupies, owned the barn, was the impetus behind the tower being built as a donation to the people of Halifax.

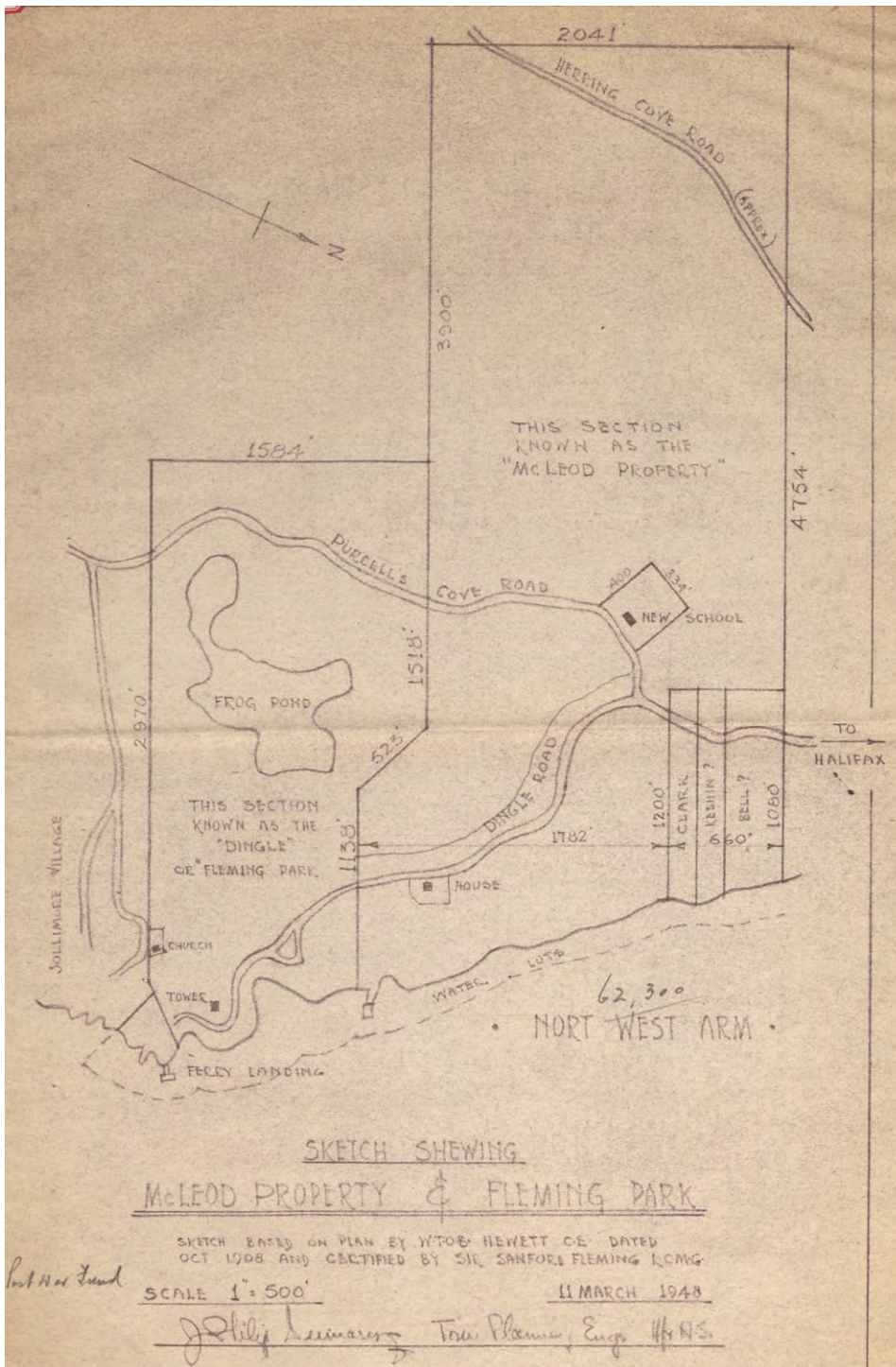
In 1908, Fleming deeded the majority of the park to the Lieutenant Governor in trust for the city of Halifax. The remainder was divided into seven lots – one for each of his living children and one for

1908 survey



himself. This latter lot contains what is now known as Fleming Cottage.

There were two extant buildings on the site when Fleming bought the land in 1870, one of which was on the site of the present cottage. The current cottage is thought to have been built around 1870. To add to the cottage's national significance, Fleming is believed to have died of pneumonia in the cottage in 1915 while visiting one of his daughters. The Fleming family owned the cottage until 1935, when it was sold to a John W. MacLeod. MacLeod gradually bought the rest of the Fleming lots and sold them all in 1948 to a Thomas Wallace, who then sold the lands to the City of Halifax, who still own the property now.



1948 survey, courtesy of the NS Archives



1.2 Recent Assessments and Reports

In 2016, S.P. Dumaresq Architect Ltd. (SPDA) was contracted to design an exterior conservation project. As part of this work, a site survey was completed by Whyte, McElmon & Associates, showing the cottage, barn, and its site, including a nearby rock wall and a portion of Dingle Road.

The SPDA team proposed taking a restoration approach to the Cottage, and returning it to the state the house would have been in when Fleming owned it in the late 1800s. As part of the restoration, the east addition was to be demolished, though it houses several Character Defining Elements of the Cottage. The restored Cottage was proposed to then serve as an Interpretive Centre for Sir Sandford Fleming, and would be tied to the other Fleming related heritage properties within the park through walking paths, gardens, and interpretive panels.

See Appendix A for drawings of the proposed Interpretive Centre and Appendix B for the SPDA Assessment from 2016.

1.3 Sir Sandford Fleming Interpretive Centre

Aside from being named after Fleming, there is little within Sir Sandford Fleming Park to demonstrate Fleming's importance within Canadian history or to interpret his connection to the park. The goal of the aforementioned restoration approach proposed in 2016 was to use the Cottage as an interpretive centre for Fleming, and to help interpret the park, tower, church, and barn's connections to Fleming through the Cottage. More moderate approaches, such as preservation or rehabilitation, could also be used to achieve this.

In any of these three approaches, which will be discussed in Section 4.1.2 of this report, the Cottage could be linked downhill to the Barn through paths and gardens. The Barn, which naturally has a greater open space conducive to public gathering, could serve as a space for the community to gather, perhaps administered by staff working from the Cottage. Parking could also be located around the Barn, as its site is much flatter than the Cottage's and already has an access driveway.

2. Report Objective

There are three objectives of this Feasibility Report:

1. Determine what work is required to make the Cottage useable within the overall concept of a Sir Sandford Fleming Interpretive Centre, as well as determining possible uses for the Cottage within such a park;
2. Estimate the costs of this work;
3. Recommend next steps.

This report will outline three different conservation approaches for the HRM: preservation, rehabilitation, and restoration. The work involved with each, their pros and cons in terms of heritage, and their cost will each be analysed.

3. Building Assessments

3.1 General

To make Fleming Cottage useable to the public, significant work would be required to upgrade the accessibility, mechanical, and structural systems of the building. Less significant work would be required to upgrade the buildings' envelope, finishes, and electrical systems.

3.2 Architectural

3.2.1 Accessibility

3.2.1.1 Site

The current site is not barrier free due to its steepness and lack of paved and smooth surfaces. As it stands, the only accessible paths through Sir Sandford Fleming Park are the road and the path along the sea wall. However, the narrowness of the road and lack of a sidewalk detract from the road's accessibility. There is currently only one parking spot for Fleming Cottage. SPDA recommends that the existing driveway be removed and the area landscaped. An accessible parking area could be located nearby with an accessible path to the front door.

Though the land immediately surrounding the Cottage is quite steep, there is sufficient space to create a path with switchbacks which could lead down to the Barn. Making such a path accessible would be beneficial to the concept of the Sir Sandford Fleming Interpretive Centre. It would also enable people to park around the barn, and then make their way up the hill to visit the house, all in a barrier free manner.

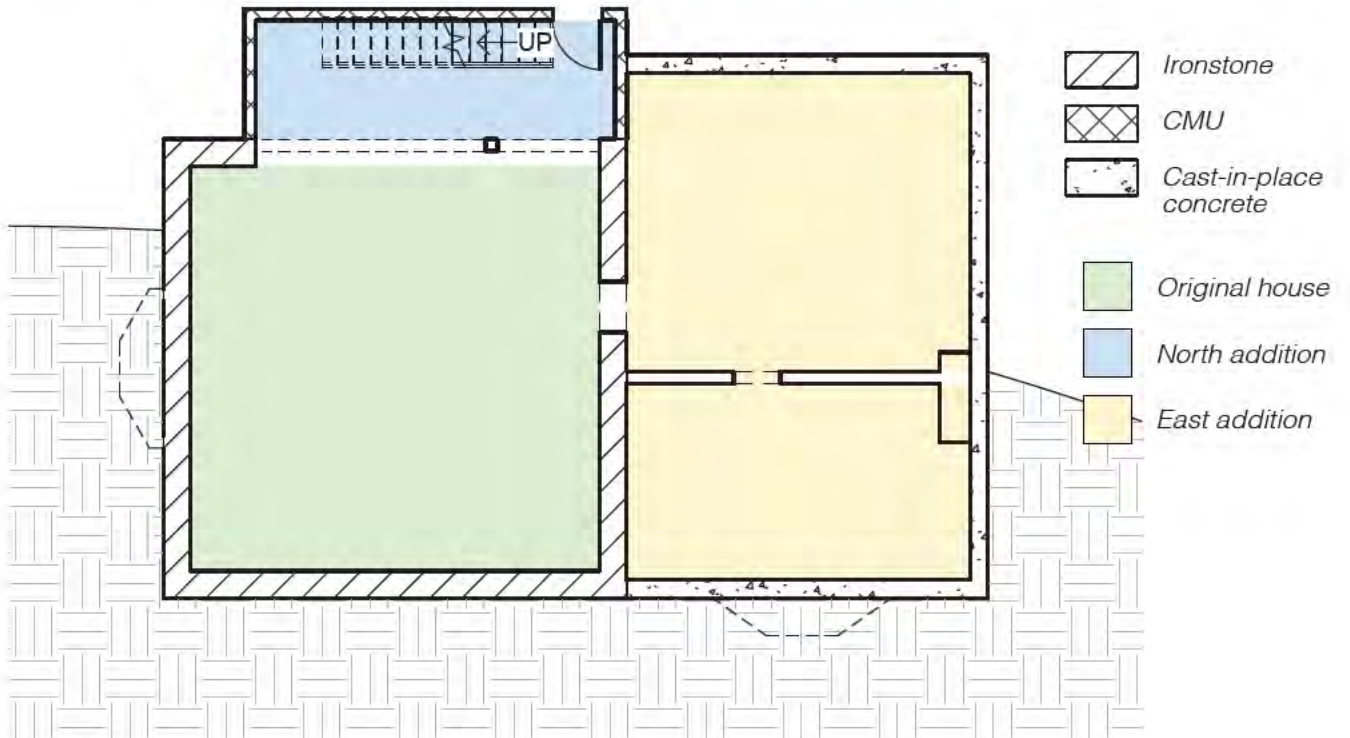
3.2.1.2 Front Entrance

The current front entrance is not barrier free. Though it is essentially on grade with the road, there is a 6" step up from the parking space onto the concrete porch, and another 6" step up from the concrete into the house. The existing concrete pad should be removed and replaced with a barrier free wood deck. Removing the concrete pad will also remove the columns footing, so new footings for the columns should also be provided. The ground around the entrance should be regraded to aid in making the entrance barrier free.





① Site
 $1/64" = 1'-0"$

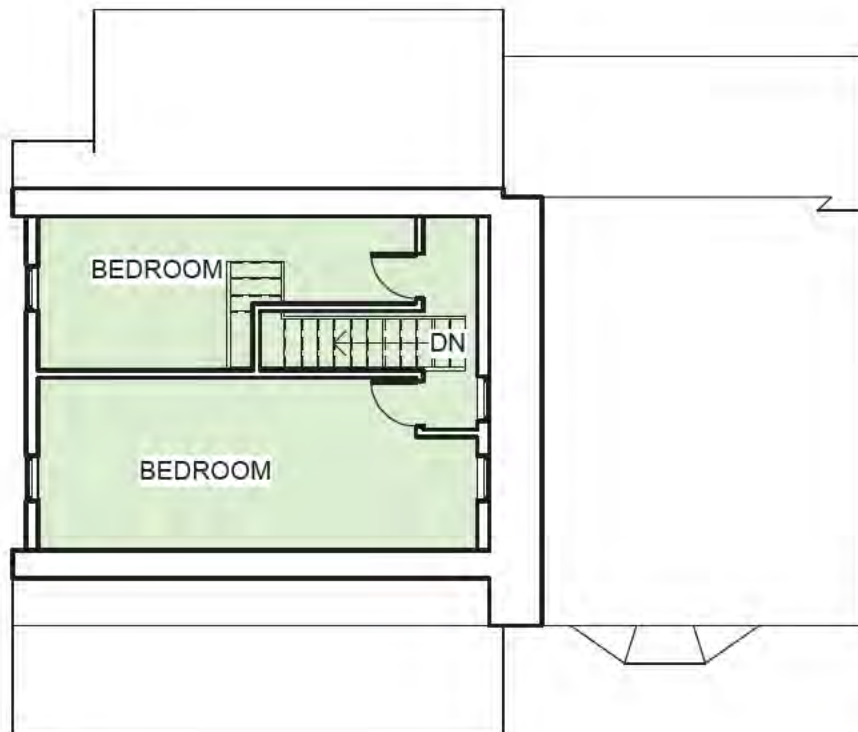


② Basement
 $3/32" = 1'-0"$





3 Level 1
 $3/32" = 1'-0"$



4 Level 2
 $3/32" = 1'-0"$

- Original house
- North addition
- East addition



The current, heritage door is 33" wide, which is too narrow to meet accessibility standards. This door and the transom above should be replaced with a similarly designed door that's 36" wide. The current door and transom should be retained, perhaps for use elsewhere in the house or around the park.

Once inside the house, there is a very small foyer which is too small to enable a wheelchair to turn around in. SPDA recommends that the wall between the foyer and the dining room be removed in order to widen the foyer.

