

NO: R145

COUNCIL DATE: June 25, 2018

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **June 21, 2018**

FROM: **General Manager, Planning & Development** FILE: **7918-0037-00**

SUBJECT: **Heritage Revitalization Agreement Application No. 7918-0037-00 for
1881 Town Hall and Old Anniedale School located at 17710 – 56A Avenue**

RECOMMENDATION

The Planning & Development Department recommends that Council:

1. Receive this report for information;
2. Authorize the City Clerk to bring forward the Heritage Revitalization Agreement (HRA) By-laws for the required readings, attached as Appendix “I” and Appendix “II”; and
3. Authorize the City Clerk to file the appropriate notice at the Land Title Office and with the appropriate Provincial Minister in accordance with Section 610 of the *Local Government Act*.

INTENT

The intent of this report is to obtain Council approval to bring forward HRA By-laws in order to formally protect the 1881 Town Hall and the Old Anniedale School at their new location on the Museum of Surrey campus, located at 17710 – 56A Avenue.

BACKGROUND

As part of a major cultural investment supported by three levels of government, the 1881 Town Hall (currently located at 6022 – 176 Street) and the Old Anniedale School (currently located at 9744 – 176 Street) will be relocated from their current locations to the Museum of Surrey campus at 17710 – 56A Avenue, as shown in Appendices “III”, “IV”, and “V”. The 1881 Town Hall and the Old Anniedale School are presently protected by Heritage Designation Bylaw, 1982, No. 7289 and Heritage Designation By-law, 1986, No. 8579, respectively. Heritage Alteration Permits were issued in order to allow for the relocation of the buildings to the Museum of Surrey campus. These proposed HRA By-laws will provide the long term preservation and conservation of the buildings at their new location.

Historical Background and Heritage Value of the 1881 Town Hall

The 1881 Town Hall is valued as Surrey's first "seat of government", and as a testament to the generosity and community spirit of some of Surrey's early settlers. Abraham Huck, one of the earliest newcomers to Surrey, bought land at Surrey Centre in 1872. Gradually, more newcomers arrived and laid the foundation of the community.

In 1879, Surrey was incorporated as a District Municipality. For the first 18 months of the Municipality, there was no formal public meeting place. Meetings of Surrey Council were held in Councillors' homes and other locations around the Municipality. The first by-law of the Municipality of Surrey was to authorize Council to purchase real estate for the erection of a Town Hall, at "a cost not to exceed one dollar... from Abraham Huck." It was not uncommon for residents to either sell land at minimal prices, or to donate land, for public good. The first meeting in the new Town Hall was held on May 2, 1881, at its original location across from Christ Church on Old McLellan Road. The 1881 Town Hall also served as an important community gathering space, in addition to being Surrey's seat of government until 1912, when a new Municipal Hall was built in Cloverdale.

The 1881 Town Hall is significant as an example of early frontier wooden construction, with vertical board and batten siding and square forged nails. The simplicity of the design reflects vernacular building techniques, and the modest pioneer origins of Surrey. At the time, the construction costs were not to exceed \$400. The heritage value of the 1881 Town Hall also lies in its interpretive value: The building is an important asset for the interpretation of Surrey's civic heritage.

The 1881 Town Hall was moved in 1938 to its present location, at the Cloverdale Fairgrounds, and later became Surrey's first museum, which is indicative of Surrey's commitment to preserving and interpreting its built and cultural heritage.

The 1881 Town Hall will be extracted from its current location in the former Surrey Museum at 6022 - 176 Street, and moved to the current Museum of Surrey campus, located at 17710 - 56A Avenue before the end of August 2018. To make this move, a portion of the existing building surrounding the 1881 Town Hall will be demolished. The remaining portion, to which the BC Vintage Truck Museum lease applies, will have new exterior walls constructed to re-establish its enclosure. Once the demolition has been completed to free the 1881 Town Hall, it will be moved as a whole by a professional building moving company. Civic Facilities has applied for all required permits for this work.

The key elements that define the heritage character of the 1881 Town Hall include its:

- Symmetrical form, scale and massing, as expressed by its simple rectangular floor plan;
- Front gabled roof with cedar shingle cladding;
- Exterior vertical board and batten siding, with original square forged nails; and
- Original multi-paned double-hung panelling and wooden floors.

At its new location, the 1881 Town Hall will be in closer proximity to another one of Surrey's former City Halls, which was located at 14245 - 56 Avenue, and is now home to a detachment of the Surrey RCMP.

Historical Background and Heritage Value of the Old Anniedale School

The Old Anniedale School has historic value as one of the earliest schools in Surrey. It opened in 1891 with thirteen pupils and, until it closed in 1954, it played a vital role in the life of the community's children. The Old Anniedale School was designed by the British Columbia Department of Lands and Works, and it was constructed by Samuel Edge. Today, the building is one of the few remaining one-room schoolhouses left in the Lower Mainland.

The Old Anniedale School is also significant for its association with the early development of the Tynehead and Anniedale neighbourhoods. The Old Anniedale School was valued by the community as a significant heritage asset as early as the 1970s. At that time, the Tynehead Community Association raised funds to have the Old Anniedale School moved from the corner of 96 Avenue and 184 Street to its present location at 9744 – 176 Street.

For many years, the one-room schoolhouse was used for educational programming by the Surrey School District. The City purchased the Old Anniedale School from the Surrey School District in 2017, for a nominal fee of \$10.00.

The Old Anniedale School will be moved as a whole, by a professional building moving company, from its present location at 9744 – 176 Street to the Museum of Surrey campus, located at 17710 – 56A Avenue, before the end of August 2018.

The key elements that define the heritage character of the Old Anniedale School include its:

- Simple rectangular form, scale and massing with mansard roof;
- Exterior elements such as wooden drop siding; and
- Double-hung wooden-sash four-over-four windows, which are banked in quadruple assembly on the east façade, and two more in single assembly on the west façade.

DISCUSSION

Heritage Revitalization Agreement

The heritage protection instrument applied for is a voluntary agreement between landowners and the City. This HRA is given effect through a By-law under Section 610 of the *Local Government Act*. The proposed HRA By-laws are attached as Appendix "I" and "II". The By-laws consist of two parts:

1. The Agreement
 - a. The Agreement outlines the Owner's obligations and responsibilities for long-term preservation and conservation of the 1881 Town Hall and the Old Anniedale School. This includes provisions to rebuild the 1881 Town Hall or the Old Anniedale School in the unlikely event that either building is destroyed.
2. The Conservation Plan, which includes:
 - a. A description of the heritage significance of the 1881 Town Hall and the Old Anniedale School;
 - b. A list of the character-defining elements of the 1881 Town Hall and the Old Anniedale School;

- c. A description of the maintenance and restoration requirements consistent with the heritage character of the 1881 Town Hall and the Old Anniedale School; and
- d. An indication of what intervention would require or would not require issuance of heritage alteration permits before works can be done.

The Conservation Plan does not require restorations to be commenced within a specific timeframe. It will be up to the Owner of the 1881 Town Hall and the Old Anniedale School to undertake restorations and maintenance in accordance with the Conservation Plan, as finances permit.

On May 23, 2018, the Surrey Heritage Advisory Commission reviewed the proposed HRA By-laws for the 1881 Town Hall and the Old Anniedale School and recommended that:

“The General Manager, Planning & Development forward the HRAs for the 1881 Town Hall and Old Anniedale School (17710 – 56A Avenue) to Council for consideration.”

Process

This By-law is not subject to a Public Hearing requirement, as a change in use or density is not proposed.

Once the By-law is given Final Adoption, the City Clerk will arrange to have the HRA executed. In accordance with Section 610 (10) *Local Government Act*, the City Clerk will send a letter to the Provincial Minister responsible, and will file a notice of the agreement at the Land Title Office. A copy of the executed agreement is also sent to the property owner.

Civic Facilities staff has applied for all the required permits in order to move both buildings to the Museum of Surrey campus, which includes extracting the 1881 Town Hall building from its current location at 6022 – 176 Street, the site of the former Surrey Museum.

Legal Services Review

The Legal Services Division has reviewed the HRAs and has no concerns.

SUSTAINABILITY CONSIDERATIONS

The protection and relocation of the 1881 Town Hall and the Old Anniedale School to the Museum of Surrey campus aligns with the Sustainability Charter 2.0 goal of “access to diverse, high quality learning opportunities, and vibrant arts, heritage and cultural experiences for all Surrey residents”. Specifically this will assist in meeting the following Desired Outcomes (DO) and Strategic Directions (SD):

Education and Culture

- DO8:** Arts, heritage and entertainment spaces are incorporated throughout the City.
- DO9:** Surrey supports and celebrates its diverse artists, cultures and community heritage through inclusive festivals, programming and events.
- DO10:** Surrey celebrates, protects and promotes its natural and built heritage sites.

SD11: Create better access to arts, heritage and culture facilities and services at the neighbourhood level.

SD12: Develop community-based arts and heritage spaces and programming throughout the City.

SD13: Protect natural and built heritage sites.

CONCLUSION

The 1881 Town Hall and the Old Anniedale School will be relocated to the Museum of Surrey campus as part of a major cultural investment supported by three levels of government. The attached HRAs will provide for the long-term preservation and conservation of these important Surrey buildings in their new location.

It is recommended that Council:

- Receive this report for information;
- Authorize the City Clerk to bring forward the HRA By-laws (the “HRA”) for the required readings, attached as Appendix “I” and Appendix “II”; and
- Authorize the City Clerk to file the appropriate notice at the Land Title Office and with the appropriate Provincial Minister in accordance with Section 610 of the *Local Government Act*.

Original signed by
Jean Lamontagne
General Manager, Planning & Development

PH/KB/ss

Appendix “I” Heritage Revitalization Agreement (HRA) By-law for the 1881 Town Hall
Appendix “II” Heritage Revitalization Agreement (HRA) By-law for the Old Anniedale School
Appendix “III” Location Map – 1881 Town Hall
Appendix “IV” Location Map – Old Anniedale School
Appendix “V” Relocation Map – Museum of Surrey Campus
Appendix “VI” Historical Photos of the 1881 Town Hall and the Old Anniedale School

CITY OF SURREY

BY-LAW NO.

A by-law to enter into a heritage revitalization agreement

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WHEREAS:

- A. The Council may by by-law pursuant to Part 15 of the Local Government Act, R.S.B.C. 2015, Chapter 1, as may be amended from time to time, enter into a heritage revitalization agreement with the owner of heritage property;

- B. The Council considers that certain lands, premises and improvements have *heritage value* and *heritage character* and ought to be conserved, which are situate within the City and described as:

Parcel Identifier: 025-960-024
 Lot 1 Section 8 Township 8 New Westminster District Plan BCP11474

17710 - 56A Avenue

(the "Lands");

- C. The owner of the Lands and the City of Surrey have agreed on the nature, character and extent of the *heritage value* and *heritage character* of the Lands and on the nature, extent and form of conservation necessary to protect the *heritage value* and *heritage character* of the Lands;

NOW THEREFORE, the City Council of the City of Surrey, in open meeting assembled, enacts as follows:

- 1. The City is authorized hereby to enter into that certain Heritage Revitalization Agreement appended to this By-law as Schedule "I" (the "Heritage Revitalization Agreement") in respect of the Lands.

- 2. The Mayor and the City Clerk are authorized on behalf of the Council to sign the Heritage Revitalization Agreement and to register a notice on the title of the Lands.

- 3. Schedule "I" forms a part of this By-law.

4. This By-law may be cited for all purposes as "City of Surrey Heritage Revitalization Agreement By-law, 20 , No._____."

PASSED FIRST READING on the ____ day of _____.

PASSED SECOND READING on the ____ day of _____.

PASSED THIRD READING on the ____ day of _____.

RECONSIDERED AND FINALLY ADOPTED, signed by the Mayor and Clerk, and sealed with the Corporate Seal on the ____ day of _____ 20 .

_____ MAYOR

_____ CLERK

SCHEDULE "I"

[To City of Surrey Heritage Revitalization Agreement By-law, 20 , No._____]

HERITAGE REVITALIZATION AGREEMENT

This Agreement made the ___ day of _____, 20

BETWEEN:

CITY OF SURREY,
as represented by Realty Section, Engineering Department
13450 104 Avenue
Surrey, British Columbia V3T 1V8

(the "Owner")

OF THE FIRST PART

AND:

CITY OF SURREY, a municipal corporation,
and having offices at 13450 104 Avenue
Surrey, British Columbia V3T 1V8

(the "City")

OF THE SECOND PART

WHEREAS:

- A. The Owner is the registered owner in fee simple of the following lands and premises situate in the City of Surrey, British Columbia and described as:

Parcel Identifier: 025-960-024
Lot 1 Section 8 Township 8 New Westminster District Plan BCP11474

17710 - 56A Avenue

(the "Lands");

- B. The improvements and features on the Lands identified in and described by text, photographs, plans and drawings attached to this Agreement as Appendix "A" (the "Conservation Plan") and Appendix "B" (the "McGinn Engineering & Preservation Ltd. Plan") as the 1881 Town Hall (the "1881 Town Hall") are considered by the City and the Owner to have *heritage value* and *heritage character*;
- C. The 1881 Town Hall is listed on the Surrey Heritage Register and the Owner and the City desire to conserve the *heritage value* and *heritage character* of the 1881 Town Hall;

- D. The 1881 Town Hall has been previously identified as having *heritage value* and *heritage character* in Surrey Municipal Heritage Site Designation By-law, 1982, No. 7289 (the "Designation Bylaw");
- E. A heritage alteration permit shall be issued pursuant to the Designation Bylaw for the purpose of relocating the School from its present location at 6022 176 Street, Surrey, BC to the Lands
- F. For the purpose of conservation of the *heritage value* and *heritage character* of the 1881 Town Hall on the Lands, the Owner and the City have agreed to enter into this Agreement setting out the terms and conditions of continuing protection for the *heritage value* and *heritage character* of the 1881 Town Hall;
- G. The Owner has agreed to the terms for compensating the City for the loss in *heritage value* in accordance with Section 2(f) of this Agreement in the event the 1881 Town Hall is moved or destroyed other than through natural causes or those causes outside of the Owner's reasonable control; and
- H. All provisions of this Agreement applicable to the Lands also apply to the 1881 Town Hall.

NOW THEREFORE THIS AGREEMENT WITNESSES that in consideration of the mutual premises of the parties hereto and for other good and valuable consideration (the receipt and sufficiency of whereof is hereby by the parties acknowledged) the Owner and the City covenant and agree with one another pursuant to Section 610 of the Local Government Act, R.S.B.C. 2015, Chapter 1, as amended, re-enacted or consolidated from time to time and any successor statute (the "Local Government Act"), as follows:

Conservation Plan

- 1. (a) The Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan form part of this Agreement. To the extent that the text, photographs, plans and drawings constituting the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan require interpretation, the City shall be, in the first instance, the interpreter of the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan and shall determine the matter. If the Owner is dissatisfied with the City's interpretation, then Section 15 of this Agreement shall apply.
- (b) Part I of the Conservation Plan identifies, details and describes the character, extent and nature of the improvements and features on the Lands that have *heritage value* and *heritage character*. Part II of the Conservation Plan sets out the maintenance strategy, general standards and exemptions for the *conservation* and maintenance of all improvements and features on the Lands that have *heritage value* and *heritage character*. Part III of the Conservation Plan sets out the standards and specifications for relocation, restoration, rehabilitation, replication, repair, replacement or maintenance of the 1881 Town Hall on the Lands to be undertaken and completed pursuant to this Agreement, including, but not limited to: the structure, building envelope and exterior; doors; roof structure and cladding; and finishes of the building.

Owner's Obligations to Protect, Conserve, Maintain and Rebuild

2. The Owner covenants and agrees that:
- (a) The 1881 Town Hall shall not be *altered*, including alterations required or authorized by this Agreement, except as agreed to in writing by the City.
 - (b) Each action of relocation, restoration, rehabilitation, replication, repair, replacement or maintenance required by Parts I, II, and III of the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan shall be commenced and completed in accordance with the timing, phasing, standards and specifications set out the Conservation Plan.
 - (c) The 1881 Town Hall shall be maintained to the minimum standards and in accordance with the guidelines and requirements set out in the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan.
 - (d) In the event the 1881 Town Hall is damaged, other than through causes outside of the Owner's reasonable control, the Owner of the Lands accepts the obligation to undertake all necessary construction to restore the damaged portion or portions of the 1881 Town Hall to its original condition. The Owner is required to apply for and to hold a heritage alteration permit specifying the measures to be taken to restore the damaged portion or portions of the 1881 Town Hall. The heritage alteration permit shall be subject to review and approval by the Heritage Advisory Commission. The restoration of the 1881 Town Hall shall reflect the character-defining elements and design components including, but not limited to: symmetrical form, scale and massing, as expressed by its simple rectangular floor plan; front gabled roof with cedar shingle cladding; exterior vertical board and batten siding, with original square forged nails; original multi-paned double-hung panelling and wooden floors, all as subject to approval by the City Architect or designate.
 - (e) In the event the 1881 Town Hall is destroyed, other than through natural causes or those causes outside of the Owner's reasonable control, the Owner of the Lands accepts the obligation to undertake all necessary construction to create a replica of the 1881 Town Hall. The Owner is required to apply for and to hold a heritage alteration permit specifying the measures to be taken to create a replica of the 1881 Town Hall. The heritage alteration permit shall be subject to review and approval by the Heritage Advisory Commission. The construction of the replica of the 1881 Town Hall shall reflect the character-defining elements and design components as described in Section 2(d), all as subject to approval by the City Architect or designate.

- (f) In the event that the 1881 Town Hall is destroyed, other than through natural causes or those causes outside of the Owner's reasonable control, in addition to the construction of a replica described in 2(e), the Owner covenants and agrees to compensate the City for the loss in *heritage value* to the community in the amount of \$29,526.25 indexed to the Vancouver Consumer Price Index (CPI) with 2017 being the base year, except that if the 1881 Town Hall is destroyed through natural causes, including but not limited to, flood, earthquake and accidental fire as determined by the City in its sole discretion, and a replica is constructed by the Owner that is acceptable to the Heritage Advisory Commission or any successor decision making body in its sole discretion, then payment of compensation by the Owner to the City is not required.
- (g) The Owner shall do or cause to be done all such things, and shall take or cause to be taken all such actions, as are necessary to ensure that the restrictions and requirements set out in Parts II and III of the Conservation Plan and in the McGinn Engineering & Preservation Ltd. Plan are fully observed, and the Owner shall not do, cause or allow to be done anything that would be in breach of the restrictions and requirements of this Agreement.
- (k) Where required by the City in a heritage alteration permit, the Owner shall provide security to the City to guarantee the performance of the terms, requirements and conditions contained in the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan.
- (l) The Owner may apply to the City for funding including, but not limited to, monies for exemption from taxes, or any provision for assistance as specified in Section 25 of the Community Charter, S.B.C. 2003, c.26 (the "Community Charter").

Variations to By-laws

- 3. Not applicable to the Lands.

Construction and Maintenance

- 4. Wherever under this Agreement the Owner relocates, restores, rehabilitates, replicates, repairs, replaces, maintains or in any way alters the 1881 Town Hall or constructs or maintains other works to protect or conserve the 1881 Town Hall, all such work shall be done at the Owner's sole expense strictly in accordance with the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan and as agreed by the City in writing and all improvements or features shall be diligently and continuously maintained in good repair and efficient operating condition by the Owner at the Owner's sole expense in accordance with good engineering, design, heritage and conservation practice.

No Liability to City

- 5. In no case shall the City be liable or responsible in any way for:

- (a) any personal injury, death or consequential damage of any nature whatsoever, howsoever caused, that may be suffered or sustained by the Owner or by any other person who may be on the Lands; or
- (b) any loss or damage of any nature whatsoever, howsoever caused to the Lands or any improvements or personal property thereon belonging to the Owner or to any other person,

arising directly or indirectly from compliance with the restrictions and requirements of this Agreement, wrongful or negligent failure or omission to comply with its restrictions and requirements, or refusal, omission or failure of the City to enforce or require compliance by the Owner with the restrictions or requirements or with any other term, condition or provision of this Agreement.

Reasonable Care and Risk

- 6. The Owner shall at all times, in complying with the restrictions or requirements of this Agreement, take reasonable care not to injure any person or cause or allow damage to any property, and shall take reasonable care not to cause, suffer, permit or allow any condition to exist that might reasonably lead to, cause or result in injury to any person or property including persons and property on adjacent lands. It shall be the sole responsibility of the Owner to comply and maintain compliance with the restrictions and requirements in a safe manner, and without reasonably foreseeable risk to person or property. Compliance with the restrictions and requirements in this Agreement shall be at the sole and exclusive risk and cost of the Owner.

Modification

- 7. If, in fulfilling its responsibilities and obligations pursuant to this Agreement, the Owner perceives or becomes aware of any unreasonable risk of injury to persons or damage to property or other potential loss that cannot be reasonably avoided, alleviated, reduced or eliminated except by measures that would be a breach of the restrictions, requirements of this Agreement, the Owner shall notify the City in writing of the nature and extent of the risk and of the measures proposed by the Owner to be undertaken at its sole cost to reduce, alleviate, avoid or eliminate the risk. Risk shall remain with the Owner.

Indemnity

- 8. The Owner shall at all times indemnify and save harmless the City and its elected and appointed officials, employees, contractors and agents of and from all loss and damage, and all actions, claims, costs, demands, expenses, fines, liabilities and suits of any nature whatsoever by whomsoever brought for which the City shall or may become liable, incur or suffer by reason of existence and effect whether direct or indirect of the restrictions or requirements of this Agreement, or breach or non-performance by the Owner of any covenant, term or provision hereof, or by reason of any work or action of the Owner in performance of this Agreement, or by reason of any work or action of the Owner in performance of its obligations, or by reason of any wrongful act or omission, default or negligence of the Owner.

Alternative Remedies

9. Any performance by the City pursuant to a statutory right to perform the obligations of an Owner arising out of this Agreement may be exercised fully in accordance with the Local Government Act and the Community Charter, and shall be without prejudice to any and all other remedies at law and equity available to the City, and no reference in this Agreement to, or exercise of any specific right or remedy by the City, shall preclude the City from exercising any other right or remedy.

Damages

10. The Owner covenants and agrees that the measure of damages for any breach of the restrictions or requirements of this Agreement shall include, but shall not be limited to, the actual cost and expense of all administration, labour, materials, equipment, services and work required for all remedial acts necessary to fully restore, rehabilitate, replace, repair or maintain the 1881 Town Hall. The nature and extent of any breach of the said restrictions and requirements, and the nature and extent of any relocation, restoration, rehabilitation, replacement, maintenance or remedial work or action of any nature required to remedy such breach shall be determined by the City by reference to the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan, and Sections 2 and 4 of this Agreement.

No Waiver

11. No restrictions, requirements or other provisions in this Agreement shall be deemed to have been waived by the City unless a written waiver authorized by resolution of the Council and signed by an officer of the City has first been obtained, and without limiting the generality of the foregoing, no condoning, excusing or overlooking by the City on previous occasions of any default nor any previous written waiver shall be taken to operate as a waiver by the City of any subsequent default or in any way to defeat or affect the rights of remedies to the City.

Statutory Authority and Proprietary Rights

12. Nothing in this Agreement shall limit, impair, fetter, or derogate from the statutory powers of the City all of which powers may be exercised by the City from time to time and at any time to the fullest extent that the City is enabled and no permissive by-law enacted by the City, or permit, license or *approval*, granted, made or issued hereunder, or pursuant to statute, by the City shall stop, limit or impair the City from relying upon and enforcing this Agreement.

Compliance with Laws

13. Despite any provision of this Agreement, the Owner shall comply with all laws, including by-laws of the City and all regulations and orders of any authority having jurisdiction, and to the extent only that such laws, regulations and orders are mandatory and necessarily require the breach of any restriction or positive obligation of this Agreement to be observed or performed by the Owner, or less than strict compliance with the terms hereof, then the Owner upon sixty (60) days' written notice to the City shall be excused from complying with such restrictions or performing such obligation and such restriction or obligation shall be suspended but only to the extent and for the time that such mandatory law, regulation or order is inconsistent with compliance with the said restrictions or obligations.

Notice

14. Any notice to be given under this Agreement shall be in writing and may be either delivered personally or sent by prepaid registered mail and if so mailed shall be deemed to have been given five (5) days following the date upon which it was mailed. The address of the parties for the purpose of notice shall be as follows:

If to the City:

Attention: City Clerk
CITY OF SURREY
13450 104 Avenue
Surrey, British Columbia V3T 1V8

If to the Owner:

Attn: Realty Section, Engineering Department
CITY OF SURREY
13450 104 Avenue
Surrey, British Columbia V3T 1V8

Any party may at any time give notice in writing to the other of any change of address and after the third day of giving of the notice, the address specified in the notice shall be the address of the party for the giving of notices.

If title to the Lands is transferred to a new Owner, the new Owner shall provide notice in writing to the City within 15 days of such a transfer providing the name of the new Owner, the contact for notice if it is different than the Owner and the new Address to which notices are to be sent.

Arbitration

15. The Owner, if dissatisfied with the City's interpretation of the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan and any determination pursuant to Section 1(a) of this Agreement may require that the matter be decided and determined by binding arbitration as follows:
 - (a) The Owner must, within thirty (30) days of any exercise of discretion by the City, give notice to the City of its intention to dispute and in such

notice shall name a member in good standing of the Architectural Institute of British Columbia who has agreed to act as an arbitrator;

- (b) The City shall within thirty (30) days of receipt of the aforesaid notice either accept the Owner's arbitrator, or name another with the same qualifications willing to act, and shall give notice of the same to the Owner;
 - (c) Where each of the Owner and the City have named an arbitrator, the two arbitrators shall within thirty (30) days of the City's notice pursuant to Section 15(b) appoint a third arbitrator having the same qualifications and the three arbitrators shall decide the dispute;
 - (d) Where the City accepts the arbitrator first selected by the Owner, that arbitrator shall act as a single arbitrator and forthwith decide the dispute;
 - (e) Any arbitrator's decision in respect of the exercise of discretion by the City shall be final, conclusive and binding on all parties;
 - (f) The arbitrator shall award the prevailing party full compensation for all costs and expenses of the arbitrator, costs and fees of the proceedings and solicitor-client costs and expenses; and
 - (g) The arbitrator shall issue a final decision regarding the dispute within twenty-five (25) business days after the arbitrator's appointment, subject to extension of that time by agreement of the parties.
16. Without limiting the City's power of inspection conferred by statute and in addition to that power, the City shall be entitled at all reasonable times and with reasonable notice to enter onto the Lands from time to time for the purpose of ensuring that the Owner is fully observing and performing all of the restrictions and requirements in this Agreement to be observed and performed by the Owner, and wherever possible, when an inspection of the Lands is undertaken, the City shall provide reasonable notice to the Owner.

Headings

17. The headings in this Agreement are inserted for convenience only and shall not affect the construction of this Agreement or any of its provisions.

Schedules

18. All schedules to this Agreement are incorporated into and form part of this Agreement.

Number and Gender

19. Whenever the singular or masculine or neuter is used in this Agreement, the same shall be construed to mean the plural or feminine or body corporate where the context so requires.

Interpretation

20. Terms used in this Agreement that are italicized are defined in the Local

Government Act, and the Heritage Conservation Act, R.S.B.C. 1996, Chapter 187, as amended, re-enacted or consolidated from time to time and any successor statute, and shall take their meaning from those Acts.

Successors Bound

- 21. All restrictions, rights and liabilities imposed upon or given to the respective parties under this Agreement shall extend to and be binding upon their respective heirs, executors, administrators, successors and assigns. When the Owner is more than one party they shall be bound jointly and severally by the terms, covenants and agreements on the part of the Owner.

Notice to be Filed

- 22. Notice of this Agreement and amendments to it will be filed in the Land Title Office and once filed, this Agreement and amendments will be binding on all persons who acquire an interest in the Lands.

IN WITNESS WHEREOF the Owner and the City have executed this Agreement as of the date first above written.

CITY OF SURREY

CITY OF SURREY

Linda Hepner
Mayor

Jane Sullivan
City Clerk

Appendix "A"

CONSERVATION PLAN

PART I – HISTORICAL AND ARCHITECTURAL BACKGROUND

1. Description of Historic Place

The 1881 Town Hall is a single-storey, single-roomed, wood-frame building, rectangular in plan, with a front gable roof, clad in vertical board and batten. The original interior and most of the exterior are preserved. The building was completely encased within a later building, with only the peak of its gabled roof visible from the street. The Hall was moved again from that location to its present location in 2018.

2. Heritage Value of Historic Place

The 1881 Town Hall is valued for its role in the history of the City and as a testament to the generosity, determination, and civic will of the area's pioneers. Abraham Huck, the area's first settler, bought land at Surrey Centre in 1872. Gradually, more settlers arrived and began laying the foundations of the community. In 1879 the District of Surrey was incorporated, but at the time there was no public meeting place. Abraham Huck donated one acre of his Surrey Centre land for the construction of this Hall, and the first meeting in the building was held on May 2, 1881. The erection of the Town Hall, which was also used for church services until Christ Church was completed nearby, symbolized rapid progress within the community.

The 1881 Town Hall is also significant as an example of early frontier wooden construction, with vertical board and batten siding and square forged nails. The simplicity of the design reflects vernacular building techniques, and the modest pioneer origins of Surrey.

The heritage value of the Town Hall also lies in its interpretive value. The building is an important cultural feature for the interpretation of Surrey's civic heritage to the public. It was moved, in 1938, to the Cloverdale Exhibition Grounds, and later became Surrey's first museum, indicative of Surrey's commitment to preserving and interpreting its built and cultural heritage.

3. Character Defining Elements

Key elements that define the heritage character of the 1881 Town Hall include its:

- Symmetrical form, scale and massing, as expressed by its simple rectangular floor plan;
- Front gabled roof with cedar shingle cladding;
- Exterior vertical board and batted siding, with original square forged nails; and
- Original multi-paned double-hung panelling and wooden floors.

PART II – MAINTENANCE STANDARDS AND PERMIT APPROVALS

1. General

A. Requirement to Commence Renovations

Moving of the 1881 Town Hall may commence at any time following the issuance of a Heritage Alteration Permit and as authorized by the issuance of a building permit.

Restoration of the 1881 Town Hall, including works that are consistent with Part III – Restoration Standards and Specifications, may commence at any time following the adoption of a by-law to enter into this Agreement and the issuance of a building permit authorizing the works.

B. Maintenance Strategy

The strategy to ensure ongoing conservation of the 1881 Town Hall shall consist of a Maintenance Plan and a Funding Strategy.

The Maintenance Plan shall be prepared with input from a conservation architect or qualified heritage consultant that is acceptable to the City. Issues to be addressed in the Maintenance Plan include water penetration and damage from sun, wind, weather and animals. Maintenance includes, but is not limited to, painting or staining, sealing, weather-stripping and the like.

The Funding Strategy shall include, but is not limited to, whether or not the Owner intends to absorb all the costs, undertake fundraising or seek government financial incentives, including those available from the City.

The Owner shall submit a Maintenance Plan and Funding Strategy for review and approval by the General Manager, Planning and Development and , if deemed necessary by the General Manager, Planning and Development, the Heritage Advisory Commission within one (1) year of the adoption of a by-law to enter into this Agreement.

The Maintenance Plan and Funding Strategy for the 1881 Town Hall shall include, but is not limited to, the following:

- (a) A description and a time schedule for the renovations, repair, and replacement of the exterior elements, *landscaping* or other identified works on the Lands that constitute the character-defining elements and as identified in Part III – Renovation Standards and Specifications;
- (b) A description and time schedule for the ongoing maintenance of the elements, *landscaping* or other identified works on the Lands and other relevant details. Maintenance includes: painting, staining and sealing of the exterior cladding and trims, weather stripping, re-roofing, replacement of windows, doors and exterior cladding or trims to match the existing materials;
- (c) Ongoing maintenance of *landscaping*;
- (d) A description of any matters noted in Part III – Renovation Standards and Specifications or in the plans attached to this Agreement as requiring further details; and
- (e) A financial plan detailing the funding for the renovation and maintenance outlined above, including corporate sponsorships, annual budgets by the

Owner or tenant, applications for government grants, strata fees, and other relevant details.

C. Amending an Established Maintenance Strategy

An Owner may apply to the City to amend an existing Maintenance Plan and Funding Strategy. Any amendment is subject to approval by the General Manager, Planning and Development and, if deemed necessary by the General Manager, Planning and Development, the Heritage Advisory Commission.

2. Standards

The "Standards and Guidelines for the Conservation of Historic Places in Canada", established under the Historic Places Program or successor guidelines as may be approved by the City are to apply to all construction, maintenance, restoration or renovation works undertaken under Parts II or III on the 1881 Town Hall.

3. Timing and Phasing

This provision does not apply to the lands.

4. Heritage Alteration Permit(s) Approval

A. Changes to the building, structure, exterior appearance of the 1881 Town Hall, features on the Lands identified in the Conservation Plan, McGinn Engineering & Preservation Ltd. Plan. or character-defining elements may require the Owner to apply for a heritage alteration permit or obtain approval from the City.

Proposed changes shall be referred to the Planning & Development Department of the City prior to the commencement of any work to determine if the changes require or do not require a heritage alteration permit.

B. A heritage alteration permit may not be required for alterations including, but not limited to, the following:

- (a) changes to the Conservation Plan or the McGinn Engineering & Preservation Ltd. Plan that are considered by the City Architect to be minor in nature and not affecting the character-defining elements of the 1881 Town Hall;
- (b) restorations considered by the City Architect to be consistent with the original design, being made to replace stylistically foreign elements and done in consultation with an independent conservation architect or qualified heritage consultant acceptable to the City; or
- (c) simple repair and maintenance of existing elements not affecting the *building* structure, exterior or interior appearance of the 1881 Town Hall.

C. A heritage alteration permit shall be required for all but minor alterations including, but not limited to, the following:

- (a) changes to the 1881 Town Hall structure;
- (b) changes to the exterior appearance of the 1881 Town Hall;

- (c) replacement of existing elements and/or construction of additions to the 1881 Town Hall;
- (d) changes to the external appearance of the 1881 Town Hall due to interior renovations.

If a heritage alteration permit is determined to be required, the Owner shall apply to the City for a heritage alteration permit before undertaking any of the works listed in this Section 4.C.

After the heritage alteration permit application is submitted, the heritage alteration permit will be considered for issuance by City Council upon the recommendation of the General Manager, Planning and Development and the Heritage Advisory Commission, or by a City official delegated by City Council.

5. Building Permit Approval

Construction, alterations or other actions to be authorized by a building permit shall be consistent with the provisions of the Conservation Plan, McGinn Engineering & Preservation Ltd. Plan, and with heritage alteration permits sanctioning construction, alterations or other actions.

