

Kansas Department of Correctionalals
Lansing Correctional Facility
June 2022



ASSESSMENT OVERVIEW

INTRODUCTION

CGL FACILITY MANAGEMENT CONDUCTED AN EQUIPMENT AND FACILITY CONDITION ASSESSMENT OF THE SITE, SITE IMPROVEMENTS, AND RELATED FEATURES CONTAINED AT:

Lansing Correctional Facility

PURPOSE

The primary purpose of the Facility Condition Assessment is to identify visually apparent deficiencies in the building/s and develop a cost basis for repair, upgrade, or replacement.

The key issues addressed in the Facility Condition Assessments include:

- Perform a visual assessment of the interior, exterior, and site components
- A detailed description of the equipment and conditions found during the site visit
- Strategy to resolve key issues
- Recommendations for all systems

METHODOLOGY

This Facility assessment was conducted by the following experts that have extensive hands-on experience with government, Correctional, commercial, and industrial buildings, and facility maintenance.

- Phil Loftin, Electrical Engineer
- Alex Campbell, Facility Specialist
- TJ Kelley, Systems Specialist
- Russ Rieske, Mechanical Engineer
- Ted Perry, LEAD AP & OM
- Mike Lynch, Architect

CGL's Assessment Team conducted a field survey of the buildings' envelope and equipment that could readily be observed. The team did not attempt to uncover hidden conditions, move fixed equipment, or otherwise discover deficiencies that could not be immediately detected. The analysis included interviews with building management and maintenance personnel and a review of any documents made available at the time of the visit.

The team collected data on the condition and life cycle of major systems. All conditions were documented by digital photographs.

CGL analyzed the information collected during the Facilities Condition Assessment and developed recommendations for upgrades and replacements.

A general scoring matrix used in analysis of major group elements, group elements, and individual elements is included below:

< 5%	Good	Infrastructure & systems are new or rehabilitated with few elements showing normal wear that requires routine maintenance
5% - 10%	Fair	Infrastructure & systems show some signs that require attention with a few elements needing immediate repair
11% - 15%	Poor	Infrastructure & systems are mostly below standard with some elements reaching the end of useful life and requiring replacement
16% -25%	Severe	Infrastructure & systems are in unacceptable condition with widespread signs of deterioration
26% - 50%	Critical	Infrastructure & systems require replacement to restore function. Systems could be unsafe to operate in the current condition
> 50%	Replace	Infrastructure or systems need to be replaced immediately for safety, security, and/or serviceability



MAJOR SYSTEMS ASSESSED

- **Substructure:** CGL observed the structures for visible signs of distress.
- Shell: CGL visually observed the exterior wall system, window, and door systems for visible evidence of
 deficiencies, continuity of seals, and other types of distress. CGL reviewed available flashing and connection
 details for drainage design and observed the condition and placement of expansion joints. CGL visual
 observations were based on those conditions that can be observed from roof and ground level. CGL visually
 evaluated the condition of accessible roof systems and discussed any existing/remaining roof warranties.
- Interiors: CGL visually observed the interior areas of the property and reported their general condition.
- Services: CGL observed the age and condition of the Mechanical, HVAC, Electrical, Plumbing, and Fire
 Protection (MEPFP) Systems and related building equipment and have commented on their condition and
 visible deficiencies.
- Site-work: CGL visually observed the exterior areas of the property and reported their general condition.
- Accessibility: CGL reviewed the property for conformance with applicable accessibility requirements and reported CGL findings.

The scope of services under which the Facility Condition Assessment was completed was visual in nature and not intended to be destructive to the property to gain access to hidden conditions. CGL did not perform any destructive testing, uncover, or expose any system members. CGL has documented the type and extent of visually apparent defects in the systems to develop the condition assessment.

