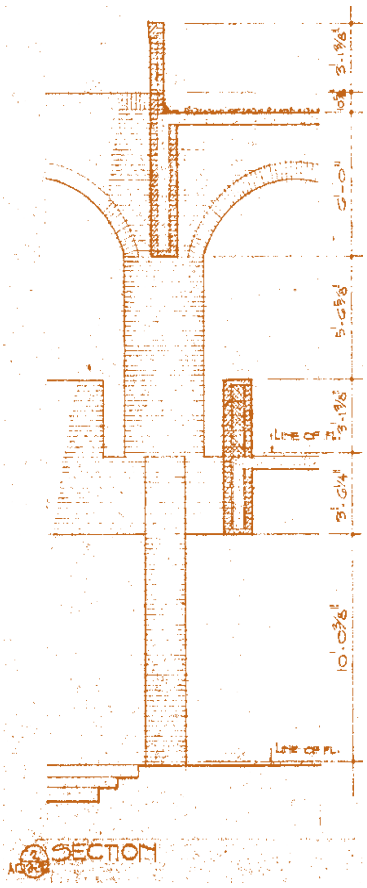
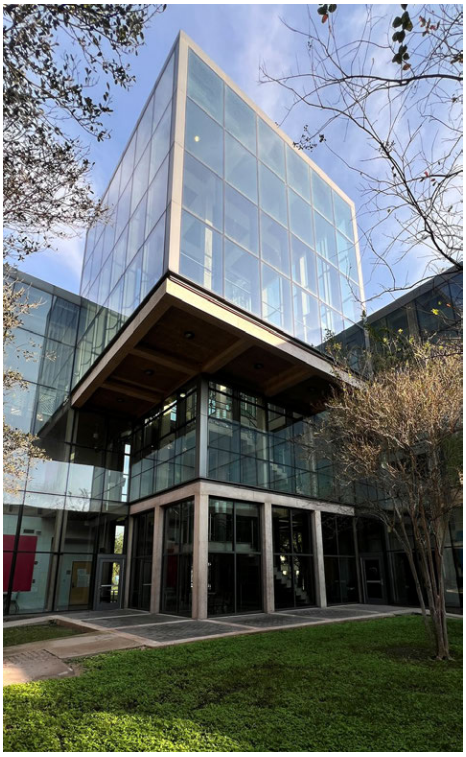
Operations Planning & Construction





Owner Design Guidelines

University of Texas Rio Grande Valley

Spring 2026

Final Draft – 01.30.2026

Contents

Section 1: Introduction & Overview

EEDUC Building C Courtyard

The UTRGV OP&C Owners Design Guidelines are intended as guidance for the project Architect/Engineer team and the Contractor team during the planning, design, and construction processes for The University of Texas Rio Grande Valley Capital Improvement Projects and Institutionally Managed Renovation & Construction Projects.

This document also covers specific design criteria, design processes, and administrative processes for permanent buildings on UTRGV Campuses, renovations of buildings on UTRGV campuses, and renovations in leased spaces. The focus of the document will be the core room type categories - Classroom, Laboratory, Office, Study, Health Care, and Residential Facilities. The chart which follows outlines the topics, organized by room type categories developed by the Texas Higher Education Coordinating Board.

The mission and vision guiding each project are centered on enhancing the UTRGV built environment by providing thoughtfully designed, high-performance instructional facilities that meet the academic needs of students and departments while remaining fully aligned with the University's Mission, Vision, and Strategic Plan. Each building shall represent a state-of-the-art learning environment, integrating innovative technologies and design strategies befitting a dynamic, modern university positioned for growth in the 21st century.

These guidelines constitute a required framework governing the planning, development, and delivery of new construction and renovation projects at UTRGV. During the preliminary planning phase, when institutional stakeholders evaluate potential facility needs, these guidelines provide authoritative direction regarding expected scale, functional performance, and spatial requirements. As project concepts advance, UTRGV Planning & Construction shall refine these

guidelines to adjust to the various programmatic needs of UTRGV projects, establish gross square footage, and prepare preliminary budget estimates consistent with University standards.

Upon formal project authorization, these guidelines become the governing reference for P&C and any external consultants in the development of programming documentation and subsequent design deliverables. This document establishes the minimum design standards and planning metrics for defined room types and serves as the technical framework for preliminary planning, spatial sizing, and cost estimation applicable to both new construction and renovation of existing facilities. Collectively, these guidelines ensure compliance, consistency, and alignment with UTRGV's established policies and expectations throughout all phases of facility planning and design.

These Campus Design Guidelines shall serve as a continuously updated document, amended as necessary by the University to ensure alignment and relevance with current policies, regulations, campus design trends, technology, and campus planning priorities.

Terms and Definitions

Listed below are terms and definitions frequently used in this document:

Abbreviations

UTRGV – The University of Texas Rio Grande Valley

ODG – Owner's Design Guidelines; This Reference Document

A/E – Project Architect / Engineer; the Project Principal Project Consultant, the Project Design Team

ADA - Americans with Disabilities Act

AFF - Above Finish Floor

ASF - Assignable Square Feet

CFCI – Contractor-Furnished, Contractor-Installed

CIP – Capital Improvement Project; University Projects in excess of $10M

GFCI - Ground Fault Circuit Interrupter

GSF - Gross Square Feet

HVAC - Heating, Ventilation and Air Conditioning

IM/IMP- Institutionally Managed Projects; University Projects less than $10M

MAX/MIN - Maximum/Minimum

MEP NASF - Mechanical, Electrical and Plumbing

NO - Number

OCP – UT System Office of Capital Projects

OFCI – Owner-Furnished, Contractor-Installed

OFOI - Owner-Furnished, Owner-Installed

OPC - UTRGV Office of Planning & Construction

OPR - Owners Project Representative

PM – UTRGV Project Manager

QTY - Quantity

RGV – Rio Grande Valley

RM - Room

THECB - Texas Higher Education Coordinating Board

Definitions

Assignable Square Feet (ASF) - The usable area or area within the inside face of the interior walls of each space Gross Square Feet

Gross Square Feet (GSF) The area within the outside face of the exterior walls of the building which includes assignable square feet, non-assignable square feet, building service area, circulation area, mechanical area, and structural area

Non-Assignable Square Feet (NASF) - Areas such as mechanical space, telecommunication closets, janitor closets, etc., which are an inherent part of the building, but are not usable space for the owner's program activities (includes building service, circulation, and mechanical areas)

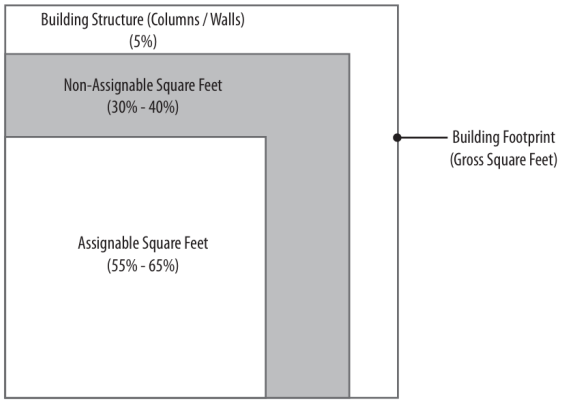
Structural Area - The sum of all areas on all floors that can not be occupied or put to use because of structural building features

Technical Requirements - Mechanical, electrical, and plumbing (mep) and other physical, technical, or building construction requirements

Assignable vs. Gross Square Feet

The diagram below depicts area sizes in Assignable Square Feet (ASF) and non-assignable square feet (NASF) unless Gross Square Feet (GSF) is specifically noted. Only the usable area of a given space is included in ASF. It does not include spaces such as lobbies, corridors (except for internal circulation within suites) and other public and support spaces such as mechanical rooms, toilets, stairs, etc. These types of spaces are included in the NASF. The sum of the ASF, NASF and the structural areas is equal to the gross square footage of the building. The distinction between ASF and GSF is an important one, as the ASF is an indicator of the usable area of a space, while the GSF indicates the overall size of the building or project, and is used to develop cost estimates.

In University facilities, the Texas Higher Education Coordinating Board (THECB) recommended ASF to GSF ratios range between 50% and 65%. A typical academic building consisting of classrooms and offices would use a 60% – 65% ASF/GSF ratio. For example, a new building with 10,000 ASF would convert to approximately 15,385 GSF at a 65% ASF/GSF ratio. Laboratory buildings require more MEP infrastructure, so that same 10,000 ASF would convert to approximately 20,000 GSF at 50% ASF/GSF ratio.



Gross Square Feet = Assignable Square Feet + Non-Assignable Square Feet + Building Structure

The THECB recommended NASF/GSF ratios for specific types of spaces are as follows:

- Classrooms and General-Purpose Facilities: 0.60 or greater.
- Office Space: 0.65 or greater.
- Clinical Facilities: 0.50 or greater.
- Diagnostic Support Laboratories: 0.50 or greater.
- Technical Research Buildings: 0.50 or greater.
- The THECB considers Space Usage Efficiency (SUE), with a score of 75 or higher indicating standard classroom and lab utilization
- All projects must avoid creating a campus space surplus, as per 19 Texas Administrative Code § 17.30.

1.1 Operations Planning & Construction

The UTRGV Operations Planning & Construction Department (OPC) is comprised of several units that work together in support of the University's mission to ensure student success under the leadership of the Vice President for Operations Planning and Construction**.**

The **UTRGV Campus Operations Unit** will provide leadership and management for the acquisition, planning, design, and construction of all campus buildings and spaces to create functional and aesthetically enhancing environments that support the University's mission while meeting all regulatory requirements related to the health, safety and welfare of our faculty, staff, students, and visitors.

The OPC team works on renovation, remodeling and new construction projects, and is involved in all aspects of building planning, design and construction, real estate, and space management for all UTRGV owned and leased facilities throughout the Rio Grande Valley.

UTRGV Office of Operations Planning and Construction

Leadership Structure

- VP for Operations Planning and Construction

Planning & Construction

- AVP Planning & Construction
- Sr. Director of Capital Projects
- Sr. Director of Institutional Projects
    - University Architect
- AVP Strategic Space Planning
- Chief Real Estate Officer
- Director of Environmental Health Safety & Risk Management

Campus Facilities Operations

- AVP Campus Facilities Operations
- Director of Facilities Operation Edinburg
- Director of Facilities Operations Brownsville

1.2 Campus Context

UTRGV is a regional institution serving the citizens of the entire Rio Grande Valley with a worldwide academic online presence. Geographically, UTRGV is located at the Southernmost tip of Texas. The Rio Grande Valley consists of four counties at the southern tip of Texas covering 4,885 square miles along the U.S. / Mexico border. The region has enjoyed the benefits as well as the difficulties that come with its location on the border. In June 2013, the governor signed Senate Bill 24, approving the creation of a new University of Texas institution in South Texas henceforth named The University of Texas Rio Grande Valley.

UTRGV combined the physical assets and resources of The University of Texas–Pan American and The University of Texas at Brownsville, as well as established the future UTRGV School of Medicine, and became eligible to receive funding from the Permanent University Fund. Additionally, The University of Texas Board of Regents approved $100 million in funding over the following decade to accelerate the establishment of the new School of Medicine.

The University of Texas Rio Grande Valley (UTRGV) is intentionally designed as a distributed university, meaning it functions across multiple campuses and educational sites spread throughout the Rio Grande Valley rather than being concentrated in a single location. This model allows UTRGV to serve a large, geographically dispersed region while integrating education, research, healthcare, and community engagement across South Texas.

1.3 A Distributed Campus

UTRGV maintains major campuses in Edinburg and Brownsville, with additional academic, research, and clinical sites extending and expanding throughout the Valley. UTRGV has Campus sites at Brownsville, Edinburg, Harlingen, McAllen, Port Isabel, Rio Grande City, and South Padre Island. The UTRGV footprint spans the entire region rather than operating from a single centralized campus. UTRGV spans the full Rio Grande Valley, from Starr County to South Padre Island. The university's "Locations" overview highlights this regional spread and describes it as one of the largest, most geographically distributed university footprints in Texas.

1.4 Purposeful Regional Integration

UTRGV's distributed model is intended to ensure regional unification and strengthen educational access across South Texas. The distributed design model is tied directly to the university's mission: regional equity, access to higher education, economic development, and community engagement.

UTRGV operates two main campus site locations in the Rio Grande Valley Region. The Brownsville site oversees campus operations for Cameron and Willacy Counties, and the Edinburg site oversees campus operations for Hidalgo and Starr counties.

Beyond traditional academic campuses, UTRGV's distributed model includes specialized facilities in Harlingen with clinical education sites for the School of Medicine, South Padre Island with the Coastal Studies Lab for Marine Science, Port Isabel with the Coastal and Environmental Research Campus, and McAllen & Rio Grande City with the UTRGV Administrative Headquarters, UT Health | UTRGV Cancer Center Hospital and Medical Center Campus, and additional teaching and outreach centers

1.5 Unified Institutional Identity

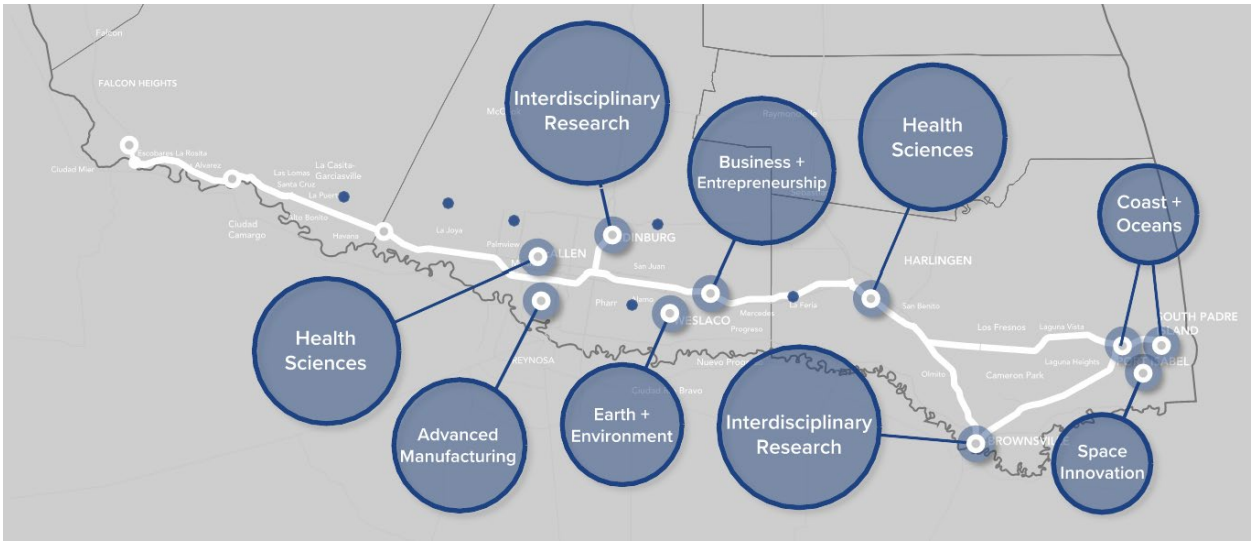
Despite its geographic breadth, UTRGV operates as a single, unified academic institution. Its "one university, many locations" model ensures that students experience a cohesive university identity even though campuses are distributed across the Rio Grande Valley. This unified structure is supported by:

- **One institutional accreditation**
- **A centralized administration and leadership team**
- **A shared mission and strategic plan**
- **Integrated academic programs across all sites**
- **Consistent student services at every location**

This distributed campus model is foundational to UTRGV's identity and mission. It expands educational access across an underserved region, supports the School of Medicine's extensive clinical network, integrates research with local industries and ecosystems, and addresses regional needs in education, healthcare, and workforce development. Most importantly, it brings university resources directly into communities throughout the Valley.

UTRGV's unified, multi-site structure allows it not only to function within the Rio Grande Valley, but to truly serve as the premier university for the entire region. Through the continued development of this distributed campus model, UTRGV will further invest in coordinated planning, shared infrastructure, and cross-campus collaboration, strengthening the systems that unify our locations and ensuring that every student, regardless of where they begin their journey, benefits from the full power, reach, and promise of a truly unified regional serving university, poised to lead the Rio Grande Valley into a brighter, more transformative future.

Section 2: UTRGV – Transformative Values and Strategy



Founded in 2013 as part of a transformative initiative to expand educational opportunities in the Rio Grande Valley, UTRGV was one of the first universities to be established in the 21st century. What had once been two distinct institutions in The University of Texas System became one of the largest Hispanic-Serving Institutions (HSIs) in the nation. Celebrating its 10th anniversary during the 2025-2026 academic year, The University of Texas Rio Grande Valley – UTRGV, is on a mission to transform the Rio Grande Valley, the Americas, and the world. As one of the country's largest Hispanic-Serving Institutions and Seal of Excelencia certified, UTRGV has earned national recognition for its academic excellence, social mobility, and student success since opening on August 31, 2015. V's Up!

2.1 Mission

UTRGV serves the Rio Grande Valley and beyond via an innovative and unique multicultural education dedicated to student access and success. By championing leading research, healthcare, and application of university discoveries, UTRGV supports sustainable development, community engagement, and well-being.

2.2 Vision

Drawing on the unique identity as the leading Hispanic-Serving Institution in a bilingual and bicultural environment, UTRGV will promote student access and success by building from strength in education and creating a vibrant campus experience. UTRGV intends to accelerate transformation in the Rio Grande Valley and beyond by driving meaningful advancements in research and creative works, expanding access to high-quality and affordable healthcare, and fostering authentic community engagement and integration.

2.3 Guiding Principles

UTRGV seeks to expand access to high-value educational programs, critical healthcare services, and cutting-edge research and, by virtue of this broadened access, to foster growth, health, and well-being in communities throughout the Valley.

The UTRGV Guiding Principles are:

- Prioritize student access and success
- Cultivate deep ties with the communities that surround our distributed campuses.

2.4 Strategic Plan

The UTRGV Strategic Plan identifies five focused priorities and two cross-cutting priorities designed to enhance our impact on students and the Rio Grande Valley community, positioning us to become the leading Hispanic-Serving Institution (HSI) in the United States.

- **Focused priorities**—**Academic Excellence**, **Student Access & Success**, **Campus Life**, **Research & Scholarship**, and **Health Education & Patient Care**—represent key areas that will drive our vision forward over the next five years and beyond.
- **Cross-cutting priorities**—**People** and **Community Engagement & Integration**—serve as foundational elements that support and strengthen each of the focused priorities, ensuring the success of our strategic initiatives.
- UTRGV Strategic Plan can be found here: https://www.utrgv.edu/strategic-plan/spsi/index.htm

2.5 Project Mission & Vision

The mission and vision of every UTRGV project is to transform the UTRGV built environment into an academic landscape of possibility that empowers scholars, inspires discovery, and elevates the human experience across the Rio Grande Valley. Each physical space conceived is more than a building; it is a catalyst for transformation, fully aligned with the institution's mission, vision, and the UTRGV Strategic Plan.

UTRGV facilities aspire to embody the future of higher education. They will integrate breakthrough technologies that bring learning and research to life including immersive extended reality environments that dissolve the boundaries between physical and digital worlds, intelligent classrooms that adapt to learners in real time, autonomous building systems that optimize energy and comfort, research cores equipped with precision robotics and advanced analytics, and dynamic telepresence hubs that connect our distributed campuses as if they were a single room.

Every UTRGV project shall be designed around the notion to imagine what the university of tomorrow can be: a place where creativity is amplified, ideas move without friction, and students and faculty are surrounded by tools that broaden access, spark innovation, and accelerate impact. By embedding vision into architecture and infusing emerging technology into every layer of the campus, UTRGV is building an environment where the extraordinary becomes everyday, automatic, and where the academic and research future of the RGV begins. The resulting facilities will be considered state-of-the-art, incorporating advanced technologies to meet the needs of a dynamic and growing 21st-century university.

Section 3: Campus & Architectural Design Standards

EHPE1 Fieldhouse New Atrium Entry

3.1 Campus Architectural Design

The University of Texas Rio Grande Valley features some of the most iconic architectural compositions found in the Rio Grande Valley - works shaped by several of most prolific architects in the region, state and beyond. The UTRGV campus design strategy and architectural language emerge from a deep responsiveness to the local environment, with each campus shaped by its own physical, cultural, and ecological context.

Campus architecture must embody:

- Regional & Cultural heritage
- Climate-appropriate materials
- Strong indoor–outdoor relationships
- Spaces that foster community, collaboration, and cultural expression

Every UTRGV site shall engage its immediate surroundings—its climate, topography, material traditions, and community patterns—resulting in buildings and open spaces that feel authentically rooted in place. This design approach is further enriched by carefully layered historical (where applicable) and contextual references unique to each location, allowing the architecture to both reflect and reinterpret the stories, landscapes, and cultural identities of the Rio Grande Valley.

Campus Site Planning should skillfully incorporate:

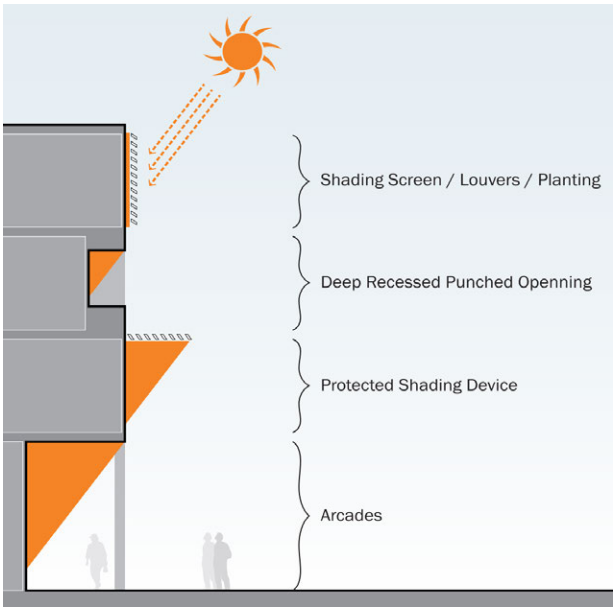
- **Paths**: Make primary pedestrian spines continuous, shaded, and obvious; align sight lines to key nodes.
- **Edges**: Use arcades, loggias, landscape, and building frontages to define the edges of quads and courtyards.
- **Districts**: Give each precinct a distinct but compatible character (materials, landscape, lighting tone).
- **Nodes**: Design intersections as small plazas with seating, trees, and warm, concealed LED lighting.
- **Landmarks**: Reserve “iconic” elements for true campus anchors; ensure visibility and simplicity of form.

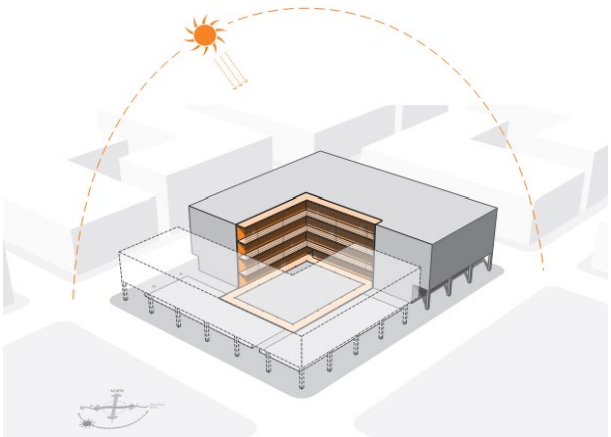
UTRGV Campus Architecture shall strive to honor and advance the legacy established at both the Edinburg and Brownsville campuses, carrying forward their distinct historical, cultural, and architectural identities while maintaining a visionary, forward-looking posture toward the university’s transformational future.

Shading and Sun Control

Effective management and the creative manipulation of shade and sunlight is essential to creating comfortable, resilient, and energy-efficient campus environments across UTRGV’s diverse climatic conditions. Architectural and landscape strategies must work in tandem to reduce heat gain, enhance outdoor usability, and provide daylight-rich interiors that support well-being and academic performance. Shading systems, vegetative canopies, and building massing can work together to temper microclimates, creating cooler, more inviting courtyards, walkways, and gathering areas.

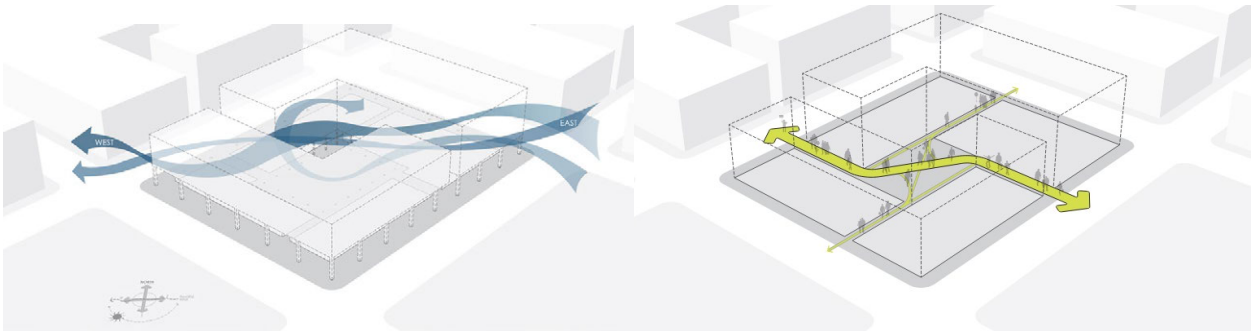
These interventions not only support student comfort and campus vibrancy, but also decrease the reliance on mechanical cooling, advancing long-term sustainability goals. When coordinated deliberately, these principles transform sunlight and shade from environmental challenges into design assets—enhancing the everyday campus experience, supporting resilience, and reflecting UTRGV’s leadership in climate-responsive design.





UTRGV buildings and site designs shall creatively and skillfully integrate:

- Shaded circulation routes, including arcades, breezeways, courtyards, canopies, and covered walkways that enable year-round pedestrian comfort.
- Deep façade shading, achieved through recessed windows, thick masonry walls, overhangs, vertical fins, and brise-soleils sized to respond to solar orientation.
- Climate-responsive massing, where building forms and courtyard layouts are arranged to cast strategic shadows, reduce late-afternoon exposure, and create thermally comfortable gathering spaces.
- Landscape-driven shading, using native, drought-tolerant tree canopies and layered plantings to buffer solar exposure, cool microclimates, and complement built shade structures.
- Balanced passive daylighting systems such as clerestories, light shelves, filtered glazing, and calibrated skylights, ensuring abundant natural light without glare or thermal excess.
- Pedestrian and occupant circulation, mixed uses and central courtyards offering respite from the climatic conditions in South Texas.
- Appropriate massing and scale. Buildings should be designed to reduce their visual scale, remaining approachable to occupants and maintaining a pedestrian oriented experience across the campus fabric.
- Arcades and other means to cover walkways at grade also afford cooler pedestrian zones while creating a human scale at grade level.
- Courtyards as the fundamental structure of the urban fabric embracing a courtyard typology that provides ventilation and daylighting as well as protected open spaces that expand the learning environment beyond the building.
- A clear understanding of all predominant natural site forces and features that would affect the design or the user experience (Prevailing winds, solar orientation, etc.)



3.2 Architectural Design Guidance & Oversight

EPACA Entry Loggia

UTRGV hereby establishes a unified design framework for all new construction, exterior renovations, site improvements, and public-realm enhancements across the Edinburg and Brownsville campuses for the preservation and extension the architectural character shaped by each campus' unique history.

UTRGV campus architecture shall reflect and continue the narrative established by both founding campuses, creating visual cohesion across all future development and reinforcing an identity rooted in the cultural and environmental heritage of the Rio Grande Valley that supports timeless, durable, and climate-responsive design.

To ensure that this legacy is preserved and thoughtfully evolved, UTRGV shall establish and maintain an active ad hoc Architectural Design Guidance Team (ADGT). The informal oversight committee will serve as the university's steward of campus architectural quality, identity, and cohesion. The ADGT reviews all projects that affect the quality and character of the campus, including new buildings and outdoor spaces, exterior renovations, road relocations, public art installations and non-standard exterior signage.

The Architectural Design Guidance Team membership shall include:

- The University Architect
- The AVP of Planning and Construction or an assigned designee(s)
- The AVP of Campus Operations or an assigned designee(s)
- The VP of Operations Planning and Construction or an assigned designee(s)
- Additional project specific membership as assigned by UTRGV Executive Leadership

The Architectural Design Guidance Team responsibilities:

- Provide general guidance, expertise, and oversight of all new building projects, from conceptual design through final documentation, to ensure alignment with established campus architectural guidelines.
- Review renovation, rehabilitation, and exterior modification projects to maintain consistency with campus character, material palettes, massing strategies, and placemaking principles.
- Ensure that campus development supports long-term master planning goals, sustainability commitments, and evolving pedagogical, cultural, and community needs.
- Serve as a cross-disciplinary advisory body, integrating perspectives from architecture, planning, landscape design, engineering, environmental sustainability, historic preservation, and campus operations.

Through this structure, UTRGV reaffirms its commitment to architectural excellence, campus identity, sustainability, and the creation of meaningful, enduring places that serve current and future generations of students, faculty, and the broader Rio Grande Valley community.

The ADGT structure is intended as a living framework, updated periodically to incorporate evolving sustainability practices, support emerging academic and research needs, honor new discoveries in campus heritage or architectural preservation, and ensure UTRGV's architectural catalog continues to exemplify innovation rooted in place.

3.3 Materiality

EHPE1 Fieldhouse Atrium Entry showing material juxtaposition of Brick, Glass, Concrete, Metal, and Landscapes

The primary exterior materials approved for use on all UTRGV buildings include **brick, concrete, glass, metal panels, sustainable/composite/engineered wood & timber, and structural steel** elements. These materials are selected for their durability, long-term performance in the South Texas climate, and their ability to support a cohesive architectural identity across campus. Their use promotes consistency in appearance, simplifies maintenance requirements, and aligns with UTRGV's architectural character and sustainability objectives.

Variations or alternative exterior materials may be considered only when they meet or exceed University standards for performance, compatibility, and aesthetic integration

The exterior material palette used across UTRGV facilities is a critical component in establishing a cohesive architectural identity, ensuring long-term performance, and supporting responsible stewardship of University resources. Exterior materials must reinforce the character of the campus, withstand the environmental conditions of South Texas, and facilitate efficient maintenance over the life of the building.

The following materials shall serve as the baseline exterior materials palette for all UTRGV facilities:

- Brick to match each campus site specifications
- Exposed Concrete (including architectural precast and site-cast elements)
- Glass systems (curtain wall, storefront, punched openings)
- Metal panels (non-reflective, durable, campus-appropriate finishes and colors)
- Structural and Architectural steel elements
- Thermally modified, sustainably forested wood cladding and wood-alternative exterior composites
- These materials have been selected based on demonstrated durability, ease of maintenance, lifecycle performance, and their capacity to create a unified campus aesthetic.



Material Performance Requirements

All exterior materials must meet the following performance expectations:

Durability and Climate Response

- Materials shall be suitable for the heat, humidity, UV exposure, and severe weather patterns typical of South Texas.
- Systems must maintain structural integrity and appearance with reasonable maintenance.

Maintenance and Cleaning

- Materials must demonstrate successful performance in comparable institutional environments subject to similar cleaning frequencies and operational demands.
- Finishes shall resist staining, fading, corrosion, or surface deterioration.

Long-Term Appearance and Compatibility

- Material selections shall complement the architectural context of the campus, supporting a cohesive institutional identity.
- Textures, colors, and patterns shall be consistent with or compatible with existing UTRGV facilities.

Materiality Design Considerations

Aesthetic Cohesion

- **Buildings** should incorporate the primary materials and proportions that reinforce consistency with adjacent campus structures.
- **Glass systems** should balance daylighting objectives with thermal performance and glare control.
- **Masonry and cladding materials** should reflect the established campus palette—such as brick, stone, stucco, or metal panels—while allowing for contemporary interpretations that maintain overall harmony.
- **Color palletes** should be drawn from and adhere to the existing architectural context, using complementary hues and finishes to strengthen visual continuity and reduce thermal absorption where appropriate.
- **Roof forms and materials** should align with adjacent structures, ensuring that slopes, parapet heights, and material types contribute to a unified campus skyline.
- **Structural expression**—such as exposed steel, concrete, or timber—should be used consistently across projects so that visible systems read as intentional and campus-specific rather than stylistically isolated or frivilous.
- **Exterior shading devices** (louvers, fins, canopies) should incorporate materials and proportions that echo surrounding buildings while meeting performance goals for solar control and durability.
- **Hardscape materials**—including pavers, walkways, seat walls, and site furniture—should coordinate with architectural finishes to create a seamless transition between building interiors and outdoor campus spaces.
- **Detailing and trim elements**, such as window frames, handrails, and façade accents, should follow a coordinated design vocabulary that reinforces campus identity and reduces visual clutter.
- **Lighting fixtures and exterior illumination strategies** should use a consistent family of materials and forms to ensure nighttime cohesiveness while supporting safety and energy efficiency.

Culturally Relevant and Appropriate, Iconic & Timeless

- Strengthen campus identity and convey a distinctive, high-quality University image.
- Reflect and support the University's mission and the cultural and regional context.
- Enhance the UTRGV built environment to ensure it is memorable, recognizable, and meaningful.
- Mark important civic moments such as gateways, anchors, and significant architectural parti and view termini.
- Provide durable, timeless focal points that consistently contribute to a unified campus character over time.