As the 1881 Town Hall is recognized as a historic site, Building Code equivalencies may be used to lessen visual impacts on the historical appearance or authenticity of the *building*. To utilize Building Code equivalencies, the Owner shall retain a qualified architect that is acceptable to the City Architect.

6. Conditions

- A. The works specified in Part III and attachments to this Conservation Plan shall be supervised by a conservation architect or qualified heritage consultant acceptable to the City.
- B. The works specified in Part III and attachments to this Conservation Plan shall be approved by a conservation architect or qualified heritage consultant acceptable to the City prior to the City granting final building approval.

PART III – RESTORATION STANDARDS AND SPECIFICATIONS

1. Foundation:

See Section 4.2.3 “New Foundation & Foundation Wall” of the McGinn Engineering & Preservation Ltd. Plan.

2. Roof Structure:

See Section 4.2.2 “Roof Structure Upgrades” of the McGinn Engineering & Preservation Ltd. Plan.

3. Chimney Restoration:

See Section 4.2.7 “Chimney Restoration” of the McGinn Engineering & Preservation Ltd. Plan.

4. Front Stair Reconstruction:

See Section 4.2.9 “Front & Side Reconstruction of the McGinn Engineering & Preservation Ltd. Plan.

5. Front Stoop Reconstruction:

See Section 4.2.8 “Front Stoop Reconstruction” of the McGinn Engineering & Preservation Ltd. Plan.

6. Windows and Doors:

See Section 4.2.10 “Window and Door Restoration” of the McGinn Engineering & Preservation Ltd. Plan.

7. Colour scheme:

See Section 4.2.16 “Exterior Painting” of the McGinn Engineering & Preservation Ltd. Plan.

If the exterior paint colour of the 1881 Town Hall is to be changed, the change shall be done in consultation with the City and reflect as best as can be determined the original appearance of the 1881 Town Hall or heritage colours appropriate for the period of the Hall.

Changes to the exterior colour scheme shall not be undertaken without being reviewed and approved by the City Architect. The City Architect may consult with the Heritage Advisory Commission about the colour scheme.

Prior to final paint application, samples of the colours should be placed on the *building* to be viewed in natural light. Final colour selection can then be verified. Matching to any other paint company products should be verified by the heritage consultant.

8. Interior:

See Section “4.2.14 “Interior Features” of the McGinn Engineering & Preservation Ltd. Plan.

9. Other:

The general intent is to promote restoration and retention of existing materials and elements wherever possible. If restoration is not feasible, replacements shall be constructed to match existing in terms of form, detailing and materials. Where original features have already been removed, altered or replaced by stylistically foreign elements, new replacements shall be consistent with the original design and done in consultation

with an independent conservation architect or qualified heritage consultant acceptable to the City.

Minor changes to the provisions of Part III that do not affect the character defining elements or that improve the authenticity of the restorations, may be approved by the City Architect, in consultation with the Heritage Advisory Commission.

(Note: Terms used in Appendix "A" of this Agreement that are italicized are defined in Surrey Zoning By-law, 1993, No. 12000, as amended, and shall take their meaning from the By-law.)

Appendix "B"

HERITAGE CONSERVATION PLAN
1881 Town Hall, 17710 56A Avenue, Conservation and Relocation Plan
McGinn Engineering & Preservation Ltd., May 2018

(The " McGinn Engineering & Preservation Ltd. Plan.")

(Attachment beginning on the next page)



conservation plan

1881 SURREY TOWN HALL

6022 176 STREET, SURREY, BC

MAY 2018



TDM PROJECTS INC.
6420 Rosebery Ave.
West Vancouver, BC. V7W 2C6



McGinn Engineering &
Preservation Ltd.
Barry McGinn Architect.

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Early Photograph of the 1881 Surrey Town Hall

1 HERITAGE VALUE ASSESSMENT

** Heritage Value Assessment of 1881 Surrey Town Hall is adapted from the Canadian Register of Historic Places (in the Appendix)*

1.1 History/Description

The 1881 Surrey Town Hall is a single-storey, single-roomed, wood-frame building, rectangular in plan, with a front gable roof, clad in vertical board and batten. The building is now completely encased within a later building, with only the peak of its gabled roof visible from the street. The original interior and most of the exterior are preserved, and can be seen inside the enclosing building.



Early Photograph of the 1881 Surrey Town Hall

1.2 Summary of Heritage Value

The 1881 Surrey Town Hall is valued for its role in the history of the City and as a testament to the generosity, determination, and civic will of the area's pioneers. Abraham Huck, the area's first settler, bought land at Surrey Centre in 1872. Gradually, more settlers arrived and began laying the foundations of the community. In 1879 the District of Surrey was incorporated, but at the time there was no public meeting place. Abraham Huck donated one acre of his Surrey Centre land for the construction of this Hall, and the first meeting in the building was held on May 2, 1881. The erection of the Town Hall, which was also used for church services until Christ Church was completed nearby, symbolized rapid progress within the community.

The Town Hall is also significant as an example of early frontier wooden construction, with vertical board and batten siding and square forged nails. The simplicity of the design reflects vernacular building techniques, and the modest pioneer origins of Surrey.

The heritage value of the Town Hall also lies in its interpretive value. The building is an important cultural feature for the interpretation of Surrey’s civic heritage to the public. It was moved, in 1938, to the Cloverdale Exhibition Grounds, and later became Surrey’s first museum, indicative of Surrey’s commitment to preserving and interpreting its built and cultural heritage.

(Source: *Heritage Planning Files, City of Surrey*)

1.3 Character Defining Elements

The character-defining elements of the 1881 Surrey Town Hall include its:

- symmetrical form, scale and massing, as expressed by its simple rectangular floor plan;
- front gabled roof with cedar shingle cladding;
- exterior vertical board and batten siding, with original square forged nails;
- original multi-paned double-hung paneling and wooden floors.

2 POLICY FRAMEWORK


2.1 Heritage Designation





The 1881 Surrey Town Hall is currently listed in the Surrey’s Community Heritage Register as site number 8 with its significance classified as ‘Historical.’ It is protected by Heritage Designation By-law, 1982, No. 7289.

2.2 Current Zoning Designation


1881 Surrey Town Hall is currently located in the *CD-One Comprehensive Development* zone..

3 CONDITION ASSESSMENT





CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.1	Form, Scale & Massing	The building has been added to over time, to the point that it has been enveloped on all sides by the existing building. The only discernable massing from the exterior is the gabled roof, and gable ends. This encasement is not desirable from a heritage standpoint as it altered the historic place beyond recognition.	




CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.2	Cladding, Fascia & Soffits	<p>The historic hall has its original cedar board and batten cladding intact and in good condition. The cladding has been replaced at the vertical sections aligning with the east elevation beam penetrations, as the support for the beams on this elevation was integrated into the heritage hall exterior wall to take advantage of the concrete foundation was built to receive the relocated building.</p> <p>Comparisons to historic photography indicate that the roof had quite a small eave extension, but may have been further clipped back during subsequent roof renovations since the relocation.</p> <p>The exterior board and batten cedar cladding is also in excellent condition.</p>	   








CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.3	Doors	The original doors have been removed, as has the original front stoop.	
3.1.4	Windows	The original 6-over-6 wood muntined double hung windows have survived in good condition. The glazing has been painted on some elevations, but this is easy to strip off of glass.	 



CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
			
3.1.5	Roof Surface	A new sawn cedar shingle roof on a plywood sheathing was installed as part of a structural and roof rehabilitation within the last three years and is in excellent condition.	
3.1.6	Rainwater Evacuation System	A new gutter and rainwater leader system were installed at the time of the recent structural/roof renovation and is functioning well.	
3.1.7	Chimney	The original brick chimney set into the northeast wall is currently supported on wood framing and terminates just below the roof.	
3.1.8	Entry Stairs	The original entry stairs were, either, not moved with the building when it was relocated, or removed when the museum front addition was constructed.	

CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.9	Gable Vents	The original gable vent is in place and excellent condition.	
3.1.10	Interior Features	The tongue-and-groove V-groove ceiling paneling is still intact and in good condition. The same paneling, installed in a horizontal configuration, is intact and in fair condition behind a steel stud and gypsum board interior wall. The steel studs have been screwed to the interior paneling in places, so some fastener holes and patching/finishing is to be expected.	 

CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.11	Electrical Distribution	BX electrical cable is run within the interior liner wall and is fed from a panel outside the heritage hall in the museum area.	
Structure	<i>For a full analysis of the structure of the 1881 Surrey Town Hall, refer to the report in the Appendix (TDM Projects Ltd.). The condition of the structure is summarized here:</i>		
3.1.12	Structure: Floor	<p>The original 2"X10" joists are intact and supported at the ends on a new reinforced concrete foundation wall constructed at this new relocation site. A 6"X6" longitudinal beam supported on blocking runs the full length of the foundation at the center line. Wood wedge blocks have been set to level the floor.</p> <p>The original hewn log end joist, which carries the gable end wall loads, still exists in good condition, and is set on a heavy wood sill, which bears on the new concrete foundation wall. This hewn log end joist would need to be supported by the moving needle beams.</p>	 

CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.13	Structure: Walls	To limit splaying of the walls and improve the rafter support, new tie beams and tie rods have been installed, which connect through the top of the wall to an exterior heavy wood ledger. The wall structure is assumed to be 2"X4", but access to confirm this was not available.	
3.1.14	Structure: Roof	Access to the attic was not available, but the recent structural and roof rehabilitation appears to have been very successful in rectifying any discontinuities in the ridge line.	

3.2 Proposed Conservation Strategies

The Parks Canada Standards & Guidelines for the Conservation of Historic Places in Canada (2010) has been adopted by the Government of B.C. and most Federal agencies, for the assessment of the treatment of historic places. Under the Standards and Guidelines, the conservation strategies proposed for the proposed façade restoration of the 1881 Surrey Town Hall may include aspects of preservation, restoration and rehabilitation, as defined below:

Preservation

The action or process of 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.

Restoration

The action or process of accurately revealing, recovering, or representing the state of a historic place, or of an individual component, as it appeared in a particular period in its history, while protecting its heritage value.

Rehabilitation

The action or process of making possible a continuing or compatible contemporary use of an historic place or an individual component, through repair, alterations, and/or additions, while protecting its heritage value.

In reality, all three of these conservation approaches will come into play in the proposed rehabilitation and upgrade at the 1881 Surrey Town Hall.

4 UPGRADE PLAN

The Conservation Plan has been organized under the following categories, based on current condition and performance, owner priorities, code compliance and safety considerations, maintenance of envelope and heritage character integrity, improvements to occupant use and comfort and costs:

4.1 Building Relocation

This study considers a relocation of the 1881 Surrey Town Hall to the Surrey Museum, approximately 5 blocks south of this location.

Following preliminary site and project parameter review, the following approach will apply to the extraction of the 1881 Surrey Town Hall and remediation of the existing building:

Partial Demolition to Allow Extraction

- Partial demolition around the perimeter of the building to detach the building from the perimeter museum floor, ceiling and penetrating structure,



- jacking the wood floor structure, including hewn timber end joists, off of the reinforced concrete foundation wall,
- temporary interior bracing,
- Temporary post and beam or sheathed stud wall bracing of the east addition roof beams that penetrate the east heritage hall wall, so that these penetrating beams can be severed,
- Demolition of portions of the existing structure to the west, south, north and perimeter and east perimeter as per drawing DE-A1-00,
- Transportation, and the securing of the building on a new foundation. The existing cedar perimeter beam can be used for the move, and can remain in place at the new location.
- Construction of new exterior south and west walls of the existing structure exposed by partial building demolition, including the roof edge, and construction of a new exterior wall along the E-W beam and N-S beam lines adjacent to the extracted 1881 Hall, including new roof edges, as per Dwgs. .
- Clearing, grading and gravel or turf surface to the demolished building areas.

4.2 Building Upgrades

4.2.1 Building Relocation – BC Hydro Line Relocations

The transport of the building will require the temporary relocation of BC Hydro, Telus & cable lines along the path of travel.

4.2.2 Roof Structure Upgrades

The rafters must be connected to the wall plate by steel strap tie to stiffen the roof structure, and bring it into compliance with current code. Rafter tails need concealed sister repair/extensions in a number of locations.

4.2.3 New Foundation & Foundation Wall

The building will be relocated to the new Museum campus and onto a new concrete foundation. This work will involve: excavation, strip footings and construction of a reinforced foundation wall, crawlspace slab, and installation of rigid insulation on the inside of the foundation wall. The new foundation wall will be constructed to situate the new floor level height at the original floor level height, as estimated from historic photography. This work is part of the current Museum Addition contract.

4.2.4 Hazardous Material Remediation

No asbestos remediation will be required, but procedures for working in and around lead-containing materials (original lead paint) and compliant disposal of lead paint scrapings will be required.

4.2.5 Service System Trenching for New Electrical Service

New trenching will be provided to supply electrical service conduit to the building in the new location as part of the Museum Addition contract.

4.2.6 New Electrical Service

A new electrical service connection to the building will feed a sub-panel in the storage room.



4.2.7 Chimney Restoration

The chimney above the roof line will be reconstructed at the new location, utilizing salvaged heritage brick to match the surviving brick. Copper flashing and step flashing will be provided to waterproof the roof penetration.

4.2.8 Front Stoop Reconstruction

The small gable-roofed entry stoop, clad in cedar board and batten cladding to match the building, will be constructed. Historic photography provides some guidance on the character of this missing element.

4.2.9 Front Stair Reconstruction

New front entry stairs will be reconstructed to the original four risers. Guardrails with handrails will be constructed to meet current code.

4.2.10 Window and Door Restoration

The exterior doors have been removed and new period-style frame and panel doors will be installed, such as five panel door for the rear and a half-light over two panels at the front. The windows are in generally good condition, although some glazing requires paint stripping. A colour analysis should be undertaken to determine the original colour scheme, as a guide for new paint colours.

4.2.11 Accessible Ramp

As an assembly occupancy, accessibility is a necessary code upgrade and a new concrete ramp to the rear, wrapping around the side of the building will be constructed, in compliance with BC Building Code. The guardrail will be constructed in wood to integrate with the heritage building, while the concrete ramp fits well with the concrete site works.

4.2.12 Sprinklering & Fire Alarm

Although not required for this use and size of building by the building code, sprinklering saves lives and is added preservation protection for this highly combustible building. A fire alarm is required to be installed when a sprinkler system is installed, which further improves the building's life and safety performance. A new water service will be required.

4.2.13 Electrical

New electrical distribution and lighting systems will be installed. Suspended period lighting fixtures, such as enameled metal shade pendants or schoolhouse pendants would be appropriate lighting fixtures for the open space, likely with contemporary wall/task lighting.

4.2.14 Interior Features/Upgrades

The current interior wall liner should be removed and the attachment damage repaired. The interior does not appear to have been painted, but this will be confirmed when the original finishes are exposed. A new accessible washroom will be installed in one rear corner and a new storage room installed in the

other rear corner of the open space. The sprinkler double check and control vertical valve train and new electrical sub-panel will be located in the storage room.

4.2.15 Select Wall Remediation

Water ingress at the existing southeast corner at the roof had created damage to interior stud framing, the timber sill and limited damage to the wood cladding and concealed sheathing. Select insitu repairs including sistering the lower studs, select replacement of the bottom plate and sill and some limited replacement of wood cladding and sheathing will be required.

4.2.16 Exterior Painting

To protect the wood, and increase its longevity, the exterior of the building will be prepared by scraping off of all loose paint, spot primed and repainted. Trim, door and window elements including: fascia, corner trim, window & door trim, window frame, door, and water table, as well as the board and batten cladding, will be painted in accordance with the colour analysis.

4.2.17 Rainwater Evacuation System

Installation of a new rainwater leaders serving all the roofs and a new gutter on the stoop will be provided.

4.2.18 New Exit Lighting & Emergency Lighting

To improve safety, new exit lighting and emergency lighting will be installed.

4.2.19 Heating System Upgrades

A new electrical furnace installed over the new storage room and connected to an exterior electric air-to-air heat pump system mounted on a pad adjacent to the building, and screened by landscape, will provide the necessary heating, or cooling for the building.

4.2.20 New Foundation Drainage System

A new foundation drainage system connected to the site storm drainage system will be installed to ensure the crawlspace slab remains dry.

5 CONSERVATION STANDARDS

The following are the standards that define the principles of good conservation practice, and an assessment of how they relate to the proposed interventions for 1881 Surrey Town Hall.

CONSERVATION STANDARD		CONSERVATION STRATEGY
GENERAL STANDARDS FOR ALL PROJECTS		
1	<i>Conserve the heritage value of a historic place. Do not remove, replace or substantially alter its intact or repairable character-defining elements. Do not move a part of a historic place if its current location is a character-defining element.</i>	The building will be relocated to the Surrey Museum campus's heritage precinct to the north of the museum. It will be sensitively restored, rehabilitated and preserved in a manner that maintains and enhances its



		heritage character. The new stand-alone site condition will be much closer to the original context than the current building-impacted condition.
2	<i>Conserve changes to a historic place, which over time, have become character-defining elements in their own right.</i>	The building, once extracted, will be free of all alterations.
3	<i>Conserve heritage value by adopting an approach calling for minimal intervention.</i>	The proposed interventions will restore the school to its early appearance and allow sensitive rehabilitation in keeping with the building's heritage value.
4	<i>Recognize each historic place as a physical record of its time, place & use. Do not create a false sense of historic development by adding elements from other historic places or other properties, or by combining features of the same property that never coexisted.</i>	Proposed interventions will comply with this standard, but also allow respectful rehabilitation to meet modern standards for its continued use by the Surrey community. The new accessible ramp will be discernible as new construction, and the guardrail detailing executed in wood will integrate with the heritage building.
5	<i>Find a use for a historic place that requires minimal or not change to its character-defining elements.</i>	The proposed new use will be educational programming, and involve minimal change to the building's character-defining elements.
6	<i>Protect, and if necessary, stabilize a historic place until any subsequent intervention is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbance of archaeological resources, take mitigation measures to limit damage and loss of information.</i>	A new building foundation is to be constructed at the new site prior to the building relocation from the current site. No delays are expected in rehabilitating the building once it has been relocated to the new site.
7	<i>Evaluate the existing condition of character-defining elements to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect heritage value when undertaking an intervention.</i>	This report identifies deficiencies and proposed interventions which retain or restore character-defining elements, and allow respectful rehabilitation to allow future use.
8	<i>Maintain character-defining on an on-going basis. Repair character-defining elements by reinforcing the materials using recognized conservation methods. Replace in kind any extensively deteriorated or missing parts of character-defining elements, where there are surviving prototypes.</i>	A maintenance plan in compliance with this standard should be implemented.
9	<i>Make any intervention needed to preserve character-defining elements physically and visually compatible with the historic place and identifiable upon close inspection. Document any intervention for future reference.</i>	This conservation plan will provide guidance to the rehabilitation design to ensure maintenance of the building's heritage character-defining elements. Implementation measures will include the oversight of an independent heritage consultant.
ADDITIONAL STANDARDS RELATING TO REHABILITATION		
10	<i>Repair rather than replace character-defining elements. Where character-defining elements are</i>	The proposed intervention approach will comply with this Standard.



	<i>too severely deteriorated to repair, and where sufficient physical evidence exists, replace them with new elements that match the forms, materials, and detailing of sound versions of the same elements. Where there is insufficient physical evidence, make the form, material and detailing of the new elements compatible with the character of the historic place.</i>	
11	<i>Conserve the heritage value and character defining elements when creating any new additions to a historic place and any related new construction. Make the new work physically and visually compatible with, subordinate to, and distinguishable from the historic place.</i>	The accessible ramp will be constructed of concrete to integrate with the new site context and the guardrail will be detailed in wood and will be fairly 'light' in character, in an attempt not to detract from the building's heritage character.
12	<i>Create any new additions or related new construction so that the essential form and integrity of a historic place will not be impaired if the new work is removed in the future.</i>	No new additions are proposed at this time. Any future additions proposed should comply with this standard.
ADDITIONAL STANDARDS RELATING TO RESTORATION		
13	<i>Repair rather than replace character-defining elements from the restoration period. Where character defining elements are too severely deteriorated to repair and where sufficient physical evidence exists, replace them with new elements that match the forms, materials, and detailing of sound versions of the same elements.</i>	Good photography provide guidance on the restoration of the removed front stoop, and the surviving cladding and trim provide good direction on the construction and detailing approach.
14	<i>Replace missing features from the restoration period with new features whose forms, materials and detailing are based on sufficient physical, documentary and/or oral evidence.</i>	The heritage features remain largely intact. Any new bricks used in the chimney reconstruction will match in module, colour and texture and new brick will be used in discreet locations with salvaged brick to be used in more prominent locations.

6.0 PRELIMINARY OPINION OF PROBABLE REHABILITATION COSTS

6.1 Partial Demolition to Allow Extraction & Remaining South Wing Demolition

	Building Relocation – detach, temporarily brace with temporary interior wood bracing and bracing of entry, transport, and secure building on new foundation. Upgrade with new electrical and mechanical services, restored front stoop and restored exterior/interior finishes. Partial demolition of south area of the existing building, construction of a new exterior south wall of the existing building adjacent to the original hall location, construction of a new exterior west wall of the existing building adjacent to the partial demolition, and levelling, grading and gravel surface or turf to the demolished areas.	\$490,734.00
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6.2 Estimated Break-out of Rehabilitation Costs - Building Relocation & Rehabilitation {Referencing Section 4.2 tasks}		
4.2.1.	Building Relocation - Building Relocation to Surrey Museum Campus heritage precinct – detach, transport, and secure building on new foundation.	\$41,300.00
4.2.1.	Temporary Bracing for Move - Temporarily brace with temporary interior wood bracing and bracing of entry for transport, and secure building on new foundation.	\$9000.00
4.2.1.	Line Relocations (Route from current location to Surrey Museum Campus – estimate for BC Hydro, Telus, Cable)	\$14,000.00
4.2.2	Roof Structure Rehabilitation – install connector tie at rafters & end plate, install angle connectors at hip joints, repairs to rafter tails	\$7200.00
4.2.3	New Foundations - New Foundations and foundation wall at new site (excavation, forming of perimeter strip footing and foundation wall for a reinforced concrete foundation, interior beam strip footing and framed crib bearing wall, crawlspace slab, rigid insulation to inside of foundation wall) <i>{Work included in current Museum Addition Contract}</i>	\$0.00
4.2.4.	Hazardous Material Remediation - Hazardous Material Remediation (no asbestos remediation required, only adherence to WorkSafeBC procedures for work in and around lead-containing materials (original lead paint) and compliant disposal of scraped lead debris	\$4500.00
4.2.5.	Service Trenching - New trenching and electrical conduit installation for a new building electrical service. <i>{Work included in current Museum Addition Contract}</i>	\$0.00
4.2.6.	New Electrical Service/Distribution - New electrical service to a subpanel located in the new storage room, as well as new electrical distribution for lighting, receptacles, new lighting fixtures, air handling unit, hot water heater and ventilation fans. This also includes for new lighting fixture allowance.	\$24,300.00
4.2.7.	Chimney Restoration – bracing and repointing of existing chimney over the new storage room, reconstruction of the chimney above the roof line with matching salvage or cut-down new red brick, copper flashing/step flashing at the roof penetration, and roof cap.	\$9500.00
4.2.8.	New Front Stoop – framing, cladding and roofing of new front stoop	\$11,500.00
4.2.9.	New Wood Front Stairs – construction of new open riser wood front stairs with wood guardrails	\$3500.00
4.2.10	Window and Door Restoration – restoration as required to existing muntined, single glazed wood double hung windows and reconstruction of new wood frame-and-panel wood doors for the 1881 Town Hall front and rear doors.	\$17,200.00
4.2.11	Accessible Ramp – A new concrete accessible ramp wrapping around the side and rear of the building to the rear door will be constructed with a new wood guardrail and metal handrails. <i>{Work included in current Museum Addition Contract}</i>	\$0.00
4.2.12	New Sprinkler/Fire Alarm Systems – New sprinkler and fire alarm systems will be installed. Trenching, water supply, fire alarm system site conduit/wiring and tie-in to the Museum fire alarm system are part of the Museum contact. <i>{Work partially included in current Museum Addition Contract}</i>	\$13,400.00
4.2.13	Interior Features/Upgrades – The existing wall liner will be removed and the state of surviving interior wall cladding and window casing assessed, with a restoration plan determined following this exposure/assessment – a \$5000.00 allowance for window casing re-instatement is included. A new accessible washroom will be installed in one rear corner, adjacent to the rear entry, and a new storage room installed in the other rear corner. Accessible washroom accessories would be provided. Although the edge condition may need some	\$26,885.00



	further work, the existing vinyl floor surface is in good condition and will be retained. New walls/rooms will be painted, and a final finishing scheme for the original interior surfaces suspended until they are exposed.	
4.2.14	Select Wall Remediation – Water ingress at the existing southeast corner at the roof had created damage to interior stud framing, the timber sill and limited damage to the wood cladding and concealed sheathing. Select insitu repairs including sistering the lower studs, select replacement of the bottom plate and sill and some limited replacement of wood cladding and sheathing will be required.	\$2900.00
4.2.15	Exterior Painting – The exterior surfaces will be prepared and painted to the original colour scheme based on a colour analysis of existing paint layers.	\$19,000.00
4.2.16	Rainwater Evacuation System – New gutters and rainwater leaders will be installed and tied into the site storm drainage system. <i>{Work partially included in current Museum Addition Contract}</i>	\$2900.00
4.2.17	Exit and Emergency Lighting – New emergency and exit lighting will be installed.	\$2400.00
4.2.18	Heating System Upgrades – A new heat pump on a pad adjacent to the building will connect to an electric air handling unit installed over the storage room to provide heating and cooling to the space. Exposed ducts with grilles will provide the new air supply with a return grill at the upper storage room wall.	\$22,000.00
4.2.19	Ventilation System Upgrades – New washroom exhaust and crawlspace exhaust fans and ducting will be provided.	\$2100.00
4.2.20	Plumbing – A new accessible toilet and lavatory will be required, as well as a floor drain in both new rooms, hot and cold domestic supply piping, hot water heater, and air handling unit condensate drainage.	\$12,400.00
4.2.21	General Conditions – The General Contractor will have general conditions applicable to the project, including site supervision, labour, temporary shoring/support and clean-up, at an estimate of 10% of the construction costs.	\$24,598.50
4.2.22	Profit – The General Contractor will have allowed for an approximate 10% profit on the construction costs.	\$24,598.50
TOTAL PRIORITY 1		\$295,182.00

6.3 Estimated Break-out of Rehabilitation Costs - Existing Site Partial Demolition and Remediation		
6.3.1.	Partial Demolition - Partial demolition of the existing building to isolate the 1881 Surrey Town Hall and allow extraction	\$52,000.00
6.3.2.	Service System Adjustments – Rooftop unit disconnection/removal/relocation and ducting/electrical changes, gas line, water and electrical routing adjustments	\$19,200.00
6.3.3.	New Existing Building South Wall – A new exterior wall and roof overhang are needed at the south wall edge adjacent to the partial demolition required for the heritage hall extraction, including foundation alterations. 780 sq.ft. X \$45.00/sq.ft. = \$35,100.00	\$35,100.00
6.3.4	New Existing Building West Wall – A new exterior wall and roof overhang are needed at the west wall edge adjacent to the partial demolition required for the heritage hall extraction, including foundation alterations. 720 sq.ft. X \$45.00/sq.ft. = \$32,400.00	\$32,400.00
6.3.5	New Exterior Doors/Landings - two new exterior doors and landings are required for compliant exiting from the existing building.	\$11,000.00
5.2.6.	Site Clearing & Grading- Clearance and grading of existing site and topping in gravel or turf – 3900 sq.ft. X \$3.40/sq.ft.	\$13,260.00
5.2.7.	General Conditions @ 10% of construction costs	\$16,296.00
5.2.8.	Profit @ 10% of construction costs	\$16,296.00



EXISTING SITE PARTIAL DEMOLITION AND EX BLDG. REMEDIATION	\$195,552.00
--	---------------------

The above costs are net of GST.

7 REFERENCES

Canadian Register of Historic Places. *1881 Surrey Town Hall*. Retrieved March, 2016 from <http://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=11420>

City of Surrey. *Surrey Community Heritage Register: 1881 Surrey Town Hall*. Retrieved June, 2016 from <http://www.surrey.ca/city-services/3245.aspx>

Parks Canada (2010). *Standards and Guidelines for the Conservation of Historic Places in Canada*. Her Majesty the Queen in Right of Canada.

8 APPENDICES

8.1 Rehabilitation Drawings

8.2 Structural Assessment Report (TDM Projects Ltd.)

8.3 Canadian Register of Historic Places: 1881 Surrey Town Hall (Parks Canada)

8.4 Original Material & Documentation (City of Surrey)



HISTORIC _ TOWN HALL



HISTORIC _ MUSEUM & TOWN HALL

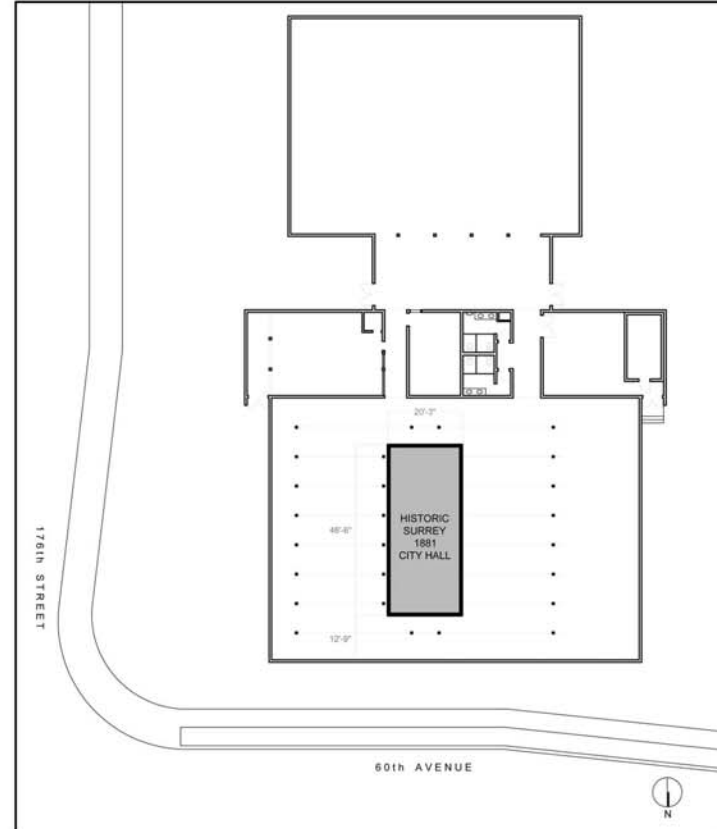


2016 _ MUSEUM & 1881 TOWN HALL FROM NORTHWEST



2016 _ MUSEUM & 1881 TOWN HALL FROM SOUTH

EXISTING BUILDING PHOTOGRAPHS



LOCATION PLAN

CIVIC ADDRESS
6022 176 STREET,
SURREY, BC V3S 4E7

LEGAL DESCRIPTION
LOT 31 SECTION 8 TOWNSHIP 8 PLAN
44254 NWD PART NW 1/4, EXCEPT PLAN
PART ROAD BCP17122

DRAWING LIST

EX-00	EXISTING BUILDING SITE PLAN
EX-A1-00	EXISTING GROUND FLOOR PLAN
EX-A2-00	EXISTING ELEVATIONS
EX-A3-00	EXISTING SECTION & RCP
DE-A1-00	DEMOLITION EXTRACTION CONCEPT PLAN
DE-A2-00	DEMOLITION BUILDING ELEVATIONS
DE-A3-00	DEMOLITION EXTRACTION BRACING SECTION & DETAILS
PR-00	PROPOSED BUILDING SITE PLAN
PR-A1-00	PROPOSED GROUND FLOOR PLAN
PR-A2-00	PROPOSED ELEVATIONS
PR-1-00	PROPOSED HALL PLANS & SECTION
PR-2-00	PROPOSED HALL ELEVATIONS

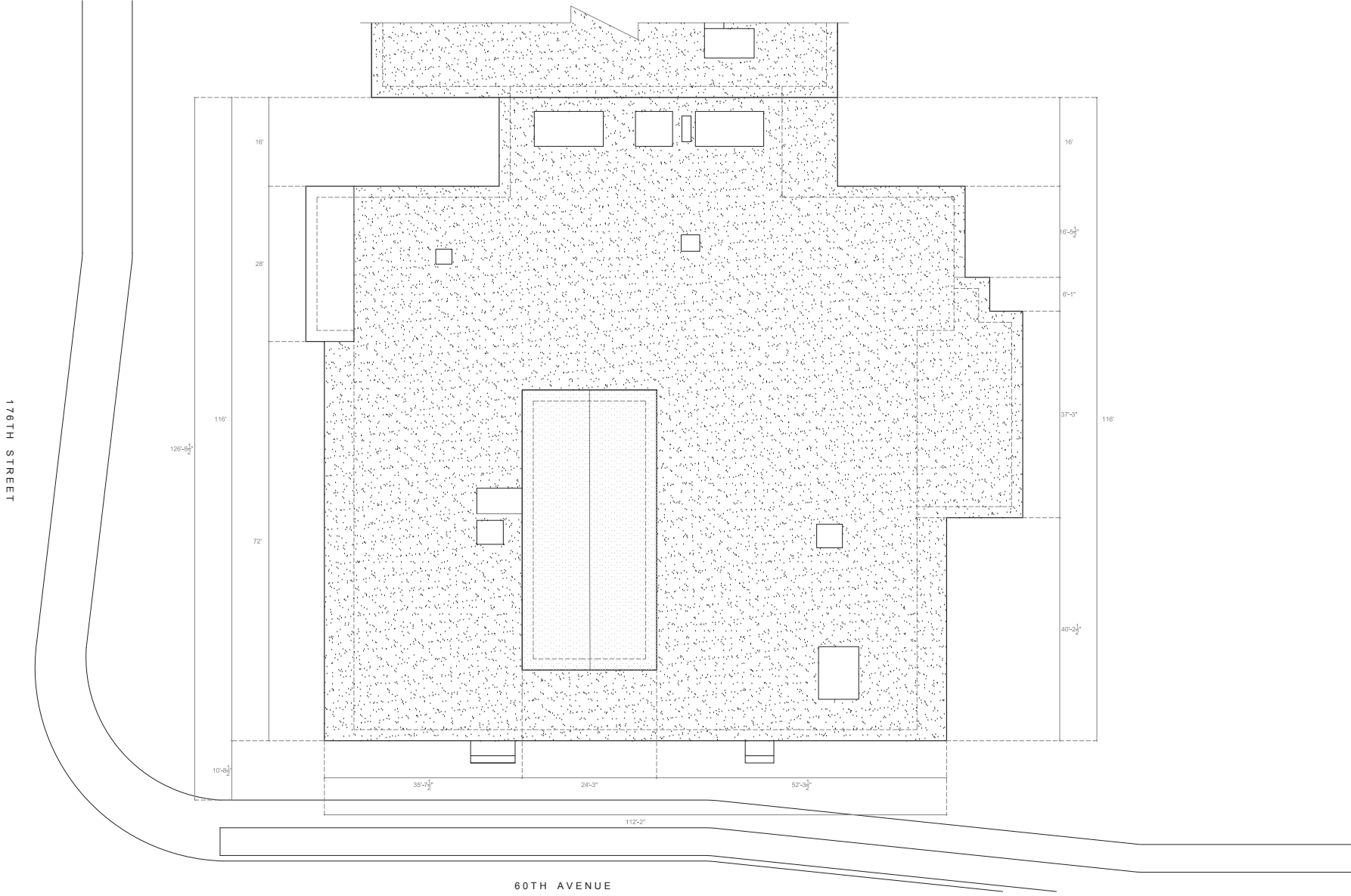
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REV.	DESCRIPTION	DATE
PROJECT:	6022 - 176 ST.	
TITLE:	PART DEMO & REPAIR	
	6022 176 STREET, SURREY, BC	

