LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

Owner:	Construction Manager:	Civil / Site:	Landscape:	Structural:	Mechanical:	Electrical:	Plumbing & Fire Protection:	Food Service:	Security:	Envelope Consultant:	Code Consultant:	Acoustical Consultant:
	Construction Manager Name	**Nitsch Engineering**	**Traverse Landscape Architects**	**Foley Buhl Roberts & Associates, Inc.**	**Garcia, Galuska, DeSousa, Inc.**	**Garcia, Galuska, DeSousa, Inc.**	**VAV International**	**Crabtree McGrath**	**Security Consultant Name**	**Envelope Consultant Name**	**Hastings Consulting**	**Cavanaugh Tocci**
155 Merrimack Street, Lowell, MA 08152	Construction Manager Address	2 Center Plaza Suite 430 Boston, MA 02108	150 Chestnut Street, 4th Floor Providence, RI 02903	2150 Washington Street Newton, MA 02462	370 Faunce Corner Road Dartmouth, MA 02747	370 Faunce Corner Road Dartmouth, MA 02747	400 West Cummings Park #400 Woburn, MA 01801	161 West Main Street Georgetown, MA 01833	Security Consultant Address	Envelope onsultant Address	142 Hanlon Rd. Holliston, MA 01746	327 F Boston Post Road Sudbury, MA 01776

DRAWING SCHEDULE

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G-300	PROJECT PHASING PLANS

SITE/CIVIL/UTILITIES

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EX-2	EXISTING CONDITIONS SURVEY
EX-3	EXISTING CONDITIONS SURVEY
EX-4	EXISTING CONDITIONS SURVEY

SITE/CIVIL/UTILITIES

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C-103	SITE DEMOLITION PLAN III
C-104	SITE DEMOLITION PLAN IV
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S-101B	FIRST FLOOR FRAMING PLAN - EAST BLDG - PART B
S-101C	FIRST FLOOR FRAMING PLAN - WEST BLDG - PART C
S-101D	FIRST FLOOR FRAMING PLAN - WEST BLDG PART D
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S-101F	FIRST FLOOR/FOUNDATION PLAN - FRESHMAN ACADEMY
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S-102D	SECOND FLOOR FRAMING PLAN - WEST BLDG - PART D
S-102E	SECOND FLOOR FRAMING PLAN - GYM
S-102F	SECOND FLOOR FRAMING PLAN - FRESHMAN ACADEMY
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S-103C	THIRD FLOOR FRAMING PLAN - WEST BLDG - PART C
S-103D	THIRD FLOOR FRAMING PLAN - WEST BLDG - PART D
S-103E	THIRD FLOOR FRAMING PLAN - GYM
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S-201D	BRACE FRAME ELEVATIONS - PART D
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ARCHITECTURAL

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AD-101B	FIRST FLOOR DEMO PLAN - EAST BLDG - PART B
AD-101C	FIRST FLOOR DEMO PLAN - WEST BLDG - PART C
AD-101D	FIRST FLOOR DEMO PLAN - WEST BLDG - PART D
AD-101E	FIRST FLOOR DEMO PLAN - FIELD HOUSE
AD-102A	SECOND FLOOR DEMO PLAN - EAST BLDG - PART A
AD-102B	SECOND FLOOR DEMO PLAN - EAST BLDG - PART B
AD-102C	SECOND FLOOR DEMO PLAN - WEST BLDG - PART C
AD-102D	SECOND FLOOR DEMO PLAN - WEST BLDG - PART D
AD-102E	SECOND FLOOR DEMO PLAN - FIELD HOUSE
AD-102F	SECOND FLOOR DEMO PLAN - BRIDGES
AD-103A	THIRD FLOOR DEMO PLAN - EAST BLDG - PART A
AD-103B	THIRD FLOOR DEMO PLAN - EAST BLDG - PART B
AD-103C	THIRD FLOOR DEMO PLAN - WEST BLDG - PART C
AD-103D	THIRD FLOOR DEMO PLAN - WEST BLDG - PART D
AD-104A	ATTIC DEMO PLAN - EAST BLDG - PART A
AD-104B	ATTIC DEMO PLAN - EAST BLDG - PART B
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AD-105B	ROOF DEMO PLAN - EAST BLDG - PART B
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A-100B	BASEMENT FLOOR PLAN - EAST BLDG - PART B
A-101	OVERALL FIRST FLOOR PLAN
A-101A	FIRST FLOOR FLOOR PLAN - EAST BLDG - PART A
A-101B	FIRST FLOOR FLOOR PLAN - EAST BLDG - PART B
A-101C	FIRST FLOOR FLOOR PLAN - WEST BLDG - PART C
A-101D	FIRST FLOOR FLOOR PLAN - WEST BLDG - PART D
A-101E	FIRST FLOOR FLOOR PLAN - GYM
A-101F	FIRST FLOOR FLOOR PLAN - FRESHMAN ACADEMY
A-102	OVERALL SECOND FLOOR PLAN
A-102A	SECOND FLOOR FLOOR PLAN - EAST BLDG - PART A
A-102B	SECOND FLOOR FLOOR PLAN - EAST BLDG - PART B
A-102C	SECOND FLOOR FLOOR PLAN - WEST BLDG - PART C
A-102D	SECOND FLOOR FLOOR PLAN - WEST BLDG - PART D
A-102E	SECOND FLOOR FLOOR PLAN - GYM
A-102F	SECOND FLOOR FLOOR PLAN - FRESHMAN ACADEMY
A-102G	SECOND FLOOR FLOOR PLANS - BRIDGES
A-103	OVERALL THIRD FLOOR PLAN
A-103A	THIRD FLOOR FLOOR PLAN - EAST BLDG - PART A
A-103B	THIRD FLOOR FLOOR PLAN - EAST BLDG - PART B
A-103C	THIRD FLOOR FLOOR PLAN - WEST BLDG - PART C
A-103D	THIRD FLOOR FLOOR PLAN - WEST BLDG - PART D
A-103E	THIRD FLOOR FLOOR PLAN - GYM
A-103F	THIRD FLOOR FLOOR PLAN - FRESHMAN ACADEMY
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A-105F	FIFTH FLOOR FLOOR PLAN - FRESHMAN ACADEMY
A-106	OVERALL ROOF PLAN
A-106A	ROOF PLAN - EAST BLDG - PART A
A-106B	ROOF PLAN - EAST BLDG - PART B
A-106C	ROOF PLAN - WEST BLDG - PART C
A-106D	ROOF PLAN - WEST BLDG - PART D
A-106E	ROOF PLAN - GYM
A-106F	ROOF PLAN - FRESHMAN ACADEMY
A-106G	ROOF PLAN - BRIDGES
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A-152W	OVERALL SECOND FLOOR RCP -WEST
A-153E	OVERALL THIRD FLOOR RCP - EAST
A-153W	OVERALL THIRD FLOOR RCP -WEST
A-154W	OVERALL FOURTH & FIFTH FLOOR RCP -WEST
A-200	EXTERIOR ELEVATIONS - OVERALL EAST BLDG
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A-202	EXTERIOR ELEVATIONS - EAST BLDG
A-203	EXTERIOR ELEVATIONS - EAST BLDG
A-204	EXTERIOR ELEVATIONS - EAST BLDG
A-205	EXTERIOR ELEVATIONS - OVERALL WEST BLDG
A-206	EXTERIOR ELEVATIONS - WEST BLDG
A-207	EXTERIOR ELEVATIONS - WEST BLDG
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A-209	EXTERIOR ELEVATIONS - GYM
A-210	EXTERIOR ELEVATIONS - FRESHMAN ACADEMY
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M1-3	HVAC SECOND FLOOR PLAN - EAST BUILDING
M1-4	HVAC THIRD FLOOR PLAN - EAST BUILDING
M1-5	HVAC ROOF PLAN - EAST BUILDING
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M2-2	HVAC SECOND FLOOR PLAN - WEST BUILDING
M2-3	HVAC THIRD FLOOR PLANS - WEST BUILDING
M2-4	HVAC FOURTH AND FIFTH FLOOR PLANS - WEST BUILDING
M2-5	HVAC ROOF PLAN - WEST BUILDING
M3-1	HVAC AIRFLOW RISER DIAGRAMS - EAST BUILDINGS
M3-2	HVAC HOT WATER FLOW DIAGRAMS - EAST BUILDINGS
M3-3	HVAC CHILLED WATER FLOW DIAGRAMS - EAST BUILDINGS
M3-4	HVAC AIRFLOW RISER DIAGRAMS - WEST BUILDINGS
M3-5	HVAC HOT WATER FLOW DIAGRAMS - WEST BUILDING
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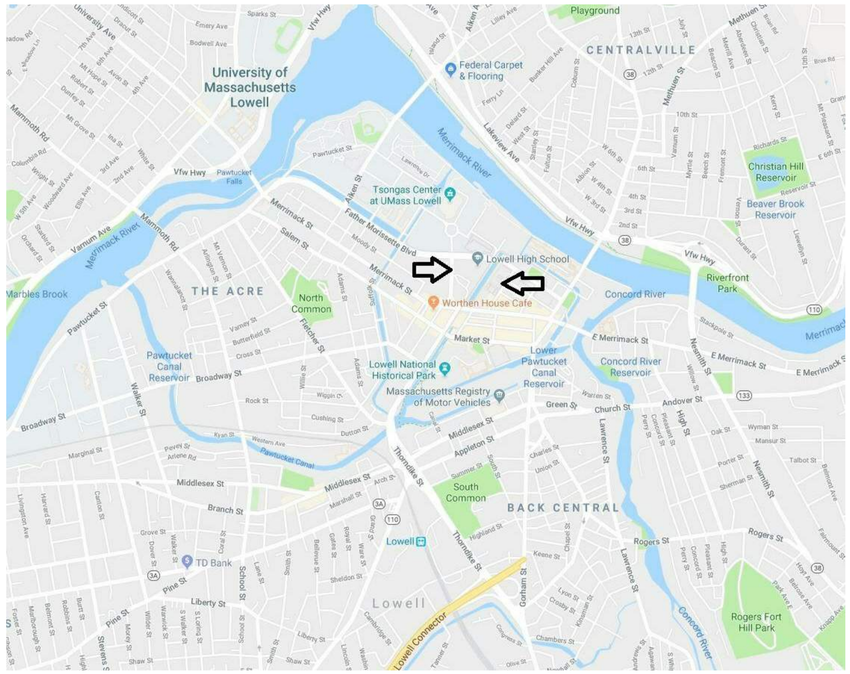
E111W	FIRST FLOOR PLAN - WEST BLDG - ELECTRICAL
E112E	SECOND FLOOR PLAN - EAST BLDG - ELECTRICAL
E112W	SECOND FLOOR PLAN - WEST BLDG - ELECTRICAL
E113E	THIRD FLOOR PLAN - EAST BLDG - ELECTRICAL
E113W	THIRD FLOOR PLAN - WEST BLDG - ELECTRICAL
E114W	FOURTH FLOOR PLAN - WEST BLDG - ELECTRICAL
E115W	FIFTH FLOOR PLAN - WEST BLDG - ELECTRICAL
E301	ONE-LINE POWER RISER
E400	FIRE ALARM RISER



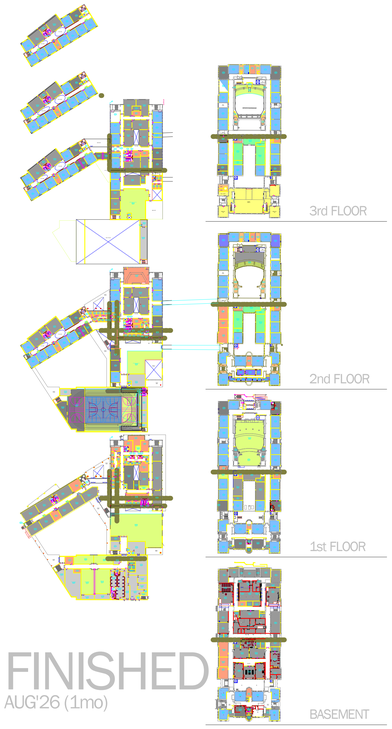


1 **AERIAL VIEW OF LOWELL HIGH SCHOOL LOOKING EAST**
1" = 10'-0"

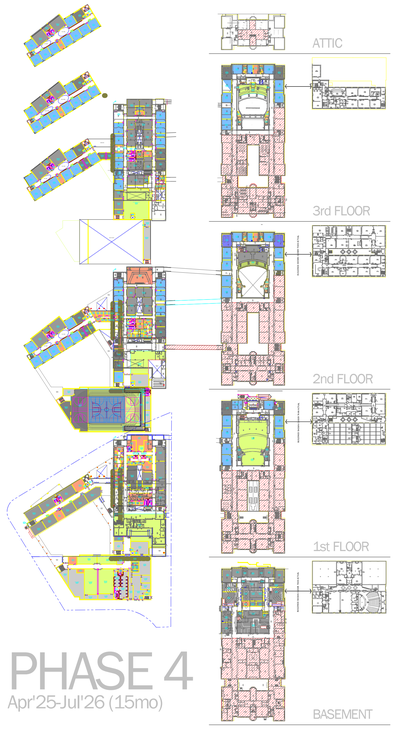
PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

SCHEMATIC DESIGN SUBMISSION

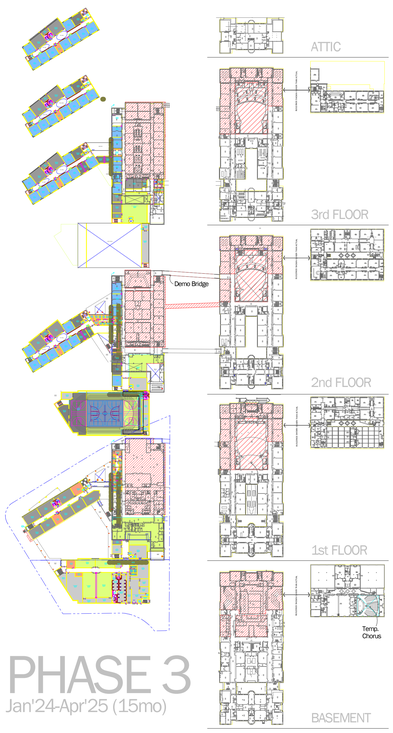
PROJECT No. 67150
02/20/2018



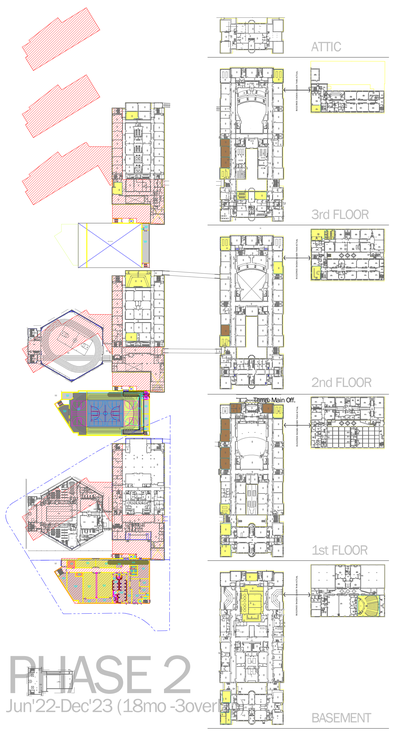
FINISHED
AUG'26 (1mo)



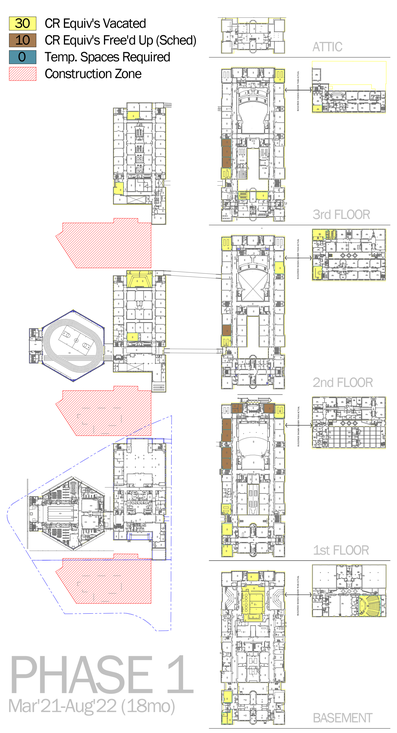
PHASE 4
Apr'25-Jul'26 (15mo)



PHASE 3
Jan'24-Apr'25 (15mo)



PHASE 2
Jun'22-Dec'23 (18mo -3over)

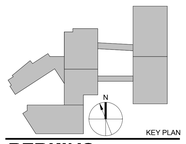


PHASE 1
Mar'21-Aug'22 (18mo)

C:\REVIT LOCAL\LHS_Canal West_V2018_r_greenberg.rvt
2/15/2019 11:54:41 PM

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
PROJECT PHASING PLANS

SCALE: 1" = 160'-0"

G-300

SCHEMATIC DESIGN SUBMISSION

02/20/2018

UTILITY INFORMATION STATEMENT

1. THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY; THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.

2. THE LOCATIONS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES HAVE BEEN DETERMINED FROM SAID INFORMATION, AND ARE APPROXIMATE ONLY. COMPILED LOCATIONS OF ANY UNDERGROUND STRUCTURES, NOT VISIBLY OBSERVED AND LOCATED, CAN VARY FROM THEIR ACTUAL LOCATIONS.

3. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.

4. THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED, IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILATION OF THIS INFORMATION.

5. IT IS INCUMBENT UPON INDIVIDUALS USING THIS INFORMATION TO UNDERSTAND THAT COMPILING UTILITY INFORMATION IS NOT EXACT, AND IS SUBJECT TO CHANGE BASED UPON VARYING PLAN INFORMATION RECEIVED AND ACTUAL LOCATIONS.

6. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER MATTERS.

7. THE PROPER UTILITY ENGINEERING/COMPANY SHOULD BE CONSULTED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHOULD BE VERIFIED IN THE FIELD (V.I.F.) BEFORE PLANNING FUTURE CONNECTIONS. CONTACT THE DIG SAFE CALL CENTER AT 1-888-344-7233, SEVENTY-TWO HOURS PRIOR TO EXCAVATION, BLASTING, GRADING, AND/OR PAVING.

8. AS OF THE DATE OF THIS PLAN RECORD INFORMATION HAS NOT BEEN RECEIVED BY NITSCH ENGINEERING FOR THE FOLLOWING UTILITIES:

NOTES

1. THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF NITSCH ENGINEERING. IT IS ISSUED TO PERKINS EASTMAN, AIA FOR PURPOSES RELATED DIRECTLY AND SOLELY TO NITSCH ENGINEERING'S SCOPE OF SERVICES UNDER CONTRACT WITH PERKINS EASTMAN, AIA FOR EXISTING CONDITIONS SURVEY OF LOWELL HIGH SCHOOL CAMPUS. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT AND PROJECT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN AUTHORIZATION IS GIVEN THEREFOR BY NITSCH ENGINEERING.

2. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING CONDITIONS SURVEY AS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY WHICH OCCURRED BETWEEN AUGUST 24 AND OCTOBER 11 OF 2016.

3. HORIZONTAL COORDINATES REFER TO NAD83 BASE ON RTK GPS OBSERVATION.

4. ELEVATION REFERS TO CITY OF LOWELL VERTICAL DATUM BASED ON RTK GPS OBSERVATION AND CHECKING BENCHMARKS..

5. THE INFORMATION CONTAINED ON THE DISK OR ELECTRONIC DRAWING FILE ACCOMPANYING THIS PLAN MUST BE COMPARED TO THE SEALED AND SIGNED HARD COPY OF THE PLAN TO ENSURE THE ACCURACY OF ALL INFORMATION AND TO ENSURE NO CHANGES, ALTERATIONS, OR MODIFICATIONS HAVE BEEN MADE. RELIANCE SHALL NOT BE MADE ON A DOCUMENT TRANSMITTED BY COMPUTER OR OTHER ELECTRONIC MEANS UNLESS FIRST COMPARED TO THE ORIGINAL SEALED DOCUMENT ISSUED AT THE TIME OF THE SURVEY. DUE TO THE CRITICAL NATURE OF SURVEYING, DATA ACQUISITION, AND AUTOCAD PLAN DEVELOPMENT, IF CRITICAL DIMENSIONAL INFORMATION IS NEEDED AND IS NOT SPECIFICALLY SHOWN ON THE ELECTRONIC DRAWING FILE, PLEASE CONTACT NITSCH ENGINEERING.

MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD 83

BENCH MARK: TBM-A
X-CUT ON BOLT OF LIGHT POLE BASE NO. 40
ELEVATION=31.48(L.C.B)
FIELD BOOK 645A PAGE 44
SET ON (09/20/16)

FATHER MORISSETTE BOULEVARD
(PUBLIC - 80' WIDE)

ARCAND DRIVE
(PUBLIC - 75' WIDE)

MERRIMACK CANAL

N:3,061,235.3121
E:706,526.3629

N:3,061,063.8047
E:706,476.7586

S88°08'10"E 313.32

N15°05'E, 129.03'

N15°05'E, 187.05'

S15°05'W, 315.81'

N58°08'27"E 409.62'

S30°08'W 441.27'

S30°08'W 445.57'

N58°08'27"W 146.09'

N58°59'32"W

R=64.00'
L=69.12'
Δ=90°00'00"
CH B=N46°51'50"E
CH D=62.23'

R=1260.00'
L=194.85'
Δ=8°51'37"
CH B=S83°42'22"E
CH D=194.65'

10' WIDE UTILITY EASEMENT

10' WIDE TEMPORARY CONSTRUCTION EASEMENT

20' RAILROAD EASEMENT

LINE OF RAILROAD EASEMENT

30' WIDE EASEMENT FOR OVERHEAD PEDESTRIAN WALKWAY TO THE CITY OF LOWELL, BOOK 2405 PAGE 382

30' WIDE EASEMENT FOR OVERHEAD PEDESTRIAN WALKWAY TO THE CITY OF LOWELL BOOK 2416, PAGE 310

2ND STORY PEDESTRIAN BRIDGE (ENCLOSED)

N/F CITY OF LOWELL SCHOOL DEPARTMENT GIS PARCEL ID#2450-50 BOOK 2313 PAGE 190

"FIELD HOUSE" NO. 50 FATHER MORISETTE BOULEVARD

3 STORY BRICK

"LORD BUILDING" NO. 50 FATHER MORISETTE BOULEVARD

N/F CITY OF LOWELL SCHOOL DEPARTMENT GIS PARCEL ID#2450-50 BOOK 2313 PAGE 190

N/F CITY OF LOWELL GIS PARCEL ID#6900-275 OF STONE MARKER ON GRANITE BLOCK WALL

MATCH LINE - SEE SHEET EX.1
MATCH LINE - SEE SHEET EX.2

MATCH LINE - SEE SHEET EX.1
MATCH LINE - SEE SHEET EX.3

LEGEND

- CB — CATCH BASIN
- CATV — CABLE TELEVISION MANHOLE
- D — DRAIN MANHOLE
- E — ELECTRIC MANHOLE
- M — MISCELLANEOUS MANHOLE
- S — SEWER MANHOLE
- T — TELEPHONE MANHOLE
- W — WATER MANHOLE
- GSO — GAS SHUT-OFF
- WSO — WATER SHUT-OFF
- GG — GAS GATE
- WG — WATER GATE
- ICV — IRRIGATION CONTROL VALVE
- CLEANOUT — CLEANOUT
- S/A — SIAMESE SPRINKLER HEAD
- FIRE HYDRANT
- DS — DOWN SPOUT
- UP — UTILITY POLE
- UP W/ UE — UTILITY POLE WITH CONDUIT LINE TO GROUND
- LIGHT POLE
- LB — LIGHT BOLLARD
- LL — LANDSCAPE LIGHT
- HH — HAND HOLE
- TC — TRASH CAN
- CAT — CATENARY POLE
- FACP — FIRE ALARM CALL BOX
- FP — FLAG POLE
- PM — PARKING METER
- S — SIGN POST
- 12" — DECIDUOUS TREE WITH TRUNK DIAMETER
- 12" — CONIFEROUS TREE WITH TRUNK DIAMETER
- HANDICAP PARKING
- 31x43 — SPOT ELEVATION
- CLF — CHAIN LINK FENCE
- SGC — SLOPED GRANITE CURB
- VGC — VERTICAL GRANITE CURB
- VCC — VERTICAL CONCRETE CURB
- WCR — WHEELCHAIR RAMP
- R= — RIM ELEVATION EQUALS
- I= — INVERT ELEVATION EQUALS
- TH= — TOP OF HOOD ELEVATION EQUALS
- NPV — NO PIPES VISIBLE
- TOW= — TOP OF WATER
- TW — TOP OF WALL ELEVATION
- CATV — UNDERGROUND CABLE TELEVISION LINE
- D — UNDERGROUND DRAIN LINE
- UD — UNDERGROUND UNDER DRAIN LINE
- E — UNDERGROUND ELECTRIC LINE
- G — UNDERGROUND GAS LINE
- S — UNDERGROUND SEWER LINE
- T — UNDERGROUND TELEPHONE LINE
- W — UNDERGROUND WATER LINE
- OHW — OVERHEAD WIRES
- BENCH MARK

GRAPHIC SCALE
20 10 0 20 40 60
SCALE: 1"=20'

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F: (617) 338-6472

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EXISTING CONDITIONS SURVEY

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 01852

PREPARED FOR:
PERKINS EASTMAN, AIA
50 FRANKLIN STREET, SUITE 203, BOSTON, MA 02110

REV.	COMMENTS	DATE
	REVISIONS	

PROJECT #	11601
FILE:	11601_TOP01.dwg
SCALE:	1"= 20'
DATE:	OCTOBER 20, 2016
DES./COMP:	ALEX A. DIOTTE
FIELD BOOK:	645A
DRAFTED BY:	TI
CHECKED BY:	

SHEET: 1

EX-1

OF 4 REV.

