

REPORT

Proposed Affordable Housing Site on 119B Avenue, Pitt Meadows, BC

Archaeological Overview Assessment

Submitted to:

Metro Vancouver - Housing, Planning and Policy

Attention: Laurel Cowan, Program Manager
Metrotower III, 4730 Kingsway
Burnaby, BC V5H 0C6

Submitted by:

Golder Associates Ltd.

Suite 200 - 2920 Virtual Way, Vancouver, British Columbia, V5M 0C4, Canada

+1 604 296 4200

21466871-002-R-Rev0

29 April 2022

Katzie Development Limited Partnership Heritage Permit 2021-30
xʷməθkʷəy̓əm (Musqueam) Heritage Permit MIB-2021-086-AOA
Seyem' Qwantlem Heritage Permit 2022-21
Stó:lō Heritage Investigation Permit 2021-141

Distribution List

- 1 copy – Metro Vancouver
- 1 copy – Cowichan Tribes
- 1 copy – Halalt First Nation
- 1 copy – Katzie First Nation
- 1 copy – Kwantlen First Nation
- 1 copy – Lake Cowichan First Nation
- 1 copy – Lyackson First Nation
- 1 copy – xʷməθkʷəy̓əm (Musqueam Indian Band)
- 1 copy – Penelakut Tribe
- 1 copy – Seabird Island Band
- 1 copy – Semiahmoo First Nation
- 1 copy – Shxw'ōwhámél First Nation
- 1 copy – Stó:lō Research and Resource Management Centre
- 1 copy – Stz'uminus First Nation

Table of Contents

1.0 INTRODUCTION	1
2.0 PROJECT DESCRIPTION	1
3.0 HERITAGE LEGISLATION, POLICIES, AND PERMITTING.....	1
3.1 Heritage Conservation Act	1
3.2 Local Government Act.....	2
3.3 First Nations Heritage Policy and Permitting Systems	2
4.0 METHODS.....	3
4.1 First Nation Communication and Permitting	3
4.2 Background Research.....	3
4.3 Assessment of Archaeological Potential.....	3
5.0 BACKGROUND RESULTS	3
5.1 First Nations Communication and Permitting.....	3
5.2 Background Research.....	4
5.2.1 Physical and Biophysical Setting	4
5.2.2 Ethnographic Background.....	5
5.3 Traditional Land Use and Place Names	5
5.4 Previous Archaeological Studies	6
5.4.1 Registered Archaeological Sites.....	7
5.4.2 Registered Historical Sites.....	7
5.5 Historic Aerial and Orthographic Imagery	8
5.6 Geotechnical Testing Data.....	8
6.0 ARCHAEOLOGICAL POTENTIAL ASSESSMENT.....	9
7.0 RECOMMENDATIONS	9
8.0 USE OF REPORT	10
9.0 CLOSURE	10
10.0 REFERENCES CITED.....	11

FIGURES

Figure 1: Overview Map

Figure 2: Midrange Map

Executive Summary

At the request of Metro Vancouver, Golder Associates Ltd. completed an archaeological overview assessment for a proposed affordable housing development site in Pitt Meadows, located on 119B Avenue between the City of Pitt Meadows Recreation Centre and the Wesbrooke senior housing facility and a portion of adjacent City-owned land.

The objectives of the AOA were to:

- Identify known archaeological sites within the Project area, to the degree possible, using existing records.
- Identify and evaluate potential of encountering archaeological sites within the Project area.
- Assess the need for more detailed archaeological investigations.
- Recommend appropriate heritage resource management actions for the proposed development.

This AOA was conducted under the following First Nations heritage permits: Musqueam Indian Band MIB-2021-086-AOA Permit, Katzie Development Limited Partnership Heritage Permit 2021-30, Seyem' Qwantlem Heritage Permit 2022-21, and Stó:lō Heritage Investigation Permit 2021-141.

Readily available information pertaining to the local physical setting (e.g., watercourses), cultural background (e.g., First Nations place names and land use) and previously recorded archaeological and historical sites were reviewed for the Project area. Based on our review of available information, the likelihood of encountering an archaeological site in the Project area is considered low. As such, we recommend the following archaeological resource management actions for the Project:

- Adopt Metro Vancouver's Archaeology Chance Find Procedure. This document provides workers with basic information for the management of known or suspected archaeological materials which may be unexpectedly encountered on a project site while an archaeologist is not present. These guidelines are designed to promote the preservation and proper management of archaeological materials while minimizing disruption to project scheduling.
- Retain an archaeological consultant to review Metro Vancouver's Archaeology Chance Find Procedure with workers on the first day of site work.

As the likelihood for encountering as-yet found archaeological materials in the Project area is considered low, we do not recommend obtaining a *Heritage Conservation Act* permit for this work. However, in the unlikely event that archaeological deposits are encountered during ground disturbing activities, all work may be required to cease while an HCA permit is obtained (~120+ days).

1.0 INTRODUCTION

At the request of Metro Vancouver (MV), Golder Associates Ltd. (Golder) completed an archaeological overview assessment (AOA) for a proposed affordable housing development site in Pitt Meadows, located on 119B Avenue and a portion of adjacent City-owned land between the City of Pitt Meadows Family Recreation Centre and the Wesbrooke senior housing facility (Project area) (Figures 1 and 2).

The objectives of the AOA were to:

- Identify known archaeological sites within the Project area, to the degree possible, using existing records.
- Identify and evaluate potential of encountering archaeological sites within the Project area.
- Assess the need for more detailed archaeological investigations (e.g., archaeological monitoring).
- Recommend appropriate heritage resource management actions for the proposed development.

For the purposes of this report, archaeological sites are defined as locations which contain physical remains of past human activity and are associated with pre-contact and/or post-contact periods which are protected under the *Heritage Conservation Act* (HCA). Historical sites are defined as any structure, site or thing that is of historical or architectural significance. Historical sites and locations in British Columbia are primarily attributable to post-contact Euro Canadian settlement and land use but can also include habitations and other evidence left by Indigenous peoples. These historical resources include structures, engineering works, architectural features, and artifacts.

