30 April 2008

CENTURY GROUP
1631 - 56th Street, Tsawwassen
Delta, B.C.
V4L 2B3

Attention: Sean Hodgins

Re: Southlands Public Design Charrette
Assessment of Archaeological Concerns

The Century Group is proposing a public design charrette to guide proposed future development of the Southlands property in the Boundary Bay neighbourhood of Delta, B.C. Two protected archaeological sites are documented from the lands encompassed by the charrette.

This letter describes the outcome of in-office research to identify and assess archaeological concerns that may arise from future developments proposed for the subject property, and provides information on potential project effects to archaeological resources are managed in B.C.

Heritage Resource Protection

Archaeological sites in B.C. are protected by the Heritage Conservation Act (RSBC 1996, c.187), administered by the Archaeology Branch (Ministry of Tourism, Sport and the Arts). The Act states that no site, nor any part of a site may be altered or disturbed in any way without a Permit issued by the Archaeology Branch. The Act provides for fines up to $1,000,000 for companies and a prison sentence of up to 6 months for company executives who are convicted for violating the Act, namely, for disturbing a protected archaeological site without a Permit.

Sites are protected by the Act whether located on public or private lands. Archaeological sites are protected if they have been designated as “provincial heritage sites” in accordance with Section 9 of the Act, or through automatic protection under Section 13 by virtue of particular historic or archaeological values. Sites automatically protected in B.C. include:
Southlands Public Design Charrette - Assessment of Archaeological Concerns

- archaeological sites occupied or used before AD 1846;
- Aboriginal rock art with historical or archaeological value;
- burial places with historical or archaeological value;
- heritage ship and aircraft wrecks; and
- sites of unknown attribution, that could have been occupied prior to AD 1846.

Protected archaeological sites may not be altered or disturbed in any manner without a Permit issued under Sections 12 or 14 of the Heritage Conservation Act. Further, heritage sites of Aboriginal origin not automatically protected by the Act may be subject to legal interpretations of the Supreme Court of Canada decision in Delgamuukw vs. British Columbia (1997), regarding the fiduciary responsibilities of provincial governments for protecting First Nations’ cultural heritage.

Archaeological Background

An archaeological site is a location that contains physical evidence of past human activity. In B.C., archaeological sites are usually attributable to pre-Contact settlement and land use by First Nations’ people. Records of archaeological sites in B.C. are maintained in the Provincial Heritage Register by the Archaeological Site Inventory Section of the Archaeology Branch, the agency responsible for the management of archaeological resources in accordance with the Heritage Conservation Act.

The most typical site types in the southern Fraser River delta are middens, burial places, and wetsites, each of which is defined as follows:

- **Middens**: Normally the most abundant archaeological remains in coastal settings, though also found in riparian environments. Middens represent the physical remnants of ancient villages or seasonal camps. In coastal environments, middens consist primarily of shellfish remains, black anthropogenic soils\(^1\), fire-altered rocks, ash and charcoal, faunal remains (fish, bird, mammal bones), artifacts, and cultural (i.e., archaeological) features such as fire-hearths, storage pits, and post-moulds. In this region, middens were frequently used as burial places by First Nations’ people.

- **Burial Places**: Locations used by First Nations to inter their dead. Through most of prehistory in this region, middens were favoured burial places. However, by about 900 years ago, most Aboriginal communities were interring their dead in above-ground settings, which leave few remains in the archaeological record. Between the abandonment of midden burial and the widespread adoption of surficial interment, some First Nations in this region buried their dead in earthen mounds that usually covered a stone substructure. Numerous pre-Contact burials have been identified from sites in the Beach Grove - Boundary Bay neighbourhoods, including one of the sites within the Southlands property.

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\(^1\) “Anthropogenic soils” are formed by past human activities, as opposed to natural soil formation processes.
- **Wetsites**: A rare combination of environmental factors occasionally produce a waterlogged cultural deposit known as a wetsite. These sites occur in permanently-saturated settings with an overlying stratum of fine-textured sediments that prevents seasonal drying. They are renowned for exceptional preservation of ordinarily perishable artifacts, such as cedar-bark basketry, matting, cordage, and wooden tools like wedges. Wetsite deposits are documented at two sites within what is now the Beach Grove Golf and Country Club.

**Archaeological Resources within the Southlands Property**

According to the Provincial Heritage Register, two documented archaeological sites (provincial registration numbers DgRs-17 and DgRs-18) are present within the Southlands property. The following text summarizes what is known about these sites.

