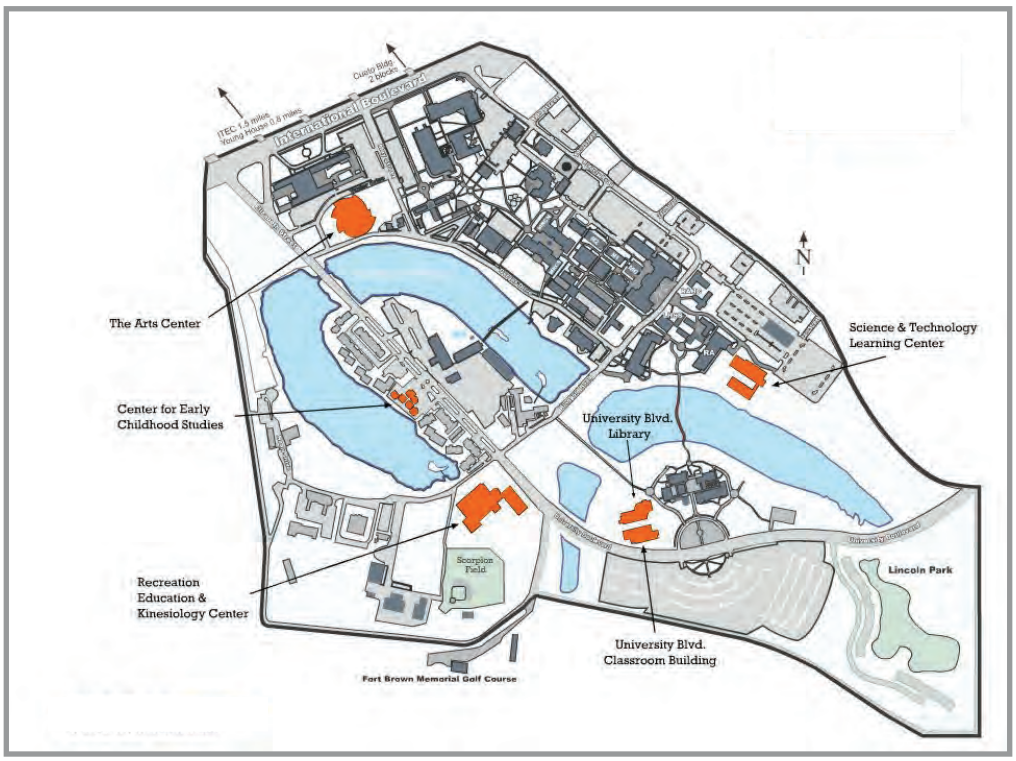
PREPARED FOR

TEXAS SOUTHMOST COLLEGE DISTRICT

Report of Findings

Review and Analysis of Bond Projects



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– REPORT OF FINDINGS –

Spire Consulting Group, LLC (Spire) prepared this Report of Findings at the request of Texas Southmost College (TSC) in response to TSC's request for construction management consulting services for a review and analysis of the construction management process of several bond projects. The findings contained in this report are based on reviews of project records provided by TSC and interviews with persons involved with the bond projects. The following report addresses Spire's findings based on analysis of documents and information reviewed to date. Spire reserves the right to supplement this report as new information is made available.

I. Executive Summary

The bond program that initiated the projects contemplated in this report resulted in a substantial effort for which UTB/TSC may not have been fully prepared. Programs of this size require a certain level of planning, processes, procedures and documentation managed by a sufficiently staffed team consisting of experienced team members. UTB/TSC did manage this program to completion but the results were not optimal and may not have met the expectations of the Board, staff or community.

The cost of the bond program significantly exceeded original budget allocations. Based on interviews with individuals involved with the bond projects and reviews of program related documents we believe that the following factors contributed to the program's overall performance:

1. Program planning and execution processes and procedures were not documented to a level commensurate with the program.
2. The number of staff assigned to the program was insufficient.
3. Staff assigned to manage certain aspects of the program may not have been sufficiently qualified.
4. Scope, schedule and budget controls were insufficient.

In order to mitigate these issues for future programs Spire recommends:

1. Develop and document program planning and execution processes and procedures to a level required by the program.
2. Develop a program staffing plan to determine the number of staff required to achieve program goals and the roles and responsibilities of each staff member.
3. Develop program management roles/responsibilities documentation and position descriptions and hire staff qualified to fill these positions.
4. Develop roles and responsibilities for PM contractor and TSC staff.

The following subsections explain Spire's methodology, findings and recommendations in more detail.

II. Background

Texas Southmost College was initially created in 1926 as The Junior College of the Lower Rio Grande Valley. In 1931, the college name was changed to the Brownsville Junior College and then to Texas Southmost College in 1949.

On September 1, 1991, Texas Southmost College and The University of Texas-Pan American at Brownsville combined their educational functions with The University of Texas at Brownsville (UTB). This entity was created as an upper-division university by the Texas Legislature in May 1991 and was authorized to enter into a partnership agreement with Texas Southmost College. This resulted in the creation of The University of Texas at Brownsville/Texas Southmost College Partnership (UTB/TSC).

The Southmost Union Junior College District continued to be governed by a seven-member board elected at large from the ad valorem taxing district of the college. The Partnership and The University of Texas at Brownsville, however, were governed by the nine-member Board of Regents of the UT System.

On November 2, 2004, voters in the Texas Southmost College taxing district approved a $68 million dollar bond package for building projects, including the Arts Center.

On February 17, 2011, the Texas Southmost College Board of Trustees approved a motion to become an autonomous institution. Efforts began to develop a model and create legislation. Legislation was passed providing for the dissolution of the existing partnership agreement, ending on or before August 31, 2015, to the extent necessary to ensure accreditation.

A new president was hired in October 2011. Texas Southmost College, which will continue to work collaboratively with The University of Texas at Brownsville to provide excellent higher education opportunities, is in the process of reestablishing itself as an independent, fully, comprehensive public community college. The many tasks to be undertaken during the transition include accreditation, strategic planning, program review, organizational design, implementation and launch.

III. Scope of Work and Approach

TSC engaged Spire to provide construction management consulting services for a review and analysis of the construction management process of several bond projects including:

1. ITEC Center Renovation
2. Recreation, Education, and Kinesiology Center
3. University Boulevard Library
4. University Boulevard Classroom Building
5. The Arts Center
6. Center for Early Childhood Studies
7. Oliveira Library Renovation

8. Student Union Building

The purpose of this engagement was to review the performance of the program, identify areas for improvement in the management of the program and provide recommendations for current and future programs.