3.2.1.3 Building Interior

Living Room

While the living room itself is accessible, the entries into the room are too narrow and will have to be widened to make the room barrier free.

Kitchen

The room itself is barrier free currently, but the entrances into the kitchen should be widened in order to render the room barrier free. The current kitchenette should also be replaced with a barrier free kitchenette.

Washroom

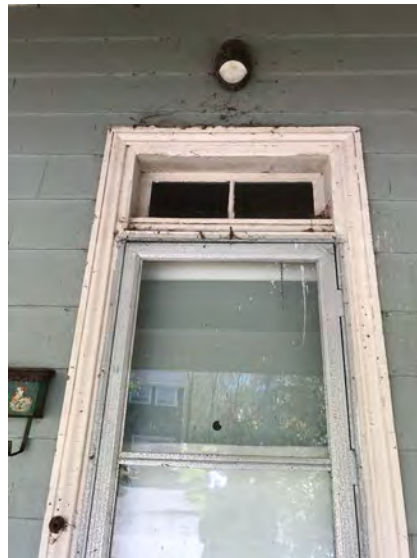
The current washroom is not barrier free and is only 4'5" wide. Consequently, it cannot be made barrier free. SPDA recommends that the entire washroom be demolished and a new washroom be built on the other side of the washroom's back wall, which appears to have once been a laundry room. This room is wider and has some existing plumbing, making it ideal to be turned into a barrier free bathroom. Additionally, by demolishing the washroom, the hallway adjacent to the stairs will be rendered barrier free.

Second Floor

The second floor is only accessed by a stair, and is consequently not barrier free. There is not space within the heritage house for an elevator to be installed, and the landing at the top of the stairs would complicate the installation of a stair lift. In light of this and the structural report in Section 2.3, SPDA recommends that the second floor not be made accessible to the public so that it is not required to be made barrier free.



Step onto concrete porch

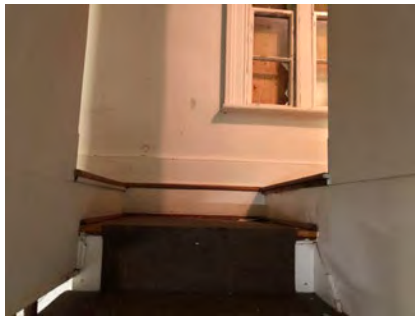


Front door and transom



Existing kitchenette

Top step of the stairs to the second floor



Basement entrance



Asphalt shingle roof and modified bitumen roof



Basement

As the basement is a service area and will not be accessed by the public, it does not need to be made barrier free.

Miscellaneous

All knob handles on doors on the first floor should be replaced with lever handles to make the floor level barrier free. The style of these lever handles should be chosen to complement the architectural style of the heritage building. It is recommended that the remaining door handles in the basement and second floor also be replaced with lever handles for improved accessibility on these levels.

3.2.2 Building Envelope

3.2.2.1 Roofs

The building's main roof has been reshingled recently and is in good condition. It does not need any modifications or repairs. The additions' modified bitumen roofs are also in good condition, and do not require any repairs. All rotten fascias should be replaced in kind. Chimney flashing should be inspected and upgraded if required.

3.2.2.2 Exterior Walls

Above Grade

The existing wood shingle siding should be scraped, primed, and painted. Rotten shingles should be removed and replaced. In the long term, all the shingles should be replaced with more historically accurate shingle coursing (5" instead of the current 9"). During this work, consider replacing the siding of the addition with different siding from the original in order to help distinguish the original design from the addition.

Foundation

The foundation walls are constructed from a variety of different types of masonry, all of which are parged. Drawing 2 on page 8 shows which walls are constructed of which types of masonry. The original house has an ironstone foundation with occasional blocks of granite, and is in fair condition. The north addition has a Concrete

Masonry Unit (CMU) foundation, and is in good condition. However, it is not advisable to leave CMU exposed to the elements, and SPDA recommends that these walls be strapped, insulated, and clad with wood shingles to match the wood siding. The east addition has a cast-in-place concrete foundation, and is likewise in good condition. The parging on all the walls should be patched where required.

On the front of the east addition, asphalt shingles have been used as cladding over the foundation wall, which is of unknown construction. The shingles should be removed. If the wall underneath is of masonry construction, the masonry should be parged to match the other foundation walls. If it is of wood construction, the wall should be clad in wood shingles to match the rest of the wood siding.

3.2.2.3 Windows

With the exception of the sashless sliding window on the north side of the addition, all windows should be rehabilitated. The broken glass in the single glazed units should be replaced. Where required, the wooden window frames and sashes should be scraped, primed, and painted. Operable, wooden storm windows should be installed over the existing windows.

The sliding window in the east addition (Window "B" on the plans) should be removed and replaced with windows to match the proportions and materials of the existing, character-defining windows, which are tall, narrow, and wooden. As the sliding window is wide and short, this may involve lowering the window sill and installing two or more windows in the space to achieve the recommended proportions.

3.2.2.4 Doors

All doors should be retained. As many as possible should be reused where possible with the widening of the doorways for accessibility purposes. Wood doors should be scraped, primed and painted. Metal storm doors should be replaced with wooden ones. A wooden storm door should be added to the back door leading



Concrete foundation wall and asphalt shingle clad foundation wall



Original windows in kitchen



Window B - sliding, sashless window

Back deck and stairs



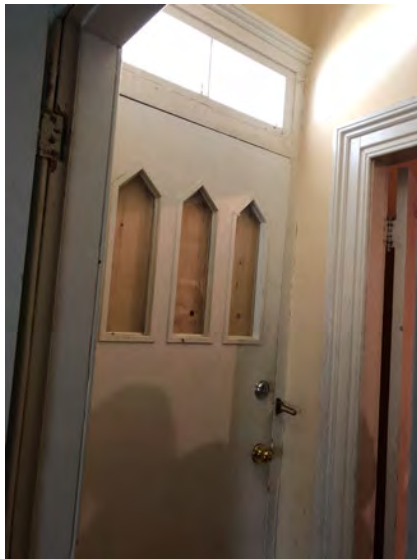
onto the back deck.

3.2.2.5 Insulation

It is expected that no insulation will be found in the walls of Fleming Cottage, in either the original house or the addition. Adding insulation is not recommended, as it may lead to condensation and rot in the wall, and could result in the building's envelope decaying faster.

3.2.3 Building Interior

Front door and foyer



3.2.3.1 Rooms

Front Entry

As outlined in Section 3.2.1.2, the wall separating the dining room and foyer should be removed to widen the entry for accessibility reasons. Other than changes listed in Section 3.2.1.2 (Accessibility) or Section 3.2.3.2 (Finishes), no changes are required to the front entry.

Living Room

Other than changes listed in Section 3.2.1.2 (Accessibility) or Section 3.2.3.2 (Finishes), no changes are required to the living room.

Kitchen

The kitchen island should be removed. The existing kitchenette should also be removed and replaced with a barrier free kitchenette. The bowing lintel above the fireplace should be reinforced.

Washroom

As outlined in Section 3.2.1.3, all plumbing fixtures should be removed and capped. The washroom should be demolished and the space used to widen the hallway. The glass in the window between the existing washroom and laundry room should be frosted.

Existing plumbing in laundry room



Laundry Room

As outlined in Section 3.2.1.3, the laundry room should be turned into a barrier free bathroom. This will require adding new plumbing lines and

fixtures, as well as a partition wall and door. The interior window (Window "A" on the plans) should be frosted.

Second floor

Layout to remain as is. Finishes should be patched and repaired.

Basement

Leave as is.

3.2.3.2 Finishes

Hazmat

Asbestos was confirmed to be present in the green floor tiles. The other vinyl tiles in the hallway, bathroom, and living room should be tested for asbestos as well. Asbestos containing tiles should be removed appropriately.

Surface mould has been remediated recently, but the state of subsurface mould in the building remains unknown. Further testing would be required to determine the state of subsurface mould. The ceilings of the living room and back halls appear to be mould impacted.

Ceilings

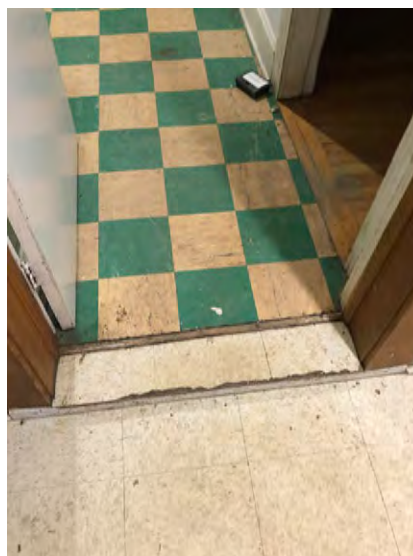
Painted ceiling finishes are in fair to poor condition. Ceiling plaster in the green bedroom upstairs is cracking, the plaster ceiling in the washroom appears water damaged, and the ceiling of the living room appears to be mould impacted. Damaged plaster should be patched and repainted.

Walls

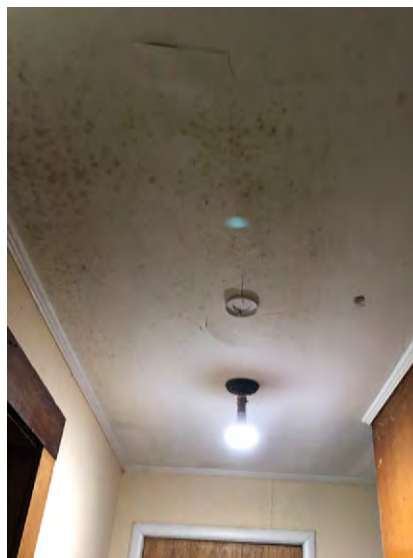
The interior walls' finishes are a mix of plaster and painted drywall, generally in fair condition. Throughout the house, minor cracks in the plaster are found, and paint is blistering and peeling. Damaged plaster should be patched and repainted to match existing. Where required, decaying paint should be scraped away and repainted to match existing. The drywall wall underneath the sliding window is significantly damaged by water, and all damaged drywall should be removed and replaced.

Floors

The wood floors are in good condition and



Green floor tiles in the hallway



Potential mould in the back hall ceiling



Water damaged drywall underneath sliding window

Wood floors



require few changes, except perhaps sanding and polishing. The carpet on the stairs should be removed and the wood underneath restored. All vinyl tiles on the first floor should be removed. It is presumed that these tiles were laid on an underlay overtop of historic, wood floors. If this is the case, the underlay should be removed and the wood floors restored. If this is not the case, the tiles should be replaced with period sensitive flooring.

Trim

The trim throughout the house is in good to fair condition. It should be sanded and repainted. The trim around the base of the wall is especially battered.

Decaying drywall adjacent to amethyst fireplace in living room



Millwork

The millwork in the kitchen is in fair to poor condition. It should be removed and replaced with barrier free millwork that is more period sensitive.

Bowing lintel in kitchen, with cracking plaster or drywall



3.3 Structural



May 26, 2022

SP Dumaresq Architect Ltd.
6389 Coburg Road, Suite 200
Halifax, Nova Scotia
B3H 2A5

ATTENTION: Mr. Syd Dumaresq

**RE: FLEMING COTTAGE, HALIFAX, NS
STRUCTURAL AUDIT OF EXISTING BUILDING**

INTRODUCTION

The undersigned visited the site on May 25, 2022, to review visible components of the structure of the above-mentioned building to determine what structural upgrades are required to open the building to the public. Note that no finishes were removed, therefore this report is necessarily limited in its scope and accuracy. The only structural elements which could be visually observed was the majority of the main floor framing which could be reviewed from the basement.

The building consists of the original cottage and two additions. The original cottage has two levels plus a basement. The original cottage main floor framing could be observed from the basement as there was no ceiling in this area. An addition appears to have been constructed on the East side of original cottage. This addition consists of a main floor and a crawl space/basement. The portion of the East addition which has a basement also has a ceiling for the most part making access to the structure difficult. No access was gained into the crawl space area. A second addition was observed on the North side of the cottage. This North addition basically houses a staircase from the basement to the main floor level. The underside of the main floor framing in this addition was accessible.

GENERAL

Note that the National Building Code of Canada (NBCC) prescribes a Live Load of 40 pounds per square foot (PSF) in a residence, however when the building is opened to the public, the Live Load is increased to 100 PSF. This in itself makes almost all floor framing structural members inadequate, therefore a general allowance should be made to double up all joists and beams framing floors which will be accessed by the public. It may be possible to leave the upper floor off limits to the public which could relieve the requirement to reinforce the upper floor framing.



No part of the roof framing in the original building or additions could be observed, therefore we cannot comment on the adequacy of the roof framing. If the roof is to be evaluated, openings through finishes will be required.

MAIN COTTAGE

The main floor framing is framed with 3x8 joists spaced at about 27" c/c spanning 10'-0". These joists will require reinforcements for the reasons mentioned above. There is one particular section of floor framing which is completely unstable and inadequate. Refer to the photograph below.



This section of floor should be temporarily reinforced as soon as possible. A couple of jack posts will stabilize this area. The foundations walls for the original building are constructed with stone and they are generally in good condition. There is a crack in the foundation wall between the original building and the East addition and this should be repaired at some point. See the photograph on the following page.



Otherwise, what could be observed from a structural perspective looked satisfactory.

EAST ADDITION

As mentioned previously the main floor framing within the East addition including beams and joists will require significant reinforcing. This main floor also has a slope indicating that some settlement or timber decay may have occurred. The East addition is not in good condition. The majority of the foundations of the East addition appear to be cast-in-place concrete. No significant cracking of the foundations was observed making it somewhat puzzling as to why the main floor has a slope. Additional investigation is required to determine the reasoning for the sloping floor. The foundations in the South-East corner of the East addition look questionable but there was not good access from either the interior or the exterior.



There is a large stone fireplace within the East addition, which is not completely supported from the basement below. In other words, the chimney upstairs is larger than the chimney support in the basement. It is recommended that the masonry chimney support within the basement be enlarged to match the chimney above. The fireplace is illustrated in the photograph below.





