



## **Minitab Headquarters**

State College, PA

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September 12, 2002  
*Updated:* January 28, 2003  
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### **Overall Existing Conditions Summary**

Minitab Headquarters is an 88,000 SF, four-story office building. The building will house Minitab, Inc. general offices and executive offices. The total project duration is to be twenty-two months with a construction period of sixteen months. Along some lines, the building could be described as a typical office building; there are several unique aspects of the building to set it apart. In an architectural sense, this includes the open four-story atrium with a pond and from a mechanical perspective, a geothermal heat pump system. Following is a summary of the Minitab Headquarters project.

### **PROJECT TEAM**

OWNER:	Minitab, Inc. <i>State College, PA</i>
ARCHITECT:	Michael C. Haluga <i>State College, PA</i>
CONSTRUCTION MANAGER:	Alexander Constructors, Inc. <i>State College, PA</i>
CIVIL ENGINEER	Keller Engineering, Inc. <i>Hollidaysburg, PA</i>
STRUCTURAL ENGINEER:	Comprehensive Design A/E <i>State College, PA</i>
HVAC DESIGN:	McClure Company <i>State College, PA</i>
ELECTRICAL, PLUMBING & FIRE PROTECTION:	The Boyer Partnership, Inc. <i>Altoona, PA</i>

## **DATES OF CONSTRUCTION**

Preconstruction: January 02, 2001 – December 05, 2001  
Construction: June 29, 2001 – October 17, 2002  
Postconstruction: October 18, 2002 – October 30, 2002

## **COST INFORMATION** *(based on Design Development Cost Estimate)*

Project Total: \$11,972,000

Site Development	\$1,082,390
Building Shell	\$2,924,846
Interior Buildout	\$2,297,258
Mechanical	\$2,025,600
Electrical	\$1,253,400
General Conditions	\$1,086,000

## **BUILDING FUNCTION & PRIMARY USES**

- ♦ Office Building

## **LOCATION & SITE**

- ♦ 1829 Pine Hall Road  
Ferguson Township, Centre County  
State College, Pennsylvania
- ♦ 16.8 acre site

## **ARCHITECTURE**

- ♦ 88,000 GSF
- ♦ Four-Story
- ♦ Exposed Basement
- ♦ Full four-story atrium with glass elevators and waterfall
- ♦ Approx. 430 offices, 12 conferences, theater, exercise area, game room
- ♦ Landscaped walking labyrinth
- ♦ Exterior – EIFS panels and 4 ft. seamless mullion, ribbon windows

## **MAJOR CODES**

- ♦ Commonwealth of Pennsylvania Department of Labor & Industry  
Occupancy: D-0  
Type of Construction: Ordinary  
Building Classification: Class 1, Office Building
- ♦ 1996 BOCA National Building Code  
Use Group Classification: B (Business)  
Type of Construction: 2C (Unprotected)  
3.3 Conversion Factor; 22,000 GSF (footprint)

## **PROJECT DELIVERY SYSTEM**

- ♦ At-Risk Construction Management contract chosen by CM proposal and issued with negotiated GMP.
- ♦ Subcontracts issued as Lump Sum.

## **BUILDING ENVELOPE**

- ♦ Façade: GFRC Panels on exposed basement level
- ♦ Façade: EIFS Panelized unit:
  - ◊ 4" Exterior Insulation Finish System
  - ◊ 5/8" Exterior gypsum sheathing
  - ◊ 6" Metal stud exterior framing with batt cavity insulation
- ♦ Windows: 4-foot seamless mullion, continuous glazing
- ♦ Roofing system: metal deck with 4" EPS insulation and adhered EPDM roofing

## **ELECTRICAL**

- ♦ MDP: 4000A, 480/277V, MLO
- ♦ Generator: 350 kW, 480/277V, 3 $\phi$ , 4W Diesel powered emergency generator
- ♦ 35 Panelboards
  - ◊ Main Distribution Panel
  - ◊ 15 – 480/277V panels
  - ◊ 19 – 120/208V panels
- ♦ 120/208V receptacles throughout
- ♦ Heat pumps for large rooms powered by 480V, 3 $\phi$  service
- ♦ Individual office heat pumps powered by 277V, single phase; max. 3 per circuit (typ)
- ♦ Majority of interior and building lighting – 277V

## **LIGHTING**

- ♦ Primarily direct/indirect pendent hung fixtures with downlight accent lights
- ♦ Additional natural light provided by open atrium and ribbon windows
- ♦ Emergency lighting and exit signage to accommodate all applicable codes

## **MECHANICAL**

- ♦ Geothermal heat pump system: 100 wells, each at 400 ft.
- ♦ 100% Outdoor air system
- ♦ Individual heat pumps for each office, personalized temperature control

## **STRUCTURAL**

- ♦ Strip footings & spread footings, 3000 psi reinforced concrete
- ♦ 4000 psi reinforced concrete piers
- ♦ 4" 3000 psi slab on grade
- ♦ Steel frame – ASTM A572 Grade 50
- ♦ Bays 24'-4" x 19'-9"/19'-5" typ.
- ♦ Additional bracing around open four-story atrium

## **FIRE PROTECTION**

- ♦ Advanced fire protection system
- ♦ Ionization/photoelectric detectors in telecommunication distribution rooms
- ♦ Manual fire alarms & emergency lighting
- ♦ Sprinklered in accordance with NFPA light hazard classification
- ♦ Storage areas, service rooms, and elevator rooms sprinklered according to NFPA ordinary hazard classification
- ♦ Spray-applied fireproofing of structural steel and metal deck for 2-hr rated rooms

## **TRANSPORTATION**

- ♦ Glass elevator in Garden Area/Lobby
- ♦ Freight elevator at Storage/Receiving Room
- ♦ 3 stairwells – 2 serve as means of egress

## **TELECOMMUNICATIONS**

- ♦ Standard telephone service system
- ♦ Main Data Service: 48-port fiber optic patch panel
- ♦ Each office has minimum of one telephone and one data outlet
- ♦ Cable television service to conference rooms, multipurpose room, and employee areas

## **SPECIAL SYSTEMS**

- ♦ Security system designed by Vigilant Security, Inc.
- ♦ Key card access
- ♦ Infrared sensors throughout building