City of Topeka

Hotel Facilites System Assessment

RFP No. 2826

July 7, 2023

schwerdt design group

SCHWERDT

DESIGN

GROUP,

INC.

July 7, 2023
Leigha Boling
Director of Contracts and Procurement
City of Topeka
215 SE 7th St., Room 60
Topeka, Ks. 66603

RE: HOTEL FACILITIES SYSTEM ASSESSMENT - CITY OF TOPEKA RFP NO. 2826

Dear Ms. Boling

III.A.1 The Schwerdt Design Group Team is excited by the opportunity to provide the City of Topeka with a comprehensive Facilities Assessment for the former Hotel Topeka located adjacent to the Stormont Vail Event Center.

SDG is a 28-person architectural, interior design, and planning firm established in 1990 offering comprehensive services throughout the Midwest and a major part of the United States. We are licensed to practice in 46 States and currently have active projects in 20 States. The SDG Team includes 9 registered architects and 3 interior designers.

III.A.2. The key individuals responsible for submitting this response include:

Sherri Hartter
Director of Strategic Communication & Development
Schwerdt Design Group
2231 S.W. Wanamaker Road, Suite 303
Topeka, Kansas 66614
slh@sdgarch.com
W: 785.730.0909 (Direct)
W: 785.273.7540 (Office)
C: 785.230.0688 (Cell)

And

Greg Schwerdt, AIA, LEED AP, NCARB
President
Schwerdt Design Group
2231 S.W. Wanamaker Road, Suite 303
Topeka, Kansas 66614
ges@sdgarch.com
W: 785.273.7540 (Office)
C: 785.224.4450 (Cell)

III.A.3. Team members with the authority to bind the firm:

Greg Schwerdt, AIA, LEED AP, NCARB
President
Schwerdt Design Group
2231 S.W. Wanamaker Road, Suite 303
Topeka, Kansas 66614
ges@sdgarch.com
W: 785.273.7540 (Office)
C: 785.224.4450 (Cell)

Architecture

Interiors

Planning

2231 SW Wanamaker Rd.

Suite 303

Topeka, Kansas

66614-4275

785.273.7540

FAX 785.273-7579

www.sdgarch.com

SCHWERDT

DESIGN

GROUP,

INC.

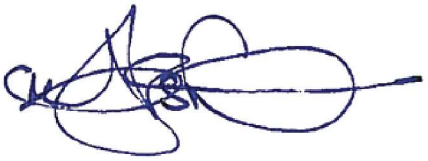
III.A.4. We are extremely confident the SDG Team has the **ability to meet the minimum requirements** of the RFP. To provide a broad professional resource base, and to assure you of the technical knowledge & skills required, we have assembled a design team of very experienced and talented architects, engineers, and interior designers that we believe are second to none. SDG offers the City of Topeka the advantages of a local industry leader familiar with the community we serve, as well as extensive experience in hotel assessments, while our team of consultants are regional and national leaders in their respective professions.

III.A.5. It is the intent of the SDG Team to **include all systems** listed in **I.B.1** through **I.B.15.** of the **Hotel Facilites System Assessment RFP** in the report to be developed for this project,.

Thank you for giving us the opportunity to introduce you to the Schwerdt Design Group Team. We believe that our Team has much to offer and we hope to have the opportunity to demonstrate this to you soon. SDG is excited about this project and being a part of your team.

Sincerely,

Schwerdt Design Group, Inc.



Greg Schwerdt, AIA, LEED AP, NCARB
President

Architecture

Interiors

Planning

2231 SW Wanamaker Rd.

Suite 303

Topeka, Kansas

66614-4275

785.273.7540

FAX 785.273-7579

www.sdgarch.com

III Proposal Response

III.B.1. Proposer's firm name, history, background, location(s) general description of services offered and contact information:

Schwerdt Design Group, Inc.
Greg Schwerdt, AIA, LEEP AP, NCARB
Founder and President
2231 SW Wanamaker Rd., Suite 303
Topeka, KS 66614-4275

Schwerdt Design Group was founded in 1990 with the goal of building a better community through design excellence and personalized service to our clients. We listen carefully to our clients and then help them develop the most comprehensive and effective solutions to their specific needs. To provide the highest quality service to our clients, our team continually engages in technical research and professional development to remain on the leading edge of our profession.

Success in fulfilling our original goal has enabled Schwerdt Design Group to grow from a 4-person firm in 1990 to a 28-person architecture, interiors, and planning firm offering comprehensive design services throughout the Midwest and many parts of the United State. SDG's corporate office is in Topeka, Kansas, with a branch office in Oklahoma City, Oklahoma. SDG also has an affiliated interior design firm, Schwerdt Contract Interiors that was established in 1995.

Schwerdt Design Group has been involved in a broad range of design projects. We do not specialize in any one project type but rather we are a multi-disciplined firm working on a vast cross-section of commissions

Over 85 percent of SDG's business is from repeat clients. We attribute our success to our commitment to providing quality design services and, most importantly, creating meaningful, lasting relationships with our clients. We strive to have a deep understanding of each of our client's project vision, mission, and goals. Although there is always room for improvement, every step is taken to communicate with our clients from the start of the project to long after its completion. Communication is the key to our success and in maintaining valuable relationships with clients. Project types include:

- Athletic Venues
- Churches & Religious Facilities
- Corporate Headquarters
- Country, Golf & Private Clubs
- Dining Establishments
- Education
- Entertainment Venues
- Health Care Facilities
- Historic Restorations & Renovations
- Hotels
- Mixed Use Living Facilities
- Multi-Family Housing
- Museums & Galleries
- Office Buildings
- Post-Secondary Education Institutions
- Public & Private Schools
- Retail Establishments
- Senior Living Communities

A general description of the services SDG offers includes:

- Master Planning
- Feasibility Study
- Site Analysis & Selection
- Pre-Design & Planning
- Programming
- Facility Assessments
- Design, Code Review & Analysis
- Zoning Approval Processing
- Interior Design
- Construction Documents
- Project Estimation
- Construction Administration
- Green & Sustainable Design
- Historic Preservation

At SDG we believe successful projects result when good clients and good architects work hand in hand to form great relationships with one another. Relationships founded on a mutual understanding of expectations, clear communication, and a willingness of all parties to accept responsibility for making projects work.

For this type of project, it is imperative that you have a Team with a strong background and proven track record in existing facility assessments, especially hotels and multi-family facilities. We believe there are very few teams that can match our experience in this regard.

To provide a broad resource base, and to assure you of the technical knowledge and skill required, we have assembled a design team of very experienced and talented architects, engineers, interior designers, and specialty consultants that we believe is second to none.

Greg Schwerdt, AIA, will serve as Principal-in-Charge of the project. He will take the lead management role of the entire project team and serve as interface between the City of Topeka and the SDG team.

Greg is the founder of a diversified and accomplished firm dedicated to excellence in architecture, planning, interior design, management, and service to our clientele. With over forty-six years of architectural practice, he continues to bring the highest level of project management and personal integrity to all his projects. He has served as principal-in-charge on numerous projects for clients in Kansas and throughout the United States. Through effective communication, he has skillfully managed large teams of consultants and related specialists. Greg's methodical approach to problem solving, together with his broad perspective on organizational matters, have been the hallmark of the diverse teams he has led.

Andrew Wiechen, will serve as Senior Project Manager. Andrew will be your primary contact and responsible for the day-to-day oversite and progress of the project as well coordination with consultants and your Team. Andrew is a results-oriented Project Manager and Designer. He has over 18 years of experience working on complex medical, commercial, government, hospitality, civic, and historical preservation projects. His expertise includes strategic planning, master planning, architecture and urban design, interiors and product design, construction documentation, and cross-functional collaboration. Most recently Andrew has served as Project Manager for the physical assessment and renovation of 14 multi-family housing projects in South Chicago, mostly constructed in the 1940's and 1950's for Icarus Development over the past 2 years. He has also completed the renovation of 15 Mainstay hotels in 10 States in the last 2 years.

