



PBK HIGHER EDUCATION

# PERFORMANCE INSPIRED DESIGN

GENERAL QUALIFICATIONS AND PORTFOLIO







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LAMAR STATE COLLEGE-ORANGE MULTI-PURPOSE BUILDING



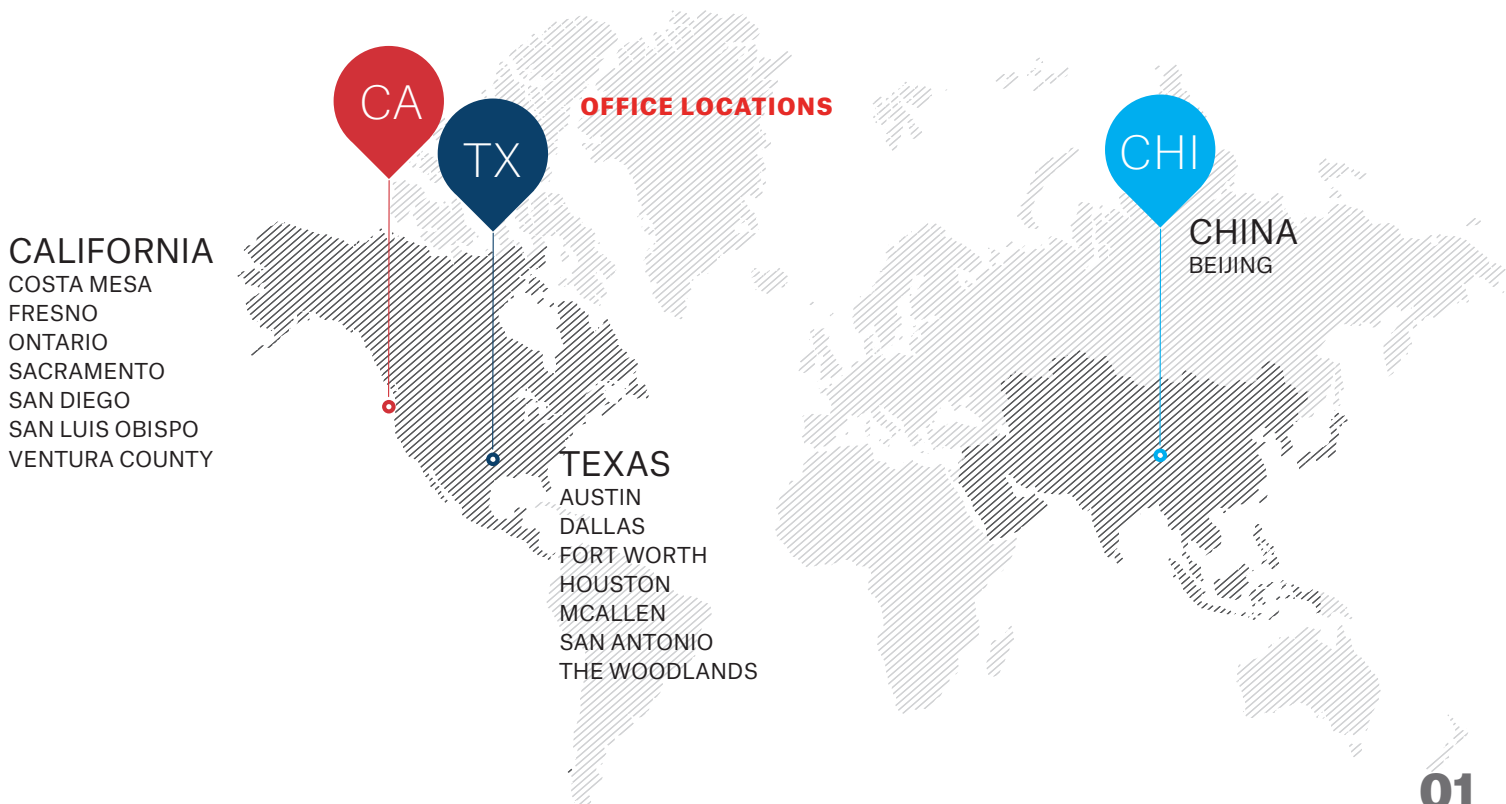


# FIRM SNAPSHOT



Since 1981, PBK has provided educational institutions with a full line of integrated planning and design services related to architecture, engineering, interior design, technology and facilities consulting. The firm consists of a network of 16 offices across Texas, California and China. Each regional office provides dedicated planning and design services for all building types for the firm's educational clients.

