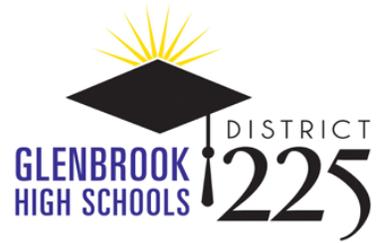


Historical Memo



To: Dr. Charles Johns
Board of Education

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

Date: Tuesday, November 12, 2019

Re: Summer 2020 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 the summer of 2020 as presented.

Background

For the past three years, the school district has utilized the approved life safety plan to define the capital improvements completed each summer. The life safety plan included a series of projects that addressed our school building's infrastructure, that were identified through a comprehensive assessment process performed by architects, and certified by the Illinois State Board of Education. These projects, which totaled approximately \$15.1M were funded through life safety bond proceeds, as a result of the 2016 and 2017 refunding of prior debt. The final life safety projects were completed this past summer, which prompted the review of those items that were originally identified as necessary infrastructure projects, but were deferred until after the life safety plan was completed.

This fall, school and district leadership team members worked with our architects, Arcon Associates, Inc. to assess identified facility needs. As part of the review process, the team re-evaluated the deferred infrastructure projects, alongside our area master plans (e.g. roofing, paving, exterior painting, fencing, athletic fields, concrete, tuckpointing). Additionally, the team evaluated and prioritized enhancement requests that would directly impact the student experience. These efforts resulted in the creation of a 3-year master facility plan. For ease of viewing the facility plan, it has been 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 2020**

The projects with financial projections stated in this column represent those projects that are recommended for completion during the summer of 2020. The majority of projects stated are for Glenbrook South, as the summer school program will be hosted at Glenbrook North this summer.

- **Summer 2021**

The projects with financial projections stated in this column represent those projects that are recommended for completion during the summer of 2021. The majority of projects stated are for Glenbrook North, as the summer school program will be hosted at Glenbrook South this summer.

- **Summer 2022**

The projects with financial projections stated in this column represent those projects that are recommended for completion during the summer of 2022. The majority of projects stated are for Glenbrook South, as the summer school program will be 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 financial projections 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 10 years.

It is important to note that the facility plans include financial projections are based on the initial assessment performed by the architects. As each project is further reviewed, the scope will be more narrowly defined, and the projection will be modified accordingly. Additionally the list is intended to be fluid in nature and items will be added, adjusted and reprioritized as necessary.

As we move forward with defining a new master facility plan, we are also working closely with our architects and construction management firm to revise the timeline for coordinating capital projects. At the current time, capital projects scheduled to begin in June 2020 are presented to the facility committee in October 2019, and then are sent out to bid in December 2019 with a bidding opening on January 15, 2020. Given the financial and planning benefits of going out to bid sooner, we are proposing that the timeline for coordinating capital projects be revised. An updated timeline is presented in Table 1.

Table 1
Capital Projects Timeline

	Completed Summer 2020	Completed Summer 2021	Completed Summer 2022
Present recommended projects to the facility committee.	October 2020	Spring 2020	Spring 2021
Present recommended projects to the Board of Education.	November 2020	Spring 2020	Spring 2021
Coordinate with architects to create specifications for projects.	November 2020	Spring/Summer 2020	Spring/Summer 2021
Initiate public bid for capital projects.	January 2020	Fall 2020	Fall 2021
Award bid to selected contractors / vendors.	February 2020	December 2020	December 2021
Begin construction work.	June 2020	June 2021	June 2022
Conclude construction work.	August 2020	August 2021	August 2022

For the 2020 capital projects, we would maintain our traditional timeline. However, for the 2021 capital projects, we would begin our discussion with the facility committee in the Spring of this year, with our bid process beginning next fall, as opposed to next winter. This change is consistent with a growing number

of other school district capital project timelines, which has enabled them to benefit from financial savings as a result of going out to bid early.

Recommended Summer 2020 Capital Projects

The projects recommended for completion the Summer of 2020 are summarized in Table 2, and presented in detail in the pages that follow. If these projects are approved in concept, the district’s architect will begin creating bid specifications, and will facilitate a public, competitive bidding process. Bids will be received after the start of the new year, and presented to the Board of Education in February 2020 for consideration.

Table 2
Summary of Summer 2020 Capital Projects by Category

Category	Location(s)	Project Description	Financial Projection
Paving	GBA, GBO, GBS	Crack-fill/Sealcoating, Track Resurfacing	\$302,000
Roofing	GBS	Roof Replacement	\$420,000
Flooring	GBN	Carpet Replacement	\$130,000
Architectural	GBN, GBS	Health Office Reconfiguration /Adjustments	\$415,000
Subtotal			\$1,267,000
Architect Fee (7.5%)			\$95,025
Construction Management Fee (7.5%)			\$95,025
Contingency (2%)			\$25,340
Grand Total			\$1,482,390

Given the life safety bond proceeds have been exhausted, funding for capital projects such as these are 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 \$1,000,000 on an annual basis 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.

While the projected amount for summer projects is in excess of the \$1,000,000 projected in the 2020-21 fiscal year budget levels, the school and district leadership teams are confident that additional budgetary savings can be achieved through a review of the school operating budget formula. This topic will be reviewed in detail with the finance committee at an upcoming meeting this winter.

Table 3
Paving Projects

Location(s)	Project Description	Projection
GBA, GBO, GBS	<p>Crack-fill and Sealcoating</p> <p>The district maintains a master paving schedule that plans for parking lot replacement every 15+ years and general maintenance (crack-fill and sealcoating) every 4 years. Planned summer of 2020 work includes seal coating all GBS lots as well as the District Office and Off Campus lot. Sealcoating is a preventative maintenance measure that extends the life of the parking lots by protecting the surface from deterioration caused by water penetration.</p>	\$192,000
GBS	<p>Stadium Track Resurfacing</p> <p>The current stadium track was installed in 2004 and resurfaced in 2012 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 2020 will be year 8. Once resurfaced, it is estimated the track will last another 8 years before being ready for full replacement.</p>	\$110,000
		\$302,000