Spire's approach included four phases of work as described below:

Phase I: Kickoff and Information Gathering

- Request preliminary documents
- Hold engagement kickoff meeting
- Identify points of contact and request additional documentation

Phase II: Review & Evaluate Performance of Past Projects

- Perform review and evaluation of past project performance based on documentation review and personnel interviews

Detailed Review Items - Detailed policy, procedure and governance review of the following areas:

Program Initiation

- Program scope
- Program planning
- Program budgeting
- Program staffing/organizational chart

Program Execution

- Procurement processes
- Program level reporting
- Contingency management
- Payment application review processes
- Program schedule management

Moderate Review Items - Moderate review of the following areas:

- Change order management process
- Claims management process

- Value engineering process
- Program close-out process

Potential Future Review Items - The following items can be reviewed if requested by TSC:

- Project planning and scheduling (specifications and update reviews)
- Project estimating, budgeting, expenses, reconciliations, total project costs and final payments
- Project procurement
- Risk management processes
- Project staffing/organization chart
- Timely receipt/review and response to issues/questions
- Submittal review process (plans and specifications, shop drawings, submittals, etc.)
- Project close-out processes (inspections, warranties, O&M manuals, final checks, etc.)
- Process to incorporate lessons learned into policies and procedures

Phase III: Prepare & Discuss Preliminary Findings & Recommendations

- Compile, analyze and summarize findings
- Prepare summary of preliminary findings and recommendations
- Discuss preliminary findings and recommendations with TSC

Phase IV: Prepare & Issue Report of Findings & Recommendations

- Incorporate feedback from TSC review of preliminary findings into Report of Findings
- Develop Report of Findings
- Perform QA/QC
- Issue Report of Findings to TSC
- Present findings to TSC

The following sections describe the findings and recommendations resulting from this evaluation in further detail.

IV. Discussion of Findings

The following sections represent the results of Spire's review and evaluation of the bond program. Each subsection contains a summary of Spire's findings and the causal factors substantiating those findings.

IV.A Program Initiation

Spire reviewed areas associated with the program initiation phase of the program. The program initiation phase includes activities that occur prior to the actual execution of the program including program scoping, planning, budgeting and staffing.

Program Scope

The program scoping and planning process for higher education facilities typically consists of identifying future needs of the campus based on planning studies and similar efforts, performing an analysis to determine the areas that must be developed to meet those needs, establishing the scope of the program and developing program planning documentation and timelines. The program scope includes the type and number of facilities needed, their locations and configurations. Program planning involves the development of program planning, process and procedural documentation around management of the program, staffing, QA/QC, budgeting, scheduling and cost control.

Prior to 2002, the Board determined that additional facilities were needed to meet rapid growth in the region. As of August 26, 2004, an additional 2,000 students had been added since the previous bond election and UTB/TSC was serving students living in surrounding areas including Harlingen and Los Fresnos. UTB/TSC was responsible for providing higher education needs to the surrounding areas which would require additional facilities.

On September 16, 2004, 3D/I, the architect, presented the revised 2020 Master Plan to the Board. The plan generally defined the scope of UTB/TSC's campus growth over the next several years. Subsequently, the Board approved the revised Master Plan.

Review, recommendation and approval of program related efforts were a team effort involving members of UTB, TSC, the student body and the community. Groups involved in the review, recommendation and approval processes included the Board of Trustees, a Board Bond Advisory Committee, Executive Council, Campus Advisory Committee, UTB/TSC Staff and Management and the Programming Team.

In 2005, a Memorandum of Understanding (MOU) was issued to Broaddus & Associates (Broaddus) to provide pre-project planning services. Broaddus subcontracted with Facility, Programming and Consulting (FPC) to perform space planning in 2005 and 2006. In December 2005, Broaddus issued a Budget and Program Review comprised of budget assumptions, building design options, space and budget summaries, cost savings opportunities and schedules. In February 2006, Broaddus and FPC issued Final Programs for the Center for Early Childhood Studies, Large Classroom Building and Small Classroom Building, Music Education/Fine Arts Facility and East Library. In August 2006, Broaddus issued a Schematic Design, Budget and Schedule Review.

Subsequently, the scope and space planning for the program changed significantly. Examples of this include the consolidation of the Recreation Center with the Kinesiology Building and substantial enhancements to the Arts Center.

Overall, it appears that the program scoping and planning process was performed in accordance with industry standards. However, there are areas where there may be room for improvement.

It does not appear that the scope of the program was significantly reduced between the failure of the $100 million bond issuance and the approval of the $68 million bond issuance. We would expect to see significant reductions in scope with a $32 million reduction in funding. In addition, the scope of several projects appears to have increased significantly over time resulting in longer project durations and increased project costs. This would indicate that there were issues with scope control. It does not appear that there were scope controls in place to mitigate excessive scope creep. As a result, the scope of the projects and their costs increased over time.

Furthermore, certain program planning activities and/or program planning documentation does not appear to have been produced. Examples of these include a program management plan, quality management plan, human resources plan, risk management plan and procurement plan. UTB/TSC appears to have relied heavily on its PM contractors during the scoping and planning phases as is expected. However, performing certain scoping and planning activities in-house, with its own staff can reduce the risk of issues during program execution.

As part of its scope and planning review, Spire performed a review of UTB/TSC's facilities portfolio. Spire compared the facilities at UTB/TSC to six other Texas community colleges located in cities with similar population and demographic backgrounds to determine and compare the types of facilities necessary to meet the surrounding communities' needs. Figure IV.A-1 shows the cities and respective community colleges that were reviewed.

City	City Population (2010 Census)	Community College
Brownsville	175,023	UTB/TSC
Laredo	236,091	Laredo Community College
Amarillo	190,695	Amarillo College
McAllen	129,877	South Texas College
Killeen	127,921	Central Texas College
Midland	111,147	Midland College
Odessa	99,940	Odessa College

Figure IV.A-1. *Comparable Cities and Community Colleges*

It was determined that the types of facilities at UTB/TSC align with the types of facilities at other comparable community colleges in Texas. All six of the schools have the following types of facilities on campus: student union or activity center, academic buildings and classrooms, library, fine arts/performing arts center, technology, engineering and/or science center, childhood development center and recreation/fitness center. Figure IV.A-2 shows the comparison of the facilities between the schools.

City	City Population (2010 Census)	Community College	Student Union/ Activities Center	Academic Buildings/ Classrooms	Library	Fine Arts/ Performing Arts Center	Technology, Engineering, and/or Science Center	Childhood Development Center	Nursing/ Health Science Center	Recreation / Fitness Center
Brownsville	175,023	UTB/TSC	X	X	X	X	X	X	X	X
Laredo	236,091	Laredo Community College	X	X	X	X	X	X	X	X
Amarillo	190,695	Amarillo College	X	X	X	X	X	X	X	X
McAllen	129,877	South Texas College	X	X	X	X	X	X	X	X
Killeen	127,921	Central Texas College	X	X	X	X	X	X	X	X
Midland	111,147	Midland College	X	X	X	X	X	X	X	X
Odessa	99,940	Odessa College	X	X	X	X	X	X	X	X
		Total:	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**

Figure IV.A-2. *Facilities at Comparable Colleges*

Some of the schools have additional specialized facilities including a greenhouse, planetarium, aircraft hangar, museum of art, farm and ranch management facility, environmental center and senior citizen center.

