

**GLENBROOK HIGH SCHOOLS
District Business Office**

TO: Dr. Mike Riggle

FROM: Kim Ptak

DATE: November 9, 2015

RE: Recommended Summer of 2016 Facility Projects

Recommendation

It is recommended that the Board of Education approve the creation of bid documents for the following facility projects. If approved, ARCON will create bid documents to be sent to bidders in February, 2016. Bid results will be shared at an early March, 2016 facility committee meeting followed by the March 14, 2016 board meeting.

1. Roofing	\$1,050,000
2. Paving	\$1,337,390
3. GBN & GBS Recommended Projects	
GBN Project Lead the Way	\$350,000
GBN Locker Room Modifications	\$15,000
GBS Physics Lab/Prep Room	\$450,000
GBS Project Lead the Way / Photo Lab Relocation	\$560,000
GBS Conversion of Tech Office and Computer Lab into Classrooms & Tech Office Relocation	\$140,000
GBS Library Furniture	\$22,000
GBS Locker Room Modification	<u>\$15,000</u>
	\$3,939,390
16% fees/contingencies	<u>\$630,302</u>
Total	\$4,569,692

1. Roofing

Overall, the district has approximately 965,000 square feet of roof surface. Glenbrook North High School is covered in a complex set of 91 separate and distinct roof areas, and Glenbrook South High School 99.

The majority of roofs are coal tar pitch built ups and more recently, multiple ply sbs bituminous (mb) roof membranes. The concept of these two roof systems is similar. They are insulated from the structural deck up, to provide the required thermal resistance (r-value) of r-25.0. The roof membrane is then installed over the roof insulation. The roof membrane provides multiple layers of waterproofing (asphalt, adhesive or coal tar) and multiple layers of reinforcement. The combination in the redundancy of the waterproofing layers and reinforcement provides long term performance characteristics. The life expectancy of this type of roof is 25-30 years.

All roof areas were reviewed and conditions assessed by Hutchinson Design group. This data, in conjunction with ARCON’s historical information, a review by Olson Roofing and Nicholas as well as input from building personnel led to a 6 year roofing plan – essentially three summers per building.

Additionally, the comprehensive roofing review assisted in the creation of an annual preventative maintenance plan which includes repairing open seams, split or cracks, topping off pitch pans, replacing caulking, removing debris, cleaning gutters and drains.

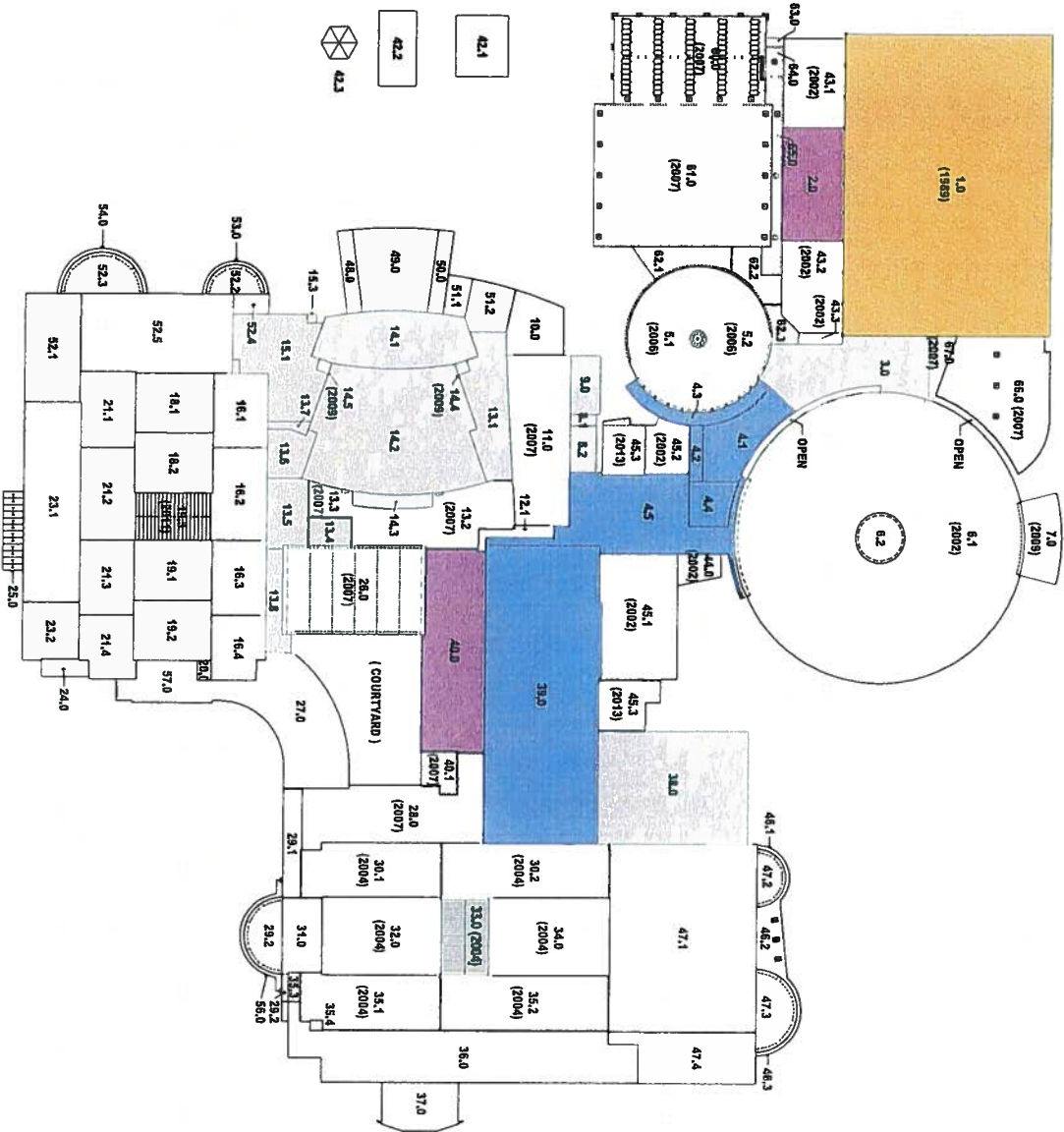
Summer/FY	Cost
Summer 2016/FY 16/17	\$1,050,000
Summer 2017/FY 17/18	\$780,000
Summer 2018/FY 18/19	\$1,319,500
Summer 2019/FY 19/20	\$200,000
Summer 2020/FY 20/21	\$500,000
Summer 2021/FY 21/22	\$1,800,000

Summer of 2016 and 2017 work includes areas we are starting to see wet insulation, blistering, ridging, deterioration of base flashings and vegetation growth. The plan is a working document and will be reevaluated on a yearly basis.

Attachments

1. GBS Map
2. GBN Map

82.1 (2007)
 82.2 (2007)
 82.3 (2007)
 83.0 (2007)
 84.0 (2007)
 85.0 (2007)



1 COMPOSITE ROOF PLAN - GLENBROOK SOUTH H.S.



ROOF AREA REPLACEMENT SUMMARY

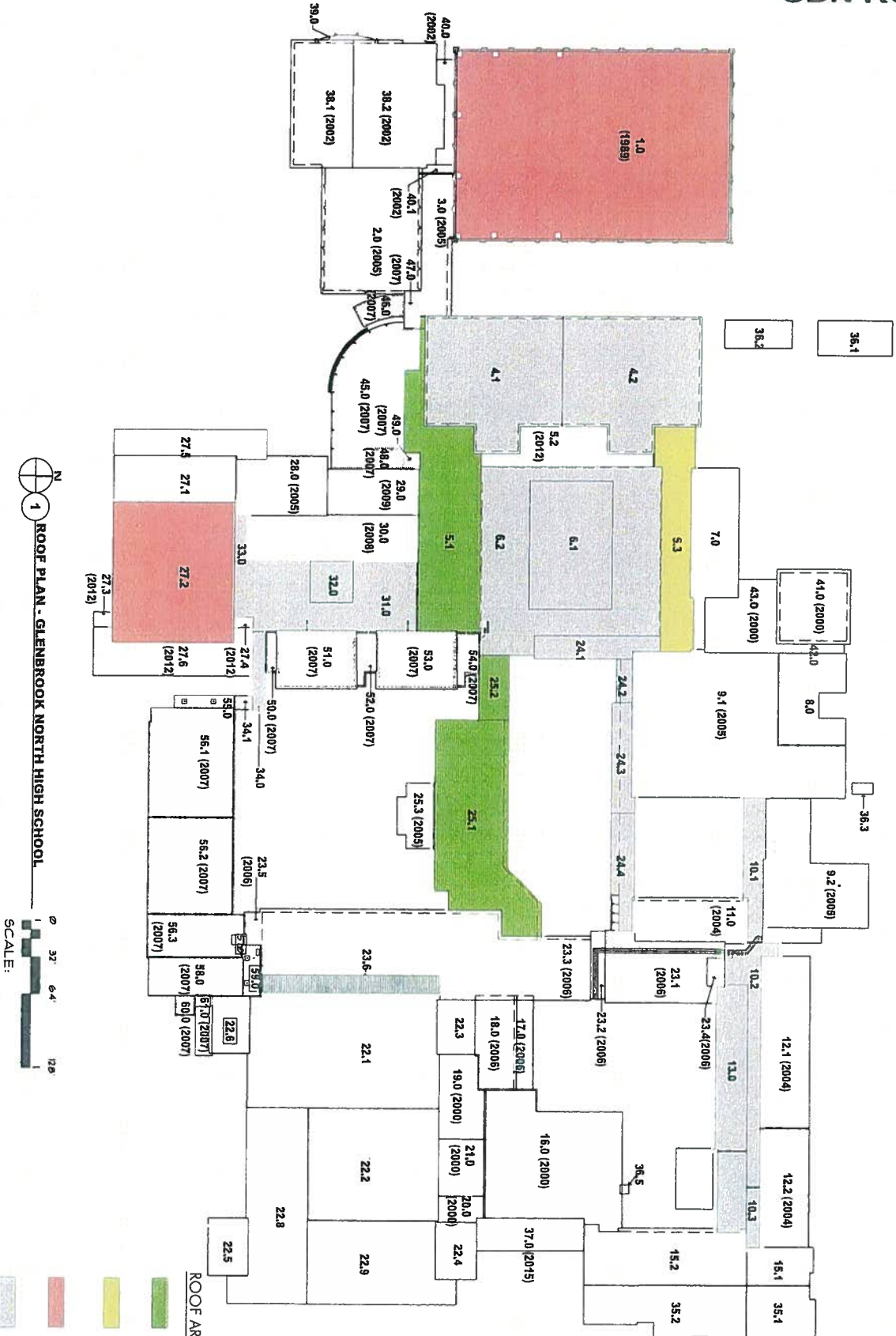
- SUMMER 2016 (4.1, 4.2, 4.3, 4.4, 4.5, 39.0)
- SUMMER 2020 (2.0, 40.0)
- SUMMER 2018 (1.0)
- 2022-2026



GLENBROOK HIGH SCHOOL DISTRICT 225
 Glenbrook South High School - Future Roof Planning (Project# 15083)



GLENBROOK HIGH SCHOOL DISTRICT 225
 Glenbrook North High School - Future Roof Planning Project # 15083



ROOF AREA REPLACEMENT SUMMARY

- SUMMER 2017 (5.1, 25.1, 25.2)
- SUMMER 2019 (5.3)
- SUMMER 2021 (1.0, 27.2)
- 2022-2026

2. Paving

Based on a review by ARCON, Nicholas and two paving contractors, as well as input from our building personnel, a six year paving, concrete and fencing plan has been created. One key difference in this paving plan versus previous plans is all parking lots have been put on a 3-year sealcoating cycle.

The first year, summer of 2016 is the largest year from a funding standpoint as it addresses the final lots in need of full replacement. These are lots showing significant cracking and are beyond being able to be repaired with crack-filling and sealcoating.