2.0 PROJECT DESCRIPTION

The Project consists of a new affordable housing development which includes a six-storey wood frame apartment building (approximately 122 dwelling units), an integrated childcare facility on the ground floor, and a single level underground parkade excavated to a depth of approximately 4.5 m below surface.

Project-related activities with the potential to impact archaeological sites (if present) may include ground disturbance from excavation associated with the construction of the building foundations and/or underground parkade, geotechnical investigations, utility installations and tie-ins, and landscaping.

3.0 HERITAGE LEGISLATION, POLICIES, AND PERMITTING

3.1 Heritage Conservation Act

All heritage resources, including archaeological sites and regardless of condition (i.e., intact or disturbed), on provincial Crown or private land that predate AD 1846 are automatically protected under the 1996 amendments to the British Columbia *Heritage Conservation Act* (HCA). Certain sites, including significant heritage sites, burials, and rock art sites, that have historical or archaeological value, are also protected regardless of age. Heritage wrecks, consisting of the remains of vessels and aircraft after two or more years since they sank, crashed, or were abandoned, including being placed in terrestrial environment as part of landfill, are also protected.

The Archaeology Branch, Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD) is the provincial government agency responsible for administering the HCA, issuing permits, maintaining a database of recorded heritage resources (the Provincial Heritage Register), and handling referrals from various development agencies.

Subsurface testing of an archaeological site or an inspection with the intent to locate an archaeological site requires an HCA Inspection Permit. Inspection permits can also be used to mitigate modest archaeological site impacts, but more extensive mitigation work may require an Investigation Permit. Where the proposed development will impact an archaeological site, an Alteration Permit must be obtained prior to construction. The Archaeology Branch will not issue an Alteration Permit unless it is satisfied that the archaeological site in question have been thoroughly assessed, and where necessary, adequate mitigation has been completed. An Inspection Permit is typically held concurrently with an Alteration Permit.

All applications for HCA permits are forwarded by the Archaeology Branch to appropriate First Nations for a 30 or 45-day¹ review period. The Archaeology Branch determines which groups and organizations receive the application based on provincial records.

3.2 Local Government Act

Post-1846 historical sites that are not protected by the HCA may be protected by municipal by-law. These sites are usually documented on municipally administered Community Heritage Registers (CHR), the Provincial Heritage Register (PHR), and the Canadian Register of Historic Places. These historical sites may include buildings, industrial remains, trees, landscape features, properties, and heritage districts. A CHR or PHR entry generates a degree of recognition for these sites; however, without a site-specific protection mechanism such as a heritage designation by-law, heritage revitalization agreement by law, or heritage restrictive covenant, inclusion on a CHR, the PHR, and/or the Canadian Register of Historic Places (CRHP) does not provide protection for these historical sites.

3.3 First Nations Heritage Policy and Permitting Systems

Many BC First Nations have developed their own heritage policies and permitting systems. Golder and the professional archaeological community largely respect these requirements, although they are not required by the Province to meet regulatory requirements. In general, the scope of these policies reflects a desire to have some measure of oversight with archaeological research in each respective First Nations' territory so that cultural protocols are observed, particularly as they relate to human remains and spiritual locations. While aspects of these policies parallel the HCA, many diverge when it comes to the definition of what constitutes a "heritage resource". Most First Nations heritage policies take a broader view of heritage resources that warrant management, compared to the HCA (Mason 2011).

¹ Due to the COVID-19 pandemic, the First Nation referral/review period may be increased at the discretion of the Archaeology Branch.

4.0 METHODS

4.1 First Nation Communication and Permitting

Based on a review of Contacts for First Nation Consultation Areas Public Map Service (previously Consultative Areas Database – Public) maintained by the BC Ministry of Aboriginal Relations and Reconciliation (British Columbia 2021a), First Nations groups or organizations with Aboriginal interests in the Project area were identified, and heritage permits were requested from those First Nations groups and organizations that have a heritage permitting system in place.

4.2 Background Research

Golder assembled and reviewed readily available information for the Project area pertaining to the local environmental setting, cultural background, historical land use, and previously recorded archaeological sites. The sources of available information that were reviewed include:

- Provincial Heritage Register, accessed using the Remote Access to Archaeological Data application maintained by the Archaeology Branch (British Columbia 2021b)
- Available ethnographic and archaeological reports
- Available orthographic maps (e.g., Google Earth)
- Available historic aerial photographs (British Columbia 2022c)
- Golder's proprietary heritage site database for the Metro Vancouver area
- Canadian Register of Historic Places database (Parks Canada 2021)
- Review of available geotechnical studies conducted within the Project area

4.3 Assessment of Archaeological Potential

Results of the background research were used to determine the potential for encountering archaeological materials in the Project area. The assessment considered variables such as proximity to known archaeological site locations, proximity to locations associated with First Nations place names and/or land use areas, and proximity to environmental features and landforms that tend to correlate with archaeological site locations.

5.0 BACKGROUND RESULTS

5.1 First Nations Communication and Permitting

Based on information obtained from the First Nation Consultation Areas Public Map Service, Golder understands the Project area is located within the area of interest of the following First Nations groups and organizations: Cowichan Tribes, Halalt First Nation, Katzie First Nation, Kwantlen First Nation, Lake Cowichan First Nation, Lyackson First Nation, Musqueam (xʷməθkʷəy̓əm) Indian Band, Penelakut Tribe, Seabird Island Band, Semiahmoo First Nation, Stz'uminus First Nation, and the Stó:lō Research and Resource Management Centre (SRRMC), which represents the Stó:lō on archaeological matters.

