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PROLOGUE

HISD's two most recent bond programs – Rebuild 2002 approved by voters in 1998 and Rebuild HISD approved in 2002 – included many new and replacement schools, as well as scores of renovations and additions. The collective good design of these schools and the lessons learned through the design and construction of these schools have been incorporated into these Design and Construction Standards, so the design of future schools can continue to improve educational opportunities for our students.

These Design and Construction Standards are intended to guide design consultants in the uniform development of new schools. There is a need to balance creativity with standards to assure that all new schools are equivalent, yet meet the specific needs of the school's student population. The consultants' design solutions will vary, but the design effect – the resulting useable building areas, systems, and materials – should be very similar. The purpose of this document is to ensure that all HISD facilities are constructed and maintained at the highest-quality possible while maintaining consistency and equity.

These Design and Construction Standards include Educational Specification information as well as Technical Standards. Sections I-IV describe sizes, quantities, and locations, while the Section VI Technical Standards provide detailed descriptions, approved products, and manufacturers. Any proposed deviations from the Design and Construction Standards must be approved in writing by the HISD Project Manager.

HISD's Design and Construction Standards are supplemental to other requirements, such as applicable building codes, energy codes, national and state accessibility standards, CPSC playground guidelines, Texas Educational Agency requirements, other legislative directives and USGBC's Leadership in Energy and Environmental Design (LEED™) criteria for points approved by HISD being pursued for certification. If there appears to be a conflict between any of the requirements, or if you have a question about the application of the requirements to your project, please notify the HISD Project Manager for clarification.

In a continuing effort to improve, HISD Construction and Facility Services welcome your comments to these Design and Construction Standards. Ideas can be submitted by e-mail to Meredith Smith (msmith6@houstonisd.org).

PURPOSE, GOALS AND CORE VALUES

Purpose

The Houston Independent School District exists to strengthen the social and economic foundation of Houston by assuring its youth the highest-quality elementary and secondary education available anywhere.

Goals

Goal 1: Increase Student Achievement

HISD student performance will demonstrate gains as evidenced by scores on TAKS, SAT, and other state and national tests, while performance gaps between minority and non-minority students will narrow.

Goal 2: Provide a Safe Environment

The district shall develop and implement a strategic plan with specific long-range actions that ensure the safety and security of all who are at district schools and facilities or attending district-related events.

Goal 3: Increase Management Efficiency

HISD will have in place a decentralized organizational structure with operational practices and procedures that distinguish between the school district's pedagogical and business aspects and employ best practices with proven business and administrative operational principles for efficient delivery of services and goods to the schools.

Goal 4: Improve Public Support and Confidence in Schools

The local, state, and national public will view HISD as a large urban school district in which achievement is primary, performance is high, educators accept responsibility for student learning, administrators and support services personnel exist to support the relationship between teacher and student, accountability exists at all levels, and there is respect among all segments of the community. Concomitantly, public confidence in public schools will improve.

Goal 5: Create a Positive District Culture

HISD will have a clearly articulated purpose, with specific goals and objectives that support it. Those will serve as the catalysts for creating a powerful sense of community and shared direction among HISD personnel, parents, students, and the public.

Goal 6: Provide Facilities-to-Standard Program

There will be in place a program designed to make all necessary repairs and renovations to bring HISD facilities up to standard. The plan will include the level of long-range and preventative maintenance necessary to keep the buildings properly up to standard.

Core Values

Safety Above All Else

Safety takes precedence over all else. A safe environment must be provided for every student and employee.

Student Learning Is the Main Thing

All decisions and actions, at any level, focus on and support “the main thing”: effective student learning.

Focus on Results and Excellence

Each employee focuses on results and excellence in individual and organizational efforts.

Parents Are Partners

Parents are valued partners in the educational process, serving as the child’s teacher in the home. All school and district activities will give proper consideration to the involvement of parents.

Common Decency

All members of the organization, both students and employees, deserve and must receive respectful and courteous treatment.

DESIGN GOALS

The design of the HISD's schools should reflect and support the purpose, strategic intent, goals, and core values of the Houston Independent School District. These fundamentals are described in a previous section of these Design and Construction Standards. In particular, the core values relating to safety and student learning should be at the forefront of the design process. As with all public school districts, funding for construction is limited and must be used efficiently for a design to be deemed successful.

Overall, HISD desires for schools to be **safe**, **simple**, **durable**, **flexible**, **uplifting**, and **sustainable**, to inspire a positive learning atmosphere.

Safety

Safety is a responsibility that pervades all aspects of the school.

Simple

Simple refers both to plan layout and the use of construction materials. Circulation within the building should be easily understood, so students and visitors do not get lost inside the building. A simple design allows the building to be a backdrop for student expression and to be customized by its occupants to express the culture of the school and community.

Durable

Durable relates to the need for buildings to serve the district for more than 50 years. Buildings should be easy to clean and maintain, and be built to withstand constant use, and even occasional abuse, by students.

Flexible

Flexible acknowledges that decisions made today may become outdated in decades ahead-the school population may increase, building systems may become obsolete-therefore, the designer must plan for future adaptation to minimize modification costs.

Uplifting

Uplifting sets forth that education has a noble obligation to cherish and promote individuals to achieve excellence for the benefit of society, and that learning should be enjoyable. A well-designed and maintained school campus is a positive influence in the community and a source of pride for students, their families, and neighbors.

Sustainable and High-Performance

To the extent practical and reasonable, the design and construction of facilities for HISD shall incorporate sustainable design principles, including criteria established for the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED™) program and document progress in achieving higher standards to the public through LEED™ certification.

where classes line up during fire drills and at drop-off/pick-up areas.