The scope of services under which the Facility Condition Assessment was completed includes only those items indicated. The evaluation does not include any environmental services such as sampling, testing, or evaluation of asbestos, lead-based paint, lead-in-water, indoor air quality, PCBs, radon, mold, or any other potentially hazardous materials or issues not outlined.



BUILDING DESCRIPTION

LANSING CORRECTIONAL FACILITY PROPERTY EXECUTIVE SUMMARY

Lansing Correctional Facility (LCF) serves as the largest and oldest Correctional complex for adult male residents. The facility consists of numerous buildings of which 2 were assessed, the administration building and an expansion of the administration building. The total square footage assessed was approximately 24,163. The construction date of the buildings was unknown; however, the two buildings were built at different times, resulting in various declining stages. The structure consists of a concrete exterior.

HVAC SYSTEMS

The HVAC systems at the facility are of various types ranging from outside air eco mixers for maximum efficiency to heating and cooling its main four buildings. These HVAC systems feature substantial insulation to maintain inside temperatures. The sizes all vary from one ton and up to fifty tons. HVAC units are of all different ages; some have been replaced or installed within the last decade. The aged-out systems should be considered for replacement soon. In addition, CGL recommends a comprehensive preventative maintenance plan to maintain the equipment and extend the life of the assets.

ELECTRICAL

Electrical service appears to be an underground supplied grid system feeding building transformers and service panels. The main power is fed through multiple power panels and step-down transformers throughout the facility.

In addition, the facility has emergency power provided by backup generators during emergency situations. The backup generators allow the effort to bypass energy outages to keep the facility in harmony, reduce chaos, and provide safety amongst inmates and staff.

PLUMBING

The plumbing throughout the site is mostly original to construction and is a combination of PVC, galvanized steel, and copper piping. The sewage and drainage systems are cast iron. Cast iron pipe deteriorates from the inside. Due to the age of the cast iron pipe, CGL recommends that an engineering study be conducted to determine the condition of drain piping. The pipe insulation around the Power Plant area of the facility appears to be original to construction and well past its expected lifecycle. Any original insulation should be further evaluated for hazardous material.

NOTE

FCIs allow you to understand how your buildings are operating and how to prepare for the future. These scores provide a valuable look into your portfolio of facilities, and they help you plan and prioritize projects over both the short- and long-term. The more accurate your FCI scores, the better you can prioritize maintenance repairs, forecast upcoming costs, and make data-driven decisions around capital planning.



PROJECT DETAIL

ITEMS	DESCRIPTION
Project Name	Lansing Correctional Facility
Property Type	Detention Facility
Address	Lansing, Kansas
Year Built	1984
Number of Levels	Varies (1-2)
Gross Building Area (GSF)	24,163
*Current Replacement Value	\$9,544,385
CRV/GSF (\$/SF)	\$395

^{*} The CRV was based on industry experience and best practices and should be considered only for determining a replacement value for the current buildings that were assessed in this report. Moreover, The CRV does not include any cost for professional services such architectural, engineering or project management fees, environmental services such as sampling, testing, or evaluation of asbestos, lead-based paint, lead-in-water, indoor air quality, PCBs, radon, mold, or any other potentially hazardous materials, or issues not outlined. The CRV does not include cost for land acquisition, demolition, abatement, remediation, or other site improvements that may be required for construction of a replacement building. The CRV was based on current cost estimates and does not include any upgrades to the existing facility or an escalation factor for future construction.

