



TEXAS TECH UNIVERSITY
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

LUBBOCK CAMPUS

MASTER PLAN

2014 UPDATE

Land-Use Vision & Plan

LUBBOCK CAMPUS

MASTER PLAN

2014 UPDATE

**Texas Tech University/Texas Tech University Health Sciences Center
Lubbock Campus Master Plan 2014 Update**

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TEXAS TECH UNIVERSITY
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

LUBBOCK CAMPUS

**MASTER
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Land-Use Vision & Plan

A COLLABORATION OF



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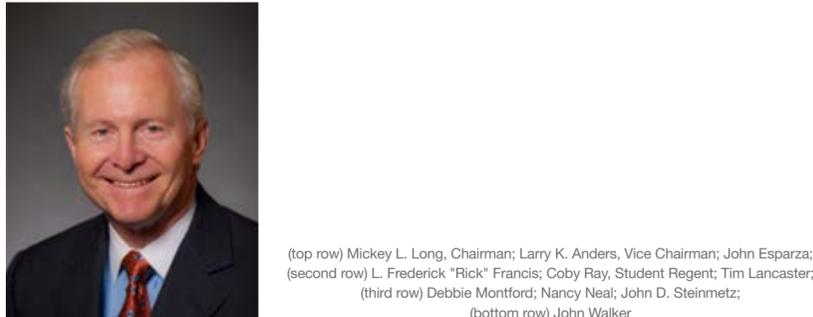
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(top row) Mickey L. Long, Chairman; Larry K. Anders, Vice Chairman; John Esparza; (second row) L. Frederick "Rick" Francis; Coby Ray, Student Regent; Tim Lancaster; (third row) Debbie Montford; Nancy Neal; John D. Steinmetz; (bottom row) John Walker



TEXAS TECH UNIVERSITY SYSTEM

The Texas Tech University System Board of Regents is proud to present the Texas Tech University and Texas Tech University Health Sciences Center 2014 Master Plan Update for the Lubbock campus. Essential to the strategic plans of the System and component institutions is the land use, facility placement and related infrastructure grid which support the institutions' visions and missions. This campus master plan update forms the framework within which to provide those opportunities for success.

Several periods of growth mark the 91 years of Texas Tech University's history. The university has grown from a few buildings to a statewide presence and a four-campus system. The founding fathers had vision and determination, which created our historic and beautiful academic campus in Lubbock. Just as those before were good to us, we owe the future generations the gift of planned growth, efficient connectivity, attractive environment, and a thriving, vibrant place to live, study, work, and play.

A new era began in 1996 at Texas Tech with the installment of new leadership to foster the Texas Tech University System. During that time, a campus master plan was developed based upon our institutions' strategic plans which would guide our physical campus development into the new millennium. The Texas Tech Board of Regents in 1997 adopted a comprehensive Campus Master Plan for Strategic Growth which would sustain a student population of 30,000.

The 2014 Lubbock Campus Master Plan Update respects and reflects the university's history from its origins as the Texas Technological College and draws inspiration from our faculty, students, staff, alumni and local community partners. We established a planning committee managed by the Office of Facilities Planning & Construction which included representatives from both component institutions, the City of Lubbock, Texas Department of Transportation and various community members.

The plan recognizes the multiple opportunities to create a more robust pedestrian campus, create leading-edge medical and academic program environments, nurture research initiatives, and celebrate the architectural language of our buildings and integrated space. It also proposes to accentuate a "sense of place" at the major entry points into campus, emphasize a well-defined campus perimeter that highlights the distinct nature of a college campus, while fostering our community relationships.

We are pleased to express our sincere appreciation to former Chancellor Kent Hance, Chancellor Robert Duncan, Facilities Chair Regent Debbie Montford, Facilities Chair, the Master Planning Committee, and the component presidents for their understanding of the importance of this plan and for their attention to the many details essential in the production of such a meaningful plan.

With this 2014 Campus Master Plan Update we continue to strengthen our vision for this campus and look forward to our 100th anniversary.

Sincerely,

Mickey Long
Chairman of the Board of Regents



TEXAS TECH UNIVERSITY SYSTEM

When the first cornerstone was laid during the construction of the Administration Building at Texas Technological College on November 11, 1924, a bold vision was set for the institution and its great future on the South Plains. The founding leaders of what is now Texas Tech University understood the historic opportunity before them and established a framework to create an expansive and supportive campus environment reflecting the university's ambition and the region's vastness.

Nearly a century later on the same plot of land, the campus has evolved to include a premier research university, a comprehensive health sciences institution and one of the state's leading systems of higher education.

Today, the 1,839-acre Lubbock campus headquarters the Texas Tech University System and two of its components—Texas Tech University, the flagship institution, and Texas Tech University Health Sciences Center, a separate health-related institution.

As Chancellor of the Texas Tech University System, it is my role to ensure we are providing each of our components with the resources and support needed to meet the global challenges of today and tomorrow. One of the most significant services of the Texas Tech University System is Facilities Planning & Construction, which manages the construction and renovation of spaces where our students and faculty learn, discover and compete.

Collaborating with external partners, this department has done an outstanding job overseeing all major construction projects at more than 12 locations throughout the state, as well as each university's campus master plan. Thanks to their efforts, the Texas Tech University System is known for its beautiful campuses adorned with Spanish Renaissance architecture and an internationally acclaimed public art collection.

While we have made great progress over the past 91 years, there is still a vision for growth and continued excellence throughout the Texas Tech University System. The 2014 update to the Lubbock Campus Master Plan is once again outlining a pathway for the important work ahead of us.

On behalf of the Texas Tech University System, I am truly grateful to our administration, staff and planning committee for their commitment to this plan and its long-term impact on our universities. We look forward to transforming our campus together.

Yours very truly,

Robert L. Duncan
Chancellor
Texas Tech University System





TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™

Academic health centers play a unique role in driving forward the innovative and explorative momentum in the healthcare system through education, research, and patient care. At Texas Tech University Health Sciences Center, our commitment to cultivate this process and improve the health of others is stronger than ever and further solidified by a dedication to our strategic priorities and through long-term planning efforts such as the 2014 Master Plan Update.

The past decade has been remarkable for Texas Tech University Health Sciences Center with a significant display of growth in the student enrollment, research expenditures, and patient visits. This growing momentum within our university is a testament to the hard work of our dedicated students, faculty, and staff. Furthermore, our momentum is a constant reminder of the importance of the 2014 Master Plan Update as a tool for identifying and securing the physical infrastructural needs and priorities for our growing university.

The 2014 Master Plan Update serves as a framework for our future growth and provides guidance in long-term development of the necessary infrastructure to facilitate optimal availability and utilization of university land and space resources. This process of inventorying existing resources and projecting our future needs is an invaluable exercise in ensuring that our university will be on a viable path for decades to come.

Sincerely,

Tedd L. Mitchell, M.D.
President
Texas Tech University Health Sciences Center



TEXAS TECH UNIVERSITY™

Paul Whitfield Horn, Texas Tech University's first president, said, "Let our thoughts be big thoughts and broad thoughts. Let our thinking be in worldwide terms." A suitable vision for a university in its infancy in the 1920s is as appropriate today as anytime over the 91-year history of Texas Tech University.

Throughout its history, Texas Tech University has firmly set its sights on the future, recognizing that a growing population lends to more business and industry job opportunities, hence creating a greater demand for higher education. Through consistent record enrollment and its emergence as a national research university leader, Texas Tech University has embraced President Horn's vision and is meeting the challenges of an expanding world. We are producing quality graduates, who continually leave here to make their marks globally.

An essential part of our contributions to society is ensuring our faculty, staff and students are teaching, conducting research, and learning in an environment conducive to success. It is imperative we continue to update, enhance and create these opportunities as our enrollment grows, as we hire new faculty, and as we welcome in advances in technology that foster an even greater learning experience.

A sound, innovative and forward-thinking master plan is vital as we continue to define our future, and I support the direction presented in the 2014 Master Plan Update.

Sincerely,

M. Duane Nellis, Ph.D.
President
Texas Tech University





EXECUTIVE SUMMARY

“Preserving the past . . . while building the future” has been the mantra for our collective master planning team’s inspiration. The team of 28 university administrators, community partners, City of Lubbock administrators, and leadership from the Lubbock District Texas Department of Transportation have concluded a robust process in identifying key principles, ideas, and creative solutions. Collectively, these will enhance our campus infrastructure and built environment into a continuum of cohesive connection of buildings, spaces, landscaping, points of interest, public art, pathways, streets, and multiple design elements. Documentation of these principles in this update will assist future leadership and partners in preserving our celebrated architectural heritage.

Our unique campus architectural design encompasses elements of the Plateresque Spanish Renaissance-revival style, which provides a strong foundation for the aesthetic development and future growth plans of Texas Tech University and the Texas Tech University Health Sciences Center. The two component institutions have a planned growth of over 1,600,221 gross square feet totaling an investment portfolio of \$1,185,214,315. After analyzing the 1,839 contiguous acres of the Lubbock campus, it is apparent that our critical mission is to maintain an environment of academic focus and energy that stimulates our students, faculty, staff, alumni, visitors, and community partners.

From a master planning perspective it is apparent that our dual campus location is the “hub” of the Hub City! TTU/TTUHSC Lubbock Campus Master Plan 2014 Update emphasizes maintaining a well-planned micro-community within the City of Lubbock as a paramount objective. Not only from an infrastructure perspective but also from a relationship perspective, connectivity to the city is crucial to our growth and land-use plan. This master plan update addresses several key issues related to perimeter growth and clearly defined boundaries of the campus. It continues to celebrate our

campus heritage while being creatively linked to the surrounding communities.

Material utilization and prolific architectural elements will create an augmented perimeter portal scheme that will embody what our campus’s historic district was founded upon. Our future facilities will be planned and developed with sustainability and life-cycle principles. Leadership in Energy and Environmental Design (LEED) design principles will be commonplace as we strive to deliver cutting-edge technology integrated into our everyday life here on campus.

Setting a precedent for conscientious design solutions is critical in transforming the way we approach how our buildings are programmed, designed, constructed, maintained, and operated. This is the basic strategy of the TTU System’s progressive collaboration with innovative design and state-of-the-art construction technology.

As we continue to design and build the Texas Tech University System Lubbock campuses, the creative and proportional use of rhythm, balance, harmony, and juxtaposition of the architectural and landscape fabric will augment and support the strategic growth plans of both Texas Tech University and Texas Tech University Health Sciences Center.

Most respectfully,

Michael S. Molina, AIA
Vice Chancellor for Facilities Planning & Construction
Texas Tech University System
2014 Master Plan Update Committee Chair
1991, B Arch College of Architecture, TTU

SYSTEM STRATEGIC PLAN SUMMARIES

Texas Tech University (TTU) received official notification in 2012 from the Texas Higher Education Coordinating Board and State Auditor's Office that it had met the necessary criteria to receive a share of the state's National Research University Fund (NRUF). Since then the university has focused on the next phase of Texas Tech University's evolution: enhancing our position as a great teaching and research university while achieving the characteristics of what are generally regarded as Tier One universities.

Attaining NRUF status was an extremely important milestone for the university. As a result of being NRUF-certified, Texas Tech University now receives approximately \$8 million each year to enhance its research enterprise. In 2009, the Legislature not only provided for the creation of the NRUF, it also established the Texas Research Incentive Program (TRIP) to provide funding for the eight Emerging Research Universities (ERU). Since the inception of that program, the Legislature has set aside \$153 million dollars for matching gifts that support research activities. So far, Texas Tech University has received over \$55 million in TRIP matching funds, more than any other ERU.

Although there is no universal agreement on what constitutes a Tier One university, Texas Tech University is making steady progress in attaining the benchmarks associated with the most prestigious national research universities. In particular, it continues to award large numbers of doctoral degrees, receive millions in research dollars, hire distinguished faculty members noted for their scholarship and creative activity, and enroll an excellent student body. Texas Tech University has improved its standing in the Center for Measuring University Performance and as well as the U.S. News & World Report College Rankings. An important ambition is to achieve the characteristics of the membership of the Association of American Universities and to attain "Very High Research"

status by the Carnegie Foundation for the Advancement of Education.

Both Texas Tech University's and Texas Tech University Health Sciences Center's strategic plans set the course for forecasting what is needed. The job now is for the physical master plan to show where and how to meet these needs. The 2014 Master Plan Update supports the following strategic goals:

PRIORITY 1: INCREASE ENROLLMENT AND PROMOTE STUDENT SUCCESS

TTU

- Continue to implement student success initiatives to improve retention and persistence initiatives.
- Seek increased funding for academic scholarships for undergraduate and graduate students.
- Continue to implement strategies to reach Hispanic-Serving Institution status by 2020, as well as initiatives that result in enrollments that reflect the diversity of the state.
- Continue to support the efforts of TTU Worldwide eLearning.
- Continue in providing online courses and academic programs at regional sites.

TTUHSC

- Expand and build new facilities to address space needs.
- Grow student scholarships.

PRIORITY 2: STRENGTHEN ACADEMIC QUALITY AND REPUTATION

TTU

- Promote, cultivate, and support applications for prestigious national awards, fellowships, and scholarships.
- Support faculty recruitment and retention efforts that focus on research and address student faculty ratio and educational strategic initiatives.
- Increase the number of nationally recognized graduate programs.

TTUHSC

- Support development of School of Public Health.
- Recruit top scholar candidates.
- Support high-quality faculty and programs through efforts in external recognition.

PRIORITY 3: EXPAND & ENHANCE RESEARCH & CREATIVE SCHOLARSHIP

TTU

- Increase submission of proposals to extramural sponsors.
- Actively coordinate, support, and promote cross-disciplinary and transdisciplinary research.
- Promote new strategic research partnership agreements with national laboratories, science and technology research agencies, and with the private sector.

TTUHSC

- Support the efforts of new Senior Vice President for Research as well as new basic science faculty chairs.
- Facilitate faculty/student participation in research with infrastructure.
- Support TTUHSC Institutes with baseline budgeting.

PRIORITY 4: FURTHER OUTREACH AND ENGAGEMENT

TTU

- Encourage collaboration among institutions of higher education and their larger communities.
- Promote the value of engaged research, international development, community and classroom teaching, internships, and study abroad.
- Increase and enhance partnerships with TTU System institutions; other institutions; recognized regional teaching sites and centers; and community partners around targeted outreach and engagement activities.

TTUHSC

- Support student-led free clinic efforts with baseline budgeting.
- Support Global Health Department with baseline budgeting.
- Continue and accelerate collaborative efforts with component institutions and other potential partners.

PRIORITY 5: INCREASE AND MAXIMIZE RESOURCES

TTU

- Implement an incentivizing budget model that provides for growth and rewards efficiency and excellence.
- Conduct a comprehensive review of research and academic space renovation needs that directly support teaching and research missions.
- Develop strategies for developing and maintaining shared facilities.
- Develop a master plan to remediate deferred maintenance issues.

TTUHSC

- Continue efforts to maintain low administrative overhead.
- Continue efforts to improve income from practice plans, partnerships and other non-governmental resources.

Noticeably, the 2014 Campus Master Plan Update directly affects those goals that relate to the enrichment of the campus's physical environment. The challenge is then to determine how this plan supports the other goals of the strategic plan.

In this competitive, merit-based academic structure, the ability to attract the brightest students and those world-class faculty members is critical to the success of both institutions. First-class, technology-rich facilities for teaching and research are extremely important along with the numerous opportunities for scholarly engagements. These engagements take place in and out of the classroom, and a majority of the time, take place in the public spaces either indoors or outdoors. The relationship of the physical indoors to the campus environment fosters interdisciplinary teaching and research initiatives.

Texas Tech University's and Texas Tech University Health Sciences Center's relationship to the community, region, and world plays a major role in the recruitment and retention of students and faculty. The Lubbock campus of Texas Tech University and Texas Tech University Health Sciences Center is a city within a city, and the campus master plan reinforces that sense of community connectivity both on the campus and through its physical relationship to the surrounding neighborhoods, medical districts, and commercial areas.

The 2014 Lubbock Campus Master Plan Update is an expression of each institutions' strategic visions through its physical environment.



Administration Building, North Facade



TTU STRATEGIC PLAN

VISION

Texas Tech University is a great public research university where students succeed, knowledge is advanced, and global engagement is championed.

MISSION STATEMENT

As a public research university, Texas Tech University advances knowledge through innovative and creative teaching, research, and scholarship. The university is dedicated to student success by preparing learners to be ethical leaders for a diverse and globally competitive workforce. The university is committed to enhancing the cultural and economic development of the state, nation, and world.

The mission statement was approved by the Board of Regents on May 14, 2010.

BACKGROUND & REPORT ON PROGRESS

Texas Tech University (TTU) received official notification in 2012 from the Texas Higher Education Coordinating Board and State Auditor’s Office that it had met the necessary criteria to receive a share of the state’s National Research University Fund (NRUF). Since then the university has focused on the next phase of Texas Tech University’s evolution; enhancing its position as a great teaching and research university while achieving the characteristics of what are generally regarded as Tier One universities.

Attaining NRUF status was an extremely important milestone for the university. As a result of being NRUF-certified, TTU

now receives approximately \$8 million each year to enhance the research enterprise. In 2009, the Legislature not only provided for the creation of the NRUF, it also established the Texas Research Incentive Program (TRIP) to provide additional funding for the eight Emerging Research Universities (ERU). Since the inception of that program, the Legislature has set aside \$153 million for use as matching gifts that support research activities. So far, Texas Tech University has received over \$55 million in TRIP matching, more than any other ERU.

Although there is no universally agreed-upon set of criteria for what constitutes a "Tier One" university, this distinction is used to describe schools that award large numbers of doctoral degrees, receive hundreds of millions in research dollars, have a distinguished faculty noted for its scholarship and creative activity, and enroll an excellent student body. In addition, these schools typically appear in the list of top research universities published by the Center for Measuring University Performance (CMUP), have excellent graduate programs as recognized by the National Research Council rankings, are characterized as "Very High Research" by the Carnegie Foundation for the Advancement of Education, and rank well in outlets such as the U.S. News & World Report (USNWR) Best Colleges annual rankings. Whereas many institutions regarded as Tier One are not members of the Association of American Universities (AAU), certainly membership in the AAU is a recognized distinction of Tier One institutions.

PROGRESS TOWARD GOALS

In 2010, TTU adopted a strategic plan that offers a framework for growth over the next decade. The 2013-2014 update of “Making it possible...” contains tables that document the

university’s progress toward its goal of enhancing our stature as a great national research university. In addition to these tables are sets of key strategies and key challenges, along with any adjustments to goals and/or targets. The appendices contain benchmark data comparing TTU to 56 of its national peers and the other seven Emerging Research Universities in Texas, TTU’s performance in areas monitored by the National Science Foundation, and CMUP data that provides a comparison with AAU members.

As TTU continues to move toward "Tier One" status, we will be especially focused on the following priorities:

- Maintain our designation as a Community Engaged University, as classified by the Carnegie Foundation for the Advancement of Teaching.
- Continue efforts that will position Texas Tech University as a national exemplar of retention, persistence, and graduation of students.
- Maintain our national recognition as an institution of higher education with an ethnically diverse student body.
- Improve Texas Tech University’s current designation as a High Research University by the Carnegie Foundation for the Advancement of Education. The institution’s classification will be renewed in 2016, when it is anticipated that Texas Tech will move into the foundation’s highest classification—Very High Research.
- Move higher in the National Science Foundation’s (NSF) ranking of research universities. The most recent available data indicates TTU ranks 64th in earned doctorates (415

institutions ranked); 77th in full time graduate students (among 554 institutions); 125th in total R&D expenditures (653 ranked); and 162 in total federal obligations (1,128 ranked).

- Show improvement in the Association of American Universities’ (AAU) performance indices.

- o Membership in the AAU is based on a set of indicators used to assess current and potential new members. What are known membership indicators (Phase I and Phase II) constitute the first stage of membership assessment. Phase I includes assessment of competitively funded federal research support as defined through the National Science Foundation (NSF), United States Department of Agriculture funding that can be separately identified and reported, and Higher Education Research and Development (HERD) survey data system. Also important are faculty memberships in the national academies: National Academy of Science (NAS), National Academy of Engineering (NAE), Institute of Medicine (IOM), and the National Academies’ National Research Council (NRC) faculty quality ranking.

- o Phase II indicators include assessment of competitive funding from the United States Department of Agriculture, state and industry research partners; characteristics of advanced doctoral education efforts, including number of Ph.D. degrees awarded by discipline; number of postdoctoral appointees; and quality and diversity of undergraduate programs.

- Improve the scope and quality of graduate programs ranked by the National Research Council.

- Move upward in U.S. News and World Report annual rankings of national universities. In 2014, TTU was ranked 88th among public institutions, while ranking 161st overall.

- Grow National Academy membership among faculty. Following the addition of three National Academy of Engineering hires in 2013, we now have four faculty in a National Academy. This would rank TTU 60th among public universities in the latest CMUP figures (2012).

- Continue to increase in the number of doctoral degrees awarded. In 2013, 306 doctoral degrees were conferred, which would rank TTU in the top 60 universities for doctorates awarded in the 2012 CMUP report figures (2011).

In addition to the above benchmarks, Texas Tech University would greatly enhance its national stature by improving indicators that reflect student success.

This past fall TTU had 35,134 students enrolled with 5,427 at the graduate level. TTU’s fall freshman student class was one of the most academically talented ever, based upon an average SAT score of 1,115 and an average ACT score of 25.

While freshman selectivity has improved during the past decade, more needs to be done to enroll an even greater share of the best and brightest undergraduate and graduate student talent. TTU’s six-year graduation rate is 62 percent and one-year retention rate is 82 percent. The university falls short of the corresponding peer averages of 72 percent and 88 percent. Texas Tech has recently committed to improving its six-year graduation rate to 70 percent and one-year retention rate to 90 percent, through an aggressive retention and success campaign.

TTU STRATEGIC PLAN (continued)

TTU is in the process of implementing a wide range of strategies to enhance student success. These initiatives include:

- Participating in the nationally recognized Education Advisory Board's Student Success Collaborative.
- Developing a centralized mechanism for monitoring retention.
- Implementing continuous monitoring of the effectiveness of advising and early intervention actions.
- Providing academic colleges and departments predictive analytics as a tool to reduce attrition.
- Providing new opportunities for residential and distance students, through the development, design, and delivery of high-quality online and distance degree and certificate programs.
- Improving financial aid and scholarship opportunities.
- Enhancing student orientation with early advising experiences that include improved course selection and best fit major selection.
- Enhancing student participation in active learning opportunities, including but not limited to internships, service learning, undergraduate research, and study abroad opportunities.
- Implementing individual development plans to enhance

career preparation for graduate students and postdoctoral scholars.

The university continues to promote and encourage a diverse and multicultural environment. Of the 33,111 students enrolled in fall 2013, record numbers of Hispanic (6,308) and African-American (2,044) students were enrolled and made up 25 percent of the student population. Additionally, Hispanic enrollment accounted for 19 percent of the total enrollment.

Diversity awards and recognitions recently received by TTU include the Higher Education Excellence in Diversity Award in 2012 and 2013, the Champion of Diversity Award in 2014 from the American Association for Affirmative Action, and was honored by the American Association of University Women as one of seven schools that empower women.

To reach a broader segment of nontraditional students and to provide convenience to residential students, TTU will continue to expand TTU Worldwide eLearning. The university has developed a number of distinctive, successful online programs, including a graduate engineering degree program, which is ranked 20th in the latest U.S. News & World Report rankings of online programs.

As a result of a decentralized approach to hiring, TTU was able to hire more than 130 faculty members during FY13. These new faculty additions resulted in an improved student-to-faculty ratio of 20:1 as compared to 24:1 in the prior year (IPED Data) and contributed to the quality of the TTU faculty. Also of significance was the hiring of three National Academy of Engineering members, and the fact that TTU led the nation with 10 Fulbright Scholars in 2013.



Pfluger Fountain at Memorial Circle
Administration Building in the Background

PROGRESS TOWARD AAU CHARACTERISTICS

Measure	TTU 2012 CMUP Report	TTU 2013 Fiscal Year	Average of AAU Universities * 2012 CMUP Report				
			0th - 20th percentile	21st - 40th percentile	41st - 60th percentile	61st - 80th percentile	81st - 100th percentile
Total Research x \$1,000	106,220	137,564	159,445	348,794	496,972	660,285	985,423
Federal Research x \$1,000	32,680	28,831	97,769	223,268	312,789	410,840	691,354
Endowment Assets x \$1,000	474,855	546,229	452,033	1,067,765	2,079,068	3,961,227	12,013,456
Annual Giving x \$1,000	52,342	78,771	64,656	103,577	157,447	253,882	457,949
National Academy Members	1	4	9	23	33	61	167
Faculty Awards	1	5	9	15	20	27	44
Doctorates Awarded	262	306	188	341	437	571	769
vPostdoctoral Appointees	101		173	328	485	789	1,738
Median SAT	1,104	1,115	1,150	1,221	1,296	1,387	1,472
National Merit and Achievement Scholars	8	5	10	31	54	125	225

Source: American Research University Data (http://mup.asu.edu/research_data.html, accessed 7/2014)

*all measures exclude McGill University and University of Toronto (because CMUP has no data for these two universities)

NSF: NATIONAL CENTER FOR SCIENCE & ENGINEERING STATISTICS

Data Year	Earned Doctorates			Full-time Graduate Students			Total Federal Obligations			Total R&D Expenditures		
	Rank	Percentile	Institutions ranked	Rank	Percentile	Institutions ranked	Rank	Percentile	Institutions ranked	Rank	Percentile	Institutions ranked
2012	64	16.1	415	77	14.6	554	*	*	*	125	19.8	653
2011	67	17.1	408	68	13	552	162	15.1	1,128	122	14.2	909
2010	72	18	414	46	9	561	153	13.4	1,210	125	17.6	741
2009	87	21.4	419	46	8.9	564	159	14.3	1,177	144	21.1	707
2008	71	17.6	418	52	10	565	156	14.4	1,146	169	25.2	689
2007	73	18.4	411	68	12.7	567	176	15.4	1,207	167	25.6	668

Source: NSF Data (<https://ncesdata.nsf.gov/profiles/site.jsessionid=037A4CB2266B98768B799C60A9FB5008?method=view&fice=3644>)

* Total Federal Obligation data was not available for year 2012.



TTUHSC STRATEGIC PLAN

VISION

Texas Tech University Health Sciences Center will become a nationally recognized health sciences university.

MISSION STATEMENT

The mission of the Texas Tech University Health Sciences Center is to improve the health of people by providing high-quality educational opportunities to students and healthcare professionals, advancing knowledge through scholarship and research, and providing patient care and service.

The mission statement was approved by the Board of Regents on May 14, 2010.

TTUHSC STRATEGIC PLAN

“2009-2014 Strategic Plan” outlines Institutional goals that are broad, measurable priorities that will enable the Texas Tech University Health Sciences Center to realize its vision and mission.

Goals 1–3 highlight the institution’s commitment to continuing excellence in the areas of education, research, and service. Therefore, enhancing student learning in all of the TTUHSC’s academic programs is a major focus of the institution. A complement to the emphasis on student learning is the fostering of a research-rich academic teaching environment that will facilitate up-to-date educational experiences for our students as well as provide innovative treatment opportunities for our patients. Furthermore, these goals acknowledge the need for innovative programs that better prepare our students

for the changing demographics of both the health professions workforce and the populations that they serve.

Goal 4 focuses on the TTUHSC’s leadership role in the community by providing medical services, educating the public on health-related issues, and playing a key advocacy role in promoting a healthier environment.

Goal 5 demonstrates that the TTUHSC is committed to institutional effectiveness.

All programs and services throughout the institution support the institutional mission efficiently and effectively by engaging in ongoing and integrated planning and assessment, using the results for continuous improvement, and allocating resources accordingly.

TTUHSC’s OBJECTIVES & STRATEGIES

Goal 1 - TTUHSC will foster the development of competent healthcare professionals and biomedical researchers.

1. Increase student enrollment in targeted academic programs. Texas Tech University Health Sciences Center (TTUHSC) achieved record enrollment in fall 2013 with 4,519 students across its seven schools. This represents nearly a 40 percent increase over the past five years. TTUHSC schools of nursing and allied health sciences continue to have the largest student enrollments, but enrollments in the School of Pharmacy, Graduate School of Biomedical Sciences, TTUHSC School of Medicine, Paul L. Foster School of Medicine, and Gayle Greve Hunt School of Nursing have contributed significantly to the

institution’s overall growth as well.

- Maintain/expand recruitment of high-quality students in all schools.
- Increase the School of Medicine class size by an additional 30 students in partnership with Covenant Health System.
- Expand the BSN second degree program in Amarillo to 40 students per cohort.
- Expand the Masters in Premedical Sciences to 20 students.
- Increase student enrollment in the Paul L. Foster School of Medicine to an annual matriculating class of 100.
- Increase student enrollment in the Gayle Greve Hunt School of Nursing to more than 300 students by 2015.
- Expand Speech, Language, and Hearing Sciences programs by 18 students.
- Expand Master of Occupational Therapy program by 15 students per cohort.

2. Develop and enhance academic programs that reflect targeted healthcare education needs.

- Establish a Masters of Public Health degree program.
- Collaborate with TTU System universities to develop a minor and/or bachelor’s degree in public health.
- Initiate process to develop a School of Public Health.
- Establish a BSN second degree program in Dallas in partnership with the Texas Health Resource Hospital System.
- Increase student participation in value-added programs that culminate in a diploma and/or certificate.

Goal 2 - TTUHSC will recruit, develop, and retain outstanding employees.

1. Recruit, develop, and retain faculty who enhance the reputation of the university.

- Evaluate individual faculty members using quality metrics appropriate for the position.
- Pursue National Academy of Sciences (NAS) membership for faculty.
- Pursue Institute of Medicine (IOM) membership for faculty.
- Strengthen faculty expertise through support of individualized professional development, such as pursuing advanced degrees in health education or public health and/or participating in reputable leadership programs.

2. Recruit, develop, and retain qualified staff.

- Strengthen staff expertise through support of individualized professional development, such as pursuing advanced degrees in fields related to their positions.

Goal 3 - TTUHSC will advance knowledge and healthcare practice through innovative research and scholarship.

1. Develop and enhance programs to facilitate an increase in externally funded, peer-reviewed research that reflects a diversity of interests.

Established in 2010, the Clinical Research Institute (CRI) continued to contribute positively to the institutional mission in 2013. The CRI was developed to encourage, assist with, and conduct cooperative clinical research across all TTUHSC schools and campuses. With an

emphasis on investigator-initiated studies, the institute facilitates the conduct of clinical, epidemiologic, and educational research by faculty and provides training related to such research. In its first few years of operation, the CRI has worked collaboratively with numerous principal investigators and participated in several hundred studies. As we look toward the future, it is anticipated that the CRI will be instrumental in further developing the research culture for TTUHSC faculty, fellows, residents, and students.

- Increase student participation in research activities.
- Provide continued support for basic science/discovery science research.
- Expand the university’s research focus to include more clinical, public health, and epidemiological research.
- Pursue opportunities to increase external funding of research (e.g. CPRIT).
- Develop a TTUHSC research database based on a reputable model.
- Continue university support of the Clinical Research Institute.
- Extend Clinical Research Institute support to TTUHSC-El Paso during the transition period.

Goal 4 - TTUHSC will promote improved community health through the provision of patient care services and healthcare education.

1. Improve access to quality healthcare and education among targeted populations.

The Larry Combest Community Health & Wellness Center is currently in the midst of a 10,000-square-foot expansion made possible by a \$5 million grant. The award is part of a series of capital investments that are made available to

TTUHSC STRATEGIC PLAN (continued)

community health centers under the Affordable Care Act. The Combest Center is one of six healthcare centers in Texas to receive the full funding amount. The expansion will include new medical exam rooms, lab space, a procedure room and teaching kitchen for health education. As a Federally Qualified Health Center serving Lubbock and surrounding areas, the nurse-managed Combest Center specializes in primary care and management of chronic diseases like diabetes, asthma, hypertension, and obesity. This exciting expansion will equip the community with a new level to:

- Continue efforts at the federal level to bring a VA Super Clinic to the Lubbock campus.
- Work with the congressional delegation to bring a new VA Medical Center to the Medical Center of the Americas in El Paso.
- Work primarily through the state legislature to increase the number of GME positions and funding per position.
- Expand the student-run free clinic in Lubbock.
- Develop a student-run free clinic in El Paso.
- Sustain/increase external funding for the programs of the F. Marie Hall Institute for Rural and Community Health.
- Expand the President's Prescription segment into new markets in Texas and New Mexico.

Goal 5 - TTUHSC will operate effectively and efficiently through maximization of available resources.

1. Maintain financial stability through efficient management of fiscal resources and fundraising efforts.
 - Improve patient/payer mix in El Paso.
 - Maintain/decrease overhead as a percentage of the overall budget at levels comparable to previous years.
 - Ensure current levels of formula- and special-item funding and secure additional funding to accommodate projected growth.

- Continue to increase non-state revenue contributions to the budget.
- Create new opportunities for donors to participate in programmatic and bricks and mortar contributions.
- Seek private funds for expansion projects on regional campuses.
- Continue to raise funding for all TTUHSC institutes.
- Expand faculty endowments and increase naming opportunities.

2. Maintain appropriate technology to promote effective operations in a multi-campus system.

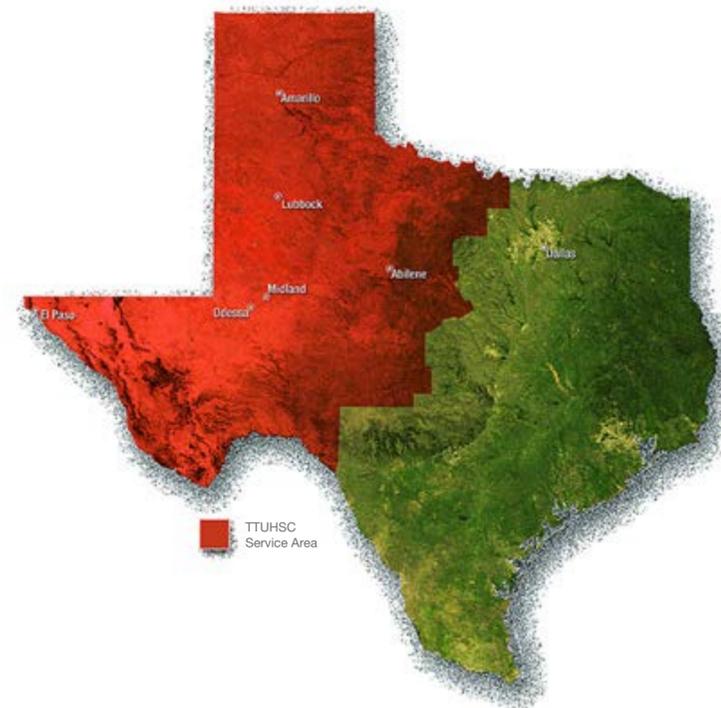
- Continue a "life cycle replacement" approach for IT infrastructure needs.
- Maintain appropriate levels of IT security across the institution.
- Develop and implement an institution-wide electronic student application and scholarship tracking system.

3. Operate and maintain a physical environment conducive to learning, research, and patient care.

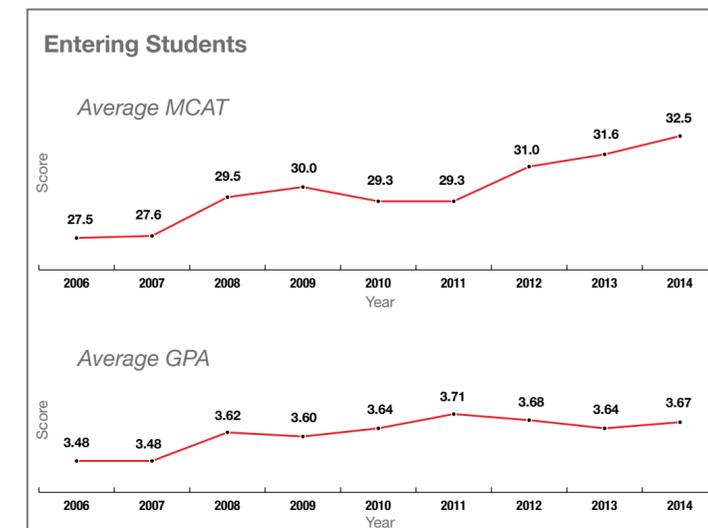
- Work collaboratively with local communities, Institutional Advancement, and government relations groups to facilitate progress on strategic building and tuition revenue bond (TRB) projects.

4. Work collaboratively with key stakeholders to accomplish the mission of the institution.

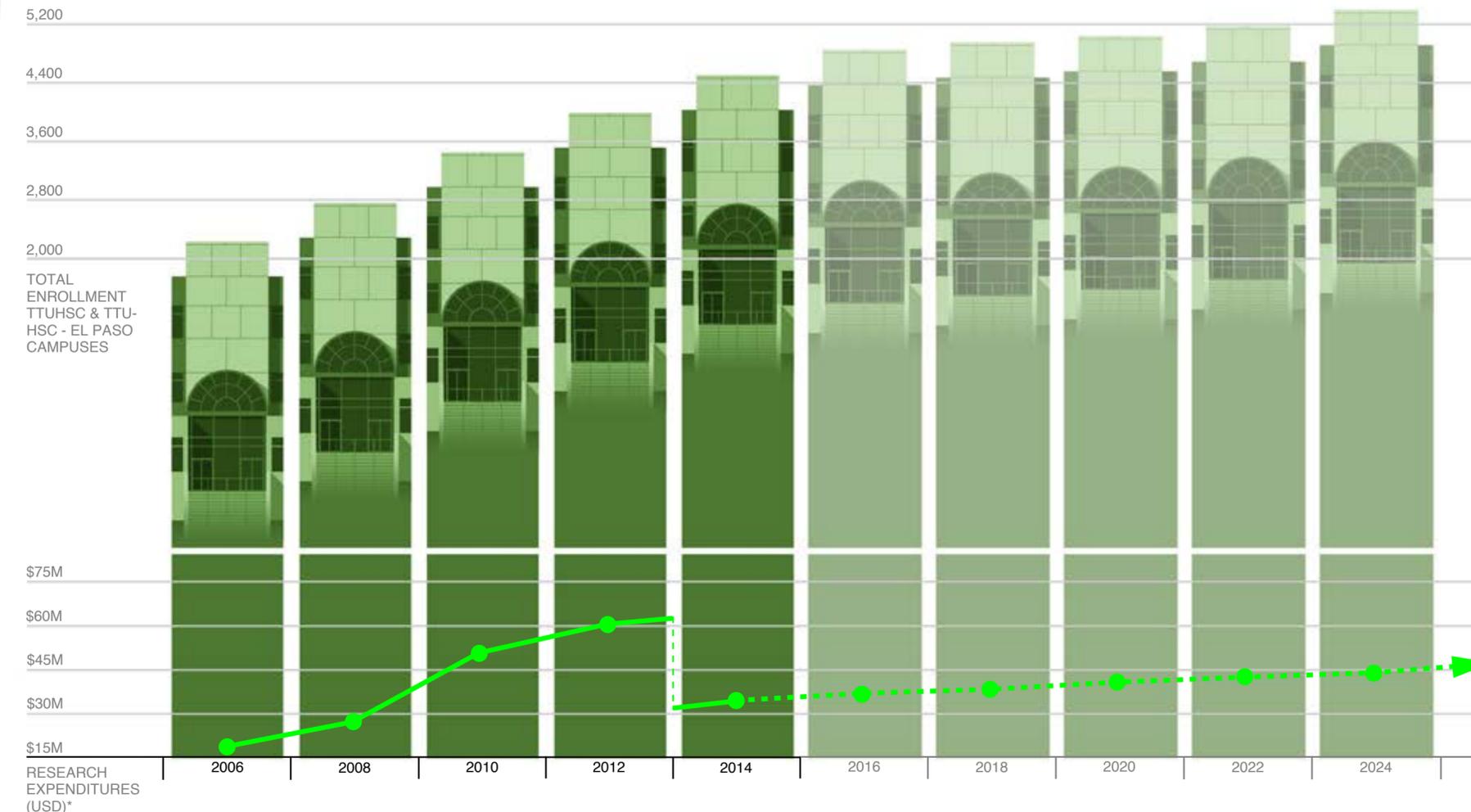
- Utilize effective marketing communications strategies to meet audience needs.
- Maintain ongoing compliance with local, state, and federal rules/regulations.
- Maintain ongoing compliance with program and regional accreditation requirements.



MEDICAL STUDENT EDUCATION



TTUHSC ENROLLMENT GROWTH



*NOTE: AFTER 2013, TTUHSC RESEARCH EXPENDITURES FOR LUBBOCK AND EL PASO CAMPUSES ARE REPORTED SEPARATELY.



PRESERVING THE PAST...
WHILE BUILDING THE FUTURE

OVERVIEW

In October 2012, under the direction of former Chancellor Kent Hance, now chancellor emeritus, and the Board of Regents, the Texas Tech University/Texas Tech University Health Sciences Center (TTU/TTUHSC) Master Planning Committee was formed and charged with incorporating the current Master Plan and Land-Use Map, the Texas Tech University (TTU) and Texas Tech University Health Sciences Center (TTUHSC) strategic plans and the TTU System Infrastructure & Service Planning Committee Conclusions into an update to the developed master plan and land-use map for the two campuses with regard to the goals of 2020 and beyond. TTU and TTUHSC embarked on a comprehensive update to the 1997 campus master plan, in conjunction with each institutions' strategic plans.

In the 17 years since the adoption of the 1997 Campus Master Plan there have been amendments regarding residence halls, chapel, golf course, Rawls College of Business, and recently, discussions of commercial/retail initiatives. The committee had to reprioritize and focus to determine the best use for TTU's and TTUHSC's land endowment with regard to the strategic plans. "Making it possible... 2010-2020 Strategic Plan" offers a framework for the vision and mission of Texas Tech University over the next decade. Therefore, this master plan update is our road map for achieving national research/Tier One status and for placing Texas Tech University in the category as one of the best institutions of higher education in the United States.

Texas Tech University has experienced an increasing number of students, transfer students, and community college partnerships, along with the modifications in the delivery of education. All of these changes translate to growth in enrollment and additional pressure on TTU to meet the needs

of an increasingly diverse student body. This is a testament to the many great attributes of Texas Tech University.

Texas Tech University Health Sciences Center (TTUHSC) has also experienced record enrollment. Over the last seven years, TTUHSC's enrollment has increased more than 70 percent. In fact, the spring semester boasted a record 4,230 students, which was an increase of more than 6 percent over the 3,973 students enrolled in spring 2013. The university's continued growth signifies its commitment to the mission of improving healthcare in Texas through research, education, and outreach.

TTUHSC's growth in enrollment is a testimony to our innovative academic programs, outstanding faculty and the highly successful students we graduate. In an increasingly interconnected environment, our excellent reputation continues to attract exceptional candidates from across Texas and the country.

Input from students, staff, faculty, surrounding neighborhoods, and business leaders, the Texas Tech University System leadership and both presidents have provided guidance, direction, and insight to the master plan update. The master planning committee has developed a plan that fosters the past, relying on the details from that plan, while incorporating the many projects and improvements completed since 1997 as well as those currently underway. This effort has resulted in a campus master plan that adds renewed vision to the long-range development of the campus.

PLANNING PROCESS

The TTU/TTUHSC Master Planning Committee with a core group from each institution's administration, major departments, student government, as well as civic, community, and business leaders. Support staff and three outside design firms provided general information, scenarios, and industry criteria throughout each step of the planning process. The initial kickoff meeting was held on October 15, 2012, with numerous planning and visioning sessions to follow.

The planning sessions reviewed and evaluated past decisions along with the proposed new opportunities. Intense discussions helped build consensus as to the confirmation of past planning initiatives and framework for implementing new opportunities. Community input was evaluated as to the direction and partnerships required along the campus edges.

Meetings with the presidents, chancellor, and Board of Regents provided leadership and assurance that the plan had the full support required for implementation.

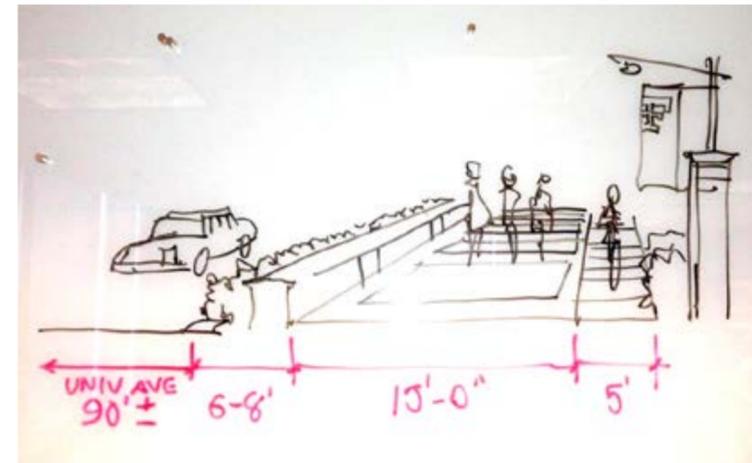
Focus sessions on specific topics were held on resident life, landscape and open space, sustainability, parking and transportation, utility infrastructure, academic program growth, and athletics. The planning process fostered open lines of communication and addressed concerns about TTU's and TTUHSC's future plans.

In June 2014, the draft plan was presented for feedback and discussion in open forums. The TTU/TTUHSC Master Planning Committee reviewed and confirmed phasing priorities and the draft plan was finalized. In August 2014, the draft of the final master plan was reviewed by the Presidents, the System Chancellor, and the Board of Regents, prior to developing the final plan documents for approval.

The TTU System and its components are committed to a comprehensive and continuous land-use planning process that results in a flexible framework to guide future development of the Lubbock campus to support the vision and mission of each institution.

The final plan was submitted for approval to the Texas Tech University System Board of Regents at the December 2014 meeting.

“
The collaborative planning process between the component institutions' strategic plans creates the roadmap for the Lubbock campus Land-Use Plan.
 ”



PLANNING STRATEGY & CORE PRINCIPLES

Texas Tech University's plan to become an AAU-member institution via excellence in institutional research and education can only be obtained through the effective synergy between academic endeavors and a built physical environment that encourages collaboration and innovation. This expectation of synergy must transcend beyond the tactical goals of promoting interdisciplinary collaboration between academic colleges within the university, and extend beyond the physical and relational boundaries that exist between Texas Tech University and the Texas Tech University Health Sciences Center. TTU's and TTUHSC's strategic plans and the physical master plan are structured to buttress and reinforce one another, but per the objectives of Principles 3 and 5, one key intention to the 2014 Master Plan Update is to further build the bonds between what is often perceived as two disparate campuses separated by the gulf of the Marsha Sharp Freeway.

The 1997 Campus Master Plan was based on the then-established objective of supporting a population of 30,000 students. However, the present-day aim is to accommodate 40,000 students by academic year 2020. TTU and TTUHSC are committed to a comprehensive and continuous land-use planning process that results in a flexible framework to guide the leadership's future decision making. This living document will allow principles and concepts to be modified over time to respond to changing dynamics, demands and geodemographic factors both internal and peripheral to the Lubbock campus. Therefore, the execution of a "living" plan in turn creates a dynamic tool for the long-term development of the campus, and physical expression of both TTU and TTUHSC missions.