Therefore, the *types* of facilities in UTB/TSC's facility portfolio are comparable to other Texas community colleges supporting similar communities. However, Spire's comparison focused only on the types of facilities at other colleges. It did

not include a comparison of the size or level of quality of those facilities. The cost of the facilities at other community colleges could vary significantly based on these and other factors. A comparison of this type is beyond the scope of this engagement but can be performed at TSC's request.

Program Budgeting

Program budgeting typically includes the process of developing cost estimates, budgets and funding allocations based on program scope and planning requirements. UTB/TSC appears to have developed these documents but there are areas that could be improved upon.

In 2002, the Board issued a bond election for $100 million which failed. On August 24, 2004 the Board called a bond election for $68 million, which would support the following facility needs:

- Classrooms and Parking
- Child Development Center for Teaching and Research
- Workforce Training
- Library
- Health Education, Outreach and Research

On November 11, 2004, the Board accepted the election results and the $68 million bond passed. Funding allocations started in 2005 based on an estimate provided by Broaddus. The $68 million bond was allocated to eight projects as shown in Figure IV.A-3.

Bond Projects	Original Bond Allocation
Arts Center	$ 8,000,000
REK Center	$ 8,000,000
Classrooms	$ 12,000,000
Library-Remodel	$ 2,000,000
Library-New	$ 12,000,000
Early Childhood Center	$ 4,000,000
ITECC	$ 17,000,000
Biomedical Research	$ 5,000,000
Project Management Fees	$ -
Cost of Insurance/Arbitrage Rebate	$ -
Subtotal	**$ 68,000,000**

Figure IV.A-3. *2005 Bond Allocation*

The Board initially issued an election for a $100 million bond and eventually received approval for $68 million. However, the original building specifications based on the $100 million bond value do not appear to have been adjusted enough to reduce the cost by $32 million. Therefore, the projects appear to have been planned outside of the budget from the beginning. As a result of this and other factors, all of the bond projects were significantly over budget. As of November 2009, the bond projects were over budget by a total of $41,855,122. Figure IV.A-4 illustrates the funding allocation evolution for the bond projects from the original bond allocation through November 2009.

Bond Projects	Original Bond Allocation	Total Funding				
		Sep-06	Nov-07	Jun-08	Nov-08	Nov-09
Arts Center	$ 8,000,000	$ 18,000,000	$ 25,195,500	$ 25,195,500	$ 25,695,500	$ 26,067,957
REK Center	$ 8,000,000	$ 26,000,000	$ 26,686,000	$ 27,560,777	$ 28,685,777	$ 29,877,751
Classrooms	$ 12,000,000	$ 12,000,000	$ 10,724,710	$ 10,724,710	$ 10,864,710	$ 10,864,710
Library-Remodel	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 3,100,000	$ 3,100,000
Library-New	$ 12,000,000	$ 12,000,000	$ 14,396,293	$ 14,396,293	$ 14,396,293	$ 14,521,293
Early Childhood Center	$ 4,000,000	$ 4,000,000	$ 5,005,000	$ 5,005,000	$ 5,005,000	$ 5,196,585
ITECC	$ 17,000,000	$ 16,060,410	$ 17,000,000	$ 18,330,000	$ 18,530,000	$ 18,858,669
Biomedical Research	$ 5,000,000	$ -	$ -	$ -	$ -	$ -
Project Management Fees	$ -	$ -	$ -	$ -	$ 462,500	$ 383,000
Cost of Insurance/Arbitrage Rebate	$ -	$ -	$ -	$ -	$ -	$ 985,157
Subtotal	**$ 68,000,000**	**$ 90,060,410**	**$101,007,503**	**$103,212,280**	**$106,739,780**	**$109,855,122**

Figure IV.A-4. *Funding Allocation Evolution*

In order to meet the increased budgets, additional funding was pulled from various sources including the maintenance notes, refinancing revenue, student fees and interest earnings. Figure IV.A-5 illustrates these funding sources as of November 2009.

Bond Projects	Funding Sources											
	Bond Issuances		Interest & Grant		UTB		TSC					
	TSC $68M Bonds	REK Student Revenue Bond	Interest Earnings	EDA Grant	UTB Tuition Rev Bond	UTB Heaf	TSC Maint Notes	TSC Fund Balance	TSC Budget	Donations	TSC Refinancing of Revenue	Total
Arts Center	$ 19,575,000		$ 762,457			$ 485,000		$ 1,000,000	$ 2,189,090	$ 1,700,000	$ 356,410	$ 26,067,957
REK Center	$ 13,159,170	$ 13,500,000	$ 2,463,862			$ 106,830		$ 226,889	$ 300,000		$ 121,000	$ 29,877,751
Classrooms	$ 9,482,875		$ 140,000		$ 950,000	$ 291,835						$ 10,864,710
Library-Remodel	$ 2,000,000		$ 1,100,000									$ 3,100,000
Library-New	$ 11,546,955		$ 125,000		$ 950,000	$ 1,473,335					$ 426,003	$ 14,521,293
Early Childhood Center	$ 4,736,000		$ 231,585			$ 229,000						$ 5,196,585
ITECC	$ 7,500,000		$ 528,669	$ 1,250,000			$ 9,196,410				$ 383,590	$ 18,858,669
Biomedical Research												
Project Management Fees			$ 383,000									$ 383,000
Cost of Insurance/Arbitrage Rebate			$ 985,157									$ 985,157
Subtotals	$ 68,000,000	$ 13,500,000	$ 6,719,730	$ 1,250,000	$ 1,900,000	$ 2,586,000	$ 9,196,410	$ 1,226,889	$ 2,489,090	$ 1,700,000	$ 1,287,003	
Total	$ 81,500,000		$ 7,969,730		$ 4,486,000		$ 15,899,392					**$ 109,855,122**

Figure IV.A-5. *Funding Sources as of November 2009*

Bond sources included the original TSC $68M bond and the REK Student Revenue Bond for $13.5M. In anticipation of receiving $1.7M in donations, TSC borrowed from its existing budget with the understanding that it would be paid back upon receipt of the donations. However, if these donations do not come in then TSC will have to draw from other funding sources. In addition, the $5M originally allocated for the Biomedical Research facility was reallocated because UTB was authorized to build a biomedical research facility.

Program Staffing

Program staffing refers to the number of staff assigned to the program, their roles and responsibilities, reporting lines of authority and financial approval levels of authority. UTB/TSC had program management staff in place and established lines and levels of authority. However, certain areas could be improved upon including staff planning and levels of expertise.