Constructability, Reliability & Durability

- **Strictly adhere to the UTRGV Master Specifications**
    - All materials, assemblies, and construction methodologies must follow the University's established specifications to ensure consistency in performance, maintenance expectations, and long-term reliability across campuses. Adherence to these standards minimizes variability and reduces operational risk.
- **Specify proven systems and assemblies effective in similar building types and climatic conditions.**
    - Product selections should be grounded in past performance data, third-party testing, and regional precedents. Preference should be given to systems that have successfully withstood the high heat, intense solar exposure, humidity, and wind loads typical of the Rio Grande Valley.
- **Ensure installations follow best practices for moisture management, thermal performance, and overall envelope integrity.**
    - Detailing must prioritize continuous air and weather barriers, robust flashing strategies, and proper integration of fenestration systems. Assemblies should be designed and installed to prevent bulk water intrusion, vapor entrapment, thermal bridging, and premature material degradation—critical factors for building durability in a hot-humid climate.
- **Emphasize ease of construction and maintainability.**
    - Systems should be selected not only for performance but also for their ease of installation, access, repair, and replacement. Simplified assemblies reduce construction errors, improve quality control, and extend the service life of building components.
- **Promote consistency in materials and technical systems across campus.**
    - Standardizing key components—such as roofing systems, mechanical equipment families, and façade assemblies—supports efficient maintenance operations, reduces spare parts inventories, and simplifies staff training.

Sustainability

- **Select materials based on full lifecycle impacts, including embodied carbon, recyclability, durability, and regional availability**.
    - Material evaluations should consider upstream extraction and manufacturing emissions, transportation distances, potential reuse, and end-of-life pathways. Favor materials with Environmental Product Declarations (EPDs), low embodied carbon options, and those sourced from the region to reduce emissions and support local economies.

- **Prioritize robust, low-maintenance systems that minimize long-term operational and maintenance costs.**
    - Systems should be durable, resilient to local climatic stressors, and selected for longevity. Reducing maintenance frequency and replacement cycles decreases operational expenditures and contributes to the University's sustainability commitments.

- **Integrate high-performance envelope strategies to reduce energy consumption.**
    - Material choices should support thermal resistance, solar control, and airtightness. Assemblies that limit heat gain and improve energy efficiency reduce load demands on mechanical systems and enhance occupant comfort.

- **Support healthy material selections that improve indoor environmental quality.**
    - Whenever possible, specify materials with low VOC emissions, minimal chemical hazards, and certifications such as GREENGUARD or Cradle to Cradle. Healthier material palettes contribute to improved air quality, well-being, and academic performance.

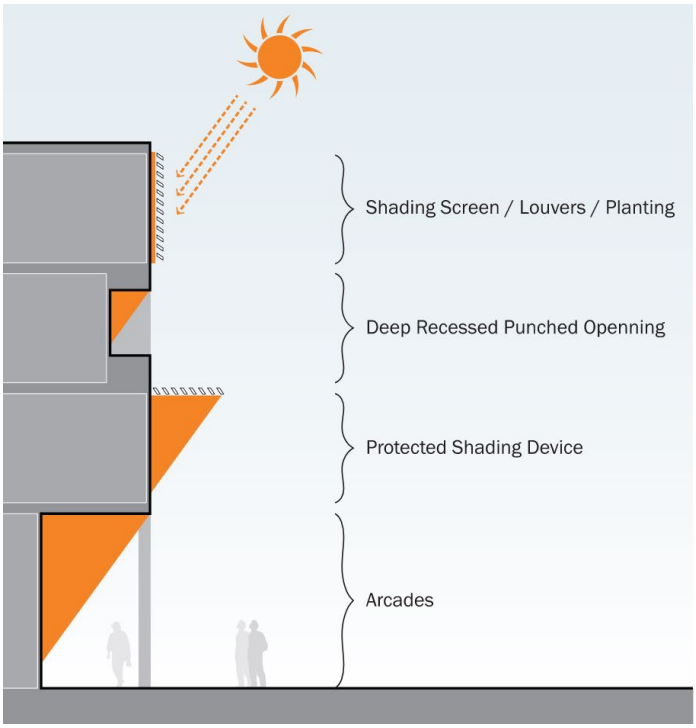
- **Use products and systems that support adaptive re-use and circularity.**
    - Favor materials and assemblies that can be disassembled, repaired, or repurposed over time. Flexible design strategies extend building life and reduce waste generation.

- **Implement procurement strategies that align with campus-wide sustainability goals.**
    - Coordinate material selections with UTRGV's broader carbon reduction, water conservation, and resilience initiatives to ensure new projects contribute meaningfully to institutional sustainability benchmarks.

3.3 Massing and Enclosure

Massing is important to the overall character of the campus. As such, the existing academic buildings are the foundation or precedent from which the new campus will extend. To honor the existing campus massing and create a compact urban campus, buildings should maintain a height of approximately 50 feet. Due to the difference in floor-to-floor heights, this equates to academic buildings of three stories and residential buildings of four or five. Buildings may be taller for landmark developments as determined by the University and in the denser area around the Jackson Street commercial corridor, however the maximum building height is limited to 5 stories above grade. Across the entire campus, the average Floor Area Ratio should be approximately 2.0. It should be noted that this number does not reflect a campus that is two stories in height as the ratio accommodates plot area dedicated

Enclosure design on campus should be based on a parti of solid and opaque surfaces. Designs are encouraged to explore texture, shadow, depth and accent materials to create interest and character. Building facades should respect the existing campus buildings to the extent that they are sensitive and responsive to the historic qualities exhibited without superficial emulation. While there is a wide range of materials available to treat facades, brick is expected for all primary facades and facades that face major circulation routes. Above all, building enclosures at each individual plot must adhere to the recommended performance metrics in order to meet or exceed the overall performance goals of the campus. This includes 100% shading of all glazing elements as well as orientation to capture and enhance prevailing winds. Digital modeling is required to demonstrate and optimize building performance. Internal courtyard facades are given more design latitude and are encouraged to be developed in a variety of building materials that express and connect to the functional uses of these spaces.

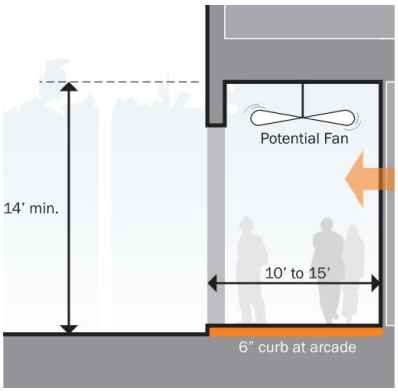


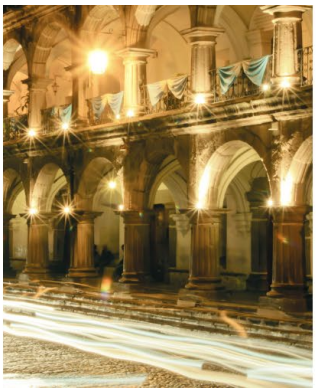
3.4 Arcades & Courtyards

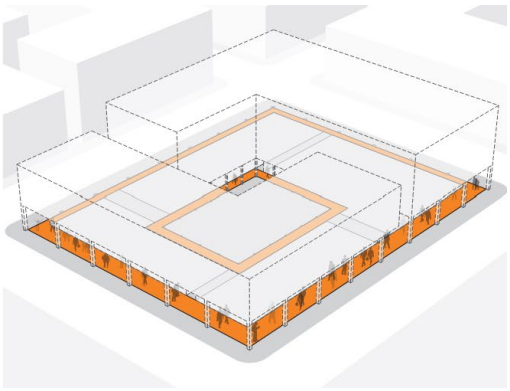
Arcades express a culture and style that connect campus buildings referencing the broader regional building tradition. They provide the campus with shaded and sheltered circulation areas as well as transition zones that blend internal and external spaces.

Arcades reveal the University's students and faculty as they move through their day. Their presence highlights that the campus is an active and lively place and invites the community to participate in campus life. Whenever possible, areas for informal study and gathering should be incorporated into arcades and courtyards to strengthen this sense of engagement.

To maintain ground level usability and ensure appropriate shading for ground level facades, arcades on campus should be 10 to 15 feet in width and at least 12 to 14 feet in height. They should be raised a minimum of 6 inches above the surrounding grade to define and separate arcade circulation from the surrounding grade. Material selection should not be merely decorative but should be designed as structural, load bearing brick or masonry walls or as structural steel.







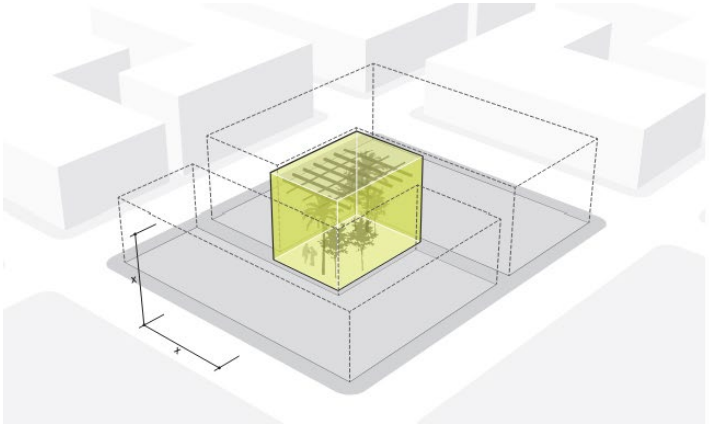
Courtyards mediate between exterior conditions and interior spaces, offering access to intimate and sheltered outdoor environments. They function as extensions of learning spaces, enhance campus amenities, reduce building depth to support naturally lit interiors, and strengthen connections to the broader pedestrian network.

All buildings on campus should embrace a courtyard typology that provides ventilation and daylighting, along with protected open spaces that extend the learning environment beyond the building core. Courtyards offer alternative circulation routes that support movement and accessibility throughout the campus and encourage incidental contact and knowledge exchange among the entire campus community and help reduce the need for air conditioning and artificial lighting in interior corridors and create cooler microclimates around classroom perimeters.

Landscape elements and mechanical shading devices within the courtyard should be used to ensure year round user comfort. To function effectively as habitable outdoor spaces, courtyards should be oriented to capture prevailing winds.

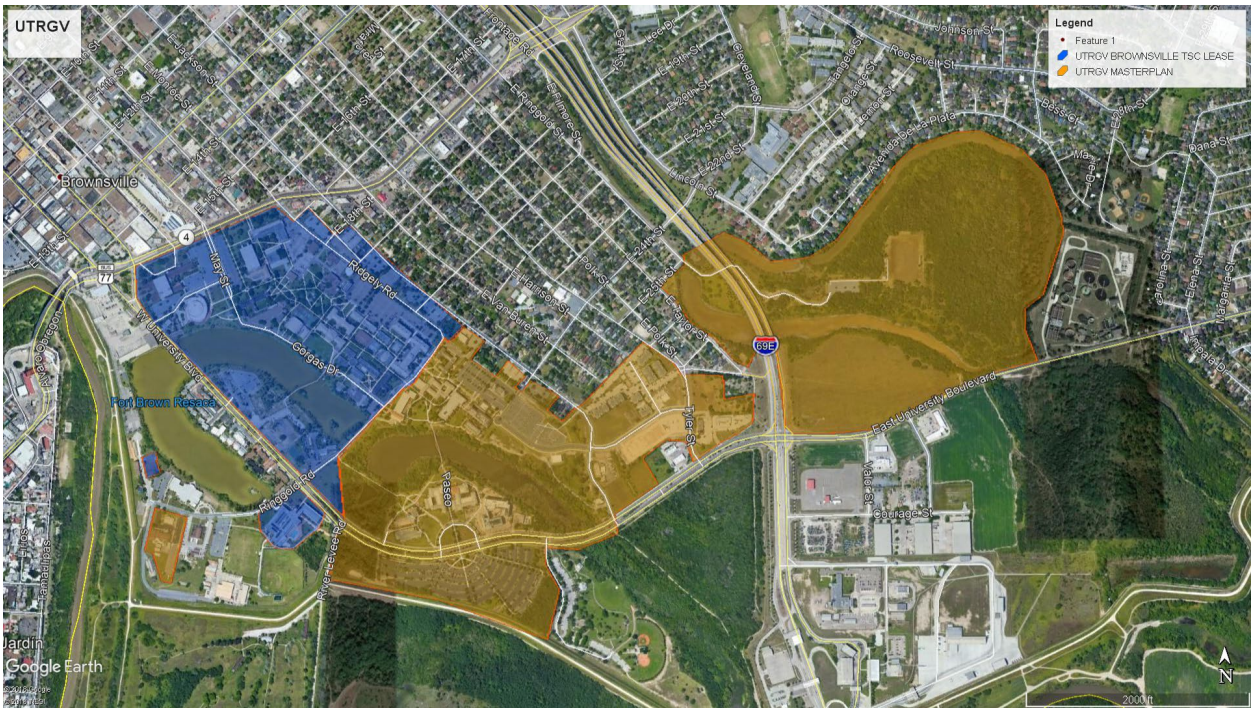
Each courtyard should vary in character and function while still aligning with the overall architectural intent of the campus. As a network of linked outdoor rooms, courtyards imply and reinforce campus connectivity by creating visible and intuitive pathways that relate buildings to

one another and guide movement through the site. Features such as water elements, tropical planting and textured hardscapes should be used to further define and enrich these spaces.



Exterior areas between buildings should also be treated as outdoor courtyards, receiving the same level of care and attention given to interior environments.

3.5 Primary Campus Site – Brownsville



The Brownsville campus comprises a collection of relatively recent buildings whose architectural character is intentionally shaped by the historic influence of adjacent Fort Brown to the north and the urban and cultural fabric of downtown Brownsville. Architectural design elements, masonry massing strategies, and material selections are deliberately calibrated to reference these contexts, creating a subtle yet meaningful continuity between past and present. This intentional alignment reinforces an authentic sense of place and ensures that, as the campus grows, it remains firmly rooted in the region's cultural and architectural heritage.

The campus is further enriched by an extensive network of resaca water features—remnant oxbow channels of the Rio Grande—that provide distinctive beauty, vital habitat, and measurable environmental performance benefits. Functioning as natural cooling assets, the resacas help moderate microclimates through evaporative cooling and enhanced breezeways, contributing to thermal comfort in outdoor spaces and reducing heat-island effects.

Ecologically, they support biodiverse riparian corridors for fish, waterfowl, pollinators, and migratory bird species, while improving stormwater resilience by offering opportunities for detention, water-quality polishing, and sediment capture. These systems also serve as living laboratories for coursework and research in ecology, hydrology, and environmental science, expanding the campus's capacity for field-based learning.

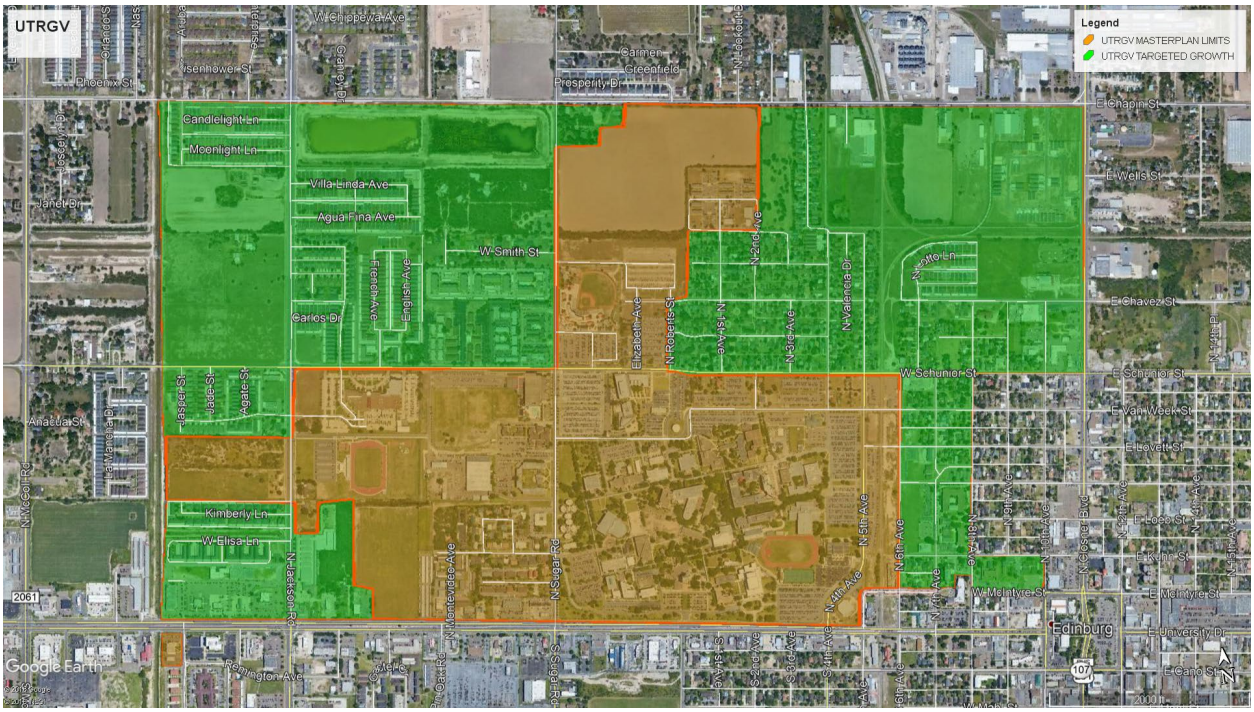
Campus design and stewardship strategies intentionally foreground the resacas as organizing features of the campus landscape. Building orientations and massing protect view corridors and prevailing wind paths; shaded promenades, overlooks, and boardwalks create universally accessible edges; and native riparian plantings stabilize banks, enhance habitat, and reduce maintenance demands.

Integrated green infrastructure and Low-impact lighting and interpretive signage promote safety and environmental literacy while preserving dark-sky conditions and wildlife movement. Together, these measures elevate the resacas from scenic amenities to essential stormwater infrastructure that advances sustainability, learning, and community engagement.

Common Architectural Elements - Brownsville

- Brick – Standard Brownsville Blends in accordance with the UTRGV Master Specifications
- Roman Full Arches to coordinate with the existing campus aesthetic
- Metal Standing Seam Roofs & Masonry Parapets
- Stucco with drainage planes as specified shall be allowed as accents and secondary wall finishes or to match existing conditions
- Ornamental Metal shall be incorporated to match or coordinate with campus aesthetic
- Tower elements and monumental arched gateways shall be incorporated where appropriate to match existing architectural aesthetic
- Traditional Spanish Colonial influence on materials and finishes.

3.6 Primary Campus Site - Edinburg



At Edinburg, the earliest buildings and campus master planning of the 1960s-era Edinburg campus were significantly influenced by renowned Rio Grande Valley architects R. Newell Waters of Weslaco, Texas, and Zeb Rike of McAllen, Texas.

This foundational architectural period would eventually lead to a third architectural era: the Kenneth Bentsen era. Bentsen's arrival introduced a new architectural identity to campus of iconic, innovative, and internationally informed architecture ushering the Rio Grande Valley into a broader and more ambitious and compelling design conversation as noted by the following excerpt from January 1972 publication of The Texas Architect:

"The Fine Arts Center (by Kenneth Bentsen) is the third structure in Phase I of the expansion program at Pan American University in Edinburg. This building reinforces the initial aim of the master plan of creating a total environment indigenous to the South Texas area. The concept, incorporating old and new forms, expresses the three separate functions and groups them around a central plaza. Aside from providing a new home for the University's art, drama and music departments, it is anticipated that the new facility will stimulate interaction between the student and the community resulting in beneficial cultural dialogue." (Source: Texas Architect Magazine, 1971)

Common Architectural Elements - Edinburg

- Brick – Standard Edinburg Blends in accordance with the UTRGV Master Specifications
- Masonry Arches - Eyebrow (EB), Roman Full Arches (RFA), Flat (FL), and Kenneth Bentsen (KB) Arches
    - Existing building repair
    - Expansions of original Kenneth Bentsen buildings, etc.
    - Building Brick Replacement of KB buildings with St. Joe brick
- Cast Stone to Match Existing in Buff, Cream, or Rose colors, etc.
- Masonry Buttresses are dominant masonry details common to the Edinburg campus.
- Shade and Sunlight interplay & management skillfully incorporated into fenestration and exterior designs

EHPE1 Fieldhouse by Kenneth Bentsen 1972 showing 3 stages of brick repair – **1**: Original St. Joe Brick; **2**: First repair, date unknown; **3**: 2026 facade replacement & repair.

EHPE 1 Complex by Kenneth Bentsen 1972

EHPE 1 Complex by Kenneth Bentsen 1972

Covered Walk / Bronc Trail by Kenneth Bentsen 1972

3.7 Satellite Campus Sites

UTRGV Harlingen Campus Site

The Brownsville and Edinburg campuses serve as the foundational architectural style anchors for UTRGV, defining the core design languages and campus identities that should guide and inform the development of all adjacent and satellite sites. These two locations should guide the form, materiality, spatial organization, and aesthetic direction of all adjacent and future UTRGV campus sites to ensure a cohesive institutional identity.

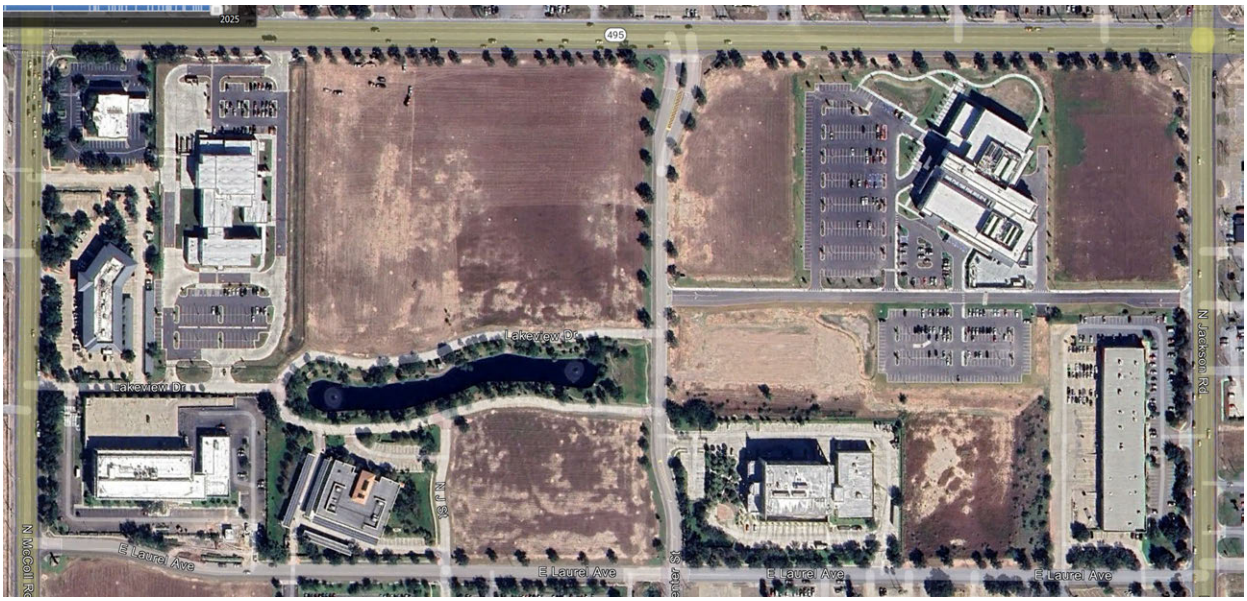
The Architectural Language from each primary campus site should influence the architecture in the relative municipal adjacencies served – Brownville influences, Harlingen, Port Isabel, etc. and Edinburg influences the architecture in McAllen, Pharr, or Rio Grande City, etc. Their established identities, design vocabularies, and spatial frameworks should inform and unify the development of all surrounding and satellite sites within the distributed campus system.

UTRGV HION Building – Harlingen

UTRGV Center for Innovation & Commercialization – Weslaco.

3.8 All Campus Sites

For all projects, new, expanded, or renovated, design teams shall use the architectural and landscape vocabulary of the nearest primary campus as the governing reference. Elements such as scale, massing, proportion, materiality, landscape integration, and contextual response must be derived from these established precedents to ensure a cohesive and consistent identity across the distributed UTRGV system.



UTRGV McAllen | Medical Center Campus Site

UTRGV Port Isabel Campus Site | School of Earth, Environmental and Marine Sciences

3.9 UTRGV Masonry Design Standards

Arches, buttresses, building fenestration, and deliberate masonry massing—along with intricate detailing and the textural variation created by diverse installation techniques—are defining architectural characteristics of UTRGV buildings. Shallow Eyebrow (EB) and Roman Full (RF) arches shall be thoughtfully integrated into new construction in accordance with the UTRGV Arch Guidelines.

Arches at the Edinburg campus shall comply as noted along with the addition of the Kenneth Bentson (KB) building arch vocabulary indicated in Section 3.2 of this guide and further detailed below.

Arches and brick detailing shall draw from the prevailing masonry detailing installed at the Tree of Life Tower area at BLHSB.

Masonry Design Guidelines:

- Do not mix Arch Types (without skillful or restrained design intent to highlight specific architectural details – main entrances, gateways, etc.)
- Maintain Arch Proportionality and Scale
- Arch Height and Width Variations with proportional height and width adaptations are allowed with approval and guidance by the UTRGV Architectural Design Review Committee.
- The UTRGV Campus Arch Standards can be found HERE or VDRIVE

EEDUC Building A

BLHSB Tree of Life Archway

BLHSB Tree of Life Tower Details featuring the Historic Ft. Brown Masonry Detail Influences

ELABN Arched Entry

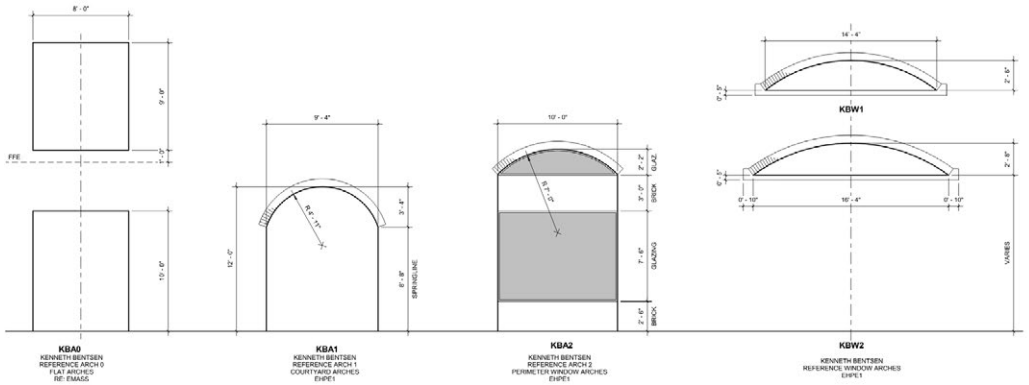



Clockwise from Top Left: ELABN North Facade, BLHSB Arcade, ESSBL Tower Facade, BSTUN Wall Detail.

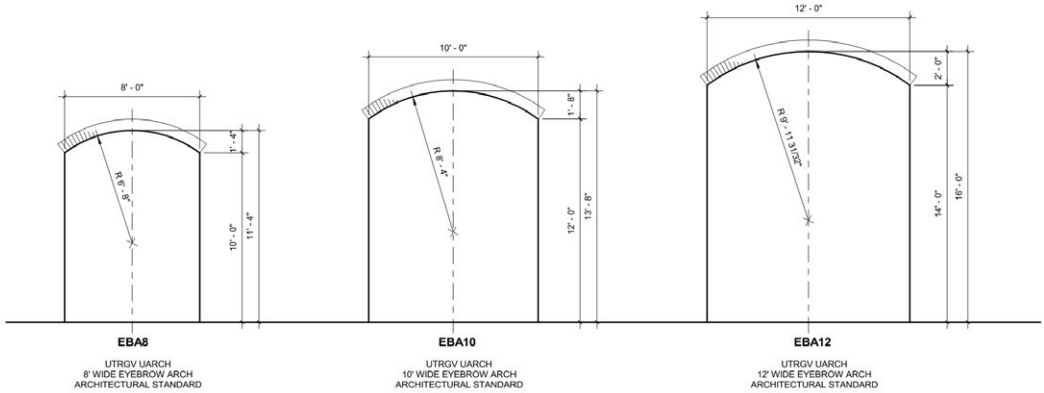
BSTUN Grand Salon Stair Entry


EHPE1 Fieldhouse Lobby Addition

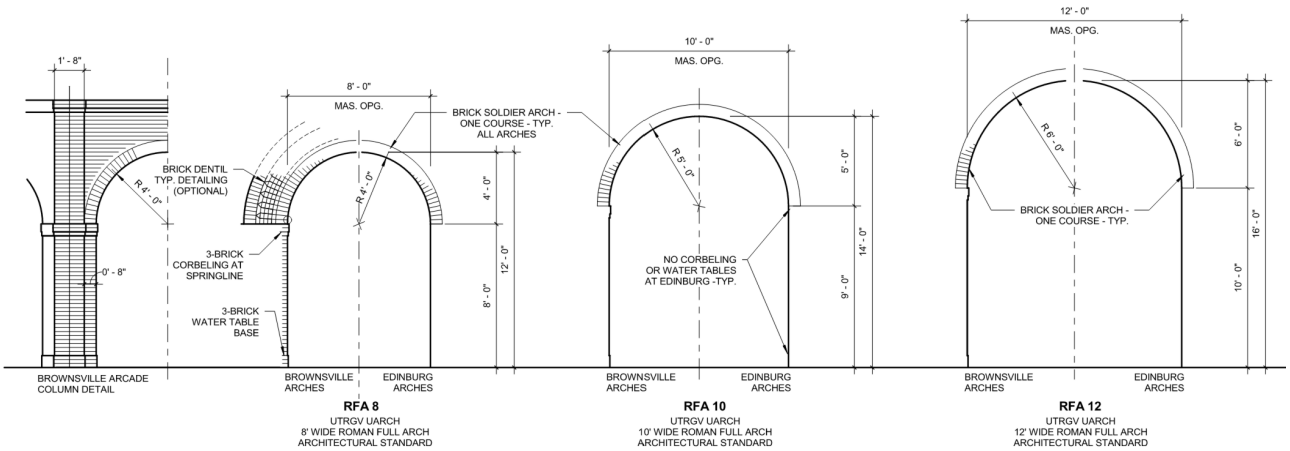
UTRGV Masonry Arch Types:



UTRGV ARCHITECTURAL STANDARDS
CAMPUS ARCHES - EDINBURG TX
KENNETH BENTSEN (KB) ARCHITECTURAL REFERENCE ARCHES



UTRGV ARCHITECTURAL STANDARDS
CAMPUS ARCHES - ALL CAMPUS SITES
EYEBROW ARCHES (EBA)



UTRGV ARCHITECTURAL STANDARDS
CAMPUS ARCHES - ALL CAMPUS SITES
ROMAN FULL ARCHES (RFA)

Section 4: UTRGV Project Programming and Design Phase Review

4.1 Facility Programming

Facility programming is the process of collecting, analyzing, synthesizing and documenting all (or most) of the requirements for a capital improvement project prior to beginning design. The facility program, or architectural program or simply program, is the term used to define the required functions of the project. It should include estimated square footage of each usage type and any other elements that achieve the project goals.

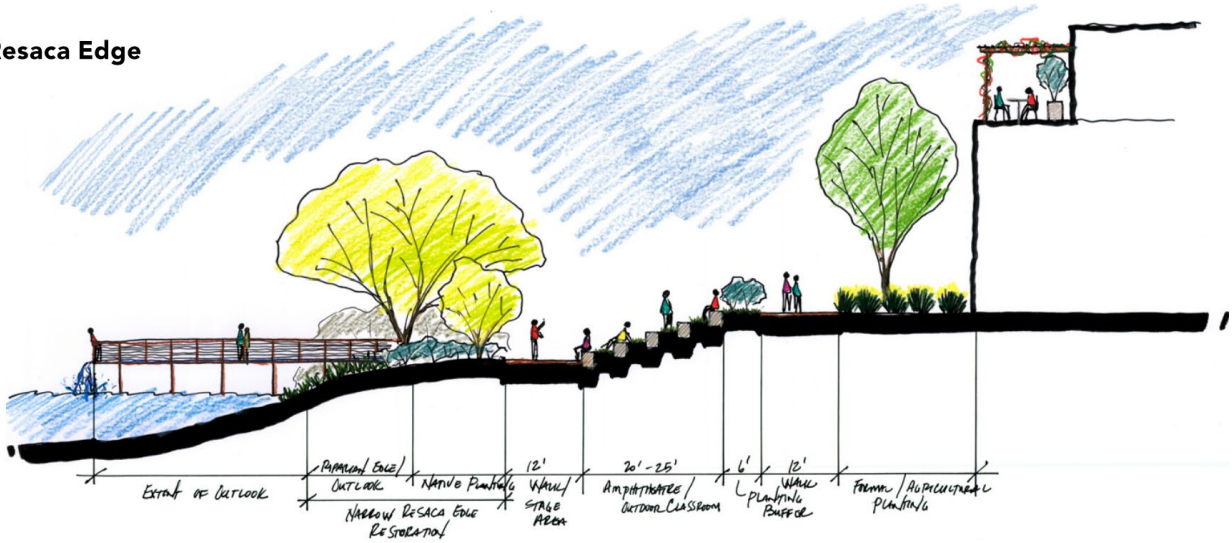
The program contains the information needed to design a project. Facility programs generally do not contain information that defines the need for the project (such as academic requirements), unless this information is needed by the architects and engineers to design the project. The facility program is a road map for the architects and engineers who will design the project intended to minimize deviation from the actual project requirements.

When the programming is complete, the institution will have a program document that communicates the following to key members of the project team:

- Strategic and master planning requirements for the project (A facility program should comply with and expand upon the already approved campus master plan)
- Site selection
- Space and functional relationships
- Determination of the cost and schedule for the project
- Intermediate and final recommendations presented in a clear and succinct manner
- Required expertise for the project team
- Investigation of permit process

- Concerns among all interested parties to the project scope, cost, schedule, risks and plan of execution
- Administrative requirements and concerns in the authorization process.

