

1. Parks Canada Mandate

On behalf of the people of Canada, Parks Canada Agency (PCA) protects and presents nationally significant examples of Canada's natural and cultural heritage, and fosters public understanding, appreciation and enjoyment in ways that ensure their ecological and commemorative integrity for present and future generations.

2. Objective

To acquire archaeological services from a professional archaeological Consultant (the Consultant) to carry out: (1) monitoring for a Phase II Environmental Site Assessment (ESA), Preliminary Quantitative Risk Assessment (PQRA), Hazardous Building Materials Assessment (HBMA), and Geotechnical Investigation Assessment (GIA); and, (2) an Archaeological Impact Assessment (AIA) for the Parks Canada Agency infrastructure project for Nááts'ihch'oh National Park Reserve in Tulita, Northwest Territories. The goals of the AIA include, but are not limited to, identifying new archaeological sites associated with the infrastructure project activities and development plans, defining the nature and temporal period of the sites and defining the limits of the site(s) within the PCA property.

2.1 Request for Quotation

Consultant shall submit a proposal, including (1) a formal plan for how the Consultant proposes to complete the requirements of this statement of work, (2) a detailed breakdown of fixed price cost estimate including hours and rates attributed to different personnel, and (3) a schedule of execution of the work. Consultant shall also submit (4) a tailored resume for the proposed principal investigator to confirm their qualifications to work in the specified region of the Northwest Territories, including past experience working in the NWT, and the number of past permits held in the NWT – in each of the categories of Indigenous, historic, and fur trade.

Parks Canada will review Consultant proposal. The Consultant shall not proceed with execution of this Statement of Work, as there is no guarantee of work, until after such a time as the lump sum cost estimate and schedule are accepted by Parks Canada, and a Contract with Parks Canada is formalized.

3. Background: Tulita Infrastructure Project

Parks Canada Agency (PCA) has purchased three lots (Lots 9-1, 9-2, 9-3, Plan 1074, Tulita NT / OR / 30 and 30A Bear Rock Drive, Tulita NT) encompassing approximately 1.09 hectares in Tulita, Northwest Territories to support the management and operations of Nááts'ihch'oh National Park Reserve. The property is bordered by the Mackenzie River (south) and Bear Rock Drive (north). The Tulita property will be developed by removal of one of the existing buildings (pending FHBRO evaluation), removal of other unnecessary infrastructure; renovation of an existing housing unit and other shed structures; construction of a new office and visitor centre building with attached cold storage warehouse, and construction of an additional new staff housing unit. Additional project activities will include construction of a parking area, possible modifications to the existing road, possible construction of a new site-access road, and possible landscaping with tree and shrub planting.

The PCA property is located just east of the Mackenzie River and Great Bear River juncture with the Great Bear River connecting the Mackenzie River to Great Bear Lake. This region is culturally significant with both rivers serving as travel corridors over thousands of years. Archaeological investigations have been limited within the Tulita area. Identified archaeological sites are a combination of contemporary, postcontact and precontact Indigenous sites. Site types vary and include historic barge landings, trails, campsites and lithic scatters. There has also been a fur trading presence in Tulita (formerly known as Fort Norman) since 1851 with 15 trading sites documented for Fort Norman that include both trading companies and individual traders.

The PCA property at Bear Rock Drive was used as a trading post with windmill and blacksmithing shop. There were other historic structures on the property that pre-date 1945 based on an air photo review during the Phase I ESA. There are also at least two Indigenous sites related to the property that have had minimal archaeological investigation. The precise location, extent and condition of archaeological resources on the property is not known. Precontact artifacts were identified along the river bank and within a garden from the previous landowner.

4. Background: Projects

4.1 Lot Assessments

Phase II Environmental Site Assessment (ESA), Preliminary Quantitative Risk Assessment (PQRA), Hazardous Building Materials Assessment (HBMA), and Geotechnical Investigation Assessment (GIA) will be conducted on the property, and

will be herein referred to as “Lot Assessments”. The Lot Assessments were planned due to the results of the 2019 Phase I ESA that identified potential environmental concerns related to historical land use; aboveground fuel storage tanks (AST), lead containing paints (LCP) and asbestos-containing materials (ACM). Further investigation conducted by PCA in 2020 around the on-site ASTs and hazardous building materials supported the need for these additional assessments. The Lot Assessments will improve understanding of the extent of potential impacts to existing structures, soil and groundwater; and baseline geotechnical information for the site. Methods of investigation for the Lot Assessments include hand auger testing, shovel testing, coring of soil samples by drilling equipment, installation of monitoring wells, and collection of samples from existing building surfaces. Dillon Consulting Ltd. has been contracted to undertake the Lot Assessments.