Summer/FY	Cost
Summer 2016/FY 16/17	\$1,337,390
Summer 2017/FY 17/18	\$264,291
Summer 2018/FY 18/19	\$498,518
Summer 2019/FY 19/20	\$242,184
Summer 2020/FY 20/21	\$418,465
Summer 2021/FY 21/22	\$435,737

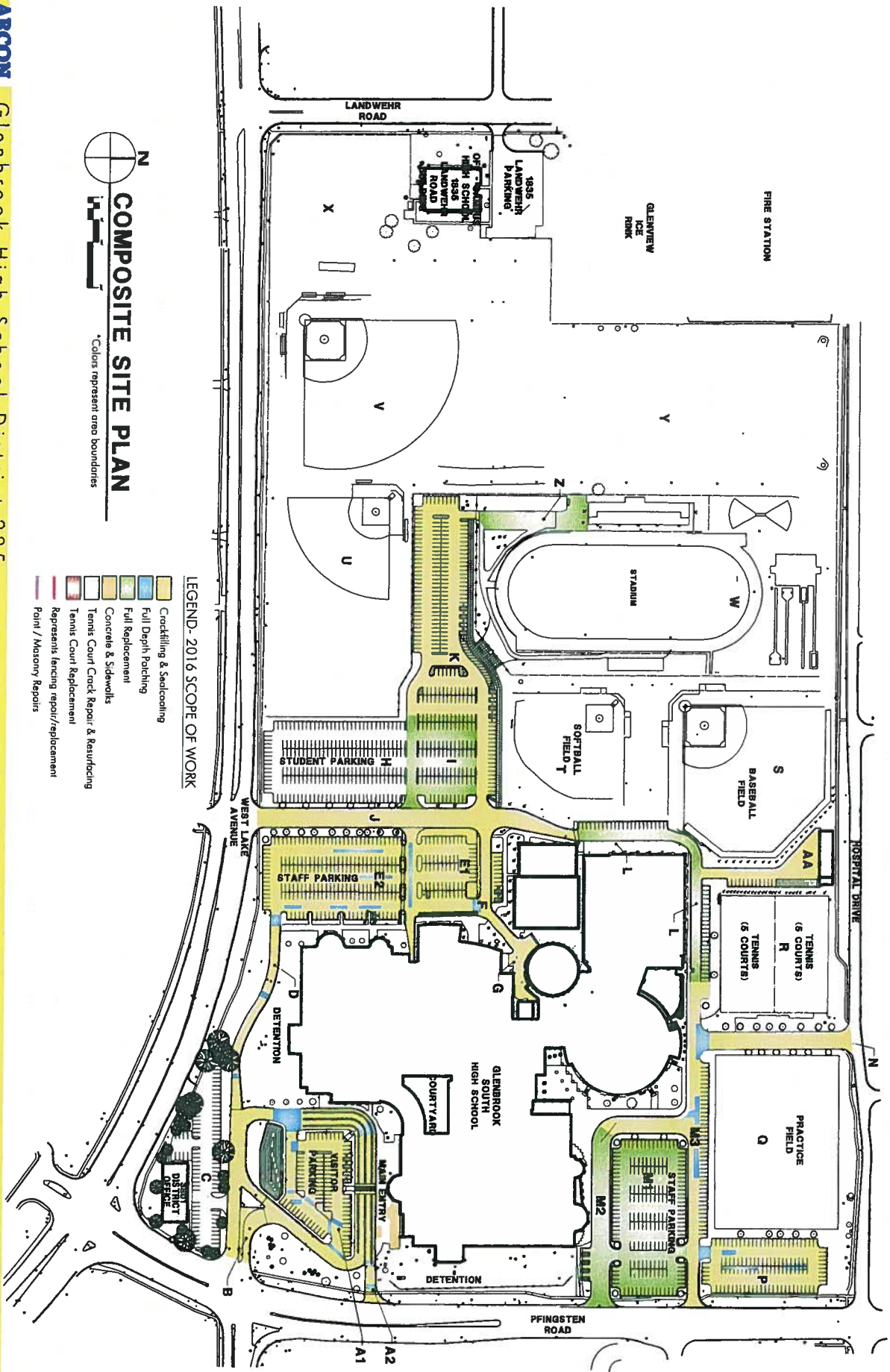
Attachments

1. GBS Map
2. GBN Map



Glenbrook High School District 225
 Long Range Asset Management of Glenbrook South High School
 Project No. 15102

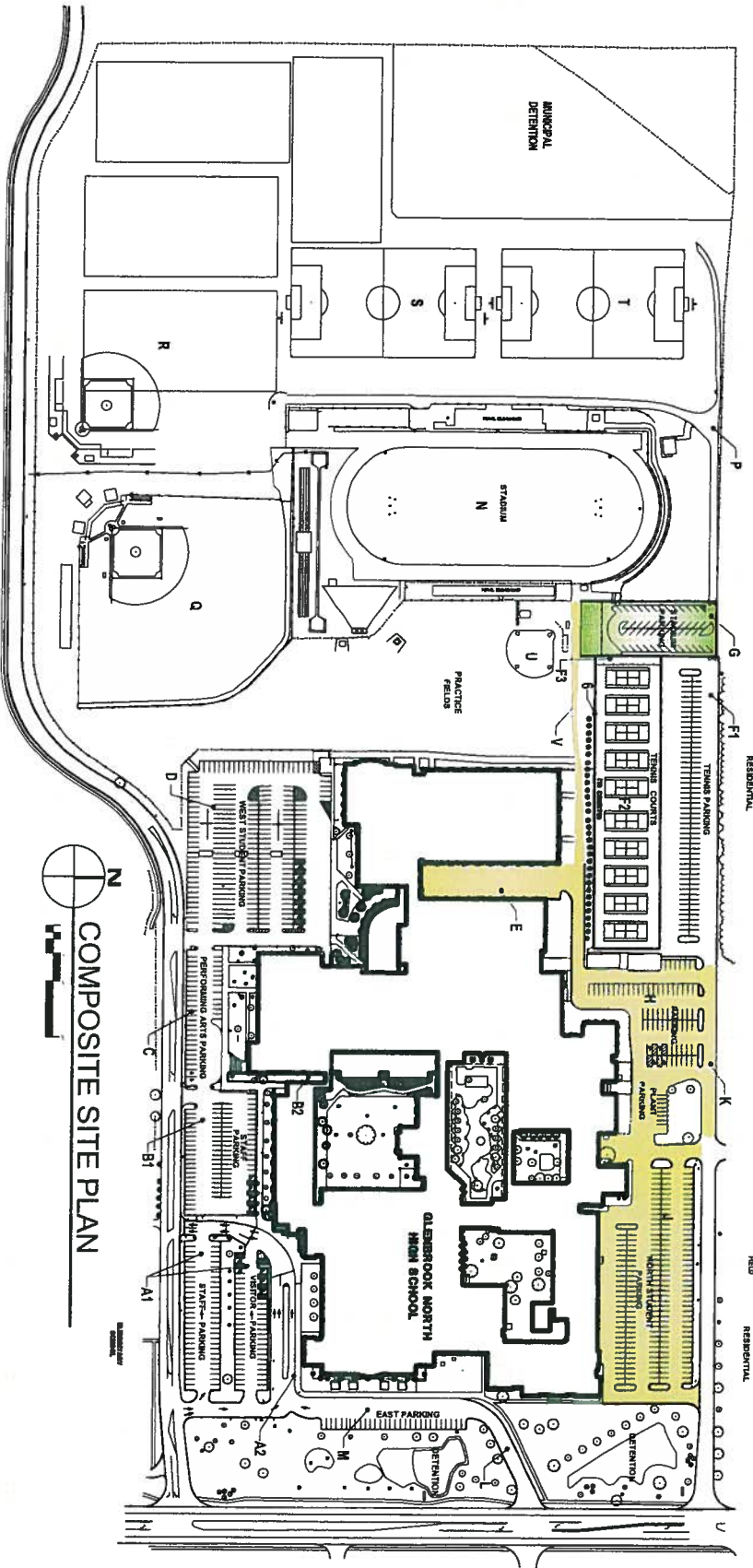
September 1, 2015



- LEGEND - 2016 SCOPE OF WORK**
- Crackfilling & Sealcoating
 - Full Depth Patching
 - Full Replacement
 - Concrete & Sidewalks
 - Tennis Court Crack Repair & Resurfacing
 - Tennis Court Replacement
 - Represents fencing repair/replacement
 - Point / Masonry Repairs



Glenbrook High School District 225
 Long Range Asset Management of Glenbrook North High School
 Project No. 15102



COMPOSITE SITE PLAN

- LEGEND - 2016 SCOPE OF WORK**
- Crackfilling & Sealcoating
 - Full Depth Patching
 - Full Replacement
 - Concrete & Sidewalks
 - Tennis Court Crack Repair
 - Represents fencing repair/replacement/Wood Timber Repair
 - Paint / Masonry/ Linoleum Repairs

3. GBN and GBS Recommended Projects

Glenbrook North

1. Project Lead the Way

\$350,000

The current architecture classroom B100 and adjoining small classroom B102 do not effectively meet the instructional needs of our expanding Project Lead The Way (PLTW) curricular program. We are in our second year of PLTW with two courses: Introduction to Engineering Design (IED) and Principles of Engineering (POE). Currently we have a total of 4 year long sections (IED - 3 sections and POE - 1 sections). Next year we will add two specialized courses as part of the program. We anticipate that we will expand to 6-7 sections of PLTW classes for the 2016-17 school year. This project will expand the classroom footprint and create a more flexible instructional space for all of our applied technology courses. Specifically, the goal is to design a learning space that supports the specialized engineering instruction of PLTW courses.

2. Locker Room Modifications

\$15,000

This project will add two private changing stalls to the girls and boys locker rooms to address overall privacy concerns.

GBN TOTAL

\$365,000

Glenbrook South

1. Physics Lab/Prep Room

\$450,000

Our current and future enrollment dictate a need for an additional science lab for next school year. Two math computer labs and a reading RTI room will be converted to a physics lab and prep room.

2. Project Lead the Way & Photo Lab Relocation

\$560,000

Our two new PLTW classrooms are being used every block this school year. The PLTW sequence will add Digital Electronics next year, along with four total sections for the STEM Learning Community over the next two years. Therefore, an additional PLTW lab is needed. The need for an additional PLTW lab was predicted at last year's Board meeting when enrollment needs were discussed. Current registrations reinforce the fact that an additional PLTW classroom will need to be created during the summer of 2016.

The third PLTW classroom should maintain easy access to an expanded Makers Space Lab that is currently shared by both PLTW classrooms. The Maker Space Lab will be expanded to accommodate the additional students. To accomplish this, the following actions will be taken:

1. Create a third PLTW classroom and expand the Makers Space Lab within the current Photos Lab.

2. Relocate the Photos Lab to the art wing within two existing general classrooms. This move also supports incorporating the photography teacher into the Art Department.

3. Conversion of Tech Office & Computer Lab into Classrooms & Tech Office **\$140,000**

Several enrollment-driven capacity issues contained within this document will require the absorption of a few existing classrooms. To offset the absorption of general classrooms and maintain GBS's general building capacity, the current tech office and science computer lab will be converted to general classrooms. The three technology staff members will move from Room 123 (new general classroom) into a smaller space in Room 133 B, C, and D. This project turns three small rooms into one office space.

4. Library Furniture **\$22,000**

The move to the block and the increase in our overall student enrollment has increased the demand for private study carrels (preferred by students and staff). We have worked with the librarians to relocate several existing bookshelves and eliminate other bookshelves to create 15 additional study carrels.

5. Locker Room Modifications **\$15,000**

This project will add two private changing stalls to the girls and boys locker rooms to address overall privacy concerns.

GBS TOTAL **\$1,187,000**

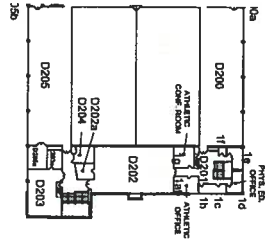
GRAND TOTAL **\$1,552,000**

Attachments

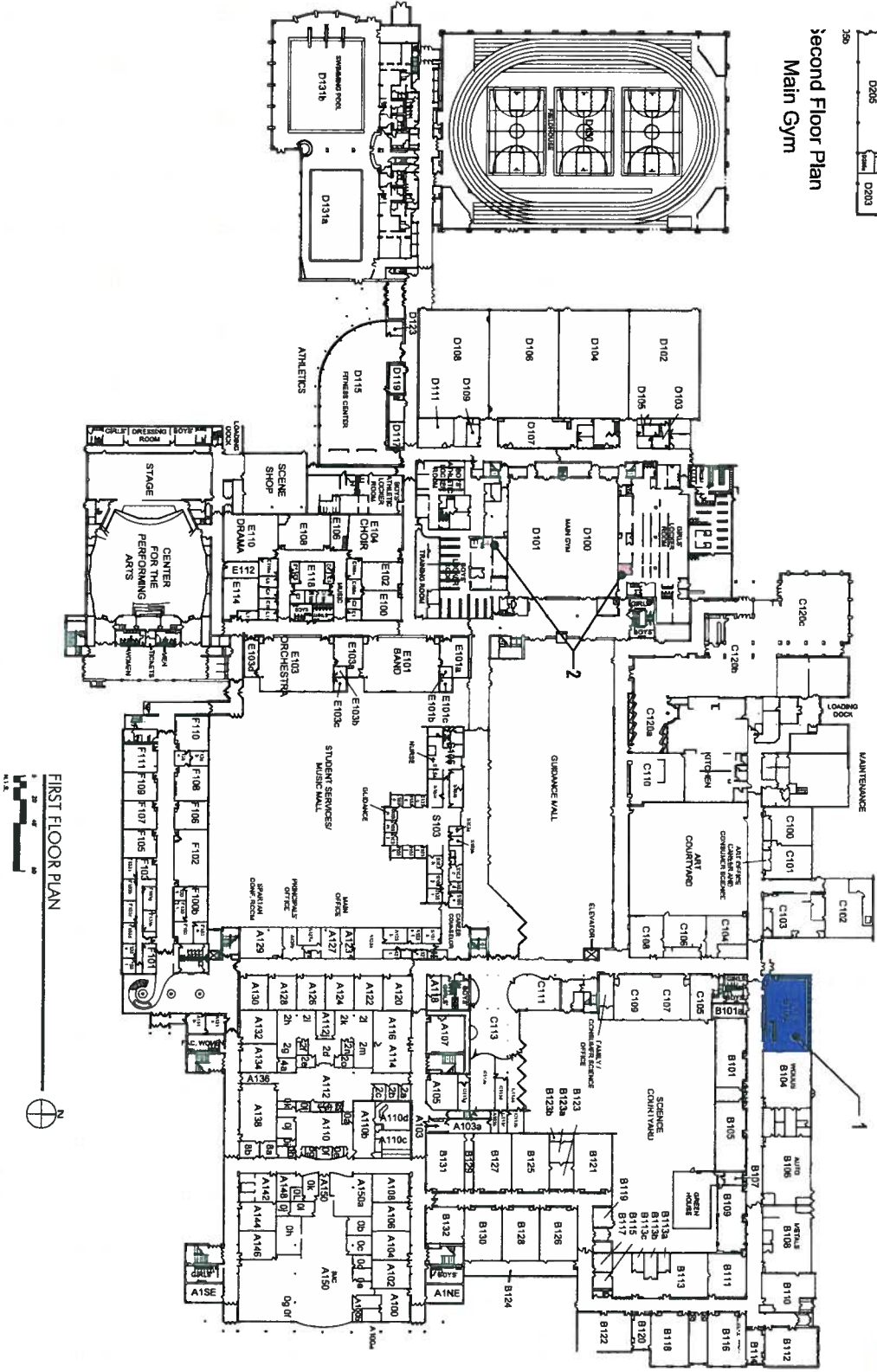
1. Composite Sketch GBN
2. Before and After Sketches for GBN Projects
3. Composite Sketch GBS
4. Before and After Sketches for GBS Projects



