MATT MCDERMOTT DIRECT TESTIMONY

Q. Please state your name, place of employment, and position.

A. Matt McDermott, Principal Investigator, Cultural Surveys Hawai‘i, Inc.

Q. How long have you held this position?

A. I started with Cultural Surveys Hawai‘i in 1988. With some interruptions for research and graduate school, I worked with Cultural Surveys Hawai‘i until I moved to Arizona in 2002. Upon my return to Hawai‘i in 2004, I rejoined Cultural Surveys Hawai‘i as a Project Manager and Principle Investigator. My total time with Cultural Surveys Hawai‘i is approximately 25 years, but my career in this area spans 30 years.

Q. Please describe your educational background and experience.

A. Please see my resume, attached as an exhibit in this proceeding.

Q. How have you been involved in this Project?

A. In 2012, the Howard Hughes Corporation (HHC) retained Cultural Surveys Hawai‘i (CSH) to conduct an archaeological literature review and predictive model and cultural impact assessment for the entire 60-acre Ward Master Plan area. CSH was engaged to prepare an archaeological inventory survey report and related studies and plans specific to the original Block C West project. This work has been underway since 2014.

Q. Please describe the archeological inventory survey (AIS) fieldwork, methods, and results.

A. The Block C West Project has undergone multiple design modifications between 2014 and 2019 which have affected its historic preservation review process history.

The original Block C West Project comprised a 2.2-acre project area. CSH completed an archaeological inventory survey plan (AISP), followed by the archaeological inventory survey (AIS) itself, including fieldwork, methods, and results reflecting the original Block C West project area.

The Block C West project area was subsequently subsumed, along with the adjacent Block B East, into a new 4.4-acre project, designated the Ward Village Gateway Project. This did not affect the results of the Block C West AIS.

Based on multiple factors, the Block C West Project and Block B East Project have been separated, with the new 2.2-acre Block C West (Victoria Place) project area boundaries matching the original project area.

EXHIBIT “O”

AIS fieldwork and methods for original Block C West project area

Fieldwork was accomplished between 14 April 2014 and 5 June 2014. All fieldwork was conducted under the direction of the principal investigator, Matt McDermott, M.A. by Ena Sroat, B.A. (project director) and was carried out following the State Historic Preservation Division's (SHPD) acceptance of the archaeological inventory survey plan (AISP) for the original Block C West project area.

A 100% coverage pedestrian inspection was conducted within the project area in order to locate any surface historic properties. The pedestrian survey concluded that the entire project area has been mechanically modified as a result of development of the Ward Warehouse commercial complex, including significant elevation of the ground surface above the surrounding environment. No surface historic properties were identified within the project area. Accordingly, fieldwork within the project area focused on a program of subsurface testing to locate buried cultural deposits that may be present beneath the modern land surface and to facilitate a thorough examination of stratigraphy within the project area.

Thirty-six test excavations, distributed generally throughout the project area, were originally proposed under the AISP. During the AIS investigation, following the survey strategy provisions of the AISP, a certain number of test excavations required slight locational shifts. Trench location shifts were due largely to the presence of dense subsurface utility corridors. Several interior test excavations were also shifted or relocated, due in part to logistical issues with accessibility of then-operational tenant spaces.

The initial stage of the subsurface testing program concentrated on the exterior (parking lot and landscape) test excavations. These test excavations consistently documented similar stratigraphy throughout the paved areas of the project area, consisting of historic salt pan remnants. Based on these results, it was determined that the *mauka* Ward Warehouse commercial building was located within this very well documented stratigraphic zone; therefore Test Excavations 13 and 15 were relocated makai—TE 13 was relocated to the central parking lot and TE 15 was relocated to the makai project area boundary in an effort to provide additional coverage of the coastal zone and to determine whether Jaucas sands and/or traditional cultural activity could be found within this area. Within the makai Ward Warehouse commercial building, only one test excavation (TE 35) was shifted to the makai coastal edge, while two others (TE 28 and TE 33) were shifted slightly, but still remain within the building footprint in order to test for the boundary of the mauka historic salt pans and the natural coastal sediments. All significant shifts in test excavation locations were discussed with and approved by the SHPD and the recognized cultural descendants participating as cultural monitors during the AIS investigation.

On average, the test excavations measured 0.6 by 6.1 m (2 by 20 ft). The total surface area of all the test excavations combined totaled 133.78 sq m (1,440 sq ft), which is

1.5% of the project's surface area. In a limited number of cases, the trench excavations were shortened slightly in order to fit within narrow constraints (i.e. subsurface utilities and surface obstacles) (e.g. TE 19, TE 21, and TE 23) or because of safety concerns (e.g. TE 35). All test excavations extended to the coral shelf or to below the water table, unless obstructed by subsurface infrastructure. All unexcavated areas beneath subsurface infrastructure are accurately represented on stratigraphic profiles (see Section 4.2).