Through the 1997 Campus Master Plan's direction and the then-established "Architectural and Site Design Guidelines" the university system achieved planning, infrastructure, and facility successes that likewise supported the vision and mission of the university. Criteria was established at that time to achieve "excellent facilities"; to realize "aesthetic character"; to afford and sustain "growth"; and to create an overall integrated campus community. While those criteria remain in place today, the 2014 Master Plan Update provides a pragmatic balance between the updated vision of the institutions and the present-day reality of future growth and development of the Lubbock campus. Much of that "reality" resides in the fruits of 17 years of successful development on and around the campus. Elements of successful development included: extensive realignment of the peripheral academic core into the foundational Beaux-Arts planning models of the campus, significant "town-and-gown" development around the campus periphery (i.e. Overton Park and the Covenant Medical District), and the incorporation of complex new elements of infrastructure ranging from on-campus Citibus service to the construction of Marsha Sharp Freeway.

Upon factoring in the present-day state of campus planning implementation, and in evaluating campus needs in the context of strategic institutional goals, the Master Planning Committee focused on the common points of interest in the planning process. (Principles 1-6, noted on the right)

- Principle 1 - Enrollment Growth
- Principle 2 - Strengthen the Academic Core
- Principle 3 - Enhance Campus Identity & Sense of Place
- Principle 4 - Position Land Endowment Parcels for Strategic Initiatives
- Principle 5 - Open Space
- Principle 6 - Campus Circulation & Connectivity

PRINCIPLE 1

ENROLLMENT GROWTH

Texas Tech University's plan to become a top-tier institution in research and education can only be obtained through the blending of academic excellence in teaching and research within their physical positioning in the campus community. Texas Tech University's and Texas Tech University Health Sciences Center's strategic plans and the physical master plan are structured to reinforce each other.

The 1997 Campus Master Plan was based on supporting a population of 30,000 students. Even before the phrase "40,000 in 2020" was stated the university had positioned itself for those 40,000 students. In March 2004, Ira Fink with

Ira Fink and Associates, Berkeley, California, reviewed and validated the 1997 Campus Master Plan to accommodate 40,000 students. Then again in January 2009 he projected space requirements for 40,000 students and the ability to support them within the academic core.

In December 2006, Chancellor Kent Hance took the helm of the TTU System and set the enrollment goal of 40,000 students by 2020 at TTU. Texas Tech University is on its way to meeting that goal. TTU reported record enrollment figures for the sixth-straight year with 35,134 students for fall 2014. The figure represents approximately a 20 percent increase over the last decade and was accomplished following a second-straight record year of more than 7,000 degrees

conferred. The difference of 2,023 students from fall 2013 represents the third-largest increase in a single year since the university opened its doors in 1925.

Frank H.T. Rhodes, former President of Cornell University and Provost at the University of Michigan stated, "Universities are the engines of economic growth, the custodians and transmitters of cultural heritage, the mentors of each new generation of entrants into every profession, the accreditors of competency and skills, and the agents of personal understanding and societal transformation."

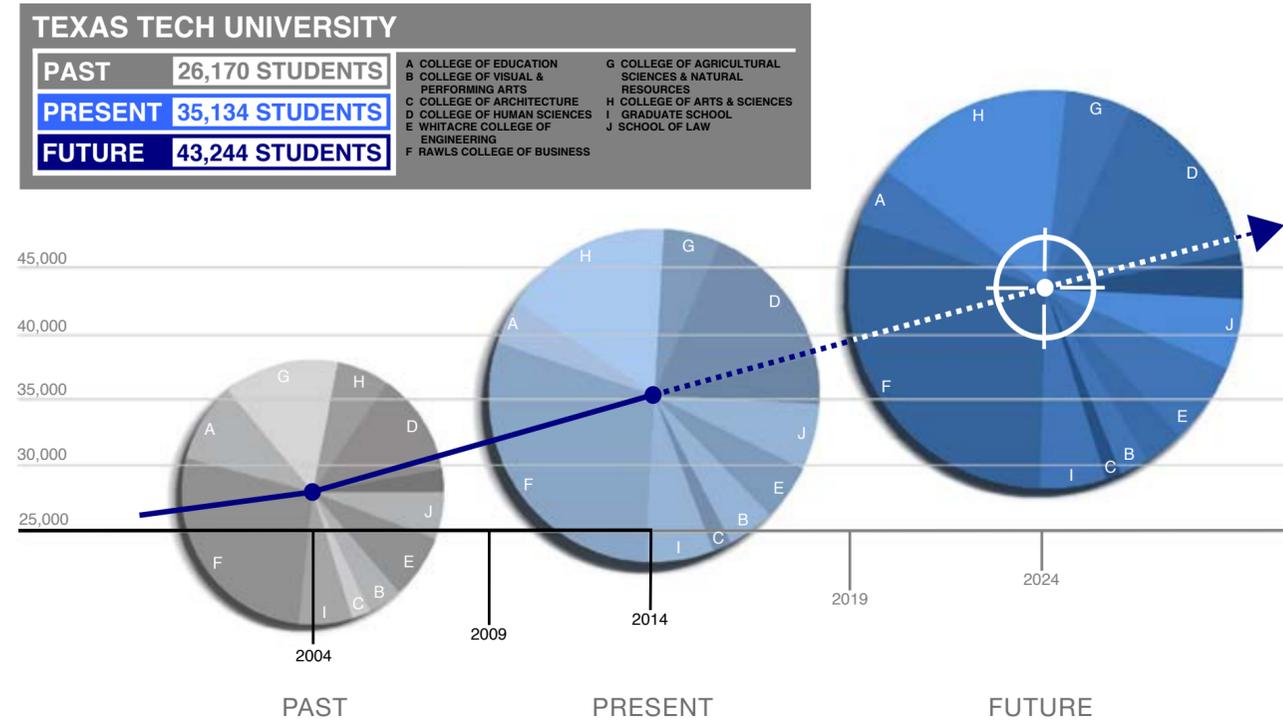
Texas Tech University Health Sciences Center announced a new enrollment record with 4,500 students enrolled in the fall

2014 semester. This is an increase of nearly 9.4 percent over the 4,114 students enrolled the previous year.

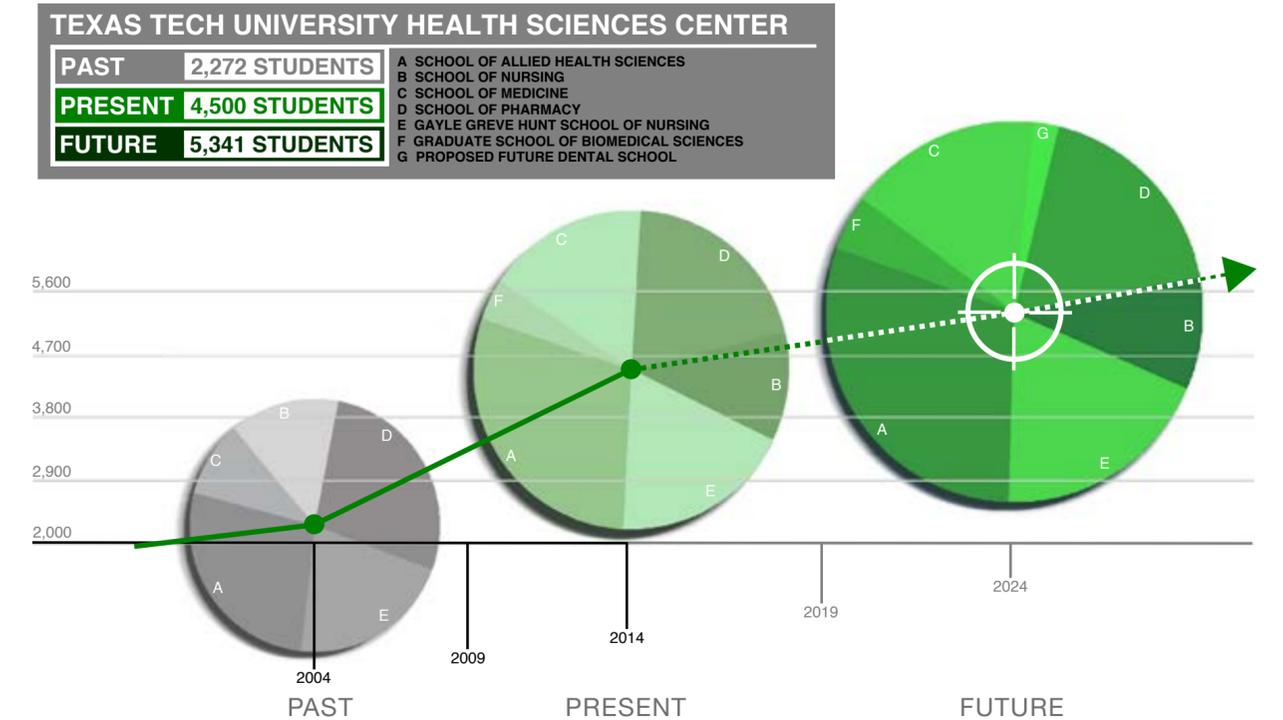
Since the fall of 2006, student enrollment at the Texas Tech University Health Sciences Center has increased by nearly 2,000 students. This significant growth is a tribute to the hard work of our faculty, staff and administrators and is helping prepare the next generation of healthcare professionals for the West Texas region and beyond.

TTUHSC's continued growth signifies its commitment to the mission of improving healthcare in Texas through research, education, and outreach.

The challenge with providing the necessary physical expansion to accommodate growth is to still maintain the character and ambiance of the campus environment. The TTU System is a university community that believes in the potential of its students, faculty, and staff to lead the world because "From here, it's possible."



“Universities are the engines of economic growth, the custodians and transmitters of cultural heritage...”



PRINCIPLE 2

STRENGTHEN THE ACADEMIC CORE

Though a much broader district than the Historic District, the general academic core of Texas Tech University has been and still remains the lifeblood that enriches student experiences on campus. This core contains vital nodes of student activities, including a majority of academic facilities, the Student Union Building (SUB), University Library, and Administration Buildings. To further reinforce student life, the general academic core is ringed with a large percentage of the student housing, athletic venues, recreation facilities and spaces, physical plant, and support services. In turn, both the academic core and campus periphery has in many quadrants of the campus been energized by privately-funded "town-and-gown" mixed-use development that has further promoted synergies not only between the campus and surrounding fabric, but also just within the academic core and its periphery, such as in the northeast area of campus between the athletic district and privately-developed North Overton neighborhoods.

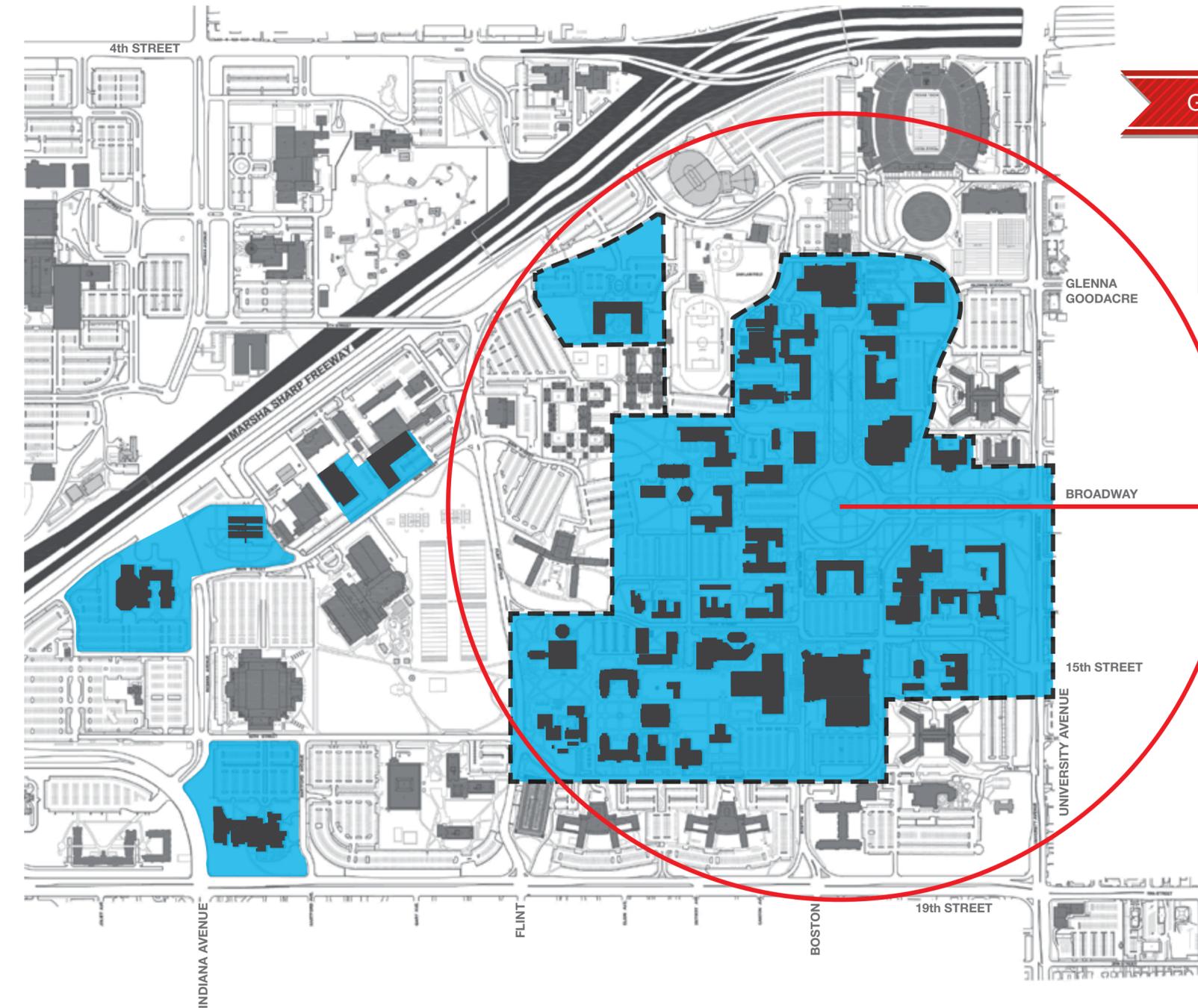
That said, despite the great efforts initiated with the 1997 Campus Master Plan and what has been accomplished since, much remains to be done in terms of further strengthening the campus academic core through increasing density, broadening student life resources to areas of the campus core that may currently lack such resources, and provide for a more sustainable, efficient, and synergistic core environment for students, faculty, staff, and visitors.

“ **The Academic Core is the lifeblood that enriches university experiences on campus.** ”

The following key objectives would be achieved through the strengthening of the general academic core:

1. Increase connectivity between academic facilities and other campus nodes.
2. Further infill undeveloped open space on campus so as to increase density and further reinforce the campus plan.
3. Incorporate more sustainable design solutions into the academic core.
4. Promote greater infrastructure efficiency into the campus fabric.
5. Create a built campus environment that invigorates collaboration and synergy between students and disciplines.

The existing campus general academic core, even though bounded by major vehicular boundaries on all sides—the Marsha Sharp Freeway to the north and west, 19th Street to the south, and University Avenue to the east—has sufficient capacity to meet university growth needs for the next 20 years and beyond.



GENERAL ACADEMIC CORE

LEGEND

- General Academic Core
- Ten-Minute Circle
- Ten-Minute Walk
- Academic



PRINCIPLE 3

CAMPUS IDENTITY & SENSE OF PLACE

Texas Tech University (TTU) is distinctly unique within the spectrum of American higher education campus design, and has in its own rich way evolved to produce its own version of the “Academical Village” so aptly termed by Thomas Jefferson over two centuries ago. The identity of the TTU campus is not only the result of the distinctive Plateresque Spanish Renaissance-revival style architecture that vertically defines the campus, but also a result of the Beaux-Arts-inspired planning traditions of the campus that were horizontally reaffirmed in the 1997 Campus Master Plan. The intention of this master plan update is to further build upon and enrich those architectural and planning elements that combine to generate a unique and beloved campus identity and a celebrated sense of place.

The following key objectives would be part of the 2014 Master Plan Update component of strengthening campus identity and reinforcing the institutional sense of place:

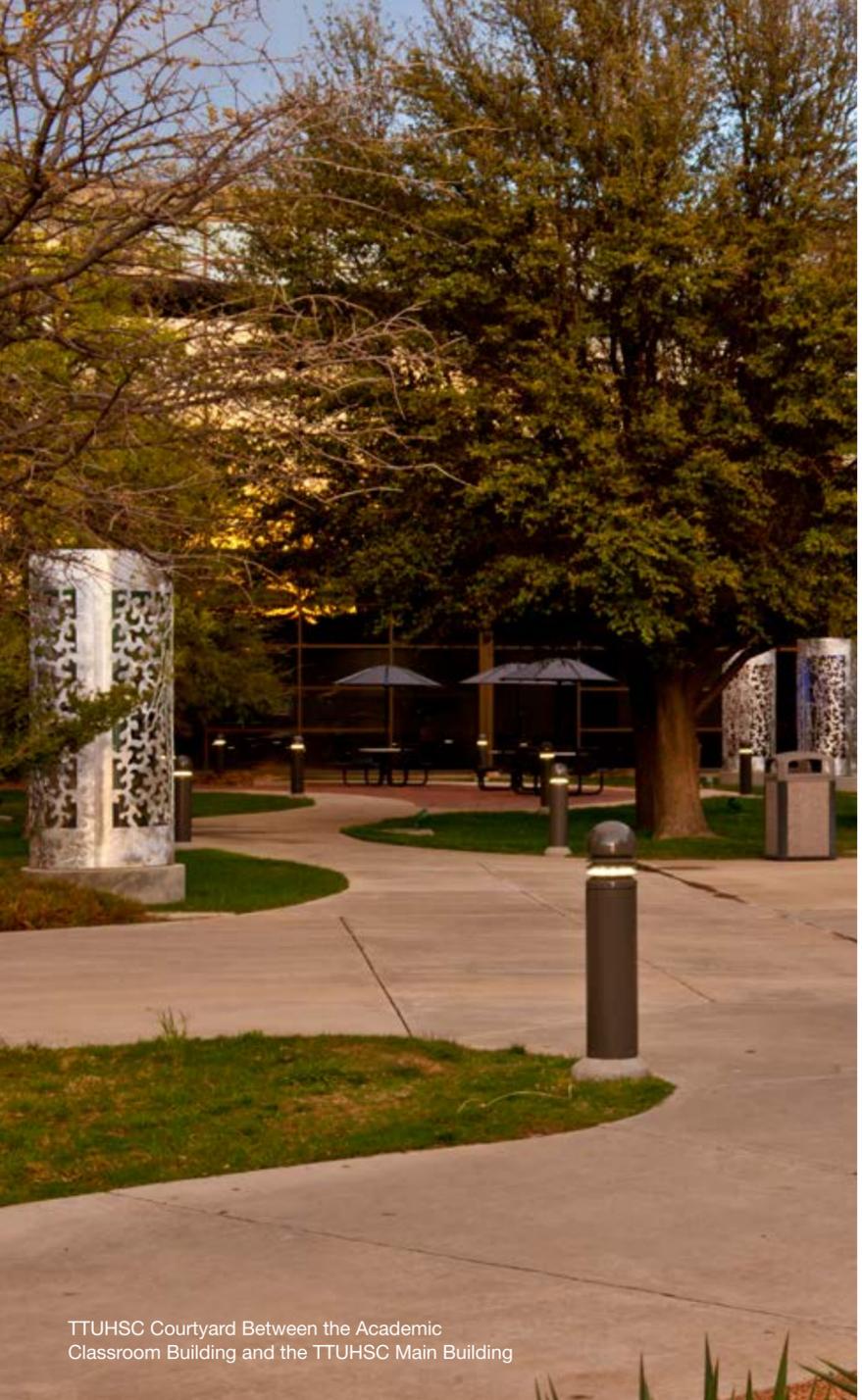
1. Locate and install architectural and didactic elements to further define and celebrate both the Texas Technological College Historic District (TTCHD), but also the various vehicular entry points around the periphery of the general academic campus, the TTUHSC district, the medical academic campus, Research Park, and northernmost boundaries.
2. Utilize future infill facility construction within the academic cores of the campus to further develop extensions of the Beaux Arts planning model already identified in the 1997 Campus Master Plan.

3. Define not only the material-specific architectural design guidelines of the university, but also provide more definitive guidelines of the formative and aesthetic design guidelines for Spanish Renaissance revival architecture on campus, and the required level of expectation both within the TTCHD and the academic core periphery.

Due to Texas Tech University Health Sciences Center's construction in 1970 when minimalist utilitarian design was the emphasis, the buildings did not follow the TTU campus design language. However, plans will incorporate the Plateresque Spanish Renaissance-revival style architecture.

4. Maintain a focus on the primary axial vistas and broad grassy malls that define the campus physical plan, but also endeavor to increase the presence of smaller, sheltered, more pedestrian-scaled landscaped peripheral zones that feed into the larger axial mall and provide outdoor space to be utilized by students and visitors.

5. Endeavor to minimize the presence of the parking lot within heavily-trafficked areas of the TTCHD through lot size reduction and the introduction of landscaping and architectural elements that reduce the visibility of any remaining parking.



TTUHSC Courtyard Between the Academic Classroom Building and the TTUHSC Main Building



English Philosophy Education Complex Courtyard



Northwest Pedestrian Mall at Holden Hall

PRINCIPLE 4

LAND ENDOWMENT

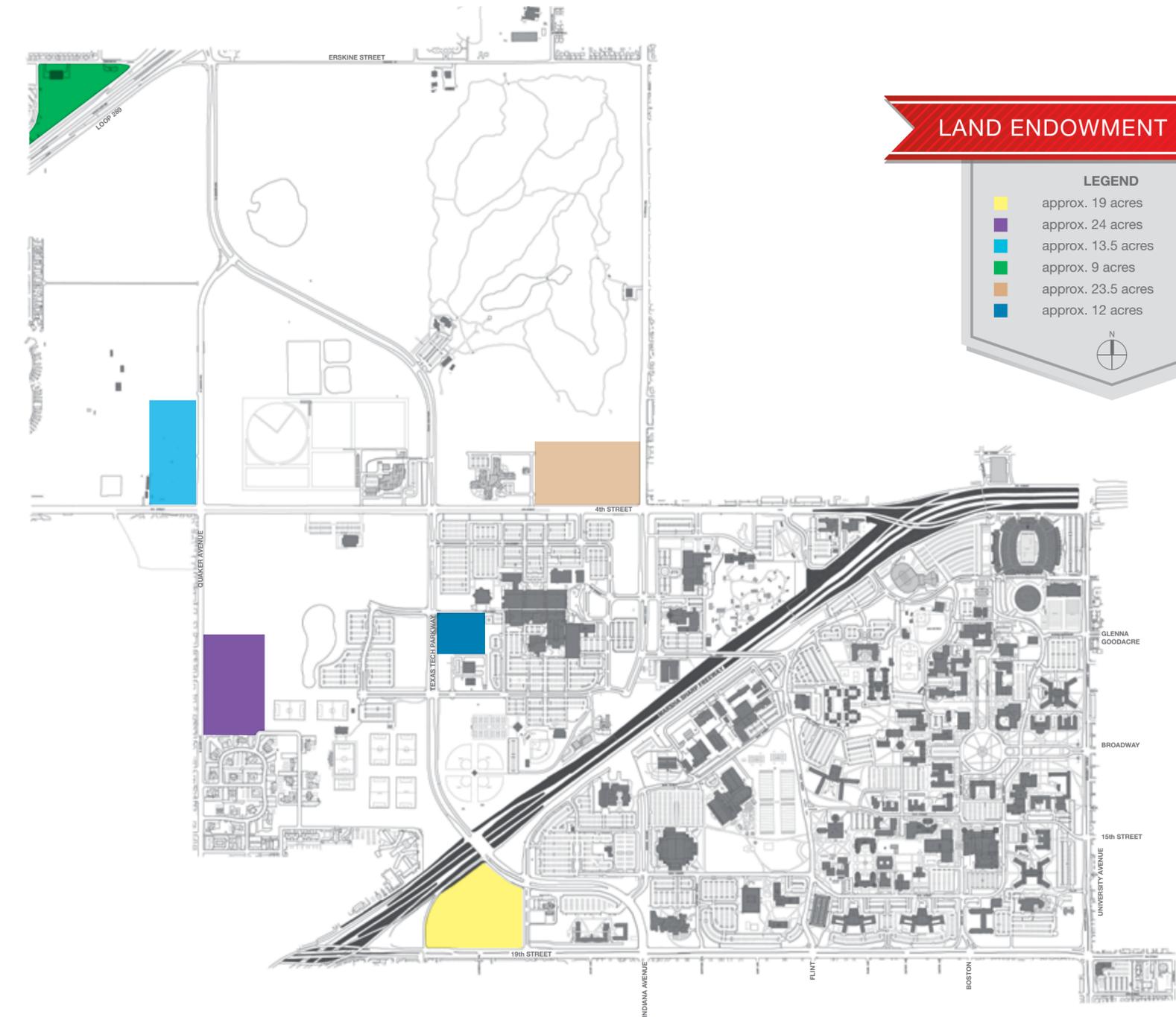
Despite ongoing efforts to further strengthen the Texas Tech University (TTU) and Texas Tech University Health Sciences Center (TTUHSC) campus academic cores through building additions and new construction initiatives, the university is left with the strategic asset of hundreds of acres of undeveloped land—predominantly located in the western and northwestern quadrants of the campus. Given the benefits of being one of the largest contiguous campuses on the North American continent, it is ironic today that the availability of land had once been a major challenge in the form of temptation to grow the university physical plant in a low-density fashion irrespective of the original campus master plan. Today, those remaining parcels of land provide the opportunity to better respond to the priorities of institutional growth and the institution's Strategic Plan.

Regardless of notable strides that have been either made or planned in increasing on-campus student housing, continued enrollment growth at a rate of better than 1,000 additional students per academic year is a daunting pace at which to match in terms of new facility needs. The opening in fall semester 2014 of new graduate- and doctoral-student housing at the northwest corner of 19th Street and Indiana Avenue will result in (456) additional bed suites for student use, with conceptual plans under development for an additional 500-bed complex intended for a fall 2017 completion north of the current project site. Even when factoring the added benefits of these facilities coupled with that of the Talkington Hall Complex (2012) and Grover Murray Hall (2005), Texas Tech University faces the reality that new student housing is being constructed at approximately one additional bed for every 3.5 additional students (projected 2005-2016). While that construction rate (28.5 percent new on-campus housing) is in net commensurate with the national trends of peer institutions, the projected total

on-campus housing capacity would still remain below 20 percent of total enrollment. As a result, alternative options for housing development—not entirely unlike the benefits realized from the success of the nearby Overton Park development—need to be examined and potentially implemented.

Strategic partnerships via land parcel leases with student life development organizations will be key to maintaining a healthy on-campus housing ratio as TTU and TTUHSC student enrollment continues to grow in the next decade. These third-party organizations have the resources to develop and build large-scale mixed-use environments within certain identified parcels on campus. By implementing mixed-use development strategies, synergistic activities in the form of food service and retail leased space venues can be introduced into the western and northwestern peripheries of the campus – areas where student activity levels are starting to increase, but lack the quantity of student life venues that presently exist within the general academic core.

One other key factor to TTU's institutional growth is Strategic Plan priorities—namely priorities 2 and 3—which address both academic and research growth to the university. As a pivotal element toward the Tier One objectives of the university and TTUHSC, as well as NRUF requirements, lands will be required for the further development of strategic initiatives and research partnerships. Catalytic efforts within this priority are already underway with construction of initial phases of the TTU Research & Technology Park west of the TTUHSC, and with the Bayer CropScience Seeds Innovation Center lease spaces south of the TTU Museum. Much like successes seen with peer institutions such as the University of North Carolina at Chapel Hill, Arizona State University, and the University of Utah, land parcels utilized in a leased facility or space model will be necessary for the continued growth of partnering with private-sector research-intensive entities.



PRINCIPLE 5

OPEN SPACE

The master plan lays a framework for a future campus where all parts reinforce its environmental quality. To this end, campus open space is evaluated according to its positive, negative, or neutral contribution to the aesthetic and functional integrity of the campus. The campus character depends on a careful balance between buildings and open space.

The removal of cars and surface parking from the campus core, along with efficient bus routes and bike paths are imperative in the recovery of open space.

The historic and physical characteristics of the campus foster the design of open spaces. Even though the campus has basically no terrain, the flat vistas create long visual lawns with opportunities for positioning either buildings or public art that can easily orient the user.

William Ward Watkin, the original campus architect, chose an axial plan for the campus that created a spine that has allowed quadrangles to populate on either side. The placement of those buildings has thereby created intimate spaces between structures and formed pedestrian malls and protected courtyards.

The master plan supports six types of open spaces: pedestrian malls, street hardscape, walkways, plazas, courtyards, and parks. The sun and shade patterns from buildings and trees add another layer of detail to open space design.

The 2014 Campus Beautification Project advocates the creation and enhancement of the campus open-space structure. The project will enrich existing spaces by improving the quality of the paving, plantings, lighting, and overall pedestrian environment.

Pedestrian Mall

Texas Tech University's malls have their origin in William Ward Watkin's axial plan for the campus. The 1997 Campus Master Plan forecast the establishment of two new malls; one east to west from the Engineering Key and another north to south behind the Science Quadrangle and the residence halls to the west. Even though these new malls are not complete, they strengthen the original plan and provide the foundation for placement of future structures. The malls should provide for pedestrian movement, promenades so to speak, shaded by trees and foster orientation and spectacular vistas.



Street Hardscape

For much of the history of TTU, and later the TTUHSC, the tenets of pedestrian-friendly campus planning and the demands of vehicular traffic on campus have opposed one another in a veritable conflict of opposing dynamics. In this "Cold War" of campus planning, efforts led by college architect Nolan E. Barrick, FAIA, in the 1950s and 1960s, followed by efforts adopted in the 1997 Campus Master Plan—efforts that have largely been implemented—helped to place the long-time predominance of roadways on campus in check, in lieu of safer, more pedestrian-friendly venues.

That said, the overwhelming majority of roadways on campus, including high-traffic, ceremonial, and historic district spaces, are all of asphaltic-paved construction, with only a few recent projects having transitioned to concrete paving. A number of pedestrian-critical zones of campus, such as the 15th and Boston corner intersection north of the Student Union Building, traffic areas on the south side of Jones AT&T Stadium, and elsewhere, are all opportunities where an increasing volume of cross-street pedestrian traffic and importance of the space warrants something more substantial than asphalt. Integral colored concrete, brick pavers, and other potential alternative surfaces, complemented by the incorporation of drop-down bollards for the periodic restriction of vehicle traffic have been proposed in a number of these areas of campus, and are shown as such in the 2024 Vision Plan.



Walkways

Concrete, integral-colored concrete and brick paver walkways help to provide a crucial gap infill between the broad pedestrian malls that so visually define the academic core of the campus, to the entries of buildings and more intimate landscaped areas of campus. In fact, while there are less than ten main axial malls either existing or proposed in the 2014 Campus Master Plan Update, every day, students, visitors, faculty and staff commute on foot on dozens of primary and tertiary walkways on campus. These routes are the physical workhorses of the Texas Tech campus. With that in mind, the continued utilization of the Texas Tech University System Board of Regents mandated 1 percent landscape enhancement budget appropriated for capital projects, coupled with the need for future infill projects at TTU and TTUHSC to incorporate additional thoughtfully-composed and strategically-minded walkways into the campus fabric. Drought-tolerant ornamental and shade trees should be incorporated with the walkways when possible, yet in a cost-effective and highest-priority mindset.

One specific network of walkways not currently in place, but proposed in the 2014 Campus Master Plan Update is the East Campus Esplanade System—a multimodal pathway designed to provide a safer designated path for student pedestrians and bicyclists that is isolated from the increased traffic of University Avenue. The Esplanade would incorporate lighting, landscaping, and seat wall screening elements that would aid greatly in focusing cross street pedestrian traffic to lighted intersections and designated crosswalks along University Avenue.

PRINCIPLE 5 (continued)

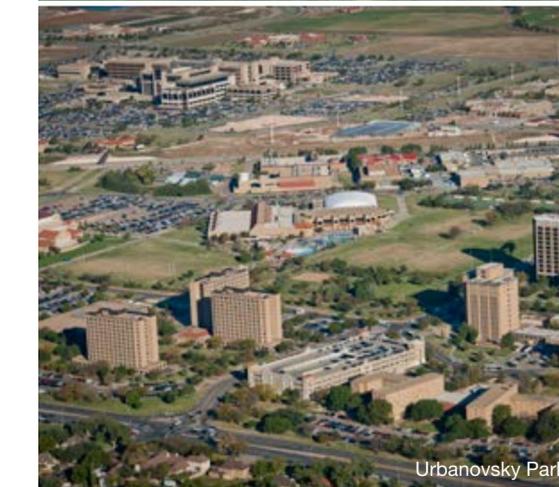
Plazas

Plazas function as outdoor living rooms, surrounded by trees and plantings with hardscape that supports seating areas. Plazas have a rich urban history along with a history rooted in the Spanish Renaissance. Plazas can be planned as much larger spaces than courtyards.



Courtyards

The cloistered and arcaded courtyard is one of the richest elements of the heritage of building elements dating back to the 1924 original campus plan developed by William Ward Watkin and dates back to being an integral part of the Castilian and Andalusian Spanish built environment. The evolution of the built campus plan over the past 90 years brought rise to the “U-shaped” building form as a predominant footprint on campus, in lieu of the cloistered “square donut” configuration that Watkin had originally championed in the original campus plan. Both configurations, along with the opportunity to locate sheltered courtyard areas with other forms of building infill are all critical to creating a larger number of smaller, more intimate outdoor spaces for student and visitor use. With the exception of new residence hall construction, at least one side, or 25 percent of any new courtyard’s linear perimeter, should be designed with a colonnaded arcade to help reduce any overbearing feel of sheer verticality and confinement to the exterior space. Design professionals should prudently consider the building orientation to any open-ended courtyards, such as courtyards to “U-shaped” buildings. Strong spring and winter winds from the west and north, coupled with notable heat gain from a slightly southerly summer sun can render ill-sited outdoor courtyards in the Lubbock area as inhospitable and as a result underutilized. A mixture of shade trees, ornamental trees, and built shade structures can help soften these courtyards as well.



Parks

Having a broad range of versatile outdoor spaces that can function beyond the aesthetic and pedestrian role of a campus mall is critical to providing a vibrant atmosphere for student life activity and recreation. Certain pedestrian malls, such as the Dairy Barn Mall, provide the dual role of serving as both an axially-oriented pedestrian mall, but also to a larger degree as an activity space for student recreation, given its location near both student residential, student life, and academic facilities.

A primary campus hub for outdoor activity has been Urbanovsky Park, situated adjacent to the Robert Ewalt Student Recreation Center. Urbanovsky Park’s role as an outdoor space for the university’s student population has evolved significantly over time, from serving its original role as purely an intramurals activity space for Texas Tech University students, into today’s emerging role of a more multipurpose, multimodal outdoor space. The 2014 Campus Master Plan Update includes proposed plans to enhance Urbanovsky Park by implementation of further shade tree plantings around the perimeters of open spaces, integration of a new jogging circuit clear of vehicular traffic on Flint Avenue and 18th Street, architecturally-articulated entry gateways, and a new south water feature. These improvements come concurrently as intramural recreation fields, once the primary student activity at Urbanovsky Park, are built in the western zone of campus, just north of the John Walker Sports Complex. With the perception of Urbanovsky Park being a largely intramural activity space largely changed, a broader range of student recreation activities can begin to be implemented at a space that may in the near future be regarded as Texas Tech’s “Central Park.”

PRINCIPLE 6

CAMPUS CIRCULATION & CONNECTIVITY

The intent of the 2014 Master Plan Update is to provide a safe, efficient, and convenient circulation network which, by virtue of its design and integration with the total campus fabric, complements and enhances the visual and perceptual experiences of its users. The primary transportation modes of walking, bicycling, private cars, motorcycles, university service vehicles, and Citibus should be managed individually but in complementing fashion to connectivity within the campus fabric. Every attempt should be made to optimize each circulation system, within the context of an existing campus and scarce resources. The integration of these systems, as well as the resolution of conflicts between them, shall recognize safety as the primary and uncompromised objective. Where issues of convenience are concerned, the solution to system conflicts should favor, in order, pedestrians, bicyclists, bus passengers, and automobile users.

It is important that the plan acknowledge that the campus does not exist as an island in the city, but that it depends heavily on residential, commercial and institutional environments around it. The campus must have strong functional connections to its surroundings while maintaining special identity.

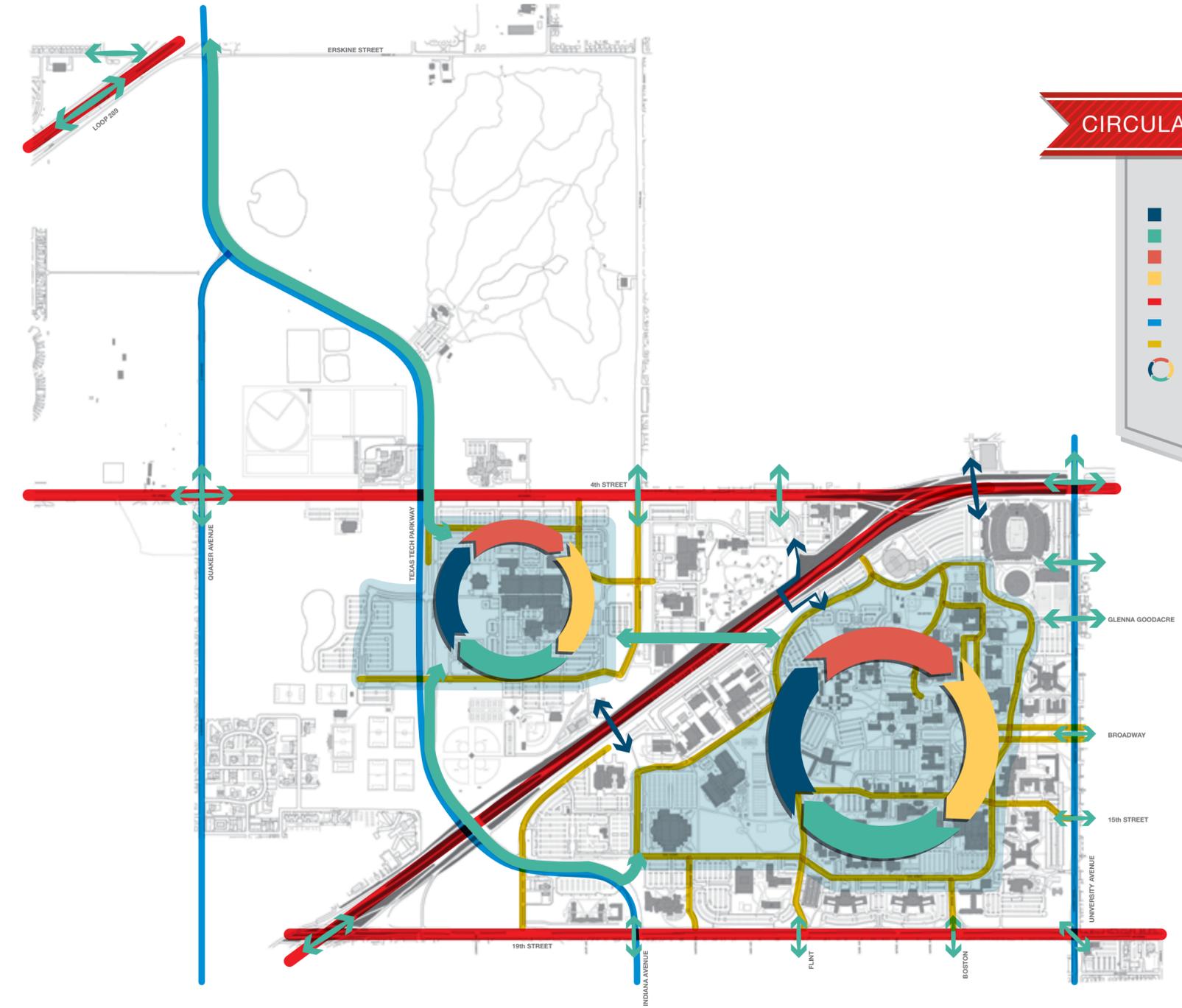
An important principle for the campus is to improve overall circulation and connectivity, both within the general academic core, medical academic core, and with other areas of the campus. The master plan incorporates strategies to improve streets and other mobility corridors throughout the campus. A separate traffic and parking study provided recommendations which are described in detail in the Circulation section of this plan.

The following campus map reflects the interaction of different modes of traffic and the roadway system in and around the campus. The major thoroughfares are red, circulation streets are blue, and the interior campus roads are gold.

The southern edge of campus is bounded by 19th Street, formerly State Highway 114. The middle of the campus is divided by 4th Street, formerly State Highway 62/82. Both these highways run east and west. The Marsha Sharp Freeway (State Highway) runs diagonal from northeast to southwest through the campus. Texas Tech Parkway opened in 1999 and runs north and south through the campus bordering the general academic and medical academic campuses. This thoroughfare provides a roadway that connects the community on the north and south sides of town with a straight through route. Texas Tech Parkway also connects with the new Marsha Sharp Freeway, thereby, providing improved migration from various parts of the community and surrounding areas. North Loop 289 provides entry to the campus from its most northern edge.

“
The pedestrian circulation is emphasized in an effort to humanize a campus.
 ”

– Paul Rudolph, Architect
 (1918-1997)



CIRCULATION & CONNECTIVITY

LEGEND

- █ Pedestrian
- █ Vehicular
- █ Bus
- █ Bike
- █ State Highway
- █ Major Thoroughfare
- █ Campus Road
- ⊕ Synergy Between Pedestrian, Vehicular, Bus, and Bicycle Movement

N

MASTER PLAN FRAMEWORK

The 2014 Campus Master Plan is a dynamic tool for the long-term development of the campus; a flexible framework for guiding the physical organization of the Texas Tech University (TTU) and Texas Tech University Health Sciences Center (TTUHSC) campus. Its purpose is to guide, not dictate, the inevitability of change. To develop a framework for the growth and enhancement of the campus that identifies short- and long-term objectives.

The update of the 1997 plan will provide the university administration with a current and relevant decision making instrument. This instrument shall include primary Campus Planning Principles, specific system recommendations, and Land-Use Map.

The composition of our campus community allows the various academic, medical, cultural, athletic, residential, and support groups to co-exist in harmony. As within any urban context, Texas Tech University has created neighborhood zones that solidify the relationships of our campus organization.

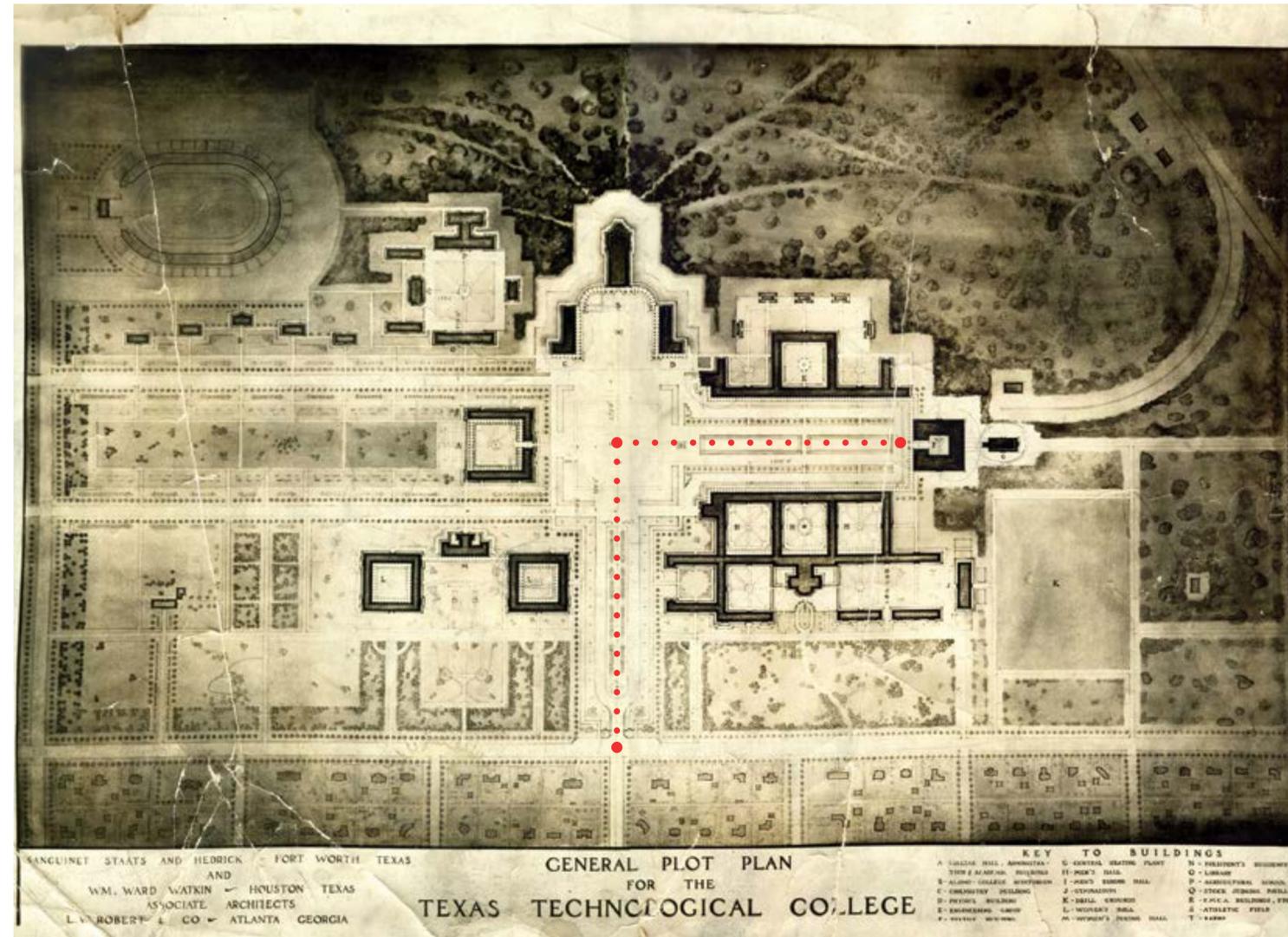
Nolan E. Barrick, FAIA (1913-2013) former chair of the Department of Architecture, College of Engineering and the supervising architect for Texas Technological College stated that "Unconfined space is virtually impossible to comprehend; consequently, a basic problem facing the planners at Texas Tech was that of developing meaningful spatial relationships on a site that afforded unrestricted vision from horizon to horizon. Neither definitions of space nor landmarks of reference existed in the natural surroundings. Buildings, therefore, became doubly important as functional entities and as significant features of the landscape."

So, if the facilities and spaces that surround those buildings where students learn, live and play are of quality and value; then an attitude of ownership is fostered.