Andrew E. Wiechen, RA
Sr. Project Manager
Schwerdt Design Group
2231 S.W. Wanamaker Road, Suite 303
Topeka, Kansas 66614
aew@sdgarch.com
Direct: 785-730-0927

Shaun Elwood, AIA, will serve as Project Architect for the Hotel Assessment Project. His responsibilities include lending his expertise and experience in facility surveys. Shaun is a licensed architect with 22 years of experience, 13 of those years with SDG. Shaun has worked on a wide variety of projects including military, industrial, commercial, educational, multifamily residential, senior living, hospitality, and is currently a key member of our Facility Management Team providing architectural on-call services for a global communication company in 9 states. Many of the projects involve physical assessments of existing real estate owned by the client, including the majority of services requested in this RFP.

More importantly Shaun has led the SDG Team that has performed more than 60 hotel assessment projects in 22 States in the past 3 years.

Shaun L Elwood
Project Manager, AIA, NCARB
Schwerdt Design Group
500 N Broadway Ave, Suite 200
Oklahoma City, OK 73102
sle@sdgarch.com
W: 405.231.3105
Direct: 785.730.0908

Andrew and Shaun will be supported by Mike Stormer, RA, as a member of the SDG investigative team. Mike is a licensed architect with 49 years of experience, 31 of those years spent with SDG. Mike has extensive experience in historic preservation, and existing building renovation and has managed many of SDG's most complex projects. He is well-versed in building codes and review processes required by various regulatory agencies

Michael Stormer, RA
Schwerdt Design Group, Inc.
2231 S.W. Wanamaker Road, Suite 303
Topeka, Kansas 66614
mls@sdgarch.com
O: 785.273.7540
D: 785.596.8944

This is our A Team. We assure you we will not shift responsibilities or personnel throughout the project. Key to our success is dedication of THIS professional team to YOU and YOUR project. Together we bring accountability and commitment of guiding YOU to YOUR final goals.

III.B.3. Detailed description of how SDG meets the minimum qualifications described in the RFP:

To meet, and we believe to exceed the minimum qualifications requested in the RFP, SDG has assembled a team that we believe is second to none. The team consists of the following expert consultants and the systems review they will be providing. A more detailed profile of each consultant follows the systems list in the order presented below:

1. Building envelope, including roofing and windows – Schwerdt Design Group (SDG) and Terracon
2. Elevators - Latimer Sommers & Associates (LS&A) / Schwerdt Design Group (SDG)
3. Mechanical – Latimer Sommers & Associates (LS&A)
4. Electrical -- Latimer Sommers & Associates (LS&A)
5. Plumbing -- Latimer Sommers & Associates (LS&A)
6. Structural – Certus Structural Engineering
7. Environmental – Terracon
8. HVAC -- Latimer Sommers & Associates (LS&A)
9. Exterior drives, parking, and sidewalks - CFS Engineers
10. Building canopies, awnings, overhangs, and porticos - Schwerdt Design Group (SDG)
11. Fire Protection - Poole Fire Protection
12. Fire/Life Safety Issues - Poole Fire Protection
13. Audio Visual Equipment - Latimer Sommers & Associates (LS&A)
14. Kitchen Equipment and Restaurant Items - Schwerdt Design Group (SDG)
15.Interior to include: flooring, doors, room amenities (bed, TV's, AC Unites, refrigerators, microwaves), Gym Equipment, Indoor Pool, Wi-Fi Connectivity, Business Center - Schwerdt Design Group (SDG), Schwerdt Contract Interiors (SCI), Terracon (Indoor Pool)

Consulting Firm Profiles

Terracon -- Terracon has grown to more than 6,000 employee-owners, including engineers, scientists, architects, facilities experts, and field professionals focused on solving engineering and technical challenges from more than 175 locations nationwide. Terracon is a multidiscipline engineering consulting firm delivering facilities, environmental, geotechnical, and materials services.

1. Environmental Services

--Terracon specializes in due diligence services to identify and address environmental issues that pose risks to the community, clients, and their investments. Phase I Environmental Site Assessments (ESA) are designed to identify potential contamination from off-site or on-site sources that may impact property values. Terracon also offers a one-source solution for asbestos consulting, including Asbestos Hazard Emergency Response Act (AHERA)-certified asbestos staff. Terracon staff includes asbestos inspectors, planners, and designers who have experience in providing asbestos management solutions.

2. Building Envelope Services -- Terracon's facilities professionals understand the complexities of building enclosure materials, components, and systems. Terracon's team of experts routinely performs evaluations and investigations to identify deficiencies and provide solutions that increase performance and reduce operating expenses and potential liabilities. Their knowledge and direct experience with how various building systems perform and interact in real-world conditions allow them to provide effective, holistic solutions needed to maximize a facility's functionality, cost efficiency, and usable lifespan.

LATIMER SOMMERS & ASSOCIATES (LS&A) -- LATIMER, SOMMERS AND ASSOCIATES, P.A. (LSA) is a consulting firm with many years of experience in the design of mechanical, electrical, plumbing, and environmental building systems. LSA's present Association was founded in 1987 as the successor of two previous firms. Six partners privately hold the firm as a Professional Association. The firm's licensed engineers specialize in mechanical and electrical system design including heating, ventilation, and air conditioning (HVAC); plumbing; lighting; and power distribution and as such complete the design of these systems having an average annual total construction cost in excess of $200 million. In addition, their engineers are qualified in fire suppression systems, fire detection systems, CCTV, and security systems. Knowledge of these systems is essential in developing a coordinated building design consistent with the construction documents being prepared by other design professionals.

Alexandre Karam has been a Partner at Latimer, Sommers & Associates, P.A. since 2007. Acting as a Project Manager/Design Engineer Mr. Karam provides mechanical, electrical, and plumbing design and development of construction contract documents as well as assisting in the bidding process and the construction administration phase of each of his projects. He accurately documents existing mechanical and electrical systems within individual buildings as well as facilities with multiple buildings and centralized utilities. Mr. Karam strives to understand a building owner or governmental agency's needs, analyze practical solutions, and implement mechanical and electrical system upgrade designs. This design approach focuses on the long-term viability and system maintenance of individual buildings and institutional facilities. His dedication, energy, and commitment to doing his best work on every project has helped him earn a great deal of respect from everyone he works with. Some of his recent work includes hotels, office buildings, K-12 and secondary education, senior housing, correctional, regional retail, and military projects. Each of these are supervised from initial client contact, through design, and into completion with construction administration.

LS&A's principals and associates share ideas in developing the preliminary design to obtain a variety of options before choosing the best design alternative for a given project. Their approach, in the design process, includes involving individuals responsible for developing the functional criteria for a given project as well as those individuals responsible for maintaining the facility. They feel that this approach creates a tailored solution to each project which enables the members of the firm to gain an understanding of that project and allows them an opportunity to provide a more qualified review during the later stages of design in order to best achieve the Owner's desired results.

LSA has strived to use the most current design and documentation technology available. Currently, the firm has eleven Computer Aided Design/Drafting Stations, a high speed-large format printer/scanner and a full-time support staff consisting of 26 total employees to ensure a quick turnaround time. LSA is fully proficient with the latest versions of AutoCAD and REVIT software platforms to create quick and detailed contract documents. CAD and REVIT software is updated as new versions become available

CERTUS - Founded in 2007, Certus Structural Engineers (CertusSE) has restructured and grown into a full-service structural engineering firm. Headquartered atop the Historic Gordon Building in beautiful downtown Topeka, Kansas, CertusSE is committed to applying our expertise and talents toward a progressive role in serving its own community as well as many others throughout the Midwest. As we honor and build on our past, we look forward to the future with a design approach founded on collaboration, creativity and commitment.

