

## **Appendix 1: SCASD Documents and Discussion:**

To ensure that the Sensible Solution HS design is comparable to the district's design, the team requested the district's needs and requirements documents and viewed other sources of information such as the school district web site and the Kimball design reports. The team sent the compiled list back to the district to verify and confirm that the list was complete. Dr. Best verbally confirmed that all design documents had been provided.

This appendix presents many of the design documents and discusses their value in providing specific guidance for determining the actual physical design dimensions and layout. As will be explained, the stated needs were often too subjective to appropriately constrain the physical space. Consequentially for the sake of an equitable comparison, but not by a preferred process of documented justification, the team decided to make the functional spaces of its design match or exceed those of the one building design.

The Outline of this appendix is as follows:

- I. Presentation of district documentation:
  - a. Chart of Documents
  - b. Compiled Display of Select District Design Documents
- II. Discussion of Priorities and Goals
- III. Discussion of Design Documents Provided by the District
- IV. Conclusion

The "needs" are presented and discussed here in five categories: 1) "Priorities" and "Broad Goals and General Requirements," 2) Educational Specifications, 3) Emerging Design Principles, 4) Deficiencies in the Current HS as of the 2001 Master Plan, and 5) 30 % design review adjacencies. There are several observations about the needs that will become clear in the following discussion in sections 2 and 3 of this appendix. As an overview, the "needs" are:

- 1) Of different types/categories – Goals, needs, principles, and deficiencies
- 2) Qualitative, not quantitative
- 3) Subjective without objective metrics to decide whether the design has met them and/or how much more the design has to change to meet the metric.
- 4) Descriptive of a desired end state – not a resulting physical requirement.
- 5) Sometimes based on existing maintenance issues and specific deficiencies that should not exist today or be mentioned in a new design. Since several involve safety problems that still exist today - it raises the concern and question whether any of these needs are really priorities. The team believes some of these are priorities that should have been corrected when they were first identified.
- 6) Mostly did not define or require any specific design.
- 7) Not of the same importance: both on an absolute basis and on a relative basis. We have ranked these as wants, needs, and requirements based on guiding principles.
- 8) Not capped by any cost target or prioritized by any expected ranking (e.g. "Outdoor toilets" received more votes than "Access to Technology Throughout" and "Faculty Resource Spaces" received zero votes in the document "Educational Specifications").

**1a. Presentation of district documentation: Chart of Documents**

<b>Document name</b>	<b>Description</b>	<b>date</b>	<b>author</b>	<b>Key</b>
<u>Educational Specifications for the Alterations and Additions to the State College Area High School</u>		Dec. 2005. Revised Jan 26, 2006	Kimball	A
<u>State College Feasibility Study</u> 12/2001 Second Draft	District Wide Master Plan DWMP	12/2001	Burt Hill Kosar Rittelmann Associates	B
<u>Campus Concepts SCASD High School Design Charette</u>	Includes 1 sheet each Schemes; A-1,A-3,B-1,B- 3, C-3,C-4,and D- 2.	No date	Kimball	C
<u>Campus Planning</u>	Organizational Principles, Organizational Issues	02.09.2005	Kimball	D
<u>30% Submission for the Alterations and Additions to the State College Area High School</u>		Nov. 9, 2005	Kimball	E
<u>Public Information Booklet Act 34 PUBLIC HEARING</u>		July 8, 2006		F
Five Loose Pages w/ tables of costs. Hand written in upper right corner "COST ESTIMATES"	Tables comparing costs by option Schemes, by Kimball vs Poee Anderson, Hard, Soft,...	Various; Nov 2,2005, Mar 23 2005, Mar 24 2005.	Kimball	G

1 page table; OPTION 2 on 11"x17" paper	No title. Supplied by SCASD as "update to DWMP" 10/10/06	Nov 9, 2005	Kimball	H
<u>60% Submission for the Alterations and Additions to the State College Area High School</u>	"Supplemental Information - Aug. 23, 2006 Approx. 40 pages	Aug. 23, 2006	Kimball	I

**1b. Compiled Display of Select District Design Documents:**

Following is the compiled display of documented needs: The documents included here are "Priorities," "Broad goals and General Requirements," "Educational Specifications," "Program design input from Various Documents," "Project Need from Act 34 documents," and "Emerging Design Principles."