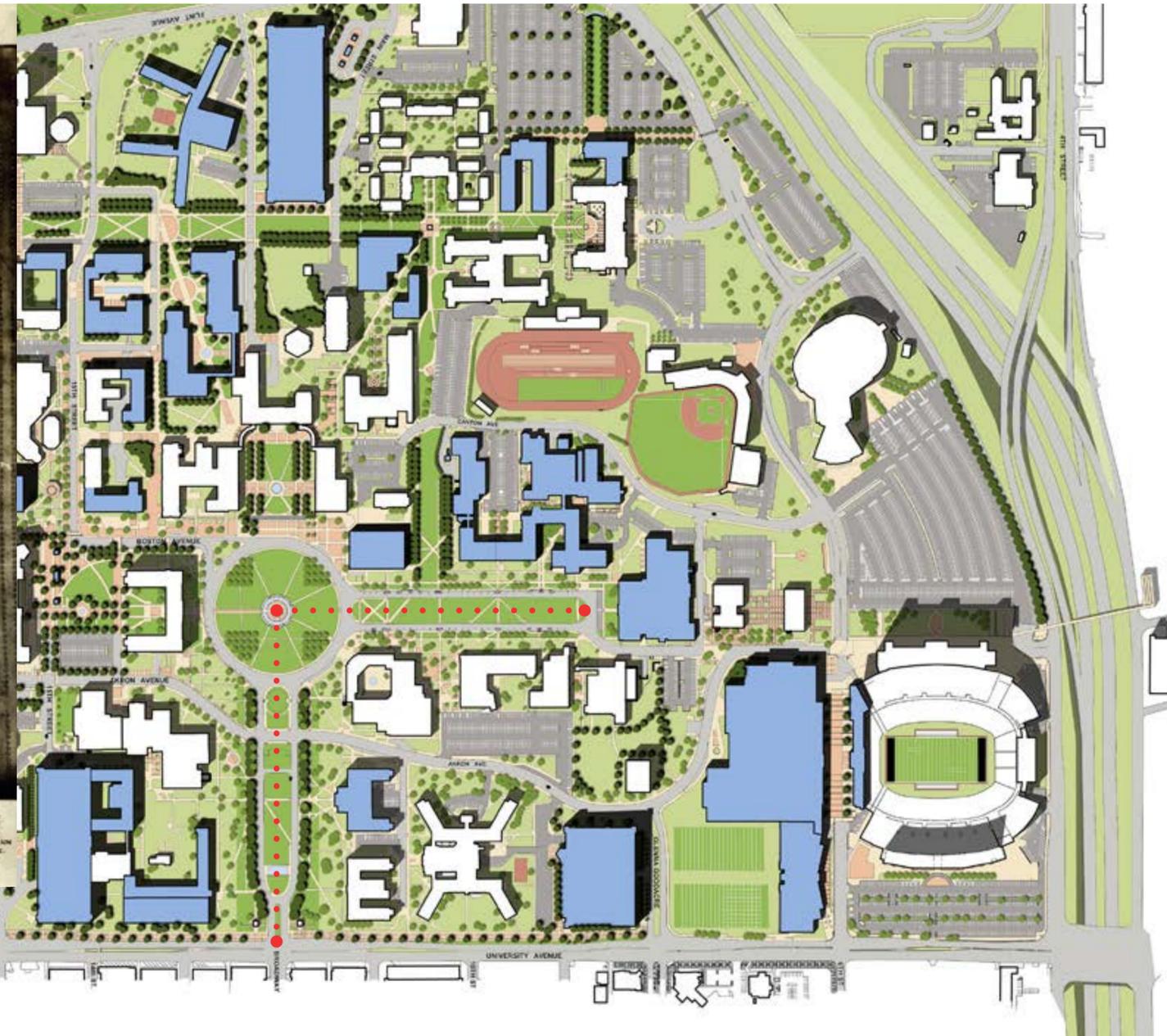
The TTU/TTUHSC Master Planning Committee promotes and encourages tangible concepts, such as:

- **The ability to create an overall campus experience that promotes the ability to achieve an excellent, diverse, and well-rounded education.**
- **The privilege to work in aesthetically pleasing and well-maintained spaces.**
- **The honor to live in a pleasant and secure surrounding.**
- **The advantage to study in facilities that are technologically advanced.**
- **The opportunity for creative energy to pave the road to excellence.**

The dynamics of this great university will be reflected by the retention of quality students, faculty, and staff and the achievement of Tier One status.



1924 CAMPUS VISION



2024 CAMPUS VISION





HISTORIC DISTRICT

The Texas Technological College Historic District (TTCHD), a district added to the U.S. National Register of Historic Places in 1996, forms a general area of campus bounded from University Avenue in the east to 15th Street in the south, and from the Old Agriculture Pavilion to the north end of the Engineering Key. This zone of campus constitutes the vast majority of all historic construction largely designed by Wyatt C. Hedrick and William Ward Watkin between 1925 and 1952. Much of the rich traditions and history of Texas Tech University were born within this district, and even today remains a bastion of pride and heritage among all who visit, attend or work at the institution.

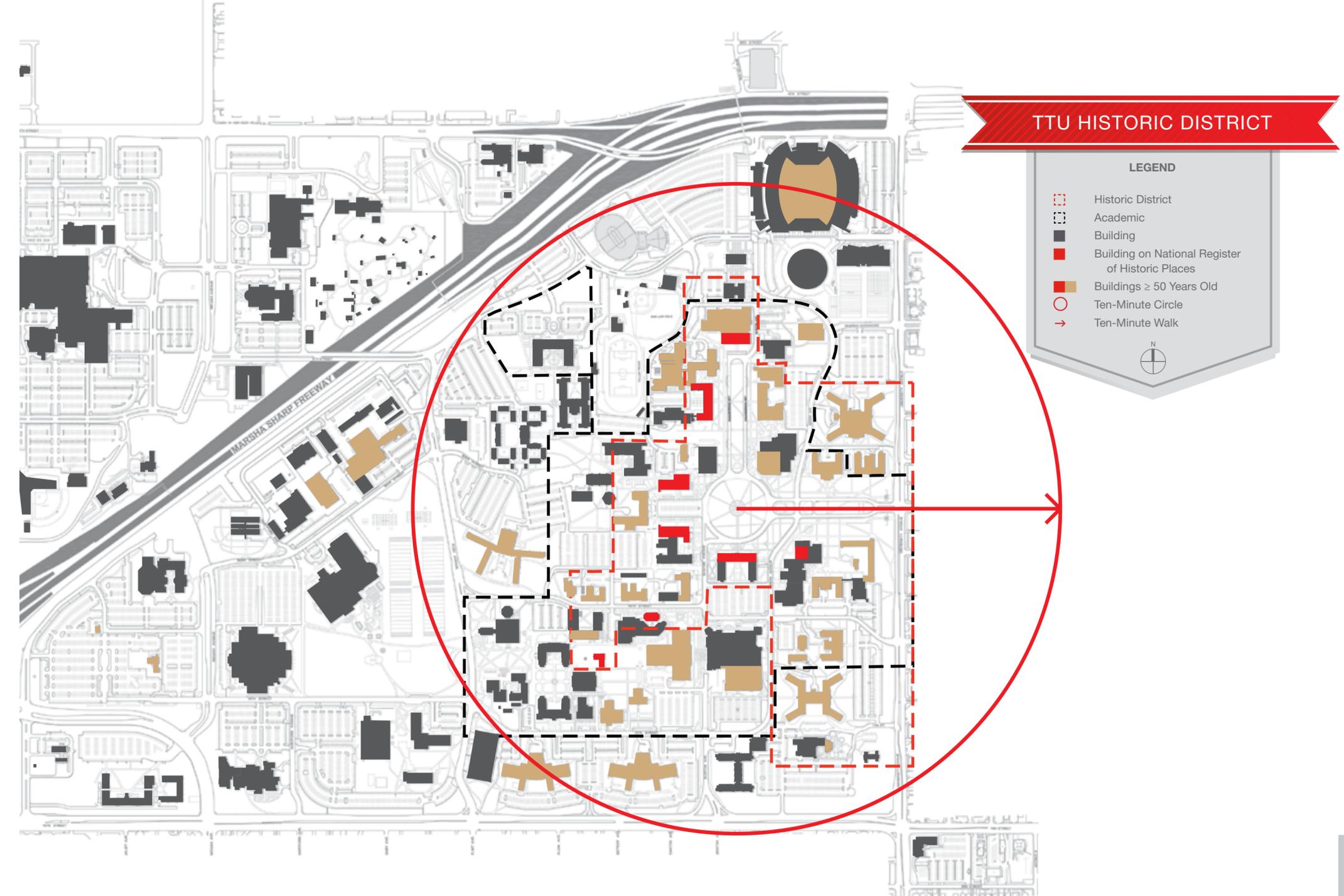
Just as a sense of place is vital to an institution's campus fabric, a sense of arrival is also an often needed element to effectively defining a place of importance. Branding and the establishment of architectural and didactic elements that clearly define a district or place while adding further layers of richness to the experience of being on campus are also vital factors to consider as well. Where the TTCHD is concerned, the following objectives have been identified to better define the boundaries of the Historic District and to enrich the experience for anyone—student, visitor, or otherwise—within the district:

- Institute a distinctive branding identity to the TTCHD in an effort to further celebrate the architectural heritage of the university and increase public awareness.
- Incorporate a range of pedestrian- and vehicular-scale gateway, wayfinding, and didactic elements that effectively define the Historic District.

- Continue to reinforce the rich architectural heritage of the district through future new infill and building addition construction.
- Endeavor to further minimize the presence of parking lots and vehicular rights-of-way in an elegant manner that does not restrict the functionality of core campus activities.

“
...the creation of unified historic districts encourage the growth of community organizations and heighten social cohesion.
 ”

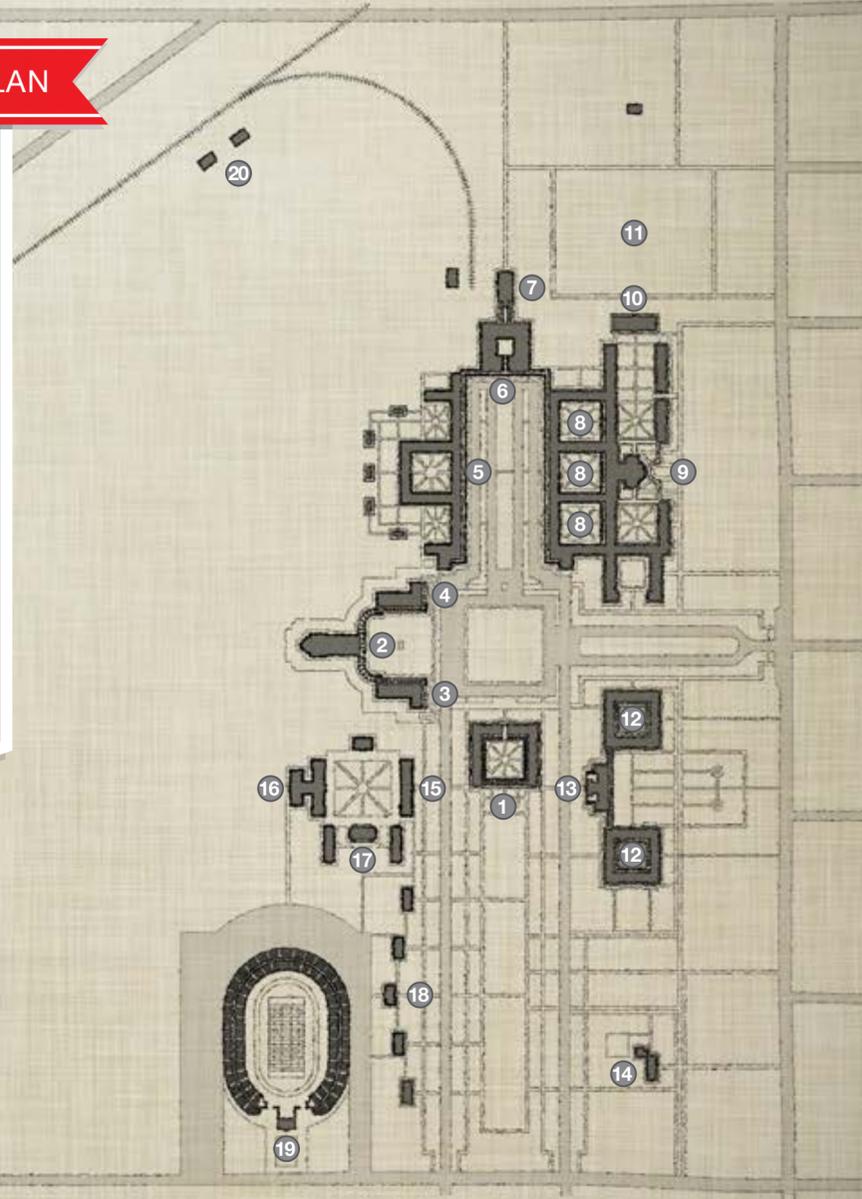
– Carol Rose, 1981



1924 ORIGINAL CAMPUS PLAN

LEGEND

- 1 College Hall—Administration & Academic Building
- 2 Alamo—College Auditorium
- 3 Chemistry Building
- 4 Physics Building
- 5 Engineering Group
- 6 Textile Building
- 7 Central Heating Plant
- 8 Men's Hall
- 9 Men's Dining Hall
- 10 Gymnasium
- 11 Drill Grounds
- 12 Women's Hall
- 13 Women's Dining Hall
- 14 President's Residence
- 15 Library
- 16 Agricultural School
- 17 Stock Judging Pavilion
- 18 Y.M.C.A. Buildings, Etc.
- 19 Athletic Field
- 20 Barns



1930 CAMPUS SNAPSHOT

LEGEND

- 1 Administration Building
- 2 Home Economics
- 3 Cafeteria
- 4 Home Economics Preparatory House (Today Human Science Cottage)
- 5 Chemistry Building
- 6 Agricultural Science (Original Cafeteria; Later Speech Bldg)
- 7 Livestock Pavilion
- 8 Dairy Barn and Silo
- 9 West Engineering (Today Electrical Engineering)
- 10 Textile Engineering (Today Industrial Engineering)
- 11 Power Plant
- 12 Basketball Gym—"The Old Barn"
- 13 Tech Field
- 14 President's House (Today McKenzie-Merket Alumni Center)



Administration Building



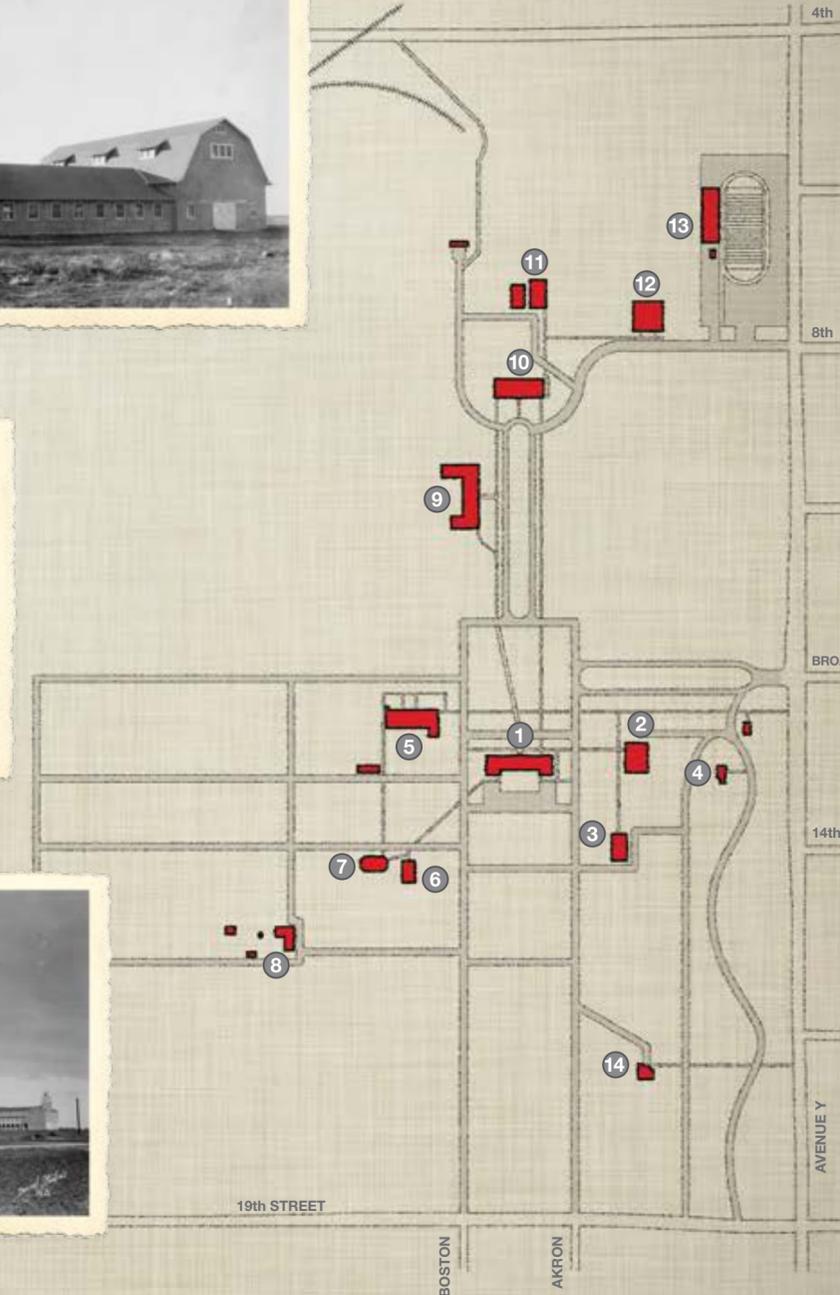
"The Old Barn"



Dairy Barn



President's House (1925/Now McKenzie-Merket Alumni Center)



This master plan developed by the partnership of Sanguinet, Staats & Hedrick of Fort Worth, William Ward Watkin of Houston, and engineer L.W. Robert of Atlanta was approved for implementation by the Texas Technological College Board of Directors in 1924. Often referred to as the "Watkin Plan," Watkin had taken a prominent design role in the master plan design, and was inspired largely by the work of his former employers—Ralph Adams Cram (1863-1942) and Bertram Grosvenor Goodhue (1869-1924). Cram had developed the Beaux-Arts-inspired master plan for Rice University in 1909, while Goodhue had developed the master plan for the Panama-California Exposition in San Diego from 1911-1915, a beloved development known today as Balboa Park. While the plan displays many of the features that make up celebrated elements of the Texas Tech University Campus Plan today—such as the Engineering Key, Administration Building, Broadway Entry Mall, and Math & Science Quadrangle—many curious and never-implemented elements exist in the original master plan. Watkin's plan called for a football stadium situated roughly where Wall/Gates Hall stands today, and the majority of student housing were to be organized in an ecclesiastically-inspired cloister pattern. In a letter from Watkin to Texas Technological College Board Director Armon Carter on February 15, 1926, Watkin indicates that the master plan had been originally sized to accommodate a student body of 6,000 students, but had anticipated that it would take 25 years to fully build out the campus to its intended design.

1940 CAMPUS SNAPSHOT

LEGEND

- 1 College Library (Today Mathematics & Statistics) Building
- 2 Women's Dormitory No. 1 (Doak Hall)
- 3 Men's Dormitory No. 1 (West Hall)
- 4 Men's Dormitory No. 2 (Sneed Hall)
- 5 Women's Dormitory No. 2 (Drane Hall)
- 6 Tech Field Wood Bleacher Expansion
- 7 Power Plant



College Library (Today Mathematics & Statistics)



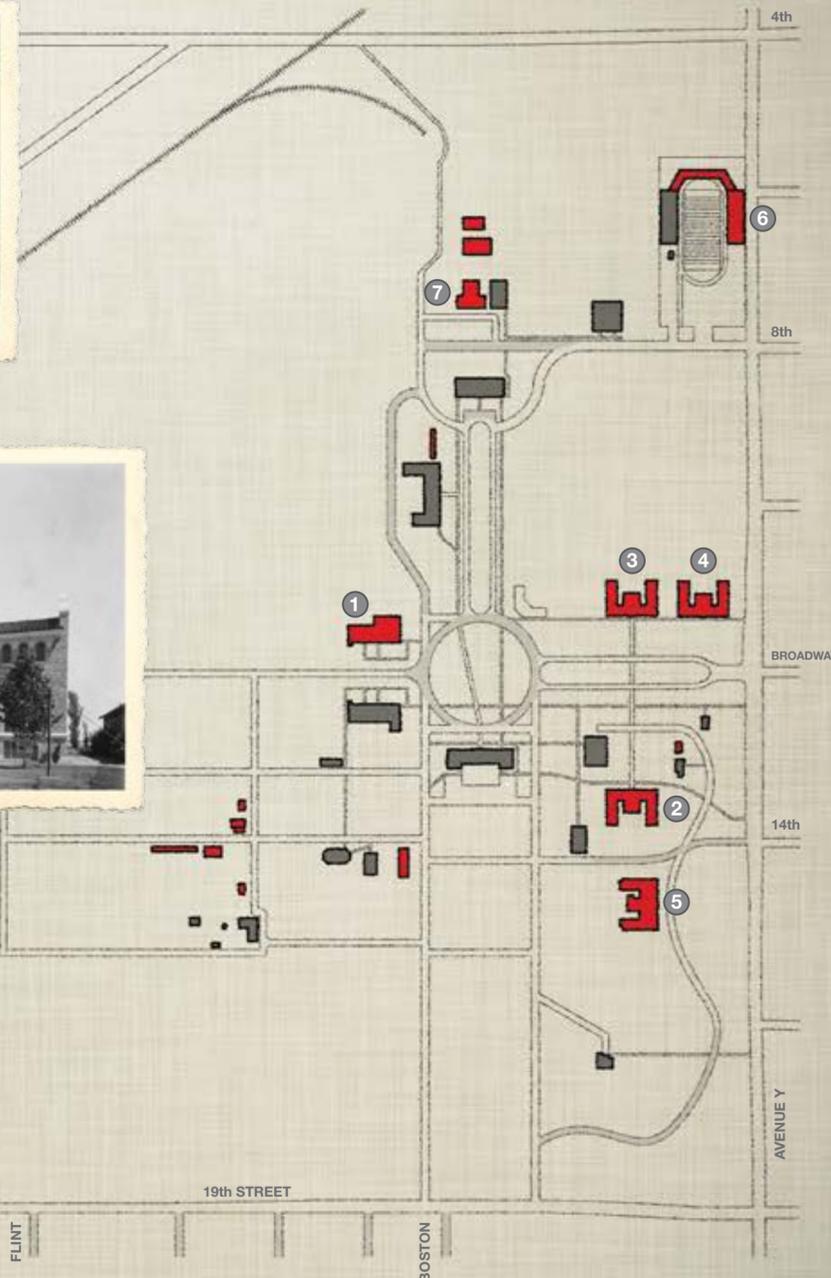
Power Plant (1931-1998)



Home Economics Building (1925-Present)



Men's Dormitory No. 1 (1934-Present/West Hall)



1950 CAMPUS SNAPSHOT

LEGEND

- 1 Museum of West Texas (Today Holden Hall)
- 2 X-Buildings
- 3 Journalism Building (Today National Wind Institute)
- 4 Women's Dormitory No. 3 (Horn/Knapp Hall)
- 5 Men's Dormitory No. 3 (Bledsoe/Gordon Hall)
- 6 Naval Reserve Auxiliary
- 7 Clifford B. and Audrey Jones Stadium
- 8 Agriculture Building
- 9 Agricultural Sciences Addition
- 10 Dormitory Business Office (Today Development Office)
- 11 Dairy Barn Addition



Journalism Building



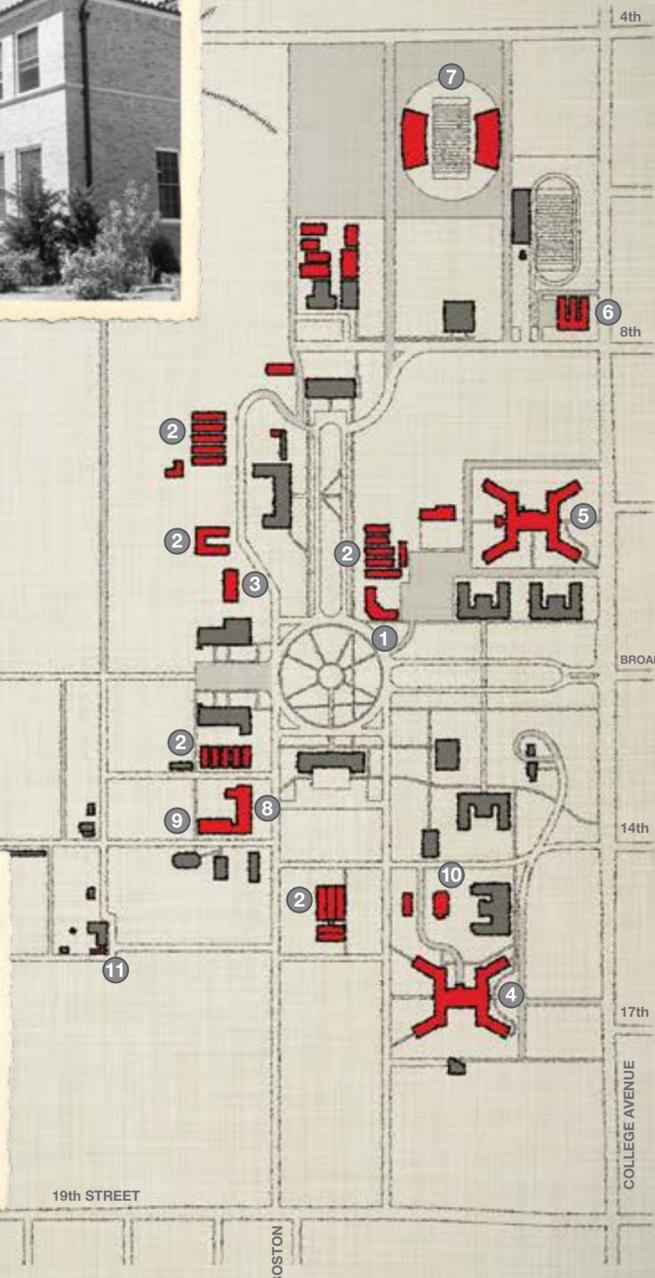
Men's Dormitory No. 2 (1938-Present/Sneed Hall)



Museum of West Texas



Agriculture Building



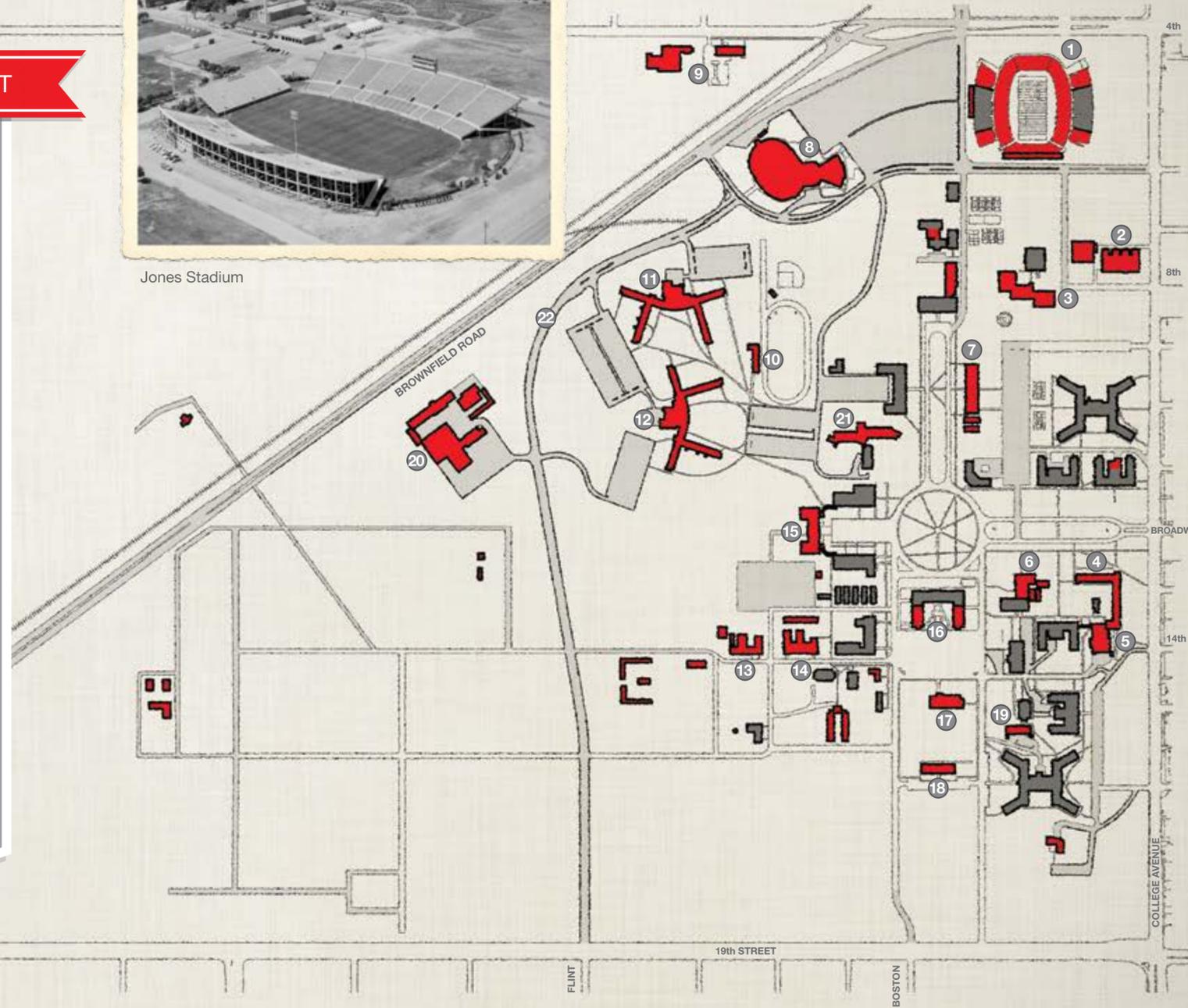
1960 CAMPUS SNAPSHOT

LEGEND

- 1 Jones Stadium East Tier Relocation and Bowl Expansion
- 2 Naval Auxiliary
- 3 Men's Gymnasium and Natatorium
- 4 Weeks Hall
- 5 Doak Hall Conference Center
- 6 Home Economics Expansion
- 7 East Engineering Building (Today Civil Engineering)
- 8 Lubbock Memorial Coliseum and Auditorium
- 9 National Guard Facilities (Today TTU Admin Services & University Police Department Buildings)
- 10 New Track Facility & Baseball Field
- 11 Gaston/Thompson Hall
- 12 Carpenter/Wells Hall
- 13 Animal Science (Today CASNR Annex)
- 14 Agricultural Engineering (Today Agriculture Communication & Education)
- 15 Science Building & Colonnade Extension
- 16 Administration Building Expansion
- 17 Student Union Building—Phase I
- 18 Music Building
- 19 McClellan Memorial Infirmary (McClellan Hall)
- 20 Physical Plant Complex
- 21 Office and Classroom Building (Later English & Philosophy Building)
- 22 Flint Avenue



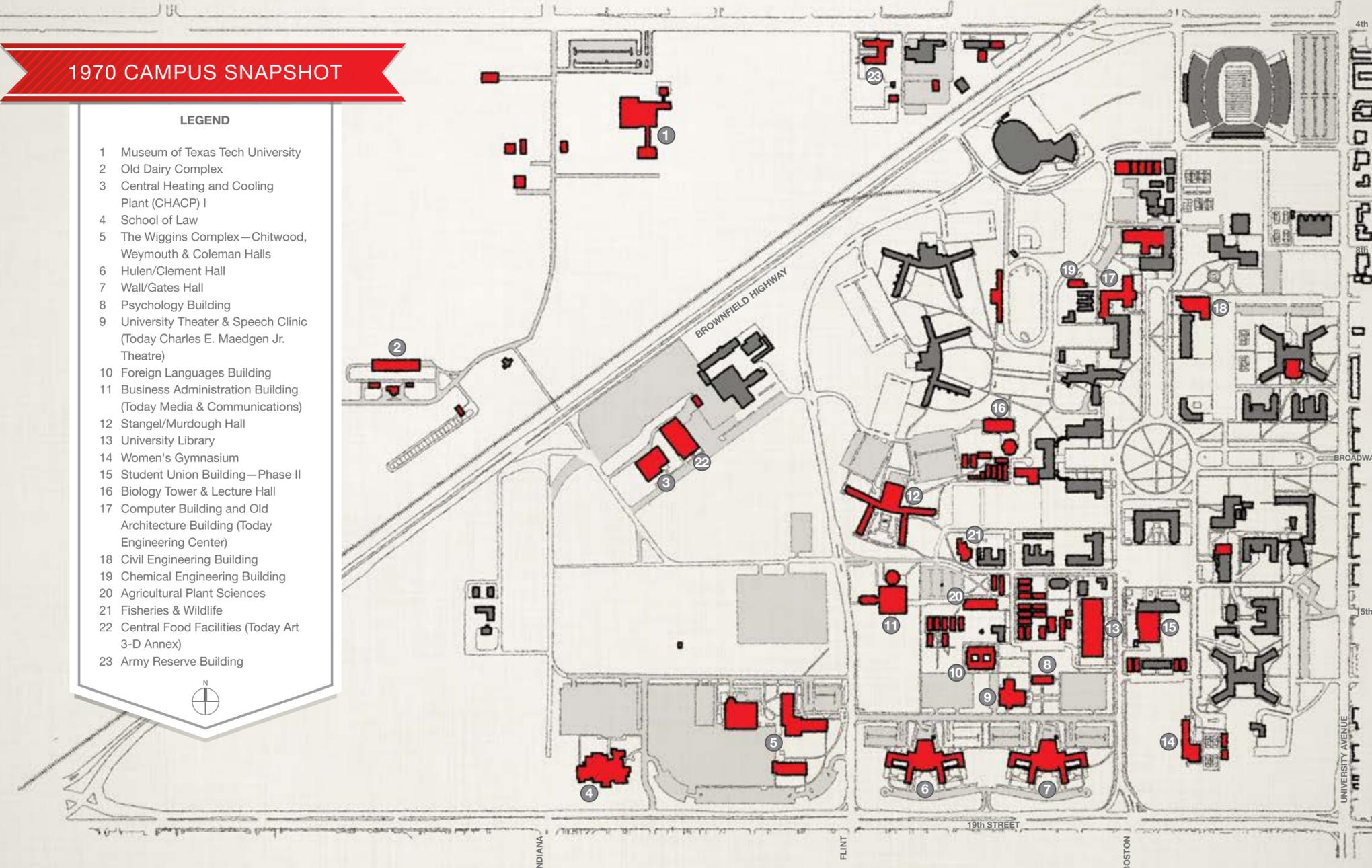
Jones Stadium



1970 CAMPUS SNAPSHOT

LEGEND

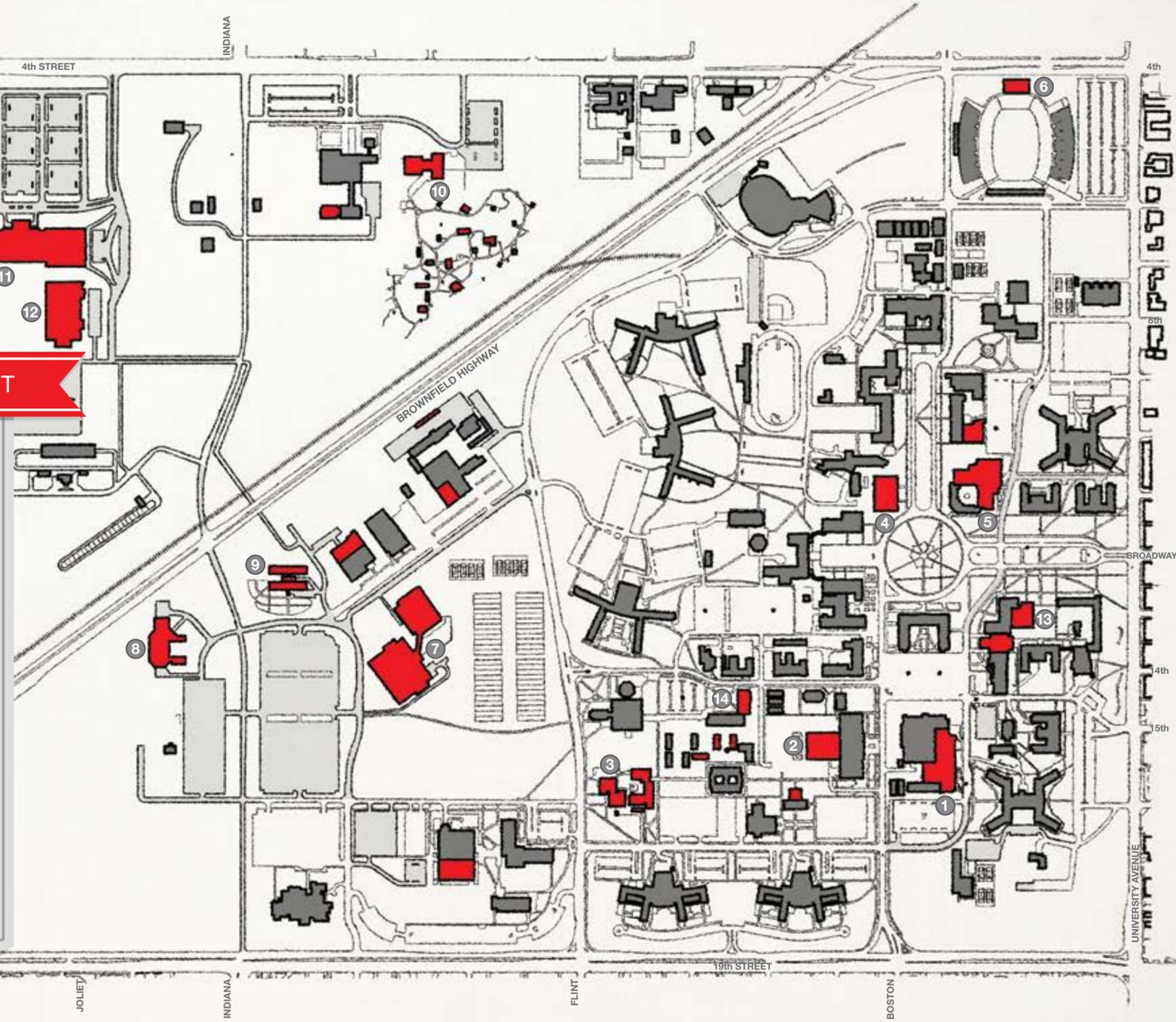
- 1 Museum of Texas Tech University
- 2 Old Dairy Complex
- 3 Central Heating and Cooling Plant (CHACP) I
- 4 School of Law
- 5 The Wiggins Complex—Chitwood, Weymouth & Coleman Halls
- 6 Hulen/Clement Hall
- 7 Wall/Gates Hall
- 8 Psychology Building
- 9 University Theater & Speech Clinic (Today Charles E. Maedgen Jr. Theatre)
- 10 Foreign Languages Building
- 11 Business Administration Building (Today Media & Communications)
- 12 Stangel/Murdough Hall
- 13 University Library
- 14 Women's Gymnasium
- 15 Student Union Building—Phase II
- 16 Biology Tower & Lecture Hall
- 17 Computer Building and Old Architecture Building (Today Engineering Center)
- 18 Civil Engineering Building
- 19 Chemical Engineering Building
- 20 Agricultural Plant Sciences
- 21 Fisheries & Wildlife
- 22 Central Food Facilities (Today Art 3-D Annex)
- 23 Army Reserve Building



1980 CAMPUS SNAPSHOT

LEGEND

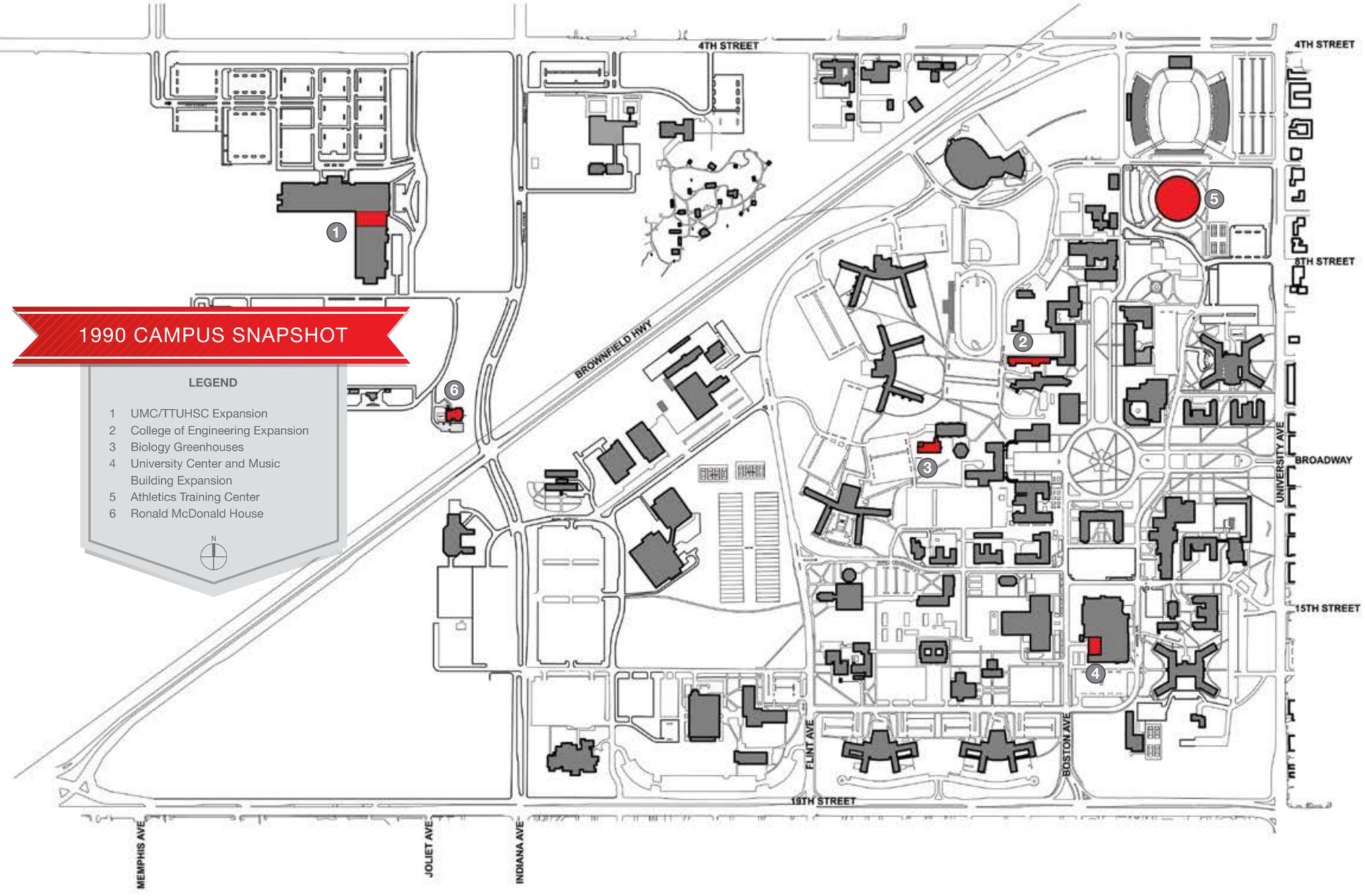
- 1 Allen Theater Expansion to University Center and Music Buildings
- 2 University Library Expansion
- 3 Art and Architecture Buildings
- 4 Mass Communications (Today Engineering & Materials Research Center)
- 5 Holden Hall Expansion
- 6 Jones Stadium Ticket Office
- 7 Robert H. Ewalt Student Recreation Center
- 8 Animal Sciences and Livestock Arena
- 9 Arboretum and Greenhouses
- 10 National Ranching Heritage Center and Procter Park
- 11 Texas Tech School of Medicine (Today TTUHSC)
- 12 Lubbock County Hospital (Today UMC)
- 13 College of Human Sciences Tower and Expansion
- 14 Goddard Range & Wildlife Management



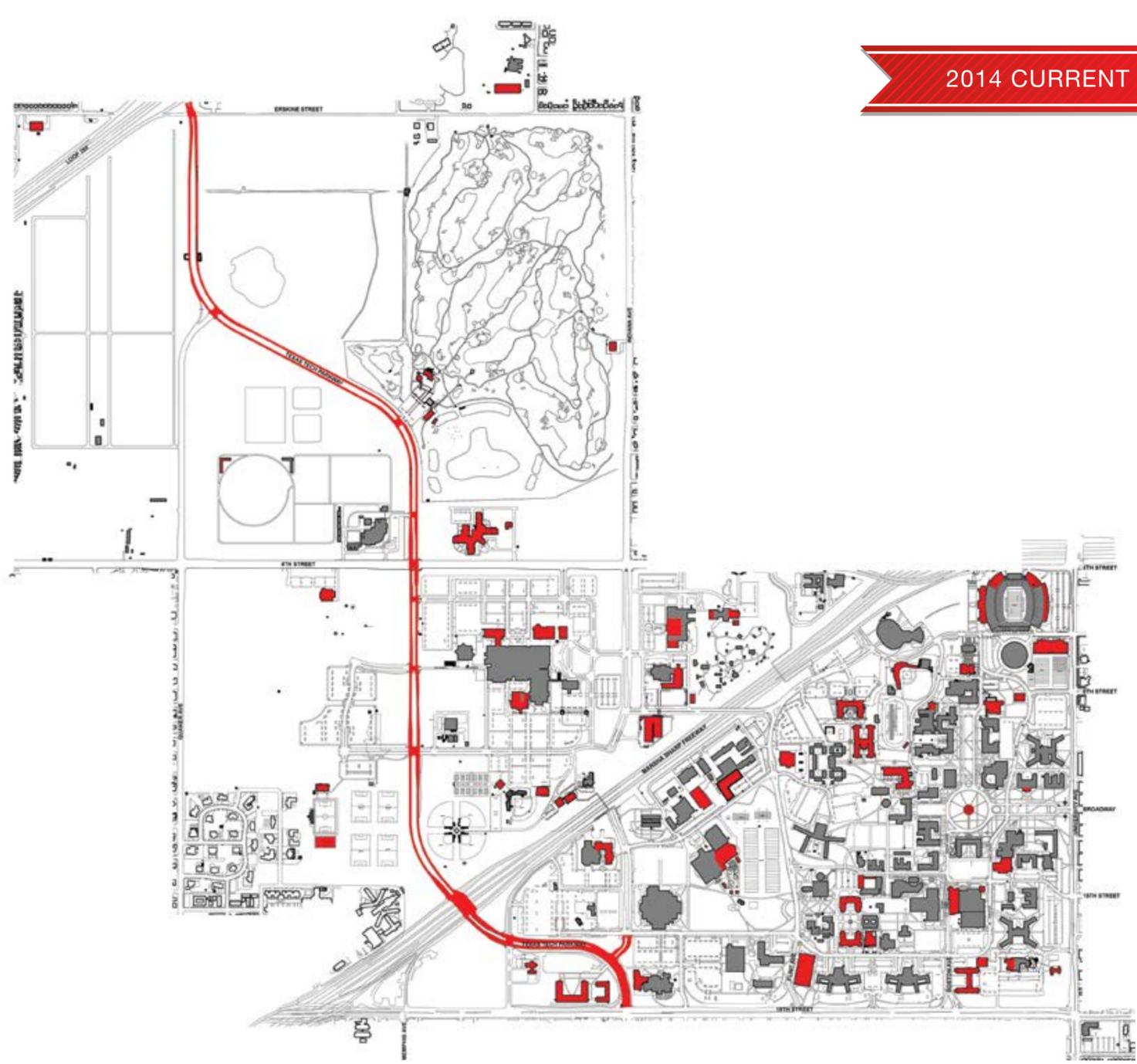
1990 CAMPUS SNAPSHOT

LEGEND

- 1 UMC/TTUHSC Expansion
- 2 College of Engineering Expansion
- 3 Biology Greenhouses
- 4 University Center and Music Building Expansion
- 5 Athletics Training Center
- 6 Ronald McDonald House