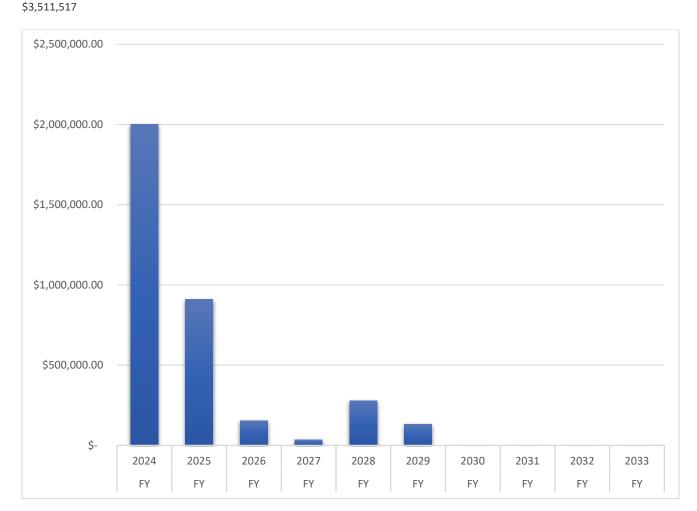


SUMMARY OF FINDINGS

This report represents summary-level findings for the Property Condition Assessment. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall Long Term Capital Needs Plan that can be the basis for a facility-wide capital improvement funding strategy. Key findings from the assessment include:

KEY FINDINGS	METRIC
10-Year Facility Condition Needs Index (FCNI)	37%
Immediate Capital Needs (Year 1)	\$2,000,917
Future Capital Needs (Year 2 to Year 10)	\$1,510,600

The building expenditure summary section provides an executive overview of the findings from the assessment. The chart below provides a summary of anticipated yearly expenditures over the study period for the Lansing Correctional Facility. Further details of these expenditures are included within each respective report section and within the expenditure forecast in Appendix A of this report. The results illustrate a total anticipated expenditure over the study period of approximately:





FACILITY CONDITION NEEDS INDEX

In this report, we have calculated the Facility Condition Needs Index (FCNI), which is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities. The FCNI is primarily used to support asset management initiatives of federal, state, and local government facilities organizations.

The FCNI is the ratio of accumulated Total Cost (TC) (Deferred Maintenance, Capital Renewal, and Plant Adaptation) to the Current Replacement Value (CRV) for a constructed asset calculated by dividing the TC by the CRV. The range is from zero for a newly built asset to one for a constructed asset with a TC value equal to its CRV. Acceptable ranges vary by "Asset Type', but as a general guideline, the FCNI scoring system is as follows:

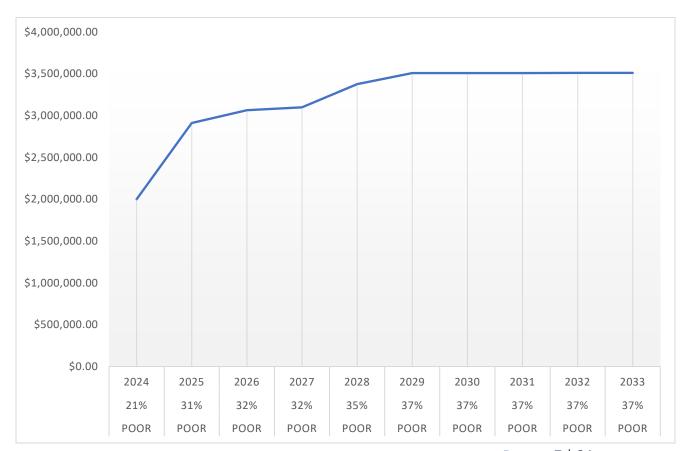
FCNI =

Deferred Maintenance + Capital Renewal + Plant Adaptation (TC)

Current Replacement Value of the Facility(s) (CRV)

If the FCNI rating is 60% or greater, then the replacement of the asset/building should be considered instead of renewal.