4.2 Lot Assessments Schedule

The tentative schedule for the Lot Assessments field work is the week of August 16th, 2021. The archaeological consultant must indicate their availability for the specific week of work, and plan the monitoring activities to coincide. If that is not possible, return a decline of services to Parks Canada at earliest possible opportunity. The archaeological consultant must closely coordinate the timing of their monitoring work with Dillon Consulting Ltd's schedule of work, and coordinate with Dillon Consulting Ltd on any need to modify the schedule. No additional mobilizations or travel allowances will be permitted such that the AIA work could occur at a different schedule to the monitoring work.

5. Scope of Work: Archaeological Monitoring during Lot Assessments

Indigenous archaeological sites have been identified along the Mackenzie and Great Bear Rivers and fur trade activities within the Tulita area date to as early as the 1850s. The Bear Rock Drive property has a long history of land use represented by precontact Indigenous archaeological resources, air photo documentation of a trading post, blacksmith shop and windmill and unidentified historic buildings predating 1945. There have been more recent ground impacts on the property after 1950 by the previous land owner. Some of these disturbances are related to building demolition and construction, former roads and gardens.

Local Indigenous representatives and/or Elders will be present and on-site during the field work at their discretion, coordinated through Parks Canada directly. The Consultant will work with and/or alongside the Local Indigenous representatives and/or Elders during the monitoring and during the AIA.

Health and Safety:

- As Dillon is Prime Contractor, Dillon and any workers undertaking work during the Lot Assessments will operate in accordance to Dillon's site-specific health and safety plan (SSHSP). Archaeological Consultant will adhere to and sign off Dillon's SSHSP.
- COVID-19:
 - Safety measures will be followed including restrictions, quarantine periods and use of PPE;
 - Contractor's responsibility to deliver the SOW in accordance with the current restrictions of the Provincial/Territorial regulator concerning public health emergencies declared within the jurisdiction of any specific restrictions within municipal or provincial jurisdictions.
- Dillon Consulting Ltd will ensure that utilities are marked prior to commencement of ground work. Utilities include electrical, phone, cable, water/storm/sewer, heating/cooling supply lines, gas and any other underground or above ground utility.

Archaeological field and laboratory work will follow the standards and practices of PCA as provided by Parks Canada Terrestrial Archaeology contact (PCTAR).

5.1 Archaeological Monitoring of Ground Testing

A qualified archaeological Consultant will work with and coordinate scheduling with Dillon Consulting Ltd, **consultant** undertaking the Lot Assessments. The archaeological Consultant will be responsible for archaeological guidelines, communications and reporting to the Project Manager (PM) and PCTAR representative as outlined in this SOW.

5.1.1 Method of Archaeological Monitoring

All on site ground testing for the Lot Assessments will be monitored for:

- Evidence and depth of *in situ* archaeological resources including cultural deposits, features and/or artifacts;
- Description of soil type and relationship within the stratigraphic profile of the archaeological resources (if possible);
- Depth of potential ground disturbance by post-1950 activities such as plowing, road or disturbed deposits and relationship of the disturbance to the stratigraphic profile (if possible).

5.1.2 Documentation of Archaeological Monitoring

Location of ground testing will be recorded by:

- GPS coordinates;
- Site map showing location of test units relative to the property. Map to include:
 - Scale and north arrow;
 - Type of testing (coring, shovel test, other); and
 - Negative and positive testing locations for ground disturbance and/or archaeological resources.
- Depth and size of testing site;
- Profile of testing site, if possible;
- Photographs of:
 - Testing site profiles, if possible;
 - Location of the testing site relative to the property;

Extent and nature (where possible) of archaeological deposits including features and/or artifact finds including:

- Top and bottom depth of deposit containing archaeological resources;
- Detailed description of the archaeological deposits;
- Description of soil type(s) associated with the archaeological resources;
- Photograph(s) of deposits and archaeological resources with scale and north arrow.