Resaca Edge



4.2 Facility Programming – Critical Steps

The critical steps to the facility programming process are as follows:

1. A project programming team shall be appointed to provide data and review conclusions.
2. When appropriate or when experienced internal programming staff is not employed by UTRGV, select outside consultants to assist in preparing the program.
3. Prepare a programming schedule of what will occur during the programming process for review and approval by UTRGV OPC.
4. Identify all of the participants that should be involved in the programming process within the institution and UTRGV OPC. Include representatives from user groups, Physical Plant, Business Affairs, EHSRM, Capital Projects, etc. Consider involving the participants in a team building process to facilitate team performance.
5. Document the decision-making process. Identify who is responsible for each action and who has the authority to approve information and make each decision.

4.3 Facility Programming – Program Scope

The facility program shall encompass the following:

1. Space requirements, functional relationships between areas, room sizes, and detailed equipment needs for each room
2. Supporting requirements relating to access, site development, parking, etc.
3. Evaluation and analysis of existing sites and buildings
4. Technical building standards, engineering requirements, and building design criteria
5. Preliminary project budget and schedule
6. Specialized project requirements

4.4 Facility Programming – Schedule

The programming schedule differs from the Project Schedule and deals only with activities that will occur during programming. The length of time required to complete a program is a function of the complexity of the project and the availability of participants to provide information and make decisions. Typically, a facility program can be developed in 3-6 months; complex projects will take longer. The programming process is not linear. Programming functions can be occurring concurrently; interaction, feedback, and iteration are inherent within the process.

The programming schedule should address the following:

- Required Programming Tasks
- Programming Task Responsibilities / Assignments
- Programming Task completion Target Milestones and Dates

The programming schedule shall include:

- Start of Programming
- Key meetings and workshops
- Periods for gathering data
- Site visits
- Presentations

- Review of the draft document
- Delivery of the final document
- Programming Schedule Sample:

Programming Schedule

Task	Assigned to:					Timeline								
	Chair	Committee	Subcommittee	Consultant	OFPC	Weeks 1	2	3	4	5	6	7	8	9
Pre-programming conference with: • UTS OCP (CIP Projects) • Institution • Facility Programmer To review the scope of work and develop this schedule of what needs to be done														
Facility programmer to develop and complete a list of tasks to get to the 1st project review meeting Submit deliverables required for the 1st project review meeting 1st project review meeting at 50% completion of the program *(usually to approve physical requirements and initial interpretation of the analysis)*														
Facility programmer to develop and complete a list of tasks to get to the 2nd project review meeting Submit deliverables required for the 2nd project review meeting 2nd project review meeting at 75% completion of the program *(usually to review a draft program)*														
Facility programmer to develop and complete a list of tasks to get to the 3rd project review meeting Submit deliverables required for the 3rd project review meeting 3rd project review meeting at 95% completion of the program														

The programming schedule should call for at least three project review meetings scheduled at 50%, 75%, and 95% completion intervals. Progress review meetings should occur at least once each month during programming or with increased frequency if the programming takes longer than three months. The development of a staffing and team building plan that outlines the roles and responsibilities of each participant in the project during programming and beyond should also occur.

Successful Programming Strategies:

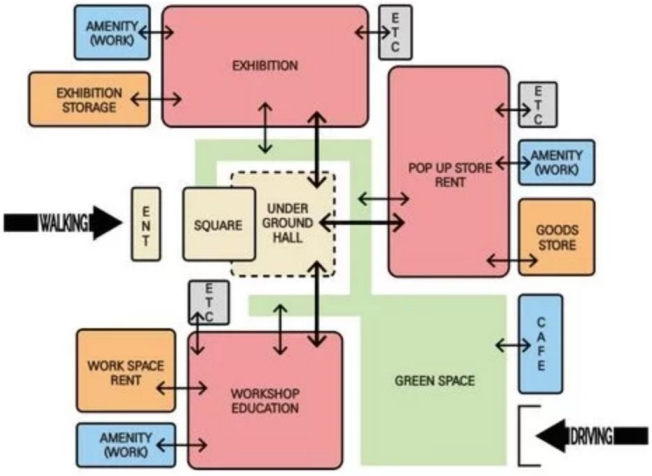
- Responsibility matrices highlighting the tasks and schedule to accomplish major programming activities help retain control of the process
- Provide accurate reporting of budgets and financial viability of the project
- Treat every project as different and in need of programming

4.5 Facility Programming – General Outline

The following outline identifies items that are typically included in a facility program. Each project is unique and shall be thoroughly programmed accordingly guided by this outline. Each facility programmer shall determine which tasks need to be performed during the programming phase. Some items may not be appropriate for all projects and prior to beginning the programming exercise. UTRGV P&C shall confirm which items need to be excluded in the facility program.

Typical Facility Programming Outline:

1. Executive Summary
2. Project Goals & Objectives
3. Programming Schedule
4. Statement of alignment with UTRGV Mission, Vision, Guiding Principles, and Strategic Plan
5. Confirmation of alignment with the appropriate UTRGV Campus Master Plan
6. Description of the programs and curricula to be included in this project
7. Description of the project intent
8. Project outcome objectives
9. Statement of conformance with the State Coordinating Board institutional space model requirements
10. Schedule of spaces / Summary of Spaces / Room Schedules
11. Overall adjacency & space diagrams
12. Programmatic Stacking Diagram
13. Future growth and/or phasing plan



14. Room data sheets to include
    - Space identification/type
    - Space detail
    - Occupancy Type and quantity
    - Functional relationship diagram
    - List of Furnishings and Equipment (FF&E)
    - Room Finish Schedule
    - Networking requirements
    - Security / Special Access issues/requirements
    - EHSRM Requirements
    - Additional requirements
15. Site Studies and Analysis to include:
    - Site Introduction
    - Site Location and Orientation (including climate, prevailing winds and solar angles)
        - Illustrate how the project and its site reinforce the University Master Plan
        - Identify potential synergies with neighboring buildings and open space
    - Site Constraints and Opportunities
        - Visual connections
        - Primary entries
        - Site boundaries, setbacks, build-to lines
        - Location of any easements or setbacks
    - Site Circulation/Connectivity
        - Pedestrian access
        - Vehicular access and parking
        - Service access
        - Emergency vehicle access
    - Site Utilities
        - Locations
        - Tie-in Information & Related Infrastructure Improvements
        - Storm Water Management
        - Landscape Overview
        - Parking Impacts to Existing Parking or Project Special Needs
        - General Building Massing
        - Alternative site studies, if required
        - Description of any known environmental issues that would limit use of the site or necessitate additional project costs such as hazardous waste cleanup
        - Diagram showing intended expansion during future phases, if planned

    - Any other significant site influences
16. Environmental studies and/or safety concerns and considerations
17. Existing Building / Facilities Studies to include:
    - Existing Building Plans, Surveys, and Specifications (Owner Provided)
    - Asbestos Study for all remodel projects requiring demolition
    - Structural Analysis or Assessment
    - Limits of Construction / Scope
    - List of salvaged equipment or items to be reused/protected
    - Existing code violations known or discovered
    - Identification of any temporary or interim facilities required during construction
18. Design Parameters to include the following:
    - Listing of all applicable codes and standards (Refer to the UTRG Master Specifications)
    - List of additional agencies that may have jurisdictional authority over proposed project
    - List of all applicable technical design standards for this project
    - See also Sections 3, 5, 6, 7, 8, 9, 10, 11, & 12 of this document for additional requirements
    - Note that the EHSRM as guided by the State Fire Marshal is the authority having jurisdiction (AHJ) for all issues pertaining to NFPA 101 Life Safety Codes.
    - Include the following references for code compliance:
        - National Fire Protection Association - NFPA 101
        - International Building Code (IBC) - most recent editions adopted by UTS
        - TDLR Texas Accessibility Standards (TAS)
        - FEMA Flood Mapping
        - Additional code compliance references indicated in the UTRGV Master Specifications
19. Preliminary Project Cost
20. Preliminary Project Schedule
21. Project implementation and project delivery and organizational approach
22. Institutional requirements impacting project
23. Acknowledgements, Authorizations, and Sign-Offs
    - Acquire the appropriate format document from UTRGV OPC for this item.

4.6 UTRGV Standard Design Phasing and Review

New construction projects shall follow the UTRGV Standard Design Phasing structure outlined as follows:

1. **UTS Definition Phase**
    - Programming – Re: Section 4.1through 4.4 of this document and as indicated below
    - Determine project goals and requirements
    - Determine the program for the project.
        - The program, or architectural program, is the term used to define the required functions of the project. It should include estimated square footage of each usage type and any other elements that achieve the project goals.
    - Deliverables:
        - Project Programming & Development Guide Document as generated by the Facility programming exercise
        - Rough Order of Magnitude (ROM) construction cost estimate
2. **Schematic Design Phase**
    - Schematic Design is the first phase of architectural and engineering services, developing a diagrammatic representation of the project based on the Facilities Program and collaboration with institutional and user representatives. The Schematic Design (SD) phase establishes the project's fundamental concept and overall design direction in alignment with the Facilities Program and in coordination with UTRGV stakeholders and user representatives. The Architect shall synthesize programmatic requirements, site and code parameters, and University standards to produce a diagrammatic representation that communicates spatial organization, massing, major systems concepts, character, and intent.
        - The SD phase forms the basis for informed decision-making and progression to Design Development.
        - This phase explores and refines conceptual options to produce preliminary floor plans, exterior and interior sketches, outline specifications for materials and finishes, and a narrative of proposed building systems.
    - **Scope of Services by A&E Teams**
        - Confirm and refine program needs, adjacencies, and performance criteria with UTRGV and user groups.
        - Evaluate site opportunities and constraints, access, circulation, utilities, and service requirements.
        - Explore and test **conceptual alternatives**; recommend a preferred direction grounded in life-cycle value, constructability, and schedule alignment.
        - Establish preliminary **building massing**, **spatial organization**, and **systems narratives** (structural, MEPFP, low-voltage/IT, and sustainability strategies).
        - Identify **code and regulatory** considerations affecting scope, schedule, and cost.

- Coordinate with University standards for materials, finishes, systems, and maintainability.

- **Deliverables (Schematic Design Package)**

  Submit a complete SD package suitable for University review and approval at 50%, 75%, and 95% intervals or as directed/established by the UTRGV project review team generally consisting of:

  - Preliminary floor plans illustrating program organization and adjacencies
  - Building massing and exterior design sketches
  - Key interior space sketches to convey character and intent
  - Outline specifications for primary materials and finishes
  - Building systems narrative summarizing structural, MEP, and technology concepts
  - Preliminary code and regulatory considerations (if applicable)
  - Initial site planning diagrams, including access, circulation, and major utilities
  - Preliminary project scope, assumptions, and design narratives

  Drawings & Diagrams

  - **Site planning diagrams**: site plan, access and circulation (pedestrian, service, emergency), parking approach, and major utility points of connection.
  - **Preliminary floor plans**: program organization, key adjacencies, net-to-gross assumptions, and egress concepts.
  - **Building massing studies** and **exterior character sketches** (elevations/perspective views) communicating scale and contextual fit.
  - **Key interior space sketches** illustrating intent for primary program areas and typical public zones.
  - **Preliminary wall sections/diagrammatic details** (as needed) to convey envelope approach and critical interfaces.

  Narratives & Lists

  - Building systems narrative: structural concept; MEPFP basis of design; low-voltage/IT, AV, and security approach; sustainability/energy strategies; and controls integration.
  - Outline specifications for primary systems, materials, and finishes aligned with UTRGV standards and performance criteria.
  - Preliminary code and regulatory summary: occupancy classifications, egress, fire protection, accessibility, and other applicable requirements.
  - Design assumptions and exclusions, including basis for area calculations and grossing factors.

ROM Costs & Schedule

- Preliminary construction cost opinion (order-of-magnitude), organized by major CSI divisions/systems and aligned to the preferred SD option.
- Milestone schedule highlighting SD decision gates, AHJ touchpoints (if any), and long-lead considerations.

Meetings and Reviews

- Project kickoff and program confirmation workshops with UTRGV and user groups.
- Concept alternatives review to compare options (scope, cost, schedule, and qualitative criteria).
- SD midpoint check-in to confirm direction, document standards alignment, and cost tracking.
- Final SD review to present the complete SD package and capture approval actions for progression to DD.
- Meeting minutes and action logs will be issued within two (2) business days of each session.

Coordination Requirements

The Design Team will coordinate:

- Integration of University standards for durability, maintainability, and operations.
- IT/AV/Security infrastructure with UTRGV's technology stakeholders.
- Accessibility and life-safety strategies with code consultants and, as directed, Authorities Having Jurisdiction.
- Sustainability targets (e.g., energy performance, low-maintenance materials), aligning with campus goals and applicable guidelines.
- Campus utilities and infrastructure planning with Facilities and relevant third parties.

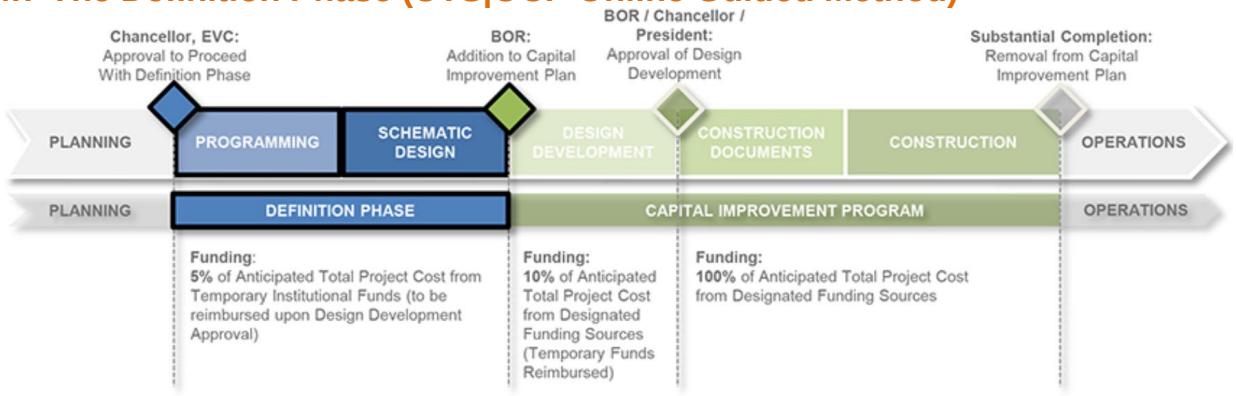
Quality, Documentation, and Format

- Drawings shall be legible at appropriate scales; narratives and outline specifications shall clearly state basis of design, performance criteria, and assumptions.
- The SD package will be submitted as PDF (drawings and narratives) plus native files upon request, consistent with UTRGV submittal protocols and naming conventions.
- All documents will reflect consistent sheet indexing, version control, and page numbering suitable for formal review.

Acceptance and Next Steps

- Upon UTRGV's SD approval, the Architect will update the project cost opinion and schedule to reflect accepted scope and proceed to Design Development in accordance with the approved basis of design, documented assumptions, and action items from the final SD review.
- Additional information and requirements can be found in Section 4.6.7 below.

4.7 The Definition Phase (UTS|OCP Online Guided Method)



Source: https://www.utsystem.edu/sites/capital-project-delivery-guide/funding-and-approval-timeline/definition-phase

The Definition Phase requirements for major new construction and renovation projects address historic trends that minimized early project planning, encouraged excessive contingencies, and resulted in expensive late changes in project scope and budget. Based on recommendations from the Task Force on Facility Planning for the 21st Century, the new requirements incorporate private sector best practices to promote forward-thinking design innovation, pursuit of construction cost economies, and incorporation of maintenance and operational efficiencies. Accordingly, process changes and new requirements were established to:

- Formalize an early planning process involving key stakeholders
- Foster engagement and ownership of the decision making process by the Institutions
- Encourage early investment in project definition and requirements
- Emphasizes communication between planning groups and other stakeholders
- Achieve cost and schedule savings by minimizing changes in projects underway

The Definition Phase is expected to more accurately resolve scope and cost confirmations for the proposed project through the appointment of a Project Advocate, completion of the Owner's Project Requirements, confirmation of the Basis of Design, resolution of the Facilities Program, and a Schematic Design including reconciliation of a detailed cost estimate.

Approval by the appropriate Executive Vice Chancellor and the Chancellor will allow a Major Project to proceed to the Definition Phase. The Definition Phase provides authority for the U. T. System Administration and the institutional administration to expend institutional funds up to 5% of the anticipated total project cost to select the project architect and other consultants, confirm the basis of design, develop the formal Facility Program document, and develop schematic project plans. These funds will be provided by the institution initially but will be reimbursed to the institution from applicable project funds upon design development approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Led by the Project Advocate, the Definition Phase is expected to include the completion of the Owner's Project Requirements workshop, confirmation of the Basis of Design, resolution of the Facilities Program, and completion of Schematic Design. It is further expected that the institutional leadership will establish a comprehensive and rigorous set of design and change management processes to more accurately resolve project scope and cost prior to requesting full funding and addition to the Capital Improvement Program (CIP).

The preliminary cost estimate and schedule will support the Business Plan and serve as the basis for the proposed project when it is added to the CIP. A conceptual cost estimate is expected to have an accuracy factor of 1.3 or better.

Prerequisites

1. **Receive Approval to Start the Definition Phase of the Project**
   Before becoming eligible for reimbursement of up to 5% of the preliminary Total Project Cost for Definition Phase services, the President of the Institution must receive formal Approval to Proceed with the Definition Phase of the Project from the appropriate Executive Vice Chancellor of Academic or Health Affairs and the Chancellor.

Tasks and Deliverables

1. **Prepare a Statement of Need**

During the initial stages of the Definition Phase, the institution must document the project's justification by preparing a Statement of Need (SoN) which will be used as a basis for ongoing efforts and required submissions. The SoN outlines the project's basic objectives, confirms the project's alignment with the institution's needs and strategic planning goals, and confirms its adherence to the currently approved Master Plan.

Key performance indicators and criteria for success are developed to support the SoN, to guide the project definition and execution, and to measure project success throughout the project life cycle. The SoN and keys to success will be included in the subsequent Owner's Project Requirements, Basis of Design, and Facility Programming efforts, the Business Plan, and the Project Planning Form (PPF) submission.

The Statement of Need typically addresses the following:

- Relationship to the department's strategic plan, including current facility deficiencies/inadequacies
- Relationship to the Institution's strategic academic/health plan
- College/Department's historical background
- College/Department's current asset management condition index, including prioritization of future projects
- Available funding
- Expected outcomes and investment metrics from the capital project
- Instructional, research, public service, and continuing education functions
- Master plan directives

- Program analysis of personnel (e.g., faculty and staff, percentage of appointment), enrollment, credit hours and weekly contact hours for academic courses, and research activities
- Statutory requirements and/or other mandates, if any

2. Procure Professional Services

Professional services procurement, selection of providers, and contract administration needed to fulfill the Project Definition Phase must follow the governing laws, regulations, or statutes outlined in the U.T. System Risk Mitigation and Monitoring Plan for Major Capital Projects as well as the procurement and contracting processes established by the UT System institution managing the contract.

Requests for Qualifications

Requests for Qualifications (RFQs) issued to solicit responses from interested architects, engineers, and design-build contractors must include a requirement that the architect, engineer, and design-build contractor evidence agreement to adhere to the approved Campus Master Plan and a set of criteria applicable to the facility program and the needs of the institution.

Contracts

Contracts with architects, engineers and construction service providers executed and delivered on behalf of the Board of Regents for Major Projects shall comply with guidelines issued by the U. T. System Administration Office of General Counsel and shall be written on a standard form approved by the Office of General Counsel. Payment and performance bonds, when required by law for contracts, shall be on a standard form approved by the Office of General Counsel.

3. Document the Owner's Project Requirements

The Owner's Project Requirements (OPR) is a written document that defines the goals, functional requirements, and stakeholder expectations surrounding a project's use, operations, and maintenance. It provides guidance and metrics for success for all subsequent design, construction, acceptance and operational decisions to ensure consistency and alignment with established goals. The OPR supplements and informs traditional Facility Programming efforts in order to better address evolving requirements for energy efficiency, sustainability, environmental quality, safety, security, maintenance, and long term cost of ownership. It is specifically designed to address commissioning requirements early in the design process and, ultimately, to facilitate confirmation that the completed project fulfills its established requirements.

The OPR builds upon the Statement of Need, using collaborative workshops and surveys to gather input from key stakeholders, gain consensus, and establish measurable criteria for success. The Owner's Project Requirements documents normally addresses the following topics:

- Statement of Need
- Project description
- Historical significance
- Funding sources, amounts, expenditures
- Investment metrics
- A project management plan
- Permits, codes, and other impact statements
- Procurement strategy
- Total Project Budget/Cost
- Total duration schedule and required BOR milestone dates
- Requirements from the Institution
- Requirements from operations and maintenance
- Requirements from the Users
- Requirements from the community
- List of Project Stakeholders
- Draft Project Charter

The OPR may be modified and updated as objectives and criteria are further refined in the subsequent Basis of Design and Programming efforts.

4. Complete the Basis of Design Documents

The Basis of Design (BoD) is a document that records the thought processes, assumptions, and key performance criteria required to meet the Owner's Project Requirements. It is generally focused on design features critical to overall building performance, and captures important information linking the Statement of Need and the OPR to the Construction Documents. Ultimately, it becomes a key tool in facilitating the commissioning team's evaluation of the project's success in fulfilling the Owner's Project Requirements.

The level of detail in the BoD evolves as the Facility Program and design progress, documenting the underlying reasons for selecting specific components, assemblies, systems and their integration at each phase. While the content of the document will vary from project to project, it should normally address the following topics:

- Fundamental BoD Criteria
- Lifespan of Building Elements Lifespan
- Economic Parameter for Life Cycle Cost Analysis
- Architectural and Engineering Criteria (Pre-Programming Phase)
- Architectural and Engineering Criteria (Post-Programming Phase)

As a direct link between the Owner's requirements and designer's drawings and specifications, additions and changes to the BoD must be fully documented by the capital delivery management team and approved by the Project Advocate.

5. Complete the Facilities Program

Facility programming is an integrated research and decision-making process that identifies the project scope, including all functional and operational requirements of the work to be designed. This process expands upon the Owner's Project Requirements and the Basis of Design by collecting, analyzing, synthesizing, and documenting significant requirements for the project. The Facilities Program should incorporate the following major elements:

- Signatures of the institution President, the Project Advocate, and key stakeholders
- Executive Summary
- The project goals, needs, and objectives
- Strategic and master planning requirements for the project
- Space and adjacency requirements
- Supporting requirements, including a detailed security assessment for each project
- Site selection with studies and surveys or existing facility studies
- Design Parameters
- Preliminary Project Budget and Schedule
- Project Implementation Strategies
- Required expertise for the project team
- Project issues to be resolved later in the Design Phase
- Special requirements specific to the Institution
- Selection of a project delivery method

Per Rules and Regulations of the Board of Regents Series 80402 and 80404, the program document(s) are expected to be approved by the institution President prior to proceeding into the Design Phase.

6. Authorize the Start of the Schematic Design Phase

Per BOR Rules and Regulations 80402 and 80404, the authority to release the project architect, engineer, or design-build contractor to prepare Schematic Plans (begin the Schematic Design Phase) resides in the following offices or their delegated agents:

- **OCP Managed Projects** – The Assistant Vice Chancellor for Capital Projects
- **Institutionally Managed Projects** – The President of the Institution

7. Complete the Schematic Design and Cost Estimate

Schematic Design is the initial phase of architectural and engineering design services that produces a diagrammatic representation of the project based on the Facilities Program and further collaboration with the Institution and user representatives. Conceptual studies and alternative schemes are generated and refined to produce floor plans, sketches of the building exterior and interior spaces, outline-level specifications of materials and finishes, and a narrative description of the proposed building systems.

Schematic Design documents normally include:

- An updated Basis of Design
- A preliminary Site Plan
- A preliminary building code analysis
- Plans of existing buildings for renovation projects
- Drawings on a small scale and schematic in nature
- Brief narrative specification descriptions of the proposed component systems, materials, and equipment, presented in the Construction Specification Institute (CSI) MasterFormat
- A preliminary construction schedule
- A construction cost estimate based on (at a minimum) square footage costs for building systems (e.g. foundation, structure, exterior closure, roof, interior construction, specialties, conveying, MEP systems, etc.) typical for the building type and location.

Per the UT System Capital Expenditure Policy, the accompanying cost estimate is expected to be within 30% of the final cost prior to consideration by the Board of Regents. The estimate should contain sufficient detail to support completion of the FPCC Agenda Item Cost Detail Template, which will be included in the Facilities Planning and Construction Committee Agenda Items and serve as a basis of benchmark comparisons with other similar projects. The cost categories an definitions used in the template are a subset of those normally required for submission to the Texas Higher Education Coordinating Board (THECB) and are outlined in the FPCC Agenda Item Cost Detail Template Instructions. Office of Capital Projects will generate comparative project cost benchmarks, which serve to inform executive decision-making while highlighting the project team's ongoing cost reduction and management efforts.

Schematic Design Guidelines & Goals

- Interpret the Program Data and translate the project's program and requirements into preliminary design solutions that establish the general scope, scale, and relationships of spaces.
- Provide visual representation of the project's basic form and function
- Serves as the foundation for cost estimation and client approval before moving to detailed design
- 50/75/95% Submission Review Schedule Deliverables:
    - Developed site plan,

- Dimensioned and annotated floor plan(s),
- SD sections
- SD elevations
- SD renderings and models.
- SD ROM construction cost analysis

- **SD Goals:**
  - Ensure the design aligns with the program requirements, project goals, and the UTRGV Values and Strategy.
  - Provide enough detail for stakeholders to make informed decisions.
  - Identify potential challenges, risks, & obstacles to successful progress.
- **SD Responsibility Matrix Sample:**

Task / Responsibility	A/E	A/E C	U:P&C	U:STH	U:IT	U:OTH
Confirm program requirements and adjacencies	●	○	●	●	○	○
Review existing site conditions and utilities	●	●	●	○	○	○
Develop conceptual design alternatives	●	○	○	○	○	○
Evaluate alternatives and provide recommendations	●	●	●	●	○	○
Preliminary floor plans & massing studies	●	○	○	○	○	○
Develop systems narratives	○	●	○	○	●	○
IT/AV/Security requirements	○	○	○	○	●	○
Sustainability & energy strategies	●	●	○	○	○	○
UTRGV Standards alignment	●	●	●	○	●	○
Code & regulatory considerations	●	●	○	○	○	●
Operational & maintenance input	○	○	●	○	○	●
Stakeholder workshops & SD reviews	●	●	●	●	●	○
Timely decisions & approvals	○	○	●	●	●	○
Outline specs & finishes	●	○	○	○	○	○
Preliminary site planning diagrams	●	●	●	○	○	○
Survey & geotechnical data	○	○	●	○	○	○
Provide & Review preliminary cost opinions	● (Provide)	○	● (Review)	○	○	○
Validate cost assumptions	●	○	●	●	○	○
Submit SD package	●	●	○	○	○	○
Meeting minutes & action items	●	○	○	○	○	○

A /E – Architect / Prime Design Consultant

A/E: C – Engineer / Subconsultants (Structural, MEPFP, Civil, IT/AV, etc.)

U:P&C – UTRGV Facilities Planning & Construction Review Team

U:STH – UTRGV PROJECT STAKEHOLDERS AND USER REPRESENTATIVES

U:IT – UTRGV Networking & Technology Services (IT/AV/Security)

U:OTH – Other Stakeholders (EH&S, Campus Police, AUX Services, etc., as applicable)

8. Complete the Executive Summary

An Executive Summary is required for all FPCC/BOR Agenda Item requests for adding Major Projects to the CIP. This document is a preliminary and abbreviated version of the Project Business Plan, which must be further developed in the subsequent Design Development phase. The Executive Summary should include the following sections as outlined in the Executive Summary for Addition to the CIP Template:

- Brief Project Description
- Alignment with Campus Master Plan
- Funding
- Strategic Implications
- Project Advocate and Change Management Process

- Operational Costs/Ability of Institution to Absorb Operational Costs
- Key Milestones
- Proposed Site Map
- Pro Forma (if Revenue System Financing Bond Proceeds are requested)

The schematic design cost estimate, operating costs, and funding plan should inform and support the Executive Summary and serve as the basis for the proposed project when added to the CIP. The document should include a Pro Forma if funded by RFS debt, identifying what revenue sources will be used to repay the debt. It must be signed by the Institution's President, Provost, VP for Business Affairs, Director of Facilities, the Project Advocate, and other key stakeholders at the institution.

9. Complete the Online Project Planning Form

All institutions requesting the addition of a project to the CIP are required to submit an online Project Planning Form (PPF), which collects detailed information about the project, including its key characteristics, its justification (the Statement of Need), the proposed funding sources, the anticipated timelines for expenditure, and key investment metrics. The PPF is reviewed by the Office of Capital Projects (OCP), and the Office of Finance to affirm appropriate costs, justifications, and the appropriate use of Debt and/or Gift funding for presentation to the BOR. Because it contains the information necessary for BOR approval, a current PPF is always required in order for the Project to be presented to the BOR. The PPF can be accessed by visiting the Office of Finance's Capital Project Approval Process Web Page.

10. Request Addition of the Project to the CIP

Following the Definition Phase, addition of a project to the CIP authorizes U. T. System Administration and the institutional administration to expend institutional funds up to 10% of the anticipated total project cost to proceed to Design Development Approval. These funds will be provided by the institution initially but will be reimbursed to the institution from applicable project funds upon Design Development Approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Addition of a project to the CIP includes authorization of institutional management of Major Projects so designated in the CIP. Requests for institutional management shall be reviewed and approved by the Assistant Vice Chancellor for Capital Projects. Projects approved for institutional management will be included in the CIP. Projects designated for institutional management shall follow the process, authority, and approvals as outlined in Rule 80404 of the Regents' Rules and Regulations for the full amount stipulated in the CIP.

Prior to requesting the addition of a project to the CIP, it is expected that the institution has completed the Definition Phase requirements with support of the appropriate Executive Vice Chancellor and the Chancellor. A review and presentation process will then be conducted with U. T. System executive officers and staff, culminating in a presentation to the Facilities Planning and Construction Committee by the institution's president.

The documents required for Adding a Major Project to the CIP include:

1. President's Agenda Item Request Memo, including confirmation of completed Definition Phase
2. Online Project Planning Form
3. FPCC Agenda Item Cost Detail per the FPCC Agenda Item Cost Detail Template Instructions
4. Fully executed Executive Summary
5. President's PowerPoint Presentation

The timeline leading up to the president's presentation to the Facilities Planning and Construction Committee is as follows:

1. Approximately 7 to 8 weeks prior to the BOR meeting (as per deadlines specified for each meeting), the institution will submit to Office of Capital Projects (cipsupport@utsystem.edu):

    1. A president's letter to the appropriate Executive Vice Chancellor (Academic or Health), requesting an Agenda Item for the purpose of adding the project to the CIP
    2. A complete, accurate and final online Project Planning Form
    3. A complete, accurate and final CIP Project Cost Detail
    4. An electronic copy of the final fully executed Executive Summary (for distribution to the Regents, EVC, Business Affairs, Real Estate, Finance, and OCP)
    5. An electronic copy of the president's final PowerPoint Presentation

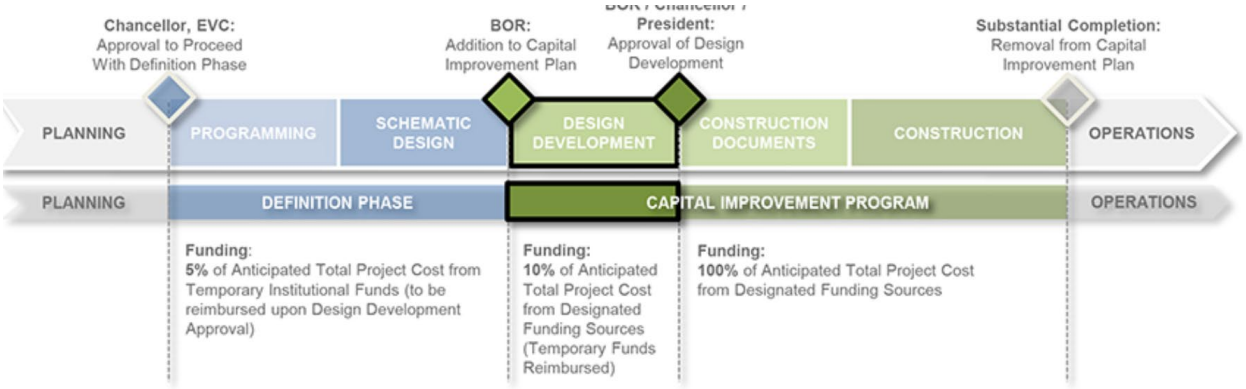
2. Based on collaboration with the project team and the information provided in the above listed documents, the OCP will generate cost benchmarks for similar projects and will incorporate them into the Agenda Item and PowerPoint Presentation.

3. OCP will submit the Executive Summary to the Board Office for inclusion in BOR agenda material sent to the Regents.

4. The president's PowerPoint presentation will be included in the overall FPCC presentation and will be set up and ready for presentation at the FPCC meeting.

For additional information on this process, please contact Capital Program Support at: cipsupport@utsystem.edu.

4.8 Design Development Phase (UTS|OCP Online Guided Method)



Source: https://www.utsystem.edu/sites/capital-project-delivery-guide/funding-and-approval-timeline/design-development-phase

1. **Addition of the Project to the Capital Improvement Program**

Before proceeding to the Design Development Phase, the Board of Regents must approve the Addition of the Project to the Capital Improvement Program (CIP). Upon approval, the institution becomes eligible for reimbursement of up to 10% of the anticipated Total Project Cost from designated funding sources.