This AOA was conducted under the following First Nation heritage permits: Musqueam Indian Band MIB-2021-086-AOA Permit, Katzie Development Limited Partnership Heritage Permit 2021-30, Seyem' Qwantlem Heritage Permit 2022-21, and Stó:lō Heritage Investigation Permit 2021-141. Those groups who do not have a heritage permitting system in place were notified of this AOA on 2 July 2021.

5.2 Background Research

5.2.1 Physical and Biophysical Setting

The Project is located in the Pitt Meadows area of the Fraser Lowland between the Pitt and Fraser Rivers. The Fraser Lowland is part of a larger feature known as the Coastal Trough physiographic subdivision. The Coastal Trough is a topographically low belt running from Puget Sound to Dixon Entrance, lying between the Insular Mountains on the west and the Coast Mountains to the east. The Fraser Lowland extends from the Fraser River Delta east toward Hope. The Lowland is an area of depositional origin and has been the site of sedimentary deposition since the late Cretaceous (Holland 1976:36-37). The area is composed topographically of low hills ranging in elevation from 50 to 300 m above sea level, separated by wide, flat-bottomed valleys.

An extensive network of streams and drainages was present throughout the Metro Vancouver area. These streams and waterways have increasingly become threatened, endangered, and even lost (Fisheries and Oceans Canada 1998). The Fraser River is located 1.6 km to the south of the Project area. Additionally, several water courses including Katzie Slough, Tully Slough, Cook Slough, McKenny Creek, are located within 3 km of the Project. Katzie and Tully Sloughs are larger watercourses, and several archaeological sites (e.g., DhRq-22, DhRq-41, DhRp-86, DhRp-35) are recorded along the banks of these waterways. Additionally, these watercourses were a significant transportation route for First Nations and provided access to winter village sites (DhRp-52, the Laseur site, the Caruthers site and the Park Farm site) as well berry picking, wapato, hunting and other faunal and floral resources areas (Katzie Development Corporation 2015; Suttles 1955; Bernick 1998, Hoffman 2010). Available sources show no additional historical drainages in proximity to the Project area.

The dominant biogeoclimatic zone within the Project area is Coastal Western Hemlock (CWH). Although biogeoclimatic zones are designations based on modern observations, they can be useful for assessing archaeological potential and the likely range of human activities in those localities where climate and vegetation have remained consistent for long periods. The CWH biogeoclimatic zone covers low- to mid-elevations and is the most productive zone in British Columbia in terms of overall biomass (Jones and Annas 1978). On average, the CWH biogeoclimatic zone is the rainiest zone in BC, with cool summers and mild winters. In the Fraser River estuary, summers are normally warm and dry, with precipitation amounts at sea level as low as 65 cm (Schaefer 1978). The understory in the CWH zone is generally lush and contains several berry species important in traditional First Nations subsistence, including blueberry, salmonberry, and red huckleberry (Pojar et al. 1991). Economically important animals include mule deer, black bear, and various species of waterfowl. Throughout the CWH zone, streams and rivers provide spawning habitat for salmon and other culturally and economically important fish species.

5.2.2 Ethnographic Background

While distinct, the First Nation groups and organizations listed in Section 5.1 share common cultural traits including a coastal or riverine settlement pattern; diverse subsistence base with a focus on anadromous fish, but also including game and plant/root resources; complex fishing and storage economy; bilateral kinship; social/political organization with families, households, local groups, and winter villages as the basic elements; and regionally similar life cycle and subsistence cycle celebrations and rituals (Suttles 1990:453-475).

Among other shared cultural traits, groups practiced a semi-sedentary lifestyle based on fishing, hunting, and gathering (Suttles 1990). Settlement and subsistence patterns were scheduled according to the seasonal availability and distribution of resources. In the warmer months, families dispersed and travelled throughout the region, regrouping periodically to make the most efficient use of available resources. During the winter months, families spent much of their time in habitations, subsisting on preserved foods gathered during warmer times of the year. Hunting occurred in the late fall and winter when the hides and size of animals were at their optimum (Duff 1952). There is evidence that the productivity of the landscape was manipulated through such practices as managed burning (Turner 1991). The Pitt Polder area was widely known as an important location for harvesting wapato, a nutritious tuber that could be stored through wintertime (Suttle 1955).

Typical activities associated with First Nations that may be reflected within the archaeological record within the general locality include resource procurement (e.g., fishing, hunting, plant/root gathering); food storage or preparation (e.g., use of drying racks, hearths, or roasting pits); habitation; transportation and trade (e.g., use of trails); and spiritual activity. Detailed ethnographic information for these groups is found in Barnett (1938, 1955), Boas (1886), Carlson (2001), Hill-Tout (1897, 1905), Matthews (1955), Maud (1978), Morin (2015), and Suttles (1951, 1955, 1987, 1990).

5.3 Traditional Land Use and Place Names

Place names and their locations are important as they demonstrate First Nations use and, in some cases, provide an indication of the range of activities that may have taken place in general or specific locations, which can provide insight as to where archaeological resources may be located. Similarly, named places do not necessarily refer to fixed geographical locations, but instead may refer to general areas or activities. Clustering of place names in certain areas typically reflects the cultural importance of these areas to Indigenous communities. Based on the available information, there are no place names located within/adjacent to the Project area, however, 11 known place names are located within approximately 5 km:

- **cx^wi't** is located at Port Hammond and said to be a former village site associated with DhRq-5 (Suttles 1955).
- **q'ə'yc'əy** is the site of a Katzie winter village site and present location of Katzie Reserve No.1 lands and is associated with DhRp-17 (Suttles 1955). McHalsie (2001) refers to the settlement location as Pipkwáqol that translates as "little potholes filled in".
- **qəl'qí'lp** is the slough connecting Katzie Slough to the Pitt River (Suttles 1995).
- **qələsí'lp/Qelóslhep** is Mann point on Barnston Island and the site where a man was "too proud" to acknowledge a transformation camp and cursed the location. Now "not even driftwood will accumulate there" (Suttles 1955). McHalsie (2001) provides a translation of "goes right by" and "water swift".

