GRUNAU GRAM

EXCELLENCE SINCE 1920

Mechanical and Fire Protection Contractors and Engineers

Winter/Spring 1999

## *The Grunau Mission*

**by Paul Grunau**
**President**

As we ring in the New Year we have an opportunity to give thanks for the blessings, challenges, and opportunities of 1998, and the chance to set new goals for 1999. For our TEAM our goals include an unwavering commitment to excellence in all that we do.

In this column I'd like to continue taking you through our Mission Statement, in order for you to fully understand the depth of our commitment to excellence.

- *Maintain an organizational structure that empowers our TEAM and allows them to see how they fit and add value.*

  As I mentioned in the last issue of the GrunauGram, each member of our TEAM is a key contributor to our ability to be successful. They all possess unique skills and capabilities, which, collectively, create the fabric of our business. One of the key tenets of our Mission Statement is to create an environment and structure where all our TEAM members are encouraged, challenged, and empowered to use their skills and capabilities to positively impact our organization. We can accomplish this by creating a comfortable, high-trust environment, with limited distractions, so that each of us can focus on excellence, and use our skills to make a positive contribution. When we can accomplish the objective, we can focus all of our energy on our customers. Whether it be how we work with you to identify construction solutions, or how we format and send you an invoice, our ability to utilize our skills and expertise in all areas will dramatically impact the quality of service we provide. Ultimately it will be our ability to empower our TEAM to focus on our customers that will set us apart.

- *Allocate resources to their highest and best use.*

  This is a strategic tenet that appears in the mission statements of many companies. While it may be popular, our TEAM believes very strongly in the importance of resource allocation.

  In the last five years we have made some difficult resource allocation decisions. We have exited certain markets, and outsourced certain activities, while at the same time making extensive investments in new markets and services. We use one principal method of evaluation in resource allocation decisions; will this decision improve our ability to serve our customers? Will we be more competitive? Can we help our customers accomplish their objectives? If the answer to these questions is yes, then the decision is consistent with our Mission Statement.

  In resource allocation decisions our goal is to improve our TEAM's ability to serve our customers. I'm explaining this to you so that you feel very secure that as your advocate, we will always look for new and more efficient ways to serve you. When you place your trust in us, that is our obligation and responsibility.

Best wishes to you and your family for a prosperous 1999!

# Grunau Completes Phase One Mechanical Work On Woodland Primes

Gilbane Development/Strong Capital Management, Inc., a Joint Venture, have recently completed phase one of Woodland Primes, an office park development nestled on a countryside setting in Menomonee Falls. This new three-story, 100,000 sq. ft. office building is the first in a series of buildings which will be developed on this site. Strong Funds Information Systems Department currently occupies the first floor. The second and third floors are available for lease.

As subcontractor to J.P. Jansen, Grunau Company performed, on a design/build basis, the plumbing, HVAC, and site work. As soon as the initial engineering phase was completed, Grunau Company began work on the site utilities to the building and drainage for the parking lot. These services were provided prior to the start of the building construction so the site drainage could be maintained during construction and the parking lot paved to provide a staging area.

The development called for the creation of five ponds within the beautifully landscaped corporate park. Grunau Company was contracted to install a pond recirculation system, which pumps pond water from the lowest pond through 1100' of 6" water main to the pond at the highest elevation. Gravity then allows the water to flow back through the five ponds. Grunau also provided the pumping equipment and electrical controls required in the pump house.

The interior plumbing work consisted of roof drainage, building water service and softener, water for outside irrigation system, wet columns for future tenant development, and development of core toilet rooms, consisting of fifteen fixtures per floor.

The base HVAC installation started with vertical duct risers and duct loops on each floor, fan-powered variable air volume boxes to provide temporary heat, core toilet exhaust risers and grilles, and two 130-ton VAV rooftop units.

During construction of the building, the development of the first floor for Strong Information Systems became part of the project. Upon completion of the design by Grunau's Engineering Team, installation began for plumbing and HVAC services for the kitchen area, offices, UPS room, and other support areas for this tenant space.