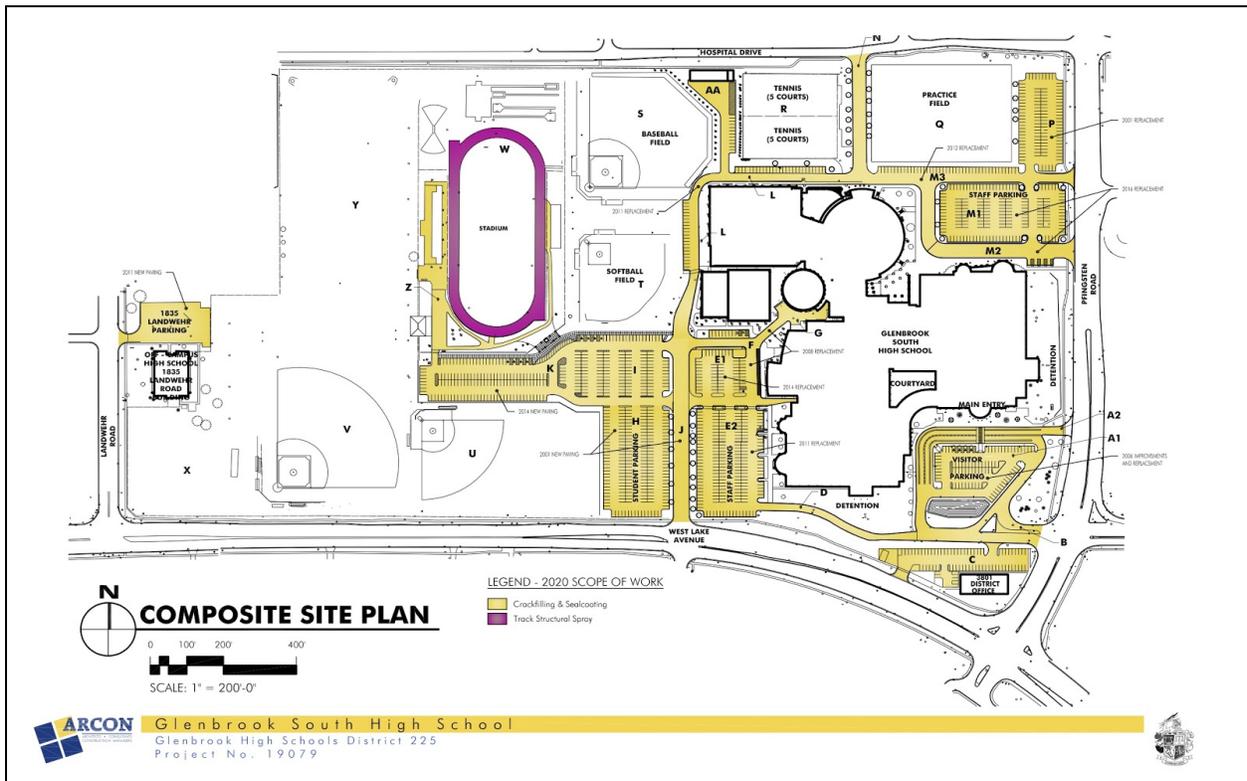


Table 4
Roofing Projects

Location(s)	Project Description	Projection
GBS	<p>Roof Replacement - Scene Shop</p> <p>The Scene Shop roof is 6,300 s.f. and was part of the new construction in 1989. The existing roof system has reached the end of its serviceable life and is experiencing a number of deficiencies typical for the age of this type of roof system. 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>	\$200,000
GBS	<p>Roof Replacement - Field House Lobby</p> <p>The Fieldhouse Lobby roof is 7,100 s.f. and was installed in 1989. It will be 31 years old this summer and is experiencing a number of deficiencies typical for the age of this type of roof system. 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>	\$220,000
		\$420,000

