

**To:** Dr. Charles Johns  
Board of Education

**From:** Dr. Kim Ptak  
Dr. R.J. Gravel

**Date:** Monday, December 14, 2020

**Re:** Summer 2021 Capital Projects and 3-Year Master Facility Plan

**Recommendation**

It is recommended that the Board of Education authorize Administration to work with Arcon Associates, the District architect, to develop bid specifications for the following capital projects to be completed in the summer of 2021 as presented.

**Background**

School and district leadership teams maintain a fluid 3-year facility master plan, including infrastructure and enhancement projects that directly impact the student experience. For ease of viewing the facility plan, it is provided in the form of a separate document. Within the summary page and each facility's project list, the following categories have been assigned:

- **Summer 2021**  
The projects with cost estimates stated in this column represent those projects recommended for completion during the summer of 2021. The projects stated are for Glenbrook North, as the summer school program is hosted at Glenbrook South this summer.
- **Summer 2022**  
The projects with cost estimates stated in this column represent those projects recommended for completion during the summer of 2022. The majority of projects stated are for Glenbrook South, as the summer school program is hosted at Glenbrook North this summer.
- **Summer 2023**  
The projects with cost estimates stated in this column represent those projects recommended for completion during the summer of 2023. The majority of projects stated are for Glenbrook South, as the summer school program is hosted at Glenbrook North this summer. Additionally, this is the year slated to upgrade the Building Automation System at Glenbrook North and Glenbrook South. While a detailed timeline needs to be created, it is estimated the work will take 10-12 months.
- **Deferred**  
The projects with cost estimates stated in this column represent those that will not need to be completed during the next three summers. However, we anticipate they will need to be completed and/or addressed within the next ten years.

It is important to note that the plan includes cost estimates based on the initial assessment performed by the school district's architect and construction manager. As the architect reviews each project, the scope

will be more narrowly defined, and the financial projection modified accordingly. Additionally, the list is intended to be fluid in nature, and items will be added, adjusted, and reprioritized as necessary.

Capital projects scheduled to begin in June 2021 are typically announced in December 2020, with a bid opening in January 2021. The facility committee will review the bid results on February 16, 2021, and a recommendation will be brought to the February 22, 2021 board meeting for approval.

**Recommended Summer 2021 Capital Projects**

The projects recommended for completion during the Summer of 2021 are summarized in Table 1 and presented in detail in the pages that follow.

**Table 1**  
**Summary of Summer 2021 Capital Projects by Category**

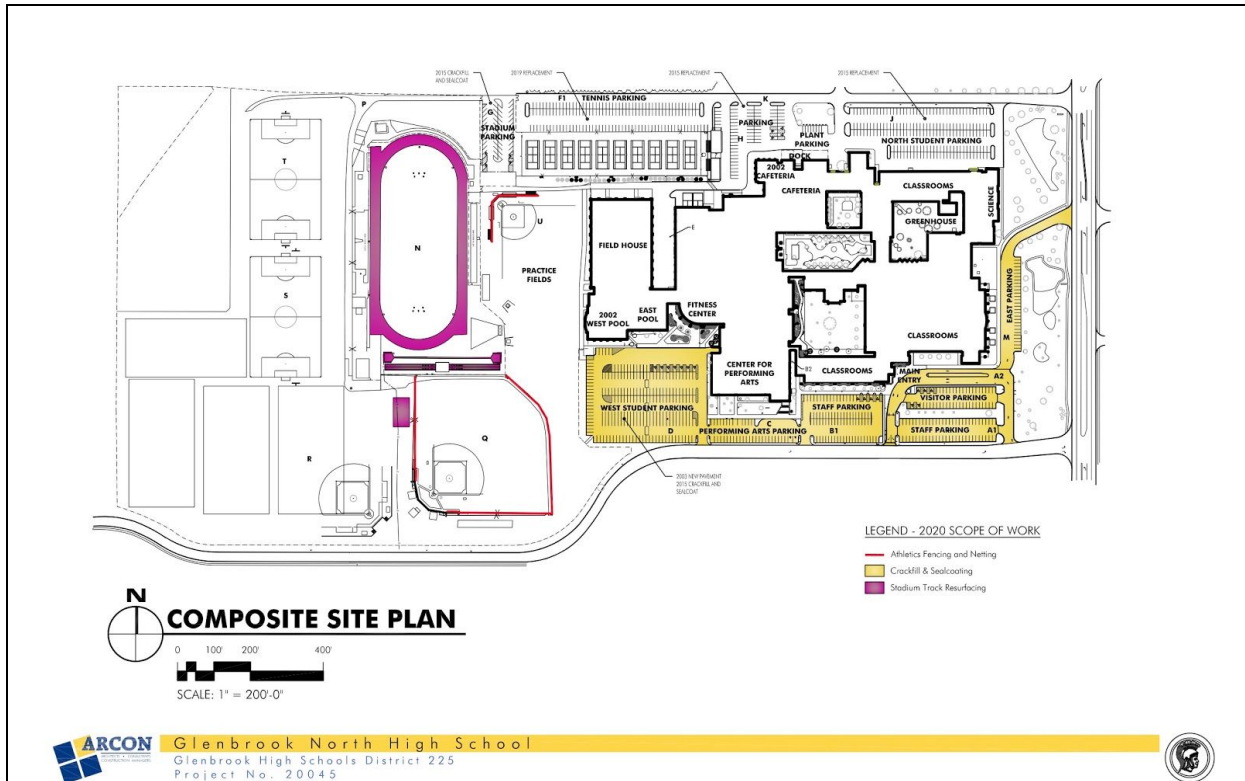
Category	Location(s)	Project Description	Financial Projection
Site Work	GBN	Crack-fill/Sealcoating, Track Resurfacing, Fence Replacement, Protective Netting	\$455,000
Roofing	GBN	Roof Replacement	\$395,000
Architectural	GBN	Career and Technical Education Room Renovation	\$245,000
<b>Subtotal</b>			<b>\$1,095,000</b>
Architect Fee (7.5%)			\$82,125
Construction Management Fee (7.5%)			\$82,125
Contingency (2%)			\$21,900
<b>Grand Total</b>			<b>\$1,281,150</b>

As all building and life safety bond proceeds have been exhausted, capital projects will be funded on a “pay as you go” basis and built into the district’s budget. Within the current financial projection model, the school district allocates \$1,500,000 annually to support capital projects. These funds are secured through developer impact fees, unrestricted revenue sources (e.g., The Glen Make-Whole Payment), and approved inter-fund transfers. Should the final expense of approved capital projects exceed \$1,500,000, the school and district leadership team will need to identify additional budgetary reductions to provide for the expense.