Extent of ground disturbance within the testing sites from recent activities will be recorded including:

- Top and bottom depth of disturbance;
- Description of disturbance;
- Photograph(s) of disturbance with scale and north arrow.

5.1.3 Artifact Collection

If significant and/or diagnostic artifacts are encountered during the site testing, they will be collected with detailed provenience information including:

- Test location identifier;
- Depth;
- Description of associated soil type;
- Photographs illustrating location of artifact within testing site and location of test site relative to the property.

Significant/diagnostic artifacts include projectile points, stone tools, fur trade artifacts and/or diagnostic historic artifacts.

5.2 Interpretation Archaeological Monitoring

Interpretation of disturbance and/or archaeological resources will be included in the final report. The contractor will review existing land use information including the results of Dillon's document review of site history and gaps required as part of the Lot Assessments. If interpretation is not possible due to the nature of the finds, this will be stated with an explanation and if there is a recommendation for additional work in that area for archaeological resource protection and/or interpretation.

5.3 Recommendations from Archaeological Monitoring

Recommendations for further investigation based on the results of the monitoring and presence/extent of disturbance and/or archaeological resources for the AIA.

6. Scope of Work: Archaeological Impact Assessment

Indigenous archaeological sites have been identified along the Mackenzie and Great Bear Rivers and fur trade activities

within the Tulita area date to as early as the 1850s. The Bear Rock Drive property has a long history of land use represented by precontact Indigenous archaeological resources, air photo documentation of a trading post, blacksmith shop and windmill and unidentified historic buildings predating 1945. There have been more recent ground impacts on the property after 1950 by the previous land owner. Some of these disturbances are related to building demolition and construction, former roads and gardens.

Local Indigenous representatives and/or Elders will be present and on-site during the field work at their discretion, coordinated through Parks Canada directly. The Consultant will work with and/or alongside the Local Indigenous representatives and/or Elders during the monitoring and during the AIA.

Health and Safety:

- As Dillon is Prime Contractor during the Lot Assessments, Dillon and any workers undertaking work during the Lot Assessments' field component of work will operate in accordance to Dillon's site-specific health and safety plan (SSHSP). Archaeological Consultant will adhere to and sign off Dillon's SSHSP.
- COVID-19:
 - Safety measures will be followed including restrictions, quarantine periods and use of PPE;
 - Contractor's responsibility to deliver the SOW in accordance with the current restrictions of the Provincial/Territorial regulator concerning public health emergencies declared within the jurisdiction of any specific restrictions within municipal or provincial jurisdictions.
- Contractor must ensure that utilities are marked prior to commencement of ground work. Utilities include electrical, phone, cable, water/storm/sewer, heating/cooling supply lines, gas and any other underground or above ground utility. Coordination with Prime Consulting Contractor (Dillon Consulting) is required for this activity.

Archaeological field and laboratory work will follow the standards and practices of PCA as provided by PCTAR.

PCA will provide the Contractor with the footprint/locations of the proposed infrastructure and associated project activities that will involve ground disturbance. This will be referred to as "project footprint".

If available at the time of AIA investigation, and in coordination with Dillon Consulting's findings, PCA will provide potential contaminated site locations or potential areas demarcated as no go zones based on the Lot Assessments.

6.1 Archaeological Pedestrian Survey

The Consultant will determine if the ground conditions are conducive for undertaking a pedestrian survey within the project footprint. If so, the project area will be walked in 5 meter transects. Project footprint is estimated at 70m E-W x 40m N-S corresponding to the north end of proposed parking lot to the south end of proposed staff housing unit corresponding to north end of floodway fringe.

Previous archaeological investigations recorded precontact archaeological resources along the Mackenzie River bank and within a former garden area of the previous land owner. Recommendations for further archaeological investigation on the property were based on these finds as well as stratigraphic deposits. The Consultant will undertake a pedestrian survey (one transect) along the Mackenzie River bank edge within the Bear Rock Drive property (estimated at 155m). This will assist with:

- Identification of potential exposed/eroding archaeological resources that may extend inland to the project footprint;
- Information on stratigraphy and depth of potential archaeological resources.

