



Report on High School Planning & Development

A planning conversation with the businesses and stakeholders of BISD concerning future High Schools and site development

Produced for Roderick Emanuel / Superintendent and BISD ADMIN COUNCIL

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How did we select the new Cedar Creek High School Site?

Planning in a growing school district—including the challenge of building a 2nd High School comes with a mixture of pain and opportunity. Until passage of the 2007 Bond referendums, which authorized BISD to construct a new high school, a centralized multi-purpose stadium, and a center for the performing arts, gathering community support for capital investment was very difficult—despite the fact that the BISD community had supported capital investments for new elementary and middle schools. Because of criticisms by our voting public over how we have determined and or identified the district’s infrastructure needs, it became clear to the Board of Trustees and the Superintendent of Schools that the district needed additional ways to properly communicate good information that clearly articulated the justification for continued development of our overall school infrastructure.

After 3 failed attempts to secure passage of bonds for a 2nd High School, the administration and the Board—based on feedback from the public—soon determined that perhaps a missing element in all previous efforts was a clear projection of how we plan for growth and what role public schools play in economic development. It is not that we ignored our responsibly towards this end, nor at various times missed opportunities to express such sentiment, but maybe we needed a different approach to growth and school development. Maybe we should get more involved in our community with respect to the issues of economic development and planning that takes us beyond the walls of the classroom and into the realm of private, municipal, and county-wide development. Maybe we needed to project an image that BISD, along with the Board of Trustees are indeed major players in the development world and that we should therefore seek a role that affects positive influence on the overall quality of life. So, borrowing ideas from comprehensive plans for growth between school districts, city, county and private entities such as those collaborative efforts found in Round Rock, Hutto, and Georgetown, BISD, the Board of Trustees and the administration retooled its community conversation.

What research tells us

“Education is the best investment we can make – one that pays off in countless dividends, for us, for our children, and for our society....if we hope to maintain or improve the quality of life in our communities, attract new industries, and continue to prosper as a nation, top-notch schools are essential.” (American Association of School Administrators, 1999)

“On a national level, there is convincing research showing that public schools have a profound effect on national economic growth....”HUMAN CAPITAL theory documents that investment in the skill level of a nation’s population translates into increased national productivity. Education also leads to higher wages and greater social opportunity.” (Jonathan D. Weiss, Public Schools and Economic Development)

“Public schools indisputably influence residential property values and emerging evidence suggests that the quality, size, and shape of school facilities themselves *affect economic development.*” (Jonathan D. Weiss, Public Schools and Economic Development)

We in the school “biz” know this. We certainly sit around conference tables and talk among ourselves pursuant to these and similar notions. Curriculum trends are influenced by the demands of national, state and local economies. And we certainly find opportunities to articulate some of the above in conversations with interested stakeholders. But, one wonders why the disconnect between an acceptance of what research tells us and the resistance to actually make the necessary investment.

In looking at the 2000 Census, Dr. J. Shapiro, author of City Growth and the 2000 Census: Which places grew, and Why, concluded: “high human capital cities (areas) grew faster, meaning that growth rates varied directly with the average educational level....several researchers conclude that a better educated local workforce can produce a better paid workforce, adding wealth in the area.”

This is further enhanced by an on-going trend in public education to develop community-oriented High Schools that offer adult and vocational training programs that improve the local skilled labor force, help develop entrepreneurial skills and business startups, and transition new workers to the local market.

But educating kids and improving the local workforce / national workforce is not the only economic impact we have that is borne of quality school investment. As a basic local industry, we are a major employer and our payrolls extend beyond teachers, support staff, and administration. We are huge consumers in the local economy. We attract development. We put money back into the local tax base that we draw revenues from....moneys that banks and individuals in turn use to spur on investment in new business expenditures and development that positively grows our local economy.

The question before us then was: *Why not therefore use our leverage as local “real estate developers” to make a better case for quality school construction that is not a reaction to growth, but a generator of positive growth and economic activity?* Our efforts would hopefully lead us to design our new school development, land

and site development, and the quality of our construction such that we are attractors of potential investors and future stakeholders who desire to relocate and call Bastrop home, just like any good commercial development.

