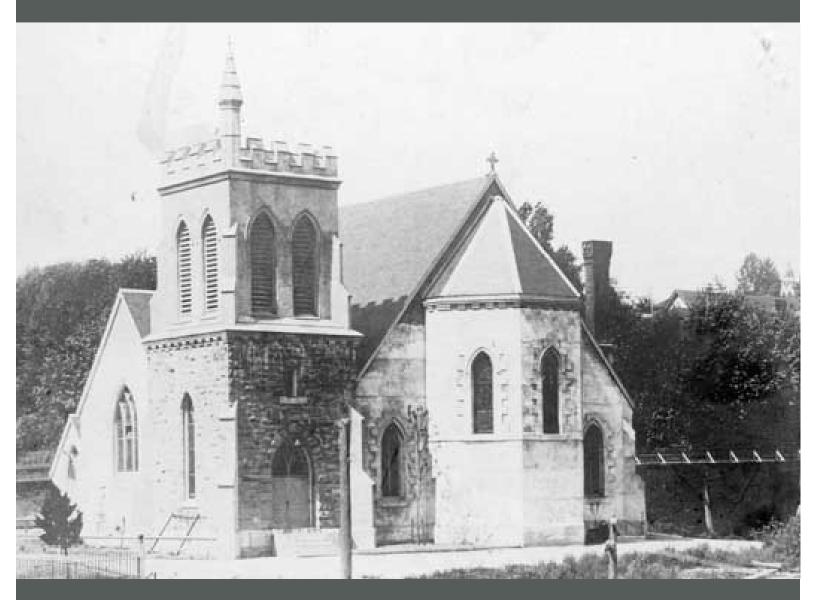
HOLY TRINITY CATHEDRAL

514 CARNARVON STREET, NEW WESTMINSTER CONSERVATION PLAN

OCTOBER 2021



AND ASSOCIATES INC

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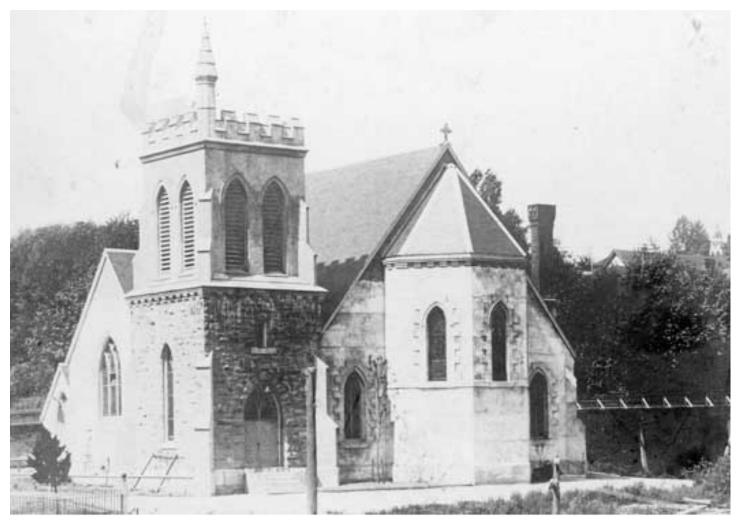
1. INTRODUCTION

SUBJECT PROPERTY: ADDRESS: CONSTRUCTION DATE: HERITAGE STATUS: HOLY TRINITY CATHEDRAL 514 CARNARVON STREET, NEW WESTMINSTER 1867 (RECONSTRUCTED 1898-99) NEW WESTMINSTER HERITAGE REGISTER

Holy Trinity is a historic parish, established in 1859, and was one of the first in the Mainland Colony of British Columbia. It is of heritage value for its association with Colonel Richard C. Moody of the Royal Engineers, who chose the location of the church in his original plan for the City. The first incarnation of this building was constructed of wood and burned in 1865, just five years after its completion. Its replacement was built two years later in sandstone, but could not withstand the Great New Westminster Fire of 1898. This current structure, constructed in 1898-99, was built incorporating the surviving walls of the earlier building.

Holy Trinity Cathedral is a prime example of the work of prolific local architect George W. Grant, who designed many of the buildings in downtown New Westminster, both before and after the Great Fire of 1898. He redesigned and restored buildings that survived, and designed replacement blocks for those that were destroyed, which were generally much reduced in scale and opulence from the pre-fire buildings. Grant's success at the time was tied not only to his skill in design, but also directly to his expertise in building construction. This cathedral is of architectural significance for its Gothic Revival style, popular in ecclesiastical construction of the time, and its majestic tower, which was redesigned in 1910 by architect Frank G. Gardiner. Gardiner had a prolific architectural career, particularly with partner A.L. Mercer. Holy Trinity Cathedral contains art glass windows by Henry Bloomfield & Sons, which installed glass in numerous buildings. The interior also boasts woodwork of native tree species.

The proposed conservation of Holy Trinity Cathedral involves overall preservation, with rehabilitation interventions to facilitate seismic upgrading, including interior and exterior rehabilitation measures. This rehabilitation will allow Holy Trinity Parish to remain active on the site that it has occupied since 1860.



Holy Trinity Cathedral view from Clarkson Street, 1900 [NWMA IHP0327]

2. SUMMARIES

2.1 HISTORICAL SUMMARY

The Establishment of New Westminster

- In 1859, New Westminster was chosen as the new capital of the Mainland Colony of British Columbia. It was incorporated as Western Canada's first city the following year.
- In the spring of 1859, the Royal Engineers began clearing the land for the establishment of New Westminster.
- In February 1859, the British War Office decided to provide spiritual care for the troops under the command of Colonel Moody, and in September, sanctioned 100 pounds sterling for the purpose. John Sheepshanks was nominated.
- Reverend Sheepshanks conducted the first Anglican service in New Westminster on Sunday September 2nd, 1859 in the Customs House.
- Holy Trinity Church was the second Anglican Church built on the mainland; the first had been built near Fort Langley.
- The first Holy Trinity Anglican Church, built in 1860, was designed by Captain Arthur Reid Lemprière, who arrived with the third group of Royal Engineers in April, 1859.

Construction of the Second Holy Trinity Anglican Church 1867

- The first Holy Trinity was destroyed by fire in 1865.
- The second building was built of sandstone imported from Salt Spring Island, and was consecrated on December 18th, 1867.
- The architect was Hermann Otto Tiedemann, a successful architect, noted as the designer of the Colonial Administration Buildings in Victoria (the "Birdcages").
- The first Bishop of the new diocese, The Right Reverend Acton Wyndeyer Sillitoe, was consecrated Lord Bishop of New Westminster on All Saints' Day 1879.
- Holy Trinity Church became the Cathedral Church of the Diocese of New Westminster in 1892.

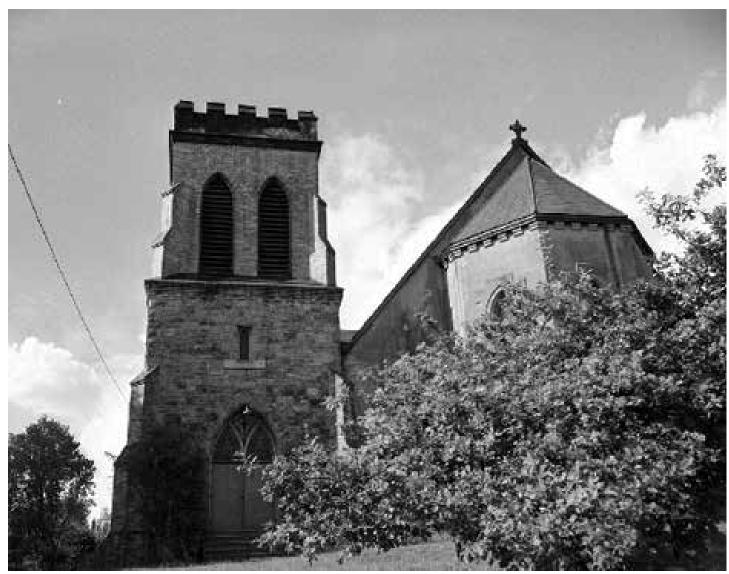
Great Fire and Rebuilding 1898-99

• Holy Trinity was burned during the great New Westminster fire of September 10, 1898.

- The wooden elements of the building were destroyed, but some of the walls, although damaged, remained standing.
- The current Cathedral is a reconstruction of the previous church, the walls and foundations of which were found to be sufficiently strong to be reused.
- The reconstruction was undertaken by local architect George W. Grant, who was extremely busy following the Great Fire, designing many of the structures in Downtown New Westminster that still stand.
- Of the peal, seven of the eight bells were cracked beyond repair, and were sent to San Francisco to be melted down to provide funds for rebuilding. The one original bell that remained, named "Wisdom", still hangs in the tower.
- Work was completed on the rebuilding of the Cathedral in 1899 in time for services on All Saints Day. The Cathedral was consecrated on April 3rd, 1902, following the settlement of the debt incurred by the restoration work.

Twentieth Century to Present

- This remained as the Cathedral Church of the Diocese until 1929 when Archbishop de Pencier designated Christ Church in Vancouver as his Cathedral.
- The Parish of Holy Trinity was bitterly disappointed, and following a fight which lasted over a year and which threatened to be dragged before the Supreme Court, a settlement was reached which included the right of Holy Trinity to retain the title of Cathedral in perpetuity.
- Notable surviving features of Holy Trinity Cathedral include the three stained glass windows in the apse, the work of local craftsmen, Henry Bloomfield and Sons.
- A number of historically significant artifacts grace the Cathedral. Ties to Westminster Abbey are represented by the pillared Credence Table in the sanctuary and the altar cross as well as the banner on the front of the pulpit. The brass lectern was a gift of the first Governor of the Colony, Sir James Douglas in 1875. This and other items were saved from the burning former building by the Rector of the day, the Reverend Shildrick.



Holy Trinity Cathedral, 1949 [BC Archives I-28023]

2.2 SUMMARY OF HERITAGE VALUES *Historical Value*

Holy Trinity Cathedral is valued historically for its association with the earliest settlement of New Westminster. The first Anglican service in New Westminster was held in 1859, reflecting the British origins of the Royal Engineers who founded the city. The Cathedral is one of the few buildings in downtown New Westminster that retains substantial historic fabric that survived the Great Fire. Numerous important historic figures from the development and construction of British Columbia are featured in the Cathedral's story; including clergy the Rev. John Sheepshanks and the Rt. Rev. Acton Sillitoe; Colonel R.C. Moody of the Royal Engineers; architect H.O. Tiedemann; builder Thomas Trounce; and architect George Grant, as well as its association its association with many prominent New Westminster families.

Architectural Value

Aesthetically, Holy Trinity Cathedral is of architectural significance for its Gothic Revival style, and for its interior and exterior design. Little of the Cathedral has been changed, and it retains much of its original features and patina. The apse is illuminated by stained glass windows of exceptional quality, and the leaded windows of the nave are also fine examples of their craft.

Community Value

This has been the site of religious worship for longer than Canada has been a country. Beyond this historic significance, there is a deep-rooted tradition of community involvement and service. The parish is active in charitable organizations, notably the New Westminster Homelessness Coalition, and as part of the Anglican Church of Canada it is a participating member of the Primate's World Relief and Development Fund. It also provides a breakfast program, providing free meals to the less fortunate, and encourages participation from volunteers including students from St. Thomas More Collegiate. The Cathedral is the focal point for pastoral care to the community, including weddings, baptisms, hospital visitations and funeral services.

2.3 SUMMARY OF HERITAGE BENEFITS

There are many ways in which this project benefits the Parish as well as the citizens of New Westminster:

Long-Term Conservation and Public Safety

The retention and upgrading of this historic church supports the City's goals of both heritage conservation and sustainability. The maintenance of landmark churches is also important for symbolic and traditional reasons, linking the past to the present and providing visual and symbolic anchors to the community as it develops. Historic churches are typically maintained by the congregation at little or no cost to government, a community benefit that adds to cultural diversity and social programming capacity.

The funds generated through this project will allow Life Safety and BC Building Code upgrading of the historic structure. This will include careful and sensitive seismic upgrading of the unreinforced masonry structure, a very costly procedure that could not otherwise be undertaken. This will not only assist in the long-term conservation of the historic fabric, it will also enable safe occupancy and continued public use of the building.

The level of restoration of HTC will be of the highest order, with particular attention paid to the exterior as well as interior features. The restoration will enable the continuing historic religious use of HTC as a character-defining element.

Enhanced Functionality

The improvements to the site will ensure long-term viability of both the historic building as well as the use of the church. These improvements include the physical rehabilitation of the historic church building as well as improved community space incorporated into the new structure.

Public Access

The Holy Trinity site was conceived originally as part of a larger public open space, and the church yard has always been accessible to the public. As part of the redevelopment of the site, a plaza will be created in front of the church that can be used in a variety of public ways. Mid-block access will be facilitated through the provision of accessibility measures, including an elevator facing Clarkson Street, to address the steep grades that currently exist.

Legal Protection of the Heritage Site

In many ways, this church site is the very core of historic New Westminster and the original Mainland Colony. As part of the redevelopment agreement, long-term legal protection will be provided for this very historic building.

