

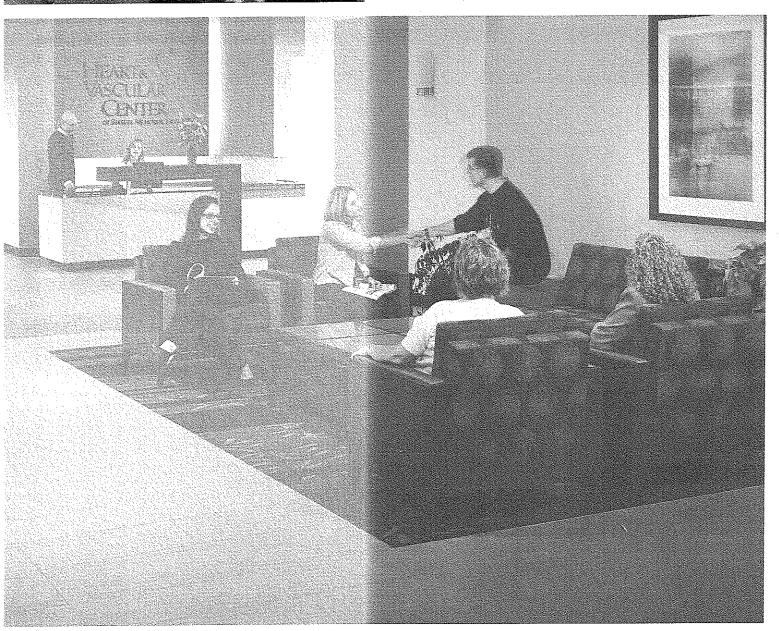


BURT, HILL

WILLIAM R. SHARPE JR. HOSPITAL

PROPOSAL FOR ARCHITECTURAL AND ENGINEERING SERVICES WESTON, WV

December 3, 2008



BURT, HILL

December 3, 2008

Purchasing Division 2019 Washington Street, East P. O. Box 50130 Charleston, WV 25

Re.

William R. Sharpe Jr. Hospital

Buyer: Roberta Wagner – File 22

Req#: WSH90086

Opening Date: 12/04/2008 Opening Time: 1:30 p.m.

Dear Ms. Wagner:

William R. Sharpe Jr. Hospital has an exciting opportunity to create a state-of-the-art addition to its existing facility that will service those in need of mental health treatment. The design of the new wing of the Hospital will strive to a) provide a safe, non-institutional, therapeutic environment appropriate for the treatment program, b) develop a facility characterized by a feeling of openness, with emphasis on natural light and exterior views for the patient, and c) include interior finishes, lighting and furnishings which suggest a residential rather than an institutional setting, helping to create a comfortable environment for the patient.

To that end, Burt Hill has assembled a team of professionals specializing in architecture, engineering, interior design, and behavioral health consultation/planning to address this very important project on your behalf – all team members have many years of experience working on similar types of projects. All look forward to the challenges that this project will present, and the potential for innovative solutions that can be developed.

Burt Hill's size, skill, and healthcare experience, joined with the psychiatric expertise of Frank Pitts at Architecture +, offers a highly-specialized team that will partner with the visionaries of William R. Sharpe Jr. Hospital to design an environment, within budget and on schedule, that will enhance your position as West Virginia's premier behavioral health facility. Thank you for the opportunity to present our credentials to you for this exciting project. If you have any questions, do not hesitate to call.

Sincerely,

BURT HILL

John E. Brock, AIA Vice President



*709015209

400 MORGAN CENTER

BUTLER PA 16001

101 EAST DIAMOND ST

BURT HILL

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

724-285-4761

Request for Quotation

RFQ NUMBER WSH90086

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ADDRESS CORRESPONDENCE TO ATTENTION OF

ROBERTA WAGNER 304-558-0067

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HEALTH AND HUMAN RESOURCES

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Charleston, WV 25305-0130

Request for Quotation

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STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

West Virginia Code §21-1D-5 provides that: Any solicitation for a public improvement construction contract shall require each vendor that submits a bid for the work to submit at the same time an affidavit that the vendor has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code. A public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the West Virginia Code may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and is in compliance with the requirements as stated.

Vendor's Name:	E C. KNEPER	
Authorized Signature:		
Purchasing Affidavit (Revised 07/01/08)	\	-

TABLE OF CONTENTS

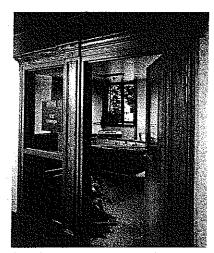
- 1 EXPERIENCE
- 2 STAFF AND RESOURCES
- 3 CONSTRUCTION MANAGEMENT

Founded in 1936, Burt Hill has grown to a leader in healthcare design, having successfully completed millions of square feet of new hospital construction and renovation projects. Our experience ranges from large teaching hospitals to community hospitals. Today, Burt Hill is among the largest healthcare architectural/engineering groups in the world. For the past ten years, Burt Hill has been ranked within the top healthcare design firms in the U.S. by Modern Healthcare and Building, Construction, & Design magazines.

Our broad healthcare expertise has offered us many unique opportunities to design "specialty hospitals" with various focuses including small, personalized-care facilities. In addition to the specialty hospital niche we have developed, Burt Hill has extensive experience with large academic teaching hospitals. The firm is currently working on nine large teaching/research medical center campuses. Our work spans every component of healthcare design. We understand your "business," and concentrate our energies on developing a very intimate knowledge of these facilities to optimize their design.

A patient care facility should strive to provide a safe, non-institutional, therapeutic environment appropriate for the treatment program. A space characterized by a feeling of openness, with emphasis on natural light and exterior views, is a pleasant one for the patient. Interior finishes, lighting and furnishings which suggest a residential rather than an institutional setting, also help create a comfortable environment. Burt Hill offers a team of interior designers who specialize in creating "warm and homey" environments for healthcare providers. We are careful to attend to the needs of your patient care program. Such environments should afford patients a variety of sensory and social experience, including privacy. Today's market is calling for an environment which will set the stage for higher levels of customer service and a new model for healing environments. To successfully complete such a charge, an experienced team is needed that will bring much experience to the innovation effort. Burt Hill's resources and expertise are invaluable in helping you meet the demands of the changing marketplace.

Burt Hill offers integrated design services with in-house engineering, interior design, and site landscape design totaling more than 1,200 professionals who are located in 11 offices in the U.S. and 3 internationally. Our engineering technology is applied to all of our projects starting at the initial project planning session, not as an afterthought. Over the past 30 years, our in-house engineering staff has grown to 400+ professionals. Burt Hill's engineering and energy expertise has won national awards. From their relevant experience and engineering integration, they will deliver a healthcare facility that will be on the cutting-edge of technology.



Our designs encourage and support social interaction and are especially sensitive to the needs of the mentally ill. The psychiatric ward at Good Samaritan Hospital offers a homey environment with warm finishes.

A psychiatric facility should strive to provide a safe, non-institutional, therapeutic environment appropriate for the treatment program. A unit characterized by a feeling of openness, with emphasis on natural light and exterior views, is a pleasant one for the patient. Interior finishes, lighting and furnishings which suggest a residential rather than an institutional setting, also help create a comfortable environment. To ensure security and safety, building components, finishes and furnishings should all minimize the opportunity for residents to injure themselves or others. Special window glazing, door and window hardware, plumbing fixtures, lighting and electrical fixtures and other safety components must be integrated into any design. Ultimately, a successful psychiatric program space allows the residents to have places to partake in social activities and places to have privacy, all the while enabling staff to monitor for treatment, security and patient safety.

We understand the variety of ways in which stress can be induced and asymptomatic institutional behavioral patterns can be reinforced by traditional psychiatric design. We are careful to attend to the needs of your therapeutic program and understand that our first mission is to "do no harm". But further, have demonstrated an ability to create environment where patients have a range of choices and environmental supports which support their stabilization and re-emergence and which directly support your therapeutic program. Such environments will afford patients a variety of sensory and social experience, including privacy. They also afford patients and therapists a range of facility settings within which to emerge, test competencies and set limits: homes, neighborhoods, and downtowns. We also have been successful in affording patients secure access to a variety of outdoor spaces: porches, courtyards and parklands. Our designs encourage and support social interaction and are especially sensitive to the needs of the mentally ill with respect to these supports. We provide opportunities for dignified and non-stigmatizing retreat to "safe near staff" areas within the facility. We provide the environment with a variety of measures which have counterpoints in the "real-world" and that afford patients a series of "places-in-between" which are helpful places of temporary respite and assessment.