**Table 2**  
**Site Work Projects**

Location(s)	Project Description	Projection
GBN	<p><b>Crack-fill and Sealcoating</b> The district maintains a master paving schedule that plans for parking lot replacement every 15+ years and general maintenance (crack-fill and seal coating) every four years. The planned summer of 2021 work includes sealcoating the GBN lots on the south side of the building. Sealcoating is a preventative maintenance measure that extends the parking lots' life by protecting the surface from deterioration caused by water penetration.</p>	\$110,000
GBN	<p><b>Stadium Track Resurfacing</b> The current stadium track was installed in 2004 and resurfaced in 2013 at the time the turf field was installed. It is recommended that the track be resurfaced with a polyurethane structural spray every 6-8 years to maintain its structural integrity and maximize its useful life. The summer of 2021 will be year 8. Once resurfaced, it is estimated the track will last another eight years before being ready for a full replacement. It should be noted that the stadium track resurfacing will include the areas for field events, pole vault, and long jump. The GBS track was completed last summer.</p>	\$125,000
GBN	<p><b>Athletic Fencing and Netting</b> The current fencing around the baseball field (1,025 linear feet) and softball field (248 linear feet) at GBN are original (50+ years old) non-coated chain link fences. The fencing has rusted, and many of the posts are heaving and lifting out of the ground. The remaining concrete posts in these areas have sharp, jagged edges that create an environment non-conducive to safe play. The metal fencing will be replaced with a black vinyl coated fence, which is consistent with all other athletic fencings at GBN.</p> <p>Additionally, considering the results of a recent safety inspection, it is recommended that a netting system be added to the softball field due to the proximity of the 1st and 3rd baselines to both the stadium bleachers and tennis courts. 50-foot high netting would anchor into a stone wall behind the home plate, and the 40-foot high net would anchor into the fence posts along the first and third baselines.</p>	\$220,000
		<b>\$455,000</b>

**Crack-fill and Sealcoating and Stadium Track Resurfacing Plan**



**Athletic Fencing and Netting**



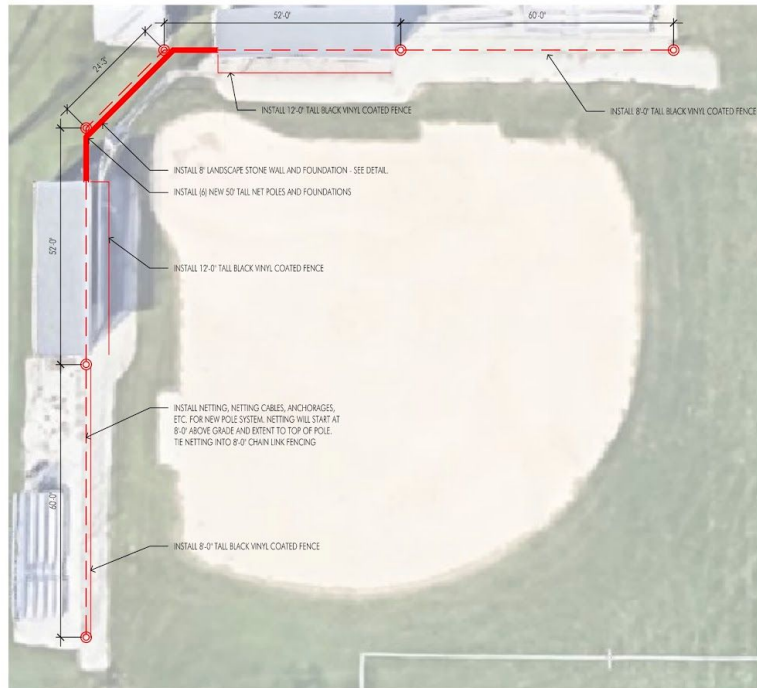


**GBN - SITE PLAN**



Glenbrook North High School  
 Glenbrook High Schools District 225  
 Project No. 20045

10/23/2020



**GBN - SOFTBALL PROPOSED WORK**  
 SCALE: 1/16" = 1'-0"



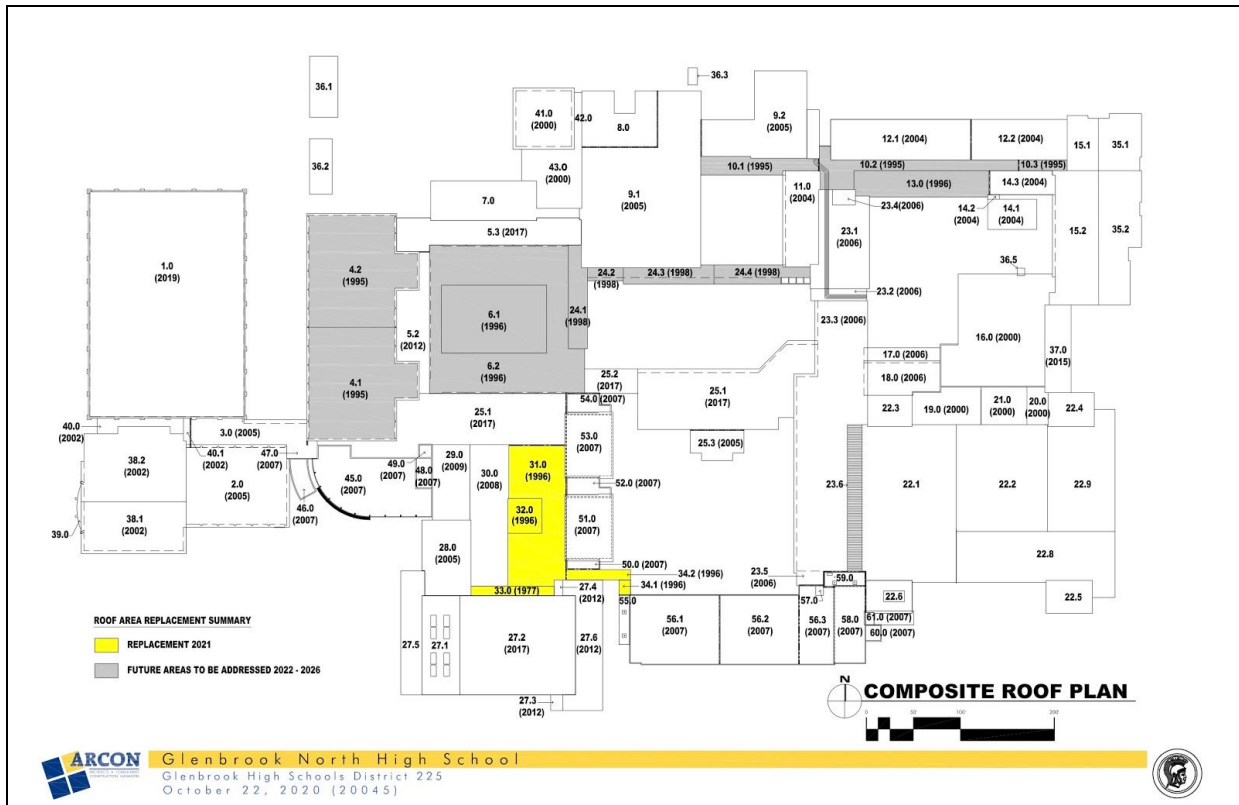
Glenbrook North High School  
 Glenbrook High Schools District 225  
 Project No. 20045