TITLE:	COVER SHEET
DRAWN BY:	SL
DATE:	06/23/2016
SCALE:	1/8" = 1'-0"

DWG# **0-00**

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176TH STREET

60TH AVENUE

1 ROOF PLA
1/8" = 1'-0"



REV.	DESCRIPTION	DATE

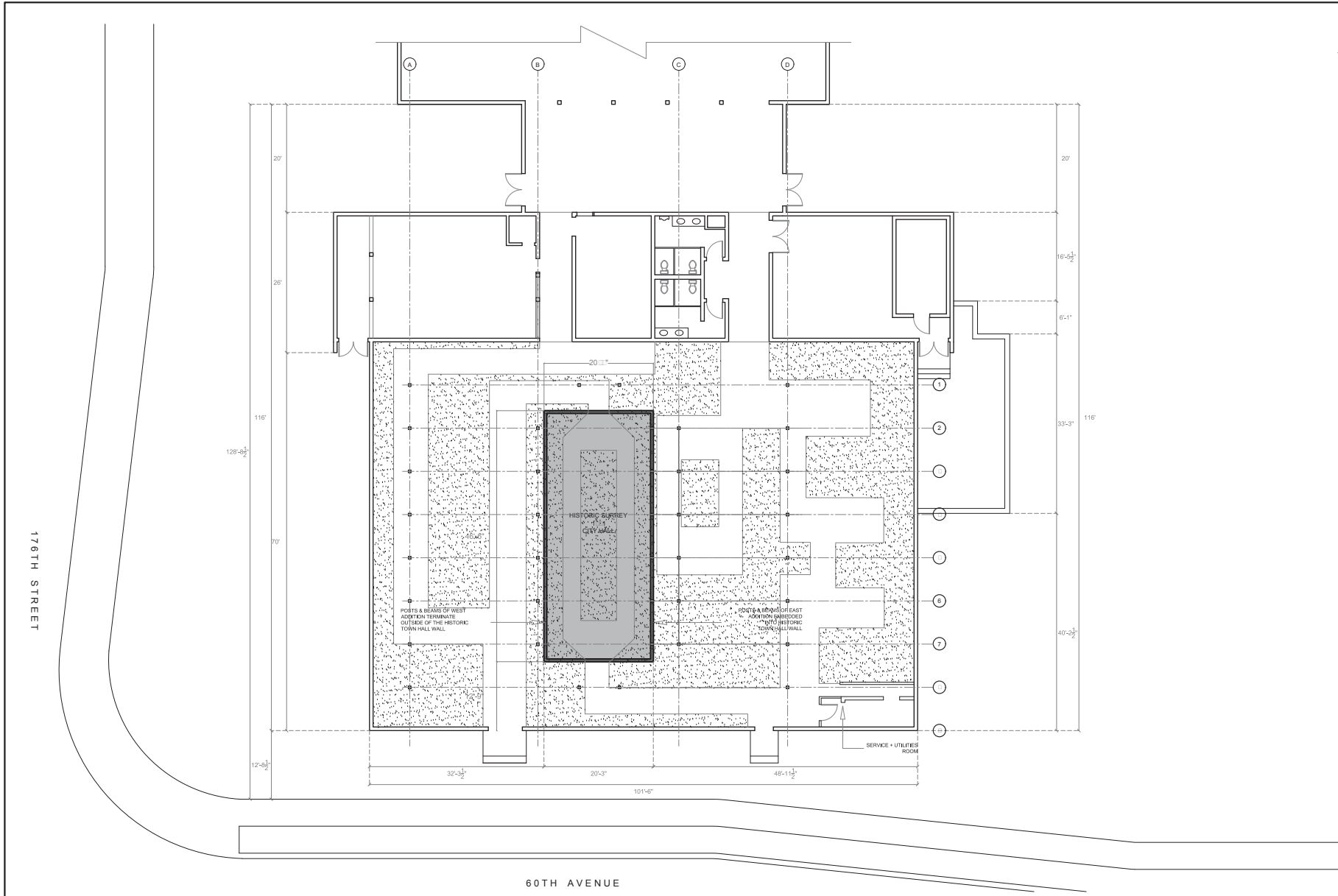
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PART DEMO & REPAIR
6022 176 STREET, SURREY, BC

TITLE:
EXISTING BUILDING SITE PLAN

DRAWN BY: **SL**
DATE: **06/21/2016**
SCALE: **1/8" = 1'-0"**

DWG#: **E-00**

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REV.	DESCRIPTION	DATE

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PART DEMO & REPAIR
6022 176 STREET, SURREY, BC

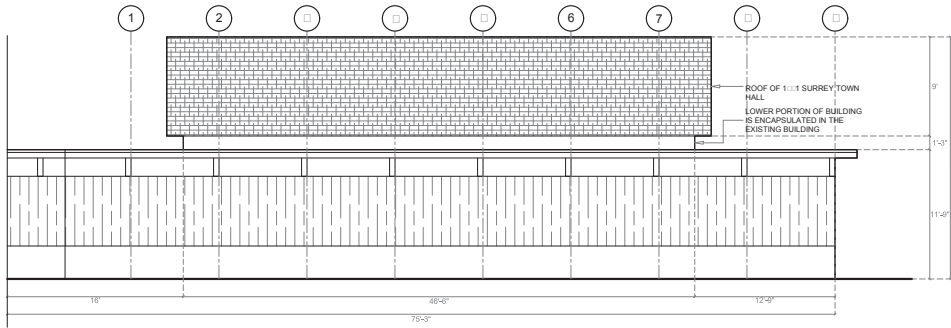
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SCALE: **1/8" = 1'-0"**

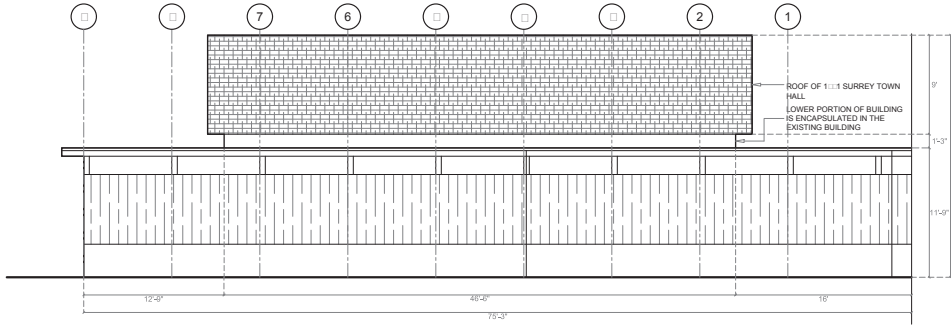
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1 GROUND FLOOR PLAN
1/8" = 1'-0"

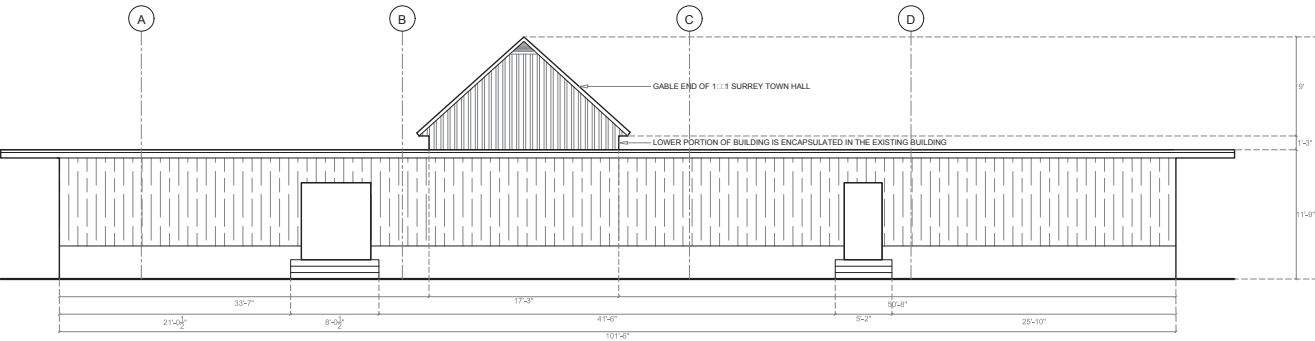




1 EAST ISTING EAST ELEVATION
3/16" = 1' - 0"



2 EAST ISTING EAST ELEVATION
3/16" = 1' - 0"



3 EAST ISTING SOUTH ELEVATION
3/16" = 1' - 0"

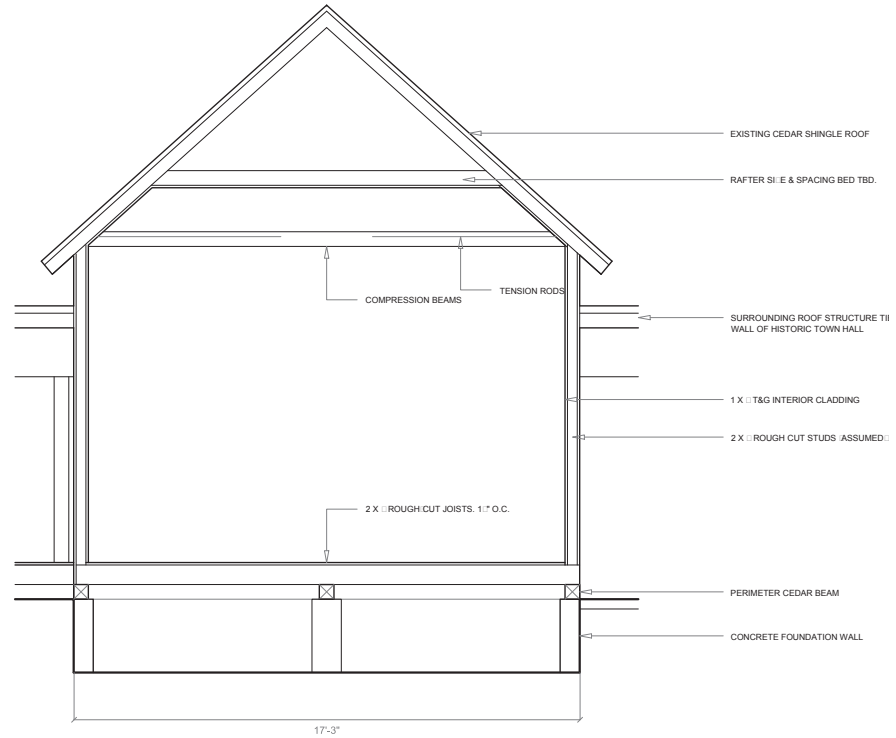
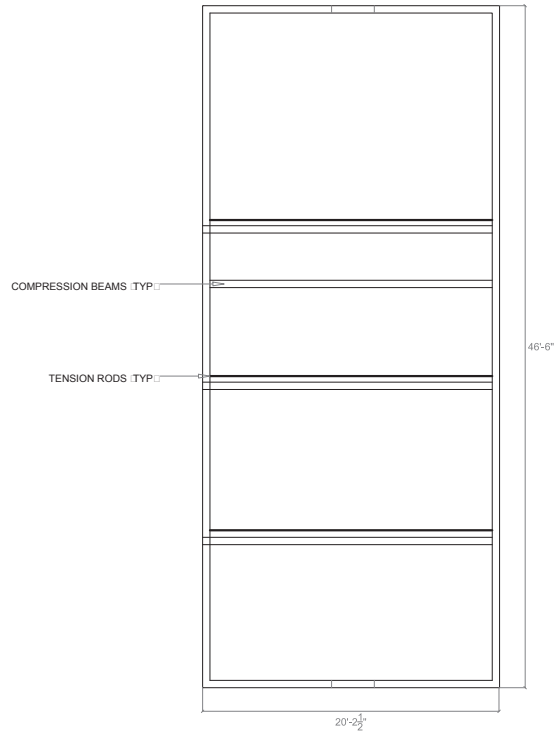
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PROJECT: **6022 - 176 ST.**
PART DEMO & REPAIR
6022 176 STREET, SURREY, BC

TITLE:
EXISTING BUILDING ELEVATIONS

DRAWN BY: **SL**
DATE: **06/21/2016**
SCALE: **3/16" = 1'-0"**

DWG#: **E-A2-00**



1 REFLECTED ELEVATION
1/4" = 1'-0"

2 EXISTING BUILDING SECTION
1/2" = 1'-0"

REV.	DESCRIPTION	DATE

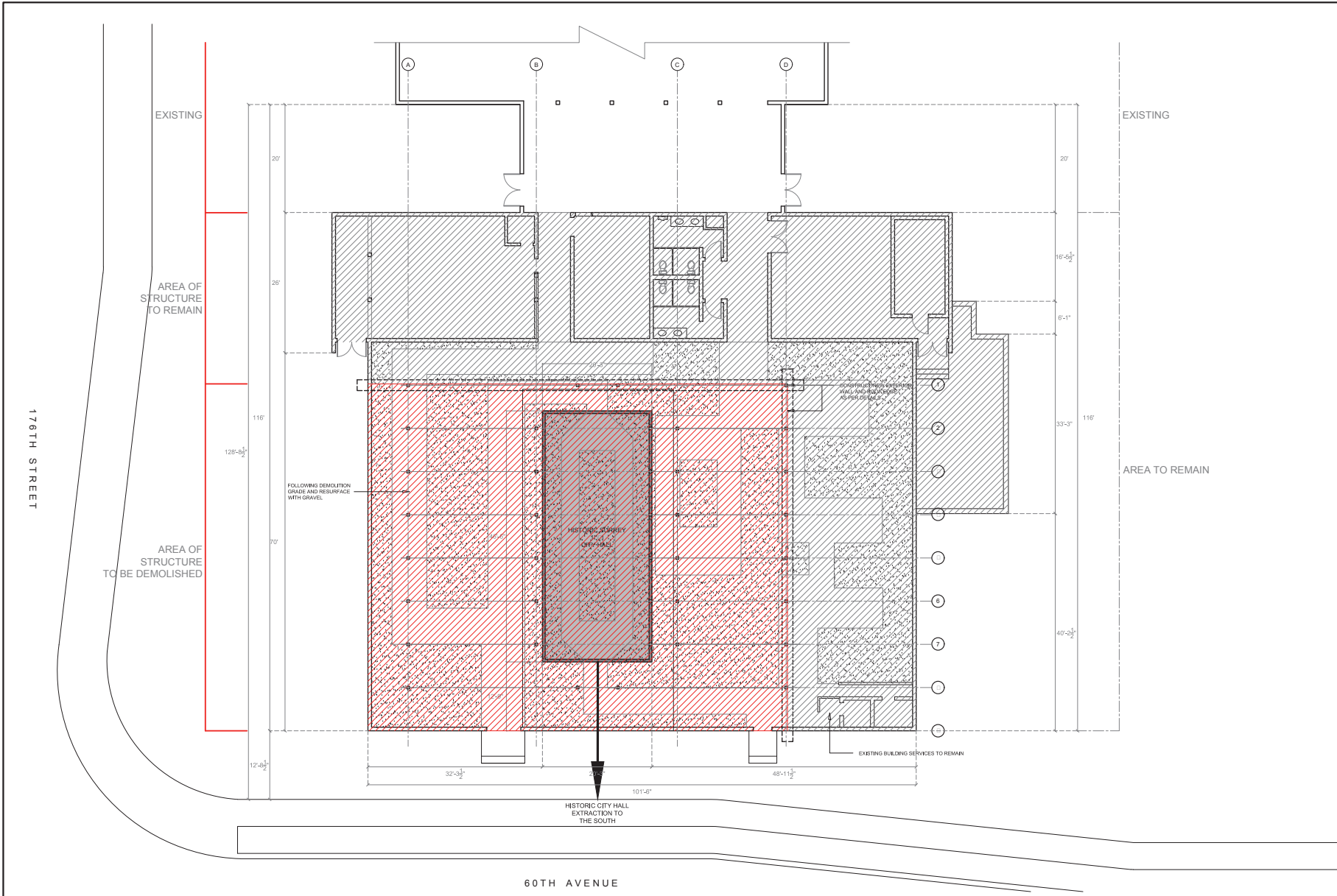
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6022 176 STREET, SURREY, BC

TITLE:
EXISTING BUILDING SECTION & RCP

DRAWN BY: **SL**
DATE: **06/21/2016**
SCALE: **AS SHOWN**

DWG#: **E-A3-00**

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REV.	DESCRIPTION	DATE

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DATE: 06/21/2016
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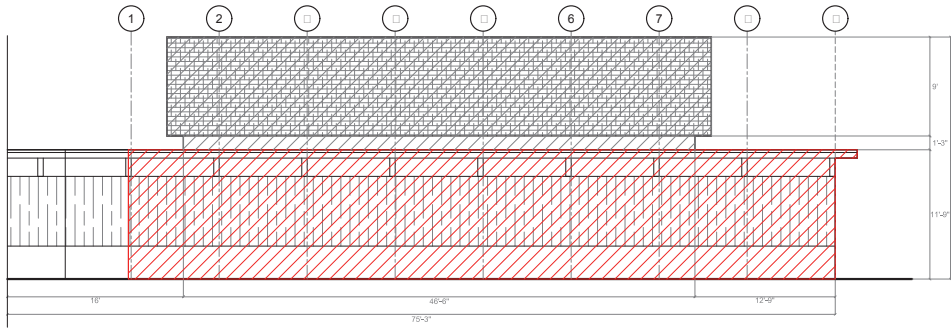
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176TH STREET

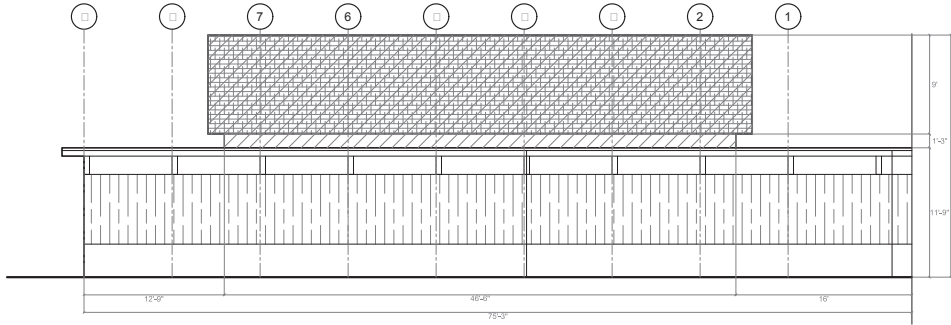
60TH AVENUE



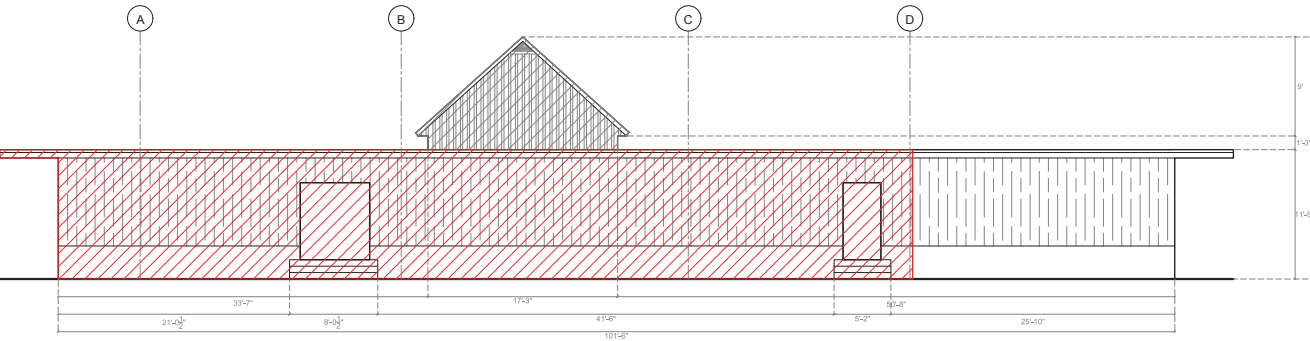
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1 ELEVATION WEST ELEVATION
3/16" = 1' - 0"



2 ELEVATION EAST ELEVATION
3/16" = 1' - 0"



3 ELEVATION SOUTH ELEVATION
3/16" = 1' - 0"

 AREA TO BE RELOCATED
 AREA TO BE DEMOLISHED

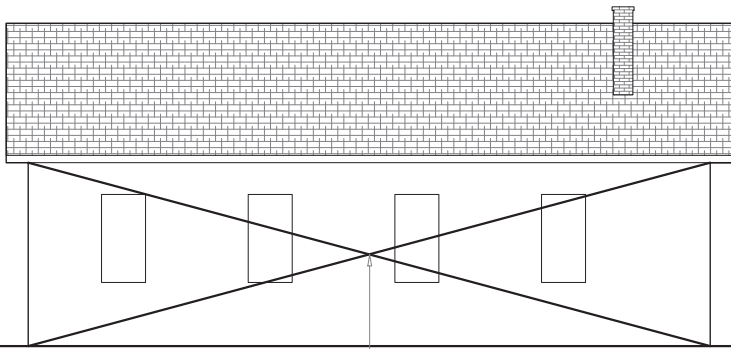
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PART DEMO & REPAIR
6022 176 STREET, SURREY, BC

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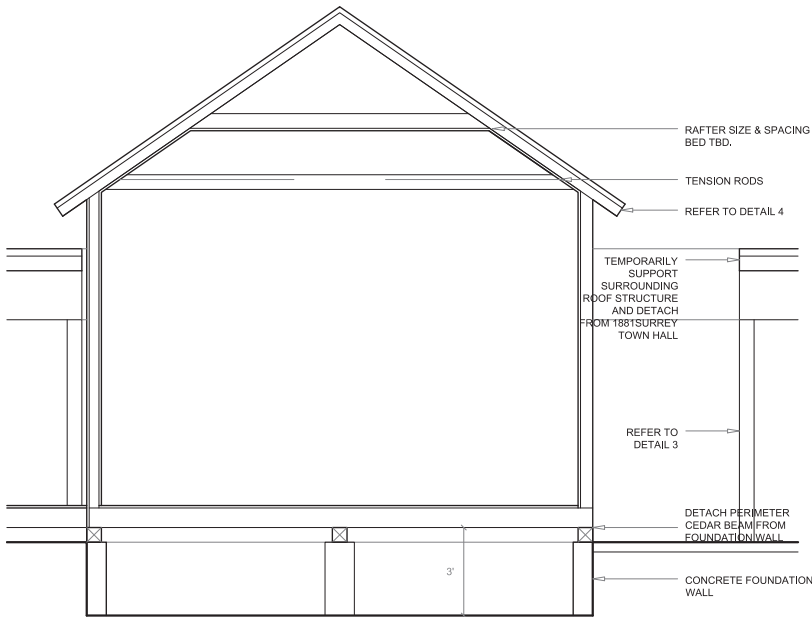
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DATE: **06/21/2016**
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DWG#: **DE-A2-00**

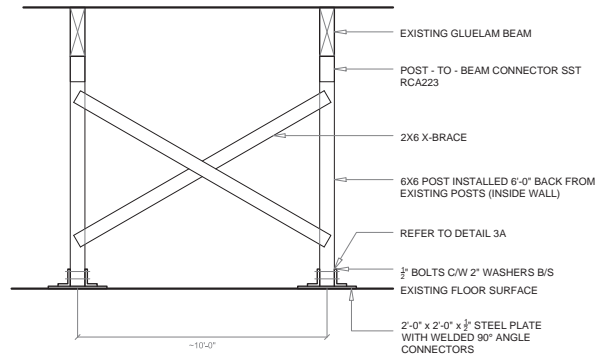


X-BRACING EXTERIOR OF ALL 4 WALL WITH S8T CM12 COILED STRAP CONNECTOR ATTACHED TO STUDS WITH SCREWS (5/8" X 3")

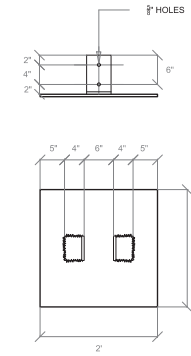
1 ALL RAFTING DIAGRAM
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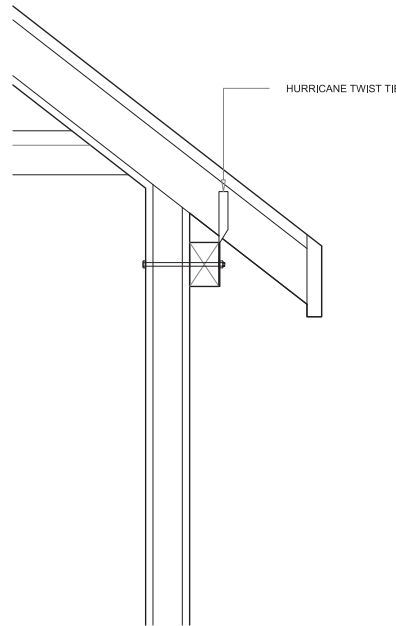
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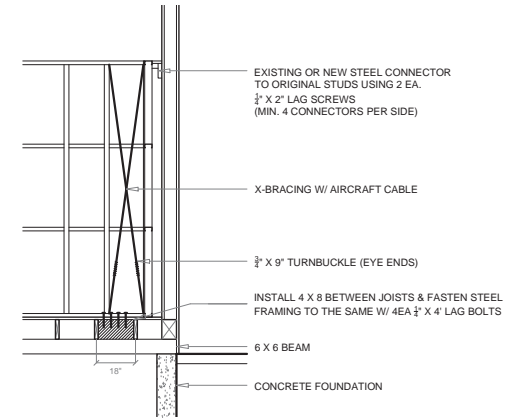
3 TEMPORARY SUPPORT FOR EAST ROOF
1/2" = 1'-0"



3A PLATE PLAN & SIDE ELEVATION
1" = 1'-0"



4 ROOF RAFTING DETAIL
1 1/2" = 1'-0"



5A ORDER RAFTING SECTION
1/2" = 1'-0"



5 ORDER RAFTING PLAN
1/2" = 1'-0"

REV.	DESCRIPTION	DATE

PROJECT: **6022 - 176 ST. PART DEMO & REPAIR**
6022 176 STREET, SURREY, BC

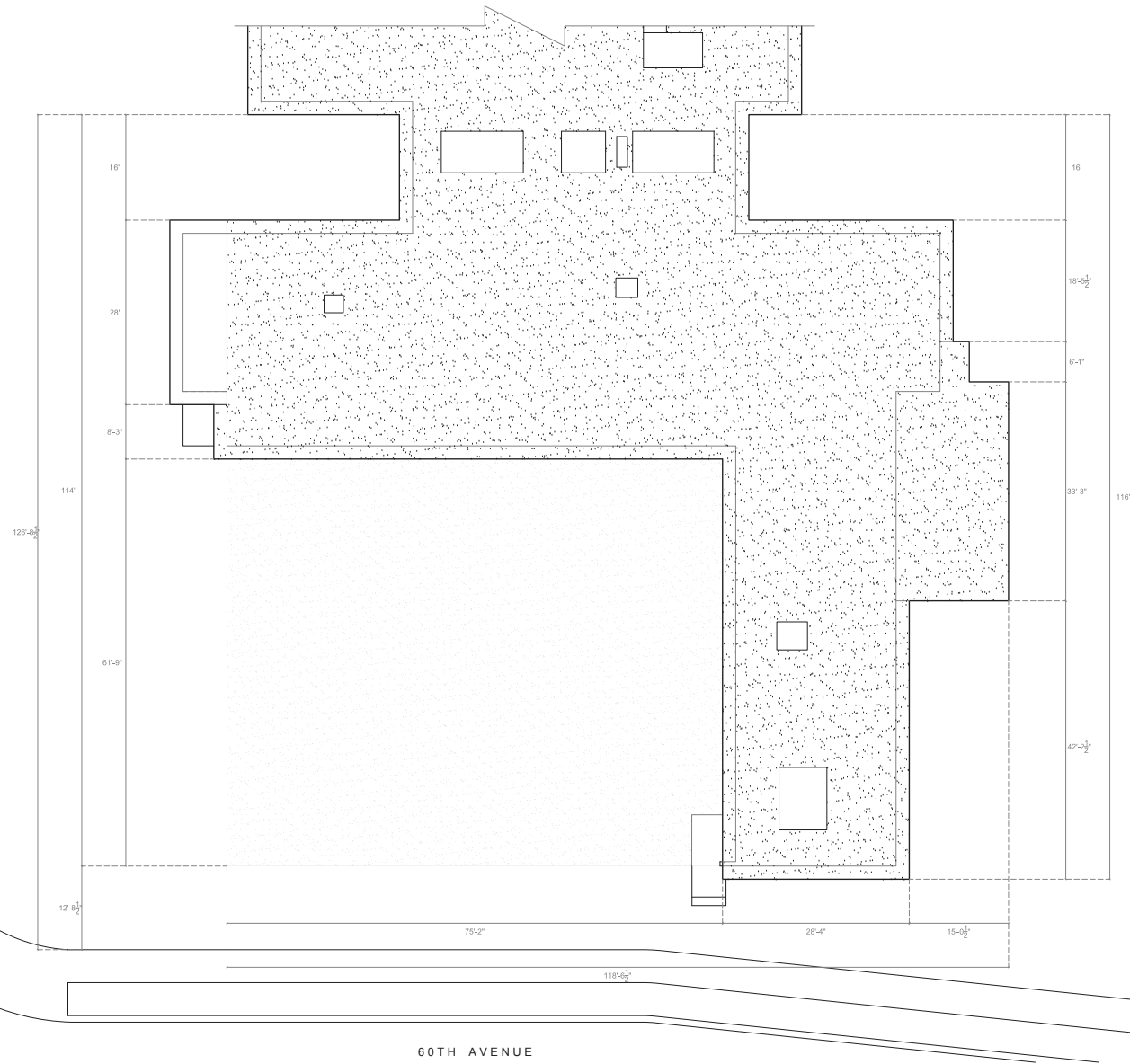
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DRAWN BY: **SL**
DATE: **06/21/2016**
SCALE: **AS SHOWN**

DWG#: **DE-A3-00**

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176TH STREET



1 ROOF PLA
1/8" = 1'-0"

REV.	DESCRIPTION	DATE

PROJECT: **6022 - 176 ST.**
PART DEMO & REPAIR
6022 176 STREET, SURREY, BC

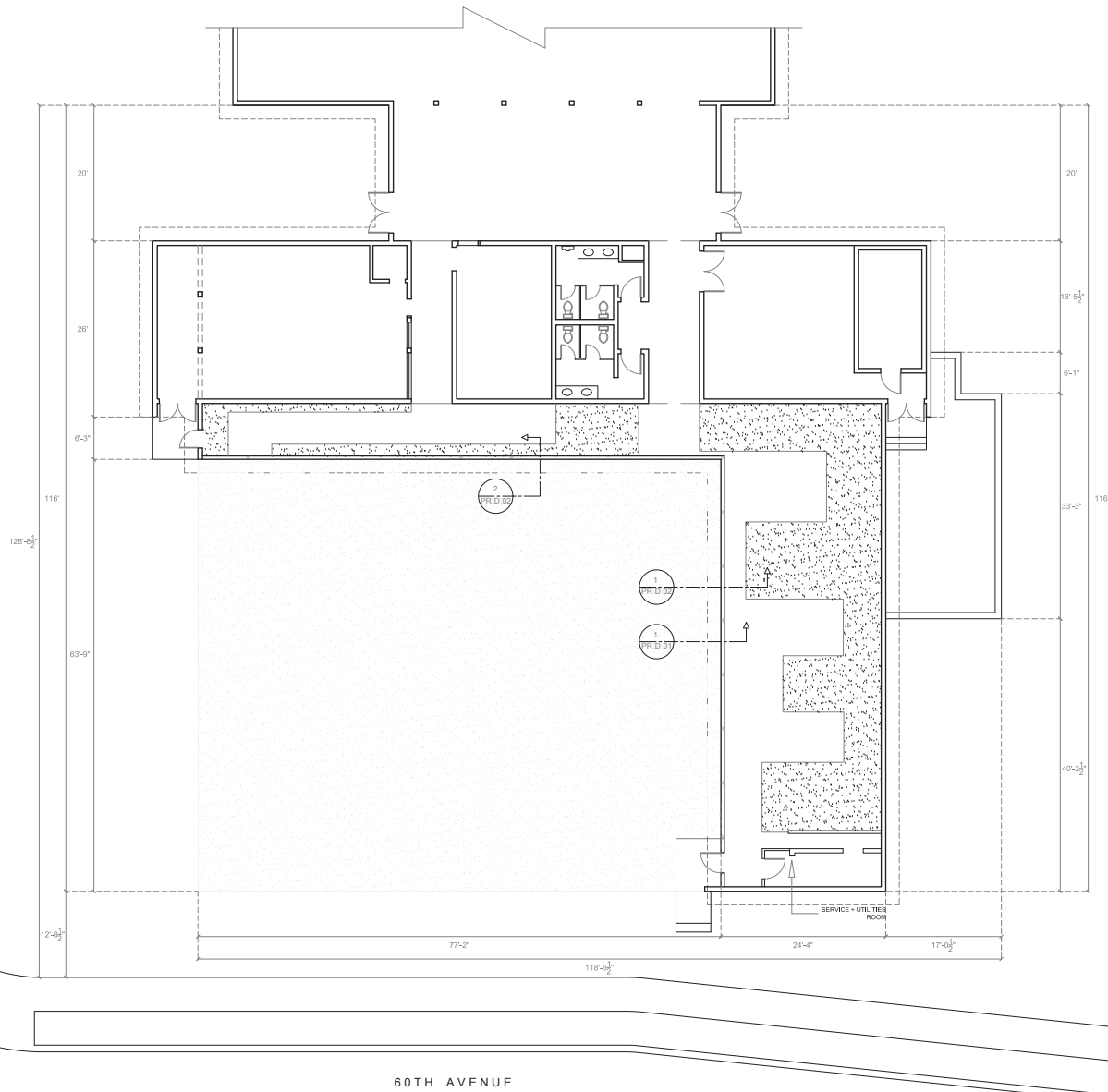
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DRAWN BY: **SL**
DATE: **06/04/2018**
SCALE: **3/16" = 1'-0"**