On a program of this size it is common for owners to develop staffing plans that identify the number of staff required, the expertise of that staff and the timing (ramp up/ramp down) of their involvement. Organization charts were produced for 2008 and 2010 but a detailed staffing plan for the program does not appear to have been developed. The program appears to have initially been staffed with staff members who may not have had experience managing large construction programs.

During the course of the program, UTB/TSC did hire individuals to perform certain owner functions including purchasing and quality assurance. However, there is little evidence indicating that UTB/TSC had planned for these staff additions in advance, planned for when or for how long these staff would be required or what the roles and responsibilities would be.

IV.B Program Execution

The program execution phase includes activities occurring after program initiation. The areas of focus for this report include procurement, reporting, contingency management, payment application reviews, program schedule management, program quality control and program close-out.

Procurement Processes

The procurement process includes the development of procurement plans, limit lines of purchasing authority and contracting plans.

The value engineering process was performed concurrently with design and contracting. Significant changes occurred prior to establishment of the GMP's and the final value engineering lists became part of the final GMP's. During the FF&E procurement process, Broaddus would set meetings to discuss various issues and procurement would be one item on that agenda.

Purchasing limit lines of authority were in place during the program. For professional services the purchasing limit that must be reviewed by the Board was $500,000. FF&E purchases over $2,000 were sent out for competitive bid. For competitive bidding situations, TSC issued an RFP after the Board approved the cost. Responses to the RFP were received and compiled by TSC. Broaddus would evaluate the responses and recommend (via a recommendation letter) a provider. The recommendation was taken to the Physical Facilities Committee (PFC) and then the Board. This process took about two months on average. Upon approval by the Board a contract and/or purchase order would be issued. At that point the file would be handed over to the contracts department.

Over the course of the program, purchasing lists often increased as the projects progressed (e.g. signage, acoustical equipment, seating) as a result of the value engineering process. Some procurement processes were eventually documented but they were not added to the procurement manual.

The value engineering process was performed during design which is a common practice in the construction industry but that can lead to challenges. As the scope changes through the value engineering process the design must be modified as well. If not managed correctly this can lead to inconsistent design documents and potentially result in costly errors.

The procurement process was managed by Broaddus. Broaddus would set meetings to discuss various issues and procurement would be one item on the agenda. During the course of the program, TSC performed certain aspects of the purchasing function as a cost savings measure. This practice is typical in the construction industry, however, soft costs associated with purchasing must be accounted for when considering potential cost savings. TSC likely incurred unanticipated overhead costs associated with receiving, validating purchases and inspection.

Program Level Reporting

Program level reporting is a primary source of information for the owner team to identify potential risks and issues during the course of the program. Typically, on a program of this size, the owner establishes certain reporting requirements especially around issues, quality, cost and schedule related items.

During the project, UTB/TSC was provided program reports through presentations and one page monthly "score cards" produced by its PM team (see Appendix B). These reports contained high level information regarding issues, open items, budget and schedule. This is the type of information typically reported to the owner by the PM. However, there does not appear to be detailed information that might be of interest to the owner including estimated cost to complete, quality assurance and safety metrics.

Notably, the project reports that were provided to UTB/TSC were monthly or quarterly snapshots of each project (not the program as a whole) and did not contain trending information. UTB/TSC does not appear to have had a single source of information related to how its program budget, cost, contingencies and schedule data was changing over time. Having this view of its data can enhance an owner's ability to identify potential issues and make fully informed decisions to mitigate them.

Furthermore, at the time this report was generated, UTB/TSC had not received a final cost report from its PM contractor. Therefore, the actual project costs are still unknown.

Contingency Management

Typically on a program of this size contingency is developed and managed at the program level and project level. It appears contingency was managed primarily at the project level. Each project had both an owner contingency and a contractor contingency.

Establishing multiple contingency accounts (owner/contractor) for each project is typically considered good practice. However, it would have been advisable to establish and manage program level contingency as well. Program level contingency tracking and reporting can provide insights into program issues and improved cost control during the program.

Payment Application Review Processes

Typically, on a program such as this the payment application review process consists of several levels of review. Contractors submit their payment applications to the program manager for review and the program manager submits its and the contractors payment applications to the owner for review. The owner should review the payment applications submitted by the program manager to ensure it is accurate, inclusive of all approved changes and does not include any costs that are not allowed under the contract. In addition, owners often have an independent third party review the payment applications on a periodic basis to identify unapproved costs.

During the program, contractors submitted their payment applications to Broaddus who submitted them to TSC who issued payment. TSC did not perform reviews of Broaddus's payment applications early in the program but may have later in the program. Furthermore, TSC did not perform validations of the costs to determine whether they were allowed by the contract or engage an independent third party auditor to perform a similar function on a periodic basis.

In addition, it does not appear that the Board received program level cost to date and cost to complete information in one package. Project budget information was tracked and reported in various reports but this information was not compiled to illustrate a global picture of the program's performance. It appears that funds were moved from various sources to compensate for continually increasing project costs but there is little documentation explaining the reasoning behind these allocations.

Finally, payment review and issuance processes and procedures do not appear to be thoroughly documented. Defining these can help ensure that payments are processed consistently and issued in the correct amounts.

Program Schedule Management

Program schedule management refers to the scheduling of the entire program and is a key component to the program's overall management and reporting processes. The program schedule can help identify risks so that they can be mitigated before they become issues.

Early in the program there was a schedule in place but after the bond was issued the Board made a demand call to build all the projects (except for the library renovation) concurrently and complete them within four years. Program schedule updates were being provided by the PM in presentations to the Board and monthly "score cards" at a high level (see Appendix B). However, Spire has not seen evidence that an integrated program level schedule existed.

Quality Assurance / Quality Control

The quality assurance and control function is intended to ensure that the owner receives the facility agreed to in the contract documents. Quality assurance and control is a role for which the owner should have in-house staff assigned.

TSC hired a QA/QC manager in March of 2008 as TSC's sole QA/QC representative during the program. His role included relaying submittals from Broaddus to Physical Plant, inspections of the project sites during construction and reporting to the VP for Planning and Construction.

The TSC manager inspected the projects on a daily basis, walking the sites and taking photos. If field installation did not match submittals then he would take a photo, write the issue up in an email and email it to the VP for Planning and

Construction. He would then follow up with Broaddus to determine when the fix was applied and perform a confirmation inspection.

Broaddus handled the QA plan and had two of its own inspectors who reported to TSC's VP for Planning and Construction. The TSC QA/QC manager attended weekly and monthly general meetings (QA was a part of these meetings) organized and facilitated by Broaddus. Broaddus performed its own QA/QC inspections and notified TSC of these inspections when TSC's presence was required. TSC witnessed the installation of the equipment and Broaddus ensured TSC certified that certain equipment was installed properly. TSC validated testing procedures against the previously provided submittals. Physical Plant participated in startup of some equipment as well. If there were startup issues then Broaddus would document the issues and notify Physical Plant. Final inspections were not signed by TSC but TSC would confirm Broaddus's final certification. QA/QC would notify the VP for Planning and Construction if items were not complete so TSC could withhold payment.