Institutional Preservation

Institutions of faith are critical to the social fabric of the community. Holy Trinity, as a long-time anchor to the downtown, has been a transformative force that meets the social and faith-based needs of local residents and groups. The location in the downtown core is critical in serving the growing population, those who travel in on the weekend and those who work in businesses downtown.

In addition to its faith-based services, the critical role played by HTC includes:

- Providing space for community functions including programming, events and recreation for seniors and youth programs;
- Hosting arts and cultural events;
- Offering care, a sense of belonging and community counsel for disadvantaged populations; and
- Providing space and programming for recovery and health programs.

Faith-based institutions play a significant role in the development of a holistic community, and HTC is aligned with current City of New Westminster and senior government policies and strategies in many key areas. Ongoing research work by Cardus [cardus.ca] regarding the critical role played by faith-based space in Canadian urban settings includes City Soul studies of Calgary, Edmonton and Toronto. These reports continue to conclude that downtown urban communities would be impoverished if faith-based space is lost, as it is a critical component in the social fabric of vital cities. There is also an alignment between community needs, the provision of social services and the support provided by faith-based institutions.

Holy Trinity Parish is challenged by its current outdated facilities, aging infrastructure and high costs of rehabilitation. This project will allow the historic HTC Parish to remain in its current location, and provide improved and expanded facilities that are invaluable for community use and outreach.

Archaeological Overview Assessment

An Archaeological Overview Assessment of the HTC site was submitted by Brown & Oakes Archaeology in January 2019. No documented archaeological or historic sites are situated within the Project Area, however archaeological sites within 2.5 km of the location include village and camp sites, subsistence features, and lithic scatters that suggest wide-ranging Indigenous land use of surrounding locales. The site has been subject to extensive historic disturbances, and further field based archaeological impact assessment is not recommended. A project-specific Archaeological Chance Find Protocol has been produced and will implemented for project and construction managers prior to construction implementation.



"The Frazer, New Westminster, September 1862." A view of the Fraser River from New Westminster showing the houses at qəyqəyt. [Sarah Crease. British Columbia Archives D-02123]



"New Westminster, 1864." [Claudet. British Columbia Archives A-03330]

First Nations Context

[From Archaeological Overview Assessment]

The Project area is within the asserted traditional territories of several handaminam groups including Katzie, Kwantlen, Kwikwetlem, Qeyget, Musqueam, Semiahmoo, Tsawwassen, and Tsleil-Waututh First Nations. Other neighbouring Nations engaged in traditional land and riverine use of the area and maintain consultative interests. Ethnographic and recorded traditional use information make clear that several First Nations formerly occupied and relied on the lands and resources in and around New Westminster. Kwantlen First Nation names several traditional ancestral villages along the north Fraser shoreline at New Westminster and describe these as traditionally occupied and controlled lands until a move upriver following the founding of Fort Langley. Other neighbouring Nations along the Fraser River and beyond claim long-held use rights, occupation or territorial connections to specific settlements or land areas. The north bank of the Fraser River around New Westminster is also closely linked to many Nation-held and ethnohistorically-recorded accounts of handaminam founding ancestors and beginning-of-time stories. The swift taking of land, establishment of the Colonial government, and the burgeoning commercial and industrial activities in and around New Westminster in the mid-1800s acted to rapidly displace First Nations from traditionally occupied and spiritually important lands. Efforts to reestablish connections and engage in land planning decisions and heritage site protections are underway by several area First Nations.

Reconciliation with Indigenous People

Reconciliation between settler and Indigenous communities is and will continue to be a lengthy process as we restore right relationships and address systemic wrongs. On August 3, 1993 Archbishop Michael Peers, the Primate (presiding bishop) of the Anglican Church of Canada, at a gathering of the leaders of Indigenous Anglican communities, issued a formal apology for the role of the Anglican Church of Canada in residential schools. The Diocese of New Westminster, the regional judicatory of the Anglican Church of Canada, in the Lower Mainland and Fraser Valley, has also committed its resources to facilitate reconciliation between settler and Indigenous communities in this region of the Province. Holy Trinity Cathedral is deeply aware that its own history is entwined with the history of colonization in Canada and in British Columbia. Even as Anglican worship began in September of 1859 in New Westminster, the government was displacing Indigenous communities from their ancestral lands along the Fraser River. The Mission Priorities of the Diocese of New Westminster emphasize reconciliation and respect for diversity, and there is a dedicated staff member charged with facilitating Indigenous Justice.

The redevelopment of the Cathedral properties will include significant steps toward reconciliation. As part of the application process, at least sixteen Indigenous communities have been notified at various stages. The following context is proposed for this development as an acknowledgement of the need for ongoing reconciliation measures:

- signage in həndəminəm;
- Indigenous art either in free-standing forms or incorporated in the building's design features;
- interpretive signage regarding the historical context;
- programming to support the City and Indigenous communities in reconciliation, and
- other mutually sustainable initiatives.

Sustainability

The redevelopment of the HTC site also supports sustainability in the following ways:

- Economic Sustainability
- Environmental Sustainability
- Social Sustainability
- Cultural Sustainability
- Spiritual Sustainability

The development of complete communities supports the Social Pillar of sustainability. In addition, the geographic proximity of programs and services for downtown residents promotes a compact, sustainable infrastructure through access to alternate forms of transportation. Given projections of continuing increase in the population in New Westminster, the presence of this historic institution offers an anchor of stability as well as a community resource of great public benefit.

3. HISTORY OF HOLY TRINITY

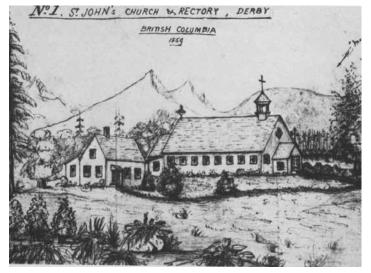
3.1 ESTABLISHMENT OF THE ANGLICAN CHURCH IN BRITISH COLUMBIA

You go not as enemies but as the benefactors of the land you visit, and children unborn will, I believe, bless the hour when Queen Victoria sent forth her sappers and miners to found a second England on the shores of the Pacific.

With these words the Colonial Secretary, Sir Edward Bulwer-Lytton, dispatched the first contingent of Royal Engineers to tame the wilderness and the wild gold seekers in British Columbia. Bulwer-Lytton was alarmed not only at the "motley inundation of immigrant diggers" that were flooding the area, but also at the possibility that the Americans would attempt to annex the area north of the forty-ninth parallel now that valuable resources had been discovered there. The first priority for the Royal Engineers was to secure the British claim to the area by surveying the boundary with the United States, but they were also charged with surveying lands and roads for public purposes, suggesting a site for the capital city for the newly formed mainland colony, and reporting on the value of mineral resources. Colonel Richard Clement Moody was appointed to command the detachment. The first contingent of the Royal Engineers arrived in mid-1858. A separate detachment arrived in late 1858 with, as Sir Edward continued, a mission "not... to fight against men, but to conquer nature; not to besiege cities, but to create them." This elite body of men laid the foundations for the development of the province. They created one major city, established the location and plan of smaller but strategically important towns, and determined the transportation routes that to this day move most people around the Lower Mainland and up into the central interior of the province.

James Douglas, newly-appointed Governor of the Mainland colony of British Columbia, had chosen Derby, near the site of the original Fort Langley, as the site for the new capital, and the Royal Engineers established their first camp there. Rev. William Burton Crickmer of Oxford was assigned as the contingent's chaplain, and he arrived at Derby in February of 1859. Soon after his arrival, he wrote to the Colonial & Continental Church Society: Your missionary preached the very first regular sermon in the Colony of British Columbia... my church was a half-finished barrack, my congregation soldiers and civilians, my pulpit a Union Jack over a box, and my text Genesis 1:27, "The New Creation."

Construction began on a church, St. John the Divine, and a rectory, both built of redwood and likely designed by Crickmer himself and following the design of his old parish church in London, St. John the Divine. Town lots were offered at auction, raising considerable money for the government. Derby, however, proved to be a short-lived settlement. Only two months after the town's inauguration, Colonel Moody condemned the site on sanitary, commercial, military and political grounds. Crickmer and his family were transferred to Yale, and the church at Derby sat empty and unused until 1882, when the Anglican congregation at Maple Ridge cut it into segments, floated it across the Fraser River, and hoisted it onto a new site, where it was reconstructed at about half its original length and still survives today.



St. John's, Derby (1859), drawn by Rev. Crickmer [City of Vancouver Archives AM447: St. John the Divine Church fonds]



Sapperton, circa 1863 [BC Archives] - A: Colonel Moody's residence, B: log church.

3.2 THE ESTABLISHMENT OF NEW WESTMINSTER

Over Governor James Douglas's objections, Moody rejected Derby as the permanent site for the new capital, and suggested another site, in a strategic location on an easily defended hill on the north side of the Fraser River, which was a greater distance from the American border and had easier access to Burrard Inlet. Queen Victoria decreed the capital would be called New Westminster. The Royal Engineers prepared a town plan suitable to the ideals of British colonialism: a romantic English plan using a grid intersected by formal gardens and grand avenues delineated Imperial presence on the land and allowed for the capitalist exchange of real estate; church and state reserves established the place of religion and government in the centre of the city; and English street names, gardens, and crescents inspired by Bath and other English cities helped transplant the culture of the Mother Country. Like those of its namesake, old Westminster, the future suburbs across the river would be known as Surrey. In the spring of 1859, the Royal Engineers began clearing the land for the establishment of New Westminster.

Despite the grand plans it was soon obvious that it would be a long time before anything resembling a city could be established, and the site was derisively called the "Imperial stump-field." Upriver, and separate from the capital, the Royal Engineers established their own camp at Sapperton where they constructed barracks, an impressive house for Colonel Moody, a school, and a log church, which was described in the Victoria Gazette as being of "a most singular and clumsy appearance." New Westminster was laid out in a grand linear plan, parallel to the Fraser River. It terminated to the west at Dock Square, and to the east at Albert Crescent, patterned after the crescents at Bath and Brighton. Eight church reserves were located throughout the lower town, accommodating all denominations. The capital's main focus was to be the centrally located government and public gardens. Moody decided to place the Anglican Cathedral "as an ornamental feature" in the centre of Victoria Gardens, indicating its importance to both the City's appearance from the river as well as its central position in the new settlement's social life.

In February 1859, the British War Office decided to provide spiritual care for the troops under the command of Colonel Moody, and in September, sanctioned 100 pounds sterling for the purpose. John Sheepshanks was nominated, and arrived before quarters could be prepared; he was invited to live with the Moody family when he arrived. Reverend Sheepshanks conducted the first Anglican service in New Westminster on Sunday September 2nd, 1859 in the Customs House.

Born in 1834, Sheepshanks was educated at Christ's College, Cambridge. Ordained in 1857, he was a curate at Leeds Parish Church prior to becoming Rector of New Westminster and Chaplain to George Hills, the Bishop of Columbia. He later held incumbencies in Bilton, Yorkshire, and Anfield Liverpool before his election to the Episcopate as Bishop of Norwich in 1893, a post he held until his death in 1909. "We like our Clergyman, so far, very well, he is High Church, but very energetic and earnest and hard-working. I do not think he has taken a fancy to us for he is very quiet and reserved. He has a room in our House, but we seldom see him excepting on Sundays when our Meal times suit him better than the Mess Hours. He is very fond of Zeffie, and plays with her constantly."

The Letters of Mary S. Moody, October 11, 1859.

"Our Church is begun, and Mr. Sheepshanks living in a "Log Hut" near the Site, which I have named 'Castle Sheepshanks', however, poor man, he was nearly burnt out last night. He is going to Victoria for a holyday, and Mr. Dundas is coming up here."

The Letters of Mary S. Moody, April 16, 1860.

Sheepshanks wrote in his memoir, "Bishop in the Rough":

During the day Mr. Sheepshanks' time was well occupied. No man can be described as idle who visits, collects subscriptions and gifts, supervises a work of building, teaches a Sunday school, preaches four sermons on the seventh day with the usual offices of the Church, and walks five or six miles in the performance of that duty. The church building progressed. There was a "bee" for the clearing of the ground. A considerable number of people put in a day's work, brought shovels and pickaxes, cleared the ground of stumps, rolled away logs, and made a pathway from the road up to the church lot. But the labours in the settlement were intermitted by an order from the Bishop to go up country and visit the miners and the [Indigenous peoples].