SERVICES

- Commercial/Retail Buildings
- Manufacturing / Industrial Facilities
- Religious Centers
- Schools / Universities
- Building Inspections / Renovations
- Specialty Structures
- Military Facilities
- Historical Buildings
- Health / Long Term Care Facilities

STRUCTURAL SOLUTIONS

- Cast-in-Place Concrete
- Tilt-Up & Precast Concrete
- Concrete Masonry Assemblies
- Structural Steel Construction
- Cold-Formed Metal Framing
- Timber & Engineered Wood
- Deep Foundations
- Site Retention Walls

WORK METHOD

Our experienced engineers and technicians successfully merge their extensive knowledge of structural engineering with a working practical knowledge of construction materials, methods of design and analysis and drafting technology to create a project solution with efficient design and constructability. We staff each project with a project manager who owns responsibility for total execution of the project from design concept through construction.

CFS -- CFS is a full-service civil engineering consulting firm that provides professional engineering, transportation and environmental services throughout the Midwest. Our staff of over 90 professionals offers client-focused solutions for public infrastructure, site development, structural, geotechnical and survey projects. As a medium sized firm, we maintain stability, constantly pushing for state-of-the- art solutions, while remaining focused on our core values of service and project quality. We consider it a privilege to have partnered with hundreds of communities and clients for the past half-century.

Our team includes dynamic professionals passionate about tackling challenges and generating real-world, common-sense solutions. Within each project, we strive to improve quality of life, protect natural resources, and better the environment. CFS integrates a broad range of services within one organization, offers comprehensive approaches to clients, and provides expertise to infrastructure challenges.

CFS ENGINEERS SERVICES:

- Civil Engineering
- Site Development
- Traffic Engineering
- Transportation / Roadway Design Multi-Modal Transportation Planning
- Utility Coordination
- Surveying
- Public Utilities
- GIS Mapping
- Geotechnical
- Landscape Architecture

POOLE FIRE PROTECTION -- Poole Fire Protection was founded in 1991 on the principals of providing cost-effective, state-of-the-art fire protection engineering and consulting services that generate creative and innovative solutions which are responsive to client and public needs. The firm, a small, woman-owned business, remains committed to those founding principles by offering complete fire protection engineering services from initial planning through final design to construction management. Poole Fire Protection has completed hundreds of both large and small projects for cities, industries, and state and federal agencies.

Through combined education and experience as fire protection professionals, the firm's employees have a unique background of expertise in fire safety regulations and their interrelationships. Frequent contact with architectural/engineering firms, insurance representatives, building code officials, fire departments, regulatory agencies, and other authorities having jurisdiction, allows Poole Fire Protection to provide a realistic and cost-effective approach to conventional fire protection concerns, as well as those unique to specialized industries. The professional courtesy maintained with these organizations provides Poole

Fire Protection clients with the assurance that they will receive the maximum design, flexibility, combined with effective and economical fire protection and life safety.

The staff at Poole Fire Protection maintain close relationships with the National Fire Protection Association, the Society of Fire Protection Engineers, International Code Council, and other professional organizations in the engineering field. The firms serve on 13 different NFPA Technical Committees representing 18 different codes and standards.

POOLE FIRE PROTECTION'S PROFESSIONAL ABILITY

Poole Fire Protection has the staff and resources necessary to provide the services in this solicitation. The firm has specific project experience performing fire protection and life safety assessments of existing facilities for achieving compliance with building life safety and fire codes. The firm has performed facility assessments for residential, storage, medical, and many other occupancies throughout the world.
The purpose of this association is to allow us to complement each other's strong points. This allows us to join our talents, energies, and creativity to bring a significant degree of expertise that might otherwise not be possible. It provides opportunities for new and different ideas. Most importantly it provides leading experts in Facility Assessments while maintaining local daily control.

III.B.4. Narrative approach of understanding of the project and how it would proceed if selected:

Our teams understanding of how the project would proceed if selected would conform to the following process and be defined as follows:

1. Project Description -- The purpose of the description is to help the city and our Team better understand what is being proposed and expected. This will include a description of the Team's organization and scope of work for each consultant and team member and a description of how the project would meet the City's expectations as defined in the RFP.

2. Project Goals, Outputs, and Outcomes -- This will state the project's overall goal and objectives. This will also include an overview of the major outcomes to be accomplished in the project. Our team will provide a project plan with associated milestone dates so that we can track and report to the city on the project's progress.

3. Roles, Responsibilities, and Qualifications of Key Personnel & Any Project Partners -- This will list the key personnel who are going to work on the project, their qualifications for the role, and their project responsibilities. This will include any key personnel for all consultants that were not listed in the RFP due to space limitations.

4. Technical Understanding -- The purpose of this is for SDG to demonstrate that we and our consultants have the technical understanding the proposed worked and that our solutions as identified are appropriate for the project.

5. Overview of Project Budget – Our team will identify the format in which the major components of the systems analysis will be presented.

III.B.5. List recent work (last three years) illustrating expertise in evaluating each system including references:

Schwerdt Design Group

The following Facilities Assessments were provided for a single client. The projects were the analysis of either distressed or closed hotels due to the pandemic that were being considered for conversion to Workforce Housing. Not all properties became actual projects once the analysis was completed due to unforeseen conditions found during our investigation and/or cost for renovation. The reference for these projects is:

Chris Potterpin
Vice President
PK Companies | PK Development Group | PK Construction Co.
1784 Hamilton Road | Okemos, MI 48864
Office: 517-347-9662 | Direct: 517-325-0275 | Cell: 517-927-4936
cpotterpin@pkhousing.com

Projects include:

1. Topeka Holidome -- Topeka, KS
2. Plato's Workforce Housing – Sterling Heights, MI
3. Plato's Workforce Housing – Columbus, OH
4. Plato's Workforce Housing – Sheffield, AL
5. Plato's Workforce Housing – Akron, OH
6. Plato's Workforce Housing – Fayetteville, NC
7. Plato's Workforce Housing – Costa Mesa, CA
8. Plato's Workforce Housing – Oklahoma City, OK
9. Plato's Workforce Housing – Cincinnati, OH
10. Plato's Workforce Housing – Sharonville, OH
11. Plato's Workforce Housing – Hawthorne, CA
12. Plato's Workforce Housing – Reno, NV
13. Plato's Workforce Housing – Irving, TX
14. Plato's Workforce Housing – Dallas, TX
15. Plato's Workforce Housing – Troy, MI
16. Plato's Workforce Housing – Oakland, CA
17. Plato's Workforce Housing – Columbus, OH
18. Plato's Workforce Housing – Washington, DC
19. Plato's Workforce Housing – Houston, TX
20. Plato's Workforce Housing – Oklahoma City, OK
21. Plato's Workforce Housing – Lafayette, LA
22. Plato's Workforce Housing – Baton Rouge, LA
23. Plato's Workforce Housing – Harrisburg, PA
24. Plato's Workforce Housing – Kansas City, MO
25. Plato's Workforce Housing – Indianapolis, IN
26. Plato's Workforce Housing – Madison, WI
27. Plato's Workforce Housing – South Bend, IN
28. Plato's Workforce Housing – Oklahoma City, OK
29. Plato's Workforce Housing – Birmingham, AL
30. Plato's Workforce Housing – Tulsa, OK
31. Plato's Workforce Housing – Broken Arrow, OK
32. Plato's Workforce Housing – Overland Park, KS
33. Plato's Workforce Housing – Blue Springs, MO
34. Plato's Workforce Housing – St Louis, MO
35. Plato's Workforce Housing – Jacksonville, FL
36. Plato's Workforce Housing – Long Island, NY
37. Plato's Workforce Housing –Austell, GA
38. Plato's Workforce Housing – Reno, NV
39. Plato's Workforce Housing – Reno, NV
40. Plato's Workforce Housing – Sparks, NV
41. Plato's Workforce Housing – Long Island, NY
42. Plato's Workforce Housing – Long Island, NY
43. Plato's Workforce Housing – Phoenix, AZ
44. Plato's Workforce Housing – Austin, TX
45. Plato's Workforce Housing – Raleigh, NC
46. Plato's Workforce Housing – Denver, CO
47. Plato's Workforce Housing – Altus, OK
48. Plato's Workforce Housing – Charlotte, NC
49. Plato's Workforce Housing – Columbus, OH
50. Plato's Workforce Housing – St Louis, MO
51. Plato's Workforce Housing – Tucson, AZ