Initial excavation methods consisted of saw cutting of the asphalt parking lot surface (exterior excavations) or commercial flooring (interior excavations). Removal of the underlying fill deposits was undertaken via backhoe (exterior) or via mini-excavator (interior). Fill deposits consisted of various layers of base course material, and various imported fill sediments including imported hydraulic fill. Archaeologists and project cultural monitors observed the excavation and removal of all fill sediments from the excavation.

Per the requirements of the AISP, all natural sand deposits underlying historic fill layers were excavated by hand, while all other natural non-sand deposits were removed slowly via thin mechanized shovel scrapes. Natural marine sandy clay deposits were encountered only along the makai boundary of the project area; while no Jaucas sand deposits were identified in this area, these natural deposits were nevertheless hand excavated based on the potential for encountering traditional Hawaiian cultural deposits and/or burials in this zone. The remainder of the Block C West project area contains non-sand deposits and was excavated by backhoe, with controlled pauses in which to enter the test excavations and investigate the stratigraphy.

All artifacts and historic pit features found in situ were mapped in plan or profile view and were excavated by hand if feasible. Large pit features containing rubble or historic material, were sampled using a combination of hand and mechanized excavation methods. Artifact assemblages in fill deposits and historic pit features primarily consisted of very small fragments not readily identifiable as diagnostic or construction debris; in most cases these historic fragments were photographed and documented in the field, reducing sample sizes collected for further analysis and curation. Photographs and analysis information pertaining to artifacts documented in the field are included in the report.

The stratigraphy in each test excavation was drawn and photographed. The sediments were described for each of the test excavations using USDA soil description observations and terminology. Sediment descriptions included Munsell color, texture, consistence, structure, plasticity, origin of sediments, descriptions of any inclusions such as cultural material and/or roots and rootlets, lower boundary distinctiveness and topography, and other general observations.

Photographs were taken of the general project area and in-progress work, recording on-the-job procedures, personnel, work conditions, and the area's natural and/or built

environment. Additionally, overview and profile view photographs were taken of each trench showing stratigraphic sequence, the presence/absence of utilities, and any possible cultural or construction-related stratigraphic features. A photographic scale was included as appropriate, and the general orientation was noted for each photograph.

The locations of the majority of the exterior test excavations were recorded using a Trimble Pro XH mapping grade global positioning system (GPS) unit with real-time differential correction. This unit provides sub-meter horizontal accuracy in the field. GPS field data was post-processed, yielding horizontal accuracy between 0.5 and 0.3 m. GPS location information was converted into geographic information systems (GIS) shape files using Trimble's Pathfinder Office software, version 2.80, and graphically displayed using Environmental Systems Research Institute's (ESRI) ArcGIS 9.1. Interior test excavation locations, as well as exterior test excavations located in areas inaccessible to accurate GPS readings, were recorded using tape measurements and a project area footprint map and added to GIS data layers.

AIS results for original Block C West project area

Two historic properties were identified within the C West project area:

1) State Inventory of Historic Places (SIHP) # 50-80-14-7655 consists of subsurface historic salt pan remnants, documented as laminated organic material and associated man-made berms. The historic property reflects land-use activities related to historic salt production.
2) SIHP # 50-80-14-7658 consists of buried historic surfaces, including asphalt, concrete, coral and tar pavement, oil-rolled surfaces, and fence-lines associated with the historic development of the project area.

Q. Please describe archaeological historic properties documented in the Project area.

A. Descriptions are taken from the SHPD-accepted AIS report.

1) SIHP # 50-80-14-7655 consists of a large complex of buried historic salt pan remnants located within the Ward Warehouse commercial center. SIHP # -7655 extends across two contiguous project areas, Block C West and Block B East, and extends from Auahi Street to the *makai* edge of the Ward Warehouse commercial buildings, encompassing the majority of both project areas. The buried salt pan remnants are comprised of an interconnected system of man-made linear structural features (berms) and low-lying, level wetland sediments overlain by thin organic laminations (salt pan beds). Based on the magnitude of this structural complex and the significant earth-moving activity that would have been required to construct the berms, that border and provide access to the salt pan beds, these buried structural

features and sediments represent historic commercial salt production activity.

2) SIHP # 50-80-14-7658 consists of buried structural remnants possibly associated with several periods of development during the late nineteenth to mid-twentieth century. This noncontiguous historic property is distributed throughout the adjacent project areas of Block B East and Block C West.

SIHP # -7658 is composed of 42 subsurface structures: three buried oiled, rolled surfaces, a highly compacted cinder surface, 17 layers of buried asphalt surface, four layers with disturbed asphalt chunks, three layers of buried asphalt surfaces overlying three buried concrete slabs, four buried concrete slabs not associated with an asphalt surface, three buried coral and tar pavement surfaces, and four buried wooden post remnants. There are 18 buried surfaces associated with Block B East and 24 buried surfaces associated with Block C West. Continuity of the structures could not be established except for a concrete surface observed in Block B East Test Excavations (TE) 7 and 37, in which TE 37 intersects TE 7.