TSC did not have documented QA/QC processes or personnel prior to hiring a QA/QC manager in 2008. QA/QC processes implemented by the QA/QC manager appear to have been performed in a manner consistent with industry standards. However, there was little document control during the program. The QA/QC manager documented issues via email and QA/QC records are on his computer, not in a central record repository. Furthermore, the QA/QC processes were not documented for future use.

Program Close-Out Processes

Program close-out processes are those that transition all facilities and documentation from the PM to the owner. This includes the completion and acceptance of the facilities, final testing reports, as-built drawings, warranties and manuals.

Upon completion of each project, TSC's Physical Plant department would submit and document the project warranties. However, the warranty books were provided by Broaddus and Physical Plant accepted them as-is, assuming they were accurate and complete. Physical Plant did not perform a review of the warranty manuals provided by Broaddus. Performing reviews of the warranty manuals is a recommended practice and can mitigate issues related to building operations such as inadequate warranties.

Furthermore, TSC has not yet received a close-out report or audit from its PM. Without these reports, TSC has limited visibility into the performance of its program and may not know the actual costs of the program. Spire recommends obtaining and reviewing these reports in order to obtain a better understanding of its final program performance.

Maintenance

Maintenance for the program facilities will be handled by TSC's Physical Plant department. Physical Plant was involved in the design and construction phases of the program reviewing drawings and performing inspections. Physical Plant will create preventative maintenance work orders using their TMA system. These preventative maintenance work orders are typically for HVAC equipment. Other maintenance issues are handled retroactively. Costs for maintenance are captured on work orders. Personnel time for work orders is entered into their time keeping system and assigned to each work order. Recently, the personnel time keeping system was updated to keep track of maintenance expenses at a more detailed level than was previously being tracked so that maintenance costs can be more accurately captured and reported.

V. Conclusions & Recommendations

The bond program was a substantial effort for which UTB/TSC may not have been fully prepared. Programs of this size require a certain level of planning, process and procedural controls and documentation managed by a sufficiently staffed team consisting of experienced team members.

UTB/TSC's planning, process and procedural controls and documentation efforts managed by staff with little program management background contributed to the program incurring costs in excess of its original plan. Spire's review indicates that UTB/TSC initiated a large program and then relied heavily on its PM contractor to ensure that the program performed to expectations. The PM contractor should (and in this case appears that it did) support the owner in its program management efforts but the owner still must dedicate significant resources to the planning and management of the program. It appears that UTB/TSC did not fully appreciate the level of effort and expertise that this program would require from its staff. The primary factors common to several of the areas reviewed for this report that resulted in the program's performance include:

1. Program planning and execution processes and procedures were not documented to a level commensurate with the program.
2. The number of staff assigned to the program was insufficient.
3. Staff assigned to manage certain aspects of the program may not have been sufficiently qualified.
4. Scope, schedule and budget controls were insufficient.

In order to mitigate these issues for future programs Spire recommends:

1. Develop and document program planning and execution processes and procedures to a level required by the program.

2. Develop a program staffing plan to determine the number of staff required to achieve program goals and the roles and responsibilities of each staff member.
3. Develop program management roles/responsibilities documentation and position descriptions and hire staff qualified to fill these positions.
4. Develop roles and responsibilities for PM contractor and TSC staff.

VI. Appendices

Appendix A – Documents Received

Appendix B – Reference Documents

Appendix A – Documents Received

– REPORT OF FINDINGS –

Spire received and generally reviewed the categorical documents listed below:

- August 2004 – TSC Master Plan by 3DI
- July 1, 2005 – Memorandum of Understanding, Broaddus and TSC
- August 25, 2005 – Contract, Broaddus and TSC
- December 14, 2005 – Overall Program and Budget Review
- February 2006 – Final Building Programs for Large Classroom Building, Small Classroom Building, Center for Early Childhood Studies, Music Education/Fine Arts Facility and East Library
- August 28, 2006 – Overall Program and Budget Review
- 2006 to 2009 – Project Allocation and Funding Summaries
- October 23, 2006 and October 16, 2007 – Broaddus Purchasing Strategies Executive Summary
- Broaddus Program Management Services Value Added Log
- September 1, 2005 to August 31, 2011 – General Ledgers for Arts Center, Early Childhood Center, ITECC Renovations, Large Classrooms, East Library, Oliveira Library, REK Center and Small Classrooms
- 2004 to 2010 – Board of Trustees Meeting Minutes
- September 2005 – CAC Group Meeting Minutes, Program Review for Biomedical Research and Outreach, Music Education/Fine Arts, Early Childhood Development Center, General Classrooms, ITECC and Libraries
- 2008 to 2010 – Physical Facilities Committee Meeting Minutes
- 2005 to 2009 – Board Bond Advisory Committee Presentations
- 2007 to 2009 – Board of Trustees Meeting Presentations
- 2007 to 2010 – Physical Facilities Committee Meeting Presentations
- Broaddus Monthly Project Reports – 2007 to 2010
- 2008 and 2010 – Partnership Affairs Division Organization Charts

- Construction Manager-at-Risk Contracts for J.E. Dunn/Terry Ray, Skanska USA Building Inc. and SpawGlass Contractors, Inc.
- Purchase Orders for RGV Paint Center and Construction, Inc., Skanska USA Building Inc. and SpawGlass Contractors, Inc.
- RGV Paint Center and Construction, Inc. Proposal
- RGV Paint Center and Construction, Inc. Pay Applications No. 5 – 19
- Skanska USA Building Inc. Pay Applications No. 4 – 24
- J.E. Dunn/Terry Ray Pay Applications No. 1 – 25
- SpawGlass Contractors, Inc. Pay Applications No. Preconstruction – 16
- Student Union Documents – KM & BFW, LLC Contract, Original, 2003 and 2005 Budgets, General Ledger, Schedule
- May 2010 – Southmost Union Junior College District Policy Manual