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Alliance Community Hospital - Replacement Hospital, Alliance, OH

The design for a new 8,500-square-foot, 12-bed senior care (Gero-Psych) unit is a part of a 349,000-square-foot replacement hospital complex for the Alliance community. The unit houses eight private and two semi-private bedrooms for a maximum occupancy of 12 patients. The unit serves patients, typically over the age of 50, who require a hospital stay of less than two weeks. The area is isolated from the rest of the hospital for security reasons, but is close enough to take advantage of hospital diagnostic and treatment services, as well as maintenance and support.

Brookville Hospital, Brookville, PA

Burt Hill performed architectural and engineering design services for the renovation of the Gero Psychiatric Ward.

Butler Memorial Hospital, Butler, PA

Psychiatric Unit -- This 12,000 square foot project was an overall renovation of an existing hospital wing which was originally constructed in 1920. This 19-bed unit included a nurses station, dining room/lounge area, isolation quarters, classrooms, examination and treatment, areas along with conference and administrative space. This project was part of a major 95,000 square foot addition/renovation project.

Butler Memorial Hospital - Radiology / TX Building / Main Addition, Butler,

This project included a new out-patient surgery area, renovation of existing patient floors, child psychiatric unit, administrative offices, medical records, purchasing, and accounting.

Conemaugh Health System - Good Samaritan Hospital, Johnstown, PA

- Adult Inpatient Psychiatric Unit -- The adult inpatient psychiatric unit, a
 14,000-square-foot, high-security, locked unit, is divided into three levels
 of acuity with each level in its own wing of the T-shaped floor plan.
 Patient visibility is absolutely critical for this type of unit, so cameras were
 positioned to allow staff to monitor the corridors at all times.
 Additionally, the entry, main nurse station, and the majority of the public
 rooms are located centrally at the point where all of the wings join. In
 the wing designated for high-acuity / low-stimulation patients, isolation
 rooms are equipped with observation cameras and these patients have
 their own dedicated lounge.
- Inpatient Detox Unit -- The 4,000-square-foot inpatient detox unit has
 nine inpatient beds and a large group room to serve both inpatient and
 outpatient group sessions. There is also a centrally located nurses'
 station for inpatient and outpatient visibility and security.

Excela Health - Latrobe Hospital, Latrobe, PA

The project included renovation of 5,400 square feet for a ten-bed pediatric psychiatric unit and studies for the renovation of the existing psychiatric wing for outpatient care.

Meadville Medical Center, Meadville, PA

The renovations at the Meadville Medical Center included a 10-Bed Adult Psychiatric Unit, an 18-bed Geropsych Unit and required Support Areas. The total area of the two units is 13,400 square feet. The total construction cost is \$350,000.

Mercy Hospital, Pittsburgh, PA

Burt Hill provided design services for complete renovation of an existing inpatient floor into a psychiatric ward. The area included patient rooms, exam rooms, group therapy areas, multipurpose rooms, nurse stations, and miscellaneous support space for three different populations of residents:

- Adolescent
- Adult
- Dual

Saint Francis Hospital, New Castle, PA

Psychiatric Unit - Renovation of 13,000 square feet of existing psychiatric ward and the 220 square foot outpatient psychiatric unit.

Saint John's Hospital, Pittsburgh, PA

Offices admissions, and hospitality shop, psychiatric unit, neighborhood health clinic consisting of 20,000 square feet.

The Children's Institute, Pittsburgh, PA

The facility houses both adult and pediatric patients in an inpatient and outpatient environment. The project included a 17-bed specialized psychiatric unit to treat adolescents with Praeder-Willi. Other renovation work included an 18-bed pediatric unit; a 22-bed transitional care unit; three new classrooms; a renovated dietary department; a relocated telephone switch board; and a patient drop-off canopy.

The Devereaux Foundation - Brandywine Campus Housing, Devon, PA Burt Hill designed two housing facilities, 8,000 square feet each with 16 beds

for emotionally and mentally disturbed teens. The units will serve as prototype designs for nationwide application and are certified psychiatric hospital units.

Thomas Jefferson University - Geriatric Psychiatric Unit Relocation, Philadelphia, PA

Burt Hill provided renovations to the 8,000-square-foot existing acute care unit to create 12 patient rooms for the geriatric psychiatric unit.

Titusville Area Hospital, Titusville, PA

Renovation of a 12-bed psychiatric unit.

University of Pittsburgh Medical Center - Master Planning, Pittsburgh, PA

Comprehensive master facilities plan for a \$300 million expansion and renovation program at Presbyterian University Hospital, Montefiore University Hospital, Western Psychiatric Institute, and Clinic Pittsburgh Cancer Institute School of Health Sciences.



UPMC Braddock, Pittsburgh, PA

Emergency-based psychiatric facility included in the 27,000-square-foot emergency department. This unit is the primary provider of psychiatric services for the city of Pittsburgh.

Veteran's Affairs Medical Center - Building 78 Mental Hygiene Clinic, Butler, PA

Building 78 was constructed as a nurses' barracks in 1945. Because World War II ended, the 7,200-square foot facility was never used. The Veterans Administration selected Burt Hill to provide architecture and engineering services to renovate the building and convert it for use as a mental hygiene clinic with associated administrative offices. This outpatient clinic was restored from a gutted building. Since the shape of the building was long in length and thin in width, Burt Hill designed an entry structure made of glass block to expand and brighten the waiting and reception area.

Veteran's Affairs Medical Center - Erie, Erie, PA

Renovation and addition to the Behavioral Health Clinic includes offices, exam rooms, group rooms, and a mini gym. The clinic finishes are home-like and therapeutic including outside vistas.

Veteran's Affairs Medical Center - Philadelphia Psychiatric Unit, Philadelphia, PA

The project consists of renovation to an 8,000 square foot psychiatric ward. The work includes total redesign for the area, including elevator and mechanical upgrades.

Western Psychiatric Institute & Clinic, Pittsburgh, PA

In order to consolidate and align psychiatric services for children, the UPMC Health System directed Burt Hill to investigate opportunities, identify issues, and design a 100,000-square-foot addition to the Western Psychiatric Institute and Clinic (WPIC). The existing WPIC would continue to house administration; with patient housing; and research space in its existing 400,000 square feet. The addition would house outpatient services and be identified as the Children and Youth Center (CYC). Project completed through CD's only

Western Psychiatric Institute & Clinic - Tunnel, Pittsburgh, PA

In order to provide safe, weather-protected transportation between the University of Pittsburgh Medical Center and Western Psychiatric Institute and Clinic, Burt Hill designed a tunnel between the two facilities. The tunnel, which goes under a city street, is used to transfer staff, patients, visitors, and materials.



6TH FLOOR PSYCH UNIT

PENNSYLVANIA HOSPITAL PHILADELPHIA PENNSYLVANIA

TYPE:

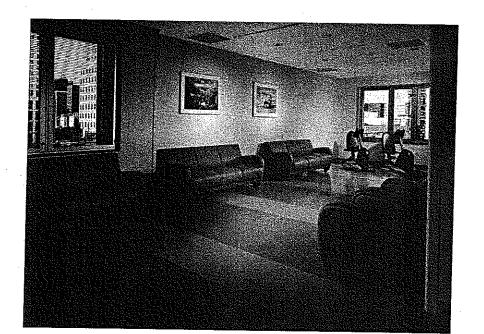
Healthcare Renovation

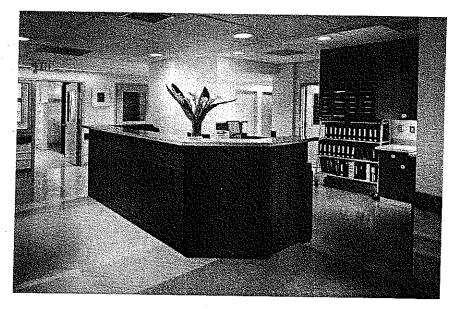
SIZE:

12,000 square feet

SERVICES: Architecture

Architecture Interior Design





Burt Hill provided architectural services for a new, 12,000-square-foot, 18-bed psychiatric unit at Pennsylvania Hospital. The unit provides an improved patient care environment for a diverse population, including geriatric and medically co-morbid psychiatric patients, and patients with mood disorders. This project included an extensive programming phase to develop patient safety and anti-ligature strategies that were incorporated into the hospital standards for psychiatric care.