The following Facilities Assessments were provided for a single client. The projects were the analysis of multi-family living units on the south side of Chicago. Not all properties became actual projects once the analysis was completed due to unforeseen conditions found during our investigation and/or cost for renovation. The reference for these projects is:

David Pezzola
Founder/CEO
Icarus Investment Group, LLC
1142 W Madison St, Suite 402
Chicago, IL 60607
david@icarusinvestmentgroup.com
M: (917) 993-2821

1. Better Housing Foundation, Chicago, IL
2. 1215 E 72nd St, Chicago IL
3. 67th & Blackstone Apartments, Chicago, IL
4. 2600 W 23rd St, Chicago, IL
5. 6054 S Albany, Chicago, IL
6. 5019 S Drexel, Chicago, IL
7. 1719 S Clinton St, Chicago, IL
8. 2026 S Washtenaw Ave, Chicago, IL
9. 914 W Hubbard St, Chicago, IL

Latimer Somers & Associates

Kansas State University – Engineering Complex Expansion (Data Center)
Manhattan, Kansas
George Werth, P.E., CEM, Engineering Project Manager, (785) 532-1801
$2.5 million
Estimated completion date is Fall 2024

Plato's Cave (West Topeka Holidome) Facility Assessment
Topeka, Kansas
Corey Dehn, AIA, LEED AP, Senior Project Manager, (785) 273-7540
$7 million
Project did not move forward after the assessment was completed.

USD 115 Nemaha Central Schools – School Buildings Assessments
Seneca, Kansas
Steve Rothers, Facilities Manager, (785) 336-3557
$28 million
Estimated completion date is 2025.

USD 345 Seaman Schools – Facility Evaluations (all schools)
Topeka, Kansas
Lance Bradley, Director of Facilities & Grounds, (785) 286-8430
Estimated $25 million for all schools.
Assessments are in the process of being completed at this time.

Sunflower Foundation – Menninger Building Assessments
Topeka, Kansas
Gavin Hoskins, Facilities Manager, (785) 232-3000
$18 million
Project completed in April 2022.

III.B.6. Project management experience:

Project Management Approach and Methodology

At Schwerdt Design Group (SDG), we believe successful projects occur when we form quality relationships with our clients - relationships based on open communication, trust and mutual understanding of expectations. SDG is committed to a participatory approach to providing professional services for your project. From the start, our clients play an integral part of the project team. Before any programming is done or pen put to paper, SDG works with clients to establish clear lines of communication and decision-making protocols for the project. Together, we define who provides input, who will be informed about project development, and who makes decisions about the project.

Architectural Programming

Good design solutions are a result of balancing client needs, desired, values and goals with project constraints - budget, schedule, site, etc. Architectural programming defines the project values, goals and functional requirements and provides a systematic process for making informed decisions on subsequent project issues.

SDG works with clients to identify the quantitative and qualitative requirements for their project. This includes:

1. Design objectives, limitations, and criteria
2. Room names
3. Room capabilities
4. Required furnishings and / or equipment for each room
5. Critical room dimensions
6. Minimum room areas
7. Additional gross areas necessary to accommodate steps one through six
8. Qualitative requirements for each room - light, sound, etc.
9. Primary adjacencies between rooms
10. Priority of development relative to other desired facilities
11. Preliminary cost estimates

Facility Analysis

SDG analyses project site and its immediate surrounding to determine potential opportunities and the challenges and makes recommendations for how to address them. The facility analysis examines the following issues:

1. Structural system and configuration of the building
2. Current condition of building materials, components, and systems
3. Study existing configurations, staff flow, member flow, and intensity of space utilization
4. Environmental factors like solar orientation, prevailing winds, etc.

Schematic Design

Schematic design identifies feasible concepts and presents them in a manner that clients can easily understand. This phase clarifies project priorities, explores alternative designs, and provides a rational base for analyzing project costs. During this phase, clients are offered alternatives for interior and exterior materials and given comparisons for structural and mechanical systems that include the cost, durability, maintenance, life cycle, operational efficiency , energy efficiency, and compatibility with the desired project aesthetic.

Every project has unique challenges and SDG utilizes our experience with previous, similar projects to develop informed evaluations of a projects design solutions. However, we do not have preconceived notions for solving problems and will not force a previous solution to a new problem.

Design Development

The design development phase refines and describes in greater detail all important aspects of a project. This phase ends with a clear description of all design elements so all that remains is the formal construction contract documents. Design development includes:

1. Fully developed floor plans
2. Reflected ceiling plans
3. Exterior elevations
4. Interior elevations
5. Building sections
6. Wall sections
7. Key details

Construction Documents

Construction documents are the written and graphic documents prepared for communicating the project design and administering project construction. They include:

1. Drawings
2. Specifications
3. Contract forms and conditions
4. Bidding requirements

Construction documents contain three types of information:

1. Legal and contractual information
2. Procedural and administrative information
3. Architectural and construction information

Bidding

The bidding phase is critical to the project delivery process as it determines the project administration, duration, and cost. Various entities submit a proposal outlining what services they provide, the estimated timeline for those services, and the cost of performing those services.

Construction Administration

The commencement of construction reconciles the predesign, design, documentation, bidding and negotiation of services processes. Throughout construction SDG remains involved to:

1. Ensure the construction work conforms to project drawings and specifications
2. Process contractor drawings, product data and samples
3. Review results of construction tests and inspections
4. Evaluate contractor submissions for payment
5. Oversee requests for changes during construction
6. Resolve claims throughout the project from the client or contractors
7. Administer the completion and close-out process of the project.

September 14, 2017

WASHBURN UNIVERSITY

HENDERSON LEARNING CENTER – ASSESSMENT OF EXISTING MEP SYSTEMS

EXECUTIVE SUMMARY

Henderson Learning Center was designed in the late 1960's and the building was dedicated in 1971. At that time the MEP systems selected were state-of-the-art for a university classroom teaching and departmental office facility. Comfort, functionality, flexibility of the teaching environment such as a variety of lighting switching schemes, large numbers of receptacles and communication jacks, and a diversity of classroom, offices, meeting room functions were emphasized. Along with connection to the campus high pressure steam and medium voltage power systems, the HVAC systems were designed to be robust and last for many years. Due to these choices and very good maintenance, most of these systems remain functional to this day and have served the University well.

While Henderson is functional, unfortunately it is a 46 year old facility with many original MEP systems which have exceeded their normal useful life expectancy. Many systems require very high maintenance, are obsolete and/or parts are no longer available. Notable systems in this category include most air handling systems, dual duct HVAC boxes, steam and hot water plant systems, some condenser water systems, main switchboard, electrical distribution, panelboards, many lighting systems, and original wiring and switching devices.

Henderson is also deficient with respect to compliance with modern building codes and standards, and accessibility codes. Most notable at Henderson, the ventilation shafts are not compliant with respect to fire and smoke management as they are open to return air plenums at each floor. There are very few fire and smoke dampers to provide floor-to-floor, occupancy, or corridor protection. The upper floors of the building lack fire sprinkling. Restrooms are not ADA compliant and lack proper exhaust. These deficiencies are difficult and expensive to resolve without significant renovation work.