PBK employs 500+ planning and design professionals who embody a unique business culture that prioritizes client attention, responsiveness and Next Generation design solutions. The diverse talent of our teammates, combined with the team's highly collaborative design process, enables PBK to provide qualified programmers, planners, architects, engineers, and designers, regardless of building type and/or geographic location.



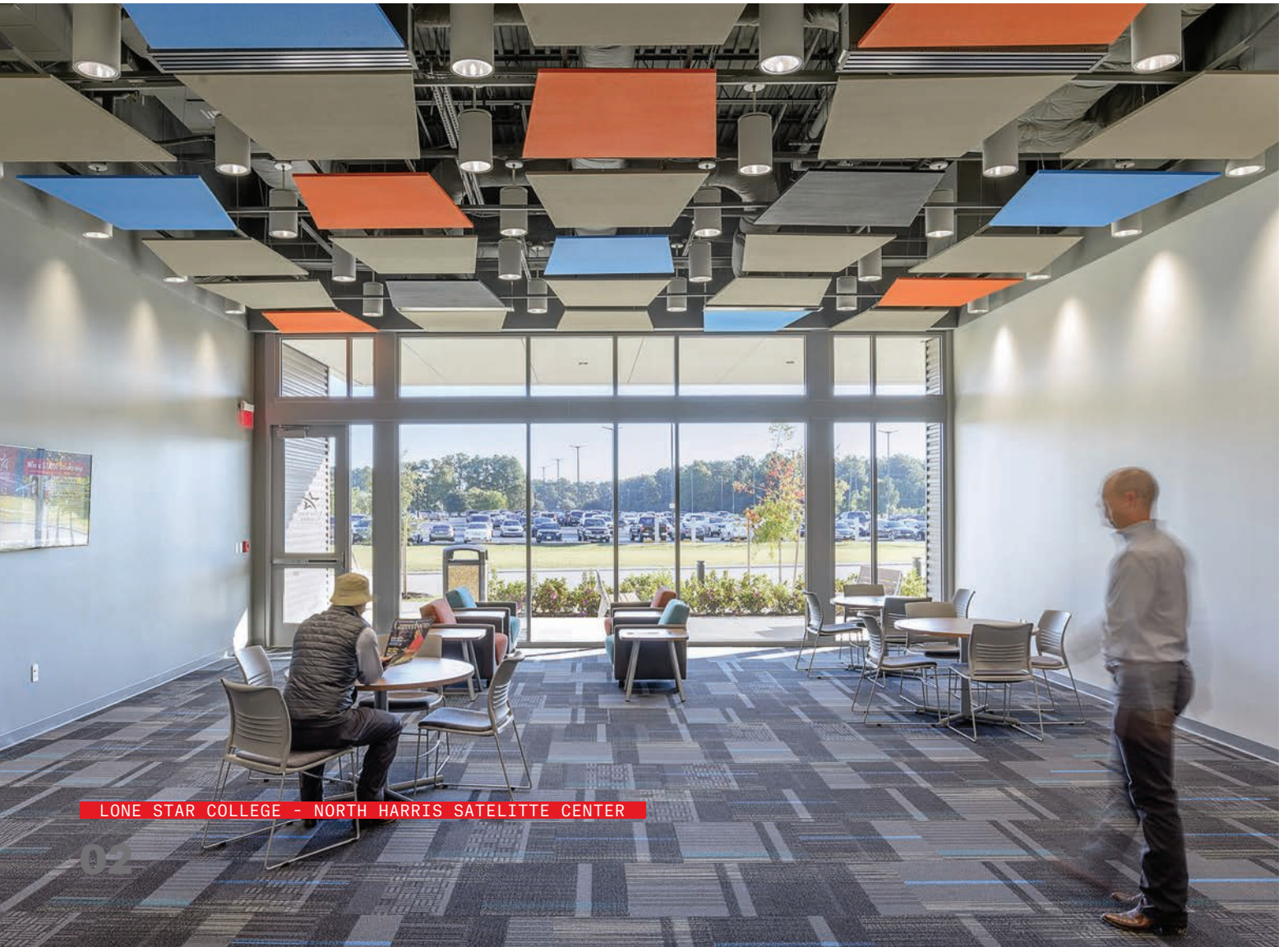


### PERFORMANCE INSPIRED DESIGN

Through unique opportunities and on-going relationships that have evolved from working with a variety of clients in diverse industries, we are committed to creating performance inspired design solutions that make a positive impact on people's lives and embrace sustainable design, innovation and building performance. Each project is approached individually, without preconceptions, and designed to accommodate the needs and objectives for each client we serve, always with the goal of achieving design excellence. We listen carefully to the client's needs, to articulate existing variables, and to use the potential of those variables to arrive at the appropriate design solution. We believe that truly listening to clients and responding to their needs – instead of to our own preconceptions – leads to performance inspired design.



Texas A&M University - McAllen Campus



LONE STAR COLLEGE - NORTH HARRIS SATELLITE CENTER



### METHODOLOGY

Our team approaches each design challenge as a unique opportunity to create attractive, functional environments that embrace the values, culture and budget specific to each program and institution. Collaborative on-site workshops with the University and stakeholders allow the design team to understand the culture, traditions and needs of the students, faculty, staff, facilities and maintenance issues. These important charrette-style workshops will provide us with a stronger design approach as we modify the building form and systems to reflect the vision, goals and objectives of the project. This approach is proven to be a very effective collaborative and consensus tool that validates the program and specific needs of the stakeholders.