This is not the first time Grunau Company has teamed with the following individuals and we look forward to working together again in the future:

**Gilbane Properties, Inc., Developer**
Edward T. Broderick, Vice President

**J.P. Jansen Company, Inc., General Contractor**
John Mann, Chief Operating Officer/Project Manager
Mike Riesner, Superintendent

**Strong Capital Management, Inc.**
Bruce Behling, Senior Vice President

**Eppstein Uhen Architects, Architect**
Greg Uhen, President
Jerry Bruscato, Project Manager

**Grunau Company**
Ron Kwiatkowski, Vice President/Project Manager
Ken Dottai, HVAC Engineer
Jeff Kuhnke, HVAC Engineer
Aaron Block, Plumbing Engineer
Mike Rossa, Foreman
Bob Stich, HVAC Foreman
Dennis Laney, Site Utilities Superintendent
Tim Sadowske, Site Utilities Foreman
Tom Owen, Electrical Manager
Ingo Luther, Electrical Foreman

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# SSMC CAMPUS CONSOLIDATION

Founded in 1903 as Mount Sinai Hospital, Good Samaritan Medical Center merged in 1984 with an Aurora affiliate, to form Sinai Samaritan Medical Center (SSMC). This 296 bed facility is located in the center of downtown Milwaukee. The hospital offers cardiology, obstetrics, neonatal services, surgical oncology, and general surgery services, as well as being home to the Sexual Assault Treatment Center. SSMC was named one of "America's Best Hospitals" in 1998 by U.S. News and World Report.

For many years SSMC consisted of two campuses; the East Campus (Sinai), and the West Campus (Samaritan). To better serve the downtown community and hospital personnel, a decision was made to undergo a major consolidation of these hospital campuses, with the result being one full-service hospital at the Sinai Campus.

In February, 1996, Grunau Company submitted their "Request for Proposal," which was followed by a series of interviews with Grunau/Gilbane, Construction Manager; Sinai Samaritan Medical Center, Owner; and Hammel, Green, Abrahamson, Inc. (HGA), Architects & Engineers. The mechanical contractor selection was based on project knowledge, field/office management team, system cost evaluation, and project fee. In March, 1996, Grunau Company was welcomed into the "Partnering" relationship to perform the HVAC, Plumbing, Site Work, and installation of Automatic Temperature Controls. The total value of our work was $13,000,000.00

Grunau Company initiated a program with owner/construction manager to select the seven major air handling units for the project based on cost, performance, serviceability, construction and warranty. Grunau also participated in an owner tax savings program on approximately $3 million of construction material and equipment.

This project consisted of a 275,000 sq. ft. addition to the existing hospital to provide new emergency area, cafeteria, surgery recovery expansion, labor, delivery, sterilization, inpatient rehab utilizing "Easy Street Therapy," and 117,000 sq. ft. of hospital renovation which allowed the consolidation and relocation of services from the West Campus.

The existing central heating/cooling plant was demolished and replaced by a central chilled water plant in a new penthouse, and connection to a central steam service provided by WEPCO in the lower level of the addition. The reconnection of all plumbing, medical gas, steam and chilled water service to the new central systems required great coordination and timing.

The plumbing for the new addition consisted of complete domestic hot and cold water systems that originated from a new water service and two domestic water heaters. Medical gas piping was provided throughout the building from either new air, vacuum and oxygen systems or where connected to existing services. All medical gas alarm systems were installed by Grunau plumbers and wired by Grunau electricians. The original plumbing project started with over 900 plumbing fixtures, 200 hospital and kitchen equipment connections, and 80 backflow preventers, with quantities constantly increasing as the scope of the project moved to the remodeling segment of the existing building.

A new parking lot was added on the west side of the addition which required new sewers and drainage. Two new 12" storm laterals were installed to serve the main parking lot. A new 6" lateral was installed to serve the west entrance, which had to be engineered through an existing steam tunnel. Grunau Company also installed new drains and piping on the remodel of the existing parking structure to the south of the hospital.

The sheet metal portion of this job required installation of over 650,000 pounds of ductwork which had to be closely coordinated with not only the Grunau tradesmen but also the electrical, fire protection and other contractors. Along with the sheet metal, Grunau pipefitters installed close to 12,000 sq. ft. of pipe for steam, hot water and chilled water systems.