Exposed surface artifacts and/or potential archaeological features (such as, but not limited to, depressions or other indicators for previous building foundations, artifact concentrations, etc.) will be documented by mapping, GPS coordinate(s), photographs and detailed descriptions.

Significant artifacts such as projectile points, stone tools, fur trade artifacts and/or diagnostic historic artifacts will be collected with detailed provenience information, photographs and cross-referenced to map location.

6.2 Archaeological Test Unit Excavation

The Consultant is required to carry out an AIA archaeological test unit excavation within the footprint of the project area including:

- Project footprint including (maximum of 40 test units):
 - Proposed location of new buildings and staging areas;
 - Location of other infrastructure/development such as parking lot, roads and landscaping;
- Confirmation of anomalies identified during the ground penetrating radar (GPR) survey (maximum of 10 test units or linear trenches);
- Locations where significant artifacts and/or features were identified through the pedestrian survey (maximum of 20 extra units related to strategic features).

The shovel test units will be strategically placed based on professional judgement and environmental factors within the above locations to determine nature and extent of potential *in situ* archaeological resources. The test units should be placed at staggered intervals. The test units should begin at 5m apart and jump to 10m if test units contain recently disturbed deposits on top of sterile soil. If there are *in situ* archaeological resources, then the testing should revert back to 5m intervals. If archaeological features or historic building foundations are located, then test unit interval should be adjusted to capture the edges of these features. This may also be achieved through 20-30cm wide trench(s), depending on depth of cultural deposits.

Avoidance of potential contaminated site locations or potential areas demarcated as no go zones will not be included in the testing. As coordinated by Dillon Consulting, if the information is available at the time of AIA investigation, these locations will be included on the site map with a description on the map and in the report as to the nature of avoidance.

The shovel tests will be at least 30 cm in diameter (at top and bottom of test) excavated stratigraphic layer at minimum 5cm intervals into *in situ* sterile soils. The 5cm interval will not apply to recently disturbed deposits.

All soils will be screened through 6 mm (¼ inch) mesh for artifact recovery. All artifacts will be collected and bagged by lot provenience.

All tests will be backfilled with original spoil and the area returned to a pre-excavation state.

All shovel test pits must be recorded individually using a standardized Shovel Test Recording Form.

Modern debris (post-1950) recovered from a test pit *does not* indicate a positive test. However, the test pit should be recorded as containing modern debris and documented as per the Shovel Test Recording Form.

6.3 Development of Additional Mitigation Measures

Depending on the findings from the above investigations, additional mitigation measures may be required if significant finds are located (such as but not limited to historic foundations, significant artifact concentrations pre-dating 1950s, precontact hearth or occupation deposits).

The Consultant will develop recommendations for archaeological mitigation measure(s) relative to the potential archaeological resource(s) to be impacted, and communicate them to the PM and PCTAR so that a determination can be made if further testing is needed to evaluate the relationship of these finds to the proposed construction activities and/or if mitigation of a portion of these potential finds will be required.

Note that it is a preference of Parks Canada to avoid the need for further investigative work beyond this scope. Mitigations applied to the Construction phase of work should be the approach used wherever feasible. Archaeologist should be in communication with PCTAR and PCA PM while in the field to ensure that decisions can be made remotely, and during progress of work. Completion of work should be such that the site is left usable for regular site uses, for a duration of several months following the field component of the AIA.

6.4 Post-1950 Deposits and Modern Debris

Modern debris will be documented in the field notes and field recording forms according to stratigraphic provenience, and presented as evidence to support stratigraphic interpretation(s) in the report. Material not collected will be returned to the test pit, prior to backfilling. Examples of modern debris (post 1950) includes, but is not limited to, plastic, plastic/foil packaging, Styrofoam or other recent synthetic products, wire-cut nails.