DWG#: **PR-00**

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176TH STREET



1 GROUND FLOOR PLAN
1/8" = 1'-0"

REV.	DESCRIPTION	DATE

PROJECT: **6022 - 176 ST.**
PART DEMO & REPAIR
6022 176 STREET, SURREY, BC

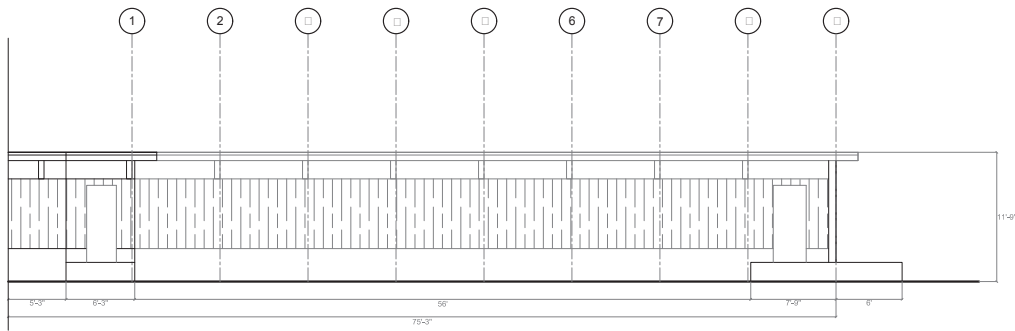
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DRAWN BY: **SL**
DATE: **06/04/2018**

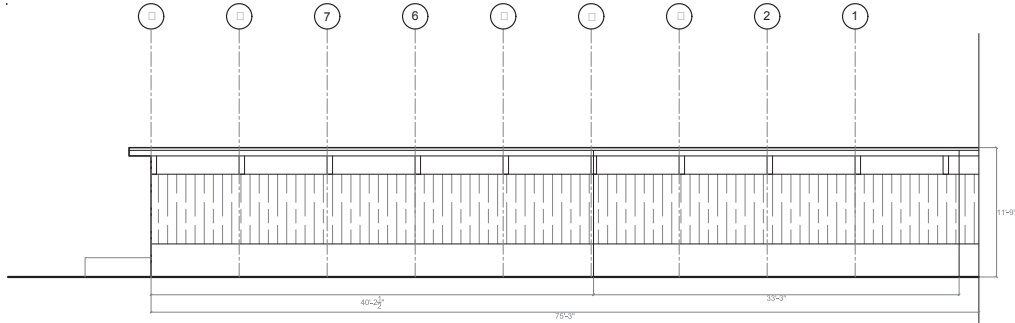
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DWG#: **PR-A1-00**

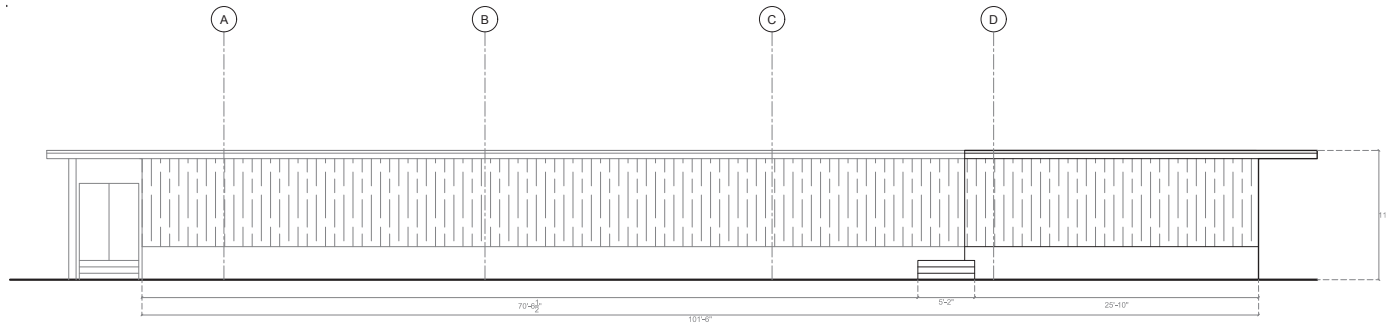
60TH AVENUE



1 WEST ELEVATION
3/16" = 1' - 0"



2 EAST ELEVATION
3/16" = 1' - 0"



3 SOUTH ELEVATION
3/16" = 1' - 0"

REV.	DESCRIPTION	DATE
------	-------------	------

PROJECT: **6022 - 176 ST.**
PART DEMO & REPAIR
6022 176 STREET, SURREY, BC

TITLE: **PROPOSED BUILDING ELEVATIONS**

DRAWN BY: **SL**

DATE: **06/21/2018**

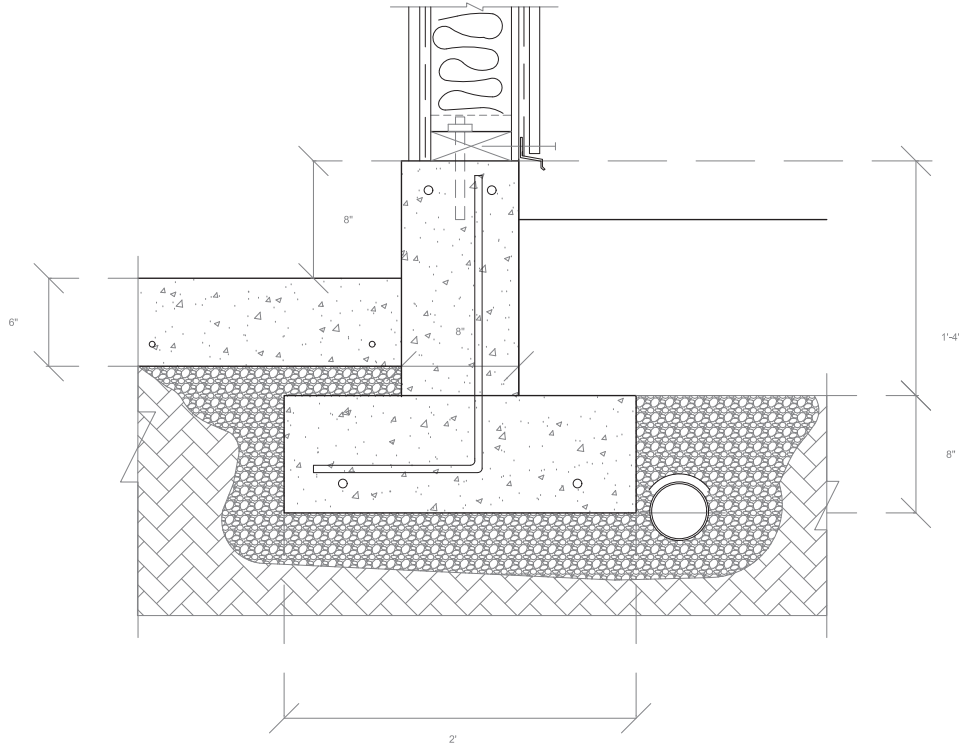
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DWG#: **PR-A2-00**

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WALL ASSEMBLY

- 7/8" GWB
- VAPOUR BARRIER
- 2 X 6 STUDS - 16" O.C
- R-11 FIBERGLASS BATT INSULATION
- 1/2" EXTERIOR PLYWOOD SHEATHING
- 2 LAYERS OF #8 BUILDING PAPER
- VERTICAL BOARD SIDING TO MATCH EXISTING



1 PROPOSED ALL BASE DETAIL
3" = 1'-0"

REV.	DESCRIPTION	DATE

PROJECT:
**6022 - 176 ST. PART
DEMO & REPAIR**
6022 176 STREET, SURREY, BC

TITLE:
**PROPOSED WALL
BASE DETAIL**

DRAWN BY: **SG**

DATE: **06/11/2018**

SCALE: **3" = 1'-0"**

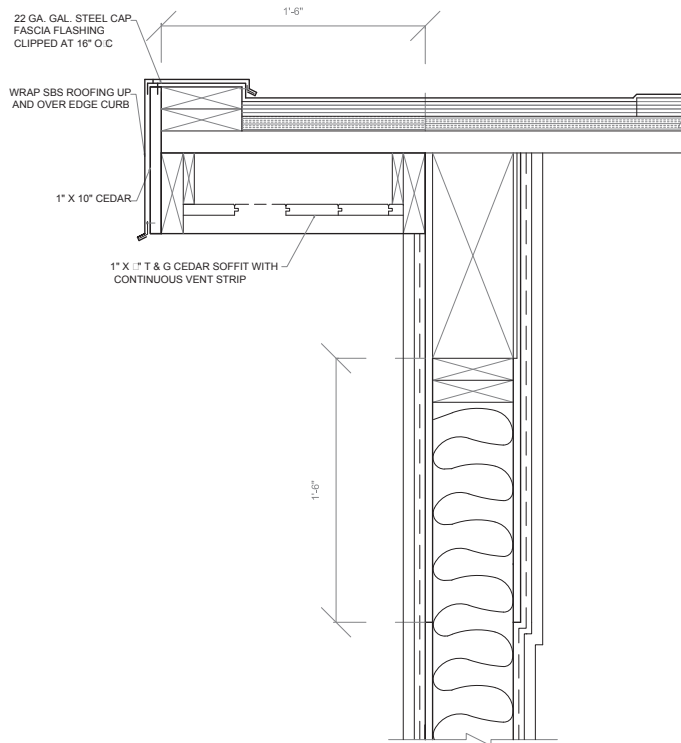
DWG#:

PR-D-01

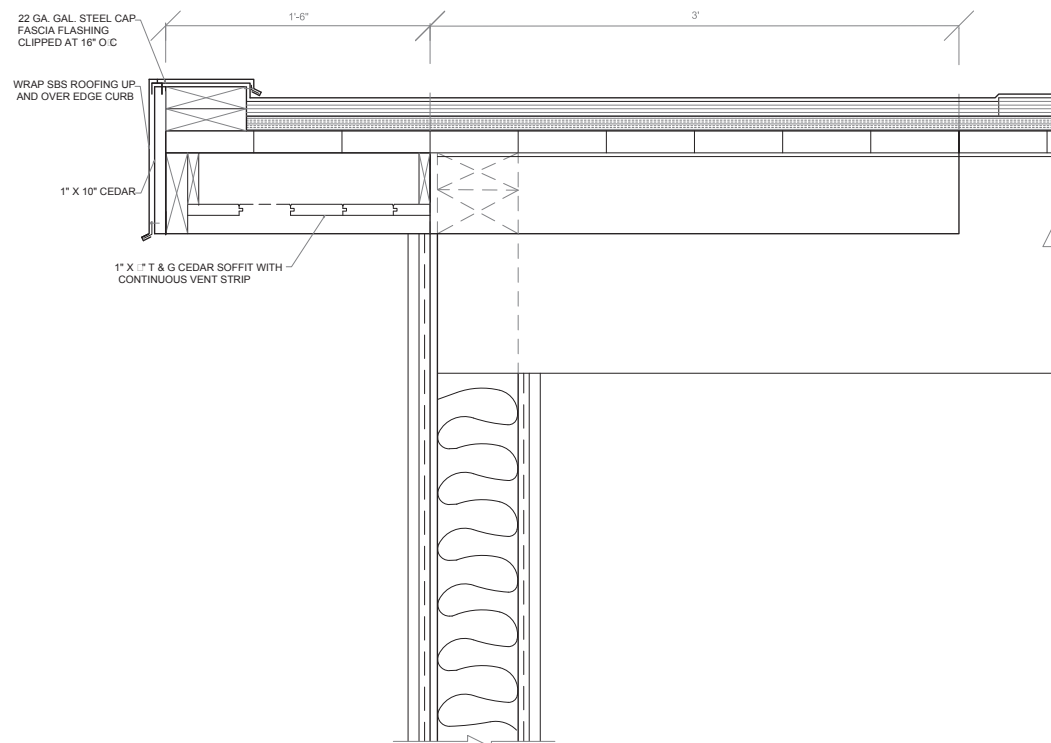
- WALL ASSEMBLY**
- 7/8" GWB
 - VAPOUR BARRIER
 - 2 X 6 STUDS @ 16" O.C
 - R-11 FIBERGLASS BATT INSULATION
 - 1/2" EXTERIOR PLYWOOD SHEATHING
 - 2 LAYERS OF #18 BUILDING PAPER
 - VERTICAL BOARD SIDING TO MATCH EXISTING

- WALL ASSEMBLY**
- 7/8" GWB
 - VAPOUR BARRIER
 - 2 X 6 STUDS @ 16" O.C
 - R-11 FIBERGLASS BATT INSULATION
 - 1/2" EXTERIOR PLYWOOD SHEATHING
 - 2 LAYERS OF #18 BUILDING PAPER
 - VERTICAL BOARD SIDING TO MATCH EXISTING

- ROOF ASSEMBLY**
- 2 PLY SBS MEMBRANE TORCHED TO EX. BUR
 - ASPHALT ENPREGNATED SUBSTRATE BOARD TO MAKE BUR HEIGHT
 - 1" RIGID INSULATION
 - 1" CEDAR DECKING



1 PROPOSED ROOF DETAIL
3" = 1'-0"



2 PROPOSED ROOF DETAIL
3" = 1'-0"

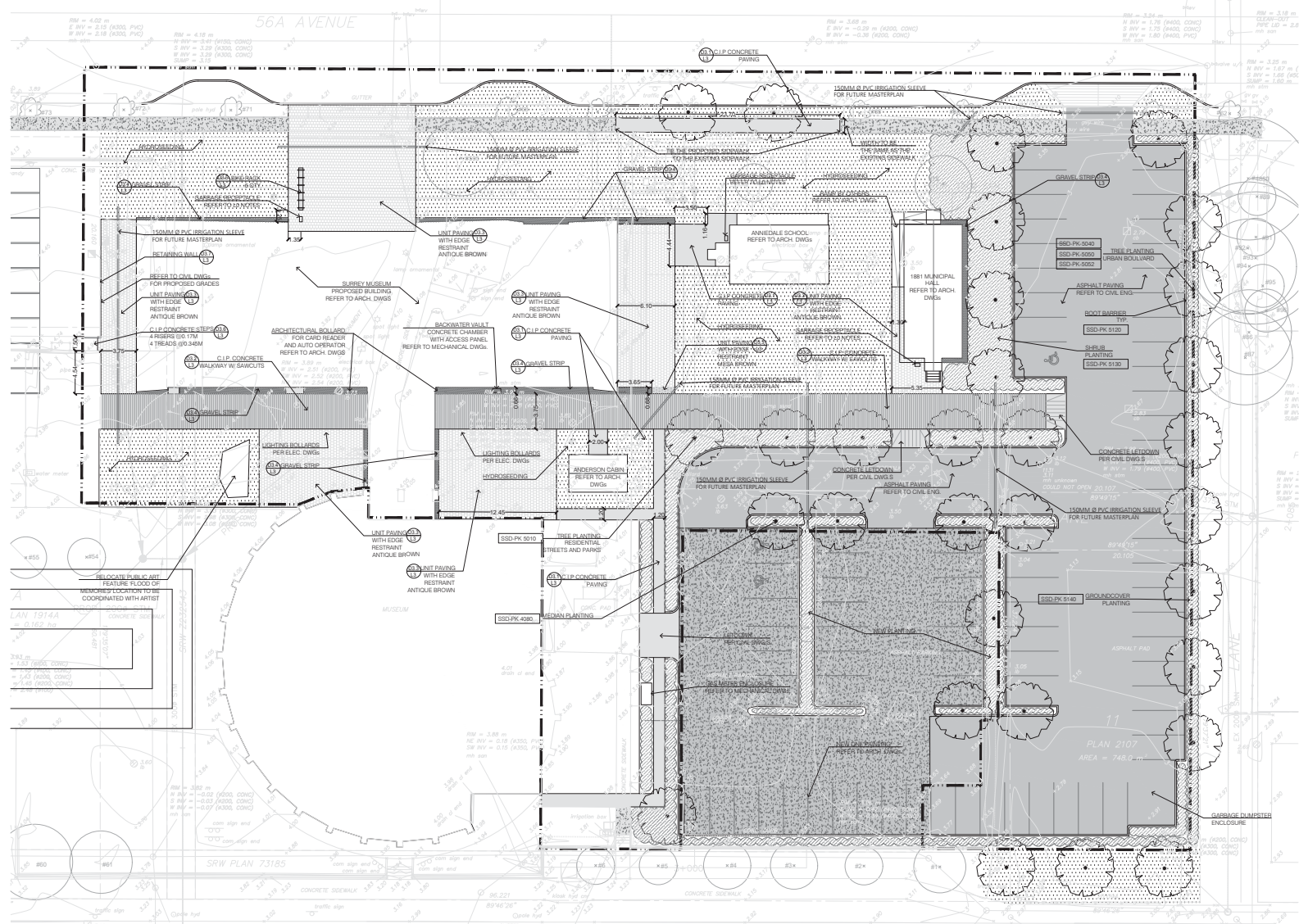
REV.	DESCRIPTION	DATE

PROJECT:
**6022 - 176 ST. PART
DEMO & REPAIR**
6022 176 STREET, SURREY, BC

TITLE:
**PROPOSED ROOF
DETAIL**

DRAWN BY: **SG**
DATE: **06/14/2018**
SCALE: **3" = 1'-0"**

DWG#: **PR-D-02**



MATERIALS LEGEND

ASPHALT PAVING (NEW)	EXISTING CONCRETE PAVING	SHRUB PLANTING (ALL SHRUB PLANTING TO BE MEDIUM HEIGHT (1M - 1.5M) 400MM DEPTH GROWING MEDIUM)
C.I.P. CONCRETE WALKWAY WITH PARALLEL SAW-CUTS (SEE DETAIL 3.2)	HYDROSEDED LAWN (150MM DEPTH GROWING MEDIUM)	EXISTING TREE TO BE RETAINED (REFER TO TREE RETENTION PLAN)
BROADWAY 3' X 18' NOMINAL ANTIQUE BROWN PRECAST CONCRETE UNIT PAVERS - SEE DETAIL 03.3	ASPHALT PAVING (EXISTING)	PROPOSED TREE
C.I.P. CONCRETE PAVING	GRAVEL STRIP	LIMIT OF WORK
CITY OF SURREY STANDARD DETAIL		
SPACEPLACE STANDARD DETAIL		

DATE	ISSUE	DESCRIPTION	BY	CHK

Professional Engineer in good standing in and for the Province of British Columbia. I hereby certify that the work shown on this plan was designed by me or under my direct supervision and that I am a member of the Institution of Professional Engineers of Canada (IPEC) and the City of Surrey Planning Commission. I am a member of the City of Surrey Planning Commission. I am a member of the City of Surrey Planning Commission. I am a member of the City of Surrey Planning Commission.

CONSULTANT

CITY OF SURREY

CLIENT

City of Surrey

TITLE

Surrey Museum Expansion
Landscape Materials Plan

LEGAL DESCRIPTION:

LOT 1, SECTION 8, TOWNSHIP 8, NEW WESTMINSTER DISTRICT, PLAN BC171474

CIVIC ADDRESS:

17710 56A AVENUE, SURREY, BC, Canada V3S 5H8

SCALE: 1:150

DATE: 2019-20

DESIGNED BY: PW/JC

DRAWN BY: PW/NR

REVIEWED BY: JC

CONSULTANT PROJECT NO: 16-003

SURVEY DRAWING NUMBER: L2.1

REVISIONS:

REVISION NO. 1

REVISION DESCRIPTION

DATE

BY

CHK

STRUCTURAL ASSESSMENT FOR RELOCATION OF SURREY 1881 TOWNHALL

The Townhall is located in the Cloverdale Truck Museum site, completely surrounded by structures built after the Townhall was relocated to this site in 1937.

STRUCTURAL ASSESSMENT OF THE TOWNHALL STRUCTURE.

The Townhall structure walls were placed on a concrete perimeter foundation that created a crawl space about 3' high. The walls are resting on the perimeter cedar beam as this was one of the common foundations for buildings in the 19th century in Lower Mainland. The beam is placed on top of the concrete foundation.



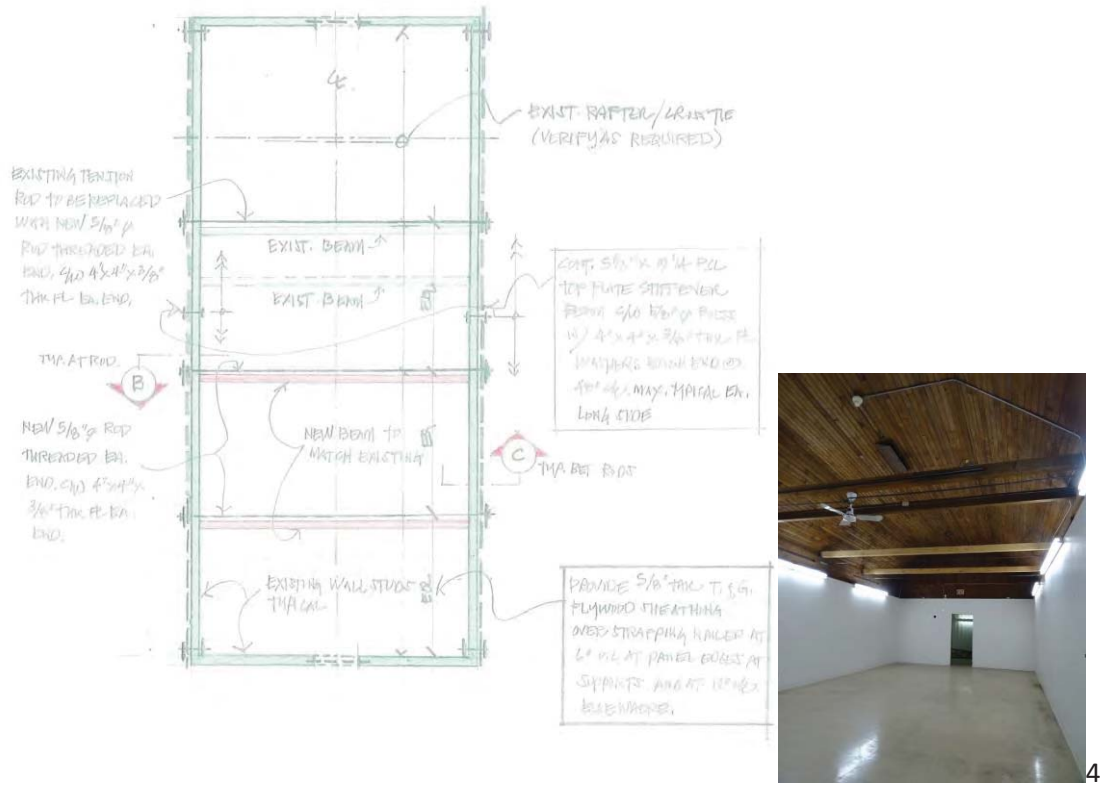
The floor joists are rough cut 2x8 spaced 18" running parallel to the shorter walls, about 20 feet in length. The floor joist are seated on the perimeter foundation beam and on the centrally located 6x6 rough cut beam so that the active load bearing length of the joists is 10 feet. The beam is supported by piers consisting of a combination of concrete blocks, 6x6 timber and 2x8 RC lumber. The joists are shimmed by lumber wedges where required. The floor boards appear to be 2x8 RC lumber.



The floor structure is capable of meeting the assembly loads in compliance with the current building code.

The walls of the Townhall are framed using 2x4 assumed RC lumber for studs and 1x4 T&G horizontal interior cladding. The walls are about 11 feet high. Exterior wall siding was not accessible for inspection.

The superstructure was subject to repairs to correct the sagging roof in the summer of 2014. The then existing one tension rod and two compression beams were augmented by installation of two new similar elements.



This 2014 installation will be very helpful for preparing the structure for the planned relocation.

As there is no access to the attic, we cannot comment on the roof structure other than the roof has been in place for over 130 years and still serves well. The roof cladding indicates that there is a collar tie fixing the rafter pairs and wall top plate from lateral spreading. The cedar shake roofing was replaced in 2015, unfortunately all we can deduce from the inspection photos is that the rafters are about 2 feet o.c. The size of the rafter is unknown.

The 1881 Townhall has been used as a display museum-type facility and for this function an interior secondary wall structure was erected. This consists of 4" steel stud @ 36" o.c. framing attached to the original walls and floor with horizontal bracing and 1/2" drywall sheathing applied to the steel framing that is some 9 feet high. This installation also will be of benefit for the planned relocation as it will be used for bracing the walls for the move.

SIE PREPARATION FOR THE MOVE.

The 1881 Townhall is completely surrounded by structures installed following its relocation to the present location. The Townhall has to be moved in southerly direction to 60th Avenue as the first step

once the structure is loaded onto lowboy. The entire south side frontage of the current building has to be removed to accommodate the move, including the raised concrete slab and wall foundation.

The north, west and east structures will have to be removed for minimum of four (4) feet measured from the perimeter walls of the Townhall. This would include removal of the foundation, concrete slabs and adjustments to roof supporting structural elements – gluelam beams and supporting columns.



South



West

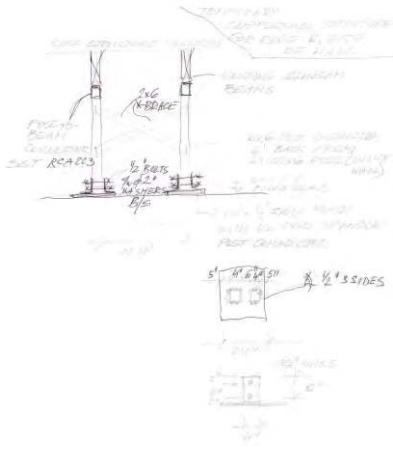


North



East

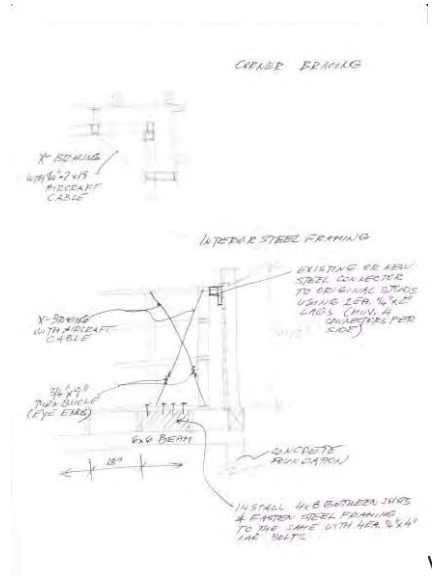
The 6x24 beams will have to be cut back 4 ft. and supported by temporary 6x6 columns allowing for some 24" cantilever as per the following sketch.



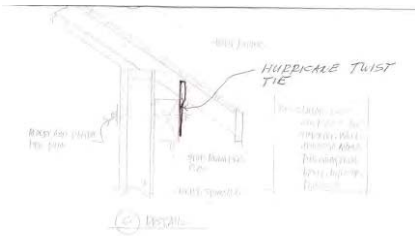
HERE COMES THE SKETCH

1881 TOWNHALL STRENGTHENING FOR RELOCATION

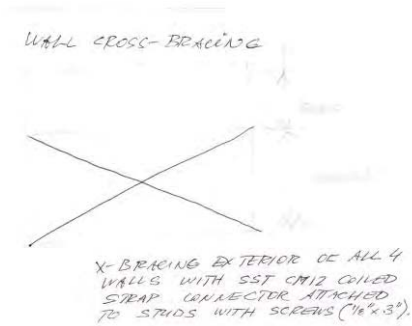
It is proposed to strip the drywall off the interior wall steel framing to expose the original walls. The steel framing shall be used to stiffen the heritage structure by attaching the it to the floor and wall studs. The corners of the structure shall be stiffened and cross-braced as per the CORNER BRACING SKETCH.



The roof rafters shall be attached to the exterior existing stiff beam (installed in 2014) using SST hurricane stiff ties.



The exterior of the building shall be cross-braced using SST CM12 coiled strap ties as per WALL CROSS-BRACING sketch



As the original exterior siding of the 1881 Townhall has been clad with a variety of lumber products (e. g. 1x6 shiplap) this cladding may be retained to apply the cross-bracing and then removed following the relocation.

Thomas Day-Madunicky

TDM Projects Inc.

1881 Town Hall

17635 60 Avenue, Surrey, British Columbia, V3S, Canada

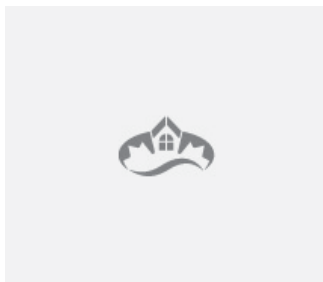
Formally Recognized: 1982/10/04



oblique view



Now part of Surrey Museum



OTHER NAME(S)

1881 Town Hall
Old Surrey Municipal Hall
Surrey Museum

LINKS AND DOCUMENTS

[Surrey Heritage Register](#)

CONSTRUCTION DATE(S)

1881/01/01

LISTED ON THE CANADIAN REGISTER: 2006/08/02

 STATEMENT OF SIGNIFICANCE

DESCRIPTION OF HISTORIC PLACE

The 1881 Town Hall is a single-storey, single-roomed, wood-frame building, rectangular in plan, with a front gable roof, clad in vertical board and batten. The building is now completely encased within a later building, with only the peak of its gabled roof visible from the street. The original interior and most of the exterior are preserved, and can be seen inside the enclosing building.

HERITAGE VALUE

The 1881 Surrey Town Hall is valued for its role in the history of the City and as a testament to the generosity, determination, and civic will of the area's pioneers. Abraham Huck, the area's first settler, bought land at Surrey Centre in 1872. Gradually, more settlers arrived and began laying the foundations of the community. In 1879 the District of Surrey was incorporated, but at the time there was no public meeting place. Abraham Huck donated one acre of his Surrey Centre land for the construction of this Hall, and the first meeting in the building was held on May 2, 1881. The erection of the Town Hall, which was also used for church services until Christ Church was completed nearby, symbolized rapid progress within the community.

The Town Hall is also significant as an example of early frontier wooden construction, with vertical board and batten siding and square forged nails. The simplicity of the design reflects vernacular building techniques, and the modest pioneer origins of Surrey.

The heritage value of the Town Hall also lies in its interpretive value. The building is an important cultural feature for the interpretation of Surrey's civic heritage to the public. It was moved, in 1938, to the Cloverdale Exhibition Grounds, and later became Surrey's first museum, indicative of Surrey's commitment to preserving and interpreting its built and cultural heritage.

commitment to preserving and interpreting its built and cultural heritage.

Source: Heritage Planning Files, City of Surrey

CHARACTER-DEFINING ELEMENTS

Key elements that define the heritage character of the 1881 Town Hall include its:

- symmetrical form, scale and massing, as expressed by its simple rectangular floor plan;
- front gabled roof with cedar shingle cladding;
- exterior vertical board and batten siding, with original square forged nails;
- original multi-paned double-hung panelling and wooden floors.

RECOGNITION

JURISDICTION

British Columbia

RECOGNITION AUTHORITY

Local Governments (BC)

RECOGNITION STATUTE

Local Government Act, s.967

RECOGNITION TYPE

Heritage Designation

RECOGNITION DATE

1982/10/04

HISTORICAL INFORMATION

SIGNIFICANT DATE(S)

1938/01/01 to 1938/01/01

THEME - CATEGORY AND TYPE

Governing Canada

Government and Institutions

Building Social and Community Life

Education and Social Well-Being

FUNCTION - CATEGORY AND TYPE

CURRENT

Leisure

Historic or Interpretive Site

HISTORIC

Government

Town or City Hall

ARCHITECT / DESIGNER

n/a

BUILDER

n/a

ADDITIONAL INFORMATION

LOCATION OF SUPPORTING DOCUMENTATION

Heritage Planning Files, City of Surrey

CROSS-REFERENCE TO COLLECTION

FED/PROV/TERR IDENTIFIER

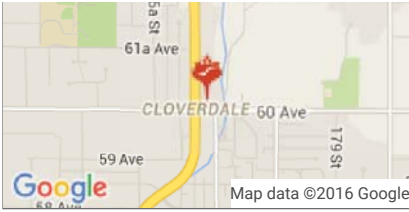
DgRq-11

STATUS

Published

RELATED PLACES

n/a



NEARBY PLACES



Cloverdale United Church

17553 58A Avenue, Surrey, British Columbia

The Cloverdale United Church is a stucco-clad Gothic Revival-inspired church with a later bell...



Dr. Sinclair House

17725 58A Avenue, Surrey, British Columbia

Set on a single-family residential lot, the Dr. Sinclair House is a two and one-half storey...



Highway Garage

CITY OF SURREY

BY-LAW NO.

A by-law to enter into a heritage revitalization agreement

.....

WHEREAS:

- A. The Council may by by-law pursuant to Part 15 of the Local Government Act, R.S.B.C. 2015, Chapter 1, as may be amended from time to time, enter into a heritage revitalization agreement with the owner of heritage property;

- B. The Council considers that certain lands, premises and improvements have *heritage value* and *heritage character* and ought to be conserved, which are situate within the City and described as:

Parcel Identifier: 025-960-024
 Lot 1 Section 8 Township 8 New Westminster District Plan BCP11474

17710 - 56A Avenue

(the "Lands");

- C. The owner of the Lands and the City of Surrey have agreed on the nature, character and extent of the *heritage value* and *heritage character* of the Lands and on the nature, extent and form of conservation necessary to protect the *heritage value* and *heritage character* of the Lands;

NOW THEREFORE, the City Council of the City of Surrey, in open meeting assembled, enacts as follows:

- 1. The City is authorized hereby to enter into that certain Heritage Revitalization Agreement appended to this By-law as Schedule "I" (the "Heritage Revitalization Agreement") in respect of the Lands.

- 2. The Mayor and the City Clerk are authorized on behalf of the Council to sign the Heritage Revitalization Agreement and to register a notice on the title of the Lands.

- 3. Schedule "I" forms a part of this By-law.

4. This By-law may be cited for all purposes as "City of Surrey Heritage Revitalization Agreement By-law, 20 , No._____."

PASSED FIRST READING on the ____ day of _____.

PASSED SECOND READING on the ____ day of _____.

PASSED THIRD READING on the ____ day of _____.

RECONSIDERED AND FINALLY ADOPTED, signed by the Mayor and Clerk, and sealed with the Corporate Seal on the ____ day of _____ 20 .