Glenbrook High School District 225
 Glenbrook North High School- 2016 Building Projects
 Project No. 15083



Second Floor Plan
 Main Gym



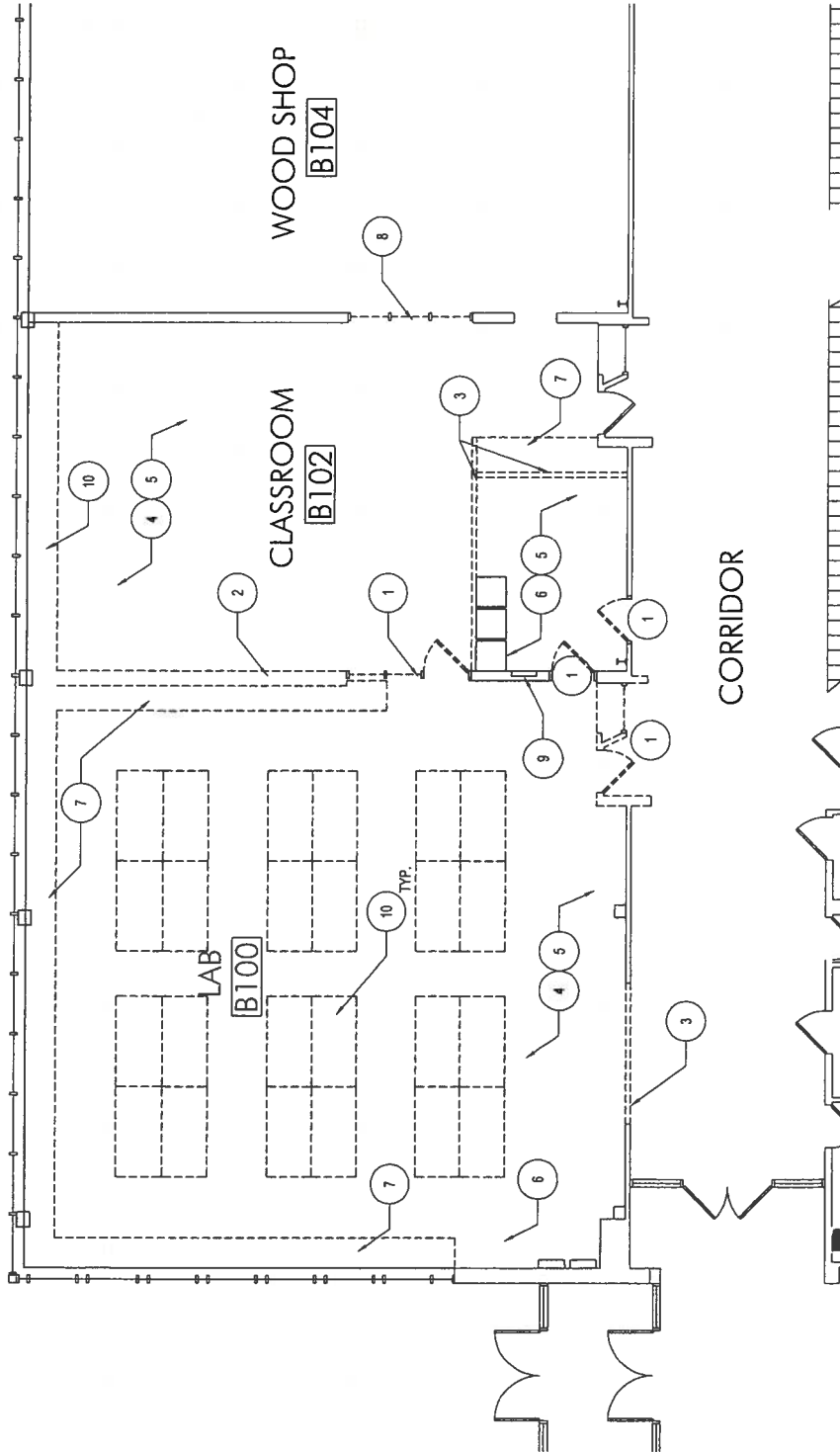
FIRST FLOOR PLAN

- LEGEND**
- 1. Project Lead the Way
 - 2. Locker Room Modifications

Glenbrook North High School 2016 Recommended Projects

DEMOLITION NOTES

1. **DOORS:** CAREFULLY REMOVE AND DISPOSE OF COMPLETE, ENTIRE DOOR, FRAME, GLAZING, AND HARDWARE COMPLETE.
2. **INTERIOR MASONRY WALL:** SAWCUT, REMOVE & DISPOSE OF EXISTING MASONRY WALL COMPLETE
3. **CREATE NEW OPENING:** CAREFULLY SAWCUT & REMOVE PORTION OF EXISTING MASONRY WALL AS REQUIRED TO INSTALL NEW DOOR & FRAME OR BORROWED LITE. SEE FLOOR PLAN FOR NEW OPENING SIZES.
4. **CEILING:** REMOVE AND REINSTALL EXISTING CEILING AS REQUIRED TO COMPLETE MEP WORK. SEE MEP DOCUMENTS
5. **FLOORING:** REMOVE AND DISPOSE OF ALL FLOOR COVERING, ACCESSORIES & ASSOCIATED MASTIC COMPLETE
6. **SAW CUT SLAB:** CAREFULLY SAW CUT EXISTING 5" THICK SLAB AS NECESSARY TO PERFORM UNDER SLAB PLUMBING OR ELECTRICAL WORK.
7. **CASEWORK:** REMOVE AND DISPOSE OF EXISTING BUILT-IN COMPUTER STATIONS AND SHELVING COMPLETE
8. **GLAZING:** EXISTING FRAME TO REMAIN REPLACE WIRE GLASS WITH TEMPERED GLASS.
9. **ELECTRICAL PANEL:** EXISTING ELECTRICAL PANEL TO REMAIN
10. **WORKSTATIONS:** CAREFULLY REMOVE EXISTING STUDENT WORKSTATIONS AND RETURN TO OWNER

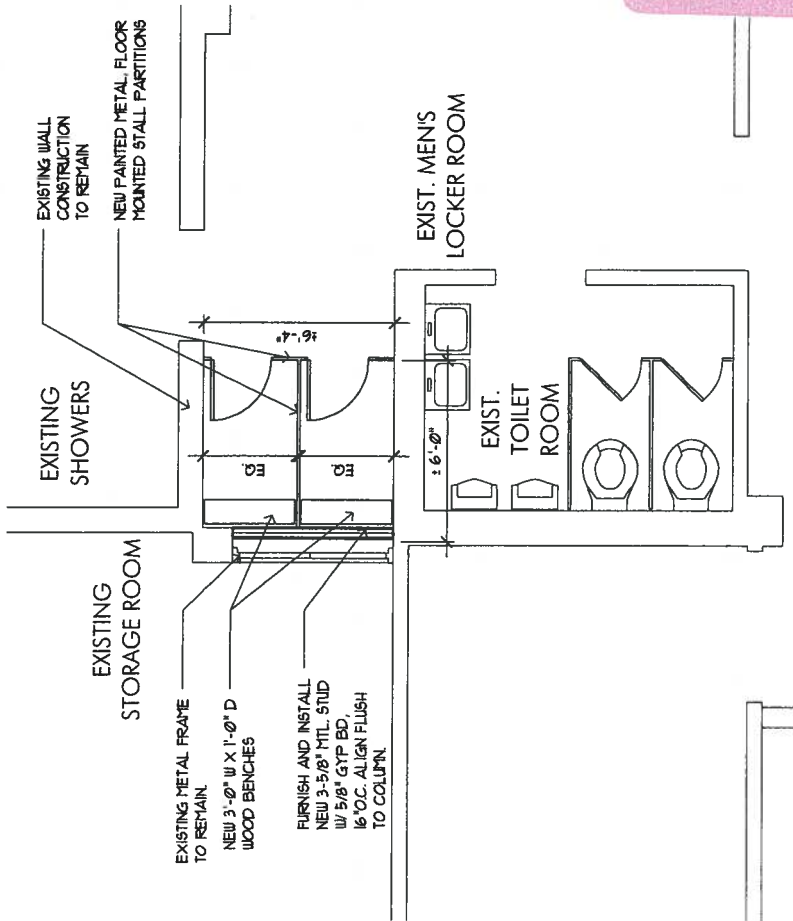


PROJECT LEAD THE WAY - EXISTING FLOOR PLAN / DEMOLITION
 1/8" = 1'-0"

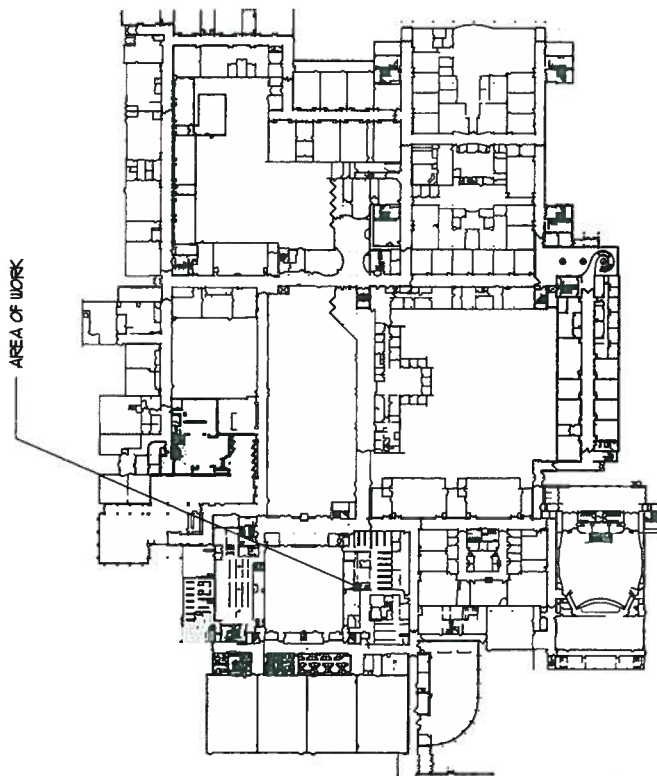


Glenbrook North High School
 Glenbrook High Schools District 225
 Project No. 15083

October 16, 2015



N  **1** PARTIAL FIRST FLOOR PLAN
1/4" = 1'-0"



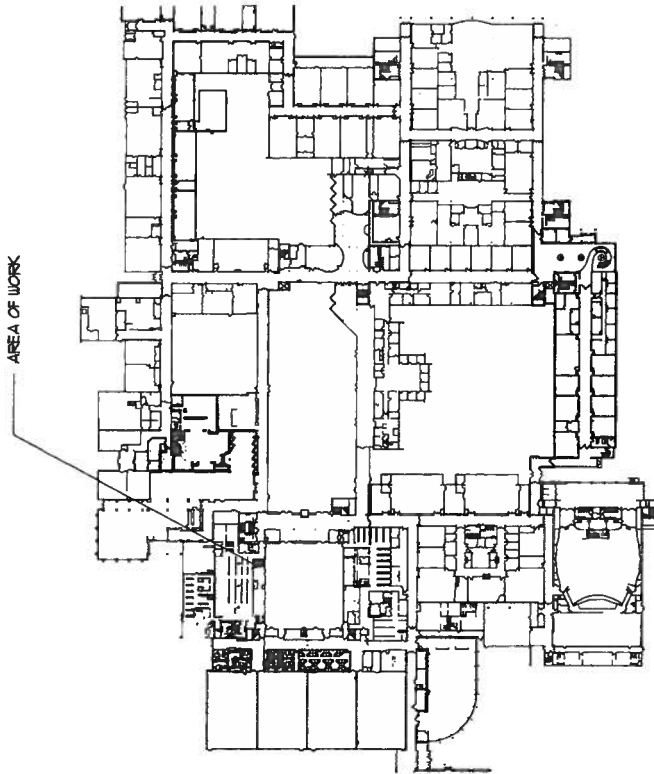
N  **KEY PLAN**
NTS

Date 06-
Project No. 14079
Drawn By: LAF

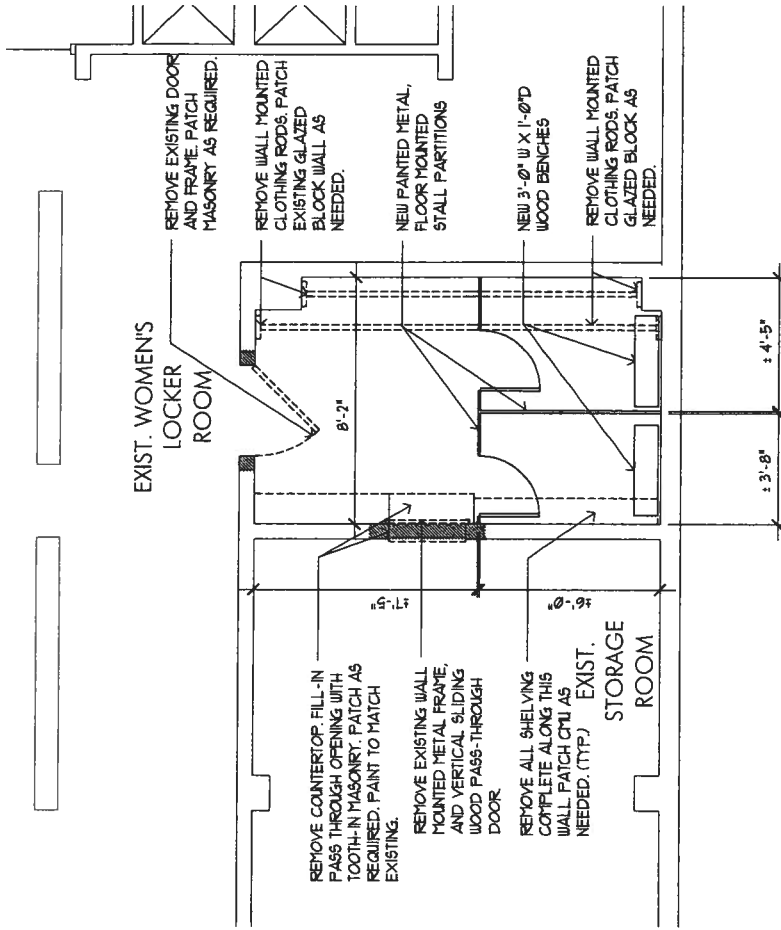
Sheet SK-0

Project Name: PRIVATE CHANGING AREAS AT GLENBROOK NORTH HIGH SCHOOL AND GLENBROOK SOUTH HIGH SCHOOL
GLENBROOK NORTH MEN'S LOCKER ROOM