7. Prior to Commencement of Fieldwork

- a. The Consultant must submit an on-line application for a Parks Canada Research and Collection Permit (RCPS) (http://www.pc.gc.ca/apps/rps/page1_e.asp). As the primary permit holder, the Principal Investigator, representing the Consultant, and the Consultant are responsible for all responsibilities identified in the general conditions and any special conditions identified within the permit. No archaeological work can commence until the RCPS permit has been approved.
- b. The Consultant for the AIA must ensure or obtain utility locations for all areas to be tested as described above.
- c. The Consultant must meet at minimum once, by phone, with the PM, PCTAR and other Parks Canada staff as appropriate in order to ensure the Project requirements and engagement context are understood, to identify any issues and establish a communication protocol for the duration of the project.
- d. Site number and other relevant Parks Canada provenience information will be provided to the Consultant by the PCTAR at the beginning of the contract with start numbers and instructions on their use in cataloguing artifacts, maps, field notes, photographs, etc.
- e. Consultant must validate with the PCTAR how they will use the Parks Canada provenience system with the exact numbers they will use (i.e., Operations, Sub- operations, Lots, artifact catalogues, cataloging photographs, maps etc.). All errors that do not respect the provenience system and start numbers provided must be corrected by the Consultant at their cost.
- f. The Consultant will provide PCA with a Health and Safety Plan, to be approved by PCA prior to commencement of fieldwork. The Health and Safety Plan must include use of appropriate personal protective equipment and other equipment including that related to COVID 19 protocols. The Consultant will adhere to the Safety Plan provided by Dillon Consultants Ltd during the archaeological monitoring for the Lot Assessments.

8. Archaeological Documentation Requirements

During all stages of archaeological investigation, the Consultant shall record all archaeological resources encountered during the project. All recording where applicable will follow the procedures and guidelines listed in the *Parks Canada Archaeological Recording Manual: Excavations and Surveys* (<http://www.pc.gc.ca/eng/docs/pc/guide/fp-es/index.aspx>).

- a. Archaeological control through stratigraphic excavation is required for all excavation units. Arbitrary levels may be assigned within stratigraphic layers.
- b. The general stratigraphy and any significant variance in the stratigraphy, such as the appearance of additional stratigraphic layers, and/or significant change in thickness, soil content and/or colour, is also to be recorded, and the representative stratigraphy of these units photo-documented. Soil descriptions are to include, but need not be limited to, soil types, colour, composition, inclusions, thickness, interpretation, nature and stratigraphic relationship of deposit(s).
- c. All positive shovel test pits must be recorded individually using a Shovel Test Record Form.
- d. If the stratigraphy is not clear nor evident through photo-documentation, a profile drawing of each unit wall containing differing stratigraphy will be produced by the Consultant.
- e. To-scale, As Found plan view drawings of features and structural remains of heritage value, encountered during the investigations, are to be produced by the Consultant. These drawings are to be clearly labelled with the appropriate provenience information and may be in digital format.
- f. The Project Area(s) and excavated shovel test pits must be documented with photographs as follows:

- Overview of the project area environment.
- All positive shovel test pits with close-up and contextual views.
- Representative sample of negative shovel test pits with close-up and contextual views.
- All photographs (except overview of the project area) must include a north arrow and scale; *in situ* sterile soils will be clearly evident.

Photographs must be digital in .jpg or .tiff format and in high resolution to support 8x10", 300dpi or equivalent. They will be catalogued following the format provided by PCTAR.

- g. Parks Canada requires all Archaeology Research and Collection permit final submissions to include digital spatial data as shapefiles. The spatial data set(s) should include:
- All horizontal co-ordinates to a maximum error of 5 metres.
 - Centroid location of any newly identified sites (point).
 - Identified features (point, line, or polygon).
 - Site limits as determined by the investigation (polygon).
 - All positive shovel test locations (point location) and excavation units/blocks (polygon and centroid point).
 - The extents of each area assessed.
 - Any other spatial data relevant to the assessment (confirm with PCTAR).
- h. Archaeological field recording including; field notes, drawings and photo records, will be catalogued, packed and delivered in such a way as to be compatible with the *Parks Canada Collections Standards* outlined in the *Parks Canada Archaeological Recording Manual: Excavations and Surveys*. Parks Canada will provide the appropriate archaeological site numbers, provenience and photographic catalogue numbers to be used.
- i. The Consultant must use archival quality recording material (e.g. acid-free paper, ink, pencil) for all field and laboratory recording. If electronic field recording is implemented, a paper and .pdf copy of all notes will be submitted to the PCTAR.

9. Deliverables

All deliverables must be submitted and approved by PCTAR prior to final payment and closing of the contract.