Other documents included in our review were design sketches of various two-building options that were top-down views of the campus configurations, 30 and 60 percent design reviews from Kimball and various public documents regarding stated public concerns and needs and the SCASD website. All of these documents are not included here for the sake of brevity; but all are public and available through the school district and/or at the Schlow Library Reference Desk.

**PRIORITIES:**

The School District's three top "priorities" for the High School Project are inserted here from the district website:

<http://www.scasd.org/249710026193544/blank/browse.asp?a=383&BMDRN=2000&BCOB=0&c=55399&249710026193544Nav=%7C&NodeID=1135> on 12/19/06):

**FROM THE DISTRICT WEBSITE LIST OF PRIORITIES FOR THE HIGH SCHOOL:**

This project reflects three key priorities:

**Maintaining the excellent instructional program for all students.**

Our current high school provides every student with the opportunity for a full spectrum of basic, advanced and specialized courses in all academic and elective areas, and 14 fully developed vocational programs. Every student has a path to develop individual interests, talents and skills leading to further schooling and/or employment.

Our students perform well according to accepted measures of achievement. These consistent results have been recognized by state and national entities that assess the quality of schools.

During our strategic planning process in 2001, the curriculum was consistently regarded as a major strength. We believe it is important to maintain these opportunities for all students, and that is exactly what the current project does.

**Engaging every one of our high school students in their school.**

Students need to belong -- not just most students, but every student. Our students have indicated that they want to know their classmates better and have more opportunities for interaction with their teachers. They want to be connected to their school.

We want that, too. Our faculty and administrators, along with students and parents, have been working for the past two years on a creative way to make this happen called the Small Schools Initiative.

Beginning in 2007-08, every student will have a faculty mentor and will participate in a "small school." The current six small schools are Natural Sciences, Humanities and Social Sciences, Health and Human Development, Arts, Business and Communication, and Career and Technical Education.

Students will still have the full range of curriculum choices for their regular academic program, but they will have the additional advantage of being part of an interest-based group meeting several times a month for study, exploration and activities throughout their high school years.

Our high school is a large school, but it need not be impersonal.

**Managing costs to the community.**

In considering the variety of options during the decision-making process, the board kept the complete financial picture of the district and the community firmly in view. The current project is less costly, by \$25 million to \$35 million, than a new building on a new site.

It is also less costly than financing and operating two separate high schools with identical instructional programs and double athletic and extracurricular activities. It goes beyond minimal renovations of the two buildings as they stand, thus providing substantial improvement.

In addition, our community faces the significant costs of renovating at least five more elementary schools during the coming decade. This decision will result in a fine high school but considers additional facilities costs ahead.

Broad Goals and General Requirements – Table 1:

Inserted from the District Website on 12/20/06 at:

<http://www.scasd.org/249710026193544/blank/browse.asp?a=383&BMDRN=2000&BCOB=0&c=54988&249710026193544Nav=|1135|&NodeID=1149>.

**The primary goals of the high school project are:**

- To provide a safe, secure, healthy, and comfortable environment for student learning
- To provide student centered spaces
- To provide sufficient space to accommodate the functions of the facility
- To improve the organization of the campus and buildings
- To create a flexible facility that can accommodate change
- To integrate technology into the facility
- To upgrade the physical operation and appearance of the facility, while incorporating features and components that promote environmental responsibility.
- To provide appropriate outdoor support facilities
- To accommodate and manage the community's use of the facility

Educational Specifications:

The following four tables (2- 5) are from a document entitled: The Educational Specifications for the Alterations and Additions to the State College Area High School document. These tables contain rankings by 24 voting members from three groups; District Administration, HS Building Administration Team, and HS Curriculum Council. The items are in category tables assigned by the same group.