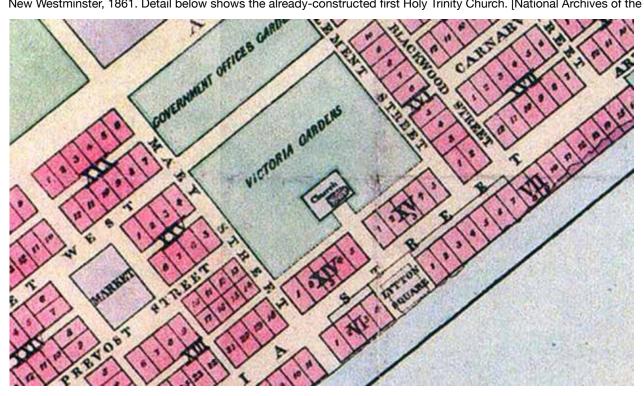
Reverend John Sheepshanks, circa 1860. Photographer: G.R. Fardon [BC Archives F-05146]



Bishop of Norwich, the Rt. Rev. John Sheepshanks, DD [NWMA IHP2530]



New Westminster, 1861. Detail below shows the already-constructed first Holy Trinity Church. [National Archives of the UK]





First Holy Trinity Church, New Westminster; church destroyed by fire in 1865. "Castle Sheepshanks" is visible in the foreground. Photographer Francis George Claudet. Date: 1860 [BC Archives A-01672]

3.3 FIRST HOLY TRINITY CHURCH, 1860

New Westminster's Holy Trinity Anglican Church, built in 1860, was designed by Captain Arthur Reid Lemprière, who arrived with the third group of Royal Engineers in April, 1859. The first of three Church buildings, it was of wood construction. On December 8, 1860, Holy Trinity was consecrated. The church was described in the *New Westminster Times:*

The edifice, which commands a lovely view of the river, mountains and surrounding scenery, is built in the early style of Gothic Architecture... The interior consists of a nave, two aisles, chancel, vestry and recess for organ. The uprights and rafters are of fir, massive pillars with Gothic arches between, a series of arches also spanning the nave and giving a rich and ecclesiastical appearance to the whole. The internal fittings are of the handsomest description. The seats, which have been presented by various individuals whose hearts warmed towards the completion of the good work, are of fir, trimmed with the famous California redwood. The lectern or bibledesk (a gift) is of fir and the Columbian Cottonwood; the poppy heads of redwood are admirably contrasted, and present an exceedingly rich and elegant appearance. The communion rails, designed by one of the Royal Engineers, are beautifully executed. The whole building reflects the highest credit both upon the taste of the committee, who approved of the plans (presented by Captain A.R. Lemprière, R.E.,) and upon the builders, Messrs. Manson and White, who have performed their part in a truly workmanlike and skillful manner.

Sheepshank's parsonage was a log hut built by two miners, close to the church and measuring 7 feet by 10 feet. Notches were cut into the logs for whiskey bottles, which originally served as windows, soon replaced by a cloth curtain on a sliding frame. Sheepshanks noted that he could "sit on my wooden bunk and open the window, shut the door, poke the fire in the stove, and get anything down from the shelf without moving."

The helpful, friendly Engineers were ordered home [in 1863], and embarked for England to the tune so hard for exiles to bear, "Home, sweet Home." The monotony of Church life was broken by what may be called the Battle of the Bells. About this time we heard in the Victoria, V. I., newspaper of a beautiful peal of bells for the Bishop's church at Victoria, given by Miss (afterwards Lady) Burdett-Coutts. And in due time the arrival of the ship with the bells was chronicled. I happened to be in Victoria at the time, and meeting my good friend Mr. Holbrook, who also chanced to be down there, we agreed to go on board the vessel and have a look at them.

Accordingly we went on board, and, the hatches being open, we looked down and saw one or two of the bells being uncovered. I climbed down into the hold and read the inscription on the tenor bell, and I remember well the shout of delight with which I called up to Mr. Holbrook, who was looking down from the deck above, to tell him that the inscription was ' for the Church of St. Stephen, New Westminster.'

There was always a good deal of rivalry and jealousy between Victoria and New Westminster, and we knew that every effort would be made by the people of Victoria to retain the bells there. With regard to this fine peal of bells, it was true that our church was not dedicated in the name of St. Stephen, yet the crucial point, we thought, was the place, and as they were inscribed 'New Westminster,' we believed and maintained that of right they were ours.

We took measures accordingly, and got up a public meeting and began a movement for the erection of a bell-tower, and memorialized the Bishop. And, in short, we showed ourselves so unanimous and insistent that we gained our point, and in a few weeks' time the bells were deposited on the bank of Frazer River. John Sheepshanks, "Bishop in the Rough."

In 1865, a 100-foot bell tower designed by architects Wright & Sanders of Victoria, was built to house the bells. The church burned to the ground that year.

3.4 SECOND HOLY TRINITY CHURCH, 1867

The first Holy Trinity was destroyed by fire in 1865. The second building was built of stone and was consecrated on December 18th, 1867. Hermann Otto Tiedemann (1821-1891) was a successful architect, surveyor and civil engineer, who emigrated from Prussia to Victoria in 1858. Noted as the designer of the Colonial Administration Buildings in Victoria (the "Birdcages"), in 1867 he secured the architectural commission for Holy Trinity Anglican Church in New Westminster. Built in the "pure Gothic" style desired by the clients, Holy Trinity was of cross-axial design with a semi-octagonal apse. The contract for its construction was awarded to Thomas Trounce, and its walls were built of sandstone imported from Salt Spring Island.

The first Bishop of the new diocese, The Right Reverend Acton Wyndeyer Sillitoe, was born in Australia in 1840 and educated in England. He married first, in 1870, Charlotte, second daughter of Thomas Sillitoe, of Buenos Aires (who died in 1878), and secondly, in 1878, Violet Emily, second daughter of Justinian Pelly, of Yoxford, Suffolk. He was educated at King's College School, London, and at Pembroke College, Cambridge, and was ordained in 1869. After holding various preferments, he was consecrated Lord Bishop of New Westminster on All Saints' Day 1879. He and Mrs. Sillitoe arrived in New Westminster on June 18th, 1880.

The boundaries of the diocese were from the forty-fifth parallel to the fifty-fourth, and from the Rocky Mountains to the Pacific Ocean, an area of 160,000 square miles. The Rev. L.N. Tucker, Rector of Christ Church, Vancouver, voiced the opinion: "No one, I am sure, could know Bishop Sillitoe intimately without being charmed by his genial and friendly manner, and without being impressed by his zeal, earnestness, and manliness. Such qualities – the gifts of the Eternal Spirit – are not likely soon to die or to be forgotten. Through them, though dead, be yet speaketh, and will speak for many years to come to all who knew him."

Holy Trinity Church became the Cathedral Church of the Diocese of New Westminster in 1892.



Right Reverend Acton Sillitoe, circa 1870 [City of Vancouver Archives CVA Port P1282]



Interior of Holy Trinity Cathedral, prior to fire of 1898. [BC Archives G-01086]

3.5 GREAT FIRE AND REBUILDING 1898-99

Holy Trinity burned during the great New Westminster fire of September 10, 1898. The wooden elements of the building were destroyed, but some of the walls, although damaged, remained standing. Of the peal, seven of the eight bells were cracked beyond repair. Burdett-Coutts refused to donate more bells, so the seven cracked bells were sent to San Francisco to be melted down to provide funds for rebuilding the Cathedral. The one original bell that remained, named "Wisdom," still hangs in the tower.



The fire-damaged bells of Holy Trinity Cathedral. [BC Archives A-03362]

The current Cathedral is a reconstruction of the previous church, the surviving walls and foundations of which were found to be sufficiently strong to be reused. Much of the masonry was still structurally sound and was retained, though a cement parging was used to conceal the scorch marks. Further, the nave was extended 13 feet and the bell tower constructed thirty feet beyond its existing height. The reconstruction was undertaken by local architect George W. Grant, who was extremely busy following the Great Fire, designing many of the structures in Downtown New Westminster that still stand. Work was completed on the rebuilding of the Cathedral in 1899 in time for services on All Saints Day. The Cathedral was consecrated on April 3rd, 1902, following the settlement of the debt incurred by the restoration work.

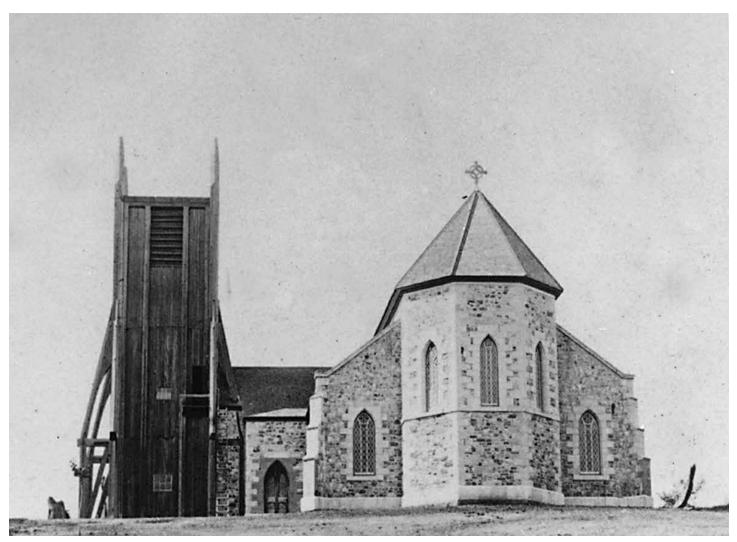
The majestic bell-tower was redesigned in 1910 by architect Frank G. Gardiner. Gardiner had a prolific architectural career, particularly with partner A.L. Mercer, who designed many buildings in downtown New Westminster. Holy Trinity Cathedral contains art glass windows by Henry Bloomfield and Sons, which installed glass in numerous buildings, including St. Paul's Anglican Church in Vancouver. The interior also boasts woodwork of native tree species. This remained as the Cathedral Church of the Diocese until 1929 when Archbishop de Pencier designated Christ Church as his Cathedral. The Parish of Holy Trinity was bitterly disappointed, and following a fight which lasted over a year and which threatened to be dragged before the Supreme Court, a settlement was reached which included the right of Holy Trinity to retain the title of Cathedral in perpetuity.

Notable surviving features of Holy Trinity Cathedral include the three stained glass windows in the apse, the work of local craftsmen, Henry Bloomfield and Sons. The left window is believed to be among the first depictions of First Nations people in stained glass. The right window was of gift of the Grand Lodge of British Columbia of which Bishop Sillitoe was Grand Chaplain. It contains symbols of the Masonic Order and represents the Holy Spirit descending upon the Apostles at Pentecost. The Bloomfield sons gave Saint Peter, the central figure, the face of their father, Henry. The central window represents Christ the King enthroned in glory. This window also contains a delightful blushing angel.

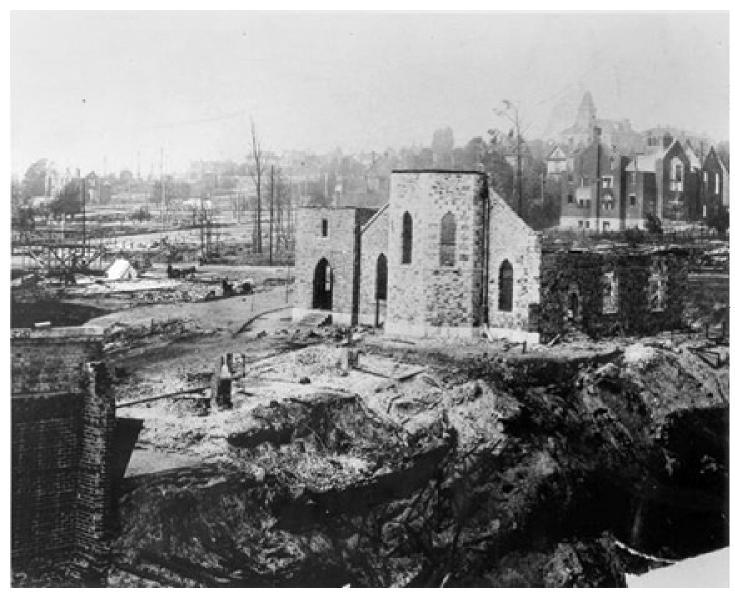
A number of historically significant artifacts grace the Cathedral. Ties to Westminster Abbey are represented by the pillared Credence Table in the sanctuary and the altar cross as well as the banner on the front of the pulpit. The brass lectern was a gift of the first Governor of the Colony, Sir James Douglas in 1875. This and other items were saved from the burning former building by the Rector of the day, the Reverend Shildrick.