9.1 Letter for Mitigation Measures

The Consultant will communicate in writing to the PM and PCTAR if there are any recommendations for archaeological mitigation measure(s) relative to the potential archaeological resource(s) that may be impacted as a result of the proposed project. The letter must list the provenience location(s), historical significance and extent including depth. This should be communicated when the find(s) become apparent so that possible mitigation measures within the scope of this project can be determined. If there are no mitigation measures, this too must be reported to the PM and PCTAR within fourteen (14) days of the AIA completion.

9.2 Draft Report

Unless otherwise agreed to in writing, the Consultant must produce a draft report, to be submitted as per the schedule outlined below. The draft report will include findings from the archaeological work and recommendations for all archaeological sites and features uncovered, with appropriate photographs, maps and/or profile and plan view drawings.

The report at a minimum must include:

- **Introduction:** stating the scope of the archaeological work undertaken.
- **Historical Background:** PCTAR will provide the Archaeological Overview Assessment that can be used as background. An overview of the Indigenous and historic land-use. PCTAR will provide background documents including the land-use studies included in the ESA, Archaeological Overview Assessment and air photos.
- **Method:** describing documentary, field, laboratory, and analytical methods employed.
- **Results:** detailing the archaeological resources identified, including interpretation and analysis of the archaeological resources encountered in the study area.

- **Interpretation:** of stratigraphic sequence and temporal phasing for the archaeological deposits encountered as applicable to the project and associated discipline of archaeology.
- **Interpretation:** description of artifacts and archaeological resources collected in the field.
- **Conclusions:** what archaeological and/or cultural resources are present, the significance to be inferred from their presence, potential heritage value and their locations.
- **Mitigation measures:** the Consultant will provide recommendations as to what, if any, additional mitigation investigations may be required (such as excavation, monitoring or additional recording) to preserve sufficient record of the archaeological resources.
- **Photographs:** all photographs must have the appropriate PCA catalogue number referenced.

9.3 Final Report

Unless otherwise agreed to in writing, ten (10) business days following receipt of comments from Parks Canada's review of the draft report, the Consultant must produce a final report. The final report for the archaeological work is to be signed and submitted by the Principle Investigator, who was granted the Parks Canada Research and Collection Permit. The Final report will be reviewed and approved by Parks Canada.

Two (2) bound originals of the final report will be submitted. One will be submitted to the PM and the second will be submitted to PCTAR.

Unless otherwise specified, all final reports, including embedded images and tables, will also be submitted via a secure file transfer and must be:

- Free of computer viruses;
- Formatted and accurately matched to the paper versions. Electronic versions that do not accurately match the paper versions will be rejected, and correction at no extra cost will be required;
- Submitted in Adobe Acrobat format (pdf);
- When creating the Adobe Acrobat format (pdf), ensure that all fonts required by the document are embedded and that copying of text is permitted;
- Submit in high resolution;
- It is acceptable to submit the various sections of the report as appropriately labelled and organized separate files. However, a single, consolidated file must also be submitted;
- Compatible with standard Microsoft Windows fonts;
- Clearly labeled, including title, permit number, project name, site number, Consultant group name, and the date;
- Organize/label the files in a logical, user-friendly fashion;

9.4 Artifacts

All artifacts and artifact catalogues are to be provided in both paper and electronic format (MS Excel) and delivered to the PCTAR within thirty (30) days of the completion of final report. Artifacts are to be processed, inventoried and packaged, by the Consultant, using archival quality materials and according to the standards of Parks Canada (See Appendix D).

9.5 Field Records

A copy of all original records (i.e., field notes, photographs, drawings etc.) and a copy, in both paper and digital format, are to be delivered to the PCTAR within thirty (30) days of the completion of the final report. If any electronic field recording is implemented, a paper and .pdf copy of all notes will also be submitted to the PCTAR.

The Consultant will be required to complete and submit provenience information in electronic format.

For digital photographs, the file name of each photograph will match the Parks Canada catalogue number (e.g., the catalogue number for field photograph #2330 will be 150H2330E and will correspond to the photograph file name 150H2330E.jpg). An image catalogue in electronic format (MS Excel) must be supplied with the digital photographs and will include for each digital image the source number (e.g. USB memory stick number), digital image number, provenience number, the author, the date of creation, direction taken, and a brief subject caption.