These funds will be provided by the institution initially but will be reimbursed to the institution from applicable project funds upon Design Development Approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Tasks and Deliverables

1. **Authorize Preparation of Design Development Documents**

   Per BOR Rules and Regulations 80402 and 80404, the authority to release the project architect, engineer, or design-build contractor to prepare Design Development Plans resides in the following offices:

   - For OCP Managed Projects – The Assistant Vice Chancellor for Capital Projects
   - For Institutionally Managed Projects – The President of the Institution

2. **Complete Design Development and the Associated Cost Estimate**

   Design Development entails the confirmation of the program requirements and schematic design efforts, the continued development and refinement of the project design and detailing, and the expansion of outline specifications and Basis of Design to fully describe the nature and intent of the project prior to developing the construction documents.

Design Development documents normally include:

- Updated Basis of Design
- Complete building code analysis
- Complete drawings to scale
- Further refinement of all plans incorporating Schematic Design review comments, including the number of drawing sheets
- Draft SECO worksheets
- For renovation projects, include existing building plans, elevations, structural, architectural, and demolition plans
- Descriptive specifications with a narrative description of the component systems, materials, and equipment in alignment with the Construction Specification Institute (CSI) MasterFormat
- Descriptive literature cataloging cut-sheets of proposed systems, materials, and equipment Summary construction schedule, sufficiently tied to the costs and specifications to allow a meaningful analysis
- Construction cost estimate based on detailed quantities and unit costs for all materials, labor, equipment, building systems, general conditions, fees and contingencies in the CSI MasterFormat or Uniformat Assemblies format.

Per the UT System Capital Expenditure Policy, the Design Development cost estimate is expected to be within 10% of the final cost prior to consideration by the Board of Regents. For new construction, the cost estimate should be itemized in accordance with the FPCC Agenda Item Cost Detail Template Instructions for presentation to the Board.

With the exception of "Insurance", which is specific to certain U. T. System projects, the cost breakdown categories are a subset of those normally required for the subsequent submission to the Texas Higher Education Coordinating Board (THECB).

3. Complete the Project Business Plan for New Construction Projects

A finalized Business Plan is required for all FPCC/BOR requests for Design Development Approval of Major New Construction Projects. The Design development cost estimate, operating costs, and funding plan inform and support the Business Plan and serve as the basis for evaluating the proposed project.

The Business Plan should include a Pro Forma for all Major Projects funded by RFS debt identifying what revenue sources will be used to repay the debt. If the project is gift or grant funded, the Institution's Representative should confirm when the funds are available, including if there is a date when they need to be spent. Institutions should also address anticipated costs for physical asset recapitalization and long-term facility maintenance.

The Business Plan must be signed by the Institution's President, Provost, VP for Business Affairs, Director of Facilities, the Project Advocate, and other key stakeholders at the institution.

The Business Plan normally includes the following sections as further detailed in the Business Plan Template:

1. I. Executive Summary
2. II. Project Description
3. III. Strategic Rationale, Justification and Options
4. IV. Summary of Economic Analysis
5. V. Opportunities and Risks Analysis
6. VI. Success Criteria
7. VII. Impact of Project Postponement
8. Appendix A: Proposed Site Map
9. Appendix B: Pro Forma
10. Deferred Maintenance and Recapitalization Plan

4. Request Design Development Approval

Upon completion of the Design Development Phase, Design Development Approval authorizes the U.T. System Administration and the institutional administration to expend 100% of the anticipated total project cost from designated project funds to complete the project. Expenses from temporary funds provided by the institution will be reimbursed to the institution from applicable project funds upon Design Development Approval or upon submission of the project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Once the institution determines that the project design, cost estimate, and business plan are ready to submit for Design Development (DD) approval, the following steps must be completed for various project categories.

Design Development Approval of Major New Construction Projects

Design Development Approval for all Major New Construction requires that certain project and administrative activities be completed and that a review and presentation process be conducted with U. T. System executive officers and staff. The process is as follows:

Documents Required for Requesting Design Development Approval on a New Construction Project:

1. President’s Agenda Item Request Memo or President's Agenda Item Request Letter Template With TPC Increase including confirmation of completed Definition Phase
2. Online Project Planning Form (updated as necessary)
3. FPCC Agenda Item Cost Detail per the FPCC Agenda Item Cost Detail Template Instructions
4. Finalized Business Plan
5. DD PowerPoint Presentation
6. DD Fact Sheet (OCP Managed Projects Only)

Timeline for Document Submission for Requests for DD Approval on a New Construction Project:

1. Approximately 7 to 8 weeks prior to the BOR meeting (as per deadlines specified for each meeting), the institution will submit the following to OCP (cipsupport@utsystem.edu):
    - A president's letter to the appropriate Executive Vice Chancellor (Academic or Health), requesting an Agenda Item for the purpose of DD Approval (Please copy cipsupport@utsystem.edu).
    - A complete, accurate and final Online Project Planning Form.
    - A complete, accurate and final FPCC Agenda Item Cost Detail.
    - An electronic copy of the updated final, fully executed Business Plan to cipsupport@utsystem.edu for distribution to System Offices (OCP, EVC, Business Affairs, Real Estate and Finance).

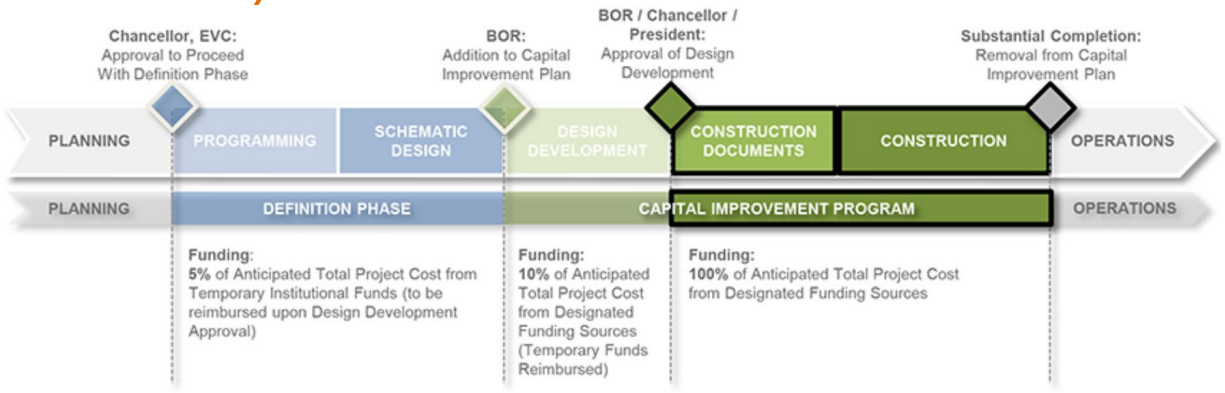
1. For OCP managed projects that are to be presented to the FPCC by the Assistant Vice Chancellor for Capital Projects, approximately 6-8 weeks prior to the BOR meeting: OCP will schedule a dry run of the DD presentation with the AVCFPC, OCP staff, and institution's staff. A draft of the DD presentation and DD Fact Sheet should be submitted to cipsupport@utsystem.edu no later than two (2) days prior to the dry run.
2. Based on collaboration with the project team and the information provided in the above listed documents, OCP will generate updated cost benchmarks for similar projects and will incorporate them into the Agenda Item and PowerPoint Presentation.
3. OCP will submit the Business Plan to the Board Office for inclusion in BOR agenda material sent to the Regents.
4. The DD Approval PowerPoint Presentation will be included in the overall FPCC presentation and will be set up and ready for presentation by the appropriate party at the FPCC meeting.

Design Development Approval of Major Repair and Renovation Projects

Per BOR Rules and Regulations 80402 and 80404, the authority to approve the Design Development Plans for all major repair and rehabilitation projects that are not architecturally or historically significant and authorize expenditure of appropriated funds resides in the following offices:

- OCP Managed Projects – The Chancellor
- Institutionally Managed Projects – The President of the Institution

4.9 The Construction Documents and Construction Phases (UTS|OCP Online Guided Method)



Source: https://www.utsystem.edu/sites/capital-project-delivery-guide/funding-and-approval-timeline/construction-documents-and-construction-phase

Prerequisites

1. Receive Design Development Approval

Upon receiving Design Development Approval, the project team is authorized to spend the remainder of the approved funding to finalize the construction documents and complete construction without further approvals from the Board of Regents. Expenses from temporary funds provided by the institution will be reimbursed from applicable project funds upon Design Development Approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Tasks and Deliverables

1. Authorize Preparation of Construction Documents

The Construction Documents phase builds upon the Design Development work by updating the Basis of Design and producing the plans, drawings, and specifications needed to price and build the project. Per BOR Rules and Regulations 80402 and 80404, the authority to release the project architect, engineer, or design-build contractor to begin preparing Construction Documents resides in the following offices or their delegated agents:

- OCP Managed Projects – The Assistant Vice Chancellor for Capital Projects
- Institutionally Managed Projects – The President of the Institution

2. Coordinate Systemwide Insurance Program Coverage

Projects enrolled in UT Systemwide Insurance Programs should coordinate their activities with the Office of Risk Management to ensure uninterrupted coverage of:

- Builder's Risk Insurance Program
- Rolling Owner Controlled Insurance Program (ROCIP)
- Comprehensive Property Protection Plan (CPPP)
- Additional details can also be found in Construction Risk Insurance Guidance for ROCIP VIII & BR IV.

3. Manage the Project's Construction

All construction related activities are governed by the laws, regulations, and statutes outlined in the U.T. System Risk Mitigation and Monitoring Plan for Major Capital Projects. Special attention should be given to the requirements established in the Uniform General Conditions for all UT System construction contracts.

Per BOR Rules and Regulations 80402 and 80404, the authority to approve the construction contractor's, design-build contractor's, or construction manager's estimates, guaranteed maximum price, or stipulated sum proposals; sign change orders; and provide general supervision of all Major Projects resides in the following offices or their delegated agents:

- OCP Managed Projects – The Assistant Vice Chancellor for Capital Projects executed by the Executive Vice Chancellor for Business Affairs
- Institutionally Managed Projects – The President of the Institution

4. Modify or Augment Project Funding Sources as Necessary

Changes to Funding Sources or Cumulative Funding Increases of Less Than or Equal to 10% of the BOR Approved TPC (Back to Top)

To revise or reallocate project funding sources or to increase total funding by less than or equal to 10% of the BOR approved TPC, the changes must be approved by the following offices or their delegated agents, with copies of the approval documents provided to OCP and the Office of Finance:

- **OCP Managed Projects** – The Chancellor, with the advice of the Deputy Chancellor, the appropriate Executive Vice Chancellor, the Office of Finance, and the institutional president. Draft letters should be submitted to cipsupport@utsystem.edu for review and approval prior to obtaining the president's signature on the letter.
- **Institutionally Managed Projects** – The President of the Institution, with the advice of the appropriate Executive Vice Chancellor. Contact cipsupport@utsystem.edu for review if desired.

To provide funding for the increase, the delegated authority may reallocate funding between or among approved projects at the institution if funding for such projects has previously been authorized or is from some other source of approved funds available to the institution.

Cumulative Funding Increases Greater Than 10% of the BOR Approved TPC

To increase total project funding by more than 10% of the BOR approved TPC, the changes must be approved by the Board of Regents as a Modification to the CIP. Requesting a Modification to an existing CIP Project requires that certain project and administrative activities be completed and that a review and presentation process be conducted with UT System executive officers and staff, leading up to a presentation of the project by the institution president to the Facilities Planning and Construction Committee. The process is as follows:

Documents Required for Requesting a Modification to an Existing CIP Project via BOR Agenda Item:

1. President's Agenda Item Request Letter
2. Online Project Planning Form
3. CIP Project Cost Detail
4. Updated Business Plan

Timeline for Document Submission for Requesting a Modification to an Existing CIP Project:

1. Approximately 7 to 8 weeks prior to the BOR meeting (as per deadlines specified for each meeting), the institution will submit to OCP (cipsupport@utsystem.edu):
   - A president's letter to the appropriate Executive Vice Chancellor (Academic or Health), requesting an Agenda Item for the purpose of a CIP Project Modification and detailing the reason for the modification. Please copy cipsupport@utsystem.edu.
   - A complete, accurate and final online Project Planning Form, with all information updated to reflect the reason for the modification, as well as the revised scope and TPC.
   - A complete, accurate and final CIP Project Cost Detail, updated to reflect the revised TPC
   - An electronic copy of the updated final fully executed Business Plan for Modification of an existing CIP Project to cipsupport@utsystem.edu for distribution to System Offices (OCP, EVC, Business Affairs, Real Estate and Finance). The update should include all revisions necessary to reflect the revised scope and TPC.
2. Based on collaboration with the project team and the information provided in the above listed documents, the Office of Facilities Planning and Construction (OCP) will generate cost benchmarks for similar projects and will incorporate them into the Agenda Item and PowerPoint Presentation.
3. OCP will submit the Business Plan to the Board Office for inclusion in BOR agenda material sent to the Regents.
4. The party responsible for presenting the modification to the FPCC is determined on a project-by-project basis and will be coordinated by OCP CIP Support.

Section 5: UTRGV Master Specifications

The UTRGV Master Specifications shall be provided to the Design Team for every UTRGV project.

The UTRGV Project Master Specifications are available from the UTRGV OP&C website at the following link:

Weblink to OP&C Master Spec Page Here or P&C Staff Link Here

5.1 Master Specifications Contents

The UTRGV Project Master Specifications contain the following project specification data:

- **Procurement And Contracting Requirements Group**
  - Division 00 – Procurement And Contracting Requirements
- **Specifications Groups**
  - **General Requirements Subgroup**
    - Division 00 - Ut System Front End Specifications
    - Division 01 - General Requirements
  - **Facility Construction Subgroup**
    - Division 02 - Existing Conditions
    - Division 03 - Concrete
    - Division 04 - Masonry
    - Division 05 - Metals
    - Division 06 - Wood, Plastics, And Composites
    - Division 07 - Thermal And Moisture Protection
    - Division 08 - Openings
    - Division 09 - Finishes
    - Division 10 - Specialties
    - Division 11 - Equipment
    - Division 12 - Furnishings
    - Division 13 - Special Construction
    - Division 14 - Conveying Equipment
    - Division 15 Through 20 - Not Used
    - Division 21 - Fire Suppression
    - Division 22 - Plumbing
    - Division 23 - Heating, Ventilating, And Air Conditioning (Hvac)
    - Division 24 & 25 - Not Used
    - Division 26 - Electrical
    - Division 27 - Communications
    - Division 28 - Electronic Safety And Security
    - Division 29 - Not Used
- **Site And Infrastructure Subgroup**
    - Division 31- Earthwork
    - Division 32 - Exterior Improvements
    - Division 33 – Utilities
- **Process Equipment Subgroup**
    - Divisions 40 Through 49 - Not Used

Section 6: Materials & Finishes

To support operational reliability, maintenance efficiency, and to strategically reduce the total cost of ownership, UTRGV establishes standardized requirements for all building materials and finishes to ensure campus-wide consistency, durability, and ease of upkeep, applicable to all interior and exterior surfaces, assemblies, and components—including exterior envelopes and roofing; glazing systems; doors, frames, and hardware; wall, ceiling, and floor systems; casework and millwork; coatings and sealants; railings; site elements; and ancillary facilities.

All specified materials and finishes shall meet University sustainability criteria—including low-/no-VOC content and emissions, durability and reparability, recycled or rapidly renewable content, FSC- or equivalent-certified wood, published EPD/HPD documentation, regional sourcing where feasible, reduced embodied carbon, and end-of-life recyclability—and shall comply with all applicable environmental, health, and safety requirements.

To maximize service life, reduce total cost of ownership, and minimize environmental impacts associated with replacement, all materials and finishes shall be selected, detailed, and installed for durability appropriate to their use, exposure, and maintenance context.

6.1 Material Performance Requirements

- **Fit-for-Use:** Materials shall be appropriate to their program and exposure (e.g., high-traffic corridors, wet areas, exterior coastal/humid conditions, labs).
- **Validated Testing:** Submittals shall include third-party test data demonstrating compliance with recognized standards (e.g., ASTM/ANSI/ISO) relevant to the material class, such as:
  - Abrasion/impact resistance (e.g., ASTM D4060, ASTM D2794)
  - Moisture/alkali/chemical resistance (e.g., ASTM D1308, ASTM D2247)
  - UV/weathering (e.g., ASTM G154/G155) for exterior coatings and polymers
  - Adhesion (e.g., ASTM D3359/D4541) for coatings and applied systems
  - Slip resistance for walking surfaces (e.g., ANSI A326.3)
  - Corrosion resistance for metals and coatings (e.g., ASTM B117; galvanic compatibility)
- **System Compatibility:** Assemblies (substrate, primer, membrane, finish) must be specified and installed as a tested system; mixing components across manufacturers is prohibited unless an equivalency package is approved.
- **Service-Life Targets**
  - General Targets: Materials and finishes shall meet or exceed University service-life expectations for their use category. At minimum:
    - High-duty/interior (corridors, classrooms, public spaces): long-cycle finishes and impact-resistant assemblies.
    - Wet/clinical/lab areas: moisture/chemical-resistant substrates and finishes with integral protection (not solely topical).
    - Exterior envelope/roof/site: assemblies specified for the project's climate, solar exposure, and wind loads.

- **Project Documentation:**
    - The Design Team shall provide a Service-Life Matrix in Design Development identifying each major material/finish, intended use, expected service life, and maintenance cycle; update at Construction Documents and Closeout.
- **Maintainability & Reparability**
    - Maintainable by Design: Prefer modular, panelized, or tileable systems that enable selective replacement and repairs without wholesale demolition.
    - Readily Cleanable: Select textures and coatings that tolerate routine cleaning/disinfection appropriate to the setting; provide manufacturer cleaning guidance.
    - Repair Kits & Attic Stock: Provide labeled attic stock and touch-up/repair kits for all finish systems per University quantities; include location schedules at closeout.
    - Access & Protection: Detail protective guards, corner reinforcement, chair rails, and kick plates where routine impact is expected; provide access panels for concealed services.
- **Environmental & Exposure Considerations**
    - Moisture & High Humidity: Use moisture-tolerant substrates and vapor control strategies to prevent condensation, efflorescence, and microbial growth; verify substrate moisture prior to installation per manufacturer protocols.
    - Thermal & UV: For exterior and sun-exposed interiors, select UV-stable and thermally tolerant materials/coatings; avoid finishes prone to chalking, embrittlement, or color shift.
    - Corrosion: For metals, specify alloys, coatings, and isolation methods suitable for local atmospheric exposure; prevent galvanic corrosion at dissimilar-metal interfaces.
    - Acoustic & Impact: Where acoustics are critical, select impact-resistant acoustic finishes or protected panels to balance durability and performance.
- **Warranties, Quality Assurance & Verification**
    - Warranties: Provide manufacturer warranties meeting or exceeding University standards for the material class and use; workmanship warranties shall cover installation quality and corrective work.
    - Mockups: Construct mockups for representative conditions (joints, corners, penetrations, transitions) to evaluate durability, cleanability, and appearance before full installation.
    - Field Testing: Perform adhesion, moisture, and performance checks as applicable (e.g., field adhesion for coatings; slab RH/MC testing for resilient flooring).

- **Closeout Deliverables**:
    - Provide maintenance guidelines, cleaning protocols, finish schedules, and service-life/maintenance matrix; train Facilities staff on care and repair procedures in accordance with the project specifications
- **Sustainability Linkage to Materials Durability**
    - Durability is integral to sustainability. Preference shall be given to durable, repairable, low-emitting, and lower-embodied-carbon materials that extend replacement cycles and reduce waste. Where alternatives offer similar performance, select the option with longer service life and documented environmental disclosures (EPD/HPD), consistent with the University's sustainability criteria.

Refer to the appropriate section of the UTRGV Master specifications for additional product specific information.

6.2 Roofs

- **Standardization:** Only University-approved roofing systems (manufacturers, product lines, sheens, and color palettes) shall be specified and used on all UTRGV construction projects.
- **Consistency:** Color selection where applicable must be made from the approved campus palettes appropriate to building type, location, and use.
- **Performance:** Specified products must meet or exceed performance criteria defined in the University Master Specifications.
- **Built Up Roofs (BUR):** Siplast Systems as specified basis of design w/ 25-year warranty.
- **Metal Roofs:** 22 Gauge, mechanically seamed, Standing Seam Roof as specified basis of design with appropriate underlayment systems to ensure building envelope integrity and weather resistance. 20-year weathertightness warranty and 40 year finish warranty standard.
- **Other Specialty Roof Systems**: Options as applicable and appropriate to the building design with minimum 20-year weathertightness warranty.
- Single-ply roofing systems not recommended
- Refer to the appropriate section of the UTRGV Master specifications for additional product specific information.

6.3 Masonry & Stucco

- **Standardization:** Only University-approved masonry shall be specified and used on all UTRGV construction projects and work orders.
- **Consistency:** Color selection must be made from the approved campus palettes appropriate to building type, location, and use. Accent colors are permitted only where identified in the standards or as approved through the appropriate review process.
- **Performance:** Specified products must meet or exceed performance criteria defined in the University Master Specifications.

- Refer to Sections 3, 3.6, & 7.3 of this guide for additional information.
- Refer to the appropriate section of the UTRGV Master specifications for additional product specific information.

6.4 Paint

- **Standardization:** Only University-approved paint systems (manufacturers, product lines, sheens, and color palettes) shall be specified and used on all UTRGV construction projects and work orders.
- **Consistency:** Color selection must be made from the approved campus palettes appropriate to building type, location, and use. Accent colors are permitted only where identified in the standards or as approved through the review process.
- **Performance:** Specified products must meet or exceed performance criteria defined in the University Master Specifications (e.g., scrub resistance, stain resistance, corrosion resistance for metal, and substrate compatibility).
- **Sustainability & Safety:** Paint systems shall comply with applicable environmental, health, and safety requirements (e.g., low-VOC where required by code or University standards).
- **Brand & Context Alignment:** Exterior selections must align with campus architectural intent and contextual guidelines as defined by the Office of the University Architect or the Office of Planning & Construction; interior selections must support function and wayfinding while maintaining campus continuity.
- **Documentation:** All projects must submit paint schedules, manufacturer data sheets, and color boards for review and record.

6.5 Flooring

- **Standardization:** Only University-approved flooring shall be specified and used on all UTRGV construction projects and work orders.
- **Consistency:** Color selection must be made from the approved campus palettes appropriate to building type, location, and use. Accent colors are permitted only where identified in the standards or as approved through the appropriate review process.
- **Performance:** Specified products must meet or exceed performance criteria defined in the University Master Specifications.
- Refer to Section 7.4 for additional information.
- Refer to the appropriate section of the UTRGV Master specifications for additional product specific information.

6.6 Metals

- **Standardization:** Only University-approved metal building systems and components shall be specified and used on all UTRGV construction projects and work orders.
- **Consistency:** Color selection must be made from the approved campus palettes appropriate to building type, location, and use as approved through the appropriate review process.

- **Performance:** Specified products must meet or exceed performance criteria defined in the University Master Specifications.
- Refer to Sections 7 for additional information and guidance on color selections.
- Refer to the appropriate section of the UTRGV Master specifications for additional product specific information.

6.7 Furniture

This section is in development and will be updated in subsequent revisions to align with UTRGV documentation standards.

- **Standardization:** Only University-approved furniture purchased through UTRGV procurement approved contract furniture vendors shall be specified and used on all UTRGV construction projects requiring new furnishings.
- **Consistency:**
    - Furniture selections must be made from the approved campus furniture manufacturers and lines appropriate to building type, location, and use.
    - For renovation projects, the design team shall respect the building's existing character and finish standards. All material selections must match or complement the existing palette. Certain buildings require strict adherence to an established finish palette; any proposed exceptions must be coordinated with the UTRGV Owner's Designated Representative (ODR).
- **Performance:**
    - Specified products must meet or exceed performance criteria defined in the UTRGV Furniture Specifications.
    - All UTRGV furniture must meet relevant ANSI / BIFMA standards.
    - ANSI / BIFMA X5.1 Office Seating.
    - ANSI / BIFMA X5.3 Vertical Files.
    - ANSI / BIFMA X5.4 Lounge and Public Seating.
    - ANSI / BIFMA X5.5 Desk Products.
    - ANSI / BIFMA X5.6 Panel Systems.
    - ANSI / BIFMA X5.9 Storage Units.
    - ANSI / BIFMA X6.1 Educational Seating.
- **Textiles:**
    - Standards of Durability
    - Vinyl Upholstery Preferred on all High-Touch surfaces
    - Minimum **100,000 Double Rubs Minimum** (Wyzenbeek)
    - Minimum 10 – Year Warranty Expectation on all furniture purchased.
    - Note that COM and Non-Carded Textiles affect warranty terms and should be avoided.
    - Bleach Cleanable, Zero VOC
- All furniture selections require design review by the UTRGV Architectural Design Guidance Team and the ODR. (Future Edit: UTRGV Furniture Design Guidance Team)
- All specified items must have demonstrated history in a similar institutional setting, with similar regularity of cleaning and maintenance.

- All Specified items must meet relevant ANSI / BIFMA standards.
- Avoid custom material(s) or material(s) that require significant specialized maintenance or that will reduce standard warranty time periods.
- Coordinate power requirements for furnishings with the electrical consultant.
- Coordinate requirements for attic stock with UTRGV OPR.
- Minimum 300 pound Load Rating required for all UTRGV seating
- Sample Furniture Cutsheet for Student Seating:

Product Code: **1061 FT4 AR1 SC27 VG2 CS6 MB MC21 FC2 AC**

BACK STYLE:	Mesh
BACK FRAME & ARMS COLOR:	Fog
MESH COLOR:	Nickel
CAL 133:	No CAL 133
TEXTILE:	Grade 2
ARM STYLE:	Fixed Arm
BASE FRAME & CASTERS COLOR:	Silver
CASTERS:	Hard Floor and Carpet Casters
PACKAGING:	Fully Assembled in a Carton

Textile Specifications

	Manufacturer: SitOnIt
	Pattern: Slide
	Colorway: Tangerine
	Grade: 2

MOVI NESTER

Lean back. Nest easy.

Goodbye, bulky and cumbersome. Hello, quick and easy. Introducing the last nester you'll ever need. For all those quick touch bases that end up being anything but, there's Movi. With up to 14 degrees of flexible support at the hip, the Movi helps distribute pressure evenly across the back and seat for better, long-term support. Discover an easy-to-maneuver, agile seating solution that can adapt quickly to a constantly changing environment.

- Flexes at the hip 14 degrees for enhanced comfort
- Caster design and ip up seat provide easy nesting
- Movement-friendly back & arm support
- Clean-out space for easy maintenance
- Bleach cleanable mesh back (10:1)
- 12 mesh colors
- 3 base frame & caster colors
- 3 back frame & arm colors
- Hard Floor & Hard Floor & Carpet Casters Available
- 300 lbs. weight capacity
- Lifetime Warranty

Section 7: UTRGV Finishes Selection Guide

UTRGV has assembled the following finishes guide to help direct design teams towards the appropriate selections for various building and construction elements exposed to view.

7.1 UTRGV Official Color Palette

The University's official colors are orange, gray and white, as specified below. Note that UTRGV gray may be either the PMS spot color, "Cool Gray 10," or 74% black, in process printing or a black-ink-only setting.

PRIMARY PALETTE

Color	Ink Colors	Digital Colors
Orange	***PMS:** 1655 C **CMYK:** C:0, M:84, Y:100, K:0	**Hex:** F05023 **RGB:** R:240, G:80, B:35
Gray	***PMS:** Cool Gray 10 C **CMYK:** C:61, M:53, Y:48, K:19	**Hex:** 646469 **RGB:** R:100, G:100, B:105
74% Black	**CMYK:** C:0, M:0, Y:0, K:74	**Hex:** 646469 **RGB:** R:100, G:100, B:105
White	**CMYK:** C:0, M:0, Y:0, K:0	**Hex:** FFFFFF **RGB:** R:255, G:255, B:255

Cool Gray 10 and **74% Black** are interchangeable.

Source: UTRGV Brand Identity & Style Guide

Orange and Gray - The Vaquero Way!

7.2 Paint Colors

To enhance operational performance and maintenance efficiency, UTRGV paint specifications and color palettes have been standardized, promoting uniformity and ease of maintenance across all campus buildings and sites.

Refer to the appropriate section of the UTRGV Master specifications for additional product specific information

UTRGV Paint Standard:

- Interior Paint:
    - Sherwin Williams Promar 200 Zero Voc Interior Latex Paint
        - Satin / Eggshell on low-touch surfaces (Offices, etc.)
        - Semi-Gloss on Medium-touch surfaces (Corridors, Classrooms, Labs, etc.)
        - Gloss / High-Gloss Enamels on all High-Touch applications (Handrails, HM Doors & Frames, etc.)
        - Flat Sheens shall not be used unless noted below or for special approved circumstance.
- Exterior Paint:
    - **Sherwin Williams A100 Exterior Acrylic Latex Paint**
        - **Semi -** Gloss or Semi-Gloss
        - **Color –** Match existing closest buildings or wall areas adjacent to area to be painted.
- These paint product standards shall be considered the basis of design for all UTRGV projects.
- Acceptable sheen levels for walls are Eggshell, Satin/Pearl, Semi-gloss or Gloss. Flat or Matte sheens shall not be used except for ceilings or furr-down areas above 9'-0" A.F.F.
- Painted Metals, HM Doors & Door Frames, Base Boards, Handrails & Guard Rails and any other high Touch surfaces shall be painted with the highest sheen available.
- Substitutions for consideration of "or equal" products will be considered in accordance with the UTRGV Master Specifications.

Standard Paint Colors

- **UTRGV Orange**: Obstinate Orange SW 6884
- **UTRGV Gray**: Web Gray SW 7075

Interior Paint Colors:

- **White Paint Colors**
    - Pure White SW 7005
    - Ceiling Bright White SW7007
    - Alabaster SW7008
- **Wall Field Paint Colors**
    - Anew Grey SW 7030
    - Silver Plate SW 7649
    - Mindful Gray SW7016 – Field
    - Warm Stone SW7032 – Field

- **Wall Accent Paint Colors**
  - UTRGV Orange: Obstinate Orange SW 6884
  - UTRGV Gray: Web Gray SW 7075
  - Outgoing Orange SW 6641
- **Miscellaneous Accent Colors – Handrails, Door Frames, Etc.**
  - Gauntlet Gray SW 7019
  - Dovetail SW 7018
  - Enduring Bronze SW 7055
- **School Of Medicine Clinics Only**
  - **Wall Field**
    - Accessible Beige SW7036
    - Anew Grey SW7030
  - **Wall Accent**
    - Outgoing Orange SW 6641
- **Metal Panels:**
  - **MBCI – Signature 300 PVDF Low Gloss (Signature 200 not allowed)**
    - Slate Gray (UTRGV Athletics Buildings, Etc)
    - Storm Gray
    - Tundra
    - Galvalume Plus (Cool Roof Approved Color)
    - Medium Bronze (Brownsville Gutters & Downspouts)
  - **Berridge – Kynar 500 / Hylar 5000**
    - City Scape
    - Zink Grey
    - Charcoal Grey (UTRGV Grey)
    - Sierra Tan (Existing Edinburg Wall Caps where applicable)
    - Copper-Cote (Special Accents, Etc.)

7.3 Masonry Color Blends

To enhance operational performance and maintenance efficiency, UTRGV Masonry specifications and color selections have been standardized, promoting design uniformity across all campus buildings and sites.

Refer to the appropriate section of the UTRGV Master specifications for additional masonry product specific information.

UTRGV Masonry shall conform to the following:

- **Concrete Masonry Units**
  - USA Manufactured Only
  - Standard smooth, split face, burnished face, and decorative CMU units with nominal face dimensions of 16 by 8 inches and nominal depth of 8 inches manufactured with Integral Water Repellent
  - Normal and heavy weight Load-Bearing Units to comply with ASTM C90,
  - Non-loadbearing Units: ASTM C129.

- Hollow Core and Solid Units
- Standard Gray or Integrally colored

- **Modular Brick:**
  - ASTM C216, Type FBS Smooth, Grade SW
  - Denton Plant to match buildings adjacent to new construction
  - Match Existing Campus Blends, Modular, Heritage Texture
  - No Substitutions without UTRGV Approval
  - Multiple mockups required until appropriate match is accepted

- **Modular Brick Veneer Standards:**
  - **Edinburg**
    - **Brick – New Construction**
      - ACME Via Roma #242 UTRGV 50/50 Custom Blend
      - ACME Via Roma #242 UTRGV 3-Color Custom Blend
    - **Brick – Existing Buildings**
      - Existing ACME Brick Veneer
        - Match Existing brick using a custom combination of ACME Via Roma 242 blends
      - Existing St. Joe Brick Blends
        - Match existing using a using a combination of ACME VIA ROMA 242 blends
    - **Mortar:**
      - Lambert Dry Cement Colors 2 ¼ Lbs. Antique Rose
      - Capital Types: 1 Sack Gray <Masonry Cement
      - Mathis Masonry Sand: 15 Gallons
  - **Brownsville:**
    - **Brick – New Construction**
      - ACME Denton UTRGV Brownsville Blend
      - Hebron Brick UTRGV Prairie Common Rustic Blend
    - **Brick – Existing Buildings**
      - Existing ACME Brick Veneer
        - Match Existing brick using a custom combination of ACME Brownsville blends

7.4 Flooring

To enhance operational performance and maintenance efficiency, UTRGV Floor Finishes and color selections have been standardized, promoting design uniformity across all campus buildings and sites.