CONDITION	DEFINITION	PERCENTAGE VALUE
GOOD	In a new or well-maintained condition, with no visual evidence of wear, soiling, or other deficiencies.	0% to 5%
FAIR	Subject to wear and soiling but is still in a serviceable and functioning condition.	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 10%
V-POOR	It is subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal is now necessary.	Greater than 60%





DISTRIBUTION OF NEEDS BY PRIORITY

CGL Facility Management has prioritized the identified work in order to assist with analyzing the deficiencies found during the assessment. The baseline prioritization model is not just based on replacement year or criticality but uses four key data attributes to build an overall importance metric for every recommendation: System type, the cause or nature of the issue, timing, and building mission incorporated into the model with relative weighting to provide an overall priority score. Priority categories are shown below:

Priority 1 Systems requiring immediate action that have failed, compromises staff or public **Currently Critical:** safety, or required to be upgraded to comply with current codes and accessibility

Priority 2 A system or component is nearing the end of useful life, if not addressed, will cause

Potentially Critical: additional deterioration and added repair costs

Priority 3Lifecycle replacements necessary but not critical or mid-term future replacements

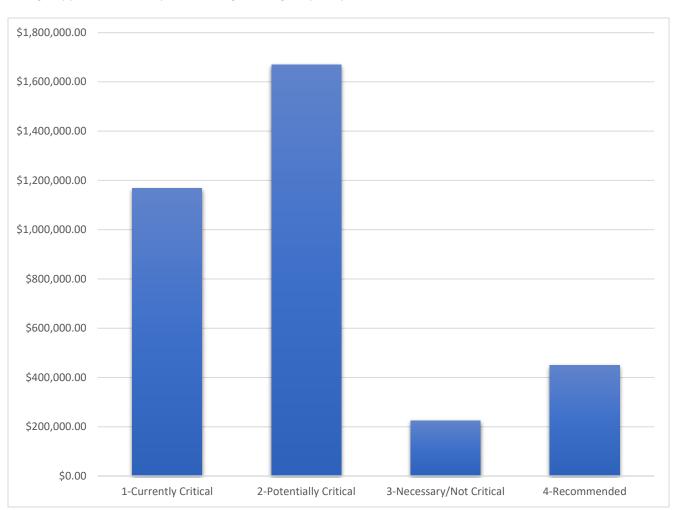
Necessary / Not Critical: to maintain the integrity of the facility or component

Priority 4

Recommended:

Items under this classification are not required for normal function and operation of the facility but would improve the efficiency and functionality of the facility or reduce long-term maintenance.

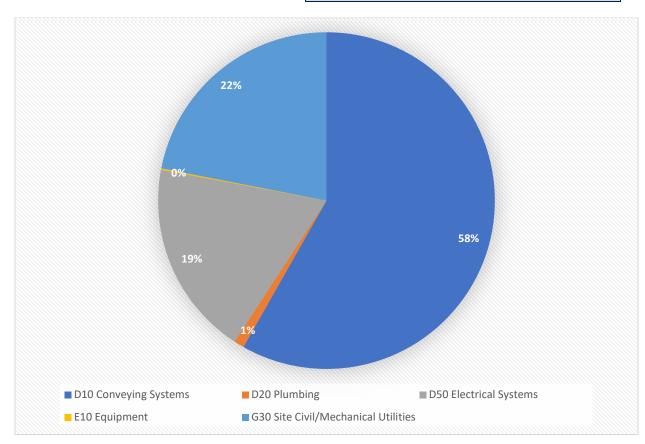
The chart below illustrates the breakdown of expenditure according to the priority coding providing an opportunity to strategically plan and effectively direct funding to the highest priority.