Appendix B – Reference Documents

Project Allocation and Funding Summary – November 2009

Texas Southmost College November 19, 2009 Exhibit F

DRAFT November 2009

Texas Southmost College
Project Allocation and Funding Summary

PROJECTS	Original Bond Allocation	FUNDING SOURCES: TSC $68M Bonds	TSC Maint Notes	Interest Earnings	TSC Refinancing of Revenue	TSC Fund Balance	TSC Budget	REK Student Fees	UTB Tuition Rev Bond	UTB Heaf	UTB Resources	EDA Grant	Donations	Total
Bond														
Arts Center	$ 8,000,000	$ 19,575,000		$ 762,457	$ 356,410	$ 1,000,000	$ 2,189,090			$ 485,000			$ 1,700,000	$ 26,067,957
REK Center	$ 8,000,000	$ 13,159,170		$ 2,463,862	$ 121,000	$ 226,889	$ 300,000	$ 13,500,000		$ 106,830				$ 29,877,751
Classrooms	$ 12,000,000	$ 9,482,875		$ 140,000					$ 950,000	$ 291,835				$ 10,864,710
Library - Remodel	$ 2,000,000	$ 2,000,000		$ 1,100,000										$ 3,100,000
Library -New	$ 12,000,000	$ 11,546,955		$ 125,000	$ 426,003				$ 950,000	$ 1,473,335				$ 14,521,293
Early Childhood Center	$ 4,000,000	$ 4,736,000		$ 231,585						$ 229,000				$ 5,196,585
ITECC	$ 17,000,000	$ 7,500,000	$ 9,196,410	$ 528,669	$ 383,590							$ 1,250,000		$ 18,858,669
Biomedical Research	$ 5,000,000													$ -
Project Management Fees				$ 383,000										$ 383,000
Cost of Issuance/Arbitrage Rebate				$ 985,157										$ 985,157
Subtotal	$ 68,000,000													$ 109,855,122
TRB														
Science & Technology									$ 31,900,000					$ 31,900,000
TSC														
Athletic Zone			$ -		$ 750,000	$ 850,000	$ 100,000							$ 1,700,000
Capital Improvements			$ 1,520,429											$ 1,520,429
Cavalry			$ 850,000			$ 100,000								$ 950,000
Condos & Jackson			$ -		$ 500,000									$ 500,000
Comissary Renovation			$ 516,090			$ 200,000	$ 379,910							$ 1,096,000
Commandant's			$ 200,000											$ 200,000
Compress			$ 50,000											$ 50,000
Cortez			$ 325,000											$ 325,000
Neutra House			$ 150,000											$ 150,000
MRC Upgrades			$ 70,000											$ 70,000
Perimeter Fence			$ -			$ 739,000								$ 739,000
Resaca Club Demolition			$ -			$ 400,000								$ 400,000
Contingency			$ 53,161											$ 53,161
Unallocated			$ 1,734,910											$ 1,734,910
Subtotal														$ 9,488,500
UTB														
University Blvd. Parking Lot							$ 684,415				$ 1,600,000			$ 2,284,415
Property Acquistions											$ 2,113,484			$ 2,113,484
North Thermal Plant											$ 1,650,000			$ 1,650,000
Subtotal														$ 6,047,899
Totals	$ 68,000,000	$ 68,000,000	$ 14,666,000	$ 6,719,730	$ 2,537,003	$ 3,515,889	$ 3,653,415	$ 13,500,000	$ 33,800,000	$ 2,586,000	$ 5,363,484	$ 1,250,000	$ 1,700,000	$ 157,291,521

11/17/2009

Center for Early Childhood Studies Score Card – July 2008

BROADDUS & ASSOCIATES
Innovative Project Management and Consulting

UTB TSC

Center for Early Childhood Studies
Project Report
July 2008

Scope

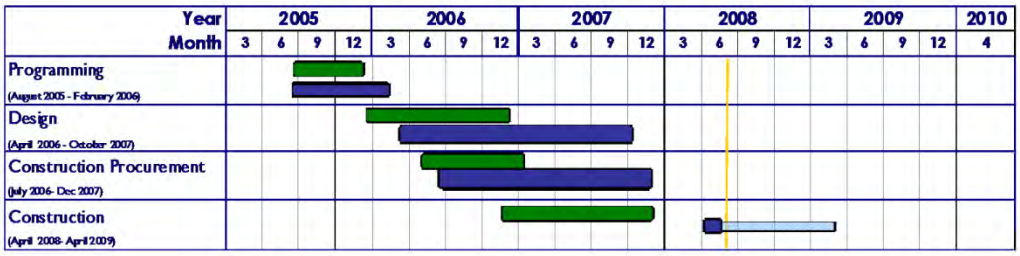
	Square Footage
Gross Square Footage	16,802
Porches @ ½	2,655
Total	19,457

Budget

RGV Contract Amount	$3,439,611
Construction Cost Limitation	$3,795,320
Other Items	$1,209,680
Total Project Cost	**$5,005,000**