Finally, many of the existing MEP systems are inefficient and don't meet modern codes for efficiency, comfort or ventilation. Recent Trane ESCO improvements (2013) greatly improved lighting, chiller plant and air handling unit efficiency, but substantial savings remain possible through modest improvements to the cooling tower/condenser water system, heating systems, chiller programming, pumping, BAS programming and controls, etc. Even lighting retrofits implemented in 2013 can be greatly improved upon with new LED lighting and controls that have attractive payback and life cycle costs.

PRIORITIZED LIST OF RECOMMENDED REPAIRS, REPLACEMENTS AND/OR IMPROVEMENTS NECESSARY TO ADDRESS SHORT-TERM AND LONG-TERM CONCERNS

Based on site observation the following generalized categories and lists of repairs, replacements, or improvements are proposed based on the severity, urgency, or importance of the underlying concern. "Replacement" should not imply that the same type system will be recommended for the deficient equipment as many new modern system options are available today.

Numbered categories are listed from highest to lowest priority. Some improvements are interrelated or contingent upon implementation of other improvements necessary to support its operation.

Priority #1: Life Safety, Safety, Egress, Security, Fire Protection

Repair or replace any/all leaking steam valves.

Simulate power outage and complete performance review to improve egress and emergency lighting where required.

Improve entrance and perimeter site/walkway lighting.

Replace basement fire sprinkler heads with new quick-response heads.

Improve video surveillance at perimeter.

Priority #2: Improve Accessibility and Functionality; Immediate HVAC adjustments and replacements required for proper operation and/or rapid energy payback

Review chiller setpoints and programming to resolve operating issues and lessen cycling.

Restroom ADA/Accessibility, plumbing, clearances, etc.

Restroom flush valves and controls

Restroom exhaust improvements and rooftop exhaust fan replacement.

Test and/or replace steam traps and strainers.

Repair leaking AHU drain pans.

Cooling Tower basin and condenser water improvements.

oRemove basin, convert to tower basin operation.
oAdd VFDs to condenser pumps.
oAdd 2nd basket strainer.
oAdd sidestream filtration system.

Replace Hot Water System pumps

oProvide HW pump VFDs/controls
oProvide 2-way control valves at AHUs.
oReplace HW expansion tank.

Add chilled water system flow water control valves at AHUs and make pumping programming adjustments.

Protect IT equipment and KTWU transmitter equipment with enclosures.

Priority #3: Deferred Maintenance, Parts Availability, Operation

Replace all original gate valves at chilled and hot water systems
Replace branch panelboards
Replace motor control centers
Replace secondary gutter/disconnect switches with circuit breaker distribution panels.
Replace transformers with high efficiency transformers
Replace main switchboard, substation transformer, MV switches.
Replace original receptacles and light switches
Replace AHU supply fans at AHU-3, 4, 6.
Add return air ceiling grilles at offices.

Priority #4: Energy Conservation and Savings

Replace steam heating systems with new high efficiency natural gas boilers
Implement new LED lighting and lighting controls throughout facility.
Implement BAS system improvements.
Add small base load chiller to operate 80% of time and reduce building electrical demand.

Priority #5: Long Term Improvements

Replace all AHUs with new VAV, DOAS or other higher efficiency modern systems.
Replace all dual-duct mixing boxes with alternative high efficiency heating and cooling terminal devices.
Decommission or modify ventilation shafts so that they are code compliant.
Provide quick-response wet type fire sprinkler system throughout facility.
Replace lead-acid emergency lighting inverter with rooftop natural gas generator system.

A. GENERAL BUILDING INFORMATION:

Year of Construction: Dedicated 1971

Approximate Total Area: 100,700 GSF (Excluding unexcavated areas)

Building Usage and Function: College Classrooms, offices, assembly, department offices (non-science).

Construction Type: Mostly concrete structure, concrete block infill/skin, stone and precast aggregate panel veneer.

B. NARRATIVE AND SUMMARY OF EXISTING MEP SYSTEMS

1.Existing HVAC Systems

Henderson Learning Center HVAC systems consist mainly of original dual-duct hot deck/cold deck central air handling systems serving original dual-duct zone mixing boxes. Air handlers utilize chilled and hot water deck coils served from a basement central plant. Central plant consists of a single water-cooled centrifugal chiller, single rooftop cooling tower, associated chilled and condenser water pumps; hot water converters served by seasonal campus district steam, and associated hot water pumps. A 2013 Trane ESCO project replaced the chiller, associated pumps, and retrofitted dual-duct box controls and other building HVAC control systems as indicated below.

The following major HVAC systems and/or equipment were noted during our site review:

Air handling systems

- o(3) large ~~original dual-duct~~ system air handlers (AHU-1, AHU-2, AHU-6)
- o(2) small cold deck/hot deck single zone air handlers with built-up fans and mixing boxes. (AHU-3, AHU-4).
- o(1) small new built-up cooling-only VAV air handler (AHU-5)
- o(1) small new heating/cooling single zone air handler (AHU-7)
- o2-way chilled water control valves except 3-way at AHU-6.
- o3-way hot water control valves at all AHUs
- oManual balancing valves for coil flow control.
- oOriginal in-line air-foil fans at AHU-3, AHU-4
- oNew cabinet centrifugal fans at AHU-1, AHU-2
- oForward curve fan at new built-up VAV AHU-5
- oOriginal centrifugal fan at built-up dual-duct AHU-6

Chilled Water Plant
o(1) New (2013) Trane CVHE 280 Ton water-cooled centrifugal chiller with variable speed drive
o(2) new (2013) 20 HP end-suction chilled water pumps, redundant with dedicated VFDs, and 3D valves.
o(2) new 30 HP end-suction condenser water pumps, redundant with 3D valves. Constant volume, motor starter control.
o(1) 300 Ton rooftop Marley Quadraflow fiberglass cooling tower with gear drive. 20 HP with fan VFD. Remote basement cooling tower basin with tower bypass pumping arrangement. Basket strainer at discharge.
oChem-Aqua chemical-based condenser water treatment system.

Heating Water Plant
oSteam pressure reducing station with bypass and pilot regulators near building service tunnel entrance.
o(2) steam-to-hot water shell-and-tube convertors.
o(2) older 10 HP hot water pumps. Constant volume.

Zone Terminal Heating and Cooling Devices
o(150) original constant volume dual-duct mixing boxes for zone temperature control with interlocked inlet dampers. (New controls, see below)
o(12) original variable volume dual-duct mixing boxes for zone temperature control with separate hot/cold inlet dampers. (New controls, see below)

HVAC Controls (2013 Trane ESCO)
oTrane Tracer DDC platform and network to campus head-end.
o2-way chilled water AHU cold deck temperature control (3-way at AHU-6)
o3-way hot water AHU hot deck temperature control
oVFD air handler fan speed control based on duct static pressure (AHU-7 constant volume)
oAir-handler hot deck temperature reset based on critical zone temperature and OA temperature.
oAir handler cold deck temperature reset based on critical zone temperature and OA temperature.
oHot water temperature reset (180-120°F) based on OA temperature.
oNew actuators, sensors and controller retrofitted on all 162 dual duct boxes.
oSpace DDC temperature sensors in all public spaces.
oSpace DDC thermostats/sensors with thumbwheel control and unoccupied mode override button in all classrooms and offices.
oRemote zone damper control at AHU-5 zone dampers (7) VAV zones.

2. Existing Plumbing Systems

Restroom plumbing fixtures are typically wall-mounted, china with manual single lever faucet controls and water closet/urinal flush valve controls. Restroom configuration is mostly unchanged from original building design with most restrooms retrofitted in attempt to achieve a certain level of ADA compliance.

The following major plumbing systems and/or equipment were noted during site review:

4" domestic water service
6" sanitary sewer service (cast iron interior, VCP exterior)
Combined fire/water meter pit at west side of building
Copper domestic water piping with fiberglass insulation
Cast iron waste and vent systems.
Domestic hot water is generated remotely at MaBee Library using new gas-fired water heater (2013 Trane ESCO) and piped to Henderson via tunnel.
DHW recirculation is provided via pump located at MaBee.
Combination of gate-type and ball-type shut off valves throughout system.