8/20/2020

**Table 4**  
**Roofing Projects**

Location(s)	Project Description	Projection
GBN	<p><b>Roof Replacement - Music</b></p> <p>The Music roof is 9,600 s.f. and was installed in 1996. The existing roof system has reached the end of its serviceable life and is experiencing a number of deficiencies typical for this roof system's age. The proposed new roof system would consist of roof insulation with an R-value of 30.0 minimum and a multi-ply modified bitumen built-up roof membrane with gravel surfacing. The life expectancy of the new roof is 30+ years.</p>	\$345,000
GBN	<p><b>Roof Replacement - CPA Corridor and Lobby</b></p> <p>The CPA Corridor and Lobby roofs total 1,900 s.f. and were installed in 1996. The CPA corridor and lobby roofs are experiencing several deficiencies typical for this roof system's age. The proposed new roof system would consist of roof insulation with an R-value of 30.0 minimum and a multi-ply modified bitumen built-up roof membrane with gravel surfacing. The life expectancy of the new roof is 30+ years.</p>	\$50,000
		<b>\$395,000</b>

**Roofing Plan**

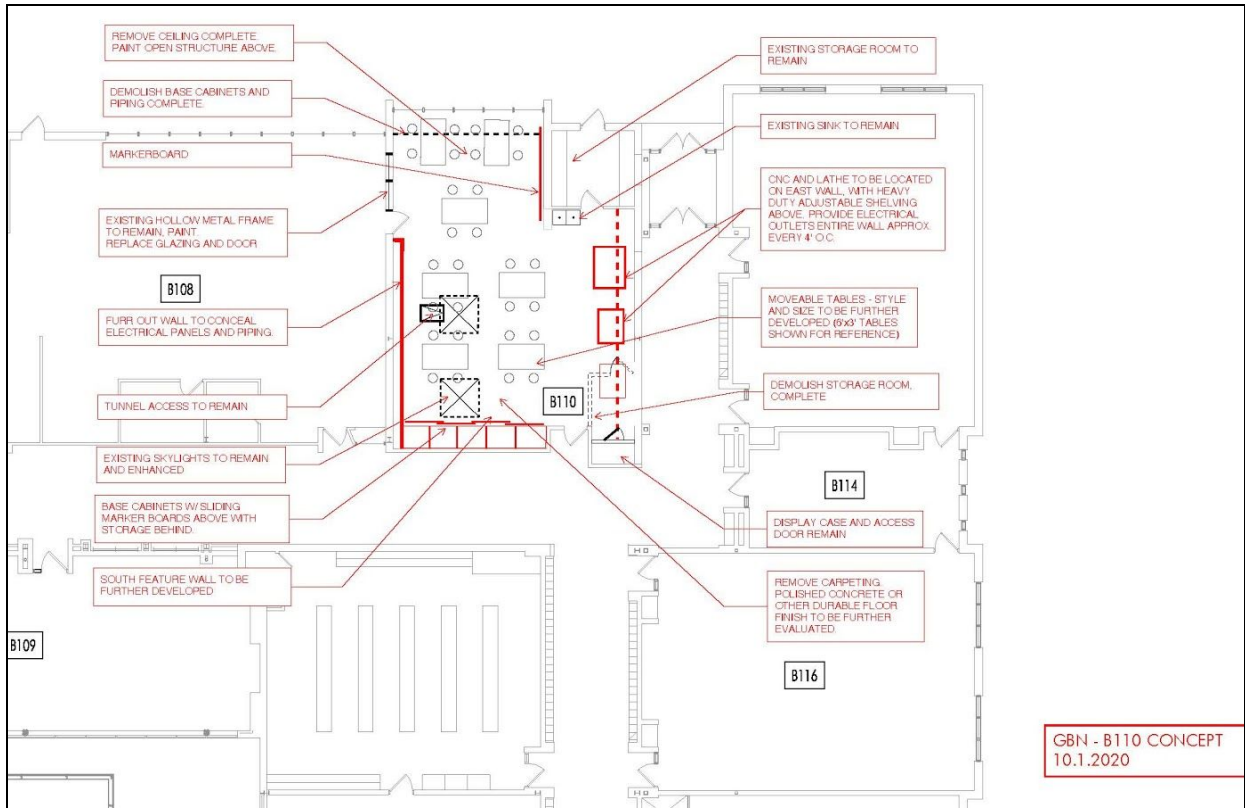


**Table 5**  
**Architectural Projects**

Location(s)	Project Description	Projection
GBN	<p><b>Career and Technical Education Classroom Renovation (B110)</b>                      B110 is an approximately 1,200 square foot classroom in the Career and Technical Education (CTE) wing. The classroom has not been updated in over 30 years. It has old carpeting that is soiled and torn, an original drop ceiling with fluorescent lighting, exposed pipes, and a storage closet no longer needed but taking up valuable space. The room has primarily been used for Sci Tech and Welding courses. The Sci Tech computer curriculum historically was taught on desktop computers and, as such, the room is still in its original configuration with heavy, individual study carrels with desktop computers. Part of the technology computer refresh plan includes replacing the desktops this year with laptop computers. Additionally, the room has several pieces of welding equipment that are no longer being used and will be replaced this year with newer technology through grant funds. Due to its configuration and the limited “project space,” the room cannot be used for the majority of CTE classes.</p> <p>The CTE courses have significantly expanded over the years, and new courses have been added through the annual curriculum review process. Over the last three years, a robust engineering sequence was added to the course list, which earns four credit hours at Oakton Community College. The courses available to students in this sequence include Introduction to Engineering Design, Principles of Engineering, Civil Engineering and Architecture, Welding 1, and Advanced Welding. The scheduling of these new courses has been difficult, and an extra classroom is needed. Renovating room B110 allows it to become a multi-purpose CTE classroom.</p> <p>The renovation scope includes removing the old drop ceiling, painting exposed ductwork, installing LED lighting, asbestos abatement, new flooring (polished concrete), and mobile furniture. The renovation will allow the room to be a maker space lab that all CTE courses (Sci Tech, Welding, PLTW, Business Incubator, Game Design, and future CTE machining/manufacturing courses) can utilize.</p>	\$245,000
		<b>\$245,000</b>