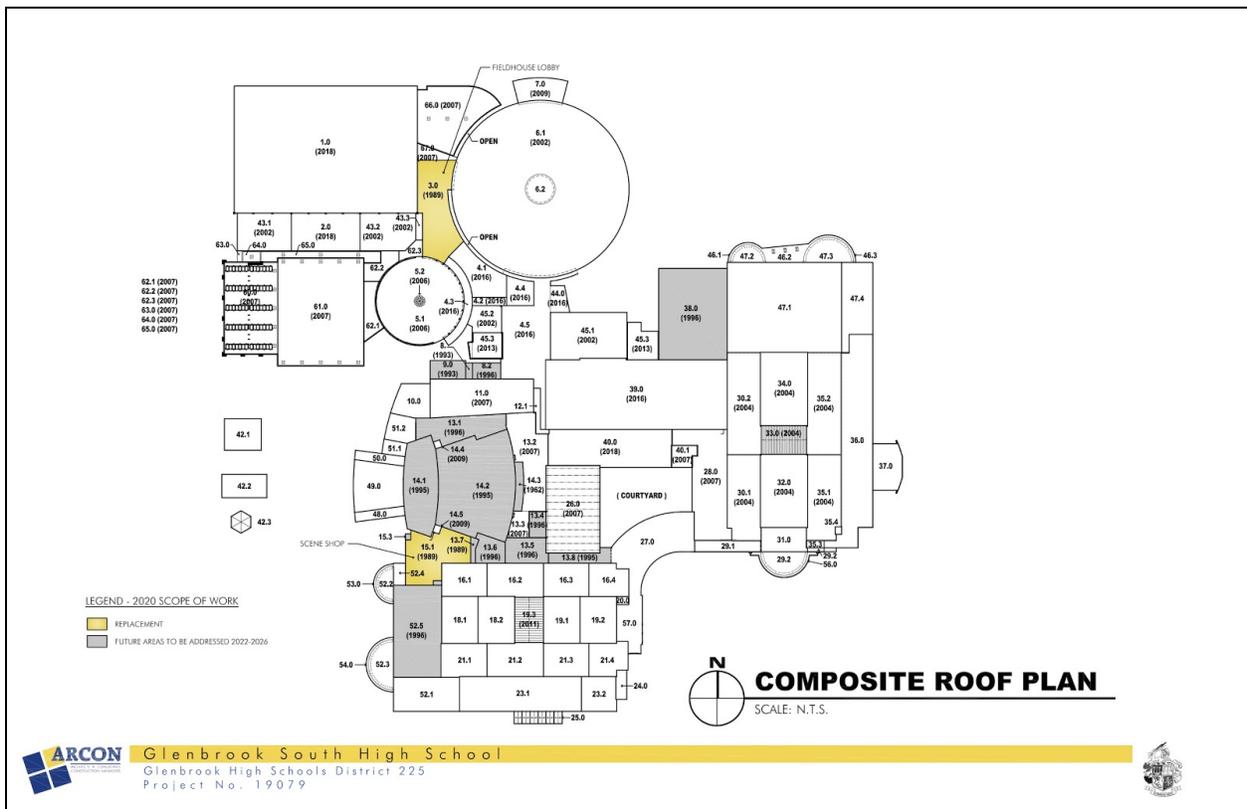


Table 5
Flooring Projects

Location(s)	Project Description	Projection
GBN	<p>Carpet Replacement/Painting - Math, Social Studies, World Language Offices and Room A204</p> <p>Each building maintains an overall flooring plan which assists in the prioritization process for flooring replacement. At GBN, carpeting in the Math, Social Studies and World Language offices as well as room A204 which is an oversized classroom (seats 100) used for testing, professional development and large group instruction is worn and separating at the seams. The carpeting was installed during renovations to the A building in 1996 and will be 24 years old this summer. When the carpeting is replaced, it presents an opportunity to remove an interior wall segregating a small portion of the social studies office which will create a more open space. Area will also be repainted.</p>	\$130,000
		\$130,000