- ***səqə́m/seq'á:m*** is Robert Point on Barnston Island (Suttles 1955) translated as “split” or “divide” (McHalsie 2001).
- ***spé́ p̄xənɛ́ mix/Spipxelmexw*** is the hillside east of Katzie Slough and a former village site that translates as “little prairie with an extra small one above” (Suttles 1955; McHalsie 2001).
- ***Sq'ethetol*** is the name given to Katzie Slough which according to McHalsie (2001:148) is a transformer slough created by Swaneset and when translated means “all close together or combining into one main one”.
- ***sq'ɛ́ w'nəc*** is the eastern shore of the mouth of the Pitt River (Suttles 1955).
- ***sq'ə́ yc'əyaʔl stá tləw/Sq'ethetol stotelo*** is a geographic place name for Katzie Slough (Suttles 1955; Carlson 2001). *Sq'ethetol* translates as “all close together” and “combining into one main one”, and *stotelo* typically translates as “little creek” (McHalsie 2001).
- ***t'lí nəctən/T'tl' natstan*** is a “conflict” or “settlement” place name that translates as “kidnapped all the women” (Carlson 2001). Located on the south-eastern portion of a hillside north of q'ə́ yc'əy (Suttles 1955; McHalsie 2001).
- ***xc'ɛ́ wəltən*** is the slough connecting Katzie Slough and the Alouette River (Suttles 1955).

5.4 Previous Archaeological Studies

The Katzie Development Corporation conducted an AOA for the Pitt Meadows Regional Airport in 2015 that included the extension of two runways and associated utilities. Located approximately 1.1 km to the southwest of the current Project, the AOA determined the project fell within high archaeological potential due to its proximity (less than 200 m) to the Fraser River and partial project overlap with archaeological site DhRq-23.

In 2014 Golder conducted a heritage review for the proposed Harris Road Interchange Project. Located approximately 1.2 km to the northeast of the current Project area. The heritage review found that all proposed options for the interchange location overlapped with archaeological site DhRq-22. In addition to DhRq-22, areas of the proposed project associated proximate to watercourses were considered to have archaeological potential.

In 2013 Golder conducted an archaeological impact assessment for the subdivision development of Vaughan Place at 20178 Chatwin Avenue in Maple Ridge, located approximately 2.1 km northeast of the current Project. The report provides a summary of previous archaeological investigations at DhRp-35 and DhRp-50. These sites are associated with Katzie Slough and provide insights into archaeological site types typical of the surrounding area.

In 2011 Golder conducted an archaeological impact assessment for the Barnston/Maple Ridge Pump Station Project located approximately 1.9 km to the east of the current Project. Subsurface shovel and backhoe testing showed that fill materials were common in the area, ranging in depths of 50 to 200 cm below surface. No cultural materials were identified during the assessment.

In 2007, Arcas conducted an archaeological impact assessment for the Pitt Meadows Airport Way located approximately 1.3 km south of the current Project. Surface inspection and shovel/auger testing did not identify any archaeological materials during this assessment. A plough zone was observed as deep as ~20 cm below surface.

Sediments below the plough zone was dominated by grey clays. A layer of peat was present from 20 to 30 cm below surface at several locations.

5.4.1 Registered Archaeological Sites

A search of the PHR indicates that no registered archaeological are located within the Project area. The closest archaeological site is DhRq-33 located approximately 630 m to the north. The site consists of a historical burial dated to c. 1900 and was identified during the installation of a watermain along the west side of Harris Road. All skeletal elements and related historical materials were excavated and collected. No additional archaeological sites are identified within 1000 m of the current Project area.

5.4.2 Registered Historical Sites

No registered historical sites are located within the Project area. A search of the PHR (British Columbia 2021a) indicates nine historical sites within 1000 m of the Project (Figure 1), many within what is locally known as the Harris Road historical grouping.

DhRq-30 is the Pitt Meadows General Store and Post Office. Built in 1908, the building served as the main grocer and post office until its closure in 1952. Today it houses a portion of the Pitt Meadows Museum and Archives and was granted heritage status by the City of Pitt Meadows in 1987.

DhRq-61 is the Hoffman and Son Shop and house located at 12256-12277 Harris Road. Built in 1936, the site consists of a one and a half story home and associated machinist shop that has become part of the Pitt Meadows Museum and Archives. The site was granted heritage status by the City of Pitt Meadows in 2006.

DhRq-62 is the Pitt Meadows Municipal Hall located at 12460 Harris Road. Built in 1931, the building was known as the central commercial centre of the community and housed municipal offices and a community hall. The building housed the municipal offices until the early 1970s and has continued to serve a community role that includes use as a daycare centre today (Parks Canada 2021). The site was granted heritage status by the City of Pitt Meadows in 2006.

DhRq-64 is the Pitt Meadows community church located at 12109 Harris Road. Built in 1910 the building is an early example of early BC Mills Timber and Trading Company prefabricated buildings and is one of only two surviving examples remaining in Pitt Meadows. The place of worship was initially built and used by the Seventh Day Adventists until it was sold to the Community Church Society in 1922 (Parks Canada 2021). The site was granted heritage status by the City of Pitt Meadows in 2002.

DhRq-65 is the McMyn/Masson House originally located at the corner of Park and Bonson Roads and moved to municipal land within Hoffmann Park in 1995 to prevent its demolition and was granted heritage status by the City of Pitt Meadows the same year. Built in 1909 by John and Margaret McMyn, the building was later sold to the Masson family in 1931. It is another example of early BC Mills Timber and Trading Company prefabricated buildings remaining in Pitt Meadows (Parks Canada 2021). Today the building houses the Alaska Japanese Restaurant.

DhRq-66 is the Struthers Residence located at the corner of Harris Road and 122nd Avenue. William Struthers Jr. built the one storey bungalow in 1931. The Struthers were a well-known family in the area and operated the general store and post office until 1954 (Parks Canada 2021). The site was granted heritage status by the City of Pitt Meadows in 2006.