COOD SAMARITAN HOSPITAL CONEMAUCH HEALTH SYSTEM JOHNSTOWN, PENNSYLVANIA

Type:

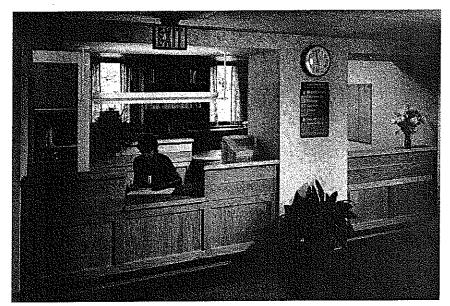
Hospital

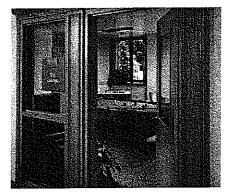
Size:

14,000 square feet

Services: Architecture

Interior Design







The adult inpatient psychiatric unit, a 14,000-square-foot, high-security, locked unit, is divided into three levels of acuity with each level in its own wing of the T-shaped floor plan. Patient visibility is absolutely critical for this type of unit, so cameras were positioned to allow staff to monitor the corridors at all times. Additionally, the entry, main nurse station, and the majority of the public rooms are located centrally at the point where all of the wings join. In the wing designated for high-acuity / low-stimulation patients, isolation rooms are equipped with observation cameras and these patients have their own dedicated lounge.

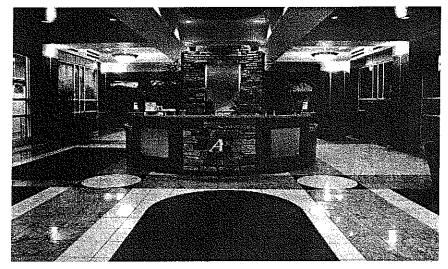
PSYCHIATRIC UNIT ALLIANCE COMMUNITY HOSPITAL ALLIANCE, OHIO

Туре: Size:

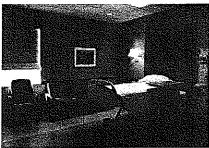
Psychiatric Ward 8,500 square feet

Services: Architecture

Engineering Interior Design







The design for a new 8,500-square-foot, 12-bed senior care (Gero-Psych) unit is a part of a 349,00-square-foot replacement hospital complex for the Alliance community. The unit houses eight private and two semi-private bedrooms for a maximum occupancy of 12 patients. The unit serves patients, typically over the age of 50, who require a hospital stay of less than two weeks. The area is isolated from the rest of the hospital for security reasons, but is close enough to take advantage of hospital diagnostic and treatment services, as well as maintenance and support.

UNIT 6 F AND C UPMC PRESBYTERIAN PITTSBURCH, PENNSYLVANIA

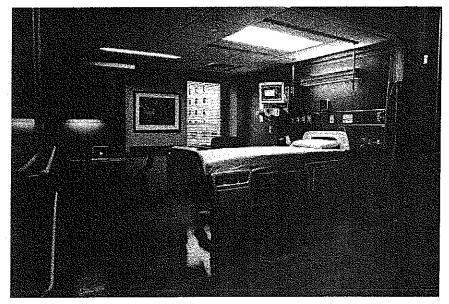
Туре:

Med / Surg Patient Care

Size: 15,000 square feet

Services: Architecture

Engineering Interior Design







The goal of this project was to create a state-of-the-art universal bed concept offering flexiblity and options on Level Six of UPMC Presbyterian Hospital. The entire area of the project included 15,000 square feet of renovation and the inclusion of a 20,000 CFM air handling unit.

Burt Hill's design included oversize med / surg rooms with a three-fixture toilet room. The size of the room allows the beds to also be used as intensive care beds, allowing the hospital greater flexibility in the use of their bed complement. Very careful planning of duct routing and drilling holes in the structural steel to allow the running of conduit and pipe above the ductwork was essential in establishing a quality environment for the patient, visitors, and staff.



PSYCHIATRIC UNIT THE CHILDREN'S INSTITUTE PITTSBURCH, PENNSYLVANIA

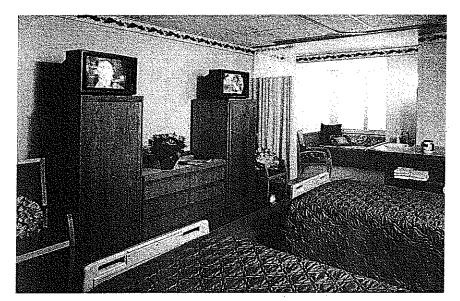
Type: Hospital

Size: 116,000 square feet

Services: Architecture

Engineering Interior Design

Landscape Architecture







The facility houses both adult and pediatric patients in an inpatient and outpatient environment. The project included a 17-bed specialized psychiatric unit to treat adolescents with Praeder-Willi. Other renovation work included an 18-bed pediatric unit; a 22-bed transitional care unit; three new classrooms; a renovated dietary department; a relocated telephone switch board; and a patient drop-off canopy.

RESIDENTIAL TREATMENT CENTER

BRANDYWINE CAMPUS HOUSINC THE DEVEREUX FOUNDATION DEVON, PENNSYLVANIA

Туре:

Residential Treatment Center

Size:

15,850 square feet

Services: Architecture

Engineering Interior Design







Located in a rural setting, the Devereux Foundation's Brandywine campus is a residential treatment center for boys, ages 6 to 21, suffering from emotional, behavioral, and attention deficit disorders. Burt Hill's challenge was to design two new housing units to meet very strict budget requirements while providing an appropriate and secure environment for the residents. The goal of the project was to create a residential character for the units that blended with the existing Chester County farm vernacular.

Each of the housing units is divided into two eight-bedroom houses to separate the children into more manageable groups. A wide corridor linking the housing units provides visual access that creates a sense of security for the counselors and reduces the number of staff required to supervise the children. Bedrooms are grouped around a common living area for group interaction and watching television. This arrangement provides the children with a real sense of home and "pride of place," and has dramatically decreased damage to the rooms and furniture. The units also include a nurses' station, exam room, seclusion area with a time-out room, classroom, study rooms, and restrooms.

The buildings were constructed primarily of reinforced concrete block foundation and wood framing for the walls, floors, and roof structure. The exterior finishes include wood siding, veneer stone, and a standing seam metal roof. Interior finishes include painted walls and ceilings, wood, carpet, vinyl, and ceramic tile floors. The construction type and finishes were chosen for their durability, the residents' safety, and budgetary considerations.

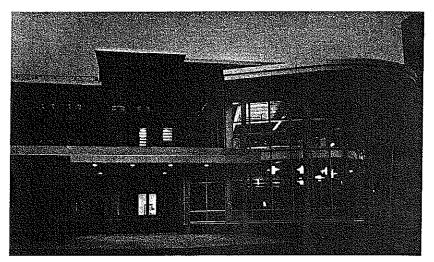
HUDON RIVER PSYCHIATRIC CENTER

POUCHKEEPSIE. NEW YORK

Type: Size: Psychiatric Center 6,000-square foot

Services: Architecture

Engineering Interior Design







The Hudson River Psychiatric Center (HRPC) selected architecture+ to design a 6,000-square-foot program addition to compliment the renovation of their 150-bed inpatient hospital. The addition houses classrooms, a multifunctional room, a teaching kitchen, and a large gathering space. The addition was designed to be a fun, yet calming, environment where clients receive treatment while building independence and respect. The building embodies these ideals through the use of color and open inviting spaces that encourage growth and social interaction.

The project has been well received by HRPC staff. According to facility director Jean Wolfersteig, the staff are "truly delighted to have treatment programs held in such beautiful, light-filled spaces, conducive to making progress and developing self-confi dence and hope." HPRC has named the addition "Wellness Center" to signify its role in the hospital.

INTENSIVE TREATMENT FACILITY

NORWICH CENTER NORWICH, NEW YORK

Type: Size: Treatment Center 25,000 square feet

for entire project

Services: Architecture

Engineering Interior Design







architecture+ provided services from design through construction of this new \$17 million, 60-bed unit. Built for the New York State Office of Mental Retardation and Developmental Disabilities, this facility, along with Sunmount CIT, was the first of their kind in the nation. They were designed within a camplike compond to provide secure living accommodations and treatment for developmentally disabled adults in need of custodial care. They represent an innovative alliance of security and active treatment.

Great care was taken to provide invulnerability and safety without compromising the sense of home and neighborhood. Five residential "cottages" each contain 12 beds, along with living, dining, recreation and support spaces. In addition, the complex includes a 25,000 square foot program and therapy building, with offices, classrooms and a workshop. Work included extensive perimeter security, site work and development of more than one mile of new roadway and public utilities to service the site.