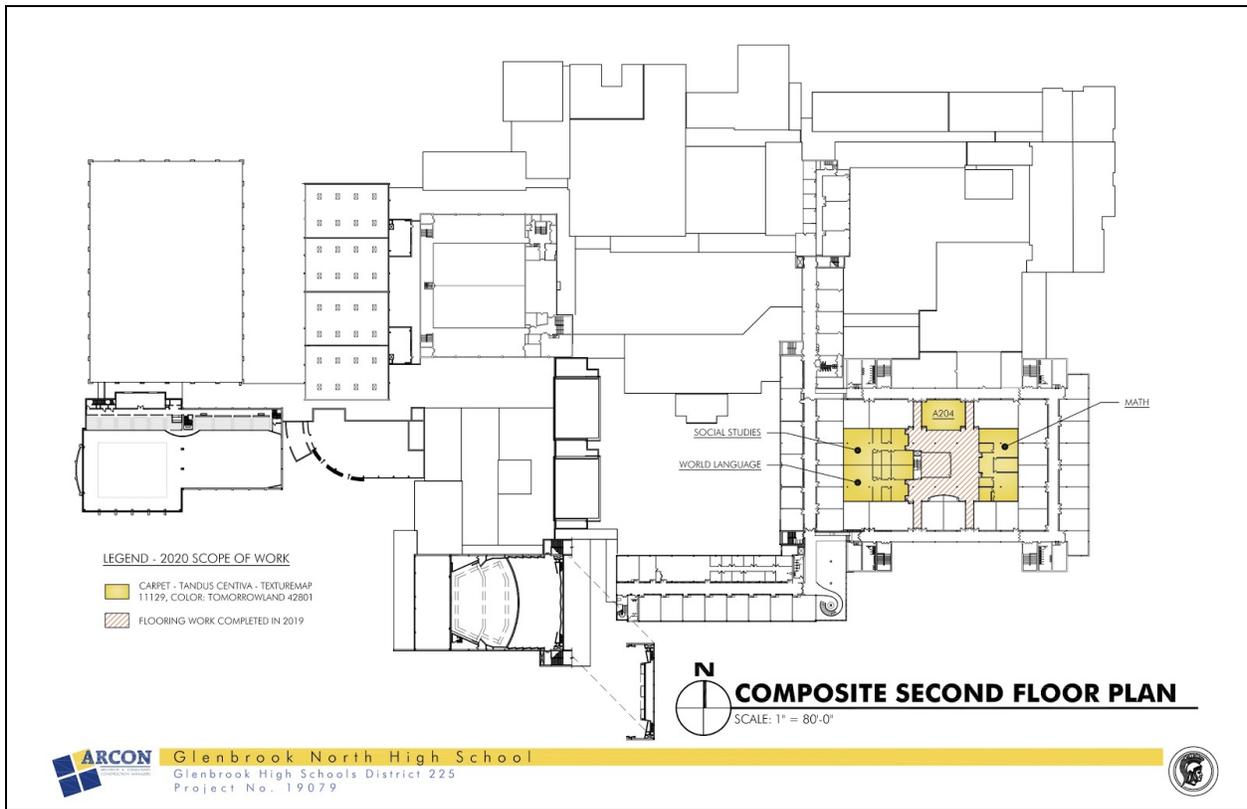
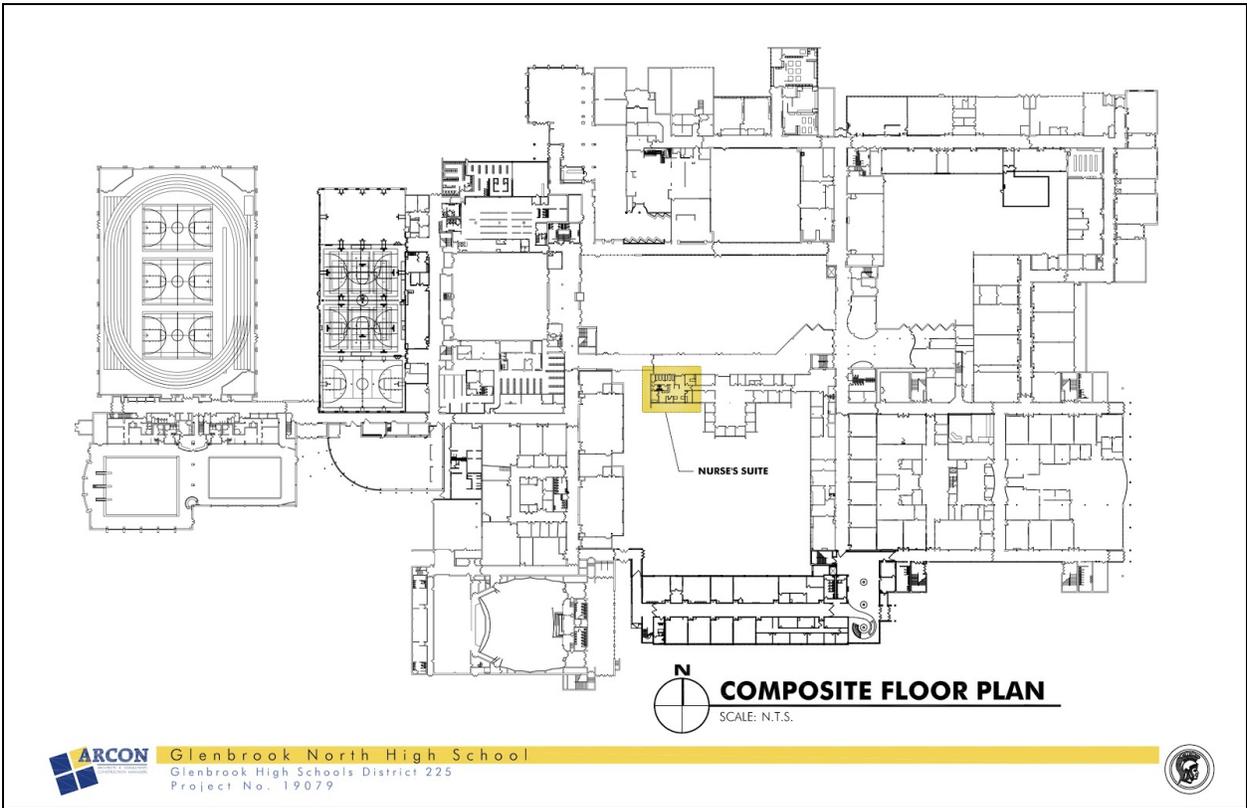
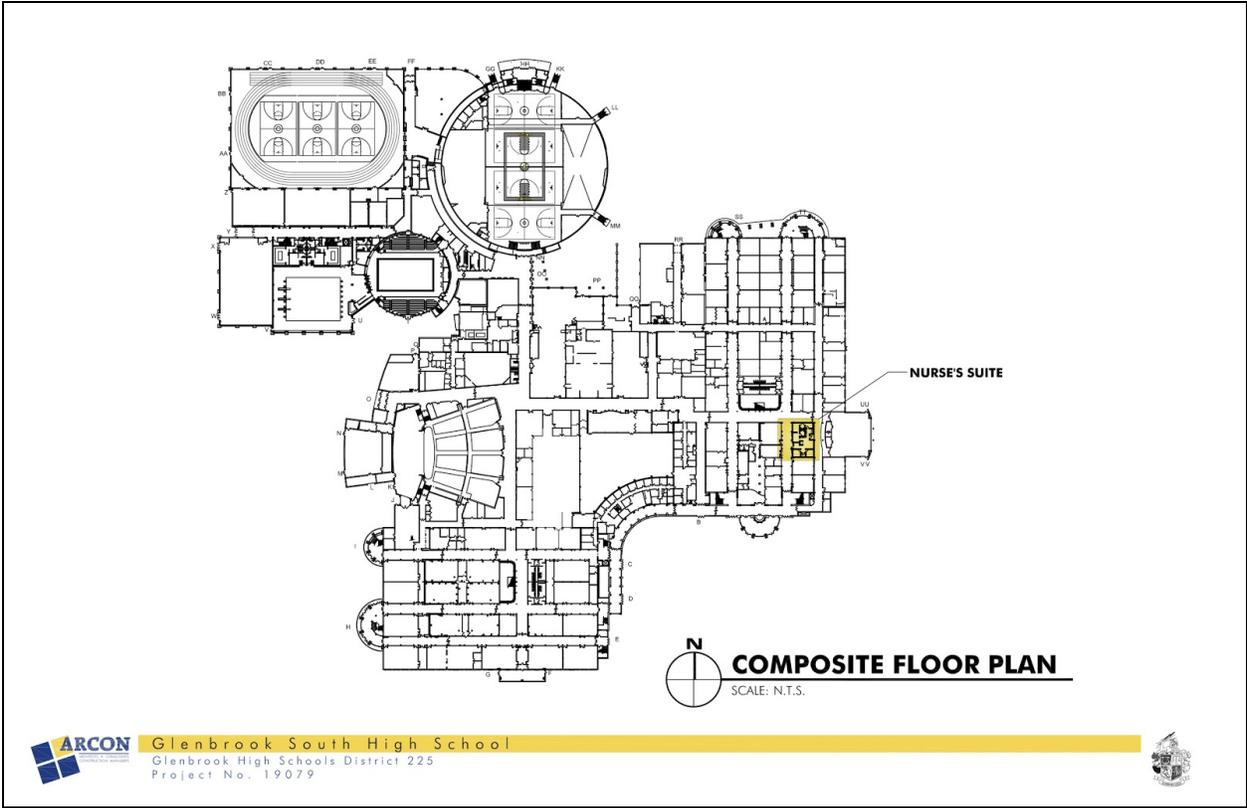