Refer to the appropriate section of the UTRGV Master specifications for additional product specific information

- **LVT: 20 MIL 10-YEAR LIMITED COMMERCIAL WARRANTY OR BETTER**
  - **MANNINGTON:**
    - **SPACIA/SPACIA FIRST COLLECTIONS;**
    - **COLOR FAMILIES: SP53020, SP5W2494, SP5W3020, SP5W3023. SF3S3606, SF3A3800, SF3S4433**

- **OTHER COLORS/PATTERNS AS SUBMITTED FOR APPROVAL CONSIDERATION**

- **INTERFACE LVT:**
  - **Level Set LVT**
    - **used with interface carpet tile**
  - **STUDIO SET LVT;**
    - **Color Families:**
    - **A00104, A00308, A00309, A00310, A00301, A00302, A00303, A00702, A00703, A00705, A0071**
  - **Other colors/patterns as submitted for approval consideration**

- **PATCRAFT:**
  - **Typography Letterpress.Typeface / Charted Blends**
  - **Color family 00630 or other colors/patterns as submitted for approval consideration**

- **MOHAWK:**
  - **20 MIL wear layer /10 year in colors/patterns similar to the above or other colors/patterns as submitted for approval consideration**

- **CARPET: SQUARE OR PLANK SOLUTION DYED 100% NYLON MODULAR TILES**
  - **PATCRAFT:**
    - LEARNING LAB
      - COLORWAYS: 00625, 00590
    - COLOR REVEAL
      - 00550, 00560,00580, 00680
    - LINEAR TENSION
      - 00550, 00560,00580, 00680
    - OTHER COLORS/PATTERNS AS SUBMITTED FOR APPROVAL CONSIDERATION
  - **INTERFACE:**
    - UTRGV AE312 CUSTOM
      - COLOR MATCH REFERENCE ORDER # 880611
    - AERIAL COLLECTION PLANK BLEND:
      - AE315 – 104672/
      - COLORWAYS: 104672/105811/105824 33.33% EACH COLORWAY;
    - QUICKSHIP
      - AE310
      - COLORWAYS: SMOKE, GREIGE, IRON, INK (Non-QS)
    - OTHER COLORS/PATTERNS AS SUBMITTED FOR APPROVAL CONSIDERATION
  - **MANNINGTON**:
    - ELEVATION / ELEVT
      - PATTERN: DISTRICT
      - COLORWAY: 13219
    - DIVERGENT COLLECTION
      - PATTERNS: EBB, CURRENT, FLOW
      - COLORWAYS:11834,12835, 13842, 14843, 83840
    - URBAN PATINA COLLECTION
      - PATTERNS: ELEVATION/SPAN PATTERNS –

        - COLORWAYS: 13219
    - BLUEPRINT COLLECTION
        - PATTERNS: SKETCH/OUTLINE
        - COLORWAYS: 15217, 13219, 14215
    - URBAN GRID COLLECTION
        - PATTERNS: MESH, SCAFFOLD
        - COLORWAYS: 13219, 14215, 15217
    - OTHER COLORS/PATTERNS AS SUBMITTED FOR APPROVAL CONSIDERATION
- **MOHAWK**
    - LICHEN COMMUNITY
        - MIRO BLOOM II / MACRO BLOOM II
        - COLORWAY: 832 SUNBURST BARK
    - DISRUPTIVE PATH
        - BT430
        - COLORWAYS: 933 CRIMSON FLASH SUNBURST BARK, 955 COSMIC SKY
- **Ceramic / Porcelain Tile:**
    - **Basis of Design:** Daltile commercial rated tile in colors/patterns as submitted for approval consideration
- **Wall Base:** Roppe 3 ½" Black Brown

7.5 General & Miscellaneous Interior Finishes

- **Gyp. Bd. Wall Finish:**
    - Level 3 Smooth
    - No Texture
    - Painted

- **Gyp. Bd. Wall Finish for Graphics:**
    - Level 5 Smooth,
    - No Texture,
    - Painted

- **ACT Ceilings:**
    - 2'-0" x 2'-0" Acoustical Ceiling Tile
    - USG 2210 Radar

- **ACT Ceiling Grid:**
    - 2'-0" x 2'x0" Spacing
    - White

- **Window Shades:**
    - Fabric Rolling
    - Black or Gray
    - 60% Translucent

- **Interior Signage:**
    - Match Existing or
    - Follow Signage Guide – ODG Section 9

- **Corner Guards:**
  - Stainless Steel,
  - 2” x 2” x 6’-0”
- **Doors:**
  - Match Existing
  - Solid Core,
  - PLAM Finishes – Typ.

- **Door Frames:**
  - Match Existing,
  - RACO Aluminum
  - Hollow Metal (HM)
  - Painted – High-Gloss Enamel

- **Door Lites:**
  - Provide at all Office and Classroom Doors
  - Comply With TDLR TAS

- **Tack Boards:**
  - Per Project

- **Marker Boards:**
  - Magnetic
  - Non-Ghosting
  - Marker Tray Included
  - Starter Marker Kit and Magnetic Accessories –
  - Glass Preferred or White Ceramic

- **Directional Signage:**
  - Match Existing
  - Follow Signage Guide – ODG Section 9

- **Building Lettering:**
  - Match Campus Signage
  - Follow Signage Guide & Wayfinging Standards - ODG Section 9

- **Mother’s Nursing Suite:**
  - Match Campus Standards & Guidelines

- **Restroom Partitions:** Solid Phenolic Or Stainless Embossed
- **Counter Tops:** Solid Surface Preferred, Plam, Stainless Steel

Section 8: UTRGV Environment, Site Development & Landscape Guidelines

The UTRGV Site & Landscape Guidelines enhance the pedestrian experience, expand shade, and reduce energy consumption. They knit together dispersed areas of campus by extending a network of tree-lined pedestrian walkways and by creating a variety of quadrangles, courtyards and informal park-like spaces. The guidelines also prioritize plant species that attract indigenous wildlife, thereby advancing environmental sustainability and strengthening the campus's role as an outdoor classroom.

The Interdependence of Landscape & Architectural Design

The public realm of each campus site is defined and given character by a well-conceived armature of outdoor open spaces, thoughtful native landscaping, complementary architectural design, and integral public space adjacencies. Each of these aspects of campus design should be an inextricable part of the overall composition.

The Landscaped environment at UTRGV is the most important component of each campus in terms of the impacts made influencing the campus's sense of place and the quality of the pedestrian experience. The UTRGV landscaped realm is intended to connect buildings, provide continuity, define space, and complement and enhance the architectural forms of each campus.

The following guidelines focus first on the interrelationship between landscape and architectural design in defining the civic structure of the campus, and then discuss specific aspects of landscape design in more detail.

- These general principles are intended to integrate the campus's character, scale, circulation, and open space, defining the campus's public realm by bringing its landscape and architectural design into harmony.
- New quadrangles and courtyards should be created to extend the campus's civic structure and to expand the possibilities of leisure and ceremonial use.
- New quadrangles should expand the landscape repertoire to a full range of landscape types, from formal to picturesque
- Courtyards should be included in new buildings when feasible, and underdeveloped existing courtyards should be improved.

- The campus should have a hierarchy of streets and paths, ranging from vehicular streets on the city street grid, to major pedestrian streets, to secondary and minor pedestrian paths. Their landscape design should range from formal and regular to informal and picturesque in accord with their importance.
- Seating, pedestrian lighting, building entrances, and bicycle parking should be integrated into the design of pedestrian paths.
- Plants and landscape design throughout the campus should be compatible with climate of the Valley region.

UTRGV plays a significant role in the community by educating and preparing the next generation of leaders. Beyond its academic programs, the institution fosters responsible, engaged citizenship by cultivating environments where students learn through daily social interactions and cultural exchanges. These informal moments—occurring in the spaces between classes and throughout campus life—build cultural capital, strengthen community ties, and reinforce the democratic values that underpin our society.

The campus public realm functions as the primary framework supporting these interactions, shaping the daily patterns of movement, exchange, and community-building. By establishing a safe, inclusive, and thoughtfully landscaped environment, the University creates the conditions for robust student engagement and enables the campus population to contribute meaningfully to the broader civic and cultural life of the institution.

Landscapes Informed by Tradition

Regional traditions manifest in outdoor plazas, courtyards and pedestrian streets that become gathering spaces and marketplaces for students as well as residents of the greater UTRGV communities. The region's rich agricultural heritage should also be reinterpreted throughout the shared public gathering spaces as a productive urban landscape that is an educational and economic asset.

Promoting Economic Viability & Commmunity Interactions

Student spaces for vendors, tabling, markets and crafts provide selling and buying opportunities and imbue the University with a sense of economic viability reminiscent of the regional history as a leading trade center.

Placemaking

Clear, defined, memorable and enjoyable outdoor spaces with ample amenities for a range of activities support academic pursuits by providing a diversity of contexts for learning and research.

Accessibility & Connection

UTRGV intends to eliminate, to the extent possible, unnecessary barriers encountered by persons with disabilities whose ability to engage in gainful occupations or to achieve maximum personal independence in alignment with Texas Government Code Chapter 469. Universal accessibility, safety, wayfinding and campus connections are paramount to any campus design and play an integral role in creating the social and cultural linkages between students and communities.

Through the design and activation of engaging public spaces, the lessons embedded in the region's history can begin to inform and shape a forward-looking vision for the campus. In embracing its multicultural character and ecological richness, the University evolves into a nexus of education, community interaction, and environmental stewardship. In doing so, the campus serves as a model for integrated economic and ecological sustainability, demonstrating how place-based design can support both institutional mission and long-term regional resilience.

Preservation of Flora and Fauna

The Lower Rio Grande Valley, with its unique location, climate and environment, is a sanctuary for some of the endangered species of the regional biome. This region is also along the migratory flight paths for several important bird species unique to North America. With a regenerative approach, campus development shall promote native habitat preservation within campus lands so as to further enhance biodiversity. Furthermore, campus landscape shall foster conservation of native species, flora and fauna to sustain the fragile ecosystem of this region.

Follow Existing Human Ecologies

For centuries, mankind has adapted to the existing climate and environment within this region. Both agriculture and the preservation of resacas are interventions that balance the need for human sustenance as well as preservation of water as a resource. These human ecologies have also become ingrained in the culture of the region. This reinforces the cultural identity of the

campus and promotes the University as a leader in sustainability. The campus will be a laboratory that develops best practices for developing environments that balance human interventions with the natural landscape.

Blended Cultural Heritage

The Lower Rio Grande Valley, a semi-tropical area adjacent to the Rio Grande River which defines the U.S.-Mexico Border. This geographical heritage has long served peoples on both sides of the river, positioning the Rio Grande Valley as an important trade center and agricultural hub. Rich alluvial soils, temperate weather, and an abundance of water support a long tradition of cotton, aloe, citrus, and sugarcane farming. Historic farms that have survived for over a century and a half reflect the endurance and resilience of the Lower Rio Grande Valley landscape and peoples.

The UTRGV campus landscape responds to regional and local typologies as well as cultural traditions stemming from a rich regional heritage and history.

Tamaulipan Thornscrub Ecology

Agricultural productivity has also led to the clearance of over 95% of native Tamaulipan Thornscrub Forest, an extremely diverse ecosystem that once thrived within the states of Texas, Tamaulipas, Coahuila and Nuevo León. Home to a documented 1,200 plants, 300 butterflies, 700 vertebrates and 520 bird species, the forest now thrives only in isolated pockets within South Texas. The Southmost Preserve, 8.5 miles southeast of the Brownsville Campus, and the Lower Rio Grande Valley National Wildlife Refuge Near Alamo, Tx, protect some of the largest and highest quality Tamaulipan Thornscrub and Sabal Palm Forests that remain. These protected

areas offer habitat for the native and endangered black spotted newt, southern yellow bat, sheep frog, speckled racer snake, jaguarondi, Rio Grande lesser siren and UTB's beloved mascot, the endangered ocelot, of which only between 50 and 90 are estimated to remain.

https://www.fws.gov/refuge/lower-rio-grande-valley/visit-us

Spanish Architectural Tradition and Influence

Courtyards, plazas, portals, arcades, and acequias (runnels/irrigation channels) are the legacy of Spanish architecture exemplified by several important South Texas institutions. These architectural features welcome gatherings, markets and festivals that characterize the vibrancy of South Texas culture.

8.1 UTRGV Landscape Design Standards

Mature live oaks, with their expansive canopies and distinctive architectural presence, provide broad areas of shade across the campus's green lawns and continue to serve as defining elements of the university's landscape identity. Palms introduce vertical emphasis and a sense of movement, while flowering trees and shrubs contribute seasonal color, refined texture, and visual interest. Collectively, the campus's assemblage of native trees, shrubs, and flowering plants forms a resilient ecological framework that supports a wide range of birds, butterflies, and other wildlife.

Equally significant are the densely vegetated natural areas which offer layered plant communities, moderated microclimates, and enhanced biodiversity. These spaces function as vital ecological sanctuaries within the larger campus environment. In addition to their environmental value, they provide meaningful opportunities for experiential learning, serving as outdoor classrooms where biology students can engage directly with natural systems and observe ecological processes in situ.

8.2 UTRGV Landscape Materials

- Recommended Plant Species Include:
    - Live Oaks
    - Palm Trees - varied species
    - Bougainvillea
    - Crepe Myrtles
    - Cedar Elms
    - Jacarandas
    - Wild Olives
    - Royal Poincianas

- Species of particular value to birds and insects include:
    - Turk's Cap (Malvaviscus arboreus)
    - Texas Lantana, Lantana (Lantana urticoides)
    - Golden-eye Daisy (Viguera stenoloba)
    - Bush Sunflower (Wedelia texana)
    - Low Croton/Dove Croton (Croton humilis)
    - Wild Olive (Cordia boissieri)
    - Mexican Oregano (Lippia graveolens)
    - Invasive species should be avoided and native species should be promoted.

- Xeriscape principles should be applied where appropriate to reduce water consumption and serve as a foundational guideline for campus landscape design to optimize irrigation efficiency, reduce potable water demand, and support long-term landscape resource conservation.
- Where applicable and appropriate, permeable walking surfaces—such as compacted decomposed granite, stabilized aggregate, or other engineered permeable paving systems—should be strategically incorporated where appropriate to enhance on-site stormwater infiltration, reduce runoff volume, and support compliance with low-impact development (LID) and sustainable site hydrology standards. These materials provide a durable, accessible walking surface while contributing to improved groundwater recharge and minimizing reliance on conventional impervious pavements.

8.3 UTRGV Landscape Sustainability Framework

UTRGV is committed to transitioning all landscape and grounds operations toward a more ecologically resilient and resource-efficient model. This transition will be supported through expanded staff training, public awareness initiatives, and the integration of sustainable design and maintenance principles. Collectively, these efforts represent a cultural shift toward landscape stewardship, climate-responsive design, and long-term fiscal and environmental responsibility.

The primary principle entails a change of campus community culture by focusing on the preservation of natural resources while minimizing our carbon footprint elements (i.e. electricity and water) which have historically been consumed at a higher rate, yet essential for the operation of the institution.

Landscape Sustainability Goals and Strategies

Goal I: Integrate Sustainable Planning and Design Principles Into All New Construction

- **Intent:** Ensure that all new landscape projects support long-term resilience, water efficiency, ecological diversity, and reduced maintenance requirements.
- **Strategies:**
    - Conduct supplemental review of landscape and irrigation plans at key design and construction milestones to ensure appropriate plant selection that enhances low-maintenance, heat- and drought-tolerant landscapes and increases the use of native species.
    - Compile and maintain an updated list of native and native-adaptive plant materials for required use in new landscape designs.
    - Promote design approaches that de-emphasize high-water-demand flower beds and instead prioritize drought-tolerant and drought-resistant groundcovers, shrubs, and trees, with emphasis on species native to the Rio Grande Valley.
    - Encourage the integration of bioswales, vegetated filtration zones, and other sustainable stormwater management systems in new construction and parking lot projects.

- Collaborate with municipal forestry professionals and certified arborists throughout the design review process to support shared stewardship, consistent tree-care standards, and coordinated long-term canopy management.

Goal II: Apply Sustainable Landscape Practices Across Existing Campus Areas

- **Intent:** Strengthen water conservation, stormwater performance, and ecological resilience by upgrading existing landscapes to meet contemporary sustainability standards.
- **Strategies**
  - De-emphasize high-water-demand flower beds by reducing their overall footprint and converting these areas to climate-adaptive, low-water landscape palettes.
  - Implement a phased, multi-year replacement cycle to transition non-sustainable or high-maintenance plant materials to heat- and drought-tolerant species.
  - Establish a dedicated budget to support long-term landscape replacement, enhancement, and sustainability initiatives.
  - Promote the conversion of existing high-water-use areas—including oversized flower beds and non-performing planting zones—to more sustainable species in alignment with the replacement schedule.
  - Promote the replacement of carpet grasses and other high-water-use turf areas with Bermuda hybrids or other regionally appropriate turf alternatives to reduce irrigation demand while maintaining functional and aesthetic performance.

Goal III: Strengthen Maintenance and Operations Practices for Long-Term Sustainability

- **Intent:** Embed sustainability into day-to-day landscape operations to improve environmental performance, reduce resource consumption, and enhance operational efficiency.
- **Strategies**
  - Develop operational guidelines that integrate sustainable maintenance practices to reduce long-term resource inputs and support Maintenance & Operations budget resilience.
  - Provide targeted staff training on sustainability principles, ecological stewardship, and best practices for landscape management, fostering a culture of continuous improvement.
  - Evaluate and modify mowing cycles to reduce equipment use, fuel consumption, and maintenance costs while improving turf health and resilience.
  - Implement an expanded organics recycling program to process yard waste into campus-produced compost and mulch, reducing landfill disposal and improving soil quality.
  - Review and refine vegetation management practices by assessing the current list of herbicides and pesticides and transitioning to environmentally responsible alternatives aligned with integrated pest management (IPM) standards.

- Establish a comprehensive irrigation maintenance program that includes regular system audits, leak detection, and performance adjustments to reinforce institutional water-conservation goals.
- Consider the creation of a Sustainable Practices Coordinator position to lead program implementation, monitor performance metrics, support staff education, and coordinate sustainability initiatives across landscape operations.

8.4 Landscape Typologies

The UTRGV campus landscape is structured around a series of regionally inspired typologies that reveal the living ecological layers of the Rio Grande Valley while making the area's natural systems visible, interpretable, and central to the campus experience.

UTRGV celebrates the geography and robust culture of South Texas. The development and incorporation of these interconnected landscape typologies help to define diverse programmatic spaces, provide varied experience, and bind the campus to its unique place. **Resacas & Fountains, Gardens & Forests, Courtyards & Quadrangles, and Pedestrian Paseos** become the connective tissue of the campus, intersecting and influencing each typology.

The landscape typologies presented here establish the foundational spatial, ecological, and experiential parameters that guide campus landscape planning and design. These typologies create a consistent framework and shared professional vocabulary that support long-term stewardship, design excellence, and the integration of landscape performance principles across all campus environments. By articulating the essential attributes of each landscape type, this framework ensures coherence while allowing for context-sensitive adaptation over time.

Each typology is defined according to the following criteria:

- **Design Intent & Landscape Character**
  - Describes the guiding vision, experiential goals, and defining identity of the landscape, consistent with best practices for conceptual and schematic design articulation.
- **Aesthetic Expression & Visual Composition**
  - Addresses form-giving strategies, spatial hierarchy, design style, and visual continuity, reflecting principles of landscape composition, unity, and rhythm.
- **Programmatic Uses & Activation**
  - Defines the functional program, activity zones, and capacity to support daily use, events, and flexible programming in alignment with public-realm and campus-design guidelines.
- **Materiality, Site Elements & Spatial Form**
  - Identifies paving systems, structural elements, grading strategies, circulation frameworks, and form-defining components that support durability, accessibility, and design coherence.
- **Site Furnishings, Lighting & Support Infrastructure**
  - Specifies benches, lighting, waste receptacles, signage, bike infrastructure, and other elements that enhance usability, safety, wayfinding, and universal access.
- **Planting Design, Ecological Function & Habitat Value**
  - Outlines plant communities, species selection, ecological services, biodiversity contributions, and strategies to enhance soil health, stormwater performance, and habitat creation

- **Health, Wellness & Restorative Opportunities**
    - Identifies spaces that promote mental restoration, quiet reflection, and physical comfort design priorities.
- **Sensory Experience & Environmental Engagement**
    - Describes multisensory qualities—sound, texture, seasonality, movement, fragrance, and microclimatic variation—that contribute to a richer and more inclusive user experience.
- **Shade Provision & Microclimate Optimization**
    - Specifies strategies for thermal comfort, resilience to heat, and climate adaptation, including canopy coverage, shade structures, orientation, and wind mitigation.
- **User Comfort, Accessibility & Inclusion**
    - Addresses ergonomic, microclimatic, and universal-access considerations that ensure landscapes are welcoming, safe, and inclusive for all users, in alignment with Universal Design principles.

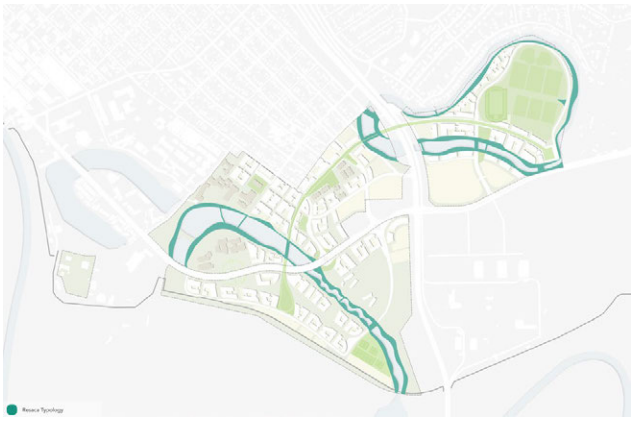
The landscape typology framework establishes a unified structure for guiding the planning, design, and long-term stewardship of campus outdoor environments. Each typology defines the essential spatial, ecological, and experiential qualities needed to ensure design consistency across diverse campus contexts.

Typologies are evaluated through key criteria including design intent and character, aesthetic expression, programmatic use, materiality, site furnishings, planting design, sensory experience, and user comfort. These attributes collectively ensure that each landscape supports functional needs, enhances environmental resilience, and delivers a high-quality, restorative experience for campus occupants.

8.4.1 Resacas & Fountains

Water brings life and in the heat of the Rio Grande Valley, the presence of water carries a profound cultural resonance echoing the long Indigenous traditions that honored water as a living force connecting earth and sky, while recalling the Spanish colonial acequia systems that brought community-managed irrigation to sustain early settlements and agriculture. Within this landscape shaped by rivers, resacas, and ancient stewardship practices, water should be revealed with intention and celebrated as a symbol of continuity, renewal, and shared heritage.

On campus sites where present, resacas are a compelling and unique feature of South Texas that reveal the story of a landscape forged by the waters of the Rio Grande. Once restored, the resacas become a central and essential aspect of the campus story. Trails, outlooks, amphitheaters and outdoor classroom spaces will facilitate ecological studies, while campus buildings collect and recirculate rainwater to the resacas. In this way resacas take center stage as both a landscape feature and learning opportunity working with the architecture to define an entirely unique campus experience.



On campus sites where natural water features are absent, the incorporation of fountains positioned within quadrangles and courtyards is also an important part of the architectural fabric at UTRGV. These features provide not only visual beauty and sensory delight but also carry symbolic meaning where their forms reference elements of local culture and customs and conceptually connect UTRGV to its surrounding landscape and habitats

Fountains are most effective when integrated into the architectural context, serving as focal elements that define building forecourts, enrich internal courtyards, and enhance the character of key open spaces. In alignment with this legacy, fountains should be incorporated, where appropriate, into the design of new construction projects.

8.4.2 Gardens & Forests (Urban Ecology)

EMEBL Healing and Reflection Garden | UTRGV online photo by Silver Salas

UTRGV's urban ecology, expressed through local gardens and urban forests, has matured into an intentional, high-performance landscape network that shapes and enriches the pedestrian experience across every campus. In Brownsville, the surrounding environment is defined by an exceptionally diverse ecosystem unique to the region, where only a few isolated remnants of the historic Tamaulipan Thornscrub Forest remain today.

UTRGV is uniquely positioned—and fortunate—to steward one of the last remaining stands of this rare habitat. As the campus continues to grow, the university has the remarkable opportunity to regenerate this ecological legacy while integrating it thoughtfully into future development.

UTRGV has integrated a series of intimate and inward facing landscape gardens that serve as living laboratories and connective spaces within the campus. These curated environments, including pollinator and ethnobotanical gardens along with bioswales and xeric demonstration plots, are strategically placed to link academic buildings, courtyards, and circulation routes. Through purposeful pathways, shaded seating areas, interpretive signage, and regionally adapted vegetation, the gardens create a sequence of outdoor rooms that enrich the pedestrian experience. In addition to supporting ecological observation and hands on learning, they offer moments of respite, strengthen wayfinding, and unify the campus, transforming movement between buildings into an educational and restorative journey.

8.4.1 Courtyards & Quadrangles

BHLSB Courtyard and Fountain | UTRGV online photo by David Pike

As UTRGV landscape gardens transition into courtyard and quadrangle spaces, they reinforce a coherent spatial hierarchy across campus. The smaller, specialized gardens serve as ecological and pedagogical thresholds that lead into the more expansive courtyards, where broader social, academic, and ceremonial functions take place. In this way, the intimate garden spaces not only support experiential learning but also act as experiential connectors—guiding movement, framing views, and establishing a seamless progression from building interiors to shared outdoor environments.

This integrated landscape strategy strengthens campus identity, enhances walkability, and ensures that courtyards and quadrangles operate as vibrant extensions of both academic life and the surrounding ecological context.

Courtyard Typologies

UTRGV courtyards have served as foundational spatial elements in campus design since inception, functioning as mediators between buildings, climate, and community life. At UTRGV, these typologies can be understood through several key categories, each shaped by scale, program, enclosure, and relationship to adjacent landscape gardens.

The UTRGV Courtyard Typologies are Academic, Ceremonial, Social/Student Life, Ecological, & Residential.

Academic Courtyards

Academic courtyards are typically medium-scaled outdoor rooms embedded within clusters of instructional buildings. Their primary purpose is to extend learning environments outdoors, offering informal study space, quiet reflection zones, and small gathering areas.

Characteristics often include:

- Moderate enclosure on three or four sides
- Shaded seating and tree canopies
- Direct visual and physical connections to classrooms and labs
- Integration of interpretive or ecological features
- Act as intermediaries between specialized garden spaces and larger campus quadrangles.
- Example locations include EEDUC, EDCNE, EPAC, BMAIN, BSMLC, BLHSB

Social or Student-Life Courtyards

These are lively, multi-functional spaces located near student hubs such as unions, dining facilities, and residence halls.

Typical features include:

- Flexible seating arrangements
- Improved hardscape for events and circulation
- Shade structures, café-style terraces, or outdoor performance pockets Their design prioritizes social interaction, visibility, and comfort, making them active nodes throughout the day.
- Examples include EUNTY, EUREC, EQUAD, Vaquero Villiage, BSTUN

Ceremonial Courtyards

Found near primary administrative or symbolic buildings, ceremonial courtyards emphasize formality, symmetry, and identity.

Key elements may involve:

- Strong axial alignments and framed vistas
- Landmark plantings or focal sculptures
- Defined paving patterns or processional paths
- These courtyards reinforce institutional character and support rituals, ceremonies, and official events.
- Examples include BSMLC, BSTUN, ESTUN, EMEBL

Ecological or Landscape-Dominant Courtyards

These courtyard spaces prioritize ecological function as their primary design driver, creating environments that support biodiversity, environmental resilience, and regenerative landscape performance. Rather than serving merely as aesthetic or circulation spaces, they operate as living systems that contribute to stormwater management, microclimate regulation, habitat creation, and long-term ecological health.

Common attributes include:

- Native plant communities
- Bioswales, rain gardens, or habitat zones
- Interpretive signage for educational use
- These courtyards seamlessly transition from interior-building environments to the surrounding living-laboratory gardens.
- The utilization of pollinator-supportive planting palettes to enhance ecological networks on campus.
- The creation of shaded microhabitats that reduce heat-island effects and improve thermal comfort functioning as dynamic living systems, where natural processes—seasonal changes, plant growth cycles, and wildlife activity—are intentionally visible.
- Restorative, sensory-rich environments for students, faculty, and visitors.
- Enhanced well-being by offering shaded refuge, visual connection to nature, and spaces for passive recreation or quiet contemplation.
- The demonstration of holistic design approach where ecological stewardship, campus identity, and user experience reinforce one another.
- Examples Include Brownsville Duck Head, Edinburg Research Garden, EQUAD

Residential Courtyards

Located within or between housing complexes, residential courtyards prioritize comfort, privacy, and small-group interaction.

Features may include:

- High-shade tree canopies
- Semi-private seating clusters
- Recreational micro-spaces (grills, hammocks, small lawns)
- These spaces cultivate community within living environments while reinforcing safe, walkable connections across housing zones.
- Examples Include EUNITY, EVLGE, BCASA

Campus Quadrangles (Quads)

Quadrangles are the largest and most iconic courtyard typology. They typically operate as anchors of the campus landscape structure.

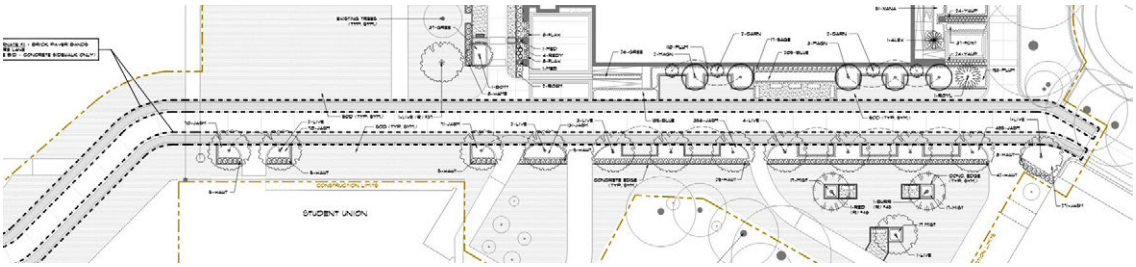
Defining traits include:

- Large, open lawns or flexible greens
- Strong perimeter building edges that shape a cohesive outdoor “room”
- Clear axial paths that support wayfinding and ceremonial movement
- Capacity to host both large events and everyday pedestrian circulation Quads often serve as the culmination of smaller garden and courtyard sequences, functioning as symbolic and functional centers of campus life.
- Examples include EQUAD, Duck Head, BMAIN Plaza, ECHAP Garden

Pedestrian Paseos & Walks

The primary pedestrian circulation system at UTRGV is composed of a skillfully integrated network of tree-lined walkways that traverse and unify each campus. Given the pedestrian-oriented nature of these environments, intentionally designed **paseos**—shared by pedestrians and service vehicles—must clearly communicate their predominantly pedestrian function. To enhance safety, comfort, and wayfinding, the spatial configuration, paving strategies, and supporting pedestrian amenities should overtly signal that vehicles operate as secondary users within these zones.

Through differentiated paving materials, narrowed vehicular access lanes, shaded walking corridors, and careful placement of landscape elements, these shared pathways reinforce a pedestrian-first hierarchy and elevate the quality and prominence of the walking experience for every traveler.



Section 9: Signage & Wayfinding

The UTRGV signage and wayfinding system provides a clear, cohesive, and accessible method for navigating university environments. It reinforces institutional identity, supports first-time visitors, and enhances safety while contributing to a unified campus experience at any and every campus. These guidelines ensure all signage installations align with campus planning goals, architectural character, and branded identity standards.

Guiding principles:

- **Clarity:** Communicate information simply, legibly, and at the appropriate scale.
- **Consistency:** Maintain a unified design language across all campuses.
- **Accessibility:** Meet or exceed ADA standards for visibility, mounting, and tactile information.
- **Durability**: Use materials resilient to climate, UV exposure, and high-traffic environments.
- **Integration:** Ensure signage complements architecture, landscape, and pedestrian circulation.
- **Compliance:** Ensure all campus signage is in alignment with the UTRGV Brand Identity and Style Guidelines set forth by University Marketing and Communications.

UMC Review:

As overseers of the brand, University Marketing and Communications must consider these factors:

- Logo and brand guidelines.
- Accessibility issues (must avoid at all costs).
- Current marketing campaigns.

University Marketing and Communications, not clients or vendors, is responsible for using the brand across the university and promo items. University Marketing and Communications must review promo items created by vendors.

Send files to umcreview@utrgv.edu. https://utrgv.link/umcreview

https://utrgv.link/umcreview

9.1 Signage Design, Objectives, & Standards

University Name
The University of Texas Rio Grande Valley is the official name of the university.

The University of Texas Rio Grande Valley should always be used in first reference in all formal communications. “The” is part of the name and should always be included, uppercase, in first reference. Second reference of the university name will be abbreviated as **UTRGV.**

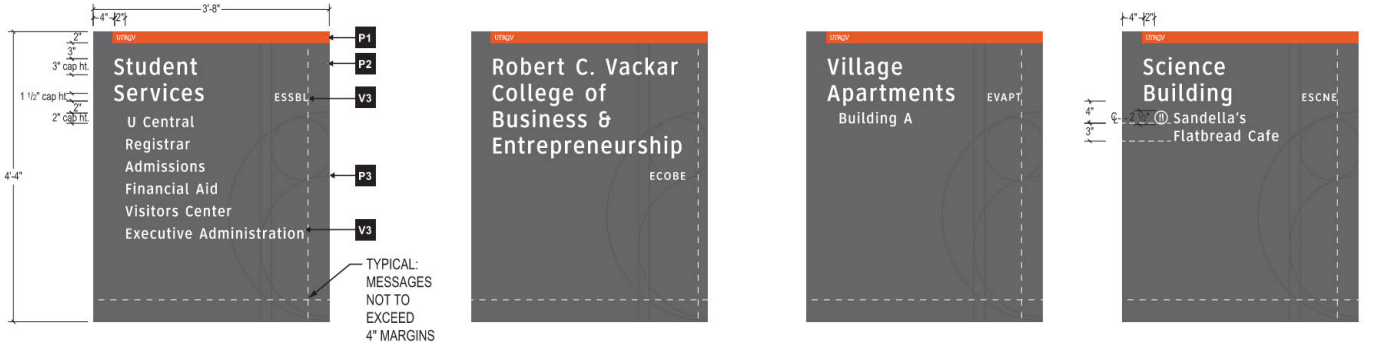
Do not use hyphens in the university name e.g., UT-RGV.