Our team encourages the free exchange of ideas. We firmly believe a project's success is dependent upon the abilities of everyone involved to maintain a respectful and collaborative working environment. Projects thrive when a working group is dedicated to work continuously with the planning and design team in developing project knowledge and understanding of the basis of decisions. This group should include six to ten people, faculty and staff, facilities staff, students and representatives of the University. A university representative provides a convenient and consistent point-of-contact with the institution for our design team.

### INTEGRATING INSTITUTIONAL STANDARDS

Our design team has experience working with a diverse range of institutional standards for leading colleges and universities throughout the State of Texas. The standards vary at each institution, but the overall main goal is the same, to ensure a constant level of quality across campus.

We understand your University's standards and guidelines and how to incorporate them into a project. In order for our team to meet these standards we need to accomplish the following:

- Thoroughly review the standards and confirm questions with appropriate staff, if we have any.
- Produce comprehensive drawing packages at each phase, and allow for ample review time from the university's staff.
- Create a thorough response to the review comments from the university.
- Continuous review of the standards at each phase of design to assure compliance with the standards.

Our past experience and the stakeholders' knowledge will provide a groundwork for us to build upon during the process of the project.

*Our vast resources and holistic approach springs from the broad array of interconnected disciplines within our firm. Our offices are staffed with the expertise of the nation's top specialists in next generation learning environments.*



Mandarin Immersion Magnet School



## PROFESSIONAL CULTURE

The cornerstone of PBK's business philosophy can be summed up in three words: unparalleled customer service. Every aspect of our firm - from selection of personnel, to construction administration services - is strategically aligned to respond to the specific needs of our clients. Regardless of building type and/or geographic location, PBK ensures a world-class level of service to each client we serve and is delivered consistently throughout each encounter.



