

THE UNIVERSITY OF MICHIGAN  
REGENTS COMMUNICATION

ACTION REQUEST

Subject: University of Michigan Hospitals (UMH)  
Helipad Relocation Project

Action

Requested: Approval of Site and to Proceed with Project, and Authorization to Appoint an Architect and Submit a Certificate of Need Application

Background:

The UMHS Survival Flight air ambulance program bases the operation of two helicopters on a helipad located on the roof of the Taubman Health Center. This patient care program currently averages 1,400 transports per year and is an integral part of the Health System's commitment to emergency service to the surrounding communities. The Taubman rooftop helipad was constructed in 1986. With the introduction of larger helicopters in 1994, the takeoff and landing of the aircraft produces exhaust odors. These odors are drawn into adjacent buildings through fresh air intake vents and have generated numerous complaints causing internal and external reviews of the environment for patients and staff. The problem persists despite the following remedial actions taken to date:

- Adjusted helicopter landing procedures;
- Reduced helicopter idling time on the roof;
- Reduced routine helicopter flights from the airport;
- Implemented temporary operation of the backup helipad across East Medical Center Drive during "peak odor seasons" in the spring and fall;
- Placed air handling units into "recirculation mode" while helicopters are landing or taking off;
- Increased minimum ventilation rates in Taubman to help "flush out" odors once they have entered the building;
- Installed charcoal filters in selected air handling units throughout the complex; and
- Sealed filter edges in air handlers to eliminate odor bypass.

Over the past four years, the remedial actions taken have led to approximately \$3 million in capital expenditures; \$267,000 annual operational expenditures for charcoal filters; and \$1,000/week for ground based transport when the back-up pad across East Medical Center Drive is in use. Over the years, leaks have developed in the existing pad and rooftop. The entire pad needs to be removed to implement long term repairs of the roof.

Several additional technical operational options were explored as potential solutions to the exhaust issues:

- Install an "exhaust scavenging" system on the Taubman roof;
- Relocate the helipad;

APPROVED BY THE REGENTS ON

- Maintain seasonal rooftop helipad operation;
- Install filter technology advancements;
- Retrofit the air intakes with "zero leakage" dampers to improve "recirculation mode;"
- Relocate the existing air intakes to separate them further from the helipad; and
- Maintain status quo.

In August 1996, the Michigan Aeronautics Board issued new rules regulating hospital-based helipads. The existing rooftop helipad is insufficient with respect to size and requires enlargement.

In order to improve the indoor air quality and address the size and leakage issues of the existing pad, relocation of the helipad is the preferred option. We propose to relocate the helipad to the hillside northeast of the Emergency Department across East Medical Center Drive. The project consists of constructing a landing deck, a staff ready room, a refueling station, a tunnel and an elevator connecting directly to the Emergency Department. The Taubman rooftop helipad will be removed in order to repair the roof. The project was reviewed in detail with Venturi, Scott Brown and Associates (VSBA), leading to additional efforts to protect the aesthetics. The total cost to implement the helipad relocation project is estimated at \$7,027,000. Funding is available from Hospitals' reserves. A Certificate of Need (CoN) approval will be required and is expected to be obtained within two months of Regental approval. The project will be completed by Winter 2000.

Since the relocated helipad, tunnel, and elevator will connect directly into the Emergency Department of University Hospital, we recommend the firm of Albert Kahn Associates as architects for design of this project. The firm is currently designing the expansion and renovation to the Emergency Department. We will continue working with VSBA as this project progresses.

We recommend the Regents approve the project and site as described (see attached map), and authorize the appointment of an architect and the submission of a Certificate of Need application. The Hospital Executive Board voted unanimously to recommend this project to the Regents for approval.

Respectfully submitted,



---

Robert Kasdin  
Executive Vice President  
and Chief Financial Officer



---

Gilbert S. Omenn  
Executive Vice President for Medical Affairs  
and Chief Executive Officer,  
University of Michigan Health System

July 1998  
attachment