_____ MAYOR

_____ CLERK

SCHEDULE "I"

[To City of Surrey Heritage Revitalization Agreement By-law, 20 , No._____]

HERITAGE REVITALIZATION AGREEMENT

This Agreement made the ___ day of _____, 20

BETWEEN:

CITY OF SURREY,
as represented by Realty Section, Engineering Department
13450 104 Avenue
Surrey, British Columbia V3T 1V8

(the "Owner")

OF THE FIRST PART

AND:

CITY OF SURREY, a municipal corporation,
and having offices at 13450 104 Avenue
Surrey, British Columbia V3T 1V8

(the "City")

OF THE SECOND PART

WHEREAS:

- A. The Owner is the registered owner in fee simple of the following lands and premises situate in the City of Surrey, British Columbia and described as:

Parcel Identifier: 025-960-024
Lot 1 Section 8 Township 8 New Westminster District Plan BCP11474

17710 - 56A Avenue

(the "Lands");

- B. The improvements and features on the Lands identified in and described by text, photographs, plans and drawings attached to this Agreement as Appendix "A" (the "Conservation Plan") and Appendix "B" (the "McGinn Engineering & Preservation Ltd. Plan") as the Old Anniedale School (the "School") are considered by the City and the Owner to have *heritage value* and *heritage character*;
- C. The School is listed on the Surrey Heritage Register;
- D. The School has been previously identified as having *heritage value* and *heritage character* in Surrey Municipal Heritage Site Designation By-law, 1986, No. 8579 (the "Designation Bylaw");

- E. A heritage alteration permit shall be issued pursuant to the Designation Bylaw for the purpose of relocating the School from its present location at 9744 176 Street, Surrey, BC to the Lands;
- F. The Owner and the City desire to conserve the *heritage value* and *heritage character* of the School on the Lands;
- G. For the purpose of conservation of the *heritage value* and *heritage character* of the School, the Owner and the City have agreed to enter into this Agreement setting out the terms and conditions of continuing protection for the *heritage value* and *heritage character* of the School;
- H. The Owner has agreed to the terms for compensating the City for the loss in *heritage value* in accordance with Section 2(f) of this Agreement in the event the School is moved or destroyed other than through natural causes or those causes outside of the Owner's reasonable control;
- I. All provisions of this Agreement applicable to the Lands also apply to the School;

NOW THEREFORE THIS AGREEMENT WITNESSES that in consideration of the mutual premises of the parties hereto and for other good and valuable consideration (the receipt and sufficiency of whereof is hereby by the parties acknowledged) the Owner and the City covenant and agree with one another pursuant to Section 610 of the Local Government Act, R.S.B.C. 2015, Chapter 1, as amended, re-enacted or consolidated from time to time and any successor statute (the "Local Government Act"), as follows:

Conservation Plan

- 1. (a) The Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan form part of this Agreement. To the extent that the text, photographs, plans and drawings constituting the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan require interpretation, the City shall be, in the first instance, the interpreter of the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan and shall determine the matter. If the Owner is dissatisfied with the City's interpretation, then Section 15 of this Agreement shall apply.
- (b) Part I of the Conservation Plan identifies, details and describes the character, extent and nature of the improvements and features on the Lands that have *heritage value* and *heritage character*. Part II of the Conservation Plan sets out the maintenance strategy, general standards and exemptions for the *conservation* and maintenance of all improvements and features on the Lands that have *heritage value* and *heritage character*. Part III of the Conservation Plan sets out the standards and specifications for relocation, restoration, rehabilitation, replication, repair, replacement or maintenance of the School on the Lands to be undertaken and completed pursuant to this Agreement, including, but not limited to: the structure, building envelope and exterior; doors; roof structure and cladding; and finishes of the building.

Owner's Obligations to Protect, Conserve, Maintain and Rebuild

2. The Owner covenants and agrees that:
- (a) The School shall not be *altered*, including alterations required or authorized by this Agreement, except as agreed to in writing by the City.
 - (b) Each action of relocation, restoration, rehabilitation, replication, repair, replacement or maintenance required by Parts I, II, and III of the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan shall be commenced and completed in accordance with the timing, phasing, standards and specifications set out the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan.
 - (c) The School shall be maintained to the minimum standards and in accordance with the guidelines and requirements set out in the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan.
 - (d) In the event the School is damaged, other than through causes outside of the Owner's reasonable control, the Owner of the Lands accepts the obligation to undertake all necessary construction to restore the damaged portion or portions of the School to its original condition. The Owner is required to apply for and to hold a heritage alteration permit specifying the measures to be taken to restore the damaged portion or portions of the School. The heritage alteration permit shall be subject to review and approval by the Heritage Advisory Commission. The restoration of the School shall reflect the character-defining elements and design components including, but not limited to: simple rectangular form, scale and massing with mansard roof; exterior elements such as wooden drop siding; double-hung wooden-sash 4-over-4 windows; banked in quadruple assembly on the east façade, and two in single assembly on the west facade, all as subject to approval by the City Architect or designate.
 - (e) In the event the School is destroyed, other than through natural causes or those causes outside of the Owner's reasonable control, the Owner of the Lands accepts the obligation to undertake all necessary construction to create a replica of the School. The Owner is required to apply for and to hold a heritage alteration permit specifying the measures to be taken to create a replica of the School. The heritage alteration permit shall be subject to review and approval by the Heritage Advisory Commission. The construction of the replica of the School shall reflect the character-defining elements and design components as described in Section 2(d), all as subject to approval by the City Architect or designate.

- (f) In the event that the School is destroyed, other than through natural causes or those causes outside of the Owner's reasonable control, in addition to the construction of a replica described in 2(e), the Owner covenants and agrees to compensate the City for the loss in *heritage value* to the community in the amount of \$29,526.25 indexed to the Vancouver Consumer Price Index (CPI) with 2018 being the base year, except that if the School is destroyed through natural causes, including but not limited to, flood, earthquake and accidental fire as determined by the City in its sole discretion, and a replica is constructed by the Owner that is acceptable to the Heritage Advisory Commission or any successor decision making body in its sole discretion, then payment of compensation by the Owner to the City is not required.
- (g) The Owner shall do or cause to be done all such things, and shall take or cause to be taken all such actions, as are necessary to ensure that the restrictions and requirements set out in Parts II and III of the Conservation Plan and in the McGinn Engineering & Preservation Ltd. Plan are fully observed, and the Owner shall not do, cause or allow to be done anything that would be in breach of the restrictions and requirements of this Agreement.
- (k) Where required by the City in a heritage alteration permit, the Owner shall provide security to the City to guarantee the performance of the terms, requirements and conditions contained in the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan.
- (l) The Owner may apply to the City for funding including, but not limited to, monies for exemption from taxes, or any provision for assistance as specified in Section 25 of the Community Charter, S.B.C. 2003, c.26 (the "Community Charter").

Variations to By-laws

- 3. Not applicable to the Lands.

Construction and Maintenance

- 4. Wherever under this Agreement the Owner relocates, restores, rehabilitates, replicates, repairs, replaces, maintains or in any way alters the School or constructs or maintains other works to protect or conserve the School, all such work shall be done at the Owner's sole expense strictly in accordance with the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan and as agreed by the City in writing and all improvements or features shall be diligently and continuously maintained in good repair and efficient operating condition by the Owner at the Owner's sole expense in accordance with good engineering, design, heritage and conservation practice.

No Liability to City

- 5. In no case shall the City be liable or responsible in any way for:

- (a) any personal injury, death or consequential damage of any nature whatsoever, howsoever caused, that may be suffered or sustained by the Owner or by any other person who may be on the Lands; or
- (b) any loss or damage of any nature whatsoever, howsoever caused to the Lands or any improvements or personal property thereon belonging to the Owner or to any other person,

arising directly or indirectly from compliance with the restrictions and requirements of this Agreement, wrongful or negligent failure or omission to comply with its restrictions and requirements, or refusal, omission or failure of the City to enforce or require compliance by the Owner with the restrictions or requirements or with any other term, condition or provision of this Agreement.

Reasonable Care and Risk

- 6. The Owner shall at all times, in complying with the restrictions or requirements of this Agreement, take reasonable care not to injure any person or cause or allow damage to any property, and shall take reasonable care not to cause, suffer, permit or allow any condition to exist that might reasonably lead to, cause or result in injury to any person or property including persons and property on adjacent lands. It shall be the sole responsibility of the Owner to comply and maintain compliance with the restrictions and requirements in a safe manner, and without reasonably foreseeable risk to person or property. Compliance with the restrictions and requirements in this Agreement shall be at the sole and exclusive risk and cost of the Owner.

Modification

- 7. If, in fulfilling its responsibilities and obligations pursuant to this Agreement, the Owner perceives or becomes aware of any unreasonable risk of injury to persons or damage to property or other potential loss that cannot be reasonably avoided, alleviated, reduced or eliminated except by measures that would be a breach of the restrictions, requirements of this Agreement, the Owner shall notify the City in writing of the nature and extent of the risk and of the measures proposed by the Owner to be undertaken at its sole cost to reduce, alleviate, avoid or eliminate the risk. Risk shall remain with the Owner.

Indemnity

- 8. The Owner shall at all times indemnify and save harmless the City and its elected and appointed officials, employees, contractors and agents of and from all loss and damage, and all actions, claims, costs, demands, expenses, fines, liabilities and suits of any nature whatsoever by whomsoever brought for which the City shall or may become liable, incur or suffer by reason of existence and effect whether direct or indirect of the restrictions or requirements of this Agreement, or breach or non-performance by the Owner of any covenant, term or provision hereof, or by reason of any work or action of the Owner in performance of this Agreement, or by reason of any work or action of the Owner in performance of its obligations, or by reason of any wrongful act or omission, default or negligence of the Owner.

Alternative Remedies

9. Any performance by the City pursuant to a statutory right to perform the obligations of an Owner arising out of this Agreement may be exercised fully in accordance with the Local Government Act and the Community Charter, and shall be without prejudice to any and all other remedies at law and equity available to the City, and no reference in this Agreement to, or exercise of any specific right or remedy by the City, shall preclude the City from exercising any other right or remedy.

Damages

10. The Owner covenants and agrees that the measure of damages for any breach of the restrictions or requirements of this Agreement shall include, but shall not be limited to, the actual cost and expense of all administration, labour, materials, equipment, services and work required for all remedial acts necessary to fully restore, rehabilitate, replace, repair or maintain the School. The nature and extent of any breach of the said restrictions and requirements, and the nature and extent of any relocation, restoration, rehabilitation, replacement, maintenance or remedial work or action of any nature required to remedy such breach shall be determined by the City by reference to the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan, and Sections 2 and 4 of this Agreement.

No Waiver

11. No restrictions, requirements or other provisions in this Agreement shall be deemed to have been waived by the City unless a written waiver authorized by resolution of the Council and signed by an officer of the City has first been obtained, and without limiting the generality of the foregoing, no condoning, excusing or overlooking by the City on previous occasions of any default nor any previous written waiver shall be taken to operate as a waiver by the City of any subsequent default or in any way to defeat or affect the rights of remedies to the City.

Statutory Authority and Proprietary Rights

12. Nothing in this Agreement shall limit, impair, fetter, or derogate from the statutory powers of the City all of which powers may be exercised by the City from time to time and at any time to the fullest extent that the City is enabled and no permissive by-law enacted by the City, or permit, license or *approval*, granted, made or issued hereunder, or pursuant to statute, by the City shall stop, limit or impair the City from relying upon and enforcing this Agreement.

Compliance with Laws

13. Despite any provision of this Agreement, the Owner shall comply with all laws, including by-laws of the City and all regulations and orders of any authority having jurisdiction, and to the extent only that such laws, regulations and orders are mandatory and necessarily require the breach of any restriction or positive obligation of this Agreement to be observed or performed by the Owner, or less than strict compliance with the terms hereof, then the Owner upon sixty (60) days' written notice to the City shall be excused from complying with such restrictions or performing such obligation and such restriction or obligation shall be suspended but only to the extent and for the time that such mandatory law, regulation or order is inconsistent with compliance with the said restrictions or obligations.

Notice

14. Any notice to be given under this Agreement shall be in writing and may be either delivered personally or sent by prepaid registered mail and if so mailed shall be deemed to have been given five (5) days following the date upon which it was mailed. The address of the parties for the purpose of notice shall be as follows:

If to the City:

Attention: City Clerk
CITY OF SURREY
13450 104 Avenue
Surrey, British Columbia V3T 1V8

If to the Owner:

Attn: Realty Section, Engineering Department
CITY OF SURREY
13450 104 Avenue
Surrey, British Columbia V3T 1V8

Any party may at any time give notice in writing to the other of any change of address and after the third day of giving of the notice, the address specified in the notice shall be the address of the party for the giving of notices.

If title to the Lands is transferred to a new Owner, the new Owner shall provide notice in writing to the City within 15 days of such a transfer providing the name of the new Owner, the contact for notice if it is different than the Owner and the new Address to which notices are to be sent.

Arbitration

15. The Owner, if dissatisfied with the City's interpretation of the Conservation Plan and the McGinn Engineering & Preservation Ltd. Plan and any determination pursuant to Section 1(a) of this Agreement may require that the matter be decided and determined by binding arbitration as follows:
 - (a) The Owner must, within thirty (30) days of any exercise of discretion by the City, give notice to the City of its intention to dispute and in such

notice shall name a member in good standing of the Architectural Institute of British Columbia who has agreed to act as an arbitrator;

- (b) The City shall within thirty (30) days of receipt of the aforesaid notice either accept the Owner's arbitrator, or name another with the same qualifications willing to act, and shall give notice of the same to the Owner;
 - (c) Where each of the Owner and the City have named an arbitrator, the two arbitrators shall within thirty (30) days of the City's notice pursuant to Section 15(b) appoint a third arbitrator having the same qualifications and the three arbitrators shall decide the dispute;
 - (d) Where the City accepts the arbitrator first selected by the Owner, that arbitrator shall act as a single arbitrator and forthwith decide the dispute;
 - (e) Any arbitrator's decision in respect of the exercise of discretion by the City shall be final, conclusive and binding on all parties;
 - (f) The arbitrator shall award the prevailing party full compensation for all costs and expenses of the arbitrator, costs and fees of the proceedings and solicitor-client costs and expenses; and
 - (g) The arbitrator shall issue a final decision regarding the dispute within twenty-five (25) business days after the arbitrator's appointment, subject to extension of that time by agreement of the parties.
16. Without limiting the City's power of inspection conferred by statute and in addition to that power, the City shall be entitled at all reasonable times and with reasonable notice to enter onto the Lands from time to time for the purpose of ensuring that the Owner is fully observing and performing all of the restrictions and requirements in this Agreement to be observed and performed by the Owner, and wherever possible, when an inspection of the Lands is undertaken, the City shall provide reasonable notice to the Owner.

Headings

17. The headings in this Agreement are inserted for convenience only and shall not affect the construction of this Agreement or any of its provisions.

Schedules

18. All schedules to this Agreement are incorporated into and form part of this Agreement.

Number and Gender

19. Whenever the singular or masculine or neuter is used in this Agreement, the same shall be construed to mean the plural or feminine or body corporate where the context so requires.

Interpretation

20. Terms used in this Agreement that are italicized are defined in the Local

Government Act, and the Heritage Conservation Act, R.S.B.C. 1996, Chapter 187, as amended, re-enacted or consolidated from time to time and any successor statute, and shall take their meaning from those Acts.

Successors Bound

- 21. All restrictions, rights and liabilities imposed upon or given to the respective parties under this Agreement shall extend to and be binding upon their respective heirs, executors, administrators, successors and assigns. When the Owner is more than one party they shall be bound jointly and severally by the terms, covenants and agreements on the part of the Owner.

Notice to be Filed

- 22. Notice of this Agreement and amendments to it will be filed in the Land Title Office and once filed, this Agreement and amendments will be binding on all persons who acquire an interest in the Lands.

IN WITNESS WHEREOF the Owner and the City have executed this Agreement as of the date first above written.

CITY OF SURREY

CITY OF SURREY

Linda Hepner
Mayor

Jane Sullivan
City Clerk

Appendix "A"

CONSERVATION PLAN

PART I – HISTORICAL AND ARCHITECTURAL BACKGROUND

1. Description of Historic Place

The Old Anniedale School is a wood frame building, rectangular in plan, with a hipped roof. The entrance has an enclosed porch, to the right of which hangs the school bell. The building is clad in drop siding with vertical siding cladding the foundations. It was moved in 1975 from its original site at the corner of 96th Avenue and 184th Street to 9744 176 Street. It was moved again from that location to its present location in 2018.

2. Heritage Value of Historic Place

The Old Anniedale School has historic value as one of the earliest schools in Surrey. It opened in 1891 with thirteen pupils and, until it closed in 1954, it played a vital role in the life of the community's children. During all the years of its operation it had the local distinction of having the highest percentage of its graduates obtain university degrees. The building was designed by the British Columbia Department of Lands and Works and it was constructed by Samuel Edge.

The Old Anniedale School is also significant for its association with the development of the Tynehead and Anniedale neighbourhoods, first settled in the 1860s by the Bothwell brothers, who pre-empted land along the Coast Meridian Road (168th Street) near the headwaters of the Serpentine River. Surveyed in 1859, the Coast Meridian was defined by the meridian of longitude closest to the Pacific coast at the 49th parallel. Settlement occurred as logging, farming and fishing developed in the area.

3. Character Defining Elements

Key elements that define the heritage character of the School include its:

- Simple rectangular form, scale and massing with mansard roof;
- Exterior elements such as wooden drop siding; and
- Double-hung wooden-sash 4-over four windows; banked in quadruple assembly on the east façade, and two in single assembly on the west façade.

PART II – MAINTENANCE STANDARDS AND PERMIT APPROVALS

1. General

A. Requirement to Commence Renovations

Moving of the School may commence at any time following the issuance of a Heritage Alteration Permit and as authorized by the issuance of a building permit.

Restoration of the School, including works that are consistent with Part III – Restoration Standards and Specifications, may commence at any time following the adoption of a by-law to enter into this Agreement and the issuance of a building permit authorizing the works.

B. Maintenance Strategy

The strategy to ensure ongoing conservation of the School shall consist of a Maintenance Plan and a Funding Strategy.

The Maintenance Plan shall be prepared with input from a conservation architect or qualified heritage consultant that is acceptable to the City. Issues to be addressed in the Maintenance Plan include water penetration and damage from sun, wind, weather and animals. Maintenance includes, but is not limited to, painting or staining, sealing, weather-stripping and the like.

The Funding Strategy shall include, but is not limited to, whether or not the Owner intends to absorb all the costs, undertake fundraising or seek government financial incentives, including those available from the City.

The Owner shall submit a Maintenance Plan and Funding Strategy for review and approval by the General Manager, Planning and Development and , if deemed necessary by the General Manager, Planning and Development, the Heritage Advisory Commission within one (1) year of the adoption of a by-law to enter into this Agreement.

The Maintenance Plan and Funding Strategy for the School shall include, but is not limited to, the following:

- (a) A description and a time schedule for the renovations, repair, and replacement of the exterior elements, *landscaping* or other identified works on the Lands that constitute the character-defining elements and as identified in Part III – Renovation Standards and Specifications;
- (b) A description and time schedule for the ongoing maintenance of the elements, *landscaping* or other identified works on the Lands and other relevant details. Maintenance includes: painting, staining and sealing of the exterior cladding and trims, weather stripping, re-roofing, replacement of windows, doors and exterior cladding or trims to match the existing materials;
- (c) Ongoing maintenance of *landscaping*;
- (d) A description of any matters noted in Part III – Renovation Standards and Specifications or in the plans attached to this Agreement as requiring further details; and
- (e) A financial plan detailing the funding for the renovation and maintenance outlined above, including corporate sponsorships, annual budgets by the Owner or tenant, applications for government grants, strata fees, and other relevant details.

C. Amending an Established Maintenance Strategy

An Owner may apply to the City to amend an existing Maintenance Plan and Funding Strategy. Any amendment is subject to approval by the General Manager, Planning and Development and, if deemed necessary by the General Manager, Planning and Development, the Heritage Advisory Commission.

2. Standards

The "Standards and Guidelines for the Conservation of Historic Places in Canada", established under the Historic Places Program or successor guidelines as may be approved by the City are to apply to all construction, maintenance, restoration or renovation works undertaken under Parts II or III on the School.

3. Timing and Phasing

This provision does not apply to the lands.

4. Heritage Alteration Permit(s) Approval

A. Changes to the building, structure, exterior appearance of the School, features on the Lands identified in the Conservation Plan, McGinn Engineering & Preservation Ltd. Plan. or character-defining elements may require the Owner to apply for a heritage alteration permit or obtain approval from the City.

Proposed changes shall be referred to the Planning & Development Department of the City prior to the commencement of any work to determine if the changes require or do not require a heritage alteration permit.

B. A heritage alteration permit may not be required for alterations including, but not limited to, the following:

- (a) changes to the Conservation Plan or the McGinn Engineering & Preservation Ltd. Plan that are considered by the City Architect to be minor in nature and not affecting the character-defining elements of the School;
- (b) restorations considered by the City Architect to be consistent with the original design, being made to replace stylistically foreign elements and done in consultation with an independent conservation architect or qualified heritage consultant acceptable to the City; or
- (c) simple repair and maintenance of existing elements not affecting the *building* structure, exterior or interior appearance of the School.

C. A heritage alteration permit shall be required for all but minor alterations including, but not limited to, the following:

- (a) changes to the School structure;
- (b) changes to the exterior appearance of the School;
- (c) replacement of existing elements and/or construction of additions to the School;

- (d) changes to the external appearance of the School due to interior renovations.

If a heritage alteration permit is determined to be required, the Owner shall apply to the City for a heritage alteration permit before undertaking any of the works listed in this Section 4.C.

After the heritage alteration permit application is submitted, the heritage alteration permit will be considered for issuance by City Council upon the recommendation of the General Manager, Planning and Development and the Heritage Advisory Commission, or by a City official delegated by City Council.

5. **Building Permit Approval**

Construction, alterations or other actions to be authorized by a building permit shall be consistent with the provisions of the Conservation Plan, McGinn Engineering & Preservation Ltd. Plan, and with heritage alteration permits sanctioning construction, alterations or other actions.

As the School is recognized as a historic site, Building Code equivalencies may be used to lessen visual impacts on the historical appearance or authenticity of the *building*. To utilize Building Code equivalencies, the Owner shall retain a qualified architect that is acceptable to the City Architect.

6. **Conditions**

- A. The works specified in Part III and attachments to this Conservation Plan shall be supervised by a conservation architect or qualified heritage consultant acceptable to the City.
- B. The works specified in Part III and attachments to this Conservation Plan shall be approved by a conservation architect or qualified heritage consultant acceptable to the City prior to the City granting final building approval.

PART III – RESTORATION STANDARDS AND SPECIFICATIONS

1. **Foundation:**

See Section 4.1.4 “New Foundation & Foundation Wall” of the McGinn Engineering & Preservation Ltd. Plan.

2. **Roof Structure and Cladding:**

See Section 4.1.3 “Roof Structure Upgrades” of the McGinn Engineering & Preservation Ltd. Plan.

3. **Chimney Restoration:**

See Section 4.1.9 “Chimney Restoration” of the McGinn Engineering & Preservation Ltd. Plan.

4. **Front & Side Stair Reconstruction:**

See Section 4.1.10 “Front & Side Reconstruction” of the McGinn Engineering & Preservation Ltd. Plan.

5. **Exterior Door Preservation:**

See Section 4.2.5 “Exterior Door Preservation” of the McGinn Engineering & Preservation Ltd. Plan.

6. **Interior Feature Preservation**

See Section 4.2.6 “Interior Feature Preservation” of the McGinn Engineering & Preservation Ltd. Plan.

7. **Colour scheme:**

See Section 4.1.11 “Exterior Painting” of the McGinn Engineering & Preservation Ltd. Plan.

If the exterior paint colour of the School is to be changed, the change shall be done in consultation with the City and reflect as best as can be determined the original appearance of the School or heritage colours appropriate for the period of the School.

Changes to the exterior colour scheme shall not be undertaken without being reviewed and approved by the City Architect. The City Architect may consult with the Heritage Advisory Commission about the colour scheme.

Prior to final paint application, samples of the colours should be placed on the *building* to be viewed in natural light. Final colour selection can then be verified. Matching to any other paint company products should be verified by the heritage consultant.

8. Interior:

See Section "4.2.6 "Interior Features" of the McGinn Engineering & Preservation Ltd. Plan.

9. Other:

The general intent is to promote restoration and retention of existing materials and elements wherever possible. If restoration is not feasible, replacements shall be constructed to match existing in terms of form, detailing and materials. Where original features have already been removed, altered or replaced by stylistically foreign elements, new replacements shall be consistent with the original design and done in consultation with an independent conservation architect or qualified heritage consultant acceptable to the City.

Minor changes to the provisions of Part III that do not affect the character defining elements or that improve the authenticity of the restorations, may be approved by the City Architect, in consultation with the Heritage Advisory Commission.

(Note: Terms used in Appendix "A" of this Agreement that are italicized are defined in Surrey Zoning By-law, 1993, No. 12000, as amended, and shall take their meaning from the By-law.)

Appendix "B"

**HERITAGE CONSERVATION PLAN
Old Anniedale School, 17710 – 56A Avenue, Conservation Plan
McGinn Engineering & Preservation Ltd., May 2018**

(The " McGinn Engineering & Preservation Ltd. Plan.")

(Attachment beginning on the next page)



CONSERVATION PLAN

OLD ANNIE DALE SCHOOL

9744 176 STREET, SURREY, BC

MAY 2018



TDM PROJECTS INC.
6420 Rosebery Ave.
West Vancouver, BC. V7W 2C6



McGinn Engineering &
Preservation Ltd.
Barry McGinn Architect.

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Early photograph of the Old Anniedale School

1 HERITAGE VALUE ASSESSMENT

** Heritage Value Assessment of Old Anniedale School is adapted from the Canadian Register of Historic Places (in the Appendix)*

1.1 History/Description of Old Anniedale School

The Old Anniedale School is a wood frame building, rectangular in plan, with a hipped roof. The entrance has an enclosed porch, to the right of which hangs the school bell. The building is clad in drop siding with vertical siding cladding the foundations. It was moved in 1975 to its present location from its original site at the corner of 96th Avenue and 184th Street.



Old Anniedale School and surroundings, 1891

1.2 Summary of Heritage Value

The Old Anniedale School has historic value as one of the earliest schools in Surrey. It opened in 1891 with thirteen pupils and, until it closed in 1954, it played a vital role in the life of the community's children. During all the years of its operation it had the local distinction of having the highest percentage of its graduates obtain university degrees. The building was designed by the British Columbia Department of Lands and Works and it was constructed by Samuel Edge.

The Old Anniedale School is also significant for its association with the development of the Tynehead and Anniedale neighbourhoods, first settled in the 1860s by the Bothwell brothers, who pre-empted land along the Coast Meridian Road (168th Street) near the headwaters of the Serpentine River. Surveyed in 1859, the Coast Meridian was defined by the meridian of longitude closest to the Pacific coast at the 49th parallel. Settlement occurred as logging, farming and fishing developed in the area.

(Source: Heritage Planning Files, City of Surrey)

1.3 Character Defining Elements

The character-defining elements of the Old Anniedale School include its:

- simple rectangular form, scale and massing with mansard roof
- exterior elements such as wooden drop siding
- double-hung wooden-sash 4-over-four windows; banked in quadruple assembly on the east facade, and two in single assembly on the west façade

2 POLICY FRAMEWORK


2.1 Heritage Designation

The Old Anniedale School is currently listed in the Surrey’s Community Heritage Register as site number 21 with its significance classified as ‘Historical.’ It is protected by Heritage Designation By-law, 1986, No. 8579.







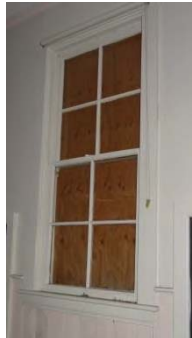
2.2 Current Zoning Designation

Old Anniedale School is currently located in the *RA-One Acre Residential* zone. In this zone, the current assembly use is an existing non-conforming use. The current building is in compliance of lot coverage, building height, and minimum front and side yard setbacks.





3 CONDITION ASSESSMENT

CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.1	Form, Scale & Massing	No significant alterations or additions have affected the building’s form scale and massing and these aspects of the building are essentially original.	



CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.2	Cladding, Fascia & Soffits	The original wood clapboard cladding is still largely intact, likely with select replacement of isolated boards over time as general maintenance required. The existing wood clapboard, fascia, and soffits are in good condition, with only the paint showing signs of peeling.	 
3.1.3	Doors	The original wood frame and panel doors are existing and in fair condition. The original vintage hardware is existing and should be retained.	 
3.1.4	Windows	The original 4-over-4 windows have been boarded up from the outside, but are in good condition with the glass still intact. The interior window mouldings, trim and sills are still intact and in good condition.	  







CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.5	Roof Surface	The cedar shingle roof surface is not original, but is in good condition, only showing minor signs of warping and biological growth.	
3.1.6	Rainwater Evacuation System	Currently there is only one gutter, on the one side elevation with the side door. It is attached to a rainwater leader. The remaining eaves (including those on the front porch) do not have gutters or leaders.	
3.1.7	Chimney	The original brick chimney is in poor condition. Several bricks are severely spalled and the mortar joints have washed out. The sheet metal flashing at the roof is deformed and deteriorated. It appears that the chimney was reconstructed from the 6 th brick course up. This was perhaps done during the move in 1975. It is the reconstructed portion that is in poor condition. There is considerable evidence of water ingress from failed and corroded sheet-steel chimney step flashing at the interior ceiling.	
3.1.8	Entry Stairs	The entry stairs at the main entry and the side entry are in poor condition. The treads have deteriorated. The railings do not comply to the current building code.	



CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.9	School Bell	The historic bell, while of heritage character, is not an original feature to the building. It could be retained and displayed on the interior as part of an exhibit. The current location of the bell is originally the location of a painted sign that should be reinstated.	
3.1.10	Interior Features	Many of the original interior features have survived and are in good condition. The original 5-panelled doors, door hardware, door trim, wood wainscoting, moldings, blackboards and original schoolhouse style light fixtures are all intact and in good condition. The original washbasin is existing in the sink room, and should be retained as a heritage feature, but not plumbed.	
3.1.11	Electrical Distribution	The original electrical infrastructure was upgraded after the move in 1975. It appears to be in generally good condition, although some later wiring is not code-compliant.	



CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.12	Woodstove	The current wood stove is not original, but contributes to the heritage character of the space.	
Structure		<i>For a full analysis of the structure of the Old Anniedale School, refer to the report in the Appendix (TDM Projects Ltd.). The condition of the structure is summarized here:</i>	
3.1.13	Structure: Basement	<p>The 6'-4" concrete foundation wall is in very good condition.</p> <p>The steel needle beams that were used in the move have remained in place. They are in good condition and are more than adequate for the load.</p> <p>Some of the wood joists have been doubled and new joists have been added over time. The 4" seats are adequate.</p>	
3.1.14	Structure: Main Floor	The walls are framed with rough cut 2 x4's at 16" o.c. The ceiling joists are rough cut 2x6's, also 16" o.c.	

CONDITION ASSESSMENT TABLE			
REF.	ELEMENT	DESCRIPTION/CONDITION	IMAGE REFERENCE
3.1.15	Structure: Roof	The rafters are rough cut 2x6's at 3'-0" o.c. and is in good condition, however, they are likely 'birdmouthed' and possibly toenailed to the top plate, which does not comply with current building code.	

3.2 Proposed Conservation Strategies

The Parks Canada Standards & Guidelines for the Conservation of Historic Places in Canada (2010) has been adopted by the Government of B.C. and most Federal agencies, for the assessment of the treatment of historic places. Under the Standards and Guidelines, the conservation strategies proposed for the proposed façade restoration of Old Anniedale Schoolhouse may include aspects of preservation, restoration and rehabilitation, as defined below:

Preservation

The action or process of 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.

Restoration

The action or process of accurately revealing, recovering, or representing the state of a historic place, or of an individual component, as it appeared in a particular period in its history, while protecting its heritage value.

Rehabilitation

The action or process of making possible a continuing or compatible contemporary use of an historic place or an individual component, through repair, alterations, and/or additions, while protecting its heritage value.

In reality, all three of these conservation approaches will come into play in the proposed rehabilitation and upgrade at the Old Anniedale Schoolhouse.

4 PRIORITIZED UPGRADE PLAN

The Conservation Plan has been organized under the following categories, based on current condition and performance, owner priorities, code compliance and safety considerations, maintenance of envelope and heritage character integrity, improvements to occupant use and comfort and costs:

Priority 1: Currently Critical	<i>Should be addressed within a 1 year time frame</i>
Priority 2: Recommended	<i>Recommended to enhance building accessibility, safety, and heritage qualities.</i>

4.1 Priority 1: Currently Critical

4.1.1 Building Relocation

Numerous groups are interested in moving the building. A new Museum Heritage Park Location on the north side of the Surrey Museum has been selected as the new location for the building. Relocation of the Old Anniedale School will involve the detachment, temporary interior bracing, bracing of entry, transportation, and the securing of the building on a new foundation. The two existing steel beams can be used for the move, and can remain in place at the new location.

4.1.2 Building Relocation – BC Hydro Line Relocations

The transport of the building will require the temporary relocation of BC Hydro, Telus & cable lines along the path of travel.

4.1.3 Roof Structure Upgrades

- a) The rafters must be connected to the wall plate by steel strap tie to stiffen the roof structure, and bring it into compliance with current code.
- b) The two hip joints of the rafters should be upgraded with steel angle connectors to brace the roof from uplift forces of wind and seismic events.

4.1.4 New Foundation & Foundation Wall

A new reinforced concrete foundation and foundation wall will be required at the new location. The new foundation wall supporting the original floor structure and surviving needle beams from the last building move will be configured to allow the new main floor elevation to match the original main floor height above grade. This work will involve: excavation, forming of strip footings and the reinforced foundation wall, crawlspace slab, and installation of rigid insulation on the inside of the foundation wall. A basement is not being considered as the original building did not have a basement, and the building was originally situated closer to grade.

4.1.5 HAZMAT Remediation

A HAZMAT report was conducted by Epoch Environmental (found in the appendix). The building requires remediation of all gypsum and underlying lathe and plaster, mostly above the wainscot to the



ceiling in the classroom space. The building also requires the removal vermiculite in the attic and, likely, in the wall cavity. (refer to HAZMAT report for full analysis).

4.1.6 New GWB Finishes to Classroom Interior Above Wainscot

To replace the finishes removed in the HAZMAT remediation.

4.1.7 Service System Trenching for New Electrical Service

New trenching will be required to supply electrical service conduit to the building in the new location, and has been allowed for in the current Museum Addition contract.

4.1.8 New Electrical Service

A new electrical sub-panel serving the building and tied into the Museum site services under a different contract, will be provided.