The West Houston Institute

## WE ARE A "FIRM WITHOUT WALLS"

PBK takes a "firm without walls" approach to every project and uses our depth of resources and unmatched experience to provide our clients with the best final product. To accomplish this, PBK fosters close coordination with all local consultants in the design process and throughout all project phases. The firm has advanced technological capability and virtual tools that allow all team members to easily communicate ideas and input in every meeting. This technology includes latest project management technology including interactive video-conferencing, Newforma, and a cloud-based platform for meetings and document exchanges. The PBK team can also interconnect through our comprehensive project website platform that is secure and easy to navigate, which increases utilization by our consultants and clients. The result of this overall approach enables us to ensure that our client's objectives are incorporated into the final product and completed in the most timely and efficient manner possible.



**HIGHER EDUCATION FOCUS**

PBK has been designing institutions for higher education, both public and private, for more than 39 years and is well equipped to work with the diversity of educational systems found across the nation, be they for Tier 1 State universities, private colleges, or community colleges. Wherever we work, we are committed to the design of learning environments of the very highest standards, taking the best from modern teaching/learning standards and translating ethos and vision into applicable setting.

PBK brings a powerful combination of higher education design expertise – we understand local building procedures and possess an intimate knowledge of how to successfully execute complex Higher Education projects. Our unique team approach coupled with our signature design process are consistently leveraged to guide the optimal creation, modernization, addition, or retrofit of a building to best express our client’s mission and values. Whatever the scope, one single point of contact manages all our planning and design resources for each client we serve.



Collin College Public Safety Building

PBK has completed literally thousands of projects, of every size and scope, over the last three decades. In doing so, the firm has become acutely knowledgeable of planning and design solutions for practically every type of higher education project. Below is an abbreviated list of recent clients:

- Alamo Colleges–Kingsville
- Angelo State University
- Baylor University
- Blinn College
- California Baptist University
- Central Louisiana Technical Community College - Huey P. Long Campus
- Central Texas College
- College of the Mainland
- Collin College
- Criswell College
- Delgado Community College - Sidney Collier Campus
- Fletcher Technical Community College
- Houston Community College
- Howard Payne University
- Howard Payne University New Braunfels
- Lamar Institute of Technology
- Lamar State College–Orange
- Laredo Community College
- Lee College
- Lone Star College System
- MiraCosta College
- Northshore Technical Community College - Florida Parishes Campus
- Northwest Louisiana Technical College - Minden Campus
- Northwood University
- Prairie View A&M University
- Rancho Santiago Community College
- Rice University
- River Parishes Community College
- Sam Houston State University
- San Jacinto College District
- Santa Monica College South Texas College
- Southern Methodist University
- Southwestern University
- SOWELA Technical Community College
- St. Mary’s University
- State Center Community College District
- Sul Ross State University
- Tarrant County College District
- Texas A&M University
- Texas A&M University–Commerce
- Texas A&M University–Corpus Christi
- Texas A&M University–Kingsville
- Texas A&M University–McAllen
- Texas A&M University–San Antonio
- Texas Southern University
- Texas Southmost College
- Texas State Technical College Harlingen
- Texas State Technical College Fort Bend
- Texas State University
- The University of Texas at Austin
- The University of Texas at Brownsville
- The University of Texas–Pan American
- The University of Texas Health Science Center at Houston
- The University of Texas at San Antonio
- University of Houston
- University of Houston–Clear Lake
- University of Houston–Clear Lake Pearland Campus
- University of Houston–Downtown
- University of Houston–Victoria
- University of Mary Hardin–Baylor
- University of North Texas
- West Texas A&M University





## ARCHITECTURAL DESIGN

PBK incorporates architectural design as both an art and a science. We are concerned about the craft of putting buildings together, combining form and function that align with programmatic and financial requirements with an overriding focus of achieving design excellence. A client's mission is a forceful determinant of building form, and building organization should grow directly from patterns of use. A building can and should express the values and aspirations of its users. At PBK, design is not an abstract exercise in combining shapes, forms, and materials. It's a problem-solving effort for people.