The official university name in Spanish is La Universidad de Texas de El Valle del Río Grande.

Campuses & Sites
UTRGV is a distributed institution made up of numerous campuses and sites across the Rio Grande Valley. Use the appropriate name from the following list when identifying specific campuses or sites:

- The University of Texas Rio Grande Valley Edinburg Campus
- UTRGV Edinburg Campus
- The University of Texas Rio Grande Valley Brownsville Campus
- UTRGV Brownsville Campus
- UTRGV Harlingen Clinical Education Site
- UTRGV McAllen
- UTRGV Port Isabel School of Earth, Environmental and Marine Sciences
- UTRGV Rio Grande City
- UTRGV SPI Coastal Studies Lab
- UTRGV Stargate
- UTRGV Weslaco Center for Innovation and Commercialization (CIC)

DO NOT use hyphens, such as in these examples: The University of Texas Rio Grande Valley-Edinburg; UTRGV-Edinburg; UTRGV-Brownsville campus, or similar configurations.



1 FRONT ELEVATION – PANEL CONDITION 1 Scale: 3/4" = 1' - 0"
2 FRONT ELEVATION – PANEL CONDITION 2 Scale: 3/4" = 1' - 0"
3 FRONT ELEVATION – PANEL CONDITION 3 Scale: 3/4" = 1' - 0"
4 FRONT ELEVATION – PANEL CONDITION 4 Scale: 3/4" = 1' - 0"

Signage Design Objectives

The 2016 UTRGV Signage and Wayfinding Master Plan was developed during a period of rapid institutional formation and campus consolidation. Its primary goals focus on creating a coherent, navigable, and unified identity across a distributed university system. The overarching objectives can be described as follows:

Establish a Unified Institutional Identity

With multiple campuses created through the consolidation of legacy institutions, the 2016 plan aimed to create a consistent, recognizable visual language across all UTRGV locations. Key intentions included:

- Standardizing colors, typography, and materials for all signage
- Reinforcing UTRGV's new brand through gateway monuments, building IDs, and directional signs
- Creating a sense of arrival at campus edges

Improve Navigation Across a Distributed, Multi-Campus System

The plan seeks to simplify wayfinding across **Edinburg, Brownsville, Harlingen, McAllen**, and other teaching sites.

Core goals:

- Make navigation intuitive for visitors, students, and patients
- Integrate vehicular, pedestrian, and transit-based wayfinding
- Provide consistent directional cues across districts and buildings

Support a Pedestrian-Oriented Campus Environment

As UTRGV prioritized walkability, the 2016 plan emphasized:

- Clear pedestrian directional systems
- Wayfinding that connects paseos, courtyards, and campus landscape networks
- Visibility and safety in shared zones used by pedestrians, bicycles, and service vehicles

Enhance Accessibility and ADA Compliance

Accessibility was a central component of the wayfinding strategy.

- Ensure all signs met compliance with The Texas Accessibility Standards for mounting height, tactile lettering, and Braille
- Identify accessible routes and entrances clearly
- Provide universal access to all buildings and outdoor spaces

Integrate Signage with Landscape, Architecture, and Campus Experience
The plan established guidelines to ensure signage did not compete with architecture but rather supported the spatial experience.

This included:

- Aligning sign placement with major pathways, nodes, and campus sightlines
- Using materials consistent with campus landscape and building palettes
- Minimizing visual clutter through coordinated installation standards

Support Campus Safety, Emergency Response, and Operational Efficiency
Signage was understood as part of the university's safety and operations infrastructure. Goals included:

- Clear marking of emergency phones, muster points, and accessible evacuation routes
- Logical identification of service, delivery, and restricted-access zones
- Simplifying navigation for campus operations and visitors

Create a Scalable and Maintainable System

Due to rapid expansion of UTRGV the signage master plan emphasized:

- A modular signage system adaptable to new buildings and future growth
- Durable materials appropriate for the climate
- A maintenance strategy for consistency over time

Typography

- Use a clear, sans-serif typeface consistent with university branding.
- Vehicular signs: larger, high-contrast text optimized for fast viewing.
- Pedestrian signs: medium-weight, ADA-compliant tactile and Braille as required.

Color Palette

- Consistent application of institutional colors across sign families.
- Contrast ratios must meet accessibility standards for legibility.
- Secondary colors may be used for districting or wayfinding tiers.

Materials and Finishes

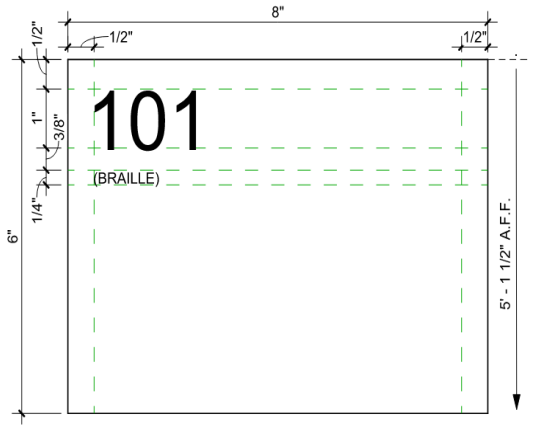
- Durable exterior-grade materials: powder-coated metal, UV-resistant laminates, anti-graffiti finishes.
- Materials should complement campus architecture and withstand regional climate conditions.
- Lighting elements (where used) must be energy-efficient and shielded to reduce glare.

Mounting and Placement

- Mounting heights must comply with ADA requirements.
- Avoid blocking accessibility routes, vegetation growth zones, and building utility lines.
- Ensure lines-of-sight are unobstructed, particularly at intersections and plazas.

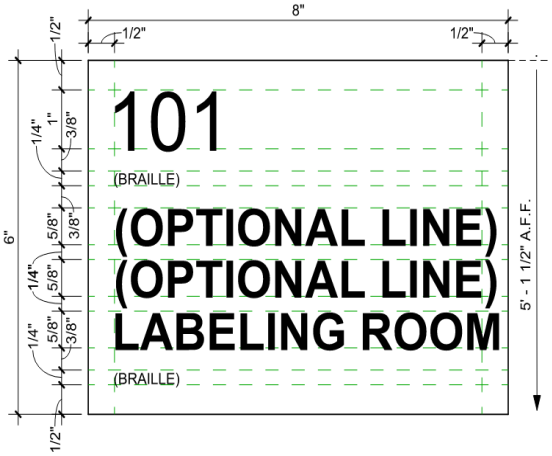
9.2 Standard Room Signage

UTRGV Standard Room Signage shall conform as follows:



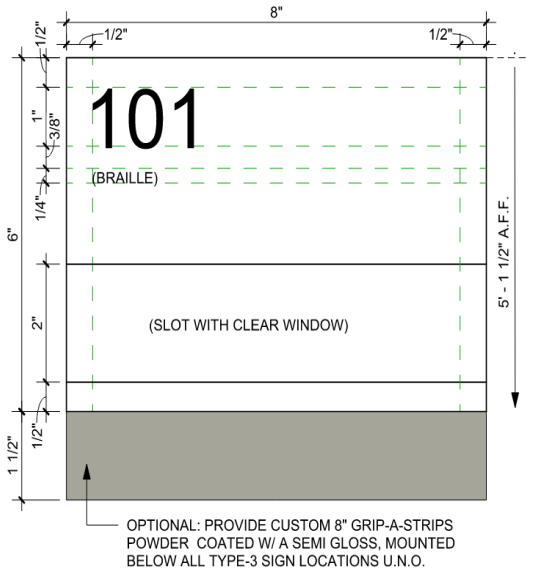
1 TYPE - RM1 ROOM NUMBER

6" = 1'-0"



2 TYPE - RM2 NUMBER & LABEL

6" = 1'-0"



3 TYPE - RM3 NUMBER / SLOT

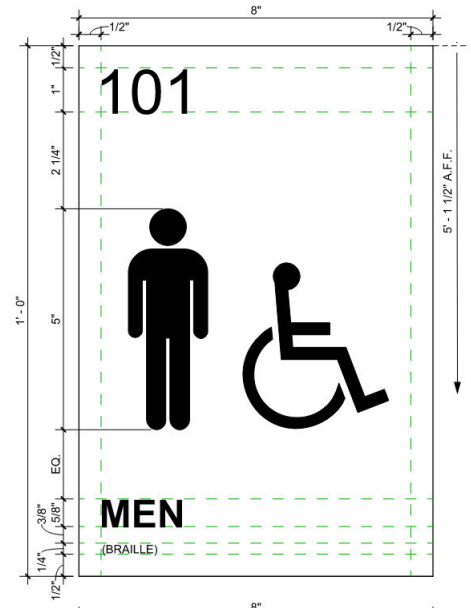
6" = 1'-0"

SIGNAGE GENERAL NOTES

1. ALL CLASSROOM AND OFFICE DOORS TO RECEIVE TYPE-3 SIGNAGE, TYPICAL.
2. ALL NON-CLASSROOM AND OFFICE DOORS TO RECEIVE TYPE-2 SIGNAGE, TYPICAL.
3. ALL ELEVATOR DOORS AT ALL LEVELS TO RECEIVE TYPE-6 SIGNAGE AS SHOWN ON DETAIL 12/A-411.
4. MOUNTING OF SIGNAGE TO BE PER 12/A-411.
5. ALL ELEVATOR LOBBIES TO RECEIVE TYPE-10 SIGNAGE.
6. ENSURE ALL SIGNAGE COMPLIES WITH CURRENT TAS ACCESSIBILITY STANDARDS.
7. ALL TEXT SHALL BE HELVETICA MEDIUM BOLD.
8. ALL NUMBERS AND TEXT SYMBOLS ARE RAISED ADA TEXT.
9. PROVIDE GRADE 2 BRAILLE WHERE INDICATED.
10. WHERE THERE IS LIMITED OR NO WALL SPACE ADJACENT DOOR, SIGN SHALL BE INSTALLED ON THE WALL ADJACENT TO THE DOOR. COORDINATE WITH ARCHITECT.
11. SIDELIGHT SIGNS TO HAVE VINYL BACKER ON BACK SIDE OF GLASS.
12. FIRE EXTINGUISHER CABINETS TO BE IDENTIFIED WITH RED VERTICAL LETTERS ON FACE OF CABINET DOOR READING "FIRE EXTINGUISHER" IN 2" HIGH CHARACTERS.

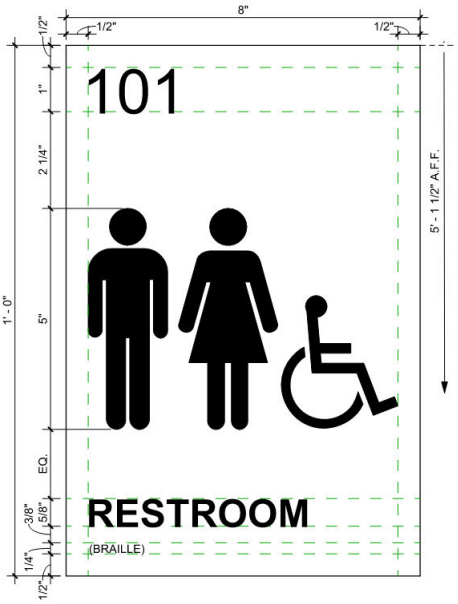
9.3 Standard Restroom Signage

UTRGV Restroom Signage shall conform as follows:



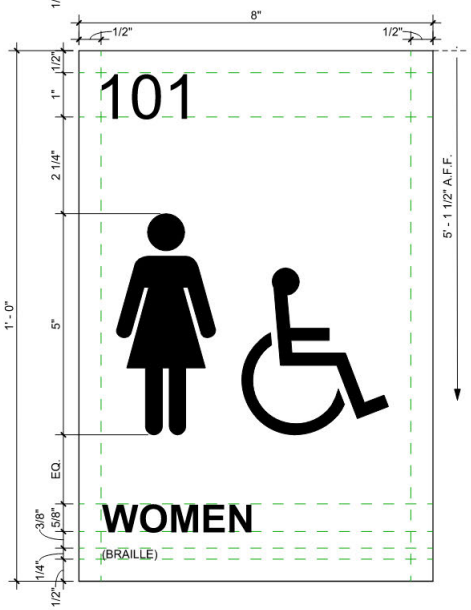
1 TYPE - R1 RESTROOM - M/F

6" = 1'-0"



2 TYPE - R2 RESTROOM - UNISEX

6" = 1'-0"



SIGNAGE GENERAL NOTES

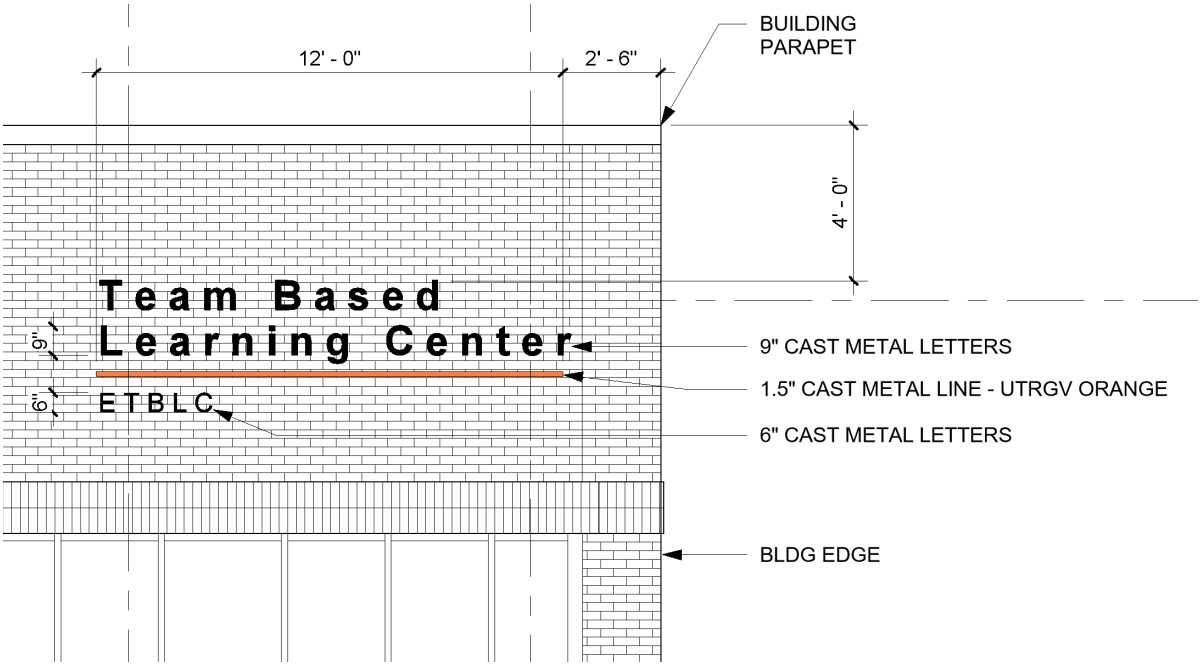
1. ALL CLASSROOM AND OFFICE DOORS TO RECEIVE TYPE-3 SIGNAGE, TYPICAL.
2. ALL NON-CLASSROOM AND OFFICE DOORS TO RECEIVE TYPE-2 SIGNAGE, TYPICAL.
3. ALL ELEVATOR DOORS AT ALL LEVELS TO RECEIVE TYPE-6 SIGNAGE AS SHOWN ON DETAIL 12/A-411.
4. MOUNTING OF SIGNAGE TO BE PER 12/A-411.
5. ALL ELEVATOR LOBBIES TO RECEIVE TYPE-10 SIGNAGE.
6. ENSURE ALL SIGNAGE COMPLIES WITH CURRENT TAS ACCESSIBILITY STANDARDS.
7. ALL TEXT SHALL BE HELVETICA MEDIUM BOLD.
8. ALL NUMBERS AND TEXT SYMBOLS ARE RAISED ADA TEXT.
9. PROVIDE GRADE 2 BRAILLE WHERE INDICATED.
10. WHERE THERE IS LIMITED OR NO WALL SPACE ADJACENT DOOR, SIGN SHALL BE INSTALLED ON THE WALL ADJACENT TO THE DOOR. COORDINATE WITH ARCHITECT.
11. SIDELIGHT SIGNS TO HAVE VINYL BACKER ON BACK SIDE OF GLASS.
12. FIRE EXTINGUISHER CABINETS TO BE IDENTIFIED WITH RED VERTICAL LETTERS ON FACE OF CABINET DOOR READING "FIRE EXTINGUISHER" IN 2" HIGH CHARACTERS.

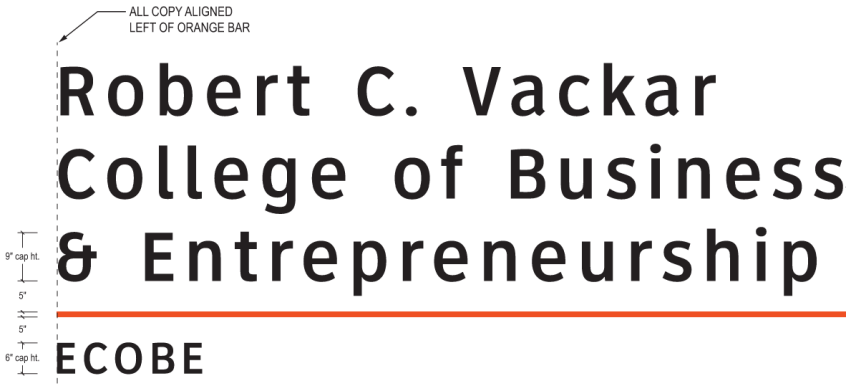
9.4 Additional Standard Interiors Identification Signage

Additional miscellaneous building interiors signage can be found HERE or VDRIVE

9.5 Building Identification Signage

UTRGV Building Identification Signage shall conform as follows:



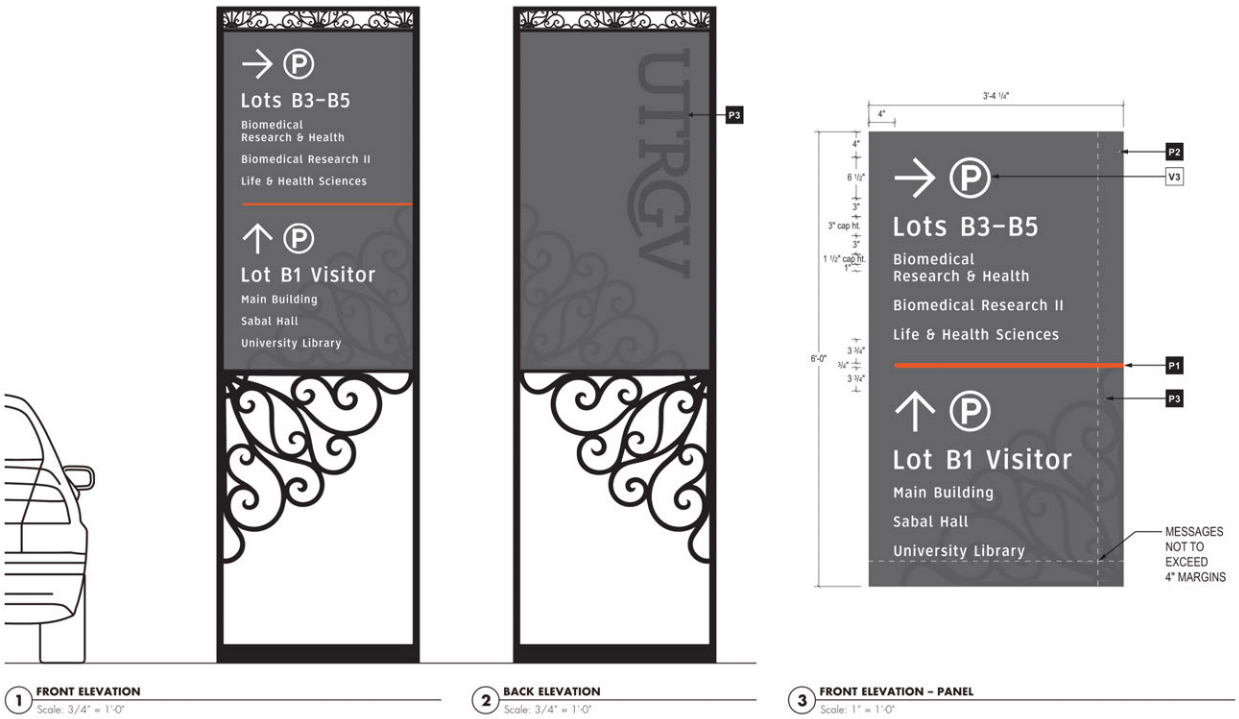


Edinburg Campus Based Buildings

Brownsville Campus Based Buildings

9.6 Campus Wayfinding Signage

UTRGV Campus Wayfinding Signage will follow the existing UTRGV signage and Wayfinging Master Plan Document until further notice.

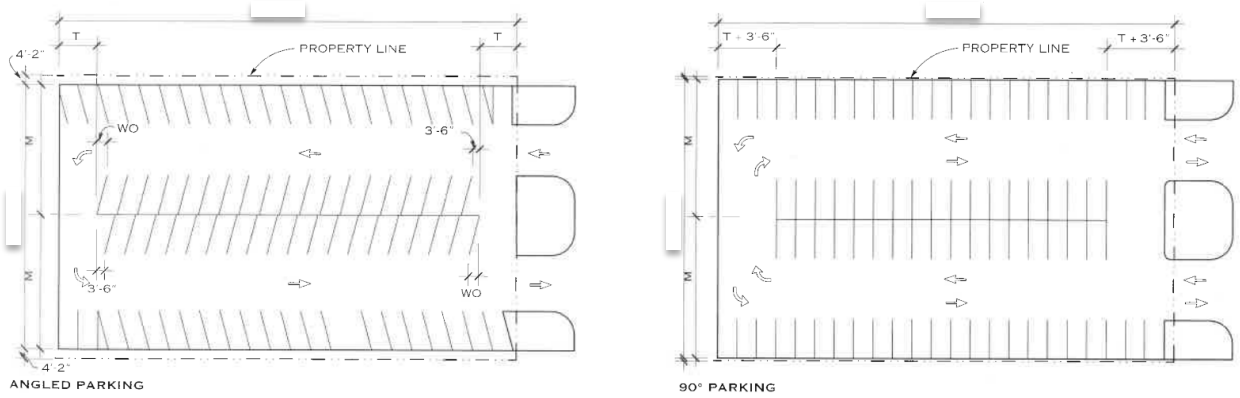


Download the [UTRGV Signage & Wayfinding Master Plan] here or [VDRIVE]

9.7 UTRGV Signage Addenda

Reserved for Future Content

Section 10: Parking Lot Design Planning & Parking Principles for a Distributed University



New parking lot planning at UTRGV must respond to the university's distributed multi-campus structure, pedestrian-oriented cores, regional climate, and evolving mobility needs. Across every town served by UTRGV, parking functions as the initial and ultimate extension of the campus arrival and departure experience, landscape framework, and mobility hierarchy for students that do not reside on campus. The following tailored guidelines reflect conditions and priorities specific to UTRGV.

10.1 Demand Management Across Multiple Campuses

UTRGV's unique geographic distribution requires coordinated parking supply strategies tailored to the distinct roles of each campus. Edinburg and Brownsville support larger populations and therefore require higher-capacity lots, structured parking options, and strong integration with transit. Smaller sites—such as Harlingen and McAllen—benefit from shared parking with academic, clinical, or community-oriented partners.

10.2 Prioritizing Pedestrian-Oriented Cores

Consistent with UTRGV's long-term planning objectives, surface parking should be located at the periphery of pedestrian-dominant academic zones, allowing campus paseos, courtyards, and quads to remain vehicle-free. This promotes walkability, reduces conflicts, and reinforces the campus landscape hierarchy and safety.

10.3 Connected Multimodal Networks

To ensure that movement from parking to the academic core is safe, intuitive, and climate-responsive, UTRGV parking lots must integrate seamlessly with:

- the Vaquero Express bus system,
- bicycle infrastructure,
- shaded pedestrian pathways, and
- key campus gateways.

10.4 Stall Configurations

UTRGV campuses commonly benefit from:

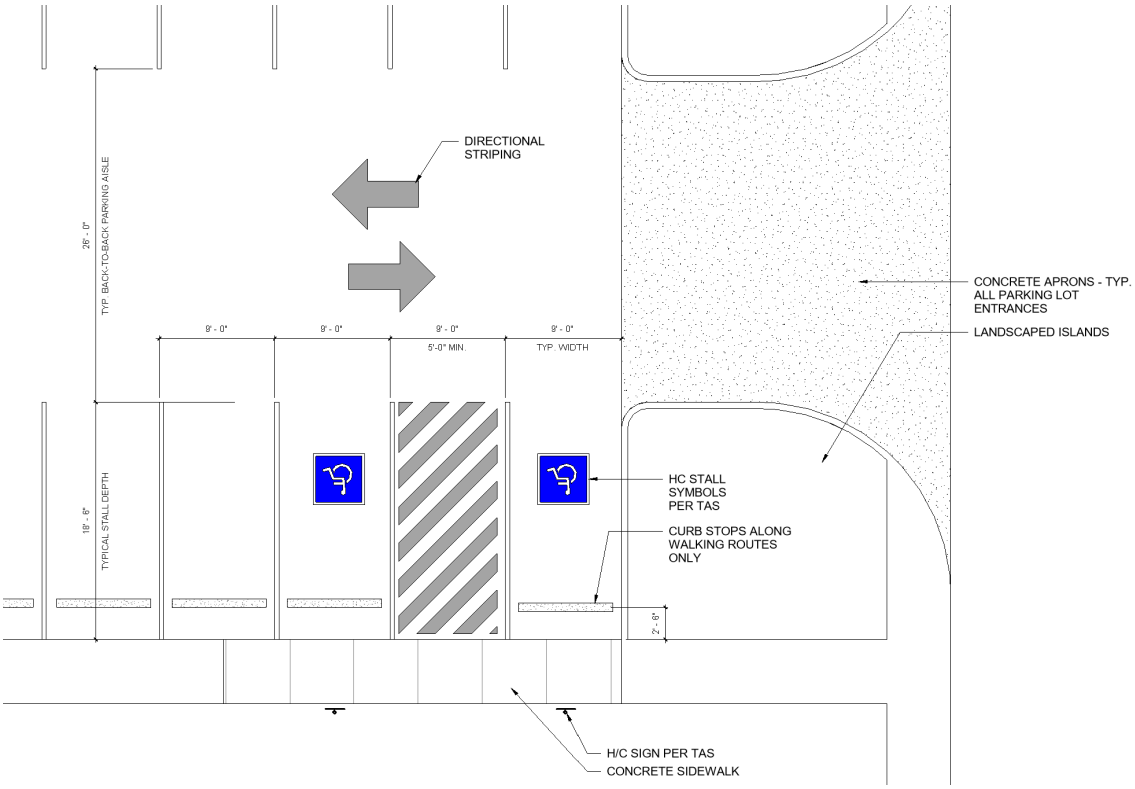
- All Stalls shall be 18’-6” deep and 9’-0” wide minimum.
- Individual curb stops shall be installed at all sidewalk adjacent parking spaces at a distance of 2’-0” minimum from face of curb adjacent to sidewalk.
- 90° standard parking is preferred in larger peripheral lots for efficiency and maximum space allotments.
- 60° angled parking is permissible in constrained sites or narrow drive aisles or where two-way traffic flow issues are a concern.
- Parallel Parking is permissible where feasible and space allows along interior campus streets where pedestrian volume is high.

10.5 Aisle and Drive Hierarchy

Primary drives at parking lot perimeters should facilitate efficient circulation, while internal aisles support slower speeds and more deliberate driver behavior. This hierarchy contributes to safety and reduces conflicts with pedestrian zones transitioning from lots into landscaped walkways.

KEY UTRGV Aisle & Drive Configurations

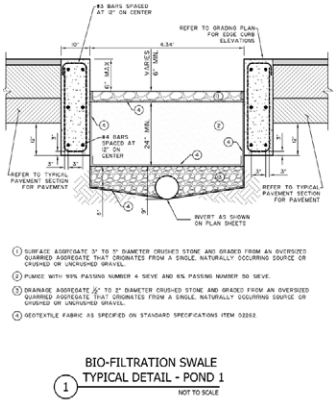
- 30’ - 0” wide & clear at all Primary entry and main circuolation Aisles
- 26’ - 0” wide and clear at all back-to-back 90° standard parking aisles
- 16’ - 6” Wide and clear at 60° angled parking lot aisles in constrained sites or narrow drive aisles. All angled parking aisles shall be one-way directional aisles with appropriate directional striping and signage.

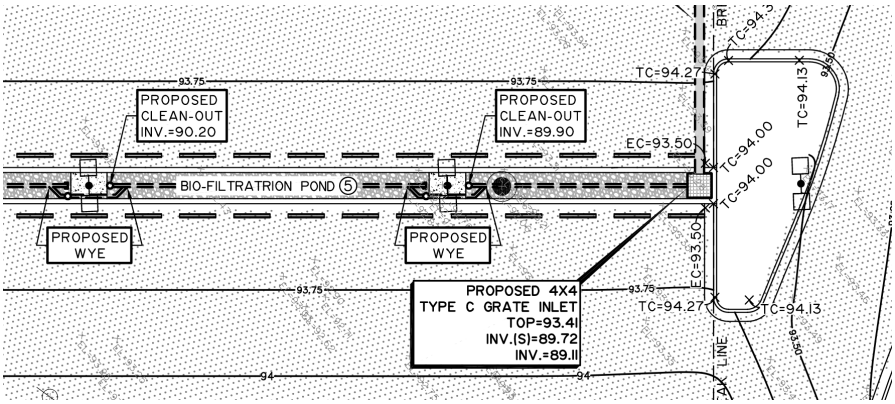


10.6 Parking Lot Sustainability Objectives

UTRGV promotes green infrastructure that reduces runoff, improves water quality, enhances campus ecology, and mitigates localized flooding, with solutions that are visible, maintainable, and cost-effective over the asset life cycle. Priority strategies include bioswales, vegetated filtration zones, bioretention cells, rain gardens, and permeable pavements, integrated with conventional drainage where needed.

New projects shall incorporate linear bioswales along drive aisles, perimeter edges, and pedestrian spines; bioretention in parking islands, end caps, and setbacks; vegetated filter strips bordering large pavements.





10.6 Pedestrian Safety, Climate and Experience

UTRGV's location in the Rio Grande Valley makes thermal comfort and shade critical components of parking lot design. Given the volume of students walking from outer parking areas into academic courtyards, pedestrian routes must feel safe, intuitive, continuous, and comfortable across all seasons and weather conditions.

Key UTRGV-specific strategies include:

- Pedestrian crosswalks shall be designed to meet high-visibility and universal-access standards, ensuring safety, clear delineation, maximum safety, and barrier-free accessibility for all users.
- Shaded pedestrian paths leading from lots into campus paseos and intermittent landscaped islands should be incorporated into parking lot designs
- Highly visible crosswalks at all primary access points appropriately striped with safety signage.
- Vertical and visual cues (poles, signage, contrasting pavement) reinforcing pedestrian priority
- Safe nighttime environments through consistent, uniform lighting consistent with the minimum UTRGV Lighting Standards

Section 11: Campus Lighting

Purpose and Vision

Campus lighting shapes the character, functionality, and safety of the University environment. It supports academic life by keeping outdoor spaces accessible after sunset, reinforces architectural intent, and strengthens a unified campus identity. A successful approach balances performance, aesthetics, safety, and sustainability so that lighting reveals buildings, landscapes, and circulation paths without causing glare or visual clutter. As residential life expands, lighting plays an even larger role in welcoming and protecting the campus community at night.

Core Lighting Principles

- Prioritize human comfort, safety, and clear wayfinding.
- Use energy efficient systems and integrate daylight first.
- Reinforce architectural order and landscape structure.
- Avoid direct glare and minimize unnecessary brightness.
- Ensure consistency across projects for a cohesive campus identity.

11.1 Daylighting and Interior Lighting Performance

Interior artificial lighting represents a significant energy demand and contributes to internal heat gain. Reducing this load is essential to meeting the University's energy goals. Effective daylighting relies on thoughtful enclosure design, appropriate floor plate depth, and strategic placement of openings. Designers should incorporate daylighting opportunities early in the process to reduce reliance on artificial lighting while still avoiding excess solar heat and glare.