DISTRIBUTION OF IMMEDIATE NEEDS (YEAR 1) BY BUILDING SYSTEM

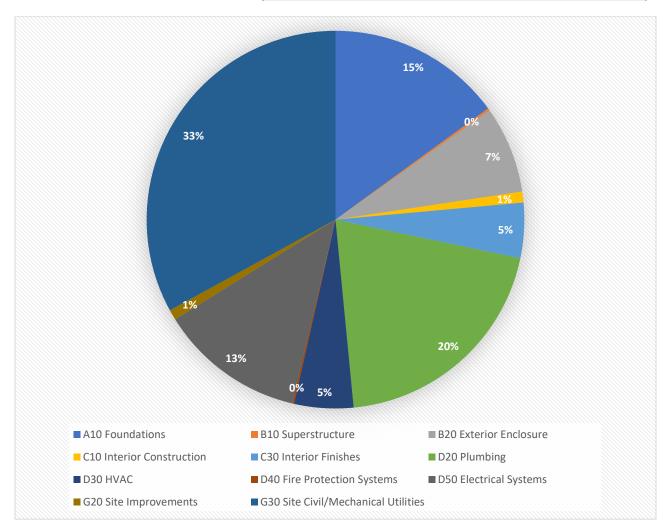
Building System	Estimated Cost	Percent of Total Cost
D10 Conveying Systems	\$1,164,874	58.22%
D20 Plumbing	\$19,512	0.98%
D50 Electrical Systems	\$374,869	18.73%
E10 Equipment	\$2,884	0.14%
G30 Site Civil/Mechanical Utilities	\$438,779	21.93%





DISTRIBUTION OF FUTURE NEEDS (YEAR 2 TO YEAR 10) BY BUILDING SYSTEM

Building System	Estimated Cost	Percent of Total Cost
A10 Foundations	\$226,240.00	14.98%
B10 Superstructure	\$3,074.00	0.20%
B20 Exterior Enclosure	\$112,357.34	7.44%
C10 Interior Construction	\$14,164.20	0.94%
C30 Interior Finishes	\$71,511.40	4.73%
D20 Plumbing	\$304,754.72	20.17%
D30 HVAC	\$76,548.96	5.07%
D40 Fire Protection Systems	\$2,458.40	0.16%
D50 Electrical Systems	\$188,055.92	12.45%
G20 Site Improvements	\$13,336.00	0.88%
G30 Site Civil/Mechanical Utilities	\$498,099.00	32.97%





DISTRIBUTION OF NEEDS BY PLAN TYPE

PLAN TYPE 1 LIFECYCLE REPLACEMENT:

Indicates the need for replacement or major refurbishment of an asset, typically based on age and use but required in the future within a reasonable planning horizon.

PLAN TYPE 2 MAJOR REPAIR:

Any component or system in which future major repair is anticipated but not a replacement of the entire component.

PLAN TYPE 3 LIFE-SAFETY / CODE COMPLIANCE:

Any action to correct a deficiency related to life safety or code violation.

PLAN TYPE 4 ENGINEERING STUDY:

Includes recommendations for further investigation into appropriate repair/replacement action.

PLAN TYPE 5 MODERNIZATION / IMPROVEMENTS:

Actions that are considered upgrading or improving beyond a standard life cycle replacement. These actions are often considered optional.

PLAN TYPE 6 ENERGY:

When the repair or replacement of equipment or systems are recommended to improve energy and sustainability performance.

PLAN TYPE 7 ADA:

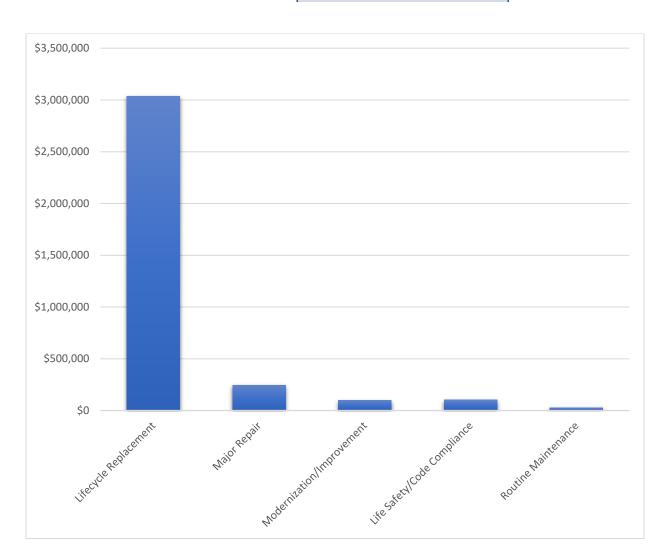
When the repair or replacement of equipment or system is recommended to comply with ADA.