- Conceptual Design
- Schematic Design
- Stacking Diagrams
- Departmental Adjacencies
- Building Code Analysis
- Agency Review and Approvals
- Design Development
- Construction Documents
- Construction Observation
- Bidding & Negotiations
- Existing Building Survey
- 3-Dimensional Renderings
- 3-Dimensional Animations
- Models
- Cost Estimating
- Existing Site Survey
- Zoning/Public Agency Representation
- Phased Expansion Planning
- Urban Design
- Site Design



## INTERIORS

- Space Planning
- Interior Design
- Pre-lease Services
- Workplace Strategies
- Design Standards
- Furniture Planning, Design, Guidelines and Standards
- Lighting and Fixture Design
- Artwork Program Branding, Signage and Graphic Design
- Cost Analysis

## PLANNING

- Long Range Master Planning
- Conceptual Master Planning
- Environmental Conservation
- Ecological Asset Management
- Campus Planning
- Feasibility Studies
- Land Development Planning
- Land Use Analysis
- Land Use Planning
- Site Analysis
- Site Selection
- Site Planning
- Site Design
- Strategic Development Planning
- Safety and Security Planning
- Alternate Funding Resources



TEXAS STATE TECHNICAL CENTER - BRAZOS CENTER





**MEP ENGINEERING**

Leading Energy-efficient Automated Facilities (LEAF) Engineers provides comprehensive mechanical, electrical and plumbing/fire protection engineering design services to a wide range of clients in diverse industries. From K-12 to higher education and commercial facilities, our engineers focus on optimized system performance, reliability, flexibility and ease of maintenance. Our integrated approach goes beyond the traditional MEP approach by holistically integrating the architectural and building systems design.

- Mechanical
- HVAC Design
- Chilled Water Systems
- Life-Cycle Cost Analysis
- Demand Control Ventilation
- Hot Water Systems
- Steam Generation & Distribution Systems
- Acoustically-Sensitive Design
- Electrical
- Medium Voltage Distribution
- Photometric Analysis
- Low Impedance Grounding Systems
- Transient Voltage Surge Protection Systems
- Daylight Harvesting
- Plumbing
- Domestic Hot Water Systems
- Storm Water Systems
- Sanitary, Waste and Ventilation Systems
- Gas Distribution Systems
- Water Treatment Systems
- Fire Sprinkler Systems
- Rain Harvesting Systems
- PVS Systems Planning and Analysis



**BUILDING ENVELOPE**

Building Envelope Asset Management (BEAM) Professionals have specialized expertise in roofing, waterproofing, exterior building envelope, and forensic investigation. BEAM has more than 38 years dedicated to providing a high-level of service to a diverse range of educational institutions, and they have a strong reputation for service excellence and delivering viable solutions that are financially responsive.

**Roofing Services**

- Establish a scope of work- roof replacement or maintenance
- Preparation of construction documents
- Pre-proposal and proposal conference
- Review of submittals
- Construction quality assurance
- Final inspection & project closeout
- Storm damage assessment
- Roof management program
- Forensic Investigations
- Destructive core sampling
- Moisture analysis
- Thermal “infrared” analysis
- Wind up-lift resistance analysis
- Drainage evaluations
- Wall cavity investigations
- Digital roof system uplift assessment

**Building Envelope Consulting Services**

- Roof inspection
- Exterior wall / window inspection

**Indoor Air Quality**

- Interior & exterior surveys
- Preparations of remediation & build back documents

## CIVIL ENGINEERING

Drainage Infrastructure and Grading (DIG) Engineers comprises a team of seasoned civil design professionals with expert knowledge of utility and infrastructure design. The company's in-house network of engineers has grown organically over the last 20 + years to provide a sustained level of superior service, thought leadership, and local knowledge. DIG delivers site development and land services that create context-inspired places providing long-term growth and sustainability.