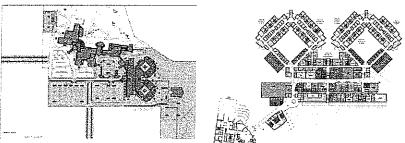
PARKWOOD SPECIAL CARE FACILITY LONDON ONTARIO

Type: Special Care Facility

Size: 64-bed Services: Architecture

> Engineering Interior Design





This hospital is part of the reconfiguration of the Provision of Mental Health Services in the Province of Ontario. This facility resolved the challenge of how to provide a new facility that is free standing and yet integrated with an existing hospital complex. It is designed to accommodate 50% expansion in beds, and clinical and support space. The hospital embodies the house, neighborhood, downtown treatment concept first advanced at the Rochester Psychiatric Center, yet is a unique response to the program and the site.

Patient privacy and some measure of normalcy are achieved by residential unit designs that are experientially small — 67 beds — while operational efficiency is obtained by grouping beds into 24-bed supervisory and administrative clusters. All patient bedrooms either face conservation land to the north or landscaped interior courtyards. We were subsequently engaged to develop detailed Master Plans for site and schematic design.

HILLSIDE HOSPITAL NORTH SHORE-LONG ISLAND JEWISH **HEALTH SYSTEM** CLEN OAK, NEW YORK

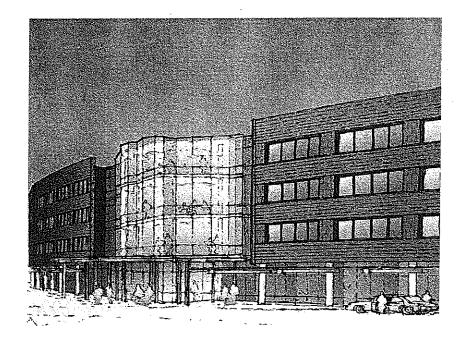
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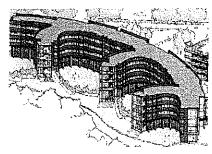
Psychiatric Facility

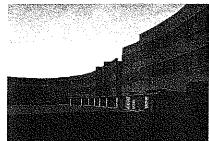
Size:

180-bed Services: Architecture

> Engineering Interior Design







Phase 1 of this major expansion project involved new construction and renovation valued at \$88 million. This included the addition of 180 psychiatric beds and other medical facilities such as outpatient services, ambulatory clinics, children's psychiatric services, research facilities and emergency department facilities.

Administrative components include space for clinical administration, nursing administration, resource management and unit services management. We also designed a new conference center, medical library, power plant and parking garage. Bohlin Cywinski Jackson, Associated Architects

INDIANA RECIONAL TREATMENT **CENTERS**

VARIOUS LOCATIONS, INDIANA

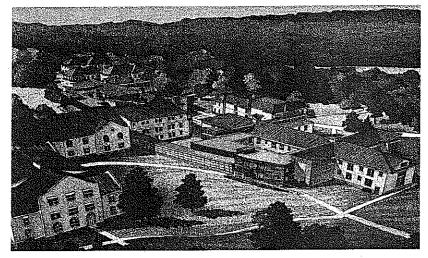
Туре:

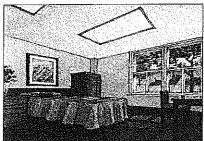
Treatment Center

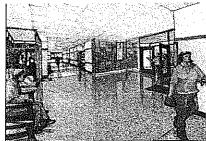
Size:

150-bed Services: Architecture

> Engineering Interior Design

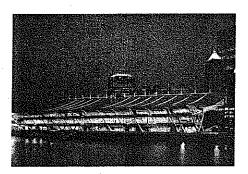






We were initially retained as a programming and planning consultant to HOK for a free-standing, 150-bed state-owned regional treatment center in Madison. At the completion of this project, we were selected by The State of Indiana as the Prime Consultant for additional projects.

As the Prime Consultant, we conducted programming and planning for two additional regional treatment centers of 120 beds in Fort Wayne and 170 beds in Indianapolis.



Burt Hill was a founding member of the U.S. Green Building Council which developed the LEED rating criteria. Our expertise in green design strategies was recognized by the LEED Gold Rating of the David L. Lawrence Convention Center which is the largest building in the world obtaining that designation.

The engineering systems selection for a facility of this type will play a major role in energy use. Large energy users will be the HVAC and lighting treatment of the clinical and atrium spaces, domestic hot water production, and treatment of the outside air.

The clinical spaces are governed by codes with respect to outside air and total air flow. In addition to the typical energy saving methods such as variable air volume, variable frequency drives, supply temperature optimization, the greatest opportunity for energy conservation for the clinical spaces would be some form of heat recovery combined with an efficient building skin.

Day lighting is the most economical and environmentally responsible lighting technique available today. Day lighting saves money on energy bills, connects people to the outdoors, and makes the building environmentally friendly.

Day lighting uses natural light to illuminate buildings. Rather than relying on fluorescent lights, day lighting brings in direct sunlight into a building, connecting people to the rhythms of nature while providing pleasing illumination at a fraction of the cost of electric lighting. Careful design of day lighting systems to incorporate "cool day lighting" concepts will increase effective day lighting while reducing heat and glare.

Examples of innovative project designed that have help control operational costs for our clients include:

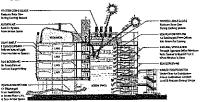
UPMC St. Margaret's Hospital, Pittsburgh, PA

This project was requested by UPMC St. Margaret's Hospital to design a chiller plant to replace the existing aging chiller plant. The new plant was designed and constructed while the existing plant was in operation. Valves were placed during the winter months in strategic locations to allow seamless changeover in the summer without loss of chilled water. This system includes four 500-ton centrifugal chillers, one 250-ton air cooled chiller for winter operation and emergency cooling during power outages. Also, complementary pumps and cooling towers were designed and installed. Energy saving features implemented includes variable speed drive chillers, primary/variable flow secondary pumping systems, variable speed cooling towers and chilled water reset strategies. The demolished chiller plant location will be used for a boiler replacement program in the future.

David L. Lawrence Convention Center, Pittsburgh, PA

The goal of the project was to design the most environmentally-friendly, fiscally responsible convention center possible. Burt Hill provided innovative sustainable design solutions for the convention center. In particular, three sustainable design strategies - natural ventilation, natural lighting, and water efficiency - were developed to cut energy consumption by 30% compared to that of similar, but more conventionally engineered facilities. The roof shape encourages cross ventilation utilizing air currents from the river. Skylights provide natural light, the cooling system uses cascading water on the roof, and a low temperature air supply system minimizes duct work, fan capacity, and energy consumption. Burt Hill provided MEP engineering, sustainable





University of Texas is striving to design a campus of healthy buildings that demonstrate the link between human well-being and the built environment. The IMM laboratory facility will enhance the overall indoor environmental quality promoting the health and safety of its occupants. This project is registered for LEED certification.

design, and LEED certification services for this \$277 million project, designed by Rafael Viñoly Architects.

UPMC Lee Regional, Johnstown, PA

The sixth floor of the Patient Care Facility houses a new 700 BHP boiler plant for the entire hospital that includes a pressurized deaerator, a hot water pump and converter system for the addition, and boiler feed equipment. Burt Hill also designed a chiller plant to serve the greater hospital, replete with two 400-ton chillers and two 250-ton chillers, with primary / distributed secondary pumping systems, matched cooling towers, and sand filtration on the condenser water. Services run from the new plants to the existing hospital via a new service tunnel underneath a sidewalk. A new electrical service entrance and 800kw emergency generator with distribution gear and electrical riser system were also included in the project.

University of Texas Health Science Center - The Fayez S. Sarofim Research Building, Houston, TX

Sustainable design goals of the research facility included a site design that respects all living systems and biodiversity; minimizing the use of water, and collecting, reusing, and cleaning water on site; establishing energy effectiveness and LEED energy performance goals prior to design; selecting materials with a high recycled content and low embodied energy; and creating indoor environments that promote health and well-being by optimizing day lighting, effective ventilation, and the use of non-toxic materials. The building incorporates sustainable design strategies at many scales. Building orientation allows optimum penetration and control of natural daylight in relationship to the differing programmatic elements. Sectional organization allowed the design team to optimize the spatial characteristics of different program elements. By separating office and lab elements, the environmental control system is able to capture and reuse energy that would normally be wasted. Cladding and finishes are based on a palette of natural, sustainable, and low VOC emitting materials.