Existing Electrical Distribution Systems

3. Henderson is served by the campus primary electrical system (4160V west loop) via MV voltage load-break switches located at the basement substation. Nearly all switchgear is original ITE equipment.

The following major electrical system and/or equipment were noted during site review:

1000 KVA substation transformer
1600 A 277/480V substation bolted pressure Main Service Disconnect switch
(2) 1600A 277/480V fusible switch substation distribution sections
(1) 800A motor control center with fusible switches and integral starters.
(2) 225 KVA remote 120/208 step-down transformers with down-stream gutter-type fusible disconnect switch distribution.
(1) 277/480V branch circuit breaker lighting panel per floor.
(3) 120/208V branch circuit breaker general power panels per floor.
(1) small emergency lighting panelboard.
All wiring appears to be copper in metallic conduit systems.

4. Existing Lighting Systems

In general all original fluorescent, incandescent and HID lighting systems were retrofitted with newer, more efficient T8 fluorescent lamp and ballast systems as part of the 2013 Trane ESCO project. Ceiling and wall motion sensors, both passive and active were added at that time. Original switching configurations are mostly still utilized with separate switching and/or dimming provided at teaching walls.

The following major lighting systems and/or equipment were noted during our site review:

Mostly 2x4 3-lamp T8 troffers with instant start electronic ballasts.
Similar 2x4 4-lamp troffers and surface fixtures utilized at private offices.
Passive wall-mount motion sensor switches in small offices/rooms.
Passive and active ceiling mount motion sensors in larger spaces and classrooms with wall switch override.
Screw-in base fluorescent PAR style retrofit lamps at original incandescent fixtures.
LED exit signs.
Dual-head screw-in fluorescent egress lights.
1500 VA emergency lighting inverter with lead-acid batteries in remote wood battery cabinet.
Various selected battery incandescent unitary packs.
Miscellaneous T8 stair lights, wraparounds and industrial fixtures.
Manual switching in utility rooms and most restrooms.
Recessed soffit fixtures at (4) primary Level 1 entries have been abandoned in place and covered with screen. A single 2-lamp surface-mounted fluorescent area fixture is utilized at each entry location.
No façade or signage lighting.
(4) metal halide pedestrian pole lights at south parking lot with integral PE control.
Various pedestrian metal halide pole lights with integral PE control at perimeter side walks.
Original relay-operated lighting controls and zoning in large theater classrooms and auditoriums.

5. Existing Fire Sprinkler Systems

Only the basement is sprinkled by a NFPA 13 wet-type fire sprinkler system. A 6” fire service line enters at the basement northwest mechanical room. System is monitored by the addressable fire alarm system. Class 1 standpipe hose cabinets at the (4) stair towers have been decommissioned and are used to house chemical fire extinguishers. A post-indicator valve is provided at the west exterior water service meter pit.

6.Existing Fire Alarm Systems

The building is served by a newer Simplex 4100 Series addressable fire alarm system with main panel located in the main mechanical room. The following summarizes the existing system and devices noted during site review:

Pull stations at building exits and stair entrances, each floor.
Addressable smoke detection throughout corridors and exit paths.
Smoke detection at all AHU supply ducts and return openings/ducts.
Horn/strobe annunciation throughout.
Limited ADA strobe annunciation.
Fire sprinkler system monitoring.
Most wiring in conduit systems.
No voice EVAC systems (none required).

C. RECOMMENDED SHORT TERM IMPROVEMENTS

The following repairs, replacements, or improvements are recommended to address short-term concerns, deferred maintenance and/or reduce energy consumption/costs:

1.Average chiller run time is 1.9 hours/start and 1268 starts per season. Average load on chiller is less than 50% of capacity. Review chiller capacity trending and consider reducing capacity limit setpoint below 100% to reduce start-up demand and cycling. Review building night setback/setup sequences to determine appropriate setpoint.

2.Provide automatic flow control valves at all AHU chilled water coils to improve variable speed pumping energy savings and stabilize valve control. Consider replacing valves with pressure independent control valves (PICV) for maximum savings and control.

3.Replace 3-way HW control valves with 2-way control valves similar to CW valves at all AHUs except AHU-6. Provide with automatic flow control valves or provide PICV valves.

4.Improve chilled water pumping efficiency by adjusting system pressure and VFD settings.

5.Remove indoor remote condenser water tank and activate existing tower sump. Provide level controls and heaters for outdoor basin operation. Condenser water riser piping will be flooded and noise, vibration, pipe erosion, water surging will be eliminated. Energy savings due to greatly reduced static pumping head will be considerable.

6.Provide VFDs and open 3D valves at condenser water pumps. Utilize VFDs for constant water flow balancing and/or chilled water plant optimization.

7.Replace all rusted, leaking and/or inoperative gate valves and strainers. Provide butterfly valves where possible.

8.Replace hot water pumps and HW expansion tank.

9.Provide VFDs for hot water pumps to allow flow modulation/control and associated energy savings.

10.Replace cooling tower fill. Provide cooling tower screens.

11.Repair leaking drain pans at AHU-1 and AHU-6.

12.Remove inlet vanes and provide new supply fan at AHU-6 similar to AHU-1 and AHU-2.

13.Provide ventilation air measurement and demand-based ventilation control for large AHUs 1, 2, and 6.

14.Replace OA dampers with low leakage type at AHUs 1, 2, and 6.

15.Add return air grilles with sound boot at offices and other spaces lacking a direct return air path to plenum.

16.Replace rooftop exhaust fans with direct drive type upblast fans and increase/improve rest room exhaust quantities.

17.Investigate and improve return air paths into basement mechanical rooms from chases, corridors back to AHUs 1, 2 and 6.

18.Replace all branch panelboards with new panels with available parts/breakers. Increase branch circuit amount to 54 or 72 circuit breakers per panel and provide conduit rough-ins for future use.

19.Replace the 800A motor control center. Review loads still requiring motor starters (most loads now have remote VFDs or starters) and consider providing standard circuit breaker distribution sections if possible.

20.Replace inefficient 120/208V stepdown transformers with new that meet DOE 2016 energy standards. Eliminate gutter/disconnect switch secondary distribution and provide new circuit breaker MDPs to serve downstream panelboards instead. Provide MDP with spares for easy addition of future loads/panels if needed.

21. Replace exterior metal halide pole lights with new LED poles/fixtures at parking and pedestrian paths.

22. Improve south parking lighting to meet recommended standards.

23. Improve site lighting and pathway lighting near Metro Bike parking.

24. Remove surface fluorescent fixtures and improve soffit lighting at the (4) primary entrances using new cut-off style LED fixtures to provide lighting suitable for a building entrance.

25. Improve building video surveillance both interior and exterior.

26. Update restrooms to meet ADA for clearances, fixture heights, controls, grab bars, etc. Provide reduced flow water closets and urinals with automatic flush valves. Provide new manual control faucets and lavatories.

27. Replace lighting and controls at all theater seating classrooms and Auditorium 100 with new LED lighting and low voltage controls/dimming.

28. Replace any damaged switches and receptacles.

29. Provide new quick response sprinkler heads at basement corridors.

30. Lubricate, exercise and test substation medium voltage load break switches. Re-torque lugs, check for tracking, heating and cable integrity.

31. Investigate and check cooling tower fan blade balancing and gear box bearings for acceptable vibration.

32. Add bottle fillers at existing electric drinking fountains.

D.RECOMMENDED LONG TERM IMPROVEMENTS

The following replacements and improvements are recommended to provide long term utilization of the facility as well as provide modern systems with improved efficiency, comfort, energy savings, parts availability and reduced maintenance.