As we go forward in terms of our long-range planning, perhaps the key to bond successes...

must include expanding our conversation beyond just convincing the voting public we need new “brick and mortar” to house our growth. Indeed today, the leadership of this district has come to believe it will be necessary for us to develop sites and make the case for new school investments by keeping the chamber of commerce, real estate community, business community, banking community, and city and county zoning and planning communities engaged in our process and if need be, actually “carry the water” in those areas where developmental leadership is not forward leaning. Aside from our primary focus of providing a quality education, as developers of real estate we now believe it can be argued that our entire local economy can benefit from the economic activities surrounding the enterprise we call Bastrop Independent School District.

So, what are other districts doing in site development and building construction:

How much land is needed to develop a school site?

How much land to develop a school site? According to Gary Marek of TEA, there is no standard.....this is a local decision, but he said the prevailing thought during the last decade has been ~

- 1) 10 acres for elementary schools, plus one acre per 100 students
- 2) 20 acres for middle schools, plus one acre per 100 students
- 3) 30 acres for high schools, plus one acre per 100 students

In visiting with Allen Albers from RRISD, Mr. Greg Lookabaugh—the Director of Facility Services for RSC 4, Mr. Tim Niccum from RSC 4 Service Center (facility planning division), Dee Kile from TASBO, and several colleagues with CEFPI (Council of Educational Facility Planners International), the above is where most of school districts begin.

If we made our calculations for a future high school using the above, we would then come up with around 54 acres to serve a student population of 2400. Dee Kile told us that a 100-acre site for most high school planners is probably on the high end of high school site planning and would be ideal for most growing school districts. However, she and many of the other folks we visited with have said 80 acres for a 2400 student high school is more the going standard.

Yet, high school planning involves more than just a nice and neat little parcel of land. What goes on top of the property as the finished developed project will

impact the amount of land we need. Utility easements alone can eat up 2 to 10 acres of usable land, and as has been the case for our rural school sites; the need for wastewater disposal is a chief concern in acreage considerations. It is estimated that a school site located somewhere in the western zone would require a built out capacity to handle upwards of 40,000 gallons of wastewater per day. If we continue using drip irrigation systems, this will most likely require 10 to 12 acres of land.

Even if we couldn't fully develop a second high school to include all of the typical parts associated with high school planning (i.e. a full stadium complex, fine arts facilities, etc.) a bunch of land will be required just for parking, practice fields, all weather track, tennis courts, etc....before we could even begin the footprint of 250,000 to 300,000 square feet of physical plant associated with classrooms.

Why we put schools where we do and how we look for suitable sites ~

The taxpayers of BISD should be proud of this district's efforts to look for quality real estate pieces to develop our schools on. Indeed we believe we have a great track record of studying growth, using quality demographic data, and making site selections relevant to geography to decide where schools should be located.

Picking a school site is first determined by demographics and this should be a priority for discussions involving multiple high schools.

Once we have the demographic data to help us whittle down the possibilities in terms of a general area, then there should not be many criticisms for where we look. Certain geographies are ruled out simply because the demographics will not support certain locales. Needless to say this does not necessarily mean we will not receive comment about locales, but we will always use data as a practical guide to our selection process starting point.

After demographics, next comes the actual site visit of potential real properties to determine "build-ability." Nice flat pieces, that are cleared of woodlands and or existing buildings have good appeal in that civil engineering will have less complication. The greater the variances of topography and or rolling terrain equates to more expense in the civil work.

While we are looking at sites, we also investigate accessibility and utility capacity. Are there good existing roadways with safe visibility for access and evacuation? Is the site generally safe with respect to traffic patterns and population mobility? Are the utilities available to the site and is there enough capacity?

When we find a nice piece of property with potential, then we have statutory requirements as we put up earnest moneys. Any contract we come up with between the district and a seller should be subject to a Phase One Environmental. This will help us identify possible problems: wetland issues, fault lines, archeological and historical concerns, volatile organic compounds and potential hazardous materials located on, in, or near potential properties, electromagnetism concerns from major power lines, soil tests, etc.

