



**MECHANICAL & ELECTRICAL
ENGINEERING, INC.**
1222 LUISA ST. SUITE B
SANTA FE, NM 87505
505/983-2389
fax 505/989-8776

June 14, 2022

A site review was performed by M&E Engineering on June 3, 2022. The site review was limited to visual observations only. Detailed testing or investigation is beyond the scope of this report. Very little information concerning existing systems and equipment was available the time of this report. It is recommended that all buried utilities be located before the project proceeds.

HVAC

The existing heating in the spaces consist of various wall heaters and portable floor units. The spaces are cluttered and block off ventilation to and from the heaters. These units are old and present a fire hazard, as well as possible exposure to carbon monoxide. Adequate fresh air needs to be provided to these spaces per current code requirements.

A swamp cooler sits on the roof above Room 5 for the Shop. This unit requires regular service and lacks humidity control.

Final equipment recommendations will be dependent upon the Clients' as of yet undetermined program requirements and preservation considerations of both the collections and the building.

ELECTRICAL

The Building Service and Meter is on the North wall exterior of Room 5. It is a 240 v, 3 wire, 200-amp main breaker which is back-to-back with a 200 amp main panel on the interior closet in Room 5, and it appears to serve the entire building. An upgraded electrical service may be required once programmatic requirements are better defined. The feed for this service appears to be underground from the East at the North Wall of the Carson House Shop.

Kit Carson Electric will have to be contacted to verify the source of the feed to the meter, meter# 01 522 643.

Many of the electrical circuits are extended over the roof and are exposed.

Lighting is mostly incandescent surface mount fixtures, New LED Lighting should be installed to reduce electrical consumption reflecting the Client's program requirements once determined

SECURITY

The existing security system consists of cameras, motion sensors and door contacts. The security control panel is on the wall in a closet in Room 5. The system is old and should be upgraded, using mostly cameras and motion sensors.

TELEPHONE AND COMMUNICATIONS

Wiring for these systems is exposed throughout the interior spaces and exterior walls and roof. Wire is primarily Category 3 and should be replaced with Category 6-E and/or Fiber Optic Cable. The Museum is currently working with Kit Carson Electric to upgrade internet service.

ENVIRONMENTAL

Several areas are suspect of containing Asbestos. The Exterior and Interior Plasters need to be sampled as well as the roofing throughout.

Additional items that are suspect and should be sampled include drywall, drywall compound, glazing putty, and the flooring under the carpet in Rooms 4 & 5 of the Carson house. Other suspect materials that may be encountered during the project include piping and pipe/duct insulation and wrapping.

Many of the painted surfaces most likely have at least one layer of Lead Based Paint.