Rensselaer Polytechnic Institute - Center for Biotechnology and Interdisciplinary Studies, Troy, NY

The Center for Biotechnology and Interdisciplinary Studies offers state-of-the-art research and teaching facilities in a building designed for optimal energy and environmental performance. The building's organizing principle is a linear atrium that allows each office, meeting, and laboratory space to have controlled daylighting and views. Abundant fresh air, low-polluting materials, advanced laboratory controls, and a heat recovery system create a healthy indoor environment and result in energy savings. Building materials have a high recycled content and high durability to minimize environmental impact. The building, a product of collaboration with Bohlin Cywinski Jackson, was designed to achieve a LEED Silver certification.



The Genomic Laboratory at Princeton University offers flexible research space for interdisciplinary activity. Among the innovative engineering features are air handling systems which are linked to provide redundancy for lab units without the cost of additional backup and flexible enough to facilitate future fit out and distribution changes. The building also features shading devices to minimize atrium cooling requirements.

Princeton University - Lewis-Sigler Institute for Integrated Genomics, Princeton, NJ

The 97,000-square-foot research and teaching facility employs innovative engineering features, such as air-handling systems that are linked to provide redundancy for lab units without the cost of additional backup and are flexible enough to facilitate future fit out and distribution changes. The building also features solar shading devices to minimize atrium cooling requirements. A state-of-the-art energy recovery system reduces heating and cooling requirements. Energy performance for the building is ten percent above ASHRAE 90.1. Burt Hill provided engineering services as a member of the Rafael Vinoly Architects design team.

William R. Sharpe Jr. Hospital

Architectural/Engineering Services

John E. Brock, AIA Principal in Charge

Jeffrey N. Heiskell, AIA, NCARB *Project Manager*

Burt Hill Architects

Carrie N. Haines, AIA Project Architect

Nickolette N. Goodemote, NCIDQ Certified Interior Design

Burt Hill Engineers

James J. Hannon, PE Electrical Engineer

Russell R. Sullivan, PE Mechanical Engineer

architecture +

Francis Murdock Pitts, AIA, FACHA, OAA Psychiatric Healthcare Architect .

JOHN E. BROCK, AIA PRÍNCIPAL IN CHARCE BURT HILL

EDUCATION

Pennsylvania State University, Bachelor of Architecture, Architecture, 1976 Darmstadt, Germany, Architectural Study, Teschnicle Hochschule

REGISTRATIONS

Architecture: Pennsylvania

PROFESSIONAL AFFILIATIONS

American Hospital Association (AHA), Member
American Institute of Architects, Committee on Architecture for Health,
Member
American Institute of Architects, Forum for Health Care Planning, Member
Health Executive Forum, Member
Pennsylvania Society of Architects (PSA), Member

LEAN Construction Institute, Member

PROFILE

Architectural management revolves around creative problem-solving. John's approach to the management of hospital design is separating large, complex problems, and solving each component with the appropriate talent from the project team. Being responsible for the scheduling and overall direction of numerous projects, John has exceptional managerial and people skills. He has applied his skills to many complicated projects, including a \$300 million upgrade at the University of Pittsburgh Medical Center. John is personally committed to each project and client. This commitment combined with his technical expertise makes him a strong project manager for any major hospital complex.

John is the Principal in Charge of Burt Hill's Healthcare Division. He is a member of the executive committee of the firm and has conducted numerous presentations/lectures on cutting edge technology for hospitals. In addition to his project responsibilities, John focuses on improving quality and procedures firm wide.

Brookville Hospital, Brookville, PA

Burt Hill completed a building evaluation and prepared an on-going planning document, which included the renovation of gero psychiatric ward, endoscopy, pre-care, laboratory, and rehabilitation unit.

Butler Memorial Hospital - Phase III - Main Wing Addition, Butler, PA Renovation of 69,200 square feet and an addition of 51,100 square feet of space to accommodate the following departments: emergency room, central processing, pharmacy, patient floors, maternity suite (birthing rooms, C-section, nursing, post-partum), cardiac care unit, child psychiatric unit, outpatient facilities for nuclear medicine, EEG/EKG departments, and shell space for future expansion.

Butler Memorial Hospital - Radiology / TX Building / Main Addition, Butler, PA

Butler Memorial's Phase II and III were treated as one project. Phase II was the completion of shell space from the first expansion. The space that was completed was a radiology department. Phase III consisted actually of two projects. First, there was the renovation of the T&X building. This included a new outpatient surgery area, renovation of existing patient floors, child psychiatric unit, administrative offices, medical records, purchasing, and accounting. The second part of Phase III was a new 6-story addition. In the



addition were a new emergency room suite, central processing, pharmacy, maternity suite, CCU, mammography suite, nuclear medicine, outpatient entrance, registration and waiting areas, and shell space for future expansion.

Meadville Medical Center, Meadville, PA

Psychiatric Unit - The renovations at the Meadville Medical Center included a 10-Bed Adult Psychiatric Unit, an 18-bed Geropsych Unit and required Support Areas. The total area of the two units is 13,400 square feet. The total construction cost is \$350,000.

Mercy Hospital, Pittsburgh, PA

Facilities Management - Burt Hill was asked to create a comprehensive facilities Master Plan document with automated area and cost calculations for a 1 million square foot, multi-story Healthcare facility. The final deliverable was a coordinated CAD database that assembled all existing plan data, cost center area tables and functional area tables which are utilized as a facilities management and planning tool. The database extracts departmental areas directly from the CAD drawings, assembling the tabular information into a Mater Plan spreadsheet. This flexible tool, usable by both the owner and architect, was used as a planning tool which defines budgets and helps to prioritize renovation projects that are key to the hospital's strategic plan.

Saint Francis Hospital, New Castle, PA

Psychiatric Unit - Renovation of 13,000 square feet of existing psychiatric ward and the 220 square foot outpatient psychiatric unit.

Master Planning - Master plan to upgrade and reorganize the entire 193-bed facility. In addition to the interior work a high priority includes exterior landscaping, circulation, and image. The major focus was to convert the former inpatient hospital to a facility that caters to the current outpatient trend.

Emergency Room Renovations - Renovation of 4,200 square feet of space on the ground floor that consists of a 6-bed treatment area, 2-bed trauma room, waiting area, registration/triage area, nurse station, seclusion room, and covered entry way to the parking lot.

Outpatient Facilities - Planning, architectural, engineering and interior design services. A strategic master plan has been implemented and a number of the top priority projects have been put in place. Projects completed include: emergency room upgrades, renovation of the psychiatric unit and the creation of satellite facilities for outpatient rehabilitation, physician offices and pediatric physicians offices.

Outpatient Rehabilitation - Conversion of a former liquor store and a Rite-Aid drugstore in a strip mall into an outpatient rehabilitation facility. The facility includes a gym, hand area, therapy rooms, hydrotherapy and support space. Project totaled 4,500 square feet.

JEFFREY N. HEISKELL, AIA, NCARB PROJECT MANACER BURT HILL

EDUCATION

Carnegie Mellon University, Masters of Architecture, Architecture, 1981 West Virginia University, Bachelor of Arts, History, 1974

REGISTRATIONS

Architecture: Pennsylvania, West Virginia

PROFESSIONAL AFFILIATIONS

American Institute of Architects (AIA), Member Pennsylvania Society of Architects (PSA), Member West Virginia Society of Architects, Member National Trust for Historic Preservation, Member National Council of Architectural Registration Boards (NCARB)

PROFILE

With more than 25 years of healthcare experience, Jeff is a Project Manager in the healthcare architecture division of Burt Hill. Jeff has previous experience as a Principal at two other architectural firms before coming to Burt Hill and brings invaluable expertise in all aspects of healthcare architecture planning, design, and management. Jeff has a wealth of experience ranging from development and implementation of small, complex hospital remodeling projects to macro planning of large healthcare facility replacement/addition projects. He is particularly skilled in planning, budget and schedule management, code compliance issues, as well as client relations.

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Chiller/AHU Study - Study of two large chiller plants having a total capacity of 4,200 tons. We conducted a thorough analysis of the primary/secondary pumping system and associated piping connections, and conducted a complete feasibility study for upgrading and interconnecting the refrigeration plants. The study also included evaluating the feasibility of modifying existing air handling units serving the operating rooms and intensive care units so that the air handling units could satisfy the cooling loads they served utilizing 45°F entering chilled water.

Feasibility Study for Mechanical System Upgrades - Conducted a thorough analysis of the primary/secondary pumping system and associated piping connections, and conducted a complete feasibility study for upgrading and interconnecting the refrigeration plants. The study also included evaluating the feasibility of modifying existing air handling units serving the operating rooms and intensive care units so that the air handling units could satisfy the cooling loads they served utilizing 45°F entering chilled water.