KEY PLAN
NTS



1
1/4" = 1'-0"

Project Name: PRIVATE CHANGING AREAS AT GLENBROOK NORTH HIGH SCHOOL AND GLENBROOK SOUTH HIGH SCHOOL
 GLENBROOK NORTH WOMEN'S LOCKER ROOM

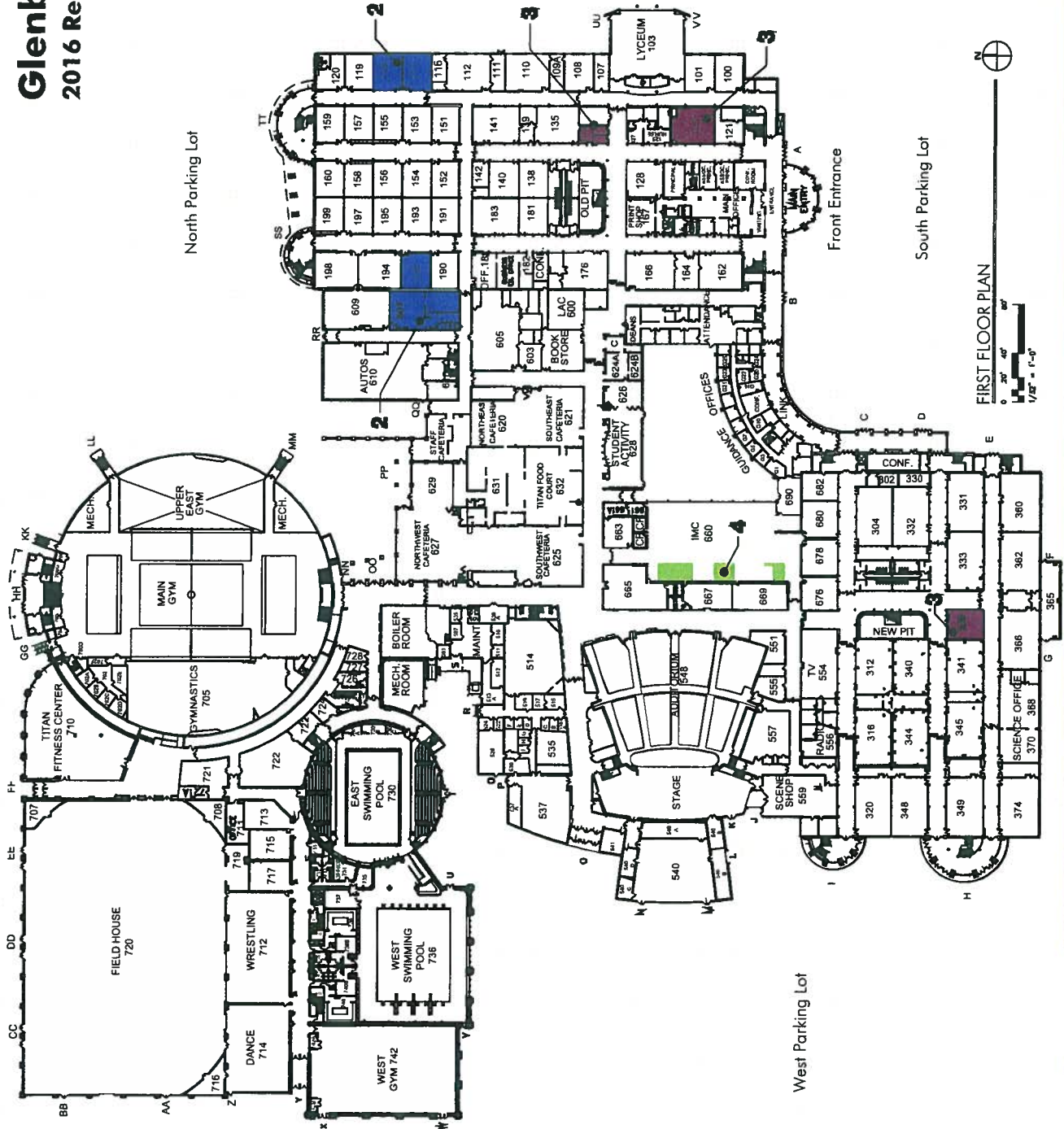
Date: 06-17-2015
 Project No. 140719
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 Drawn By: LAF

Glenbrook South High School

2016 Recommended Projects

LEGEND

- 1. Physics Lab/Prep Room
- 2. Project Lead the Way & Photo Lab Relocation
- 3. Conversion of Tech Office & Computer Lab into Classrooms/Tech Office Relocation
- 4. Library Furniture
- 5. Locker Room Modifications



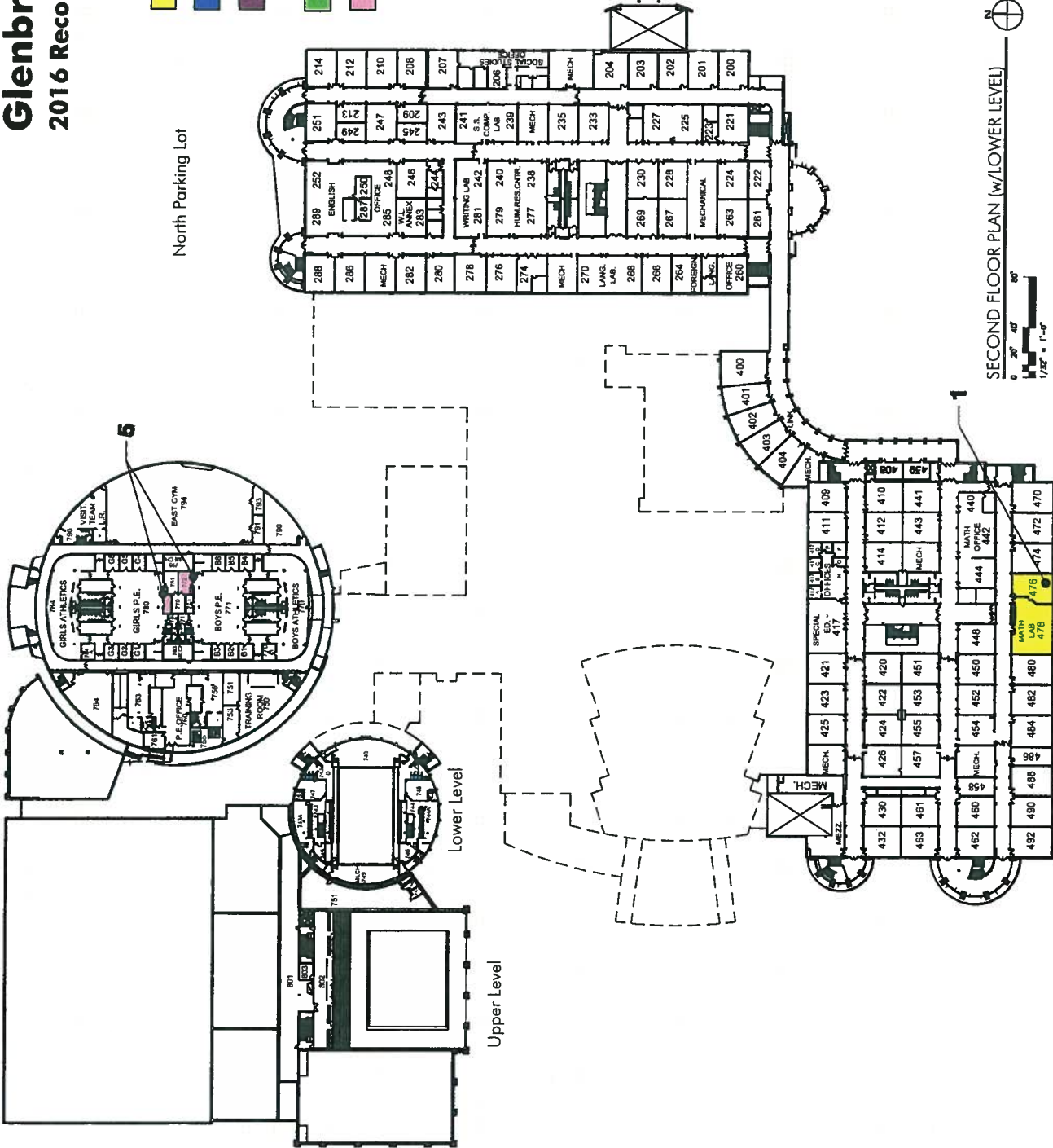
Glenbrook South High School

2016 Recommended Projects

LEGEND



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2. Project Lead the Way & Photo Lab Relocation
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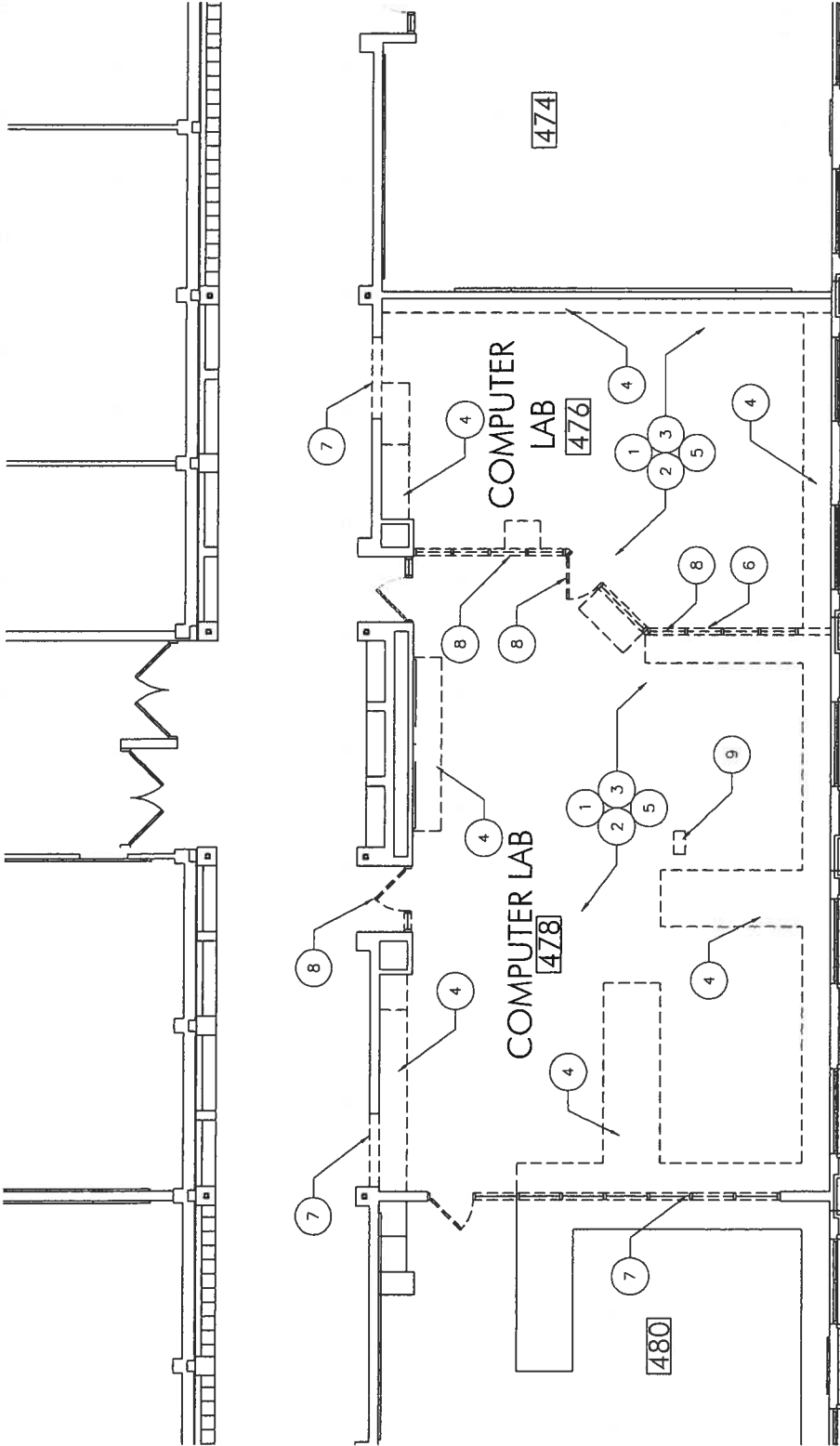


Glenbrook High School District 225
 Glenbrook South High School- 2016 Enrollment Projects
 Project No. 15083