**Whalen Farm Site (DgRs-14)**

DgRs-14 is situated astride the International Boundary on the eastern side of the Point Roberts peninsula. Pioneer archaeologist Harlan I. Smith first investigated the Whalen Farm Site in 1898, at which time he conducted an excavation on the portion of the site within Canada. The following quotation describes the site as it was then, and it is instructive to see that even at this early date, land use patterns were adversely affecting the integrity of this site:

"A shell heap in the form of a ridge extends from a point on the United States side of the line, at the present southeastern shore of Point Roberts, along the eastern shore for about a mile to the northward, and ends on Canadian soil. About half a mile from its beginning at the beach, where it fills the space to the bluff, it turns back westward from the present shoreline, and at its northern end is a comparatively long distance from the sea. Branching from the rear of this, and running parallel with it, is another shellheap, probably an older one. The northern ends of these swing out in a line following the general trend of the beach, and some distance in front of the bluff. From the appearance of the coast, especially toward the northward, it would seem that the shore has been [building] out, and that formerly the sea must have washed against the base of the bluff, which extends backward and deviates from the line of these shellheaps. The bluff is probably an old island; and the low land, delta deposit. If this be true, it would satisfactorily account for the distance from the northern end of the shellheap to the present beach. Beyond the southern end the sea still washes the base of the bluff. We were told that on Mr. Alexander’s farm, at the northern ends of these shell-ridges, there had formerly been a number of large pits about 10 meters in diameter and perhaps 5 meters in depth. These have now been entirely obliterated by ploughing” (Harlan I. Smith 1907).

Charles Borden (University of British Columbia) formally recorded DgRs-14 in the early 1950s. He conducted excavations on the Washington side of the site in 1949 and 1950. Additional excavations took place on the American side by crews of Simon Fraser University students in 1971 and 1972, and on the Canadian side in 1985, under the direction of Dimmity Hammon (Delta Museum).
Over two seasons, Borden excavated a total of 19, 5 × 5-foot pits on the site, and identified artifacts, post-mould features, and 13 burials. Some faunal remains were recovered and collected, but no formal analysis of any of these materials took place until 1992, when Brian Thom (UBC) published a re-analysis of the artifacts from this site.

Brian Seymour (SFU) conducted emergency salvage excavation of a residential lot in the Maple Bay neighbourhood in 1972. Two 2 m² and two 1 × 2 m² pits were excavated, and a fifth, smaller pit was also dug on this part of the site. Many artifacts were recovered from the excavations, with bone and antler artifacts predominating over those made from stone. All types of faunal remains were collected, but fish bones were not thoroughly analysed. Human remains, representing at least three individuals, were recovered. No radiocarbon dates were obtained.

Site-survey investigations of the Canadian portion of the site were conducted by Ray Kenny/Grant Edmonds (Archaeological Sites Advisory Board) in 1975 and again by Len Ham/Mike Broderick/Rose Gundel/Stephanie Yip (ASAB) in 1978. Discrete midden deposits (conforming to Smith’s “shell-ridges”) had been registered as three separate sites until 1978, when Ham et al. consolidated them into the single site of DgRs-14, as it remains today.

In 1982, Steve Cassidy/Richard Brolly (Heritage Conservation Branch) carried out systematic subsurface testing across the Dawn Developments property – equivalent to the southern third of the Southlands property (i.e., lands south of 3rd Avenue). The 1982 survey determined that the largest area of intact midden deposits, including burials, was associated with the forested setting at the southwestern corner of the property.

In 1985, Dimmity Hammon carried out a research excavation on the eastern aspect of the Whalen Farm Site, in the grounds of the elementary school adjacent to the Southlands property. Two 2 m² and several 1 m² pits were excavated, and an 11 m-long trench was dug from one of the latter units. Three radiocarbon dates (2360, 2100, 2060 BP) were obtained in 1985. Partial analysis was done for the faunal remains collected from this part of the site; salmon and flatfish were the dominant fish species present, but herring are probably under-represented. A pit feature contained a large amount of elderberry seeds, suggesting that it was used for plant processing or food storage. Two intact burials and scattered remnants of eight other individuals were encountered. The artifacts are very similar to those recovered by the SFU excavations on the American side of the border.

Since 1985, archaeological studies associated with DgRs-14 have been confined to localized impact assessments for small-scale residential developments or installation of municipal infrastructure developments. Work on the American portion of the site has likewise focussed on impact assessments for residential developments in the Maple Bay neighbourhood.

As presently understood, DgRs-14 is a very large site, principally comprised of shelly midden deposits and black anthropogenic loam, amongst which are moderately abundant artifacts, faunal remains, fire-altered rocks, hearths, cooking pits, post-moulds, and

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human burials. The boundaries of the site shown on the accompanying orthophoto (dated 2006) reflect the current state of knowledge about the extent of DgRs-14 within and adjacent to the Southlands property.

Cultural deposits attributable to this site extend north into the Boundary Bay neighbourhood from Maple Bay in Washington, and then east onto the Southlands property beyond the elementary school; these deposits area referred to as the “eastern aspect” of DgRs-14. Most of these deposits have been severely disturbed or destroyed by residential and municipal infrastructure developments, but >100 cm of midden deposits were found at the elementary school in 1985 and a similar depth of deposit may exist on the subject property. A larger area of essentially intact midden deposits, on a pair of parallel beach-ridges, comprises the “western aspect” of DgRs-14. An intact burial was observed here in 1982 and this setting appears to have been largely undisturbed since then. Lastly, three localized patches of midden deposits (the “central aspect”) are present between the western and eastern deposits; when observed in 1982, these appeared to be relatively shallow and somewhat disturbed.