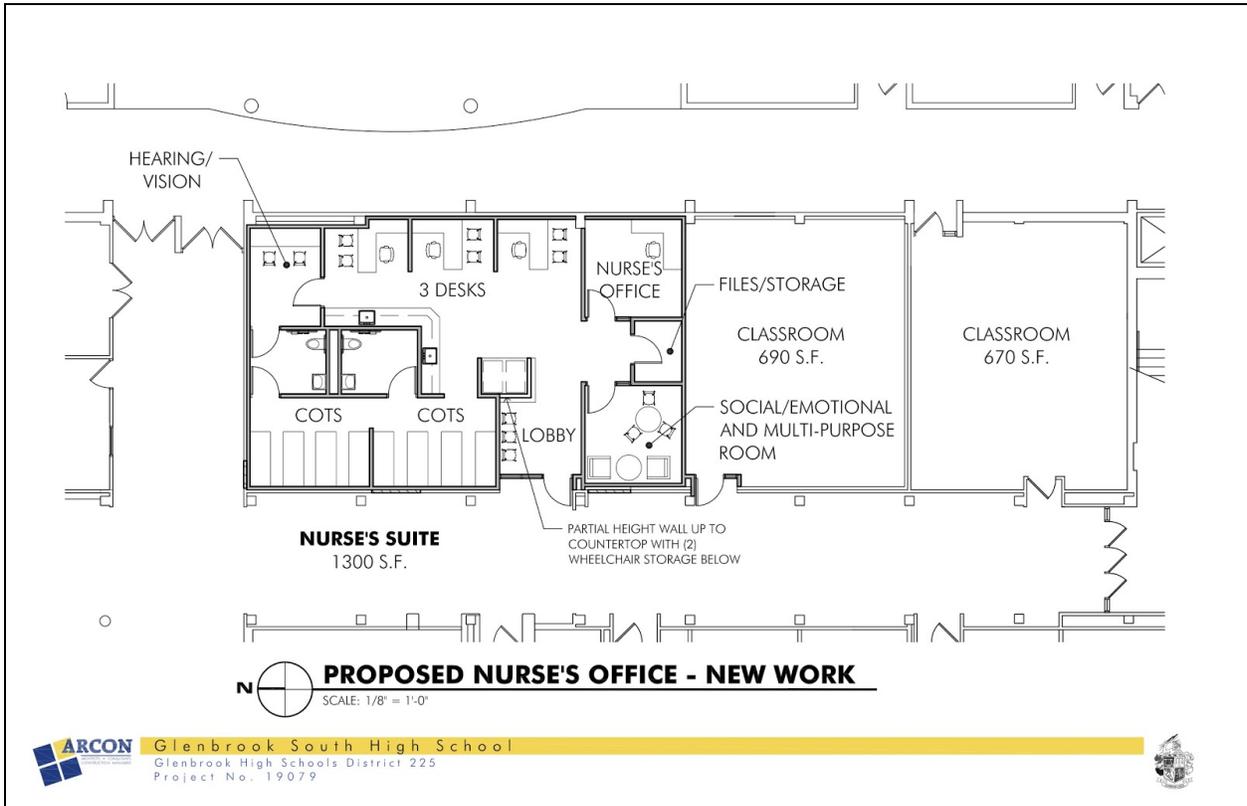
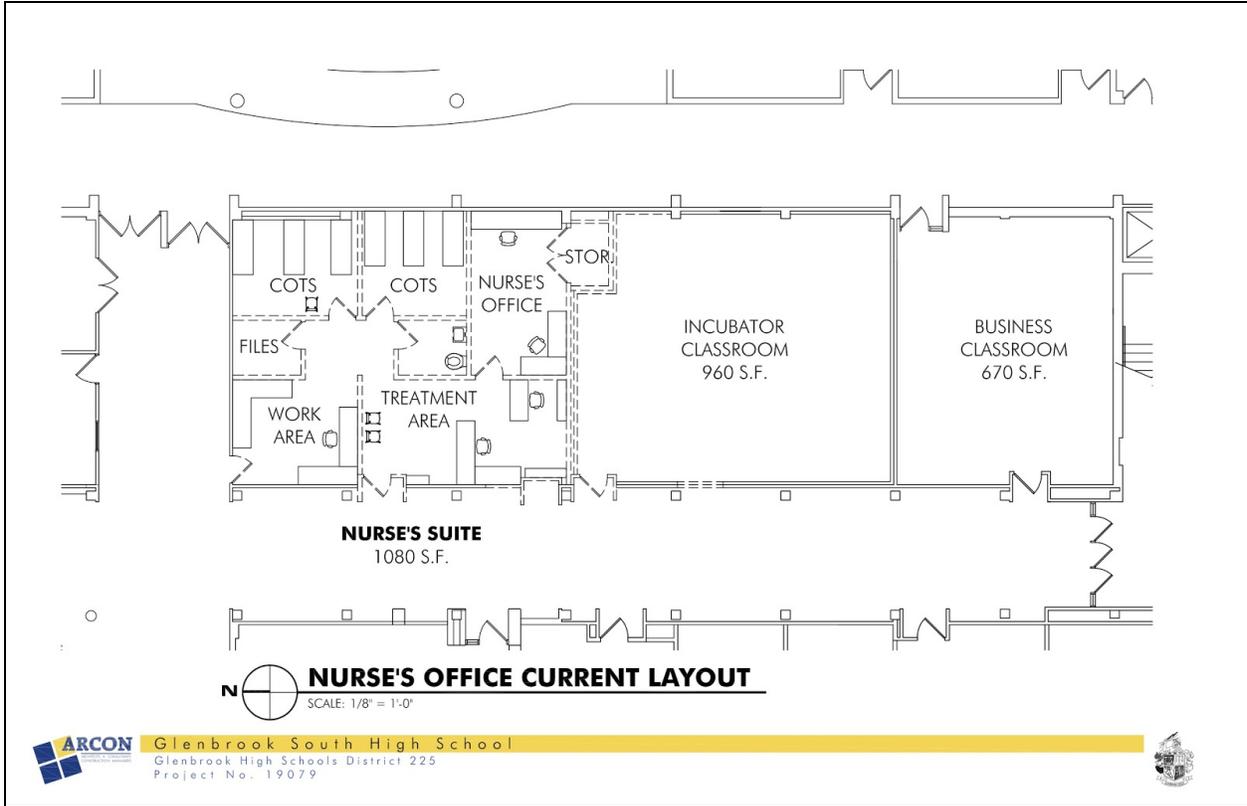
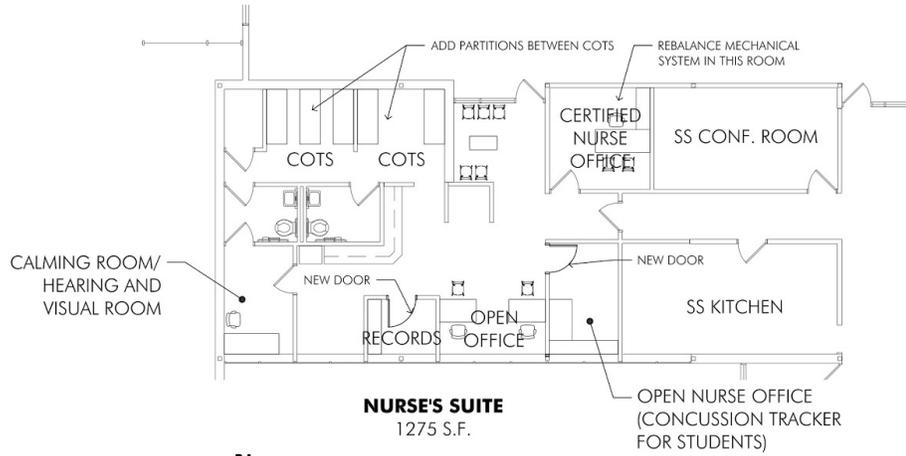