4.1.9 Chimney Restoration

The chimney should be reconstructed, replacing the severely spalled bricks with new brick. Attention should be paid to the placement of the new brick so that it is not highly visible from the ground. Use of the salvaged brick in the most visible areas of the chimney is desirable. A new, reinforced, cast-stone chimney cap should be fabricated and installed to match the original in size and profile.

4.1.10 Front & Side Stair Reconstruction

New stairs should be reconstructed. The height may vary depending on the selected future site, but it is recommended the Schoolhouse floor level be closer to grade. In one historic photograph, the stair is only 3 steps high. The new stairs should have rounded nosing and a closed riser, as seen in historic photography, and painted in a dark colour. Handrails should be constructed to meet current code.

4.1.11 Exterior Painting

The existing exterior paint has reached the end of its service life and is peeling in many locations. To protect the wood, and increase its longevity, the exterior of the building should be prepped by scraping off of all loose paint, spot primed and repainted. Trim, door and window elements including: fascia, corner trim, window & door trim, window frame, door, and water table should be painted in an off-white. Clapboard above the water table should be painted in a light colour, to be selected by a heritage consultant, or selected from Benjamin Moore's "Historical Vancouver True Colors" palette.

4.1.12 Rainwater Evacuation System

Installation of a new gutter on all roof eaves, including front entry porch, new downpipes routing rainwater to the site storm drainage system will be provided under the separate Museum Addition contract.

4.1.13 Foundation Drainage System

Installation of a new foundation drainage system routing foundation drainage to the site storm drainage system will be provided under the separate Museum Addition contact.



4.2 Priority 2: Recommended

4.2.1 Accessible Entry

An accessible ramp will be constructed to the side entry to allow for barrier-free accessibility into the building, with new door opener with interior/exterior push button operator for the side door. The accessible ramp is part of the Museum Addition contract.

4.2.2 Upgrade Interior Lighting

New energy efficient LED lighting, should be installed in the original glass schoolhouse pendant fixtures.

4.2.3 New Fire Alarm System

The building will be tied into the overall Museum fire alarm system with separate indication of devices (pull stations, sprinkler zone valve).

4.2.4 Sprinkler System

Sprinkler systems have been accepted by Authorities Having Jurisdiction as providing a significant improvement in life safety, as well as property protection. The latter is a distinct advantage to combustible heritage buildings in terms of heritage resource protection. A new sprinkler system to NFPA 13 will be installed in the building as separate zone within the larger Museum sprinkler system, with the water supply and trenching part of the Museum Addition contract.

4.2.5 Exterior Door Preservation

The existing original exterior doors, complete with original hardware are in fair condition and require restoration. The original frame and panel doors and the distinctive vintage hardware will be preserved.

4.2.6 Interior Feature Preservation

The interior wood wainscot and ceiling paneling, blackboards, base/trim/casing throughout the interior spaces, and wood paneled doors will be preserved.

4.2.7 New Exit Lighting & Emergency Lighting

To improve safety, new exit lighting and emergency lighting will be installed.

4.2.8 New Heating and Cooling System

A new air-to-air heat pump and electric furnace situated in the concealed space over the rear washroom will supply ceiling grilles and a sidewall return grille to heat the space.



5 CONSERVATION STANDARDS

The following are the standards that define the principles of good conservation practice, and an assessment of how they relate to the proposed interventions for Old Anniedale Schoolhouse.

CONSERVATION STANDARD		CONSERVATION STRATEGY
GENERAL STANDARDS FOR ALL PROJECTS		
1	<i>Conserve the heritage value of a historic place. Do not remove, replace or substantially alter its intact or repairable character-defining elements. Do not move a part of a historic place if its current location is a character-defining element.</i>	The historic school was moved to the current location at the edge of the highway, making it difficult to access and isolating it from any sense of its original context. It will be sensitively restored, rehabilitated and preserved in a manner that maintains and enhances its heritage character within a heritage building precinct north of the Surrey Museum.
2	<i>Conserve changes to a historic place, which over time, have become character-defining elements in their own right.</i>	The bell, although of good heritage character, is not the original, and the hanging structure is of poor character, and should be removed.
3	<i>Conserve heritage value by adopting an approach calling for minimal intervention.</i>	The proposed interventions will restore the school to its early appearance or allow sensitive rehabilitation in keeping with the building's heritage value. The proposed new use of educational programming is a continuation of the building's current use and requires no interior alterations.
4	<i>Recognize each historic place as a physical record of its time, place & use. Do not create a false sense of historic development by adding elements from other historic places or other properties, or by combining features of the same property that never coexisted.</i>	Proposed interventions will comply with this standard, but also allow respectful rehabilitation to meet modern standards for its continued use by the Surrey community.
5	<i>Find a use for a historic place that requires minimal or not change to its character-defining elements.</i>	The building use will continue as an historic one-room school museum, and involve minimal change to the building's character-defining elements to provide a building code-compliant level of life safety.
6	<i>Protect, and if necessary, stabilize a historic place until any subsequent intervention is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbance of archaeological resources, take mitigation measures to limit damage and loss of information.</i>	A new building foundation is to be constructed at the new site and allow the building to be situated lower to grade with a three-sided wood entry stair as per the original condition.
7	<i>Evaluate the existing condition of character-defining elements to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect heritage value when undertaking an intervention.</i>	This report identifies deficiencies and proposed interventions which retain or restore character-defining elements, and allow respectful rehabilitation to allow future use.
8	<i>Maintain character-defining on an on-going basis.</i>	A maintenance plan in compliance with



	<i>Repair character-defining elements by reinforcing the materials using recognized conservation methods. Replace in kind any extensively deteriorated or missing parts of character-defining elements, where there are surviving prototypes.</i>	this standard should be implemented.
9	<i>Make any intervention needed to preserve character-defining elements physically and visually compatible with the historic place and identifiable upon close inspection. Document any intervention for future reference.</i>	This conservation plan will provide guidance on future interventions to ensure maintenance of the building's heritage character-defining elements. Implementation measures will allow for the oversight of an independent heritage consultant.
ADDITIONAL STANDARDS RELATING TO REHABILITATION		
10	<i>Repair rather than replace character-defining elements. Where character-defining elements are too severely deteriorated to repair, and where sufficient physical evidence exists, replace them with new elements that match the forms, materials, and detailing of sound versions of the same elements. Where there is insufficient physical evidence, make the form, material and detailing of the new elements compatible with the character of the historic place.</i>	The proposed intervention approach will comply with this Standard.
11	<i>Conserve the heritage value and character defining elements when creating any new additions to a historic place and any related new construction. Make the new work physically and visually compatible with, subordinate to, and distinguishable from the historic place.</i>	No new building additions are being considered and the new accessible ramp will be constructed in concrete and be discernible as a contemporary addition. The guardrail will be detailed in wood to integrate sensitively with the wood character of the building.
12	<i>Create any new additions or related new construction so that the essential form and integrity of a historic place will not be impaired if the new work is removed in the future.</i>	No new additions are proposed at this time. Any future additions proposed should comply with this standard.
ADDITIONAL STANDARDS RELATING TO RESTORATION		
13	<i>Repair rather than replace character-defining elements from the restoration period. Where character defining elements are too severely deteriorated to repair and where sufficient physical evidence exists, replace them with new elements that match the forms, materials, and detailing of sound versions of the same elements.</i>	The proposed intervention approach will comply with this Standard.
14	<i>Replace missing features from the restoration period with new features whose forms, materials and detailing are based on sufficient physical, documentary and/or oral evidence.</i>	The heritage features remain largely intact. Any new bricks used in the chimney reconstruction should match in module, colour and texture and new brick should be used in discreet locations, salvaged brick to be used in more prominent locations.



6 PRELIMINARY OPINION OF PROBABLE REHABILITATION COSTS

5.1. Priority 1: Currently Critical		
5.1.1.	Building Relocation (within 5 km) – detach, temporarily brace with temporary interior wood bracing and bracing of entry, transport, and secure building on new foundation.	\$35,000.00
5.1.2.	Line Relocations (local 5 km route – estimate for BC Hydro, Telus, Cable)	\$15,000.00
5.1.3.	Roof Structure Rehabilitation – install connector tie at rafters & end plate, install angle connectors at hip joints.	\$5500.00
5.1.4.	New Foundations and foundation wall at new site (excavation, forming of perimeter strip footing and 5' foundation wall for a reinforced concrete foundation, crawlspace slab, rigid insulation to inside of foundation wall) <i>{Work included in current Museum Addition Contract}</i>	\$0.00
5.1.5	Hazardous Material Remediation (removal of classroom gypsum, and underlying lath/plaster back to the studs, mostly in areas above the wainscot to ceiling, removal of vermiculite in the attic and likely the wall cavity)	\$31,000.00
5.1.6	New finished GWB finishes to classroom interior above wainscot, incl. paint	\$6200.00
5.1.7	Service system trenching for new electrical service <i>{Work included in current Museum Addition Contract}</i>	\$0.00
5.1.8	New electrical service/distribution <i>{Work partially included in current Museum Addition Contract}</i>	\$3600.00
5.1.9	Chimney Restoration – reconstruct brick chimney w/ new cast stone cap stone.	\$15,000.00
5.1.10	Front & Side Stair Reconstruction	\$10,000.00
5.1.11	Exterior Painting – prep, spot prime and repaint all exterior wood elements	\$9400.00
5.1.12	New gutter, downpipes and connection to site storm drainage system	\$3900.00
5.1.13	New foundation drainage and connection to site storm drainage system <i>{Work included in current Museum Addition Contract}</i>	\$0.00
TOTAL PRIORITY 1		\$134,600.00

5.2 Priority 2: Recommended		
5.2.1.	Accessible Entry – ramp, door opener with int/ext push button operator for exterior accessible door <i>{Work partially included in current Museum Addition Contract}</i>	\$3500.00
5.2.2.	Upgrade Interior Lighting – install LED lighting into existing original fixtures	\$800.00
5.2.3.	New Fire Alarm System – New fire alarm system with connection to independent monitoring service <i>{Work partially included in current Museum Addition Contract}</i>	\$2500.00
5.2.4.	Sprinkler System – New sprinkler system to NFPA 13, concealed piping and heads, – \$7.40/sq.ft. X 700 sq.ft., new water service for higher water flows - \$7000.00 <i>{Work partially included in current Museum Addition Contract}</i>	\$5180.00
5.2.5.	Exterior Door Preservation - retain original frame and panel doors and distinctive vintage hardware	\$4800.00
5.2.6.	Interior Feature Preservation - Retain and preserve interior wall and ceiling paneling, surviving trim, frame and panel doors	\$4000.00
5.2.7.	New exit lighting and emergency lighting	\$3200.00
5.2.8.	New heating and cooling system <i>{Work partially included in current Museum Addition Contract}</i>	\$14,000.00
TOTAL PRIORITY 2		\$37,980.00



The above costs do not include soft costs (consulting fees, project management fees, permits, insurance, etc.) At this early stage of preliminary project costing, we recommend a 25% project contingency allowance.

7 REFERENCES

Canadian Register of Historic Places. *Old Anniedale School*. Retrieved March, 2016 from <http://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=11420>

City of Surrey. *Surrey Community Heritage Register: Old Anniedale School*. Retrieved March, 2016 from <http://www.surrey.ca/city-services/3407.aspx>

City of Surrey. *Surrey's Heritage Documentation Data Worksheet: Old Anniedale School*. Author Unknown

Parks Canada (2010). *Standards and Guidelines for the Conservation of Historic Places in Canada*. Her Majesty the Queen in Right of Canada.

8 APPENDICES

8.1 Rehabilitation Drawings

8.2 Structural Assessment Report (TDM Projects Ltd.)

8.3 Canadian Register of Historic Places: Old Anniedale School (Parks Canada)

8.4 Original Material & Documentation (City of Surrey)

8.5 HAZMAT Assessment (Epoch Environmental)



HISTORICAL _ ENTRANCE



HISTORICAL _ 1899



2016 _ NORTH ELEVATION



2016 _ WEST ELEVATION

EXISTING BUILDING PHOTOGRAPHS



SITE PLAN

CIVIC ADDRESS
 9744 176 SREET,
 SURREY, BC, V4N 3V3

LEGAL DESCRIPTION
 RAE G 020)7.538 acre, PID 008-848-564, DL
 390A, Group 2, NWLD, Except Plan PART
 ON PLAN EPP4939

DRAWING LIST

EX-A1-00	EXISTING FLOOR PLAN & ROOF PLAN
EX-A2-00	EXISTING ELEVATIONS
EX-A3-00	EXISTING SECTION
PR-A1-00	PROPOSED FLOOR PLAN & ROOF PLAN
PR-A2-00	PROPOSED ELEVATIONS
PR-A3-00	PROPOSED SECTION
SPACE TO PLACE LOCATION PLAN	

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REV	DESCRIPTION	DATE

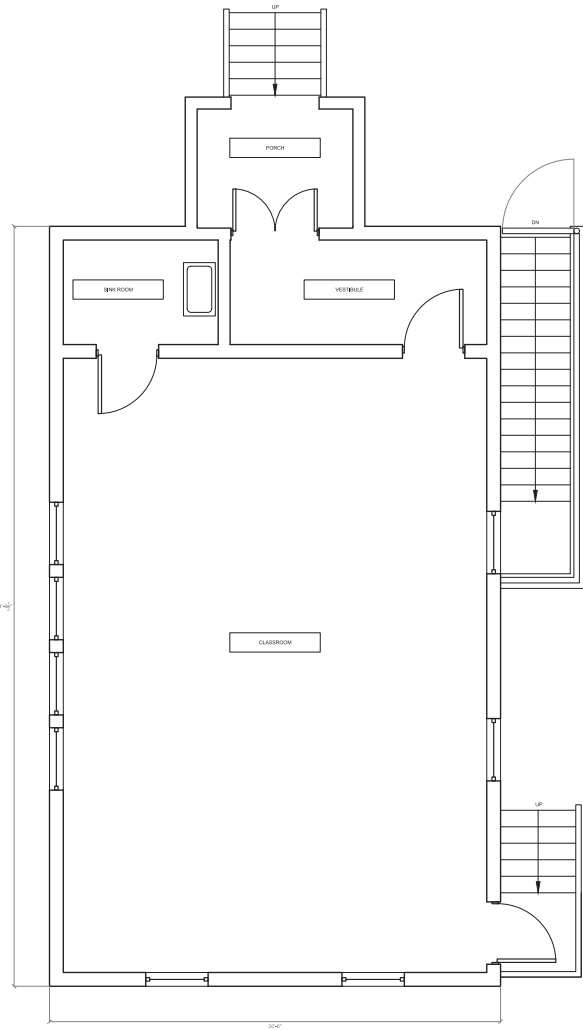
PROJECT:
OLD ANNIE DALE SCHOOLHOUSE
 9744 176 STREET, SURREY, BC

TITLE:
COVER SHEET

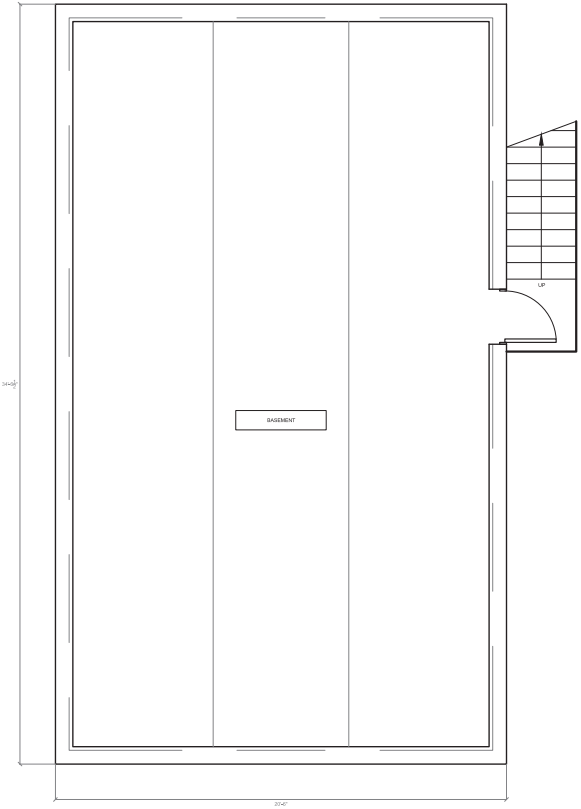
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DATE:	06/06/2016
SCALE:	1/16" = 1'-0"

DWG#:
0-00

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1 EXISTING MAIN FLOOR PLAN
3/8" = 1'-0"



2 EXISTING BASEMENT PLAN
3/8" = 1'-0"



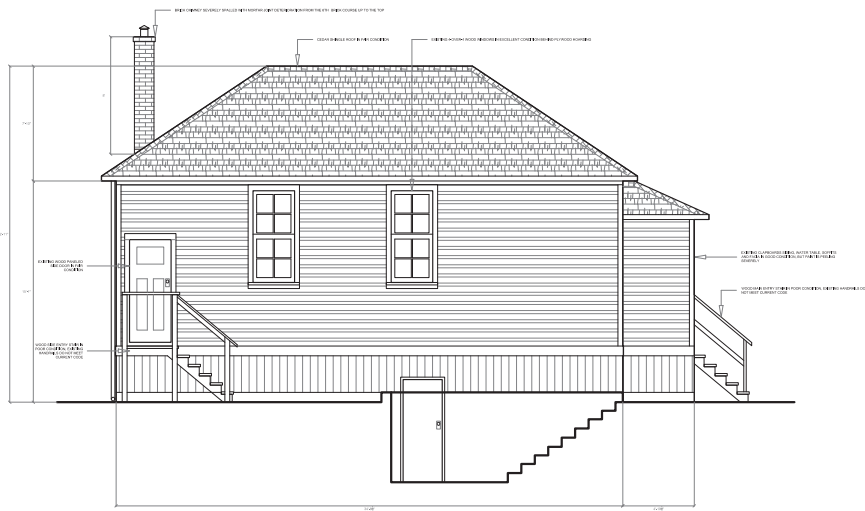
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OLD ANNIEDALE SCHOOLHOUSE
9744 176 STREET, SURREY, BC

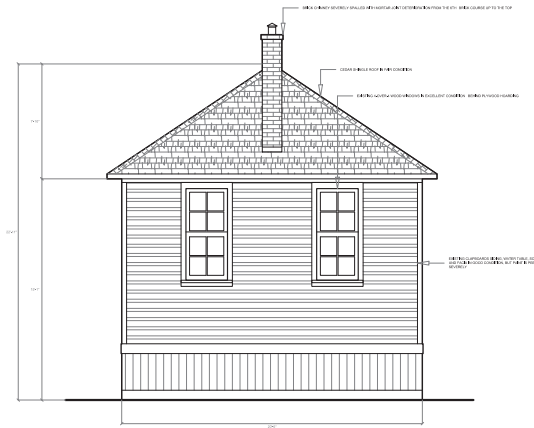
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DATE: 06/06/2016
SCALE: 3/8" = 1'-0"

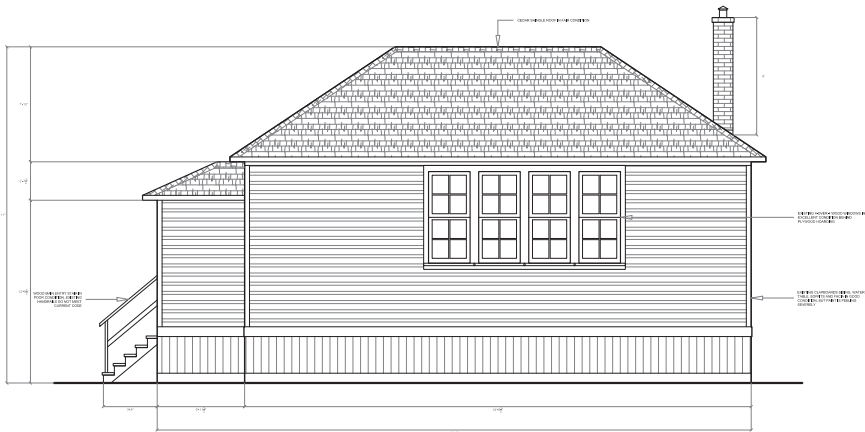
DWG#: **EX-A1-00**



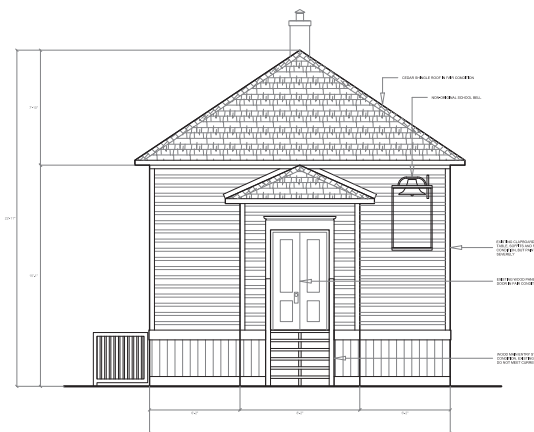
4 EXISTING SIDE ELEVATION
1/4" = 1'-0"



3 EXISTING REAR ELEVATION
1/4" = 1'-0"



2 EXISTING SIDE ELEVATION
1/4" = 1'-0"



1 EXISTING FRONT ELEVATION
1/4" = 1'-0"

McGinn Engineering & Preservation Ltd.
Barry McGinn Architect.
#803-402 West Pender St. Vancouver, B.C.
Tel: 604-473-9866 Fax: 604-473-9877
Web: www.mcginn-engineering.com

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REV.	DESCRIPTION	DATE

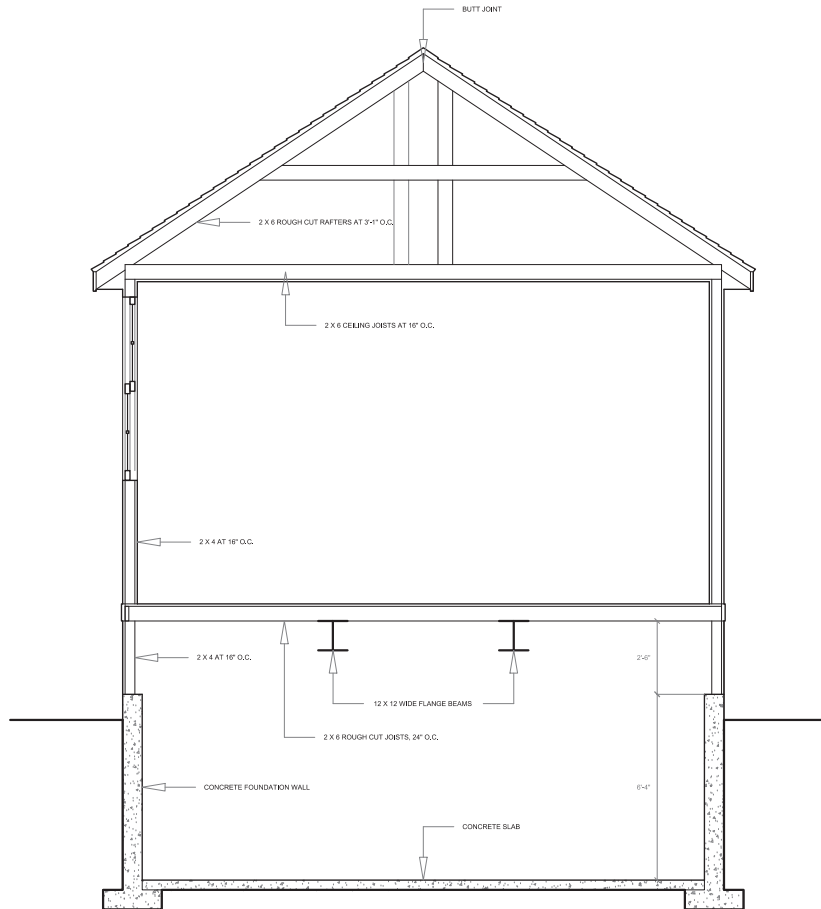
PROJECT:
OLD ANNIDALE SCHOOLHOUSE
9744 176 STREET, SURREY, BC

TITLE:
EXISTING ELEVATIONS

DRAWN BY: SL
DATE: 06/06/2016
SCALE: 1/4" = 1'-0"

DWG#: **EX-A2-00**

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1 EXISTING BUILDING SECTION
1/2" = 1'-0"

REV.	DESCRIPTION	DATE

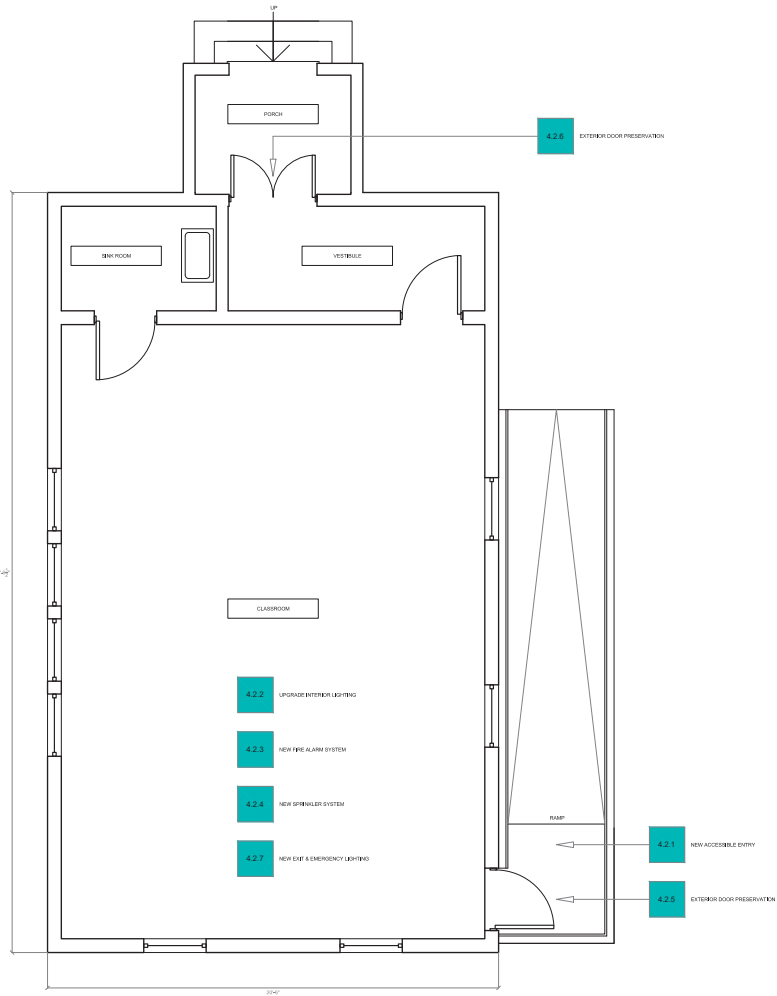
PROJECT:
**OLD ANNIEDALE
SCHOOLHOUSE**
9744 176 STREET, SURREY, BC

TITLE:
**EXISTING
BUILDING SECTION**

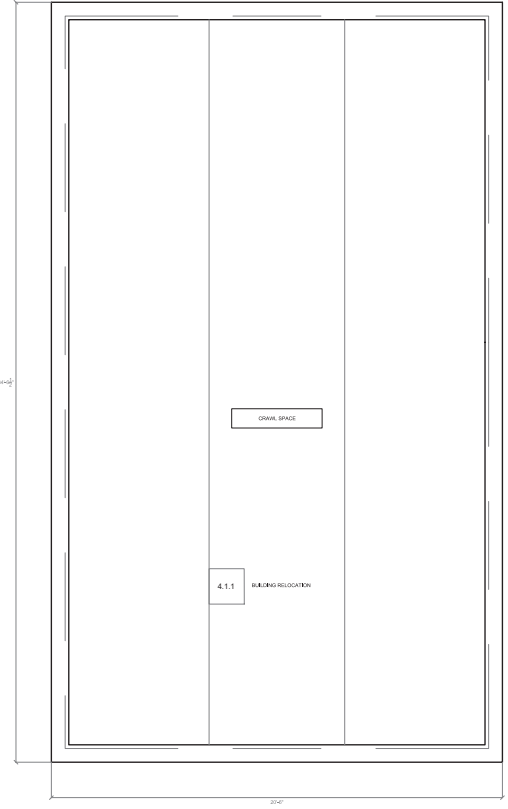
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DATE: **06/06/2016**
SCALE: **1/2" = 1'-0"**

DWG#: **EX-A3-00**

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1 PROPOSED MAIN FLOOR PLAN
3/8" = 1'-0"



2 PROPOSED CRAWLSPACE
3/8" = 1'-0"



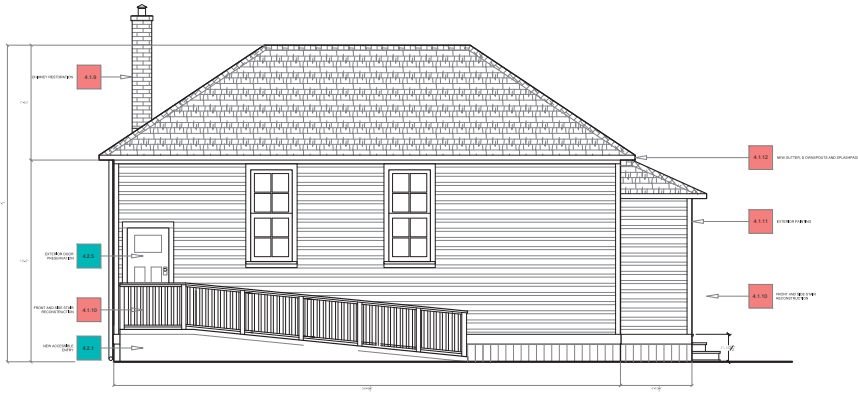
REV.	DESCRIPTION	DATE

PROJECT:
OLD ANNIDALE SCHOOLHOUSE
9744 176 STREET, SURREY, BC

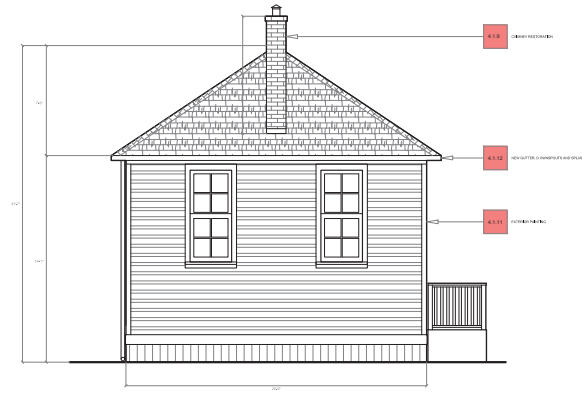
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PROPOSED MAIN FLOOR & CRAWLSPACE PLAN

DRAWN BY: SL
DATE: 01/29/2018
SCALE: 3/8" = 1'-0"

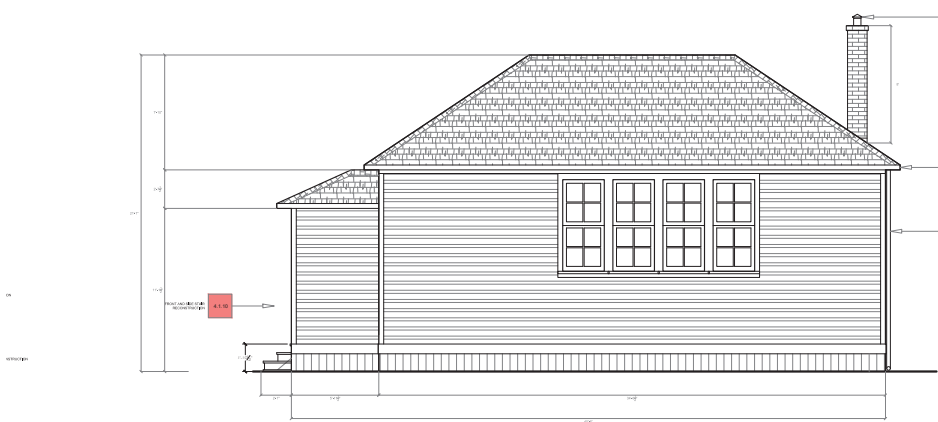
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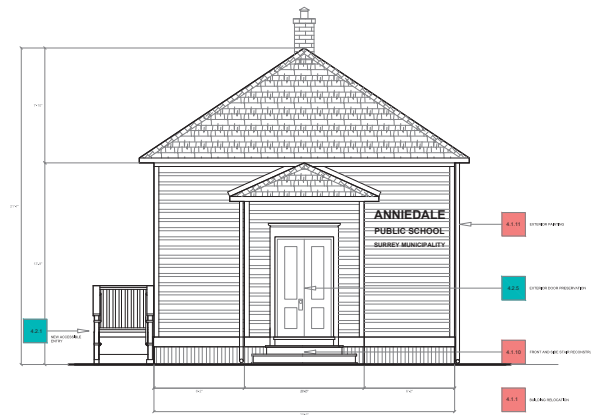
4 PROPOSED SIDE ELEVATION
1/4" = 1'-0"