TABLE 2 SAFETY & SECURITY

# OF VOTES	ITEM	Source
16	Traffic and Parking	A
14	Limited Building Access/ Number of Entry Points	A
8	Building Flow	A
5	Classrooms Lockable from Interior of Classroom	A
5	Cameras	A
4	Directly Accessible Shelter(s) at Remote Fields	A
3	Safer Stage "Set " & "Lighting" Adjustments	A
3	Controlled Building Access	A
3	Main Office/Nurse's Office Location	A
2	Bus Drop-off	A
2	Alternate Fire Drill Route	A
2	PA System that Works	A
1	"Traction" of Wet Floors - Wet Weather	A
1	Skid Proof Ramps - Interior/Exterior	A
1	Double Doors Where Needed for Movement of Equipment	A
1	Weather Protection for Bus Pick-up and Waiting	A
1	Safety Equipment where Appropriate	A
0	Shatterproof Glass	A
0	Emergency Lighting	A
0	Evacuation Plans for Handicapped Students	A
0	Controlled Area Access	A
0	Lockers with Working, Integrated Locks	A
0	Limited Access without Gates	A
0	Visual Control of Campus	A
0	Fire Alarms that Work	A
0	Electric Backup of Critical Systems	A
0	Dumpsters, Location and Access	A
0	Outside Access to Utility Meters to Avoid Building Access	A
0	Controlled Building Access - Multiple Levels	A

TABLE 3 TEACHING AND LEARNING ENVIRONMENT

# OF VOTES	ITEM	Source
8	Departmental Clusters	A
8	Appealing Environment	A
6	Air Quality and Climate Control	A
5	Organizational Arrangement to Enhance and Emphasize Flexible Teaching Arrangements	A
5	Video and Computer Access in Classrooms and Common Areas	A
4	Access to Technology Throughout	A
4	Well Designed Student, Staff, and Vehicular Traffic Flow	A
4	Opportunities for Multiple Functions in Classrooms	A
3	Student Lounge	A
3	Storage	A
3	Room Tailored to Program	A
3	Auditorium Size and Use	A
3	Adequate Gym Space with Scoreboard and Sound Systems	A
2	Flexibility	A
2	Day Lighting	A
2	Student Computer Workrooms	A
2	Activity Areas for Students During Lunch, Before & After School	A
1	More Rest Rooms	A
1	Offices for Teacher/Parent Meetings	A
1	Easy Access to Office/Administration	A
1	Accommodation of Large Groups/instruction (interior)	A
1	Building to Building Flow	A
0	Adequate Parking	A
0	Adequate Space Accommodating Safety	A
0	Student Center Close to Cafeteria	A
0	Allowances for Outdoor Classrooms	A
0	Service Elevator	A
0	Display Opportunities in Common Areas	A
0	Noise Pollution	A
0	Separate Copy Areas	A
0	Functional Clocks	A
0	Public Address System	A
0	"Softer" Floors	A
0	Quality Seating	A

TABLE 3 TEACHING AND LEARNING ENVIRONMENT (Continued)

# OF VOTES	ITEM	Source
0	Faculty Resource Spaces	A
0	Outdoor Instruction/Amphitheatre	A
0	Transportation/Building Access	A
0	Large Hallways	A
0	Health Suite/Nursing	A
0	Location and Layout of Common Spaces	A
0	More Meeting Areas (Groups)	A
0	Telephones in All Rooms	A
0	Security	A
0	Loading Dock	A
0	Accessibility	A
0	Accommodations for Building Faculty and Staff	A

TABLE 4 COMMUNITY USE

# OF VOTES	ITEM	Source
11	Outside Concession and Toilet Services	A
10	Separate Gym Storage for Community and School Uses	A
8	More and Larger Auditorium Seating	A
7	"Compact" the Building to Reduce Sprawl	A
6	Parking	A
6	Upgrades to Auditorium Facilities	A
5	Large Group Room	A
5	Secure School Circulation from Community Use	A
5	Better Signage and Way Finding	A
4	Durability	A
4	Community Based Continuing Education	A
1	Exterior Lighting	A
0	Room Number Organization	A
0	Emergency Shelter	A
0	Separate Storage for Continuing Education	A

TABLE 5 CURRENT & FUTURE CONSIDERATIONS

# OF VOTES	ITEM	Source
14	Air Quality for Year Round Use	A
12	Smart Classrooms	A
9	Instructional Flexibility for Large and Small Group Instruction/Distance Learning	A
7	Opportunities for Wellness	A
7	Collaborative Spaces for Teachers to Work Together	A
6	Educational Design Changes to Match Cultural Changes	A
3	Flexibility for Program Changes	A
3	Dedicated Space for Staff Development	A
3	Wireless - One to One Computer/Student Ratio	A
3	Humane and Nurturing Environment	A
2	Green Areas/Landscaping	A
1	Space for PSU Collaboration	A
1	Plan for Expansion	A
0	Flexibility for Lifetime Learning	A
0	Smaller Specialized Learning Environment	A
0	Growth of School Day and Year	A
0	More Message Boards	A
0	Additional Computer Labs	A
0	Language Lab	A
0	More Community Services	A