10/20/2016 10:52 AM

A:\11601 Lowell Hs Utility Survey\Cad\11601_layout.dwg



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8. AS OF THE DATE OF THIS PLAN RECORD INFORMATION HAS NOT BEEN RECEIVED BY NITSCH ENGINEERING FOR THE FOLLOWING UTILITIES:

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LEGEND

	CATCH BASIN
C	CABLE TELEVISION MANHOLE
D	DRAIN MANHOLE
E	ELECTRIC MANHOLE
M	MISCELLANEOUS MANHOLE
S	SEWER MANHOLE
T	TELEPHONE MANHOLE
W	WATER MANHOLE
GSO	GAS SHUT-OFF
WSO	WATER SHUT-OFF
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FACB	FIRE ALARM CALL BOX
FP	FLAG POLE
PM	PARKING METER
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12"	DECIDUOUS TREE WITH TRUNK DIAMETER
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CLF	CHAIN LINK FENCE
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S	UNDERGROUND SEWER LINE
T	UNDERGROUND TELEPHONE LINE
W	UNDERGROUND WATER LINE
OHW	OVERHEAD WIRES
	BENCH MARK

GRAPHIC SCALE
20 10 0 20 40 60
SCALE: 1"=20'

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EXISTING CONDITIONS SURVEY
LOWELL HIGH SCHOOL
50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 01852

PREPARED FOR:
PERKINS EASTMAN, AIA
50 FRANKLIN STREET, SUITE 203, BOSTON, MA 02110

REV.	COMMENTS	DATE
	REVISIONS	

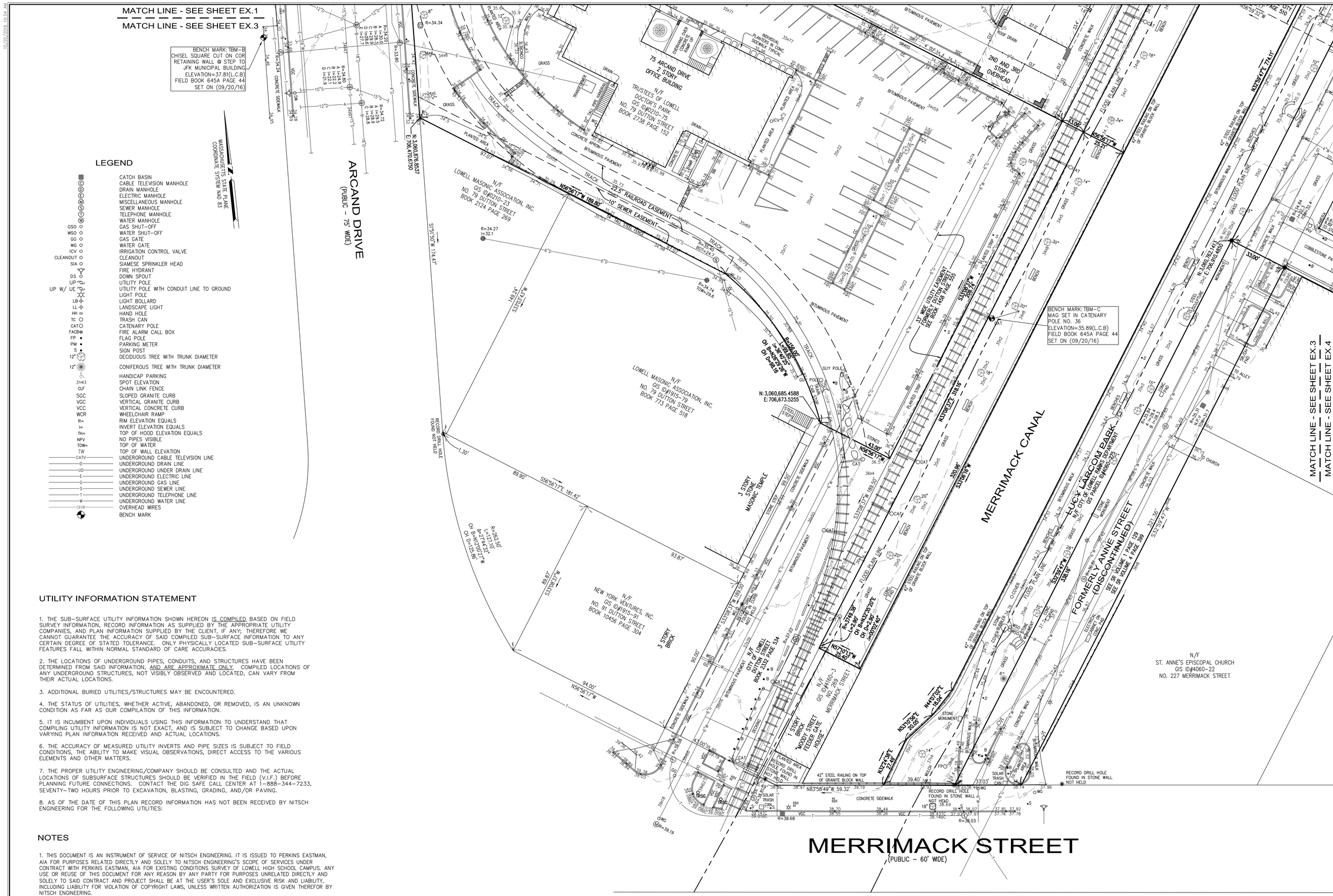
PROJECT #	11601
FILE:	11601_TOPO1.dwg
SCALE:	1"= 20'
DATE:	OCTOBER 20, 2016
DES./COMP:	ALEX A. DIOTTE
FIELD BOOK:	645A
DRAFTED BY:	TI
CHECKED BY:	

SHEET: 2

EX-2

OF 4 REV.

10/20/2016, 10:53 AM
L:\11601 Lowell, MA HS\Drawings\Civil\11601_TOPO1.dwg



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EXISTING CONDITIONS SURVEY

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 01852

PREPARED FOR:

PERKINS EASTMAN, AIA

50 FRANKLIN STREET, SUITE 203, BOSTON, MA 02110

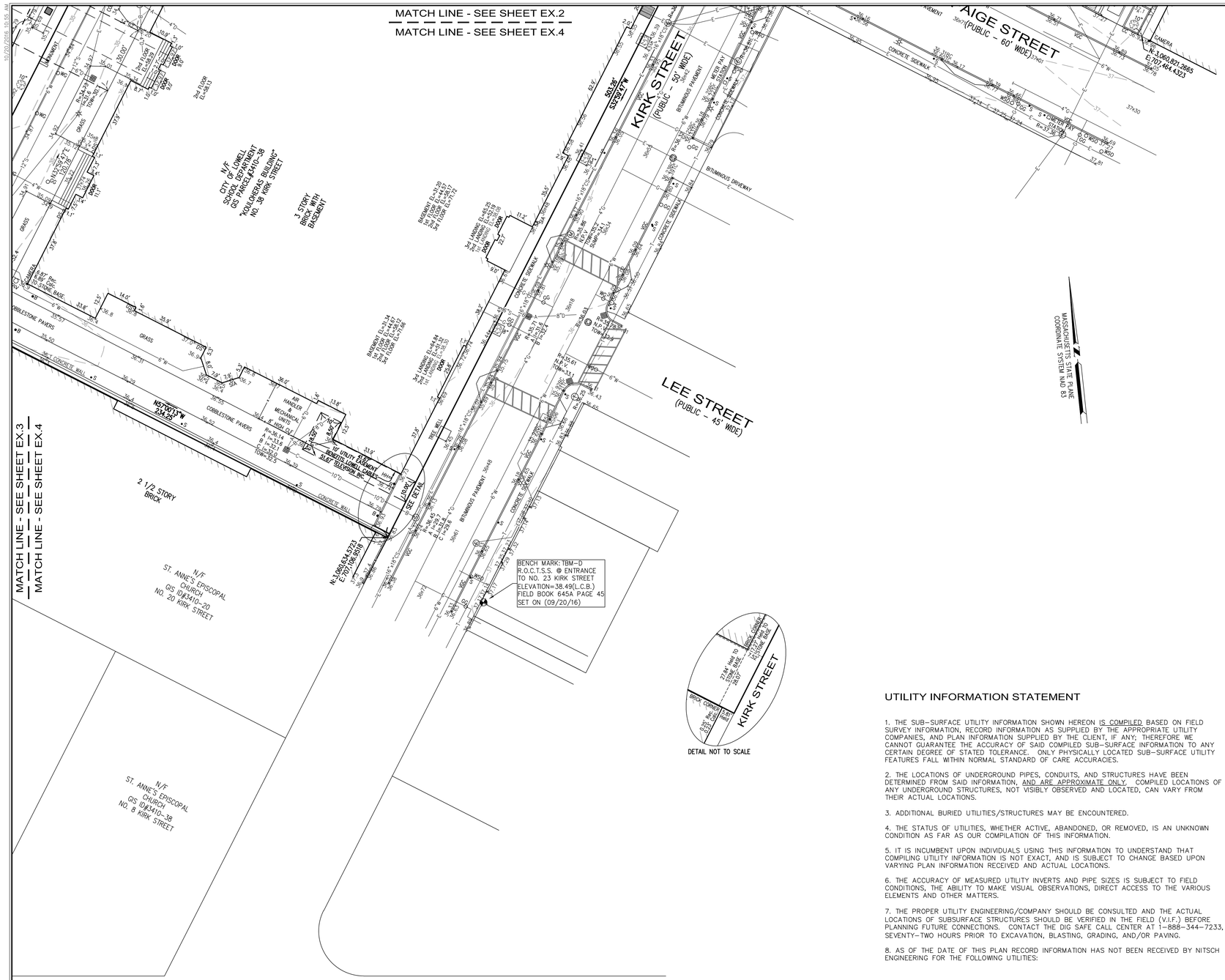
REV.	COMMENTS	DATE
	REVISIONS	

PROJECT #	11601
FILE:	11601_TOPO1.dwg
SCALE:	1"= 20'
DATE:	OCTOBER 20, 2016
DES./COMP:	ALEX A. DIOTTE
FIELD BOOK:	645A
DRAFTED BY:	TI
CHECKED BY:	

SHEET: 3

EX-3

OF 4 REV.



LEGEND

	CATCH BASIN
(C)	CABLE TELEVISION MANHOLE
(D)	DRAIN MANHOLE
(E)	ELECTRIC MANHOLE
(M)	MISCELLANEOUS MANHOLE
(S)	SEWER MANHOLE
(T)	TELEPHONE MANHOLE
(W)	WATER MANHOLE
GSO	GAS SHUT-OFF
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SIA	SIAMESE SPRINKLER HEAD
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NOTES

PROPERTY PLAN BY YALE SURVEY, INC.
STONEHAM, MASS AND IS SHOWN IN SHEET X/02
"ADDITIONS, THE LOWELL HIGH SCHOOL" BY
PERLEY F. GILBERT ASSOCIATES, INC.
ARCHITECTS & ENGINEERS, LOWELL, MA
SUN BUILDING. (RE: PEDESTRIAN BRIDGE
EASEMENTS ACROSS MERRIMACK CANAL)

PLAN REFERENCES:
MIDDLESEX (NORTH) COUNTY REGISTRY OF DEEDS

PLAN BOOK 176 PLAN 17
PLAN BOOK 186 PLAN 121
PLAN BOOK 180 PLAN 45
PLAN BOOK 108 PLAN 36
PLAN BOOK 107 PLAN 41
PLAN BOOK 126 PLAN 142
PLAN BOOK 130 PLAN 80
PLAN BOOK 16 PLAN 38
PLAN BOOK 33 PLAN 70
PLAN BOOK 109 PLAN 63A
PLAN BOOK 119 PLAN 100A
PLAN BOOK 220 PLAN 44
PLAN BOOK 163 PLAN 99
PLAN BOOK 130 PLAN 80
PLAN BOOK 128 PLAN 25
PLAN BOOK 136 PLAN 136A
PLAN BOOK 107 PLAN 41
PLAN BOOK 109 PLAN 54A
PLAN BOOK 63 PLAN 9

LAND COURT PLAN 5011A

CITY OF LOWELL STREET RECORDS
SR VOLUME 1 PAGE 129
SR VOLUME 4 PAGE 399

GRAPHIC SCALE
20 10 0 20 40 60
SCALE: 1"=20'

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PREPARED FOR:
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REV.	COMMENTS	DATE
	REVISIONS	

PROJECT # 11601
FILE: 11601_TOPO1.dwg
SCALE: 1"= 20'
DATE: OCTOBER 20, 2016
DES./COMP: ALEX A. DIOTTE
FIELD BOOK: 645A
DRAFTED BY: TI
CHECKED BY:

SHEET: 4

EX-4

OF 4 REV.

10/20/2016, 10:55 AM
A:\11601 (used to be stor\Survey\cad\11601_topo1.dwg

DEMOLITION NOTES:

1. SITE PREPARATION AND DEMOLITION SHALL INCLUDE THOSE AREAS WITHIN THE LIMIT OF WORK LINE AS SHOWN ON THE CONTRACT DOCUMENTS.
2. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
3. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING DEMOLITION.
4. THE CONTRACTOR SHALL COORDINATE SITE DEMOLITION EFFORTS WITH ALL TRADES THAT MAY BE AFFECTED BY THE WORK.
5. ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH TO INCLUDE BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS REQUIRED TO FACILITATE CONSTRUCTION, AND LEGALLY DISPOSED OF OFFSITE BY CONTRACTOR.
6. UTILITY PIPES DESIGNATED TO BE ABANDONED IN PLACE SHALL BE PLUGGED AT THEIR ENDS WITH WATERTIGHT BRICK MASONRY OR CEMENT MORTAR WITH A MINIMUM THICKNESS OF 8 INCHES.
7. UTILITY PIPES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF THE ENTIRE LENGTH OF PIPE AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN THE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
8. UTILITY STRUCTURES DESIGNATED TO BE ABANDONED IN PLACE SHALL HAVE THEIR CAST IRON CASTINGS REMOVED AND DISPOSED, INLET AND OUTLET PIPES PLUGGED, THE BOTTOM OF THE STRUCTURES SHALL BE BROKEN, THE VOID OF THE STRUCTURES SHALL BE BACKFILLED AND COMPACTED TO 95% WITH ORDINARY BORROW OR FLOWABLE FILL, AND THE TOP OF THE STRUCTURE SHALL BE REMOVED SO THAT IT IS AT LEAST 36 INCHES BELOW FINISH GRADE.
9. UTILITY STRUCTURES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF CAST IRON CASTINGS, PLUGGING OF INLET AND OUTLET PIPES, REMOVAL OF THE STRUCTURE, AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN HE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
10. ALL DEBRIS GENERATED DURING SITE PREPARATION ACTIVITIES SHALL BE LEGALLY DISPOSED OF OFFSITE.
11. AT ALL LOCATIONS WHERE EXISTING CURBING, CONCRETE PAVEMENT OR BITUMINOUS CONCRETE ROADWAY ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE.
12. EXTEND DESIGNATED LIMIT OF WORK AS NECESSARY TO ACCOMPLISH ROUGH GRADING, EROSION CONTROL, TREE PROTECTION, AND SITE WORK AS REQUIRED BY THESE DRAWINGS AND SPECIFICATIONS.
13. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL RUBBISH AND DEBRIS FOUND THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. THE CONTRACTOR SHALL LEAVE THE SITE IN SAFE, CLEAN, AND LEVEL CONDITION UPON COMPLETION OF THE SITE DEMOLITION WORK.
14. REMOVE AND STOCKPILE ALL EXISTING SITE LIGHTS, BENCHES, TRASH RECEPTACLES, TRAFFIC SIGNS, GRANITE CURB, AND OTHER SITE IMPROVEMENTS WITHIN LIMIT OF WORK LINE UNLESS OTHERWISE NOTED.
15. ALL EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE TIME OF CONSTRUCTION, AS SPECIFIED AND DIRECTED BY THE LANDSCAPE ARCHITECT.
16. BEFORE ANY TREES OR SHRUBS ARE REMOVED, THE CONTRACTOR SHALL ARRANGE A CONFERENCE ON THE SITE WITH THE OWNER OR OWNER'S REPRESENTATIVE TO IDENTIFY TREES AND SHRUBS THAT ARE TO BE REMOVED, AS WELL AS THOSE WHICH ARE TO BE PROTECTED. DO NOT COMMENCE CLEARING OPERATIONS WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.
17. THE CONTRACTOR SHALL REMOVE FROM THE AREA OF CONSTRUCTION PAVEMENT, CONCRETE, CURBING, POLES AND FOUNDATIONS, ISLANDS, TREE BERMS AND OTHER FEATURES WITHIN THE LIMITS OF CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION WHETHER SPECIFIED ON THE DRAWINGS OR NOT.

COST ESTIMATING NOTES:

1. ALL WATER LINES ARE CEMENT LINED DUCTILE IRON UNLESS OTHERWISE NOTED. ASSUME ALL WATER LINES INSTALLED WITH 5' OF COVER.
2. ASSUME ALL ROADWAY DRAINAGE LINES ARE 12" RCP UNLESS OTHERWISE NOTED. ASSUME ALL DRAIN LINES INSTALLED WITH 4' OF COVER.
3. ASSUME ALL ROOF DRAINAGE LINES ARE 8" CORRUGATED PLASTIC PIPE UNLESS OTHERWISE NOTED. ASSUME ALL DRAIN LINES INSTALLED WITH 4' OF COVER.
4. ASSUME THAT ALL SEWER LINES ARE 8" PVC. ASSUME ALL SEWER LINES INSTALLED WITH 5' OF COVER.
5. ASSUME ALL STRUCTURES ARE 4' INSIDE DIAMETER, EXCEPT FOR DOUBLE CB'S AND STRUCTURES THAT ARE DIRECTLY CONNECTED TO THE UNDER GROUND DETENTION SYSTEM. ASSUME THOSE STRUCTURES ARE 6' INSIDE DIAMETER.
6. SEE MEP PLANS FOR SIZING ELECTRIC, CABLE, TELEPHONE AND LIGHTING.

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS" PREPARED BY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF RESOURCE PROTECTION, AND THE CURRENT NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
2. MEANS OF EROSION AND SEDIMENT PROTECTION AS NOTED ON THE DRAWINGS INDICATE MINIMUM RECOMMENDED PROVISIONS. THE CONTRACTOR IS RESPONSIBLE FOR FINAL SELECTION AND PLACEMENT OF EROSION AND SEDIMENTATION CONTROLS BASED ON ACTUAL SITE CONDITIONS AND CONSTRUCTION CONDITIONS. ADDITIONAL MEANS OF PROTECTION SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED FOR CONTINUED OR UNFORESEEN EROSION PROBLEMS, OR AS DIRECTED BY CONTROLLING MUNICIPAL AUTHORITIES, AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. AN EROSION CONTROL BARRIER SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT AS INDICATED IN THE PLAN PRIOR TO COMMENCEMENT OF DEMOLITION OR CONSTRUCTION OPERATIONS.
4. SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF AND DURING ALL PHASES OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO AND IMMEDIATELY AFTER ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
5. AFTER ANY SIGNIFICANT RAINFALL (GREATER THAN 0.25 INCHES OF RAINFALL WITHIN 24 HOURS), SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGE SHALL BE CORRECTED IMMEDIATELY.
6. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES SHALL BE PROVIDED TO ENSURE THAT THE INTENDED PURPOSE IS ACCOMPLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE LIMIT OF WORK. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SEDIMENT FROM ENTERING ANY STORM DRAINAGE SYSTEM AND FROM BEING CONVEYED TO ANY WETLAND RESOURCE AREA, PUBLIC WAYS, ABUTTING PROPERTY, OR OUTSIDE OF THE PROJECT LIMITS.
8. THE CONTRACTOR SHALL PROTECT ALL DRAINAGE SWALES AND GROUND SURFACES WITHIN THE LIMIT OF WORK FROM EROSIVE CONDITIONS. STRAW BALE, CRUSHED STONE OR EQUIVALENT CHECK DAMS ARE TO BE PROVIDED AT A MAXIMUM OF TWO HUNDRED (200) FOOT SPACING, OR LESS AS SITE-SPECIFIC CONDITIONS WARRANT, WITHIN ALL DRAINAGE SWALES AND DITCHES AND AT UPSTREAM SIDES OF ALL DRAINAGE INLETS.
9. ALL STOCK PILES SHALL BE PROTECTED AND LOCATED A MINIMUM OF 100' FROM EXISTING WETLAND RESOURCE AREAS & WITHIN THE LIMIT OF WORK.
10. ANY SEDIMENT TRACKED ONTO PAVED AREAS SHALL BE SWEPT AT THE END OF EACH WORKING DAY.
11. ALL SEDIMENT RETAINED BY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE LEGALLY DISPOSED OF OFFSITE.
12. TEMPORARY DIVERSION DITCHES, PERMANENT DITCHES, CHANNELS, EMBANKMENTS, AND ANY DENUDED SURFACE THAT WILL BE EXPOSED FOR A PERIOD OF 14 CALENDAR DAYS OR MORE SHALL BE CONSIDERED CRITICAL VEGETATION AREAS. THESE AREAS SHALL BE STABILIZED/PROTECTED WITH APPROPRIATE EROSION CONTROL MATTING OR OTHER EROSION CONTROL METHODS.
13. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS DIRECTED BY THE PERMITTING AUTHORITY OR OWNER.
14. THE CONTRACTOR SHALL USE TEMPORARY SEEDING, MULCHING, OR OTHER APPROVED STABILIZATION MEASURES TO PROTECT EXPOSED AREAS DURING PROLONGED CONSTRUCTION OR OTHER LAND DISTURBANCE. STOCKPILES THAT WILL BE EXPOSED FOR LONGER THAN 14 DAYS SHALL BE STABILIZED.
15. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL EROSION AND SEDIMENT CONTROLS AT THE COMPLETION OF SITE CONSTRUCTION, BUT ONLY WHEN DIRECTED BY THE CITY OF LOWELL CONSERVATION AGENT. STABILIZE OR SEED BARE AREAS LEFT AFTER EROSION CONTROL REMOVAL.