Butler Memorial Hospital, Butler, PA

Burt Hill and Butler Memorial Hospital have shared a continuous relationship since the 1970s. A series of major additions and alterations projects have resulted in approximately 520,000 square feet of new or upgraded space have been completed including two, six-story additions and extensive renovation.

Ohio Valley General Hospital, McKees Rocks, PA

Burt Hill has been the architect of record at Ohio Valley General Hospital since 1986. The hospital has been renovated to enable it to compete with other local community hospitals. Burt Hill has provided architecture and interior design services for many areas of the hospital totaling 228,150 square feet of renovations.

Uniontown Hospital - Patient Wing Additions and Alterations, Uniontown, PA The program requires the addition of 56 private inpatient beds; an expanded emergency room; and a consolidation of their outpatient services. The 75,000-square-foot hospital addition and 30,000-square-foot renovation will require augmentation of their central physical plant with additional emergency generators; boilers; chillers; and new water and electrical service entrances.

Children's Hospital of Pittsburgh, Pittsburgh, PA

Design services for the renovation of 16,000 square feet to house the Primary Care Center. Upgrade of existing facilities to accommodate a new children's clinic/teaching facility. Program included new reception/registration and public waiting areas, exam rooms and preceptors' areas, with adjacent offices for Hospital's Child Development Unit and Adolescent Medicine Departments.

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CARRIE N. HAINES, AIA PROJECT ARCHITECT BURT HILL

EDUCATION

REGISTRATIONS

PROFILE

Auburn University Auburn, AL, Bachelor of Architecture, 2002 Auburn University, Auburn, AL, Bachelor of Interior Architecture, 2002

Architecture: Pennsylvania

Carrie has spent the majority of her career in healthcare planning and design. She works particularly well with user groups and is excellent in coordinating the architecture and engineering disciplines. From working with the user groups, she has gained a solid understanding of the "business" that is conducted in healthcare facilities. This knowledge coupled with her creative design solutions and project management skills produces effective solutions to the challenges presented by healthcare projects.

Children's Hospital of Pittsburgh, Pittsburgh, PA

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Excela Health - Latrobe Hospital, Latrobe, PA Long Range Facility Plan

Latrobe Hospital embarked on a long-range facility plan to solve numerous issues throughout the campus. The plan, as it exists today, is one that is composed of five separate phases grouping interconnected projects together. The areas that are affected by the plan include but are not limited to:

- Mental Health
- Inpatient / Outpatient
- Family Practice
- Diagnostics
 - Emergency Department
 - PT / OT / Speech
- Pharmacy
- Outpatient Special Procedures Unit
- Building Infrastructure Upgrades
 - 250-Car Parking Garage

The plan, when completed, represents a reorganization of all of the space to combine the outpatient activities on the west end of the campus and the support activity on the east end of the campus.

Short Procedure Unit

The primary function of the short procedure unit is to provide the community with a service designed to facilitate the performance of outpatient and inpatient diagnostic and therapeutic procedures via endoscopy. The unit is also designed for monitoring patients pre- and post-endoscopy and also for radiological procedures. Minor surgical procedures requiring local anesthesia are performed in the unit as well as outpatient I.V. therapeutic procedures.

Mercy Hospital, Pittsburgh, PA

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Schenley Place - Confidential, Pittsburgh, PA

The Elmhurst Group has asked Burt Hill to provide full design services for a medical office building and acute-care facility at Bayard Street and Ruskin Avenue. Being located near historic landmarks, the design needed to be contextual. The program includes three levels of parking totaling 63,000 square feet, five levels of acute-care facilities totaling approximately 82,000 square feet, and four levels of speculative medical office space adding another 56,000 square feet. The primary materials are planned to be a steel frame, pre-cast concrete skin with aluminum windows and storefront.

Uniontown Hospital - Patient Wing Additions and Alterations, Uniontown, PA The program requires the addition of 56 private inpatient beds; an expanded emergency room; and a consolidation of their outpatient services. The 75,000-square-foot hospital addition and 30,000-square-foot renovation will require augmentation of their central physical plant with additional emergency generators; boilers; chillers; and new water and electrical service entrances.

EDUCATION

PROFILE

La Roche College, Bachelor of Science, Interior Design, 1998

Nickolette is an interior designer within Burt Hill's healthcare division. She is knowledgeable about product finishes and furniture, which greatly benefits our clients. Her design skills create functional and comfortably aesthetic environments for very technical spaces. Nickolette believes that a wellplanned space will have a positive effect on patients' well-being. She works particularly well with user groups and is excellent in coordinating the owner and the project team.

Alliance Community Hospital - Replacement Hospital, Alliance, OH

This replacement hospital complex includes a new three-story 52,000-squarefoot professional building, a 249,000-square-foot hospital, and a 48,000square-foot nursing home. The professional building houses physicians' offices, administrative offices, and ambulatory services. The hospital was designed for outpatient care, and houses the emergency department, outpatient services, imaging, registration, dietary services, same-day surgery. a six operating room surgery suite, central sterile, critical care, and 102 medical / surgical inpatient beds. The nursing home houses 90 beds, with dedicated beds for 12 geropsychiatric patients, 28 rehabilitation patients, and 50 nursing home patients.

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The Children's Institute, Pittsburgh, PA

The Children's Institute, formerly The Rehabilitation Institute, is both a rehabilitation hospital and school. The construction consisted of a 116,000-square-foot addition and is comprised of three floors. The first floor has a new loading dock and a single-level parking garage designed to hold approximately 75 vehicles. There is staff parking to help alleviate congestion on the neighboring streets.

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UPMC Lee Regional - Patient Care Facility, Johnstown, PA

Burt Hill has provided continuous services to the hospital, implementing a five-year MEP master plan, doing various renovations, and designing a six-story, 100,000-square-foot inpatient wing immediately adjacent to the existing hospital. In this addition, known as the Patient Care Facility, we have designed each floor around service lines with care disciplines contained on individual floors, eliminating vertical movement of patients and staff within the facility and creating a more efficient work environment. The idea of patient privacy was also considered in designing the addition. To address this issue, the majority of the new patient rooms were designed as private rooms. The interior spaces incorporate high-end, hotel-style finishes to offer a more relaxed, non-institutional environment.

JAMES J. HANNON, PE ELECTRICAL ENCINEER BURT HILL

EDUCATION

REGISTRATIONS

PROFILE

Pennsylvania State University, Bachelor of Science, Electrical Engineering, 1986

Pennsylvania State University, Associate Degree, Electrical Engineering, 1984

Professional Engineer: Pennsylvania

As an electrical engineer at Burt Hill, Jim provides electrical design for hospital, laboratory and college campus projects. He has been involved with electrical design decisions throughout project development, bidding, and construction phases.

Jim looks at the design of electrical systems and determines the best options based on reliability, future capability, and budget. With Jim's expertise, he can bring a logical solution into a building and effective distribution within the budget. He will offer various options to the owner and together they will arrive at the best solution.

Alliance Community Hospital - Replacement Hospital, Alliance, OH

This replacement hospital complex includes a new three-story 52,000-square-foot professional building, a 249,000-square-foot hospital, and a 48,000-square-foot nursing home. The professional building houses physicians' offices, administrative offices, and ambulatory services. The hospital was designed for outpatient care, and houses the emergency department, outpatient services, imaging, registration, dietary services, same-day surgery, a six operating room surgery suite, central sterile, critical care, and 102 medical / surgical inpatient beds. The nursing home houses 90 beds, with dedicated beds for 12 geropsychiatric patients, 28 rehabilitation patients, and 50 nursing home patients.

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Psychiatric Unit - Renovation of 13,000 square feet of existing psychiatric ward and the 220 square foot outpatient psychiatric unit.

Master Planning - Master plan to upgrade and reorganize the entire 193-bed facility. In addition to the interior work a high priority includes exterior landscaping, circulation, and image. The major focus was to convert the former inpatient hospital to a facility that caters to the current outpatient trend.

Emergency Room Renovations - Renovation of 4,200 square feet of space on the ground floor that consists of a 6-bed treatment area, 2-bed trauma room, waiting area, registration/triage area, nurse station, seclusion room, and covered entry way to the parking lot.

LDRP Unit - Renovation of a 9,800 square foot existing area into a labor/delivery/recovery/postpartum unit. The unit includes a full-term nursery, a "C"-section suite, four labor and delivery rooms and a postpartum suite.

