

**GLENBROOK HIGH SCHOOLS
DISTRICT BUSINESS OFFICE**

TO: Dr. Mike Riggle

FROM: Kimberly Ptak

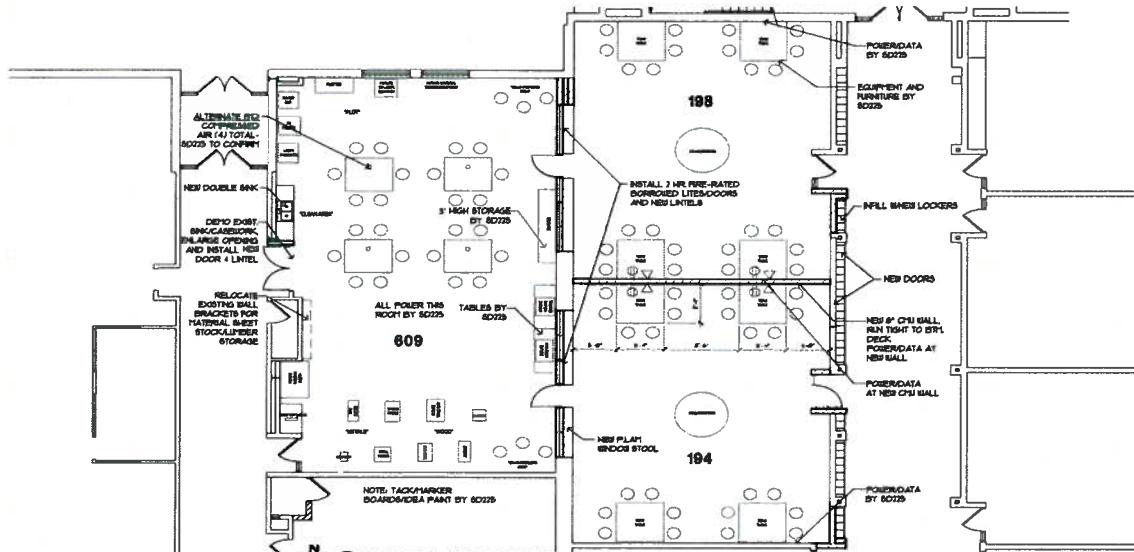
DATE: April 28, 2014

SUBJECT: Approval of GBS Project Lead the Way and Computer Lab Conversion Bids

It is recommended that the Board of Education approve the following bids, totaling \$451,685 for GBS Project Lead the Way and Computer Lab Conversion work to be completed the summer of 2014. This recommendation was discussed and agreed upon at the April 22nd facility committee meeting.

<u>Trade</u>	<u>Low Bidder</u>	<u>PLTW</u>	<u>Lab Conversion</u>	<u>Total</u>
Demolition	Robinette	\$38,900	\$28,600	\$67,500
Masonry	Midwest Masonry	\$22,100	\$35,800	\$57,900
General Trades	Monarch	\$67,910	\$95,500	\$163,410
Plumbing	Hartwig	\$8,425	n/a	\$8,425
HVAC	DeKalb Mechanical	\$16,000	\$9,500	\$25,500
Electrical	Carey Electric	\$44,950	\$84,000	\$129,950
Total Cost		\$198,285	\$253,400	\$451,685
Estimate		\$190,000	\$251,892	\$441,892
Over/(Under) Budget		\$8,285	\$1,508	\$9,793
% over/(under) budget		4%	1%	2%

Project Lead the Way



BACKGROUND

Following is the summary provided by Gary Freund at an October, 2014 board meeting.

Project Lead the Way (PLTW) Facility

PLTW was introduced at Glenbrook South for the 2013-2014 school year. Student response has exceeded expectations with 250 students registered for the first two courses offered.

Combining these requests with existing CAD enrollment requires 4 classes to be taught outside the current CAD Lab during the 2013-2014 school year. PLTW will continue to expand as additional courses are implemented over the next three years, which drives the need to expand our PLTW facility. The courses housed in the engineering classrooms for PLTW and CAD include:

1. Introduction to Engineering Design (IED)
 - Designed for 9th or 10th grade students, the major focus of IED is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.
2. Principles of Engineering (POE)
 - Designed for 10th or 11th grade students, this survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanics, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges as they document their work and communicate solutions.
3. Architecture
4. CAD 1 and CAD 2
5. Future PLTW courses (beginning in 2014 - 2015) will be selected from: Digital Electronics, Civil Engineering and Architecture, and Engineering Design & Development.

This project incorporates two general classrooms with the existing CAD Lab to create two high-end computer driven classrooms with a shared production lab. This efficient model has been designed with the input of our experienced PLTW teachers.

In addition, this project involves converting 3 computer labs into 5 classrooms and 4 peer group rooms into 8 peer group rooms.