GENERAL NOTES:

1. TOPOGRAPHIC DATA, PROPERTY LINE INFORMATION, AND EXISTING SITE FEATURES WERE OBTAINED FROM A PLAN ENTITLED "EXISTING CONDITIONS SURVEY, LOWELL HIGH SCHOOL, 50 FATHER MORISSETE BOULEVARD, LOWELL, MA", PREPARED BY NITSCH ENGINEERING., DATED OCTOBER 20, 2016 (4 SHEETS).
2. FLOODPLAIN INFORMATION WAS OBTAINED FROM THE FLOOD INSURANCE RATE MAPS (FIRM) NO. 25017C 0139F AND 25017C 0143F DATED JULY 7, 2016. THE SITE IS LOCATED IN ZONE X (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). THERE IS A CANAL LOCATED IN ZONE A (NO BASE FLOOD ELEVATIONS DETERMINED) THAT ABUTS THE SITE.
3. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82, SECTION 40, AS AMENDED, WHICH STATES THAT NO ONE MAY EXCAVATE IN THE COMMONWEALTH OF MASSACHUSETTS EXCEPT IN AN EMERGENCY WITHOUT 72 HOURS NOTICE, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, TO NATURAL GAS PIPELINE COMPANIES, AND MUNICIPAL UTILITY DEPARTMENTS THAT SUPPLY GAS, ELECTRICITY, TELEPHONE, OR CABLE TELEVISION SERVICE IN OR TO THE CITY OR TOWN WHERE THE EXCAVATION IS TO BE MADE. THE CONTRACTOR SHALL CALL "DIG SAFE" AT 1-888-DIG-SAFE.
4. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82A, ALSO REFERRED TO AS JACKIE'S LAW, AS DETAILED IN SECTION 520 CMR 14.00 OF THE CODE OF MASSACHUSETTS REGULATIONS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS AND SAFETY CODES IN THE CONSTRUCTION OF ALL IMPROVEMENTS.
6. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRESENCE AND LOCATIONS OF ALL UTILITIES WITHIN THE LIMIT OF WORK MUST BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND CONTACTING THE CONTROLLING AUTHORITIES AND/OR UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THEIR LINES. THE CONTRACTOR SHALL KEEP A RECORD OF ANY DISCREPANCIES OR CHANGES IN THE LOCATIONS OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND NITSCH ENGINEERING. ANY DAMAGE RESULTING FROM THE FAILURE OF THE CONTRACTOR TO MAKE THESE DETERMINATIONS AND CONTACTS SHALL BE BORNE BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL, THROUGHOUT CONSTRUCTION, TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKS, GRADING, SIDEWALKS AND SITE DETAILS OUTSIDE OF THE LIMIT OF WORK AS DEFINED ON THE DRAWINGS AND SHALL REPAIR AND REPLACE OR OTHERWISE MAKE GOOD AS DIRECTED BY THE ENGINEER OR OWNER'S DESIGNATED REPRESENTATIVE ANY SUCH OR OTHER DAMAGE SO CAUSED.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND ALL CONSTRUCTION MEANS AND METHODS.
9. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE AND CONSTRUCTION DOCUMENTS TO DEVELOP A THOROUGH UNDERSTANDING OF THE PROJECT, INCLUDING ANY SPECIAL CONDITIONS AND CONSTRAINTS.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PROJECT SITE AND TO VERIFY ALL CONDITIONS IN THE FIELD AND REPORT DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER OR OWNER'S REPRESENTATION IMMEDIATELY.
11. THE CONTRACTOR SHALL CONDUCT ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS.
12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ESTABLISHMENT AND USE OF ALL VERTICAL AND HORIZONTAL CONSTRUCTION CONTROLS.
13. ELEVATIONS REFER TO CITY OF LOWELL VERTICAL DATUM BASED ON RTK GPS OBSERVATION AND CHECKING BENCHMARK.
14. THE CONTRACTOR SHALL COMPLY WITH THE ORDER OF CONDITIONS DATED XXXX XX, XXXX AND ISSUED BY THE LOWELL CONSERVATION COMMISSION (DEP #XXX-XXX).
15. FOR SOIL INFORMATION REFER TO GEOTECHNICAL REPORT PREPARED BY GEOTECHNICAL PARTERNSHIP, INC.

UTILITY NOTES:

1. ALL UTILITY CONNECTIONS ARE SUBJECT TO THE APPROVAL OF, AND GRANTING OF PERMITS BY, THE LOCAL MUNICIPALITY IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS AND APPROVALS RELATED TO UTILITY WORK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ALL PERMISSIONS FOR, AND FOR CONDUCTING ALL PREPARATIONS RELATED TO, WORK AFFECTING ANY UTILITIES WITHIN THE JURISDICTION OF ANY NON-MUNICIPAL UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO ELECTRIC, TELEPHONE, AND/OR GAS. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES, DEPARTMENTS, AND UTILITY COMPANIES, IN WRITING, AT LEAST 7 DAYS (OR PER UTILITY COMPANY REQUIREMENT) AND NOT MORE THAN 30 DAYS PRIOR TO ANY CONSTRUCTION.
3. THE CONTRACTOR SHALL MAINTAIN UTILITIES SERVICING BUILDINGS AND FACILITIES WITHIN OR OUTSIDE THE PROJECT LIMIT UNLESS THE INTERRUPTION OF SERVICE IS COORDINATED WITH THE OWNER.
4. ALL WATER, SEWER, AND DRAIN WORK SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS AND STANDARD SPECIFICATIONS OF THE LOCAL MUNICIPALITY.
5. GAS, TELECOMMUNICATIONS AND ELECTRIC SERVICES ARE TO BE DESIGNED BY EACH UTILITY COMPANY IN COORDINATION WITH THE MECHANICAL, ELECTRIC, AND PLUMBING CONSULTANTS.
6. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES OF NEW UTILITIES WITH GAS, TELECOMMUNICATION AND ELECTRICAL SERVICES.
7. INSTALL WATER LINES WITH A MINIMUM OF FIVE FEET OF COVER AND A MAXIMUM OF SEVEN FEET COVER FROM THE FINAL DESIGN GRADES.
8. MAINTAIN 10 FEET HORIZONTAL SEPARATION AND 18 INCHES VERTICAL SEPARATION (WATER OVER SEWER) BETWEEN SEWER AND WATER LINES. WHEREVER THERE IS LESS THAN 10 FEET OF HORIZONTAL SEPARATION AND 18 INCHES OF VERTICAL SEPARATION BETWEEN A PROPOSED OR EXISTING SEWER LINE TO REMAIN AND A PROPOSED OR EXISTING WATER LINE TO REMAIN BOTH WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT CEMENT LINED DUCTILE IRON PIPE FOR A DISTANCE OF 10-FEET ON EITHER SIDE OF THE CROSSING. ONE (1) FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER AT THE CROSSING.
9. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES EXCEPT THOSE NOTED TO BE ABANDONED AND/OR REMOVED & DISPOSED.
10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR TRENCHING, BACKFILLING, AND SURFACE RESTORATION FOR GAS UTILITY SYSTEMS.
11. ALL ONSITE UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
12. ALL EXISTING AND PROPOSED MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, CASTINGS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL GRADING AND PAVING CONSTRUCTION.
13. ALL GRATES IN WALKWAYS SHALL BE ADA COMPLIANT.

PROPOSED LEGEND

- LIMIT OF WORK
- EXISTING UTILITY TO BE ABANDONED, REMOVED AND DISPOSED IF IN CONFLICT WITH NEW SITE IMPROVEMENTS, OR AS INDICATED ON DRAWINGS
- EROSION CONTROL BARRIER
- CONSTRUCTION FENCE
- W — DOMESTIC WATER PIPE
- FP — FIRE PROTECTION PIPE
- S — SANITARY SEWER PIPE
- D — STORM DRAIN PIPE
- G — GAS PIPE
- E — ELECTRIC DUCTBANK
- T/C — TELECOM DUCTBANK
- CW — CHILLED WATER PIPE
- STM — STEAM PIPE
- INLET PROTECTION
- ELEVATION CONTOURS
- MATCH LINE
- CENTERLINE
- CO — CLEANOUT
- AD — AREA DRAIN
- AB — ACCESS BASIN
- DMH — DRAIN MANHOLE
- WQS — WATER QUALITY STRUCTURE
- CB — CATCH BASIN
- DCB — DOUBLE CATCH BASIN
- WQI — WATER QUALITY INLET
- SMH — SEWER MANHOLE
- TMH — TELECOM MANHOLE
- EMH — ELECTRIC MANHOLE
- WV — WATER VALVE
- HYD — FIRE HYDRANT
- EXISTING BUILDING DEMOLITION
- SUBSURFACE INFILTRATION SYSTEM

ABBREVIATIONS

AB	ACCESS BASIN
AD	AREA DRAIN
BC	BOTTOM OF CURB ELEVATION
CB	CATCH BASIN
CCB	CAPE COD BERM
CI	CAST IRON
CJ	CONTROL JOINT
CL	CENTER LINE
CO	CLEANOUT
COP	CENTER OF PIPE
CP	CARRIER PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
DCB	DOUBLE CATCH BASIN
DI	DUCTILE IRON PIPE CEMENT LINED
DMH	DRAIN MANHOLE
EHH	ELECTRIC HANDHOLE
EJ	EXPANSION JOINT
EMH	ELECTRIC MANHOLE
FD	FOUNDATION DRAIN
FFE	FINISHED FLOOR ELEVATION
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT ELEVATION
LF	LINEAR FEET
LOW	LIMIT OF WORK
LP	LOW POINT
LW	LAB WASTE
M&P	MAINTAIN AND PROTECT
NIC	NOT IN CONTRACT
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
PD	PERIMETER DRAIN
PERF	PERFORATED
PVC	POLYVINYL CHLORIDE PIPE
R&D	REMOVE AND DISPOSE
R&S	REMOVE AND STOCKPILE
RD	ROOF DRAIN
RIM	RIM ELEVATION
SMH	SEWER MANHOLE
SS	SEWER SERVICE
TC	TOP OF CURB ELEVATION
THH	TELECOM HANDHOLE
TMH	TELECOM MANHOLE
TOP	TOP OF PIPE
TOD	TOP OF DUCT BANK
TYP	TYPICAL
UD	UNDERDRAIN
USD	UNDERSLAB DRAIN
VGC	VERTICAL GRANITE CURB
WQI	WATER QUALITY INLET
WQS	WATER QUALITY STRUCTURE
WV	WATER VALVE

NITSCH PROJECT NO. 11601

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SEAL

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KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

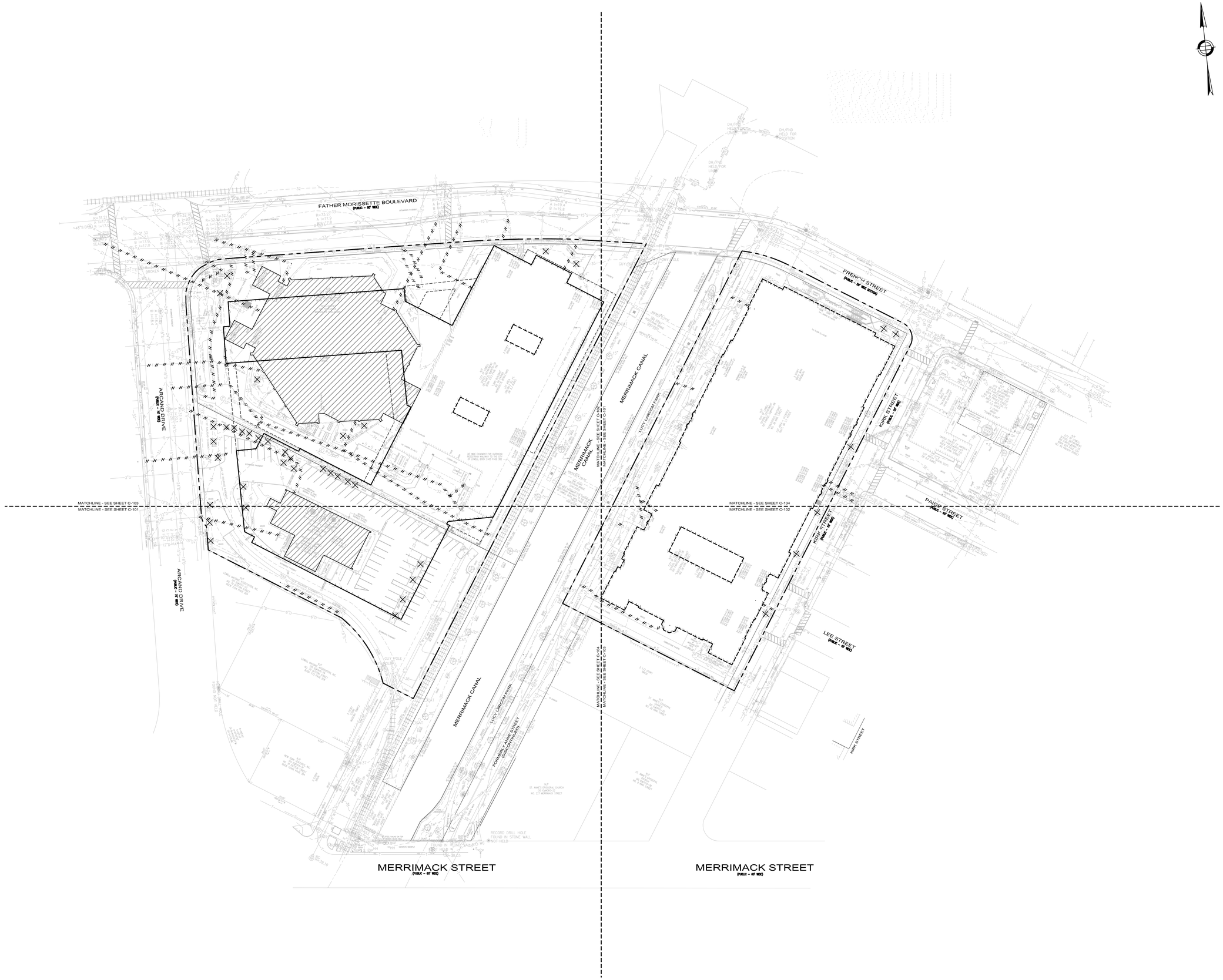
PROJECT No: 67150

DRAWING TITLE:
CIVIL NOTES, LEGEND AND ABBREVIATIONS

SCALE:
C-000

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE DEMOLITION NOTES.

SCALE:
1" = 40'
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NITSCH PROJECT NO. 11601

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Construction Manager Address

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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

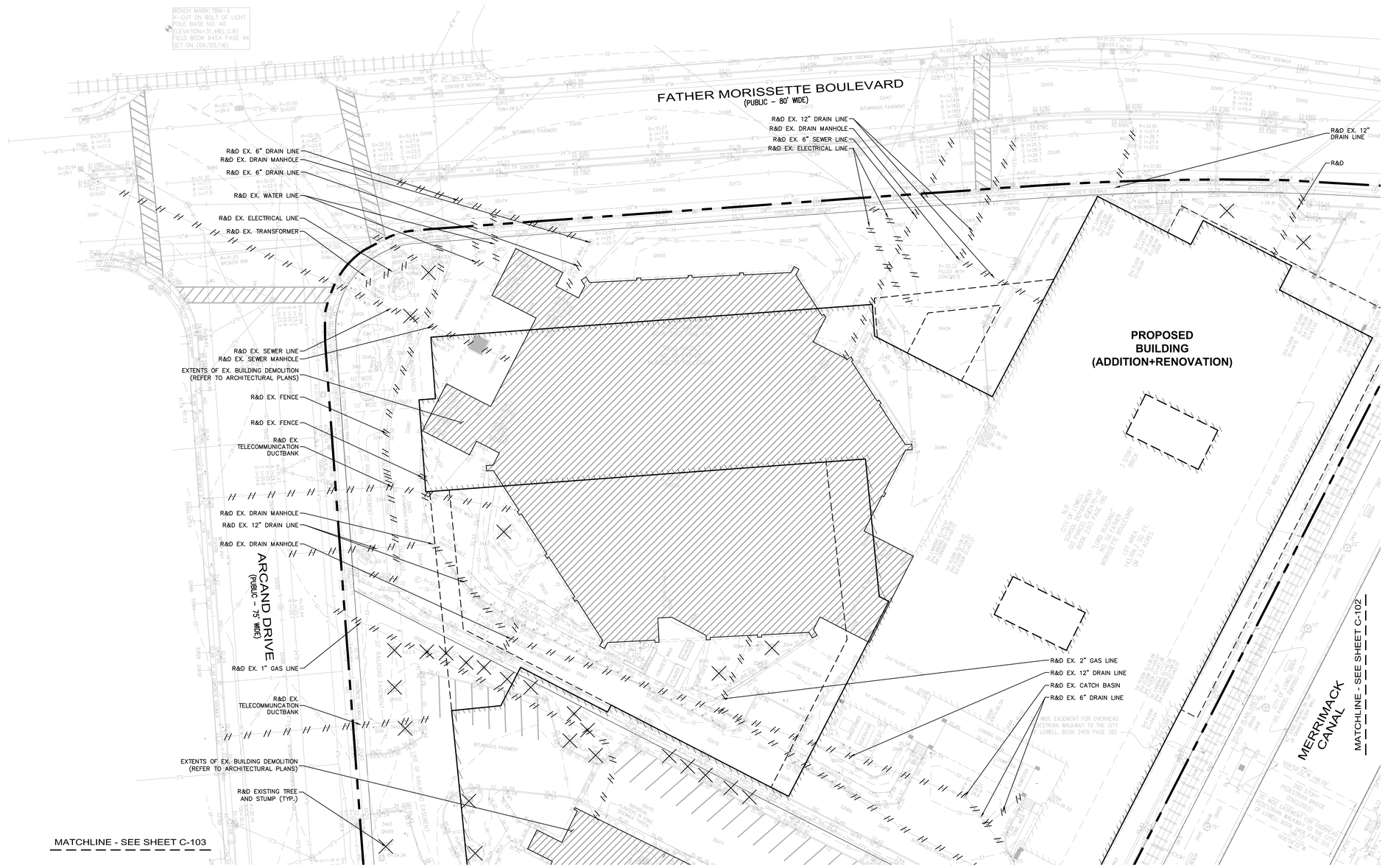
DRAWING TITLE:
OVERALL SITE DEMOLITION PLAN

SCALE: 1"=40'

C-100

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE DEMOLITION NOTES.

SCALE:
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NITSCH PROJECT NO. 11601

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LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

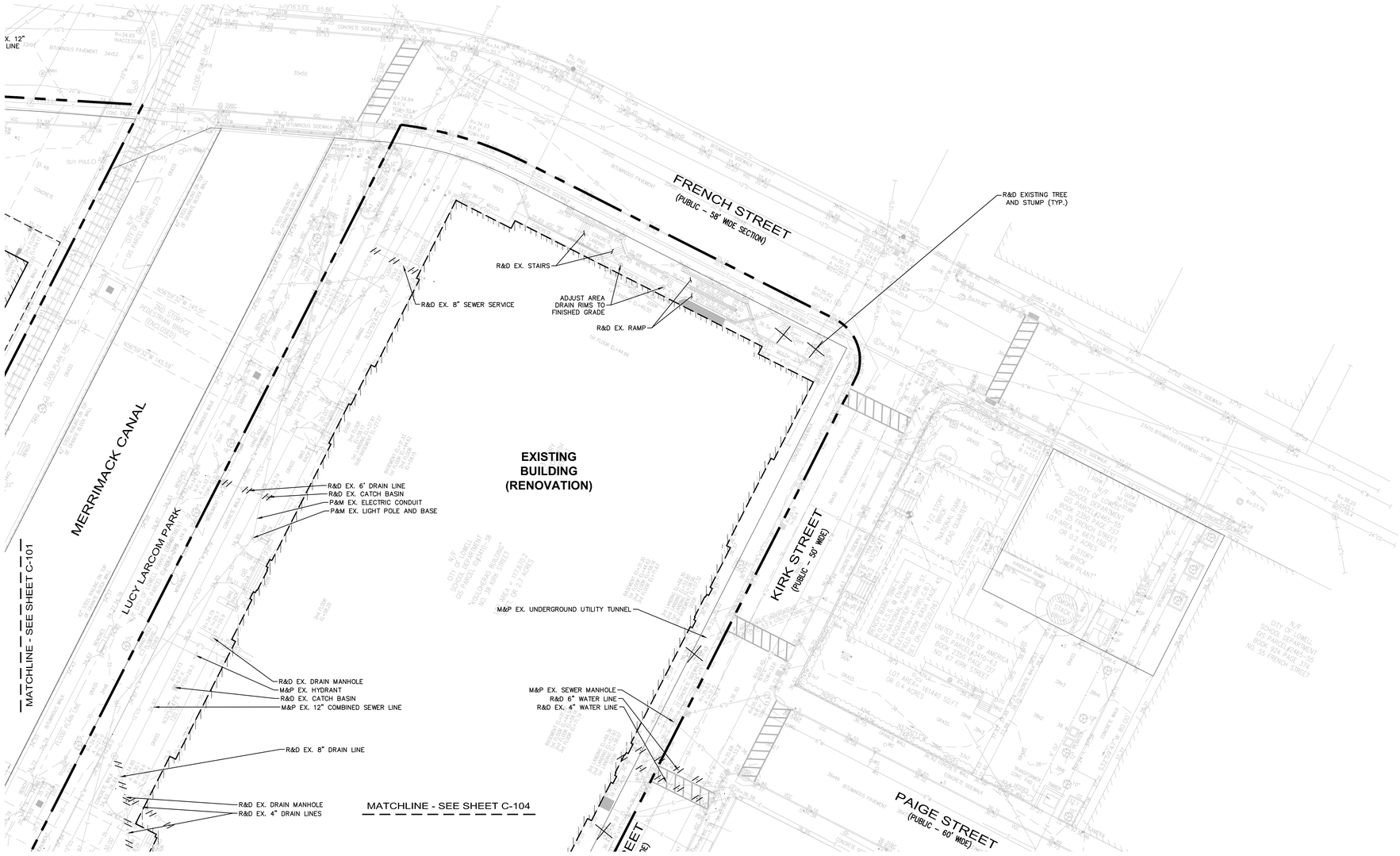
SITE DEMOLITION PLAN I

SCALE: 1"=20'

C-101

SCHEMATIC DESIGN SUBMISSION

2/20/2019



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NITSCH PROJECT NO. 11601

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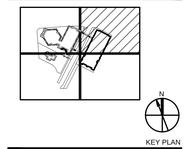

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Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

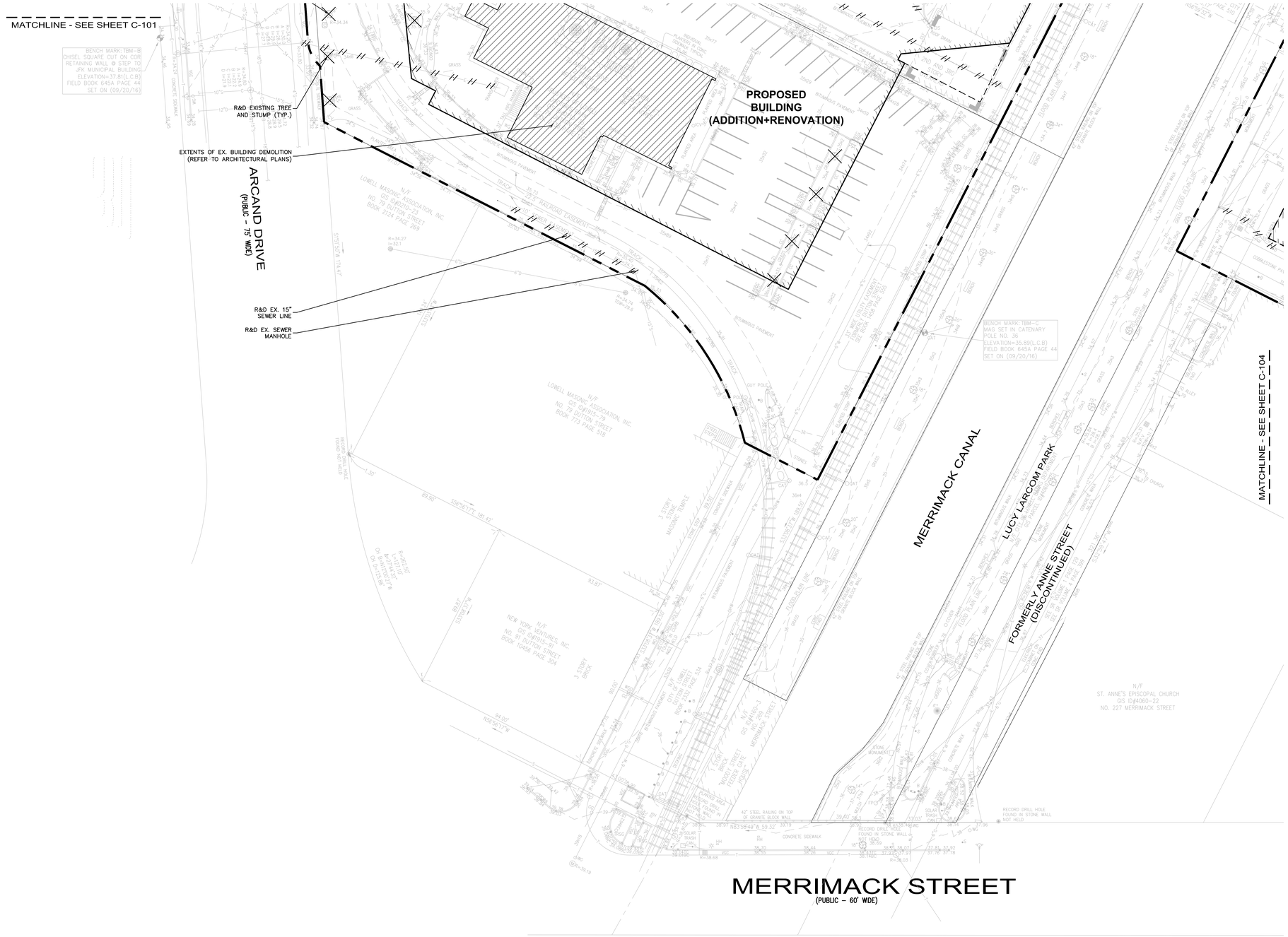
SITE DEMOLITION PLAN II

SCALE: 1"=20'

C-102

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE DEMOLITION NOTES.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