Cement parging on exterior of church, 1900 [NWMA IHP0009]



The second Holy Trinity Church and Bell-Tower, 186- [BC Archives C-03820]

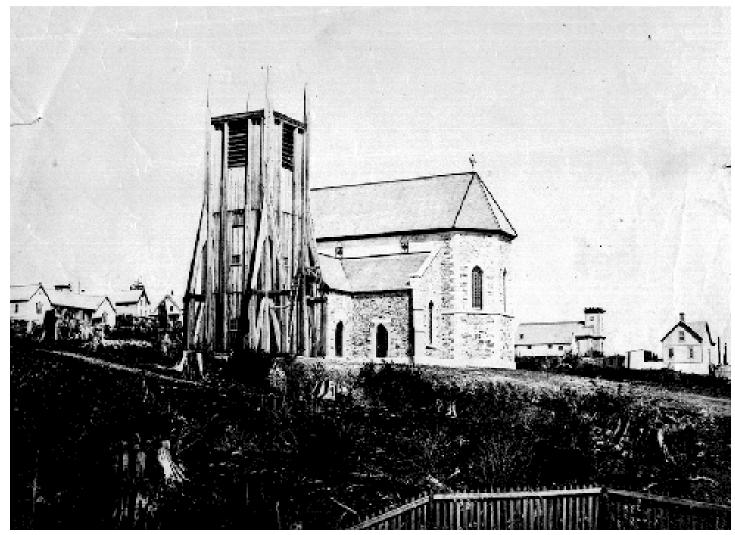


Fire-damaged Holy Trinity Cathedral, 1898 [NWPL 576]



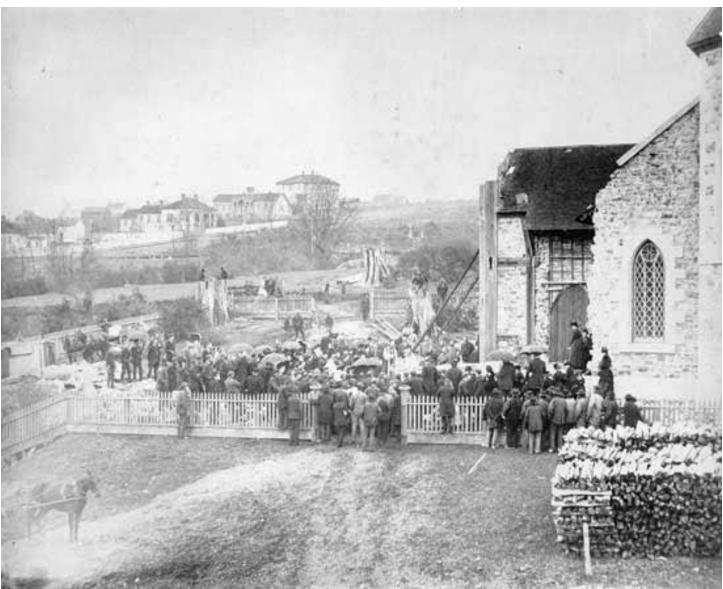
Interior of rebuilt Holy Trinity Cathedral [BC Archives D-07839]

3.6 HISTORY OF THE TOWER



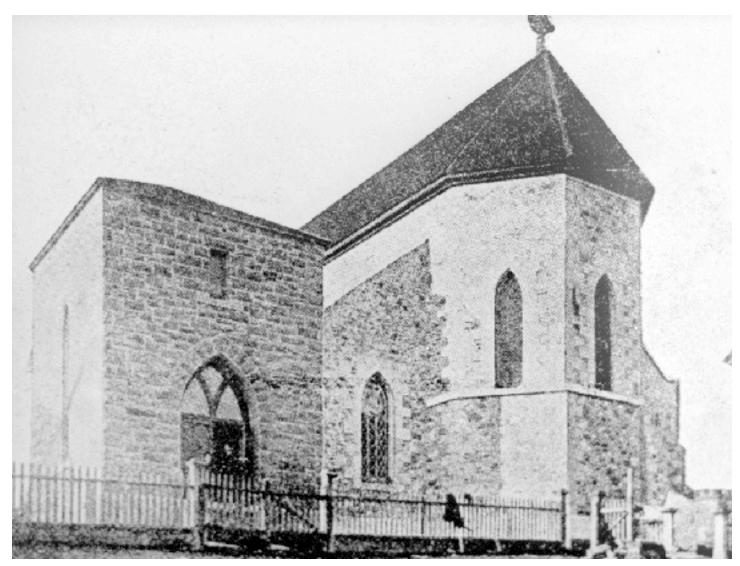
Second Holy Trinity Cathedral (First built in stone), with 1865 wood tower, 186- [BC Archives A-01593]

June 12th, 1867, the contract to erect a new stone church was let to Mr. Thomas Trounce of Victoria... On October 16th, 1867, the cornerstone was laid by Governor Seymour... Lack of funds prevented the completion of the tower... The tower itself had been raised all too hastily and none too well... In 1880, it was decided that the old tower could be left standing no longer, but though it had appears so decrepit, it turned defiant at the last and proved far more sturdy than they thought. It was with some difficulty, even with three teams of horses, that it was pulled down.



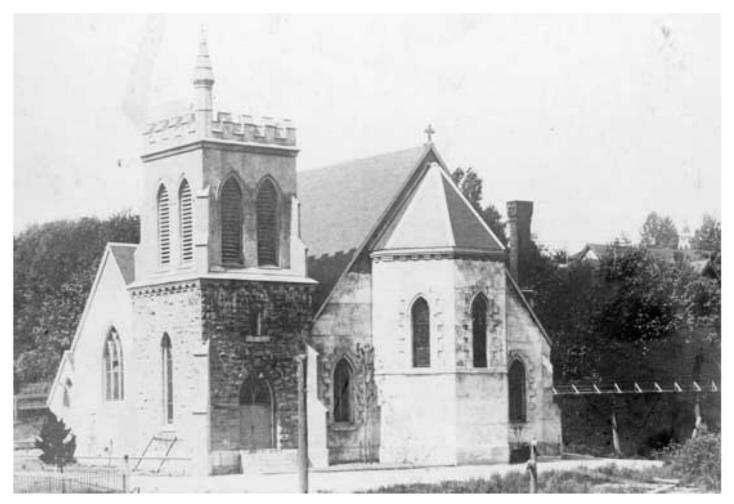
Laying of the new tower cornerstone, April 1886 [NWMA IHP0647]

It was not until April 10th, 1886, that the cornerstone of the new tower was laid... But the tower, begun with such high hopes, was never sufficiently completed for the bells to be hung.



Holy Trinity Cathedral [BC Archives B-05504]

Then came the disastrous fire of '98. For the second time, the Church of Holy Trinity was in ruins and this time the bells which had been stored in a shed nearby, were lost.



Rebuilt Church, view from Clarkson Street, 1900 [NWMA IHP0327]

3.7 HISTORY OF INTERIOR



Interior of Holy Trinity Cathedral, 1867 [NWPL 1654]





Interior of Holy Trinity Cathedral, February 2, 1901 [NWPL 1657]

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Interior of Holy Trinity Cathedral, 1951 [NWPL 1653]



Interior of Holy Trinity Cathedral, 195- [BC Archives D-07839]



Interior of Holy Trinity Cathedral, 1959 [NWPL 1656]

3.7.1 HISTORIC FURNISHINGS

The Holy Trinity Cathedral features a large collection of significant interior furnishings that are of historical value to the Church. These historic furnishings will be removed, stored, restored and reinstated following rehabilitation work.

The following descriptions are sourced from *The Memories of* a Cathedral – A Century of Christian Activity 1859-1959.

WINDOWS



The three windows in the Sanctuary are worthy of close inspection for they contain a wealth of interesting detail. The North Window designed to remind us of God, the Father, represents the Baptism of Jesus when the voice of the Father was heard saying, "This is my beloved Son, in whom I am well pleased."

The Central Window depicts God the Son, enthroned in glory. This window contains a delightful blushing angel and the symbols of the four Evangelists. Both these windows were given by friends and parishioners in memory of Bishop Sillitoe. The third window is a gift of the Masons of British Columbia and is also a memorial to Bishop Sillitoe who was at one time, their Grand Champlain. It contains many symbols of the Order and represents God the Holy Spirit by depicting the descent of the Holy Spirit upon the Disciples at Pentecost. One of the most interesting facts about these windows is that they were made in British Columbia at the turn of the Century, by the firm of Henry Bloomfield and Sons, which was established in New Westminster until the great fire of '98, after which it was moved to Vancouver. The windows were designed by one of the sons, James, who at that time, was in Manchester, England. He sent out the designs, and the glass was made and assembled by another son, Charles, a boy still in his teens. A touching and unique feature of the Masonic Window is that the boys gave to the Central figure, St. Peter, the face of their father, Henry.

THE ALTAR AND REREDOS

The Sanctuary, as well as the East Windows of Holy Trinity, form a memorial to Bishop Sillitoe. The Altar and Reredos were designed by Canon Beanlands of Victoria. Across the top of the carved reredos are eight heraldic shields, which are relative to Bishop Sillitoe's life. Facing the Altar from left to right they are 1. The Coat of Arms of St. John Baptist Church, Coventry, where Bishop Sillitoe was consecrated Bishop; 2. The Coat of Arms of York Minster; 3. The Coat of Arms for Lichfield Cathedral where the Bishop was ordained both deacon and priest; 4. The Coat of Arms of Canterbury Cathedral; 5. The Coat of Arms of the Diocese of British Columbia; 6. The Coat of Arms of the Sillitoes; 8. The Coat of Arms of Mrs. Sillitoe's family, the Pellys, of Upton, Essex, Baronets.

THE FRONTALS AND EUCHARIST VESTMENTS

The Frontals and Eucharist Vestments of Holy Trinity are magnificent. These priceless ornaments were made and embroidered by the Sisters of the Community of All Hallows', Ditchinham, Norfolk.

THE ALTAR CROSS

The Altar Cross was presented to Bishop Sillitoe by the Dean of Westminster Abbey, the Very Rev. Arthur Penrhyn Stanley,



known to the world as "Little Arthur" in "Tom Brown's School Days," "As a mark of sympathy between the old and new cities." Old Westminster and New Westminster. The base of the Cross is of oak fashioned from a rafter of the Abbey of the time of Henry V.

THE BISHOP'S THRONE AND CHAIR

Holy Trinity has both a Bishop's Throne and a Bishop's Chair in the Sanctuary. The former, lofty and simple in design, is the original Bishop's Throne for the Diocese of New Westminster. It



is of oak, upholstered in Purple Velvet in contrast to the Sedilia, opposite, which is upholstered in crimson. The beautifully carved Bishop's Chair stands beside the Throne and is made of walnut. It is a memorial to William Angust Bartlett Stokes, R.C.A.F., killed in action June 11th, 1943, aged 24.

THE ALTAR LIGHTS

The beautiful Candlesticks on the Altar were carved at Oberamnergau by the Passion Players, legend attributing requisite work to principal character Anton Lang. They were the





gift of the Victorian philanthropist, Arthur Evans, Esq., of London, England, in 1896.

THE CREDENCE

The Credence in Holy Trinity is most unique. The four pedestals once supported the marble mensa of the Altar in the Chapel of Henry VII, Westminster Abbey. They are of cedarwood, richly wrought with Renaissance foliage and covered with gold leaf.

THE DOUGLAS LECTERN

The handsome brass Lectern, known as the Douglas lectern, was presented to Holy Trinity by Sir James Douglas, K.C.B., first Governor of the Colony in 1875.

THE FONT AND EWER

The Font is of sandstone and was presented by the Whatsoever Society of Holy Trinity Parish, a parochial organization long extinct, but in its day was very active in raising funds for the church. The Font cover was bequeathed to the Cathedral by Mr. John P. Voss on Easter Day, April 4th, 1926. The magnificent brass Ewer was a gift from St. Agatha's Guild of St. James Church, Vancouver, in memory of Bishop Sillitoe.

THE REGIMENTAL COLORS

The colors of the Westminster Regiment hand in the Chancel. They were deposited by the Commanding Officer, Lt.-Col. G. B. Corbould, on Saturday, October 26th, 1929. Holy Trinity, from the days of the Royal Engineers has always been considered by the Regiment as its Garrison Church. Over the 100 years the closest ties between the two have been formed. As were many of his predecessors, the present Rector is Chaplain of the Regiment. On the other hand, many of the officers and men have taken a very active part in the affairs of the Parish.

THE COMMUNION SETS

The two Communion Services in possession of Holy Trinity are very fine. The first, consisting of jewelled chalice of silver gilt, flagon and paten was the gift of the parishioners of Coatham, Yorkshire, in 1886. The less elaborate set, consisting of jewelled chalice and paten was presented by the Rev. Herbert Bering.



4. STATEMENT OF SIGNIFICANCE

Description Of Historic Place

Holy Trinity Cathedral is a stone and brick Gothic Revival church with a front gabled roof and a brick and stone tower. The building is located in a commanding position on Carnarvon Street at Church Street, near New Westminster's historic downtown core.