- Land / Site Development
- Feasibility Studies
- Land Planning
- Utility Districts
- Sports & Education
- Storm Water Management
- Detention / Retention
- Storm Sewers
- Storm Water Quality
- Storm Water Pump Stations
- Transportation
- Roads / Paving / Parking
- Special Services
- Feasibility Studies
- Construction Management
- LID (Low Impact Development)
- Facilities & Planning
- Environmental
- Public Works
- Water Production Treatment
- Water Distribution
- Wastewater Treatment & Collection
- Lift Stations
- Hydraulics & Hydrology





# PBK VIZ LAB



- High-end Renderings & Animations
- Interactive Presentations
- Augmented Reality Presentations

## VISUALIZATION SERVICES

PBK proudly introduces our Viz Lab design team – a team of highly talented creatives who utilize smart visualization and modeling technologies to provide dynamic, real-time project visualizations that enable our clients to see life-like images of their projects before construction begins. PBK's Viz Lab team integrates the strategic, conceptual and functional components of facility planning and design that can be applied to any building and space type. The process developed for our visualization services focuses on helping clients achieve a clearer perspective of their project so they can make intelligent, well informed decisions for building character and space utilization.

## PROJECT APPLICATIONS

Beyond the realm of traditional BIM services, the Viz Lab has the capability to produce smart data applications (Apps) that foster enhanced client communications and highly efficient project workflows. With a growing demand for quality, speed of delivery and lower project costs, mobile project Apps provide better workflow processes for improved collaboration between the design and client teams. These tools facilitate information sharing across owners, architects, engineers, interior designers, contractors, facility managers and other project team members. Because each team member can access and share the same data, Viz Lab's mobile Apps assist in uniting design and construction teams into a focused, more unified entity.

## SMART VISUALIZATION SOLUTIONS

### TECHNOLOGY RESEARCH AND DEVELOPMENT: BIM CAVE

Additionally, the Viz Lab will be researching new technologies and developing viable workflows to push the envelope of technology within architectural practice. The first development of this push for new technology is the "BIM CAVE", an acronym for Building Information Modeling Computer-Aided Virtual Environment. The BIM CAVE provides the Viz Lab team with the technology to view Revit, Navisworks, 3ds Max, and unreal models at full scale, and then very quickly become a 'fly on the wall' to view and look for interferences inside walls, above ceilings, etc. The BIM CAVE enables a project team to collaborate in an immersive environment and simulate a variety of scenarios from construction scheduling to project visualization.