3 PROPOSED REAR ELEVATION
1/4" = 1'-0"



2 PROPOSED SIDE ELEVATION
1/4" = 1'-0"



1 PROPOSED FRONT ELEVATION
1/4" = 1'-0"

REV.	DESCRIPTION	DATE

PROJECT:
OLD ANNIDALE SCHOOLHOUSE
9744 176 STREET, SURREY, BC

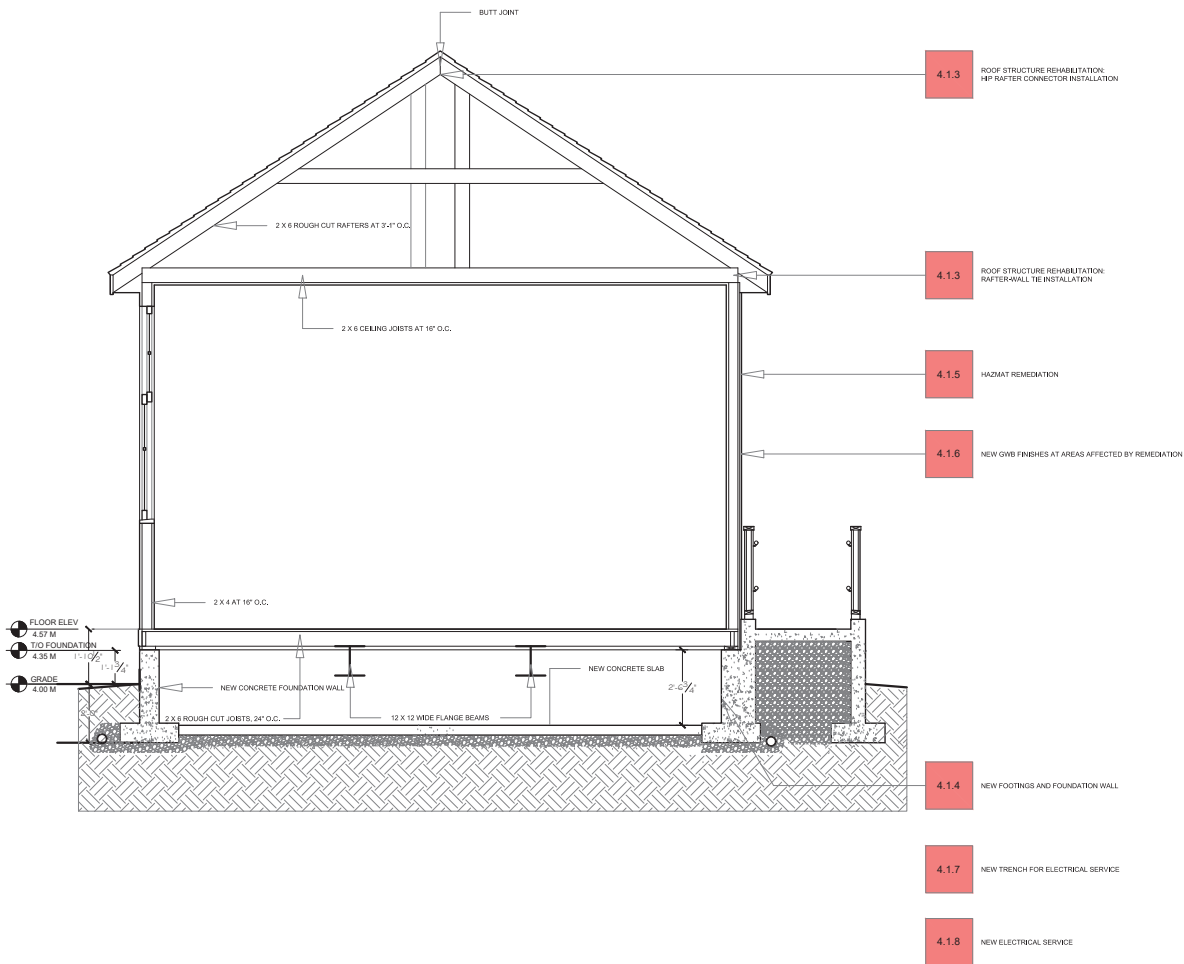
TITLE:
PROPOSED ELEVATIONS

DRAWN BY: SL

DATE: 01/29/2018

SCALE: 1/4" = 1'-0"

DWG#: **PR-A2-00**



4.1.3 ROOF STRUCTURE REHABILITATION:
HP RAFTER CONNECTOR INSTALLATION

4.1.3 ROOF STRUCTURE REHABILITATION:
RAFTER-WALL TIE INSTALLATION

4.1.5 HAZMAT REMEDIATION

4.1.6 NEW GWB FINISHES AT AREAS AFFECTED BY REMEDIATION

4.1.4 NEW FOOTINGS AND FOUNDATION WALL

4.1.7 NEW TRENCH FOR ELECTRICAL SERVICE

4.1.8 NEW ELECTRICAL SERVICE

FLOOR ELEV
4.57 M
7/0 FOUNDATION
4.35 M
GRADE
4.00 M

1 PROPOSED BUILDING SECTION
1/2" = 1'-0"

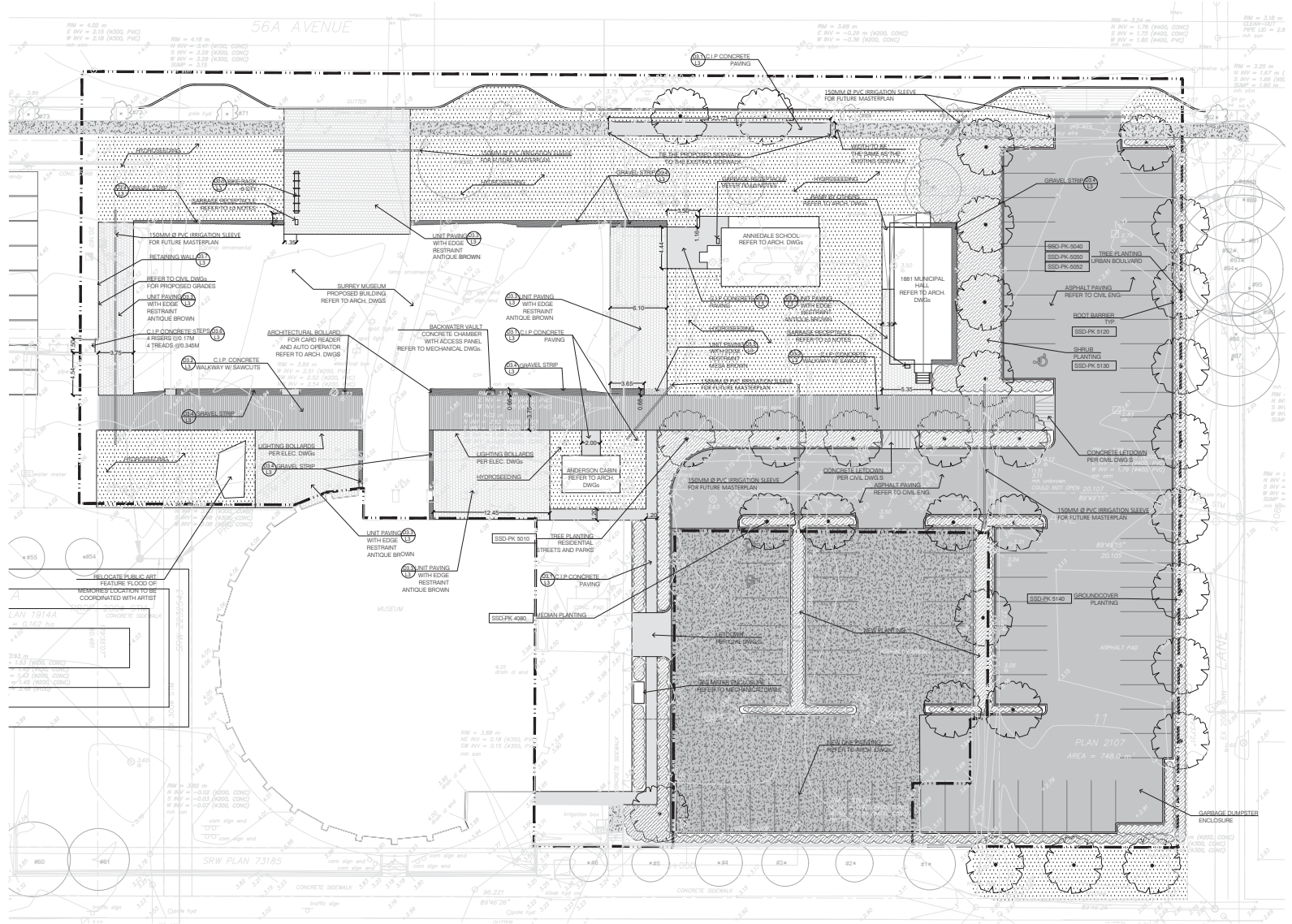
REV.	DESCRIPTION	DATE

PROJECT:
**OLD ANNIEDALE
SCHOOLHOUSE**
9744 176 STREET, SURREY, BC

TITLE:
**PROPOSED
BUILDING SECTION**

DRAWN BY: SL
DATE: 01/29/2018
SCALE: 1/2" = 1'-0"

DWG#: **PR-A3-00**



MATERIALS LEGEND

ASPHALT PAVING (NEW)	EXISTING CONCRETE PAVING	SHRUB PLANTING (ALL SHRUB PLANTING TO BE MEDIUM HEIGHT (1M - 1.5M) 400MM DEPTH GROWING MEDIUM)
C.I.P. CONCRETE WALKWAY WITH PARALLEL SAW-CUTS (SEE DETAIL 3.2)	HYDROSEEDED LAWN (150MM DEPTH GROWING MEDIUM)	EXISTING TREE TO BE RETAINED (REFER TO TREE RETENTION PLAN)
BROADWAY 3' X 18' NOMINAL ANTIQUE BROWN PRECAST CONCRETE UNIT PAVING - SEE DETAIL D3.3	ASPHALT PAVING (EXISTING)	PROPOSED TREE
C.I.P. CONCRETE PAVING	GRAVEL STRIP	LIMIT OF WORK
CITY OF SURREY STANDARD DETAIL		
SPACEPLACE STANDARD DETAIL		

DATE	ISSUE	DESCRIPTION

Professional Engineer in good standing in and for the Province of British Columbia. I hereby certify that the work shown on this plan is the work of me or under my direct supervision and that I am a member of the British Columbia Professional Engineers and Geoscientists Society (BCPEGS), which is the body of Engineers, Geoscientists and Geoscientists Licensed (EGL), authorized by the City of Surrey.

CONSULTANT



CLIENT
City of Surrey

TITLE
Surrey Museum Expansion
Landscape Materials Plan

LEGAL DESCRIPTION:
LOT 1, SECTION 8, TOWNSHIP 8,
NEW WESTMINSTER DISTRICT,
PLAN BC171474

CIVIC ADDRESS:
17710 56A AVENUE, SURREY, BC,
Canada V3S 5H8

SCALE: 1:150

DATE: 2019-20

DESIGNED BY: PW/JC

CONSULTANT PROJECT NO.: 16-003

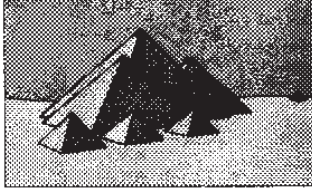
DRAWN BY: PW/NR

SURVEY PROJECT NUMBER: SURREY DRAWING NUMBER

REVIEWED BY: JC

DATE: 2019-20

SCALE: L2.1



TDM PROJECTS INC.

6420 Rosebery Ave.

West Vancouver, BC. V7W 2C6

OLD ANNIEDALE SCHOOL, Surrey, BC

STRUCTURAL ENGINEERING ASSESSMENT



Old Anniedale School is in good condition overall. It was moved to the present location some 40 years ago. Some structural components of the building were improved at the time.



The access stairs to the school building were adequately constructed; however the treads and stringers are well aged and should be replaced. The railings do not comply with the current building code.



The basement of the school has only exterior entry. The 6'-4" high concrete wall is in very good condition. It is topped by 2'-6" high pony wall (see below). The pony wall was constructed after the building was moved to the present location; the steel needle beams used for the move have remained in place and are supported by 1-1/2' high solid wood stack of 1'x3-1/2" in area that transfers the load to the concrete wall. Though the two steel beams have been welded from shorter segments and have minor cut outs the size of WF 12"x64 (approximate beam size for 12" wide flange) for the span of 28' is more than adequate as it can carry double the current load for assembly type use.



The original floor joists were rough cut 2x6 at 24" o.c. The joists extend to the exterior sheathing with more than adequate seats on the 4" deep top plate of the pony wall (see next photo). It appears that during the last renovations some joist may have been damaged and were doubled and also some new joists were added.





This damaged wall at the entry foyer allowed us determine the wall structure. The walls are framed using 2x4 most likely rough cut lumber at 16" o.c. which is also the spacing of the ceiling jooists.

The hip roof structure has 2x6 rough cut rafters at approximately 3'-0" o.c. The rafters extend about a foot past the wall top plate to form the outer roof perimeter including fascia, soffit and gutters. The rafters must be "birdmouthed" and possibly toe nailed to the top plate as they do not match the ceiling joists which are 16" o.c. The common rafter sets have collar ties every 4th set and wind braces at one of the common rafter sets inbetween the colar tie sets. It is generally very well constructed roof though somewhat evading current roof standards. The roof structure complies with current load standards though in order to comply with the 2012 Building Code the rafters would have to be connected to wall plate by ties. As the rafters butt-end at the hip line, installing a steel strap connector would stiffen the roof structure.





One possible connector type that could be installed to tie the roof to the walls.

The rafters support horizontal battens but at some roof areas the battens are doubled by perpendicular installed boards, the boards as well as the batten lathe are of varied width as the following photo documents.



One rare occurrence of rafter coinciding with ceiling joist.

The two hip joints of the common rafters and hip rafters are a masterpiece of carpentry with no evidence of nails, strictly relying on compression. However, as winds and seismic events apply to the structure horizontally and uplift forces, it would be desirable to use steel connectors for the hip ridge joint and for the jacks attached to hip rafters.



SST – LS 18 field adjustable angle connector.

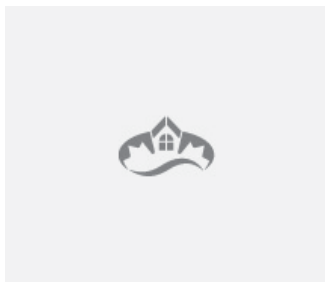
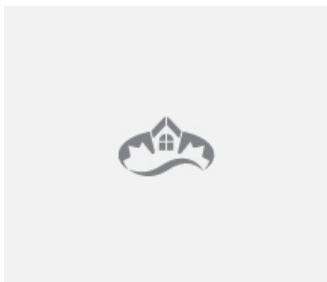
Old Anniedale School

9744 176th Street, Surrey, British Columbia, V4N, Canada

Formally Recognized: 1986/06/23



oblique view



OTHER NAME(S)

Anniedale School
Old Anniedale School

LINKS AND DOCUMENTS

[City of Surrey Heritage Register](#)

CONSTRUCTION DATE(S)

1891/01/01

LISTED ON THE CANADIAN REGISTER: 2004/11/10

STATEMENT OF SIGNIFICANCE

DESCRIPTION OF HISTORIC PLACE

The Old Anniedale School is a wood frame building, rectangular in plan, with a hipped roof. The entrance has an enclosed porch, to the right of which hangs the school bell. The building is clad in drop siding with vertical siding cladding the foundations. It was moved in 1975 to its present location from its original site at the corner of 96th Avenue and 184th Street.

HERITAGE VALUE

The Old Anniedale School has historic value as one of the earliest schools in Surrey. It opened in 1891 with thirteen pupils and, until it closed in 1954, it played a vital role in the life of the community's children. During all the years of its operation it had the local distinction of having the highest percentage of its graduates obtain university degrees. The building was designed by the British Columbia Department of Lands and Works and it was constructed by Samuel Edge.

The Old Anniedale School is also significant for its association with the development of the Tynehead and Anniedale neighbourhoods, first settled in the 1860s by the Bothwell brothers, who pre-empted land along the Coast Meridian Road (168th Street) near the headwaters of the Serpentine River. Surveyed in 1859, the Coast Meridian was defined by the meridian of longitude closest to the Pacific coast at the 49th parallel. Settlement occurred as logging, farming and fishing developed in the area.

In its current location on the grounds of the modern Anniedale Elementary School, it continues to play a valuable role in the education of the young, by providing for the presentation of 19th Century school lessons in an historical context. Its value to the community was recognized by the Anniedale Parent Teacher Association (PTA) which saved the school from probable demolition in 1975. It was renovated with grants from the federal and municipal governments, and local donations of labour and materials.

Source: Heritage Planning Files, City of Surrey

CHARACTER-DEFINING ELEMENTS

The character-defining elements of the Old Anniedale School include its:

- landmark location, visible from the Trans-Canada Highway
- form, scale and massing
- exterior elements such as wooden drop siding
- double-hung wooden-sash 4-over-four windows; banked in quadruple assembly on the east facade, and two in single assembly on the west facade

RECOGNITION

JURISDICTION

British Columbia

RECOGNITION AUTHORITY

Local Governments (BC)

RECOGNITION STATUTE

Local Government Act, s.967

RECOGNITION TYPE

Heritage Designation

RECOGNITION DATE

1986/06/23

HISTORICAL INFORMATION

SIGNIFICANT DATE(S)

n/a

THEME - CATEGORY AND TYPE

Building Social and Community Life
Education and Social Well-Being

FUNCTION - CATEGORY AND TYPE

CURRENT

Education
One-Room School

HISTORIC

ARCHITECT / DESIGNER

n/a

BUILDER

Samuel Edge

ADDITIONAL INFORMATION

LOCATION OF SUPPORTING DOCUMENTATION

Heritage Planning Files, City of Surrey

CROSS-REFERENCE TO COLLECTION

FED/PROV/TERR IDENTIFIER

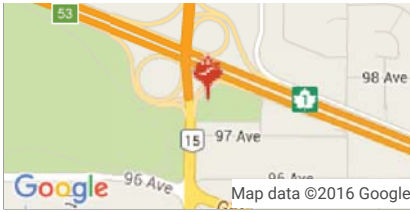
DgRq-23

STATUS

Published

RELATED PLACES

n/a



NEARBY PLACES



Latimer Residence

8534 192nd Street, Surrey, British Columbia

The Latimer Residence is a one-storey wood-frame cottage style home with a barn, located on a treed...



St. Oswald's Anglican Church

19016 96 Avenue, Surrey, British Columbia

Set in a grassy churchyard on a prominent corner location in the neighbourhood of Port Kells, St....

Old Anniedale School | City of Surrey



Heritage Area: Anniedale

Site #: 21

Location: 9744 176 Street

Registered: June 3, 1997

Significance: Historical

Description: Single rectangular box layout with plain double hung ribbon windows. One of the first schools in Surrey, built c. 1899, and the oldest still standing, originally at 96 Ave and 184 St, used until 1954 and moved in 1975.

Protected by Heritage Designation By-law, 1986, No. 8579 [\(PDF\)](#).

HAZARDOUS MATERIAL INVENTORY INSPECTION AND RISK ASSESSMENT



REPORT ON THE PRESENCE AND CONDITION OF
HAZARDOUS BUILDING MATERIALS AT:
9744 – 176th Street
Surrey, British Columbia

Prepared for:

**Barry McGinn Architect /
McGinn Engineering & Preservation Ltd.**

#803 – 402 West Pender Street
Vancouver, BC
V6B 1T6

Prepared by:



EPOCH Environmental Consulting Limited

Unit 100 - 42 Fawcett Road
Coquitlam, BC
V3K 6X9

April 2016

April 6, 2016



**Barry McGinn Architect /
McGinn Engineering & Preservation Ltd.**
#803 – 402 West Pender Street
Vancouver, BC
V6B 1T6

Unit 100 - 42 Fawcett Road
Coquitlam, BC V3K 6X9
Office: (604) 553-3370
Fax: (604) 553-3371
info@epochenvironmental.ca

Attention: Mr. Barry McGinn

Re: HAZARDOUS MATERIAL INVENTORY INSPECTION AND RISK ASSESSMENT FOR SUSPECT HAZARDOUS BUILDING MATERIALS AT 9744 – 176TH STREET, SURREY, BRITISH COLUMBIA

Dear Mr. McGinn,

Epoch Environmental Consulting Ltd. (EPOCH) was retained to conduct a hazardous material inventory inspection and risk assessment for suspect lead and asbestos-containing building materials at a commercial building and located at 9744 – 176TH Street, Surrey, British Columbia.

1.0 EXECUTIVE SUMMARY

1.1 ASBESTOS-CONTAINING MATERIALS

The above referenced building is currently unoccupied. If any interior/exterior demolition is required during rehabilitation, then all hazardous material shall be removed prior to any work. An inspection was requested to identify possible asbestos-containing materials from both within and outside the building located at the above referenced address.

The building located at 9744 – 176th Street consists of two levels:

- Main level – classroom; cloak room; and closet;
- Basement level – storage room.

- The interior walls/ceilings of the main levels were observed to consist of plaster and gypsum boards
- Flooring throughout the building was observed to consist of hardwood
- Windows throughout the building were observed to be of older construction;
- The attic was observed to consist of loose fill vermiculite insulation;
- The roof was observed to consist of wood shingles.

Minimum sampling requirements were conducted based on WorkSafeBC guideline 20.112 Hazardous Materials – Asbestos. Please see Appendix [C] for Safe Work practices for Handling Asbestos – Bulk material sample collection guide.

The following materials identified **to contain asbestos** are listed below:

9744 – 176th Street:
- Drywall Joint or Taping Compound;
- Vermiculite Insulation.

- Asbestos-containing drywall joint or taping compound (DJC) was identified in the main floor classroom Southwest and Northeast corner. Please note that the areas specified above are the exact locations of the asbestos-containing DJC samples collected. However, **all DJC throughout the building must be assumed as asbestos-containing** unless sufficient additional sampling can prove otherwise by isolating the specific areas which are not comprised of asbestos-containing DJC. Approximately 1000 square feet of gypsum boards with drywall joint compound material is estimated within the building.
- Asbestos-containing vermiculite insulation was observed within the upper attic space (approximately 1000 square feet), under loose fill insulation. This material was also be present and concealed in areas such as within wall cavities or ceiling spaces throughout the building.
- Asbestos-containing paper tape was not observed though this material may also be present at floor exhaust registers / diffusers; behind walls; within crawl space; and, above false ceiling throughout the building.

The following building materials were sampled and analyzed as no asbestos detected:

- Interior plaster walls from the main level;
- Insulating cement or parging from the basement chimney duct penetration;
- Chimney mortar.

<Sample Results in Appendix A>

Potential asbestos-containing materials may be present in concealed areas of the building under newer layer of gypsum; flooring; behind walls and ceilings. If suspicious materials are observed during rehabilitation, work shall stop, and the material further tested for asbestos. Such materials may include flooring (linoleum; vinyl floor tile, or residual flooring) potentially concealed under other flooring layers, wood sub-flooring, and/or carpeted areas within the building; paper tape on the joints or seams of heating ducts located on floor exhaust registers/diffusers; behind walls; crawlspace; and, above false ceiling throughout the building; insulations concealed within furnaces, or behind walls and ceilings (vermiculite) throughout the building, and/or drywall joint compound applied to concealed layers of drywall or additional plaster layers behind walls or ceilings.

Results and location of the sampled materials may be found in Section 4 and 5 of this report.

WorkSafeBC modified “Moderate” to “High Risk” asbestos work procedures will be required to safely remove and to clean-up the **joint taping compound** complete with the drywall as outlined in the “Safe Work Practices for Handling Asbestos” guidelines, 2012 Publication. Modified “Moderate Risk” work Procedure entails additional engineering controls such as the use of HEPA Filtration cabinets, and 3-stage decontamination facility for worker entry / exit into work area. In addition, upgrade in personal respirator protection to either a Full-face Passive respirator (5 f/ml), or a full face powered air purifying respirator PAPR (10f/ml). Air monitoring is recommended for modified “Moderate Risk” work activities.

WorkSafeBC “High Risk” asbestos work procedures will be required to safely remove and to clean-up the **vermiculite insulation** and associated debris as outlined in the “Safe Work Practices for Handling Asbestos’ guidelines, 2012 Publication. Air monitoring is required for all “High Risk” work activities.

WorkSafeBC “Moderate Risk” asbestos work procedures will be required to safely remove and clean-up the **potential paper tape** on heating ducts joints as outlined in the “Safe Work Practices for Handling Asbestos’ guidelines, 2012 Publication. The paper tape may alternatively be removed complete with the heating ducts, if any exists.

1.2 LEAD-CONTAINING PAINTS AND COATINGS

Surface paints and coatings were analyzed from the building interior and exterior. The representative paints and coatings analyzed from the exterior/interior of the building were identified to contain lead concentrations exceeding 0.06% by weight (or $\sim 0.04 \text{ mg/cm}^2$) as established by WorkSafeBC. Contractor disturbing these materials shall consider potential lead exposure and shall consider lead exposure in their Exposure Control Plan. In addition, develop and implement safe work procedures.

Work procedures must be developed in accordance to WorkSafeBC and inclusive of Part 5.48-5.49 (controlling Exposure), and Part 6.59-6.69 (Lead). EPOCH recommends referencing WorkSafeBC publication, “Lead – Preventing Exposure at Work”, 2012; and, the “Lead-Containing Paint and Coatings” guidelines, 2011. These documents will assist current practices for lead information, products, health hazards, worker protection requirement, safe work procedures, and techniques for lead abatement.

Painted/coated surfaces from the building were identified to range up to 8.34 mg/cm^2 lead. Due to the high level of lead identified in the surfaces paints/coatings all similar materials shall also be assumed to contain lead. The paints/coatings may pose a health risk when sanded, abraded and broken. An exposure control plan and related work procedures shall be developed or included for handling lead paints and materials. **Professional abatement by a qualified lead-abatement contractor for lead-based materials and thorough cleaning of any lead dust debris from rehabilitation is recommended.**

1.2.1 DISPOSAL OF LEAD-BASED PAINTS/COATINGS

The surface paints/coatings at the building were identified to contain lead concentrations up to 8.34 mg/cm^2 ; exceeding 1.0 mg/cm^2 for lead-based paints/coatings as established by the U.S. Housing and Urban Development. Therefore, these and all similar surface paints/coatings are classified as lead-based paints/coatings. Lead-based paints/coatings shall be classified as hazardous waste unless further analysis can prove otherwise. Due to the high level of lead identified in the surface paints/coatings, these and any similar surfaces shall be classified as hazardous waste and shall be disposed in accordance to the Ministry of Environment Waste Management Act - Hazardous Waste Regulations.

Based on the lead-based paints/coatings identified, additional waste characteristic testing by Toxicity Characteristic Leaching Procedure (TCLP) is recommended prior to disposal of lead-based paints/coatings identified at the building. The purpose of this test is to determine the TCLP concentration for disposal requirement with respect to “leachability” or “mobility” of paints/coatings. If the lead-based paints/coatings exceed a leaching lead concentration of 5.0 mg/L , the material and substrate will be classified as Hazardous Waste and therefore will require disposal in accordance to the

Ministry of Environment. If the lead-based paints/coatings do not exceed a leaching lead concentration of 5.0 mg/L, the materials may be disposed of as regular construction waste. **This test should be performed prior to any disposal of lead-based painted/coated surfaces.** Contractors disposing painted/coated materials to landfill must ensure that the paints/coatings do not exceed Leachate levels. **The estimated laboratory cost per sample for TCLP analysis is \$180.00.** The methodology requires a minimum sample weight of 105 grams for TCLP analysis, and requires invasive or destructive sampling.

1.3 OTHER HAZARDOUS MATERIALS

Other suspect hazardous materials identified in the building at the time of the inspection were:

- Poly chlorinated biphenyl (PCB) in fluorescent light ballasts;
- lead vent pipes on the roof;
- rat droppings.

2.0 INTRODUCTION

A site inspection of the building was conducted by a certified US AHERA Asbestos Inspector on March 29, 2016 by Mr. Alex Lee, B.Sc. (AHERA Cert# G4419), of EPOCH. AHERA certifications were completed with The Asbestos Institute, Phoenix, Arizona. Suspect building materials were collected for asbestos identification. Other hazardous materials (i.e. Mercury thermostat switches, Paints, Chemical & Solvent, and PCB ballast) were also inspected for and noted, if observed.

The WorkSafeBC Occupational Health & Safety regulations; Part 20 Construction, Excavation, and Demolition; Section 20.112 Hazardous Material – states that before any work begins on the demolition or salvage of machinery, equipment, building or structures, the employer or owner must inspect the site to identify any asbestos, lead, or other heavy metals or toxic, flammable or explosive materials that may be handled, disturbed, or removed. In addition, the WorkSafeBC regulations require any identified hazardous materials shall be safely removed or contained prior to building rehabilitation.

<Attached in Appendix C>

Section 6.1 of the OHS Regulation defines asbestos-containing material (ACM) as follows: means any manufactured article or other material which contains 0.5% or more asbestos by weight at the time of manufacture, or which contains 0.5% or more asbestos as determined in the National Institute for Occupational Safety and Health Manual of Analytical Methods, Method 9002, Issue 2 (microscopy, stereo and polarized light, with dispersion staining) or other method acceptable to the Board (EPA/600/R-93/116).

The Ministry of Environment – Hazardous Waste Regulations, and Transport Canada - Transportation of Dangerous Goods Regulations require that all hazardous materials be recycled, packaged, transported and/or disposed properly.

3.0 SCOPE OF WORK

The scope of work conducted:

- Inspect each floor level and the exterior of the commercial building for visible suspect asbestos-containing building materials;
- Collect and analyze suspected asbestos-containing building material samples;
- Collect and/or analyze suspected paints/coatings for lead;
- Provide risk assessment of identified asbestos material and remedial options;
- Report results of samples analysis;
- Provide general observations of other hazardous materials.

Minimum sampling requirements were conducted based on WorkSafeBC guideline 20.112 Hazardous Materials – Asbestos. Please see Appendix [C] for Safe Work practices for Handling Asbestos – Bulk material sample collection guide.

No detailed investigation for underground storage tank (UST) was conducted within the property. If an underground storage tank (UST) is encountered during rehabilitation, work shall stop until further assessment is conducted and a proper permit retained for the removal of the tank.

4.0 LABORATORY RESULTS

4.1 ASBESTOS

Nine (9) suspected building material samples were collected for laboratory analysis, to determine the presence of asbestos. The samples were delivered to the laboratory on March 29, 2016, and were analyzed on April 1, 2016.

Three (3) of the nine (9) samples collected for laboratory analysis were analyzed to contain asbestos. <Sample Results in Appendix A>

The collected bulk asbestos-containing materials were delivered to and analyzed at EPOCH Analytical Incorporated in Coquitlam, BC. The bulk material samples were analyzed in accordance to EPA/600/R-93/116 Method for identifying asbestos. The type and concentration of asbestos in the bulk samples were determined by combination of: Polarized Light Microscopy (PLM); morphology; refractive index; extinction; signs of elongation; birefringence and dispersion staining colors. Table 1 summarizes the laboratory results of identified asbestos-containing materials.

Table 1: Laboratory Results

Sample Number	Location	Area	Material Sampled	Asbestos
9744 – 176th Street				
1	Main Level	SW corner wall	Drywall Joint Compound	Yes
2	Main Level	NE corner wall	Drywall Joint Compound	Yes
6	Attic	Attic Space	Vermiculite	Yes

<See attached laboratory analysis results in Appendix A.>

4.2 LEAD-CONTAINING PAINTS AND COATINGS

4.2.1 Lead Identification

During our inspection, it was observed that some enamels, primers, coatings, and oil-based paints applied to the interior or exterior surfaces of the building were suspected of containing lead and/or other heavy metals. All paints/coatings shall be treated as suspect lead unless tested otherwise.

Painted surfaces and coatings were analyzed from the areas listed in Table 2. The surfaces were analyzed with Niton XLp X-Ray Fluorescence (XRF) Lead analyzer, to determine the concentration of lead in paint and other materials. The limit of detection (LOD) for lead in paint using XRF is 0.3 µg/cm² (0.0003 mg/cm²). The results only relates to the items tested. Other surface paints, coatings or materials may also contain lead.

Surface paints and coatings resulting below the limit of detection (<LOD) cannot be assumed to not contain lead unless further lab analysis methods can prove otherwise. Paint/coating chip samples may be collected and analyzed by a laboratory to determine greater accuracy. Any detectable amount of lead in paints or coatings may pose a health risk when the material is disturbed.

Table 2: Summary of Lead Paints and Coatings Results

Sample Number	Sample Location	Substrate	Colour	Lead Concentration (mg/cm ²)	Lead - Containing / Lead-Based
LP1	East upper siding	Wood	Blue	0.19	Containing
LP2	East middle trim	Wood	White	<LOD	
LP3	East lower siding	Wood	Blue	0.4	Containing
LP4	South exterior corner trim	Wood	White	0.48	Containing
LP5	South stair rail	Wood	Blue	<LOD	
LP6	South stair step	Wood	Blue	<LOD	
LP7	South entry door	Wood	White	0.41	Containing
LP8	South entry door trim	Wood	White	1.7	Lead-based
LP9	NW entry door	Wood	White	0.59	Containing
LP10	NW entry door trim	Wood	White	0.64	Containing
LP11	Front deck ceiling	Wood	White	8.34	Lead-based
LP12	Exterior soffit	Wood	White	5.43	Lead-based
LP13	Exterior fascia	Wood	White	0.28	Containing
LP14	South interior ceiling	Wood	White	0.17	Containing
LP15	Entrance foyer upper wall	Wood	White	0.21	Containing
LP16	Entrance foyer lower wall	Wood	Pink	3.28	Lead-based
LP17	West upper wall	Drywall	White	<LOD	
LP18	West window frame	Wood	White	0.12	Containing

LP19	Interior trims	Wood	White	0.02	
LP20	Interior base-board	Wood	White	<LOD	
CHPA	<i>Canadian Hazardous Product Act</i>			0.009 % wt.	
WorkSafeBC	<i>Lead Exposure</i>			0.06 % wt. (~0.04 mg/cm²)	
HUD	<i>Housing and Urban Development</i>			0.50 % wt. or 1.0 mg/cm²	

- ❖ **WorkSafeBC** suggests that removal of lead-containing paint/coating which equals or exceeds 600 mg/kg (0.06 % wt. or ~**0.04 mg/cm²**) requires safe work procedures worker protection (HEPA respirator and coveralls) and an exposure control plan be implemented.
- ❖ In Canada, the new ***Canadian Hazardous Product Act (CHPA)***, under the Surface Coating Material Regulations (SOR/2005-109) defines that surface paint in ***new*** materials containing lead greater than 0.009% wt. is to be considered lead-containing paints.
- ❖ Lead-based paint is defined as paint or other surface coatings that contain lead equal to or exceeding 0.5 percent (%) by weight as per the U.S. Department of ***Housing and Urban Development (HUD)***.

The surface paints/coatings analyzed were identified to range < LOD to 8.34 mg/cm². The interior and exterior surface paints/coatings were observed to have lead concentration which exceeds WorkSafeBC guidelines for lead-containing paints/coatings and their removal.

During rehabilitation of the building structure, the contractor shall not sand, crush, pulverize, abrade, or create dust from suspected paint surfaces that may contain lead. Any disturbance of lead-containing paints/coatings shall require a risk assessment conducted, and be controlled through the safe work procedures. See below for WorkSafeBC regulations regarding lead-containing paints/coatings.

Work procedures must be developed in accordance to WorkSafeBC and inclusive of Part 5.48-5.49 (controlling Exposure), and Part 6.59-6.69 (Lead). EPOCH recommends referencing WorkSafeBC publication, “Lead – Preventing Exposure at Work”, 2012; and, the “Lead-Containing Paint and Coatings” guidelines, 2011. These documents will assist current practices for lead information, products, health hazards, worker protection requirement, safe work procedures, and techniques for lead abatement.

4.2.2 Lead-Based Paints/Coatings Leachability

Additional waste characteristic testing, Toxicity Characteristic Leaching Procedure (TCLP), is recommended for lead-based paints/coatings identified. The purpose of this test is to determine the TCLP concentration for disposal requirement with respect to “leachability” or “mobility” of paints/coatings and is required prior to any non-regulated disposal of lead-based paints/coatings. The methodology requires a minimum sample weight of 105 grams for TCLP analysis. If the lead-based paints/coatings exceed a leaching lead concentration of 5.0 mg/L, the paint/coatings and substrate will be classified as hazardous waste and therefore will require disposal in accordance to the Ministry of Environment. If the lead-based paints/coatings do not exceed a leaching lead concentration of 5.0 mg/L, the material may be disposed as regular construction waste. Contractors disposing painted/coated materials to landfill must ensure that the paints do not exceed Leachate levels.