Table 6
Architectural Projects

Location(s)	Project Description	Projection
GBN, GBS	<p>Nurses’ Office Reconfiguration and Enhancements</p> <p>Both schools have extremely busy and highly effective nurses on staff who typically see 100+ students on a daily basis. In addition to treating student illnesses and providing first aid and emergency services, nurses on staff also conduct vision/hearing screenings, administer medications, maintain medical records in accordance with state mandates (includes immunizations, physical examinations and medical conditions), assist students with eating disorders which may include supervising students during the lunch period, assist students experiencing panic or other social/emotional struggles, conduct meetings and treat ill teachers and staff.</p> <p>The GBN nurses’ office was reconfigured in 2008 as part of the referendum work and, with the exception of a few recommended adjustments, effectively meets the needs of nurses, students and staff. Recommended adjustments to the space include adding a door to two rooms to give an option for privacy, adding dividing partitions to the resting room, and rebalancing the mechanical system in the private office which was split off from an existing conference room. The mechanical work entails adding a VAV box, running ductwork and electrical work.</p> <p>The GBS nurses’ office is located off the main hall just to the east of the main office. This location is ideal as it is close to the main entrance of the building, easily accessible in the event paramedics are needed, and away from the busy corridors. The current space and configuration is not meeting the needs from a capacity, privacy and efficiency standpoint. The space lacks a private triage area which limits student privacy as students currently are first treated in the main entrance of the space. The overall flow of the space is choppy and the layout tends to be disruptive; for example, the vision and hearing screenings are conducted in the certified nurse’s office, which is the same space she currently meets with parents, treats students, makes confidential phone calls and assists with triage. All storage for the space is also inside the certified nurse’s office. The two registered nurses are separated by a glass window and can’t effectively treat students or consult and communicate with one another. Other concerns include the “resting” room which has cots lined up next to each other and lack privacy, additionally there is only a single bathroom and not enough dedicated refrigerated space for prescriptions and other medications.</p> <p>The recommendation is to grow the existing 1,080 square foot office space to the south and claim 270 square feet of the adjacent Business Incubator classroom, making the overall space 1,350 square feet which is comparable to the space at GBN and will effectively serve the needs. The adjacent classroom is an oversized classroom and would be reduced to 690 square feet which is sufficient and comparable with other classroom spaces.</p>	\$415,000
		\$415,000







NURSE'S SUITE
1275 S.F.

NEW WORK FLOOR PLAN
SCALE: 1/8" = 1'-0"



Glenbrook North High School
Glenbrook High Schools District 225
Project No. 19079



Glenbrook High School District 225 - District Administration Building (GBA) Master Facility Plan

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
Paving and Site Work							
DO	Paving - Parking Lot	As part of the district's preventative maintenance plan for parking lots, a 4 year crack-fill/sealcoating cycle is followed. The summer of 2020 the lot should be sealcoated, crack-filled and striped. Parking lot replacement recommended.	\$6,000	\$6,000			
DO	Paving - Parking Lot	According to building records, the district parking lot was installed in 1988 and has been patched and sealcoated multiple times. It is recommended that the lot be replaced in the next five years. Parking lot replacement recommended.	\$130,000				\$130,000
Mechanical							
DO	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. Provide new heating and cooling systems for this space that is tied into the overall building systems.	\$75,000				\$75,000
Electrical							
DO	Lighting Retrofit - 2E, 2W, 3W	The lighting in suites 2E, 2W and 3W are the remaining areas at the district office with fluorescent lighting. Lighting should be upgraded to LED. Update lighting to LED.	\$100,000				\$100,000
Flooring/Tiling							
DO	Flooring - Carpet Replacement	The carpeting in suites 3W and 2E are ready for replacement in accordance with the district's carpet replacement cycle. Carpet replacement recommended.	\$60,000		\$30,000	\$30,000	
Larger Purchases							
DO	Furniture - Throughout	There are multiple spaces throughout the district office where soft seating and other collaborative work arrangements are recommended to support a collaborative work environment. Furniture replacement recommended.	\$60,000		\$30,000	\$30,000	
Subtotal for All Project Areas			\$431,000	\$6,000	\$60,000	\$60,000	\$305,000
Fees/Construction Contingency			\$73,270	\$1,020	\$10,200	\$10,200	\$51,850
Grand Total			\$504,270	\$7,020	\$70,200	\$70,200	\$356,850

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

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
Roofing							
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.	\$2,710,439		\$338,805		\$2,371,634
Roof replacement recommended.							
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. In order to prevent the threat of water damage, the hatches should be replaced.	\$105,000		\$105,000		
Replace smoke relief hatches.							
Paving and Site Work							
GBN	Paving - 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.	\$185,000		\$85,000		\$100,000
Crack-fill/sealcoating recommended.							
GBN	Paving - Staff and West Student Lot	The staff parking lot and west student parking lot are scheduled for replacement the summer of 2023.	\$605,000				\$605,000
Replacement of parking lot recommended.							
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
Resurfacing of tennis courts recommended.							

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

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
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. Stadium Track Replacement Recommended.	\$110,000		\$110,000		
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. Replacement of field surface recommended.	\$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. Add 50 foot netting behind the backstop and the first and third baselines recommended.	\$190,000				\$190,000
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. Add 50 foot netting behind the backstop and the first and third baselines recommended.	\$180,000		\$180,000		
GBN	Fencing - Baseball Field	The GBN baseball fencing is original and has significant rusting. The fence is, in many places, twelve inches above the ground and concrete posts are exposed. Add 50 foot netting behind the backstop and the first and third baselines recommended.	\$110,000				\$110,000
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. Replacement of bleachers, press box recommended.	\$1,500,000				\$1,500,000
Mechanical/Plumbing							
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. Replace BAS system and components. Run new wiring.	\$900,000			\$900,000	

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

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
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. Replace Hydraulic Lift	\$350,000				\$350,000
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. Provide a new Air Handling System to service these areas.	\$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. Replace existing steam boilers with new gas fired hot water boilers. Extend new hot water supply and return mains to existing equipment.	\$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. Replace one condensation tank/pump.	\$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. Replace unit ventilators with a rooftop unit.	\$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. Replace piping and fixtures with new.	\$70,000				\$70,000