DhRq-89 is the Anderson Park Residence located at 12417 193B Street. Little has been recorded for this site. It was added to the Pitt Meadows Community Heritage Register in 2012.

DhRq-99 is the Royal Oak Tree located at 12460 Harris Road. Planted in 1937, the tree was added to the Pitt Meadows Community Heritage Register in 2009.

DhRq-104 is the Pitt Meadows Japanese Canadian Meeting Hall located at 19089 Advent Road. Built in 1928 the building is currently used as a church and day care centre. The building was added to the Pitt Meadows Community Heritage Register in 2017.

5.5 Historic Aerial and Orthographic Imagery

Available historical imagery shows in 1968 the area to the east of the Pitt Meadows Airport largely consists of cleared fields used for agricultural purposes with only a few houses visible along what is now 119th Avenue. By 1976 the residential subdivision south of Ford Road to the west of the Project area has been constructed. The Pitt Meadows City Hall and Pitt Meadows Elementary School to the east of the Project area still consists of an open and grass field. By 1980 there is continued residential development in the general Project area.

By 2009 most of the southern half of the Project area has been altered for use as a parking lot. At this point in time, it is unclear if the parking lot consists of fill or pavement. By late 2012 the adjacent property to the west has begun development for the Wesbrooke senior housing facility. The imagery shows that the construction activities expanded into the north end of the Project area, although it is unclear to what extent surficial disturbance occurred at the time. By 2013 the north end of the Project area is once again grassed over with the southern parking lot remaining at its current extent into the present day.

Today, much of the Project area is in an urban environment that has been subject to residential development and associated utility installation. Approximately half of the Project area is covered by a parking lot; it is uncertain if near-surface sediments have been displaced or disturbed by previous development. However, based on information available on the City of Pitt Meadows Mapview², two stormsewer pipes run along the north and east side of the Project area, and several hydro poles are located in the middle of the parking lot. These utilities would have likely displaced or disturbed native sediments at these locations.

5.6 Geotechnical Testing Data

Geotechnical auger testing was conducted within the Project area in January of 2020. Results show stratigraphy within the Project area is relatively consistent, with approximately 50 cm of fill materials overlying native soils. Tests in the grassed north half of the Project area were described as having approximately 30 cm of topsoil with root mat atop imported gravel and sand, transitioning to an approximately 1 m thick layer of brown sandy silt, with

² Available at <https://pittmeadows.myplanworx.com/PlanworX/public?apikey=f50d9903-5f23-4203-bacb-facb31f565f0>; accessed March 2022.

a final transition to a brown, poorly graded sand with trace gravels. Each test was dug to a maximum depth of approximately 6 m. Four of the auger tests located within the gravel parking lot showed trace organics in the brown silty sand layer, but this was likely caused by the placement of gravel fill directly over the previous surface level.

6.0 ARCHAEOLOGICAL POTENTIAL ASSESSMENT

In 2009, Golder prepared a predictive model for the Chilliwack Forest District to identify areas of archaeological potential. The study broke down potential into three classes, with Class I consisting of the highest potential. The model predicts the general Pitt Meadows area to fall within Class I archaeological potential due it being situated on near level terrain within the Fraser Valley, and its proximity to the Fraser River and other tributary drainages.

Although high archaeological potential is predicted by the model in the Pitt Meadows area, the current Project area is not in proximity to any current or known historical watercourses, the closest being Tulley Slough located 650 m to the northwest, with the Fraser River located 1.6 km to the south, and Katzie Slough located 1.5 km to the east. While these cultural and environmental attributes positively correlate with archaeological site locations, the inland setting of the Project area suggests archaeological deposits, if present, would likely be limited to isolated finds or low-density artifact scatters with low archaeological visibility. More extensive sites would be expected along the shoreline of the Fraser River or banks of Katzie and Tulley Sloughs to the east and of the Project area, respectively. Additionally, there are no known archaeological sites and/or First Nations place names within/adjacent to the Project area. Based on the combined results of the background review, the likelihood for encountering as-yet found archaeological materials in the Project area is considered low.

The assessment of “low” potential does not mean “no” potential for the presence of archaeological sites. Areas having low potential still retain archaeological potential as human behaviour can be variable and unpredictable, forming sites in unexpected locations. Archaeological site types in low potential areas can include, but are not limited to, brief occupational camps, isolated finds, expedient processing sites, and low-density artifact scatters.

7.0 RECOMMENDATIONS

Based on this assessment, we recommend the following archaeological resource management actions for the Project:

- Adopt Metro Vancouver’s Archaeology Chance Find Procedure. This document provides workers with basic information for the management of known or suspected archaeological materials which may be unexpectedly encountered on a project site while an archaeologist is not present. These guidelines are designed to promote the preservation and proper management of archaeological materials while minimizing disruption to project scheduling.
- Retain an archaeological consultant to review Metro Vancouver’s Archaeology Chance Find Procedure with workers on the first day of site work.

As the likelihood for encountering as-yet found archaeological materials in the Project area is considered low, we do not recommend obtaining a *Heritage Conservation Act* permit for this work. However, in the unlikely event that archaeological deposits are encountered during ground disturbing activities, all work may be required to cease while an HCA permit is obtained (~120+ days).

8.0 USE OF REPORT

This report was prepared for the exclusive use of Metro Vancouver. Any use, reliance, or decisions made by third parties on the basis of this report are the responsibility of such third parties. The AOA was not specifically designed to address past, present, or anticipated First Nation use of the Project area for traditional purposes and does not constitute a traditional use study. This report was written without prejudice to potential or established First Nation rights, including title, or treaty rights.

9.0 CLOSURE

We trust the information contained in this report is sufficient for your current needs. Should you have any questions regarding this report, please do not hesitate to contact the undersigned at 604-296-4200.

Golder Associates Ltd.