NORTH ADDITION

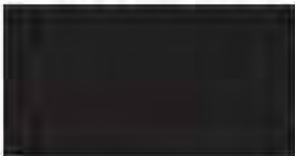
The North addition floor framing will require reinforcing of floor joists and beams. No other deficiencies were observed.

CONCLUSIONS

Generally the building is in fair condition. Please note that no portions of the upper floor framing or roof framing was reviewed. If we can be of further assistance please advise.

Yours very truly,

BMR STRUCTURAL ENGINEERING LTD.



John Richardson, M.Sc., P.Eng.



3.4 Mechanical

1. EXISTING MECHANICAL SYSTEM

1.1. Plumbing Systems

Domestic water for Sir Sanford Fleming Cottage is supplied by a ¾” water service with a water entrance located in the basement. The water entrance is equipped with a globe valve and 5/8” totalizing water meter, there is no back flow prevention device installed. The Domestic water supply to the building is ½” copper.

The water distribution piping is copper with soldered joints and globe valves used for isolation. The piping is of a vintage which would have used lead solder at the fittings.

Domestic hot water is generated by a newer model Rheem 40 gallon electric domestic hot water heater, the date of installation is known. Domestic hot water supply piping is ½” copper with soldered joints.

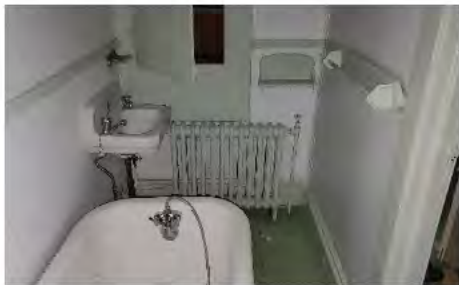
The building is serviced by a 4” sanitary sewer main which extends to site services. The sanitary piping within the building is a mixture of original cast iron with lead and oakum joints and copper with soldered fittings. The system is of a vintage where “S” traps were used at fixtures, this arrangement is no longer permitted by the National Plumbing Code of Canada.

Plumbing fixtures appear original to when plumbing system where first installed in the building and are past their expected service life.



M1: Water Entrance

M2: Sanitary Sewer



M3: Original Plumbing Fixtures.



M4: "S" Trap.

1.2. Heating Systems

Perimeter heating is provided by a hot water heating system with cast iron radiators throughout the building. The piping distribution system uses steel piping with threaded fittings and is original to when the central heating system was first installed. Copper piping has been used where alterations and additions were made to the original work. Isolation valves are gate style, many are corroded and leaking, and valve stems would most likely break if they were operated.

The system is supplied by a Saturn dry base steel oil fired boiler manufactured by Kerr Heating and is equipped with a Riello 40F5 burner. The system is configured as one zone with a single circulator. The boiler appears to be good condition, although the date of installation is unknown.

Fuel oil is stored in a 200 gallon single wall steel oil tank located in the basement below the stairs. The fill and vent pipe terminate below the porch stairs at the back of the cottage. The oil supply to the burner is flexible bare copper and has been run along the basement slab with a filter and Tiger Loop oil deaerator at the burner.



M4: Oil Fired Boiler

M5: Leaking valves



M6: Cast Iron Radiator

1.3. Mechanical Ventilation

The building is not equipped with a mechanical ventilation system.

2. **RECCOMENDATIONS FOR MECHANICAL SYSTEM**

In general, the plumbing systems are well past the expected service life and should be replaced. As part of the plumbing upgrade a new domestic water entrance with back flow preventer is recommended in accordance with the requirements of the Halifax Regional Water Commission.

The heating system, except for the boiler and oil tank is well past the expected service life and should be replaced if the building is to be re-purposed. In the interim the system can continue to provide heating for the facility with regular maintenance. Leaking valves should be replaced. The oil line in contact with the concrete should be replaced with a PVC coated oil line to avoid corrosion and leakage. The age and internal condition of the oil tank is unknown, however it is generally accepted that an interior tank should provide 15-20 years of service. Since the building is unoccupied and the ramifications of an oil leak can be costly, it is recommended that a drip tray with monitor be installed.

Depending on the final use for the building and requirements for HVAC zoning there are several upgrade options which would help reduce operating costs and carbon emissions including:

1. Propane gas fired condensing boilers.
2. Air source heat pumps (Air-to-Air) zoning would be limited and duct routing may present a number of challenges with this option.
3. Air to water heat pumps. There are a limited number of manufacturers who offer residential equipment currently.

A new mechanical ventilation system is recommended to supply the volumes of outside air required by ASHRAE Standard 62 Ventilation for Acceptable Indoor Air Quality. Recommendations include the installation of a packaged energy recovery ventilator (ERV) with ducted supply and return to each space. If a central air source heat pump is used, it may be possible to couple the ERV with the air handler such that only one duct

system is required. The capacity of the new mechanical ventilation system will depend on the function of the building.

The need for mechanical cooling is undecided, however systems such as an air-to-air heat pump could provide mechanical cooling and heating as one system with limited zoning.

The vast majority of HVAC systems used for buildings of this size incorporate packaged controls, however a modest building automation system (BAS) could provide the ability to remotely monitor and control HVAC systems. The need for a BAS should be discussed at the time of detailed design.

A preliminary budget estimate to upgrade the mechanical systems would be in the area of **\$90,000.00 - \$100,000. Preliminary budget estimates are based on an air source air to air heat pump. The estimates of probable cost make no allowance for a BAS system.**

3.5 Electrical

1. EXISTING ELECTRICAL SYSTEM

The Sir Sanford Fleming Cottage electrical system is fed from an overhead electrical service which originates from a utility pole on Dingle Road. It is equipped with a Nova Scotia Power revenue meter (#2375063). The electrical service is a 120/240-volt, single phase, three wire grounded type and terminates in an Amalgamated Electric Limited main fusible switch located in the basement rated for 60 amps @ 240 VAC. The switch contains two NRN60 amp fuses.

The main disconnect switch feeds a Cutler-Hammer branch circuit load centre rated for 125 amps @ 120/208 VAC equipped with a main 100 Amp two pole circuit breaker. The panel has the capacity for 16 full size or 32 mini circuit breakers. It is currently equipped with three full size circuit breakers and twenty mini breakers. It has three spaces to add additional breakers and has three breakers identified as “spare”.

Wiring methods observed include armoured cable, NMD cable and fabric insulated conductors. In the basement, some wiring has been spliced without using a sealed electrical junction box. There may be other concealed non-code compliant issues with the electrical system which we could not observe.

The building is equipped with older style ungrounded receptacles and also a few newer grounded outlets. There is an electric hot water tank rated for 2255 watts fed from the branch circuit load centre. Although the building is heated mainly by an oil-fired boiler and hot water system, there were a few areas equipped with electric baseboard heaters.

The building is equipped with a 40A range receptacle and a 30A electric dryer receptacle.

Interior lighting consists of mainly incandescent fixtures with local line voltage switches. Exterior security lighting consists of an LED dual head fixture with a built-in motion sensor.

The main disconnect switch appears to be very old, however the branch circuit load centre appears to be a more recent replacement and is in good condition.

2. RECOMMENDATIONS FOR ELECTRICAL SYSTEM IMPROVEMENTS

The electrical service entrance is equipped with fuses with a 60-amp rating. This service can only be safely loaded to 80% of the fuse rating which translates to a continuous load of only 48 amps. This ampacity will not support the addition of any significant electrical loads which may be required in a future renovation.

For example, if HRM implements a policy to remove the existing oil-fired heating system and replace it with heat pumps or electric boilers in an effort to reduce the building's carbon foot print the electrical system would require an increase in electrical capacity.

Consideration to replacing the existing aging main disconnect switch and 60-amp electrical service with a new 200-amp, 120/240 VAC, single phase, three wire service should be entertained as part of any proposed building renovation. A new main electrical panel equipped with a 200A amp main circuit breaker and suitable distribution spaces for existing and future loads should be considered.

The existing electrical distribution system should be upgraded, and new grounded receptacles should be installed to meet the current requirements of the Canadian Electrical Code (CEC). Ground fault receptacles should be installed where required to comply with the CEC.

If the existing range and dryer outlets are to remain, they should be rewired to the new electrical panel and recessed in the wall.

The lighting system should be upgraded to an energy efficient LED system using light fixtures which compliment the historical setting for the Cottage.

3. **PRELIMINARY OPINION OF PROBABLE COST ASSOCIATED WITH THE PROPOSED ELECTRICAL SYSTEM UPGRADE**

Based on the above, a preliminary estimate of probable cost associated with implementing the electrical system improvements is \$ 25,000.00.

Estimates of probable cost are preliminary in nature and are presented as “order -of-magnitude” numbers to be used for budgeting purposes only. A more accurate estimate can only be prepared following the preparation of detailed engineered drawings.



4. **PHOTOGRAPHS OF THE ELECTRICAL SYSTEM**



E1-Electrical Mast and Meter Base



E2- Electrical Service Entrance Equipment





E3- Amalgamated Main Fusible Disconnect Switch Fused at 60 Amps.



E4- Cutler-Hammer Electrical Load Centre, 16 Circuit Capacity with a 100A Main Breaker



E5- Typical Wiring Methods Observed.



E6- Electric Joint Made Without Benefit of Junction Box.



E7- Typical Ungrounded Receptacle.



E8- Typical Appliance Receptacle



E8- Typical Light Fixture

3.6 Sustainability and HRM goals

Insulation should not be added to the exterior walls to increase their R values, as insulation may accelerate the rate of decay of the heritage walls. The addition of storm windows ovetop of the existing single paned, wood windows will increase the windows' R value. SPDA recommends accepting the use of the current fossil fuel burning furnace in the short term, and in the long term investigate the use of geothermal energy or heat pumps to heat the building.

4. Discussion

4.1 Standards and Guidelines

4.1.1 Character-Defining Elements

The Character-Defining Elements (CDEs) of Fleming Cottage are listed in the Canadian Register of Historic Places.

4.1.1.1 List

Exterior

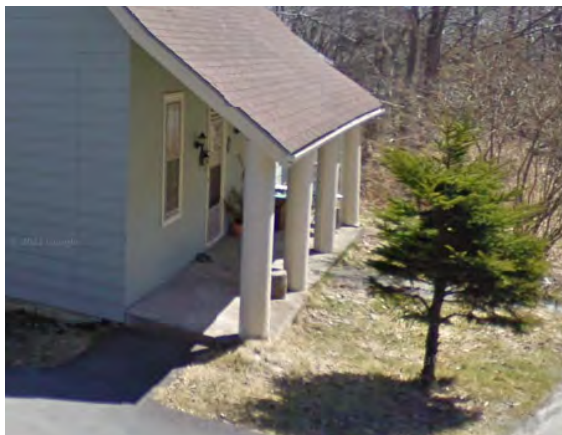
- secluded setting in Sir Sandford Fleming Park;
- unformalized style of the cottage with features built in a late-Victorian rustic design;
- one-and-a-half storey, wood frame structure with vertical sash windows and a three-sided bay window with bracketed eaves on the side elevation;
- hipped gable roof with a slope extending over the verandah and a small central, triangular dormer window;
- front veranda's straight circular column supports with no decoration or capitals;
- three bay front façade with central entranceway and window on either side of the bay;
- central chimney;
- tall, narrow proportions of the windows in the front façade and the second floor level of the gable ends;
- small pediments notched into the roof eaves on the east and west elevations;
- central brick chimney on main structure, and tall offset brick chimney on side wing;
- one storey, shed roofed wing on the east side with a three sided bay window decorated with brackets.

Interior

- large, stone fireplace in the wing and brick fireplace in the first-floor kitchen;
- wide board wall construction in various places throughout the interior.

4.1.1.2 Discussion

All CDEs are intact, save the front veranda columns. Sometime between 2009 and 2012, the rounded columns with no capitals or bases were replaced with square columns with capitals and bases. Sufficient photographic evidence remains to reconstruct these rounded columns to how they appeared in the 2000s.



*Left: Google Streetview from April 2009.
Right: Google Streetview from June 2012.*



4.1.2 Approaches

This Feasibility Report will explore three different conservation approaches to the Cottage: preservation, rehabilitation, and restoration. The preservation approach would take the route of minimal intervention, and would only seek to maintain the Cottage in its present state. The rehabilitation approach would focus on making the Cottage useable for the public by making it barrier free. The restoration approach will follow the approach proposed in 2016, and will seek to return the Cottage to its state when Fleming owned it in the late 1800s.

4.1.2.1 Preservation

The Standards and Guidelines define the approach of preservation as “protecting, maintaining, and/or stabilizing the existing materials, form, and integrity of an historic place, or of an individual component, while protecting its heritage value” (*Standards and Guidelines*, 17). Preservation seeks to demolish as little as possible, instead focussing on maintaining existing materials, and does not extend to “extensive alterations or additions” that are required continue a building’s use or give it a new one (16). Consequently, following this approach, the majority of the work on the Cottage would be on envelope and finishes repair, and little work would be done to increase the accessibility of the Cottage. The work contemplated under a preservationist approach would include:

Accessibility

Only exterior work would be completed to render the site and building accessible, such as regrading, adding an accessible path to the Barn, and replacing the concrete pad with a barrier free wooden deck. No interior work would be completed.

Building Envelope

All instances of decay recommended in Section 3.2.2 would be addressed, save widening exterior doors for accessibility reasons. Work such as replacing rotten fascia and shingles, replacing the sashless window, and scraping, priming and painting the exterior shingles, wood trim, and window sills would be completed.

Building Interior

All instances of decay recommended in Section 3.2.3.2 would be addressed, such as reinforcing the bowing lintel in the kitchen and repainting walls. The asbestos tiles would be removed.

Structural

All structural work recommended by BMR in Section 3.3 would be completed.

Mechanical

All mechanical work viewed as necessary by Dumac in Section 3.4, such as replacement of the plumbing system, would be completed. The existing furnace would be maintained and continued to be used in the short term, and in the long term may be replaced following Dumac’s recommendations.