October 16, 2015

DEMOLITION NOTES

1. **CEILING:** REMOVE & DISPOSE OF EXISTING ACOUSTICAL CEILING SYSTEM, LIGHT FIXTURES AND ACCESSORIES COMPLETE. SEE MEP DOCS. REMOVE & REINSTALL 1ST FLOOR CEILING BELOW AS REQUIRED TO PERFORM MEP WORK.
2. **FLOORING:** REMOVE AND DISPOSE OF ALL FLOOR COVERING.
3. **SAW CUT SLAB:** CAREFULLY SAW CUT EXISTING 5" THICK SLAB AS REQUIRED TO PERFORM PLUMBING AND ELECTRICAL WORK.
4. **CASEWORK:** REMOVE ALL CASEWORK AND WALL MOUNTED EQUIPMENT COMPLETE.
5. **WALLS:** REMOVE ALL WALL MOUNTED OBJECTS, I.E. TV, WHITE BOARD, PROJECTOR SCREEN, CLOCK, ETC. COMPLETE.
6. **WALLS:** SAWCUT AND DEMOLISH EXISTING MASONRY WALLS COMPLETE
7. **NEW OPENING:** SAWCUT AND DEMOLISH PORTION OF EXISTING MASONRY WALL AS REQUIRED FOR INSTALLATION OF NEW DOOR OR BORROWED LITE
8. **DOORS/BORROWED LITES:** CAREFULLY REMOVE AND DISPOSE OF COMPLETE. DOOR OR BORROWED LITE ASSEMBLY INCLUDING DOOR, FRAME, GLAZING HARDWARE COMPLETE
9. **PROJECTOR:** DISCONNECT AND REMOVE EXISTING PROJECTOR. SEE ELEC



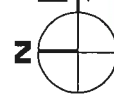
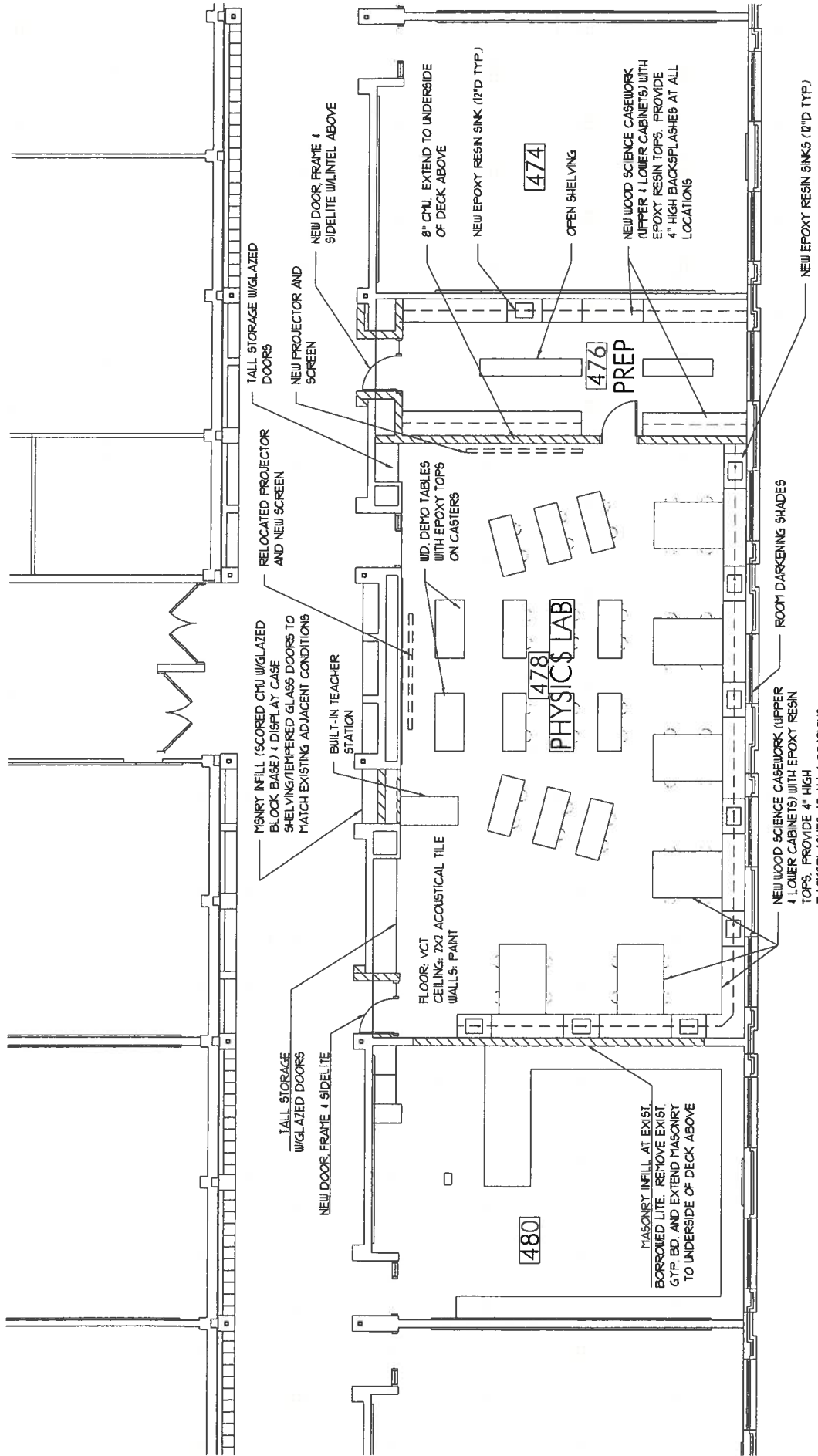
PHYSICS LAB EXISTING FLOOR PLAN / DEMOLITION

1/8" = 1'-0"



Glenbrook South High School
 Glenbrook High Schools District 225
 Project No. 15083

October 16, 2015



PHYSICS LAB- FLOOR PLAN

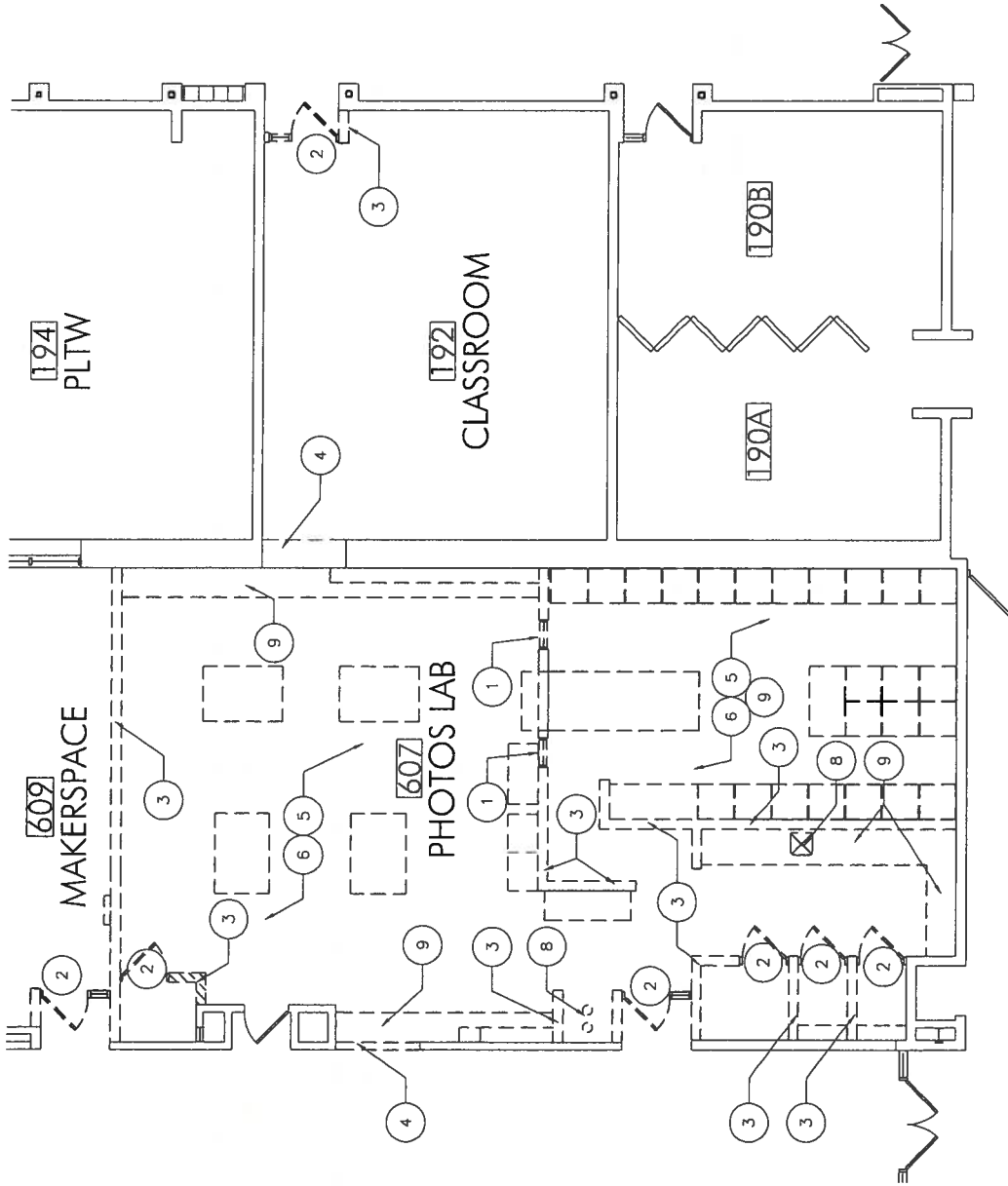
1/4" = 1'-0"



Glenbrook South High School
 Glenbrook High Schools District 225
 Project No. 15083

October 16, 2015





DEMOLITION NOTES

1. **WINDOW SYSTEM:** CAREFULLY REMOVE AND DISPOSE OF EXISTING BORROWED LITE COMPLETE, INCLUDING GLAZING, FRAME, & LINTEL.
2. **DOORS:** CAREFULLY REMOVE AND DISPOSE OF EXISTING DOOR, FRAME, GLAZING, AND HARDWARE COMPLETE.
3. **INTERIOR MASONRY WALL:** CAREFULLY SAWCUT, REMOVE & DISPOSE OF EXISTING MASONRY WALL COMPLETE.
4. **CREATE NEW OPENING:** CAREFULLY SAWCUT & REMOVE PORTION OF EXISTING MASONRY AS REQUIRED TO INSTALL NEW DOOR, FRAME OR BORROWED LITE.
5. **CEILING:** REMOVE & DISPOSE OF EXISTING ACOUSTICAL CEILING SYSTEM, LIGHT FIXTURES & ACCESSORIES COMPLETE. SEE MEP DOCS.
6. **FLOORING:** REMOVE AND DISPOSE OF EXISTING FLOOR COVERING, ACCESSORIES, AND ASSOCIATED MASTIC COMPLETE.
7. **SAW CUT SLAB:** CAREFULLY SAW CUT EXISTING 5" THICK SLAB AS NECESSARY TO PERFORM UNDER SLAB PLUMBING OR ELECTRICAL WORK.
8. **PLUMBING FIXTURES:** REMOVE AND DISPOSE OF EXISTING PLUMBING FIXTURES COMPLETE. SEE PLBG DOCS.
9. **CASEWORK/LAB EQUIPMENT:** CAREFULLY REMOVE EXISTING CASEWORK AND LAB EQUIPMENT COMPLETE AND RETAIN FOR REINSTALLATION AT RELOCATED PHOTO LAB.

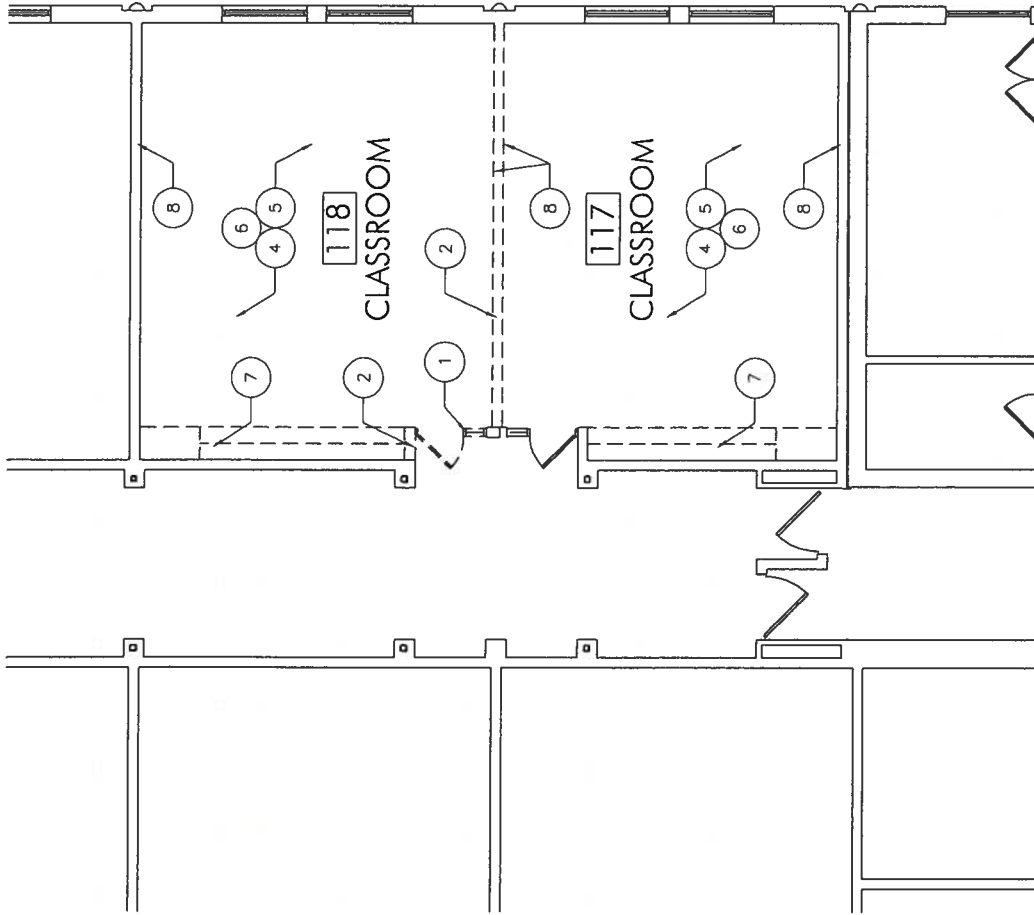
PROJECT LEAD THE WAY - EXISTING FLOOR PLAN / DEMOLITION