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

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
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. Replace piping and fixtures with new.	\$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. Replace piping and fixtures with new.	\$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. Replace piping and fixtures with new.	\$180,000				\$180,000
GBN	Ductwork Cleaning - Throughout (Pre-2008 areas)	The ductwork is old and has dust and residue building up, it needs to be cleaned to maintain air quality. Clean ductwork.	\$120,000				\$120,000
Electrical							
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. LED retrofit is recommended.	\$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. Provide a new drop ceiling and LED lighting.	\$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. Replace fluorescent fixtures with new LED and control with new wall box 0-10V dimmer.	\$50,000				\$50,000

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

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
GBN	Lighting - Athletic Stadium	The existing athletic stadium fixtures are energy inefficient and high maintenance. Replace 400W metal halide light fixtures with energy efficient LED fixtures.	\$180,000				\$180,000
GBN	Lighting - Classrooms	Convert general classrooms to LED lighting. There are approximately 170 classrooms. LED retrofit recommended.	\$320,000				\$320,000
Flooring/Tiling							
GBN	Flooring - 2nd floor Math, SS and WL offices and room A204	The carpeting is original to the building and in need of replacement. There are multiple seams separating creating tripping hazards. There is a dividing interior wall in Social Studies that can be removed at the time carpeting is replaced. Carpet replacement recommended.	\$130,000	\$130,000			
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. Replacement of CPA stage flooring recommended.	\$85,000				\$85,000
GBN	Flooring - CPA Stage	The modular, rollout dance was installed in the 1980s and is beyond its serviceable life. It is recommended that this floor be replaced and the purchase include storage carts with rolling devices to assist with storage. Replace modular dance floor.	\$80,000				\$80,000
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. Replace VCT with quartz tile.	\$160,000				\$160,000
Architectural							
GBN	Door Replacement - Throughout Building	The Total Doors do not always properly latch and should be replaced. Replace Hallway Total Doors	\$300,000				\$300,000
GBN	Structural Repair - CPA Stairwell	There is seperation between the east exterior wall and perpendicular interior walls of the NE and SE stairwells of the CPA. When the CPA was constructed in 1977 it appears wall anchors were not used which is causing this seperation. The recommended solution is being investigated. Add structural ties or wall anchors at the NE and SE stairwells.	\$200,000				\$200,000

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

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
GBN	Reconfiguration - Nurses' Office	The nurses' office was remodeled during the 2008 referendum work at GBN. There are a few minor enhancements recommended to enhance the functionality of the space including rebalancing the HVAC system, adding a door to an office and adding dividers between the cots to add privacy. Enhancements to health office recommended.	\$20,000	\$20,000			
GBN	Glazing - Wrestling Room	The wrestling room is a high ceiling space located in the lower level directly beneath the CPA lobby. It is a dark and narrow room and since it's east wall is an exterior wall there is an opportunity to add a ribbon of windows (18 inches in height). Add glazing to the east wall of the wrestling room.	\$60,000				\$60,000
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. Redesign of B-111 and new furniture recommended.	\$75,000				\$75,000
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. Redesign of A208 and new furniture recommended.	\$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. Redesign of Culinary arts and new furniture recommended.	\$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. Additional Performing Arts Space(s) recommended.	\$2,000,000				\$2,000,000
Larger Purchases							
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. Furniture replacement recommended.	\$50,000				\$50,000
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. Furniture purchase recommended.	\$50,000				\$50,000

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

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
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. Furniture replacement recommended.	\$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. Furniture replacement recommended.	\$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. Furniture replacement recommended.	\$100,000				\$100,000
GBN	Locker Purchase - Womens Locker Room	Additional lockers are needed to accomodate the number of female coaches. Locker purchase recommended.	\$20,000				\$20,000
GBN	Furniture Purchase - Social Studies Offices	Soft seating would provide for a needed collaborative space. Furniture purchase recommended.	\$20,000				\$20,000
GBN	Furniture Purchase - Math office spaces	The desks are 30+ years old and do not accomodate the desire for collaborative and flexible space. Furniture purchase recommended.	\$50,000				\$50,000
Subtotal for All Project Areas			\$16,005,239	\$150,000	\$988,805	\$900,000	\$13,966,434
Fees/Construction Contingency			\$2,720,891	\$25,500	\$168,097	\$153,000	\$2,374,294
Grand Total			\$18,726,130	\$175,500	\$1,156,902	\$1,053,000	\$16,340,728

Glenbrook High School District 225 - Glenbrook Off Campus (GBO) Master Facility Plan					Updated as of November 3, 2019		
School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
Paving and Site Work							
OC	Paving - Parking Lot	As part of the district's preventative maintenance plan for parking lots, a 4 year crack-fill/sealcoating cycle is followed. The OC lot should be addressed the summer of 2020. Crack-fill/sealcoating recommended.	\$6,000	\$6,000			
Electrical							
OC	Lighting - Throughout the Building	The current lighting at OC is fluorescent and the overall light quality and energy efficiency is less than LED lighting. LED retrofit is recommended.	\$120,000				\$120,000
Flooring/Tiling							
OC	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. Carpet replacement recommended.	\$180,000				\$180,000
Architectural							
OC	Restroom Reconfiguration - Student Restrooms	There are four individual student bathrooms. It is recommended that individual partitions with lockable doors be added to each individual bathroom. This will allow the outer door to remain unlocked while still providing individual privacy. Add individual partitions to student bathrooms.	\$20,000		\$20,000		
Larger Purchases							
OC	Furniture - Classrooms	The classroom furniture is original to the off campus program and is not conducive to today's active learning environment. Furniture replacement recommended.	\$120,000		\$60,000	\$60,000	
OC	Soft Furniture/Blinds - Throughout	To facilitate collaborative learning and planning soft seating and other active learning furniture arrangements are recommended. Furniture purchase recommended.	\$40,000		\$20,000	\$20,000	
Subtotal for All Project Areas			\$486,000	\$6,000	\$100,000	\$80,000	\$300,000
Fees/Construction Contingency			\$82,620	\$1,020	\$17,000	\$13,600	\$51,000
Grand Total			\$568,620	\$7,020	\$117,000	\$93,600	\$351,000