Program Design Input from Various Documents:

TABLE 6 Deficiencies noted North Building – per DWMP

ITEM	Source
Lack of Music Program	B
Students crossing parkway	B
ADA problems at ramp, LGI room – <i>room 230 South bldg??</i>	B
Library is too small (No recommended space or needs)	B
Science lab casework has outlived its useful life [	B
Auditorium seats 636 students - too small for a full class	B
Size and location of main office creates an environment that is not efficient and not <u>secure (?)</u>	B
Exterior doors – Replacement recommended	B
Skylights – good condition	B
<b>North Bldg Food Services study (DWMP)</b>	B
Lower Kitchen – undersized for current operations	B
Second Level Kitchen Undersized for current operations, inefficient layout ?? – <i>South bldg??</i>	B
Vo-Tech Kitchen Update layout would improve program	B
<b>Mechanical Study North Bldg (DWMP)</b>	B
Combustion units should be installed to meet current International Mechanical Code requirements	B
Gymnasium air/water heating has outlived its useful life and should be replaced	B
New relief air systems should be installed in classroom areas to bring system into compliance with codes and standards.	B
Toilet exhaust systems should be updated or replaced to conform with codes and standards.	B
Solder of 50-50 composition poses a risk of contamination to water system	B
Fire sprinkling system should be brought up to existing codes	B
<b>Electrical Study North Bldg (DWMP)</b>	B
Electrical Service Entrance Limited capacity	B
Electrical Distribution	B
Spare boiler capacity unknown	B
Lighting System No deficiencies noted	B
Fire Alarm System No deficiencies noted	B
PA System Frequent interferences	B
Sound System No deficiencies noted	B
Security System No deficiencies noted	B
Data System No deficiencies noted	B

Miscellaneous – Emergency power shut-off switches missing??	B
Electrical Recommendations ???	B
Recommendations – North Bldg	B
Renovate entire building <u>to meet today's educational requirements</u> (Undefined)	B

TABLE 7 Deficiencies noted South Building – per DWMP

ITEM	Source
Cafeteria is too small	B
Courtyard is used at lunchtime in good weather (?)	B
Music suite is small and <u>not well suited for the music curriculum.</u> (No recommended space or needs)	B
Storage/keyboarding lab - bad acoustics	B
Darkroom is inadequate	B
Library is too small (No recommended space or needs)	B
Science labs outdated (In what ways - No recommended space or needs)	B
Major water problem in band wing (Still? - 5 years later) ?? <i>North Bldg ??</i>	B
Fitness room is inadequate (No recommended space or needs)	B
<b>South Building Food Service Study</b>	B
Full service kitchen walk-in and dry storage areas undersized	B
<b>Mechanical Study South Bldg (DWMP)</b>	B
Toilet exhaust systems should be updated or replaced to conform with codes and standards	B
<b>Electrical Study South Bldg (DWMP)</b>	B
Electrical Service Entrance - No deficiencies noted	B
Electrical Distribution No deficiencies noted	B
Lighting System New gym too dark/dismal, No other deficiencies noted	B
Fire Alarm System No deficiencies noted	B
PA System No deficiencies noted	B
Sound System No deficiencies noted	B
Security System No deficiencies noted	B
Data System No deficiencies noted	B
Miscellaneous - Emergency power shut-off switches (Missing?)	B
<b>Recommendations – South Bldg</b>	B
Existing systems and many aspects of design do not <u>the needs of the curriculum</u> (Undefined)	B
Renovate building with some minor additions <u>to meet current program</u> (Undefined)	B

TABLE 8 "Project Need" Pages 15, 16 Act 34 Document July 8 2006

ITEM	Source
<b>Shortage of space has been identified in both buildings. Per Act-34 document.</b>	F
The need for additional space has been identified in the following areas:	
General and Special-Purpose Classrooms	F
Art, Science and Family Consumer Science Classrooms	F
Library	F
Educational Support Spaces	F
Career and Technology Spaces	F
Music and Performing Arts	F
Physical Education	F
Food Services	F
Administration	F
Mechanical/Service Spaces	F

At the culmination of the Campus Design phase of the design process, the following design principles were enumerated and reviewed with the Citizens Advisory Committee for Facilities on June 15, 2005.