Grunau's Miscellaneous Metals Division was brought into the project to provide structural support for duct/pipe risers within the large mechanical shafts.

As the original building project neared completion, additional projects were added to the scope but needed completion by the original job schedule. These areas included a Sub Acute Care, Psychology area, Pharmacy, GI Lab, remodeling in existing "A" Building, and difficult work to provide VAV boxes at each Surgery Room with new humidifiers. All building air and water balancing was self-performed by Grunau technicians.

Due to phasing and escalation of the project, the Grunau team set up field coordination centers to work closely with all trade foremen so problem-solving could occur quickly at the site. Many plumbing conflicts and problems were solved by the teamwork of Howie Laumer in the office, and Don Czajka, the site foreman, through review of fixture locations and piping that were conflicting with structural beams before rooms were built at the site.

The project which began in October, 1996, was successfully completed in November 1998. Grunau Company was proud to have been involved in this partnering relationship with:

**Sinai Samaritan Medical Center, Owner**
- Len Wilks, President
- Bill Romo, Director, Program & Facility Programming
- Jeff Kurtzweil, Plant Operations Manager

**Grunau/Gilbane, Construction Manager**
- Mike McNamee, Project Manager
- Gene Hult, General Superintendent
- Jim Strand, Project Engineer

**Hammel, Green, Abrahamson, Inc., Architects & Engineers**
- d'Andre Willis, Project Manager
- Dave Janous, Project Architect

**Grunau Company**
- Ron Kwiatkowski, Vice President/Project Manager
- Jeff Kuhnke, Assistant HVAC Project Manager
- Howie Laumer, Assistant Plumbing Project Manager
- Rod Patzner, MEP Coordination
- David Bartoshevich, MEP Coordination
- Don Czajka, Plumbing Foreman
- Doug Ehler, Plumbing Foreman
- Tom Stoiber, Sheet Metal Foreman
- Jerry Beiter, Piping Foreman
- Bob Koepnick, Piping Foreman
- Bob Niedzwiecki, Air Balancer Foreman
- Tom Owen, ATC Project Manager
- Dennis Laney, Laborer Superintendent
- Tim Sadowske, Laborer Foreman

# SSMC CAMPUS CONSOLIDATION (Cont'd)

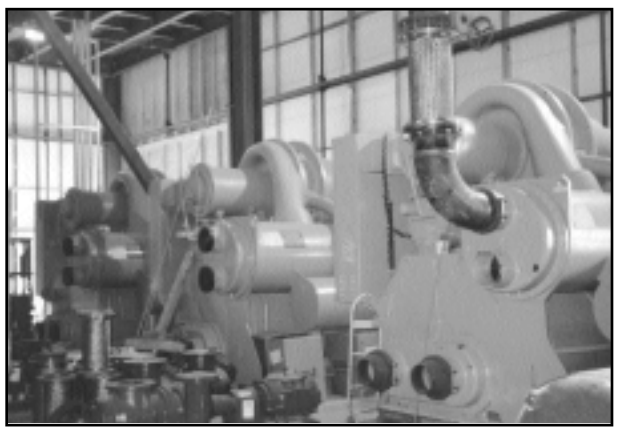
At project completion, Gene Hult, General Superintendent for Grunau/Gilbane wrote:

*"Ron Kwiatkowski, Jeff Kuhnke, and Howie Laumer went way beyond the normal effort required to make a complex mechanical project successful. It was also a plus that they were always professional and consistently correct in their approach to the project.*

*Your field force were also some of the most competent individuals I've ever seen. I worked closely with Don Czajka, Tom Stoiber, Jerry Beiter, and Tom Nutting, and others who really ran the project. On numerous occasions, I saw your field people solve very difficult problems and often under hardship conditions.*