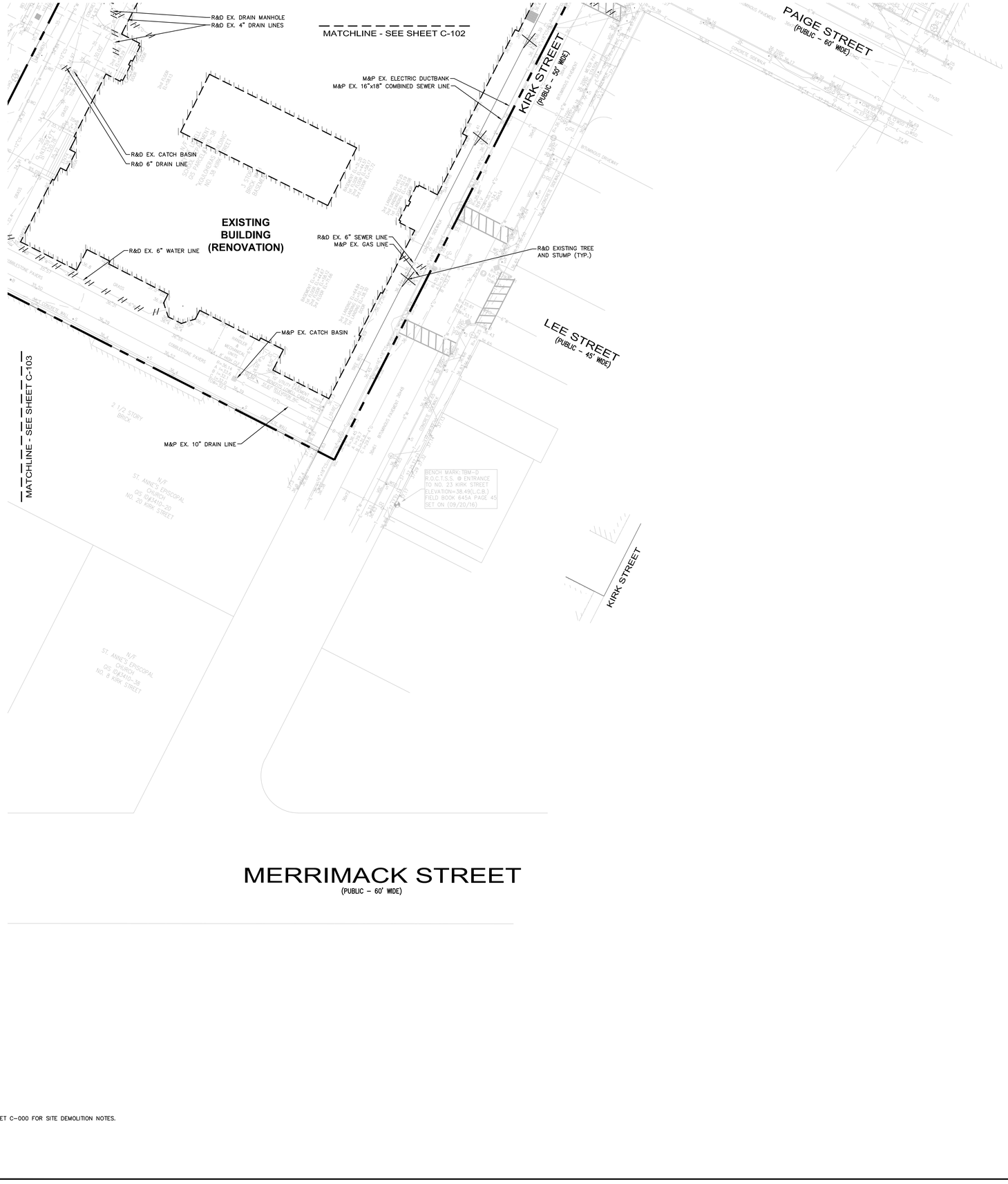
DRAWING TITLE:
SITE DEMOLITION PLAN III

SCALE: 1"=20'

C-103

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE DEMOLITION NOTES.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

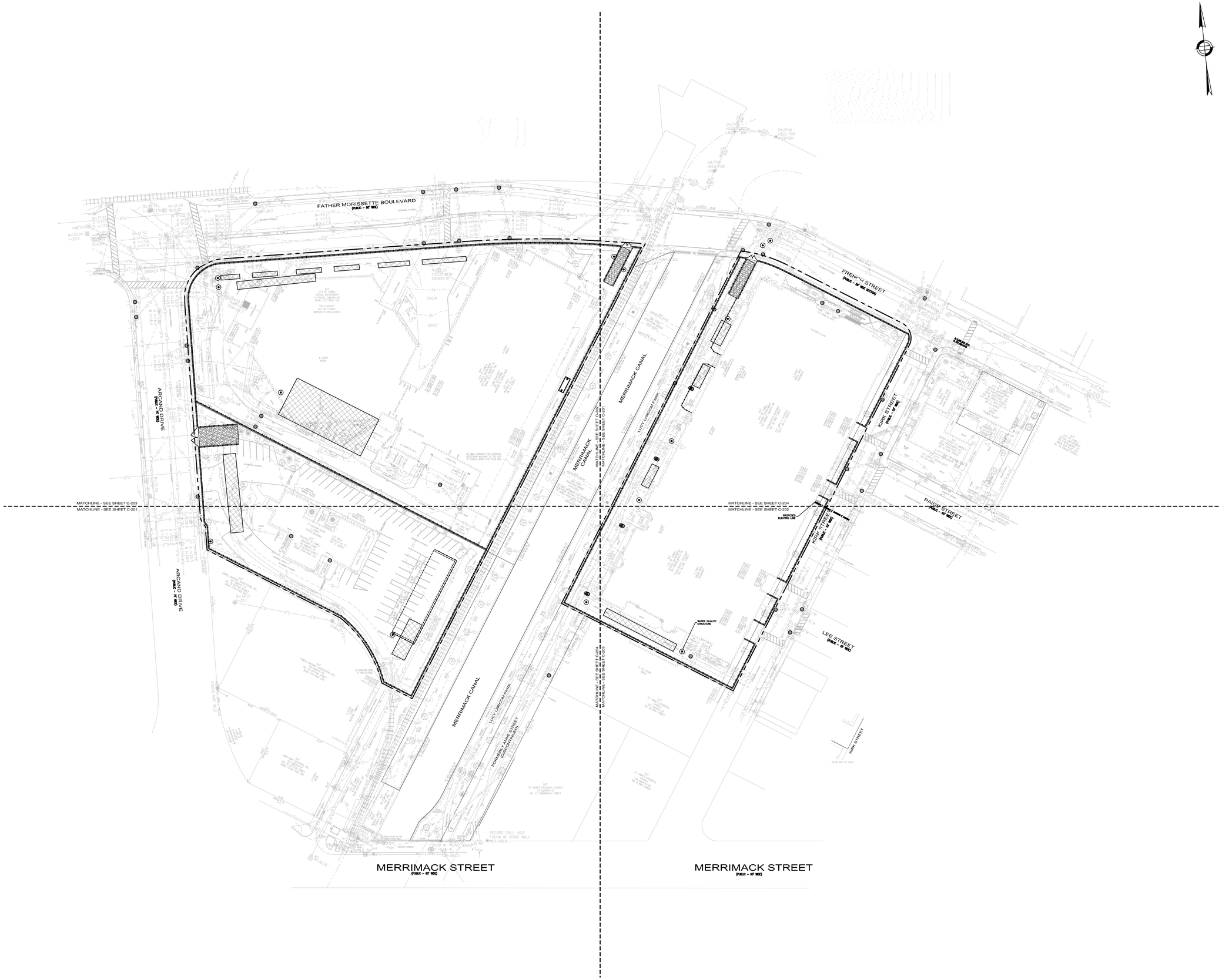
DRAWING TITLE:
SITE DEMOLITION PLAN IV

SCALE: 1"=20'

C-104

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE EROSION AND SEDIMENTATION CONTROL NOTES.
2. REFER TO SHEET C-400 FOR SITE EROSION AND SEDIMENTATION CONTROL DETAILS.

SCALE:
1" = 40'
40 20 0 40 80

NITSCH PROJECT NO. 11601

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SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

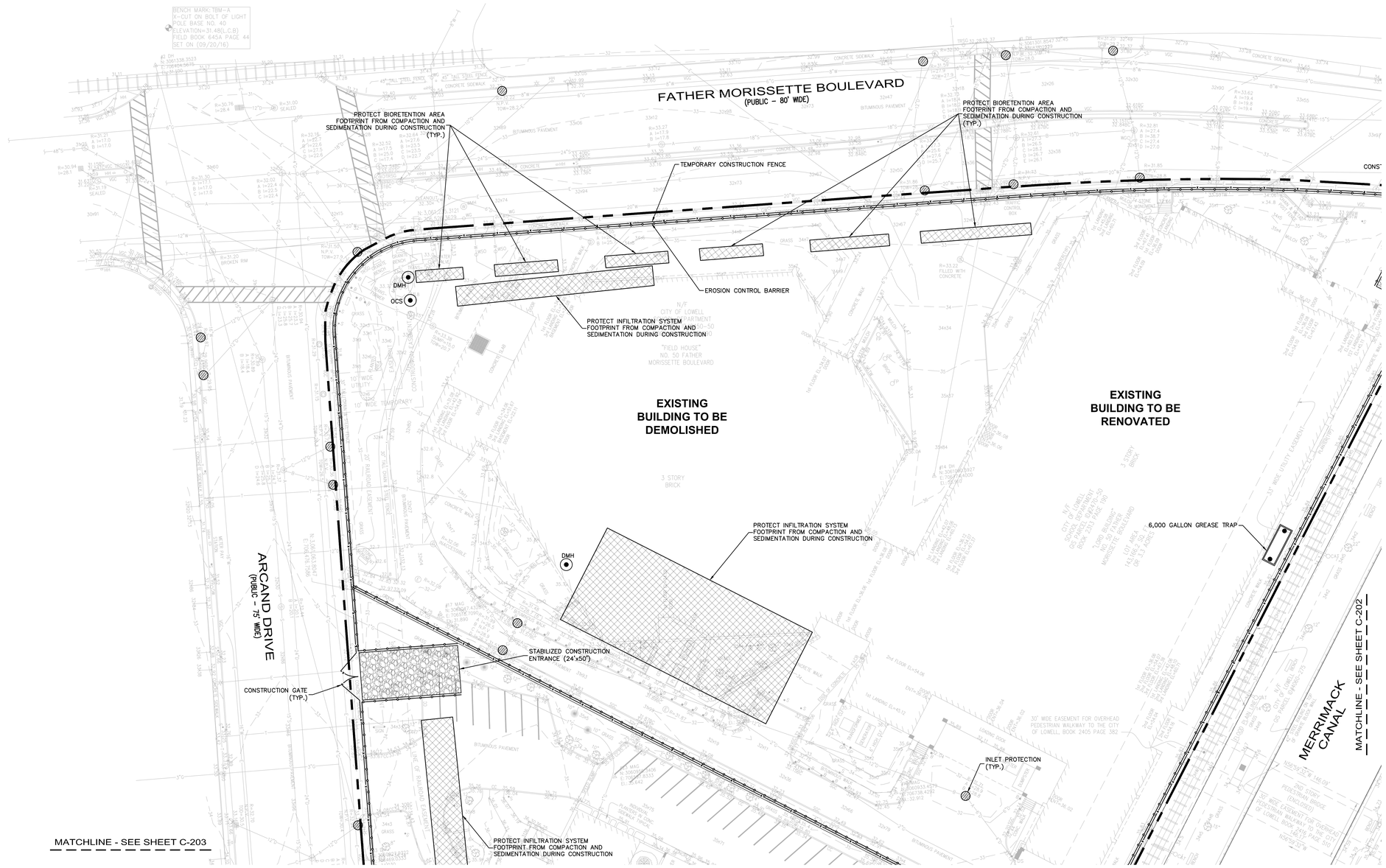
DRAWING TITLE:
OVERALL SITE EROSION AND SEDIMENTATION CONTROL PLAN

SCALE: 1"=40'

C-200

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE EROSION AND SEDIMENTATION CONTROL NOTES.
2. REFER TO SHEET C-400 FOR SITE EROSION AND SEDIMENTATION CONTROL DETAILS.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
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Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanagh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

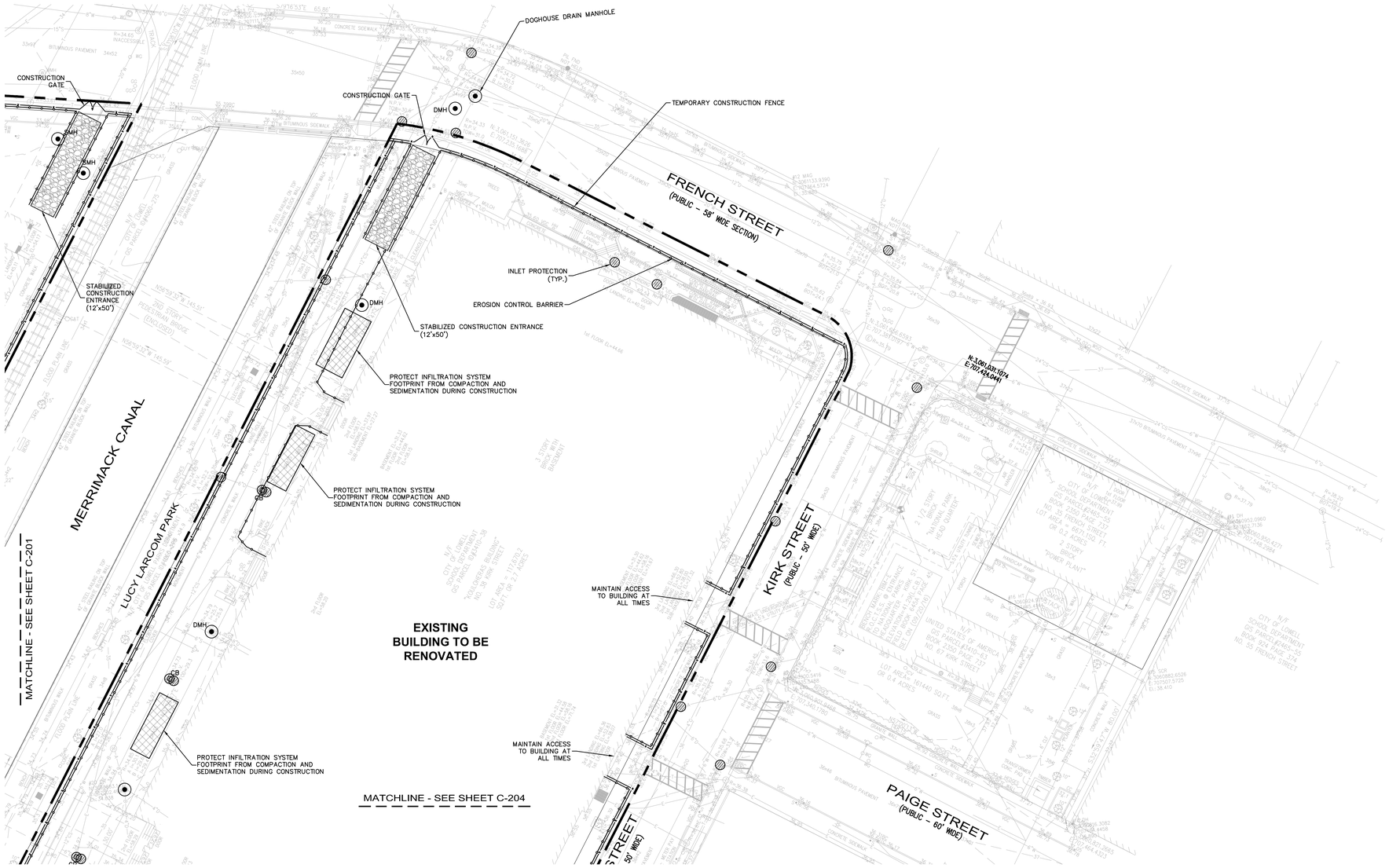
DRAWING TITLE:
SITE EROSION AND SEDIMENTATION CONTROL PLAN I

SCALE: 1"=20'

C-201

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE EROSION AND SEDIMENTATION CONTROL NOTES.
2. REFER TO SHEET C-400 FOR SITE EROSION AND SEDIMENTATION CONTROL DETAILS.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:

375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

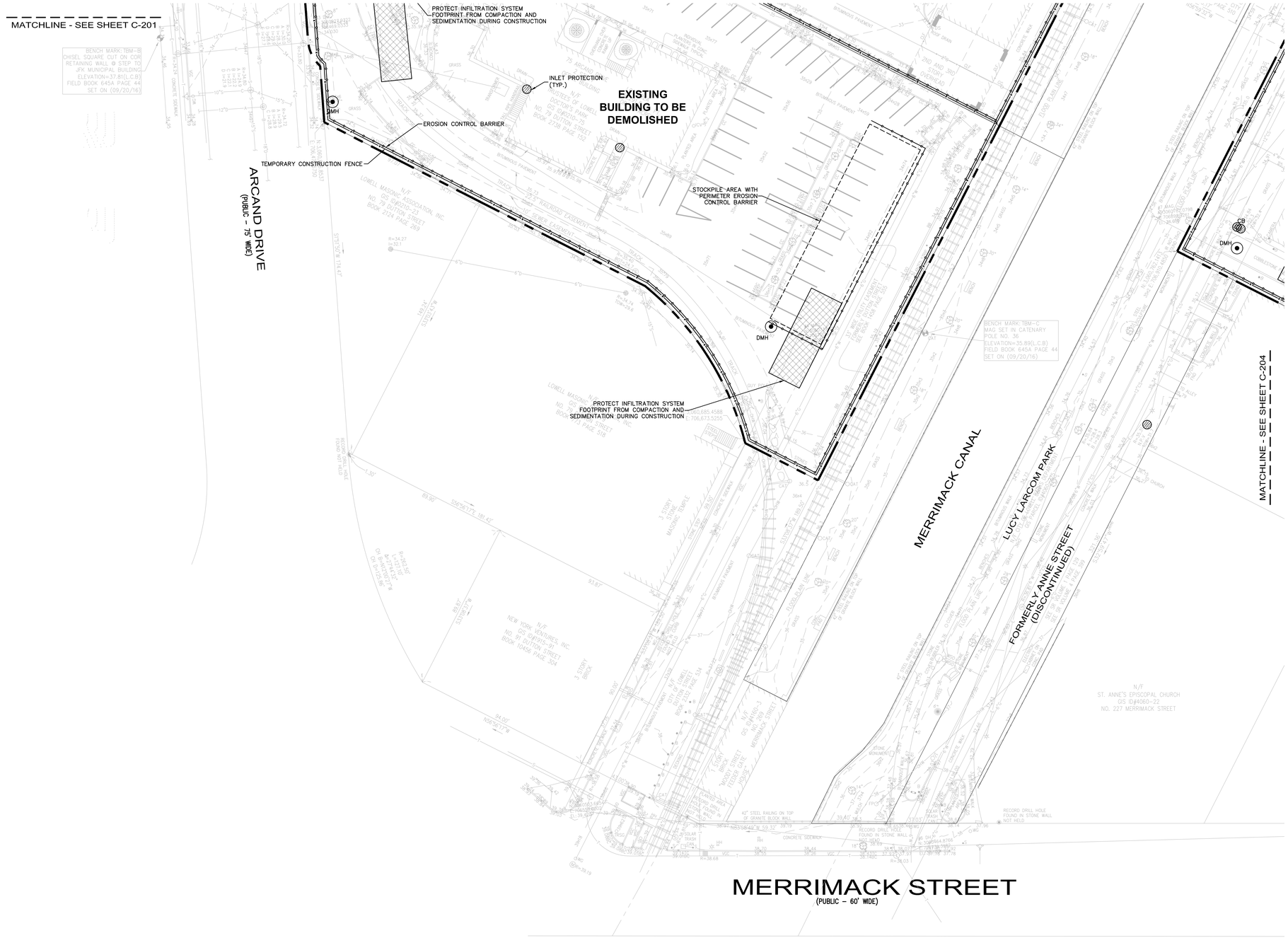
SITE EROSION AND SEDIMENTATION CONTROL PLAN II

SCALE: 1"=20'

C-202

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE EROSION AND SEDIMENTATION CONTROL NOTES.
2. REFER TO SHEET C-400 FOR SITE EROSION AND SEDIMENTATION CONTROL DETAILS.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

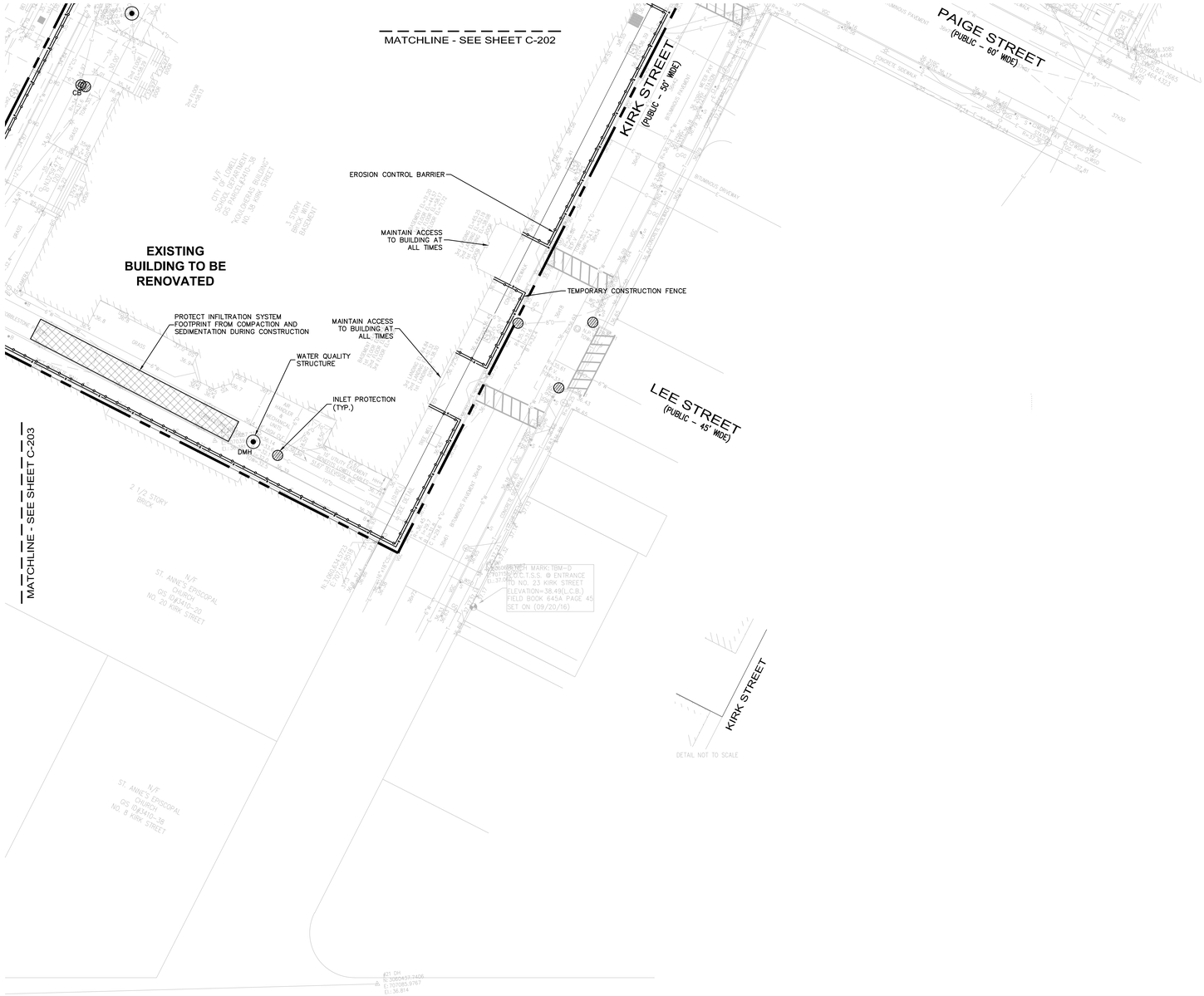
DRAWING TITLE:
SITE EROSION AND SEDIMENTATION CONTROL PLAN III

SCALE: 1"=20'

C-203

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE EROSION AND SEDIMENTATION CONTROL NOTES,
2. REFER TO SHEET C-400 FOR SITE EROSION AND SEDIMENTATION CONTROL DETAILS.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