### ONLINE EXAMPLE ANIMATIONS



ZHENGZHOU AIRPORT NORTH MASTER PLAN



<https://www.youtube.com/watch?v=O-QP1HUzJn4>



ARSU MASTER PLAN



<https://youtu.be/roYFXyB0-g>



# ARCHER COLLEGE OF HEALTH AND HUMAN SERVICES

ANGELO STATE UNIVERSITY









# HIGHER EDUCATION CENTER

TEXAS A&M UNIVERSITY-MCALLEN









# PETROCHEMICAL AND ADVANCED TECHNOLOGY CENTER

LAMAR INSTITUTE OF TECHNOLOGY



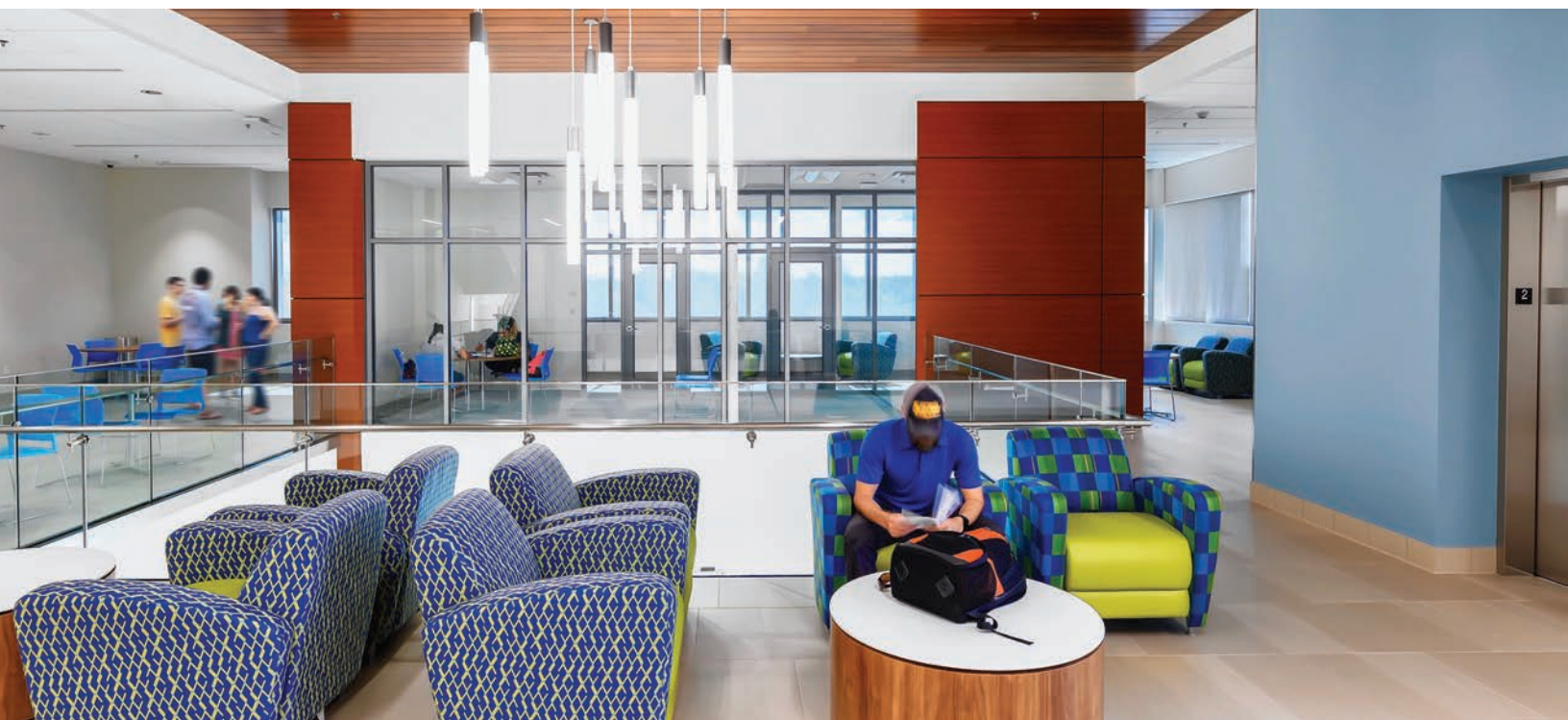






# HEALTH SCIENCES AND CLASSROOM BUILDING

UNIVERSITY OF HOUSTON-CLEAR LAKE PEARLAND CAMPUS









# STUDENT SERVICES BUILDING

TEXAS A&M UNIVERSITY









# THE WEST HOUSTON INSTITUTE

HOUSTON COMMUNITY COLLEGE









# CREEKSIDE CENTER

LONE STAR COLLEGE SYSTEM









# CONSTRUCTION & SKILLED TRADES TECHNOLOGY CENTER

LONE STAR COLLEGE-NORTH HARRIS







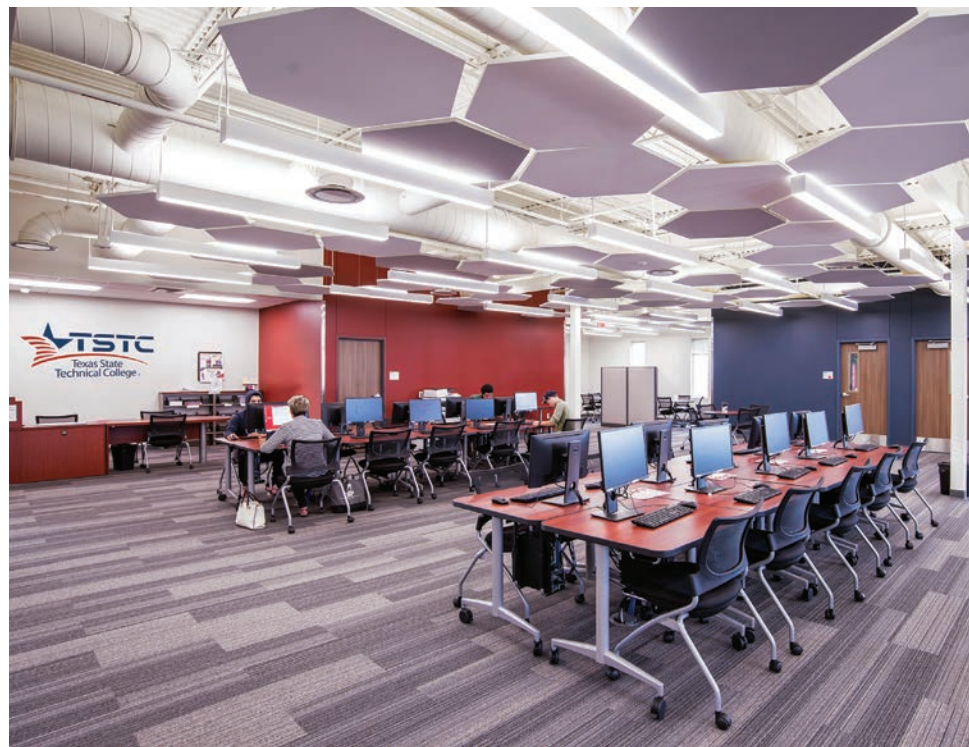


# INDUSTRIAL TECHNOLOGY CENTER & BRAZOS CENTER

TEXAS STATE TECHNICAL COLLEGE - FORT BEND









# J. MICHAEL & BRIDGET SHAHAN EVENTS CENTER AND NURSING & CLASSROOM BUILDING

LAMAR STATE COLLEGE-ORANGE















## SUSTAINABLE DESIGN



PBK strives to make every design environmentally sensitive, continually building on our team’s experience and advancing sustainable design methods and technology to improve the practice of design as a whole. As one of the world’s most influential design firms in educational design, we embrace our responsibility to create a built environment in which human and natural systems can thrive.