Adam Gray, MA
Archaeologist



Andy Mason, MA, RPCA
Principal, Senior Archaeologist

AG/ARM/lmk

Golder and the G logo are trademarks of Golder Associates Corporation

[https://golderassociates.sharepoint.com/sites/146414/project files/6 deliverables/3.0_issued/21466871-002-r-rev0/21466871-002-r-rev0-pit meadows aoa-29apr_22.docx](https://golderassociates.sharepoint.com/sites/146414/project%20files/6%20deliverables/3.0_issued/21466871-002-r-rev0/21466871-002-r-rev0-pit%20meadows%20aoa-29apr_22.docx)

10.0 REFERENCES CITED

Archaeology Branch

- 1998 *Archaeological Impact Assessment Guidelines, Fourth Revised Edition*. Prepared by the Ministry of Small Business, Tourism and Culture.
- 1990. British Columbia archaeological resource management handbook. Victoria BC: Ministry of Small Business, Tourism and Culture.

Arcas Consulting Archeologists

- 2008. Pitt Meadows – Airport Way: Harris Road to Bonson Road Archaeological Impact Assessment. HIP 2007-0179 report on file with the Archaeology Branch, Victoria.

Barnett H.

- 1938. The Coast Salish of Canada. *American Anthropologist* 40(1): 118–141.
- 1955. *The Coast Salish of British Columbia*. University of Oregon Press, Eugene.

Bernick, Kathryn

- 1998. Hidden Dimensions: The Cultural Significance of Wetland Archaeology. UBC Press, Vancouver.

Boas, F.

- 1886. The Coast Tribes of British Columbia. *Science* 9(216): 288–289.

British Columbia.

- 2021a. Information on CAD. Ministry of Indigenous Relation and Reconciliation. [accessed September 2021]. <http://catalogue.data.gov.bc.ca/dataset/first-nations-consultative-areas-report-public-map-service>.
- 2021b. Information on RAAD: Overview. Ministry of Forests, Lands, Natural Resource Operations and Rural Development. [accessed September 2021]. http://www.for.gov.bc.ca/archaeology/accessing_archaeological_data/RAAD_overview.htm.
- 2022c. GeoBC Imagery Finder [Accessed 21 March 2022]. Available at: <http://a100.gov.bc.ca/pub/wimsi/AirphotoSearch>.

Duff, Wilson.

- 1952. The Upper Stalo Indians of the Fraser valley, British Columbia. Anthropology in British Columbia, Memoir No.1. British Columbia Provincial Museum, Victoria.

Fisheries and Oceans Canada.

- 1998. Lower Fraser River Stream Inventory Atlas: *Second Edition*. Habitat and Enhancement Branch, Fisheries and Oceans Canada, Vancouver.

Golder Associates Ltd.

- 2009. Archaeological Review and Management Plan for the Southern Chilliwack Forest District. Report on file with the Archaeology Branch, Victoria.
- 2013. Archaeological Impact Assessment for the Subdivision Development of Vaughn Place, 20178 Chatwin Avenue, Maple Ridge, BC. HIP 2013-0120 report on file with the Archaeology Branch, Victoria.
- 2014. Archaeological and Heritage Resources Review of Highway 7 Widening Project between 266 Street and 287 Street in Maple Ridge, BC. Report on file with Golder Associates Ltd., Vancouver.

Hill-Tout C.

1897. Notes on the cosmology and history of the Squamish Indians of British Columbia. *Transactions of the Royal Society of Canada, 2nd ser.* 3(2): 85–90.
1905. The Salish Tribes of the Coast and Lower Fraser Delta. *Ontario Provincial Museum Annual Archaeological Report* 12: 225-235.

Holland, S.S.

1976. Landforms of British Columbia. A Physiographic Outline. Bulletin 48, B.C. Department of Mines and Petroleum Resources, Victoria, B.C. pp. 138

Hoffman, T.

2010. Archaeological Impact Assessment: Segments of Golden Ears Bridge Right of Way. HCA Permit 2006-2002. Unpublished report on file with the Archaeology Branch, Victoria.

Jones, R. and Annas, R.

1978. Vegetation. In *The soil landscapes of British Columbia*, edited by Valentine, K.G., Sprout, P.N., Baker, T.E. and Lavkulich, L.M., pp 35-45. BC Ministry of Environment, Victoria.

Katzie Development Corporation

2015. Archaeological Overview Assessment for the Extension of Runway 08R and 26L and Related Airside Works Project Pitt Meadows Regional Airport, Pitt Meadows, BC. Report on file with the Katzie Limited Development Partnership, Vancouver.

Mason, A.

2011. Cultural resource management in the context of forestry in British Columbia: Existing conditions and new opportunities in Aboriginal Peoples and forest lands in British Columbia and Canada. Vancouver BC: University of British Columbia Press. p. 102–117.

Matthews, J.S.

1955. Conversations with Khahtsahlano 1932-1954. Vancouver, BC.

Maud, R., editor.

1978. *The Salish People*. The local contribution of Charles Hill-Tout Volume III: The Mainland Halkomelem. Talonbooks, Vancouver.

McHalsie, A.

2001. *Halq'eméylem Place Names in Stó:lō Territory*. In A Stó:lō Coast Salish Historical Atlas, edited by K. Carlson. Stó:lō Heritage Trust, Chilliwack, B.C.

Morin, J.

2015. Tsleil-Waututh Nation's history, culture and Aboriginal Interest in Eastern Burrard Inlet (redacted version). [accessed September 2021]. <http://twnsacredtrust.ca/wp-content/uploads/2015/05/Morin-Expert-Report-PUBLIC-VERSION-sm.pdf>.

Parks Canada

2021. Canadian Register of Historic Places. [accessed September 2021].
<https://www.historicplaces.ca/en/results-resultats.aspx?m=2&Keyword=Pitt%20Meadows>

Pojar J., Klinke, K., Demarchi, D.A.