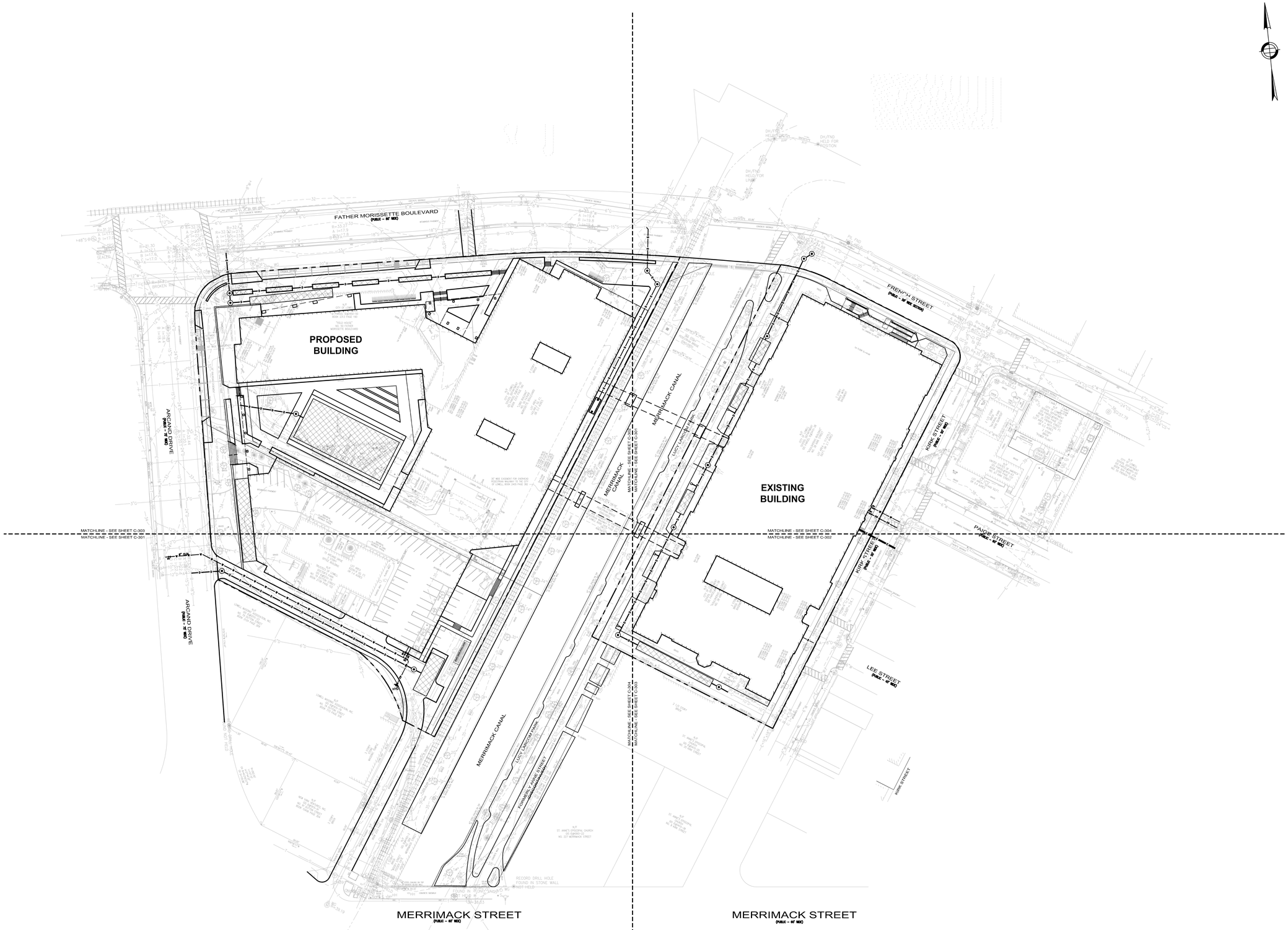
DRAWING TITLE:
SITE EROSION AND SEDIMENTATION CONTROL PLAN IV

SCALE: 1"=20'

C-204

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE UTILITY NOTES.
2. REFER TO SHEETS C-402 AND C-403 FOR SITE UTILITY DETAILS.

SCALE:
1" = 40'
40 20 0 40 80

NITSCH PROJECT NO. 11601

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:

375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

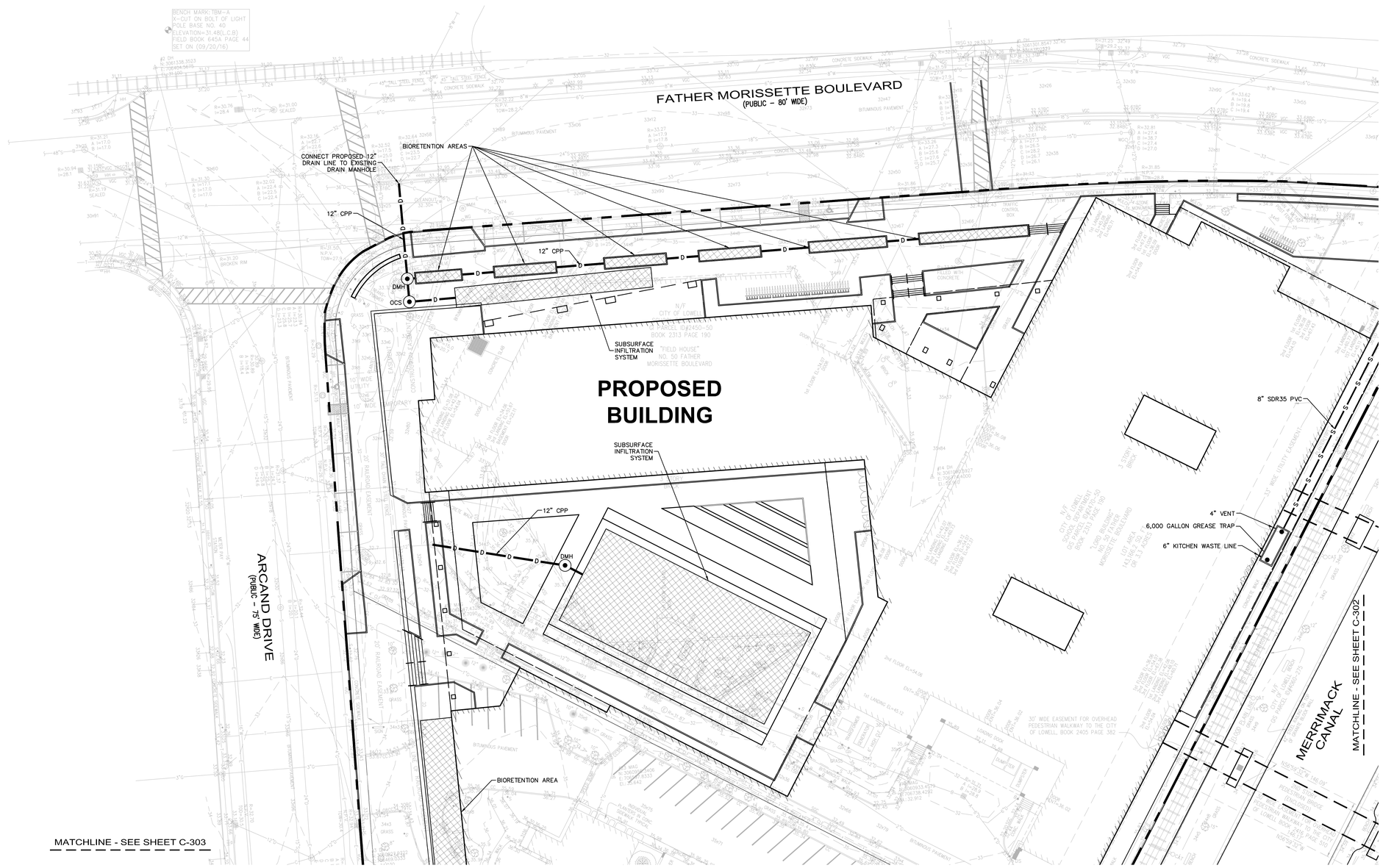
OVERALL SITE UTILITY PLAN

SCALE: 1"=40'

C-300

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE UTILITY NOTES,
2. REFER TO SHEETS C-402 AND C-403 FOR SITE UTILITY DETAILS.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
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2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

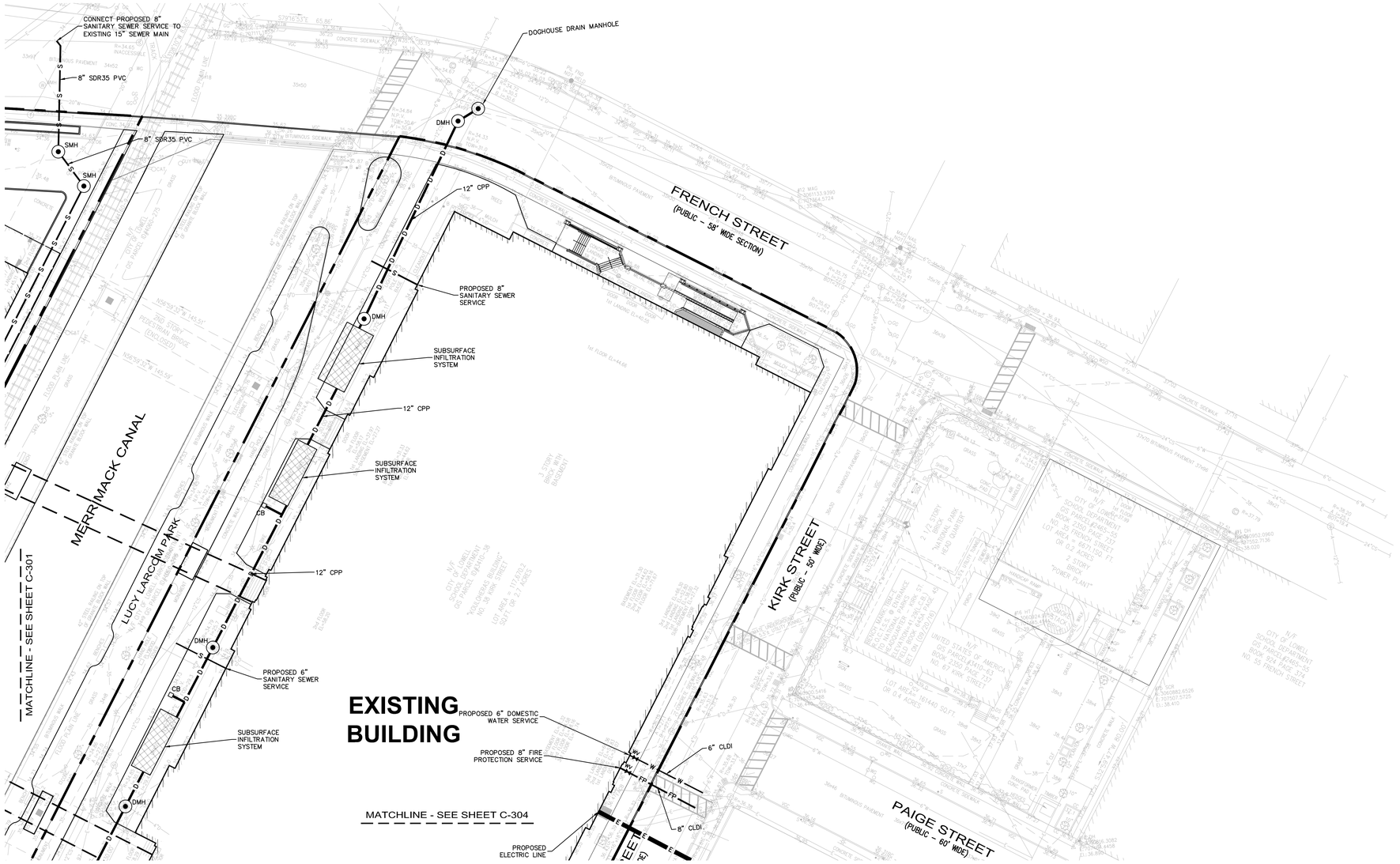
DRAWING TITLE:
SITE UTILITY PLAN I

SCALE: 1"=20'

C-301

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE UTILITY NOTES,
2. REFER TO SHEET C-402 AND C-403 FOR SITE UTILITY DETAILS.

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SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
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F. +1 212 353 7676

Owner:

375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
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2 Center Plaza Suite 430 Boston, MA 02108

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150 Chestnut Street, 4th Floor Providence, RI 02903

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Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

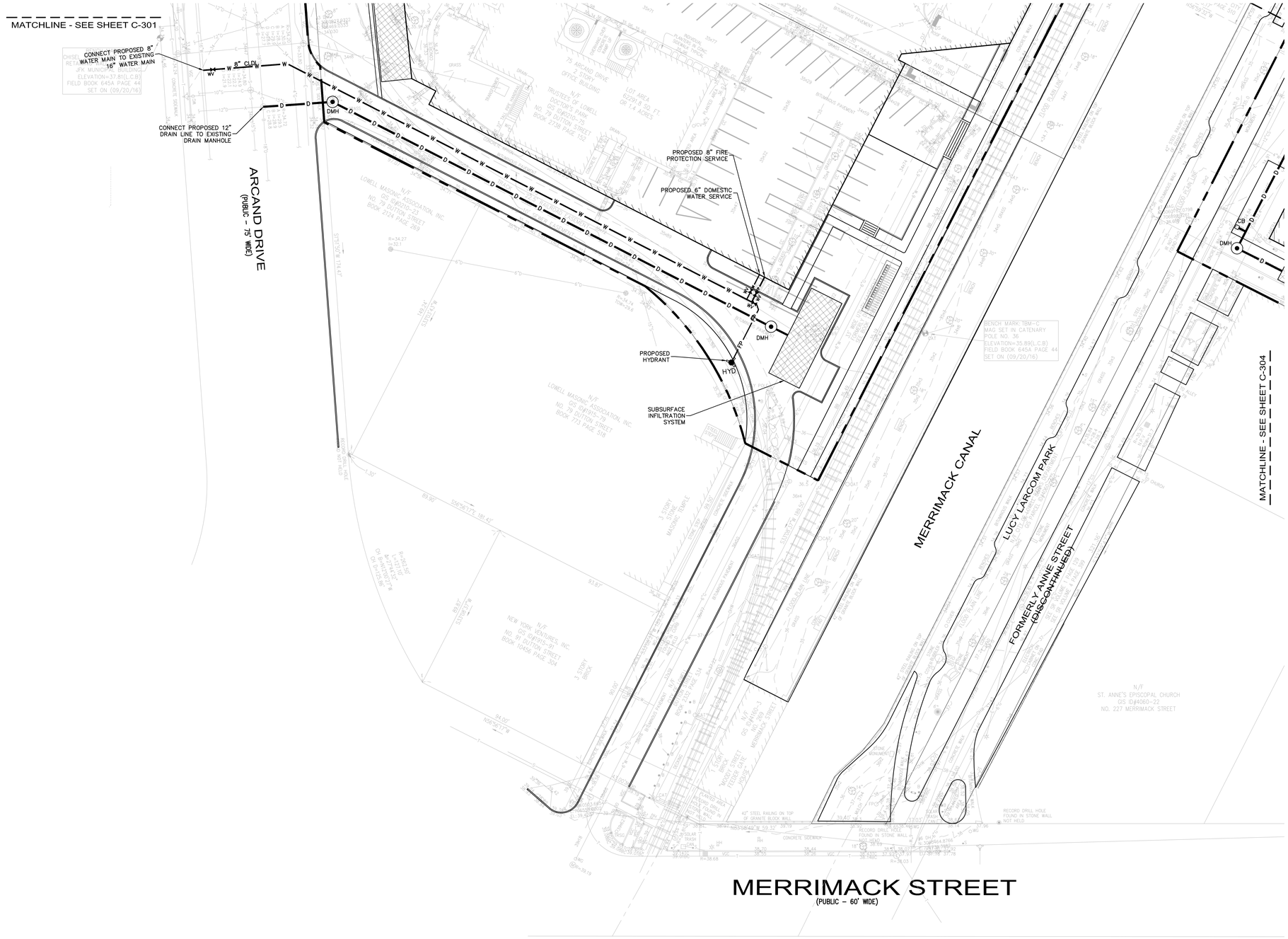
SITE UTILITY PLAN II

SCALE: 1"=20'

C-302

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE UTILITY NOTES.
2. REFER TO SHEETS C-402 AND C-403 FOR SITE UTILITY DETAILS.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:

375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

SITE UTILITY PLAN III

SCALE: 1"=20'

C-303

SCHEMATIC DESIGN SUBMISSION

2/20/2019



NOTES:
1. REFER TO SHEET C-000 FOR SITE UTILITY NOTES.
2. REFER TO SHEETS C-402 AND C-403 FOR SITE UTILITY DETAILS.

SCALE:
1" = 20'
20 10 0 20 40

NITSCH PROJECT NO. 11601

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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

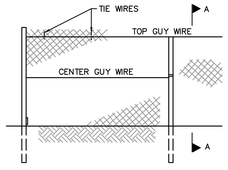
DRAWING TITLE:
SITE UTILITY PLAN IV

SCALE: 1"=20'

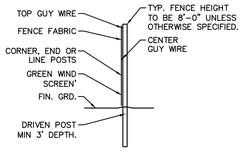
C-304

SCHEMATIC DESIGN SUBMISSION

2/20/2019



ELEVATION



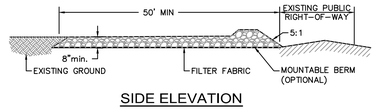
SECTION A-A

CHAIN LINK CONSTRUCTION FENCE

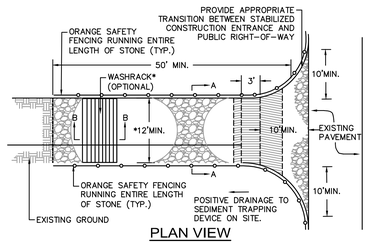
NOT TO SCALE

CONSTRUCTION FENCE AND GATE NOTES

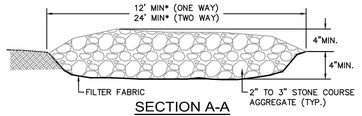
1. FABRIC SHALL BE 0.148" WIRE, WOVEN INTO APPROXIMATELY 2" DIAMOND MESH.
2. THE FENCE FABRIC SHALL BE ZINC COATED STEEL OR ALUMINUM COATED STEEL.
3. FENCE POSTS SHALL RECEIVE THE SAME COATING AND TREATMENT AS THE FENCE FABRIC (DESCRIBED ABOVE).
4. THE CONTRACTOR SHALL ADD A GREEN WIND SCREEN
5. LINE POSTS SHALL BE 2½" O.D. END OR CORNER POSTS SHALL BE 3" O.D.
6. THE CONTRACTOR IS RESPONSIBLE FOR SURFACE RESTORATION ONCE THE FENCE IS REMOVED.
7. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE TEMPORARY CONSTRUCTION FENCE AT THE CONCLUSION OF THE PROJECT.



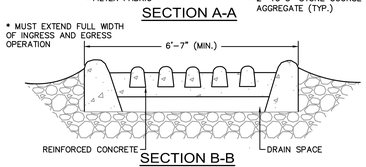
SIDE ELEVATION



PLAN VIEW



SECTION A-A



SECTION B-B

CONSTRUCTION SPECIFICATIONS

CONSTRUCTION SPECIFICATIONS

LENGTH – GREATER THAN OR EQUAL TO 50 FEET

WIDTH – TWELVE FOOT MINIMUM (ONE WAY), TWENTY FOUR FOOT MINIMUM (TWO WAY), BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE PERMITTED.

THICKNESS – 8"

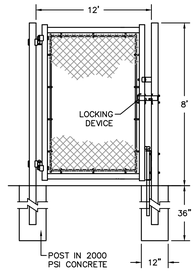
MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED.

STABILIZED CONSTRUCTION ENTRANCE



GATE PLAN



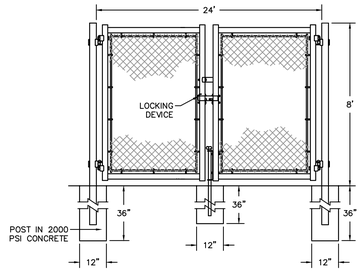
SINGLE GATE ELEVATION

12' WIDE EMERGENCY GATE

NOT TO SCALE



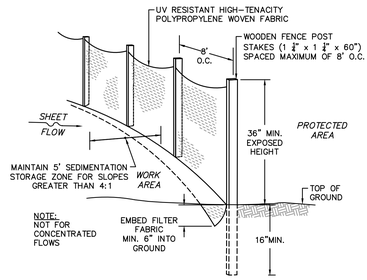
GATE PLAN



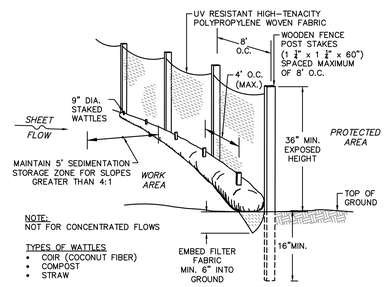
DOUBLE GATE ELEVATION

24' WIDE DOUBLE GATE

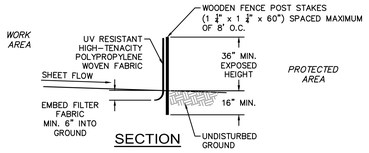
NOT TO SCALE



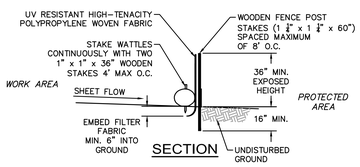
PERSPECTIVE VIEW



PERSPECTIVE VIEW

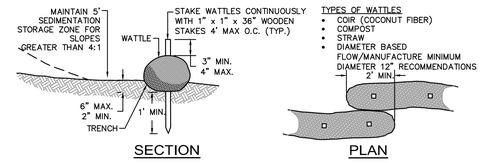


PERIMETER PROTECTION BARRIER



PERIMETER PROTECTION BARRIER
SILT FENCE DETAIL WITH WATTLES

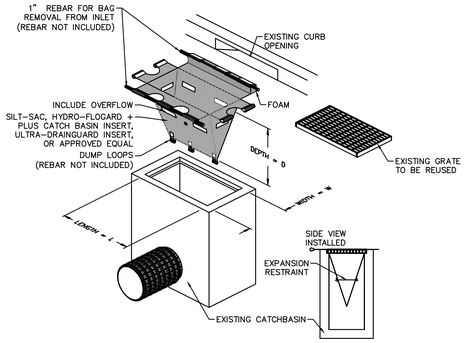
NOT TO SCALE



SECTION PLAN

WATTLES - SLOPE PROTECTION FOR SLOPES LESS THAN 10:1

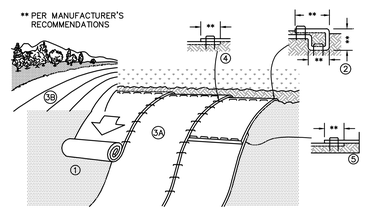
NOT TO SCALE



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS SHEET, OVERLAND OR CONCENTRATED FLOWS (NOT GREATER THAN 1 CFS). THE METHOD CAN DRAIN FLAT AREA TO STEEP SLOPES. INLET CAPACITY WILL BE DECREASED WITH THIS METHOD AND THE CONTRACTOR SHALL EXPECT PONDING DURING HIGH FLOW EVENTS.

INLET PROTECTION ②
CATCH BASIN W/ SILTATION SACK

NOT TO SCALE



SLOPE INSTALLATION

NOTES:

1. PREPARE SOIL BEFORE INSTALLING EROSION CONTROL BLANKETS (ECB's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE ECB's IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING PORTION OF ECB's BACK OVER SEED AND COMPACTED SOIL. SECURE ECB's OVER COMPACTED SOIL WITH A ROW OF STAKES/STAPLES SPACED ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATIONS ACROSS THE WIDTH OF THE ECB's.
3. ROLL THE ECB's DOWN (A) OR HORIZONTALLY (B) ACROSS THE SLOPE. ECB's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL ECB's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAKES/STAPLES IN APPROPRIATE LOCATIONS AS SHOWN ON THE STAKE/STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL ECB's MUST BE STAKED/STAPLED WITH OVERLAP DEPENDING ON ECB's TYPE. SEE THE MANUFACTURER'S RECOMMENDATIONS.
5. CONSECUTIVE ECB's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN OVERLAP (SEE THE MANUFACTURER'S RECOMMENDATIONS). STAKE/STAPLE THROUGH OVERLAPPED AREA, ACROSS ENTIRE ECB's WIDTH PER MANUFACTURER'S RECOMMENDATIONS.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAKE OR STAPLE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE ECB's.
7. THE CONTRACTOR SHALL FOLLOW ALL INSTALLATION INSTRUCTIONS AS RECOMMENDED BY THE MANUFACTURER.