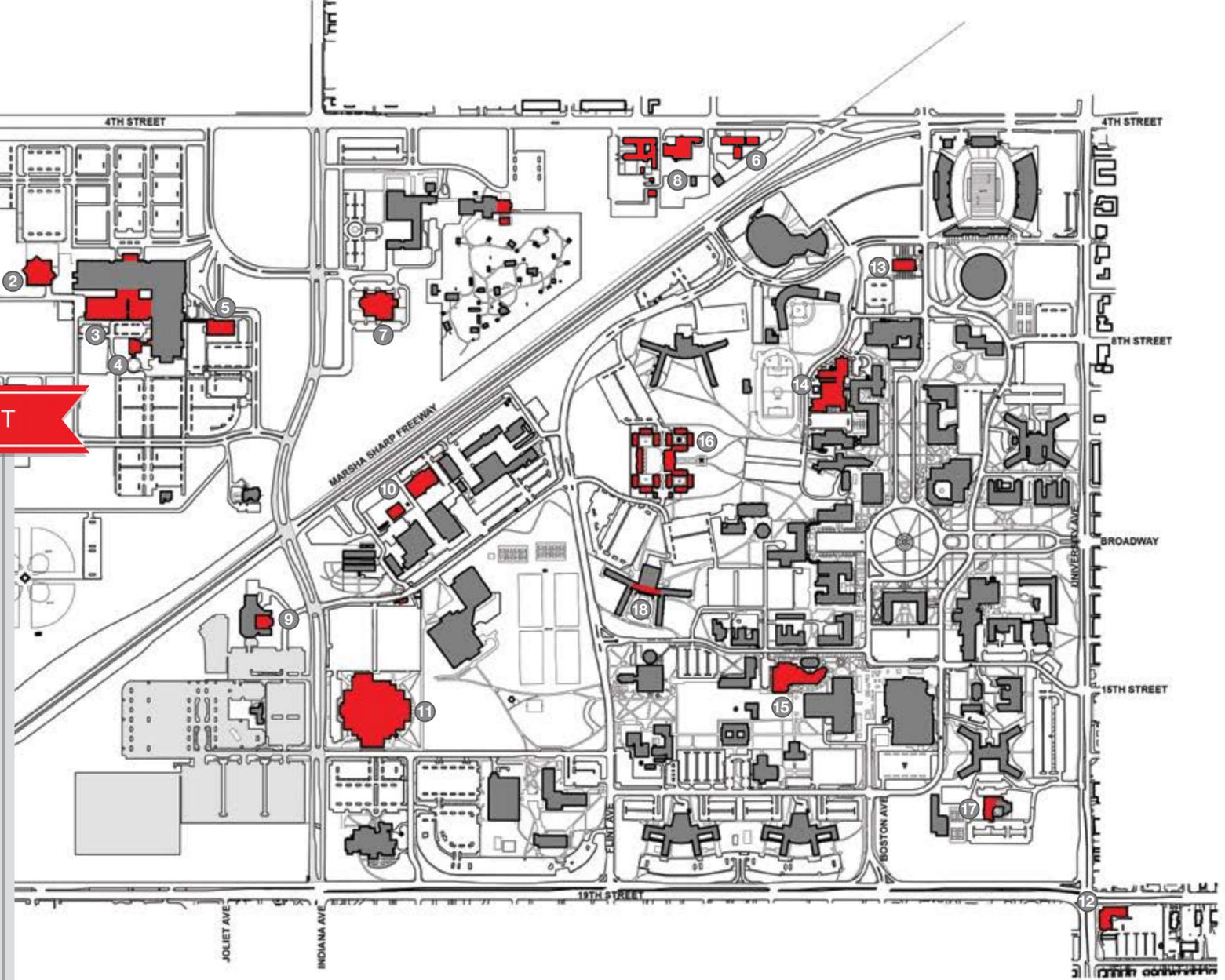
2014 CURRENT CAMPUS

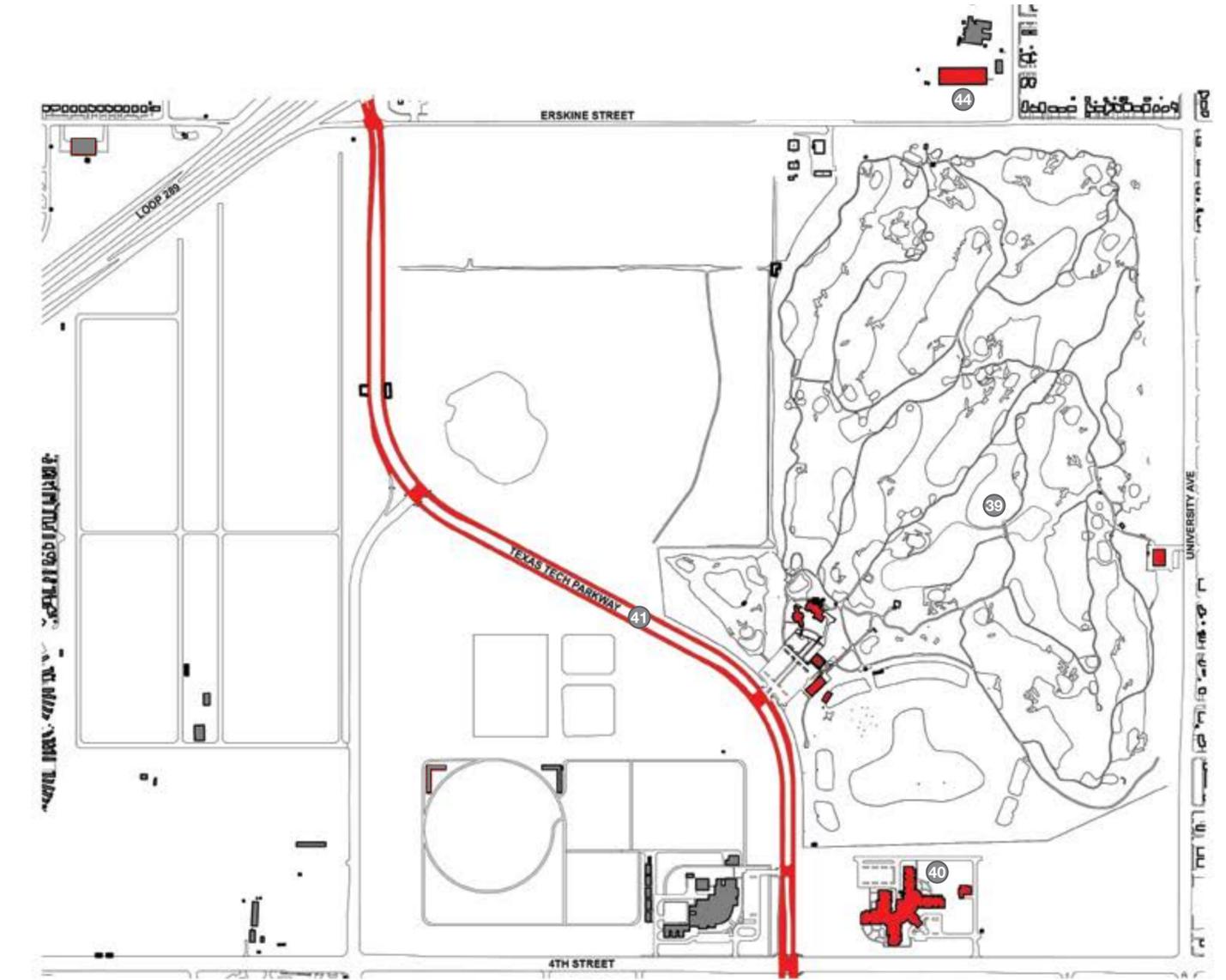
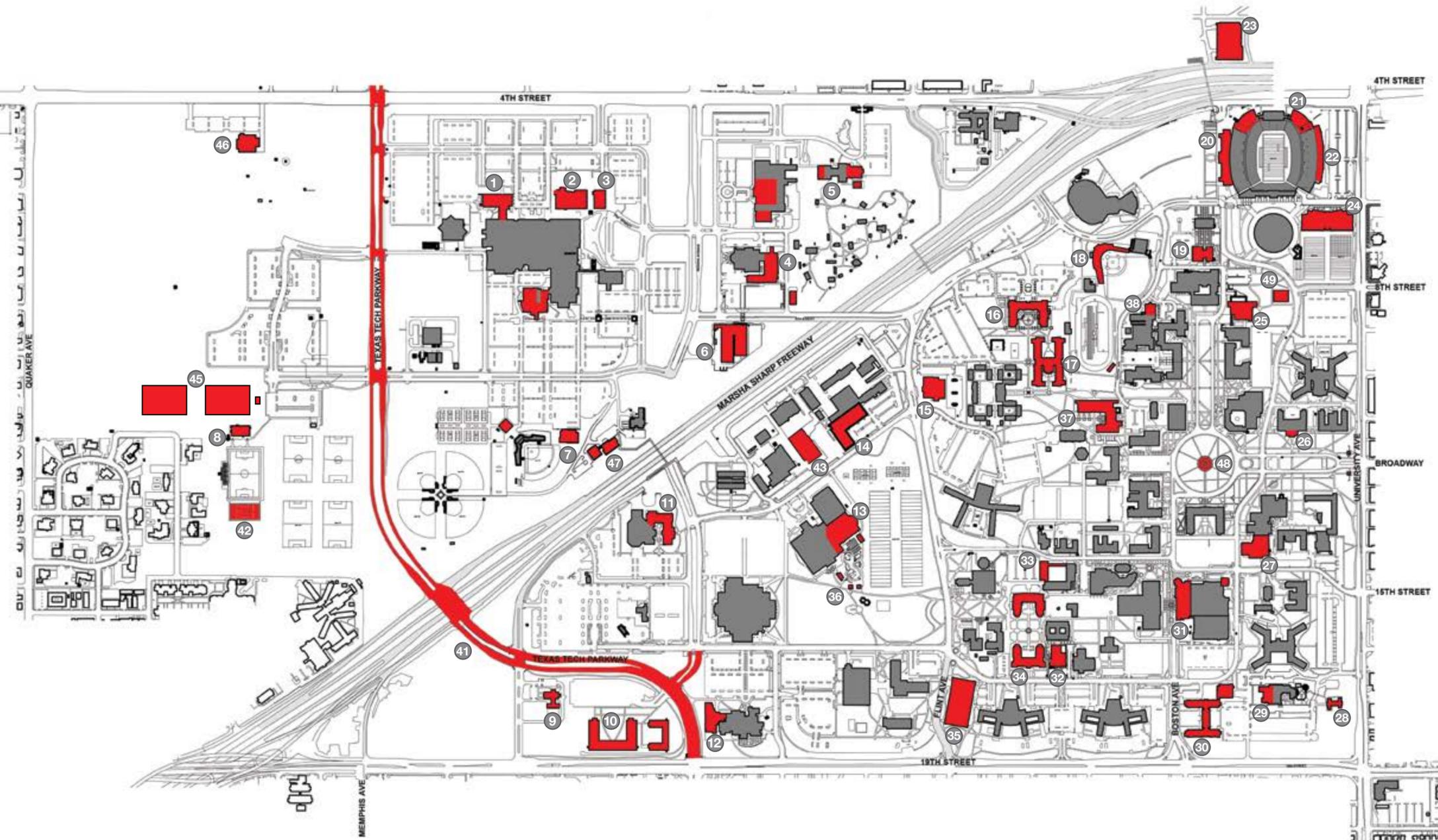


2000 CAMPUS SNAPSHOT

LEGEND

- 1 USDA Plant Stress Laboratory
- 2 Preston Smith Library of the Medical Sciences
- 3 UMC Expansion
- 4 UMC Southwest Cancer Center
- 5 UMC Medical Office Plaza
- 6 Texas Tech Police Department
- 7 International Cultural Center
- 8 Administrative Support Center (Former Military Reserve Complex)
- 9 Livestock Pavilion Expansion
- 10 Physical Plant/CHACP I Expansion
- 11 United Spirit Arena (Today United Supermarkets Arena)
- 12 Texas Tech Plaza
- 13 Frazier Alumni Pavilion
- 14 College of Engineering Expansion
- 15 Southwest Collections/Special Collections Library
- 16 Carpenter/Wells Residential Complex
- 17 McKenzie Merket Alumni Center
- 18 The Market at Stangel/Murdough Hall



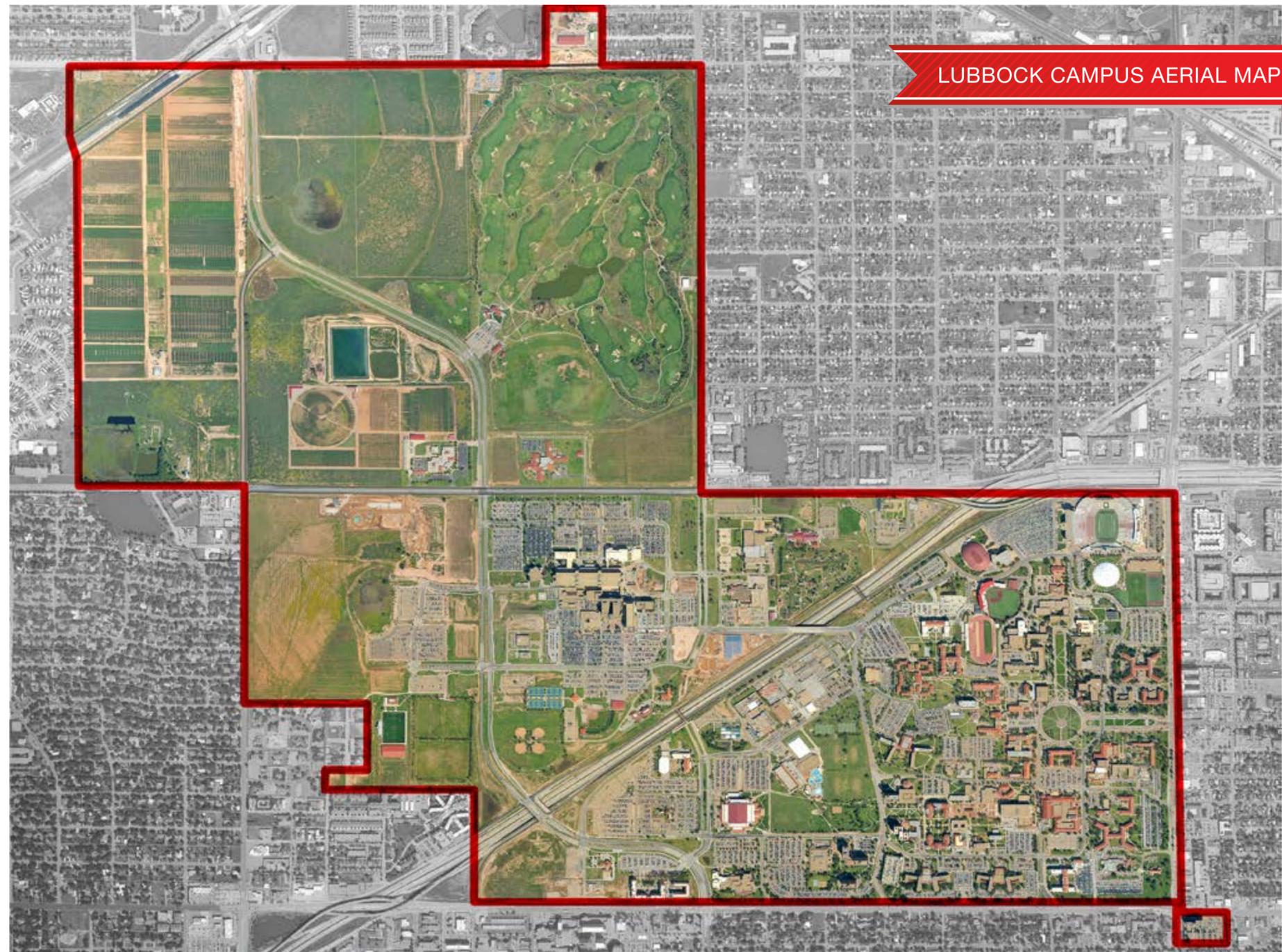


LEGEND

- 1 TTUHSC Academic Classroom Building
- 2 Texas Tech Physicians Medical Pavilion
- 3 Messer-Racz International Pain Center (Today Texas Tech Physicians Heart Care Center)
- 4 Outreach and Extended Studies (Today Bayer CropScience)
- 5 National Ranching Heritage Center Expansion
- 6 Bayer CropScience Seeds Innovation Center
- 7 Softball Team Facility
- 8 John Walker Soccer Complex
- 9 Texas Tech Federal Credit Union
- 10 West Village Residence Halls
- 11 Animal and Food Science Addition
- 12 Mark and Becky Lanier Professional Development Center
- 13 Recreation Center Additions & Renovations
- 14 Exercise & Sports Sciences
- 15 Student Wellness Center
- 16 Jerry S. Rawls College of Business Administration
- 17 Grover E. Murray Residence Hall
- 18 Dan Law Field Renovations & Additions
- 19 Marsha Sharp Center for Student Athletes
- 20 Jones AT&T Stadium West Expansion
- 21 Jones AT&T Stadium North Expansion
- 22 Jones AT&T Stadium East Expansion & Texas Tech Club
- 23 Raider Park Parking Garage (Leased Facility)
- 24 Football Training Facility
- 25 Terry Fuller Petroleum Engineering Research Building
- 26 West Hall Renovation & Expansion
- 27 Child Development Research Center/The Center for the Study of Addiction & Recovery
- 28 Kent R. Hance Chapel
- 29 McKenzie-Merkel Alumni Center Expansion
- 30 J.T. & Margaret Talkington Hall Residential Complex and The Commons by United Supermarkets
- 31 Student Union Building Renovation & Expansion
- 32 Burkhart Center for Autism Education and Research
- 33 Bayer Plant Science Building (Plant and Soil Sciences Addition)
- 34 English, Philosophy and Education Complex
- 35 Flint Avenue Parking Facility
- 36 Student Leisure Pool Facility
- 37 Experimental Sciences Building
- 38 Livermore Engineering Expansion
- 39 The Rawls Course, Clubhouse and Team Facility
- 40 The Mildred & Shirley L. Garrison Geriatric Education and Care Center
- 41 Texas Tech Parkway
- 42 Gerald and Carol Myers Indoor Soccer Facility
- 43 Art 3D Annex
- 44 Grantham Building
- 45 Synthetic Turf Recreation Fields
- 46 Research & Technology Park—Phase 1
- 47 American Cancer Society—Hope Lodge
- 48 Pfluger Fountain at Memorial Circle
- 49 Creative Movement Studio



LUBBOCK CAMPUS AERIAL MAP



LAND-USE PLAN

The Land-Use Plan seeks to build on the strength of the 1997 Campus Master Plan extending it another 50 years. The Land-Use Plan proposes a framework which can be supported by the evolving needs of both Texas Tech University and Texas Tech University Health Sciences Center.

The campus of Texas Technological College originally encompassed 2,017.792 acres, when purchased in 1923. In 1973, 1990, and again in 1997, the usable campus acreage was noted as 1,839 acres. However, that number needs to be adjusted due to the widening roadway corners at the intersections of Broadway and University Avenue, 15th Street and University Avenue, 19th Street and University Avenue, the Marsha Sharp Freeway R.O.W. purchase by the state, and a few other changes. The 1,839 contiguous acres of land accommodate the general academic campus, the medical academic campus, recreation fields, athletic fields, golf course, agriculture fields, museum/cultural sites, and various lease properties. The current land endowment accommodates any potential campus change for the next 50 years, as projected today. Given the dynamic changes taking place in higher education, medical education, and research today, the Texas Tech University System is well positioned to be a strong competitor in those areas.

The Land-Use Plan converts Texas Tech University's and Texas Tech University Health Sciences Center's strategic goals into a physical realization. The greatest value of the Land-Use Plan is to showcase the institutions' long-range vision while maintaining flexibility. Although the vision is a bold statement for the future, it is sensitive to the history, architectural character, and natural beauty of the campus.

The Land-Use Plan seeks to build upon the strength of the 1997 Campus Master Plan and strengthen the academic

core within the housing, athletic, and recreational zones. The updated plan extends the vehicular and pedestrian circulation systems created in the 1997 plan and reshapes the areas that have changed from that plan. The campus Land-Use Plan continues to cluster similar activities and programs together, which provides an order and sense of place, improves interdisciplinary interaction, improves efficiency, and fosters community. This method structures an atmosphere and physical environment that best supports and identifies the uses within it. Such information helps inform how the Lubbock campus approaches building and open space development, utility distribution, vehicular and pedestrian circulation, and parking. The links between these diverse areas are planned and implemented in ways that foster collaboration and collegiality.

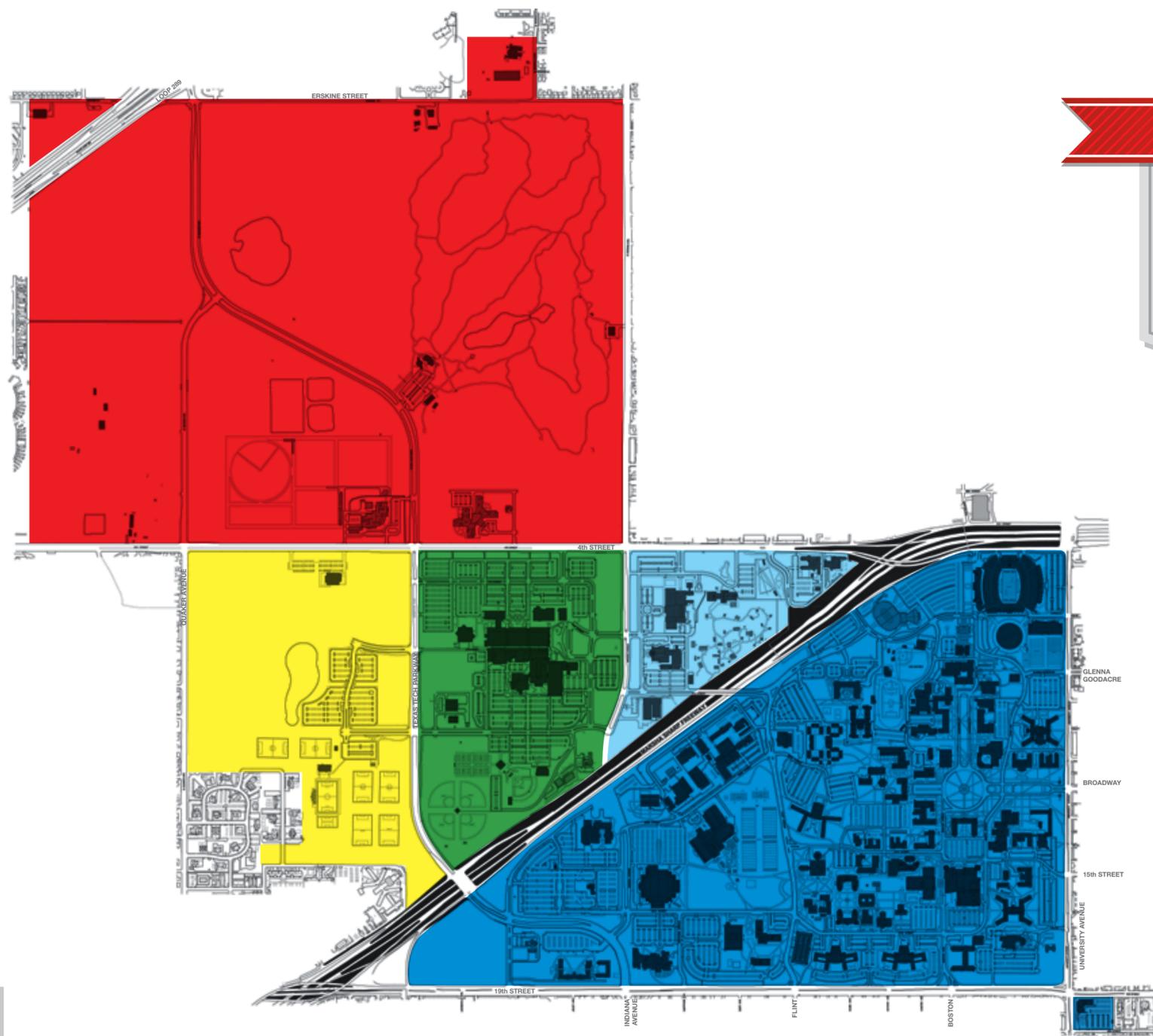
The goal is to strengthen the visual character of campus and provide a framework that identifies areas of opportunity for continued growth and change. The Land-Use Plan strives to leverage the endowment lands for opportunities that will strengthen the missions of Texas Tech University and Texas Tech University Health Sciences Center. The land banking not only provides opportunities for near-term development, but holds the opportunity to preserve land for future generations.

The Land-Use Plan envisions a campus that contributes to the live, learn, and play ideal for students and provides the physical environment for such to thrive. It is anticipated that the current generation of university and community leaders will embrace the Land-Use Plan's vision and implement phases of infrastructure with each campus facilities initiative.



Concept Renderings





CAMPUS ZONES

LEGEND

- Northwest Campus
- Research/West Campus
- Medical Academic/Hospital
- Cultural
- General Academic

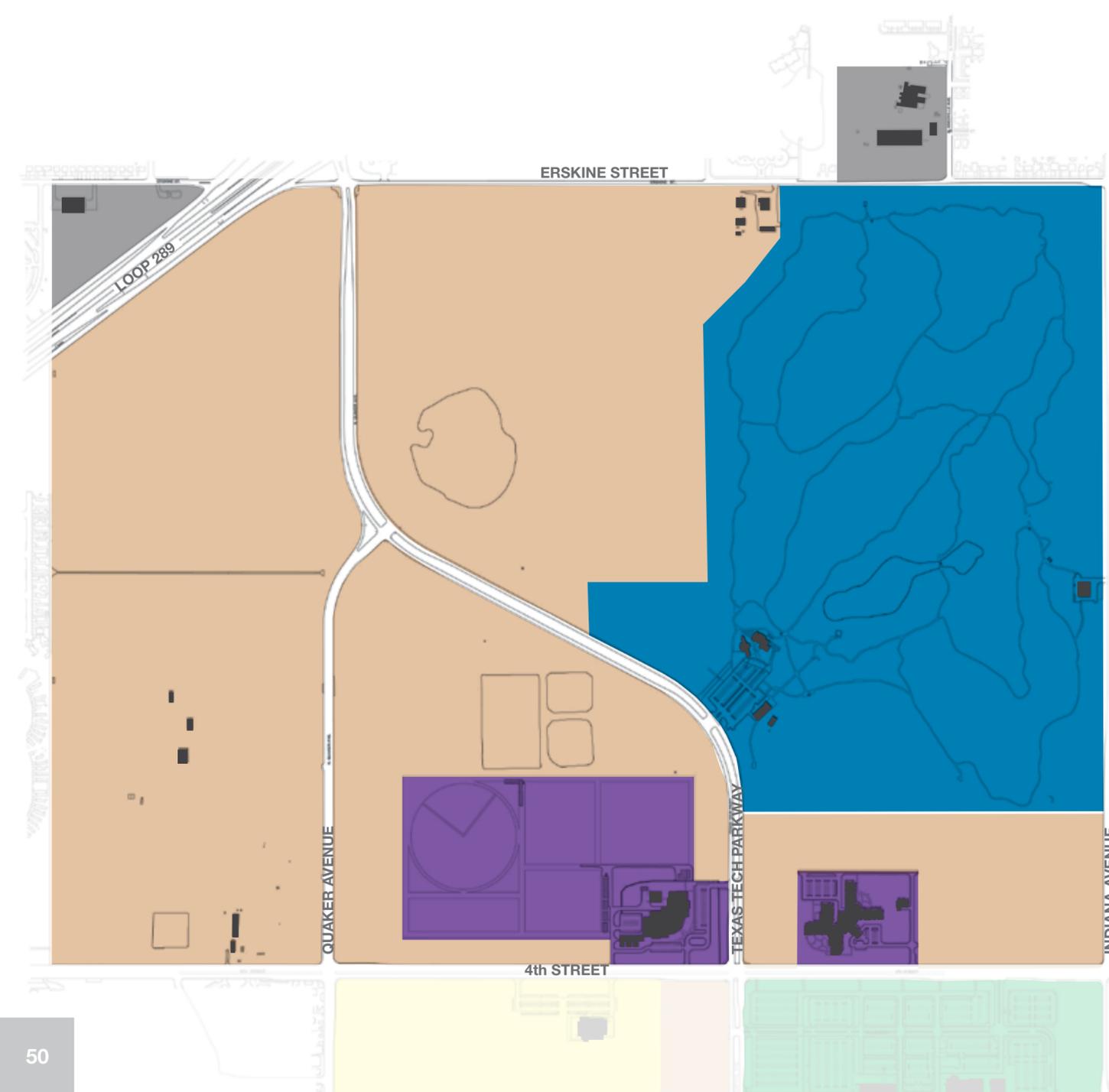


2014 LAND USE

LEGEND

- Historic District
- Academic Core
- Administration & Student Services
- Agricultural
- Athletics
- Cultural
- Academic
- Healthcare
- Maintenance Facilities
- Recreational Sports
- Research
- Residence Halls
- Property Lease
- Greek Circle #3 (Future)
- Future Development Tracts
- Building



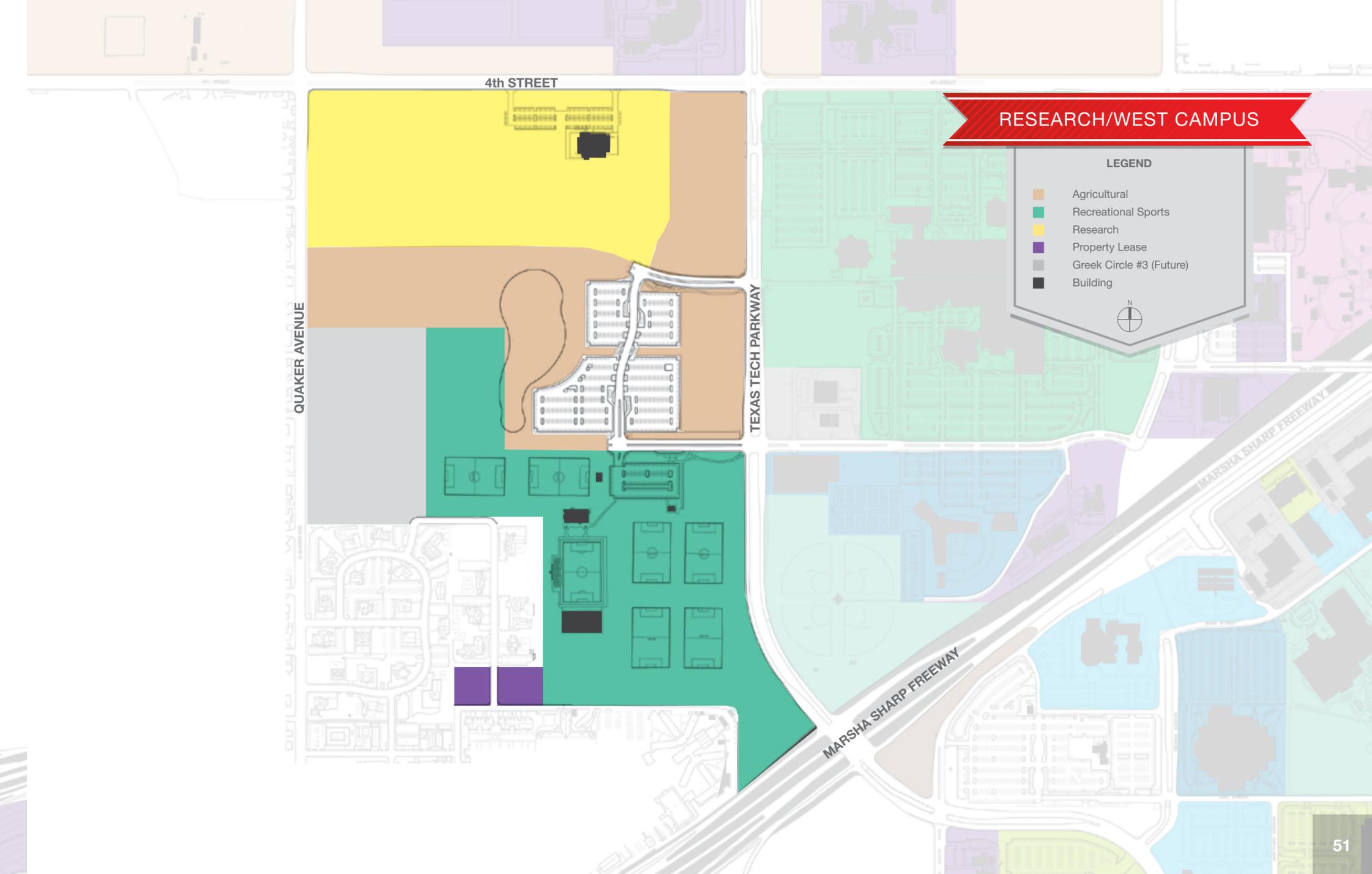


NORTHWEST CAMPUS

LEGEND

- Agricultural
- Athletics
- Maintenance Facilities
- Property Lease
- Building

N

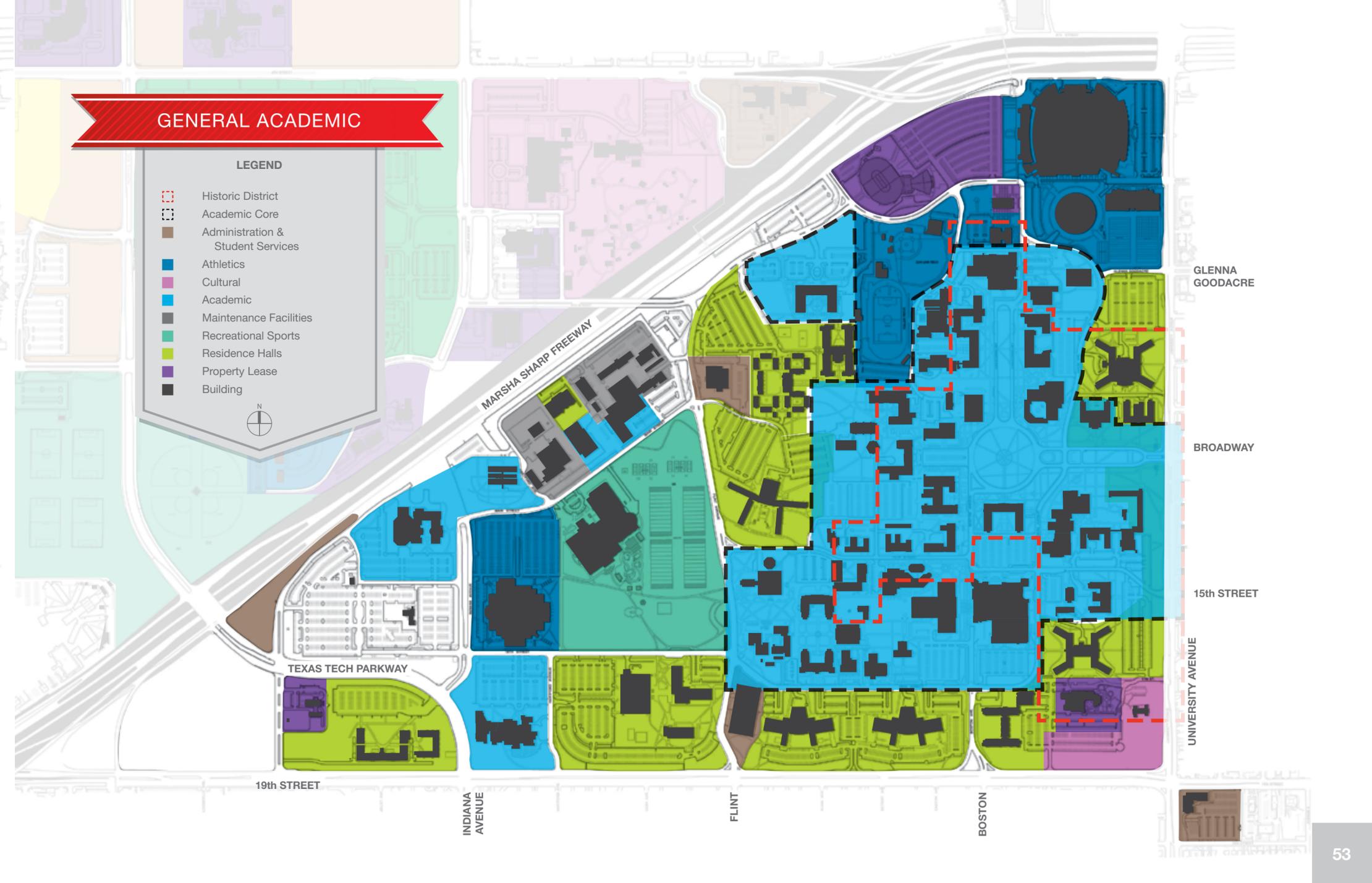
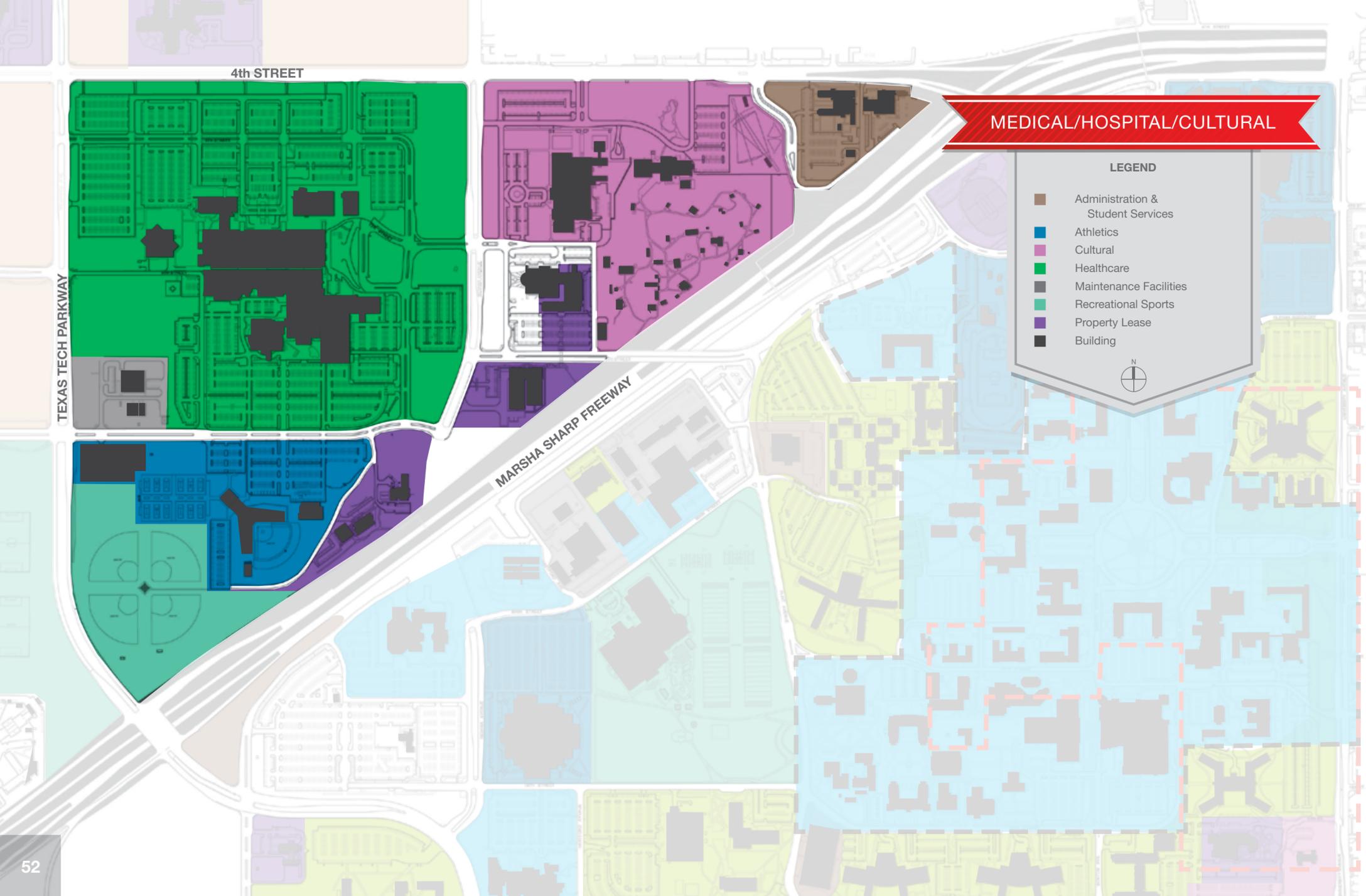


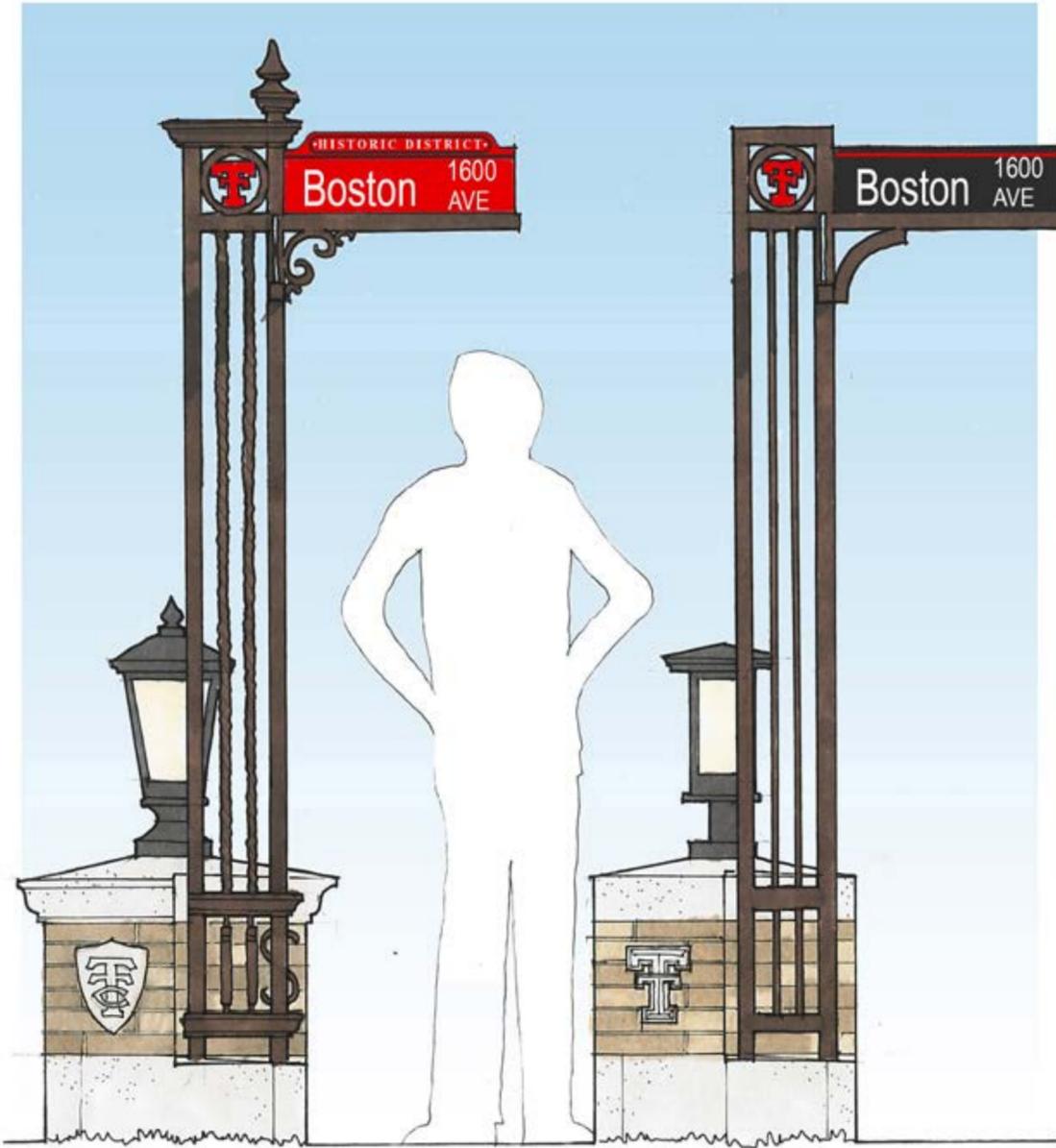
RESEARCH/WEST CAMPUS

LEGEND

- Agricultural
- Recreational Sports
- Research
- Property Lease
- Greek Circle #3 (Future)
- Building

N





HISTORIC DISTRICT STREET INTERSECTION

MAIN CAMPUS STREET INTERSECTION

CAMPUS GATEWAYS & SIGNAGE

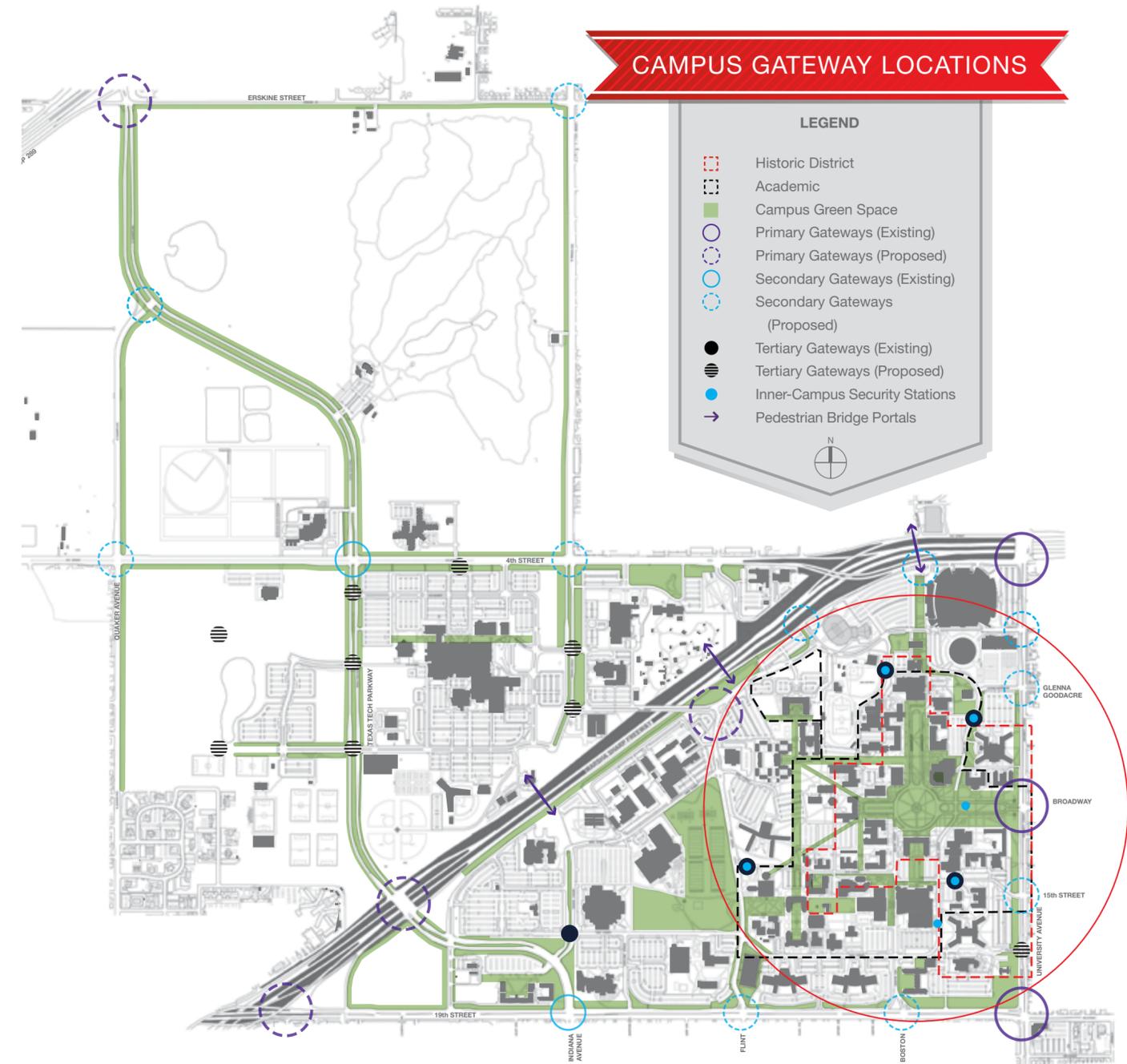
Though much has been accomplished in the past 15 years to increase the degree by which entry onto the Texas Tech University and Texas Tech University Health Sciences Center campuses have been architecturally articulated, a considerable challenge remains in further developing and defining the borders of the physical institutions with built elements that announce arrival onto the campus of Texas Tech University. The sheer size of the Lubbock campus—one of the largest land-area campuses in the United States—coupled with the quantity of vehicular entrances that remain visually undefined represents a considerable issue that the objectives of this 2014 Master Plan Update are intended to address. The subsequent drawings and images in this section present concepts of further developing signage, architectural gateways, and smaller elements such as street signage and pedestrian-scale portals that will help to further enrich the fabric of the campus.