15. Exterior key safe “Knox-Box” located discreetly and recessed in the exterior building surface, wired to the security system (refer to Technical Standards section).
16. Accessible loading zones shall be marked to comply with TDLR and other applicable codes and regulations.
17. At a minimum all curbs adjacent to the building shall be painted red and labeled “Fire Lane No Parking”. Additional areas may be required by code and/or Fire Marshal reviews.

There are several steps in the process that leads to the final determination of colors for a school. The process should begin during design development and have approvals prior to issuing documents for bidding, so that "vendor specific" or long lead item selections, such as brick, carpet, and perhaps ceramic tile, can be included in the bidding documents.

- 6.1. The A/E should discuss with the building committee how colors may be effective in the design, and the committee may respond to suggested color schemes or material selections.
- 6.2. The A/E selects colors for the building and prepares color boards for a complete presentation. The A/E should only select colors that represent the A/E's best design judgment for the school.
- 6.3. Selected colors are reviewed by the HISD Project Manager.
- 6.4. The A/E presents the color boards to the building committee. At the presentation meeting, it is appropriate for the A/E to have other (equally appropriate) color options readily available, should a color selection not be well received, but not for the A/E to present numerous options for the principal or designated school representative or the committee to choose from.
- 6.5. The committee concurs with the color recommendations of the A/E, or asks the A/E to reconsider and follow-up in a future meeting with a modified presentation.
- 6.6. If the committee concurs, the principal (or designated school representative) and Regional Superintendent will indicate their approval of the selections by signing the color boards. If the committee does not concur after a second presentation, the A/E should involve the HISD Project Manager to review the recommendations and suggestions.
- 6.7. After signatures are obtained and the HISD Project Manager concurs with the final selections, the HISD Project Manager advises the A/E to proceed with the documentation of any color selections that are not already included in the construction documents. This documentation should be expedited to avoid any delay (or claim of delay) in the construction.
- 6.8. The A/E may be asked to assist in coordinating color and finish selections for furniture with the approved building colors. Since furniture options are not extensive, this can usually be accomplished in one session arranged through the HISD Project Manager with the furniture procurement staff and the principal (or designated school representative). The A/E should arrange for the approved color boards to be available for this meeting.

**2007 Facilities Capital Program
HISD Required LEED Credits
September 10, 2008 Update**

New Schools

In accordance with the HISD and A/E agreement, the A/E shall pursue as a minimum, a **CERTIFIED** level in the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating program. HISD does have certain preferences on required and not allowed credits (see below). There are also credits under consideration by HISD which require policy and educational specification changes. Other than these, HISD does not intend to mandate which credits should be earned, however HISD does reserve the right to approve all attempted LEED credits. A list of all attempted LEED credits shall be included in the **Schematic Design** submission for review and approval by the HISD Facilities Project Manager. **Do not include** credits "Under HISD Consideration".

All attempted credits should be selected in keeping with maintaining the overall construction budget and schedule.

HISD Req'd.	HISD Not Allowed	Under HISD Consideration	Category and Credit
			Sustainable Sites
		✓	Credit 4.2 – Bike Storage and Showers
		✓	Credit 4.3 - Low Emission and Fuel Efficient Vehicles
	✓		Credit 4.4 - Alternative Transportation – Parking Capacity
			Water Efficiency
	✓		Credit 1.2 - No Potable Water use or no irrigation
✓			Credit 3.1 - Water Use Reduction 20% Reduction
			Energy & Atmosphere
✓			Credit 3 - Enhanced Commissioning
✓			Credit 4 - Enhanced Refrigerant Management
		✓	Credit 6 – Green Power
			Materials & Resources
	✓		Credit 1.1 - Building Reuse Maintain 75% Existing Walls, Floors & Roof
	✓		Credit 1.2 - Building Reuse Maintain 95% Existing Walls, Floors & Roof
	✓		Credit 1.3 - Building Reuse Maintain 50% of Interior Non-Structural elements
			Indoor Environmental Quality
✓			Credit 1 - Outdoor air delivery monitoring
	✓		Credit 2 - Increased Ventilation
✓			Credit 3.1 - Construction IAQ Management Plan, During Construction
✓			Credit 3.2 - Construction IAQ Management Plan, Before Occupancy

✓			Credit 4 - Low-Emitting Materials
✓			Credit 9 – Enhanced Acoustical Performance, 40dBA / RC level of 32
✓			Credit 10 - Mold Prevention
			Innovation & Design Process
		✓	Credit 1 – Low Impact Cleaning & Maintenance Equip. Policy
✓			Credit 2 - LEED Accredited Professional
✓			Credit 3- School as a Teaching Tool

**2007 Facilities Capital Program
HISD Required LEED Credits
April 30, 2009 Update**

Major Renovations & Additions

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	✓		Credit 4.4 - Alternative Transportation – Parking Capacity
			Water Efficiency
	✓		Credit 1.2 - No Potable Water use or no irrigation
✓			Credit 1.2 - Water Use Reduction 20% Reduction
			Energy & Atmosphere
✓			Credit 3 - Enhanced Commissioning
✓			Credit 4 - Enhanced Refrigerant Management
		✓	Credit 6 – Green Power
			Indoor Environmental Quality
✓			Credit 1 - Outdoor air delivery monitoring
	✓		Credit 2 - Increased Ventilation
✓			Credit 3.1 - Construction IAQ Management Plan, During Construction
✓			Credit 3.2 - Construction IAQ Management Plan, Before Occupancy
✓			Credit 4 - Low-Emitting Materials
✗			Credit 9—Enhanced Acoustical Performance, 40dBA/ RC level of 32
✓			Credit 10 - Mold Prevention
			Innovation & Design Process
		✓	Credit 1 – Low Impact Cleaning & Maintenance Equip. Policy

✓			Credit 2 - LEED Accredited Professional
✓			Credit 3- School as a Teaching Tool