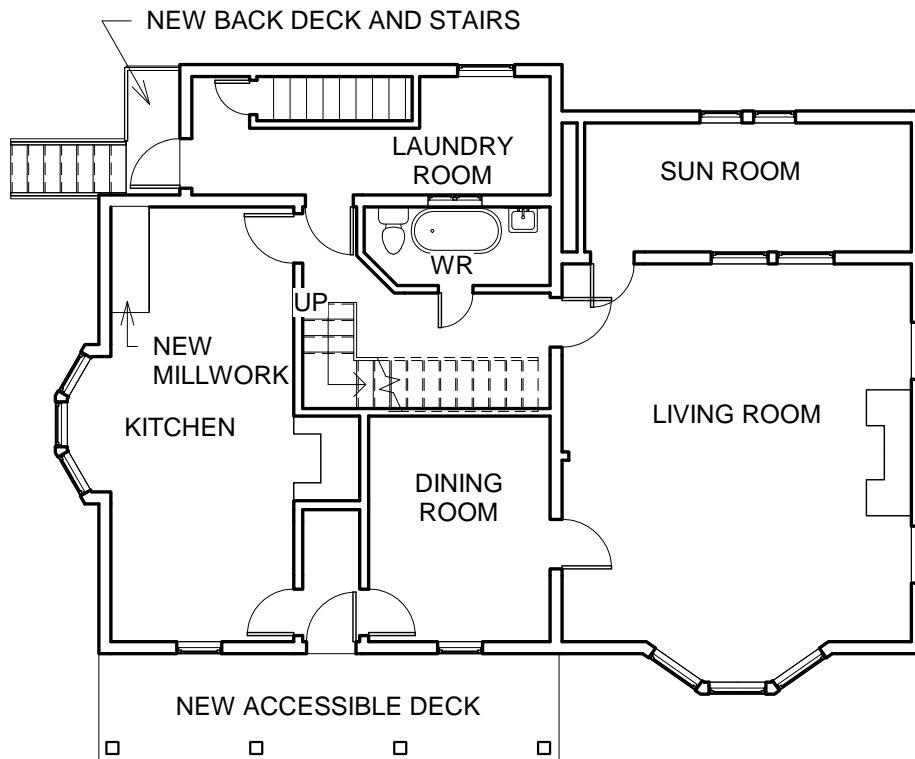
Electrical

All electrical work recommended by Dumac in Section 3.5 would be completed.

Sustainability and HRM goals

No insulation would be added to the Cottage.

By adhering to Standard #3 and taking the approach of minimal intervention (*Standards and Guidelines*, 26) the preservation approach would do an excellent job of conserving the Cottage's heritage value. It would maintain all extant CDEs and little to no heritage fabric would be lost. However, this approach would not improve the Cottage's connection to Sir Sandford Fleming, and members of the public would still need the assistance of interpretive plaques to understand the Cottage's significance. Additionally, as the approach of preservation does not allow for "extensive alterations or additions" (16), the likes of which would be required to make the building accessible, the preservation approach would not allow for the Cottage to adopt a public usage. Its uses would be limited to those by private companies leasing the space.



① Level 1 - Preservation
 $3/32" = 1'-0"$

4.1.2.2 Rehabilitation

Rehabilitation is defined in the *Standards and Guidelines* as “making possible a continuing or compatible contemporary use of an historic place, or an individual component, while protecting its heritage value” (17). Following this approach, historic places can be sensitively adapted for new uses, and missing historic features can be replaced. A rehabilitation approach is best suited to projects where alterations are required in order to accommodate new or existing uses, such as alterations to make a building barrier free to give it a public use. As such, all work to render Fleming Cottage’s first floor accessible would be completed under this approach, as well as all maintenance work required. This work would include:

Accessibility

All work recommended in Section 3.2.1 would be completed, including demolishing the bathroom, turning the laundry room into a barrier free bathroom, widening most of the doorways on the first floor, regrading the site, and switching the door knobs to levers.

Building envelope

All work recommended in Section 3.2.2 would be completed. Following Standard #10, the square columns under the veranda would be replaced with the correct round columns. Replacing the siding of the addition with a different siding from the original house should be considered, with the goal of making the form of the original house more distinguishable from the addition.

Building interior

All work recommended in Section 3.2.3 would be completed, including removing all of the vinyl tiles and restoring the existing wood floors. Following Standard #11, all added materials should be “physically and visually compatible” (*Standards and Guidelines*, 34) with the historic place, but should also be distinguishable from the existing house. These added materials include any flooring that might be added, new bathroom fixtures, the widened doors, and the lever door handles.

Structural

All structural work recommended by BMR in Section 3.3 would be completed.

Mechanical

All mechanical work viewed as necessary by Dumac in Section 3.4, such as replacement of the plumbing system, would be completed. Giving the Cottage a public use may require the installation of a ventilation system, which could also double as a new heating system, as Dumac suggests.

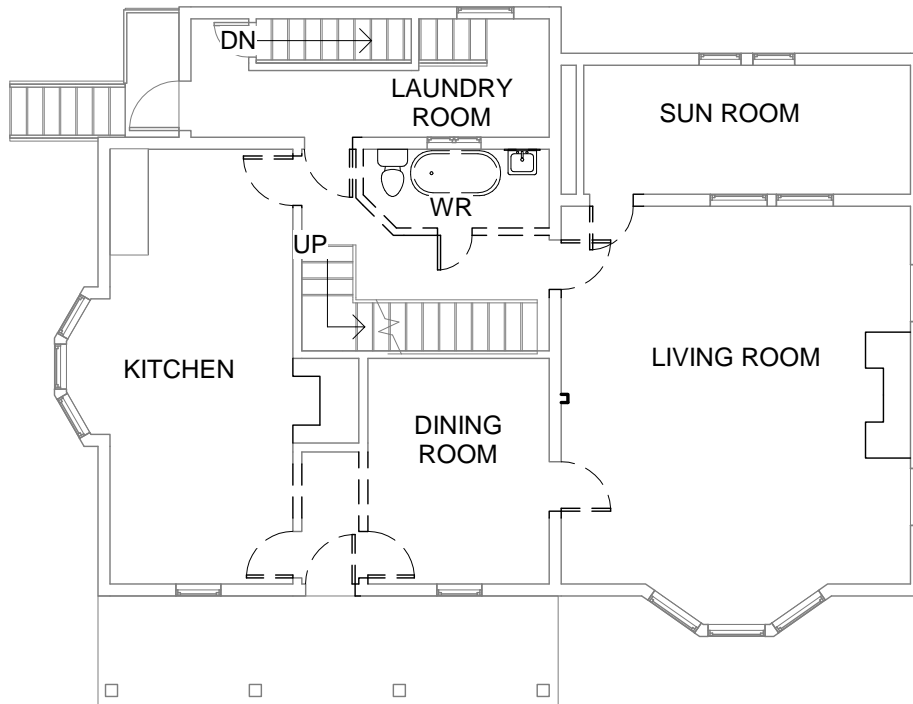
Electrical

All electrical work recommended by Dumac in Section 3.5 would be completed.

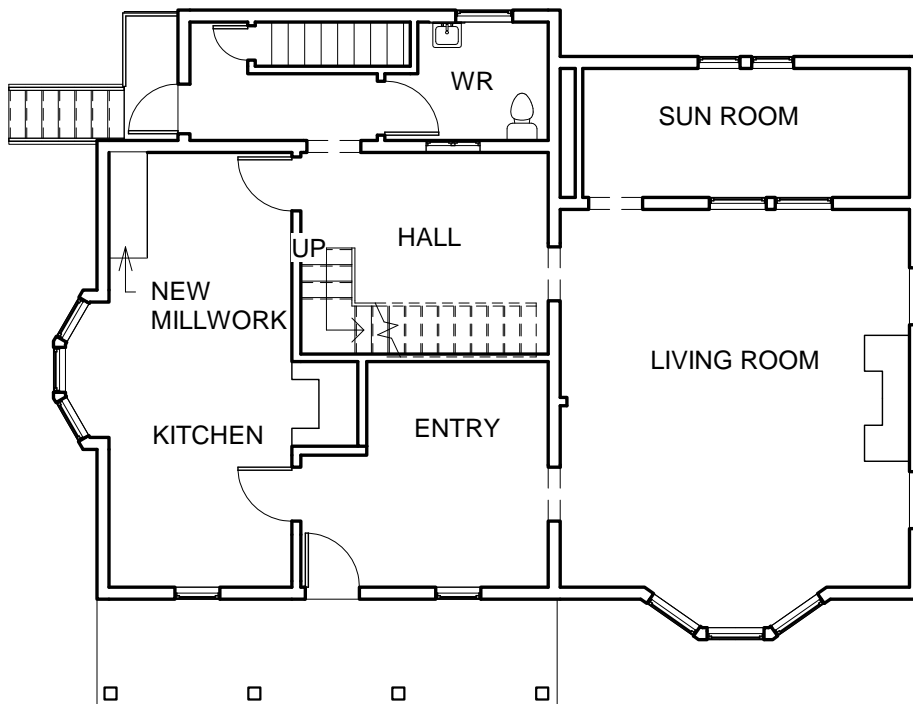
Sustainability and HRM goals

No insulation would be added to the Cottage.

By altering the Cottage’s floorplan to make the first floor barrier free, a rehabilitation approach would open Fleming Cottage to public use. It could then be used as an interpretive or visitor’s centre, or as a café or icecream stand. Despite the number of alterations this approach would require, all extant CDEs will be retained and maintained, and the lost CDE will be reinstated. Some heritage fabric would be lost, such as the front door and transom. Somewhat irreversible work would also be completed, as multiple walls would be removed. Nonetheless, a rehabilitation approach would make the building usable and more of an asset to the community, thereby increasing its heritage value. Were the building to be used as an interpretive centre or visitor’s centre, this would further increase the Cottage’s heritage value by linking the building to its heritage significance, as well as helping interpret the rest of the park’s significance.



② Level 1 - Rehabilitation - Demo
 3/32" = 1'-0"



③ Level 1 - Rehabilitation
 3/32" = 1'-0"

4.1.2.3 Restoration

One of the main goals of this approach would be to demolish the east addition of the Cottage, as it detracts from the character and aesthetics of the original Cottage and has the most significant instances of decay (ceiling showing signs of mould, the settling NE corner). The *Standards and Guidelines* define restoration as the “action or process of accurately revealing, recovering, or representing the state of an historic place, or of an individual component, as it appeared at a particular period in its history, while protecting its heritage value” (17). By removing the addition, the Cottage would be partially returned to its condition when Fleming owned the Cottage in the late 1800s, and would consequently show his vision more strongly. As the other goal of this approach would be to use the Cottage as an interpretive centre, all alterations required to make the first floor barrier free would also be completed. The work completed under this approach would include:

Accessibility

All work pertaining to the main house recommended in Section 3.2.1 would be completed, including demolishing the bathroom, building a new barrier free one, regrading the site, and swapping the door knobs to levers. These lever handles would be as period accurate as possible, while still being accessible.

Building envelope

All work pertaining to the main house recommended in Section 3.2.2 would be completed. Any added elements, such as the wood gutters, storm windows, and storm door, should be as period accurate as possible, following Standard #14. The hole on the east side of the house where the addition would be removed would be infilled to match the existing assembly both above and below grade. The 9” wood shingle coursing would be replaced with 5” coursing. The square columns would be replaced with the historically accurate round ones.

Building interior

All work pertaining to the main house recommended in Section 3.2.3 would be completed. All added elements, such as bathroom fixtures, the kitchenette, and the lever door handles, would be as period accurate as possible, following Standard #14.

Structural

All structural work to the main house recommended by BMR in Section 3.3 would be completed.

Mechanical

All mechanical work to the main house viewed as necessary by Dumac in Section 3.4, such as replacement of the plumbing system, would be completed. Giving the Cottage a public use may require the installation of a ventilation system, which could also double as a new heating system, as Dumac suggests.

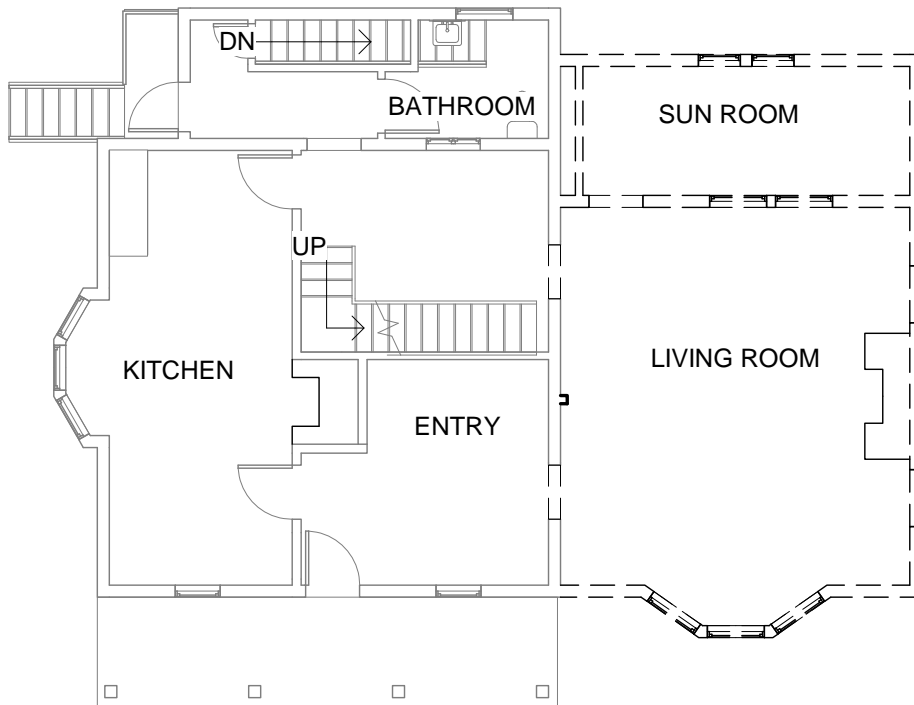
Electrical

All electrical work to the main house recommended by Dumac in Section 3.5 would be completed.