1/8" = 1'-0"



Glenbrook South High School
 Glenbrook High Schools District 225
 Project No. 15083

October 16, 2015



DEMOLITION NOTES	
1.	DOORS: CAREFULLY REMOVE AND DISPOSE OF EXISTING DOOR, FRAME, GLAZING, AND HARDWARE COMPLETE.
2.	INTERIOR MASONRY WALL: CAREFULLY SAWCUT. REMOVE & DISPOSE OF EXISTING MASONRY WALL COMPLETE.
3.	CREATE NEW OPENING: CAREFULLY SAWCUT & REMOVE PORTION OF EXISTING MASONRY AS REQUIRED TO INSTALL NEW DOOR, FRAME OR BORROWED LITE
4.	CEILING: REMOVE & DISPOSE OF EXISTING ACOUSTICAL CEILING SYSTEM, LIGHT FIXTURES & ACCESSORIES COMPLETE. SEE MEP DOCS.
5.	FLOORING: REMOVE AND DISPOSE OF EXISTING FLOOR COVERING, ACCESSORIES, AND ASSOCIATED MASTIC COMPLETE
6.	SAW CUT SLAB: CAREFULLY SAW CUT EXISTING 5" THICK SLAB AS NECESSARY TO PERFORM UNDER SLAB PLUMBING OR ELECTRICAL WORK.
7.	CASEWORK/LAB EQUIPMENT: CAREFULLY REMOVE AND DISPOSE OF EXISTING CASEWORK COMPLETE
8.	REMOVE & DISPOSE OF COMPLETE EXISTING WALL MOUNTED ACCESSORIES INCLUDING, BUT NOT LIMITED TO: WHITE BOARDS, TACK BOARDS, AND PROJECTOR SCREENS

N
 PHOTO LAB - EXISTING FLOOR PLAN/DEMOLITION
 1/8" = 1'-0"



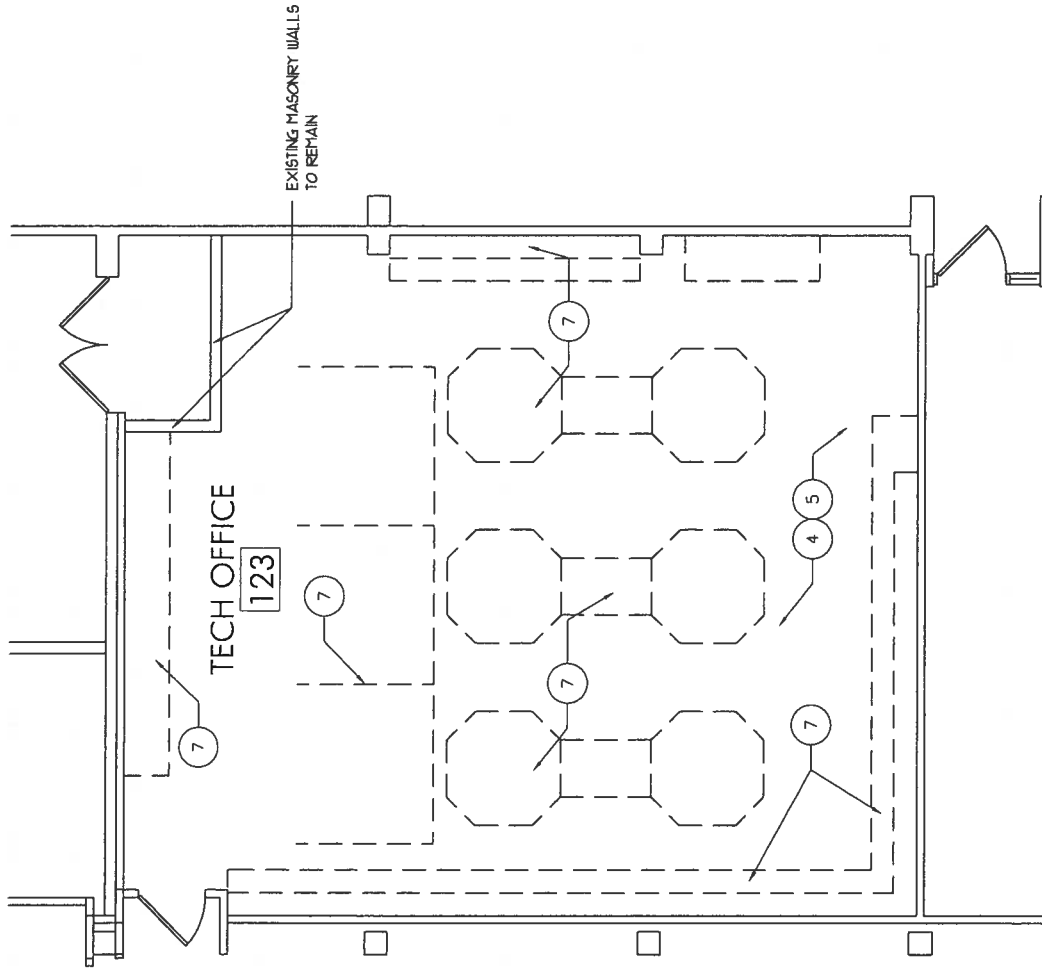
Glenbrook South High School
 Glenbrook High Schools District 225
 Project No. 15083



October 16, 2015

DEMOLITION NOTES

1. **DOORS:** CAREFULLY REMOVE AND DISPOSE OF EXISTING DOOR, FRAME, GLAZING, AND HARDWARE COMPLETE.
2. **INTERIOR MASONRY WALL:** CAREFULLY SAWCUT, REMOVE & DISPOSE OF EXISTING MASONRY WALL COMPLETE.
3. **CREATE NEW OPENING:** CAREFULLY SAWCUT & REMOVE PORTION OF EXISTING MASONRY AS REQUIRED TO INSTALL NEW DOOR, FRAME OR BORROWED LITE
4. **CEILING:** PATCH CEILING AT LOCATIONS OF CABLE RACEWAY REMOVAL
5. **FLOORING:** REMOVE AND DISPOSE OF EXISTING FLOOR COVERING, ACCESSORIES, AND ASSOCIATED MASTIC COMPLETE
6. **SAW CUT SLAB:** CAREFULLY SAW CUT EXISTING 5" THICK SLAB AS NECESSARY TO PERFORM UNDER SLAB PLUMBING OR ELECTRICAL WORK.
7. **CASEWORK:** CAREFULLY REMOVE AND DISPOSE OF EXISTING SCIENCE CASEWORK OR OFFICE WORKSTATIONS COMPLETE
8. **REMOVE & DISPOSE OF COMPLETE EXISTING WALL MOUNTED ACCESSORIES INCLUDING, BUT NOT LIMITED TO: WHITE BOARDS, TACK BOARDS, AND PROJECTOR SCREENS**



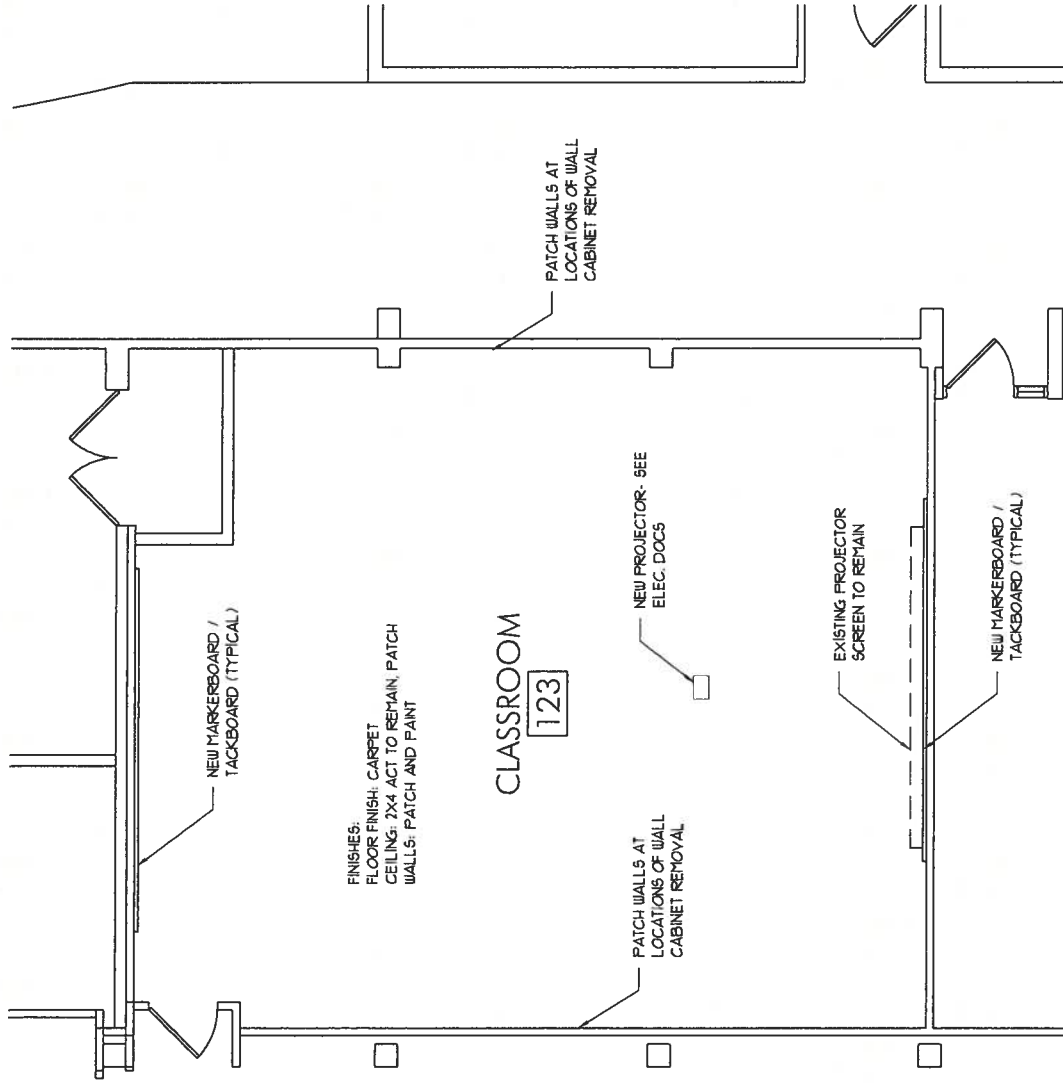
CLASSROOM 123 - EXISTING FLOOR PLAN / DEMOLITION

3/16" = 1'-0"



Glenbrook South High School
Glenbrook High Schools District 225
Project No. 15083

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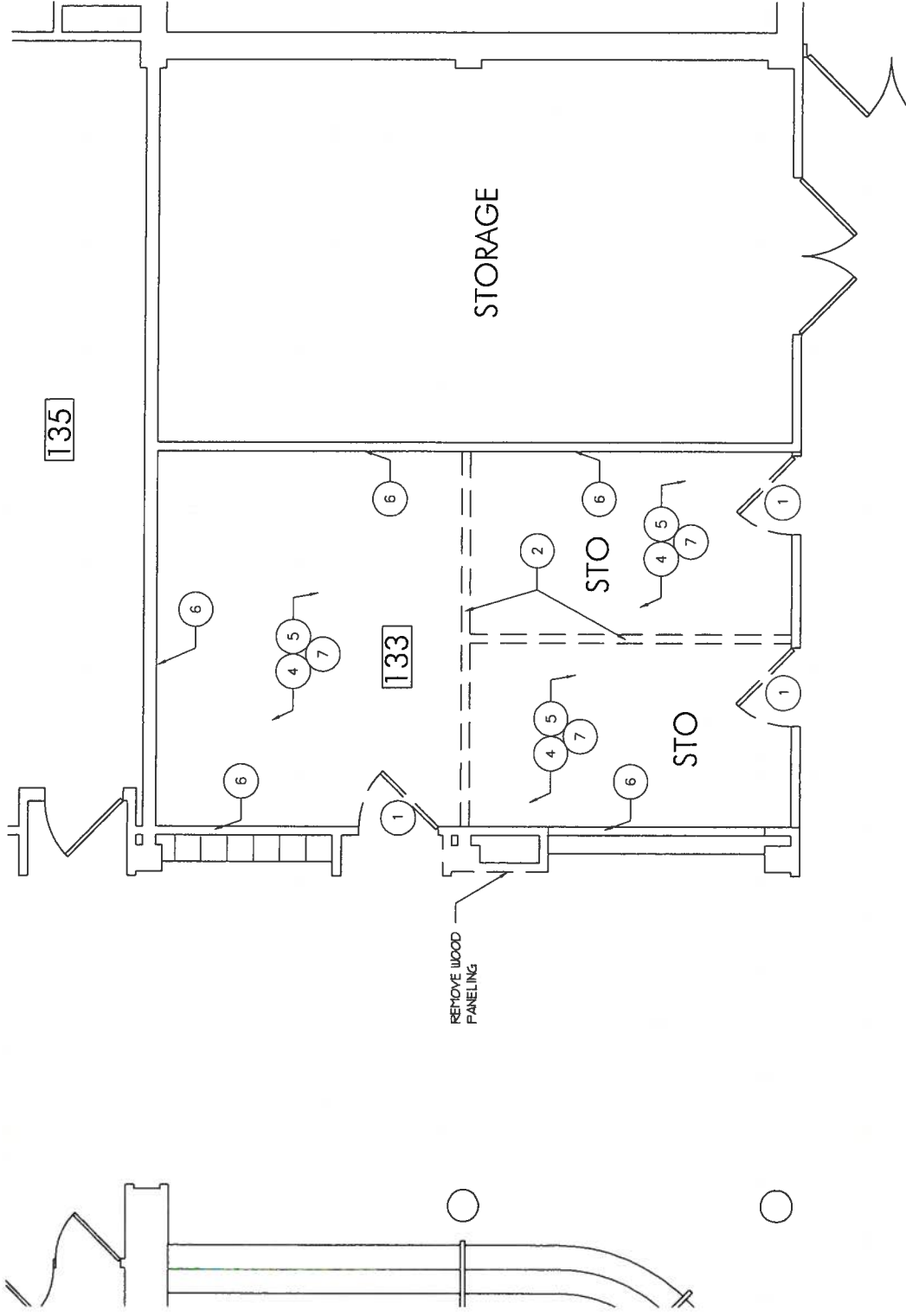
N CLASSROOM 123 - FLOOR PLAN
 $\frac{3}{16}'' = 1'-0''$