All field drawings (maps, plans, elevations, etc.) are to be duly catalogued. Each record is to contain the following information: site, project name, provenience number, description, scale, date of production, cross reference (e.g., page numbers) with field notes.

The next catalogue numbers for each type of field record will be provided by the PCTAR.

9.6 Maps

Maps will be included in the final report. The Consultant will provide the collected mapping data set(s) as shapefiles (.shp and auxiliary files) to Parks Canada. All shapefiles should be packaged as winzip files with all auxiliary files included. Map packages, geopackages and geodatabases will not be accepted, though geodatabases can be submitted as additional documentation. All layers must be clearly labelled with appropriate metadata attached (i.e. name of consulting company, date of acquisition (yyyy-mm-dd), method of positioning and precision, provenience number or Borden (if applicable). All data should be in Geographic Decimal Degree format, NAD83, and when possible, comply with the North American Profile of ISO 19115 - Geographic information - Metadata (NAP - Metadata), published by the Canadian General Standards Board.

10. Schedule

The following table outlines the proposed schedule for this Project from Consultant Contract to Completion:

Table 1 Estimated Project Schedule	
Task Name	Total Time/Deadline
Start-up Meeting	1 day
Permitting	1 week for Parks Canada to process
Archaeological Impact Assessment – Fieldwork	*must be coordinated with Dillon Consulting Ltd *tentative requirement for monitoring: 16 th August 2021
Archaeological Impact Assessment – Letter of Mitigation Measures	Fourteen (14) days following completion of Fieldwork
Archaeological Impact Assessment – Draft Report	Sixty (60) days following completion of Fieldwork
Archaeological Impact Assessment – Final Report	Ten (10) days following PCA review of draft report
Submission of Final Report, Artifacts, Field Records and Maps	Within thirty (30) days of the completion of the final report

11. Co-ordination and Communication

The Consultant will provide regular briefings to the PM and PCTAR, providing progress updates on the state of the investigations; summaries of the findings, with appropriate photographs and spatial data (e.g. gps co-ordinates, mapping); and recommendations for archaeological mitigation measure(s) encountered.

Where the Consultant can implement immediate mitigation measure(s) on archaeological resources of heritage value, this must be communicated in writing to the PM and PCTAR. Approval must be provided by the PM, based on advice of the PCTAR, prior to the Consultant implementing the mitigation measure(s).

12. Indigenous Field Liaison Representatives

Local Indigenous representatives and/or Elders will be present and on-site during the field work at their discretion, coordinated through Parks Canada directly. The Consultant will work with and/or alongside the Local Indigenous representatives and/or Elders during the monitoring and during the AIA.

13. Weather Delays

PCA will not be responsible for any weather delays to the project. If work is not possible due to weather, the Consultant will only be permitted to charge for artifact processing and/or report writing, as appropriate.

14. Parks Canada's Responsibilities

Parks Canada will provide the Consultant with access to the relevant documents for the Project and relevant reports pertaining to previous archaeological investigations prior to the commencement of fieldwork.

Documents to be provided will include:

- Archaeological Overview Assessment Tulita Infrastructure Project, Nááts'j'ch'oh National Park Reserve
- Wood Phase I Environmental Site Assessment
- Historic air photos Related to the property
- GPR Survey Report Lots 9-1, 9-2 & 9-3 Tulita, Northwest Territories
- Archaeological Reports related to the area.

Parks Canada will provide all required site numbers, provenience information and starting numbers for cataloging artifacts, maps and photos to the Consultant.

15. Consultant's Responsibilities

Ensure a safe working environment for their staff. All applicable health and safety laws, regulations and requirements must be adhered to.

Execute the scope of work and provide the deliverables described above.