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 Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
Roofing							
GBS	Roof Replacement - Scene Shop	The scene shop roof was installed in 1989 and will be 31 years old the summer of 2020. Over the last year the condition has worsened and there has been significant leaking and repair and patching is becoming difficult. A built up roof system will be used, which offers multiple layers of waterproofing and protection. The life expectancy of the new roof is 30+ years. Roof replacement recommended.	\$200,000	\$200,000			
GBS	Roof Replacement - Fieldhouse Lobby	The fieldhouse lobby roof was installed in 1989 and will be 31 years old the summer of 2020. Over the course of the last year there has been significant leaking and certain areas can no longer be patched and repaired. A built up roof system will be used, which offers multiple layers of waterproofing and protection. The life expectancy of the new roof is 30+ years. Roof replacement recommended.	\$220,000	\$220,000			
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. Replacement of roofing recommended.	\$1,438,000			\$239,667	\$1,198,333
Paving and Site Work							
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. Crack-fill/sealcoating recommended.	\$180,000	\$180,000			
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. Replacement of west student lot recommended.	\$290,000				\$290,000

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Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
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. Resurfacing of tennis courts recommended.	\$135,000			\$135,000	
GBS	Track Resurface - Stadium Track	The current stadium track was installed in 2004 and resurfaced in 2012 at the time the turf field was installed. It is recommended the track be resurfaced with a structural spray every 6-8 years to maintain the integrity of the track and expand the useful life. It will be eight years the summer of 2020. Once resurfaced, the track should last another 8 years before needing to be fully replaced in 2028. Apply a structural spray to the track.	\$110,000	\$110,000			
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. Stadium Track Replacement Recommended.	\$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. Replacement of field surface recommended.	\$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. Add 50 foot netting behind the backstop and the first and third baselines recommended.	\$190,000				\$190,000
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. Add 50 foot netting behind the backstop and the first and third baselines recommended.	\$180,000				\$180,000
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).	\$1,200,000				\$1,200,000

Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan							Updated as of November 3, 2019	
School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred	
Replacement of bleachers, press box recommended.								
Mechanical and Plumbing								
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. Replace BAS system and components.	\$900,000			\$900,000		
GBS	Ejector Pump Replacement - Boiler	The large ejector/sump pump in the boiler room is original to the building and ready for replacement. Replace ejector pump.	\$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. Restroom renovation recommended.	\$130,000				\$130,000	
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. Renovate restrooms and ensure ADA compliance.	\$130,000				\$130,000	
GBS	Ductwork Cleaning - Throughout (Pre-2008 areas)	The ductwork is old and has dust and residue building up, it needs to be cleaned to maintain air quality. Clean ductwork.	\$120,000				\$120,000	
Electrical								
GBS	Lighting - Auditorium	The existing house lighting is inefficient incandescent and difficult to maintain. The stage lights were converted to LED in 2014. LED retrofit to house lighting is recommended.	\$300,000				\$300,000	
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. Replace ceiling tile and update lighting to LED.	\$80,000				\$80,000	
GBS	Lighting - Athletic Stadium	The existing athletic stadium fixtures are energy inefficient and high maintenance. Replace 400W metal halide light fixtures with energy efficient LED fixtures.	\$180,000				\$180,000	

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Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan						Updated as of November 3, 2019	
School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
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. Replace the front end of the PA system.	\$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. Upgrade 12 remaining science classrooms to LED lighting.	\$50,000		\$50,000		
Flooring/Tiling							
GBS	Abatement and Flooring - Fashion Studio (176) and Child Development classroom (181)	The flooring in the fashion studio needs abatement and install of new quartz tile. The Child Development classroom needs abatement and new carpet planks. Note: According to records, only 2 spaces remaining on 1st floor to abate: Foods classroom and bookstore Abatement and floor replacement recommended.	\$55,000		\$55,000		
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. Flooring replacement recommended.	\$175,000				\$175,000
GBS	Flooring and Furniture - Adam's Resource Center (ARC)	The carpet in the Adam's Resource Center is worn and in need of replacement. The furniture is original to the space and not conducive to team collaboration and student interaction. Redesign of the Adam's Resource Center and new flooring and furniture recommended.	\$75,000			\$75,000	
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. Redesign of Social Studies Office and new flooring and furniture recommended.	\$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. Abatement, Floor Replacement, Room Renovation Recommended.	\$180,000				\$180,000
GBS	Flooring - 4 Stairwell Towers	The stair treads on the four stairwell towers are worn and in need of replacement. Replacement of stairway flooring recommended.	\$80,000				\$80,000
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.	\$60,000				\$60,000

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Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan

Updated as of November 3, 2019

School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022	Deferred
		Replacement of pool locker room flooring recommended.					
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.	\$60,000				\$60,000
		Replacement of girls west pool locker room shower tile recommended.					
GBS	Flooring - Student Activity Center	The flooring in the Student Activity Center was installed as part of the 2008 referendum projects and overtime has become scratched and worn from the various room set ups and groups utilizing the room. It is recommended that the floor be replaced with new LVT flooring which is significantly more durable than the products available in 2008.	\$75,000				\$75,000
		Flooring replacement recommended.					
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.	\$85,000				\$85,000
		Replacement of auditorium stage flooring recommended.					
Architectural							
GBS	Door Replacement - Throughout Building	The Total Doors do not always properly latch and should be replaced.	\$300,000				\$300,000
		Replace Hallway Total Doors					
GBS	Room Numbering - Throughout Building	The current room numbering at GBS is not ADA compliant as it lacks the required braille and is not installed at ADA required height. Additionally rooms should be numbered in a more meaningful way.	\$200,000				\$200,000
		Renumber the building and replace signage.					
GBS	Nurses' Office	The existing configuration of the nurses' office is not conducive to the volume of students visiting the space on a daily basis. The layout is not efficient, doesn't provide sufficient privacy and lacks storage.	\$395,000	\$395,000			
		Reconfiguration and renovation of health office recommended.					
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.	\$2,000,000				\$2,000,000
		Additional Performing Arts Space(s) recommended.					
Larger Purchases							

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Glenbrook High School District 225 - Glenbrook South High School (GBS) Master Facility Plan						<i>Updated as of November 3, 2019</i>
School	Project & Area	Description of concern and recommended action	Cost Est. Total	Summer 2020	Summer 2021	Summer 2022 Deferred
		Subtotal for All Project Areas	\$11,159,800	\$1,105,000	\$185,000	\$1,409,667 \$8,460,133
		Fees/Construction Contingency	\$1,897,166	\$187,850	\$31,450	\$239,643 \$1,438,223
		Grand Total	\$13,056,966	\$1,292,850	\$216,450	\$1,649,310 \$9,898,356