Schedule

Schedule Legend
Baseline — Date Line
Current Schedule — Progress



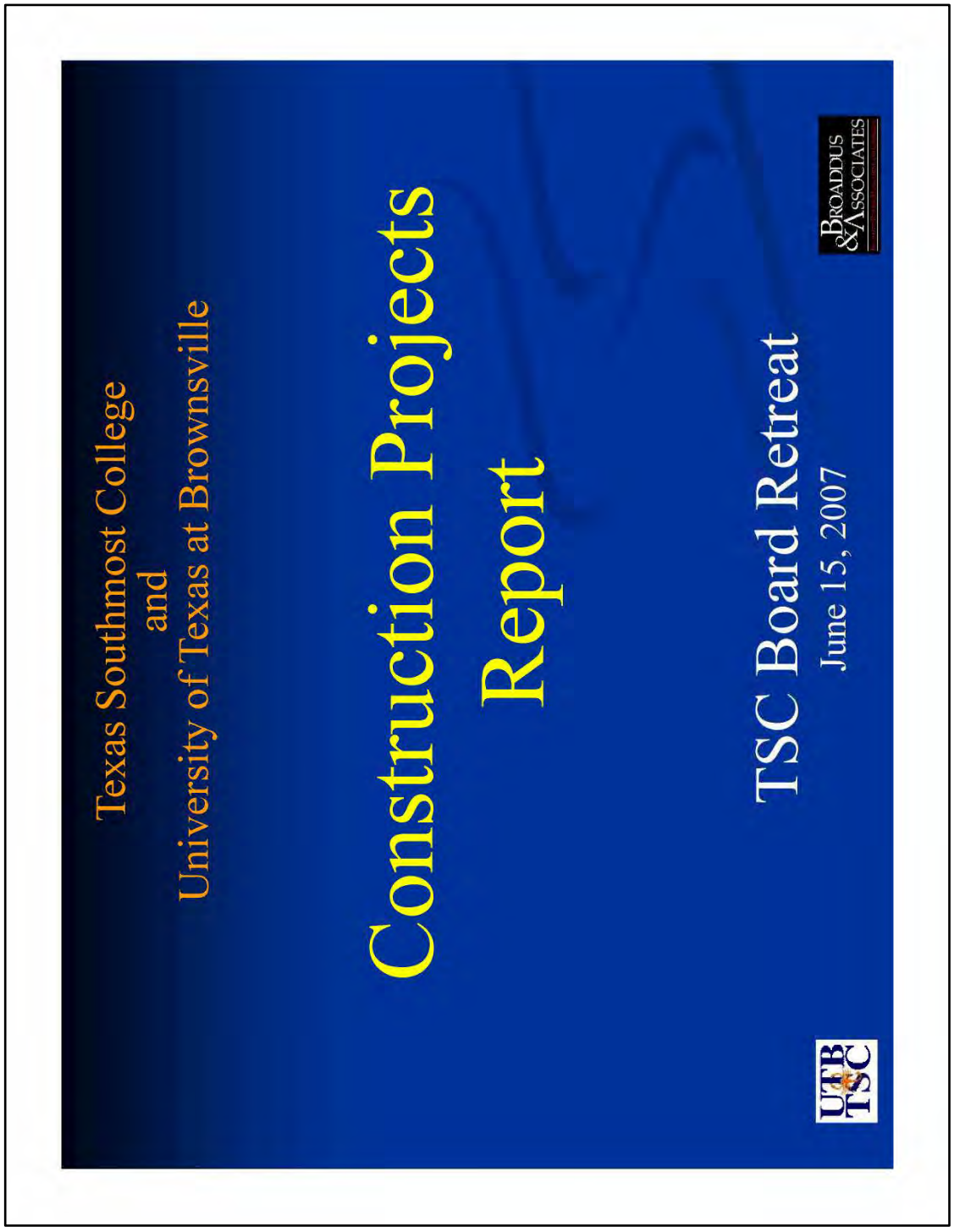
Owner Issues

- Resaca Retaining wall costs 2x what was expected
- Water service not per Civil drawings need to bore under University Blvd- Change order pending
- Changes to site plan: drive was deleted and fire lane was added-meeting w/Traffic Engineer is pending
- Furniture selection- needs to be ordered by August

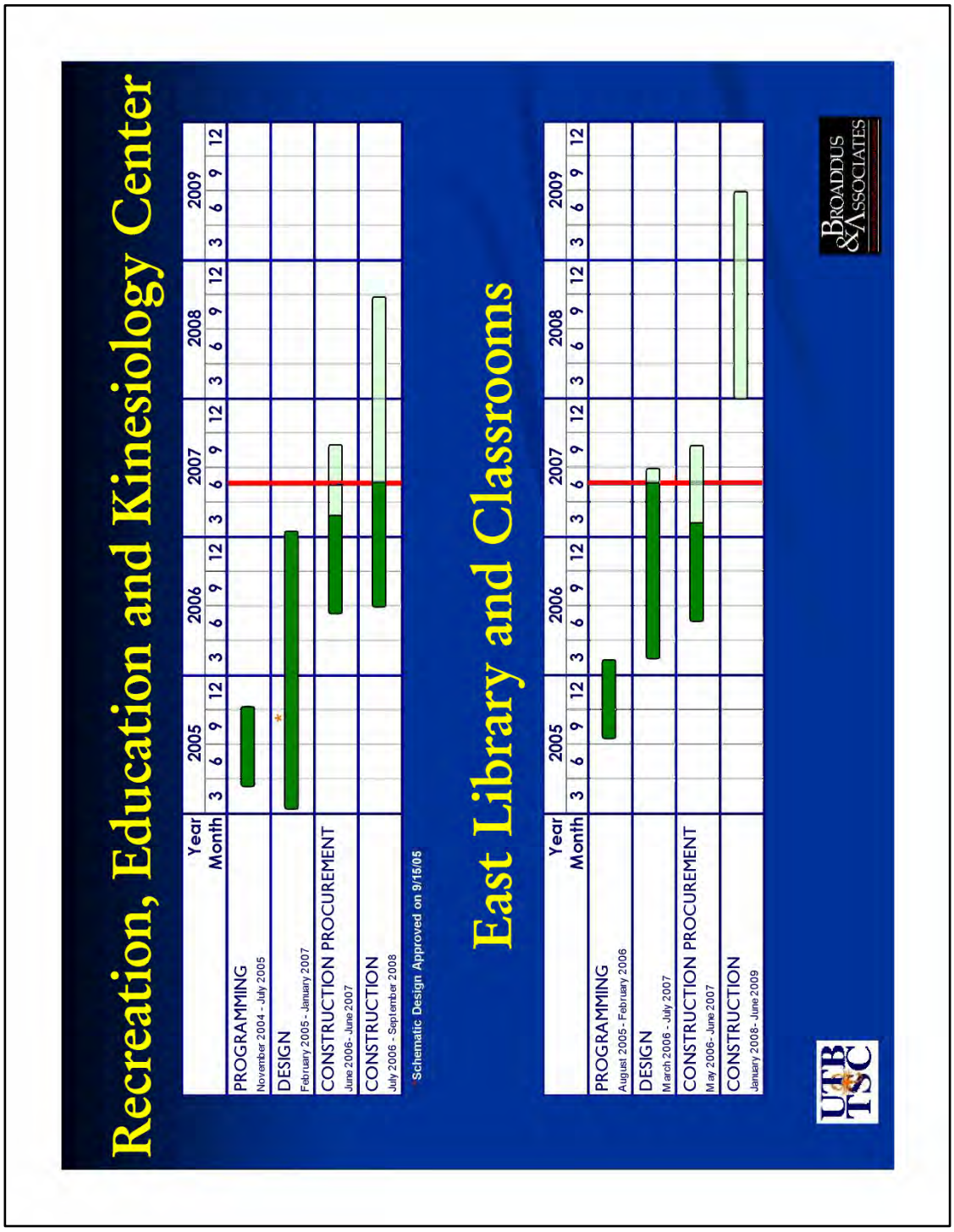
30-Day Look Ahead (Milestones)

- Anticipated Notice to proceed- May 19, 2008
- Groundbreaking date: to be announced.