Another purpose to enhancing the campus-wide palette of gateways and signage is to not only address the perimeters of the institution, but also to provide more intentionally-designed didactic elements on campus for street signage, historic features, and to announce and celebrate the heritage of the Texas Technological College Historic District (TTCHD). Furthermore, the 2014 Master Plan Update proposes that for the boundaries of the Historic District, a separate range of vehicular-scale and pedestrian-scale gateways be incorporated into the core of the campus in the more ornate vernacular of the historic campus core, so as to further draw attention to the architectural heritage of the institution. In the case of the TTCHD, by further building upon the rich heritage already woven into the historic buildings of the campus

designed by William Ward Watkin and Wyatt C. Hedrick, this 2014 Master Plan Update proposes to draw from that rich vernacular with a particular often-recognized piece of Texas Tech architectural history.

In the 1929 Chemistry Building, the last building at Texas Technological College designed by William Ward Watkin, a small stone shield with the raised stylized letters “TTC” was incorporated into the many Corinthian capitals ensconced upon columns along the building’s east colonnade. For one of the first times in an architectural form, the two “T’s” were superimposed to create an early version of the beloved “Double T” that is so ubiquitous to the institution today. Campus artwork and photography has for decades captured this celebrated feature. To help articulate and more uniquely define the boundaries of the TTCHD, one element to the 2014 Master Plan Update is to utilize the iconic “TTC” shield moving forward as the defining symbol specifically reserved for the gateways, signage and didactic elements of the Historic District, while the standard post-1999 “Double T” would remain a visual marker for any other elements built in the campus non-historic academic core or periphery.

The range and size of gateway elements incorporated throughout the Lubbock Campus would vary, from small flanking screen walls and lampposts to archways and gatehouses, designed with the traditional range of brick, stone, and clay tile currently used on campus. In the case of elements built within the Historic District, elements would incorporate more ornate stonework and detail than would those elements built into the more peripheral zones of the Texas Tech Campus.



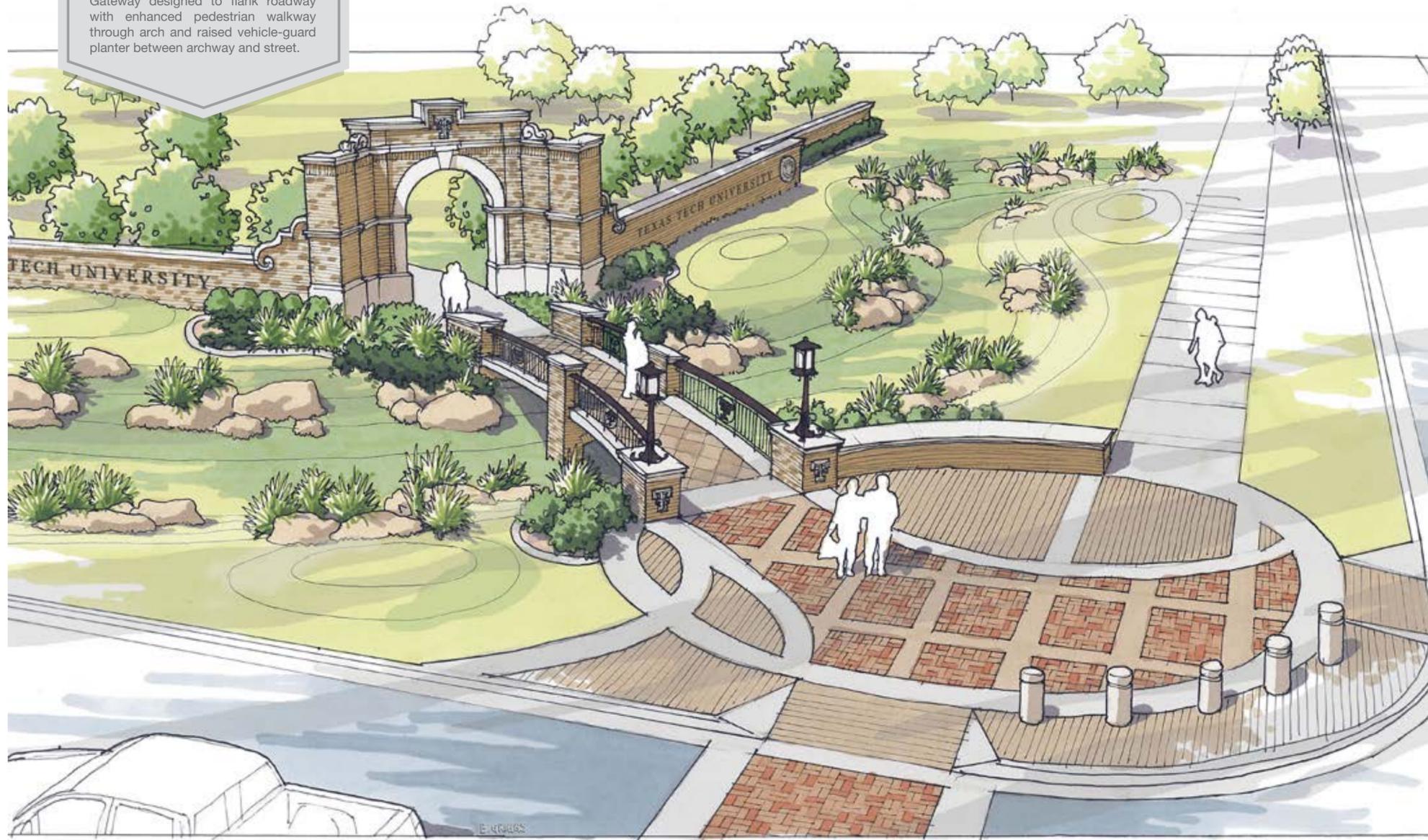
CAMPUS GATEWAY LOCATIONS

LEGEND

- Historic District
- Academic
- Campus Green Space
- Primary Gateways (Existing)
- Primary Gateways (Proposed)
- Secondary Gateways (Existing)
- Secondary Gateways (Proposed)
- Tertiary Gateways (Existing)
- Tertiary Gateways (Proposed)
- Inner-Campus Security Stations
- Pedestrian Bridge Portals

PERIPHERAL CAMPUS GATEWAY

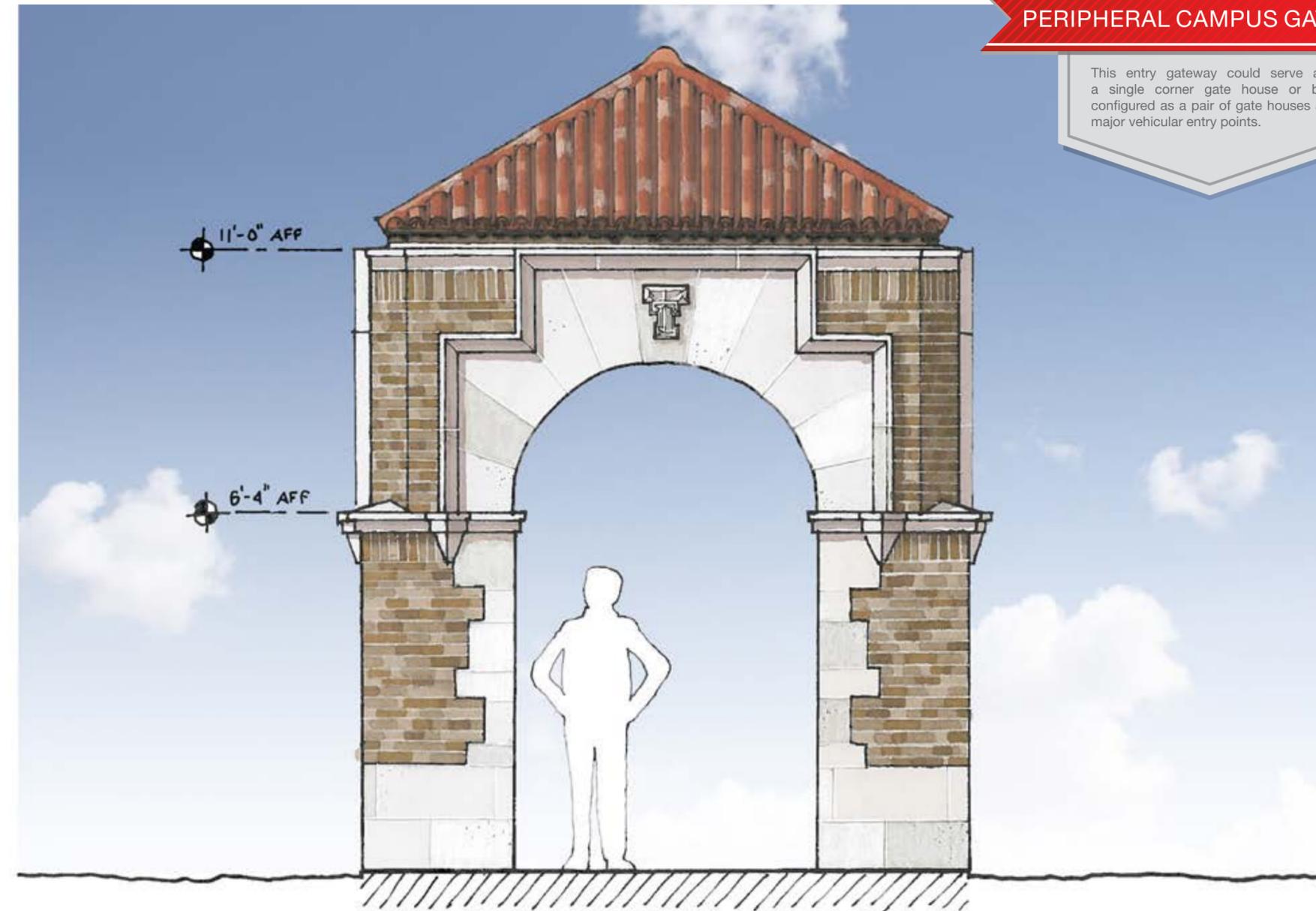
Gateway designed to flank roadway with enhanced pedestrian walkway through arch and raised vehicle-guard planter between archway and street.



CONCEPT RENDERING

PERIPHERAL CAMPUS GATEWAY

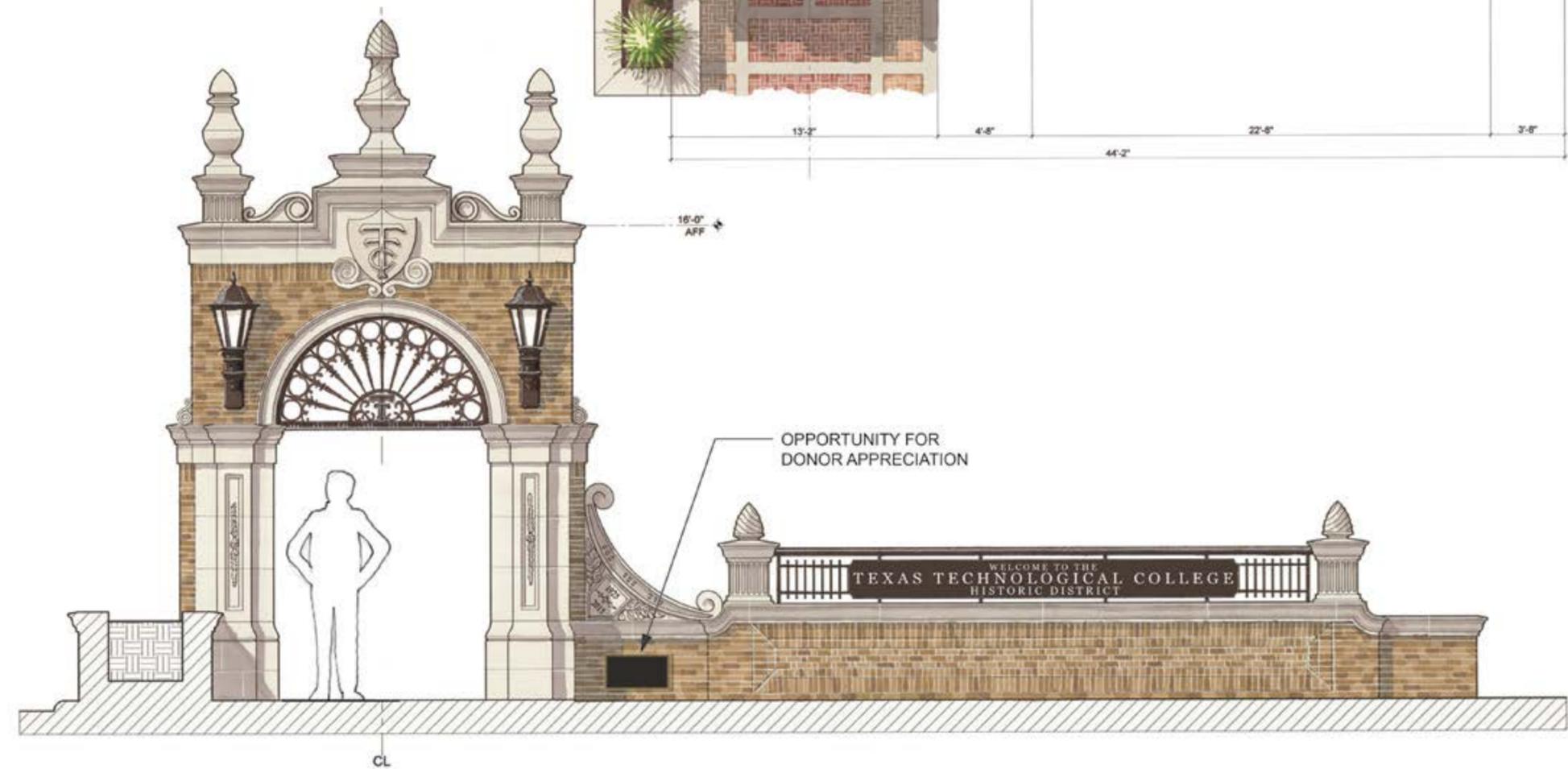
This entry gateway could serve as a single corner gate house or be configured as a pair of gate houses at major vehicular entry points.



CONCEPT RENDERING

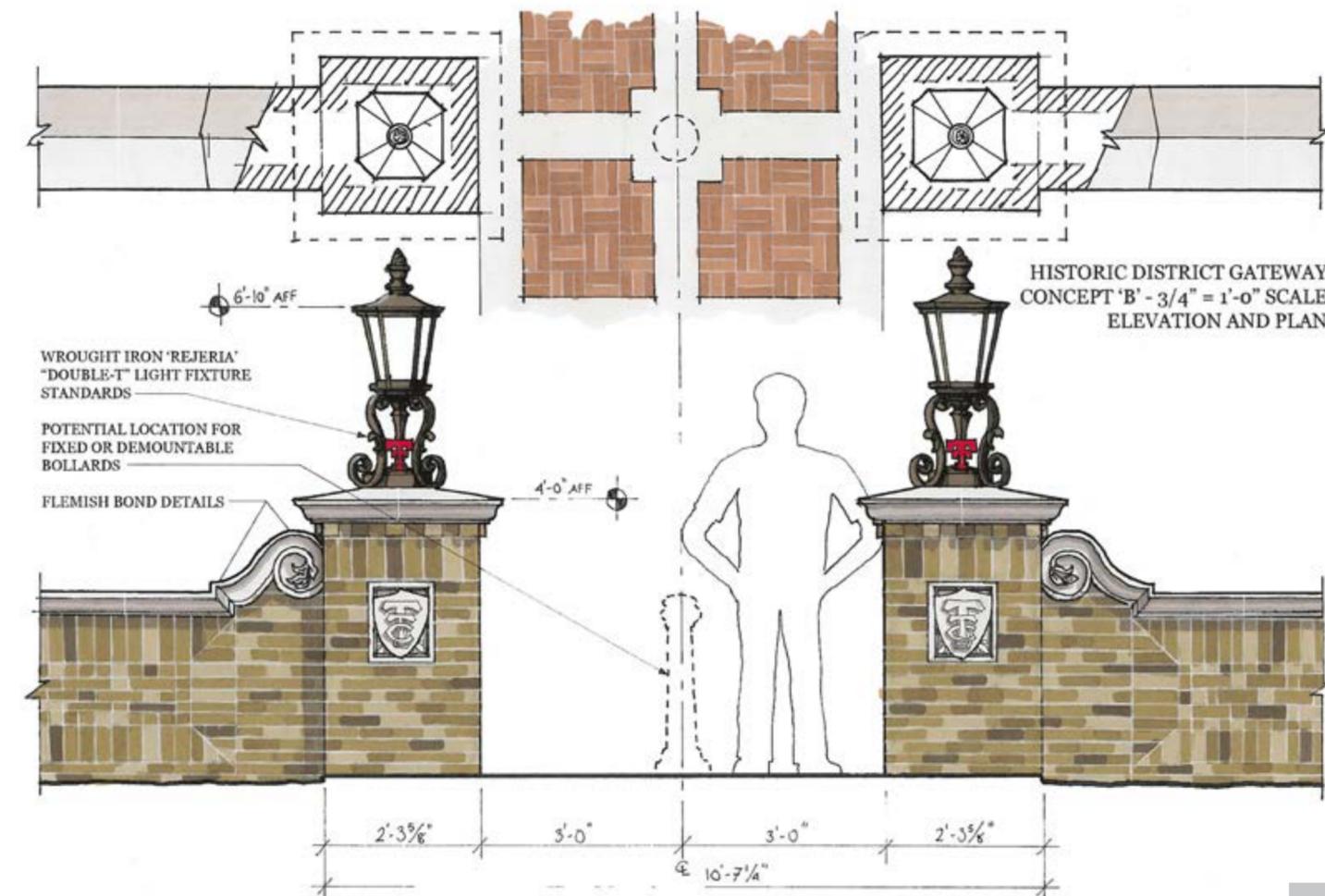
HISTORIC DISTRICT GATEWAY

Gateway designed to flank roadway with enhanced pedestrian walkway through arch and raised vehicle-guard planter between archway and street.



HISTORIC DISTRICT GATEWAY

This gateway is designed to serve as a pedestrian passageway between buildings or site work.



Monogram Symbol for Texas Technological College Carved into Columns on Chemistry Building

CAMPUS HERITAGE: DIDACTIC PLAQUES

As Texas Tech approaches the century mark as a built institution, it must be realized that a rich and multifaceted heritage exists to our institution—a heritage that should be both remembered and celebrated. Yet, many of the unique stories, sources of inspiration, and historic events that have built the bulwark of institutional heritage are largely unknown, beyond those stories and traditions that are so integral to our institution. For one, Texas Tech University has perhaps one of the greatest depths of architectural heritage of any higher education institution in the United States. At least ten specific historic structures in Spain, and one in the New World were directly drawn upon by the original campus architects of Texas Technological College for design inspiration on the Lubbock campus, and those architects and that architectural style went far in defining the traditions of the institution,

including the design of the university seal, the university mascot and school colors, early school organizations and clubs, and even the name of the school newspaper, to name a few. This story demands to be celebrated in a built form. In addition, the hard-fought efforts of past institution leadership, past and present athletic teams, students and faculty alike, all have spawned scores of stories that attest to the heritage of Texas Tech University.

That said, as an element to the 2014 Master Plan Update, a system of commemorative informational plaques—either mounted on pedestals or directly on buildings or site work—are proposed to be situated throughout the campus to help tell the powerful, but often lesser-known stories of Texas Tech's heritage. Stories of former buildings, events,

traditions, architectural history, and athletic history will all be told at sites throughout the campus, as shown in the following diagram and legend. Didactic elements such as these will help as part of the larger strategic effort outlined in Principle 3: Campus Identity and Sense of Place, as well as to continue to spread awareness and pride in the proud heritage of a great institution. Included also on this page are sample plaques demonstrating examples of the messages that could be conveyed through didactic elements such as these.

Administration Building Carillon Towers
Wyatt C. Hedrick & William Ward Watkin, Architects
Completed August 1925

The design of the iconic twin carillon towers is largely influenced by the Torre del Alminar, the often-recognized bell tower located at the northwest corner of the patio plaza of the Cathedral of Córdoba in Córdoba, Spain. Originally built as a minaret in the 12th Century when the present-day cathedral was a mosque, Spanish architect and builder Hernan Ruiz III rebuilt the tower in 1593, recladding it in a baroque style that is strikingly similar in appearance to Tech's two carillon towers. Interestingly, a failed attempt was made by Texas Tech in 1927 to gain state funding to expand the Administration Building to accommodate a new library, classrooms, as well as a gym and indoor pool. Had it been successful, the Administration Building today would have four, rather than just two identical carillon towers.

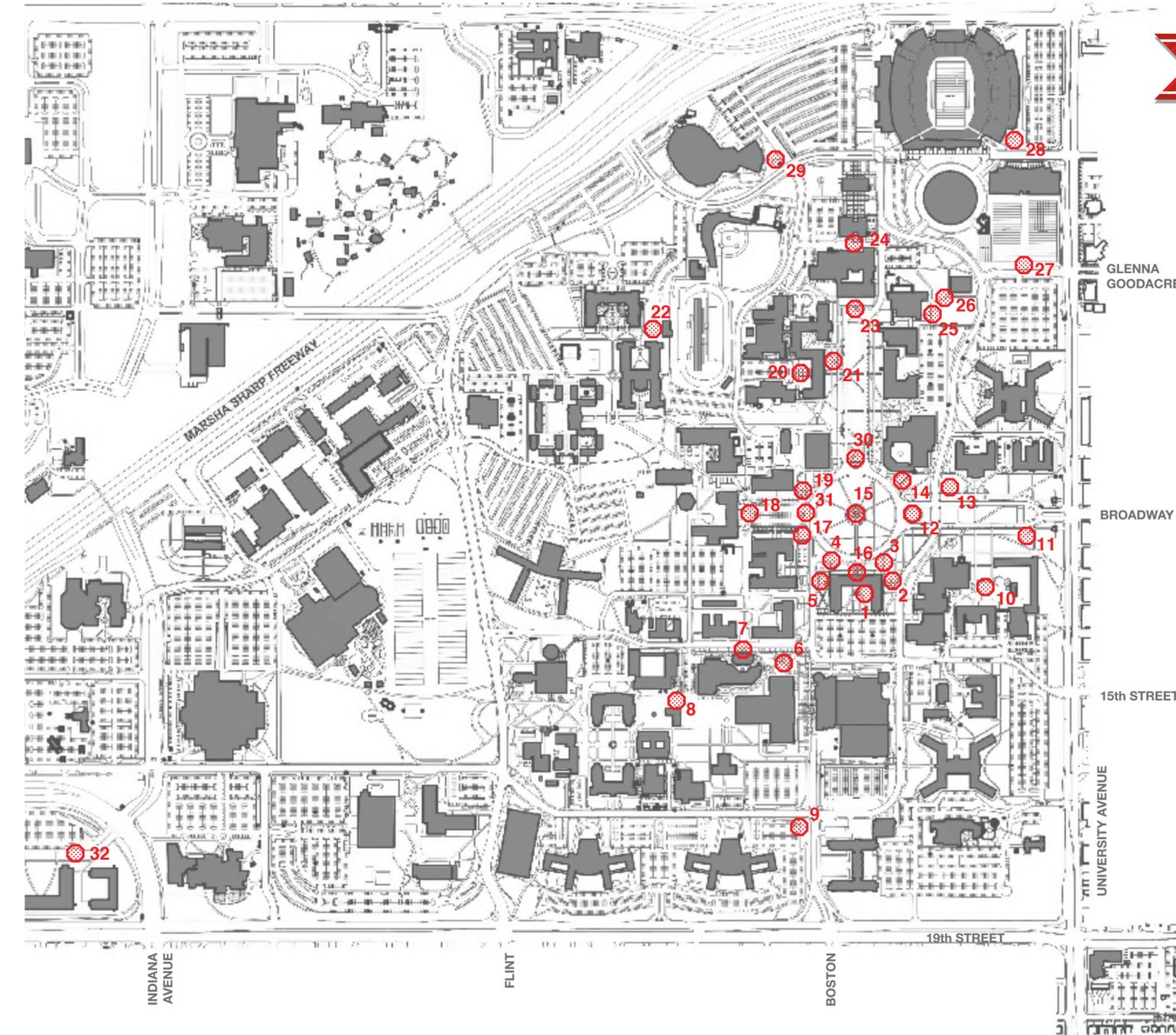
Texas Technological College Historic District
Commemorative Plaque Added 2015

Tech Field - 1927 - 1947
Former Home to the Texas Tech Matadors & Red Raiders

Tech Field was the first on-campus stadium home for Texas Technological College, built as a 4,400-seat venue in 1927 specifically for the first ever matchup by Tech against rival Texas A&M. In 20 years, Tech would boast an enviable home record of 78-29-4, with victories against schools such as Baylor, Arizona, BYU, Miami, Wake Forest, Oklahoma State, and Marquette. Following a failed attempt in late 1935 to build a new 19,000-seat earthen bowl stadium on campus, administrators made due with expanding Tech Field with 6,000 more seats built of wood bleachers. One week after reopening the expanded stadium on September 26th, 1936, Tech Field would be site to one of the most iconic victories in school history, as they defeated the defending national champion TCU Horned Frogs 7-0, a win that would spawn the beloved school tradition of ringing the Victory Bells following a Red Raider victory. A fire in late 1944 destroyed nearly 1,000 of the wooden bleacher seats, leading Tech to realize that Tech Field had served her course, and leaders proceeded with plans for a new concrete stadium to the northwest - what would become the Clifford B. and Audrey Jones Stadium.

Texas Tech University Heritage
Commemorative Plaque Added 2015

EXAMPLES



PROPOSED DIDACTIC PLAQUES

- LEGEND
- 1 South Arcade Colegio de los Nobles Irlandeses
 - 2 Administration Building Carillon Towers
 - 3 Armistice Day 1924 Cornerstone Laying Ceremony
 - 4 Convocation Day October, 1925
 - 5 Sigüenza Doors
 - 6 Old Cafeteria and Speech Building
 - 7 The Old Livestock Pavilion
 - 8 Dairy Barn
 - 9 Proposed Original Site for Tech's First Football Stadium
 - 10 "We're in the SWC" Speech May 12, 1956
 - 11 Aron G. Carter and Texas Tech University
 - 12 Will Rogers and Texas Tech University
 - 13 "We Want Jones" Rally 1938
 - 14 Museum of West Texas
 - 15 How Memorial Square Became Memorial Circle
 - 16 The Administration Building and Universidad de Alcalá
 - 17 Chemistry Building and Heritage of Alchemy
 - 18 Alamo Commencement Hall
 - 19 Texas Tech's First Real Library
 - 20 The Blarney Stone
 - 21 West Engineering and Universidad de Salamanca
 - 22 The Bleachers of Old Tech Field
 - 23 Textile Engineering and the 1915 California State Building at Balboa Park
 - 24 Old Power Plant
 - 25 Original Home of the SWC Bonfire Circle
 - 26 Old Barn
 - 27 Tech Field
 - 28 Engineering Feat that Expanded Jones Stadium
 - 29 Lubbock Memorial Coliseum—Red Raider & Lady Raider Home 1957–1999
 - 30 Engineering Key and El Prado
 - 31 Architectural Heritage of Math and Science Quadrangle
 - 32 Aggie Grove Planted by Raleigh C. Middleton



OPEN SPACE/GREEN SPACE

The campus has historically placed great emphasis upon the broad vista-like main axes that define both the ceremonial east Broadway entrance to the campus to Memorial Circle, and likewise from Memorial Circle spanning to the north end of the Engineering Key. Axes such as these were the impetus of expanding Beaux-Arts axial plan corridors further west and northwest into the periphery of the academic core in the planning constructs of the 1997 Campus Master Plan; some of those axial developments have taken productive shape.

It is ironic in many ways that the broad, great-lawn axial dynamic has become such a firmly rooted fixture of Texas Tech campus planning vernacular. Most ironic is that most people do not realize in the word campus—the Latin word for Lawn—is drawn from the heritage of Roman military encampments. It was not first applied in its present-day collegiate context until the design development of the Princeton University campus in the 1750s. Two designs developed by noted architect Bertram Grosvenor Goodhue—the grand Prado avenue that served as a centerpiece to the Panama-California Exposition in San Diego, or what is today known as Balboa Park, and Goodhue’s failed design proposal for the main quadrangle at the Rice Institute (University) in Houston, heavily influenced William Ward Watkin’s concept for the two primary malls in the original 1924 Campus Master Plan. In particular, the concept of providing a broad open central clearing much in the vein of Jefferson’s central mall at the University of Virginia, or Joseph Jacques Ramée’s commons planned for Union College in New York, ringed in turn with perimeter arcades of trees, appears to be very strongly based on Goodhue’s ideas.

However, the use of broad, grassy malls at Texas Tech University carries with it the challenge of accounting for the

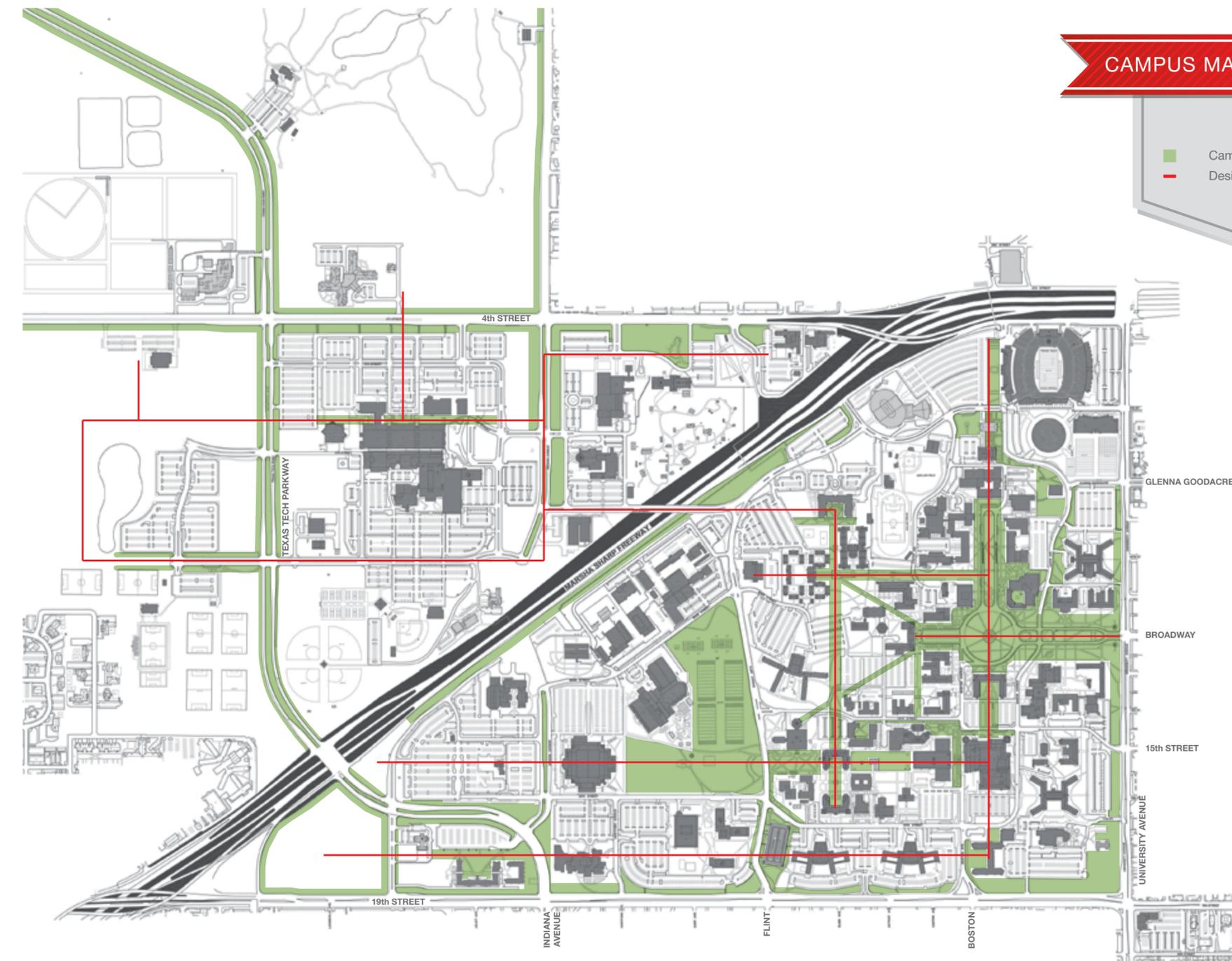
pedestrian inadequacies of wide open spaces that fail to shade passers-by from summer heat or abate the cold winds of winter. While the 1997 Campus Master Plan made great strides forward in broadening our planning heritage into the western quadrants of campus, the 2014 Master Plan Update raises attention to the need to complement those large malls with a far greater number of more intimate, sheltered or cloistered spaces for students to congregate, eat, wait for class, or study. Campus development after 1997 introduced many such cloistered spaces onto the Lubbock campus, such as zones between the Student Union Building and the University Library, landscaping north of the Experimental Sciences Building, and enclaves within the Carpenter-Wells apartment village. The recent focus toward academic core infill construction has also spurred greater opportunities to develop these smaller-scaled, more intimate landscaped/hardscaped areas situated off of more predominant pedestrian malls. The heightened development in quantity of such spaces will help further deepen the Spirit of Place within students and visitors alike, and reduce load off of other indoor spaces such as the Student Union where students might otherwise congregate.

In addition, the TTU/TTUHSC Master Planning Committee sought to further refine the technical aspects of creating new or improving existing future green spaces on campus. It was not until after the 1997 Campus Master Plan that the university embarked upon finding more xeric, sustainable solutions to the landscapes on campus. Fifteen years of experience has generated a much better knowledge base as to bedding materials, irrigation and suitable planting species and patterns to use to create a vibrant, but sustainable landscape. The use of drought-tolerant shade trees will also help to create those cloistered zones beyond the broad

pedestrian malls that students and visitors can enjoy. Finding broader solutions to the palette of hardscaped materials such as brick pavers and integral-colored concrete will also aid in providing further vibrancy to the Lubbock campus.

“
...green spaces provide a refreshing contrast to the shape, color, and texture of buildings, and stimulate the senses with their simple color, sound, smell, and motions.
 ”

– Dorward, 1990; Miller, 1997



CAMPUS MALLS & DESIGN AXES

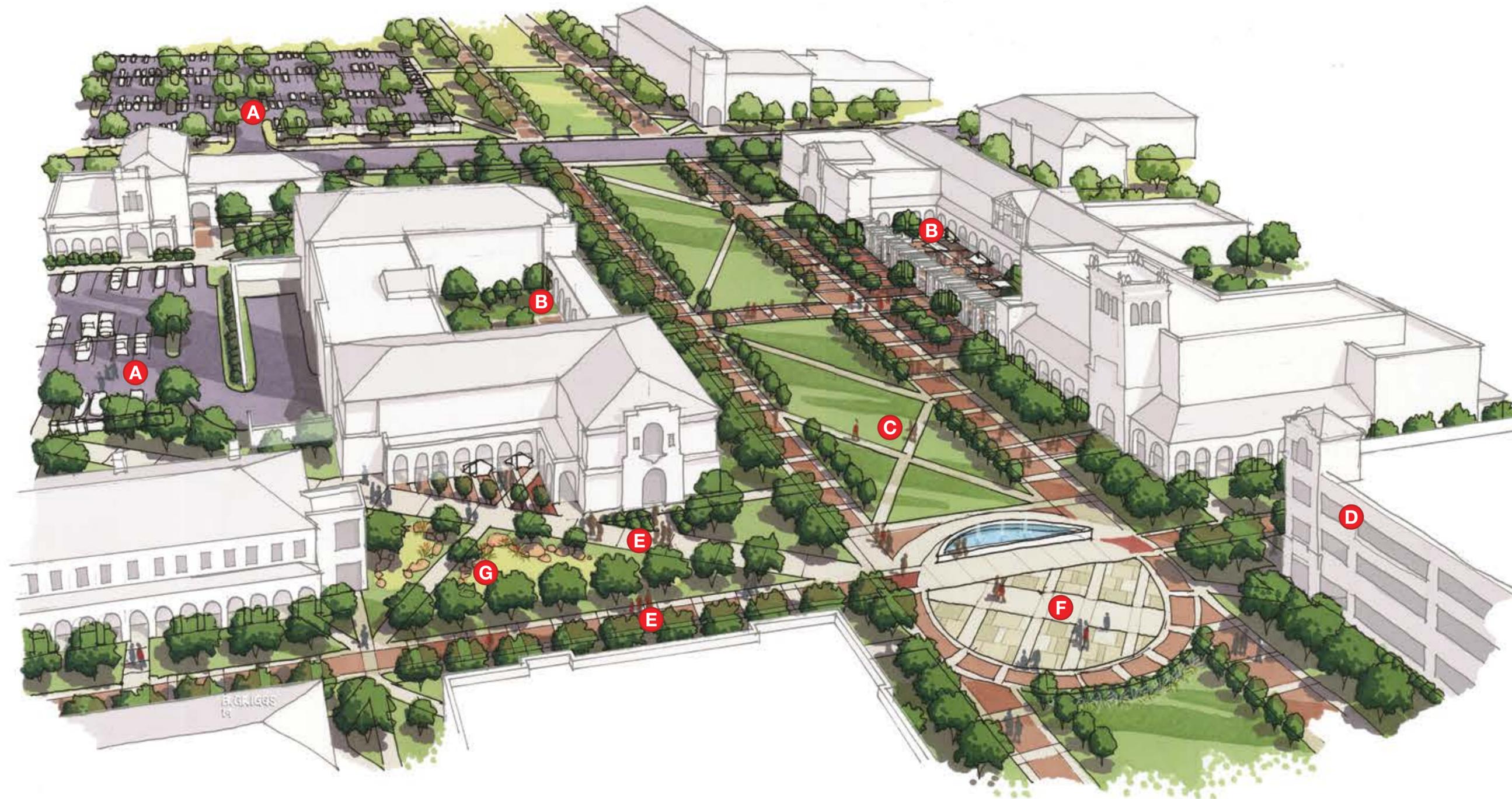
LEGEND

- Campus Malls/Green Space
- Design Axes

N

CAMPUS PLANNING PRINCIPLES

The montage shown at right, though hypothetical, demonstrates the intent to expand the presence of green space beyond the basic system of large axial malls which form a bulwark to the open space of the Texas Tech Campus Plan. That expansion would come with the integration of smaller green space plazas and courtyards—spaces that can be more readily used by students over a longer span of the school year, and whose configuration directly connect to the larger axial malls to which they are adjoined.



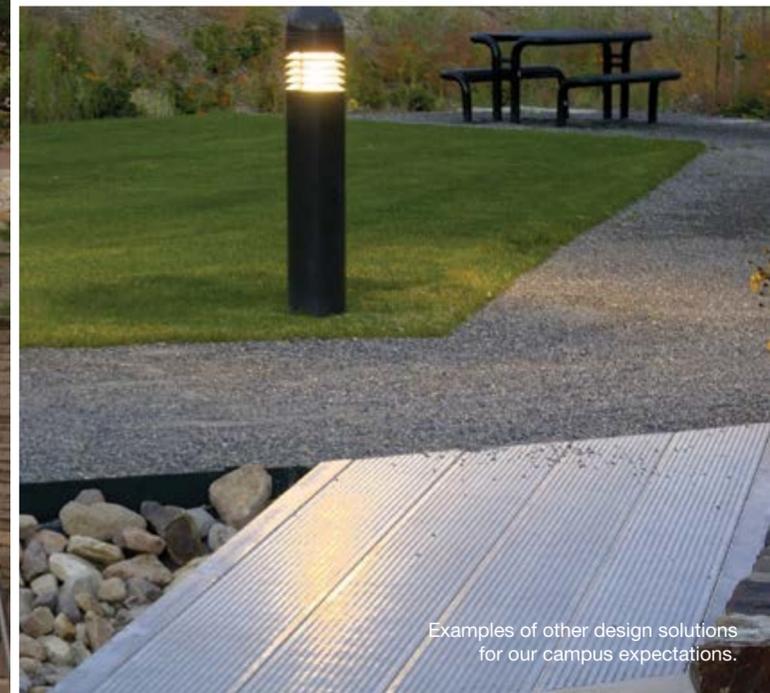
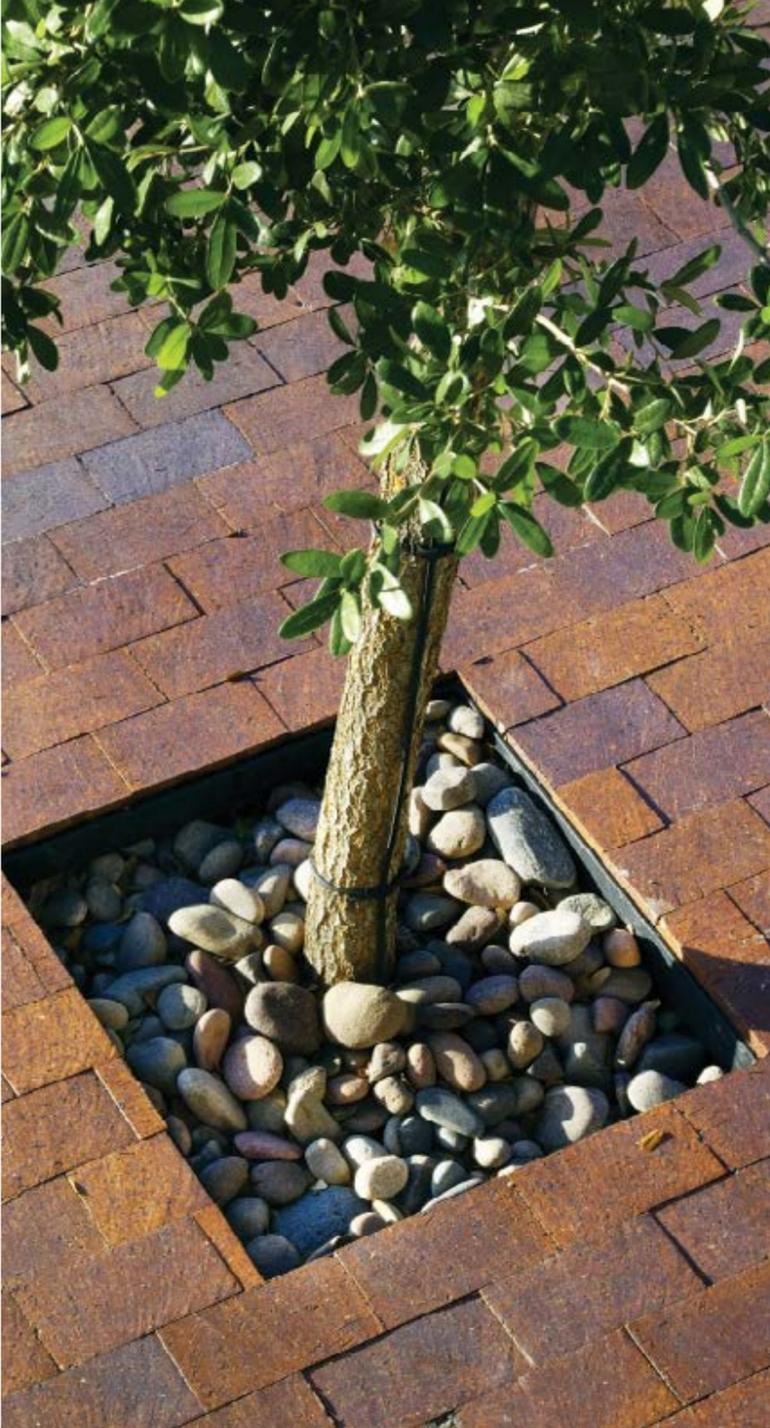
BUILDING & MALL PERSPECTIVE

- A Any future surface parking built within the Academic Core needs to be limited in scale and screened from view with landscaping, screen wall elements, or even masses of buildings themselves.
- B Small entry or building courtyards, as well as hard-scaped plazas with shaded seating areas for studying, food service or student congregation should be carefully and bioclimatically integrated into future construction. Consider using arcades and trellises to cloister these spaces from main open green spaces.
- C Main axial malls should be designed so as to have a visual terminus, and to have functional broad pedestrian walkways to support heavy student traffic.
- D The replacement of surface parking with structured parking facilities will aid in increasing density and can help, as shown here, in framing campus malls.
- E Secondary and tertiary pedestrian malls act much like the foot-traffic version of 'feeder streets' directing traffic onto arterial routes like the large 'Beaux-Arts'-inspired axial malls. Future building construction should be configured as to help frame these smaller malls as well.
- F Mall intersections present the opportunity for a visual terminus such as public art or a water feature.
- G Remaining unused green space can be capitalized into storm water-retaining bioswales that reduce the shear area of turf lawn to maintain, in lieu of rough-hewn rock-lined zones of low-maintenance xeric plantings.

REFINEMENT OF ENVIRONMENTAL QUALITY



Examples of other design solutions for our campus expectations.



Examples of other design solutions for our campus expectations.



PUBLIC ART

What is public art? Public art refers to works of art in any medium that are planned, created, bought, commissioned, and executed with the specific purpose of being sited in a public place or space. The purpose of a university public art program is to tell a story through artistic endeavor, encourage interaction of the public, create memories, and contribute to the university's sense of place. A public art collection contributes to the university's growing global identity, and serves to enrich the civic culture.

TTU and TTUHSC seek to enrich the cultural and intellectual life of each campus by building and maintaining a unique collection of public art created by leading artists of our time. The Public Art program at Texas Tech University System was initiated by the Board of Regents in 1998 to "enliven the campus environment and extend the University's educational mission."

The program's funding structure is based on similar percent-for-art programs in the nation. TTU System allocates 1 percent of the estimated total cost of each capital project, over \$2.0 million, to commission works of art of the highest quality. The development of the collection is guided by members of the University Public Art Committee, which

includes faculty, staff, students, alumni, and university and community leaders.