Archaeological field and laboratory work will follow the standards and practices of PCA including:

- Parks Canada's Archaeological Recording Manual: Excavations and Surveys
<http://www.pc.gc.ca/en/docs/pc/guide/fp-es/>
- Parks Canada's Cultural Resource Management (CRM) Policy
<http://www.pc.gc.ca/en/docs/pc/poli/grc-crm/>
- Standards and Guidelines for the Conservation of Historic Places in Canada
<http://www.historicplaces.ca/en/pages/standards-normes.aspx>
- Management Directive 2.3.1 HUMAN REMAINS CEMETERIES AND BURIAL GROUNDS. All cemeteries, burial grounds, human remains, funerary objects, and grave markers found in the project area are subject to the *Management Directive 2.3.1: Human Remains, Cemeteries and Burial Grounds* (Parks Canada 2000). Human remains are not considered archaeological resources. If human remains be encountered, all activities must be halted and the Cultural Resource Management Advisor or Resource Conservation Manager and Field Unit Superintendent must be notified. The archaeology consultant must await further direction from the Cultural Resource Management Advisor or Resource Conservation Manager and Field Unit Superintendent before proceeding with any further activity.

16. Parks Canada Agency Departmental Representatives

Project Authorities:

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Appendix A: Artifact Processing and Inventory Standards

- a. The procedure for collecting artifacts during fieldwork is designed to avoid a situation where retrieved artifacts are separated from the record of their provenience. Artifacts from different operations, sub-operations and lots should not be inter mixed. All artifacts from any excavation unit, shovel test pits, or discrete surface location must be put into their own unique, acid free and water resistant artifact bag (plastic boxes and acid free tags may be used).
- b. Artifacts removed from saturated grounds must remain wet until they can be transferred to Parks Canada for further assessment and treatment. Artifacts requiring specialized intervention must be brought to the attention of PCTAR for further instruction.
- c. All artifact processing, cataloguing and inventory must follow Parks Canada standards and the Parks Canada Archaeological Recording Manual: Excavations and Surveys.
- d. All stable artifacts that can be washed will be washed. Items that cannot be washed due to their composition or stability will not be brushed or will be dry brushed when appropriate.
- e. A record number is given to each artifact inventory entry, however, objects can be grouped as long as they are of the same type and not considered a major diagnostic (i.e., projectile point, bottle finish, base with maker's mark, etc.). A total count must be provided. For example, a group of blue transfer print, refined white earthenware, body sherds may have one record number; e.g., 1230021 as long as a total count is provided.
- f. An individual catalogue record must be created for each catalogue number assigned; i.e., a record line which lists a range of artifacts on a single line is not acceptable. It is, however, permissible to group like artifacts together and assign a single catalogue number. For example, 10 unworked, unidentifiable fragments of large mammal bone from the same lot could be bagged together under a single catalogue number, with quantity entered as 10. This should be done judiciously, however, and any diagnostic artifacts or artifacts likely to be photographed or discussed specifically in reports should not be lumped together with others.
- g. Any artifact requiring special treatment or handling must be put into their own separate container and identified on the corresponding label as such for proper, subsequent care and attention. Such special artifacts are to be packaged in such a way as to ensure their continued survival. Artifacts requiring conservation treatment must be brought to the attention of PCTAR for further instruction.
- h. Artifacts sent for or requiring conservation or special treatment must be flagged in the artifact inventory.
- i. All artifacts must be packaged in appropriate containers, either 4ml re-sealable plastic bags or rigid boxes. Refer below on how to label Individual Artifact Inventory Bags.
- j. All processed and labeled bags of artifacts must be placed in boxes (archivally acceptable bankers' boxes) sized 12" x 15" x 10" and weighing not more than 25lbs. Each box should include a list of contents (for example: Box 1 – 150H1A1 – 150H1A5 – Mixed Materials; Box 2 – Field Notes – Final Report). Refer below on how to label Artifact Storage Boxes.
- k. Only archivally stable packaging materials will be accepted by Parks Canada.
- l. All artifact packaging must be tagged clearly and permanently with the appropriate provenience information.
 - a. Artifact Storage Boxes: Provenience, Site Name, Project Name & Number, Consultant Company Name, Year of Excavation, Box Number (e.g., Box 1 of 10).
 - b. Large Artifact Provenience Bags: Provenience, Project Name
 - c. Individual Artifact Inventory Bags: Provenience, Catalogue Number, Artifact Primary Diagnostic information (e.g. blue transfer print, tea cup).
 - d. All Artifact Containers: Provenience, Catalogue Number, Artifact Primary Diagnostic information (e.g., blue transfer print, tea cup). The information should be entered either directly on the container or with a label securely attached, so that the label does not become separated from the container.