Q. In your professional opinion, what impacts will the Project have on archaeological historic properties?

A. Ground disturbance associated with project construction includes demolition and removal of Ward Warehouse and at grade parking lot, borings related to foundation pile installation, and excavation related to the project area's development, including structural footings, utility installation, roadway and parking area installation, and landscaping. This ground disturbance will potentially affect two historic properties (SIHP #s -7655 and -7658) identified within the project area.

Q. What mitigation measures have been developed for those historic properties?

A. Per the AIS report, CSH's project specific effect recommendation is "effect, with agreed upon mitigation commitments." The recommended mitigation measures will reduce the project's potential adverse effect on significant historic properties. The recommended mitigation measures for the two historic properties encountered within the Block C West project area consisted of data recovery and archaeological monitoring.

In approximately 2014, design plans for a contiguous project area were finalized and blocks B East and C West were combined into a single development project known as the Ward Village Gateway Project. It was agreed that the reconfigured Ward Village Gateway Project represented a single project area and that associated mitigation plans should address the entire Ward Village Gateway Project, incorporating both B East and C West.

Data Recovery

In consultation with the SHPD, it was determined that an archaeological data recovery program was an appropriate mitigation for the historic salt pan remnants SIHP # 50-80-14-7655, located within the central and *mauka* portions of the original C West project area. Data recovery, which addressed the entire Ward Village Gateway Project including the original Block C West project, was designed to better determine the form, characteristics, and function of the salt pan berm structures, as well as to investigate characteristics and functions of the salt pans, including focusing on the laminated organic layers and underlying wetlands. Data recovery would also seek to further characterize the Ward Estate salt production commercial enterprise in the wider context of historic salt production on O'ahu and salt production methods.

The archaeological data recovery program began with a data recovery plan for SHPD's review and approval. Data recovery fieldwork for the Ward Village Gateway Project was conducted between 23 February 2015 and 4 March 2015. An end of data recovery fieldwork letter report was prepared by CSH and accepted by SHPD.

Archaeological Monitoring

To mitigate the potential adverse impact to SIHP #s -7655 and -7658, or any as yet unidentified cultural resources within the original Block C West project area, it was recommended that all subsurface project construction activities within the project area proceed under an archaeological monitoring program.

This monitoring program will facilitate the identification and proper treatment of any archaeological deposits disturbed by project construction, and will enable collection of additional samples and information related to the two identified historic properties. The archaeological monitoring program will include additional documentation, sampling, and analysis of SIHP #s -7655 and -7658. In addition, the natural marine sediments present in the makai portion of the project area will be fully recorded and closely examined for potential historic properties. Although the AIS identified largely disturbed marine sandy clay sediments in this area, the adjacent Block B East project area did identify in situ Jaucas sands as well as isolated human skeletal remains (SIHP # -7656). The details of the monitoring program will be included in the project's archaeological monitoring plan to be reviewed and approved by the SHPD.

Q. Please describe the current status of the SHPD process in this case.

A. The SHPD has reviewed documents related to the original Block C West project area, and the project as part of the larger Ward Village Gateway Project:

- The AIS report for the original Block C West project area (Sroat, Pammer, and McDermott 2014) was accepted by the SHPD in a letter dated 20 October 2014 (LOG NO: 2014.04570, DOC NO: 1410SL22).

- After the Block C West project area was incorporated into the Ward Village Gateway Project, an archaeological data recovery plan for the Ward Village Gateway Project (Sroat and McDermott 2014) was accepted by the SHPD on 19 November 2014 (LOG NO: 2014.05179, DOC NO: 1411SL21).

- An end of fieldwork report for archaeological data recovery for the Ward Village Gateway Project (Sroat 2017) was accepted by the SHPD on 8 August 2017 (LOG NO: 2017.01583, DOC NO. 1708JA03).

- A letter from SHPD dated 9 July 2019 (LOG NO: 2019.01133, DOC NO: 1708AM05) agreed that the project proponents had completed five of the six historic preservation review procedural steps pursuant to Hawai'i Revised Statutes (HRS) §6E-42 and Hawai'i Administrative Rules § 13-284-3(b)(1-5), consisting of:
    1) Identification and inventory to determine if historic properties are present and, if so, to identify and document them;
    2) Evaluation of significance;
    3) Effect determination;
    4) Mitigation commitments; and
    5) Detailed mitigation plan(s).

Q. Please describe the cultural consultation that has occurred to date.

A. Cultural consultation with state agencies and cultural stakeholders is an important component of the historic preservation review process. The Block C West Project's cultural consultation effort has been robust. Consultation with the Office of Hawaiian Affairs (OHA), the SHPD, the OIBC, and Native Hawaiian cultural descendants regarding the original Block C West project began in 2013 and was maintained throughout the AIS investigation in 2014. Consultation continued when blocks B East and C West were combined into the Ward Village Gateway Project.

# # #