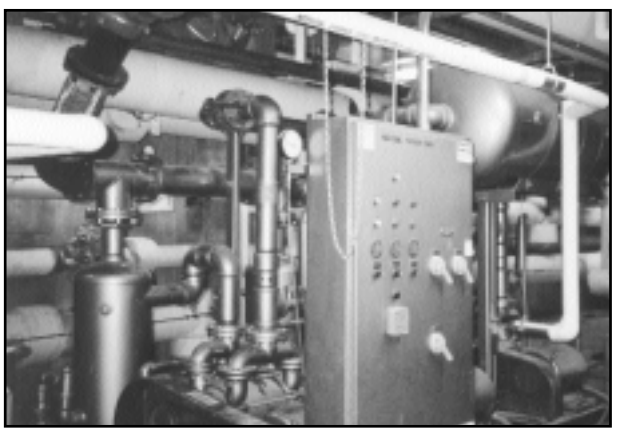
*It was a pleasure being associated with your firm."*

Ultimately we are in business to help our customers accomplish their objectives. It is always nice to receive positive feedback.



*Chillers*

*Cooling Towers*



*Vacuum Pump System*

# ORLANDO FIRE PROTECTION PROJECTS AT UNIVERSAL STUDIOS – ORLANDO

## UNIVERSAL ISLANDS OF ADVENTURE #2

Grunau's contract consisted of eight fully sprinklered buildings; four restaurant facilities, and four amusement rides. This island is based on the Dr. Seuss series of books and movies. The structures include: *"Green Eggs and Ham,"* a restaurant shaped like a large green ham; *"Hop-on-Pop Ice Cream Shop;" "Mulberry Street Emporium;"* and the *"Big Top Buffeteria,"* a single story building. The dining room ceiling is a fabric tent with 128 pendant heads, which had to hit an exact 3-D location due to the fabric being fabricated in California and the penetrations were being pre-cut. Grunau accomplished this with a 95% accuracy rate.

To picture this, refer to any Dr. Seuss book and note that none of the structures have any straight lines. This held true in the most challenging structure, a ride called *"Sylvester McMonkey,"* which consisted of three 8" dry pipe systems and one 8" wet system. The roof structure consisted of bent 8" double XX steel pipe. We bent the branch piping to match this structure.

This project required total team commitment. Because of the unique architecture we constantly changed our methods to accommodate Universal's objectives.

**GENERAL CONTRACTOR:**

**Whiting Turner Construction Company**
Lou Rossi, Sr. Project Manager

## UNIVERSAL ISLANDS OF ADVENTURE #3

Total Heads: Approximately 2000

| | |
|---|---|
| Fifteen Wet Systems | Five Dry Systems |
| Four Preaction Systems | One 6" Deluge System |

This project theme was based on the Lost Continent of Atlantis. There are a total of fifteen fully sprinklered buildings on this project; two full service restaurants, three walk-up food stands, two retail stores, six game rooms, two shows, and one roller coaster.

The most challenging building is the show *"Poseidon's Fury."* This is a 74' - 0" tall two-story building which is a working part of the most intricate building ever encountered by Grunau's Orlando office. The main show scene has some fantastic flame effects which required the use of a perimeter preaction system and an 82 nozzle deluge system. The 90° spray nozzle had to be located in an exact 3-D location in order to prevent spray pattern due to an unusual ceiling configuration.

Other intricate buildings on the project were *"Merlin's Restaurant"* which contained one dry pipe system and one wet pipe system. The difficulty came in at the main dining hall due to the ceiling being carved plaster that was shaped like the inside of a hollow tree stump. The main dining hall at *"Mythos Restaurant"* was designed to replicate the inside of a cave, so finish coordination was very difficult.

Other buildings on the project include *"Sinbad Arena,"* a show based on the voyages of Sinbad, and *"Dueling Dragons Coaster,"* a twin racing inverted roller coaster which has a themed queue line fashioned after the inside of a mountain castle.

**GENERAL CONTRACTOR:**

**Whiting Turner Construction Company**
Dave Meyer, Sr. Project Manager

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# MEDICAL COLLEGE OF WISCONSIN

The Medical College of Wisconsin Health Research Center is located in the 248 acre Milwaukee Regional Medical Center, a major medical campus that includes the College, its teaching hospitals, and other health care institutions serving the communities of Southeastern Wisconsin. The Medical College of Wisconsin is a private, academic institution dedicated to leadership and excellence in: education, research, patient care, and community services.