Heritage Value Of Historic Place

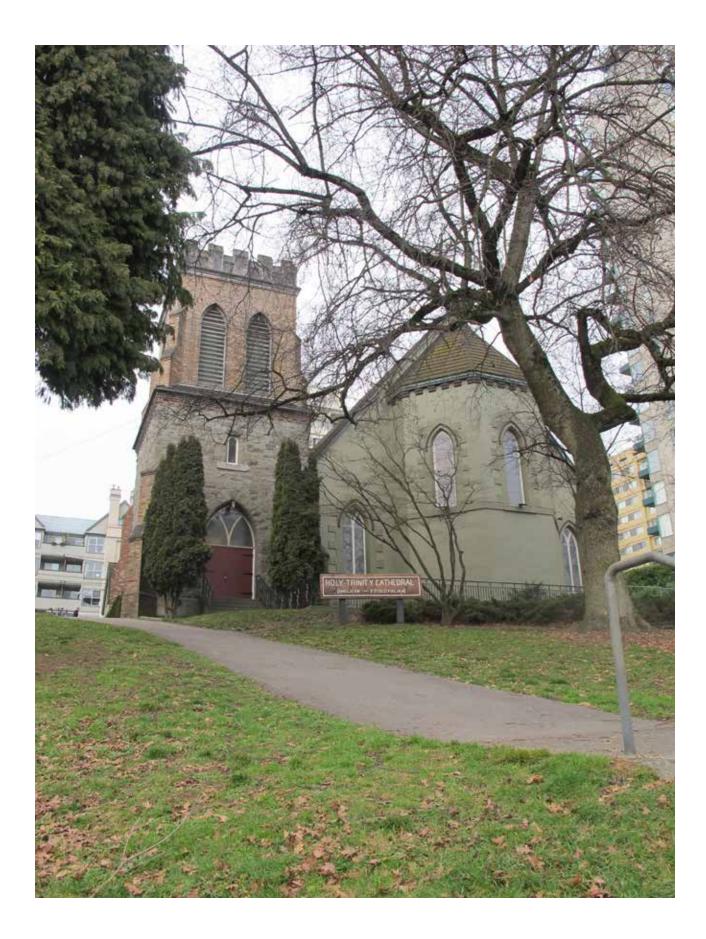
Holy Trinity Cathedral is valued for its association with the earliest settlement of New Westminster. The first Anglican service in New Westminster was held in 1859, reflecting the British origins of the Royal Engineers who founded the city. Colonel R.C. Moody of the Royal Engineers designed the original layout of the city to include this church site as a prominent central feature, demonstrating loyalty to the primary faith of the Mother Country. The first Holy Trinity Anglican church, built by the Royal Engineers in 1860, was destroyed by fire in 1865. A second church, designed by Victoria architect H.O. Tiedemann and built from imported Salt Spring Island sandstone, was erected in 1867-68. In 1892, Holy Trinity became the Cathedral Church of the Diocese of New Westminster. The disastrous 1898 fire, which wiped out the greater part of downtown New Westminster, destroyed the second Holy Trinity, but the thick stone walls survived. Between 1899 and 1902 the cathedral was rebuilt using the original walls of the earlier building.

Additionally, Holy Trinity Cathedral is of architectural significance for its Gothic Revival style, and for its interior and exterior design. The reconstruction of the church was designed by George William Grant (1852-1925), a prolific architect who designed many of the buildings in downtown New Westminster, before and after the Great Fire. The interior of Holy Trinity Cathedral was based on the design of St. Paul's Church, Kensington, London, and remains in substantially original condition. The vaulted space is illuminated by art glass windows executed by Henry Bloomfield and Sons, a prominent firm established in New Westminster in 1890.

Character-Defining Elements

Key elements that define the heritage character of the Holy Trinity Cathedral include its:

- continuous use as a church site since the earliest development of the city;
- location on Carnarvon Street, part of a grouping of late Victorian and Edwardian era buildings in historic downtown New Westminster;
- ecclesiastical form, scale and massing as expressed by its irregular picturesque shape, steeply-pitched rooflines, and offset buttressed tower with a crenellated roof-line
- gabled roof with minimal overhangs and gabled roof on the western projection;
- elements of the Gothic Revival style, such as the massive masonry construction, asymmetrical bell tower and Gothic pointed-arch windows; and
- interior features such as the original vaulted ceilings, art glass windows, dark-stained woodwork, altar and reredos.



5. CONSERVATION GUIDELINES

5.1 STANDARDS AND GUIDELINES

The Holy Trinity Cathedral is a listed building on the New Westminster municipal Heritage Register, and is a significant historical resource in the City of New Westminster. The Parks Canada *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010) is the source used to assess the appropriate level of conservation and intervention. Under the Guidelines, the work proposed for the Holy Trinity Cathedral includes aspects of preservation, rehabilitation and restoration.

PRESERVATION: the action or process of protecting, maintaining, and/or stabilizing the existing materials, form, and integrity of a 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 at 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 a historic place or an individual component, through repair, alterations, and/or additions, while protecting its heritage value.

Interventions to the Holy Trinity Cathedral should be based upon the Standards outlined in the *Standards and Guidelines*, which are conservation principles of best practice. The following **General Standards** should be followed when carrying out any work to an historic property.

STANDARDS

Standards relating to all Conservation Projects

- 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 characterdefining element.
- Conserve changes to a historic place, which over time, have become character-defining elements in their own right.
- 3. Conserve heritage value by adopting an approach calling for minimal intervention.
- 4. Recognize each historic place as a physical record of its time, place and use. Do not create a false sense of historical development by adding elements from other historic places or other properties or by combining features of the same property that never coexisted.
- 5. Find a use for a historic place that requires minimal or no change to its character defining elements.
- 6. 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.

 Evaluate the existing condition of character-defining element to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect heritage value when undertaking an intervention.

8. Maintain character-defining elements on an ongoing basis. Repair character-defining element 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.

9. Make any intervention needed to preserve characterdefining elements physically and visually compatible with the historic place and identifiable upon close inspection. Document any intervention for future reference.

Additional Standards relating to Rehabilitation

- 10. 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.
- 11. 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.
- 12. 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.

Additional Standards relating to Restoration

- 13. 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.
- 14. 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.

5.2 CONSERVATION REFERENCES

The proposed conservation of Holy Trinity Cathedral involves overall preservation, with rehabilitation interventions to facilitate seismic upgrading, including interior and exterior rehabilitation measures. This rehabilitation will allow Holy Trinity Parish to remain active on the site that it has occupied since 1860. The following conservation resources should be referred to:

Standards and Guidelines for the Conservation of Historic Places in Canada, Parks Canada, 2010.

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

National Park Service, Technical Preservation Services. Preservation Briefs:

Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings.

http://www.nps.gov/tps/how-to-preserve/briefs/1-cleaningwater-repellent.htm

Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings.

http://www.nps.gov/tps/how-to-preserve/briefs/2-repointmortar-joints.htm

Preservation Brief 3: Improving Energy Efficiency in Historic Buildings.

http://www.nps.gov/tps/how-to-preserve/briefs/3-improveenergy-efficiency.htm

Preservation Brief 4: Roofing for Historic Buildings.

http://www.nps.gov/tps/how-to-preserve/briefs/4-roofing.htm

Preservation Brief 9: The Repair of Historic Wooden Windows.

http://www.nps.gov/tps/how-to-preserve/briefs/9-woodenwindows.htm

Preservation Brief 10: Exterior Paint Problems on Historic Woodwork.

http://www.nps.gov/tps/how-to-preserve/briefs/10-paint-problems.htm

Preservation Brief 16: The Use of Substitute Materials on Historic Buildings.

http://www.nps.gov/tps/how-to-preserve/briefs/16-substitute-materials.htm

Preservation Brief 21: Repairing Historic Flat Plaster – Walls and Ceilings.

http://www.nps.gov/tps/how-to-preserve/briefs/21-flat-plaster. htm

Preservation Brief 28: Painting Historic Interiors.

http://www.nps.gov/tps/how-to-preserve/briefs/28-paintinginteriors.htm

Preservation Brief 33: The Preservation and Repair of Historic Stained and Leaded Glass.

http://www.nps.gov/tps/how-to-preserve/briefs/33-stained-leaded-glass.htm

Preservation Brief 41: The Seismic Retrofit of Historic Buildings: Keeping Preservation in the Forefront.

http://www.nps.gov/tps/how-to-preserve/briefs/41-seismicretrofit.htm

5.3 GENERAL CONSERVATION STRATEGY

The primary intent is to preserve the existing historic structure, while undertaking a rehabilitation that will upgrade its structure and services to increase its functionality. As part of the scope of work, character-defining elements will be preserved, while missing or deteriorated elements will be restored.

The major proposed interventions of the overall project are to:

- preserve the original character-defining elements of the church,
- restore character-defining elements that have been altered over the years,
- seismically upgrade the structure as required, and
- rehabilitate windows and doors, as required.

The rehabilitation of the church is part of a larger proposed redevelopment plan of the site, which includes demolishing the existing adjacent Parish Hall and constructing a new residential tower with a new amenity structure that directly connects to the historic church.

Structural Upgrades:

The church has been structurally assessed, and will require significant intervention to ensure its longevity and stability through seismic upgrading. All structural rehabilitation work should be sensitive to the historic structure, and will respect character-defining elements.

EAST ELEVATION		
MAIN STRUCTURE		
Stonework	Currently parged in cement stucco	
Windows		
1.	Pointed arch clerestory window above door	
2.	Southernmost window, pointed arch	
3.	Centre window, pointed arch	
4.	Northernmost window, pointed arch	
Eave Brackets	Brackets course along roofline	
Entryway	Projecting front-gabled side entryway portico	
Stone Buttresses	Currently parged with cement stucco	
Window Hoods	Hoods above windows	
TOWER		
Stonework	Original stonework (Currently parged in cement stucco)	
Crenellated Parapet		
Wood Louvres	Two pointed arch wood louvres (Currently have metal mesh covering)	
Brickwork	Exposed brickwork	
Anchor Ties	Circular cast-iron anchor ties	

NORTH ELEVATION		
MAIN STRUCTURE		
Stonework	Currently parged in cement stucco	
Windows		
1.	Large pointed arch window	
Louvre	Single wood louvre within gable-end	
Buttresses	Parged	
Granite Base		
Window Hood	Hood above window	
TOWER		
Stonework	Original stonework (Currently parged above roofline in cement stucco)	
Crenellated Parapet		
Wood Louvres	Two pointed arch wood louvres (Currently have metal mesh covering)	
Brickwork	Exposed brickwork	
Anchor Ties	Circular cast-iron anchor ties	

SOUTH ELEVATION MAIN STRUCTURE		
Windows		
1.	Westernmost window, pointed arch	
2.	Easternmost window, pointed arch	
3.	Westernmost window in bay, pointed arch	
4.	Centre window in bay, pointed arch	
5.	Easternmost window in bay, pointed arch	
Quoining around windows	Quoining around all windows, parged in cement stucco	
Continuous Sill	Within bay	
Eave Brackets	Located along roofline, within bay	
Window Hoods	Hoods above windows	
TOWER		
Stonework	Original stonework, exposed	
Granite Base		
Granite Sills		
Windows		
1.	Clerestory pointed arch window within doorway assembly	
2.	Pointed arch (Currently has exterior lexar covering)	
Brickwork	Exposed brickwork on upper storey with detailed brickwork cornice above stone walls	
Brick Buttresses	Corner buttresses	
Crenellated Parapet		
Wood Louvres	Two pointed arch wood louvres (Currently have metal mesh covering)	
Anchor Ties	Circular cast-iron anchor ties	

Elements that are NOT included in the Heritage List:

- Copper Gutters (main structure): Within bay
- Copper Flashing (main structure)
- Cross (main structure): Cross on gable-end peak
- Door (tower): Double wood panelled door, ironwork

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	WEST ELEVATION		
MAIN STRUCTURE			
Stonework	Currently parged in cement stucco		
Windows			
1.	Large pointed arch window within front-gabled side extension		
2.	Pointed arch window above entry door		
3.	Window south of entry door		
4.	Window within north facing elevation of side extension, pointed arch		
Eave Brackets	Located along roofline		
Entryway	Projecting front-gabled side entryway portico		
Window Hoods	Hoods above windows		
TOWER			
Stonework	Original stonework, exposed		
Granite Base			
Granite Sills			
Windows			
1.	Second storey small window, rounded arch		
Brickwork	Exposed brickwork on upper storey		
Brick Buttresses	Corner buttresses		
Crenellated Parapet			
Wood Louvres	Two pointed arch wood louvres (Currently have metal mesh coverings)		
Anchor Ties	Circular cast-iron anchor ties		

- Elements that are NOT included in the Heritage List:Door (main structure): Double wood panelled entry door
- Copper Gutters (main structure): Within bay •

5.4 SUSTAINABILITY STRATEGY

Sustainability is most commonly defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Common Future. The Bruntland Commission). The four-pillar model of sustainability identifies four interlinked dimensions: environmental, economic, social and cultural sustainability, the latter including the built heritage environment.

Current research links sustainability considerations with the conservation of our built and natural environments. A competitive, sustainable economy requires the conservation of heritage buildings as an important component of a high quality urban environment.

"We need to use our cities, our cultural resources, and our memories in such a way that they are available for future generations to use as well. Historic preservation makes cities viable, makes cities liveable, makes cities equitable." (Economic Benefits of Preservation, Sustainability and Historic Preservation)

Heritage conservation and sustainable development can go hand in hand with the mutual effort of all stakeholders. In a practical context, the conservation and re-use of historic structures contributes to environmental sustainability by:

- Reducing solid waste disposal (reduced impact on landfills and their expansions);
- Saving embodied energy (defined as the total expenditure of energy involved in the creation of the building and its constituent materials);
- Conserving historic materials that are significantly less consumptive of energy than many new replacement materials (often local and regional materials, e.g. timber, brick, concrete, plaster, can be preserved and reduce the carbon footprint of manufacturing and transporting new materials).

The following considerations for energy efficiency in historic structures are recommended in the Parks Canada *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010) and can be utilized for the Holy Trinity Cathedral.