Glenbrook South High School
 Glenbrook High Schools District 225
 Project No 15083



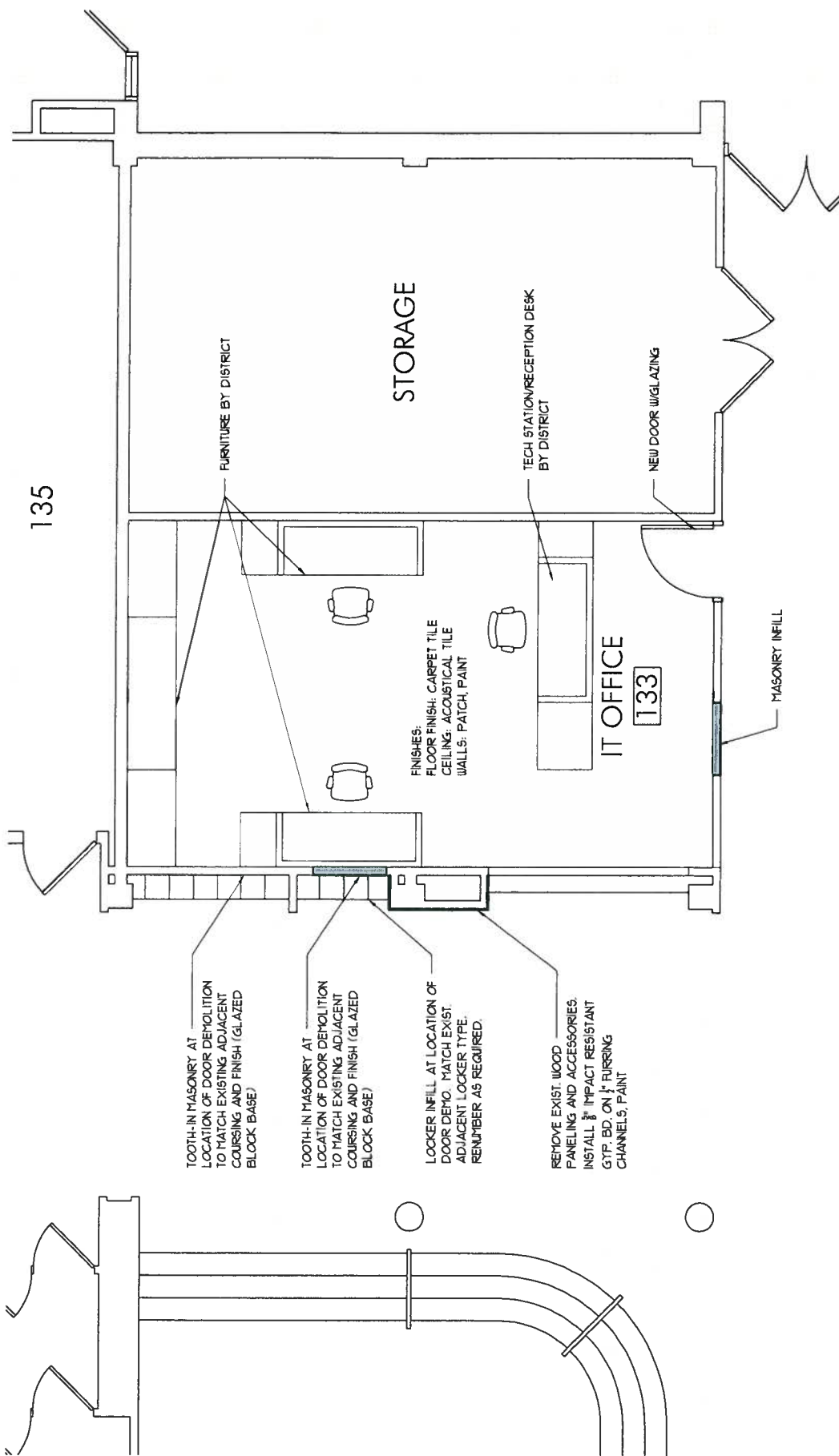
October 16, 2015



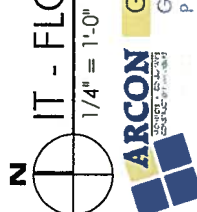
DEMOLITION NOTES	
1.	DOORS: CAREFULLY REMOVE AND DISPOSE OF EXISTING DOOR, FRAME, GLAZING, AND HARDWARE COMPLETE.
2.	INTERIOR MASONRY WALL: CAREFULLY SAWCUT, REMOVE & DISPOSE OF EXISTING MASONRY WALL COMPLETE.
3.	CREATE NEW OPENING: CAREFULLY SAWCUT & REMOVE PORTION OF EXISTING MASONRY AS REQUIRED TO INSTALL NEW DOOR, FRAME OR BORROWED LITE
4.	CEILING: REMOVE & DISPOSE OF EXISTING ACOUSTICAL CEILING SYSTEM, LIGHT FIXTURES AND ACCESSORIES COMPLETE. SEE MEP DOCS.
5.	FLOORING: REMOVE AND DISPOSE OF EXISTING FLOOR COVERING, ACCESSORIES, AND ASSOCIATED MASTIC COMPLETE.
6.	WALLS: REMOVE & DISPOSE OF COMPLETE EXISTING WALL MOUNTED ACCESSORIES INCLUDING, BUT NOT LIMITED TO: WHITE BOARDS, TACK BOARDS, AND PROJECTOR SCREENS
7.	CASEWORK: REMOVE ALL WALL-MOUNTED STORAGE SHELVING COMPLETE

IT - EXISTING FLOOR PLAN / DEMOLITION
 1/4" = 1'-0"





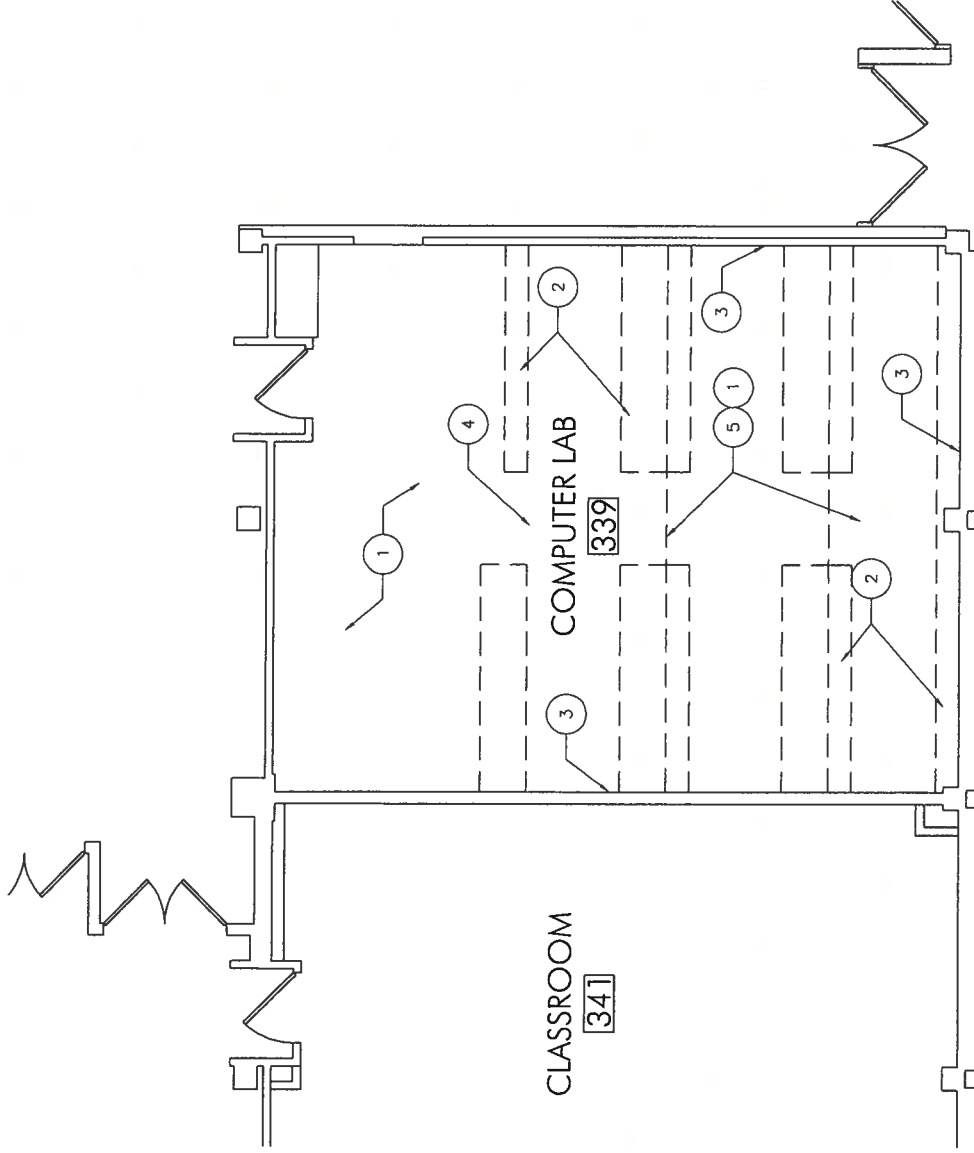
IT - FLOOR PLAN
1/4" = 1'-0"



Glenbrook South High School
Glenbrook High Schools District 225
Project No. 15083

October 16, 2015





DEMOLITION NOTES

1. FLOORING: REMOVE AND DISPOSE OF ALL FLOOR COVERING, MASTIC, AND ACCESSORIES COMPLETE.
2. CASEWORK: REMOVE AND DISPOSE OF ALL BUILT-IN COMPUTER WORKSTATIONS AND ACCESSORIES COMPLETE.
3. WALLS: REMOVE ALL WIREMOLD COMPLETE. SEE ELECTRICAL DOCS.
4. PROJECTOR: DISCONNECT AND RELOCATE EXISTING PROJECTOR. SEE ELEC. DOCS.
5. ELEVATED RISERS: REMOVE AND DISPOSE OF ELEVATED FLOOR STRUCTURE AND ACCESSORIES COMPLETE. PATCH FLOOR AND WALLS AS REQUIRED TO RECEIVE NEW FINISHES.

N CLASSROOM 339 - EXISTING FLOOR PLAN / DEMOLITION

3/16" = 1'-0"



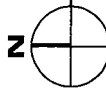
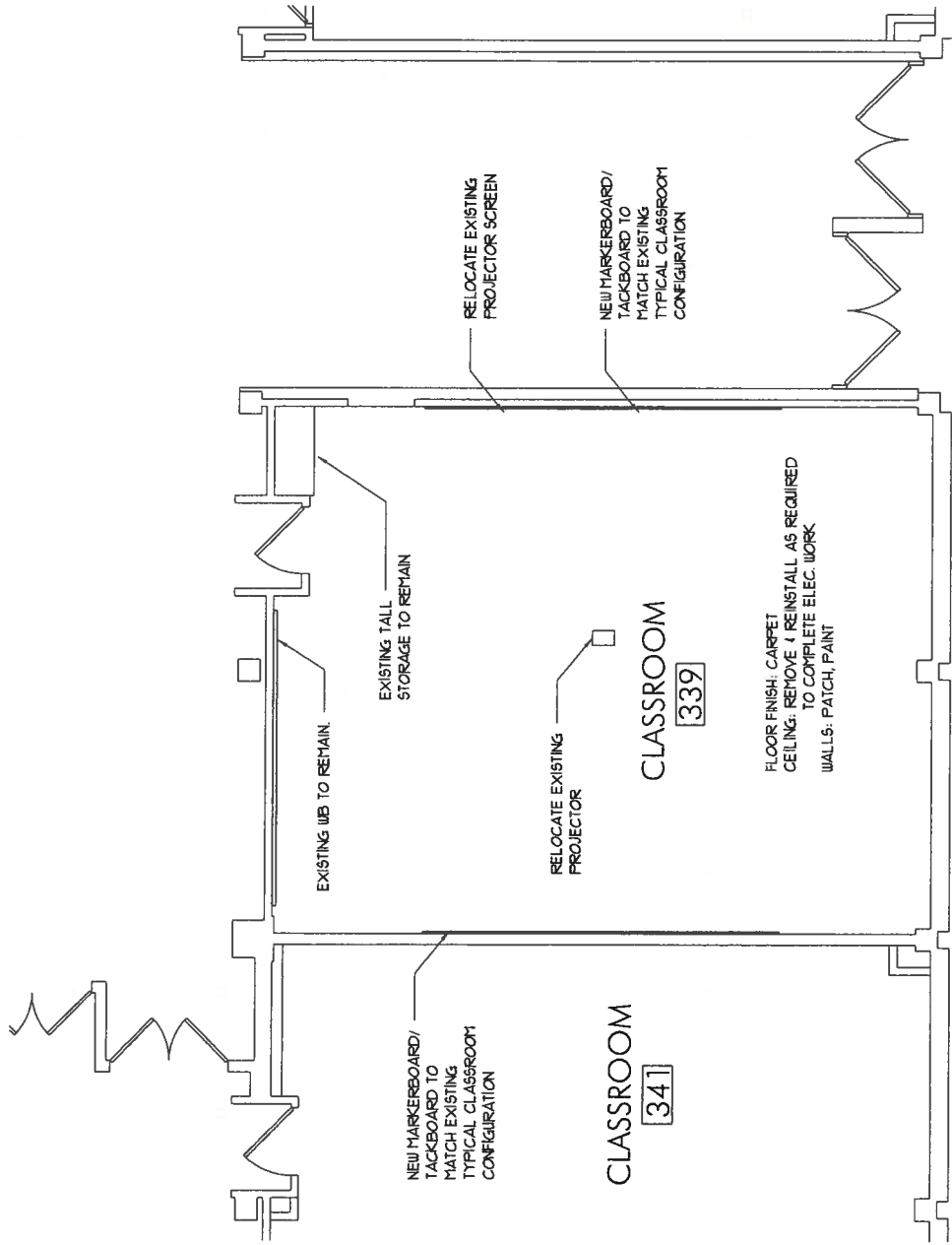
Glenbrook South High School