PLAN TYPE 8 ROUTINE MAINTENANCE:

Any component or system in which routine maintenance or repairs is anticipated but not a replacement of the entire component.



PLAN TYPE	TOTAL COST
Lifecycle Replacement	\$3,037,439
Major Repair	\$245,755
Modernization/Improvement	\$98,461
Life Safety/Code Compliance	\$102,362
Routine Maintenance	\$27,500





ASSETS OBSERVED

All assets observed are provided in this section sorted by the Uniformat II coding, indexed is as follows:

A - SUBSTRUCTURE

- A10 Foundations
- A20 Basement Construction

B-SHELL

- B10 Superstructure
- B20 Exterior Enclosure
- B30 Roofing

C-INTERIORS

- C10 Interior Construction
- C20 Stairs
- C30 Interior Finishes

D - SERVICES

- D10 Conveying Systems
- D20 Plumbing
- D30 HVAC
- D40 Fire Protection Systems
- D50 Electrical Systems

E - EQUIPMENT & FURNISHING

- E10 Equipment
- E20 Furnishings

F - SPECIAL CONSTRUCTION AND DEMOLITION

- F10 Special Construction
- F20 Selective Demolition

G - BUILDING SITE WORK

- G10 Site Preparation
- G20 Site Improvements
- G30 Site Civil/Mechanical Utilities
- G40 Site Electrical Utilities
- G90 Other Site Construction



APENDIX A – EXPENDITURE FORECAST

Survey Section	Unif. L3	Display Name	Quantity	Unit of Measure	Unit Cost	Total Expense	Residual Life	Category	Priority
Admin Building	D1010	Elevator	3.00	Ea.	\$388,291.20	\$1,164,874	0	Lifecycle Replacement	1-Currently Critical
Admin Building	B1010	Concrete Steps	50.00	S.F.	\$61.48	\$3,074	3	Major Repair	1-Currently Critical
Admin Building	A1030	Concrete	2000.00	S.F.	\$113.12	\$226,240	1	Major Repair	2-Potentially Critical
Admin Building	D2020	Water Heater	2.00	Ea.	\$54,490.60	\$108,981	2	Lifecycle Replacement	2-Potentially Critical
Admin Building	D2020	Domestic water piping	440.00	L.F.	\$238.44	\$104,914	4	Lifecycle Replacement	2-Potentially Critical
Admin Building	D2030	Sewage cast iron piping	220.00	L.F.	\$351.20	\$77,264	4	Lifecycle Replacement	2-Potentially Critical
Admin Building	D3040	Exhaust Fans	12.00	Ea.	\$6,379.08	\$76,549	1	Lifecycle Replacement	2-Potentially Critical
Admin Building	D5030	Fire Alarm Panel	1.00	Ea.	\$51,660.52	\$51,661	1	Life Safety/Code Compliance	2-Potentially Critical
Admin Building	C3020	Vinyl Tile Flooring	250.00	S.Y.	\$174.02	\$43,505	5	Lifecycle Replacement	2-Potentially Critical
Admin Building	D5030	CCTV	25.00	Ea.	\$1,578.62	\$39,466	2	Modernization/Improvement	2-Potentially Critical
Admin Building	D5030	Smoke Detectors	40.00	Ea.	\$653.86	\$26,154	4	Life Safety/Code Compliance	2-Potentially Critical
Admin Building	D5090	Exit Lights	15.00	Ea.	\$1,472.58	\$22,089	1	Life Safety/Code Compliance	2-Potentially Critical
Admin Building	B2030	Aluminum Storefront Doors	6.00	Ea.	\$1,284.48	\$7,707	3	Lifecycle Replacement	2-Potentially Critical
Admin Building	D2020	Drainage	1.00	Ea.	\$6,171.92	\$6,172	1	Major Repair	2-Potentially Critical
Admin Building	B2030	Sliding Garage Door	1.00	Ea.	\$3,444.34	\$3,444	4	Lifecycle Replacement	2-Potentially Critical
Admin Building	D4090	Fire Alarm Horn Strobes	8.00	Ea.	\$307.30	\$2,458	8	Life Safety/Code Compliance	2-Potentially Critical