Outpatient Facilities - Planning, architectural, engineering and interior design services. A strategic master plan has been implemented and a number of the top priority projects have been put in place. Projects completed include:

emergency room upgrades, renovation of the psychiatric unit and the creation of satellite facilities for outpatient rehabilitation, physician offices and pediatric physicians offices.

Outpatient Rehabilitation - Conversion of a former liquor store and a Rite-Aid drugstore in a strip mall into an outpatient rehabilitation facility. The facility includes a gym, hand area, therapy rooms, hydrotherapy and support space. Project totaled 4,500 square feet.

UPMC Braddock, Pittsburgh, PA

Original objectives for the replacement of the existing, circa-1950s, surgical facilities at UPMC Braddock was to build a state-of-the-art, community-based facility. The addition incorporates all support services including Phase I and Phase II recovery. A new admissions department and lobby renovation is part of a second phase, completing a total redesign of the outpatient surgery program.

The addition consists of 13,500 square feet with 4,500 square feet of renovations. These areas include:

- Four Operating Rooms
- One Cystoscopic Operating Room
- Equipment
- Decontamination Area
- Anesthesia
- Staff Lounge and Locker Rooms
- Phase I Recovery
- Phase II Recovery

Western Psychiatric Institute & Clinic, Pittsburgh, PA

In order to consolidate and align psychiatric services for children, the UPMC Health System directed Burt Hill to investigate opportunities, identify issues, and design a 100,000-square-foot addition to the Western Psychiatric Institute and Clinic (WPIC). The existing WPIC would continue to house administration; with patient housing; and research space in its 400,000 square feet. The addition would house outpatient services and be identified as the Children and Youth Center (CYC).

RUSSELL R. SULLIVAN, PE, CEM MECHANICAL ENCINEER BURT HILL

EDUCATION

REGISTRATIONS

PROFESSIONAL AFFILIATIONS

PROFILE

Pennsylvania State University, Bachelor of Architectural Engineering, Architectural Engineering, 1980

Professional Engineer: Maryland, Pennsylvania

American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), Member

Russ is one of our leaders of the healthcare engineering team. He has more than 25+years of experience in designing mechanical systems specifically for healthcare. From the smallest infection isolation room to massive chiller plant designs -- Russ strives for energy efficient, yet functional solutions. He is integral to the early design process, as 50 percent to 60 percent of the cost of your new building will be mechanical and electrical. It is imperative that engineering be integrated into the design from the earliest concepts. Russ will prepare life-cycle cost analysis of the various mechanical systems so you can make informed decisions.

Alliance Community Hospital - Replacement Hospital, Alliance, OH

This replacement hospital complex includes a new three-story 52,000-square-foot professional building, a 249,000-square-foot hospital, and a 48,000-square-foot nursing home. The professional building houses physicians' offices, administrative offices, and ambulatory services. The hospital was designed for outpatient care, and houses the emergency department, outpatient services, imaging, registration, dietary services, same-day surgery, a six operating room surgery suite, central sterile, critical care, and 102 medical / surgical inpatient beds. The nursing home houses 90 beds, with dedicated beds for 12 geropsychiatric patients, 28 rehabilitation patients, and 50 nursing home patients.

Brookville Hospital, Brookville, PA

Burt Hill completed a building evaluation and prepared an on-going planning document, which included the renovation of gero psychiatric ward, endoscopy, pre-care, laboratory, and rehabilitation unit.

Butler Memorial Hospital - Phase III - Main Wing Addition, Butler, PA

Renovation of 69,200 square feet and an addition of 51,100 square feet of space to accommodate the following departments: emergency room, central processing, pharmacy, patient floors, maternity suite (birthing rooms, Csection, nursing, post-partum), cardiac care unit, child psychiatric unit, outpatient facilities for nuclear medicine, EEG/EKG departments, and shell space for future expansion.

Meadville Medical Center, Meadville, PA

Psychiatric Unit - The renovations at the Meadville Medical Center included a 10-Bed Adult Psychiatric Unit, an 18-bed Geropsych Unit and required Support Areas. The total area of the two units is 13,400 square feet. The total construction cost is \$350,000.

Medical Office Building - Architectural and engineering services for the design of the new attached 36,600 square foot Medical Office Building.



Saint Francis Hospital, New Castle, PA

Psychiatric Unit - Renovation of 13,000 square feet of existing psychiatric ward and the 220 square foot outpatient psychiatric unit.

Master Planning - Master plan to upgrade and reorganize the entire 193-bed facility. In addition to the interior work a high priority includes exterior landscaping, circulation, and image. The major focus was to convert the former inpatient hospital to a facility that caters to the current outpatient trend.

Outpatient Facilities - Planning, architectural, engineering and interior design services. A strategic master plan has been implemented and a number of the top priority projects have been put in place. Projects completed include: emergency room upgrades, renovation of the psychiatric unit and the creation of satellite facilities for outpatient rehabilitation, physician offices and pediatric physicians offices.

Outpatient Rehabilitation - Conversion of a former liquor store and a Rite-Aid drugstore in a strip mall into an outpatient rehabilitation facility. The facility includes a gym, hand area, therapy rooms, hydrotherapy and support space. Project totaled 4,500 square feet.

The Devereaux Foundation - Brandywine Campus Housing, Devon, PA

Burt Hill designed two housing facilities, 8,000 square feet each with 16 beds for emotionally and mentally disturbed teens. The units will serve as prototype designs for nationwide application and are certified psychiatric hospital units.

UPMC Braddock, Pittsburgh, PA

Original objectives for the replacement of the existing, circa-1950s, surgical facilities at UPMC Braddock was to build a state-of-the-art, community-based facility. The addition incorporates all support services including Phase I and Phase II recovery. A new admissions department and lobby renovation is part of a second phase, completing a total redesign of the outpatient surgery program.

The addition consists of 13,500 square feet with 4,500 square feet of renovations. These areas include:

- Four Operating Rooms
- One Cystoscopic Operating Room
- Equipment
- Decontamination Area
- Anesthesia
- Staff Lounge and Locker Rooms
- Phase I Recovery
- Phase II Recovery

Veteran's Affairs Medical Center - Erie, Erie, PA

Renovation and addition to the Behavioral Health Clinic which includes offices, exam rooms, group rooms, and a mini gym. The clinic finishes are home-like and therapeutic including outside vistas.

FRANCIS MURDOCK PITTS, AIA, FACHA, OAA PRINCIPAL ARCHITECTURE +

EDUCATION

Rensselaer Polytechnic Institute, Bachelor of Architecture, 1976

REGISTRATIONS

Architecture: New York, Massachusetts, Vermont, Connecticut, Pennsylvania, Indiana

PROFESSIONAL AFFILIATIONS

American Institute of Architects, Academy of Architecture for Health American College of Healthcare Architects American Society for Healthcare Engineering Ontario Association of Architects, Canada

PROFILE

Frank is the founding partner and president of architecture+. He has earned a national reputation for his work in the planning and design of behavior al healthcare facilities for special populations, long-term care, and secure in situations. With 25+ years experience with this project type, Frank has been involved in a broader range of behavioral healthcare projects than anyone in North America.

In recognition of his valuable work for the mentally ill and developmentally disabled through his profession, Frank is the current President of The American College of Healthcare Architects. He has also served as President of the AIA's Academy of Architecture for Health and continues to be an active volunteer and contributor to this organization and numerous others committed to the advancement of healthcare architecture. His expertise is regularly solicited by colleagues and providers through out the United States and Canada.

Kings County Medical Center, Brooklyn, New York New 250-bed behavioral health facility.

Massachusetts State Hospital, Worcester, Massachusetts
Programming, planning and design for new freestanding, 320-bed hospital replacing two existing psychiatric centers.

Bronx Psychiatric Center Redevelopment, New York, New York Programming, planning, and design services for the development of a new integrated 500-bed replacement hospital.

Wake County Mental Health Facility, Wake County, North Carolina Expert consultation for new facility with facility based crisis unit, detox, and substance abuse treatment.

Rochester Psychiatric Center, Rochester, New York
New 330-bed adult care facility. Relocate Regional Forensic Unit.

Royal Jubilee Hospital, Vancouver, British Columbia, Canada Provided research, planning and conceptual design assistance for proposed 300-Bed Hospital.

Lakeshore Mental Health Institute, Bolivar, Tennessee Programming and planning for new 175-bed hospital. Western Mental Health Institute, Knoxville, Tennessee Programming and planning for new 250-bed hospital.