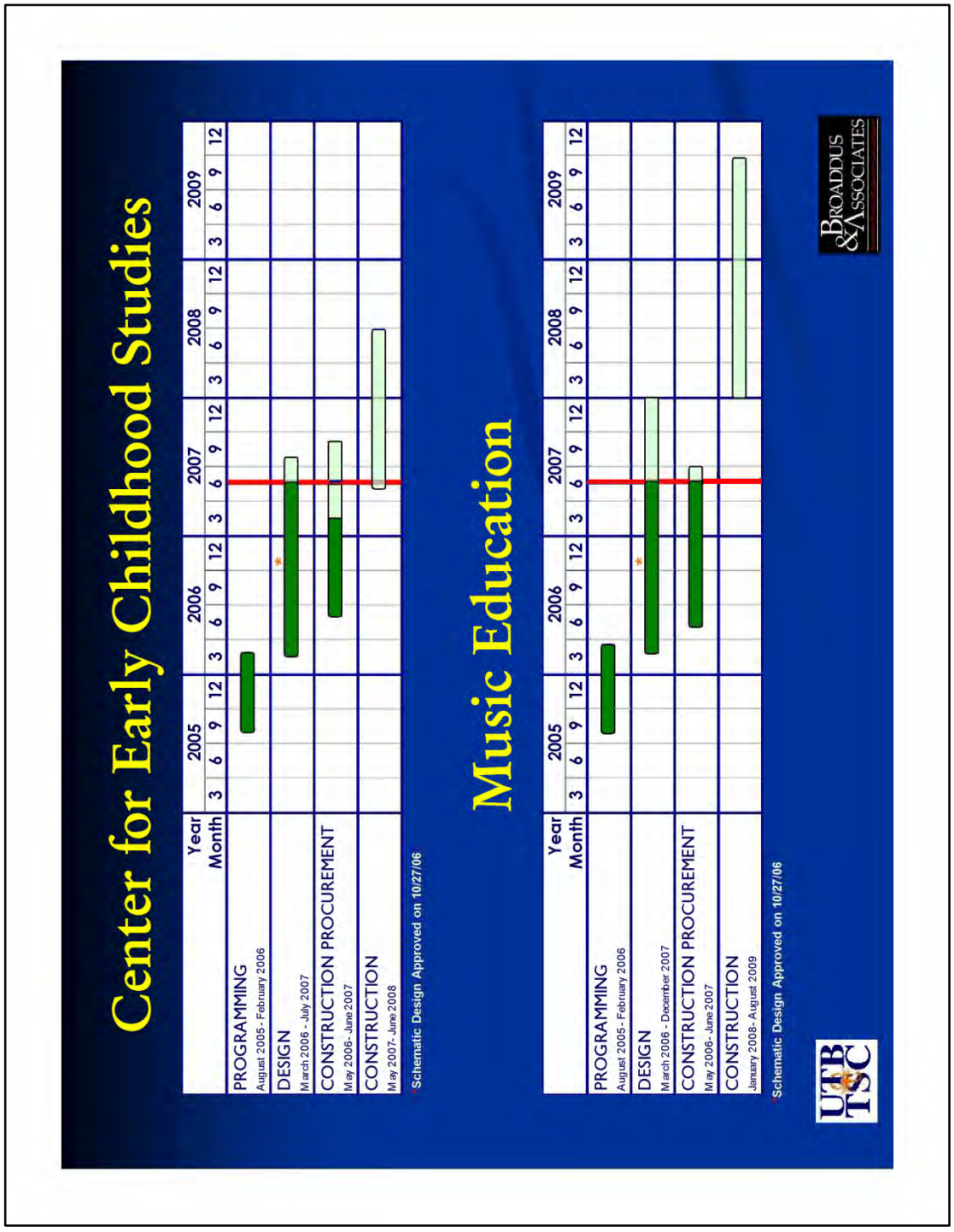
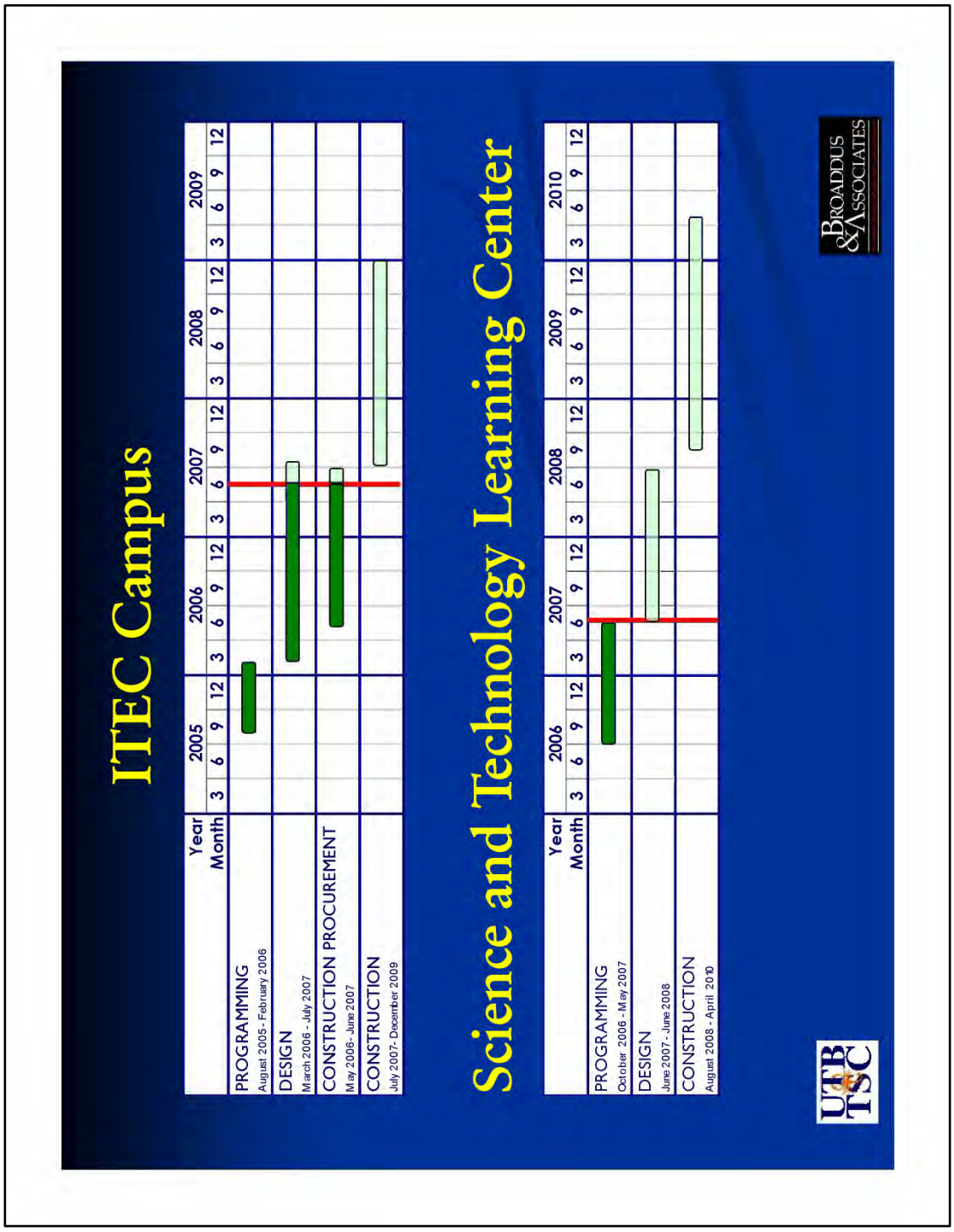
TSC Board Retreat Presentation – June 2007



TSC Board Retreat Presentation – June 2007 (continued)



TSC Board Retreat Presentation – June 2007 (continued)



TSC Board Retreat Presentation – June 2007 (continued)