Sustainability Considerations

- Add new features to meet sustainability requirements in a manner that respects the exterior form and minimizes impact on character-defining elements.
- Work with sustainability and conservation specialists to determine the most appropriate solution to sustainability requirements with the least impact on the characterdefining elements and overall heritage value of the historic building.
- Comply with energy efficiency objectives in a manner that minimizes impact on the character-defining elements and overall heritage value of the historic building.

Energy Efficiency Considerations

- Identifying the historic place's heritage value and character-defining elements materials, forms, location, spatial configurations, uses and cultural associations or meanings.
- Complying with energy efficiency objectives in such a manner that character-defining elements are conserved and the heritage value maintained.
- Working with energy efficiency and conservation specialists to determine the most appropriate solution to energy conservation problems that will have the least impact on character-defining elements and the overall heritage value.
- Weighing the total environmental cost of energy saving measures against the overall environmental costs of retaining the existing features or fabric, when deciding whether to proceed with energy saving measures.

Buildings: Insulation

- Exercising caution and foreseeing the potential effects of insulating the building on the envelope system so as to avoid damaging changes such as displacing the dew point and creating thermal bridges.
- Installing thermal insulation in attics and in unheated cellars, if applicable, and crawl spaces to increase the efficiency of the existing mechanical systems unless this could adversely affect the building envelope.
- Installing insulating material on the inside of masonry and wood-frame walls to increase energy efficiency where there is no character-defining interior moulding around the windows or other character-defining interior architectural detailing.

Buildings: Windows

- Utilizing the inherent energy conserving features of a building by maintaining character-defining windows and/or louvered blinds in good operating condition for natural ventilation.
- Improving thermal efficiency with weather-stripping and storm windows.
- Installing exterior storm windows that do not damage or obscure character-defining windows and frames.

Buildings: Mechanical Systems

• Improving the energy efficiency of existing mechanical systems by installing insulation in attics and basements, unless this could adversely affect the building envelope.

The conservation recommendations for the Holy Trinity Cathedral recognize the need for sustainable interventions and adhere to the *Standards and Guidelines* as outlined.

5.5 HERITAGE EQUIVALENCIES AND EXEMPTIONS

As a Municipal Heritage Register-listed site, the Holy Trinity Cathedral will eligible for heritage variances that will enable a higher degree of heritage conservation and retention of original material, including considerations available under the following legislation.

5.5.1 BRITISH COLUMBIA BUILDING CODE

Building Code upgrading ensures life safety and long-term protection for historic resources. It is important to consider heritage buildings on a case-by-case basis, as the blanket application of Code requirements do not recognize the individual requirements and inherent strengths of each building. Over the past few years, a number of equivalencies have been developed and adopted in the British Columbia Building Code that enable more sensitive and appropriate heritage building upgrades. For example, the use of sprinklers in a heritage structure helps to satisfy fire separation and exiting requirements. Table A-1.1.1.1, found in Appendix A of the Code, outlines the "Alternative Compliance Methods for Heritage Buildings."

Given that Code compliance is such a significant factor in the conservation of heritage buildings, the most important consideration is to provide viable economic methods of achieving building upgrades. In addition to the equivalencies offered under the current Code, the City can also accept the report of a Building Code Engineer as to acceptable levels of code performance.

5.5.2 ENERGY EFFICIENCY ACT

The provincial Energy Efficiency Act (Energy Efficiency Standards Regulation) was amended in 2009 to exempt buildings protected through heritage designation or listed on a community heritage register from compliance with the regulations. Energy Efficiency standards therefore do not apply to windows, glazing products, door slabs or products installed in heritage buildings. This means that exemptions can be allowed to energy upgrading measures that would destroy heritage character-defining elements such as original windows and doors.

These provisions do not preclude that heritage buildings must be made more energy efficient, but they do allow a more sensitive approach of alternate compliance to individual situations and a higher degree of retained integrity. Increased energy performance can be provided through non-intrusive methods of alternate compliance, such as improved insulation and mechanical systems. Please refer to the *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010) for further detail about "Energy Efficiency Considerations."

6. CONSERVATION RECOMMENDATIONS - EXTERIOR

A number of condition reviews of Holy Trinity Cathedral have been carried out during site visits commencing in January, 2014. The recommendations for conservation are based on the site reviews and archival documentation that provide valuable information about the original appearance and evolution of the historic building. The following chapter describes the materials, physical condition and recommended conservation strategies for the Holy Trinity Cathedral, based on Parks Canada's *Standard and Guidelines for the Conservation of Historic Places in Canada* (2010).



Exterior of the Holy Trinity Cathedral from Carnarvon Street.

6.1 SITE

Holy Trinity Cathedral remains in its original location. The church sits in a prominent central location, on a sloping site between Clarkson and Carnarvon Streets, near the Columbia Skytrain Station. The grading originally was less steep, as demonstrated in archival photographs. The current steep grading to the south of the church provides difficult access to the main entryway, as approached from Clarkson Street. As a result, the doorway through the tower is no longer used as a main entryway. Currently, the south, east and north elevations consist of soil in direct contact with the exterior walls and foundation.

The site will be preserved and fully rehabilitated as part of the proposed redevelopment scheme. The church will be stabilized, and the re-graded plaza surrounding the church will be accessed by a staircase and elevator from Clarkson Street. As a result of the redevelopment scheme, existing vegetation will be removed.

Conservation Strategy: Preservation

- Preserve the original location of the building. All rehabilitation work should occur within the property lines.
- Drainage issues should be addressed through the provision of adequate site drainage measures.
- Rehabilitate site to meet functional and access requirements.

6.2 OVERALL FORM, SCALE AND MASSING

Holy Trinity Cathedral features an ecclesiastical form, scale and massing as expressed by its irregular picturesque shape, steeply-pitched rooflines, and offset buttressed tower with a crenellated roof-line The form, scale and massing of the church is a character-defining element of the historic structure, and should be preserved. The church lost much of its overall material following the fire of 1898, however the front and some side walls were retained due to the fire resistant nature of the heavy sandstone walls in the tower and front elevation of the church. The full form of the original church was re-built following the fire, with the addition of a 13 foot extension towards Carnarvon Street. The church in its existing form, which is original to the 1898-99 rebuilt Cathedral, should be retained during rehabilitation work. Any additions or alterations of the form, scale and massing should be reviewed by the Heritage Consultant.

Conservation Strategy: Preservation

• Preserve the overall form, scale and massing of the building.

6.3 EXTERIOR WALLS

Some of the original sandstone walls were destroyed in the fire of 1898, with the exception of the tower base and some walls on the front and side elevations. Currently, the stone walls of the church are rendered in cement parging, and only the stonework on the tower is exposed. The parging was installed following the reconstruction of the church, due to the scorch marks from the fire on the original exterior walls. The exterior parging continues on all exterior elevations of the church, and features a large raked block pattern. The window quoining and exterior buttresses are also parged in stucco. The parging appears to be in sound condition on most exterior walls, with minimal cracking or damage visible. A number of locations also demonstrate heavy organic build-up, particularly the north and east elevations.

Further investigation is required into the condition of the cement parging and the structural stone and brickwork underneath. The cement parging should be reviewed and repaired and prepared for repainting.

Conservation Strategy: Preservation and Rehabilitation

- Undertake complete condition survey of all exterior surfaces.
- Investigate the condition of the parging, Heritage Consultant to review any test results.
- Ensure substrate materials are protected during rehabilitation work, and repair parging as required.
- Brick and stonework may require repointing. Cleaning, repair and repointing specifications to be reviewed by Heritage Consultant. When cleaning, use a soft natural bristle brush and mild water rinse. Only approved chemical restoration cleaners may be used. Sandblasting or any other abrasive cleaning method of any kind is not permitted, due to the delicate nature of the sandstone.

• Repoint the exposed stonework by raking out loose mortar material to a uniform depth. Take care that the brittle sandstone is not damaged. Work should only be undertaken by skilled masons. Do not use power tools to cut or grind joints; hand-held grinders may be used for the initial raking of horizontal joints after test samples have been undertaken and only if approved by the Heritage Consultant. Repoint mortar joints with new mortar that matches existing in consistency, composition, strength, colour and pointing profile; note the finely tooled profile of the original mortar joints.



Cracking cement parging on buttress.



Exterior cement parging.

6.4 TOWER

The original wooden tower of the earlier structure was pulled down in 1880, and rebuilt in stone construction. The stonework on the tower survived the 1898 fire. The stone and brickwork on the tower appear to be in fair-to-good condition, with minor evidence of staining or organic build-up on the brickwork. The fenestration openings within the tower are original, and new stained glass windows and wooden door were installed following the fire of 1898. The tower with its stone base and decorative brickwork between the stone base and brick upper storey and crenellated roofline is a character-defining element of the historic place, and should be preserved.

6.4.1 TOWER BRICKWORK

The church features exposed brickwork on the uppermost storey of the tower, and on the tower buttresses. The bricks are high-fire bricks, varying from dark red to light buff, and are laid in a varied bond pattern. A decorative brick cornice sits atop the stone second storey, and features an exposed brick fascia, dentil course, corbelling and a decorative row of bricks on the diagonal.

The brick appears to be in fair condition, with evidence of staining and organic build-up. The mortar joints appear to be in poor condition, with holes and cracking on most elevations. An initial visual review suggests the brickwork will require moderate cleaning, and may require repointing. Further investigation is required to determine the full condition of all exterior brickwork on the tower.

Conservation Strategy: Preservation and Rehabilitation

- Preserve the brickwork whenever possible, and replace in kind brickwork that is too deteriorated for safe use.
- Undertake complete condition survey of all brick surfaces.
- Cleaning, repair and repointing specifications to be reviewed by Heritage Consultant.
- All redundant metal inserts and services mounted on the exterior walls should be removed or reconfigured.
- Any holes in the brick should be filled or replaced to match existing.

- Overall cleaning of the brick on the exterior front façade and rear elevation should be carried out. Use a soft natural bristle brush and mild water rinse. Only approved chemical restoration cleaners may be used. Sandblasting or any other abrasive cleaning method of any kind is not permitted.
- Repoint the brickwork by raking out loose mortar material to a uniform depth. Take care that the arrises of the brick are not damaged. Work should only be undertaken by skilled masons. Do not use power tools to cut or grind joints; hand-held grinders may be used for the initial raking of horizontal joints after test samples have been undertaken and only if approved by the Heritage Consultant. Repoint mortar joints with new mortar that matches existing in consistency, composition, strength, colour and pointing profile; note the finely tooled profile of the original mortar joints.
- Retain sound exterior masonry or deteriorated exterior masonry that can be repaired.



Brickwork on tower.

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6.4.2 TOWER STONEWORK

The cathedral features original sandstone walls that survived the fire in 1898. The imported Saltspring Island sandstone is a character-defining element of the historic church, and should be preserved. The stone appears to be in good condition, but the mortar joints should be inspected to determine their condition. The mortar appears to be a new intervention, and does not match the historic original tuck pointed mortar joints that are visible on the narrow north wall of the tower, between the buttress and the west elevation of the church. If possible, the original mortar joint profile should be reinstated on the remaining elevations of the tower.

Conservation Strategy: Preservation and Rehabilitation

- Preserve the stone tower walls whenever possible, and replace in kind stonework that is too deteriorated for safe use.
- Undertake complete condition survey of all stone surfaces.
- Cleaning, repair and repointing specifications to be reviewed by Heritage Consultant.
- All redundant metal inserts and services mounted on the exterior walls should be removed or reconfigured.
- Any holes in the stone should be filled or replaced to match existing.
- Overall cleaning of the sandstone on the exterior tower walls should be carried out. Use a soft natural bristle brush and mild water rinse. Only approved chemical restoration cleaners may be used. Sandblasting or any other abrasive cleaning method of any kind is not permitted.



Early pointing.

If required, repoint the stonework by raking out loose mortar material to a uniform depth. Work should only be undertaken by skilled masons. Do not use power tools to cut or grind joints; hand-held grinders may be used for the initial raking of joints after test samples have been undertaken and only if approved by the Heritage Consultant. Repoint mortar joints with new mortar that matches existing in consistency, composition, strength, colour and pointing profile; note the finely tooled profile of the original mortar joints. The new mortar should match the original tuck pointed mortar joints, which are visible on the narrow north wall of the tower, between the buttress and the west elevation of the church.



Tower base.

6.4.3 PARAPET CAP FLASHING

Once access is available, the parapet cap flashing over the crenellated tower walls should be investigated. New flashing will be required, to ensure the prolonged protection of the masonry walls. If new flashing is required, the colour and material should be reviewed by Heritage Consultant.

Conservation Strategy: Investigate + Rehabilitation

- Evaluate the overall condition of the parapet cap flashing to determine whether more than protection, maintenance and limited repair or replacement in kind is required.
- Remove corrosion that may be discovered upon close inspection, patch and repair, caulk joints as required.
- Repair or replace deteriorated flashing, as required. Repairs should be physically and visually compatible.
- If new flashings are installed, ensure that the colour is compatible with the overall colour scheme. Heritage Consultant should review, as part of the overall restoration colour scheme.