Practical Lighting Strategies

- **Plan for Daylight First**
  - Shape building massing to support daylight: prioritize reasonable floor plate depths and introduce atria, clerestories, or light wells where depth increases.
  - Orient major learning and work spaces along building perimeters; place support spaces deeper in the plan.
  - Use courtyards and arcades to bring soft daylight to interior edges while reducing direct sun exposure at ground level.
- **Facade and Openings**
  - Calibrate window size and placement by orientation to balance daylight with solar control.
  - Favor exterior shading (overhangs, fins, screens, arcades, vegetation) to block high heat sun before it reaches glass.
  - Integrate light shelves on appropriate orientations to bounce light to the ceiling and deepen daylight penetration.
  - Select glazing with visible light transmission and solar control appropriate to orientation and program; avoid overly dark glass that undermines daylight quality.
- **Interior Layout and Finishes**
  - Keep ceiling planes as high and uncluttered as practical near windows to allow light distribution.
  - Use high-reflectance ceilings and upper walls to improve daylight spread; use matte finishes to limit glare.
  - Borrow light across zones with interior glazing, sidelights, and clerestories above partitions.
  - Arrange work surfaces and screens to limit direct sun on tasks and reduce monitor glare.
- **Layered Electric Lighting (LED Only)**
  - Use LED luminaires exclusively to meet University policy and reduce energy and internal heat.
  - Adopt a task and ambient strategy: provide focused task lighting where needed, and design ambient lighting at modest levels.
  - Choose optics and distributions that deliver light to the ceiling and upper walls for visual comfort and an open feel without overlighting.
  - Select quality color rendering and appropriate color tone based on program and time of day needs, while maintaining consistency across districts.
- **Daylight Responsive Controls**

    - Provide daylight dimming zones within a defined distance from windows and skylights so fixtures automatically reduce output when daylight is available.
    - Use multi-zone switching and continuous dimming to fine tune output by orientation, depth, and program.
    - Coordinate shades with sensors so glare is controlled without defeating daylight harvesting.
- **Occupancy and Scheduling**
    - Use vacancy or occupancy sensors in classrooms, offices, conference rooms, and restrooms to turn lights off when spaces are empty.
    - Apply time-of-day scheduling in shared and public areas, with setback levels in low-use periods.
    - Provide simple local controls for users to adjust light to task without raising whole zone levels.
- **Glare and Solar Heat Management**
    - Prioritize exterior shading to manage heat and brightness before it enters the building.
    - Use interior shading devices with appropriate openness and color to cut brightness while maintaining outward views.
    - Diffuse toplighting with lenses, baffles, or fabric systems to avoid hot spots and direct beam on work surfaces.
    - Avoid specular or very glossy finishes near windows and under skylights.
- **Commissioning, Tuning, and Maintenance**
    - Commission lighting and controls to ensure sensors, setpoints, and scenes perform as intended.
    - Perform seasonal tuning to account for sun angle and schedule changes.
    - Maintain luminaires, glazing, and shading so optical performance and daylight availability remain high.
    - Provide quick user guidance so occupants know how to operate shades and local controls.
- **Program-Specific Tips**
    - **Classrooms**: preset scenes for lecture, discussion, and AV; ensure vertical illumination for teaching walls while allowing daylight dimming at the perimeter.
    - **Offices**: pair modest ambient levels with adjustable task lights; align workstations to minimize monitor glare from windows.
    - **Labs and studios**: use localized task lighting at benches and tables; keep ambient lighting efficient and uniform without overlighting.
    - **Corridors and lobbies**: use cross-daylighting from courtyards and glazed partitions; apply low baseline levels with occupancy trimming.
- **Integration with Architecture and Landscape**
    - Align lighting with the pedestrian network so primary paths and nodes remain intuitive day and night.
    - Ensure pedestrian pathways, building egress points, and parking lots are purposefully and appropriately lit in accordance with UTRGV security lighting requirements for camera image capture.

- Leverage landscape (trees, trellises, pergolas) to filter daylight and reduce perimeter heat gain. Incorporate a artificial Moonlighting landscape lighting strategy.
- Detail soffits, arcades, and porches to conceal sources and create comfortable luminous ceilings at entries.

11.2 Approved Lighting Technology

LED lighting is the only approved lighting type for use at UTRGV. LED fixtures are essential for achieving required illumination levels while minimizing energy consumption. Continued advancements in LED technology and increased market competitiveness provide improved performance and reliability, making LED systems the most efficient and durable option for campus buildings.

Refer to the appropriate section of the UTRGV Master specifications for additional product specific information.

11.3 Nighttime Lighting and the Campus Environment

With the campus's expanding residential presence, nighttime lighting plays an essential role in ensuring safety and shaping the overall atmosphere of the campus after dark. Exterior lighting should create a calm, comfortable, and navigable environment that supports nighttime activity while respecting the surrounding academic and residential context.

11.4 Building Lighting Strategy

Building mounted lighting should be located primarily within recessed or covered architectural elements such as lobbies, loggias, porticoes, and trellises. When viewed from the exterior, these spaces should produce a warm, inviting glow from concealed sources. Direct glare from exposed fixtures must be avoided, and exterior illumination of building facades should not be used except where required for life safety.

11.5 Color and Material Harmony

The color of luminaires should complement campus materials. A warm hue is preferred to highlight the buff brick and warm toned concrete paths found throughout the campus, reinforcing visual cohesion and contributing to a comfortable nighttime environment.

11.6 Implementation Notes

- Coordinate lighting design with architectural and landscape elements to establish a consistent hierarchy.
- Incorporate lighting controls, including dimming and scheduling, to balance efficiency, safety, and user comfort.
- Conceal fixtures and wiring where practical to maintain visual clarity and reduce clutter.
- Use mockups or pilot installations when beneficial to verify lighting quality and performance.

- Due to significant long-term maintenance, safety, and performance challenges, vulnerabilities to water infiltration, soil movement, and debris accumulation, buried, in-grade, concrete encased, or inground light fixtures should be avoided.

11.7 UTRGV Approved Lighting Fixtures & Electrical Accessories

Interior Lighting – Refer To UTRGV Master Specs For Complete Mep Information

- **FIXTURES:** 2X2,2X4 &1X4 ULTRA LOW-PROFILE DIMMABLE LED PANEL FIXTURES BY RAB OR LITHONIA (FIXTURES REQUIRED TO BE MULTI VOLTAGE CAPABLE AND COLOR TEMP ADJUSTABLE TO 5000K)
- **OUTLETS:** LEVITON BRYANT/ HUBBELL
- **SWITCHES:** LEVITON BRYANT/HUBBELL – HARD WIRED
- **COVER PLATES:** LEVITON BRYANT/HUBBELL
- **PANELS & DISCONNECT:** SQUARE D/EATON/SIEMENS
- **BREAKERS & CONTACTORS:** SQUARE D/EATON/SIEMENS
- **FUSES:** COOPER-BUSSMAN

Exterior Lighting – Refer To Utrgv Master Specs For Complete Mep Information

- **BUILDING WALL PACKS:** HIGH-EFFICIENCY DARK SKY COMPLIANT LED EXTERIOR GRADE FIXTURES WITH ROAM NODE LIGHTING CONTROLS BY VISIONARE LIGHTING, LITHONIA, COPPER
- **PEDESTRIAN POLES LIGHTING:** CALIFORNIA ARIA SIZE 1 LED SILVER METALLIC; 16' POLES, TOP FIXTURE IS CAL-1-L, CONNECTED TO AUTOMATED CONTROL SYSTEM
- **TRANSFORMERS:** VISIONAIRE, RLX SERIES
- **METERS & GUAGES:** DWYER
- **LIGHT BULBS:** GE OR PHILLIPS (NO GENERIC BRANDS)

Approved Exterior Lighting Fixture Schedules by Campus

EDINBURG CAMPUS LIGHT FIXTURE SCHEDULE

TYPE	MANUF.	MODEL NUMBER	LAMPS	VA	VOLTAGE	DESCRIPTION
T5AA1	VISIONAIRE LIGHTING	RLX-1-T5LS-25L-5K-UNV-MAF-SL FURNISH WITH QYT(1) 6-FOOT, TAPERED ELLIPTICAL MAST ARM # 1MA0632S-SL FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-QD-SL-ZRP-3X5HAND HOLE FURNISH QTY(1) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T5AA2	VISIONAIRE LIGHTING	RLX-1-T5LS-25L-5K-UNV-MAF-SL FURNISH WITH QYT(2) 6-FOOT, TAPERED ELLIPTICAL MAST ARM # 1MA0632S-SL FURNISH QTY(2) LIGHT FIXTURES PER POLE FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-**-SL-ZRP-3X5HAND HOLE NOTE: REFER TO PLANS FOR LIGHT FIXTURE MOUNTING CONFIGURATION FOR D2 OR D9 FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T5AA3	VISIONAIRE LIGHTING	RLX-1-T5LS-25L-5K-UNV-MAF-SL FURNISH WITH QYT(3) 6-FOOT, TAPERED ELLIPTICAL MAST ARM # 1MA0632S-SL FURNISH QTY(3) LIGHT FIXTURES PER POLE FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-T1-SL-ZRP-3X5HAND HOLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T5AA4	VISIONAIRE LIGHTING	RLX-1-T5LS-25L-5K-UNV-MAF-SL FURNISH WITH QYT(4) 6-FOOT, TAPERED ELLIPTICAL MAST ARM # 1MA0632S-SL FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-QD-SL-ZRP-3X5HAND HOLE FURNISH QTY(4) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T4AA2	VISIONAIRE LIGHTING	RLX-1-T4-25L-5K-UNV-MAF-SL FURNISH WITH QYT(2) 6-FOOT, TAPERED ELLIPTICAL MAST ARM # 1MA0632S-SL FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-QD-SL-ZRP-3X5HAND HOLE FURNISH QTY(2) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T3AA2	VISIONAIRE LIGHTING	RLX-1-T3-25L-5K-UNV-MAF-SL FURNISH WITH QYT(2) 6-FOOT, TAPERED ELLIPTICAL MAST ARM # 1MA0632S-SL FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-QD-SL-ZRP-3X5HAND HOLE FURNISH QTY(2) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
CC	VISIONAIRE LIGHTING	CAL-1-L-T2R-25L-5K-UNV-PT-SL-120 FURNISH WITH 16' POLE RTSU16-6.5-11-G-46S-BC FURNISH QTY(1) LIGHT FIXTURE PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	196-W-LED 26914 LUMENS 5000K	196	277	CAL ARIA ARRAY SERIES, LED TOP POST MOUNT
T4CC	VISIONAIRE LIGHTING	CAL-1-L-T4-25L-5K-UNV-PT-SL-120 FURNISH WITH 16' POLE RTSU16-6.5-11-G-46S-BC FURNISH QTY(1) LIGHT FIXTURE PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	196-W-LED 26914 LUMENS 5000K	196	277	CAL ARIA ARRAY SERIES, LED TOP POST MOUNT
T5CC	VISIONAIRE LIGHTING	CAL-1-L-T5LS-25L-5K-UNV-PT-SL-120 FURNISH WITH 16' POLE RTSU16-6.5-11-G-46S-BC FURNISH QTY(1) LIGHT FIXTURE PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	196-W-LED 26914 LUMENS 5000K	196	277	CAL ARIA ARRAY SERIES, LED TOP POST MOUNT

GENERAL NOTE: CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER LABOR TO FIELD VERIFY VOLTAGES PRIOR TO ORDERING LIGHT FIXTURES

BROWNSVILLE CAMPUS LIGHT FIXTURE SCHEDULE

TYPE	MANUF.	MODEL NUMBER	LAMPS	VA	VOLTAGE	DESCRIPTION
T5BB4	VISIONAIRE LIGHTING	RLX-1-T5LS-25L-5K-UNV-MAF-BZ FURNISHED WITH VISIONAIRE RMAF WITH MOUNTING CONFIGURATIONS SHOWN ON PLANS; FURNISH QTY(4) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T4BB1	VISIONAIRE LIGHTING	RLX-1-T4-25L-5K-UNV-MAF-BZ FURNISHED WITH VISIONAIRE RMAF WITH MOUNTING CONFIGURATIONS SHOWN ON PLANS; FURNISH QTY(1) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	152	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T4BB2	VISIONAIRE LIGHTING	RLX-1-T4-25L-5K-UNV-MAF-BZ FURNISHED WITH VISIONAIRE RMAF WITH MOUNTING CONFIGURATIONS NOTE: REFER TO PLANS FOR LIGHT FIXTURE MOUNTING CONFIGURATION FOR RMAF D2 OR D9 SHOWN ON PLANS; FURNISH QTY(2) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T4BB4	VISIONAIRE LIGHTING	RLX-1-T4-25L-5K-UNV-MAF-BZ FURNISHED WITH VISIONAIRE RMAF WITH MOUNTING CONFIGURATIONS SHOWN ON PLANS; FURNISH QTY(4) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	152	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
CC	HOLOPHANE LIGHTING	GVD2-P50-50K-AS-M-BZ-3-N-N-U FURNISH WITH 16' POLE RTSU16-6.5-11-G-46S-BC FURNISH WITH TWO BANNER ARMS #BA11.5H/1U105C AND BA5.5H/1U105C FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	109-W-LED 10,889 5000K	109	277	LED TOP POST MOUNT

GENERAL NOTE: CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER LABOR TO FIELD VERIFY VOLTAGES PRIOR TO ORDERING LIGHT FIXTURES

HARLINGEN CAMPUS LIGHT FIXTURE SCHEDULE

TYPE	MANUF.	MODEL NUMBER	LAMPS	VA	VOLTAGE	DESCRIPTION
T5AA4	VISIONAIRE LIGHTING	RLX-1-T5LR-25L-5K-UNV-MAF-BZ FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-QD-SL-ZRP-3X5HAND HOLE FURNISH QTY(4) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROME NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T4AA1	VISIONAIRE LIGHTING	RLX-1-T4-25L-5K-UNV-MAF-BZ FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-QD-SL-ZRP-3X5HAND HOLE FURNISH QTY(1) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
T4AA2	VISIONAIRE LIGHTING	RLX-1-T4-25L-5K-UNV-MAF-BZ FURNISH WITH VISIONAIRE LIGHT POLE RTSP-30-7G-12BC-136-QD-SL-ZRP-3X5HAND HOLE FURNISH QTY(2) LIGHT FIXTURES PER POLE FURNISH EACH LIGHT FIXTURE WITH ROAM NODE LIGHTING CONTROLS	172-W-LED 24110 LUMENS 5500K	172	480	RLX ARRAY SERIES, LED COBRA HEAD LIGHT FIXTURE
CC	HOLOPHANE LIGHTING	GVD2-P50-50K-AS-M-BZ-3-N-N-U FURNISH WITH 16' POLE RTSU16-6.5-11-G-46S-BC FURNISH WITH TWO BANNER ARMS #BA11.5H/1U105C AND BA5.5H/1U105C FURNISH EACH LIGHT FIXTURE WITH ROME NODE LIGHTING CONTROLS	109-W-LED 10,889 5000K	109	277	LED TOP POST MOUNT

GENERAL NOTE: CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER LABOR TO FIELD VERIFY VOLTAGES PRIOR TO ORDERING LIGHT FIXTURES

UTRGV Exterior Lighting Level Standards

Building Exterior	
Description	Foot-Candles (FC)
Active (pedestrian and/or conveyance)	5
Building Surroundings	1

Pedestrian Tunnels (D Plaza Area)			
Description	Avg. Horizontal FC	Avg. Vertical FC	Uniformity Ratio
Pedestrian Tunnel	4.3	5.4 @ 6’	3:1

Covered Parking Facilities*			
Description	Avg. Day FC	Avg. Night FC	Uniformity Ratio
Basic	5	5	4:1
Ramps & Corners	10	5	4:1
Entrance areas	50	5	4:1
Stairways			

Open Parking Facilities*		
Description	Avg. Horizontal FC	Uniformity Ratio
General parking & pedestrian areas	0.6	4:1
Vehicle use area (only)	1.0	3:1

Sidewalks			
Description	Avg. Horizontal FC	Avg. Vertical FC	Uniformity Ratio
Roadside Sidewalks	0.6	1.1 @ 6’	3:1
Walkways distant from roadways**	0.5	0.5 @ 6’	3:1

Roadways		
Description	Avg. Horizontal FC	Uniformity Ratio
Local roads, intermediate traffic, R4 road	0.6	6:1

* Parking areas are considered medium activity.

**Light should extend 6’ on either side at least 1/3 light level.

Note: The table is a guide only. The responsibly of the design professional (PE) is to comply with IESNA & UTRGV Police requirements regarding exterior light level.

Recommended Commonly Used Light Schedule

Type/ Figure	Manufacturer / Brand Proposed Fixture	CCT	Line Comment	Space Type	Dimming	Space Sensor Required
A	Lithonia CPX 2X2 ALO7 SWW7 M4	3500K	2x2 LED	Back of House, Housekeeping, Building & Dept. Storage, Retail, Dining, Restrooms, Autoclave, Equipment Galley	N	Y
B	Lithonia CPX 2X4 ALO8 SWW7 M2	3500K	2x4 LED		N	Y
A	Lithonia CPX 2X2 ALO7 SWW7 M4	3500K	2x2 LED	MEP Spaces, TR, Fire Command, Equipment Rooms, Kitchen, Servery, Corridor, Lobbies	N	N
B	Lithonia CPX 2X4 ALO8 SWW7 M2	3500K	2x4 LED		N	N
A	Lithonia CPX 2X2 ALO7 SWW7 M4	3500K	2x2 LED	Lab Spaces, Dark Rooms	Y	N
B	Lithonia CPX 2X4 ALO8 SWW7 M2	3500K	2x4 LED		Y	N
C1	Lithonia STAKS 2X2 ALO3 SWW7	3500K	2x2 LED	Office, Wellness, Multi-person Office, Open Office, Classroom, Student Gathering, Lab	Y	Y
C2	Lithonia STAKS 2X4 ALO6 SWW7	3500K	2x4 LED		Y	Y
D1	Lithonia CSVT L48 ALO3 MVOLT SWW3 80CRI	3500K	4FT DLC listed and IP65 and IP66 rated. Part of CS)	Wet Locations: ARC holding areas, Parking Garage Stairwells, back of house overhangs, tunnels, shops, warehouses, etc.	Match space type settings	
D2	Lithonia CNY LED ALO SWW2 UVOLT PE PIR DDB M2	3500K	14" x 14" Canopy Luminaire	Parking Garages/ Canopies	Per Code (Field Selectable)	

E1	Lithonia BLWP4 40L ADP GZ10 E10WLCP LP835 Unit with Passive Dual Technology that Dims to 50% with no occupancy, emergency backup	3500K	2', 4', and 8' lengths	Stairwell lighting, where acceptable Per Code	Per Code (Field Selectable)

Type/ Figure	Manufacturer / BrandProposed Fixture	CCT	Line Comment	Space Type	Dimming	Space Sensor Required
E2	Lithonia BLWP4 40L ADPT EZ1 LP835 MSDPDT7ADCX DIM50 Unit with Passive Dual Technology that Dims to 50% with no occupancy	3500K	2', 4', and 8' lengths	Stairwell lighting, where acceptable Per Code	Integrated Sensors with with automatic dimming control photocell	
F1	Lithonia 2SRTL G L24 5000LM IAW AFL MVOLT GZ1 35K 80CRI DWAM	3500K	2 x 2	Vapor Sealed, Clean Room, Negative Pressure Spaces, Bio-Sensitive	Match space type settings	
F2	Lithonia 2SRTL G L48 5000LM IAW AFL MVOLT GZ1 35K 80CRI DWAM	3500K	2 x 4	Vapor Sealed, Clean Room, Negative Pressure Spaces, Bio-Sensitive	Match space type settings	

U1	ABL-Juno UCES 24IN SWW6 90CRI WH	3500K	2" x 24"	Under Cabinet Lights	Match space type settings
U2	ABL-Juno UCES 36IN SWW6 90CRI WH M6	3500K	2" x 36"	Under Cabinet Lights	Match space type settings

UTRGV Typical Lighting Control Matrix

This matrix indicates the preferred Sequence of Operation by space type for the Project A/E of Record to use as a starting point.

Space Type	Manual On/Off	0-10v Dimming	Vacancy Mode Occupancy Sensor	Programable Scene Control	Scheduled Time Control
Administration					
Conference Room	Y	Y	Y	Y	N
Private Office	Y	Y	Y	N	N
Wellness Room, Meditation Room	Y	Y	Y	N	N
Multi-Person Office	Y	Y	Y	N	N
Open Office (Note 3)	Y	Y	Y	N	N
Copy Room, Huddle, Small Meeting Room	Y	N	Y	N	N
Breakroom, Lounge	Y	N	Y	N	N
Building Housekeeping, Building and Department Storage	Y	N	Y	N	N
Retail	Y	N	Y	N	N
Dining Area (Note 4)	Y	N	Y	N	N
Small Public Restroom, Staff Restroom	Y	N	Y	N	N
Large Public Restroom, Large Staff Restroom (Note 6)	N	Y	Y	N	N
Fire Stair (Note 6)	N	Y	Y	N	N
MEP Spaces, TR, Fire Command Center, Equipment Rooms	Y	N	N	N	N
Kitchen/Servery	Y	N	N	N	N
Corridor, Lobbies (Note 5)	Y	N	N	N	Y
Research and Education					
Classroom	Y	Y	Y	N	N
Student Gathering College Room	Y	Y	Y	N	N
Lab - Biochemistry, Pharmacology (Note 3)	Y	Y	N	N	N
Lab - Optics, Microscopy (Note 2)	Y	Y	N	N	N
Lab - Electro-Physiology	Y	Y	N	N	N

Space Type	Manual On/Off	0-10v Dimming	Vacancy Mode Occupancy Sensor	Programable Scene Control	Scheduled Time Control
Dark Rooms (Note 2) (Note 7)	Y	Y	N	N	N
Laser Use spaces (Note 1) (Note 2)	Y	Y	N	N	N
Lab - Tissue Culture	Y	N	Y	N	N
Housekeeping - Clean/Soiled/Chemical	Y	N	Y	N	N
Autoclave	Y	N	Y	N	N
Equipment Galley, Freezer Galley	Y	N	Y	N	N

Note 1 - Red light indicators in emergency fixtures not allowed. Provide unlit wall-mounted test switch with labelling on both switch and light fixture indicating "Push to test emergency lighting". Note 2 - Space will have lights off as standard.
Note 3 - Lighting zone sizes and locations shall occur with user input to identify group assignments. Note 4 - There may be cases of specialty dinning that may require dimming. A/E to confirm with UTRGV user group.
Note 5 - Emergency Egress lighting to be uncontrolled.
Note 6 - Dim lighting to 50% when unoccupied. Provide battery packs or generator circuit as required for egress lighting.
Note 7 - Dark rooms will require red light. A/E to confirm requirements per project.

GENERAL NOTES

- ARC (Animal Resource Center) spaces and Sound Booths are excluded from this matrix. Refer to UTRGV Design Guidelines for requirements.
- All under cabinet lighting in labs shall be controlled On/Off by the same means as the space lighting (No dimming). Other space types shall confirm with user groups.
- Where large equipment, tall lab benching, or other fixtures that may affect operability, design occupancy sensor locations to account for obstructions.
- Within offices and smaller spaces, type and location of occupancy sensor shall account for standard monitor and furniture placement to detect occupant movement.
- Lighting zone sizes and locations shall occur with user input. Labs may require special understanding of group assignments.
- For spaces with daylighting and 150 watts of lighting or greater shall be capable of dimming and be controlled via photocell per applicable IECC requirements.
- UL924 listed controls bypass devices can be used to bypass lighting controls in the event of an outage for spaces with UTRGV approval.
- Occupancy mode sensors that auto on lighting to 50%, manual on to 100% may be used instead of Vacancy mode sensors where approved by UTRGV Design Team and UTRGV PM.
- For any space types that do not fall into one of the categories above, please reach out to the UTRGV Design Team for directions.

Section 12: UTRGV Space Guidelines

The UTRGV Campus Space Standards were created by Broaddus Planning in the spring of 2019 to establish a consistent record and guide for all campus spaces used throughout the University. The purpose of these standards is to provide clear and uniform guidelines for space allocation across the UTRGV system in Edinburg, Harlingen, and Brownsville, as well as any additional locations with university space needs. These standards support equitable distribution of space at the departmental, college, administrative, and campus-wide scales and are provided to all design and planning teams to define space requirements for renovations, expansions, and new facilities within the UTRGV system.

These guidelines have been developed by the UTRGV Office of Facilities Planning and Construction, with assistance from Broaddus Planning.

The standards were prepared with reference to the Texas Higher Education Coordinating Board space guidelines and benchmarks, as well as comparisons to space standards used by other university systems across the country. They establish a framework that addresses the most common space categories encountered across campus and provide an intent that can be applied to additional space types not explicitly identified in this document.

12.1 UTRGV Space Guidelines Download

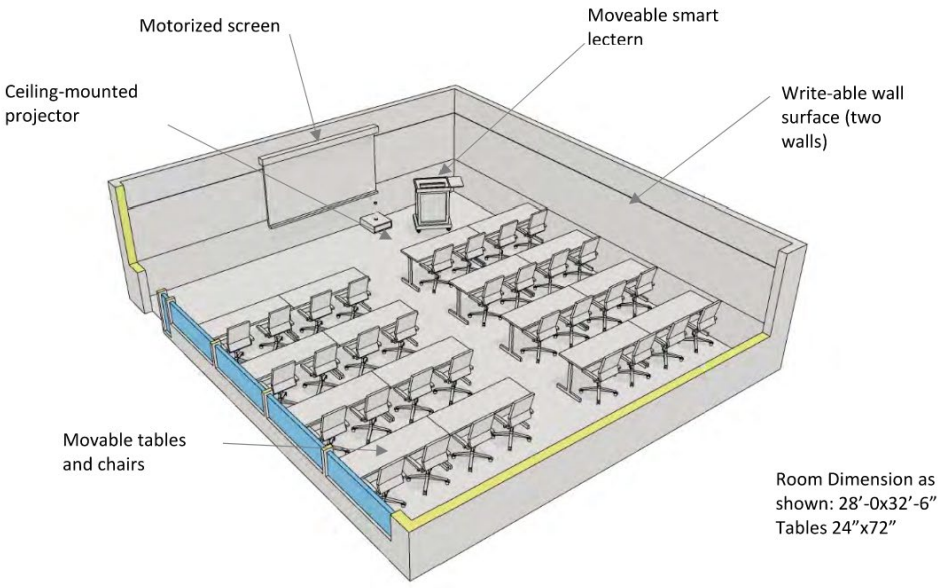
The UTRGV Campus Space Standards Document is available from the UTRGV OP&C website at the following link:

Weblink to OP&C Master Spec Page Here or P&C Staff Link Here

Instructional Spaces

Flexible Flat Floor Classroom – 32 Students

ROOM DIAGRAM



Section 13: Sustainable Design (Draft Section)

Working in collaboration with the UTRGV Office for Sustainability, all UTRGV projects shall align with and complement UTS 169 Sustainability Practices, demonstrating a commitment to environmental stewardship and the promotion of energy efficiency and sustainability principles.

All projects shall exemplify the commitment to energy savings goals, reductions in carbon emissions, and sustainable design is evident in existing practices, through the implementation of well-thought-out initiatives that increase efficiencies, reduce emissions, and promote sustainability practices that contribute meaningfully to the environment, while still achieving excellence in higher education.

Sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainability Practices mean the physical development and institutional operating practices that meet the needs of present users without compromising the ability of future generations to meet their own needs.

13.1 UTRGV Sustainability Vision

The goal at UTRGV is to position the university and the Rio Grande Valley as a living laboratory for sustainability—where education, research, and community action converge to create a just, resilient, and carbon-neutral future, envisioning a region where every graduate is prepared to lead in sustainability, every campus serves as a model of innovation, and every partnership enhances the well-being of people and the environment for generations to come.

13.2 Sustainability Objectives

UTRGV is committed to stewardship of the environment and promotion of the principles of energy efficiency and sustainability. In 2009 UT System developed UTS 169, Sustainability Practices Policy at the direction of the Board of Regents. This policy directs all UT institutions to develop and adopt sustainable operational and maintenance practices to meet sustainability goals. System Administration adopted such practices in October 2009.

The highlights of the plan addresses nine primary areas:

- Energy and Water Efficiency practices
- Alternative Energy Practices
- Climate Protection Practices
- Sustainable Transportation Practices
- Waste and Recycling Management
- Environmentally Preferable Purchasing Practices
- High Performance Buildings
- Sustainability Awareness Training, and Community Outreach

13.3 Sustainability Focus

UTRGV will strive to achieve high-performance buildings that meet or exceeds the standards of recognized high-performance building certifications whenever possible, excluding laboratory and acute care and patient care facilities, within the constraints of program needs and budget parameters. The university acknowledges and appreciates the pioneering role and achievements of early green building certification programs in promoting sustainable design; ; however, such certifications often involve substantial documentation costs; Funds that would otherwise be used for certification documentation are better allocated toward implementing more energy-efficient systems. Further evaluation will be conducted before adopting similar sustainable design policies for laboratory and acute care and/or patient care facilities.

13.4 SECO Requirements

The State Energy Conservation Office (SECO) partners with Texas local governments, county governments, public K-12 schools, public institutions of higher education and state agencies to reduce utility costs and maximize efficiency. SECO also adopts energy codes for single-family residential, commercial and state-funded buildings.

State law 4 Tex. Gov. Code §447.009 (c) and (e) directs each state agency and institution of higher education to set percentage goals for reducing its usage of water, electricity, gasoline and natural gas. These goals are to be included in a comprehensive energy and water management plan (EWMP). This law was intended to streamline and standardize the energy reporting requirements of agencies and universities.

UTRGV will update Energy and Water Management Plans to reflect energy consumption reduction goals over the baseline levels established by the Energy Utility Task Force and will report annual progress on their Energy and Water Management Plans by means of the State Energy Conservation Office (SECO) template.

Any new capital or major renovation project will apply, as a minimum, the energy efficiency design and construction principles of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1 or the International Energy Conservation Code as established by U.T. System Owner's Design Guidelines, Appendix C. The institution planning, and design process will include consideration of life cycle cost along with other factors in the project planning and design process, recognizing the importance of long-term operations, maintenance, total cost of ownership of U.T. System facilities, budgetary constraints, and programmatic requirements.

A measurement and verification plan will be prepared prior to the completion of construction of a new building or major renovation, directed toward establishing an energy service consumption baseline during the first 12 months of occupancy. Subsequent energy consumption audits every three years will document 20% variances to the baseline levels. Institutions will require rainwater and gray water harvesting systems for non-potable use for new buildings where practical and within program budgets.

Key UTRGV / SECO specific strategies include:

- Comply with energy and water conservation standards for state-funded higher education institutions as required by the Texas State Energy Conservation Office (SECO): https://comptroller.texas.gov/programs/seco/reporting/agency.php

- Demonstrate SECO compliance to Facilities Planning & Construction (FPC) at the end of Design Development.

- Submit final compliance certification directly to SECO, with copies to UTRGV P&C, at the completion of Construction Documents.

- SECO Energy and Water Management Plan link: https://seco.comptroller.texas.gov/login

13.5 UTRGV Office of Sustainability Objectives for UTRGV Facilities

Building operational activities consume 71% of energy generated in the United States and 79% of all electric expenditures, according to the DOE Buildings Energy Databook 2006. This suggests that a serious attempt to reduce CO^2 produced by a campus must focus on the reduction of electricity use in buildings. By building upon the current design guidelines and providing standards for more sustainable features in new and renovation projects, all new construction and renovation of existing buildings will become high-performance facilities that reduce energy consumption, enhance occupant comfort, and preserve the rich heritage of UTRGV.

The United States Green Building Council developed the Leadership in Energy and Environmental Design (LEED) Green Building Rating System to provide a reliable building design and performance measurement tool for building owners and operators. LEED provides a complete framework for meeting sustainability goals and assessing building performance in six categories:

- **Sustainable Sites**
- **Water Efficiency**
- **Energy and Atmosphere**
- **Materials and Resources**
- **Indoor Environmental Quality**
- **Innovation and Design Process**

UTRGV does not require projects to meet a specific LEED certification; however, because sustainability is integral to architectural integrity and building stewardship, all new construction and renovation projects should incorporate sustainable design goals and prerogatives.

The impression UTRGV makes on the community is connected to constructed and natural factors. Through the establishment of guidelines for maintaining the character of campus buildings, in tandem with ensuring that historic buildings are safe, functional, and energy efficient, UTRGV can promote sustainability awareness.

The sustainability objective UTRGV is to utilize energy-efficient and sustainable design standards on all new construction and applicable renovation projects and strive to meet or exceed a LEED silver level of sustainability.

- **Goal I: Integrate the Facilities section of the Sustainability Campus Action Plan with the Campus Master Plan. This goal will be measured by the Master Plan Update (CMP).**

- **Goal II: Apply equivalent sustainability measures to all new construction as well as renovation, remodeling, and infrastructure improvement projects.**

Strategies:

- Install utility metering for electricity, water, and chill water on each project, adhering to the maxim: "You cannot manage what you do not measure."
- Ensure project budgets include necessary resources and budget needed to integrate sustainability requirements as established by the State Energy Conservation Office (SECO).
- Make life cycle cost analysis standard practice, recognizing the importance of long-term operations, maintenance, and total cost of ownership of facilities.
- Utilize life cycle analysis in materials and equipment selection for all projects.
- Utilize energy efficient and sustainable design standards on all new construction projects. The energy-efficient design and construction principles of ASHRAE 90.1 as established by the SECO will apply, as a minimum.
- Implement sustainable measures and equipment as appropriate.

- **Goal III: Reduce construction waste via collaboration and open communication with entities involved in project.**

Strategies:

- Request data on construction waste from individual or entity responsible.
- Salvage, recycle, and reuse materials and equipment as appropriate to support goal.

Goal IV: Coordinate Facilities, Planning & Construction sustainable practices with other related local and regional entities and departments.

- This goal will be measured annually or biannually, through documentation of procedures.

Strategies:

- Conduct coordination meetings with Maintenance & Operations, Environmental Health & Safety, and UTPA Police Department.

- Prepare “Lesson Learned” document, which will discuss successes and failures in our sustainability efforts.
- Develop and maintain sufficient outreach efforts to educate community on sustainability Lessons Learned.
- Participate in the performance contract audit to acquire and use sufficient energy data to make Facilities sustainable efforts, planning, and decision making understandable to community.
- Use Energy Utilization Index (EUI) as metric to gauge reductions in GHG and gains in energy efficiency. The EUI is the amount of energy consumed per square foot per year in a building measured in British Thermal Units (BTUs). An EUI baseline will be established for each building and building type at UTRGV.