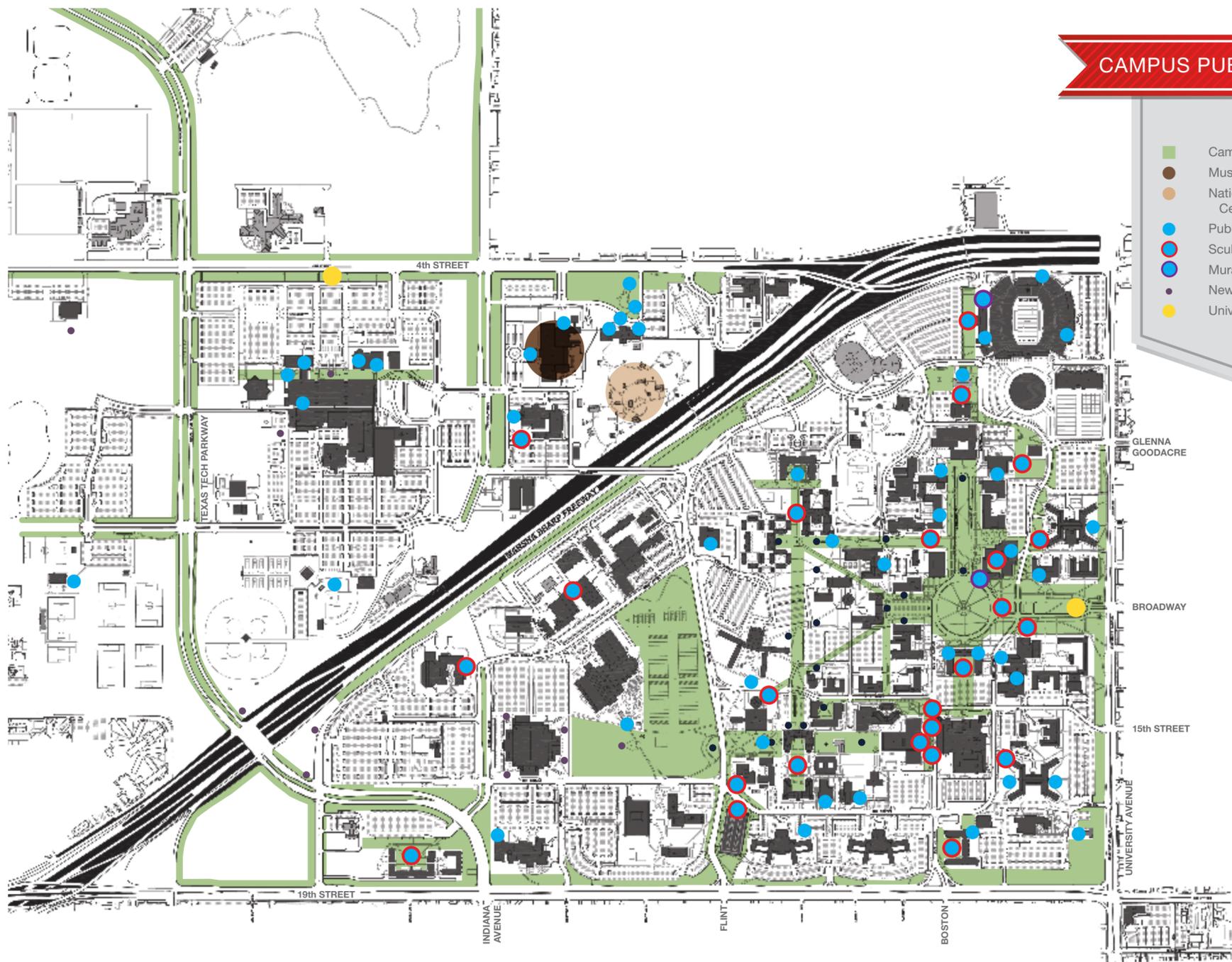
In 2006, Texas Tech University System's Public Art Collection was named one of the Top 10 University Public Art Collections in the U.S. by Public Art Review, the leading journal in the field of public art.

Today, the collection numbers 227 works with a value of \$8.1 million and includes pieces not only on the Lubbock campus, but on the Amarillo, El Paso, and Angelo State University campuses as well. We are continually adding to the collection. In fact, 2014 will see six installations with a value of \$926,000.

Since 2001, the Public Art Program has commissioned or purchased artworks by some of today's leading artists, including Deborah Butterfield, Terry Allen, Barbara Grygutis, Larry Kirkland, Mike Mandel, Jesus Moroles, Tom Otterness, Shan Shan Sheng, Cakky Brawley, and numerous others. With many projects in the works, the Texas Tech University System's Public Art Collection will remain one of the strongest in the country for years to come.



Michael Stutz: b. 1965
Four Faces: 2013/Bronze
 J.T. and Margaret Talkington
 Residence Hall



CAMPUS PUBLIC ART LOCATIONS

LEGEND

- Campus Green Space
- Museum of Texas Tech
- National Ranching Heritage Center
- Public Art (Existing)
- Sculpture (Existing)
- Mural (Existing)
- New Art Installation (Proposed)
- University Seal (Existing)

Cakky Brawley: b. 1966
Luminaries: 2011/Aluminum and LED
 Lights
 TTUHSC - Academic Classroom
 Building Courtyard



Studio Art's Desire
Transitions: 2012/Glass and High-Density Foam
The Commons by United Supermarkets



Peter Woytuk: b. 1958
Bulls: 2004/Bronze
Animal and Food Science Building



Glenna Goodacre: b. 1939
Park Place: 1997/Bronze
Human Sciences



Larry Kirkland: b. 1950
Headwaters: 2002/Granite
English/Philosophy and Education Complex



Shan-Shan Sheng: b. 1957
DNA: 2007/Architectural Art Glass and Stainless Steel
TTUHSC - Physicians Medical Pavilion

CIRCULATION & CONNECTIVITY

PEDESTRIAN

One of the guiding principles of the 2014 Master Plan Update is to maintain a pedestrian oriented academic core campus within a ten-minute walk. Maintaining a compact campus builds upon the organizational structure of the existing campus, which improves connectivity, reinforces pedestrian safety, strengthens the campus image and extends the green space character to the campus edges.

Beyond the academic core are other uses, both on and off campus, that require strong pedestrian connections. Extension of the pedestrian circulation system is proposed to link the academic core to the West Village, the neighboring Overton Park development, recreational fields, athletic venues, parking, and the surrounding community.

These proposed pedestrian connections will be landscaped pathways that follow the natural flow of pedestrians between destinations. Signage, lighting, paving, and outdoor furnishings will enhance the pedestrian experience. Well-defined and visible crosswalks will improve pedestrian safety.

PARKING SERVICES

The Transportation Parking Services Strategic Plan's main goal is to plan, develop, and maintain a parking inventory that meets the daily needs of the campus community. The benchmarks of this plan are (1) maintain utilization rates of 95 percent for faculty/staff parking, 90 percent for commuter student parking, 95 percent for resident student parking, and 90 percent for visitor parking; (2) achieve a positive parking adequacy for each quadrant of campus; and (3) increase annually the percentage of faculty/staff parking spaces designated as area reserved to achieve the greatest utilization of existing facilities and resources.

The majority of campus parking is surface parking with one parking structure on-campus and one leased structure that sits on the northern edge of the general academic campus. (See pages 76-77 for parking lots.)

Parking areas need enhancements to improve the pedestrian experience at the campus edges.

BUS SERVICES

Citibus provides on- and off-campus bus service in Lubbock. The on-campus service is free to anyone on a Texas Tech campus route. Students may ride for free on any Citibus off-campus route by showing their Texas Tech ID card. There are several off-campus routes, including ones that transfer to Texas Tech campus buses.

There are three on-campus routes—Red Raider Route; Double T Route; and the Masked Rider Route. Also, through Texas Tech's Student Government Association (SGA), Tech students may use the "S-Bus Safe Ride" at no charge. The S-Bus provides safe transportation by bus to and from certain apartment complexes and night-life locales in Lubbock.

The Transportation Master Plan proposes the removal of the bus routes using Memorial Circle and 15th Street in front of the Student Union Building. Conflict in these areas between pedestrians and buses is of grave safety concern. Moving those routes to the loop road will also decrease the wait time between stops.

BIKES

The campus mobility plan integrates pedestrian, bicycle, vehicle, service vehicles, and bus service. In order to promote bicycling as another means of transportation the bike has to be provided a functional and attractive system of connectivity to the students' destination, paths, parking, and support services.

The Lubbock Metropolitan Planning Organization, on which Texas Tech has representation, created the Lubbock Metropolitan Area Comprehensive Bicycle Plan which meets the requirements of the Intermodal Surface Transportation Efficiency Act (ISTEA) and contributes to the goals of the National Bicycling and Walking Study. The plan includes dedicated bicycle lanes on city streets and bicycle pathways that provide linkages within the city and the university. Clearly marked bicycle routes that are continuous throughout the campus should interconnect and extend into the adjoining neighborhoods.

In the fall 2013, the League of American Bicyclists announced the latest round of Bicycle Friendly Universities (BFU), and Texas Tech University was named a Bronze BFU. TTU is one of only two universities in the state to be named a BFU. The application process relies primarily on how a university addresses the five "E's": engineering, education, encouragement, enforcement, and evaluation and planning. The five E's relate to how a university has improved the bicycling experience on its campus. The bronze level TTU earned means the university has taken steps in addressing all five.

Texas Tech University's bike system currently has three miles of on-street bike lanes, 60 miles of shared use paths, and a bicycle parking capacity of around 8,000 bikes. With the implementation of a free-range policy, which allows bicyclists to ride on most sidewalks, bicycles can cross the campus quickly and efficiently and reinforce the ideal ten-minute class change time frame.

Bicycles are still prohibited within certain designated areas of heavy pedestrian movement. The campus plan includes bicycle paths, lanes, roadways and corridors. Bicycle parking, aka "bike corrals" will continue to be provided in ample supply and positioned as close as possible to the path, thereby encouraging a self-policed system. Bike corral locations include high-traffic areas, such as the library, academic nodes, student union building, recreation center, intramural fields, and student housing. Additionally, bike corrals should be built adjacent to commuter parking lots, garages, and the major roadway and pedestrian bridge links into the campus edge, thereby providing commuting students with access to their bicycles.

Texas Tech continues to foster a circulation system that leads off-campus routes into the on-campus circulation patterns. However, conflict between bicycles, vehicles, and pedestrians remain a constant concern of the university.



Pedestrian Walkways
Square Spiral Arch, Sculpture by Jesús Moroles in background
Experimental Sciences



Citibus Route



Flint Avenue Parking Structure

“ **Transportation is the center of the world!
It is the glue of our daily lives.** ”
— Robin Chase
Founder & CEO of Buzcar/Co-Founder of Zipcar



Visitor Welcome Booth
Broadway & Akron

CIRCULATION & CONNECTIVITY (continued)

VEHICULAR CIRCULATION

Great strides have been made in the last 60 years to wrest the dominance of the vehicular roadway from the fabric of the TTU and TTUHSC campuses, but as enrollment continues to increase, further attenuation must be made to maintain ease of access for automobiles on the Lubbock campus, but designed so as to be subordinate to the needs of the pedestrian. The adjacent diagram highlights the current dynamics of vehicular circulation in and around the Lubbock campus as it exists today, which has seen dramatic shifts in traffic count dynamics just in the last decade. In particular, seven key issues or matters are noted and numbered in the adjacent diagram—refer to the summaries below regarding those issues and what solutions are proposed in the Master Plan Update.

1. Southwest Campus Development—Having the greater presence of a divided and improved Knoxville Avenue will aid greatly in the anticipated near-term construction of mixed-use public/private partnership development immediately west of Knoxville and south of the Texas Tech Parkway.
2. The construction of the 9th Street bridge, coupled with increased off-ramp traffic from eastbound Marsha Sharp Freeway onto the Drive of Champions to the northeast has made the 9th Street/Flint Avenue intersection a more primary entry point to the TTU academic core of the campus. Near-term consideration of traffic control, and the possibility of greater architectural attenuation of the view beyond and east of the intersection should be considered, given its growing prominence.

3. Patient and visitor traffic to University Medical Center (UMC) continues to steadily increase, resulting in a heightened need for effective and efficient vehicular access both from the more dominant route of the Texas Tech Parkway to the west, as well as Indiana Avenue to the east. Wayfinding and careful attention to distinguishing public and reserved parking lots should be considered along 10th Street.

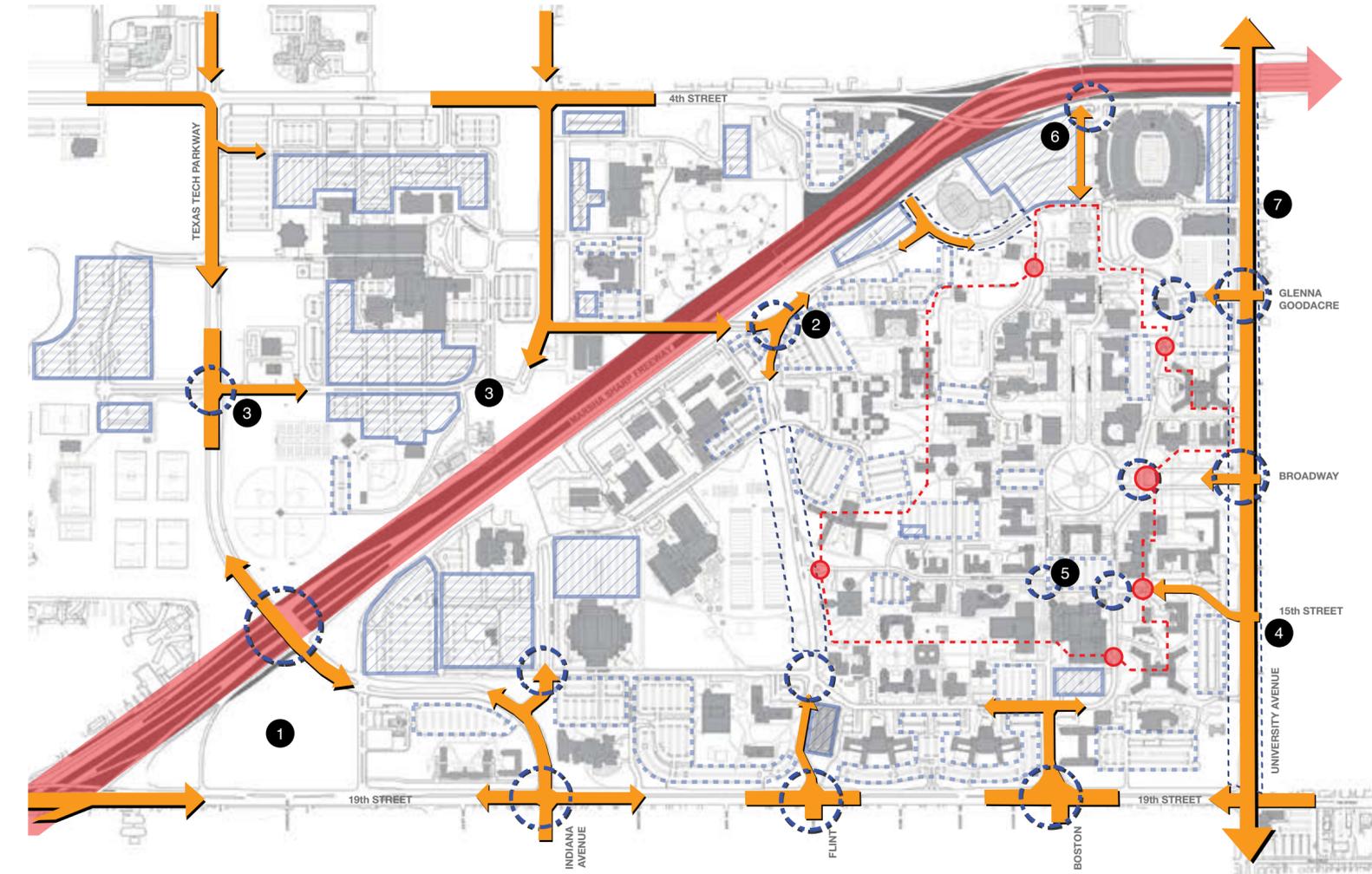
4. Per the projections of the 2024 Vision Plan, the next structured parking facility on campus will likely be located in place of 15th Street, just west of University Avenue in the southeast quadrant of the TTU academic core. The garage will perform the dual duties of displacing existing surface parking within the heart of the academic core, while also closing a long-time vehicular corridor that connected directly into the highest density zone of campus pedestrian activity. The entry station at 15th Street will no longer be needed. This new construction will aid in reducing traffic load on the 15th Street corridor, and helping to reduce automobile activity directly into the area around the Student Union Building (SUB).

5. The long-time hopes of significantly reducing parking south of the Administration Building has, as well, resulted in the opportunity to significantly restrict vehicular traffic in the segments of Boston Avenue and 15th Street immediately north of the SUB. The last decade since completion of the SUB renovations and additions have spawned a massive increase in pedestrian traffic in that area. By drawing bus traffic back out of the Memorial Circle area over time, and installing drop-down bollards on Boston north of 18th Street, and on 15th Street northeast of the SUB, that area of campus will continue

to evolve into an even more synergistically-active pedestrian activity area for students.

6. Heavy use of the commuter parking lot west of Jones AT&T Stadium has resulted in the east end of that lot becoming a de facto vehicular access circuit for students and visitors between the eastbound service road of the Marsha Sharp Freeway and the Drive of Champions, creating an unsafe passageway for students. That circuit should be broken through the redesign of vehicular access from the Drive of Champions into the commuter parking lot.

7. Phenomenal mixed-use development in the North Overton district northeast of the TTU campus has aided in making an already-busy University Avenue an even more congested thoroughfare. That said, expansion of University Avenue east of campus is simply an untenable and impossible option. Rather, targeted solutions such as the redesign of the Texas Tech side of Glenna Goodacre Boulevard to align with the North Overton divided right-of-way, and reduction of traffic-loading intersections, while focusing on dedicated crossing points along University Avenue for the hugely-increased pedestrian flow will all be needed to abate the current traffic issues.

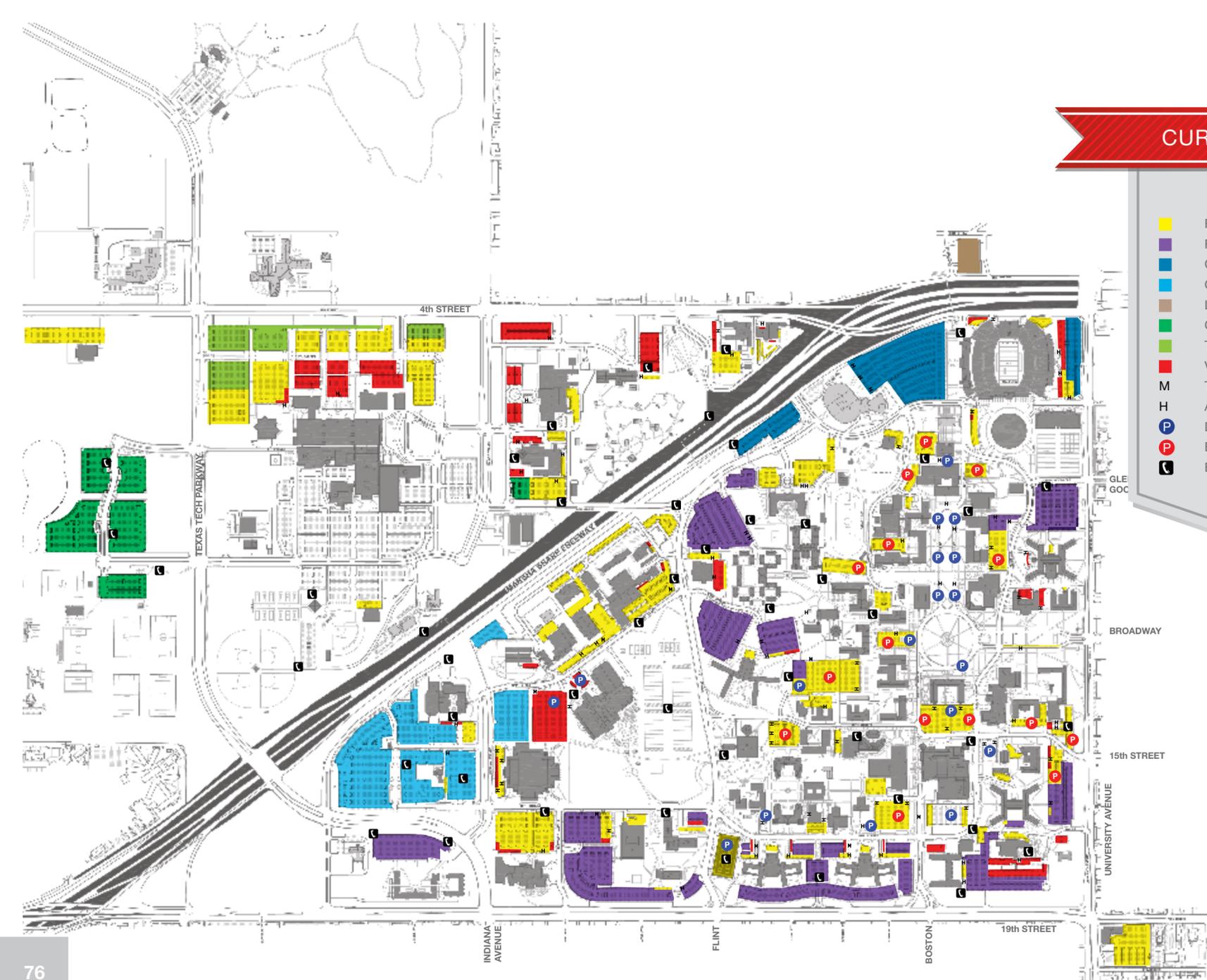


TRAFFIC PATTERNS

LEGEND

- Major Vehicular "Choke Point" Intersections
- Vehicular Control Point
- Speed & Traffic Control Zones
- Zone of Controlled Vehicle Access within Academic Core
- High-Speed Vehicle Traffic Flow
- Vehicle Traffic Flow
- High-Activity Parking Terminus
- Moderate Activity Parking Terminus

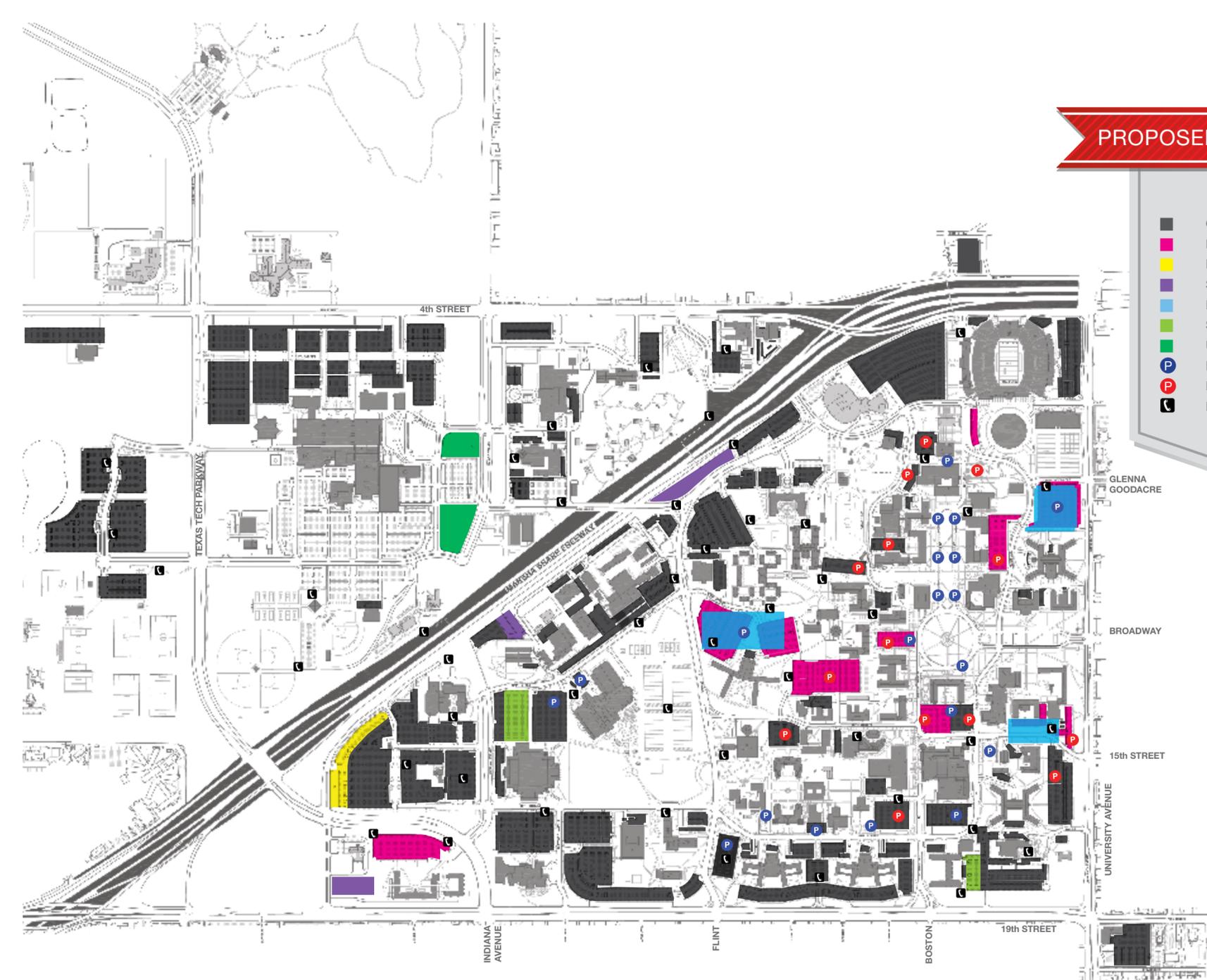
N



CURRENT PARKING

LEGEND

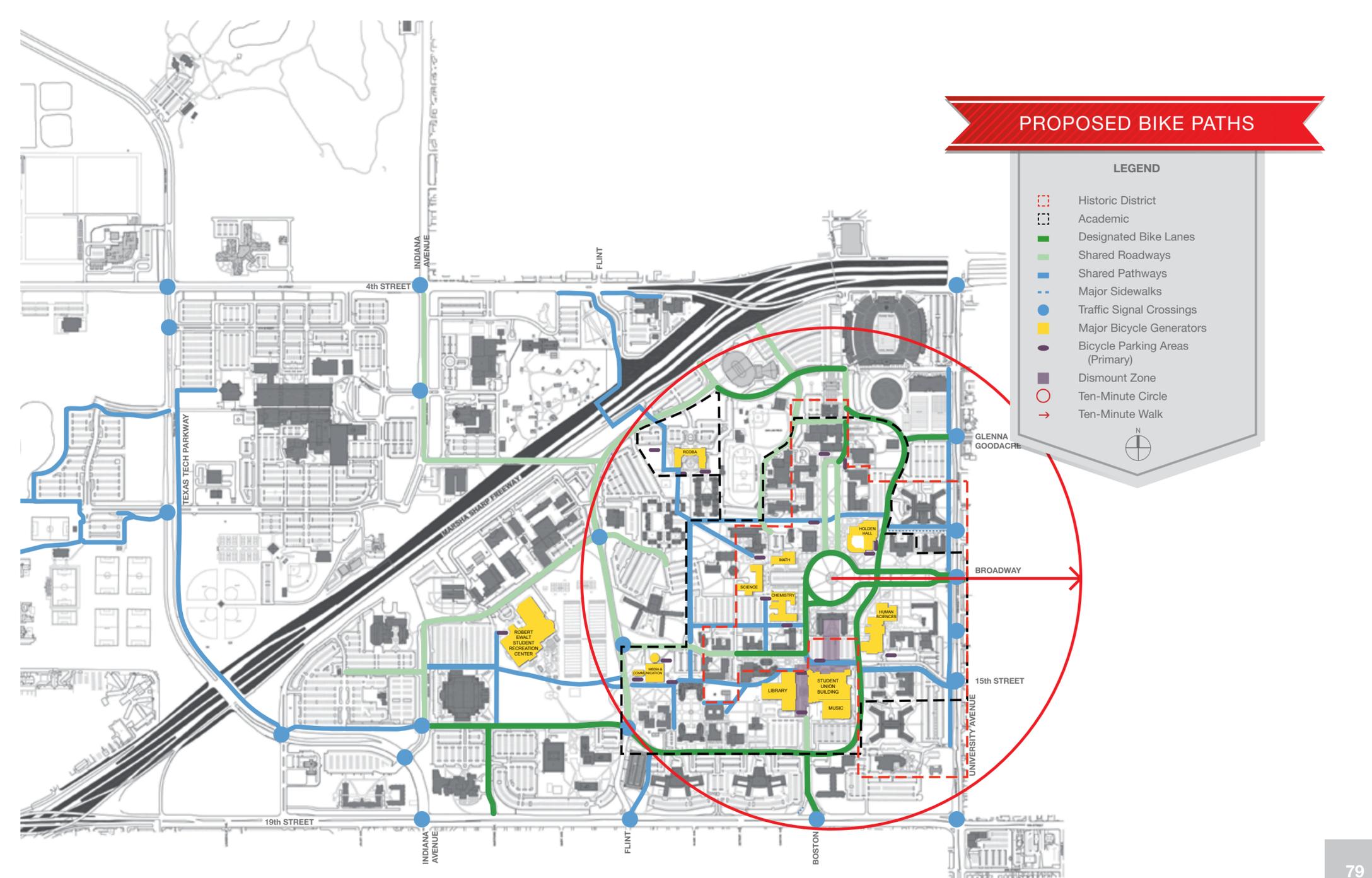
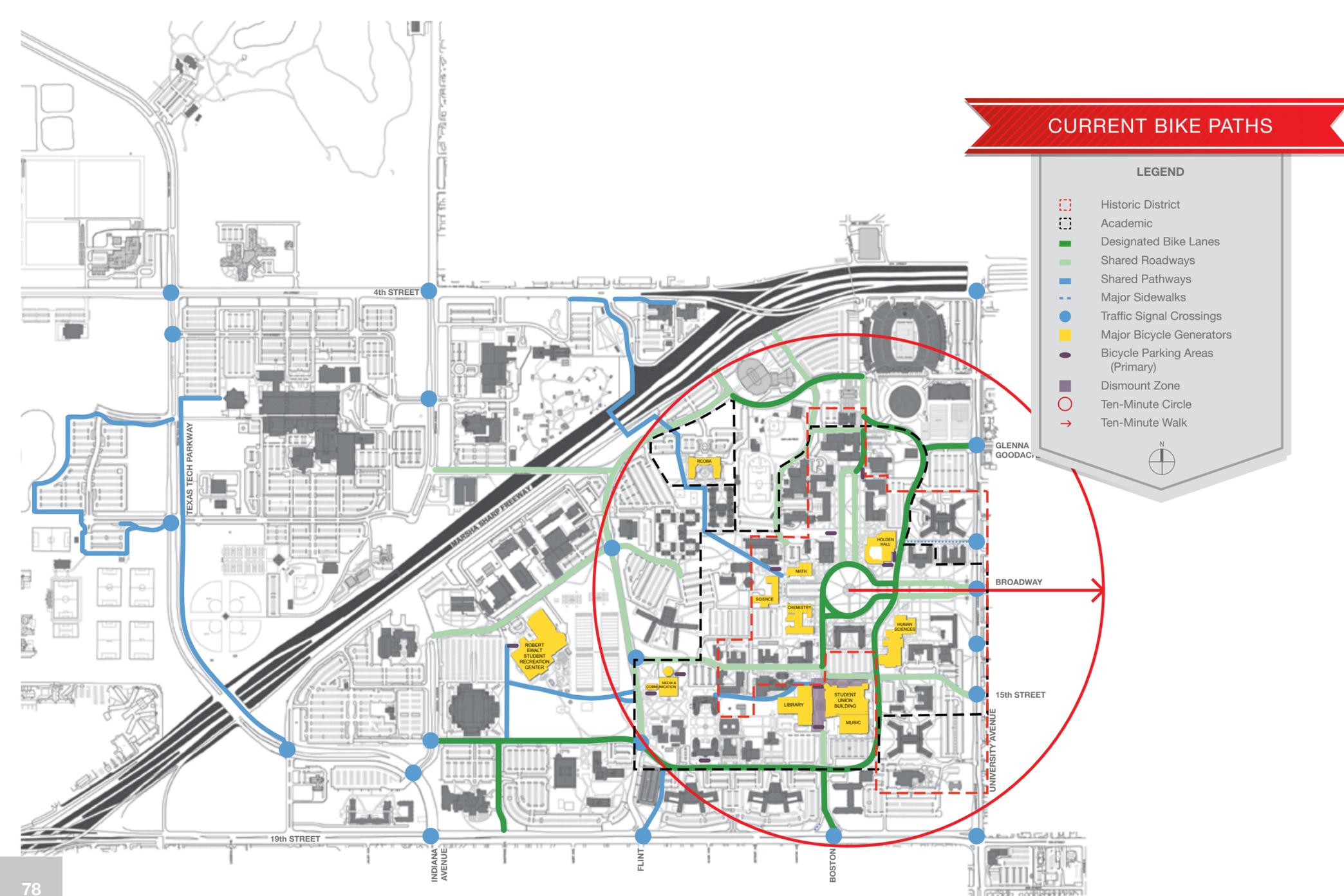
- Faculty & Staff
- Residence Halls
- Commuter North
- Commuter West
- Leased Parking
- Commuter Satellite
- TTUHSC Student
- Visitor/Time Limit
- M Two-Wheel
- H ADA
- P Daytime Park & Pay
- P Evening Park & Pay
- ☎ Emergency Phone

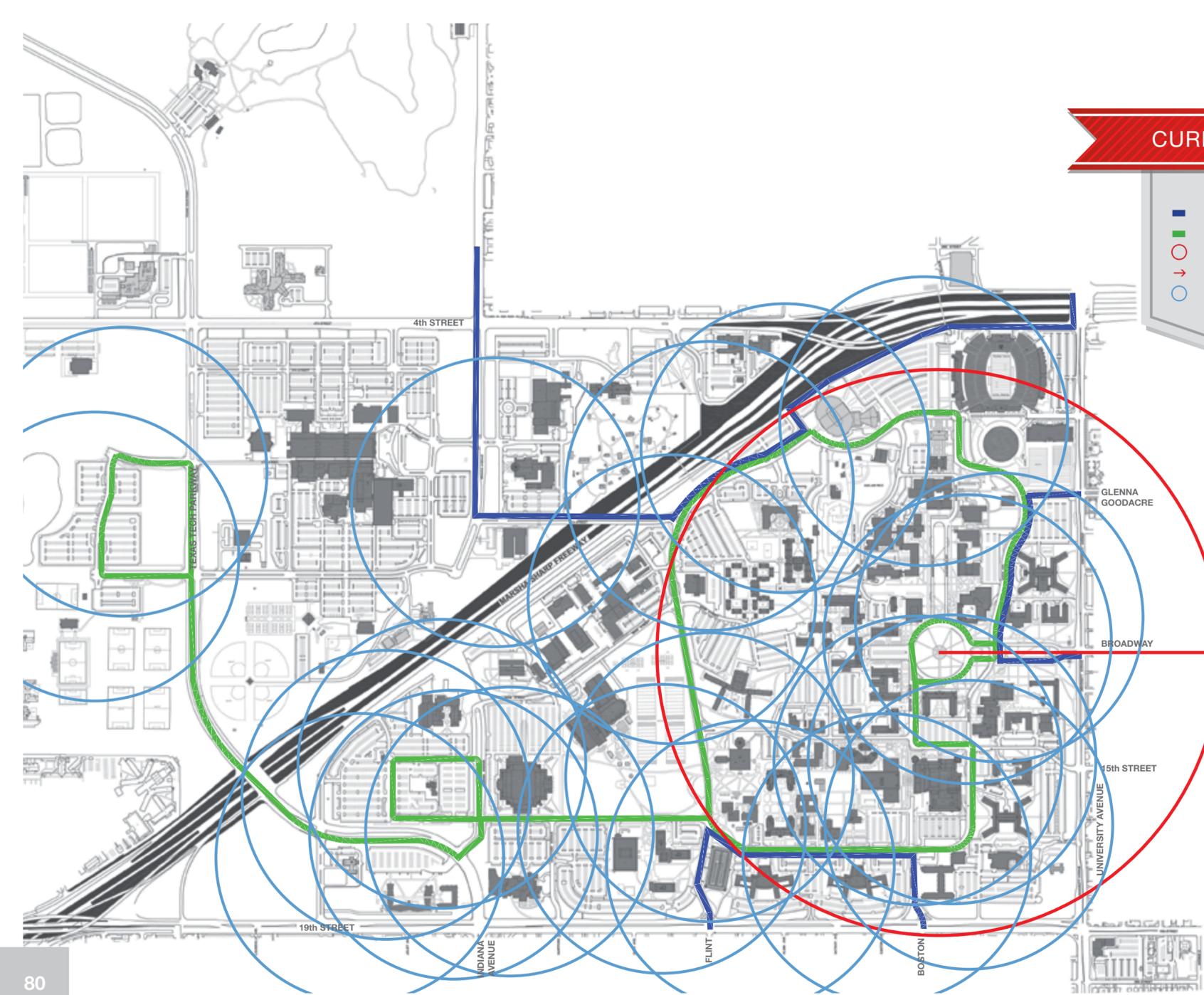


PROPOSED PARKING STRATEGY

LEGEND

- Current Parking
- Removed Parking
- Faculty & Staff
- Surface Parking
- Multi-Level Parking Structures
- Single-Level Parking Deck
- UMC Parking
- P Daytime Park & Pay
- P Evening Park & Pay
- ☎ Emergency Phone



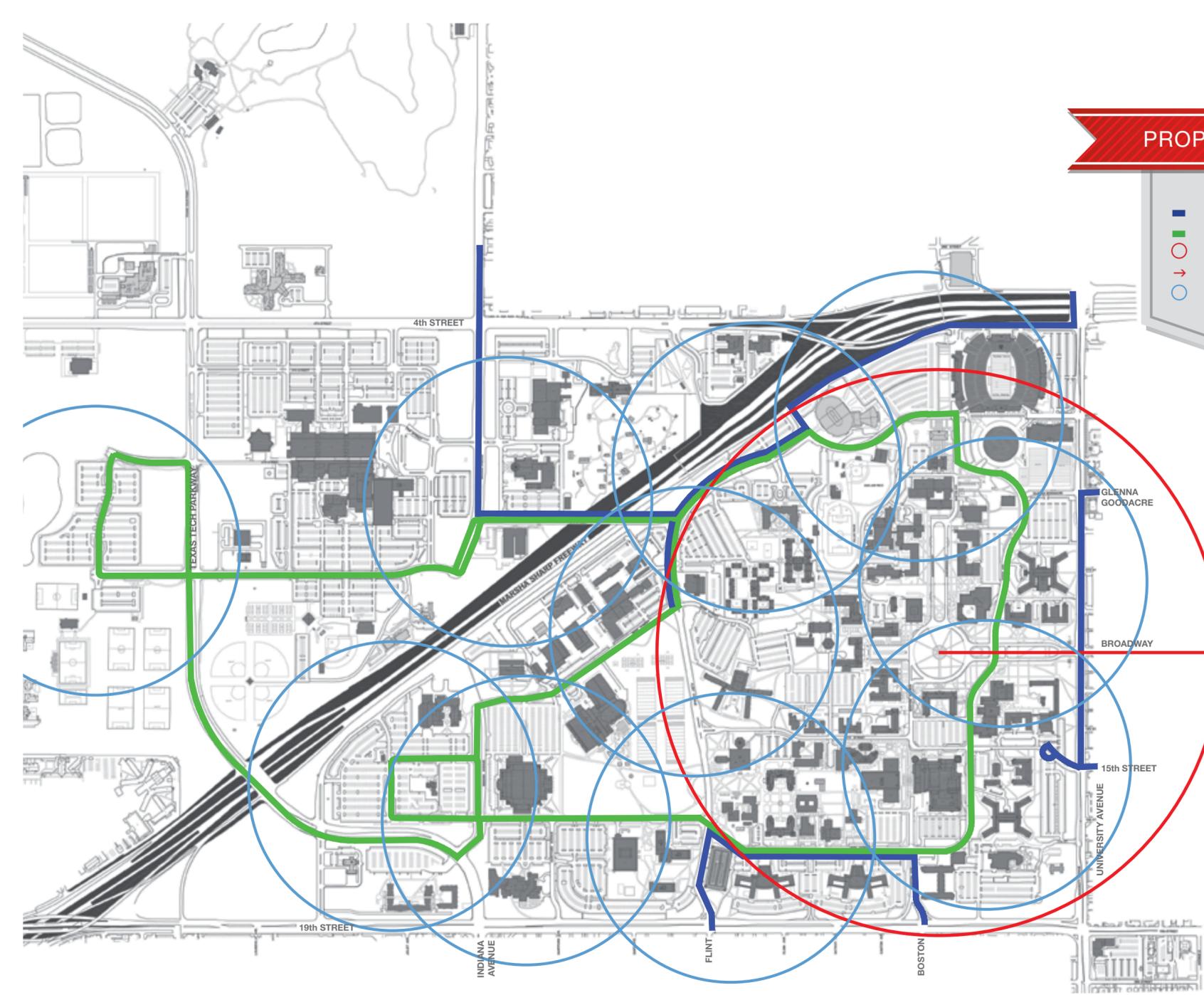


CURRENT BUS ROUTES

LEGEND

- Off-Campus Bus Routes
- On-Campus Bus Routes
- Ten-Minute Circle
- Ten-Minute Walk
- Five-Minute Walk from Bus Stop

N



PROPOSED BUS ROUTES

LEGEND

- Off-Campus Bus Routes
- On-Campus Bus Routes
- Ten-Minute Circle
- Ten-Minute Walk
- Five-Minute Walk from Bus Stop

N

CAMPUS ANALYSIS

The ongoing development of the Texas Tech University and Texas Tech University Health Sciences Center Lubbock campus has been a dynamic and unceasing effort since adoption of the 1997 Campus Master Plan and massive growth of enrollment that has taken place in the last 15 years. Campus development has largely proceeded during that time in a fashion commensurate to the design of the 1997 Future Development Plan, most notably in terms of strengthening the campus core, affirming the architectural heritage of the institution, and developing future Beaux-Arts-inspired pedestrian malls that frame the academic core of the campus to the west and north. Whereas some institutions have developed on-campus housing under the premise of generating a central academic residential district, TTU has developed and evolved its campus under a differing, but equally strong premise that on-campus student residential facilities exist as a peripheral shell to the academic core of the campus, thus promoting a more tactical synergy between individual colleges and nearby student residential nodes.

Even when accounting for student enrollment growth over the past 15 years, in general, sufficient land and space both within and on the periphery of the academic core to the Texas Tech University campus exists for the next half-century or more of institutional development.

One very successful aspect to the recent development of the campus has been a higher degree of focus towards new facilities or buildings which further infill undeveloped portions of the academic core of campus. By doing this, activity within the “Ten-Minute Circle” is reinforced and a heightened sense of place is achieved. Recently completed projects, such as the Terry Fuller Petroleum Engineering Research Building, the Burkhart Center for Autism Education and Research, expansion of the Plant & Soil Sciences Building, and the J.T. & Margaret Talkington Hall and The Commons by United

Supermarkets are all examples of ongoing infill projects within the general core of the campus. Planned future buildings identified in the subsequent Ten-Year Plan section of the 2014 Master Plan Update highlight other infill new construction projects within the central campus that will aid in promoting an enhanced quality of student life, academic access, and interdisciplinary synergy.

In regards to those efforts outlined in the 1997 Campus Master Plan to enhance and beautify the landscape and hardscape elements of the Lubbock campus, while there has been many significant achievements to count in this area, much remains to be accomplished. Ongoing efforts to beautify and aesthetically frame with shade tree infill along the Broadway entry mall, landscaping redevelopment of Memorial Circle, and the development of the north pedestrian mall connecting the Engineering Key with Grover Murray and Carpenter/Wells Halls are all examples of recent beautification successes. Additional areas that have yet to receive landscape enhancement include the parking area south of the Administration Building and Dairy Barn Mall, both of which have been identified in the subsequent Ten-Year Plan section of the Master Plan Update. The development of landscape enhancement to these areas and others will aid in providing a more walkable, livable and engaging campus.

The overarching factor in further development of pedestrian circulation routes through campus is the position and coverage of the 2,800-foot-radius “Ten-Minute Walking Circle” that has, since the 1997 Campus Master Plan, been centered on Memorial Circle, given the adjacent location of the Administration Building and Holden Hall. This “Ten-Minute Circle” analysis revealed in 1997, as it still exists today, the concerns of peripheral campus housing, academic and student life nodes residing beyond the range of that circle, and therefore students cannot—without bicycle or bus—effectively

travel from one building to another within the time of a ten-minute class change.

One unique evolution that the 2014 Master Plan Update proposes is that a massive shift in academic program geodemography on the acadmic core campus, coupled with the notable degree of residential and mixed-use development within the nearby Overton Park District has caused a shift in the pragmatic location of where the center to the “Ten-Minute Walk Circle” is actually located. Opening of the new facility for the Rawls College of Business in January 2012, the relocation of the College of Media and Communications, and new residence halls in the southeast and southwest quadrants of campus have generated new dynamic variables in campus activity that must be accounted for. Yet, the construction of several mixed-use centers and apartment complex enclaves northeast of campus in Overton Park has proven to be the largest impact factor of all, placing a tremendous genesis of “town-and-gown” student life activity on the adjacent edge of campus. More tactical development objectives outlined in the 2014 Master Plan Update such as architectural campus gateway and pedestrian improvements will need to be developed to reinforce and enhance the pedestrian routes between Overton Park, through the northeast athletics district of campus, and into the academic core.

The Overton Park development may also have had a significant, though tertiary impact upon one other key area of campus analysis: student parking and vehicular traffic. The need for further student parking—an issue that drove significant parking lot and facility additions to the physical campus between the late 1990s and mid-2000s—has largely abated, despite repeated student enrollment growth. Part of this lack of further need has come with the lease of nearby Raider Park, a structured parking facility north of the Marsha Sharp Freeway, which has added several hundred parking

spaces to TTU Traffic & Parking’s operational resources. Since on-campus housing has not grown at a pace that has matched enrollment growth, the only answer of how student commuter parking needs has not increased lies in Overton Park, as well as an enhanced CitiBus route network that now extends not only to Overton Park, but also to the Tech Terrace neighborhood to the south of campus, and other student resident-heavy apartment enclaves to the north and west. But Overton Park, with its several thousand units of apartment housing, has aided Texas Tech invaluablely during the past decade of continuous growth by keeping the university clear of the abyss of becoming what is commonly referred to as a “Commuter Campus.” Commuter parking lots and the arterial streets such as the eastbound service road to Marsha Sharp Freeway, the Texas Tech Parkway, and Indiana Avenue, have not been overwhelmed by commuter car traffic. Rather, the activity of Overton Park and the dynamics of the eastern half of campus have placed a strain on University Avenue, most particularly north of Broadway, where high vehicular traffic and pedestrian traffic are at a constant juncture. Therefore, the lack of options to expand or improve University Avenue proves to be one of the only real challenges that has emerged out of the recent success and growth at nearby Overton Park.

“
**Planning is bringing the future
into the present so that you can
do something about it now.**

—Alan Lakein

”

The Texas Tech University Health Sciences Center has for the last two decades had to attempt the transition of being a single large-scale destination facility surrounded by associated parking and site work, into becoming an integrated, multi-building campus. Not at all unlike the challenge that other emerging higher education institutions built in the 1960s and 1970s have to face today—escape the perception of being designed as a stand-alone commuter-heavy “big box” campus and design future growth to help transition the institution into having an engaging and integrated multi-building campus feel. Beginning with the Academic Classroom Building in 2002, followed by the Clinical Pavilion Tower six years later, TTUHSC has begun to accomplish this through new construction that has expanded beyond the built confines of the original 1975 TTUHSC main building.

Without careful planning, continued growth of the TTUHSC Lubbock campus could very well develop as a continuation of the original building format of the 1975 TTUHSC campus—additional stand-alone buildings that are isolated by other campus buildings only by a sea of indiscriminately-designed surface parking. Rather, as indicated in the 2024 Vision Plan design, future planned construction indicated in the 10-Year Projection have been designed where possible with shared outdoor commons spaces, and green space that helps to buffer TTUHSC campus buildings from the large quantities of parking that will remain on campus. In the case of stand-alone buildings that will reside at the perimeter of the Medical District—planned facilities such as a School of Dentistry or a Veterans Administration clinical building—will need to visually coordinate with the existing postmodernist design style and color palette of the TTUHSC and UMC campuses. This palette of warm beige precast concrete, bronze anodized metal paneling and in recent construction, introduction of the traditional Texas Tech buff-blend brick masonry, has become

almost as uniquely identifiable as a campus aesthetic as the Spanish Renaissance styling of the TTU campus.