Spetifore Farm Site (DgRs-18)

DgRs-18 is known as the Spetifore Farm Site. It appears that this site was originally discovered and recorded by Charles Borden in 1954, when some collected artifacts were attributed to “DgRs-3.” The site record became doubtful when successive attempts failed to find any archaeological materials at a variety of supposed locations for this site.

In 1981, the present site location was rediscovered by Geordie Howe/Pat Ward (Heritage Conservation Branch), who recorded the site as a small midden with shellfish remains, anthropogenic loam, and moderately abundant artifacts. Archaeological consultant Leonard Ham has made a convincing argument that DgRs-3 and DgRs-18 represent the same site, though the later number is the one presently used in the Provincial Heritage Register.

The site was revisited once by archaeologists after 1981, when Steve Cassidy/Richard Brolly observed it during their assessment of the Dawn Development property in 1982. According to the Provincial Heritage Register, no one appears to have seen the site since that date and its present status is uncertain. The accompanying orthophoto (dated 2006) showing this site indicates that the landscape around the site has changed little since DgRs-18 was recorded by Howe/Ward.

Potential Archaeological Resources within the Southlands Property

Two kinds of as-yet undiscovered archaeological sites may be present within the Southlands property, as follows:

- Deposits of black anthropogenic soil containing artifacts and other archaeological remains, similar to that reported from DgRs-18. Localized areas of elevated
ground (e.g., beach-ridge remnants) would be the most likely setting for such sites. These settings are present in the vicinity of the historic farmsteads (Spetifore, Wilson) in the east-central portion of the Southlands property, and possibly along the western margin of the property as well.

- Wetsites could be found in deeply buried, permanently saturated environments, such as those associated with infilled tidal sloughs or backwater lagoons. Prospecting for such deposits on the Southlands property would be problematic, as they will always be encountered below the lowest extent of the seasonal water-table. A search for such sites might begin with a review of historic aerial photographs to reveal extinct channel/slough scars, and they might also be expected in the swales between ancient beach-ridges. A 2-3 m-long bucket auger and/or a backhoe would be necessary to search for wetsites on this property.

Management of Development Conflicts with Archaeological Resources

The provincial Archaeology Branch has developed the B.C. Archaeological Impact Assessment & Review Process (BCAIARP) as the process by which potential conflicts between proposed developments and both known and as-yet unknown archaeological sites are identified, assessed, and managed. Published guidelines for this process can be found at [http://www.tsa.gov.bc.ca/archaeology/publications.html](http://www.tsa.gov.bc.ca/archaeology/publications.html).

The BCAIARP consists of three sequential steps: (1) an Overview Assessment (roughly equivalent to the present study), to assess archaeological resource potential within a proposed development location and determine the need and type of additional archaeological studies; (2) Impact Assessment, required to identify and evaluate archaeological sites present within a development property; and (3) Impact Management, to mitigate adverse project effects on archaeological sites (see Guidelines). In the case of private-land developments, such as those envisioned for the Southlands property, regulatory authorities like the Corporation of Delta Planning Department are empowered to request archaeological assessments as a condition of project approval.

To implement the BCAIARP, the Archaeology Branch issues three types of Permits in accordance with Sections 12 and 14 of the Heritage Conservation Act. Heritage Inspection Permits are issued to qualified archaeologists for impact assessments (specifically, to allow archaeologists to disturb protected archaeological remains). Heritage Investigation Permits are issued to qualified archaeologists for scientific excavations or other kinds of detailed studies of archaeological sites. Lastly, Site Alteration Permits are issued to development proponents or their representatives (e.g., engineering company, architectural firm, main contractor). These Permits enable a proponent to disturb parts of a protected archaeological site.

An application for any kind of Permit always involves an initial review by Archaeology Branch staff (typically 5-10 business days), following which it is sent to all First Nations’ communities with asserted traditional territories in the project locality for their review.

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and comment upon the proposed archaeological methodology (i.e., not the proposed development itself). The review period for a Permit is 30 calendar days. Some First Nations’ communities regularly request extensions, and such requests are usually accepted by the Branch without argument. The typical outcome of the First Nations’ review is that no specific methodological issues are raised and the Permit is issued, allowing work to proceed.

Lastly, some First Nations’ communities in the Lower Mainland issue their own Permits to conduct culture heritage research within their respective traditional territories. It is standard operating procedure for archaeologists in British Columbia to obtain such Permits before carrying out field investigations.

Concluding Remarks

I trust this letter has provided you with the information you require. Please contact me if you require any clarification or further information about archaeological resource protection and management in this region.

Sincerely,

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Per:

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