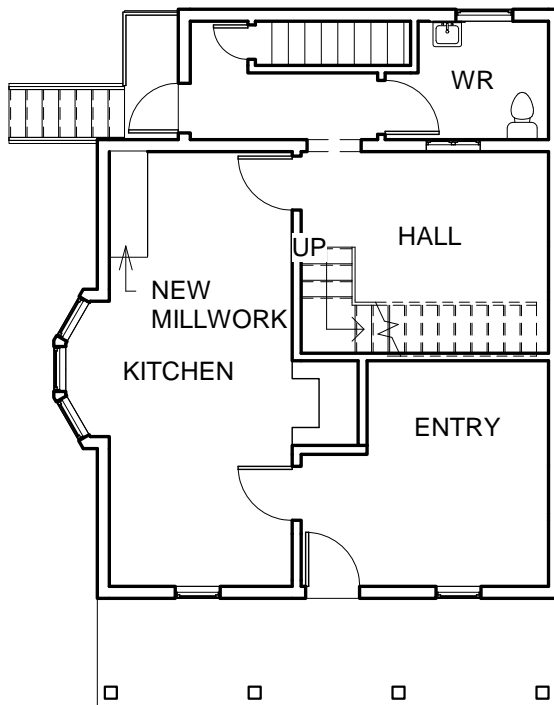
Sustainability and HRM goals

No insulation would be added to the Cottage.

A major conservation issue with this approach is the destruction of the CDEs that are part of the east addition: the roof, bay window decorated with brackets, chimney, and fireplace. However, the addition was not designed with much sensitivity to the original structure’s character, and the removal of the addition would enhance some of the CDEs of the original house. For example, the “central brick chimney” is decentralized by the addition, and the “late-Victorian rustic design” of the original



④ Level 1 - Restoration - Demo
3/32" = 1'-0"



⑤ Level 1 - Restoration
3/32" = 1'-0"

Cottage is obscured by the lack of Victorian design in the low shed roof of the addition. Additionally, the “three bay front façade with central entranceway and window on either side of the bay” would be accentuated by the removal of the addition. In terms of heritage value, removing the addition could increase the Cottage’s value by making the Cottage more accurate to Fleming’s vision for the Cottage. The Cottage would then be even more of an asset if used as an interpretive centre and could be very strong in telling its own significance, as well as helping interpret the rest of the park. However, removing the addition would result in the destruction of a fair amount of heritage fabric and multiple CDEs.

4.2 Possible Relocation

The possibility of relocating Fleming Cottage has been raised for discussion. The heritage designation of Fleming Cottage applies only to the house, not the site, so the heritage designation would allow the building to be moved. Typically, moving heritage buildings from their historic location is not recommended, unless the building will be destroyed if it is not moved, like Morris House. Were the Dingle Road being widened or the hillside crumbling, then it would be seen as an appropriate course of action to move the Cottage.

Short of natural disasters or road widening, reasons to move the Cottage include moving it to a more central location in the park, where it be used more often by park users. Or, assuming that the building is going to be a centre of activity, its current neighbours may wish it be moved so that their neighbourhood does not become overly busy and there are not too many cars parked that portion of Dingle Road. However, both of these points could be addressed by turning the Barn into a community gathering space and installing a parking lot around it, connected to Fleming Cottage by a barrier free pathway. This would focus both parking and people around the Barn, rather than Fleming Cottage, while still giving Fleming Cottage a use within the community.

Moving the Cottage would also mean a loss of heritage fabric, as the ironstone foundation walls would not be moved with the building. The house would also lose its significance as the location of where Fleming is thought to have died, and would no longer accurately show where Fleming lived for a while. In terms of CDEs, the “secluded setting in Sir Sandford Fleming Park” means that the house could only be moved to another location within the park and which is also secluded. This may prove difficult, as the road through Dingle Park is quite narrow.

5. Estimate of Probable Costs

	5.1 Preservation	5.2 Rehabilitation	5.3 Restoration
Site	7 500\$	25 000\$	30 000\$
Demolition	2 500\$	7 500\$	15 000\$
Envelope	75 000\$	75 000\$	75 000\$
Abatement of Hazardous Materials	10 000\$	10 000\$	10 000\$
Interior	2 500\$	50 000\$	40 000\$
Structural	20 000\$	20 000\$	10 000\$
Mechanical	25 000\$	95 000\$	80 000\$
Electrical	25 000\$	25 000\$	19 000\$
Subtotal	167 500\$	307 500\$	279 000\$
Contingency (20%)	33 500\$	61 500\$	55 800\$
Total	201 000\$	369 000\$	334 800\$

The above estimates do not include:

- HST
- Allowance for inflation
- Professional fees

6. Recommendations

Considering the state of decay of the house, there is no question that all the maintenance work described by the preservation approach should be completed at a minimum. How much work should be completed on top of this to make the building useable remains in question.

6.1 Preservation

This approach will keep the original building and the addition, but would not render any part of the building accessible. It then could not house any public use, and could only possibly be used as leasable space for the city. This approach is therefore not recommended.

Given the lower cost of the preservation approach, this approach could be taken if the budget for renovations is not large enough to accommodate the accessibility renovations. It could also be used as the first phase of a rehabilitation or restoration project.

6.2 Rehabilitation

This approach will keep the original building and all additions, while rendering the whole first floor accessible. As such, this approach would result in the greatest area of useable public space. The resulting building would be well suited to housing a café, icecream shop, interpretive centre, or visitor's centre, and many other uses.

Following the *Standards and Guidelines*, a rehabilitation approach would be the most appropriate. They regard rehabilitation as the most appropriate approach for projects where “heritage values related to the context of the historic place dominate” (16), as opposed to preservation, where physical materials are most valued, or restoration, where heritage values are rooted in a specific era or moment in history. This is the case with Fleming Cottage: the Statement of Significance focuses most on the context of Fleming Cottage within the park, Halifax, and the life of a specific historic figure. Additionally, it is important to heritage conservation that heritage buildings continue to be used. In the state it is currently in, Fleming Cottage is not useable to the public, and the substantial accessibility renovations that would be completed under a rehabilitation approach are required for the Cottage to be used by the public. The rehabilitation approach is highly recommended for its benefits to the Cottage and to the public.

6.3 Restoration

This approach will remove the east addition and render the remainder of the first floor accessible. Though the public would be able to use the first floor of the building, its floor area would be smaller. Its use would therefore be more suited to an icecream shop or an interpretive centre, but might prove too small for a café. The restored Cottage would be a stronger interpretive centre for Fleming if it were restored to its condition when he owned it. However, the *Standards and Guidelines* would advise against a restoration approach for the Cottage, as several CDEs would be destroyed and there is a lack of physical and documentary evidence from the restoration period.

7. Conclusion

SPDA has presented three conservation approaches to HRM through this Feasibility Report, and most strongly recommend the rehabilitation or restoration approaches. We leave it to HRM to decide which approach best suits their needs.

8. Sources

Canada's Historic Places. 2005. "Dingle Tower." Accessed May 26, 2022. <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=2447&pid=0>

Canada's Historic Places. 2005. "Dingle Tower and Sir Sanford Fleming Park." Accessed May 26, 2022. <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=3079&pid=0>

Canada's Historic Places. 2008. "Sir Sandford Fleming Barn." Accessed May 26, 2022. <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=9372&pid=0>

Canada's Historic Places. 2005. "Sir Sanford Fleming Cottage." Accessed May 26, 2022. <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=2455>

Canada's Historic Places. 2005. "St. Augustine's Chapel." Accessed May 26, 2022. <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=2383&pid=0>

Halifax Public Libraries. 2022. "Sir Sandford Fleming Park and the Memorial Tower: A Brief and Not at All Definitive History." Accessed May 27, 2022. <https://www.halifaxpubliclibraries.ca/blogs/post/sir-sandford-fleming-park-and-the-memorial-tower-a-brief-and-not-at-all-definitive-history/>

Standards and Guidelines for the Conservation of Historic Places in Canada. Second edition. Ottawa: Parks Canada, 2010.

Appendix A: SPDA Fleming Cottage Scope of Work (2016)



October 13, 2016

HRM Fleming Cottage

Scope of work

Introduction

1.0 History of the property

2.0 Existing conditions

a) Cottage

b) Stone Barn

c) Grounds

3.0 Recommended conservation

a) Cottage

b) Barn

c) Grounds

d) Interpretation

4.0 Recommended work plan

5.0 Cost estimate

6.0 Possible Funding

Appendix 1 -Fleming chronology

Appendix 2 - Griffen article from December 2009

Appendix 3 - Cottage Statement of Significance

Appendix 4 - Barn Statement of Significance

Appendix 5 - Building Condition Assessment - Cottage

Standards and Guidelines for the Conservation of Historic Places in Canada -

<http://www.historicplaces.ca/en/pages/standards-normes/document.aspx>



Figure 1 Google earth view showing Cottage and Barn

Introduction

Fleming Cottage and Barn are two of the few remaining buildings to remind us of the great Canadian Sir Sanford Fleming. It is true that Fleming Park bears his name however there is little else in our city to celebrate and explain the tremendous achievements of this generous, visionary and truly renaissance individual.

Touring the grounds today one has an idyllic image of Fleming, Jeanie (his wife) , seven children and many grandchildren frolicking in the woods and gardens, riding ponies from the barn, swimming in the Northwest Arm and ferrying back and forth between the humble cottage and the magnificent Blenheim Lodge located just across the water on the city side of the Arm.

SP Dumaresq Architect Ltd has been engaged by HRM to provide a Scope of Work for Fleming Cottage, the barn and the adjacent lands. We have researched the history of the buildings and become fascinated by the incredible career of Fleming and the connections between Fleming and Halifax.

Our recommended Scope of Work includes a conservation plan for the Cottage. Barn and Grounds and a recommendation to utilize them to celebrate Sir Sanford Fleming.

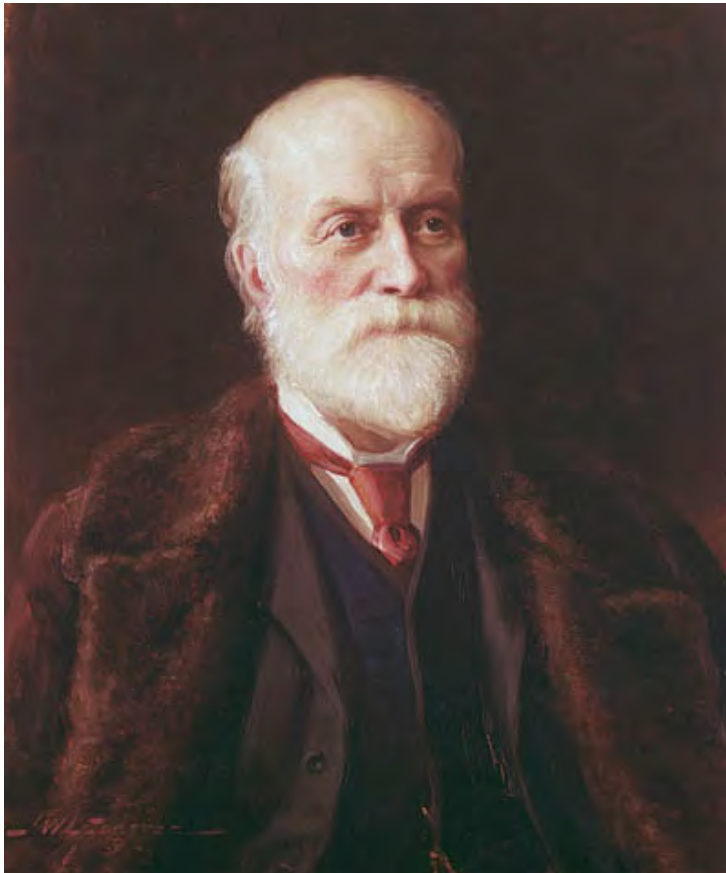


Figure 2 portrait of Sir Sanford Fleming by John Wycliffe Lowes Forster

1.0 History of the property

- a) In 1869 Sir Sanford Fleming aged 42 had already made a fortune in the Intercolonial Railway and was packing his bags to move to Ottawa to become more involved as a Director of the Canadian Pacific Railway. He maintained his Halifax house on Brunswick Street as he relocated to Ottawa.
- b) Still remembering happy days in Halifax, he purchased the 300 acre Dingle property 1870 and 1871 from three different land owners. Fleming acquired all the land between the War Department lands at Melville Cove and the Village of Jollimore (then known as Arm Village). At the time there were two buildings on the property: one on the site of the present cottage and one on the hill to the north of the cottage.
- c) Within one or two years after the Dingle purchase, Fleming purchased Blenheim Lodge, a large Victorian residence in Halifax, just across the Arm from the Dingle property. As the Flemings had seven children, the Lodge became their summer residence and the Dingle a summer retreat, easily accessible by ferry or their own boats.
- d) Fleming soon built a new cottage on the site of one of the existing buildings on the Arm property, close to the road. He also built a barn, another gazebo style summer house (on the hill north of the , a bathing/boathouse and a stone wharf. All but the cottage and the barn have disappeared.
- e) In 1908 Fleming, having already enjoyed this property for 38 years, deeded about 100 acres to the Lieutenant Governor in trust for the City of Halifax. Fleming Park was thus created. The Dingle Memorial Tower was constructed in 1910, a result of Flemings vision for the property. This vision also included an electric railway to make the Dingle Park accessible to the citizens of Halifax in a day when few could afford cars. Sir Sanford divided the balance of the property into seven lots (one for each of six surviving children), keeping the cottage lot for himself.
- f) Fleming died at the cottage in July of 1915 while visiting his daughter Minnie. Minnie had not "married well" and was at that time reduced to living at the humble cottage. The family retained all seven lots for many years. Over time, John W. Macleod gradually purchased the lots in the 1930's and sold to Thomas Wallace in 1948. In the same year Wallace sold the seven lots to the City.