Section 14: UTRGV Master Plans

Each institution of The University of Texas System is charged with developing and maintaining an Institutional or Campus Master Plan. The Master Plan, approved by the Board of Regents, provides an integrated framework for planning, design, and capital investment decisions that support the institution's unique academic and healthcare mission. Requests to authorize major capital projects are evaluated by the Board of Regents for their consistency and alignment with the approved Master Plan.

UTRGV is currently in the process of updating each campus master plan for future use.

UTRGV Maintains the following legacy institution Campus Master Plans available for review and reference.

14.1 Edinburg Campus Site - Master Plan

- The UTRGV Master Plan for the Edinburg Campus can be found HERE or VDRIVE

14.2 Brownsville Campus Site - Master Plan

- The UTRGV Master Plan for the Brownsville Campus can be found HERE or VDRIVE

14.4 Harlingen Campus Site - Master Plan

- The UTRGV Master Plan for the Harlingen Campus can be found HERE or VDRIVE

14.4 McAllen / Medical Center Campus Site - Master Plan

- The UTRGV Master Plan for the McAllen . Medical Center Campus can be found HERE or VDRIVE

14.4 Satellite Campus Sites - Master Plans

- Additional UTRGV Master Plans for UTRGV Satellite Campus locations can be found HERE or VDRIVE

Section 15: UTRGV Owner's Project Requirements

15.1 Introduction

The **Owners Design Guide** is different than the **Owner's Project Requirements (OPR).**

The OPR defines the goals, functional requirements, and stakeholder expectations surrounding a project's use, operations, and maintenance of proposed projects in preparation for the documentation required for BOR presentations and approvals. It provides guidance and metrics for success for all subsequent design, construction, acceptance and operational decisions to ensure consistency and alignment with established goals.

The OPR supplements and informs traditional facility programming efforts in order to better address evolving requirements for energy efficiency, sustainability, environmental quality, safety, security, maintenance, and long term cost of ownership. It is specifically designed to address commissioning requirements early in the design process and, ultimately, to facilitate confirmation that the completed project fulfills its established requirements.

The OPR builds upon the Statement of Need, using collaborative workshops and surveys to gather input from key stakeholders, gain consensus, and establish measurable criteria for success.

The Owner's Project Requirements documents normally address the following topics:

- Statement of Need
- Project description
- Historical significance
- Funding sources, amounts, expenditures
- Investment metrics
- A project management plan
- Permits, codes, and other impact statements
- Procurement strategy
- Total Project Budget/Cost
- Total duration schedule and required BOR milestone dates
- Requirements from the Institution
- Requirements from operations and maintenance
- Requirements from the Users
- Requirements from the community
- List of Project Stakeholders

15.2 Codes and Regulations

Refer to Section X.X of this Design Guide and the UTRGV Master Specifications for the most current list of applicable codes and regulations

UTRGV Projects shall comply with all applicable general, federal, state, and local laws, statutes, regulations, ordinances, and codes governing or otherwise affecting its design, construction, and operation including:

- The UTRGV Owner's Design Guidelines
- The UTRGV Master Specifications
- International Building Code
- International Mechanical Code
- International Plumbing Code
- National Electrical Code
- National Fire Protection Association (NFPA) 101 Life Safety
- ASHRAE 90.1-2004
- ASHRAE 62.1-2004
- International Energy Conservation Code-2004
- Texas Accessibility Standards (TAS)
- For new elevators: ASME 17.1 codes for elevators and escalators
- International Fire Code (including coordination with Local Municipal Fire Department partners offering emergency fire control coverage at project site location)
- SECO submittal
- Institution's Stormwater Management Plan

The code versions listed above shall be the version most recently adopted by UT System or as referenced in the UTRGV Master Specifications

15.3 General Requirements for Project Success

The following requirements have been historically identified via workshops for various UTRGV projects from all participating stakeholders in response to open ended questions. After each workshop, the responses were sorted, grouped and labeled into categories, which represented requirements relating to the same general topic or area of interest.

15.3.1 AESTHETICS (INTERIOR, EXTERIOR DESIGN, & LANDSCAPING) - The focus of the exterior design and landscaping criteria addressed producing a design that is complementary of the surrounding environment and the respective UTRGV Architectural Aesthetic of each campus site where possible. Additionally, the landscape design shall enhance and create a safe and inviting environment for faculty, students and staff.

General Aesthetic Requirements:

Landscape:

1. Align landscape design with the maintenance budgets and the University Design Guide standards.
2. Design exterior public use spaces to be temperate/cool and inviting and strive to reduce "heat-island" effect on Campus. Consider the use of water, shade structures, and protect and integrate existing trees.

3. Drip irrigation is acceptable. However, UTRGV Campus Operations has experienced problems on campus with squirrels damaging the drip irrigation piping.
4. Integrate appropriate water features consistent to other water features on campus where applicable.
5. Provide exterior study and gathering spaces of the building where possible.
6. Promote microclimatic environments in courtyards created by building systems, reflectivity, solar gain, air circulation, etc.
7. Provide use of landscaping biofiltration storm water run-off systems and similar design approaches integrated into the landscape as an integral element in the overall design.
8. Understand social issues of outdoor spaces with respect to how it will be used in terms of gathering spaces, passage, circulation, and campus "cut-throughs" and implement appropriate and creative design solutions.
9. Incorporate the use of native and naturalized plant species primarily where possible and maintain and complement the established urban forest species catalog as much as possible.
10. Accent with flowering/accent plantings with foliage from the "orange" color range at main focal points and wherever possible.
11. Use the principals of crime prevention through environmental design during design of landscaping and selection of materials. Be mindful of areas of concealment from security camera views and poor lines of sight of surveillance equipment.
12. Utilize efficient irrigation strategies to minimize water waste. Consider the incorporations of rainwater harvesting, etc.
13. Utilize paving materials that minimize heat gain, are consistent with existing Campus sidewalk patterns/design and where possible, minimize uncontrolled storm water run-off.

Building Exterior/Interior:

1. Where applicable, respect the established aesthetic and historical context of each respective campus site and existing building catalog.
2. Follow the human scale goal of the UTRGV campus master plans.
3. Design roof system facades to mask any roof mounted equipment. Provide minimum 20-year NDL warranty or best available for system selected. Have reinforced roof pathways on roof for maintenance of equipment.
4. Incorporate building design as part of the campus masterplan and as a celebration of academics, culture and environmental trends towards sustainability.
5. Provide a design so that faculty, staff, students, and visiting general public can easily identify the new building as part of the institution and its purpose.
6. Provide adequate space for student traffic in corridors that join classrooms.
7. Provide cool roof concepts whenever possible.
8. Provide daylighting for all regularly occupied spaces as much as possible.
9. Break room, lounges, and collaborative spaces should be located to encourage interactions between faculty and students.
10. Buffer noise in stairwells where applicable.
11. Building must have spaces for small groups of faculty/students to gather, huddle and collaborate.

12. Built-in drawers, if installed, should be able to withstand at least 30 lbs. of paper without buckling.
13. If included, provide shallow dimensioned alcoves or recesses in corridors to allow for line of sight observation at interior entrances. Minimize blind corners and blind spots.
14. Create interior spaces that connect to the exterior and landscape features in terms of form, function and building fenestration.
15. Define the occupant limits in the building assembly areas and plan accordingly to distribute general gathering spaces throughout the building so as to limit crowded public transitional spaces.
16. Create department suites to be visually open.
17. Design for the incorporation of natural light without spaces becoming overheated. Provide sun control shade or screens devices on facades hit with direct sunlight and at all windows.
18. Design MEP system for space efficiency and accessibility. Install MEP assemblies tight to structure and efficiently laid out as much as possible.
19. Design restrooms so that space is available to place books in stalls and near lavatories and that the space is TDLR - TAS compliant.
20. Do not locate elevator machine rooms or electrical equipment below bathrooms, kitchens, or other water sources.
21. Design common support spaces like conference room and workrooms to be shared spaces (non-departmental).
22. The building should have enough space so that all have adequate room for offices, conference rooms, filing/storage, teaching lab, reception, and general student use areas.
23. Include a unisex/family restroom and a comfort room (nursing mother suite) whenever possible.
24. Keep service areas out of view but integrated with building and accessible from main vehicular drives.
25. Control natural light in classrooms and instructional areas to reduce glare.
26. Locate non-main electrical rooms in interior spaces, stacked, and not landlocked by elevators/stairs/mechanical spaces.
27. Main electrical and mechanical spaces require ready access to the exterior for removal/replacement of large components.
28. Minimize the use of vertical open lobby/atrium spaces for more than two floors for cost and operational reasons.
29. Provide mail room/mail locker station locations and identify how they function if requested.
30. Provide quiet and private places for faculty, staff, and students to work. Take into consideration the noise from adjacent spaces.
31. Provide space to house attic stock & minimal maintenance items. Valves, faucets, valve tag lists, half size drawings, and O&M's shall be provided.
32. Provide visual and physical connections between floors where applicable.
33. Recognize and address different needs of lab space. Need ample workspace and lab space for faculty and grad students to work collaboratively.

34. Provide general, non-departmental common areas for students to congregate.

15.3.2 AUDIO/VISUAL - The audio/visual infrastructure (conduit, etc.) will be installed by the contractor and the Owner will pull wires, and install most equipment, except as noted below. A/V design needs to consider the possibility of future modifications and provisions for flexibility and future technology needs.

General Requirements:

1. A/V equipment and installation require a TPC IM budget allowance. The project construction cost includes Contractor provided infrastructure for equipment.
2. Contractor furnishes and installs Owner specified motorized projection screens and lighting control interfaces.
3. A/V Contractor will install Owner-furnished projector mounts and speakers
4. Contractor-provided infrastructure includes empty conduit, pull strings, pull boxes, classroom termination boxes, and power receptacles.
5. Control incoming noise from street and adjoining spaces for classrooms.
6. Coordinate and plan layout for network, telephones (VOIP), security, and AV infrastructure to ease maintenance and upgrades.
7. Coordinate with Owner-furnished video and phone conferencing capabilities in small and large conference rooms.
8. Design structural, MEP utilities, etc. to reinforce (not conflict) with A/V systems and instructional areas.
9. Provide adequate cooling where A/V equipment is located. The Owner will provide heat loads to A/E team early to enable this requirement.
10. Provide video fiber from selected classrooms, meeting rooms, labs, and public space to the MDF closet. Determine spaces that require video fiber connections during programming.
11. Provide adequate infrastructure for Distant Learning (ITV) capabilities.
12. Coordinate with owner furnished Distant Learning (ITV) equipment needs (power, data, mounting heights and quantities).
13. Coordinate locations with owner furnished monitors in public spaces.
14. Coordinate locations with owner furnished A/V cameras in classrooms.
15. Provide credenza at meeting/conference room for A/V equipment.
16. Provide floor box for podium with 1 ½" conduit for A/V cabling at classrooms and labs. Reference section 8.5 Communication/Information Technology for additional conduit requirements for data at this location.

15.3.3 CODES, ACCESSIBILITY, AND ENERGY EFFICIENCY - In addition to the Codes and Regulations stipulated in Section II above, the following requirements and considerations were stated.

General Requirements:

1. Consider higher performance for reduced environmental impacts.
2. Adhere to minimum security standards that are currently being developed by Campus Parking and Transportation Services and UTRGV Police. (Includes:

Cost of system, annual monitoring fee, and false alarm fee.). Will need to re-visit during design.

3. Provide a static pressure reset strategy.
4. Provide/incorporate infrastructure, space for future equipment for Renewable energy resources (solar, wind, water collection)
5. Consider robustness of fan selection - e.g. use “backward incline air foil,” (if it is decided not to use vane axial fans.)
6. Evaluate alternative energy options via life cycle cost basis for decision by institution.
7. Identify proprietary equipment or systems that are over and above the institution Design and Construction Standards required for this capital project. (Siemens, Johnson or ALC controls)
8. Consider using flexible sprinkler systems to allow Campus ease of sprinkler head change location when remodeling in the future. Consider as an alternate to base bid due to cost associated with this item.
9. Consider reuse of re-claimed water, fin water, rainwater, etc. for irrigation, and cooling tower make-up.
10. Meet existing institution standards for utilities.
11. Provide a 50-year structure that is straight and plumb.
12. Provide low static, (3-4 inch) low pressure air distribution systems.
13. Provide Emergency vehicle access to building.

15.3.4 COMMISSIONING – (Project Dependent) Where provided on a project, commissioning begins at the start of design and is integrated throughout the design and construction of the project. An effective commissioning process supports the successful occupation, operation, and maintenance of the building throughout its life. The process of training is especially important as the building nears substantial completion and as fire/life safety systems come on-line. While the commissioning agent is contracted through U. T. System, the institution will be involved in the development of the commissioning plan and its execution.

General Requirements:

1. Contractor to provide accurate and detailed (hard copy and digital model) as-builts of all buried utilities, building, and associated components to the institution at the completion of the project (sewer, gas, etc.) based on a contractor provided markups.
2. All systems must be completely functioning before calling for inspections and training; commissioning testing includes equipment, systems, and systems integration.
3. Demonstrate the proper functioning of provided utilities before building occupancy/turnover.
4. Design and construct the building to include all equipment and infrastructure necessary to conduct testing and maintenance on all facility systems (e.g., floor drains for sprinkler testing).

5. Develop an approved “project substantial completion plan” with UTRGV Facilities Planning and Construction (FPC) and UTRGV Campus Facilities Operations (CFO) including milestones for the general contractor.
6. Emergency systems shall be tested for all combinations of failure under full load.
7. Provide performance/functional test procedures for all installed systems with the 100% CD submittal.
8. Provide the descriptions of methods to benchmark energy performance (measurement and verification) at substantial completion, which is repeatable at regular intervals.
9. The A/E and Contractor shall provide detailed sequence of operation documentation for the HVAC system. The Commissioning agent will review.
10. The Commissioning agent shall provide written documentation to UTRGV FPC/CFO technical staff that all systems function as designed, all training is complete, and all record documentation has been turned over to UTRGV FPC including video recordings of all trainings. Provide training requirements and specifications.
11. The commissioning process shall be managed such that the project team (including the Owner) can jointly certify when the project has achieved Substantial Completion and can therefore transfer responsibility for maintaining the building from the Contractor to UTRGV Facilities. (Note: There may be phased activation and multiple substantial completion dates.)
12. The Contractor shall perform window and curtain wall leak testing at the earliest possible point of construction and prior to UTRGV Building Envelop Consultant testing.
13. The Contractor shall provide as-built documents and operations and maintenance manuals for all major equipment and systems. The Commissioning agent will review documentation for applicability and relevance to the project. Provide documentation in hard copy and digital format.
14. Users and institution staff are to be properly trained; train staff after all testing is complete.
15. Institution requires for as-built documentation to be in hard copy and digital format. The Contractor and A/E shall work together to provide record documents in a user-friendly electronic format per Campus requirements.
16. Provide a 1-year follow-up warranty walk-thru with Campus Facilities Staff.
17. Consider Retro Commissioning after one year follow up to ensure all systems are working properly to enhance overall building performance.

15.3.5 COMMUNICATIONS / INFORMATION TECHNOLOGY - The focus of the information technology criteria addressed the requirement for wireless internet access and the locations of IT and communications pathways.

General Requirements:

1. Provide redundant and independent cooling system for network equipment spaces (IDF/MDF)
2. Determine voice (POTS, voice over IP), data and cable TV requirements during design. All systems to meet ITS Telecom and Networking standards.

3. Provide as-builts of voice and data locations.
4. Provide communication pathway to point-of-entry (POE).
5. Provide pathways with excess capacity between classrooms, instructional areas, and MDF closets.
6. Provide wireless coverage throughout the building and exterior spaces to support anticipated use and device load.
7. Telecom and other often accessed pathways should avoid offices and classrooms and run in public hallways whenever possible.
8. The Main Distribution Facility (MDF) needs adequate cooling, power, and room for growth. Cooling will be done thru entire campus A/C system with an added "mini-split" A/C system as supplement. "Mini-split" to be on emergency generator power.
9. Institution will install the wired and wireless network equipment through an institutionally managed cost.
10. Provide fiber pathway redundancy.
11. Include generator back up to all network spaces (IDF/MDF)

15.3.6 CONSTRUCTABILITY - The focus of the construction consideration criteria addressed safety and access and coordination with neighbors during construction.

General Requirements:

1. Campus, design team, and construction team shall work together to devise a strategy to meet public safety, security, access, and fire truck access needs while allowing construction to proceed as normal as possible.
2. Ceiling space in classroom instructional areas should be accessible with 6- or 8-foot ladder with 2x2 "drop" ceiling grid, except for high ceiling areas defined by the Architect. Consider providing a storage area with power for a lift as part of the project for out-of-reach devices.
3. Location for construction offices within the building/construction site will not be available.
4. Construction staging needs to be designated as part of the Construction Documents.
5. Coordinate this project with any other adjacent construction projects.
6. Coordinate utility interruptions, Contractor will provide least amount of utility disruptions.
7. During construction, coordinate parking requirements and street closures with Campus Parking and Transportation Services then UTRGV Police with 72-hour notice to UTRGV OPR.
8. Establish interim life safety measures during construction.
9. Identify direct artery streets available for construction, delivery access and staging.
10. Implement best practices for tree protection, i.e. utility trenching, etc.
11. Maintain a secure facility at all times during construction.
12. Minimize dust (dust control) during construction and maintain a clean and organized construction environment.

13. Provide a termite barrier around the building foundation.
14. Provide clear and safe student and public pathways during construction.
15. Schedule deliveries during construction for the least amount of disruption.
16. No construction employee parking will be available on site.

15.3.7 ENERGY EFFICIENCY - This section briefly describes the goals of the Institution, the design team and the maintenance staff for meeting for meeting or exceeding building codes and standards.

1. Consider using lighting systems that offer cost effective energy savings potential, and lighting fixtures and/or controls shall be selected to meet minimum efficiency requirements.
2. Consider using High efficiency HVAC equipment that offers cost effective energy savings.
3. Additional energy efficiency measures that provide cost effective energy savings shall be included wherever feasible.
4. Other Institution and User requirements: (e.g., orientation, sitting, day-lighting, cool roof, natural ventilation, landscaping)

15.3.8 Environmental and Sustainability Requirements - This section briefly describes the goals of the Institution for meeting sustainable goals such as Leadership in Energy and Environmental Design (LEED). Refer to UT System policy UTS169 (Sustainability Practices). Items may include:

1. Project shall incorporate environmental and sustainability best practices.
2. Projects are **NOT** required to meet any minimum LEED rating levels.

15.3.9 ENVIRONMENTAL HEALTH AND SAFETY - The focus of the environmental health and safety criteria should be addressed. As well, clean air needs to be assured through limiting VOC's inside the building and limiting exterior fumes from getting in to the building.

General Requirements:

1. Design and construct the building to reduce the attractiveness to bats, birds, bees, and rodents; use integrated pest management techniques.
2. Design building entries to consider wind vortex and door orientation.
3. Design the outside air intake to be at higher/roof level to allow for better source of clean air.
4. Improve storm water run-off quality and reduce run-off.
5. Provide pretreatment of storm water where appropriate, (i.e., oil/water separator).
6. Provide sufficient number of trash and "recyclables" containers in the outdoor areas.
7. Use environmentally friendly (e.g,. low VOC) materials and conserve energy where possible without compromising safety.
8. UTRGV shall provide clear direction as to discharge component of elevator sump pumps and any treatment required due to new code interpretation.

15.3.10 EQUIPMENT & SYSTEMS - The focus of the equipment criteria addressed access, maintainability, and energy conservation. Requirements to minimize noise and vibration into classrooms and offices were identified.

General Requirements:

1. Alert the A/E team in programming of any equipment that is sensitive to vibrations.
2. Avoid remote access to elevator machine rooms (e.g. across roofs or inside custodial closets or offices).
3. Design ceiling fixtures so that they can be maintained and accessed easily.
4. Do NOT provide a Variable Frequency Drive controller for fire systems.
5. Equipment is defined as any major system equipment needed to support the primary building functions.
6. Limit noise from air handling systems, machine rooms, and elevators into offices, classrooms, and labs.
7. Minimize MEP serviceability points.
8. Motion Control Engineering (MCE) brand controls are required on elevators; ensure that electrical, security, HVAC, fire safety sprinklers, and plumbing interfaces meet current code.
9. Provide a descriptive points list for all building automation system points.
10. Provide a remote drain separate and in addition to the drain on the standpipe.
11. Provide a separate panel for smoke control and use the same manufacturer as fire alarm manufacturer.
12. Provide adequate space for maintenance and replacement of equipment, including any utilities pathway(s) and coordinate with other services or building components.
13. Provide crane or lifting devices for all equipment over 500 pounds.
14. Provide the correct size, type, and locations of elevators to handle traffic patterns and maintenance requirements for building functionality.
15. Use of piping, when approved by UT System, shall be “roll” grooved type; cut grooved pipe is not permitted.
16. No pipe smaller than 4" nominal pipe size shall be used for standpipe systems except for individual runouts to one hose cabinet. The 1-1/2" or 2-1/2" runout to cabinet shall have a maximum center line height of 60".
17. Scheduled 10 pipe is not permitted.
18. Where possible, cluster individual room controls (thermostat, security, lights, etc.) into a common place on the wall. Coordinate locations with furniture/equipment locations.
19. Where possible, stack mechanical and electrical rooms, piping chases, etc. vertically.

15.3.11 FIRE SAFETY AND LIFE SAFETY - The focus of the fire/life safety criteria addressed operational procedures, design requirements, testing requirements, and coordination with the institution and associated municipality serving the University campus site. If the building design includes an atrium there will be special code and smoke evacuation requirements, and these may need to be reviewed with the city Fire Marshal Office.

General Requirements:

1. Coordinate Fire Department access to site with visible fire department building connection adjacent to vehicle access roads.
2. Coordinate testing with institution’s notification requirements. Consider date and time for final testing of fire protection systems.

3. Coordinate with UT System insurance/underwriter requirements where applicable.
4. Design needs to take into consideration actual use and type of devices used (fire alarm) – such as beam detection (false alarms).
5. Ensure that all the building safety features are easily accessible.
6. Identify fire alarm notification, suppression, and shut down procedures.
7. Keep alarm pulls away from entry into high-traffic areas, especially narrow corridors, as allowable by code.
8. Provide a fire alarm system that contains voice capability and provide for linkage to UTRGV Police.
9. Provide appropriate road access for emergency vehicles.
10. Provide ease of maintenance of building fire safety equipment, sprinklers, etc.
11. Provide pedestrian (access-egress) gathering and assembly points.
12. Provide sequence of operation for HVAC-integrated systems, and smoke evacuation system if required.
13. Provide shut down of HVAC units from fire alarm system at motor starter.
14. Set up fire alarm and fire suppression for easy testing.
15. Provide egress pathway, stairwells, and exit pathways to exterior, lighting to meet current code (exterior/interior)

15.3.12 Indoor Environmental Quality - This section briefly describes the goals of the Users for occupancy comfort. Items may include:

Indoor lighting requirements:

1. Design to meet current lighting energy code compliance. Maintain Campus light fixture standards where possible.
2. Occupant lighting control requirements: Provide occupancy sensor lighting control where required.
3. Thermal comfort requirements: Provide standard temperature and humidity requirements.
4. Ventilation and filtration requirements: Provide standard ventilation and filtration requirements.
5. Occupancy HVAC control requirements: Provide building management system to interface with existing control system, reports to cooling plant, and remote/device access. New systems shall be BACnet compatible
6. Acoustic environment requirements: provide necessary components to mitigate HVAC noise transfer to classroom spaces.
7. Provide daylighting and daylighting control measures where possible.

15.3.13 OPERATIONS AND MAINTENANCE - The operation and maintenance criteria addressed necessary custodial infrastructure and the building automation system (BAS). Since this building will provide a crossroads for pedestrian movement, it is important to make sure that there are no conflicts between maintenance, operations, and pedestrian/vehicle traffic.

General Requirements:

1. Accommodate operations and maintenance needs by providing pathways, parking, and storage that do not conflict with student/faculty/staff traffic.

2. All mechanical/Electrical rooms are to be accessible using a mechanical keyway and should not be keyed to custodial closet keyways.
3. Coordinate the location of trash and recycling with the services that will collect it.
4. Design for required utility maintenance and other activities (such as sewer inspection, cleaning, rehabilitating; grease trap maintenance; etc.).
5. Design to custodial/storage space requirements.
6. Determine attic stock requirements of critical components, design adequate storage, or designate final Campus storage locations.
7. Include appropriate custodial infrastructure:
8. Electrical outlets designated for custodial & maintenance operations; outlets are maximum of 75 feet apart and preferred 3 feet off the floor on separate circuits. Also include plugs in stairwells.
9. Restroom floor drains provided to accommodate water overflow.
10. Storage space for building specific items such as floor/ceiling tiles, light bulbs, etc.
11. Important parameters of all main and backup systems are to be monitored by the building automation system; building automation sequence (BAS) of operation is to be documented and approved by maintenance personnel.
12. Ensure BAS infrastructure system remains intact and is extended via BAC-net to new building.
13. Interface with campus-wide central monitoring and control systems (i.e. HVAC, security, and other critical systems).
14. Optimize access to equipment rooms and equipment for anticipated maintenance, and provide work clearances around equipment to meet current codes, as well as manufacturer's recommendations.
15. Provide appropriate maintenance access including loading dock and freight elevator for removal and replacement of major mechanical equipment. Crane access may be required.
16. Provide coordination for economical means of exterior window washing.
17. Provide for ease of trash handling.
18. Provide for trash pickup, movement to/from, and dumpster locations.
19. Provide vehicle access to a raised loading dock, preferably with a lift, with proximity to a freight elevator if required.

15.3.14 PARKING, TRANSPORTATION, & ACCESSIBILITY- Where parcing lots are included in the project scope, the following requirements shall apply

General Requirements:

1. Design to avoid pedestrian accidents.
2. No disruptions in public right of ways (ROW's).
3. Provide sufficient number of Campus standard (Serpentine Type) bicycle racks for adequate security of bicycles.
4. Provide UTRGV approved way-finding with simple directions for visitors – during construction.
5. Provide UTRGV approved way-finding with simple directions for visitors – post-occupancy.
6. Consider retaining current traffic flow pattern and limiting disruptions to the existing campus parking lot capacities during construction

15.3.15 RESTRICTIONS & LIMITATIONS - The design and construction team will have little control over some of these issues, such as the approved project budget and the weather during construction. Other issues may be controlled through careful considerations during design and construction, including maintaining effective communications with all stakeholders, a design that is sensitive to the project's context and requirements, and smart scheduling.

General Commentary:

1. Accommodate the needs of constituents.
2. Maintain balanced resolution when it comes to program goals vs. performance goals.
3. Maintain a balanced scope, schedule and budget.
4. Manage budget constraints efficiently and effectively.
5. Establish a consensus on aesthetics early and often.
6. Cost escalation is unpredictable. Lengthy delays to the project could have a significant impact on the budget.
7. Coordinate the design and function of the fire safety air pressurization systems with UTRGV DEHS.
8. Coordinate the design and location of the required fire command room with UTRGV DEHS.
9. Provide the appropriate level of collaboration & communication among design team and between design team & users. Think outside the box.
10. Maintain communication between funding sources.
11. Coordinate Fund-raising limitations or difficulties where applicable.
12. Address potentially inadequate space/flexibility for academic programs growth or change.
13. Maintain open communication to include a clear description of needs by the users to the design team.
14. Maintain open communication between landscape maintenance groups and design team (re: budgets, maintenance needs).
15. Limit/manage loss of program SF due to high costs or escalations.
16. Limit the "small plans" mentality (setting low goals) – be transformative.
17. Design for future growth and development complimentary to the Strategic Plan.
18. Maintain quality control over construction and inspections during the construction phase of project.
19. Maintain SWPPP during all phases of construction.
20. Keep outages to a minimum and providing advance notice when they are necessary.
21. Notify UTRGV DEHS of wastewater pretreatment devices for approval.
22. Maintain a clean and safe construction site.
23. Establish a payback period with the goal of a 50-year building.
24. Limit and effectively manage scope creep.
25. Coordinate and manage staff, faculty and student relocation requirements post construction .
26. Limit the amount of time the department will spend in temporary/swing space locations
27. Construct a building which can adapt to new technologies and changes for the needs of the future graduates.
28. Minimize or eliminate the use of the landscape and outdoor space budgets as budgetary cost-cutting measure

15.3.16 SECURITY - The focus of the security criteria addressed exterior lighting, landscape, hardscape, and building access control.

General Requirements:

1. Project needs to provide a safe environment for faculty, students, staff and visitors.
2. Assess UTRGV security intent related to new building construction and identify external and internal security requirements using 360 degree scope; roof, walk all access points (all sides: roof, sides, and underground areas/tunnel[s]).
3. Confirm locations of security cameras with UTRGV IT/AV Dept., UTRGV Police Dept, and any associated end users where required or as directed by UTRGV PD.
4. Provide access control where indicated by UTRGV PD access control review.
5. Define secure access and alarm point locations.
6. Identify all security door installations during design.
7. Identify any special security requirements early in project design so that these can be easily incorporated into the design.
8. Institution Police Department will identify the existing security problems at the proposed site and surrounding area.
9. Integrate security both in system type and door hardware.
10. Provide BACS proxy-card reader security on elevators for floor access and control after hours instead of key switches.
11. Provide building access that is easily controlled by the facility management and UTRGV Police Dept.—achieved by BACS and electronic locks.
12. Provide complete security system devices, including but not limited to BACS, article protection devices, and surveillance devices, as well as the pathways and wiring for such devices.
13. Provide direct, lockable access to mechanical and electrical spaces.
14. Provide duress buttons where requested by the user and confirmed with UTRGV Police. Provide one spare 1" conduit for Campus future use. Provide telephone hard wire line not cellular. Where possible, use direct power connection in lieu of solar power.
15. Provide lighting around the building that creates gradual changes for areas of darkness and areas of light, thus providing better night vision.
16. Provide UTRGV Police help call boxes at exterior locations (the number and placement depends on the building footprint). Ensure that call boxes are easy to see and access.
17. Use building access control system (BACS) access control or keys throughout (no standalone card system) in accordance with the current UTRGV Campus standard "Vanderbilt Industries Access Control/Genetec".
18. Utilize the concepts of crime prevention through environmental design (CPTED) principles in the following areas: Lighting, landscaping, hardscape, and physical security. Create territorial reinforcement that is easily defensible, both interior and exterior of building.
19. Use design and landscape to discourage use for undesirable activities.
20. Provides clear lines of sight for security purposes. Exterior lighting provides security and attraction for events but does not create excessive light trespass and light pollution.
21. Exterior lighting—wall and pole mounts to meet a minimum of UTRGV standards and to celebrate after hours entrances.
22. Use of electric strikes to be used, no magnetic strikes.

15.3.17 STRUCTURAL, VIBRATION, & SEISMIC - Structural considerations are focused on providing a building that provides adequate floor-to-floor heights and a maximum structural grid for flexibility and expansion.

General Requirements:

1. Alert the A/E team in programming of any anticipated special structural loads e.g. libraries, hi-density files, server rooms, etc.
2. Design structure for any known or expected vertical or horizontal expansions.
3. Design structure as required to reinforce the efficiency of the building structural design.
4. Minimize transfer girder conditions, i.e. columns removed for larger open spaces.
5. Provide a building structure that allows for utility penetration in most locations.

14.3.18 UTILITIES - The utilities section addresses the need for a new duct bank section for electrical feed, metering of utilities, and access to utility spaces where applicable. In addition, there is a need to verify the existing utilities locations before construction. There is also a possibility of food vendors located outside (perimeter) of this building, and there may be a requirement for water and/or electrical service for vendor carts. The specific electrical/power requirements for a potential data center or server-room are to be determined coordinated with the final project scope.

General Requirements:

1. Address storm water issues locally as much as possible and avoid overloading the city system. Survey the site storm sewer system to confirm it meets design requirements, and repair or upgrade if necessary.
2. Coordinate all storm drainage with the appropriate UTRGV Drainage plan (TBD) for each campus location.
3. As appropriate, size the utilities to support future adjacent development.
4. Consider various reset strategies for energy savings.
5. Coordinate power, data, and HVAC controls in rooms with furniture layouts, and provide potential furniture layouts early in design to enable this coordination.
6. Coordinate institution and utility construction with surrounding areas; minimize impacts and utility outages to existing customers.
7. Design spaces to meet the requirements for mechanical rooms and utility pathways.
8. Design the HVAC systems for 16-degree Fahrenheit minimum differential (chilled water) temperatures.
9. Determine any need for emergency generator power.
10. Determine the need for, and provide if necessary, utilities for outdoor venues. If required.
11. Eliminate water piping (except for required sprinklers) from electric rooms (per code).
12. Identify utility sources early in design.
13. Identify utility sources for temporary construction activities.
14. If there is a data center, it will require conditioned power, such as with a large UPS, and/or independent circuits.
15. Contractor will provide adequate verification and complete review of existing on-site underground features prior to construction (via pot holing, topological data, etc.).
16. Plan for loop feed, 12KV primary distribution power via new duct bank section.
17. Provide adequate space for the main electric room, and adequate access and egress for removal and /or replacement of main transformers and switchgear.
18. Provide local (in-room) control of thermostat settings, within reasonable boundaries (+/- 2 degrees Fahrenheit from set point).
19. Provide separate metering for all building utilities.
20. Provide two separate and independent water feeds to the building.
21. The project team is to identify all critical and non-standard building automation system monitoring/control points and accurately document for review and approval by institution.

22. Utilize existing, or provide new, utility tunnels wherever appropriate.
23. Evaluate existing easements and the need for obtaining new easements for utility connections for each of the potential site(s) under consideration for the project.