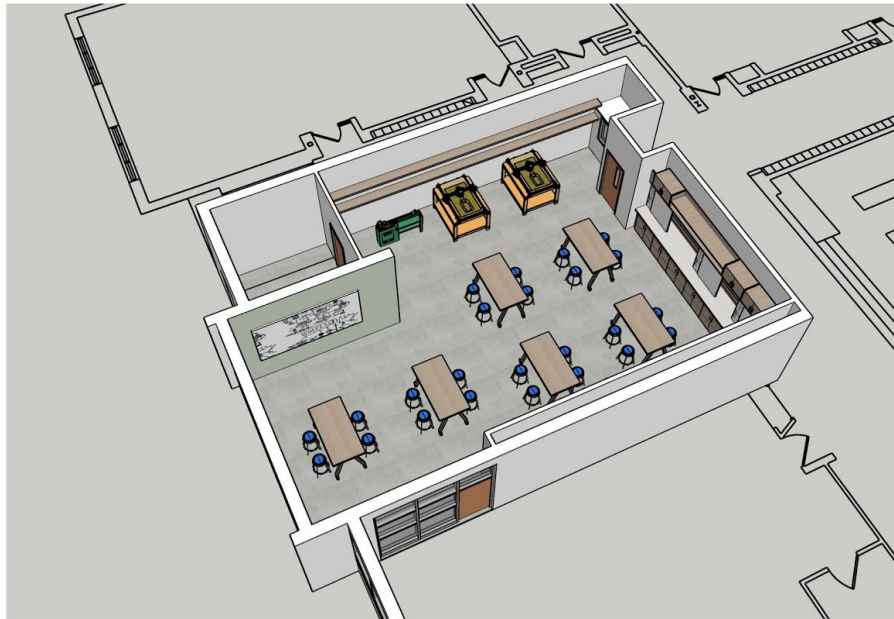
Glenbrook High Schools District 225  
Glenbrook North High School Room B110  
Project No. 20045

October 27, 2020



Glenbrook High Schools District 225  
Glenbrook North High School Room B110  
Project No. 20045

October 27, 2020



Glenbrook High Schools District 225  
Glenbrook North High School Room B110  
Project No. 20045

October 27, 2020

Glenbrook High School District 225 - Summary of Master Facility Plan

*Updated as of October 27, 2020*

Location	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
District Administration Building (GBA)	\$421,200	\$0	\$181,350	\$0	\$239,850
Glenbrook North High School (GBN)	\$18,199,116	\$1,281,150	\$87,750	\$1,205,100	\$15,625,116
Glenbrook South High School (GBS)	\$12,401,766	\$0	\$1,398,150	\$1,269,450	\$9,734,166
Glenbrook Off Campus (GBO)	\$409,500	\$0	\$105,300	\$0	\$304,200
<b>Grand Total</b>	<b>\$31,431,582</b>	<b>\$1,281,150</b>	<b>\$1,772,550</b>	<b>\$2,474,550</b>	<b>\$25,903,332</b>

Summer School Location: Glenbrook South    Glenbrook North    Glenbrook South

Glenbrook High School District 225 - District Administration Building (GBA) Master Facility Plan					Updated as of October 27, 2020				
Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred		
<b>Paving and Site Work</b>									
GBA	Paving - Parking Lot	According to building records, the district parking lot was installed in 1988 and has been patched and sealcoated multiple times. The lot was last sealcoated the summer of 2020. It is recommended that the lot be replaced the summer of 2026. <b>Parking lot replacement recommended.</b>	\$130,000						\$130,000
<b>Mechanical</b>									
GBA	HVAC Replacement - 200B, 200C, 200D, 200E	This space at the district office was previously rented by a dental practice and was configured with four small exam rooms. Each exam room is heated and cooled via window units and the space is not tied into the overall building HVAC system. <b>Provide new heating and cooling systems for this space that is tied into the overall building systems.</b>	\$75,000						\$75,000
<b>Architectural</b>									
GBA	Carpeting - 2E, 3W	The carpeting in suites 2E and 3W is 10 years old and is expected to be replaced the summer of 2022. <b>Update lighting to LED.</b>	\$75,000		\$75,000				
<b>Electrical</b>									
GBA	Lighting Retrofit - 2E, 3W	The lighting in suites 2E and 3W are the remaining areas at the district office with fluorescent lighting. Lighting should be upgraded to LED. <b>Update lighting to LED.</b>	\$80,000		\$80,000				
<b>Subtotal for All Project Areas</b>			<b>\$360,000</b>	<b>\$0</b>	<b>\$155,000</b>	<b>\$0</b>	<b>\$205,000</b>		
<b>Fees/Construction Contingency</b>			<b>\$61,200</b>	<b>\$0</b>	<b>\$26,350</b>	<b>\$0</b>	<b>\$34,850</b>		
<b>Grand Total</b>			<b>\$421,200</b>	<b>\$0</b>	<b>\$181,350</b>	<b>\$0</b>	<b>\$239,850</b>		