Figure 3 Survey showing all the land purchased by Fleming in 1870-1871

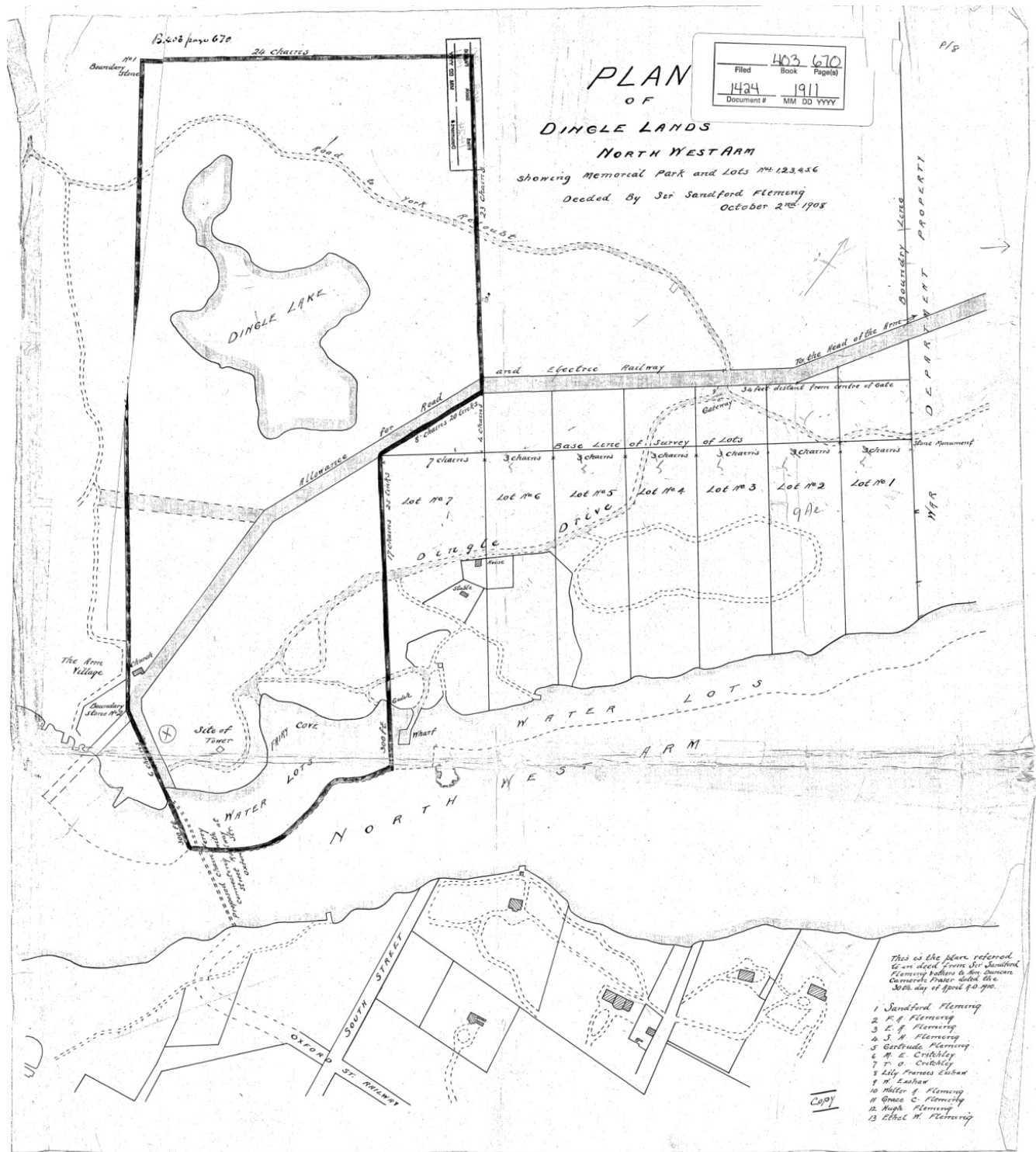


Figure 4 Survey showing 1908 subdivision

2.0 Existing Conditions

a) The Cottage

- I. The 1908 survey, at the time of the deeding of the Dingle Park to the Lieutenant Governor in trust for the City of Halifax shows a rectangular cottage with a small bump out on the north face.
- II. The Cottage has been added to over time. An addition to the east is 2 x 4 frame construction indicating an early to mid 1900's date. The concrete block foundation of this addition indicates that it was constructed in two phases, probably at two different times. This addition is in very poor condition structurally. Neither this addition or the covered porch appear on the 1908 survey. A condition report for the Cottage dated September 2014 is found in Appendix E
- III. The cottage was recognized by HRM in 1981 as one of Canada's Historic Places. The Statement of Significance is found in Appendix C. The Character Defining Elements are:
 1. Exterior
 - a. Secluded setting in Sir Sandford Fleming Park;
 - b. Un-formalized style of the cottage with features built in a late-Victorian rustic design;
 - c. One-and-a-half storey, wood frame structure with vertical sash windows and a three-sided bay window with bracketed eaves on the side elevation;
 - d. Hipped gable roof with a slope extending over the verandah and a small central, triangular dormer window;
 - e. Front veranda's straight circular column supports with no decoration or capitals;
 - f. Three bay front façade with central entranceway and window on either side of the bay;
 - g. Central chimney;
 - h. Tall, narrow proportions of the windows in the front façade and the second floor level of the gable ends;
 - i. Small pediments notched into the roof eaves on the east and west elevations;
 - j. Central brick chimney on main structure, and tall offset brick chimney on side wing;
 - k. One storey, shed roofed wing on the east side with a three sided bay window decorated with brackets.
 2. Interior
 - a. Large, stone fireplace in the wing and brick fireplace in the first-floor kitchen;
 - b. Wide board wall construction in various places throughout the interior.



Figure 5 Current view of the cottage build by Fleming

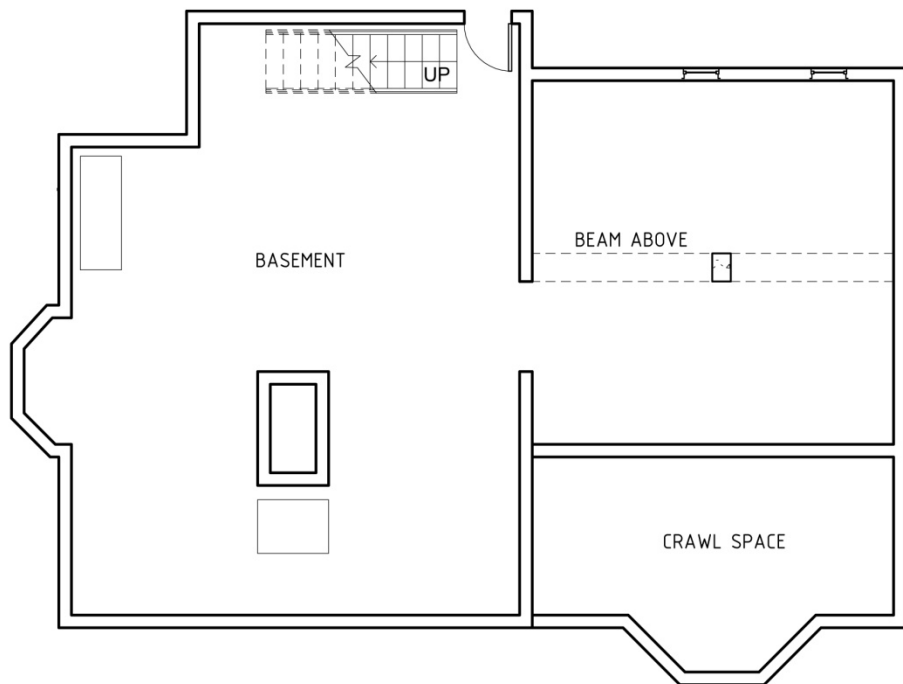


Figure 6 Cottage existing basement floor plan

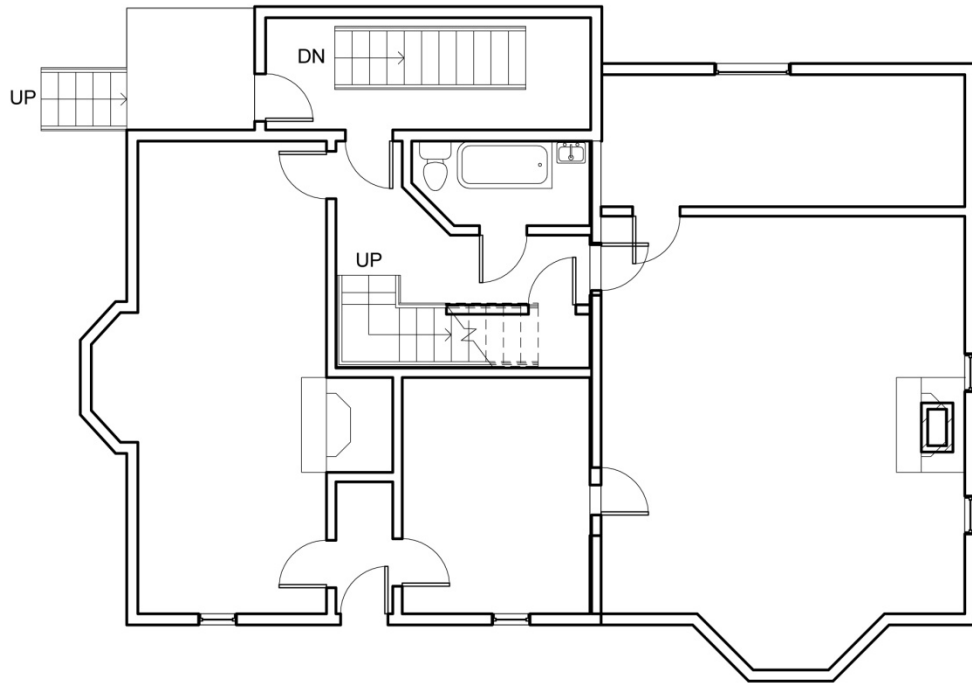


Figure 7 Cottage existing main floor plan

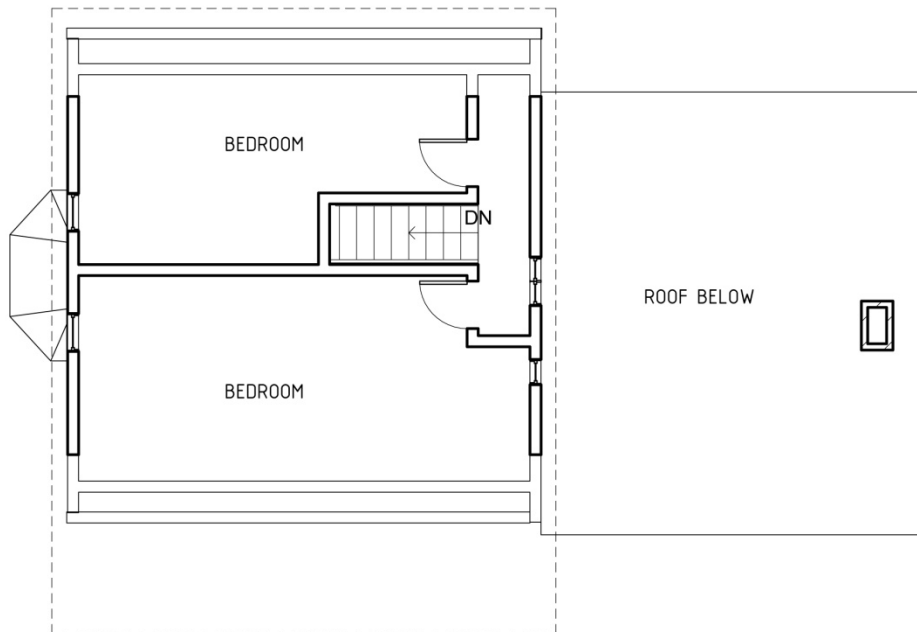


Figure 8 Cottage existing second floor plan



Figure 9 East addition



Figure 10 East addition viewed from north



Figure 11 East addition viewed from south - note second floor windows



Figure 12 Ironstone foundation under original cottage



Figure 13 Basement of east addition

- b) The barn appears to be original, unmodified and in good condition The barn is shown on the 1908 survey.



Figure 14 South elevation of barn



Figure 15 West elevation of barn



Figure 16 North elevation of barn



Figure 17 East elevation of barn

- I. The Barn was also recognized in 1981 by HRM as one of Canada's Historic Places. The Statement of Significance is found in Appendix D. The Character Defining Elements are:
 - a. Proximity to the Sir Sandford Fleming Cottage, set back from the road leading to the Dingle Tower;
 - b. Ironstone structure with granite stone quoined corners;
 - c. Gable roof with an end-wall chimney;
 - d. Board and batten cladding on the gable ends in the upper half of the structure;
 - e. Wooden barn doors centrally placed in the gable end;
 - f. Location on the same parcel of land as the Sir Sandford Fleming Cottage and Park
- II. It is worth noting that the barn and the Anglican Church on the other side of the Dingle Park share the same proportions and design elements: iron stone walls with granite quoins, board and batten clad gables and 12/12 pitched roofs. The church was built in 1895 on land donated by Fleming. The builder was James Hutton who later became caretaker for Fleming. It is possible that Hutton also built Fleming's barn and that Fleming helped finance the church.



Figure 18 Anglican Church

- c) Grounds: Stories are told of the extensive gardens, however, the grounds are overgrown and the original configuration of gardens and paths has long disappeared. One can assume that there must have been paths to the barn, the wharf and the bathing house. We do know that there was a wide path known as "The Loop Road" which circumnavigated the hill to the north where the summerhouse gazebo was located. Fleming's grandchildren are remembered in Jollimore as driving their pony cart around the Loop Road. Some of these paths are identified on the 1908 survey. See page 5. A stone wall still exists which must have been part of the original landscaping.



Figure 19 Stone wall between barn and cottage

3.0 Recommended Conservation - in accordance with Standard and Guidelines for the Conservation of Historic Places in Canada.

The time of the gift of the Fleming Park to the City (1908) and the subsequent construction of the Dingle Memorial Tower (1910) is significant to the story of Fleming. It is recommended that 1908 be the point in time selected for conservation and restoration purposes. The existence of a 1908 survey provides valuable information on the property at that time.

a) Cottage conservation:

- I. The cottage addition to the east does not appear on the 1908 land survey and does not figure in the cottage descriptions of the time. Furthermore the addition is reported to be in poor shape structurally, (the floor joists are sagging) and this addition has no apparent connection with Sir Sanford

Fleming himself. Although the addition is one of the character defining elements, the low sloped roof detracts from the architectural beauty of the original cottage. For this reason and its poor structural condition, it is recommended that this addition be removed. The covered porch, while probably not original, is in better shape, and is a one of the better character defining elements. It is recommended to be retained. The bump out to the north has been modified over time, but does appear on the 1908 survey and is recommended to be retained more or less as is. It contains a stair to the basement which has value.