1.Disconnect building from campus district steam and provide high efficiency gas-fired hot water heating boilers/plant. Gas service improvements required.

2.Replace building electrical substation including new load-break switches, high efficiency substation transformer, new circuit breaker distribution sections. Coordinate with campus Medium Voltage Electrical Distribution Master Plan for voltage, transformer type (pad/exterior), etc.

3.Replace all air-side HVAC systems including dual-duct air handlers and dual-duct zone mixing boxes with new high efficiency HVAC systems with better zone control, improved ventilation and building pressure, energy recovery (required by new energy codes), humidity control, demand based ventilation, etc. Such systems may include new VAV air handlers and zone VAV boxes, air-cooled and/or water-cooled VRF systems with DOAS ventilation units. Many other system are possible that are compliant with modern comfort and energy codes. At that time return air and relief air systems should be reviewed and improved. Consider reuse of existing dual-duct systems for new VAV or ventilation ducts where possible to reduce costs and simplify conversion.

4.Replace all building lighting with new LED lighting with dimming and addressable network control capabilities. Each fixture has address for flexible zoning and control.

5.In conjunction with existing basement fire sprinkling, extend existing and provide quick-response wet fire sprinkler systems for the balance of the building per NFPA 13 standards. The existing building fire sprinkler service entrance and piping has adequate capacity to extend and serve the entire building.

6.Replace all original building receptacles and wall switches with new devices and associated cover plates.

7.Replace lead-acid battery emergency lighting inverter system with new rooftop natural gas emergency/standby generator (approximately 20 kw). Generator can serve not only egress lighting but also IT/security needs, KTWU transmitter equipment, storm shelter lighting and other critical loads (including potential cooling tower basin heat).

8. Add a small (80 Ton) reversible chiller near existing chiller to better match building base cooling load (esp. if LED lighting is implemented) with heat recovery capability (for potential simultaneous heating or future VAV reheat).

9. Add improved electrical distribution metering and monitoring.

10. Add panels and infrastructure for future EV charging stations at south parking area.

11. Provide dedicated and secure IT closets, breakout cabinets, fiber entrances, etc. for IT equipment that is currently exposed. Provide dedicated temperature control/AC where required.

E. PHOTOGRAPHS

Lighting at the four main entrances is poor and needs improvement suitable for a university environment and student entrances.

Inadequate lighting at south parking. Appears to utilize inefficient metal halide sources/lamps.

West walkway.

Inadequate site and walkway lighting at building perimeter. No façade lighting.

South façade, loading dock and parking lighting.

Typical manual faucet controls, trap guards missing.

Some accessibility improvements have been implemented throughout facility but typically are not fully compliant with ADA regulations. Significant accessibility improvements are necessary for compliance.

Typical manual urinal flush controls.

New (2013) chilled water pumps.

New (2013) 280 ton centrifugal chiller with VSD capacity modulation.

Original remote cooling tower basin is rusted and needs replacement. Removal and use of tower sump is recommended.

Cooling tower / condenser water pumps. Single basket strainer requires system shutdown to clean. Lack of automatic filtration system requires regular manual cleaning and flushing of strainers.

Cooling tower pump pressure gauge (upstream of 30 valve) 49 PSI of pump pressure is required to pump from basement to rooftop tower. Very energy intensive. Redundant pumps are 30 HP each.

Cooling tower pump 3D valves are 72% restricted to limit flow. Very wasteful parasitic energy loss. VFDs recommended.

Receiving / surge compartment of remote tower basin.

Water level control compartment of tower basin.

In general tank is very rusted.

Tank water level controls.

Tower / condenser water chemical treatment.

Tower return strainer is leaking, needs repair and new seals. Steel tower piping should be checked for excessive piting and erosion especially at bottom of vertical drop from penthouse.

Original heating plant steam HW converters. Overall steam-to-HW process is a very inefficient heating method compared to local natural gas boilers.

Original constant speed hot water pumps, valves and pads need replacement. Pumps lack suction diffusers, strainers and balancing valves. New pumps, accessories and VFD operation is recommended.

Motor control center needs replacement.

Motor starter “cans” no longer used for starters. MCC parts and switches no longer made.

New chilled water plant VFDs and motor starters (2013).

Chiller plant refrigerant monitoring system.

Original HW system expansion tank at structure needs replacement. Old technology tank lacks bladder for air separation and pressure control. New tank would be at floor for ready inspection and maintenance.

Original built-up AHU-4. Single zone with hot/cold deck mixing. Overall condition poor to fair.

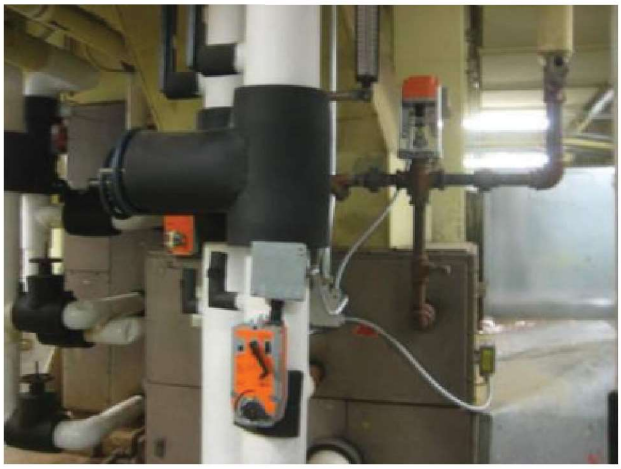
Cooling-only VAV AHU-5. Original dual deck unit replaced to serve VAV box zones.

Original built-up single zone AHU-3 similar to AHU-4.

Original AHU-3 axial flow fan.

New AHU-3 and AHU-4 VFDs. At fans original inlet vanes are in fixed position.

All AHU hot water valves are 3-way with no balancing or flow control valves. 2-way valves with flow control are recommended for energy savings.



AHU-3 (shown) and all AHUs lack CW and HW flow limiting valves which lessens energy savings possible with variable speed pumping (CW only).

Original dual-duct AHU-2 CW/HW coil section. Needs replacement.

Typical original dual-duct zone box throughout facility with new (2013) Trane control retrofit. Dual duct system and associated boxes are not compliant with modern energy codes as they mix cold and hot energy resources.

Original east 120/208V distribution equipment uses a feeder gutter and grouping of disconnect switches to serve building loads in lieu of a distribution panel. Transformer efficiency poor compared to new transformers. West 120/208V system is similar.

Original dual-duct AHU-2. Fan section replaced in 2013 .

AHU-2 cold and hot system distribution ducts.

Original main electrical service: 1600A, 1000 KVA substation fed from campus 4160 volt west primary loop. Transformer efficiency is poor compared to modern equipment. Original manufacturer is defunct and switchgear parts are not available. Replacement with modern circuit breaker substation is recommended. MV switches at end will require replacement if campus voltage increased.

Simplex 4100 addressable main fire alarm control panel. Condition good.

Main building IT and fiber entrance exposed behind substation.

Campus steam supply and condensate return at tunnel. Traps, strainers and valves should be replaced. Long term replacement with gas heating system is recommended.

Main steam shut-off valve indicated to leak. Leaking steam a safety hazard due to high pressure/temperature steam.

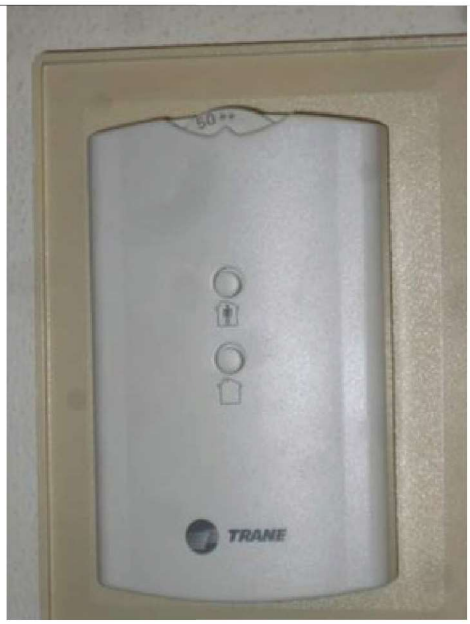
Exposed IT equipment near tunnel.