TEMPORARY EROSION CONTROL
BLANKET FOR STEEP SLOPES DETAIL

NOT TO SCALE

NITSCH PROJECT NO. 11601

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PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

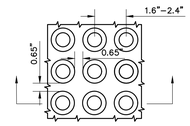
SITE EROSION AND SEDIMENTATION CONTROL DETAILS

SCALE:

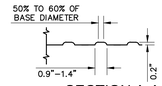
C-400

SCHEMATIC DESIGN SUBMISSION

2/20/2019



DETAIL OF DETECTABLE WARNING PANEL

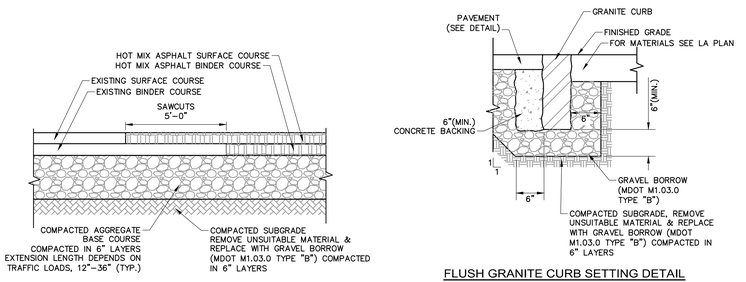


SECTION A-A

NOTE:
PANELS SHALL BE MODULAR PRECAST HIGH STRENGTH POLYMER CONCRETE PANEL PERMANENTLY APPLIED TO THE RAMP. DETECTABLE WARNING SURFACES SHALL BE COLOR SAFETY YELLOW.

DETECTABLE WARNING PANEL FOR ACCESSIBLE RAMPS

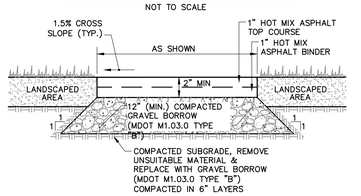
NOT TO SCALE



PAVEMENT MATCHING DETAIL

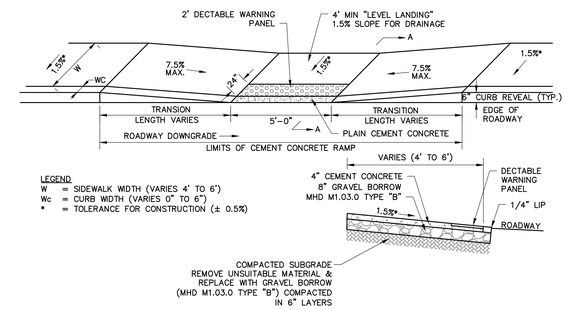
FLUSH GRANITE CURB SETTING DETAIL

NOT TO SCALE



HOT MIX ASPHALT SIDEWALK DETAIL

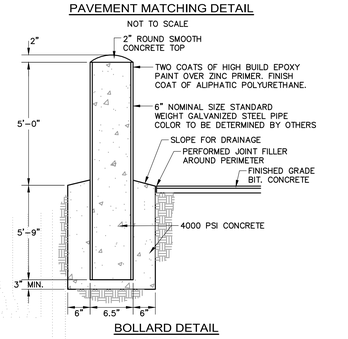
NOT TO SCALE



SECTION A-A

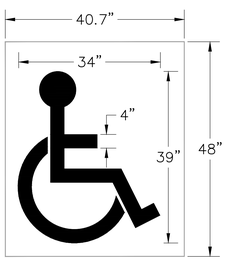
PEDESTRIAN RAMP DETAIL
(4' TO 6' WIDE)

NOT TO SCALE



BOLLARD DETAIL

NOT TO SCALE



ACCESSIBLE PARKING STENCIL DETAIL

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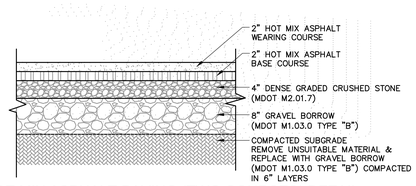
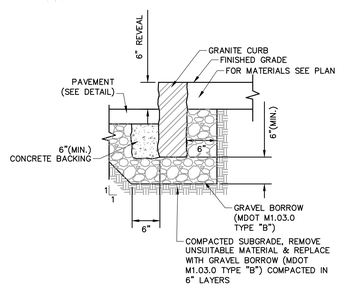


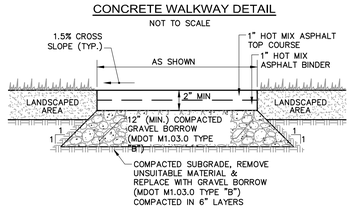
HOT MIX ASPHALT PAVING (TWO COURSES) DETAIL

NOT TO SCALE



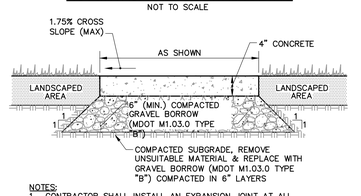
VERTICAL GRANITE CURB SETTING DETAIL

NOT TO SCALE



HOT MIX ASPHALT SIDEWALK DETAIL

NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL INSTALL AN EXPANSION JOINT AT ALL BUILDINGS AND ALL SIDEWALK INTERSECTIONS OR AT START OF CURVED SECTIONS AND SHALL INSTALL LATERAL CONTROL JOINTS AS REQUIRED (8'–0" MAX. SPACING). SLOPE SIDEWALK AS SHOWN ON PLANS OR ROADWAY SECTIONS (MINIMUM SLOPE = 1%)
2. CONCRETE SHALL BE 4000 PSI.

CONCRETE WALKWAY DETAIL

NOT TO SCALE

NITSCH PROJECT NO. 11601

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PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

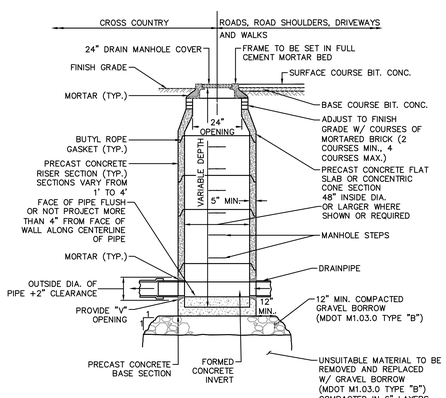
SITE LAYOUT DETAILS

SCALE:

C-401

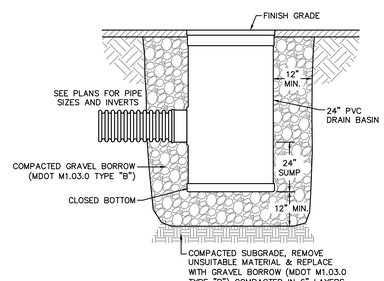
SCHEMATIC DESIGN SUBMISSION

2/20/2019



TYPICAL DRAIN MANHOLE DETAIL

NOT TO SCALE

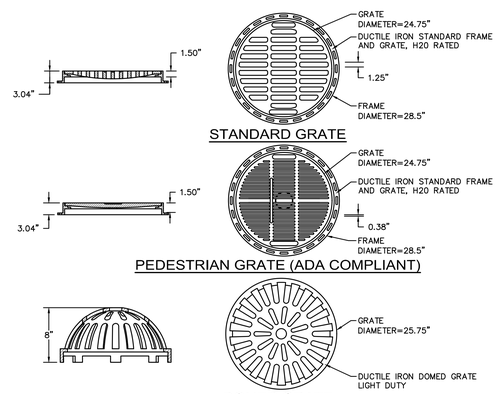


SECTION VIEW

NOTES:
1. FRAME AND GRATE SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 70-50-05.
2. 24" AREA DRAINS SHALL BE NYLOPLAST MODEL 2824 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., OR APPROVED EQUAL.
3. AREA DRAINS SHALL BE CUSTOM MANUFACTURED ACCORDING TO THE PLANS AND DETAIL.
4. CASTINGS SHALL BE FURNISHED WITH A BLACK PAINT.
5. SEE PLANS FOR LAYOUT AND ELEVATIONS OF DRAIN PIPES TO AREA DRAINS.

24" AREA DRAIN DETAIL

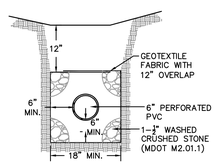
NOT TO SCALE



STANDARD GRATE

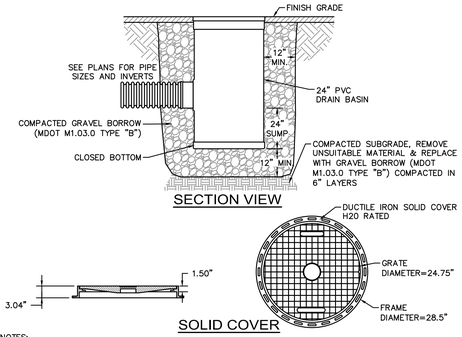
PEDESTRIAN GRATE (ADA COMPLIANT)

DOMED GRATE



UNDERDRAIN DETAIL

NOT TO SCALE



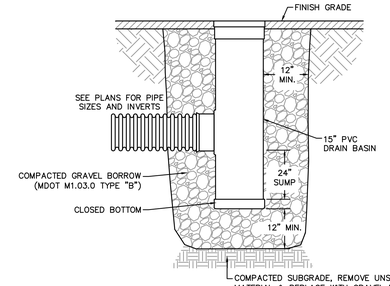
SECTION VIEW

SOLID COVER

NOTES:
1. FRAME AND COVER SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 70-50-05.
2. 24" ACCESS BASINS SHALL BE NYLOPLAST MODEL 2824 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., OR APPROVED EQUAL.
3. ACCESS BASINS SHALL BE CUSTOM MANUFACTURED ACCORDING TO THE PLANS AND DETAIL.
4. CASTINGS SHALL BE FURNISHED WITH A BLACK PAINT.
5. SEE PLANS FOR LAYOUT AND ELEVATIONS OF DRAIN PIPES TO ACCESS BASINS.

24" ACCESS BASIN DETAIL

NOT TO SCALE

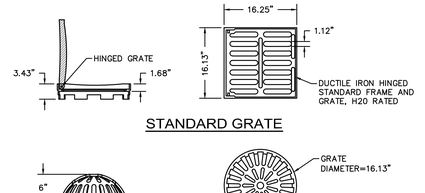


SECTION VIEW

NOTES:
1. FRAME AND GRATE SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 70-50-05.
2. 15" AREA DRAINS SHALL BE NYLOPLAST MODEL 2815 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., OR APPROVED EQUAL.
3. AREA DRAINS SHALL BE CUSTOM MANUFACTURED ACCORDING TO THE PLANS AND DETAIL.
4. CASTINGS SHALL BE FURNISHED WITH A BLACK PAINT.
5. SEE PLANS FOR LAYOUT AND ELEVATIONS OF DRAIN PIPES TO AREA DRAINS.

15" AREA DRAIN DETAIL

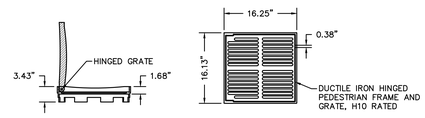
NOT TO SCALE



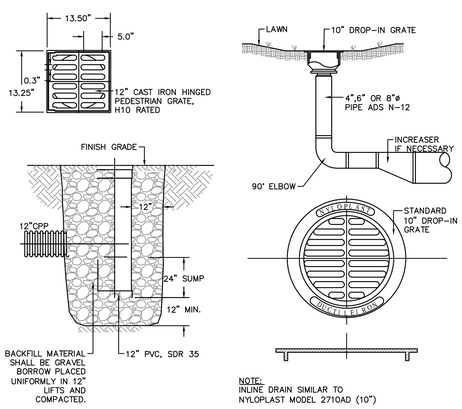
STANDARD GRATE



DOMED GRATE



PEDESTRIAN GRATE (ADA COMPLIANT)



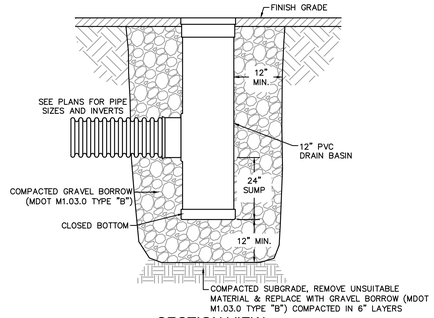
AREA DRAIN DETAIL

NOT TO SCALE

NOTE:
INLINE DRAIN SIMILAR TO NYLOPLAST MODEL 2710AD (10")

10" IN LAWN AREA DRAIN

NOT TO SCALE

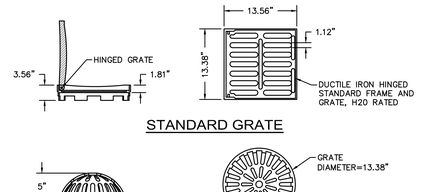


SECTION VIEW

NOTES:
1. FRAME AND GRATE SHALL BE DUCTILE IRON CONFORMING TO ASTM A536 GRADE 70-50-05.
2. 12" AREA DRAINS SHALL BE NYLOPLAST MODEL 2812 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., OR APPROVED EQUAL.
3. AREA DRAINS SHALL BE CUSTOM MANUFACTURED ACCORDING TO THE PLANS AND DETAIL.
4. CASTINGS SHALL BE FURNISHED WITH A BLACK PAINT.
5. SEE PLANS FOR LAYOUT AND ELEVATIONS OF DRAIN PIPES TO AREA DRAINS.

12" AREA DRAIN DETAIL

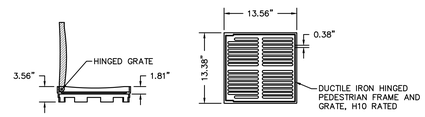
NOT TO SCALE



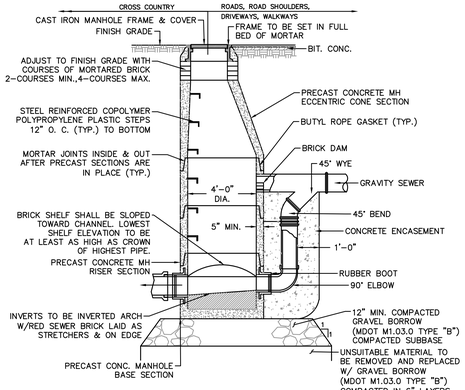
STANDARD GRATE



DOMED GRATE



PEDESTRIAN GRATE (ADA COMPLIANT)



DROP MANHOLE DETAIL

NOT TO SCALE

NITSCH PROJECT NO. 11601

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NO.	DATE	ISSUE

SEAL





KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:

375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

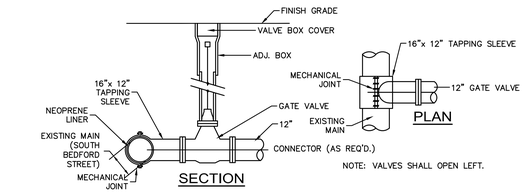
SITE UTILITY DETAILS I

SCALE:

C-402

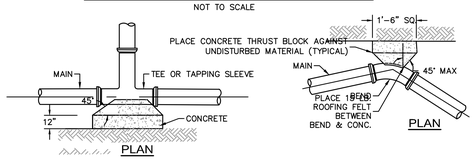
SCHEMATIC DESIGN SUBMISSION

2/20/2019



TAPPING SLEEVE, VALVE & BOX DETAIL

NOT TO SCALE



NOTES:

1. THRUST BLOCKS TO BE USED ON ALL PRESSURE PIPES AT HORIZONTAL AND VERTICAL BENDS GREATER OR EQUAL TO 45°, TEES AND DEAD ENDS.
2. FOR FITTINGS WITH LESS THAN 45° DEFLECTION USE BEARING AREAS FOR 45° BEND.
3. BEARING AREAS BASED ON HORIZONTAL PASSIVE SOIL PRESSURE OF 2000 PSF AND A MINIMUM INTERNAL WATER PRESSURE OF 175 PSIG. JOINTS SHALL NOT BE ENCASED IN CONCRETE. BEARING AREAS MAY BE DISREGARDED FOR TRENCHES IN ROCK WHERE THE TOP OF THE ROCK FACE IS AT OR ABOVE THE CROWN OF THE PIPE. HOWEVER, CONCRETE BACKING SHALL BE PLACED BETWEEN THE PIPE AND ROCK FACE.

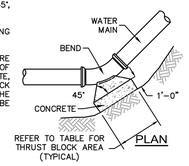
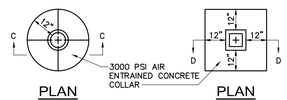


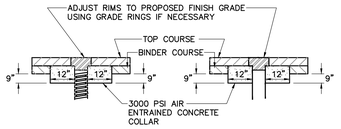
TABLE OF BEARING AREAS IN SQUARE FEET AGAINST UNDISTURBED MATERIAL FOR FITTING. *

SIZE OF MAIN (INCHES)	90° BEND (S.F.)	45° BEND (S.F.)	DEAD END (S.F.)
4	2.3	1.3	1.6
6	4.7	2.5	3.3
8	8.0	4.5	6.0
12	17.0	9.5	12.0

THRUST BLOCK DETAILS

NOT TO SCALE





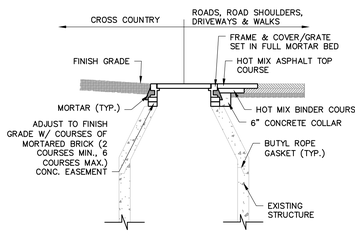
SECTION C-C ROUND

SECTION D-D SQUARE

NOTE:
ALL GATE BOX RIMS TO BE RAISED TO FINISH GRADE AFTER BINDER COURSE OR LEVELING COURSE PVMT HAS BEEN PLACED.

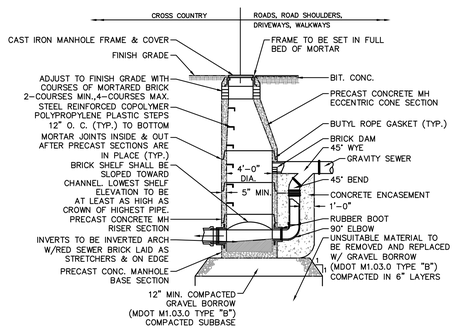
WATER GATE BOX DETAIL

NOT TO SCALE



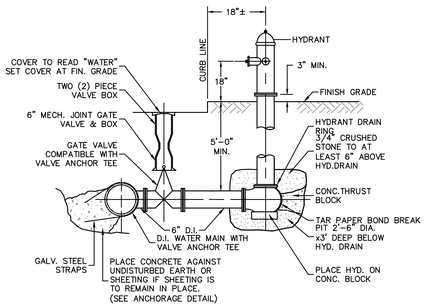
RIM SETTING DETAIL

NOT TO SCALE



DROP SEWER MANHOLE DETAIL

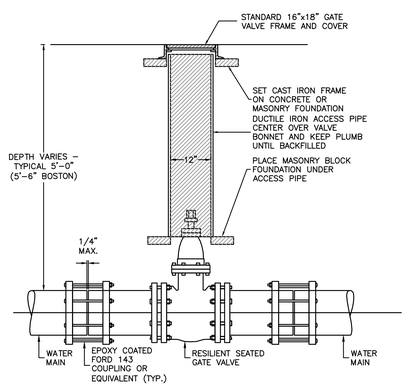
NOT TO SCALE



NOTES:
1. ALL JOINTS ON HYDRANT BRANCH TO BE RESTRAINED JOINTS.
2. HYDRANTS OPEN LEFT
3. HYDRANTS SHALL BE 'BREAKAWAY EDDY WITH DRAIN'.

FIRE HYDRANT DETAIL

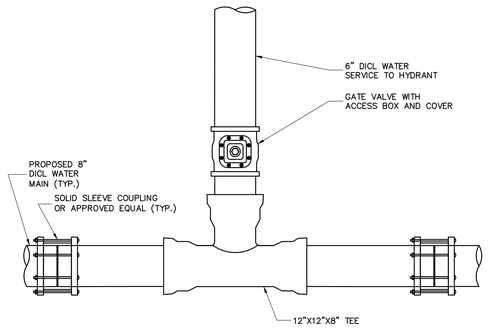
NOT TO SCALE



NOTE: VALVES SHALL OPEN LEFT.

GATE VALVE DETAIL

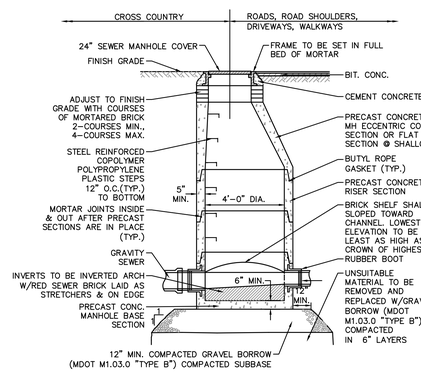
NOT TO SCALE



NOTES:
1. ALL WORK MUST BE PERFORMED BY A BURLINGTON LICENSED AND BONDED CONTRACTOR.
2. THIS PROCEDURE MAY INVOLVE A MAIN LINE SHUT DOWN THAT THE CONTRACTOR WILL COORDINATE WITH THE TOWN OF BURLINGTON.
3. 72-HOUR PRIOR WRITTEN NOTIFICATION OF ALL AFFECTED CUSTOMERS MUST BE PERFORMED BY THE CONTRACTOR.
4. ALL WORK MUST BE PERMITTED BY THE TOWN OF BURLINGTON AND ALL OTHER APPROPRIATE TOWN AGENCIES.
5. ALL WORK MUST BE INSPECTED BY THE TOWN OF BURLINGTON INSPECTOR OR DESIGNEE PRIOR TO BACKFILLING.
6. ALL WATER MAIN SHALL BE CLASS 52 DICL.

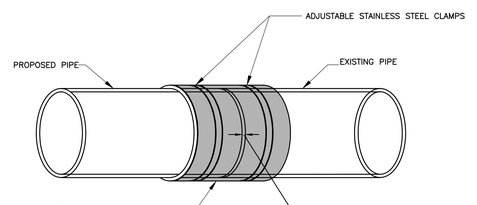
PROPOSED 6" HYDRANT TEE CONNECTION TO PROPOSED 8" WATER MAIN DETAIL

NOT TO SCALE



TYPICAL SEWER MANHOLE DETAIL

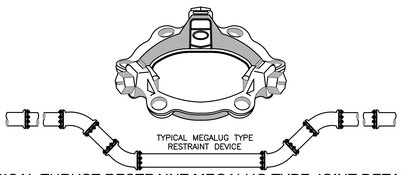
NOT TO SCALE



NOTES:
1. THE PROPOSED PIPE MAY HAVE AN OUTSIDE DIAMETER (O.D.) THAT IS DIFFERENT THAN THE O.D. OF THE EXISTING PIPE.
2. THE CONTRACTOR SHALL VERIFY THE O.D. PRIOR TO ORDERING THE COUPLING.