## Glenbrook High School District 225 - Glenbrook North High School (GBN) Master Facility Plan

Updated as of October 27, 2020

Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
<b>Roofing</b>							
GBN	Roof Replacement - Back gym, main gym balcony, art, industrial ed, cafeteria corridors, science wing, mall canopy, music, CPA lobby.	There are several roof structures reaching 26+ years old and will be closely monitored over the next 3-5 years. Summer 2021: Music, CPA Lobby and Cooridor. Summer 2023: Back Gyms	\$2,300,000	\$395,000		\$500,000	\$1,405,000
		<b>Roof replacement recommended.</b>					
GBN	Smoke Relief Hatch Replacement - CPA Roof	The stage house has three smoke relief hatches that are original to the CPA wing of the building and over 40 years old. They are beyond their useful life and no longer forming a complete seal.	\$140,000			\$140,000	
		<b>Replace smoke relief hatches.</b>					
<b>Paving and Site Work</b>							
GBN	Paving - North and South lots	Crack-filling and sealcoating is a preventative maintenance item that helps to maintain and extend the lifespan of an asphalt surface by preventing surface deterioration. The industry standard for this treatment is every three to four years, the district adopted a four year cycle. This preventative maintenance measure reduces weather damage and water penetration of the asphalt surface, resists effects from gas, oil and salts, seals and protects the asphalt surface from deteriorating effects, reduces freeze-thaw deterioration, and extends the service life of the pavement. Crack-filling and sealcoating involves cleaning and preparing the asphalt surface, installing joint sealant into prepared cracks, applying sealer and allowing it to cure, and applying pavement markings. The GBN south lots are scheduled for the summer of 2021 and the north lots the summer of 2023.	\$240,000	\$110,000		\$130,000	
		<b>Crack-fill/sealcoating recommended.</b>					
GBN	Paving - Staff and West Student Lot	The staff parking lot and west student parking lot are scheduled for replacement the summer of 2025.	\$605,000				\$605,000
		<b>Replacement of parking lot recommended.</b>					
GBN	Paving - Tennis Courts	The GBN tennis courts were replaced the summer of 2018. It is recommended that they be resurfaced every 7 years. Work should be completed the summer of 2025. Crack repair and resurfacing will involve cleaning existing cracks and court surface, installation of "crack filler", filling cracks with granular silica sand, and applying one coat of acrylic resurfacer and two coats of fortified acrylic tennis court color coating surface.	\$135,000				\$135,000
		<b>Resurfacing of tennis courts recommended.</b>					
GBN	Paving - Stadium Track	The stadium track was replaced in 2013 at the time the turf field was installed. It is recommended every 6-8 years the track be resurfaced with a structural spray to maintain the integrity of the track and expand the useful life.	\$125,000	\$125,000			
		<b>Stadium Track Replacement Recommended.</b>					

## Glenbrook High School District 225 - Glenbrook North High School (GBN) Master Facility Plan

Updated as of October 27, 2020

Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
GBN	Turf surface replacement - Stadium Field	The artificial turf field was installed in 2013. The top layer (carpet) needs to be replaced every 12-14 years. It is estimated the surface should be replaced the summer of 2027. <b>Replacement of field surface recommended.</b>	\$664,800				\$664,800
GBN	Additional Netting - Baseball Field	The current fencing along the first and third baselines of the GBN baseball fields are not high enough to prevent foul balls from flying into adjacent fields and parking lots. <b>Add 50 foot netting behind the backstop and the first and third baselines recommended.</b>	\$220,000				\$220,000
GBN	Additional Netting - Softball Field	The current fencing along the first and third baselines of the GBN softball field is not high enough to prevent foul balls from flying into the adjacent stadium track and tennis courts. <b>Add 50 foot netting behind the backstop and the first and third baselines recommended.</b>	\$85,000	\$85,000			
GBN	Fencing - Baseball Field	The GBN baseball and softball fencing is original and has significant rusting. The fence is, in many places, twelve inches above the ground and concrete posts are exposed. <b>Add 50 foot netting behind the backstop and the first and third baselines recommended.</b>	\$135,000	\$135,000			
GBN	Bleacher and Press Box Replacement - Stadium	The bleachers were installed in the late 1970s. Although passing inspection, the underlying structure is slowly deteriorating and rusting. The recommended repairs due to wear and tear has been accumulating each year including seating replacement, welding and painting. The bleachers do not have proper capacity (home 1800 and visitor 900) and are the smallest bleachers in the 12 team conference. Additionally the bleachers are not ADA compliant making it difficult for students, staff and community members to watch events with friends and family. The press box is also much smaller for today's needs which include broadcasting, filming etc. <b>Replacement of bleachers, press box recommended.</b>	\$1,500,000				\$1,500,000
<b>Mechanical/Plumbing</b>							
GBN	Building Automation System Software and Component Replacement - Throughout	GBN uses a building automation system (BAS) which was installed in 2001, to automate the many building mechanical systems. The current system and component parts (field panels, controllers) are considered obsolete and no longer available or supported. Wiring is old and has the potential to fail. <b>Replace BAS system and components. Run new wiring.</b>	\$900,000				\$900,000
GBN	Hydraulic Lift Replacement - CPA	The GBN orchestra pit lift is original construction with two hydraulic rams. There is the potential for failure. The lift can drift out of level from side to side. New pit lifts are electronically driven avoiding the need for hydraulic fluid. <b>Replace Hydraulic Lift</b>	\$350,000				\$350,000

## Glenbrook High School District 225 - Glenbrook North High School (GBN) Master Facility Plan

Updated as of October 27, 2020

Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
GBN	HVAC Replacement - Shop Classrooms Wood Shop, Auto Shop, Metal Shop	The existing ceiling hung air handling units for the shop classrooms are the original air handling unit and are approximately 60 years old. Failure of these units will result in loss of heating and ventilation and the ability to maintain proper space temperature to the areas they serve. <b>Provide a new Air Handling System to service these areas.</b>	\$350,000				\$350,000
GBN	Boiler Replacement - Boiler Room	The existing fired steam boilers (4) are over 60 years old showing signs of deterioration. Loss of the boilers would result in loss of heat to the entire building. <b>Replace existing steam boilers with new gas fired hot water boilers. Extend new hot water supply and return mains to existing equipment.</b>	\$1,800,000				\$1,800,000
GBN	Condensation Tank and Pump Replacement - Fieldhouse	There are 8 condensation tanks/pumps in the fieldhouse one of which is needing to be replaced in the next couple of years. <b>Replace one condensation tank/pump.</b>	\$40,000				\$40,000
GBN	HVAC Replacement - C-108 and Nurse/Student Services	As part of the 2016 Life Safety Bond issuance, the majority of unit ventilators were replaced. There is a remaining unit ventilator in the ceiling of room C-108 and nurses and student services are roof top units. <b>Replace unit ventilators with a rooftop unit.</b>	\$130,000				\$130,000
GBN	Water pipe and fixture replacement - Applied Tech Restrooms	The existing domestic water piping mains are the original galvanized steel piping. The piping is deteriorated causing leaks and loss of water pressure to building. The existing plumbing fixtures in classrooms and toilet rooms are the original fixtures and are worn. <b>Replace piping and fixtures with new.</b>	\$70,000				\$70,000
GBN	Water pipe and fixture replacement - Girls and Boys PE Restrooms	The existing domestic water piping mains are the original galvanized steel piping. The piping is deteriorated causing leaks and loss of water pressure to building. The existing plumbing fixtures in locker room and toilet rooms are the original fixtures and are worn. <b>Replace piping and fixtures with new.</b>	\$225,000				\$225,000
GBN	Water pipe and fixture replacement - CPA Restrooms	The existing domestic water piping mains are the original galvanized steel piping. The piping is deteriorated causing leaks and loss of water pressure to building. The existing plumbing fixtures are the original fixtures and are worn. <b>Replace piping and fixtures with new.</b>	\$220,000				\$220,000
GBN	Piping Replacement - A-Wing	The hot water piping was replaced in the late 1990s however the circulation to individual fixtures is a concern and the hot water is not effectively traveling to the individual fixing, cold water piping is now approaching the end of its useful life and is showing signs of deterioration. <b>Replace piping and fixtures with new.</b>	\$180,000				\$180,000