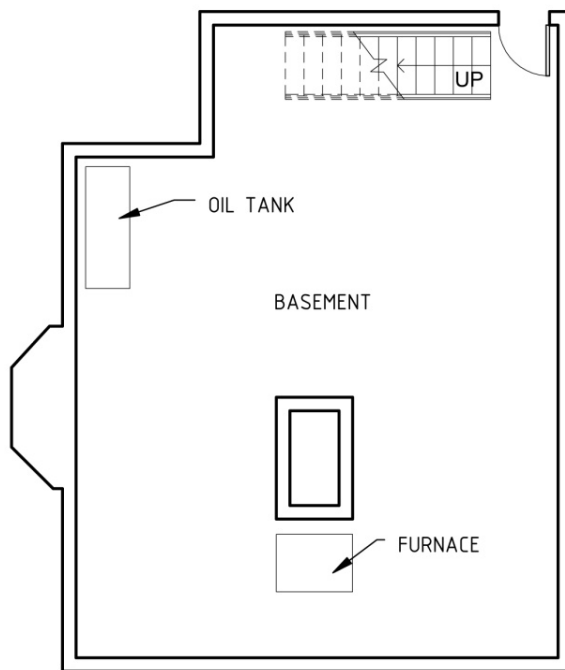
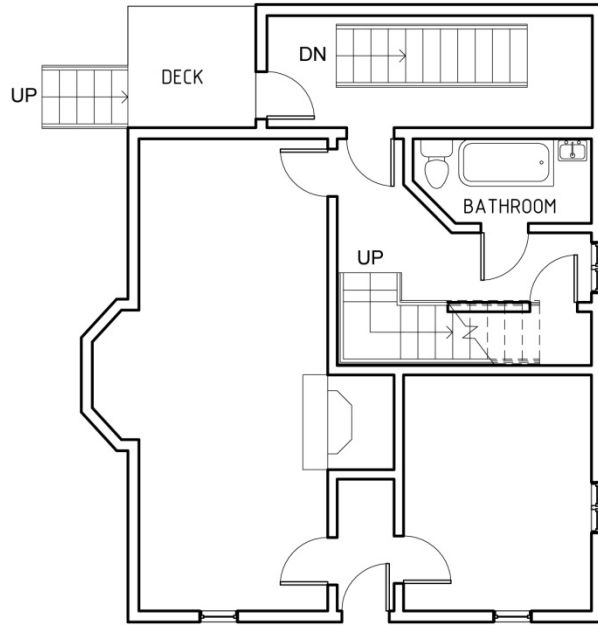


Figure 20 Basement with addition removed



□ □ □ □

Figure 21 Main floor with addition removed

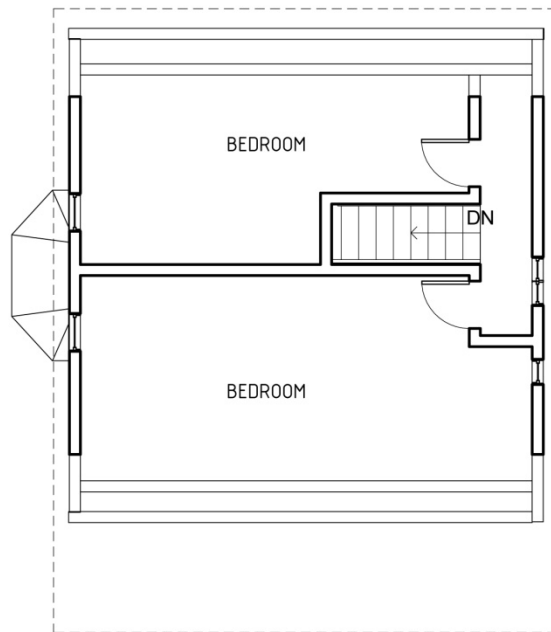


Figure 22 Second floor with addition removed



Figure 23 North addition recommended to remain



Figure 24 Stairs to basement

- b) The stone barn appears to be in original unmodified condition and should be retained and conserved.



Figure 25 Stone Barn in original condition

c) Grounds

- I. The cottage is hard against the road making pedestrian access from the road a safety hazard. As the cottage still sits on its original iron stone foundation moving to a site further from the road is not recommended. Conservation principles support retaining the cottage on its original stone foundation

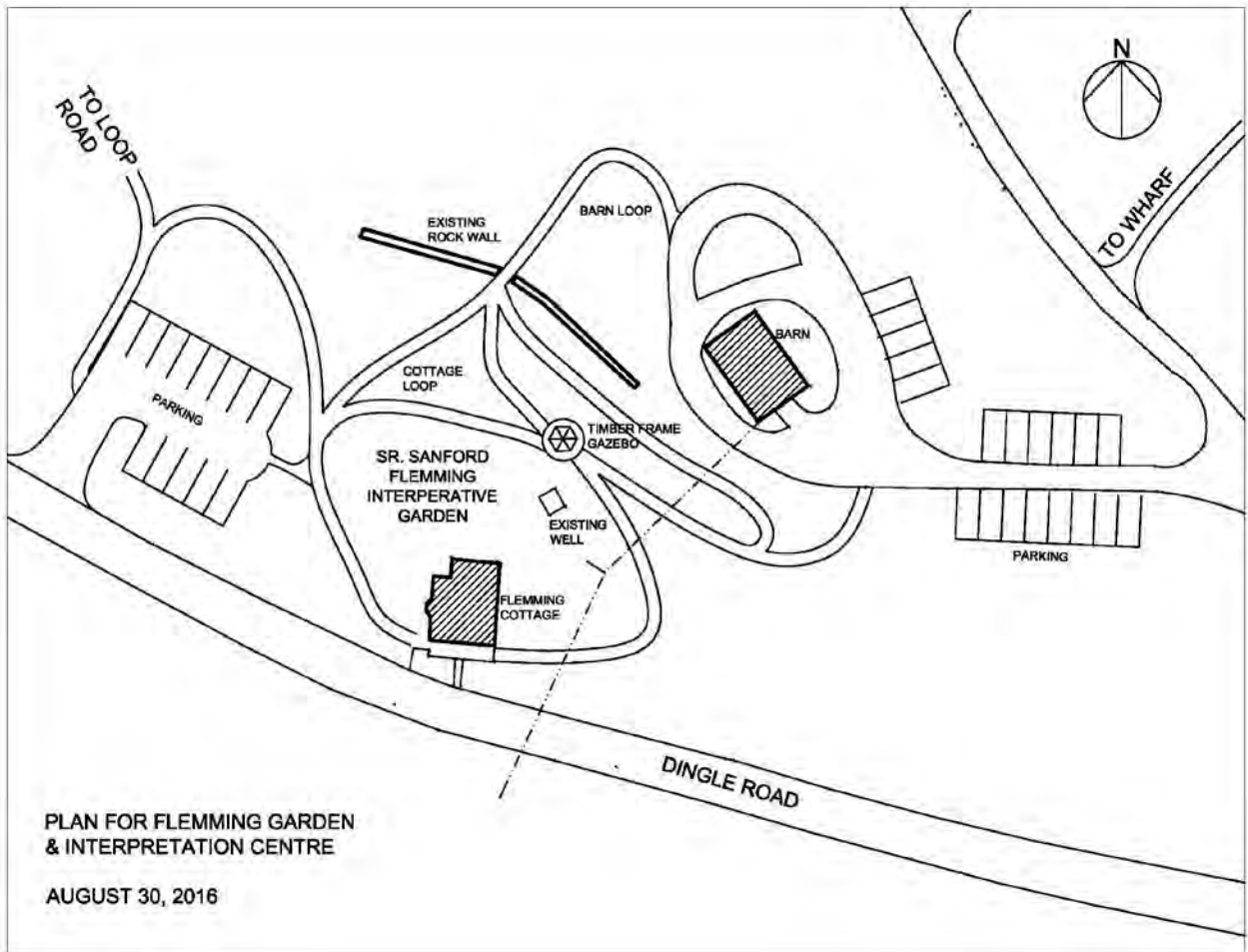


Figure 26 Cottage is very close to road



Figure 7 Ironstone foundation of original cottage

- II. Our recommendation is to access the cottage from a new parking lot near the barn. This would replicate the 1908 approach which was probably up a path up from the wharf, past the barn up to the cottage. Another parking lot could be constructed up the hill from the cottage, providing a garden loop between the parking lots, connecting the barn and the cottage and providing a safer approach to the cottage than the road. The garden loop should go through an existing gap in the stone wall which might have contained a garden gate. This path could be fully accessible, connect the barn and the cottage and could lead visitors to other pedestrian loops such as the Loop Road to the hill to the north where the summerhouse gazebo once stood and another to the shores of the Arm where the bathing/boathouse and wharf once existed.
- d) Interpretation: Sir Sanford Fleming's incredible contributions to Halifax, Nova Scotia, Canada, the British Empire and indeed the western world have largely gone un-recognized in Halifax (see the chronology in Appendix B). How wonderful it would be to celebrate Sir Sanford on the very grounds where he frolicked with his children and grandchildren! This recognition could be in the form of a Memorial Garden located between the cottage and the barn The garden could be a self guided experience with interpretative plaques. Additional interpretation could be provided in the cottage and the barn which would only be open when appropriate, provided enough information was provided in the Garden.



4.0 Recommended Work Plan

- a. Engage an Architect, a Landscape Architect and an Interpretative Consultant to prepare a long range plan for the grounds and buildings as well as a short range conservation plan for the cottage exterior, the barn and the immediately adjacent property.
- b. The recommended restoration/conservation activities for the exterior of cottage are:
 1. Remove the east addition
 2. Infill the east foundation openings with appropriate materials - probably windows and/or doors
 3. Infill ground floor openings in east wall with appropriate windows.
 4. Remove the asphalt roof shingles and replace with cedar
 5. Remove the concrete deck at the front door and replace with flagstone
 6. Re-shingle the east wall and any other areas requiring attention
 7. Conserve the wood windows and doors
 8. Paint the exterior
 9. Remove existing driveway.
 10. Maintain any existing plantings and landscaping in the immediate area of the cottage

5.0 Cost estimate

- i. Long range interpretative plan
\$40,000
- ii. Cottage exterior conservation plan and tender docs
\$20,000
- iii. Cottage exterior conservation
\$140,000
- iv. Estimated total
\$200,000

6.0 Possible Funding

As the cottage and Barn are adjacent to the Dingle Memorial Tower National Historic Site, Heritage Canada funding could be available as a level one resource supporting the Memorial Tower.

Appendix B: Sir Sandford Fleming Chronology



Sir Sanford Fleming Chronology

Fleming's Age	Dates	Events
	1827	Jan 7 Fleming born
18	1845	Emigrated to Canada as a surveyor. Stayed first summer in Peterborough at the home of Dr John Hutchison, a friend
22	1849	Founder of Royal Canadian Institute, becomes a fully qualified engineer
24	1851	April 23 designs Canada's first stamp : the Three Pence Beaver
28	1855	Marries Jeanie Hall
29	1856	Child Francis Allen born - Frank
30	1857	Child Sandford Hall born
32	1859	Mary Ethel born - Minnie
34	1861	Lily born
36	1863	Heads up plans for the Intercolonial Railway to connect NS, NB and Upper and Lower Canada. Surveys done all winter on snowshoes and by dogsled.
37	1864	Purchased Brunswick St
37	1864	Jeanie born (died aged 9 years)
38	1865	An Unnamed son born (no further records)
39	1866	Maud born died 1 year later
41	1868	Walter Arthur born
42	1869	Moved to Ottawa
43	1870 & 71	Bought 300 acres of Land (Dingle property) from William Canard, Frederick Jollimore and estate of Arthur Murphy. Stretched from Jollimore (Arm Village) to the War Department lands at Melville Cove. Cost \$12,750. Two buildings existing already. One at the site of the present cottage, one further north. A third building, a summerhouse gazebo was constructed c 1879.
43	1870	Built Cottage on property. Not sure exact date
45	1872	Hugh Percy born
	1872	Purchases Blenheim Lodge from William Duffus (across the Arm from the Dingle property)
	Late 70's	Hutton family occupies Cottage ??
47	1874	Blenheim bought, called 'The Lodge' (conflicting evidence)
		Built a bathing & boathouse and stone wharf at the Dingle (Not sure when) Also the stable (which appears on the 1908 survey)
53	1881	Trip to Europe presentation on Standard time Italy
54	1882	Founding Member of Royal Society of Canada
56	1884	Standardized time adopted
57	1885	Last spike of the railway driven Fleming was there
58	1887	Companion of the Order of St Michael and St George
60	1888	wife Jeanie dies
63	1891	Lily marries William Exshaw
66	1894	Minnie elopes and marries Thomas O Critchley
67	1895	Donates land for the stone Anglican church for Jollimore. Construction foreman was James Hutton who became Fleming's caretaker for the properties.
69	1897	Knighted by Queen Victoria

71	1899	Grandchild baptized Dingle Chapel - Oswald Francis Walter Critchley W Critchley
78	1906	Founder of the Alpine Club
80	1908	Deeded much of Dingle to Liet Gov in trust for HRM. Divided remainder (to the north) into seven lots -one per each living child (six), kept the cottage lot for himself.
83	1911	Minnie and family (2 sons) move into Dingle cottage
84	1912	Dingle Tower opens
85	1913	Deeded the cottage lot (#7) to sons Walter and Hugh, who possibly add the covered front porch
88	1915	Fleming dies while visiting Minnie at Dingle cottage on July 22
	1920	Lily Fleming Exshaw purchase cottage from her brothers Walter and Hugh
	1930's	Cottage rented to Ralph McDonald and Stan Purcell, possibly resident caretakers
	1935	Cottage sold to John W. MacLeod by Mrs. Exshaw. MacLeod gradually bought the rest of the Fleming lots Arnold Burns lived in the cottage for a time
	1948	Thomas Wallace buys MacLeod's properties.
	1948	Thomas Wallace sells the lands to the City of Halifax. Arnold Burns occupies the cottage for a time as caretaker
	1970	National Heritage Trust buys Brunswick St Fleming house

Chancellor of Queens University for 35 years

Honourary degrees from Queens, U of T and Andrew's University of Scotland

Designed Canada's first stamp - the 3 penny Beaver

Appendix C: Griffen Article (2009)



The Cottage in the Dingle – Sanford Fleming’s Rustic Retreat

by Heather Watts & Iris Shea

In the 1870s visitors to Sanford Fleming’s summer retreat on the western shore of the Northwest Arm could have come by boat from the peninsula side to Fleming’s stone wharf, or by carriage round the head of the Arm. What was once called “the old French Road” from Halifax curved down the hill to Melville Island Prison. When Fleming became owner of the Dingle lands, he persuaded the Lieutenant Governor, Major General Sir Hastings Doyle, to build the first section of a proposed new road to York Redoubt, using prison labour. Fleming then built and paid for the road to continue to the entrance to the Dingle, now marked by salt- and pepper-pot gateposts. From there he constructed a private road which went on towards the Arm. About halfway along on the left-hand side he built the cottage.