FM 812 and Hwy 21

Within our school district currently, and based on the findings of previous Boards and administrations, the property BISSD owns at 812 and 21 seemed to meet current needs for a second high school. While the issue to liquidate or keep this property either for a high school or some other development is a Board decision, there are some historical factors that we needed to keep in mind as we considered other possible sites in the western zone of our district.

1. The 2003 demographic study concluded—specific to a western zone high school site—that our most dense 9-12 grade student populations can be found along the Hwy 21 corridors southwest of Cedar Creek, with other dense and growing populations found around the Hwy 71/21 corridors. There were pockets of other 9-12 grade student populations to be found along FM 535 and FM 812. Planning zones 101, 104, 105, 111, and 112 contained the largest numbers of high school students and these planning zones are located at or near the intersection of FM 812 and Hwy 21. (Deskmap Systems, July 2003)
2. Eleven properties were investigated relevant to our demographic data and presented to the School Board prior to the purchase of the 812 and 21 site. Of the eleven, 4 specific recommendations were brought to the Board for considerations—two of which were located on 812 (including the purchased site) and two additional properties were brought for review that were located at or near what is now an improved FM 535 west of Hwy 21 (formally Pierce Lane). All of these property recommendations were re-studied by district staff, along with a couple of additional possible sites discussed in May of 2003. Almost all of the land searches were made in areas south of Hwy 71 along the Hwy 21 corridor and included areas in the FM 535, FM 812 traffic zones. We also explored different pieces of property in areas mostly west of Hwy 21 but with access only by underdeveloped or poorly developed county roads. It should be noted that the property we purchased (812 & 21) was the only site with at least two major roadway frontage areas and this was a key point in the decision.
3. Water capacity is an existing concern for much of the area in our western zone. Several properties were unfortunately eliminated along the FM 535 corridor because water capacity was not available for high school planning.
4. Roadways are a concern in the western portion of our county and district zones because once we leave the State maintained highways, the County's road infrastructure is undersized, underdeveloped and or not adequate in terms of accessibility.
5. Volatile organic compounds – along the Hwy 21 corridor, much of the land to the west of Hwy 21 has had oil exploration and production—particularly in the historic Hopewell community where there still exists some oil production, abandoned wells, old oilfield equipment, and on one particular piece of property I investigated, potential environmental clean-up concerns.
6. At the intersection of Hwy 71 and Hwy 21 there exists a north-south pipeline for diesel and jet fuel which is a major pipeline running through the heart of the western zone. Also, there are at least 2, possibly 3 major natural gas pipelines that are laid east-west that cut across the western zone of our district south of Mt. Olive and in between Mt. Olive and Hobb's creek. There are also natural gas pipelines to be found crossing FM 535. Our research has uncovered that these lines supply nearly 2/3 of all natural gas

consumed in Austin and Central Texas.....so we had to be careful in our site review of potential pipeline hazards located near possible school sites.

7. Topography, wetlands, floodplains, and other geographic features also limit and or restrict our search for suitable sites, although it is much easier in the west and southwest of our school district to find parcels of property large enough for school use that is contiguous and does not involve multiple sellers.
8. Transportation – a key factor in site selection and as we grow, locating schools in areas near growing populations will involve planning and input by our school transportation system. Safety, fuel economy, and improved service can play a role in determining a site.

Which brings us to the Pope Bend & Hwy 71 site

In 2007, BISD purchased a 65 acre tract of land at the intersection of Pope Bend South and Hwy 71. This property is due south of the Hyatt and the LCRA's McKinney Rough's preserve and Mark Rose Science Park.

Because our 2005 Demographics had shown expanding growth in our High School population along the 71 corridor (and subsequently supported by our Spring 2008 Demographic Study), the Board of Trustees asked the district to explore options in and around this updated geographical trend—the strategy being that perhaps we should develop the next High School along 71 first and then later come back and address growth in the southwest utilizing the 812 and 21 site.