Kansas Department of Corrections

Site Utilities	G3020	Underground Main sewer line over 10 inches	150.00	L.F.	\$3,320.66	\$498,099	1	Lifecycle Replacement	2-Potentially Critical
Site Utilities	D5010	Underground Main electrical service	3.00	Ea.	\$124,956.40	\$374,869	0	Lifecycle Replacement	2-Potentially Critical
Admin Building	B2020	Aluminum Frame Exterior Windows	45.00	Ea.	\$1,970.38	\$88,667	5	Lifecycle Replacement	3- Necessary/Not Critical
Admin Building	D5010	Transformer	1.00	Ea.	\$48,686.80	\$48,687	4	Modernization/Improvement	3- Necessary/Not Critical
Admin Building	C3010	Acoustical tiles	10.00	C.S.F.	\$2,289.12	\$22,891	1	Lifecycle Replacement	3- Necessary/Not Critical
Admin Building	C1010	Restroom Partitions	1.00	C.L.F.	\$14,164.20	\$14,164	4	Routine Maintenance	3- Necessary/Not Critical
Admin Building	D2010	Porcelain Toilets	6.00	Ea.	\$2,328.02	\$13,968	0	Lifecycle Replacement	3- Necessary/Not Critical
Admin Building	G2040	Chain Link Fence	200.00	Ea.	\$66.68	\$13,336	3	Routine Maintenance	3- Necessary/Not Critical
Admin Building	B2010	Concrete Block Wall	3.00	C.S.F.	\$3,423.10	\$10,269	3	Major Repair	3- Necessary/Not Critical
Admin Building	D2010	Detention Grade Toilet	6.00	Ea.	\$923.94	\$5,544	0	Lifecycle Replacement	3- Necessary/Not Critical
Admin Building	C3020	Carpeted steps	40.00	S.Y.	\$127.88	\$5,115	2	Lifecycle Replacement	3- Necessary/Not Critical
Admin Building	B2030	Detention Grade Sliding Door	2.00	Ea.	\$1,134.86	\$2,270	4	Lifecycle Replacement	3- Necessary/Not Critical
Admin Building	D2020	Pipe Insulation	320.00	L.F.	\$23.20	\$7,424	1	Modernization/Improvement	4- Recommended
Admin Building	E1090	Fluorescent Lights	10.00	Ea.	\$288.42	\$2,884	0	Modernization/Improvement	4- Recommended



ASSESSMENT

Kansas Department of Corrections

Site Utilities	G3010 Underground Water Main	Site Utilities	17.00	Ea.	\$25,810.50	\$438,779	0	Lifecycle Replacement	4- Recommended	
----------------	---------------------------------	----------------	-------	-----	-------------	-----------	---	-----------------------	-------------------	--



ADMINISTRATION BUILDING-EXTERIOR





ADMINISTRATION BUILDING-EXTERIOR













ADMINISTRATION BUILDING-INTERIOR















ADMINISTRATION BUILDING-INTERIOR & VERTICAL TRANSPORTATION















ADMINISTRATION BUILDING-MECHANICAL, ELECTRICAL & PLUMBING















ADMINISTRATION BUILDING-MECHANICAL, ELECTRICAL & PLUMBING















ADMINISTRATION BUILDING-LIFE SAFETY & SECURITY















CGL Facility Management LLC 1903 Phoenix Blvd., Suite 250 Atlanta, GA 30349 (770) 716-0081 www.CGLcompanies.com