*Medical College of Wisconsin*

In the fall of 1998, the state-of-the-art Health Research Center opened its doors. As subcontractor to M.A. Mortenson, Grunau Company was responsible for the HVAC system serving the new five-story, 169,000 sq. ft. addition and for updating existing HVAC systems. The remodel portion of this project is scheduled to be completed in May, 1999.

Floors 1 through 3 of the addition contain conference and office areas, a new bookstore, library and auditorium. The auditorium is served with a dedicated constant volume air handling unit which supplies 8,000 cfm of air. The remainder of the areas on floors 1 - 3 are served by three variable air volume systems. A central plant supplies the chilled water and steam. The air handlers and steam heat exchanger are located in the basement. Variable frequency drives control a total of 78,000 cfm of air, which is distributed to 112 VAV boxes with reheat coils before reaching the spaces. The perimeter heat loss is offset with finned pipe radiation.

Floors 4 and 5 are laboratory areas. Two 55,000 cfm built-up air handling units supply air to the floors. The units operate on 100 percent outside air. The help conserve energy, two heat recovery systems are utilized. Six powerful up blast fans pull laboratory exhaust air through heat recovery coils located in units on the roof. A glycol system transfers the heat from the reclaim coils to preheat coils located in the air handlers serving the labs.

Johnson Controls installed a Facility Management System integrated with sophisticated Phoenix Laboratory Controls to precisely monitor and regulate all supply and exhaust air to the laboratories and fume hoods. The fume hood control system measures hood sash position and maintains required face velocities into the hoods. A total of 34 laboratory control panels modulate 90 exhaust boxes and 105 make-up air boxes, with reheat coils, to supply and make-up air into rooms and exhaust air out of rooms while maintaining both temperature control and air flow balance.

Teamwork and cooperation are what make a successful project. We wish to extend our thanks and appreciation to the following team:

**Medical College of Wisconsin, Owner**
Jim Hopp, Director of Facilities
Mike Frye, Maintenance Supervisor for Facilities

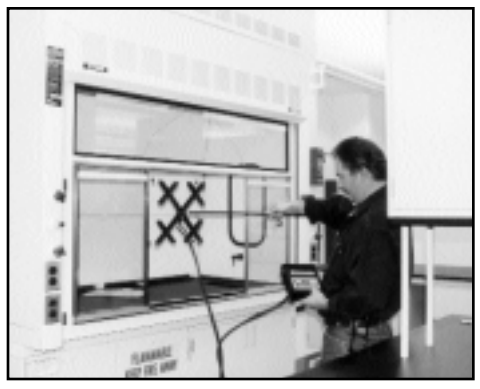
**M.A. Mortenson, Construction Manager**
Tom Wacker, Project Manager
Steve Logan, Project Manager
Steve Blazer, Superintendent
Bruce Hansen, Assistant Superintendent
Andy Zdanczewicz, Assistant Superintendent
Kyle Greenley, Project Engineer

**Plunkett Raysich Architects, Architect**
Steve Etelamaki, Project Architect

**Ring & DuChateau, Engineer**
Dave DuChateau, Project Engineer

**Johnson Controls, Temperature Controls**
Paul Schneider, Project Manager
Jason Gorak, Project Engineer

**Grunau Company**
Ron Kwiatkowski, Vice President
Tom Gorak, Project Manager
Rod Patzner, MEP Coordination
Gene Nowakowski, Piping Superintendent
Mike Reynders, Piping Superintendent
Tom Greiner, Sheet Metal Superintendent
Roger Frycienski, Sheet Metal Foreman
Gerry Gelhaar, Steam Fitter Foreman
Jon Shorougian, Steam Fitter Foreman
Alonzo Williams, Steam Fitter Foreman
Dick Wirt, Test & Balance Foreman
Paul Latus, Test & Balance



*Dick Wirt (above), Paul Latus (right), are verifying critical air flows for hood exhaust and make-up air in the laboratory.*

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