Glenbrook High Schools District 225

Project No. 15083

October 16, 2015





CLASSROOM 339 - FLOOR PLAN

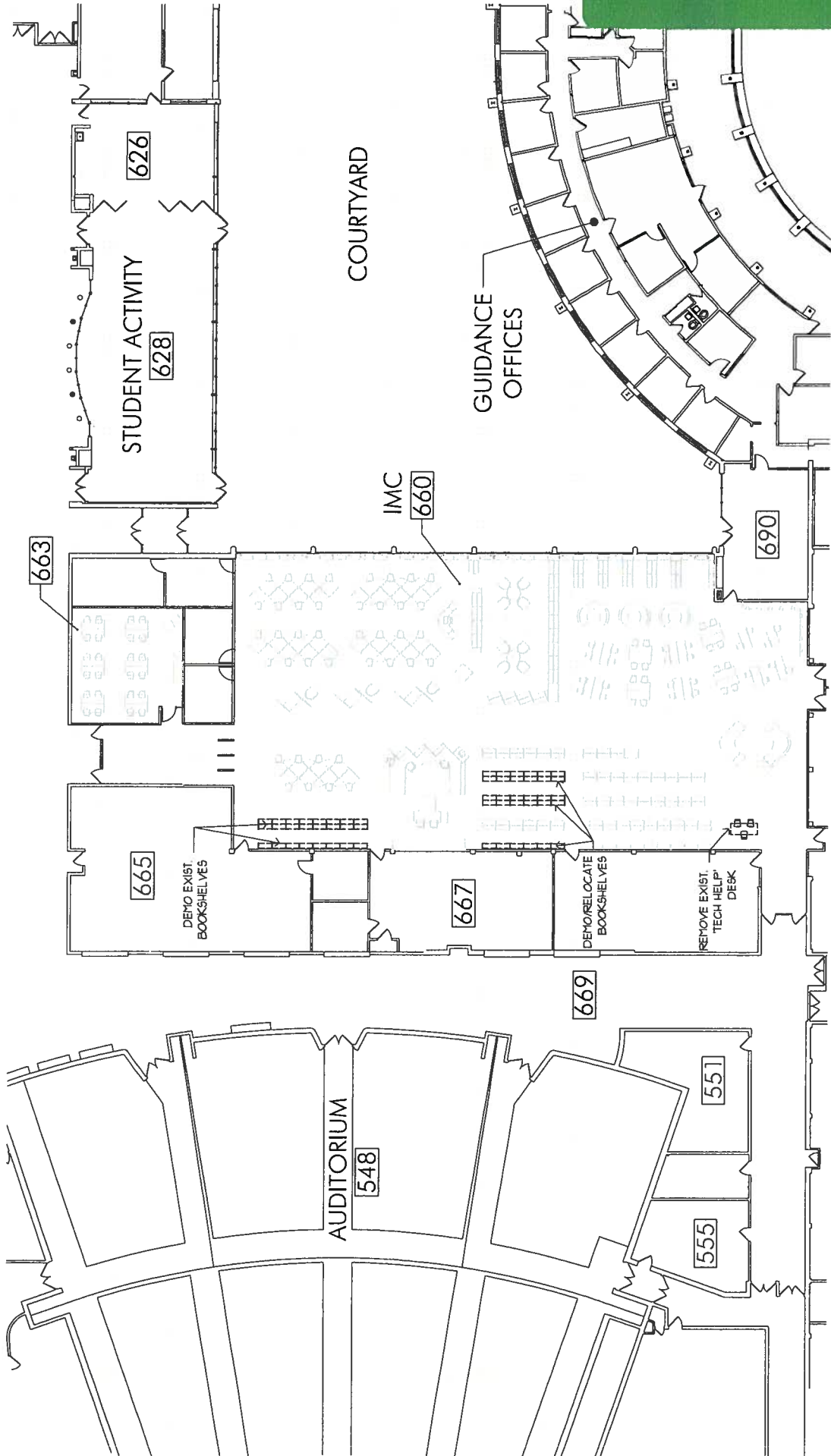
3/16" = 1'-0"



Glenbrook South High School
 Glenbrook High Schools District 225
 Project No. 15083

October 16, 2015





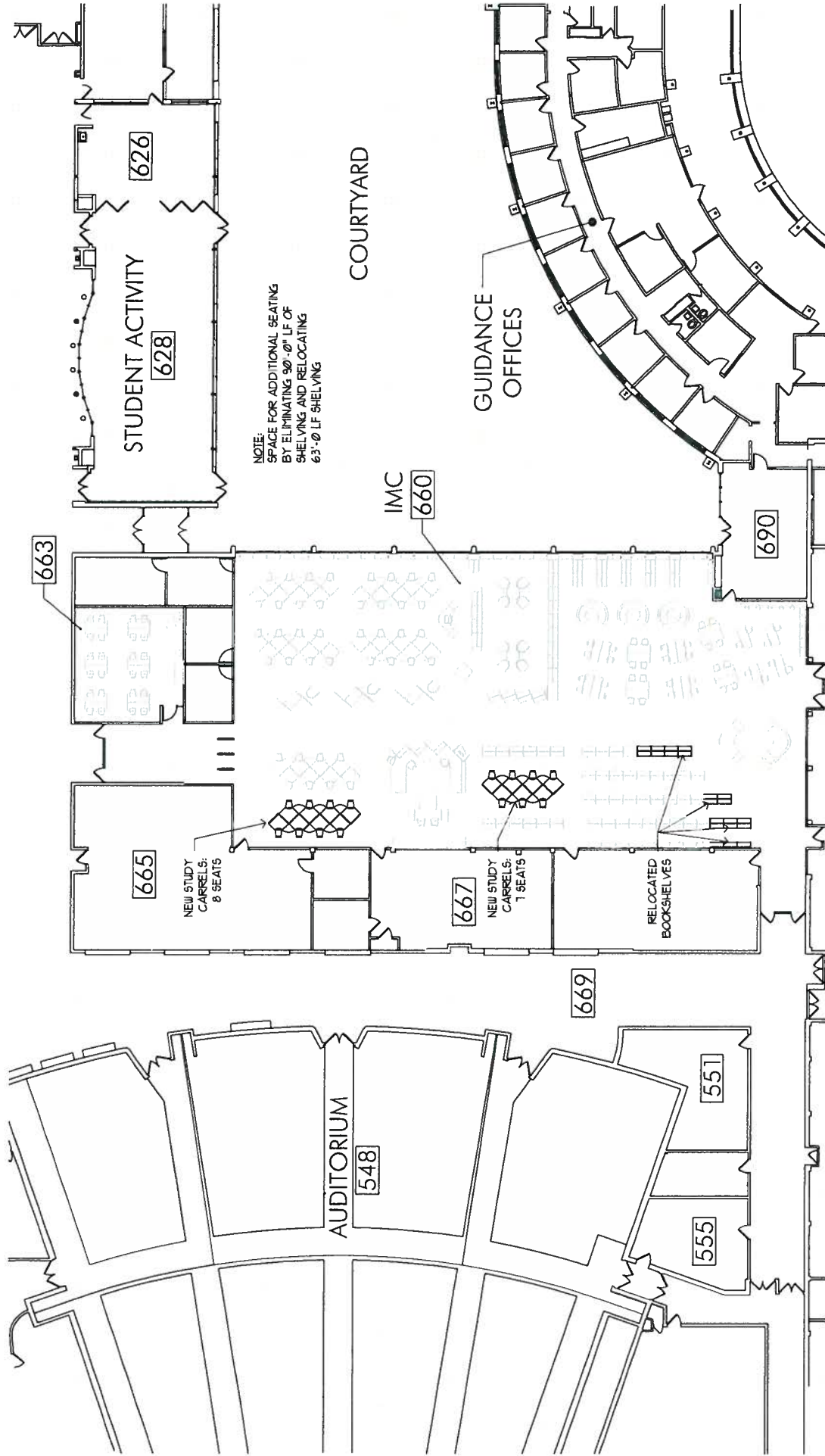
LIBRARY - EXISTING FLOOR PLAN / DEMOLITION

3/32" = 1'-0"



Glenbrook South High School
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October 16, 2015



LIBRARY - EXISTING FLOOR PLAN

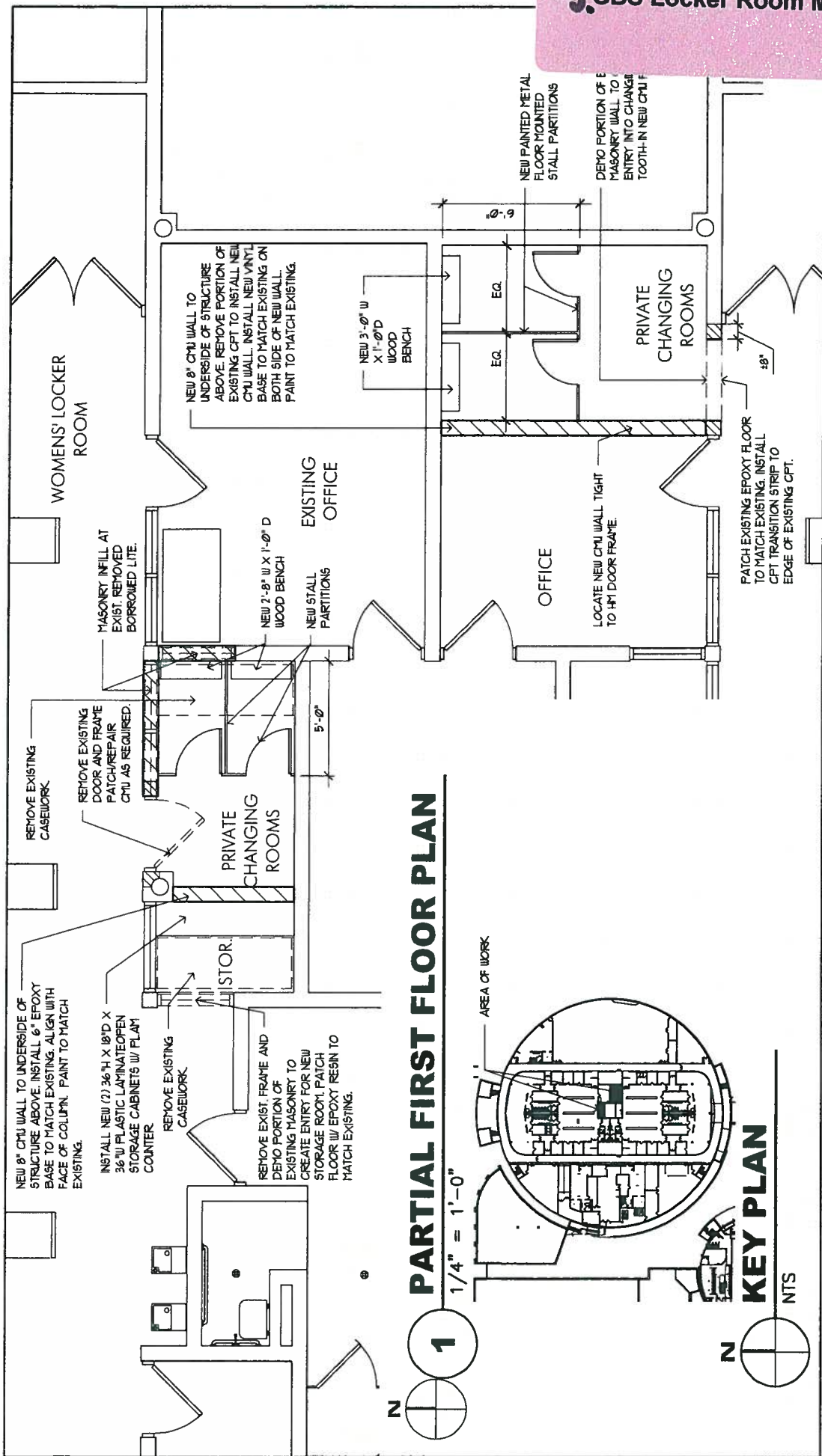
3/32" = 1'-0"



Glenbrook South High School
 Glenbrook High Schools District 225
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October 16, 2015





Date: **SK-**
 Sheet: **L-4F**

Project No: **140719**
 Drawn By: **L-4F**

Project Name: **PRIVATE CHANGING AREAS AT GLENBROOK NORTH HIGH SCHOOL AND GLENBROOK SOUTH HIGH SCHOOL**

GLENBROOK SOUTH FLOOR PLAN

