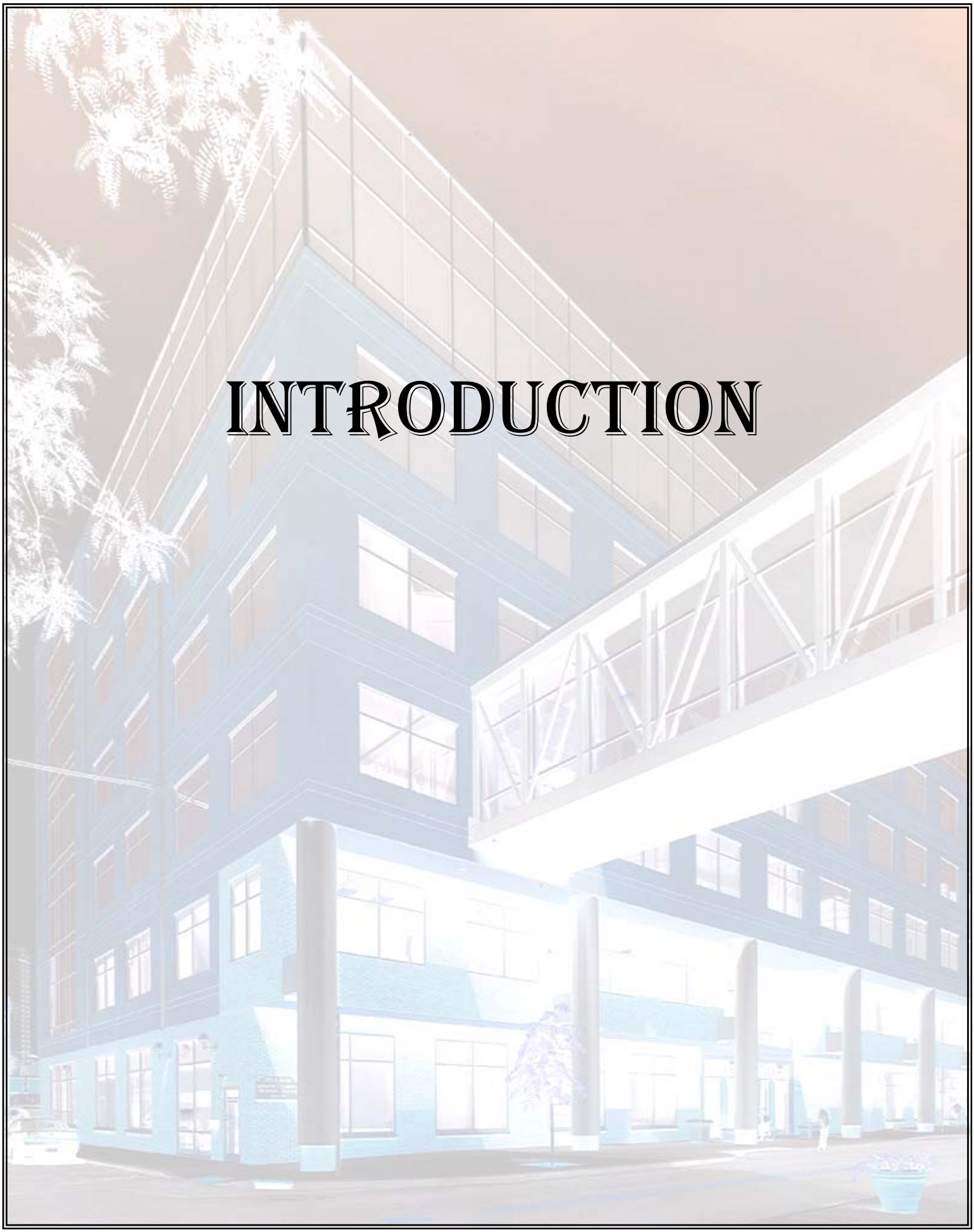

INTRODUCTION

Building Information:
The William W. Wilkins Professional Building is a six-story, 112,000 sq. ft. medical office building located on Sixth Street in downtown Columbus, Ohio. Rising 84'-8" in the air the Wilkins building is bordered by main roads on three sides. Costing approximately $7.4 million, it is an addition to the Grant Riverside hospital across Sixth street. The two buildings are connected by a pedestrian bridge from the third floor.

Project Team:
Owner: State Sixth LLC
Occupant: Grant/Riverside Methodist Hospitals
Architect/Chief Engineers: URS Corp
Geotechnical Engineer: CTL Engineering
Site Engineer: Bird & Bull
CM/GC/Developer: The Daimler Group
Demolition: Darby Creek Excavating
Steel Supplier: Ferguson Steel Co.
Concrete Supplier: Scioto Darby Concrete, Inc.