Table 9 Emerging Design Principles

Emerging Design Principles
<p>1. Clear Site Access and Circulation.</p> <ul style="list-style-type: none"> <li>a. "Front door" for parent, visitor, and main student access.</li> <li>b. "Back door(s)" for bus, staff, and limited student access.</li> <li>c. Provide direct access from building to fields, bus zone, parent drop-off, student parking, visitor parking, band practice, staff parking, etc.</li> <li>d. Provide multiple campus access points while managing through-site traffic.</li> </ul>
<p>2. Sensitivity to Adjacent Neighborhood (s).</p> <ul style="list-style-type: none"> <li>a. Minimize or eliminate street connections to Holmes Foster neighborhood.</li> <li>b. Locate green spaces adjacent to single family homes and vehicular areas adjacent to business and apartment buildings.</li> </ul>
<p>3. Organized Outdoor Spaces.</p> <ul style="list-style-type: none"> <li>a. Maximize direct access from building to Physical Education areas.</li> <li>b. Collect competition areas on South Site.</li> <li>c. Increase opportunities for practice and intramural activities. (Refer to attached Athletic Facilities Needs.)</li> <li>d. Provide for outdoor instructional spaces (Science and CTC).</li> </ul>
<p>4. Optimized Building Location.</p> <ul style="list-style-type: none"> <li>a. Provide room for parking between building and parkway.</li> <li>b. Manage impact on site drainage issues.</li> </ul>

<ul style="list-style-type: none"> <li>c. Accommodate phasing of CTC and Auditorium.</li> <li>d. Minimize footprint on Community Field.</li> </ul>
<p>5. Balance Reuse of Existing Building while Minimizing Building Footprint.</p> <ul style="list-style-type: none"> <li>a. Maximize reuse of existing building to reduce cost of project.</li> <li>b. New building areas to be multi-story.</li> </ul>
<p>6. Integrated Green Building Techniques.</p> <ul style="list-style-type: none"> <li>a. Reduce or utilize building roof water to reduce subsurface detention.</li> <li>b. Orientate building to minimize energy costs.</li> <li>c. Layout site to maximize shading and bio swale opportunities.</li> <li>d. Provide educational opportunities.</li> </ul>
<p>7. Interior "Street" for Clear Organization and Orientation.</p> <ul style="list-style-type: none"> <li>a. Provide strong interior connection between "front door" and "back door." (Mount Nittany MS not Park Forest MS.)</li> <li>b. Extend "street" into site for street crossing and parking and field access.</li> </ul>
<p>8. Integrated Auditorium for Both Event and Instructional Uses.</p> <ul style="list-style-type: none"> <li>a. Provide clear and controlled access for public.</li> <li>b. Tie multiple levels of Auditorium into multiple levels of building.</li> </ul>

## **II. Discussion of Priorities and Goals:**

The next paragraphs discuss the priorities and goals of the HS project from the website in greater detail and how the team assessed them.

### **Three Priorities:**

1. The Three Priorities of the High School Project are to 1) Maintain the Current Curriculum. Obviously, this can be achieved in the current configuration and is likely to be met in the SCASD design. 2) To Engage Students through a personalization or small schools initiative program. The small schools initiative and advisory programs underway are not finalized; however, they essentially are to personalize the large enrollment high school. Creating a larger environment whereby there is no student-focused organization to the school seems to be directly opposed to this priority. 3) To Manage Costs. Disposing of an entirely useful facility and having to rebuild it at an additional cost of \$30 million without adequate justification is not in line with managing costs.

### **Broad Goals and General Requirements:**

The needs in this category were simply listed; but for clarity and consistency with the Education Specification Ranking Tables, the team has used the same sub-categorical headings to group these goals and requirements. Note these items are broad and general and thus not quantitative - and by this very nature, cannot be used to specify an amount of improvement, space, flexibility, etc. a new HS design should contain. Apparently, since a cost target is not stated, a design philosophy of “design for or to cost” was not a goal or requirement and thus the goals and requirements are inconsistent with the third priority of the HS project as stated on the Website.