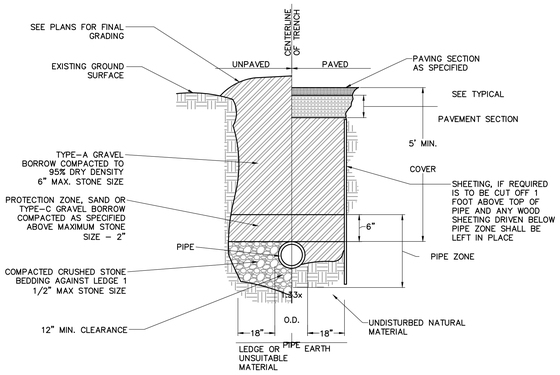
TYPICAL COUPLING DETAIL

NOT TO SCALE



TYPICAL THRUST RESTRAINT MEGALUG TYPE JOINT DETAIL

NOT TO SCALE

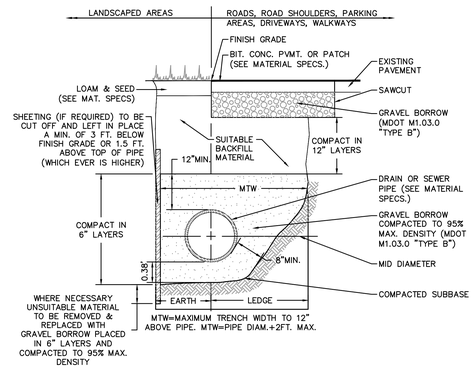


* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE CITY OF NEWTON

1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0
2. CRUSHED STONE BEDDING SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M2.01.1

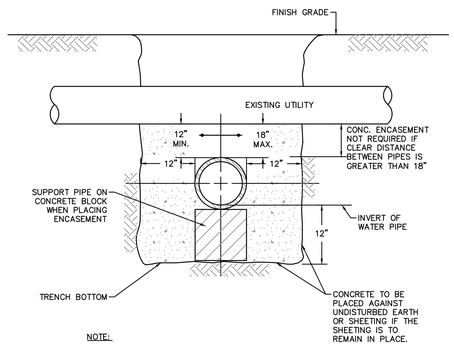
TYPICAL WATER TRENCH DETAIL

NOT TO SCALE



STANDARD TRENCH DETAIL FOR UTILITY PIPE

NOT TO SCALE

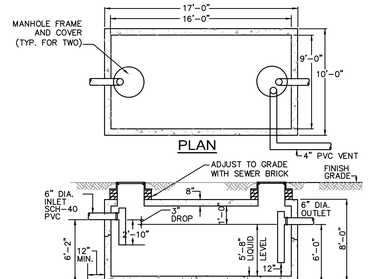


NOTE:

PIPE MUST BE BRACED VERTICALLY & HORIZONTALLY TO PREVENT FLOATATION DURING PLACEMENT OF CONCRETE

CONCRETE ENCASEMENT DETAIL AT UTILITY CROSSINGS

NOT TO SCALE

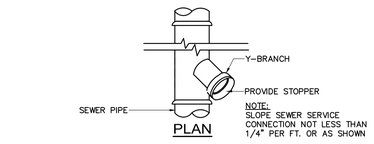


ELEVATION

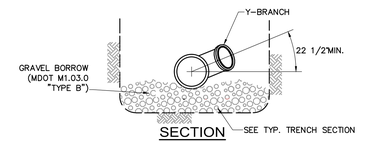
SPECIFICATIONS:
1. CONCRETE MINIMUM STRENGTH – 5,000 PSI @ 28 DAYS
2. STEEL REINFORCEMENT – ASTM A615 GR. 60, A185 OR A497 – 1" MIN. COVER
3. DESIGN LOADING – AASHTO HS20-44 – EARTH COVER 1 TO 5 FEET
4. WATER TABLE – AT SURFACE
5. CONSTRUCTION JOINT – SEALED WITH 1" DIA. BUTYL RUBBER OR EQUIVALENT

6,000 GALLON GREASE TRAP DETAIL

NOT TO SCALE

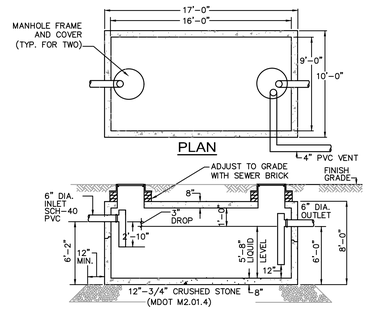


NOTE:
SLOPE SEWER SERVICE CONNECTION NOT LESS THAN 1/4" PER FT. OR AS SHOWN



WYE BRANCH FOR PIPE SERVICE CONNECTION DETAIL

NOT TO SCALE Y-BRANCH



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5. CONSTRUCTION JOINT – SEALED WITH 1" DIA. BUTYL RUBBER OR EQUIVALENT

6,000 GALLON GREASE TRAP DETAIL

NOT TO SCALE

NITSCH PROJECT NO. 11601

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 MERRIMACK STREET LOWELL, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Traverse Landscape Architects
Crabtree McGrath

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SITE UTILITY DETAILS II

SCALE:

C-403

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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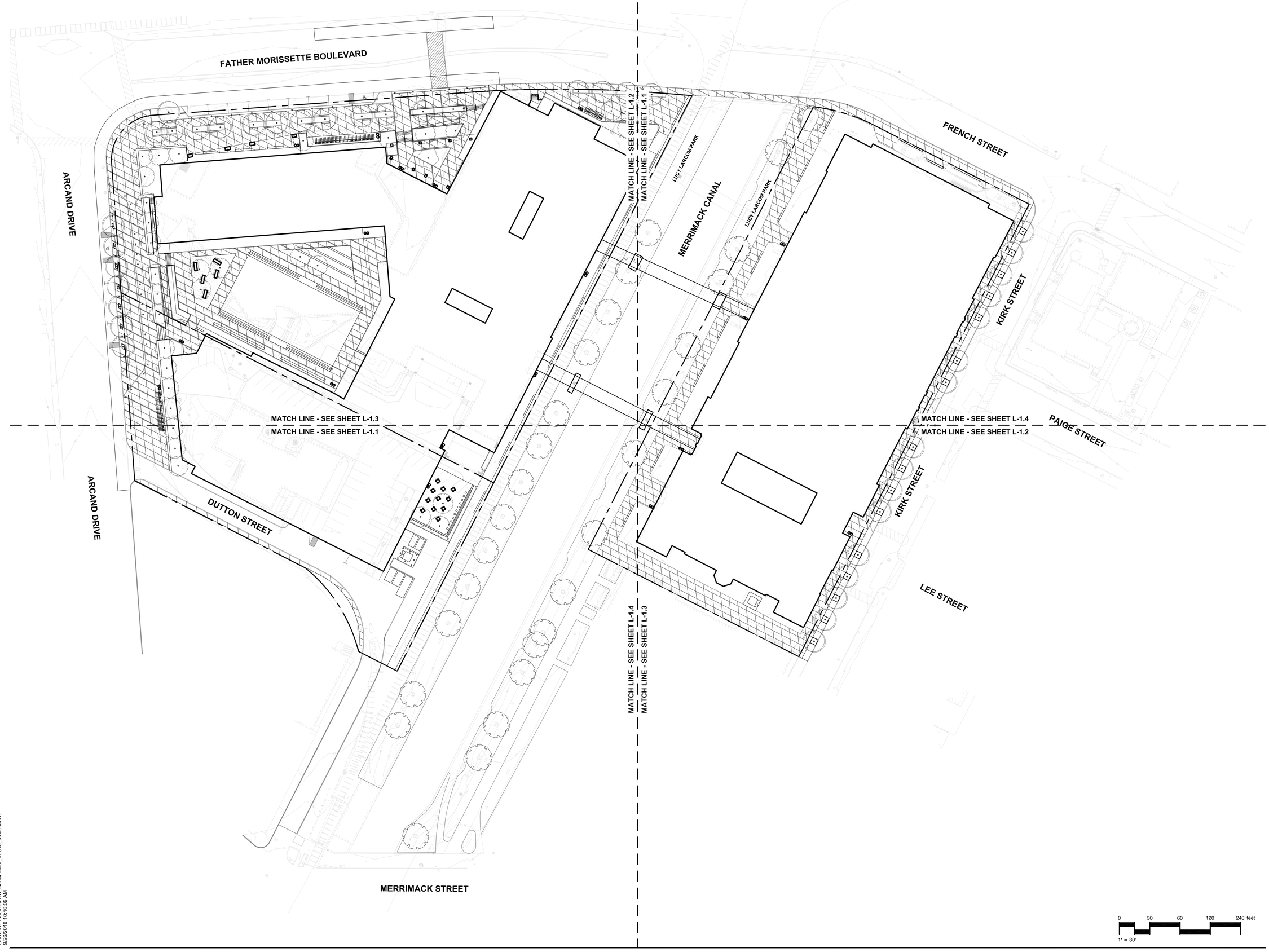

0 30 60 120 240 feet

1" = 30'

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NO.	DATE	ISSUE
1	12.21.18	LEGIBILITY

NOTES

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL HARDSCAPE PLAN

SCALE: 1"=30'-0"

L-1.0

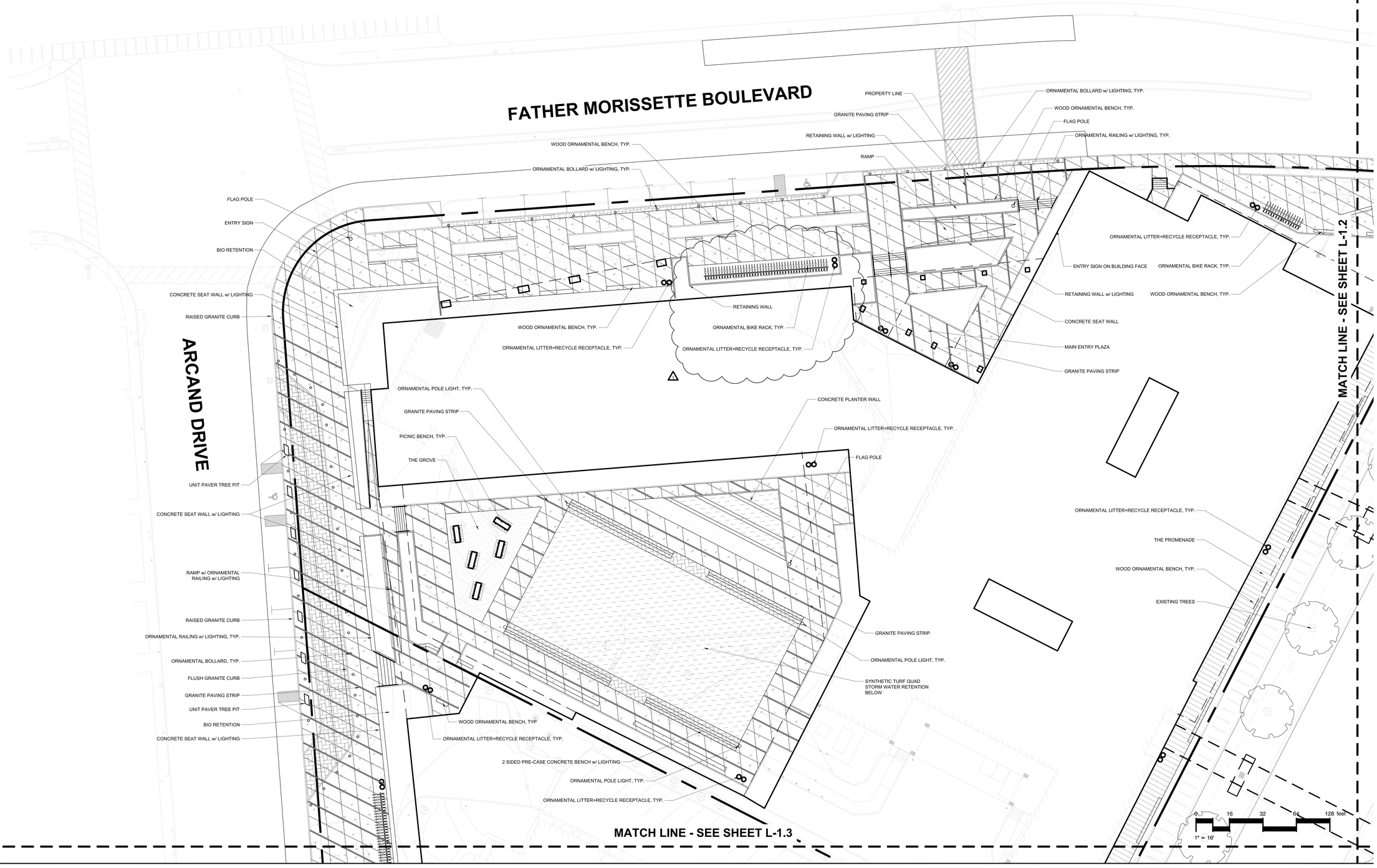
SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
	COMPACTED BONDED AGGREGATE	2,799 sf	
	PLANK PAVERS	6,273 sf	
	UNIT PAVERS	9,693 sf	
	BROOM SWEPT CONCRETE	61,441 sf	
	ARTIFICIAL TURF	8,182 sf	
	GRANITE PAVERS	999 sf	

NOTES:
1. SEE CIVIL ENGINEERING PLANS FOR ALL CURBING AND LAYOUT OF ALL UTILITIES AND DRAINAGE STRUCTURES.
2. REFER TO ELECTRICAL PLANS FOR ALL POLE AND LANDSCAPE LIGHTING.



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NO.	DATE	ISSUE
1	12.21.18	CLARIFICATION

NOTES

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

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Acoustical Consultant:
Cavanagh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HARDSCAPE PLAN 1

SCALE: 1"=16'-0"

L-1.1

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
	COMPACTED BONDED AGGREGATE	2,799 sf	
	PLANK PAVERS	6,273 sf	
	UNIT PAVERS	9,693 sf	
	BROOM SWEPT CONCRETE	61,441 sf	
	ARTIFICIAL TURF	8,182 sf	
	GRANITE PAVERS	999 sf	

NOTES:
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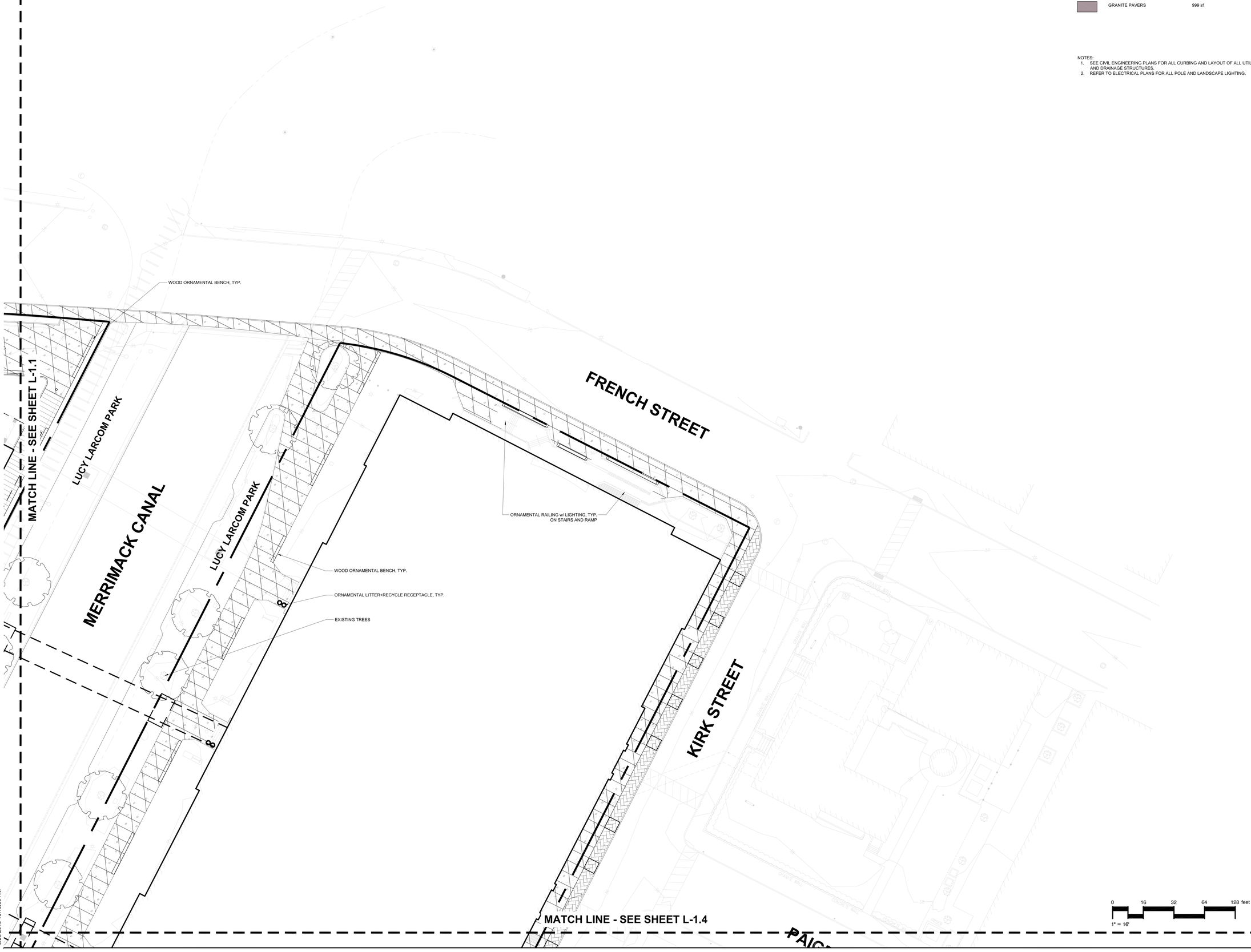

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

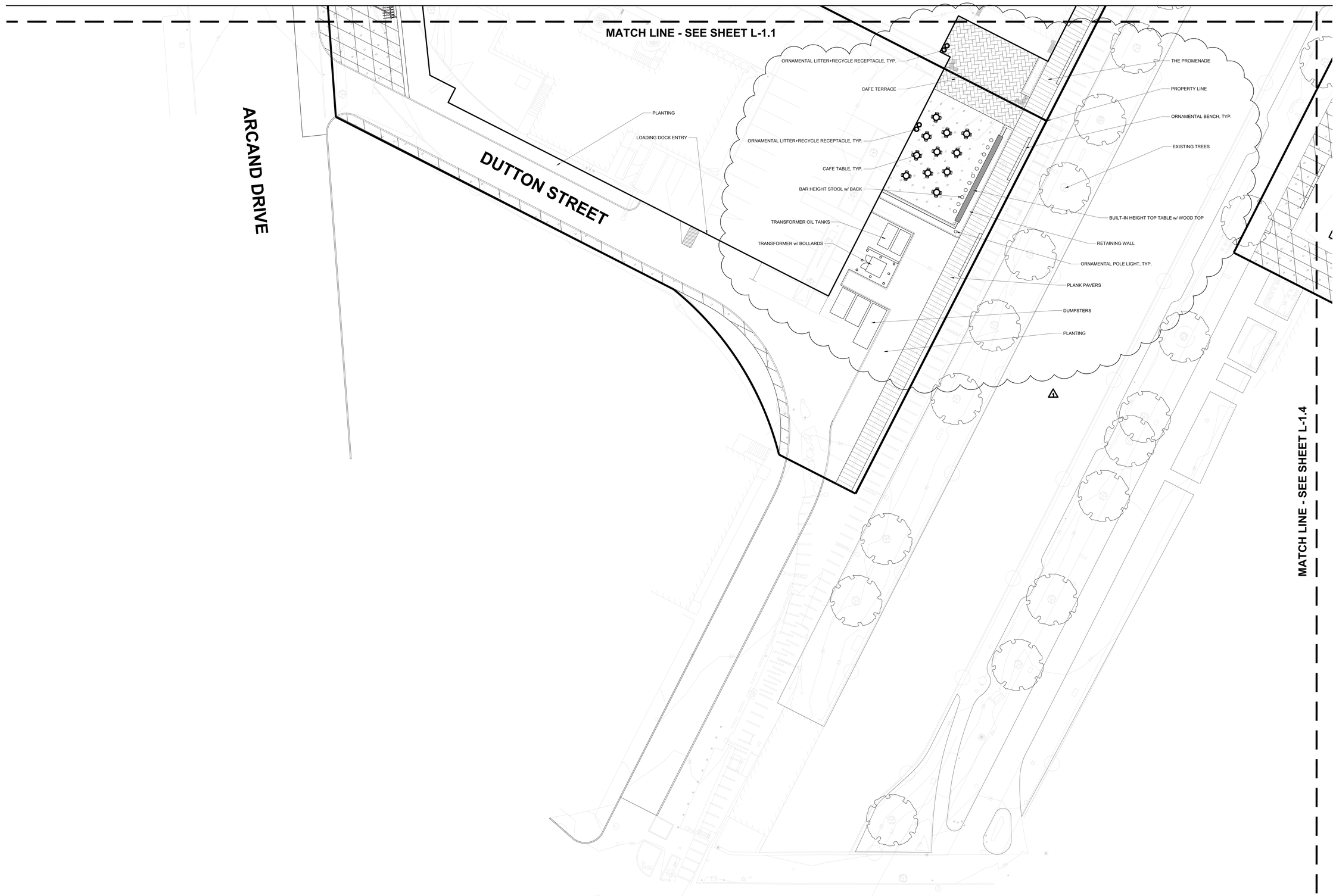
DRAWING TITLE:
HARDSCAPE PLAN 2

SCALE: 1"=16'-0"

L-1.2

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
	COMPACTED BONDED AGGREGATE	2,799 sf	
	PLANK PAVERS	6,273 sf	
	UNIT PAVERS	9,693 sf	
	BROOM SWEPT CONCRETE	61,441 sf	
	ARTIFICAIL TURF	8,182 sf	
	GRANITE PAVERS	999 sf	

NOTES:
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0 16 32 64 128 feet
1" = 16'

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Envelope Consultant:
Envelope Consultant Name
Envelope consultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanagh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

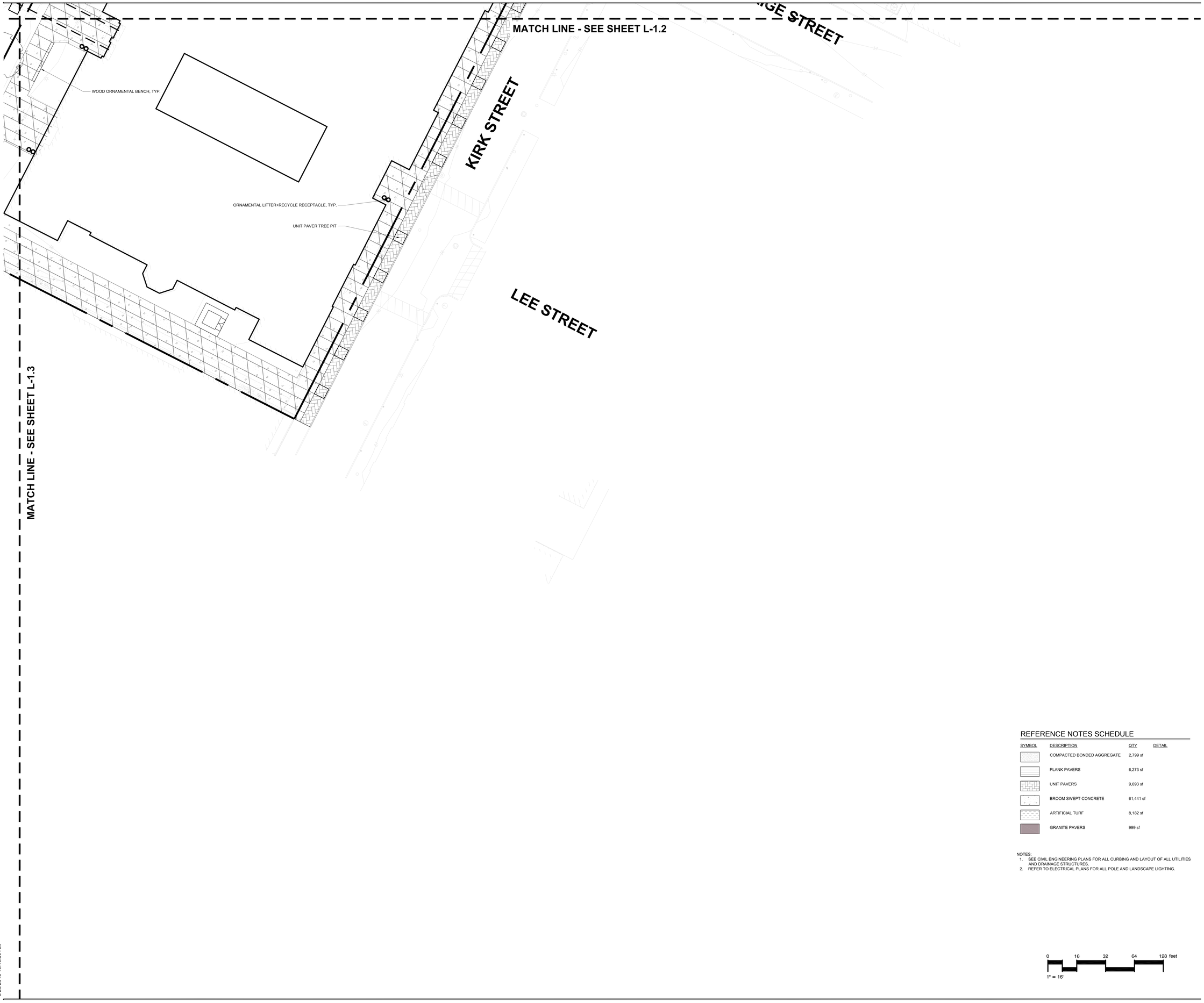
DRAWING TITLE:
HARDSCAPE PLAN 3

SCALE: 1"=16'-0"

L-1.3

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
	COMPACTED BONDED AGGREGATE	2,799 sf	
	PLANK PAVERS	6,273 sf	
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	ARTIFICIAL TURF	8,182 sf	
	GRANITE PAVERS	999 sf	

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0 16 32 64 128 feet
1" = 16'