**Electrical**



## Glenbrook High School District 225 - Glenbrook North High School (GBN) Master Facility Plan

Updated as of October 27, 2020

Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
GBN	Lighting - CPA	The current incandescent lighting in the CPA is difficult to maintain due to its height and is not energy efficient. Additionally they consume a great deal of power and burn out frequently. It is recommended that the lighting be converted to LED on both the stage and house. <b>LED retrofit is recommended.</b>	\$700,000				\$700,000
GBN	Lighting and Ceiling Tile Replacement - Back Gym Hall	The back gym hall ceiling and lighting was replaced when the back gym work was completed the summer of 2018. There is a portion of old spline ceiling with surface mounted lighting that remains. <b>Provide a new drop ceiling and LED lighting.</b>	\$50,000			\$50,000	
GBN	Lighting and Dimming System Replacement - Science Rooms	The science rooms fluorescent lighting and dimming system is at the end of its useful life and intermittently functioning. <b>Replace fluorescent fixtures with new LED and control with new wall box 0-10V dimmer.</b>	\$50,000				\$50,000
GBN	Lighting - Athletic Stadium	The existing athletic stadium fixtures are energy inefficient and high maintenance. <b>Replace 400W metal halide light fixtures with energy efficient LED fixtures.</b>	\$180,000				\$180,000
GBN	Lighting - Classrooms	Convert general classrooms to LED lighting. There are approximately 170 classrooms. <b>LED retrofit recommended.</b>	\$320,000		\$25,000	\$25,000	\$270,000
<b>Flooring/Tiling</b>							
GBN	Carpeting	Carpeting in various classrooms and corridors is 20+ years old and in need of replacement. <b>Carpet replacement recommended.</b>	\$400,000		\$50,000	\$50,000	\$300,000
GBN	Flooring - CPA Stage	The CPA stage flooring is a soft pine which becomes worn overtime from the various stage sets that are screwed into the floor. There are many weak spots and a great deal of deflection underfoot. There is splintering, shearing and the potential for failure under heavy loads. The flooring is original and in need of replacement. <b>Replacement of CPA stage flooring recommended.</b>	\$85,000			\$85,000	
GBN	Flooring - Cafeteria Hallway, Laundry Room Hallway and Main Gym Hallway	These hallways are high traffic areas and the current VCT is worn, no longer looks clean and in need of replacement. <b>Replace VCT</b>	\$160,000				\$160,000
<b>Architectural</b>							
GBN	Door Replacement - Throughout Building	The Total Doors do not always properly latch and should be replaced. <b>Replace Hallway Total Doors</b>	\$300,000				\$300,000
GBN	Reconfiguration and Furniture - Sci-Tech Room B-110	B-110 is the robotics room and needs to be reconfigured. This includes new flooring, ceiling tiles, lighting, painting and furniture. <b>Redesign of B-111 and new furniture recommended.</b>	\$245,000	\$245,000			

Glenbrook High School District 225 - Glenbrook North High School (GBN) Master Facility Plan

Updated as of October 27, 2020

Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
GBN	Reconfiguration and Furniture - Social Studies A208	A208 is an oversized social studies classroom. The room can be converted into a conference room and general classroom.  <b>Redesign of A208 and new furniture recommended.</b>	\$125,000				\$125,000
GBN	Reconfiguration and Appliance Replacement - Culinary Arts Room	There are two culinary art rooms - C106 and C108. C106 was redone a few years ago, C108 is outdated and would benefit from remodeling.  <b>Redesign of Culinary arts and new furniture recommended.</b>	\$200,000				\$200,000
GBN	Performing Arts Space	Performing arts consists of music, theater and dance. Scheduling the various practices, rehearsals and performances can be difficult due to the limited performance spaces; often after school dance clubs are forced into the cafeteria, hallways and classrooms which isn't ideal. Also, music and theater performances that are best suited in a medium sized venue are either scheduled into the large CPA or music and drama classrooms. Data is being collected and analyzed to determine the facility needs and recommendations.  <b>Additional Performing Arts Space(s) recommended.</b>	\$2,000,000				\$2,000,000
<b>Larger Purchases</b>							
GBN	Furniture Purchase - Green and Gold Conference Room	The conference tables and chairs are difficult to move limiting the use and configurations of the space.  <b>Furniture replacement recommended.</b>	\$25,000				\$25,000
GBN	Furniture Purchase - Cafeteria	About half of the cafeteria tables are from the 80s and no longer functioning properly. The benches are falling off and there is a high level of repair.  <b>Furniture purchase recommended.</b>	\$50,000			\$50,000	
GBN	Furniture Purchase - IMC	The furniture in the IMC consists of tables and chairs. To facilitate student collaboration as well as independent learning, it is recommended that modular, mobile furniture be added to these spaces.  <b>Furniture replacement recommended.</b>	\$80,000				\$80,000
GBN	Furniture Purchase - Peer Group	Peer group has a need for new chair (approximately 80). The current chairs are mismatched and not mobile.  <b>Furniture replacement recommended.</b>	\$20,000				\$20,000
GBN	Furniture Purchase - Resource Centers	The furniture in the resource centers consists of tables and chairs. To facilitate student collaboration as well as independent learning, it is recommended that modular, mobile furniture be added to these spaces.  <b>Furniture replacement recommended.</b>	\$100,000				\$100,000
GBN	Furniture Purchase - Math office spaces	The desks are 30+ years old and do not accommodate the desire for collaborative and flexible space.  <b>Furniture purchase recommended.</b>	\$50,000				\$50,000
<b>Subtotal for All Project Areas</b>			<b>\$15,554,800</b>	<b>\$1,095,000</b>	<b>\$75,000</b>	<b>\$1,030,000</b>	<b>\$13,354,800</b>
<b>Fees/Construction Contingency</b>			<b>\$2,644,316</b>	<b>\$186,150</b>	<b>\$12,750</b>	<b>\$175,100</b>	<b>\$2,270,316</b>
<b>Grand Total</b>			<b>\$18,199,116</b>	<b>\$1,281,150</b>	<b>\$87,750</b>	<b>\$1,205,100</b>	<b>\$15,625,116</b>