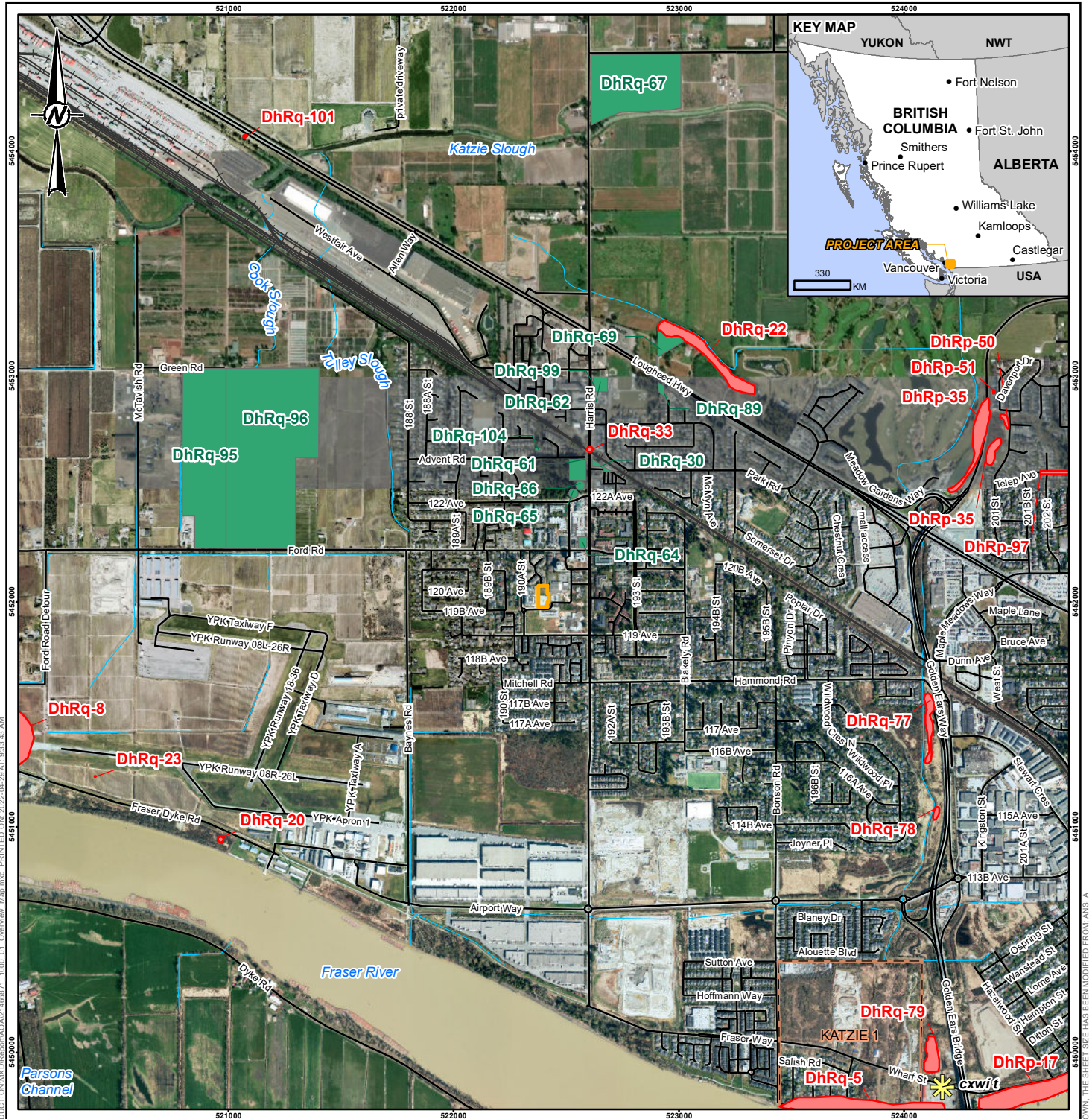
1991. Coastal Western Hemlock. In *Ecosystems of British Columbia. BC Ministry of Forests, Special Report Series, No. 6*, edited by D. Meidinger and P. Pojar, pp. 95-111. Crown Publications, Victoria.

Suttles, W.

1951. Economic life of the Coast Salish of Haro and Rosario Straits. Printed without proper identification in Coast Salish and Western Washington Indians. Garland Publishing, New York.
1955. Katzie Ethnographic Notes. Anthropology in British Columbia. Memoirs 2. British Columbia Provincial Museum, Victoria.
1987. Coast Salish essays. Talonbooks, Vancouver, BC.
1990. Central Coast Salish. In *Handbook of North American Indians, Volume 7: Northwest Coast*. Smithsonian Institute, Washington DC.

Turner, Nancy

1991. Burning Mountain Sides for Better Crops: Aboriginal Landscape Burning in British Columbia. *Archaeology in Montana* 31(2): 57-73.



LEGEND

- PROJECT
- PREVIOUSLY RECORDED ARCHAEOLOGICAL SITE
- REGISTERED HERITAGE SITE (PROTECTED)
- RESERVE LAND
- PLACE NAME
- ROAD
- RAILWAY
- WATERCOURSE

0 500 1,000
1:25,000 METRES

CLIENT

METRO VANCOUVER

CONSULTANT



GOLDER
MEMBER OF WSP

YYYY-MM-DD 2022-04-29

DESIGNED AG

PREPARED JP

REVIEWED AG

APPROVED ARM

REFERENCES

1. IMAGERY COPYRIGHT © 20190320 ESRI AND ITS LICENSORS. SOURCE: CITY OF SURREY. USED UNDER LICENSE, ALL RIGHTS RESERVED.
2. ARCHAEOLOGICAL SITES OBTAINED FROM B.C. MINISTRY OF FORESTS, LANDS, NATURAL RESOURCE OPERATIONS AND RURAL DEVELOPMENT ON 2021-03-25.
3. INDIAN RESERVE, ROAD, WATERCOURSE AND CONTOUR DATA CONTAIN INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENSE - BRITISH COLUMBIA AND CANADA.