Vermont State Hospital, Brattleboro, Rutland and Burlington, Vermont Programming, planning and design for 52 replacement beds at three sites.

Generic Output Specifications, Ontario, Canada Develop programming, planning, performance, and systems standards for mental health facilities throughout the Province of Ontario.

Maine Psychiatric Treatment Center, Portland, Maine Programming study and master plan for new center.

Centre for Addiction and Mental Health, Toronto, Canada Design competition for 1.2 million square foot replacement hospital

Central New York Psychiatric Center, Marcy, New York Programming and design for additions and renovations.

New York State Office of Mental Health Prototype for adult residential care centers Statewide

New York State Office of Mental Health

Statewide campus planning program at the following campuses:

- Binghamton PC Bronx PC
- Bronx Children's PC Buffalo PC
- Capital District PC CDPC Children's PC
- Central Islip PC Central NY Forensic
- Elmira PC Harlem Valley PC
- Hudson River PC Kingsboro PC
- Kirby Forensic PC Manhattan PC
- Middletown PC Mid-Hudson Forensic
- Mohawk Valley PC NY Psychiatric Institute
- Pilgrim PC Rochester PC

Kaiser Sunnyside Hospital, Portland, Oregon

Visioning, expert consultation and peer review for 32-bed inpatient psychiatric services in new acute medical hospital.

Beth Israel Medical Center, New York, New York

Design services for the rolling renovation of psychiatric beds. Design services for the conversion of 80 detoxification beds to 80 psychiatric beds.

Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania Planning and design services for 20-bed inpatient psychiatric unit.

QULAITY CONTROL

In addition to physical integration into your healthcare community, every project must also integrate into the client's mission, vision, and business plan. Our integrated design process allows us to simultaneously develop budgeting and scheduling tools integrated with concept designs that present a complete snapshot of the project at any point in time. These "real-time" processes assure the project remains on track with established budget and scheduling targets.

Just as we work interactively with you during the Program Phase during the Discovery Workshops, we also employ an interactive approach to Budget and Schedule control.

Our project management technique is to quickly form an interdisciplinary team to roll up their sleeves and focus on both budget and schedule. This team will include members of the design team, the owner's staff, and estimators. The targets are clear – your budget and your desired occupancy date.

The rules are simple:

The Target Cost and Occupancy Date "must not be exceeded" Only the owner may increase the Target Cost or Schedule

The Target Cost and Schedule team is organized into Component Teams with construction estimators on each team.

- Site
- Structure
- Envelope
- Systems
- Interiors

Estimates are then prepared concurrently with the design and delivered at the same time each design milestone in the schedule is reached. With the Schematic Design, a Schematic Design Estimate is delivered with the Schematic Design documents for owner review. In addition, the owner through assignment of appropriate staff is involved in the details of all design and cost decision. When one component team needs to spend more than the amount allocated, the other component teams collaborate to make offsetting adjustments in their component budgets.

Given the detailed knowledge about the design, products, and procedures required for the project, the same team can then address schedule. Rather than let the schedule play out during the design and construction process, we work interactively to facilitate the schedule discussion in team meetings. This way, conflicts are identified in facilitated conversations to organize before upcoming design and construction phases are active.

Both Target Cost and Target Scheduling maximize communication and the problem seeking and solving abilities of the combined design, cost estimator, and owner team. Projects using this approach are reporting cost under-runs, and on time performance.

Recent years have seen increased industry awareness about Building Information Modeling (BIM), a digital design process that changes design from its historical, document-based process to one driven by intelligent, datarich models. Burt Hill's unique approach to the exploration and adoption of BIM tools has garnered recognition as an industry leader and helps us provide integrated, intelligent, and efficient design solutions. Our emphasis on delivering value through knowledge-driven design practices permits our architects, engineers, and planning professionals to focus on high-value tasks; ultimately offering better value to our clients and enhancing the significance of our work in the built environment.

Leveraging the combined values of 'Design Excellence', intelligent design, analysis and documentation technologies, and 'Lean Design' principles, our clients, and all project-delivery stakeholders, benefit from:

- Improved collaboration and data-sharing between stakeholders
- Early coordination between all design disciplines avoiding costly redesign and construction change orders
- Immediate access to 3-D visualization of design and analysis
- Improved construction cost control
- Enhanced fabrication and construction coordination/scheduling
- Facilities Management and SmartBuilding benefits

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services routine are components of Burt architectural/engineering contracts. Administrative tasks include construction observation, the review and processing of Contractor' shop submittals and RFIs, attendance at bi-weekly project coordination meetings at the site (+additional site visits as required), processing of Contractor's payment applications, tracking the construction schedule, development of punch list, and project closeout. A detailed explanation of these tasks follows. We have provided these services for all of our clients. The intensity of service may range depending upon the client's needs, from periodic inspections to the staffing of a full-time job site office. Our objective is always to provide the client with the best construction value that is in accordance with the control documents, and that is on schedule and budget. Because of Burt Hill's integrated architect/engineer team approach, we offer an excellent capability to understanding and smoothing cross-trade problems on the project, often some of the most vexing to solve.

Burt Hill also offers a wide array of additional project management services beyond basic Construction Administration services, depending upon the wishes of the Client. Some examples of tasks include: Daily or weekly reports of field activities, utility service negotiations, coordination of testing services (hazardous materials, geotechnical e.g.), site logistical planning/coordination, quality verification, warranty oversight – a full list of services is available upon request.

Proximity of the A/E team to the project site during construction is an important consideration to most Clients: Burt Hill's offices are a short 2.5 hour drive on I-79, making the full resources of our firm readily available to Sharpe Hospital – we can attend meetings on short notice for example, or troubleshoot problems in the field quickly during construction, thereby keeping contractors on schedule – we have successfully demonstrated our quick response approach to other West Virginia clients with whom we are currently working: West Virginia University Hospitals (Morgantown) and Wheeling Hospital for example.

Construction Administration Tasks

Burt Hill routinely performs construction administration services as a part of our A/E service contracts. Following is an outline of our preferred approach to construction administration:

Cost Estimates --At the end of the construction document phase, the final detailed estimate of probable construction costs will have been prepared. The construction administrator uses this estimate to evaluate the bids received from potential general contractors (GC). This evaluation facilitates the process of determining low bidder, value of any exclusion, alternates and whether the GC has an adequate understanding of the scope of the project.

Schedule of Values -- The GC is responsible for submitting a schedule of values at the beginning of the construction phase. This reflects the GC's understanding of the scope of the project. Evaluating a GC's understanding of the project scope and value will help the construction administrator identify potential change orders and monitor progress payments.

Progress Meetings -- Once a GC is selected, the construction administrator must communicate openly and freely with the GC throughout the construction process, as the Owner's agent. Regularly scheduled meetings are held with the construction administrator, GC, and client representatives. The progress meetings cover outstanding issues, new issues, work completed since last meeting, work to be completed prior to next meeting, submittal status, RFI status, and assignment of responsibility to the various participants.

Construction Schedule -- The GC is responsible for providing a construction schedule at the beginning of the construction phase. This schedule must be updated prior to each progress meeting. The construction administrator reviews and monitors the schedule for potential conflict and problems areas. The schedule is to be realistic, routinely updated and strictly adhered to by the GC.

Submittals -- The construction administrator will prepare a submittal log identifying all submittals required by the project specifications. As submittals are received from the GC, they are verified against construction documents and comments made as necessary in a timely fashion. The submittal log is updated throughout the construction process.

Change Orders -- The construction administrator is responsible for keeping a detailed paper trail of change orders. Periodic and timely site visits by the construction administrator can prevent many change orders, because potential disputes and RFI's can be handled in a timely fashion, without costly down time or off site preparation of paperwork on the GC's part.

Punchlist -- The punchlist starts, informally, at the outset of the construction phase, as a natural fallout of the progress meetings. As a normal course of business, the GC will begin the punchlist process. Once substantial completion nears, the construction administrator takes over the process, fully detailing each issue that requires resolution.

Close Out -- The formal close-out of a project can be a time consuming and protracted effort, if not managed effectively. Nearing the end of construction, we prepared, for the GC, a "Close Out Form", listing all items required by contract to be submitted by the GC and/or his subcontractors. This form tracks the submission, review, and approval of all items and provides a guide reference for the construction administrator, GC, and Owner.

Commissioning -- The construction administrator can assist the Owner in the interpretation and use of O&M manuals and training of its building engineering staff to aid in the optimal operation of the new facility. In addition, for large-scale projects, we often prepare a CD-ROM disk which contains an interactive database to facilitate obtaining warranty and operational information