- The proposed 2nd High School site is located at the intersection of Pope Bend (South) and Hwy 71 / Union Chapel...approximately 8 miles West of the City of Bastrop. The site is on the south side of Hwy 71 and faces the new Hyatt Resort and McKinney Roughts.
- The property consists of 3 tracts of land that make up approximately 65 acres. Tract 1 includes approximately 3.466 acres. Tract 2 includes approximately 27.803 and 0.177 acres. Tract 3 includes approximately 33.836 acres. Records indicate these acreages were apart of the John Litton Survey Abstract A-288.
- **FLOODPLAIN** - The proposed site does not have any floodplain issues and the bulk of the property appears to be a highpoint relative to the surrounding and adjacent developed areas. The property has excellent views of all surrounding frontages and properties. There is existing drainage and a stock tank near the Western-Southwestern edge of the property....along Pope Bend South.
- **UTILITIES** – The site has good access to utilities. There are existing electrical utilities on site. Bluebonnet Electric has indicated that there should be capacity for a school site. Aqua Water has a tank and water main running through the proposed site. Entex has recently installed a new gas main and line along the Union Chapel frontage to support the new Hyatt Resort.
- **ACCESS TO SITE** – Accessibility to this site is superior.
 - The site is fronted by Pope Bend South along the Western boundary and Hwy 71 along the North.

- In addition to these frontages, between Hwy 71 and the property is a service road called Union Chapel. This road gives us above average opportunities to consider safe traffic flow of students, buses, and parents.
 - Furthermore, because the property can be accessed by Pope Bend and Union Chapel, it is possible that all bus routes south of Hwy 71 and West of Hwy 21 could be routed without having to use Hwy 71...thereby reducing traffic and safety concerns.
 - There is good to excellent line-of-site distances for all roadways which would be used to access this site.
 - Other than internal roadways through the property, we did not expect any significant civil costs associated with roadways other than perhaps turn lanes and some widening of stacking areas—but some of this could perhaps be accomplished on site.
- **Vegetation** – The site is mostly cleared for agricultural use (cattle grazing). However there are pockets of dense vegetative growth containing oak trees, cedar trees, and in some cases undergrowth. There are many large specimens of oaks and other trees that would be desirable for landscaping.
 - **Topography** – The site appears to gently roll with slopes to higher elevation towards the southern end of the property.
 - **Storm water and detention** – This site has an existing tank and some evidence of natural drainage in the lower Northern portion flowing back towards the West and South. It would appear that we could utilize the natural drainage and perhaps the existing water feature for civil controls.
 - **Wastewater** – The LCRA offered to assist us on wastewater planning in which we could perhaps link in with their wastewater systems located on the McKinney Roughs and Hyatt Resort sites.

SYNERGY

Perhaps the most exciting thing about the new Cedar Creek High School site is how nicely this development potentially taps the synergy of businesses and commercial development along Hwy 71--which poses many great opportunities for partnerships in education and the development of educational programming, along with career and technology offerings that could be made available to the students of BISD. The potential industries and development identified thus far (which include the Lost Pines Hyatt Resort, a pharmaceutical company, the LCRA's McKinney Roughs), that could be supported by educational curriculum and courses offered at the new high school include some of the following:

1. Hospitality careers – hotel/restaurant mgmt., foodservices, culinary arts...
2. Recreational arts & sciences – eco-tourism
3. Wildlife management...and any number of biology and science offerings
4. Forest Management- to include courses in conservation and forest product development
5. Courses in wild land fire management, emergency management training, and other fields in support of the growing science of multi-hazard emergency planning...
6. Courses in health sciences

In May of 2007, voters overwhelmingly passed the bond authorizing BISD to plan, design, and construct phase 2 of our high school planning. In partnership with the taxpayers of BISD, the Board of Trustees completed a successful conversation that we believe will make an economic statement and serve our community and future development interests for years to come. We believe Bastrop ISD is a place to bring future business and investment because the new high school will be seen as a major amenity that not only draws investment, but human capital to our community—an economic plus that could ease the burdens of the sacrifices made by our taxpayers.