In the case of vehicular traffic planning, much has been accomplished in the last 15 years to not only design multiple vehicular entry points onto the TTUHSC and UMC campuses, but also to interconnect them with an efficient loop road network that feeds into the nearby arterial roadways of 10th Street, Indiana Avenue, 4th Street and the Texas Tech Parkway. That said, having a vehicular loop with a decentralized range of entry points for visitors accessing from all directions creates the unforeseen issue of the campus lacking a clear central and ceremonial vehicular entry point into TTUHSC. Existing vertical construction adds to this problem, as the circa-1975 Pod A-B-C Building lacks a dominant architectural entry feature that is readily visible from nearby arterial roadways. Therefore, site work and the construction of a new central entry drive and divided parkway is needed to create this main entrance a reality. This concept is not a new one—the TTU System proposed the same concept in the 2007 Vision Plan for the 1997 Campus Master Plan, but the concept has to date, not been implemented. The same general design has been incorporated into the 2024 Vision Plan for the Texas Tech University Health Sciences Center campus.

FORECAST

The intention of any master plan is to generate a decisive but malleable framework for future growth, and likewise, the TTU/TTUHSC Master Planning Committee sought to forecast anticipated campus development that generates worthwhile objectives, but also retains an undercurrent of design flexibility for a yet unforeseen future. In general, the 1997 Campus Master Plan was largely focused on strengthening the peripheral academic core while resisting the temptation of low-density growth in the western and northwestern areas of campus. The past 17 years illustrate that the university has largely adhered to this tenet, and has limited growth outside the general academic core in large part to specific athletic, intramural, parking, and tertiary facility growth.

From a strategic standpoint, the national and global trends of an increased presence in online education and degree plans has not abated the continued enrollment growth of Texas Tech University, or other regional or peer institutions for that matter. Therefore, evidence indicates that the realm of online-delivery higher education will remain a distinctly different demographic from the growing cadre of incoming students that will attend institutions such as TTU in search of the traditional collegiate experience.

That said, the percolating impact of built learning environments and pedagogies in primary and secondary education, coupled with the changing learning modalities of an incoming generation of Millennial students will have a profound impact on future academic spaces built on the TTU and TTUHSC Lubbock campuses. Inverted instruction, a general reduction in the quantity of large-lecture delivery courses, and a shift towards smaller breakout-sized instructional groups will go far in changing the shape of future instructional spaces at Texas Tech. This change is already appearing in recently-

built facilities such as the Jerry S. Rawls College of Business Administration and the Terry Fuller Petroleum Engineering Research Building. In the Rawls College of Business, all of the third-floor instructional space is limited to small, 200-240 square foot breakout spaces, while the Terry Fuller Petroleum Engineering Research Building contains only three distinct classrooms (only two of which are tiered), while the balance of instructional space is essentially laboratory and breakout space. These trends in instructional programming may very well completely change the present-day mindset enforced by the Texas Higher Education Coordinating Board (THECB) regarding space utilization and Full-Time Equivalent (FTE) calculation, and could be of symbiotic value in concert with faculty growth of working towards the achievement of objectives to Priority #5 in the TTU Strategic Plan. With that, both Texas Tech University and the Texas Tech University Health Sciences Center must be prepared to respond to these significant changes with those future academic facilities indicated in the Ten-Year Projection.

The 2014 Master Plan Update recognizes that the multilayered growth of TTU and TTUHSC since 1997 has generated a scale of general institutional growth that is no longer linear along a single path, but rather consists of multidirectional growth in such wide-ranging areas as athletics, mixed-use lease space development, private-partnership research, government-partnership research, and more 21st century-aligned academic facility construction. Many of these directions of institutional growth require larger swaths of land and independent development plans free of the traditional academic core. As a result, development into the "Northwest" and "Research/West" zones of the campus (see page 56 map) has become an inevitable requirement to achieve a strategic development of the institutional physical plant that is commensurate of a Tier

One institution. Unlike the missteps of unchecked western campus development in the 1950s through 1970s, the TTU/TTUHSC Master Planning Committee is committed that any western or northwestern campus development is conducted in a spatially-efficient manner that is respectful of the circulation needs of students and visitors.

At the same time, academic and student life needs will remain a major concern, so both TTU and the TTUHSC must concurrently continue development of their core zones of activity; specifically the Texas Tech University academic core, and the Texas Tech University Health Sciences building complex at the core of the medical campus zone. In the case of the university, ongoing campus development must be focused on life safety and operational upgrades of existing facilities to maximize physical plant effectiveness, mitigate parking in lieu of green space within the historic district, and continue to develop the academic core through increased building density and thoughtful infill construction.

With the compounding demands of western and northwestern campus development, and ongoing core development to TTU and TTUHSC; the Texas Tech University System, and in particular the Facility Planning & Construction division must be equipped and resourced to be able to respond to the myriad of projected facility growth.

“
**The ability to look back
and analyze gives us the
clearest foresight.**
”

TEN-YEAR PROJECTION

The goal of the 2014 Campus Master Plan Update is to identify options for the placement of facilities and programs within the land-use framework over the next ten years and where possible, beyond that time period. This process will provide both TTU and TTUHSC the flexibility for the tactical implementation and ordering of those plans. In the case of this range of projects, a non-specific “roadmap” has been provided to the physical arrangement of the present and future campus fabric.

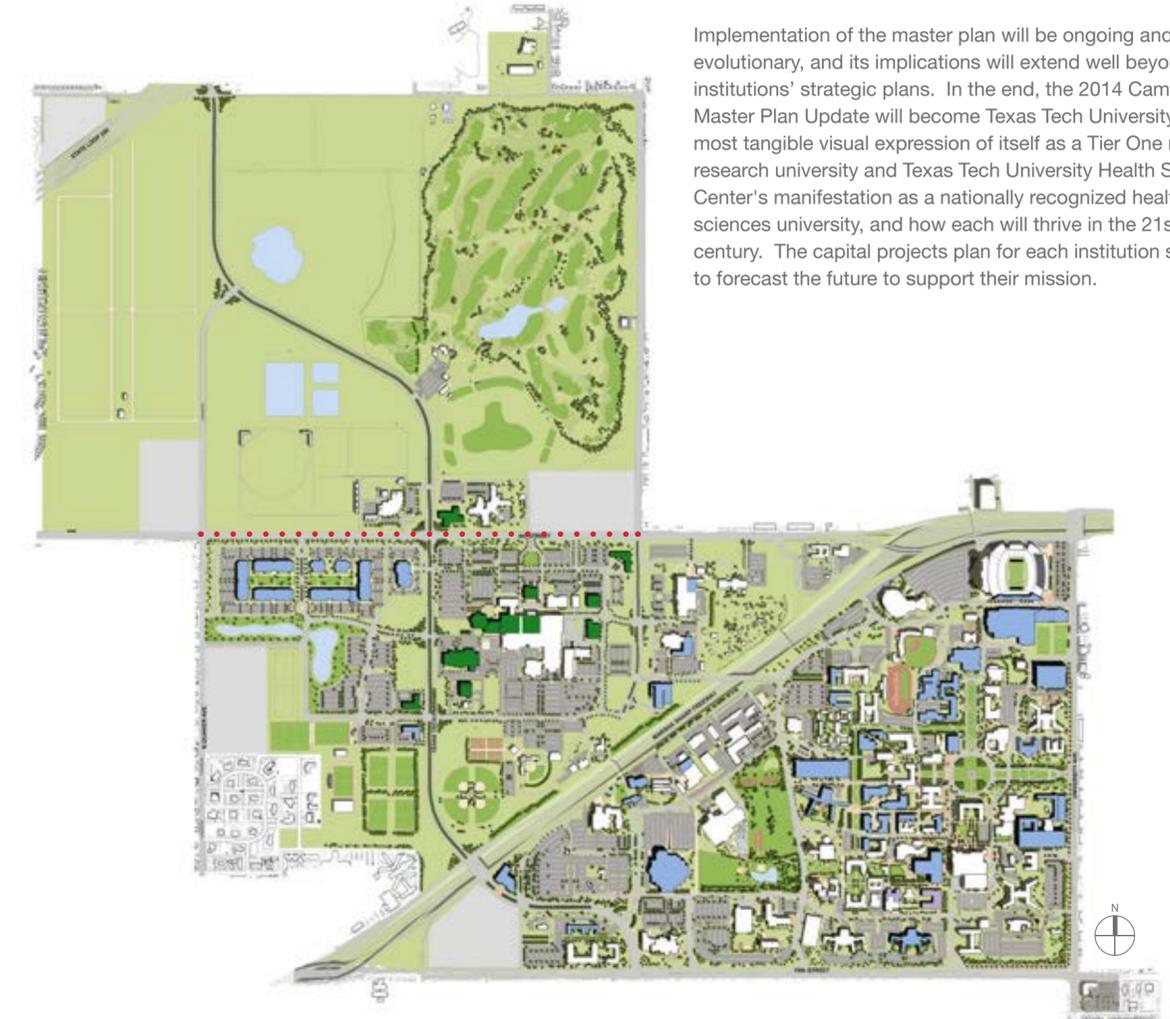
A new era began in 1996 with the establishment of the Texas Tech University System. At that time, the TTU System looked forward to a strategic plan that would guide our institutions into the new millennium, and now as we look across the campus and realize those many achievements. Tremendous growth in research, endowed scholarships and professorships and the building of numerous facilities on campus mark the conclusion to a tremendously successful era on the Lubbock campus. Yet, this “successful era” continues forward in many regards unchanged from the previous 17 years of striking growth throughout the TTU and TTUHSC campuses. Whereas, facility growth between 1997 and today was largely targeted towards academic facilities, student life, and athletics facilities, as the subsequent projections indicate, the next ten years of campus development will be focused towards shared-facility academic partnerships with private industry, research facilities, mixed-use student life development, and student residential spaces.

The Texas Higher Education Coordinating Board’s Space Projection Models provide an assessment of space needs at Texas’ public universities, technical colleges, the Lamar State Colleges, and public health-related institutions. The models respond to an institution’s evolving characteristics that drive

its need for space, such as semester credit hours, programs, level of instruction, faculty, and Education & General Use (E&G) and research expenditures. The model predicts need in the areas of teaching, office, library, research, and support space.

In 1997, the space deficit for TTU was 242,100 gross square feet based on the THECB’s predicted space need of 2,704,296 GSF. Today, that same space deficit is calculated at 1,450,691 gross square feet based on the predicted space need of 4,378,530 GSF.

Implementation of the master plan will be ongoing and evolutionary, and its implications will extend well beyond the institutions’ strategic plans. In the end, the 2014 Campus Master Plan Update will become Texas Tech University’s most tangible visual expression of itself as a Tier One national research university and Texas Tech University Health Sciences Center’s manifestation as a nationally recognized health sciences university, and how each will thrive in the 21st century. The capital projects plan for each institution strives to forecast the future to support their mission.



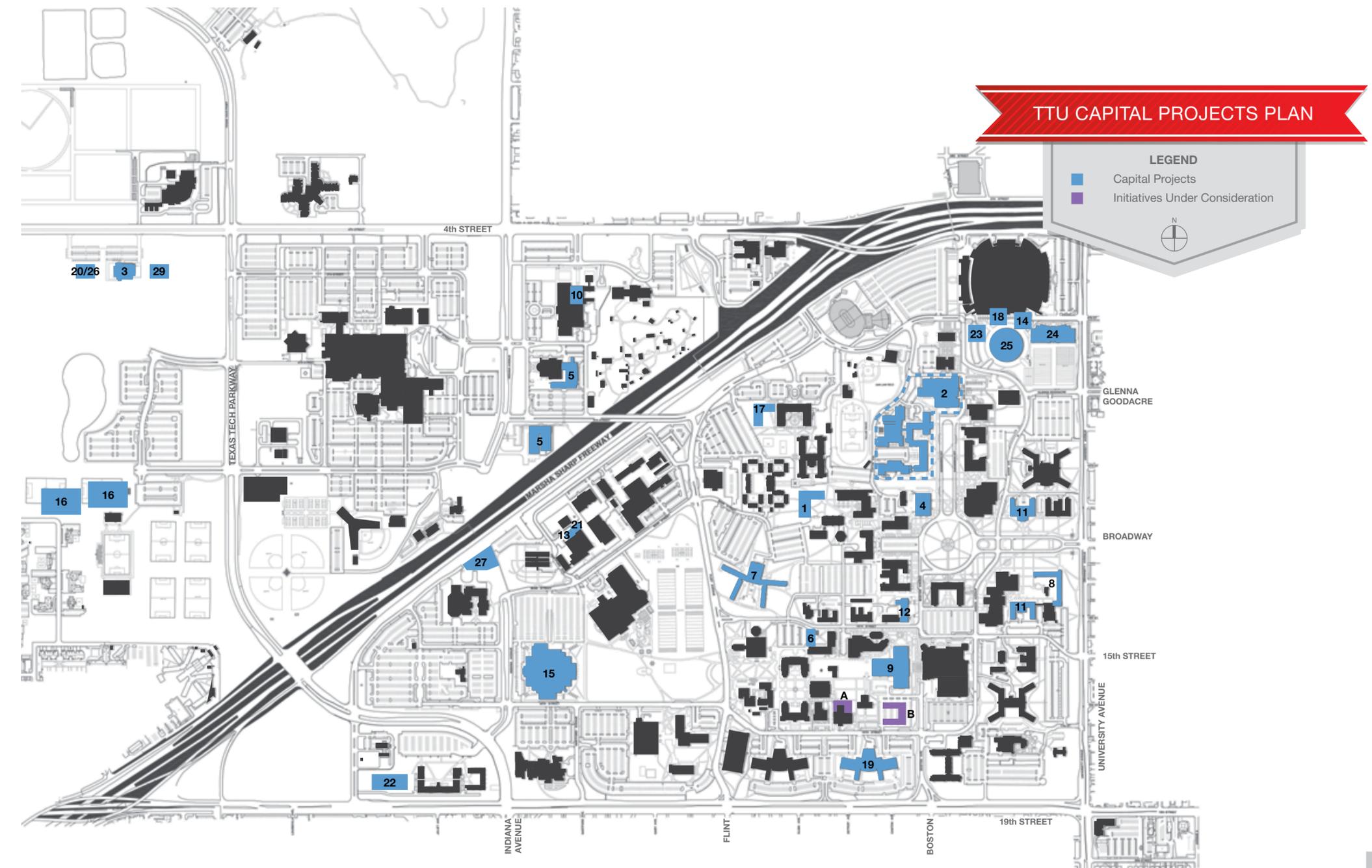
CAPITAL PROJECTS PLAN
Texas Tech University
May 16, 2014



Priority	Project Description	PROJECT TYPE						SQUARE FOOTAGE			BUDGET
		New Construction	Additions	Major Repair & Renovation	Land Acquisitions	Infrastructure	Leased Space	New Construction GSF	Major Repair & Renovation GSF	Educational & General NASF	Total Project Cost
1	Research Building (ESB II)	X						150,000		97,500	\$ 97,700,000
2	College of Engineering Expansion/Renovation (Ph II)		X	X					155,178	100,866	\$ 67,600,000
3	Research & Technology Park - Phase I (4th & Quaker)	X						41,000		0	\$ 29,045,000
4	Engineering & Materials Research Center Renovation (former Mass Communication Building)			X					73,562	44,137	\$ 30,700,000
5	University College Building Research Facility & Greenhouse/Headhouse	X		X				43,832	31,601	0	\$ 19,316,315
6	Plant & Soil Sciences Building	X		X				21,122	2,440	15,315	\$ 13,600,000
7	Stangel/Murdough Residence Halls Renovation			X					214,722	0	\$ 7,568,000
8	Weeks Hall Abatement and Renovation			X					84,373	50,624	\$ 24,200,000
9	Library Life Safety Upgrade			X					75,000	75,000	\$ 6,400,000
10	Museum Life Safety Upgrade			X					63,055	63,055	\$ 5,500,000
11	Doak Hall Renovation and Life Safety Upgrade			X					81,752	49,051	\$ 19,400,000
12	Agricultural Sciences Renovation			X					40,920	25,855	\$ 9,700,000
13	Utility Infrastructure Upgrade Phase II					X		0	0	0	\$ 6,750,000
14	Indoor Football Practice Facility	X							211,954	0	\$ 28,000,000
15	United Spirit Arena Renovations			X					17,752	0	\$ 4,300,000
16	Synthetic Turf Recreation Fields	X						0	0	0	\$ 5,785,000
17	Rawls College of Business Addition		X					38,000		0	\$ 15,000,000
18	South End Zone Renovation	X	X					113,639		0	\$ 65,000,000
19	Wall/Gates Residence Halls Renovations			X					175,633	0	\$ 6,550,000
20	Research Building II in Research Park	X						41,000		0	\$ 25,000,000
21	Utility Infrastructure Upgrade Phase III					X		0	0	0	\$ 7,000,000
22	New Residence Hall II	X						98,350		0	\$ 50,000,000
23	Athletic Facilities Upgrades			X					49,250	0	\$ 22,000,000
24	Football Training Facility Renovations			X					50,398	0	\$ 24,700,000
25	Indoor Track Facility	X						131,310		0	\$ 45,600,000
26	Animal Biosafety Level 3 Facility in Research Park	X						7,292		5,469	\$ 6,500,000
27	New Data Center	X						24,000		17,000	\$ 21,000,000
28	Real Property Purchase				X			0	0	0	\$ 6,000,000
29	Research Building III in Research Park	X						41,000		0	\$ 30,000,000
Total (Square Footage or Budget)								750,545	1,327,590	543,872	\$ 699,914,315

Initiatives Under Consideration

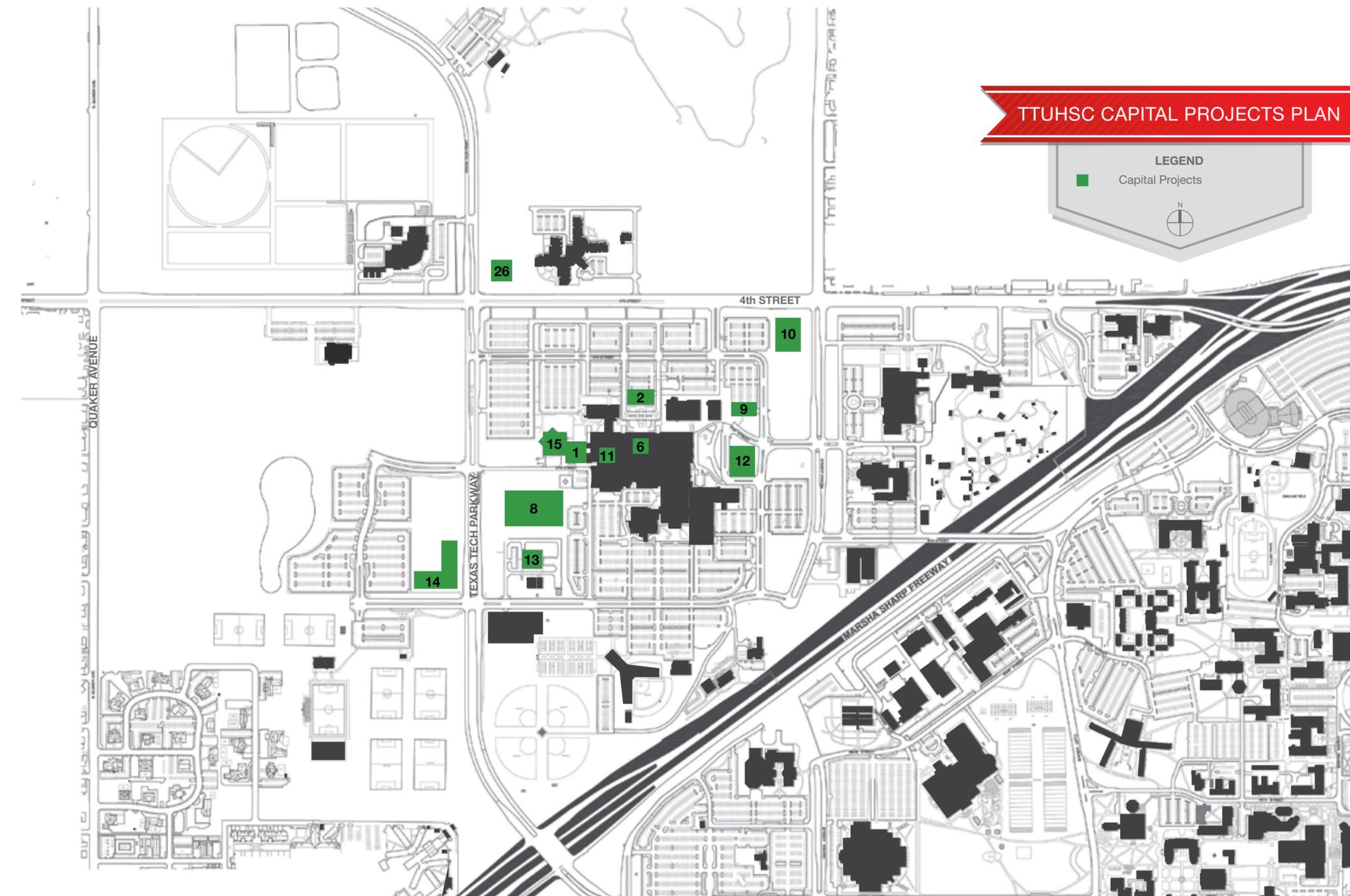
- A College of Visual and Performing Arts
- B New Music Building



CAPITAL PROJECTS PLAN
Texas Tech University Health Sciences Center
May 16, 2014

Priority	Project Description	PROJECT TYPE						SQUARE FOOTAGE					BUDGET
		New Construction	Additions	Major Repair & Renovation	Land Acquisitions	Infrastructure	Leased Space	Various HSC Campuses - New Construction GSF	Various HSC Campuses - Major Repair & Renovation GSF	Lubbock Campus - New Construction GSF	Lubbock Campus - Major Repair & Renovation GSF	Educational & General NASF	Total Project Cost
1	Lubbock West Expansion	X							100,000		44,000	\$ 38,700,000	
2	Lubbock Education, Research & Technology Building	X							100,000		44,000	\$ 45,000,000	
3	Permian Basin Academic Facility	X					54,000				23,760	\$ 19,800,000	
4	Amarillo Panhandle Clinical Simulation Center	X					21,000				13,200	\$ 9,750,000	
5	Abilene School of Pharmacy Addition		X				12,671				6,330	\$ 3,000,000	
6	Various Facility Modernization and Renewal Renovations			X						25,000	11,000	\$ 5,500,000	
7	Abilene Campus Expansion	X					40,000				24,000	\$ 14,250,000	
8	Lubbock VA Clinic	X							120,000		52,800	\$ 64,200,000	
9	Clinical & Academic Expansion (HCC)		X						42,000		18,480	\$ 21,800,000	
10	Dental School Building	X							150,000		66,000	\$ 76,300,000	
11	Lubbock LARC Expansion & Upgrades			X					39,000		11,000	\$ 18,300,000	
12	Lubbock Thermal Energy Plant & Parking Garage	X							193,000		7,920	\$ 45,000,000	
13	Lubbock Infrastructure Improvements				X				0	0	0	\$ 5,000,000	
14	Lubbock Childcare Center	X							20,000		0	\$ 7,700,000	
15	Lubbock Preston Smith Library Basement Build-Out			X					16,232		7,142	\$ 6,400,000	
16	Amarillo - Student Synergistic Center	X					10,000				2,000	\$ 6,000,000	
17	Odessa Clinic Building 3rd Floor Expansion		X				6,100				5,490	\$ 2,600,000	
18	Amarillo Renovate Women's Health & Research Institute			X				72,684			31,981	\$ 22,400,000	
19	SW SOP Dallas Renovation			X				4,115			1,810	\$ 4,200,000	
20	Jenna Welch Expansion		X				7,800				3,430	\$ 4,200,000	
21	Real Property Purchase - Lubbock				X				0	0	0	\$ 5,000,000	
22	Real Property Purchase - Abilene				X		0	0			0	\$ 5,000,000	
23	Real Property Purchase - Dallas				X		0	0			0	\$ 8,500,000	
24	Real Property Purchase - Amarillo				X		0	0			0	\$ 3,000,000	
25	Real Property Purchase - Permian Basin				X		0	0			0	\$ 3,000,000	
26	Lubbock Institute on Aging	X							69,444		30,555	\$ 40,700,000	
Total (Square Footage or Budget)							151,571	76,799	849,676	25,000	404,898	\$ 485,300,000	

Note: Projects in **BOLD** text are for the Lubbock campus



TTUHSC CAPITAL PROJECTS PLAN

LEGEND
 Capital Projects
 N

2024 CAMPUS VISION





BUILDING PALETTE

ARCHITECTURAL DESIGN GUIDELINES— OVERVIEW

The TTU/TTUHSC Master Planning Committee recognizes that in the great collection of higher education campuses that exist in the United States today, divergent fields of thought are practiced by colleges and universities as to what their individual architectural identity shall be. Some institutions, such as the Massachusetts Institute of Technology, the University of Cincinnati, and Arizona State University have adopted strategies that abandon the rigors of a historic revivalist architectural style in lieu of contemporary, project-specific new construction that eschews heritage in favor of designs that personify the building type or 21st-Century technology. Other institutions, like the University of Virginia, the quadrangular core of Stanford University, and the University of Colorado have remained largely rooted in the architectural styles that strongly contribute to the defining physical character of that institution. Both mindsets of campus design and planning are rooted in a unified objective to provide a value, pride and spirit of place to the students, faculty, and staff that live and learn at that institution. From an objective standpoint, while both approaches can aid in strengthening the quality and character of an institution, Texas Tech University has proudly affirmed the latter course in endeavoring to enrich its physical plant through the continued incorporation of various levels of the Plateresque Spanish Renaissance-revival style into the built campus fabric. The 2014 Master Plan Update continues to affirm that course and style as present and future course of architecture development on the Lubbock campus.

One could argue that few institutions in the United States, if any institution at all, has been so comprehensively shaped in its overall history and heritage by its defining architectural

style, quite like TTU. Our architecture shaped the decision of our first school mascot—the Matador—and by default shaped the decision of scarlet and black as our school colors. The seal of the university was designed by the campus design architect, William Ward Watkin. Therefore, it was more than logical that institution leadership opted to return to our roots of Spanish Renaissance revival architecture in 1997—a path that we continue on today.

Yet, the *Estilo Plateresco*—as it was known to the people of Spain five centuries ago—is not a simple or straightforward revivalist style. It is a complex and nuanced architectural ethic with its own range of aesthetic and formative elements that can easily be lost or misinterpreted. As well, the adherence to this specific Spanish Renaissance style bears with it the potential added cost of specialized ornament in stone, copper, wrought iron, and brick veneer. The leadership of the Texas Tech University System recognizes the challenges and issues that result with maintaining the effort to incorporate this style into future campus facility design in an era of ever-increasing construction costs. Furthermore, the purpose of the subsequent architectural design guidelines in this 2014 Master Plan Update are not meant to shackle design professionals with a limited framework and palette with which to work with. Rather, these guidelines are meant to inform the broad gamut of architects and engineers who across the nation are invited to design future edifices on the Lubbock campus as to the nuanced components to the Plateresque Spanish Renaissance-revival style.

THE SPANISH RENAISSANCE ARCHITECTURAL STYLE

What does the word *Plateresque* mean? In fact, the

Plateresque style of the Spanish Renaissance movement was one of multiple movements in architectural design in Spain begun around the 1490s, and the term *Estilo Plateresco* was developed in comparing the carved stone and wrought iron ornament on building facades to the prevailing style of ornate women's jewelry worn at that time, which among the growing Spanish middle and upper class was often made of silver, or *plata*. The rise of this particular architectural style in Spain coincidentally arrived at a time when Spain was catapulted to the position of a world power and empire, and when military success in Europe and the discovery of the New World brought unprecedented wealth and prosperity to Spain. At the exact same time in which Francisco Vázquez de Coronado and his party first arrived in the South Plains region where Lubbock sits today, ironically the *Estilo Plateresco* was at its apex of popularity across the Atlantic in Spanish lands.

The Spanish Renaissance architectural style—both aesthetically but also formatively—has proven remarkably well adapted to incorporation into the Texas Tech campus, largely due to the bioclimatic similarities between the South Plains of West Texas and the climate of the Andalusian and Castilian regions of Spain in which the style originally flourished. In reality, this particular architectural style is not merely a Spanish interpretation of the broader renaissance movement that began in Italy in the 15th century, but rather a “melting pot” of influences that merged to form the *Estilo Plateresco*. Though the last remnants of the Islamic Nasrid Dynasty was forced out of Spain in 1492, thousands of Islamic-trained artists and craftsmen remained in the country, and provided what became known as mudejar influences into Plateresque architecture through their remarkable skill in stone carving, wrought ironwork, and wood paneling. Spanish architects were often the sons of architects and builders who preceded them—designers who

BUILDING PALETTE (continued)

previously worked in the older gothic style, and therefore gothic elements like the flattened arch, finial and slender tracery continued to appear in renaissance-era work. The rise of the Spanish Empire and Iberian nobility meant that buildings were often emblazoned with ornate busts or coats of arms of the monarchy, or perhaps that of a prominent family. Stone, clay tile roofing, and occasionally brick or stucco were fashioned into built edifices that often veered from the geometric purity of the Italian renaissance movement to fit the irregular street and plaza patterns in which the buildings were situated. It was the conglomeration of such a broad range of these vernacular influences that combined to make the Plateresque style a truly nuanced architectural style.

The Plateresque movement was in reality short-lived, lasting barely 80 years, and was forced out of style by Juan de Herrera, the austere court architect of Spanish King Philip II in the 1560s. A revivalist resurgence within Spain in the 19th century coupled by a growing popularity in the United States of the Beaux Arts and City Beautiful movements following the World's Columbian Exposition in Chicago in 1893 ensured that the Spanish Renaissance style would abound anywhere in the U.S. where history had been heavily influenced by Spanish exploration and colonization. This emergence was benchmarked with the Spanish-inspired architectural design of the Panama-California Exposition of 1915 in San Diego by Bertram Grosvenor Goodhue (1869-1924), an exposition whose buildings today form the beloved

San Diego landmark of Balboa Park. Interestingly, at the recommendation of William Ward Watkin, who previously worked for Goodhue's firm, a team of architect Wyatt C. Hedrick, inaugural Texas Tech President Paul Horn and Board Chairman Amon Carter visited Balboa Park in early 1924 as a case study for the architecture of the Texas Tech campus. The design and initial construction of Texas Technological College in 1925 coincided—and in part helped spur—a popularity boom in the Spanish-revival architectural movement across the Southwestern United States. That boom would last well into the 1930s and beyond, and often superseded and outlasted other successive stylistic movements such as the rise of Art Deco and later, modernism.



Chemistry Building, North Facade Details



Administration Building - Bell Tower

ARCHITECTURAL DESIGN GUIDELINES

ARCHITECTURAL CHARACTER ZONES

- ZONE**
A
- ZONE**
B
- ZONE**
C
- ZONE**
D
- ZONE**
E
- ZONE**
F
- ZONE**
G

HISTORIC DISTRICT ZONE

This architectural character zone generally follows the boundaries prior established with the Texas Technological College Historic District. As the architectural flagship zone of TTU, any new construction – including additions to existing facilities – within Zone A shall adhere with the traditional formative, ornamental and material palette associated with the Spanish Renaissance-revival style present at TTU. Design professionals are not expected to generate floridly ornate designs as seen with the original development of the campus, but elements such as traditional stone profiles, modular brick masonry and classical proportions shall be adhered to. Where existing non-adherent buildings exist within this zone, future construction should be aimed to replace these buildings with more adherent additions to the campus fabric (though if the project is limited to additions, see non-conforming building note at right). New construction shall not be more than three (3) stories in height, excluding roof construction.

PERIPHERAL CAMPUS ZONE

Zone B is unique in that it largely extends inside and well beyond what is considered part of the TTU Academic Core. Thanks to a wide range of construction in the 1990s and early 2000s within the outer campus periphery – construction that adhered generally to the materials palette and general principles of the TTU Spanish Renaissance aesthetic – Zone B is today a large sum of the campus which still generally reflects the architectural spirit of the institution. Thus, new construction should adhere to this trend and designers should develop Spanish-revival designs, though they may be more contemporary than their Zone A counterparts. More simplified design forms and detailing may be used in this district, as shown later in this section. Alternative materials, such as stucco at upper floors and the use of utility-size brick in lieu of modular brick veneers, may also be employed. Prefinished sheet metal that resembles weathered, patina copper may also be utilized in lieu of sheet copper as well.

ATHLETICS ZONE

Beginning in the 1990s with the United Supermarkets Arena, TTU embarked on developing athletics facilities that are far more consistent with the Spanish Renaissance-revival spirit of the campus than the often utilitarian athletics facilities that had been built for the previous seven decades prior. Today, except where budget constraints are notably limited, athletics facilities within Zone C are expected to adhere with the same design strictures established for Zone B. Certain existing buildings, such as Rip Griffin Park, may not adhere to Zone B or C principles, and therefore additions should be made that remain complementary to the entire existing building composition. Otherwise, new construction is expected to complement the existing Spanish aesthetic of the TTU Campus.

CULTURAL ZONE

Due to specialized projects with unique programmatic objectives developed within the northern edges of campus in the 1960s and 1970s – namely the Museum of Texas Tech University and the National Ranching Heritage Center (NRHC) – the TTU Cultural Zone consists of facilities that are vernacularly one-of-a-kind on the TTU campus. Future new construction, development, and additions to Zone D should therefore be carefully adherent to the unique existing architectural heritage of those two facilities. Design professionals are strongly encouraged to investigate the existing facilities and develop a formative and material palette specifically complementary to the Museum and NRHC sites, respectively, rather than vernacular such as that present in Zones A, B, or F.

ANCILLARY ZONE

Ancillary facilities, such as buildings that house physical plant personnel, systems or administrative support functions all reside within Zone E. This zone, though vital to campus functionality, should not be regarded as a zone where close attention to Spanish Renaissance-revival detail should be adhered to. That said, building material palettes should be generally observed, where modular- or utility-size campus brick blends are utilized to ensure that additions or new construction visually blends into the campus fabric at a cursory level. However, some buildings in Zone E, like the Texas Tech Plaza tower at the southeast corner of campus, are not reflective of the general campus material palette. Additions or construction near or to these outlier buildings should be performed to aesthetically match existing construction.

MEDICAL ZONE

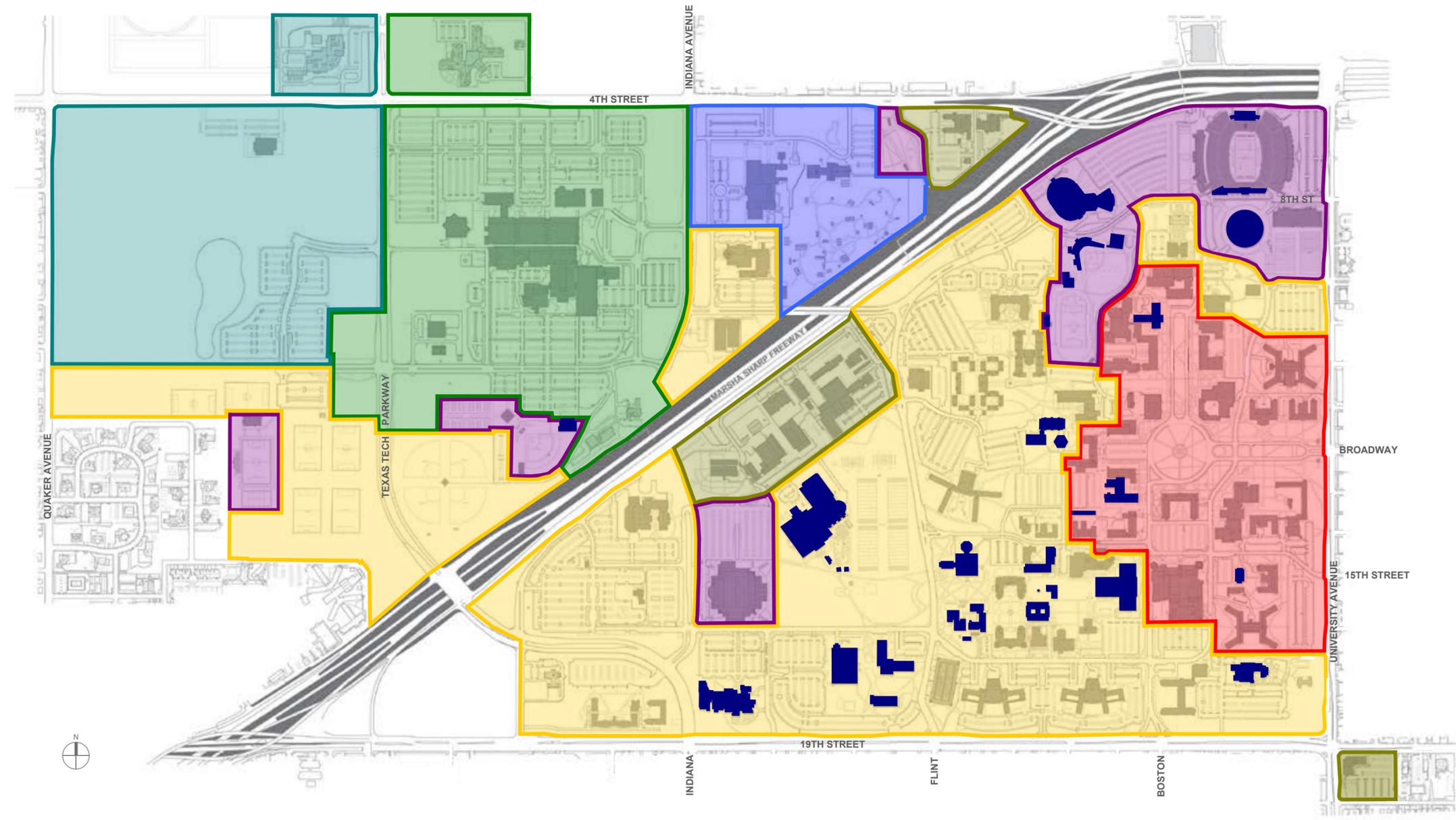
Design of the Texas Tech University Health Sciences Center in the 1970s spawned what today is a totally different architectural style for the medical architectural character zone. Facilities at TTUHSC, as well as UMC are far more vertical in scale, consisting of more modernist forms, storefront and curtain wall systems with tinted glazing and dark anodized bronze mullions, and the use of sandy-buff precast concrete panels. More recent additions to TTUHSC have resulted in the introduction of TTU-blend modular brick into that palette. All of that said, future development within this district should adhere to the design principles outlined for Zone B – in particular for those future free-standing facilities proposed in Zone F that will be free-standing and distanced from the main TTUHSC Lubbock Campus Building Complex.

RESEARCH PARK ZONE

Through the recent planning and development launch to lands west of TTUHSC, the TTU Research Park has the opportunity, like TTUHSC four decades ago, to define itself with its own unique architectural vernacular. The intention in Zone G is to remain respectful and generally reminiscent to the architectural character of Zones A and B, while creating an environment that is indicative of a high-tech, synergistic environment. Material palette elements such as TTU-blend modular- or utility-size brick, clay tile roofing, and cast stone should be complemented with curtain wall glazing, daylight interior spaces, and modern detailing. While more similar to Zone B than not in terms of general character, buildings in this zone will not be required to adhere to more Spanish-revival principles of massing and development.

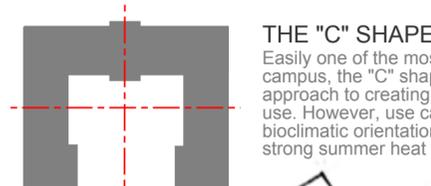
EXISTING NON-CONFORMING BUILDINGS ON CAMPUS

Like practically every classically-inspired higher education institution that continued to grow in the modernist vein of design that dominated the 1950s, 1960s, and 1970s, Texas Tech University today retains hundreds of thousands of square feet of existing facilities that do not conform to the original or present-day architectural character objectives for the campus. Many buildings, such as the Biology Tower or Computer Center, cannot be easily reconciled with the Spanish Renaissance style of the institution. Where additions to those buildings highlighted within Zones A, B, or C in blue may occur, those additions *should be performed to compliment the existing facility's design and construction as best as possible*. Please note that this does not apply to existing nonconforming buildings in Zones D or E.



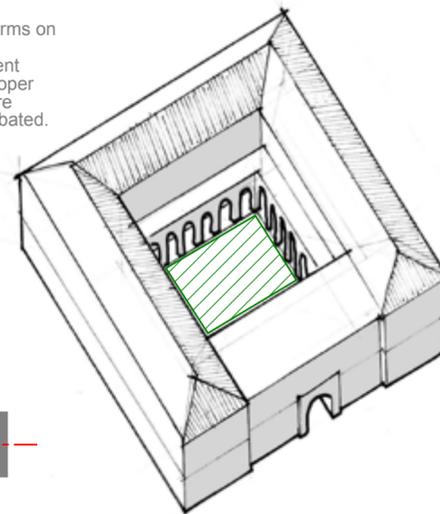
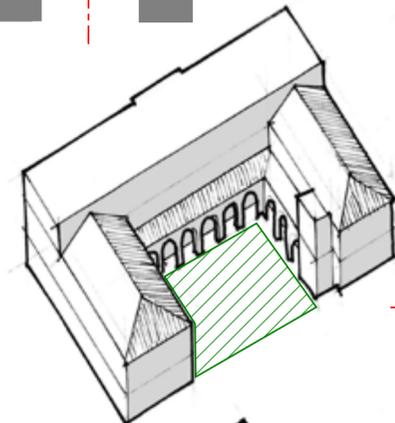
BUILDING MASSING & SHAPE GRAMMARS

The heritage of vertical construction at Texas Tech University is very much based upon both the axial-driven Beaux-Arts credo of the campus plan, but also upon the bioclimatic and formative heritage of the buildings of Plateresque Spain. Plateresque buildings often consist of relatively narrow building masses with entry points defined by either the symmetrical tendencies of the renaissance movement, countered by the often-external asymmetries of the irregular urban environment. TTU is very much conducive to these factors, and the sample building forms below provide the designer with an understanding of source vernacular opportunities in the development of future new construction or building additions.



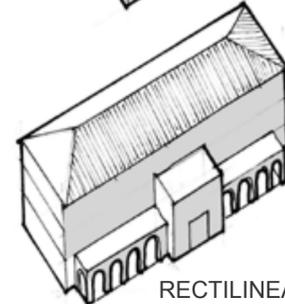
THE "C" SHAPE

Easily one of the most recognizable building forms on campus, the "C" shape affords a cost-effective approach to creating a courtyard area for student use. However, use caution to determine the proper bioclimatic orientation of the courtyard to ensure strong summer heat or cold winter winds are abated.



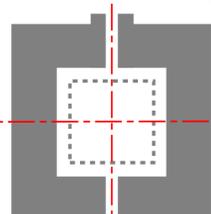
CLOISTERED FACILITY

William Ward Watkin's original master plan for Texas Tech called for a sizeable number of such cloistered structures – very much reflective of the ecclesiastical heritage of Spanish collegiate architecture. Consider not including arcades on all four sides of the interior courtyard for as a cost-saving option, and realize that *salle-portes* must be designed to allow for Grounds Maintenance access into the cloistered courtyard.



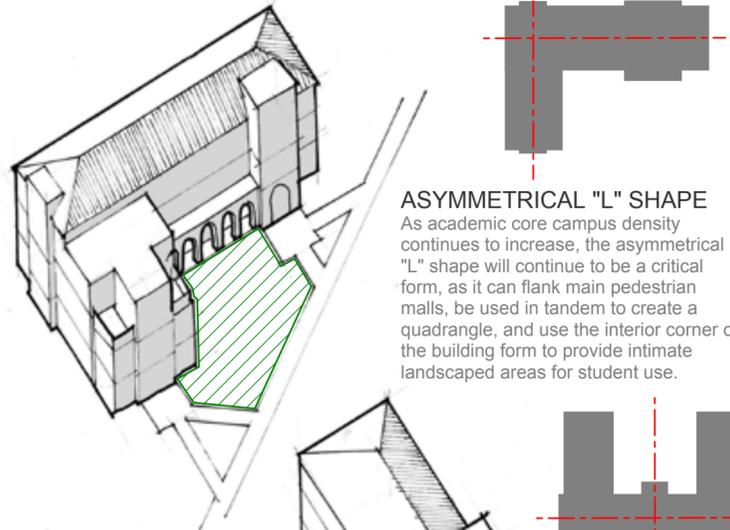
RECTILINEAR INFILL

The simple rectangle is still a critical element to planning infill on the TTU campus, and as a terminus building form for major malls and axes. Often in urban Spanish architecture, *maestro mayores* responded to the irregularity of their urban landscape by designing entries and facades asymmetrically with off-axis entry points and primary building masses.



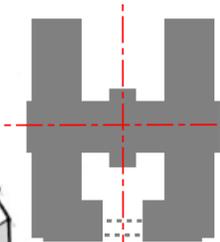
MULTI-WING/"H" SHAPE

The "H" shape form was a result of the evolutionary development of a more linear, Spanish Renaissance-responsive plan form for facilities such as residence halls which require wing extensions. As shown at right, consider engaging a courtyard with building mass extensions to produce a more intimate landscaped space for student use.

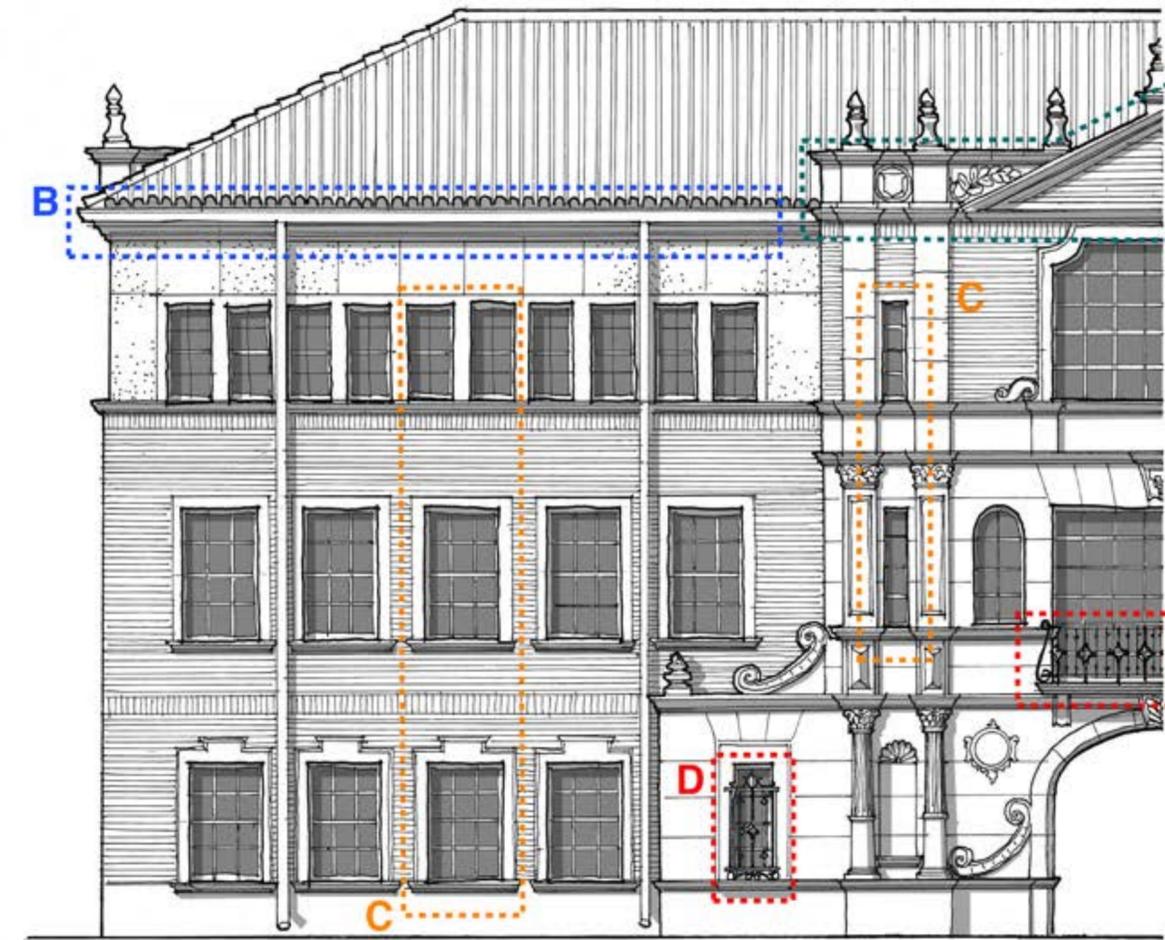


ASYMMETRICAL "L" SHAPE

As academic core campus density continues to increase, the asymmetrical "L" shape will continue to be a critical form, as it can flank main pedestrian malls, be used in tandem to create a quadrangle, and use the interior corner of the building form to provide intimate landscaped areas for student use.