6.5 FENESTRATION

Windows and doors are among the most conspicuous feature of any building. In addition to their function — providing light, views, fresh air and access to the building — their arrangement and design is fundamental to the building's appearance and heritage value. Each element of fenestration is, in itself, a complex assembly whose function and operation must be considered as part of its conservation. — Standards and Guidelines for the Conservation of Historic Places in Canada (2010).

6.5.1 WINDOWS

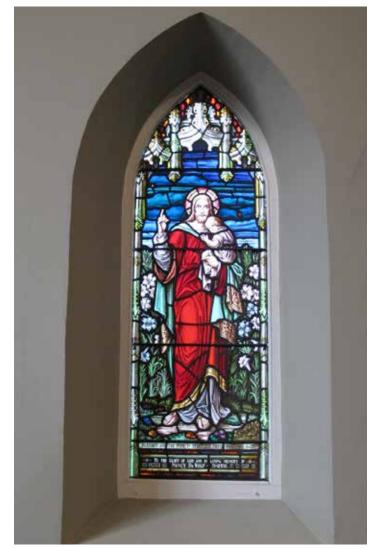
Holy Trinity Cathedral features many character-defining windows that should be preserved. An initial visual ground review suggest the windows appear to be in fair to good condition, with evidence of some damage to the window lites and sashes. The windows of the Holy Trinity Cathedral feature distinct symbols significant to the church's history. There are three unique types of stained glass windows, each with varying levels of detail and manufactured by different sources.

The three windows within the church's apse are symbolic. Henry Bloomfield and Sons made windows at the turn of the Century. James Bloomfield designed them in Manchester, England and Charles Bloomfield made and assembled them in New Westminster. The left window is believed to be among the first depictions of First Nations people in stained glass. The right window was the gift of the Grand Lodge of British Columbia of which Bishop Sillitoe was Grand Chaplain. It contains symbols of the Masonic Order and represents the Holy Spirit descending upon the Apostles at Pentecost. The Bloomfield sons gave Saint Peter, the central figure, the face of their father, Henry. The central window represents Christ the King enthroned in glory. Another significant window is located in the west transept, on the north wall across from the tower. This detailed stained-glass window was manufactured by R. McCausland, in Toronto in 1941. At the base of the window, the words "Blessed are the pure in heart, for they shall see God" and "To the glory of God and in loving memory of Nancy DeWolf Smith" are depicted.

The windows are being conserved through an ongoing restoration program with each window being investigated to determine its condition, and restored and rehabilitated as required. Work on the repair of the Cathedral's stained glass windows has begun with four windows already repaired and twelve requiring further work.

Conservation Strategy: Preservation and Rehabilitation

- Inspect for condition and complete detailed inventory to determine extent of recommended repair or replacement.
- Retain existing window sashes/leading; repair as required; install replacement matching sashes/leading where missing or beyond repair.
- Preserve and repair as required, using in kind repair techniques where feasible.
- Overhaul, tighten/reinforce joints. Repair frame, trim and counterbalances.
- Each window should be made weather tight by reputtying and weather-stripping as required.
- New glass storm windows should be installed to ensure the prolonged protection of the important stained-glass windows.
- Retain historic glass, where possible. All window repairs should be undertaken by a contractor skilled in stained leaded-glass heritage restoration.
- Any replacement glass to be single glazing, and visually and physically compatible with existing.
- Prime and repaint exterior trim, if any, as required in appropriate colour, based on colour schedule devised by Heritage Consultant.



McCausland window.



Left sanctuary window.

Centre sanctuary window.

Right sanctuary window.

6.5.2 DOORS

The main entryway to the church was relocated from within the south elevation of the tower, to the west elevation of the church. An additional door exists on the east elevation. All exterior doors should be retained and repaired, as required.

Conservation Strategy: Rehabilitation

- Retain the door openings in their original locations, and preserve and repair all original doors.
- Any new doors should be visually compatible with the historic character of the building.

6.6 ROOF

Originally, the Holy Trinity Cathedral featured clerestory windows below the roof line and wood shingles as the cladding material. Following the fire of 1898, the roof was simplified, the clerestory windows removed, and the roof rebuilt with slate tile, which is a more fire resistant material. The rebuilt 1898 roof configuration has been retained over the years, but new roof cladding has been installed. The current cladding consists of metal tiles with a composite encasement, and is not sympathetic to the historic character of the church. It is recommended that the 1898 slate roofing material should be restored, if possible. Wide corbel trim runs the full length of the side elevations, which should be preserved during rehabilitation work.

Copper gutters and flashing are installed on the side elevations of the church. Further investigation is required into the condition of the copper, and whether it can be retained.

Conservation Recommendation: Rehabilitation

- Preserve the roof structure in its current configuration.
- Roofing membrane and cladding system should be rehabilitated. Slate tile is preferred; Heritage Consultant to review proposed roofing materials.
- Design and install adequate rainwater disposal system

and ensure proper drainage from the site is maintained. Copper gutters with galvanized or pre-finished steel downspouts are recommended. Paint all drainage system elements according to colour schedule devised by Heritage Consultant, as required.



Current roofing tile.



Roof over apse.

5.6.1 CHIMNEY

Holy Trinity Cathedral features an external brick chimney on the east elevation of the church. The red brick is laid in a stretcher bond, with a simple concrete pot and no additional decorative features. The chimney should be retained, if required as part of the upgrade of mechanical services. The chimney is not a character-defining element and can be removed as part of the seismic upgrading if redundant.

Conservation Recommendation: Rehabilitation (if retained)

- Chimney may require structural stabilization.
- Investigate condition of brickwork. If required, brickwork may be repointed and cleaned using a natural bristle brush and mild rinse detergent.

6.7 EXTERIOR COLOUR SCHEDULE

Part of the Restoration process is to finish the building in historically appropriate paint colours. A restoration colour scheme will be developed in conjunction with the project architect.

The building displays areas where there was original applied paint. The final colour scheme will be based on a colour palette that will be determined by sampling. On site testing will be carried out once access is available, and paint samples assessed by microscopic analysis in order to reveal the original colour scheme of the structure.

Conservation Recommendation: Restoration

 An appropriate historic restoration colour scheme has been determined for exterior painted finishes, and will be confirmed when access is available. Test samples of proposed colours to be applied for review prior to full repainting.



Chimney.

7. CONSERVATION RECOMMENDATIONS – INTERIOR

The interior of the third Holy Trinity Cathedral appears as completed in 1899. G.W. Grant was the architect. The interior is based on the style of St. Paul's Church, Kensington, London.

"Interior features can include elements such as interior walls, floors and ceilings, mouldings, staircases, fireplace mantels, faucets, sinks, built-in cabinets, light fixtures, hardware, radiators, mail chutes, telephone booths and elevators. Because their heritage value resides not only in their physical characteristics, but also in their location in the historic building, it is important to protect them from removal. This is particularly true of doors, banisters, church pews, fireplace mantels, sinks and light fixtures, which are often replaced instead of being upgraded. Reuse in their original location not only protects their heritage value, but is also a more sustainable approach to conserving these artefacts." Standards and Guidelines for the Conservation of Historic Places in Canada (2010)

Building Code upgrading is one of the most important aspects of heritage building rehabilitation, as it ensures life safety and long-term protection for the resource. However, the interior features of an historic property are often heavily altered in the process. The British Columbia Building Code offers equivalencies and exemptions to heritage buildings, which enable a higher degree of heritage conservation and retention of original material. The following guidelines pertaining to Health, Safety and Security Considerations from the *Standards and Guidelines* should be followed when faced with the conservation of interior character-defining elements:

- Upgrade interior features to meet health, safety and security requirements, in a manner that preserves the existing feature and minimizes impact on its heritage value.
- Work with code specialists to determine the most appropriate solution to health, safety and security requirements with the least impact on the character-

defining elements and overall heritage value of the historic building.

- Explore all options for modifications to existing interior features to meet functional requirements prior to considering removal or replacement.
- Remove or encapsulate hazardous materials, such as friable asbestos insulation, using the least-invasive abatement methods possible, and only after thorough testing has been conducted.
- Install sensitively designed fire-suppression systems that retain character-defining elements and respect heritage value.

7.1 STRUCTURE

The vaulted sanctuary is supported by the thick exterior walls and two rows of 6 tall timber columns that run parallel through the full length of the church. The columns connect to one another by pointed arches that run both north and south. As the church features unreinforced masonry exterior walls, seismic upgrading will be required to ensure the long-term conservation of the historic church. Seismic upgrading should be sensitive to the historic fabric of the church, and should be concealed within the existing structure as much as possible. Interior walls may be rehabilitated to accommodate additional bracing, but all work should be inconspicuous and sensitive to interior features.



Internal structure, view of ceiling.



Internal structure, view of apse.

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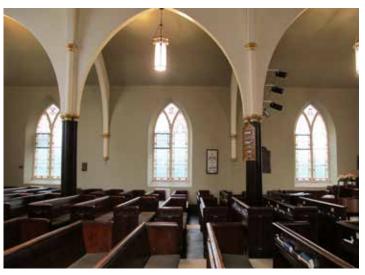
7.2 WALLS AND CEILINGS

The interior of the church features simple, unadorned lath and plaster walls. Due to the simplicity of the interior walls, this is the preferred location for rehabilitation work related to seismic upgrading, as the interior wall surfaces can easily be recreated. Rehabilitation work should be as minimally invasive as possible, and refinished walls should be consistent in appearance to their original condition.

Most interior walls, whether plaster, gypsum or other sheathing material, are covered in a protective coating of paint, which is fairly durable. Any dirt that gets brought in to the building may become airborne, which comes to rest on walls and ceilings, or additionally may be deposited on walls by the touch of people, furniture or other objects. Extensive dirt build up, most often seen around radiators and air grills, may damage the walls and ceiling finishes, and should be cleaned with appropriate conservation methods to ensure continued preservation.

Conservation Recommendation: Preservation

- Preserve original interior walls and ceilings and their original finishes, wherever possible.
- Maintain interior walls and ceilings by routine cleaning using dry methods such as dusting, light vacuuming with a soft dusting tool or with a treated dust cloth. Ledges and other horizontal elements collect dust and dirt at a much faster rate than vertical surfaces, and should be addressed more frequently.
- Only oil based paint, varnish and modern coatings can be safely washed using wet methods.



Internal structure, view through arches.

7.3 WOODEN FLOOR

Holy Trinity Cathedral features original 2-3/8" tongue and groove dark-stained fir floors. The floors demonstrate heavy wear-and-tear, but appear to be in sound condition. The floors are original to the reconstructed 1898 building, and are a significant element of the church's interior.

Conservation Recommendation: Preservation and Maintenance

- Review worn areas of wooden flooring. Repair may require careful removal and examination. Turn individual boards over, if the underside is not deteriorated. Where floor boards have deteriorated beyond repair, replace in-kind as required; install new boards in inconspicuous locations, and retain original boards wherever appropriate.
- If removal is required, then carefully salvage all wooden floorboards and store them in a dry and secure location throughout the entirety of the rehabilitation work. The original flooring should be inspected to determine the viability of reinstatement and restoration.
- Inspect the flooring to determine if any boards require repair or replacement. Flooring should be cleaned prior to any repair.
- For high traffic areas, treat the floor with a polish with high content of carnauba polish, mixed with high quality beeswax. A polyurethane varnish may be used if necessary, however it tends to provide an "artificial" appearance.



Current condition of floor.

8. MAINTENANCE PLAN

A Maintenance Plan should be adopted by the property owner, who is responsible for the long-term protection of the heritage features of the historic building. The Maintenance Plan should include provisions for:

- Copies of the Maintenance Plan and this Conservation Plan to be incorporated into the terms of reference for the management and maintenance contract for the building;
- Cyclical maintenance procedures to be adopted as outlined below;
- Record drawings and photos of the building to be kept by the management / maintenance contractor; and
- Records of all maintenance procedures to be kept by the owner.

A thorough Maintenance Plan will ensure the integrity of Holy Trinity Cathedral is preserved. If existing materials are regularly maintained and deterioration is significantly reduced or prevented, the integrity of materials and workmanship of the building will be protected. Proper maintenance is the most cost effective method of extending the life of a building, and preserving its character-defining elements. The survival of historic buildings in good condition is primarily due to regular upkeep and the preservation of historic materials.

8.1 MAINTENANCE GUIDELINES

A maintenance schedule should be formulated that adheres to the *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010). As defined by the Standards and Guidelines, maintenance is defined as:

Routine, cyclical, non-destructive actions necessary to slow the deterioration of a historic place. It entails periodic inspection; routine, cyclical, non-destructive cleaning; minor repair and refinishing operations; replacement of damaged or deteriorated materials that are impractical to save. The assumption that newly renovated buildings become immune to deterioration and require less maintenance is a falsehood. Rather, newly renovated buildings require heightened vigilance to spot errors in construction where previous problems had not occurred, and where deterioration may gain a foothold.

Routine maintenance keeps water out of the building, which is the single most damaging element to a heritage building. Maintenance also prevents damage by sun, wind, snow, frost and all weather; prevents damage by insects and vermin; and aids in protecting all parts of the building against deterioration. The effort and expense expended on an aggressive Maintenance Plan will not only lead to a higher degree of preservation, but also over time potentially save large amount of money otherwise required for later repairs.