COORDINATE SYSTEM: NAD 1983 UTM ZONE 10N

PROJECT

ARCHAEOLOGICAL OVERVIEW ASSESSMENT,
PROPOSED AFFORDABLE HOUSING SITE ON 119B AVENUE,
PITT MEADOWS, BC

TITLE

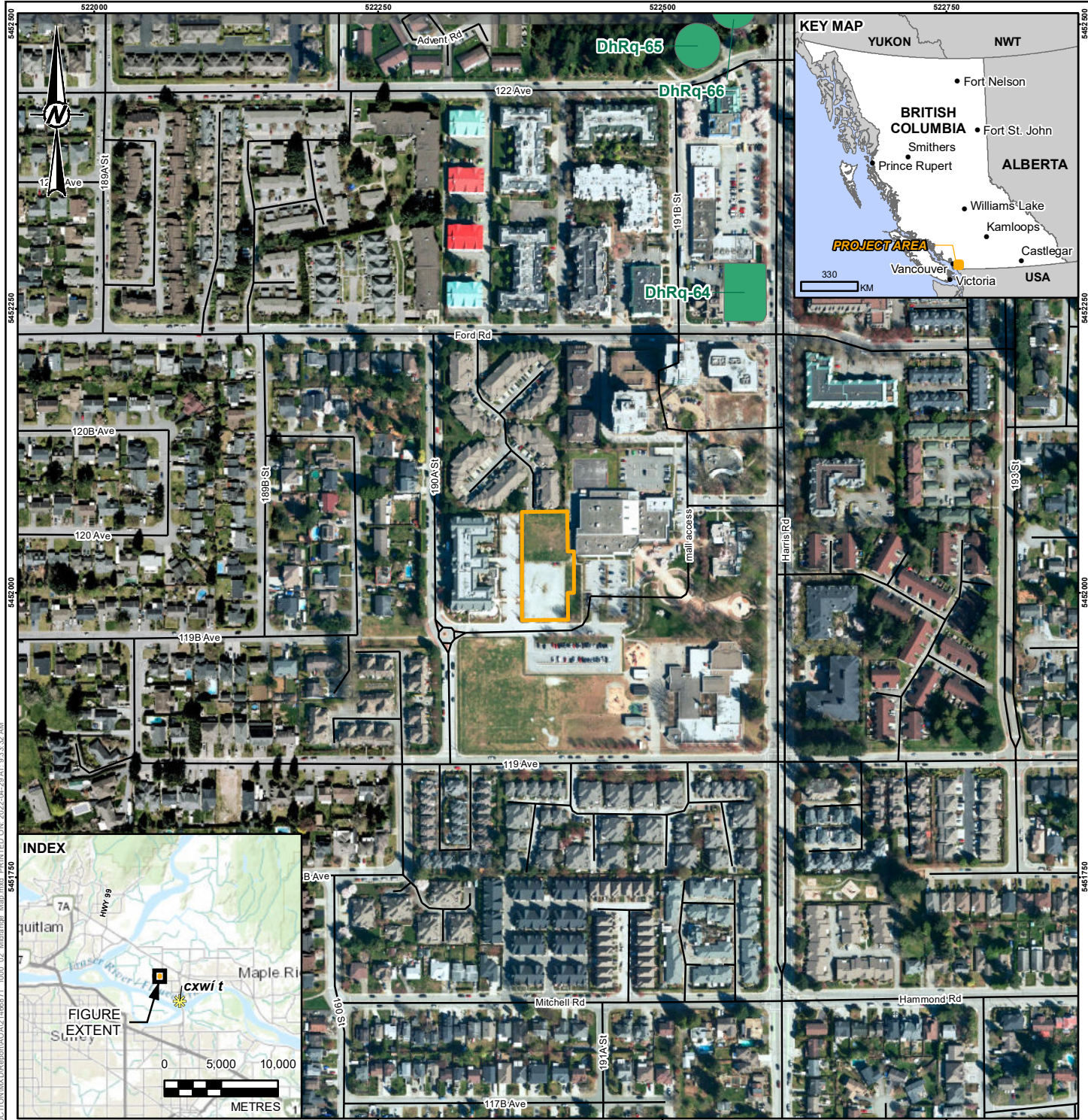
OVERVIEW MAP

PROJECT NO.
21466871

CONTROL
1000

REV.
0

FIGURE
1



LEGEND

- PROJECT AREA
- REGISTERED HERITAGE SITE (PROTECTED)
- ROAD
- RAILWAY

REFERENCES

- IMAGERY COPYRIGHT © 20190320 ESRI AND ITS LICENSORS. SOURCE: CITY OF SURREY. USED UNDER LICENSE, ALL RIGHTS RESERVED.
- ARCHAEOLOGICAL SITES AND AOA HIGH POTENTIAL OBTAINED FROM B.C. MINISTRY OF FORESTS, LANDS, NATURAL RESOURCE OPERATIONS AND RURAL DEVELOPMENT ON 2021-03-25.
- INDIAN RESERVE, ROAD, WATERCOURSE AND CONTOUR DATA CONTAIN INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENSE – BRITISH COLUMBIA AND CANADA.

COORDINATE SYSTEM: NAD 1983 UTM ZONE 10N

CLIENT
METRO VANCOUVER

CONSULTANT



YYYY-MM-DD 2022-04-29
DESIGNED AG
PREPARED JP
REVIEWED AG
APPROVED ARM

PROJECT
ARCHAEOLOGICAL OVERVIEW ASSESSMENT,
PROPOSED AFFORDABLE HOUSING SITE ON 119B AVENUE,
PITT MEADOWS, BC

TITLE
MIDRANGE MAP

PROJECT NO. 21466871 CONTROL 1000 REV. 0 FIGURE 2



golder.com