#### **SAFETY & SECURITY**

- To provide a safe, secure, healthy, and comfortable environment.
- To upgrade the physical operation and appearance of the facility, while incorporating features and components that promote environmental responsibility.

#### **TEACHING AND LEARNING ENVIRONMENT**

- To improve the organization of the campus and buildings.
- To provide sufficient space to accommodate the functions of the facility.
- To integrate technology into the facility.
- To provide student centered spaces.

#### **COMMUNITY USE**

- To provide appropriate outdoor support facilities.
- To accommodate and manage the community's use of the facility.

#### **CURRENT & FUTURE CONSIDERATIONS**

- To create a flexible facility that can accommodate change.

It could be concluded from these goals and requirements alone that no new construction is required; it is also rather questionable that these goals have been met in the one-building design.

### **III. Discussion of Design Documents Provided by the District:**

#### **Educational Specifications:**

Tables 2-5 represent the results of a brainstorming session facilitated by Kimball to generate a list of needs that were then voted upon by a small group of district faculty and staff. This list of needs appears to have been generated from desired improvements from the current two-building state. As is evident, the description of the items in each sub-category is terse and requires specific knowledge of what was intended by the entry. In many cases these “needs” refer to deficiencies in the current design. Examining deficiencies alone is a rather crude way of defining a new design. Below are discussions for each of these categories.

#### **SAFETY & SECURITY**

While the voting culminates in a ranking that represents the relative importance of each item in the sub-category list, it does not indicate its severity relative to an objective and actionable criteria. This is particularly important in the Safety and Security sub-category where presumably the HS principal, School superintendent, and School Board would not knowingly let unsafe conditions persist. It is bothersome to realize some of these deficiencies still exist after being identified by school personnel. All true safety and security items should be considered serious and be considered as design Requirements not “Needs.” They should not exist in the current facilities.

Indicative of how seriously the generators of this listing consider it to be is the inclusion of items in the list that received no votes. One need without any votes was Evacuation Plans for Handicapped Students. First of all, a “plan” is not a function of a design but how a management intends to operate - in this case in an emergency – in a given facility. The concern is that if the facility does not have a safe operational plan now, even worse conditions in the large multi-story building are envisioned. Thus, unless the management intends to take these requirements seriously, there is not much point including them in a list of design needs. All these safety and security items - and perhaps others - will be corrected in the first phase of the two building renovation to the maximum extent possible.

#### **TEACHING AND LEARNING ENVIRONMENT**

These environment items generally involve secondary internal structural modifications to the classrooms. They are primarily related to the outfitting and instructional use for the classrooms and other special purpose rooms. Note there is no quantification of how many or how much additional space should be devoted to each appropriate line item; as a nominal percentage increase from the current two high schools buildings, as a baseline. Some items in this category seem unrelated to the teaching and learning environment such as vehicular traffic. Oddly, “faculty resource space” did not receive any votes.

## COMMUNITY USE

Similar comments regarding the lack of specificity apply to items listed in this sub-category. The number one item is “outdoor toilets and concessions” – presumably for athletic events. Another high-ranking issue is parking. Since most athletic fields and a significant amount of parking will be on the south side of the campus and decisions/planning for this part of the campus have not been completed, it is hard to understand how it ranked as a “priority” with the most votes. Either these are true priorities - or not. If so, they should be addressed in the campus design before bidding/construction.

## CURRENT & FUTURE CONSIDERATIONS

Similar comments apply here also. It is noted that one vote was listed for plans for expansion. While laudatory, it is inconsistent with the SCASB premise of no growth in enrollment. Most of the items listed involve outfitting of instructional spaces with teaching capabilities. This outfitting can occur in any configuration.

### **Emerging Design Principles**

At the culmination of the Campus Design phase of the design process, the Emerging Design Principles were enumerated and reviewed with the Citizens Advisory Committee for Facilities on June 15, 2005. It is evident in the previous Educational Specifications and the Emerging Design Principles that nothing requires a single building as the design solution or precludes revision to the existing two building configuration. In “Organized Outdoor Spaces” is the item to: “Collect competition areas on South Site.” During the recent PlanConD Act 34 process the SCASB chose to remove the South building from the project in response to the public outcry to save the South building. Thus, this is an example/instance where the Board has abandoned one of its design principles as far as this project is concerned. The team was not provided the “attached Athletic Facilities Needs” mentioned in this document. It also confirms the characterization of these design principles as being subjective with no stated/published criteria regarding the degree to which they must be upheld or when they can be ignored completely.