---

Glenbrook High School District 225 - Glenbrook North High School (GBN) Master Facility Plan

*Updated as of October 27, 2020*

---

<b>Location</b>	<b>Project &amp; Area</b>	<b>Description of concern and recommended action</b>	<b>Cost Est. Total</b>	<b>Summer 2021</b>	<b>Summer 2022</b>	<b>Summer 2023</b>	<b>Deferred</b>
-----------------	---------------------------	--	----------------------------	------------------------	------------------------	------------------------	-----------------

---

## Glenbrook High School District 225 - Glenbrook Off Campus (GBO) Master Facility Plan

Updated as of October 27, 2020

Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
<b>Paving and Site Work</b>							
GBO	Paving - Parking Lot	According to building records, the off campus parking lot was last replaced in 1995 and is expected to be ready for replacement in 2025. <b>Parking lot replacement recommended.</b>	\$130,000				\$130,000
<b>Electrical</b>							
GBO	Lighting - Throughout the Building	The current lighting at OC is fluorescent and the overall light quality and energy efficiency is less than LED lighting. <b>LED retrofit is recommended.</b>	\$90,000		\$90,000		
<b>Flooring/Tiling</b>							
GBO	Flooring - Throughout the building	The carpeting is showing wear and pulling up in certain areas. It should be replaced in accordance with the district carpet replacement cycle. <b>Carpet replacement recommended.</b>	\$130,000				\$130,000
<b>Architectural</b>							
<b>Subtotal for All Project Areas</b>			<b>\$350,000</b>	<b>\$0</b>	<b>\$90,000</b>	<b>\$0</b>	<b>\$260,000</b>
<b>Fees/Construction Contingency</b>			<b>\$59,500</b>	<b>\$0</b>	<b>\$15,300</b>	<b>\$0</b>	<b>\$44,200</b>
<b>Grand Total</b>			<b>\$409,500</b>	<b>\$0</b>	<b>\$105,300</b>	<b>\$0</b>	<b>\$304,200</b>

Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan							Updated as of October 27, 2020	
Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred	
<b>Roofing</b>								
GBS	Roof Replacement - Music, Maintenance, CPA corridor, Dance Studio, IMC, CPA Stage, Industrial Arts	Several roof structures are 26+ years old and will be closely monitored over the next few years.  <b>Replacement of roofing recommended.</b>	\$1,438,000		\$380,000		\$1,058,000	
<b>Paving and Site Work</b>								
GBS	Paving - Full Parking Lot	Crack-filling and sealcoating is a preventative maintenance item that helps to maintain and extend the lifespan of an asphalt surface by preventing surface deterioration. The industry standard for this treatment is every three to four years, the district adopted a four year cycle. This preventative maintenance measure reduces weather damage and water penetration of the asphalt surface, resists effects from gas, oil and salts, seals and protects the asphalt surface from deteriorating effects, reduces freeze-thaw deterioration, and extends the service life of the pavement. Crack-filling and sealcoating involves cleaning and preparing the asphalt surface, installing joint sealant into prepared cracks, applying sealer and allowing it to cure, and applying pavement markings.  <b>Crack-fill/sealcoating recommended.</b>	\$140,000		\$140,000			
GBS	Paving - West Student Lot	The west student lot was last replaced in 2001 and is beginning to show significant cracking. The lot will need to be replaced the summer of 2024 at which point it will be 23 years old. <b>Replacement of west student lot recommended.</b>	\$290,000				\$290,000	
GBS	Paving - Tennis Courts	The GBS tennis courts were last resurfaced the summer of 2015. It is recommended that they be resurfaced every 7 years. Work should be completed the summer of 2022. Crack repair and resurfacing will involve cleaning existing cracks and court surface, installation of "crack filler", filling cracks with granular silica sand, and applying one coat of acrylic resurfacer and two coats of fortified acrylic tennis court color coating surface.  <b>Resurfacing of tennis courts recommended.</b>	\$135,000		\$135,000			
GBS	Track Replacement - Stadium Track	The stadium track was installed in 2004 and, with the resurfacing in 2020, would likely not need to be replaced until the summer of 2028. <b>Stadium Track Replacement Recommended.</b>	\$507,000				\$507,000	
GBS	Field Turf Replacement - Stadium Field	The artificial turf field was installed in 2012. The top layer (carpet) needs to be replaced every 12-14 years. It is estimated the surface should be replaced the summer of 2026. <b>Replacement of field surface recommended.</b>	\$664,800				\$664,800	
GBS	Field Netting - Baseball Field	The current fencing along the first and third baselines of the GBS baseball fields are not high enough to prevent foul balls from flying into adjacent fields and parking lots.	\$120,000		\$120,000			

Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan							Updated as of October 27, 2020	
Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred	
		<b>Add 50 foot netting behind the backstop and the first and third baselines recommended.</b>						
GBS	Field Netting - Softball Field	The current fencing along the first and third baselines of the GBS softball field is not high enough to prevent foul balls from flying into adjacent fields. <b>Add 50 foot netting behind the backstop and the first and third baselines recommended.</b>	\$90,000		\$90,000			
GBS	Bleacher and Press Box Replacement - Stadium	The bleachers were installed in the late 1970s. Although passing inspection, the underlying structure is slowly deteriorating and rusting. The recommended repairs due to wear and tear has been accumulating each year including seating replacement, welding and painting. The bleachers are not ADA compliant making it difficult for students, staff and community members to watch events with friends and family. The press box is also much smaller for today's needs which include broadcasting, filming etc. Storage is also a concern and can be added underneath the bleachers. Bleachers have good capacity (3,400 home and 1,125 away). <b>Replacement of bleachers, press box recommended.</b>	\$1,200,000				\$1,200,000	
<b>Mechanical and Plumbing</b>								
GBS	Building Automation System Software and Component Replacement - Throughout	GBS uses a building automation system (BAS) which was installed in 1992, to automate the many building mechanical systems. The current system and components (field panels, controllers) are considered obsolete and the system is ready for replacement. Existing wiring also needs to be rerun. <b>Replace BAS system and components.</b>	\$900,000			\$900,000		
GBS	Ejector Pump Replacement - Boiler Room	The large ejector/sump pump in the boiler room is original to the building and ready for replacement. <b>Replace ejector pump.</b>	\$60,000				\$60,000	
GBS	Restroom Renovation - State and Madison	The restrooms at State and Madison are original to the building and in need of renovation. The piping and fixtures are in need of replacement. The restroom space is not ADA compliant and as they are heavily utilized during the school day as well as in the evenings and on weekends they do not have adequate fixture count to handle the traffic. <b>Restroom renovation recommended.</b>	\$340,000				\$340,000	
GBS	Restroom Renovation - Athletic Wing	The athletic restrooms are original to the building and in need of renovation. They are heavily utilized during the school day as well as in the evenings and on weekends. <b>Renovate restrooms and ensure ADA compliance.</b>	\$280,000		\$280,000			
<b>Electrical</b>								
GBS	Lighting - Auditorium	The existing house lighting is inefficient incandescent and difficult to maintain. The stage lights were converted to LED in 2014. <b>LED retrofit to house lighting is recommended.</b>	\$300,000				\$300,000	

Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan							Updated as of October 27, 2020	
Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred	
GBS	Ceiling Tile and Lighting - Athletic Hallway (Titan Dome to Pool)	The corridor going from the natatorium to the fieldhouse and titan dome is a drop ceiling with fluorescent lighting. Over time the ceiling tiles have become quite worn and are ready for replacement. The existing grid will remain and be painted and the fluorescent lights will be changed to LED. It is a heavily utilized part of the building. <b>Replace ceiling tile and update lighting to LED.</b>	\$50,000		\$50,000			
GBS	Lighting - Athletic Stadium	The existing athletic stadium fixtures are energy inefficient and high maintenance. <b>Replace 400W metal halide light fixtures with energy efficient LED fixtures.</b>	\$180,000				\$180,000	
GBS	PA Front End Replacement - Main Office	The front end of the PA system was replaced ten years ago and the company has since been sold and went out of business. The current parts are no longer supported and the unit should be replaced. <b>Replace the front end of the PA system.</b>	\$80,000				\$80,000	
GBS	Lighting and Dimmer System - 12 Science Classrooms LED	The dimming system for the lights in the science classrooms is failing and consistently flickers on and off at random times during the day. It is recommended that the lights and dimming system be replaced with LED lighting and a new dimming system. Six of the science rooms have been done and twelve remain. <b>Upgrade 12 remaining science classrooms to LED lighting.</b>	\$50,000				\$50,000	
GBS	Lighting - Classrooms	Convert general classrooms to LED lighting. There are approximately 170 classrooms. <b>LED retrofit recommended.</b>	\$320,000			\$50,000	\$270,000	
<b>Flooring/Tiling</b>								
GBS	Carpeting	Carpeting in various classrooms and corridors is 20+ years old and in need of replacement. <b>Carpet replacement recommended.</b>	\$400,000			\$50,000	\$350,000	
GBS	Flooring - Old Pit, adjacent corridors, main corridor	The carpet in the old pit and adjacent corridors and main office corridor are next to be replaced on the building's carpet replacement cycle. The old pit carpeting will be replaced with LVT flooring to accommodate additional student seating. The corridors will be recarpeted. <b>Flooring replacement recommended.</b>	\$175,000				\$175,000	
GBS	Flooring and Furniture - Social Studies Office	The carpet in the social studies office is worn and in need of replacement. The furniture is original to the space and not conducive to team collaboration and student interaction. <b>Redesign of Social Studies Office and new flooring and furniture recommended.</b>	\$75,000				\$75,000	
GBS	Abatement, Flooring and Renovation - Foods Classroom	The foods classroom is in need up updating as it's appliances are now over 20 years old and the teaching / presentation stations are not meeting the needs of the curriculum. Tile would also be replaced and abatement is necessary. <b>Abatement, Floor Replacement, Room Renovation Recommended.</b>	\$300,000				\$300,000	

Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan Updated as of October 27, 2020

Location	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2021	Summer 2022	Summer 2023	Deferred
GBS	Flooring - Pool Locker Rooms	The flooring in the boys and girls pe pool locker room is a concrete floor with an 1/8th inch epoxy coating which is constantly peeling. <b>Replacement of pool locker room flooring recommended.</b>	\$60,000				\$60,000
GBS	Flooring - Girls West Pool Shower Walls	The shower walls in the girls locker room of the new pool are painted cinder block and, due to the climate, continuously peel and need to be repainted. The shower walls need to be tiled. <b>Replacement of girls west pool locker room shower tile recommended.</b>	\$60,000				\$60,000
GBS	Flooring - Auditorium Stage	The auditorium stage flooring is a soft pine which becomes worn overtime from the various stage sets that are screwed into the floor. There are many weak spots and a great deal of deflection underfoot. There is splintering, shearing and the potential for failure under heavy loads. The flooring is original and in need of replacement. <b>Replacement of auditorium stage flooring recommended.</b>	\$85,000			\$85,000	
<b>Architectural</b>							
GBS	Door Replacement - Throughout Building	The Total Doors do not always properly latch and should be replaced. <b>Replace Hallway Total Doors</b>	\$300,000				\$300,000
GBS	Performing Arts Space	Performing arts consists of music, theater and dance. Scheduling the various practices, rehearsals and performances can be difficult due to the limited performance spaces; often after school dance clubs are forced into the cafeteria, hallways and classrooms which isn't ideal. Also, music and theater performances that are best suited in a medium sized venue are either scheduled into the large CPA or music and drama classrooms. Data is being collected and analyzed to determine the facility needs and recommendations. <b>Additional Performing Arts Space(s) recommended.</b>	\$2,000,000				\$2,000,000
<b>Larger Purchases</b>							
<b>Subtotal for All Project Areas</b>			\$10,599,800	\$0	\$1,195,000	\$1,085,000	\$8,319,800
<b>Fees/Construction Contingency</b>			\$1,801,966	\$0	\$203,150	\$184,450	\$1,414,366
<b>Grand Total</b>			<b>\$12,401,766</b>	<b>\$0</b>	<b>\$1,398,150</b>	<b>\$1,269,450</b>	<b>\$9,734,166</b>