Sustainable school design can be achieved with minimal or no cost increase through using a focus on high-value design. Our holistic approach to sustainability goes beyond design and creates institutions that provide students, faculty, staff and community members with a space that celebrates learning and collaboration while fostering ethical relationships between people and the natural systems that support them.

“Design Excellence” at PBK is defined by a project’s success at achieving the following outcomes:

- Creating short- and long-term value for owners
- Expressing aesthetic intent simply and elegantly
- Responding well to the local climate, site and surroundings
- Using materials responsibly and creatively
- Demonstrating stewardship for natural resources
- Fostering community, connectivity and a healthy environment for occupants



*PBK believes that “High Performance Campuses” or “Green Building Design” does not require an application or the cost of certifications.*

*Campus projects can achieve a considerable amount of “High Performance” and “Green” components with minimum or no cost increases.*



Every higher education project for PBK goes through the LEED checklist process regardless if the client decides to proceed with the formal process or not. We believe that all of our buildings should be designed to LEED standards. Robert Bruce, LEED AP BD+C, joined the studio to lead this effort for all PBK higher education projects. The PBK higher education team currently has LEED accreditation for over 20 projects in the past 10 years.





- AUSTIN
- BEIJING
- DALLAS
- FORT WORTH
- FRESNO
- HOUSTON
- ONTARIO
- ORANGE COUNTY
- RIO GRANDE VALLEY
- SACRAMENTO
- SAN ANTONIO
- SAN DIEGO
- SAN LUIS OBISPO
- THE WOODLANDS
- VENTURA

PBK FAMILY OF COMPANIES