One of the principles that would seem to have been discarded in the single building design is under topic #5, “Balance Reuse of Existing Building while Minimizing Building Footprint.” There is no rationale for needing to reduce the footprint of the school on an 82-acre property - particularly in light of a stated objective to maximize reuse of existing facilities. The design strategy and reason was to:

- c. Maximize reuse of existing building to reduce cost of project.
- d. New building areas to be multi-story.

A major departure from the existing two building design is the construction of a single large capacity auditorium. This seems to be considered under principle # 8, “Integrated Auditorium for Both Event and Instructional Uses.”

- c. Provide clear and controlled access for public.
- d. Tie multiple levels of Auditorium into multiple levels of building.

It is also consistent with the “Community Use: of More and Larger Auditorium Seating” in the Educational Specifications. Note both these needs and principles are not

quantified, if not in seat numbers then in terms of the HS enrollment or size/seating capacity relative to other auditoria in the State college area. Does larger auditorium seating mean the seats are each larger or there are more seats? It should be noted that the existing two auditoria combined offer more seating (1500) and more stage area square footage than the SCASD plan; thus, the district's plan actually reduces total seating and stage space (and the ability to house two events simultaneously).

Another major expansion area is the space for the library and the cafeteria.

#### **Existing Building Deficiencies from the District Wide Master Plan:**

Again, the team believes that deficiencies are to be corrected in any configuration and plan and these items were noted and most were considered to be "requirements" for informing the two-building design.

#### **Adjacency Requirements:**

In the Dec 2005 Kimball document, figure G.2 (p 13), shows an adjacency matrix that represents the results of meeting with several school personnel, etc. to obtain information on the relative locations of administration offices and instructional offices. In a meeting with the school officials when reviewing these adjacencies, they indicated on this matrix those adjacency requirements as having been satisfied (green), partially satisfied (yellow) and not satisfied (red). This is followed by the statement: "Through this process Kimball and the district concluded that no design could satisfy all of the adjacency requirements as there were inherent contradictions within them." The team believes that these adjacency requirements were actually defined prior to any concept that the high school would ever be in only one building, thus seriously reducing its usefulness to inform the current SCASD one building design.

#### **IV. Conclusions:**

The needs are of several different types and they all suffer from not being well organized, definitive, quantitative (even in the most rudimentary manner, such as a percentage increase in space from an existing condition), or justified by a desired educational outcome. This raises the very pertinent question: how were the architects able to begin any design and how did the school board and architects make decisions without quantifiable parameters, (i.e. on the basis of what metrics, criteria, etc).

Equally disturbing is the lack of any document outlining whether or how the current facilities meet any of the stated needs already. There is no documented evidence that any comparison was made to determine the extent to which the current facilities offer any benefits to the high school program. Considering that the North and South buildings currently house a highly successful program, some analysis of the strengths of existing assets may have been helpful in decision-making.

Most significant to the team, was that none of the "needs" require that a single building be the preferred configuration. Further, since all these needs are met to an adequate degree at the conceptual level of the Sensible Solution, the choice between it and the district's single building design will have to be decided on much higher considerations of

educational and community suitability, and cost, including near- (acquisition cost) and long term (flexibility). It is noted that the major attractions as advertised by the single building design of a larger auditorium, cafeteria, and gymnasium did not show up as a top priority in any of the design needs provided to the team, and the cafeteria did not show up at all. It is also noted that while the district's website discusses student input with a preference for student lounge areas, student focused areas received no votes in the educational specifications. This is indicative of how inconsistently rationale for a "need" is used in one place as a serious justification for the one-building design and then not mentioned at all in documents to inform the design.

Consequently, the approach adopted by The team for an equal cost comparison was to include, as a minimum, the same general amount of space by designated use in the two buildings as indicated in the single building design. While the educational outfitting cost estimates are not included in the Sensible Solution (or the single building design), the cost estimates do include making the facilities ready for high tech devices and capabilities.

In any design selected, the district has offered no documented direct means to ensure or measure whether any design selected actually achieves any higher-level educational goals other than to maintain the current curriculum.