UNDERSTANDING PLATERESQUE FACADE DESIGN



SAMPLE TEXAS TECH UNIVERSITY BUILDING FACADE n.t.s.

The purpose of the above hypothetical elevation is not to prescribe specific design limitations to design professionals, but to provide a glimpse into the unique factors and elements that make the Plateresque Spanish Renaissance-revival style at TTU so unique, and at the same time, so difficult to execute. Despite these challenges, a broad range of traditional, transitional, and contemporary responses to this style can be achieved.

A GABLES & PARAPETS

Hip roofs are always permissible on the TTU Campus, but in the case of gable roof terminations, the roof should never terminate in a simple pediment. Flanking parapets with pilasters, fligree, or bracketing elements such as ailerons should be considered, so as to prevent the gable pediment from having a Grecian or Roman appearance.

B EAVES & TRIM

In the case of pitched clay barrel-tile roofs, a relatively simple transition should be made from the roof eave to the vertical building facade below. Texas Tech University was originally designed with Castilian Spanish-revival principles of design in mind, which rarely employ pronounced eaves, fascias and soffits to building facades. Thus, a stone ogee-profile (or simplified transitional equivalent), along with exposed metal gutter (copper within the Academic Core; prefinished metal in the peripheral campus), should be employed.

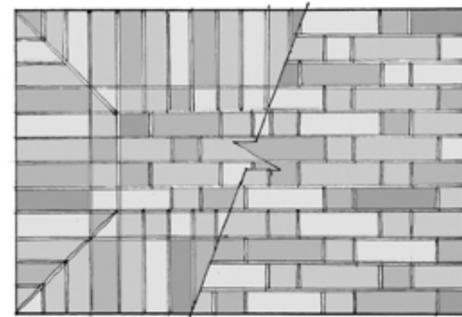
C VARIATION IN FENESTRATION

The modern era of student residential, academic building, office building and laboratory design at TTU often presume the need for vertically "gridding" a facade of windows in both the vertical and horizontal axis. Design professionals should be reticent of the tradition of "imperfect" variation in the placement of windows and openings in Plateresque architecture. In particular, smaller, more densely-spaced windows should be considered on upper most floors, while smaller windows near entries and vertical circulation points should be considered.

D SPANISH REJAS

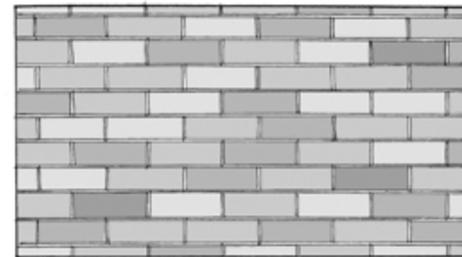
Rejas, or elements of Spanish-inspired ironwork, have long been a fundamental element of design at TTU. *Rejeras* have transitioned from their functional role five centuries ago as a piece of decorated security infrastructure into elements of decorative embellishment on building facades. In the examples at left, openings near the main entry of a building, or perhaps a balcony, or even a wrought iron grille over a window transom can be incorporated into building facades.

MASONRY VENEER SYSTEMS



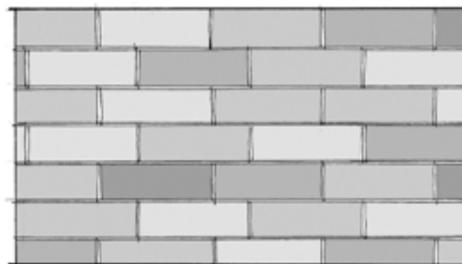
FLEMISH BOND PATTERNS

Original buildings built at TTU that had brick facades were clad in a Flemish bond pattern with modular brick. In cases such as the Administration Building, veneer panels of Flemish-bonded brick were surrounded on all sides with an inner rowlock course bounded with an outer soldier course, and mitered at all corners, as seen at far left. Masonry veneers today are not interlocked into the substrate masonry as they were 90 years ago, making this bonding an expensive, inefficient system. It should only be used in the Historic District, or as a limited detail panel, or in an addition to a historic building that has Flemish bonding.



RUNNING BOND PATTERNS

The vast majority of buildings on the TTU Campus incorporate modular brick with a 1/2-measure running bond coursing system. Within most of the campus, running bond brick veneer is an acceptable system. Design professionals should utilize the current Acme Brick Perla, AR Plant blend ratios prescribed in the *Design and Building Standards*, unless when matching brick to another existing building on campus in an addition or expansion project.



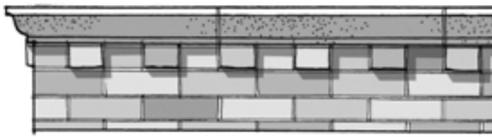
UTILITY-SIZE BRICK

Recently, TTU has had success in utilizing utility-size brick (3 5/8" W x 3 5/8" H x 11 5/8" L) in a 1/3-measure running bond pattern. This cost-efficient method should only be utilized in the peripheral academic core and periphery of the campus, and not within the Historic District. Brick color blending ratios should be specified same as in traditional modular-sized brick.

The thoughtful incorporation of brick and stone into buildings has always been a bulwark component to the architectural heritage of Texas Tech University. Below is an overview of the gamut of acceptable masonry systems, as well as a review of coursing and finishing details that are acceptable for use on the TTU Campus today. For specific masonry technical requirements, specific stone color and brick blend, design professionals are encouraged to consult the most recent edition of the Texas Tech University System *Design and Building Standards*, a document which is available from TTU System Facilities Planning & Construction.

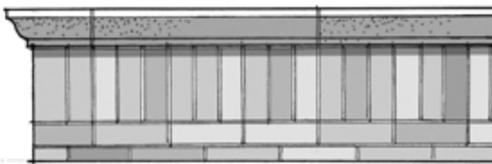
DENTIL COURSES

Seen at right below the ogee-profile stone belt course, dentil courses executed as alternating protruding brick headers have been used at TTU for decades as a terminating veneer detail on masonry facades.



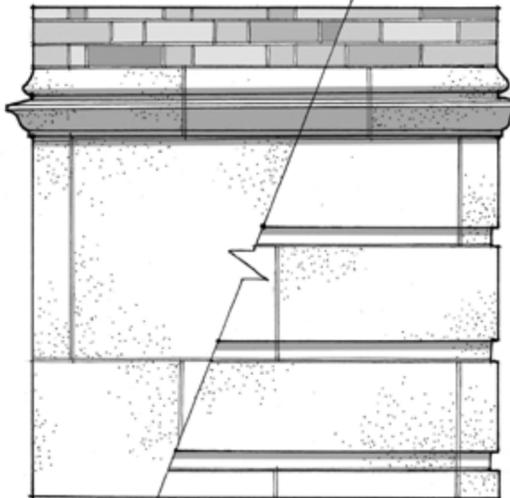
SOLDIER COURSES

Like dentil courses, soldier courses can be utilized as a simple, but effective masonry detail to terminate a veneer facade, denote a water table elevation or floor plate.

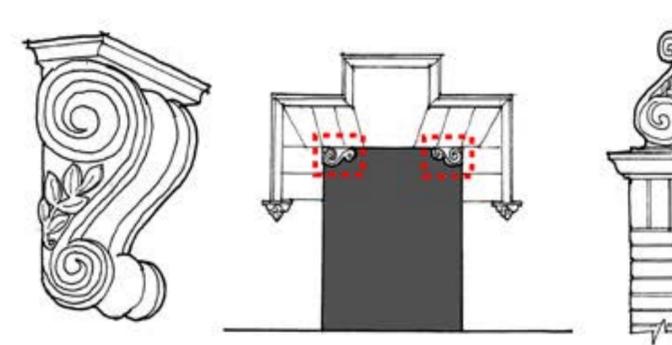


USE OF STONE VENEERS

Stone veneer, in the form of cut Oolitic limestone or Cast Stone Institute-approved cast stone, is a vital element to the material palette at Texas Tech. The original stone used at TTU was a softer cream-gray limestone quarried from Lueders, TX, approximately 35 miles north of Abilene. Nominal 4-inch veneer is often used on facades for its interchangeability with brick. On more classically-detailed facades, such as those in the Historic District, belt profiles such as the ogee (seen upper right) should be adhered to, but simpler transitional or contemporary profiles may be used within the peripheral campus. Reveal banding, such as at far right, has also been utilized with success at water tables and ground floor veneers.

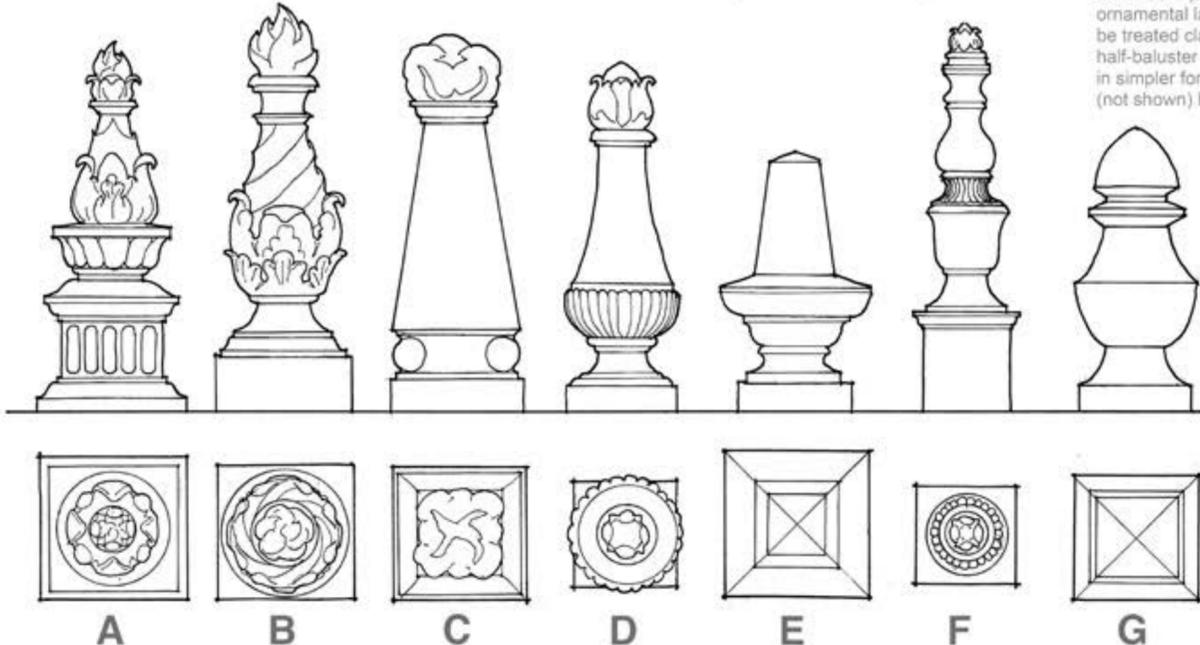


DESIGN ELEMENTS IN SPANISH RENAISSANCE ARCHITECTURE

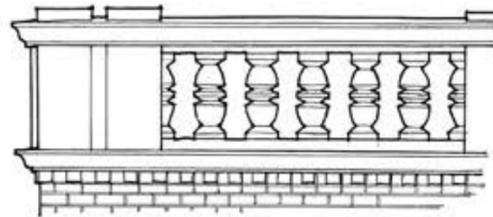


ANCON SCROLL BRACKETS

The ubiquitous ancon, seen at far left, has been used in a variety of ornamental roles at Texas Tech University, including as header brackets at square openings (see center image), as topping elements to pilasters (see right image in group at left), and also at the underside of balconies, at the base of pilasters at protruding parapets, as keystones, or in lieu of ailerons at the flanking edges of main facade features. Though more ornate versions are shown here, ancon brackets can be simplified to basic forms, particularly in more transitional or contemporary iterations on the Spanish Renaissance style at TTU.



Upper roof parapet balustrade (finials omitted); Rawls College of Business, 2011-2012



Third floor window balcony panel, Old Library (Math & Statistics) Building, 1938



PARAPETS & BALUSTRADES

Decorative parapets, stone balcony guards, and balustrades are also an important element of the ornamental language at Texas Tech University. In balustrades, as seen above, balusters should be treated classically – that is to begin and end a course of balusters with an engaged half-baluster inset in the adjacent post. Solid panels may use scrollwork, heraldic escutcheons, or in simpler forms, basic brick panels as well to accomplish the design of a parapet. Stone filigree (not shown) has also been used, but is expensive and difficult to anchor.

FINIALS

Perhaps one of the most readily recognizable pieces of ornament at Texas Tech is the Spanish-stylized finial, as hundreds of them can be spotted across campus. The key for design professionals to realize is that whether a facility is traditional or contemporary, the finial should be regarded in its Spanish inspiration as organic and unpredictable. More classical earlier finials on campus were of course more ornate, and incorporated volutes, acanthus leaves, and torch flames into their design. More modern iterations have endeavored to retain the organic nature of the finial in a more simplified form. At left are an assortment of finials seen at Texas Tech for comparison:

- A East & West Entries, Administration Building, 1925
- B "Eternal Flame" Finial, East & West Facades, Administration Building, 1925
- C Carillon Tower "Cotton Top" Finial, Administration Building, 1925
- D Chemistry Building Colonnade Parapet, 1928
- E Old Library (today Mathematics & Statistics), 1938
- F Home Economics Addition (today North Human Sciences), 1952
- G Jerry S. Rawls College of Business Administration, 2011-2012

ARCHITECTURAL DESIGN GUIDELINES

ARCADE & COLONNADE DESIGN GUIDELINES

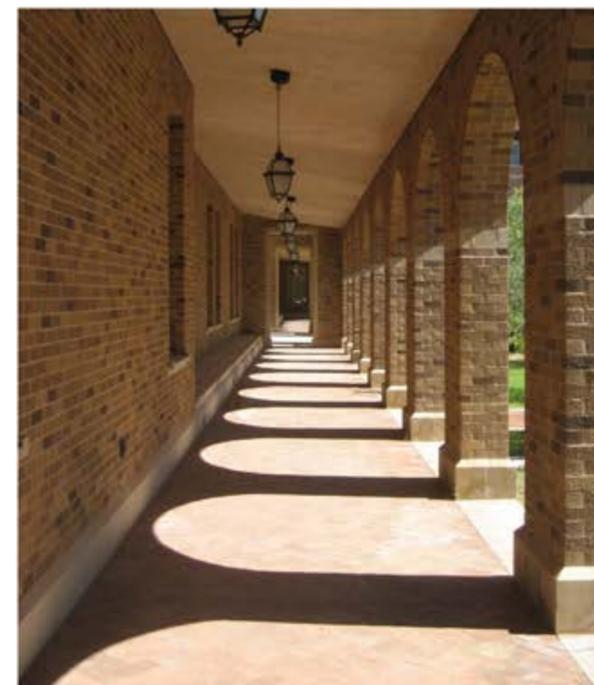
Arcades and colonnades are a crucial element to the formative vocabulary found at Texas Tech University, and have been so since the establishment of the original campus master plan in 1924. Much of the campus - especially the present-day Engineering Key and Math & Science Quadrangle - were originally envisioned by design architect William Ward Watkin to be largely framed by a cloistering network of colonnaded arcades.



Right: West Engineering (today Electrical Engineering) was completed in 1927 and illustrated Watkin's vision for a simpler colonnade system for what is today the Engineering Key. Note the "triple rowlock" system utilized to frame the arches in the colonnade.



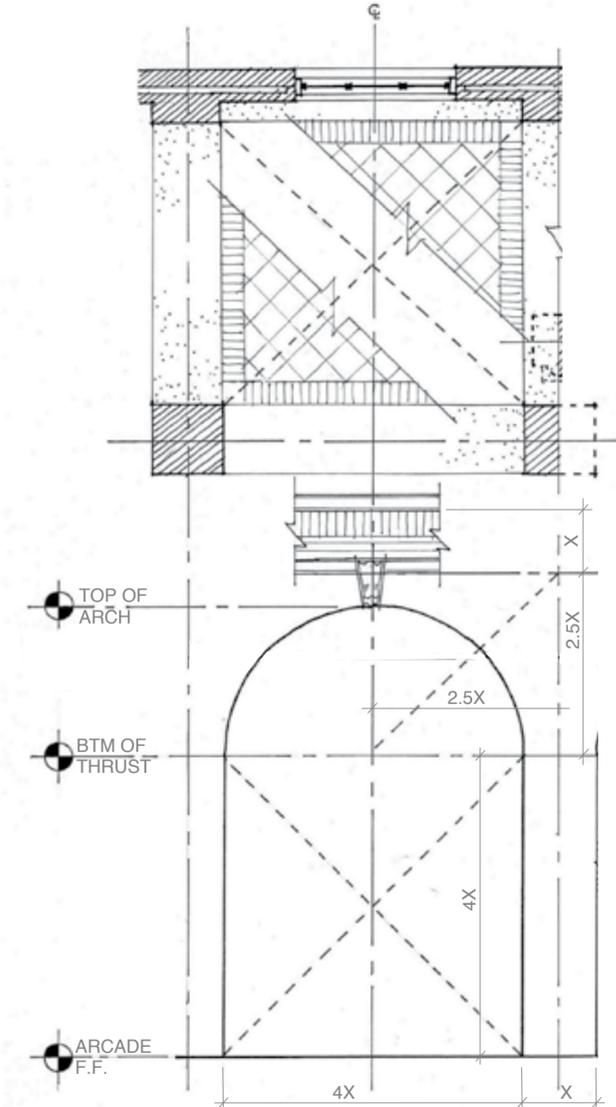
Above: The south colonnade to the Administration Building (1925) is an example of the use of engaged columns in the colonnade itself, as well as domical vaulting over the arcade itself.



Above: Experimental Sciences (completed 2006) is a more recent example of the implementation of colonnaded arcades onto campus facilities. Here, a canted plaster ceiling is in place over the arcade.

ARCHITECTURAL DESIGN GUIDELINES

ARCADE & COLONNADE DESIGN GUIDELINES

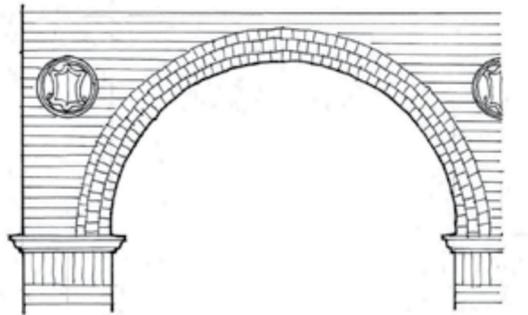


As seen in the orthographic diagrams at left, the design of colonnades at TTU is as much reliant on geometric science as it is upon Renaissance-era aesthetics. The vast majority of colonnaded arcades designed at TTU since 1924 are *araeostyle* in plan scale – that is that openings are scaled between columns at a ratio of 4:1 – or an opening four times the width of the column itself. Transversely, the depth of the arcade is usually equal to the width of the arched opening itself. This can be seen in model elevation below, where X equals the face width of the column.

The proportional height of a typical colonnade opening is traditionally square from finish floor elevation to bottom of arch thrust, though this is not always the case. At two conditions – the Administration Building and the Math & Science Quadrangle – facilities designed by Watkin and Hedrick followed a slightly different ratio – the *Golden Ratio*. At colonnades at both the Administration and Chemistry buildings, the colonnades appeared more slender, as arched openings from finish floor elevation to top of arch equaled *phi* (ϕ), or approximately 1.618 times the width of the opening, therefore creating a golden-section ratio in profile. This produces an opening about 8 percent taller than the typical profile seen in the diagram at left, but is an opening more consistent with Renaissance-era arcades built in Spain. Both proportions however are acceptable on the TTU Campus.

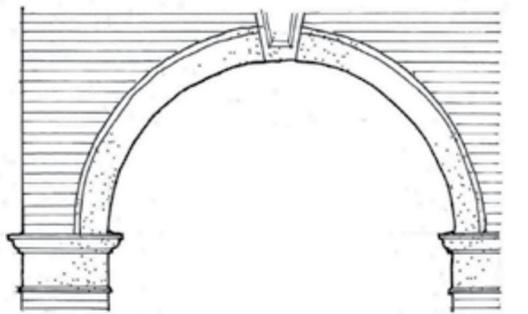
DOUBLE & TRIPLE ROWLOCKS

Commonly found in the Engineering Key and recently-built structures such as Experimental Sciences, double or triple rows of rowlock courses of brick can be laid to form the locking ring to the colonnade arches. In this case, stone escutcheons are shown on the flanking spandrels between each arch.



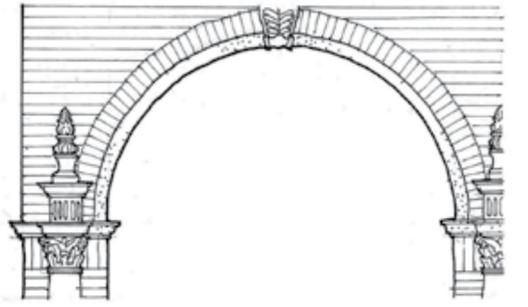
STONE-FRAMED ARCHES

Should the project budget afford it, continuous stone headers to the arches of a colonnade have been utilized at the Administration Building, and in more recently-built facilities such as the Football Training Facility. In the design at right, a simple keystone replaces an ancon bracket at the apex of the arch, and a more notable stone thrust detail similar to that used at the Old Library (today Mathematics & Statistics) is shown as well.



STONE & SOLDIER COURSES

The more ornate archway shown at left incorporates both engaged Corinthian columns and Plateresque finials into the colonnade facade. As for the arch itself, in a detail similar to that used at the Chemistry Building (1928), a header of continuous stone is shown along with an outer perimeter soldier course as well, all of which terminates into an ornate ancon keystone.



HISTORIC DISTRICT BUILDING PALETTE



Arcade Between Science and Mathematics Buildings



Mathematics & Statistics, Finials



Education Building

Spanish parapet crown w/ stone-bordered rosette opening

Consider arches over major entry or facade focal point windows

Castilian stone trabeation at edges to facade

Scroll aileron at facade setback transitions

Arch spandrels may be blank, fitted with shields, escutcheons, scroll work, acanthus leaves or arabesques

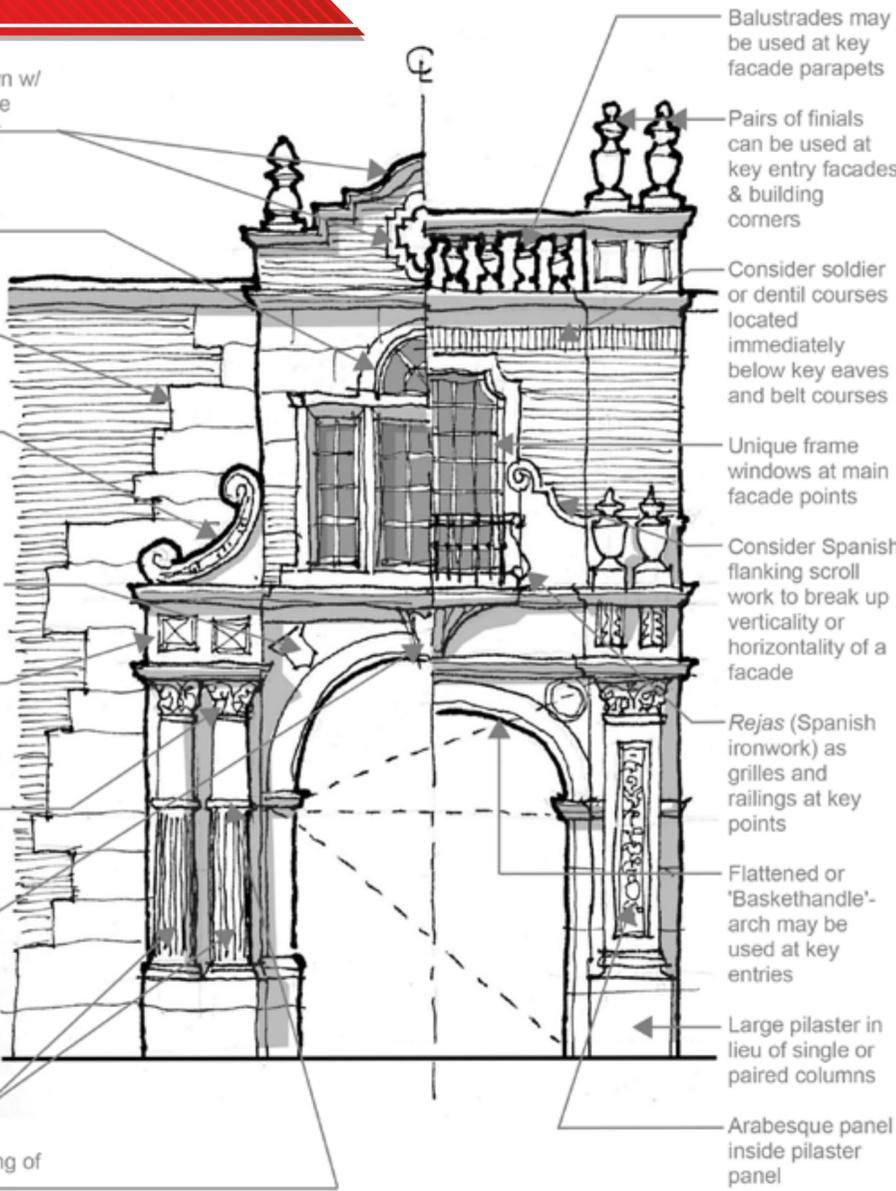
Consider a plinth block over engaged columns or pilasters

All free-standing or exposed columns should be capped w/ a Corinthian capital

Consider use of keystones (plain or detailed) at major arches

Accouplement (pairs) of columns may be used at major entries, but not for running colonnades or facade patterns

Band-interrupted fluting of columns at entries



Balustrades may be used at key facade parapets

Pairs of finials can be used at key entry facades & building corners

Consider soldier or dentil courses located immediately below key eaves and belt courses

Unique frame windows at main facade points

Consider Spanish flanking scroll work to break up verticality or horizontality of a facade

Rejas (Spanish ironwork) as grilles and railings at key points

Flattened or 'Baskethandle'-arch may be used at key entries

Large pilaster in lieu of single or paired columns

Arabesque panel inside pilaster panel

Consider segmented pilasters at parapets

Ancon or scrolled console bracket

Consider varying stone trim around unit windows

Un-crested conch recesses have been used on campus as a detail

Aedicule with finial over key windows

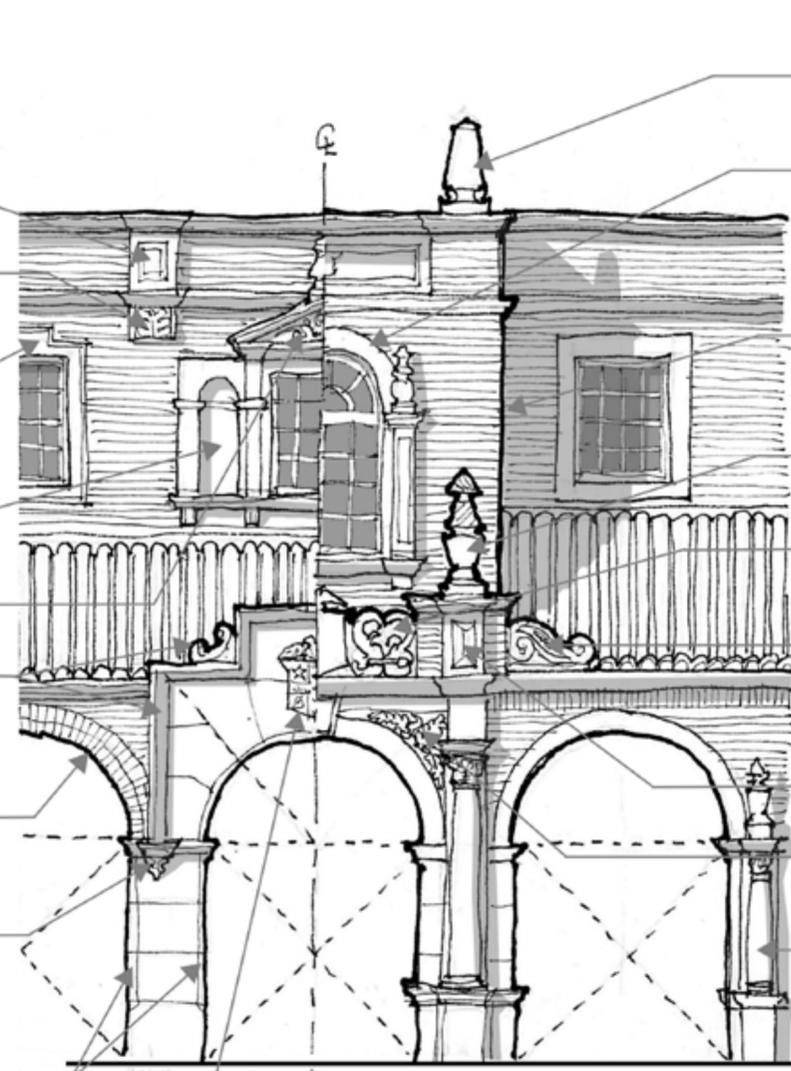
Square drip cap with minor aileron

Lesser colonnades can have a double- or triple-rowlock brick header

Terminate drip cap with an acanthus pedestal

Chamfered corner w/ tapered termination at water table elevation

Medallion, shield or escutcheon over key entry arch



Roman finials can be used at lesser facades or at parapets

Arched or crowned windows can be flanked with pilasters and/or finials; provide scrolls at base of any protruding pilaster

Projected facade over main arch helps to define entry point into building

"Eternal flame" pilasters are often used on campus

Carved stone filigree w/ centrally-located shield figure

Lateral ancon brackets can be used to transition from one belt course elevation to another

Raised anget panel in a protruding pilaster

Acanthus leaves detailing the spandrels to an arch

Consider stone headers and engaged columns and finials at high-importance colonnades



Administration Building, Northeast Corner



Chemistry Building



Terry Fuller Petroleum Engineering Research Building



English/Philosophy Building, Tower

ACADEMIC/PERIPHERAL PALETTE



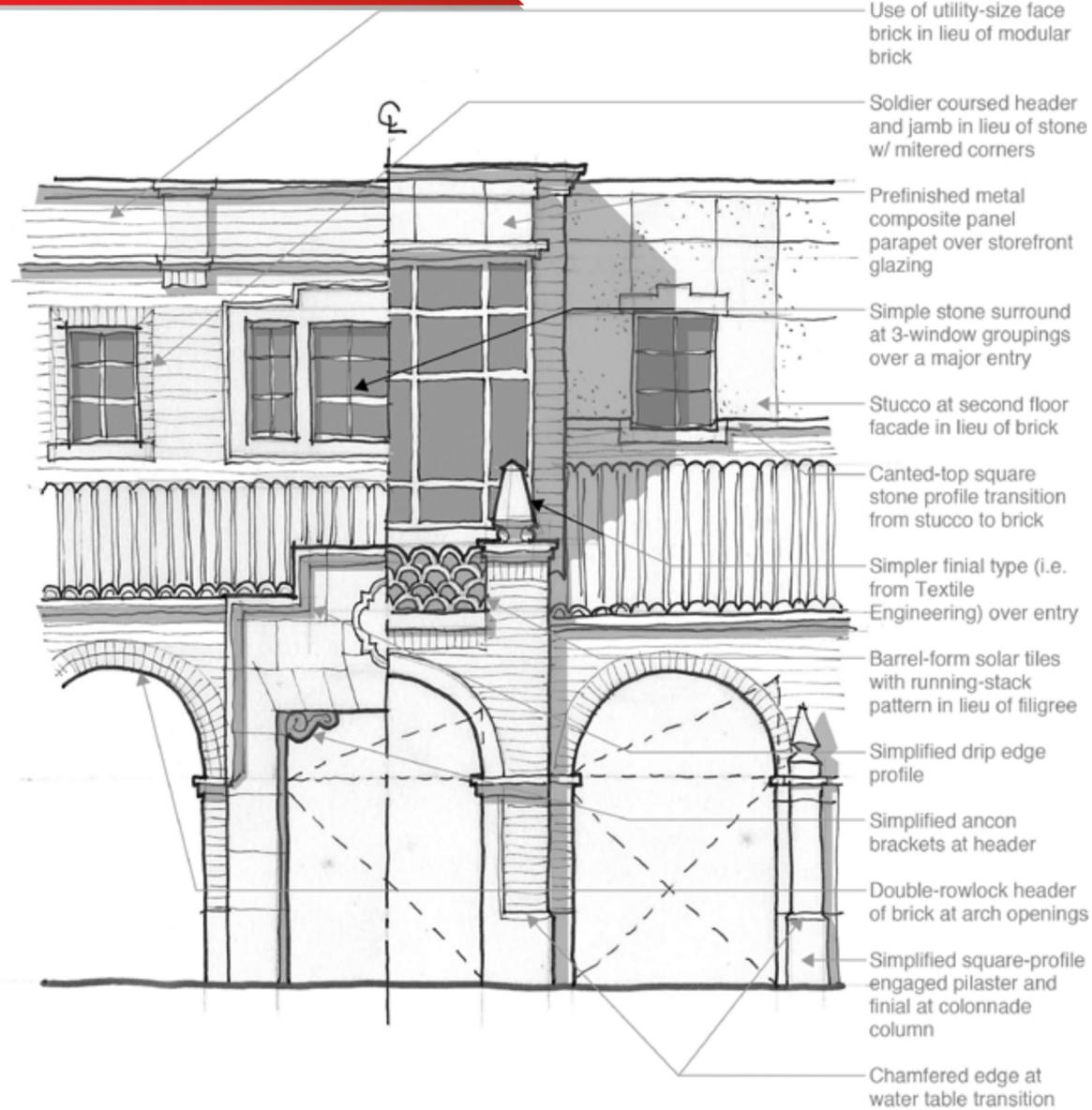
Experimental Science Building



KENT R. HANCE CHAPEL

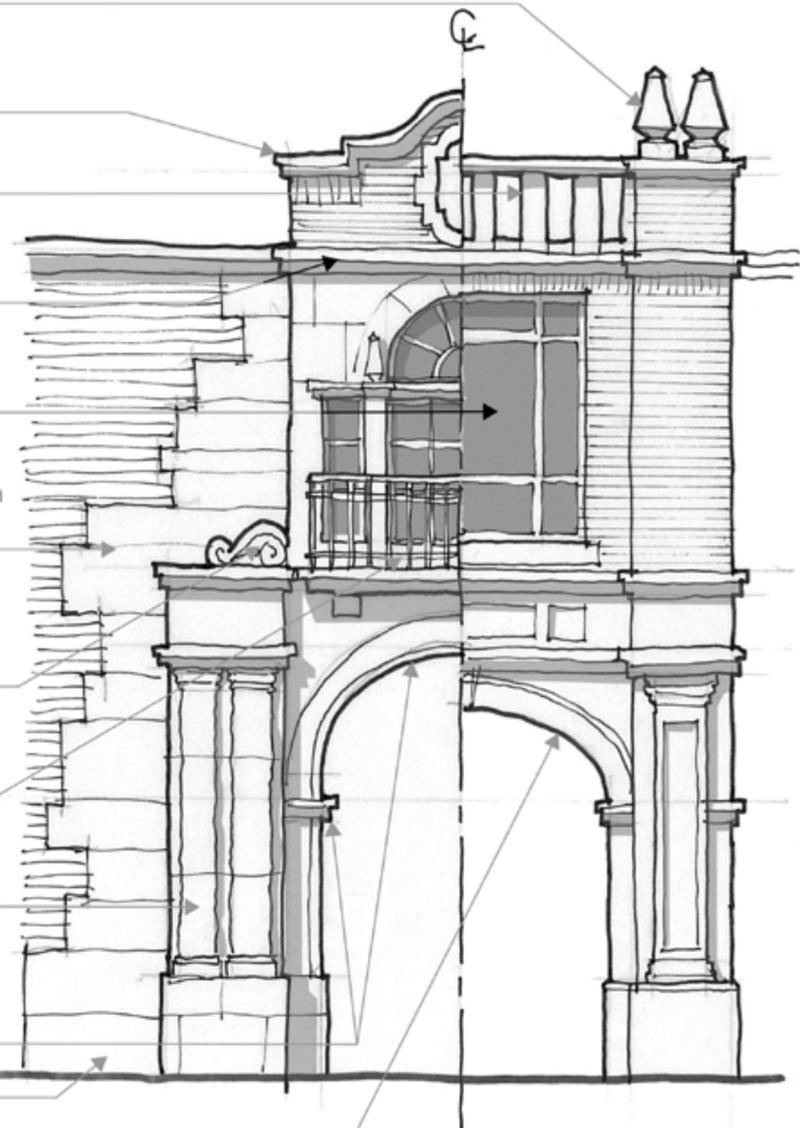


Northwest Corner of Student Union Building



- Use of utility-size face brick in lieu of modular brick
- Soldier coursed header and jamb in lieu of stone w/ mitered corners
- Prefinished metal composite panel parapet over storefront glazing
- Simple stone surround at 3-window groupings over a major entry
- Stucco at second floor facade in lieu of brick
- Canted-top square stone profile transition from stucco to brick
- Simpler finial type (i.e. from Textile Engineering) over entry
- Barrel-form solar tiles with running-stack pattern in lieu of filigree
- Simplified drip edge profile
- Simplified ancon brackets at header
- Double-rowlock header of brick at arch openings
- Simplified square-profile engaged pilaster and finial at colonnade column
- Chamfered edge at water table transition

- Angular pair of finials in lieu of more ornate elements
- Simplified Spanish parapet crown w/ opening
- Simple square-profile balusters
- Angular cross-section stone belt course in lieu of ogee profile
- Use of large storefront glazing in lieu of a unit window design
- Castilian stone trabeated transition from entry facade to field brick
- Maintain some less ornate version of ancon bracket to flare from narrow to wider facade
- Simplified Spanish *reja* balcony rail over entry arch
- Simple flush stone pilasters with limited detail at capitals
- Angular stone details, brackets and profiles around entry (in lieu of traditional details)
- Stone flush water table
- Flattened or "basket-handle" arch with simple keystone



BOB L. HERD DEPARTMENT OF PETROLEUM ENGINEERING



Student Union Building

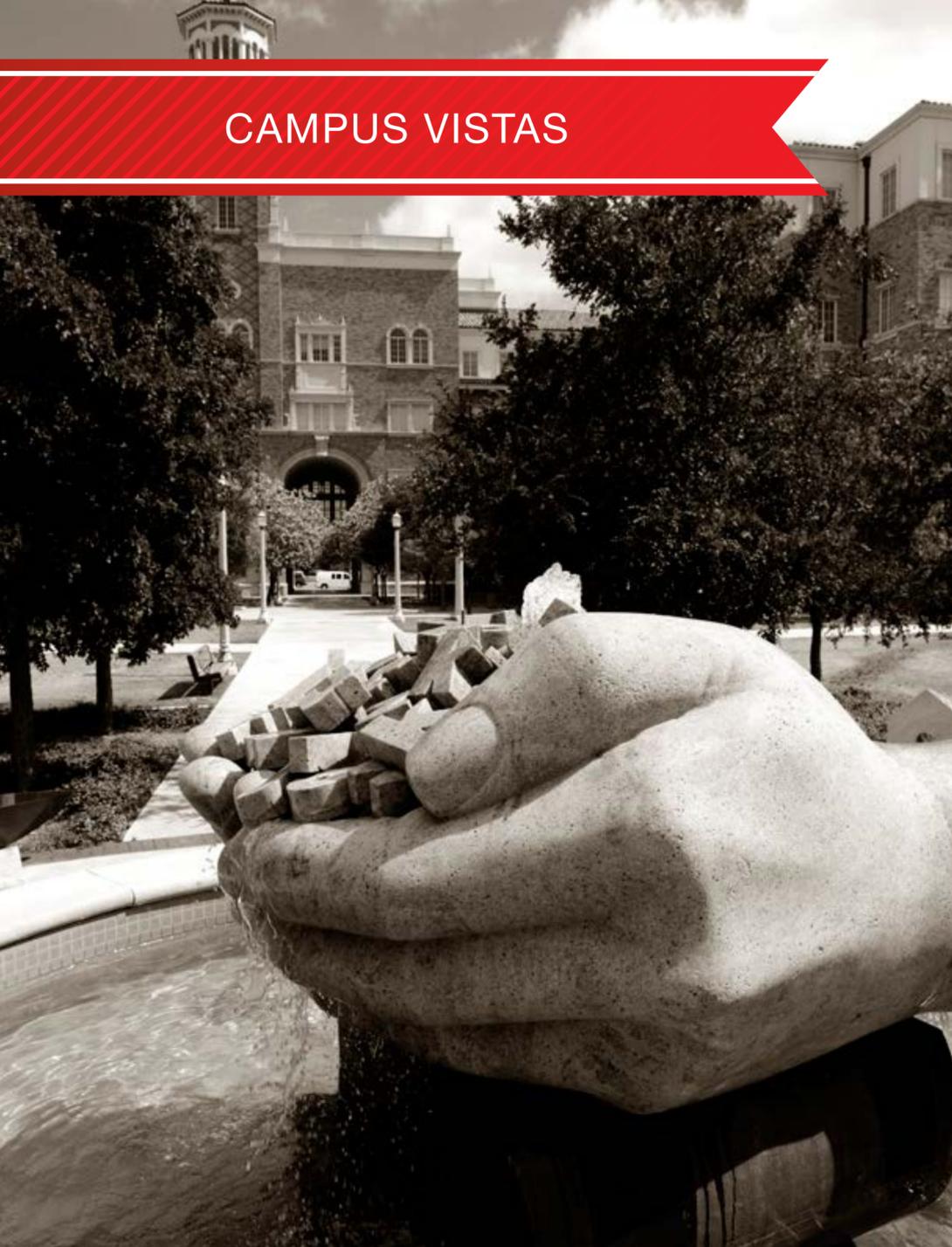


Flint Avenue Parking Facility



J.T. AND MARGARET TALKINGTON HALL

CAMPUS VISTAS



































CAMPUS VISTAS

PHOTOS IN ORDER OF APPEARANCE

English/Philosophy and Education Complex courtyard with public art piece *Headwaters* by Larry Kirkland.

Administration Building, window on the north facade.

English/Philosophy and Education Complex, tower on the Philosophy Building.

View of the Administration Building with sculpture of Will Rogers & Soapsuds. This memorial was dedicated on February 16, 1950 by longtime friend of Rogers, Amon G. Carter. On the base of the statue, the inscription reads "Lovable Old Will Rogers on his favorite horse, 'Soapsuds,' riding into the Western sunset."

Rawls College of Business Administration building courtyard—The building was completed in December 2011 and achieved Gold Leadership in Energy and Environmental Design (LEED) certification based on its energy use, lighting, water, and material use, as well as incorporating a variety of other sustainable strategies.

English/Philosophy and Education Complex courtyard looking south toward the College of Education building with the public art fountain titled *Headwaters* by Larry Kirkland.

West Village—Public art in the courtyard of Building A; *Texas Rising* by Joe O'Connell and Blessing Hancock, consists of several stainless steel stars emerging from the ground. The sculptures are equipped with LED lights inside and the pieces light up and change colors.

English/Philosophy and Education Complex courtyard looking south toward the College of Education building.

Jones AT&T Stadium East Building.

Student Leisure Pool with the public art's sculptural gates titled *Water Play* by Lars Stanley located between the two buildings in the background.

Globe Sculpture located on the entry plaza to the International Cultural Center.

Sculpture of Will Rogers & Soapsuds titled *Riding into the Sunset* by Electra Waggoner Biggs.

Jones AT&T Stadium West Building, main entry.

Industrial Engineering Building formerly known as the Textile Engineering Building. The central carved opening at the uppermost level recalls historic Spanish mission windows such as the one in Mission San Jose in San Antonio, Texas. The building was a monument to King Cotton with its stylized cotton bales the major ornamental elements at the second level. These bales occupy niches traditionally reserved on mission facades for statues of patron saints.

Texas Tech University seal located at the Broadway entrance to campus. The red granite seal sits on the Amon G. Carter Plaza and was erected in 1972.

The Texas Tech University Health Sciences Center campus. Academic Classroom Building located on the Texas Tech University Health Sciences Center campus.

Civil Engineering Building.

West Bell Tower of the Administration Building.

Masked Rider by Grant Speed, located on the plaza between

the Marsha Sharp Center for Student Athletics and the Fraizer Alumni Pavilion.

Aerial photo looking south across Memorial Circle toward the Administration Building.

Humans Sciences Building, original section in foreground.

Broadway Entrance Gatehouse.

Bronze sculpture of former Texas Governor, Preston E. Smith by Glenna Goodacre located in the courtyard of the Administration Building.

Texas Tech Physicians Medical Pavilion located on the Texas Tech University Health Sciences Center campus. The public art component of this building titled *DNA* was created by Shan-Shan Sheng. The architectural art glass stretches up four floors of the building's north elevator lobby. The framed helical structure recalls the DNA molecule and its protein rungs (C-G, A-T).

English/Philosophy Building, arcade along the north side of Philosophy.

Kent R. Hance Chapel—The photo highlights the J.T. and Margaret Talkington Campanario and Bell.

Agricultural Sciences Building, east entry.

Clock Tower located near the Carpenter/Well Complex and the Grover E. Murray Residence Hall at the intersection of the East-West Pedestrian Mall and the future North-South Pedestrian Mall.

Administration Building, north facade.

West Village—Public art in the courtyard of Building A, titled *Texas Rising* by Joe O'Connell and Blessing Hancock, consists of several stainless steel stars emerging from the ground. The sculptures are equipped with LED lights inside and the pieces light up and change colors.

Aerial photo of the Law School looking to the northwest.

Burkhart Center for Autism Education and Research—The public art is the architectural art glass, located on the second floor above the entry, titled *Summer Tree Autumn Tree* by Corinne Ulmann.

West facade of the English Building with the public art piece titled *The Messengers* by David Hickman in the foreground.

The main entry to the Rawls College of Business Administration Building.

The main entry to the Mark and Becky Lanier Professional Development Center at the School of Law. The public art is the architectural art glass untitled by Gordon Huether.

Dan Law Field (Baseball) at Rip Griffin Park.

Aerial photo looking southeast toward the Jones AT&T Stadium highlighting the new North End Zone Colonnade and West Building.



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