Architecture:

This six-story building is designed around a central lobby area. The main entrance off Sixth Street opens into a vestibule on the East side of the building that proceeds into the main lobby area. The lobby is furnished with subtle carpeting and ceramic tiles. The lighting scheme, recessed can lights accented with suspended chandeliers, creates a warm feeling. This contrasts the stark silver elevators located in the lobby. The floors are broken down into various medical offices with treatment areas, reception/waiting areas, exam rooms, and doctors' offices.

Building Envelope:
The main entrance into the building is located on the East face of the Wilkins building. Slightly off center, the entrance consists of clear tempered glass double doors with tinted insulated glass on either side. There is a large arch framed in stone above the doors and windows with a bottom row of spandrel glass and more tinted insulated glass above shaped to match the stone arch. There are seven columns approximately 26'-8" tall encased in metal siding supporting the upper levels. The upper levels overhang creating a covered walkway in front of the building. The underside of this overhang is encased with EIFS. The balance of the façade is a combination of precast concrete panels, brick veneer, and spandrel glass. In general, the lower portion of the façade is brick veneer, progressing into precast concrete followed by spandrel glass in the upper levels. Windows are symmetrically placed to create a horizontal delineation at each floor level.

The roof is a basic ballasted system. It is comprised of 3" steel decking and rigid insulation covered with a Carlisle rubber EPDM membrane held down with gravel ballast.

Electrical:
The electric power for the Wilkins building enters through (12) 4" conduits from the Division of Electricity transformer vault. Four of these conduits enter the data room for Time Warner and Ameritech service. The remaining (8) proceed to the electrical room. Located in the electrical room on each floor are six panel boards utilizing 480/277V or 208/120V. The first floor also contains (2) 208/120V emergency power panel boards located in the generator room. The generator room houses a standby natural gas generator, a main circuit breaker and an automatic transfer switch that feeds the emergency panel boards.

The main switchboard feeds the (2) 480/277V panel boards at each floor that service lighting and variable air volume boxes. From there the power is sent to a 480V delta transformer with an output of 208/120V to the remaining (4) panel boards which service the receptacles. The elevators, circulating pump and roof top units are fed directly from the main switchboard. The 20A receptacles are located along the walls with a minimum of one per wall.

Lighting:
The lighting in the Wilkins building is relatively straightforward. The ground lobby/elevator area is illuminated with 6" recessed fluorescent down lights to give a warm inviting atmosphere. The lobby/elevator area at each successive floor retains some of this feeling with a few down lights with the majority of the light coming from 4'-0" standard fluorescent strip lighting. The 4'-0" strip lighting is also utilized in the data and electrical rooms on each floor.

Lighting in tenant spaces is simple consisting mainly of 2'x4' recessed fluorescent grid troffer lighting. The ground floor treatment rooms use 2'x2' recessed fluorescent grid troffer lighting and surface mounted incandescent light fixtures. Exam rooms on the third floor also use surface mounted incandescent lights. Emergency lighting capable of operating for 90 minutes is provided in all corridors, the library, classrooms and large meeting and office areas.

Mechanical:
The primary heating, ventilating and air conditioning (HVAC) system consists of four electric nominal 105-ton variable air volume (VAV) rooftop units. Units one and four supply the fourth through sixth floors while units two and three supply the remainder of the building. Units one and two supply the South portion of the building; units three and four supply the North portion of the building. Each of the units can supply 28,000cfm with a minimum outdoor air intake of 6,000cfm. The

rooftop units are the cooling-only type and have variable frequency drives for volume control. Each unit has smoke detectors wired to shut down the units upon smoke detection as well as power exhaust and integral pressure control to maintain proper building pressurization. A small, nominal 5-ton heat pump, also located on the roof, serves the elevator machine room. This smaller unit can supply 2,000cfm with a minimum outdoor air intake of 200cfm.

Air is distributed down vertical shafts in high-pressure rectangular ductwork. The ductwork transitions to round and flat oval exiting the shafts in a manner to minimize noise. Parallel fan assisted VAV boxes and straight through VAV boxes at each floor provide individual zone control for the majority of the spaces. Boxes at the perimeter and in some interior spaces have electric heating coils to provide the source of heat for the facility. Series fan assisted boxes are employed in the lobby and entryways. Single duct boxes are used for electrical and communication closets. 2'x2' architectural ceiling diffusers are used in the majority of spaces. The fan assisted boxes with heating coils are capable of providing after hours heating without starting the rooftop air handling units. A plenum return system is used to minimize the amount of return air ductwork. All fan assisted VAV boxes have smoke detectors to comply with the latest code specifications.

The majority of the HVAC functions are controlled through a standard direct digital control (DDC) system, which has minimal energy management functions. A portable operator's terminal (POT) enables programming changes to be made at DDC control panels.