The Flemings and their four children had come to Halifax in 1864, when he took up his duties as chief surveyor of the Intercolonial Railway. He purchased a house on Brunswick Street, where four more children were born. Fleming’s wide-ranging interests soon brought him into contact with Halifax’s leading citizens, many of whom had properties on the eastern shore of the Arm. In 1869, when his work on the Intercolonial no longer required residence on the east coast, Fleming returned with his growing family to Ottawa.

Throughout his life Fleming had loved the hills, glens and sea lochs of his native Scotland, of which the Arm reminded him, and he had decided that he too wanted to acquire Arm property. Fleming became the owner of nearly 300 acres (120 ha.) of the Dingle lands in 1870 and 1871 by consolidating three purchases: from William Cunard, Frederick



Sanford Fleming's summer retreat

Jollimore, and the executors of Arthur Murphy, who owned parts of original eighteenth century land grants to Thomas Bridge and William McGrannigan. His purchase stretched from the Arm Village (now Jollimore) to the boundary of the War Department property at Melville Island and cost him \$12,750, a substantial sum. In September of 1870, when he had his first purchase surveyed by George Middleton, two buildings were already standing. One was close to the private road, in the present location of the cottage. Another smaller one may have been the first of the summerhouses on the slope of the hill to the north of the cottage. The neatly constructed platform foundation of this building is still there.

Later in the decade he built another summerhouse on the top of the same wooded hill, which for many years was a favourite spot for picnickers and mayflowering parties. This gazebo-like structure is sketched on Ruger’s panoramic map of Halifax in 1879, and is also shown in a painting by

Halifax artist Kate Lear around 1900. Unfortunately, by 1915 both were gone - one blown down in a gale, the other succumbing to fire - and neither was rebuilt.

The wood frame cottage that Fleming had built was modest in size, one and a half stories with a hipped gable roof. It is a simple late-Victorian building but noticeably different from those of the fishermen and stonecutters in the neighbouring Arm Village. The original cottage had only two rooms on the ground floor and two long narrow bedrooms under the sloping roof. An angled staircase led up to the second floor from a back corridor. Built into a slope, the cottage had a full cellar with outside access at the back. None of the rooms seem to have taken advantage of the views toward the Arm, but instead the cottage was nestled into a woodland setting. The existence of the cottage allowed the Flemings and their children to escape the muggy heat of Ottawa and return to Halifax to spend the summers in a cool and remote retreat. Three

continued overleaf

generations of the family continued to do so for over 60 years.

Visitors today immediately notice the two small triangular dormers, and the four plain round columns holding up an extension of the roof, which forms an open verandah along the front of the building. The change of pitch in the roof and the heavy unadorned columns (which seem out of keeping with the design), may indicate one of the additions made when Fleming's children acquired the property after 1913.

By 1871 the Flemings had seven children to care for, and summers in Halifax would have required larger and more convenient accommodation than the cottage allowed. The Brunswick Street house, although they still owned it, was too far from the Arm and in 1872 Fleming purchased *Blenheim Lodge* from William Duffus. *The Lodge* was located across the Arm from the Dingle, a charmingly eccentric frame house, its roof studded with tiny dormer windows overlooking the water. It had large public rooms, nine bedrooms and spacious kitchens. There the servants could look after the younger children with convenience and comfort. Meanwhile the cottage in the Dingle, with its surrounding woods, streams, a large stone wharf and later a bathing and boating house, could be used for summer expeditions and picnics.

When grandchildren started to arrive, a one and a half storey stable, which first appears on the 1908 plan of the Dingle, was added to the buildings on the property. The ground floor walls were built of ironstone, with granite quoins, lintels and sills. Above the stonework, the upper storey was board and batten siding with a scalloped trim. The building is strikingly similar to the Anglican chapel in the Arm Village, built on land donated by Fleming in 1895. The supervisor of that construction was James Hutton, a stonemason, who for several years

afterwards worked for Fleming as caretaker of the Dingle estate. It is possible he may have been responsible for both buildings.

A wide path, now known as Loop Road, was constructed around Summerhouse Hill and many years later older residents of Jollimore village still spoke of Fleming's grandchildren taking their ponies from the stable and adventuring along the Loop Road in their pony cart.

In 1908, when Fleming deeded much of the Dingle to the Lieutenant Governor in trust for the City of Halifax, he divided that portion of his estate along the Arm from Fairy Cove north to the War Department property into seven lots, one for each of his six remaining children. Lot number seven, on which the cottage stood, was at first retained by Fleming himself, then deeded to his sons Walter and Hugh in 1913.

Several changes have been made to the cottage over the years. The style of door casings and window trim in the large southern room and rear corridor is very different from that in the original cottage, indicating one of the additions. Windows at the back of the new room overlook the Arm and here also is the most

dramatic interior feature - a floor to ceiling fireplace and chimney covered in random stone and banded with chunks of amethyst quartz. The fireplace would have been a focus on summer evenings when fog crept up the Arm and hung over the water. It still draws well nearly 100 years later.

Fleming had always been generous in allowing the public access to parts of his property. His Presbyterian conscience required only that no disturbance take place on Sundays, and for many years this arrangement was satisfactory. But growth in the use of the Arm brought more picnickers and visitors and the attendant vandalism and nuisance forced Sir Sandford to close the Dingle to the public, except by permit. He much regretted this, but the "small knot of rowdies" who played noisy games on Sundays, left litter and damaged the trees, sometimes causing his own family to leave, left him no choice. The permits cost \$1, there was no access to the Dingle on Sundays, and police constables enforced the new rules, making life more peaceful. His daughter and son-in-law, the Critchleys, also erected a wire fence to ensure that trespassers kept off the private areas



The stable

of the property.

Even in his old age, Sir Sandford continued to return to the Arm, and to the cottage. In July of 1915 he was staying with his daughter, Mary Critchley, when he caught a cold, which rapidly turned to pneumonia. On July 22, 1915 he died at the Dingle, surrounded by his family. The *Halifax Herald* reported, "as the news flashed through the city, instant and spontaneous was the tribute: 'A great man has gone'." Hugh Fleming telegraphed the President of the CPR asking if a private railway car could be made available to convey the coffin and members of the family back to Ottawa on July 23. Sir Sandford was buried there, in Beechwood Cemetery.

The family, particularly the Critchleys, continued to use the cottage as their summer residence. Lily Fleming Exshaw - although she was living in Scotland at the time - purchased it from her brothers Walter and Hugh Fleming in 1920. Josiah Boutilier, the ferryman and patriarch of Jollimore Village, remembered them all. He said that Sir Sandford Fleming often visited at the Boutilier home, and that he knew the families of both daughters, the Critchleys and the Exshaws, who had stayed at the cottage over many years and used the boating and bathing houses.

One summer night in 1924 the cottage was broken into by a couple of Halifax men, accompanied by their teenaged sisters. A number of things were stolen, including silver, camping equipment and a 45 calibre revolver with ammunition, which belonged to Capt. Critchley. During the ensuing manhunt two policemen were shot, one fatally. The young veteran who had taken the gun was swiftly convicted and hanged for murder.

In the first half of the 1930s the cottage was rented to resident caretakers including the families of Ralph McDonald and Stan Purcell, but in 1935 Mrs. Exshaw decided to sell the family retreat to John W. MacLeod. MacLeod

Publicly Sponsored Twin Towers Would Obliterate Public Harbour Views

An architectural rendering shows how the twin towers would block the view of the harbour from the Halifax Citadel. (Photo by Philip Pacey)



An eleventh hour amendment to the HRM by Design plan, which amendment circumvented public scrutiny, contains a curious twist. By section 15A, a "publicly sponsored convention centre" may be developed on the two blocks bounded by Argyle, Prince,

Market and Sackville Streets (the building and lands formerly owned by the Halifax Herald Limited), permitting towers of 14 and 18 stories, instead of the nine stories otherwise permitted on these blocks under HRM by

Continued overleaf

was gradually amassing the rest of the Fleming land along the Arm, which he eventually sold to Thomas Wallace in 1948. Wallace sold the property to the City of Halifax in the same year. During MacLeod's ownership and for a few years after the sale, Arnold Burns lived in and cared for the cottage, but in more recent times it has been rented to private tenants, with the stable used for park equipment storage.

The City of Halifax has registered both the Fleming cottage and the stable as municipal heritage properties. They were assigned construction dates of 1847 and ca. 1850 respectively, bearing no relation to the existing research done on the properties for the City nor to the property deeds. Unfortunately it is these

dates that are forever captured on the enamel heritage plaques.

Thanks to the foresight of Sir Sandford in leaving his land to the City, and the care it has received since, the Dingle is now one of the area's most attractive parks. It is still possible to walk the roads and paths laid out by Fleming, to admire the quaint cottage and to climb to "Dingle Top" on Summerhouse Hill. Children feed the ducks on the Dingle Lake and probably they still play noisy games on Sundays. Fleming's rustic retreat continues to give pleasure to new generations of Haligonians every year.

Iris (née Umlah) Shea's grandfather, William Topple, was Superintendent of Fleming Park for 20 years. Iris grew up in Jollimore Village. ☞

Appendix D: Fleming Cottage Statement of Significance



Sir Sandford Fleming Cottage

30 Dingle Road, Halifax, Nova Scotia, B3P, Canada

Formally Recognized: 1985/04/17



OTHER NAME(S)

n/a

LINKS AND DOCUMENTS

n/a

CONSTRUCTION DATE(S)

1870/01/01 to 1870/12/31

LISTED ON THE CANADIAN REGISTER: 2005/11/02



STATEMENT OF SIGNIFICANCE

DESCRIPTION OF HISTORIC PLACE

The Sir Sandford Fleming Cottage is a small, rustic, one-and-a-half storey, late nineteenth-century wood framed dwelling. It is located on the northern side of Dingle Road, leading toward the Sir Sandford Fleming Park in Halifax, NS. The heritage designation applies only to the building.

HERITAGE VALUE

The Sir Sandford Fleming Cottage is valued for its association with Sir Sandford Fleming (1827-1915). Fleming moved from Scotland to Canada in 1845, was educated at Columbia University, Toronto and Queen's (Kingston), and later became appointed to conduct surveys of possible routes for the Intercolonial Railway from Halifax to Quebec. He was eventually elevated to the position of Engineer in Chief for the Canadian Pacific Railway, a position which ensured him a prominent position in Canadian history. Fleming maintained a high profile in both political and social circles in Halifax and throughout his life. He was a member of the Halifax Club, the Chancellor of Queen's University and the director of the Hudson's Bay Company. He also designed Canada's first postage stamp and became internationally famous for establishing Universal Standard Time which was universally adopted in 1884.

It is possible that the cottage was built in the 1870's when Fleming consolidated many properties along the western shore of the Northwest Arm. The cottage is shown on an 1886 military map of Halifax. Fleming resided in Halifax during the 1860's before moving permanently to Ottawa, and continued to spend summers in Halifax. It is believed that Fleming passed away in the cottage in 1915.

Architecturally, the cottage is a simple, Victorian cottage. The architectural value of this wood framed structure lies in the unique hipped gable roof which extends over a broad verandah. Additionally there are unusual, triangular dormers and small pediments notched into the eaves at each end of the building. Inside the house a notable feature is a large stone fireplace and wide wooden wall board construction. The cottage is located on a large parcel of land (The Sir Sandford Fleming Park), on which other registered heritage structures are located (The Dingle Tower and the Sir Sandford Fleming Barn). The cottage is in close proximity to the road that leads to the Dingle Tower, and is an important link to the history of the area.

Source: HRM Planning and Development Services, Heritage File No. 58.

CHARACTER-DEFINING ELEMENTS

Exterior character-defining elements of the Sir Sandford Fleming cottage include:

- secluded setting in Sir Sandford Fleming Park;
- unformalized style of the cottage with features built in a late-Victorian rustic design;
- one-and-a-half storey, wood frame structure with vertical sash windows and a three-sided bay window with bracketed eaves on the side elevation;
- hipped gable roof with a slope extending over the verandah and a small central, triangular dormer window;
- front veranda's straight circular column supports with no decoration or capitals;
- three bay front façade with central entranceway and window on either side of the bay;
- central chimney;
- tall, narrow proportions of the windows in the front façade and the second floor level of the gable ends;
- small pediments notched into the roof eaves on the east and west elevations;
- central brick chimney on main structure, and tall offset brick chimney on side wing;
- one storey, shed roofed wing on the east side with a three sided bay window decorated with brackets.

The character-defining elements in the interior of the cottage include:

- large, stone fireplace in the wing and brick fireplace in the first-floor kitchen;
- wide board wall construction in various places throughout the interior.

RECOGNITION

JURISDICTION

Nova Scotia

RECOGNITION AUTHORITY

Local Governments (NS)

RECOGNITION STATUTE

Heritage Property Act

RECOGNITION TYPE

Municipally Registered Property

RECOGNITION DATE

1985/04/17



HISTORICAL INFORMATION

SIGNIFICANT DATE(S)

n/a

THEME - CATEGORY AND TYPE

Peopling the Land
People and the Environment

FUNCTION - CATEGORY AND TYPE

CURRENT

HISTORIC

Residence
Single Dwelling

ARCHITECT / DESIGNER

n/a

BUILDER

n/a