EXECUTIVE SUMMARY

LOCATION

BACKGROUND

In 2022, the City of Prairie Village requested that Clark & Enersen provide assistance in developing an Existing Building Conditions Analysis of the existing structures at the 7700 Mission Road Municipal Complex to aid in the creation of a conceptual master plan for the campus. As part of this endeavor the Clark & Enersen "Review Team" studied each building system to determine its general condition and recommendations for updates.

The images to the left provide an overview of the Prairie Village Municipal Complex and the different structures that are currently in place. The Prairie Village Municipal Complex is located just south of 77th Street along the west side of Mission Road.

The campus itself is comprised of 3 structures:

1. City Hall
2. Police Department
3. Community Center

The overall assessment commenced on September 22, 2022. At that time we met with key project stakeholders including Melissa Prenger - Sr. Project Manager, Wes Jordan – City Administrator, Nickie Lee – Deputy City Administrator, Meghan Buum – Assistant City Administrator, and Brady Sullivan – PD, who provided an overview of the buildings that are there as well as insight into the current use and condition of each building. Subsequent meetings and tours included these individuals as well as Tim Schwartzkopf, Assistant City Administrator. During these meetings we gained valuable information from the user perspective and took photos and notes of significant building system components. Between meetings, we gathered existing documentation of the campus buildings from Melissa Prenger. These documents included historic building and renovation drawings, geothermal system drawings, Building Inspector comments, and a previously conducted Energy Audit.

In summary, the Methods of Assessment Include:

- User Input (talking, meeting)
- Existing Documentation (drawings, audits, reports)
- Site Observations/ Tours

After gathering the necessary existing documents and completing the meetings and walk-throughs, the Review Team analyzed the issues found and organized the information by system for each building in the complex. This report contains one chapter for each building. Each of these chapters contains 12 sections which are dedicated to specific building systems or components. The information in the sections is divided into three categories: System Description, Observed Deficiencies, and Recommendations. The following page is a summary of the information gathered and the implications for a future campus master plan.

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FINDINGS AND RECOMMENDATIONS

While the structures on the Municipal Complex are in varying conditions and may require some system replacements, the Review Team found no issues that would drive a full building replacement for any individual structure. Additionally, it is understood that any eventual master plan for the campus will include LEED certified buildings. The re-use of existing building structure, envelope, and/or interior nonstructural elements could provide up to six points toward a Building Life-Cycle Impact Reduction credit. The following is a summary of existing conditions and major issues specific to the individual structures.

City Hall

Due to existing conditions at City Hall and the desire to incorporate LEED certified buildings into future planning, the Review Team recommends major renovations and transformation of the current structure.

The original City Hall building was constructed in 1971. The construction is residential in nature, including sloped shingle roofing systems and wood-framed attic space. The building was renovated in 1984 and a two-story addition with a mezzanine was constructed on the southwest corner. Historic drawings show evidence of another interior renovation in 1997 and plan verification during site visits indicates additional renovations have occurred for which no historic drawings were found. Due to the historic time periods in which the building was built and renovated, it is recommended that the city obtain a full Lead & Asbestos survey prior to any further renovation activities. Building Inspection comments from previous room renovations indicate there may be mold behind drywall at exterior walls. It is recommended that any future renovations include stripping exterior walls of furring and drywall and abating any uncovered mold.

The current footprint of City Hall exceeds the allowable area per modern code for a non-sprinklered building and so it is recommended that an automatic sprinkler system be fully installed throughout the building. To improve the thermal comfort of the occupants and meet the City's goals for LEED certification, it is expected that any major building renovations would include thermal rezoning as well as additional heat pumps, thermostats, and building commissioning to improve system operations. Improvements to the building envelope are also recommended to address these concerns. Windows shall be fully replaced with thermally broken systems and insulated low-e glazing units. Exterior wall and roof insulation should be added and replacing the shingled roofing with standing seam metal roofing should be considered. All of these improvements to the energy efficiency of the building systems and envelope will reduce the area required for photovoltaic panels, should the City's goals include net zero design.

Additional mechanical recommendations include scoping of the existing sanitary waste system to ensure quality of the routing, replacement of all piping that has reached its 40+ year life expectance, and the addition of secondary roof drains in flat roof areas to comply with current code requirements.

Electrical recommendations include conducting an arch flash study, relocating or replacing the existing Evergy transformer to meet current requirements for access and clearance, re-designing and replacing the electrical service, electrical distribution system, and components of the emergency power system due to ages of equipment, location of feeders, and potential safety issues. The fire alarm system and devices are nearing the end of their serviceable life and it is recommended that a new digital, addressable horn-based fire alarm control system be installed. It is recommended that all interior and exterior lighting controls and fixtures be replaced with energy-efficient LED fixtures.

Police Department

The Police Department was constructed in 1994 and is the newest structure on the Municipal Complex. Systems appear to be in relatively good condition and it is expected that any future renovations will be primarily driven by program, upgrades for code compliance, and/or standard system replacements due to life-span of components and desire to improve energy efficiency and thermal comfort. Replacing the existing shingled roofing with a standing seam metal roof should be considered. Mechanical recommendations include redesigning thermal zones, adding heat pumps and thermostats, replacing exhaust fans and adding exhaust fans where required by program, scoping existing sanitary lines to ensure quality of piping and routing, and adding a secondary roof drain system to comply with current codes. Electrical recommendations include conducting an arch flash study, replacing all branch panelboards and the main service switchboard within 5-10 years, adding fire alarm notification devices to all spaces to comply with NFPA 72, and expanding the current panel to accommodate the new load. It is recommended that all interior and exterior lighting controls and fixtures be replaced with energy-efficient LED fixtures.

Community Center

Since no historic construction drawings were found of the Community Center, the date of its construction and subsequent renovations is unknown. It is expected that any renovations that occur in this building would be driven by program, upgrades for code compliance, and/or standard system replacements due to life-span of components and desire to improve energy efficiency and thermal comfort. Mechanical recommendations include replacing existing exhaust fans, replacing the water heater, and adding a recirculating pump. Depending on the goals of the City, an additional thermal zone may be added. The building is lacking proper fire protection to meet current building codes and so it is recommended to add a new fire service line from the city main and installing a new wet-pipe fire sprinkler system. Code required fire dampers, smoke dampers, and fire/smoke dampers should be installed as necessary. Electrical recommendations include conducting an arch flash study, and replacing all interior and exterior lighting controls and fixtures with energy-efficient LED fixtures.