5.0 OBSERVATIONS

5.1 ASBESTOS

The following identified asbestos materials and its locations are listed below:

a) Drywall Joint Compound

Drywall joint or taping compound (“DJC”) is used generally to fill-in connecting seams and uneven surfaces created by nail or screw holes on drywall boards. The DJC give the drywall a smooth and even finish for painting. DJC is considered friable, however, when applied to drywall – it may be classified as non-friable due to the inability to crush the entire combined material (Drywall & DJC) to dust by simple hand pressure.

DJC samples were collected throughout the building. Asbestos-containing taping compound or mud applied to drywall joints on wall & ceiling were collected and identified in the following areas:

- **Main Level – SW and NW corner, Drywall Joint Compound;**
- **Please note that the areas specified above are the exact locations of the asbestos-containing DJC samples collected. However, all DJC throughout the building must be assumed as asbestos-containing unless sufficient additional sampling can prove otherwise by isolating the specific areas which are not comprised of asbestos-containing DJC.**

The DJC samples collected here were analyzed to contain two percent (2%) Chrysotile asbestos (EA2016-01-402-1/2). The DJC were observed to be in good to fair condition and do not pose an immediate health or exposure risk when left undisturbed by physical contact.

WorkSafeBC modified “Moderate” to “High Risk” asbestos work procedures will be required to safely remove the asbestos-containing joint compound complete with the gypsum board from the surfaces of the walls and ceilings. Modified “Moderate Risk” work procedures include additional engineering controls and upgraded personal protective equipment such as respiratory equipment, dust control – the use of a HEPA filtration system; and, a decontamination facility which include a clean room, wash station and a worker transfer room.

b) Potential Paper Tape

Asbestos paper tape was not observed on the joints or seams of heating ducts, but may be present on ducts potentially located in the crawlspace or in the ceiling space. This material may be also be present at other concealed areas such as floor exhaust registers/diffusers; behind walls; and, above false ceiling within the building.

Asbestos paper tape typically contains 40 – 45 percent (%) Chrysotile asbestos. Asbestos paper tape is considered friable and does not pose an immediate health or exposure risk when left undisturbed by physical contact or damaged.

Removal of the potential paper tape complete with the ducts will require WorkSafeBC “Moderate Risk” asbestos work procedures as outlined in the Safe Work Practices for Handling Asbestos guidelines, 2012 Publication.

c) Vermiculite Insulation

Asbestos-containing vermiculite insulation was observed in the following area:

- **Attic Space – Throughout (under blow-in insulation), Vermiculite Insulation.**

The collected vermiculite sample was analyzed to contain 1 percent (%) Actinolite asbestos (EA2016-01-402-6). The material is considered friable, was observed in fair condition and does not pose an immediate health or exposure risk when left undisturbed.

Trace vermiculite debris was observed throughout the basement storage room and along the main level walls. It is assumed that vermiculite insulation is concealed behind the main level walls. This material can be potentially disturbed by anyone entering the building. Proper protective equipment should be donned prior to entering the building. EPOCH recommends cleanup and encapsulation of areas where trace vermiculite has been observed.

Removal and clean-up of the vermiculite insulation will require WorkSafeBC “High Risk” asbestos work procedures as outlined in the Safe Work Practices Handling for Asbestos guidelines, 2012 Publication. Mandatory air monitoring is required for all “High Risk” work activities.



d) Other Materials Observed

The following building materials were observed and not suspected to be asbestos-containing:

- Wood panel boards within the main level

5.2 PCB CONTAINING MATERIALS, MERCURY, LEAD, AND OTHER CHEMICALS

A visual inspection of the commercial building was conducted for the presence of the following materials:

- Fluorescent light fixtures suspected of containing PCB ballast,
- Paints or interior/exterior coating, construction material (vent pipes) suspected of containing lead
- Wall-mounted thermostats and other equipment suspected of containing mercury
- Stored chemicals suspected of containing toxic, corrosive, explosive, and flammable content
- Chlorofluorocarbon (CFC's) in refrigeration equipment

PCB Light Ballast

During our site inspection, fluorescent light fixtures were observed in the building and/or suspected of containing PCB's in the ballast. The fluorescent light bulbs may also contain mercury.

Mercury

During our site inspection, no wall-mounted thermostats were observed or suspected of containing liquid mercury in the switch mechanisms. Several fluorescent tubes were observed or suspected of containing mercury.

Lead-Containing Paints and Materials

During our inspection, it was observed that some enamels, primers, and oil-based paints applied to the interior and/or exterior surface of the building were suspected of containing lead and/or other heavy metals. All paints shall be treated as suspect lead paint unless tested otherwise.

If any lead-containing paint is to be removed or disturbed from its substrate, then a risk assessment, exposure control plan, and/or work procedures should be implemented.

Work procedures must be developed in accordance to WorkSafeBC and inclusive of Part 5.48-5.49 (controlling Exposure), and Part 6.59-6.69 (Lead). EPOCH recommends referencing WorkSafeBC publication, "Lead – Preventing Exposure at Work", 2012; and, the "Lead-Containing Paint and Coatings" guidelines, 2011. These documents will assist current practices for lead information, products, health hazards, worker protection requirement, safe work procedures, and techniques for lead abatement.

Lead vent pipes were not observed on the rooftop of the building.

Crystalline Silicates

Silicates can be found in concrete materials. If cutting, drilling, sanding, and /or crushing concrete material during rehabilitation, workers shall be made aware of the potential exposure to silica dust and their employers aware of the required WorkSafeBC regulations.

On-site Chemicals and Other Hazardous Materials

During our site inspection it was observed that the following materials were present and suspected at the time of our inspection:

- Rat/Rodent Droppings

6.0 RECOMMENDATIONS

All identified asbestos-containing materials shall be removed and disposed of in accordance to WorkSafeBC Occupational Health and Safety Regulations; Ministry of Environment – Waste Management Act – Hazardous Waste Regulations; and Transport Canada – Transportation of Dangerous Goods Regulations. All abatement work should be conducted by a qualified asbestos abatement contractor and all waste transported by a licensed waste disposal company, prior to any rehabilitation work on the building.

If any, all non-asbestos-containing drywall or gyproc shall be removed and disposed at an accepting recycling facility. No drywall shall be dumped at a landfill.

If any, all fluorescent lights, suspected of containing PCB ballasts, shall be dismantled and inspected by qualified personnel prior to or in conjunction with the rehabilitation of the building. Removal of the ballast shall be conducted in accordance to WorkSafeBC Occupational Health and Safety Regulations. All identified ballast containing PCB's shall be packaged, transported, and disposed of at an approved facility as per the Ministry of Environment Waste Management Act - Hazardous Waste Regulations and by a qualified and licensed company.

If any, all wall-mounted thermostats and fluorescent tubes containing mercury shall be carefully removed, and either recycled or disposed at an accepting facility as per Ministry of Environment Waste Management Act - Hazardous Waste Regulations.

If any, suspected lead and heavy metal-containing paints should be removed as possibly in-tact with its building material surface (wood, concrete, metals, etc.) by the contractor. Standard demolition work procedures, which includes the continuous use of water by a fire hose equipped with a fog nozzle, to control and assist in minimizing airborne dust. It is recommended that the heavy equipment operator, and workers in the immediate vicinity of the work, wear protective respirators equipped with HEPA filters.

Depending on the *Leachate concentration* of the lead-containing paints, established by the Ministry of Environment, lead containing paints remaining on the attached surface of the building material may be disposed as standard construction waste. If the lead paints exceed the Leachate concentration, it may be classified as hazardous waste, and therefore, will be required to be disposed in accordance to the Ministry of Environment Waste Management Act - Hazardous Waste Regulations.

If any, all ozone depleting substances in refrigeration equipment (fridges, freezers, air conditioning units), paints, and solvents observed within the building(s) and its surrounding property areas shall be collected and either disposed or recycled at an approved facility as per Ministry of Environment Waste Management Act – Hazardous Waste Regulations.

Other hazardous or infectious substances for consideration, such as: rodent dropping and/or carcasses, mold and fungi, and pigeon guano may cause infectious illnesses and/or respiratory diseases in humans. Unprotected trades or workers performing rehabilitation of the building should consider and take necessary precautions, as per the WorkSafeBC Occupational Health and Safety Regulations, to protect themselves from potential exposure of these contaminants. Worker should wear protective disposable clothing and HEPA equipped respirators when working near or in potential health hazards.

7.0 LIMITATIONS & EXCLUSIONS

EPOCH warrants that the finding and conclusions stated in this report are in accordance with generally accepted asbestos evaluation methods. Every effort was taken to minimize the disturbance to the building materials that may have contained asbestos.

Only visible suspect materials from accessible areas were sampled during the assessment. Recommendation and conclusions are based on the conditions observed at the site and should not be extrapolated to other circumstances. It is possible that other conditions may exist which could not be identified during our inspection. However, we believe that the conditions observed, provided an accurate reflection of the condition of the building.

This report was prepared for the exclusive use of the building owner, and their authorized representatives. It is intended to provide a comprehensive assessment of the presence of ACM within the building. No other parties are entitled to this report without the written permission of having first been requested from EPOCH. EPOCH accepts no responsibility for any claims by third party errors in this report.

This report and/or documents relating to this project have been prepared by EPOCH and are considered a product and shall remain a copyright property of EPOCH. The intended client or client's agent may not copy in whole or parts of, give, lend, sell, or otherwise make available the report or any portion of it to any party without the express permission of EPOCH.

The report is based on data and information available and collected at the time of the inspection. This assessment was conducted by an EPOCH representative and is based on the site conditions at the time of the inspection.

If new information becomes available or if any materials were not addressed in this report and is suspected of containing asbestos, EPOCH should be requested to further investigate the matter.

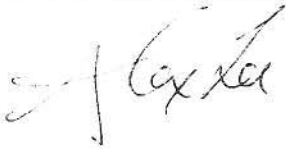
It was not possible to access, inspect, nor sample some equipment components observed at the building. Furnaces were not dismantled for inspection of suspect asbestos materials. Other areas behind walls, above false ceilings, and the building envelope that are inaccessible were also not inspected.

Prior or during rehabilitation, if any other materials are suspected for asbestos, stop work and notify the appropriate individuals to conduct further testing and risk assessment.

If you have any questions or require further assistance, please contact our office.

Sincerely,

EPOCH Environmental Consulting Limited



Alex Lee, B.Sc.
Field Technician
GL160406ALX

Reviewed by:



per: Adrian Lee, B.Eng., AScT.
Director / Project Engineer



Appendix A

Bulk Sample Results - Asbestos

April 01, 2016

Epoch Environmental Consulting - HMA

Alex Lee
100 - 42 Fawcett Road
Coquitlam, BC
Canada



Unit 100 - 42 Fawcett Road
Coquitlam, BC V3K 6X9
Tel - (604) 521-6806
Fax - (604) 521-6873
Email - info@ealabs.ca
Web - www.ealabs.ca

Attention: Alex Lee

BULK SAMPLE ASBESTOS IDENTIFICATION RESULTS - 9744 - 176TH STREET SURREY, BC - (E2016-94-01)

Please find enclosed the laboratory's results for the collected bulk material sample(s) submitted for asbestos identification. Examination of these sample(s) for asbestos content was conducted in accordance with EPA/600/R-93/116 or EPA/600/M4-82-020 methodologies using polarized light microscopy (PLM). Multiple layers of samples are analyzed and reported separately. All analysts are derived from calibrated visual estimate and measured in weight percent unless otherwise noted. Please note that the EPA test method has limitation for quantifying the percentage of sample(s) with low asbestos concentration. Transmission electron microscopy (TEM) would be encouraged for customers to obtain accurate results in these situations.

The results relate only to the items tested. If the sample(s) were not collected by EPOCH personnel, the accuracy of the results is limited by the methodology and acuity of the sample collector. The test report shall not be reproduced, except in full, without written approval of the laboratory. The sample(s) not destroyed in the testing will be kept for 30 days before being disposed. This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US federal government.

ACCREDITATIONS

EPOCH Analytical Inc is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos sample analysis under NVLAP Lab Code 200746-0.

If you have any questions or require further assistance, please do not hesitate to contact our office.

Sincerely,
EPOCH Analytical Inc.



Leanne Murakami B.A.
Lab Director

EA2016-01-402-N

GL 2016/04/01/lf

Epoch Analytical Inc

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 Email - info@ealabs.ca
 Web - www.ealabs.ca



Asbestos Bulk Analysis by Polarized Light Microscopy - EPA/600/R-93/116 or EPA/600/M4-82-020

Company / Customer:	Epoch Environmental Consulting - HMA	EA Number:	EA2016-01-402-N
Submitted By:	Alex Lee	Date Received:	03/29/2016
Address:	100 - 42 Fawcett Road Coquitlam, BC Canada	Time Received:	12:01 pm
		Date Analyzed:	04/01/2016
		Date Reported:	04/01/2016
Date Sampled:	03/29/2016	Submitted By:	Alex Lee
Client Project Number:	E2016-94-01	Collected By:	Alex Lee
Project Location:	9744 - 176th Street Surrey, BC		

Sample ID	Sample Location	Material Description (Fiber Colour)	Estimated Asbestos %	Non-Asbestos Fibers %	Non Fibrous Materials %
1	SW Corner Wall	DJC - Drywall Joint Compound (White)	Chrysotile - 2%		98%
2	NE Corner Wall	DJC - Drywall Joint Compound (White)	Chrysotile - 2%		98%
3	NW Corner Wall	DJC - Drywall Joint Compound (White)	NONE Detected	Cellulose - 5%	95%
4	Chimney Parging	Insulating Cement (Beige)	NONE Detected	Cellulose - 1%	99%
5	Chimney Brick	Mortar (Beige)	NONE Detected		100%
6	Attic Space	Vermiculite Insulation (Grey)	Actinolite - 1%		99%
7	Attic Space	Plaster : Scratch Coat (Tan)	NONE Detected	Organic Fiber - 2%	98%
8	SE Corner Above Storage Room	Plaster : Scratch Coat (Beige)	NONE Detected	Cellulose - 10%	90%
		Plaster : Smooth Coat (White)	NONE Detected		100%
9	SE Corner Above Storage Room	Plaster : Scratch Coat (Beige)	NONE Detected	Cellulose - 10%	90%
		Plaster : Smooth Coat (White)	NONE Detected		100%

Sample ID	Sample Location	Material Description (Fiber Colour)	Estimated Asbestos %	Non-Asbestos Fibers %	Non Fibrous Materials %
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Analyzed and Reviewed by:



Leanne Murakami (B.A.)
Lab Director



Appendix B

Lead Surface Paints and Materials Results

On-Site Lead Analysis Results



Address: 9744 – 176th Street, Surrey, BC
Client: City of Surrey
Date: March 29, 2016
Project #: E2016-94-01
Technician: Alex Lee, B.Sc.
Methodology: Niton 300XLP XRF (X-Ray Fluorescence)

Sample Number	Sample Location	Substrate	Colour	Lead Concentration (mg/cm ²)	Lead - Containing / Lead-Based
LP1	East upper siding	Wood	Blue	0.19	Containing
LP2	East middle trim	Wood	White	<LOD	
LP3	East lower siding	Wood	Blue	0.4	Containing
LP4	South exterior corner trim	Wood	White	0.48	Containing
LP5	South stair rail	Wood	Blue	<LOD	
LP6	South stair step	Wood	Blue	<LOD	
LP7	South entry door	Wood	White	0.41	Containing
LP8	South entry door trim	Wood	White	1.7	Lead-based
LP9	NW entry door	Wood	White	0.59	Containing
LP10	NW entry door trim	Wood	White	0.64	Containing
LP11	Front deck ceiling	Wood	White	8.34	Lead-based
LP12	Exterior soffit	Wood	White	5.43	Lead-based
LP13	Exterior fascia	Wood	White	0.28	Containing
LP14	South interior ceiling	Wood	White	0.17	Containing
LP15	Entrance foyer upper wall	Wood	White	0.21	Containing
LP16	Entrance foyer lower wall	Wood	Pink	3.28	Lead-based
LP17	West upper wall	Drywall	White	<LOD	
LP18	West window frame	Wood	White	0.12	Containing
LP19	Interior trims	Wood	White	0.02	
LP20	Interior base-board	Wood	White	<LOD	
CHPA	Canadian Hazardous Product Act			0.009 % wt.	
WorkSafeBC	Lead Exposure			0.06 % wt. (~0.04 mg/cm²)	
HUD	Housing and Urban Development			0.50 % wt. or 1.0 mg/cm²	

- < LOD –Below Limit of Detection



Workers and Human Exposure:

WorkSafeBC suggests that removal of lead-containing paint which equals or exceeds 600 mg/kg (0.06 % wt. or ~0.04 mg/cm²) requires safe work procedures worker protection (HEPA respirator and coveralls) and an exposure control plan be implemented.

In Canada, the new Canadian Hazardous Product Act (CHPA), under the Surface Coating Material Regulations (SOR/2005-109) defines that surface paint in new materials containing lead greater than 0.009% wt. is to be considered lead-containing paints.

Lead-based paint is defined as paint or other surface coatings that contain lead equal to or exceeding 0.5 percent (%) by weight or 1.0 mg/cm² as per the U.S. Department of Housing and Urban Development (HUD).

Disposal Requirement:

When paints have been identified to be lead-based paints, the paint will require waste characterization for disposal through TCLP Leachability Tests. Additional waste characteristic testing (TCLP) testing is recommended for lead-based paints. The purpose of this test is to determine the TCLP concentration for disposal requirement with respect to “leachability” or “mobility” of paints, ceramic tiles, or any materials. If the lead-containing paints or ceramic tiles exceed a leaching lead concentration of 5.0 mg/L, the paint, ceramic tile, and substrate will be classified as Hazardous waste and therefore will require proper disposal in accordance to the Ministry of Environment.

X-Ray Fluorescence:

Surface paints and coatings resulting below the limit of detection (<LOD) cannot be assumed to not contain lead unless further lab analysis methods can prove otherwise. Paint chip samples may be collected and analyzed by a lead-paint laboratory to determine greater accuracy.

Any detectable amount of lead in paints or coatings may pose a health risk when the material is disturbed.



Appendix C

WorkSafeBC Regulations

Asbestos hazards in demolition, renovation, and salvage

Asbestos causes more worker deaths than any other workplace disease – what can you do?

Asbestos is extremely hazardous to people's health. Demolishing or renovating houses containing asbestos products can release asbestos fibres, which are extremely fine and can stay in the air for hours.

Unprotected workers exposed to asbestos-contaminated air can breathe in the fibres. This may cause serious health problems, such as lung disease and cancer.

What is asbestos?

Asbestos is a strong, fire-resistant mineral fibre. In the past, asbestos was used as insulation against heat or noise, and for fire protection. It was also added to materials such as cement and plaster to give them more structural strength.

Where was asbestos used in older homes?

Until the late 1980s, more than 3,000 products containing asbestos were used in house construction. The drawing on the back of this page shows potential sources of asbestos once commonly used in residential construction. When demolishing or renovating older houses, there is a high probability of encountering asbestos-containing materials, which may release asbestos fibres and put unprotected workers at risk.

What are my responsibilities as an employer or owner/builder?

You are responsible for ensuring the health and safety of all workers present at your workplace. You are also responsible for protecting the public from any asbestos-contaminated air.

When doing any demolition, renovation, or salvage work, you must follow WorkSafeBC OHS regulations, specifically Part 20: Demolition and Part 6: Asbestos.

What do I have to do before demolishing, renovating, or salvaging buildings or structures?

1. You must have a qualified person inspect the site to identify any asbestos that may be handled, disturbed, or removed. OHS Guideline G6.6-3 outlines the acceptable qualifications for persons conducting asbestos hazard assessments.

2. You must submit to WorkSafeBC a Notice of Project form for asbestos at least 24 hours before any asbestos removal or other work begins.
3. You must have trained and qualified asbestos-removal workers properly remove and dispose of all material containing asbestos.

You should receive written confirmation that the asbestos specified for removal on the Notice of Project form has been properly removed.

For more information, refer to OHS Guideline G20.112, which explains the hazards associated with the uncontrolled release of asbestos. It also provides information on the following topics:

- What constitutes a compliant asbestos inspection.
- Arranging for and confirming the safe removal of asbestos.
- What to do if you encounter more materials suspected to contain asbestos during demolition or salvage work.

What should I do if I find more asbestos-containing material once work has started?

Stop work immediately. Have trained and qualified asbestos-removal workers properly remove these materials before resuming work.

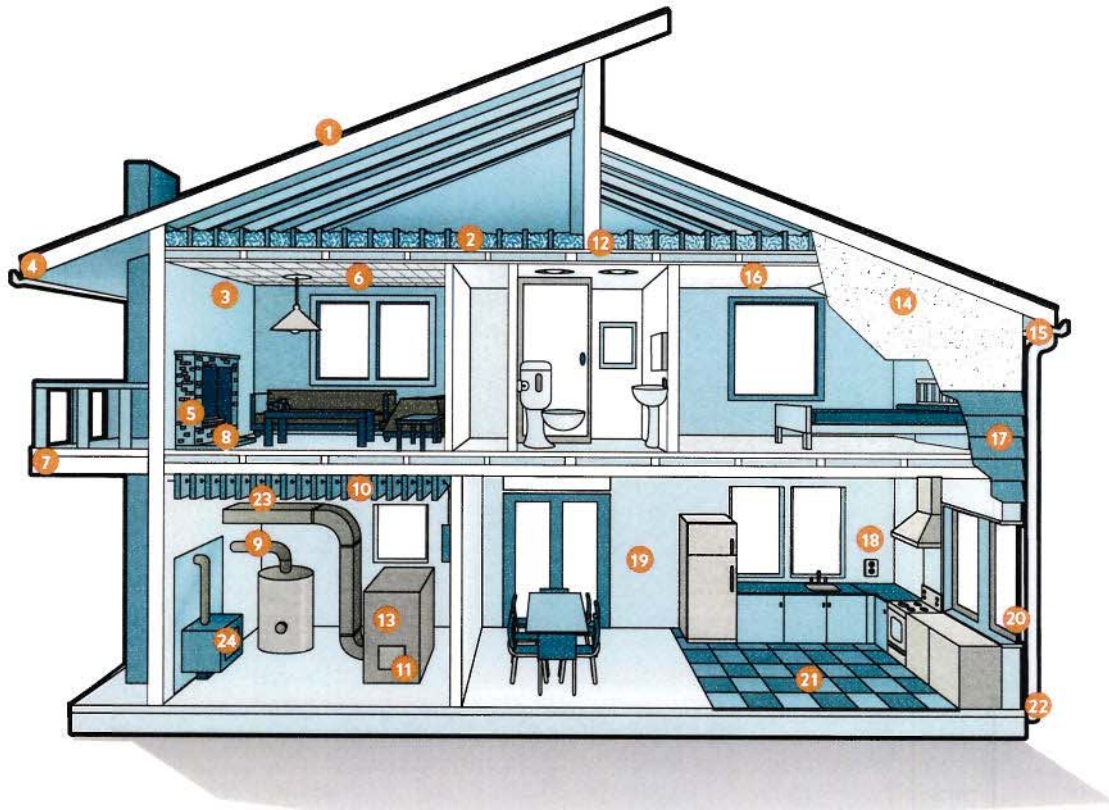
Where can I find additional information about asbestos and Notice of Project forms?

You can submit a Notice of Project form online at worksafebc.com. Asbestos survey and removal companies can be found in the Yellow Pages under Asbestos Abatement & Removal, Health & Safety Consultants, or Environmental Consultants.

For more information about asbestos and what your responsibilities are, check out hiddenkiller.ca or go to worksafebc.com for the following resources:

- *Safe Work Practices for Handling Asbestos* booklet
- Safety at Work Construction webpage
- OHS Guideline G6.8: Procedures for abatement of asbestos-containing material during house and building demolition/renovation

Potential sources of asbestos in the home.



- | | | | |
|---|---|--|---|
| 1 Roof felt and shingles | 9 Pipe insulation | 15 Soffit boards can be made of asbestos cement or asbestos insulating board | 20 Window putty |
| 2 Loose, blown-in insulation, such as vermiculite | 10 Main panel and fuse box; each fuse wire has an individual asbestos flash guard | 16 Textured or stipple-coated walls and ceilings | 21 Flooring: vinyl tiles and linoleum sheet flooring; flooring adhesive |
| 3 Incandescent light fixture backing | 11 Door and gasket covers | 17 Asbestos cement (transite) board siding and undersheeting | 22 Downpipes can be made of asbestos cement |
| 4 Roof gutters can be made of asbestos cement | 12 Backing behind recessed lighting | 18 Outlets and switches | 23 Insulation on electrical wires |
| 5 Artificial fireplace logs and ashes | 13 Boiler and furnace insulation | 19 Gypsum board filling compound, and patching and joint compound for walls and ceilings | 24 Heat reflector for wood stove |
| 6 Acoustic tiles | 14 Asbestos can be found in stucco | | |
| 7 Deck under-sheeting | | | |
| 8 Asbestos pad under the fireplace hearth | | | |

Please note: This floor plan depicts a typical older home. Asbestos use has declined significantly; homes built before 1990 are more likely to contain asbestos products.

hygiene practice. The following table provides guidance on the minimum number of bulk samples that should be collected to identify asbestos-containing materials that might be present in a building.

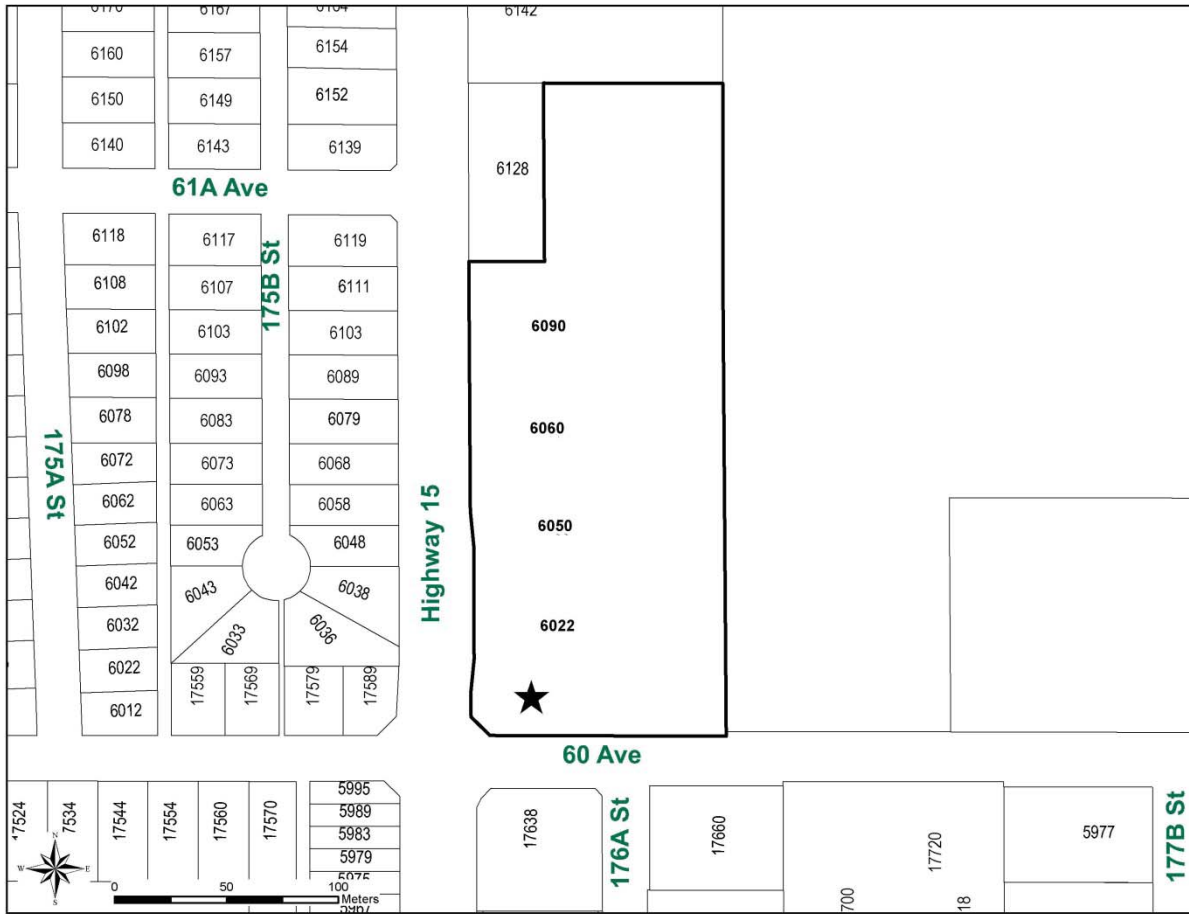
Bulk material sample collection guide

Type of material	Area of homogeneous material*	Minimum number of bulk samples to be collected**
Surfacing materials, including textured coatings, drywall mud, plasters, and stucco	Less than 90 m ² (approximately 1,000 ft ²)	At least 3 samples of each type of surfacing material
	Between 90 and 450 m ² (approximately 5,000 ft ²)	At least 5 samples of each type of surfacing material
	Greater than 450 m ²	At least 7 samples of each type of surfacing material
Sprayed insulation and blown-in insulation, including sprayed fireproofing and vermiculite insulation (including vermiculite insulation within concrete masonry units, or CMUs)	Less than 90 m ² (approximately 1,000 ft ²)	At least 3 samples
	Between 90 and 450 m ² (approximately 5,000 ft ²)	At least 5 samples
	Greater than 450 m ²	At least 7 samples
Flooring, including vinyl sheet flooring (and backing) and floor tiles	Any size	At least 1 sample per flooring type in each room (and 1 from each layer of flooring)
Mechanical insulation, including duct taping, pipe insulation, elbows and boiler/tank insulation	Any size	At least 3 samples
Mastics and putties, including duct mastic (around penetrations) and window putty	Any size	At least 3 samples
Roofing materials, including felting and shingles	Less than 90 m ² (approximately 1,000 ft ²)	At least 1 sample (each layer of material must be sampled)
	Between 90 and 450 m ² (approximately 5,000 ft ²)	At least 2 samples (each layer of material must be sampled)
	Greater than 450 m ²	At least 3 samples (each layer of material must be sampled)
Asbestos cement (transite) board and pipe	Any size	At least 1 sample
Other materials	Any size	At least 1 sample per type of material

* Homogeneous material is considered uniform in texture and appearance, was installed at one time, and is likely to be of only one type of material or formulation.

** If the material is assumed to contain asbestos, samples do not have to be collected. The professional judgment of a qualified person can be used to reduce the number of bulk samples of homogeneous materials. If fewer samples than the minimum recommended number are collected, surveyors should document the rationale for their position in the survey report.

Location Map - 1881 Town Hall (6022 - 176 Street)

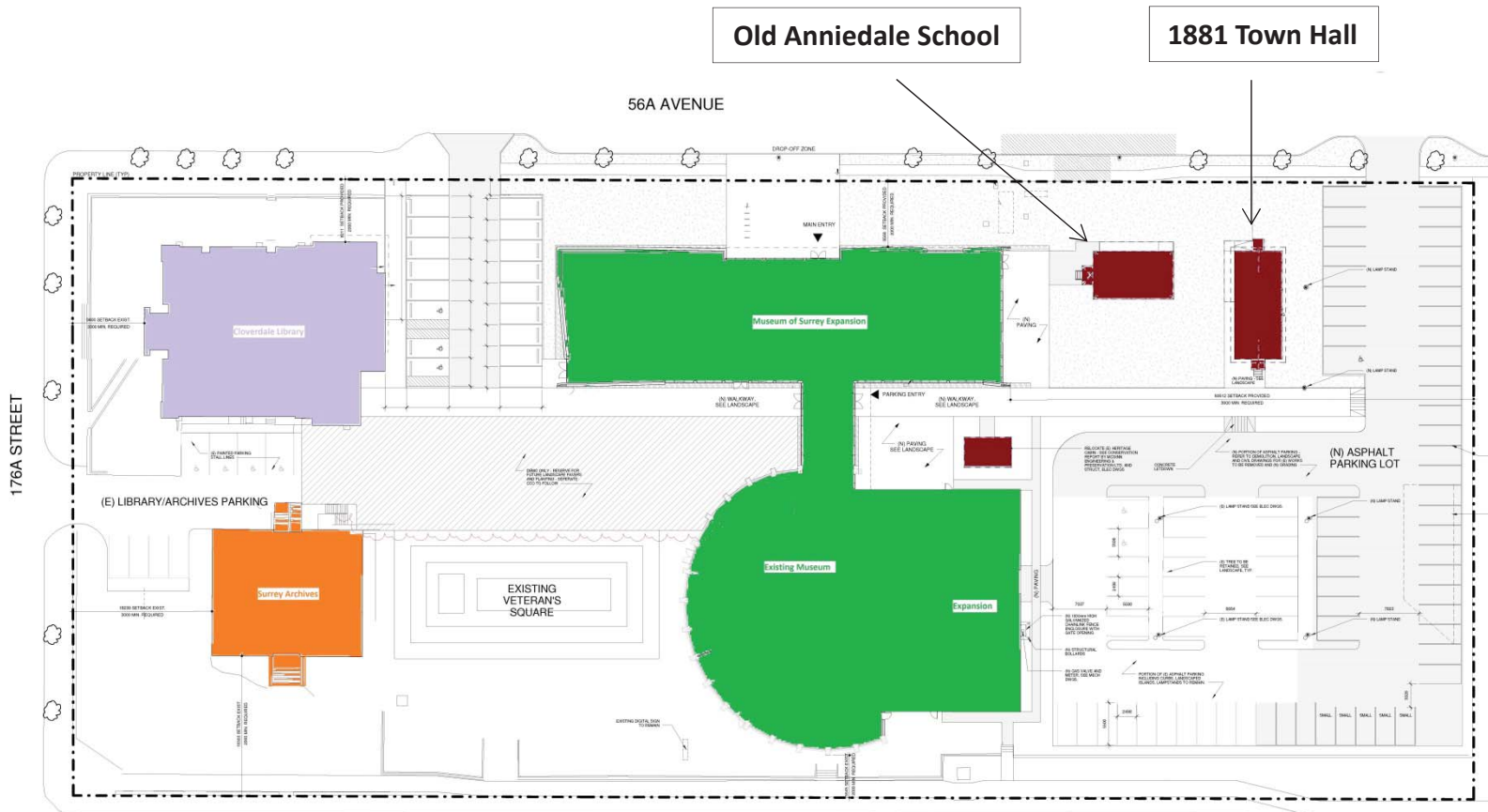


Appendix "IV"

Location Map - Old Anniedale School (9744 - 176 Street)



Relocation Map - Museum of Surrey Campus



Appendix "VI"

Historic Photos of the 1881 Town Hall and Old Anniedale School

Early photograph of the 1881 Town Hall



Early photograph of the Old Anniedale School