8.2 PERMITTING

Repair activities, such as simple in-kind repair of materials, or repainting in the same colour, should be exempt from requirements for City permits. Other more intensive activities will require the issuance of a Heritage Alteration Permit.

8.3 ROUTINE, CYCLICAL AND NON-DESTRUCTIVE CLEANING

Following the *Standards and Guidelines for the Conservation* of *Historic Places in Canada*, be mindful of the principle that recommends "using the gentlest means possible". Any cleaning procedures should be undertaken on a routine basis and should be undertaken with non-destructive methods. Cleaning should be limited to the exterior materials such as masonry wall surfaces and wood elements such as trim. All of these elements are usually easily cleaned, simply with a soft, natural bristle brush, without water, to remove dirt and other material. If a more intensive cleaning is required, this can be accomplished with warm water, mild detergent and a soft bristle brush. High-pressure washing, sandblasting or other abrasive cleaning methods should not be undertaken under any circumstances.

8.4 REPAIRS AND REPLACEMENT OF DETERIORATED MATERIALS

Interventions such as repairs and replacements must conform to the *Standards and Guidelines for the Conservation of Historic Places in Canada*. The building's character-defining elements – characteristics of the building that contribute to its heritage value (and identified in the Statement of Significance) such as materials, form, configuration, etc. - must be conserved, referencing the following principles to guide interventions:

- An approach of minimal intervention must be adopted - where intervention is carried out it will be by the least intrusive and most gentle means possible.
- Repair rather than replace character-defining elements.
- Repair character-defining elements using recognized conservation methods.
- Replace 'in kind' extensively deteriorated or missing parts of character-defining elements.
- Make interventions physically and visually compatible with the historic place.

8.5 INSPECTIONS

Inspections are a key element in the Maintenance Plan, and should be carried out by a qualified person or firm, preferably with experience in the assessment of heritage buildings. These inspections should be conducted on a regular and timely schedule. The inspection should address all aspects of the building including exterior, interior and site conditions. It makes good sense to inspect a building in wet weather, as well as in dry, in order to see how water runs off – or through – a building.

From this inspection, an inspection report should be compiled that will include notes, sketches and observations. It is helpful for the inspector to have copies of the building's elevation drawings on which to mark areas of concern such as cracks, staining and rot. These observations can then be included in the report. The report need not be overly complicated or formal, but must be thorough, clear and concise. Issues of concern, taken from the report should then be entered in a log book so that corrective action can be documented and tracked. Major issues of concern should be extracted from the report by the property manager.

An appropriate schedule for regular, periodic inspections would be twice a year, preferably during spring and fall. The spring inspection should be more rigorous since in spring moisture-related deterioration is most visible, and because needed work, such as painting, can be completed during the good weather in summer. The fall inspection should focus on seasonal issues such as weather-sealants, mechanical (heating) systems and drainage issues. Comprehensive inspections should occur at five-year periods, comparing records from previous inspections and the original work, particularly in monitoring structural movement and durability of utilities. Inspections should also occur after major storms.

8.6 INFORMATION FILE

The building should have its own information file where an inspection report can be filed. This file should also contain the log book that itemizes problems and corrective action. Additionally, this file should contain building plans, building permits, heritage reports, photographs and other relevant documentation so that a complete understanding of the building and its evolution is readily available. This will aid in determining appropriate interventions when needed.

The file should also contain a list outlining the finishes and materials used, and information detailing where they are available (store, supplier). The building owner should keep on hand a stock of spare materials for minor repairs.

8.6.1 LOG BOOK

The maintenance log book is an important maintenance tool that should be kept to record all maintenance activities, recurring problems and building observations and will assist in the overall maintenance planning of the building. Routine maintenance work should be noted in the maintenance log to keep track of past and future activities. All items noted on the maintenance log should indicate the date, problem, type of repair, location and all other observations and information pertaining to each specific maintenance activity. Each log should include the full list of recommended maintenance and inspection areas noted in this Maintenance Plan, to ensure a record of all activities is maintained. A full record of these activities will help in planning future repairs and provide valuable building information for all parties involved in the overall maintenance and operation of the building, and will provide essential information for long term programming and determining of future budgets. It will also serve as a reminder to amend the maintenance and inspection activities should new issues be discovered or previous recommendations prove inaccurate. The log book will also indicate unexpectedly repeated repairs, which may help in solving more serious problems that may arise in the historic building. The log book is a living document that will require constant adding to, and should be kept in the information file along with other documentation as noted.

8.7 EXTERIOR MAINTENANCE

Water, in all its forms and sources (rain, snow, frost, rising ground water, leaking pipes, back-splash, etc.) is the single most damaging element to historic buildings.

The most common place for water to enter a building is through the roof. Keeping roofs repaired or renewed is the most cost-effective maintenance option. Evidence of a small interior leak should be viewed as a warning for a much larger and worrisome water damage problem elsewhere and should be fixed immediately.

8.7.1 INSPECTION CHECKLIST

The following checklist considers a wide range of potential problems specific to Holy Trinity Cathedral, such as water/ moisture penetration, material deterioration and structural deterioration.

EXTERIOR INSPECTION

Site Inspection:

- Is the site well drained? Is there pooling of water?
- Does water drain away from foundation?

Foundation:

- Does pointing need repair?
- Paint peeling? Cracking?
- Is bedding mortar sound?
- Moisture: Is rising damp present?
- Is there back splashing from ground to structure?
- Is there any moisture problem general or local?
- Is spalling from freezing present? (Flakes or powder?)
- Is efflorescence present?
- Is spalling from sub-fluorescence present?
- Is damp proof course present?
- Are there shrinkage cracks in the foundation?
- Are there movement cracks in the foundation?
- Is crack monitoring required?
- Is uneven foundation settlement evident?
- Are foundation crawl space vents clear and working?
- Do foundation openings (doors and windows) show: rust; rot; insect attack; paint failure; soil build-up?
- Deflection of lintels?

Masonry:

- Are moisture problems present? (Rising damp, rain penetration, condensation, water run-off from roof, sills, or ledges?)
- Is spalling from freezing present? Location?
- Is efflorescence present? Location?
- Is spalling from sub-florescence present? Location?
- Need for pointing repair? Condition of existing pointing and re-pointing?
- Is bedding mortar sound?
- Are weep holes present and open?
- Are there cracks due to shrinking and expansion?
- Are there cracks due to structural movement?
- Are there unexplained cracks?

- Do cracks require continued monitoring?
- Are there signs of steel or iron corrosion?
- Are there stains present? Rust, copper, organic, paints, oils / tars? Cause?
- Do the surfaces need cleaning?

Wood Elements:

- Are there moisture problems present? (Rising damp, rain penetration, condensation moisture from plants, water run-off from roof, sills, or ledges?)
- Is there insect attack present? Where and probable source?
- Is there fungal attack present? Where and probable source?
- Are there any other forms of biological attack? (Moss, birds, etc.) Where and probable source?
- Is any wood surface damaged from UV radiation? (bleached surface, loose surface fibres)
- Is any wood warped, cupped or twisted?
- Is any wood split? Are there loose knots?
- Are nails pulling loose or rusted?
- Is there any staining of wood elements? Source?

Condition of Exterior Painted Materials:

- Paint shows: blistering, sagging or wrinkling, alligatoring, peeling. Cause?
- Paint has the following stains: rust, bleeding knots, mildew, etc. Cause?
- Paint cleanliness, especially at air vents?

Entries:

- Are steps safe? Handrails secure?
- Attachment are porches, steps, etc. securely connected to the building?

Windows:

- Is there glass cracked or missing?
- If the glazing is puttied has it gone brittle and cracked? Fallen out? Painted to shed water?
- Is there condensation or water damage to the paint?

- Is the frame free from distortion?
- Do sills show weathering or deterioration?
- Are drip mouldings/flashing above the windows properly shedding water?
- Is the caulking between the frame and the cladding in good condition?

Doors:

- Do the doors create a good seal when closed?
- Are the hinges sprung? In need of lubrication?
- Do locks and latches work freely?
- If glazed, is the glass in good condition? Does the putty need repair?
- Are door frames wicking up water? Where? Why?
- Are door frames caulked at the cladding? Is the caulking in good condition?
- What is the condition of the sill?

Gutters and Downspouts:

- Are downspouts leaking? Clogged? Are there holes or corrosion? (Water against structure)
- Are downspouts complete without any missing sections? Are they properly connected?
- Is the water being effectively carried away from the downspout by a drainage system?
- Do downspouts drain completely away?

Roof:

- Are there water blockage points?
- Is the leading edge of the roof wet?
- Is there evidence of biological attack? (Fungus, moss, birds, insects)
- Are slate tiles damaged or severely weathered? Are they split or lifting?
- Are flashings well positioned and sealed?
- Are metal joints and seams sound?
- If there is a lightening protection system are the cables properly connected and grounded?
- Does the soffit show any signs of water damage? Insect or bird infestation?

INTERIOR INSPECTION

Basement/ Mechanical Room

- Are there signs of moisture damage to the walls? Is masonry cracked, discoloured, spalling?
- Is wood cracked, peeling rotting? Does it appear wet when surroundings are dry?
- Are there signs of past flooding, or leaks from the floor above? Is the floor damp?
- Are walls even or buckling or cracked? Is the floor cracked or heaved?
- Are there signs of insect or rodent infestation?

Sanctuary

- Materials: plaster, wood, metal, masonry are they sound, or uneven, cracked, out of plumb or alignment; are there signs of settlement, old, or recent (bulging walls, long cracks, etc)?
- Finishes: paints, stains, etc. are they dirty, peeling, stained, cracked?
- Are there any signs of water leakage or moisture damage? (Mould? Water-stains?)

Concealed Spaces/ Attic

- Is light visible through walls, to the outsider or to another space?
- Are the ventilators for windowless spaces clear and functional?
- Do pipes or exhausts that pass through concealed spaces leak?
- Are wooden elements soft, damp, cracked? Is metal material rusted, paint peeling or off altogether?
- Infestations are there signs of birds, bats, insects, rodents, past or present?

6.7.2 MAINTENANCE PROGRAMME

INSPECTION CYCLE:

Daily

• Observations noted during cleaning (cracks; damp, dripping pipes; malfunctioning hardware; etc.) to be noted in log book or building file.

Semi-annually

- Semi-annual inspection and report with special focus on seasonal issues.
- Thorough cleaning of drainage system to cope with winter rains and summer storms
- Check condition of weather sealants (Fall).
- Clean the exterior using a soft bristle broom/brush.

Annually (Spring)

- Inspect foundations and walls for cracks, deterioration.
- Inspect metal elements, especially in areas that may trap water.
- Inspect windows for paint and glazing compound failure, corrosion and wood decay and proper operation.
- Complete annual inspection and report.
- Clean out of all perimeter drains and rainwater systems.
- Touch up worn paint on the building's exterior.
- Check for plant, insect or animal infestation.
- Routine cleaning, as required.

Five-Year Cycle

- A full inspection report should be undertaken every five years comparing records from previous inspections and the original work, particularly monitoring structural movement and durability of utilities.
- Repaint windows every five to fifteen years.

Ten-Year Cycle

• Check condition of roof.

Twenty-Year Cycle

• Confirm condition of roof and estimate effective lifespan. Replace when required.

Major Maintenance Work (as required)

• Thorough repainting, downspout and drain replacement; replacement of deteriorated building materials; etc.

RESEARCH SUMMARY

DATE OF CONSTRUCTION: 1867-68; rebuilt 1898-1902 OWNER: Anglican Diocese

ARCHITECT: H.O. Tiedemann in 1867; G.W. Grant for rebuilding in 1899

REFERENCES

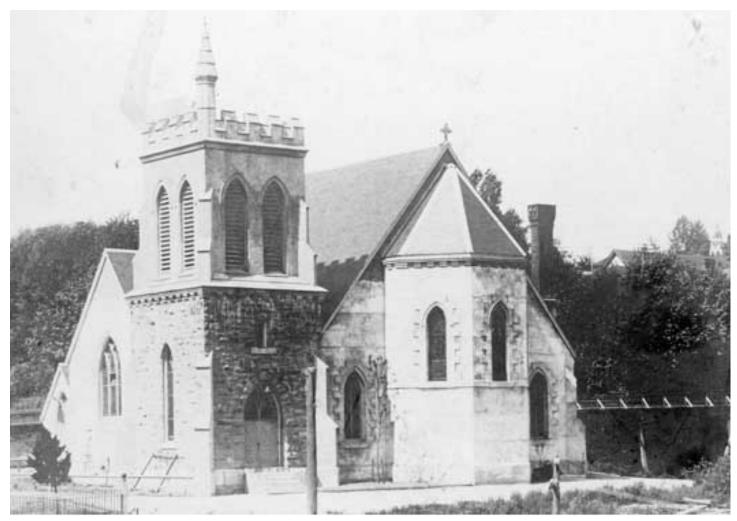
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HISTORICAL PHOTOGRAPHS

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HTC view from Clarkson Street, 1900 [NWMA IHP0327]