Steam PRV station near tunnel entrance.

Asbestos indicated at tunnel systems. Appears most building piping systems have been abated.

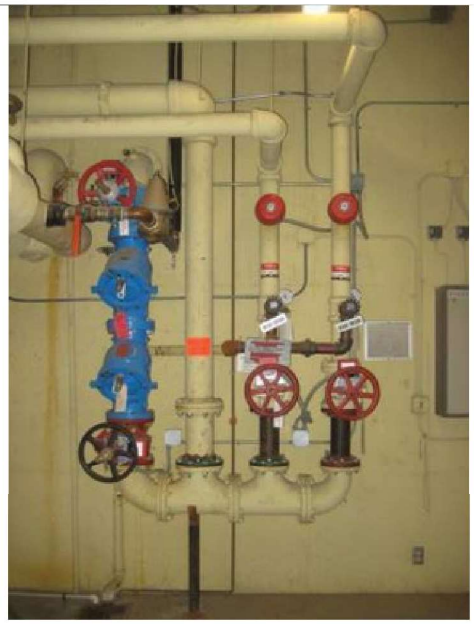
Typical original branch panelboard. Parts no longer made. Panels full. Replacement recommended.

Many original receptacles are cracked and worn, are no longer code compliant.



Typical Trane zone thermostat (2013) with OCC/UNOCC push button. Notice setpoint, set at max cooling which may indicate capacity or other system deficiencies or setpoint issues.

AHU-4 fan and mixing box need replacement.



Wet sprinkler service entrance at west basement mechanical room. Two zones serve basement only. 6" fire service should be capable of serving balance of building. DCV is new.

Fire department connections at loading dock for wet system (left) and standpipe system (right).

Typical “newer” basement sprinkler head located in past basement renovation areas. Only basement is sprinkled.

At basement, all original fused link type sprinkler heads need replacement with modern quick-response heads.

Original dual-duct AHU-1. Drain pan is leaking and casing is rusting.

AHU-1 fan has been replaced and VFD provided.

Lead-acid battery system with emergency lighting inverter on wall at right serves all egress lighting in building.

Typical OS&Y gate isolation valves at AHUs are rusted and need replacement with ball valves or butterfly valves.

Drain pan at AHU-6 is rusted and leaking at penthouse.

Original AHU-6 supply fan needs replacement. Inlet vanes have been disconnected and new VFD provides air modulation.

South AHU-6 return air shaft is open to all floor return air plenums. Also shares chilled and condenser water piping. No longer meets codes for fire and smoke containment.

North return air shaft is also open to all floors.

Cooling tower fan has gear box vibration. Needs investigation.

Rooftop intake and relief penthouses are dented and rusted, need replacement.

KTWU transmitter rack is located exposed in penthouse mechanical room. Additional protection is recommended.

Original dual-duct AHU-6 in penthouse mechanical room. Note history of condensation at casing. Needs replacement.

Typical classroom fluorescent troffers are original and have been retrofitted with electronic ballasts and T8 lamps. Similar for all fluorescent lighting throughout building.

Typical large classroom lighting controls are mostly original. Dimmers are not suitable for fluorescent lamp dimming.

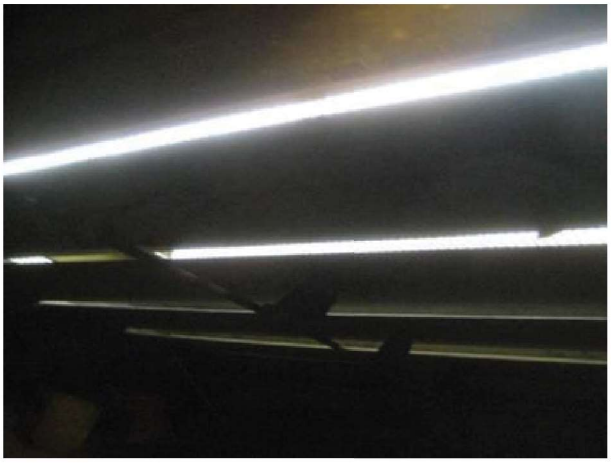
Typical small classroom thermostat and lighting controls with motion sensor retrofit.

Typical surface emergency lighting screw-in lamp holder/fixture. Overall emergency lighting coverage is fair. A mock power outage is recommended to determine actual performance and identify areas needing improvement.

Typical small exhaust grille at restrooms. Restroom exhaust in general is inadequate.

Auditorium Classroom 100 fluorescent fixtures.

AHU-6 outside air dampers with replacement actuators.



AHU-6 outside air dampers lack edge seals, don't provide full closure and waste energy.

Cooling tower CPVC return piping is in good condition.

Cooling tower fill needs replacement. Chemical treatment needs adjustment to lessen scale.

Various window assemblies leak at perimeter and sill.

Many floor boxes are no longer used and have been deactivated.

Some window sections have failed with past condensation evident between panes.

Typical classroom smoke detector and lighting control motion sensor.

Chiller shut down during occupied time 11:40am (Tuesday 8/22) during significant load conditions. Reason unknown. History should be reviewed.

Chiller came back on line at 1:50pm, OFF for over 2 hours, and required nearly full capacity to recover while increasing building electrical peak demand.

Chiller capacity limit is set at 100%. A lower setpoint should be received/considered for electrical demand savings. Typical capacity during significant load conditions is less than 60% as indicated above (57.5%)

	
Chiller is cycling, shutting down 6 times over 1 hour period during August evening. Programming should be reviewed.	Chiller has 8664 hours of operation and 4624 starts/stops since start-up in 2014, 1.9 hours average per start.

SCHWERDT

DESIGN

GROUP,

INC.

July 7, 2023
Leigha Boling
Director of Contracts and Procurement
City of Topeka
215 SE 7th St., Room 60
Topeka, Ks. 66603

RE: HOTEL FACILITIES SYSTEM ASSESSMENT - CITY OF TOPEKA RFP NO. 2826

Dear Ms. Boling

Schwerdt Design Group is pleased to submit this fee proposal to provide professional services in response to the City of Topeka Department of Administration and Financial Services, Contracts & Procurement Division Request for Proposal dated June 6, 2023.

Architecture

Interiors

Planning

III.D. Timetable for submittal of draft report from date access to building is allowed:

Approximately 60 days.

III.E. Fee Proposal (Submitted separately):

PROJECT UNDERSTANDING and SCOPE

SDG proposes to provide a visual Property Condition Assessment (PCA) in accordance with ASTM 2018-15 standards**, providing estimates of each systems remaining useful life, make narrative recommendations on repairs or replacements of each system along with estimated costs as described in "Hotel Facilities System Assessment", Event #2826.

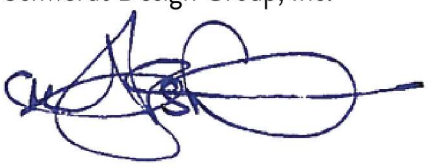
This proposal does not include any deconstructive demolition or special testing to determine status of structural, environmental or other hidden conditions.

**A Facilities Condition Assessment (FCA) with more systems detailed quantification and itemization, condition indexing, and provision of an interactive database to enable repair or replacement scenarios is available at an additional cost.

FEE PROPOSAL

Lump Sum Fee Range: One Hundred Twenty-Five Thousand Nine Hundred Dollars ($125,900.00) to One Hundred Forty-Five Thousand Eight Hundred Dollars ($145,800.00)

Sincerelyy,
Schwerdt Design Group, Inc.



Greg Schwerdt, AIA, LEED AP, NCARB
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