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Envelope onsultant Address

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

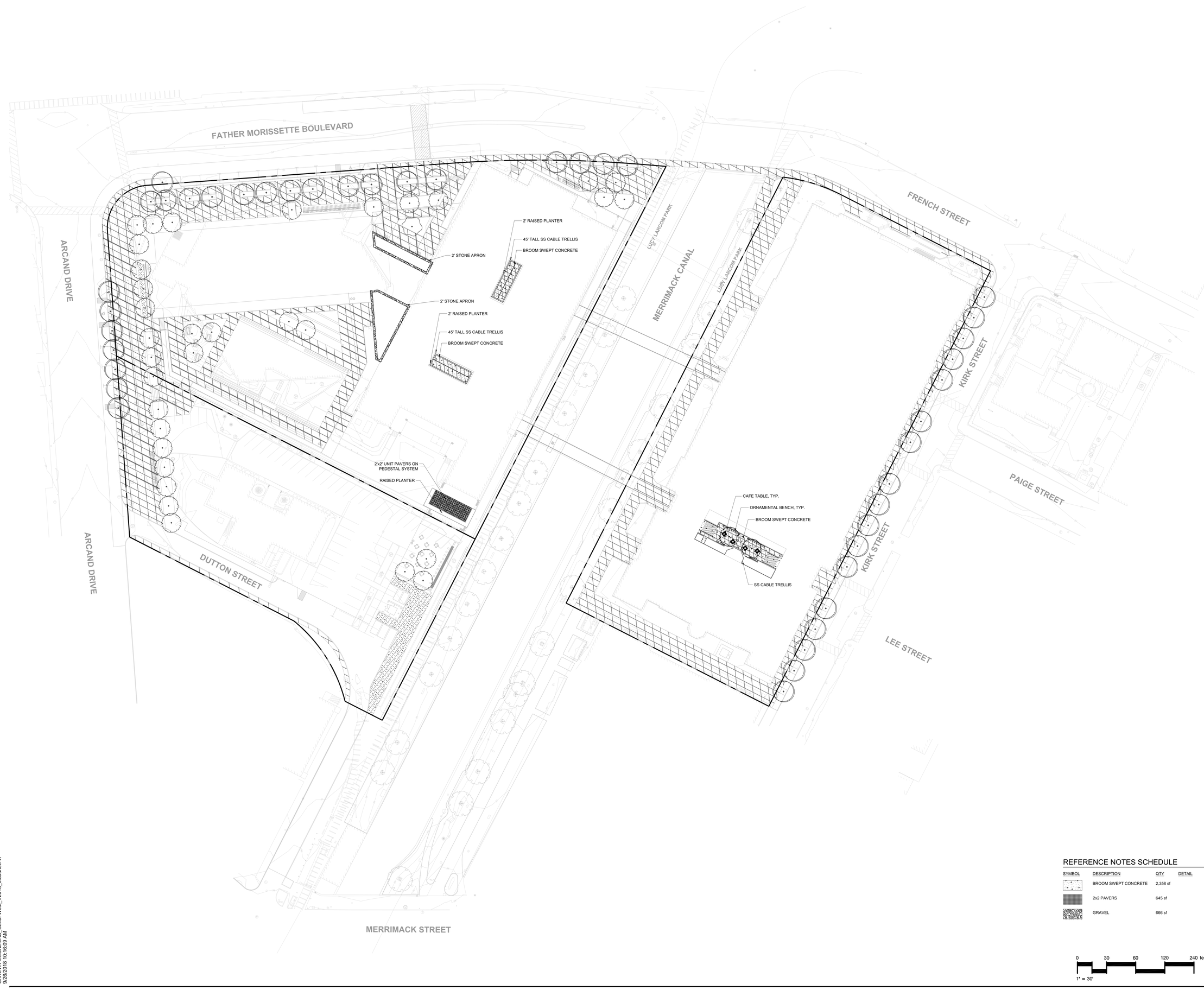
DRAWING TITLE:
HARDSCAPE PLAN 4

SCALE: 1"=16'-0"

L-1.4

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
	BROOM SWEPT CONCRETE	2,358 sf	
	2x2 PAVERS	645 sf	
	GRAVEL	666 sf	

0 30 60 120 240 feet

1" = 30'

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Construction Manager Address

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2 Center Plaza Suite 430 Boston, MA 02108

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Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

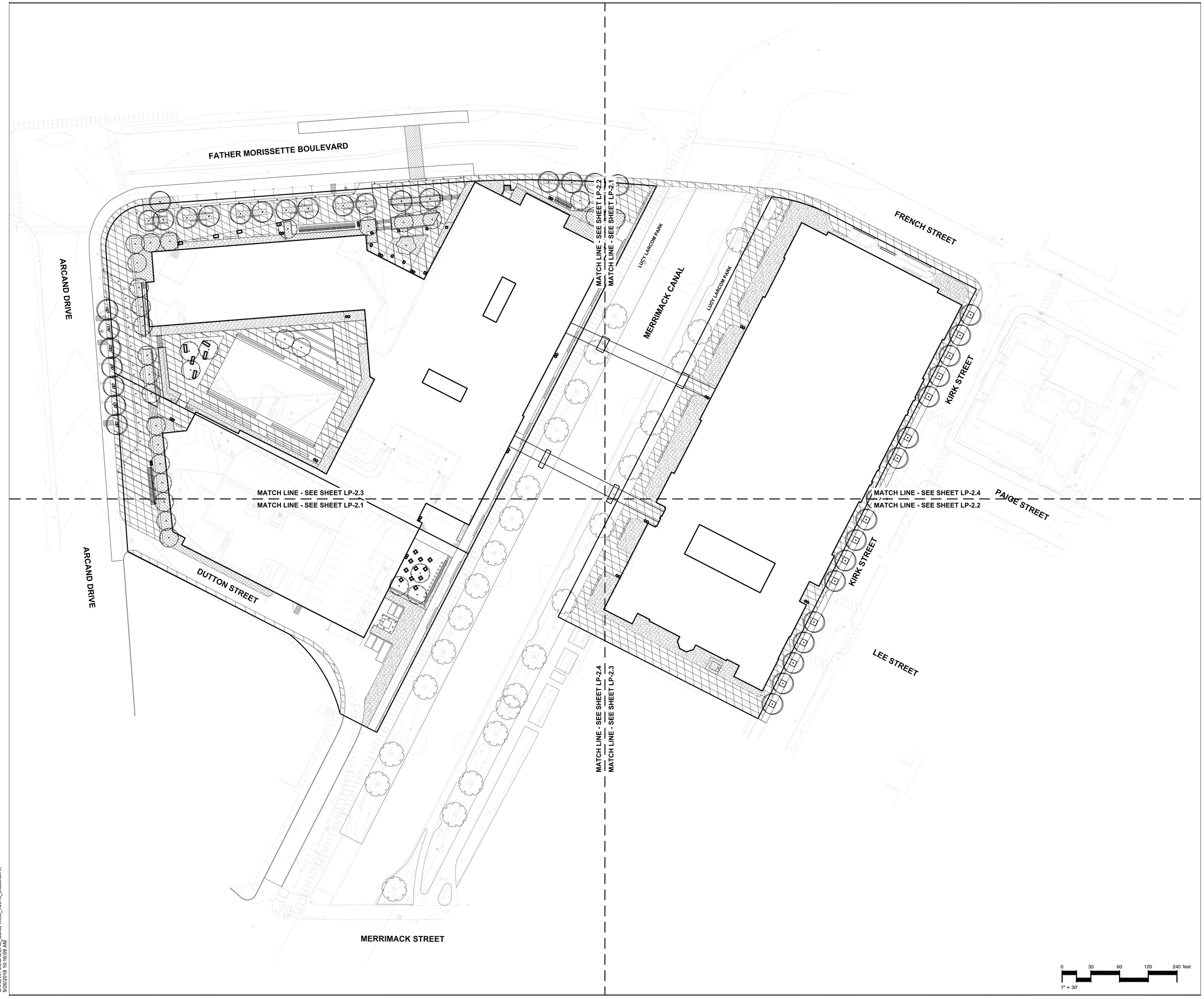
OVERALL HARDSCAPE ROOF PLAN

SCALE: 1"=30'-0"

L-1.7

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



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NO.	DATE	ISSUE
1	12.21.18	LEGIBILITY

NOTES

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL PLANTING PLAN

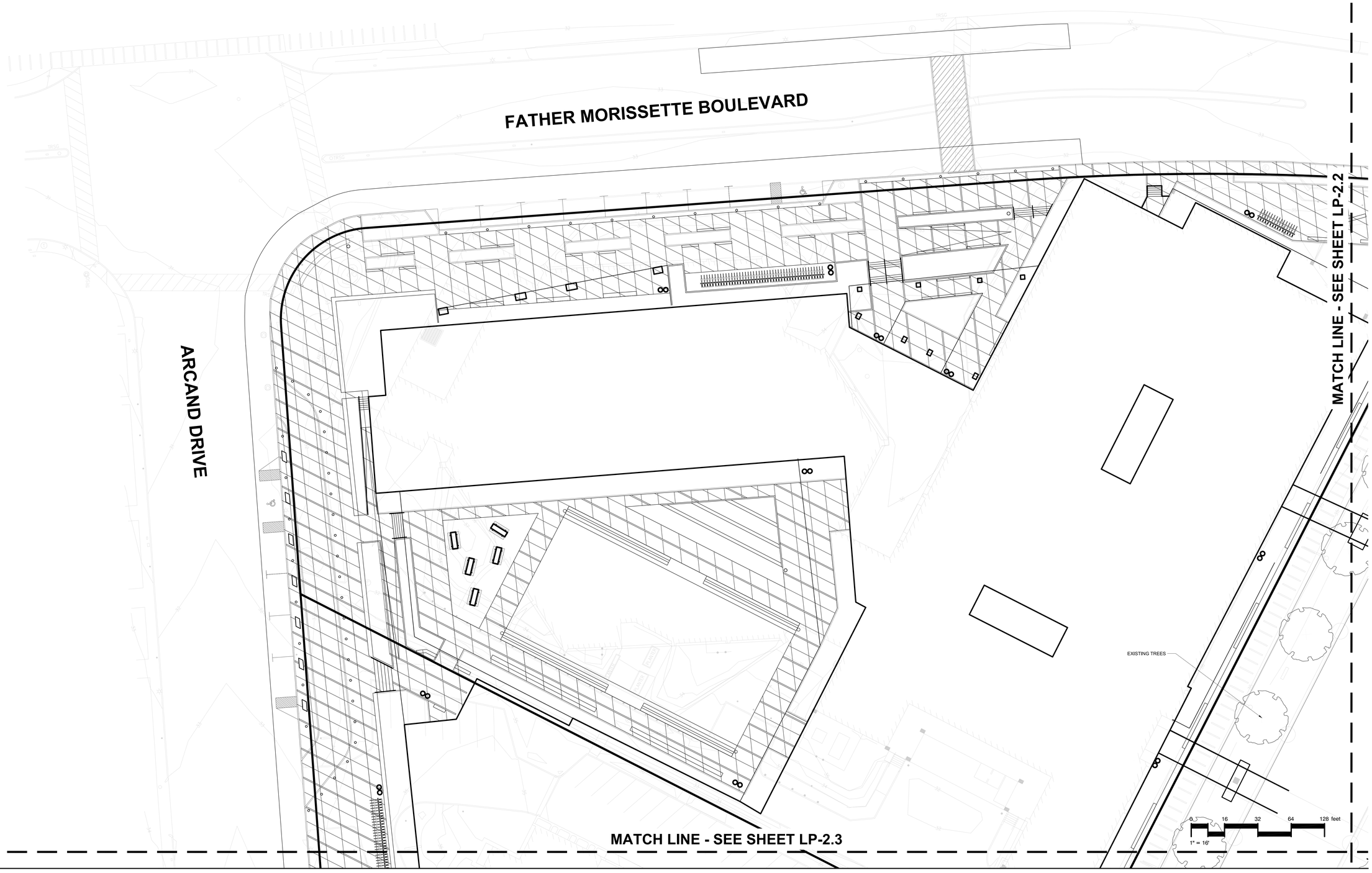
SCALE: 1"=30'-0"

LP-2.0

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

NOTES:
1. TREE PROTECTION SHALL BE APPLIED TO ALL TREES TO REMAIN WITHIN LUCY LARCOM PARK.
2. ALL TREES TO REMAIN SHALL BE PRUNED FOR FORM AND TO REMOVE ANY DEAD OR DAMAGED LEAVES.



NO.	DATE	ISSUE
1	12.21.18	LEGIBILITY

NOTES

SEAL

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115 Fifth Avenue
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Traverse Landscape Architects
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Structural:
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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
PLANTING PLAN 1

SCALE: 1"=16'-0"

LP-2.1

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

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CONCEPT PLANT SCHEDULE HS LP-2.2

	STREET TREE -	8
	ORNAMENTAL SHADE TREE -	2
	GROUNDCOVER/PERENNIAL MIX -	7,150 sf
	BIO-RETENTION/RAIN GARDEN MIX -	274 sf

NOTES:
1. TREE PROTECTION SHALL BE APPLIED TO ALL TREES TO REMAIN WITHIN LUCY LARCOM PARK.
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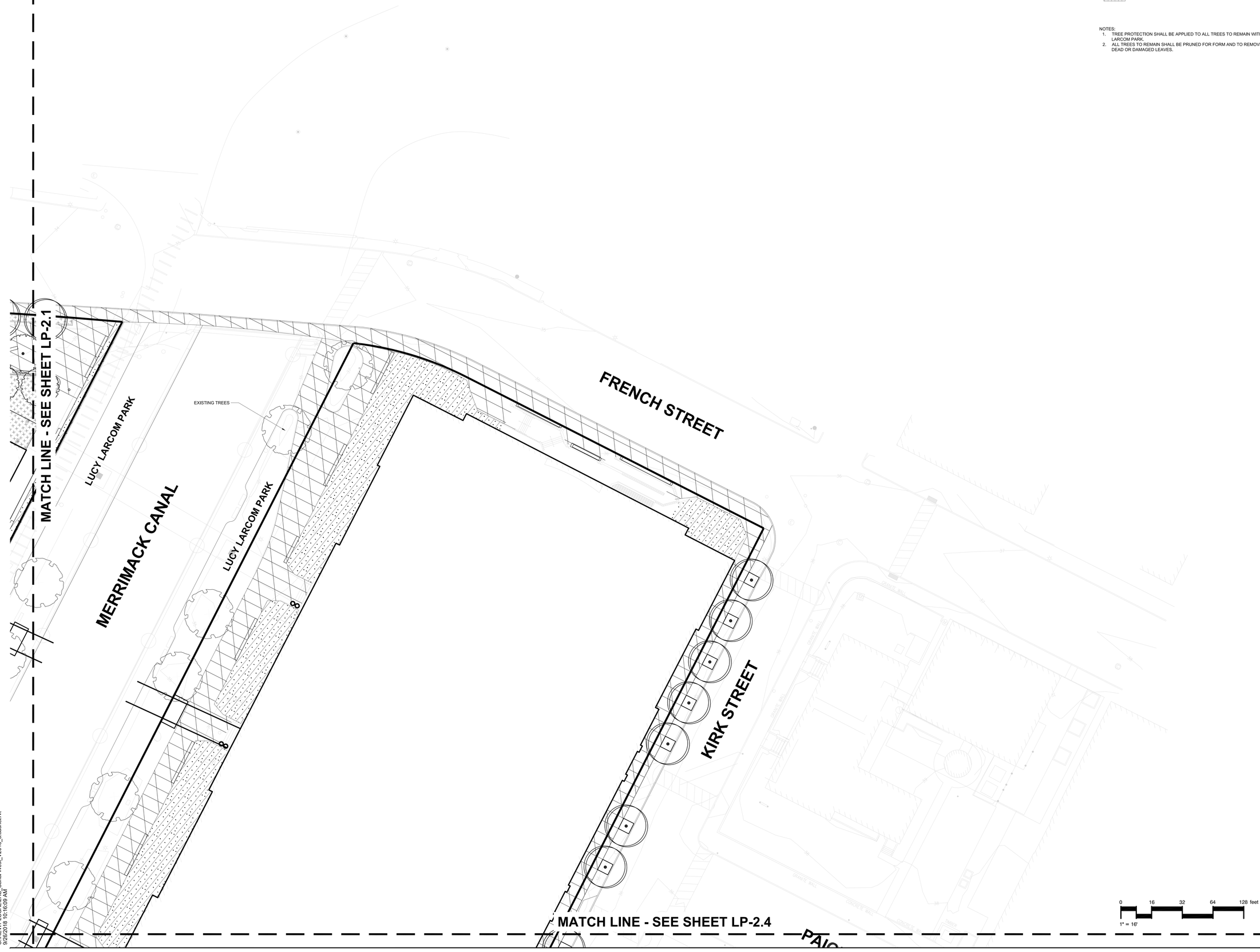

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Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

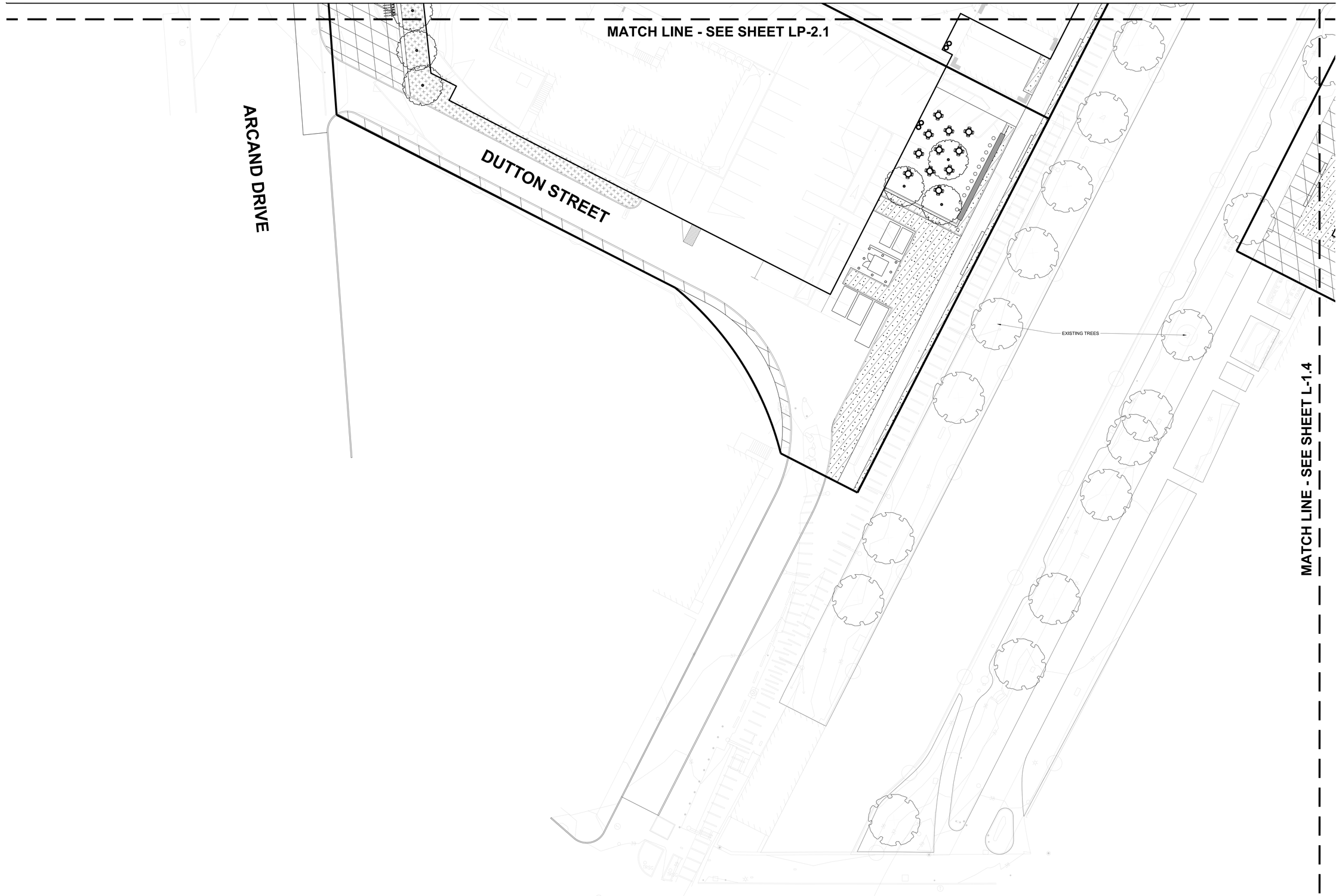
DRAWING TITLE:
PLANTING PLAN 2

SCALE: 1"=16'-0"

LP-2.2

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



CONCEPT PLANT SCHEDULE HS LP-2.3

	ORNAMENTAL SHADE TREE -	6
	GROUNDCOVER/PERENNIAL MIX -	2906 sf
	BIO-RETENTION/RAIN GARDEN MIX -	2626 sf

NOTES:
1. TREE PROTECTION SHALL BE APPLIED TO ALL TREES TO REMAIN WITHIN LUCY LARCOM PARK.
2. ALL TREES TO REMAIN SHALL BE PRUNED FOR FORM AND TO REMOVE ANY DEAD OR DAMAGED LEAVES.

0 16 32 64 128 feet
1" = 16'

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Acoustical Consultant:
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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

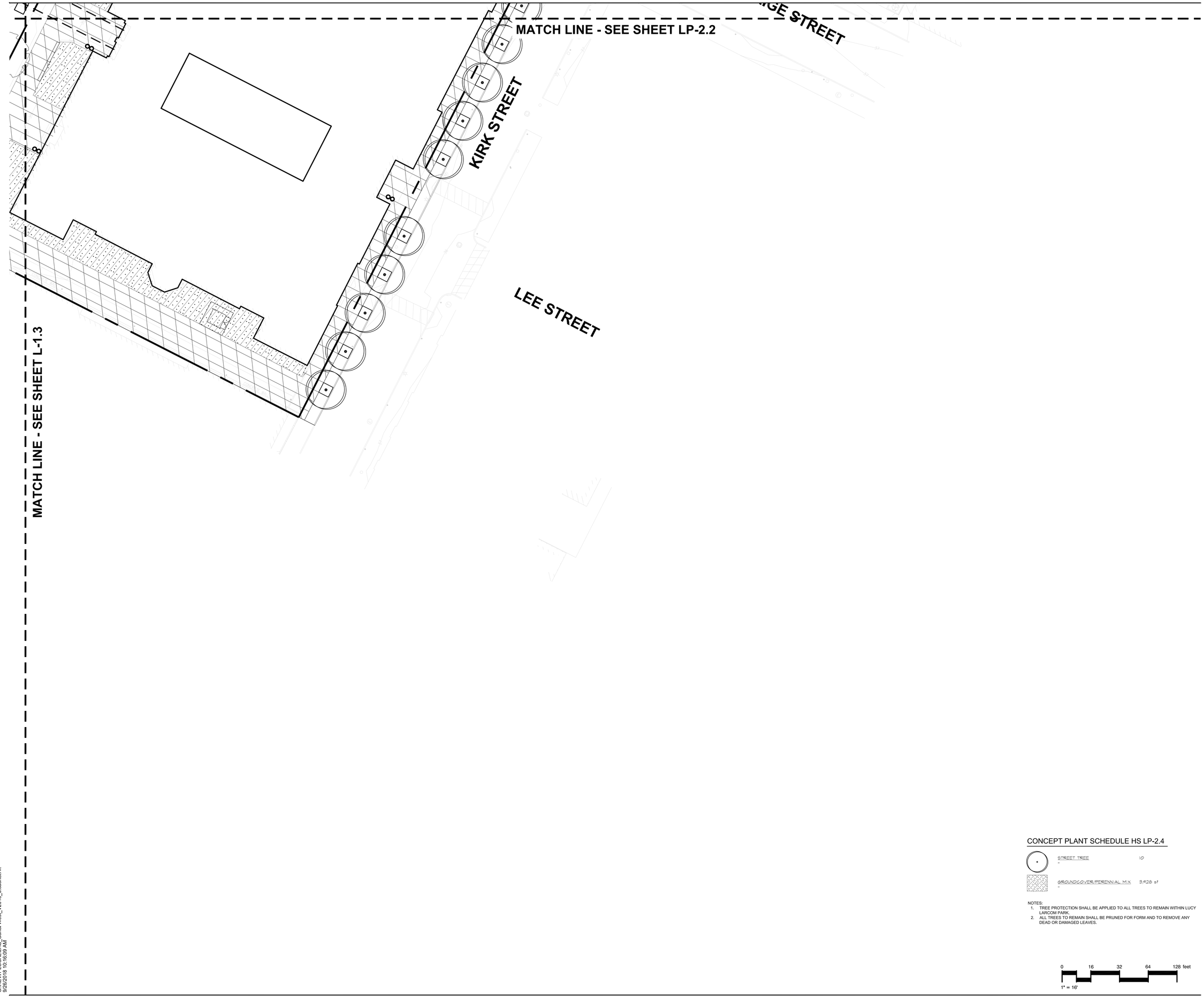
DRAWING TITLE:
PLANTING PLAN 3

SCALE: 1"=16'-0"

LP-2.3

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



CONCEPT PLANT SCHEDULE HS LP-2.4

	STREET TREE	10	
	GROUNDCOVER/PERENNIAL MIX	3,928 sf	

NOTES:
1. TREE PROTECTION SHALL BE APPLIED TO ALL TREES TO REMAIN WITHIN LUCY LARCOM PARK.
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2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

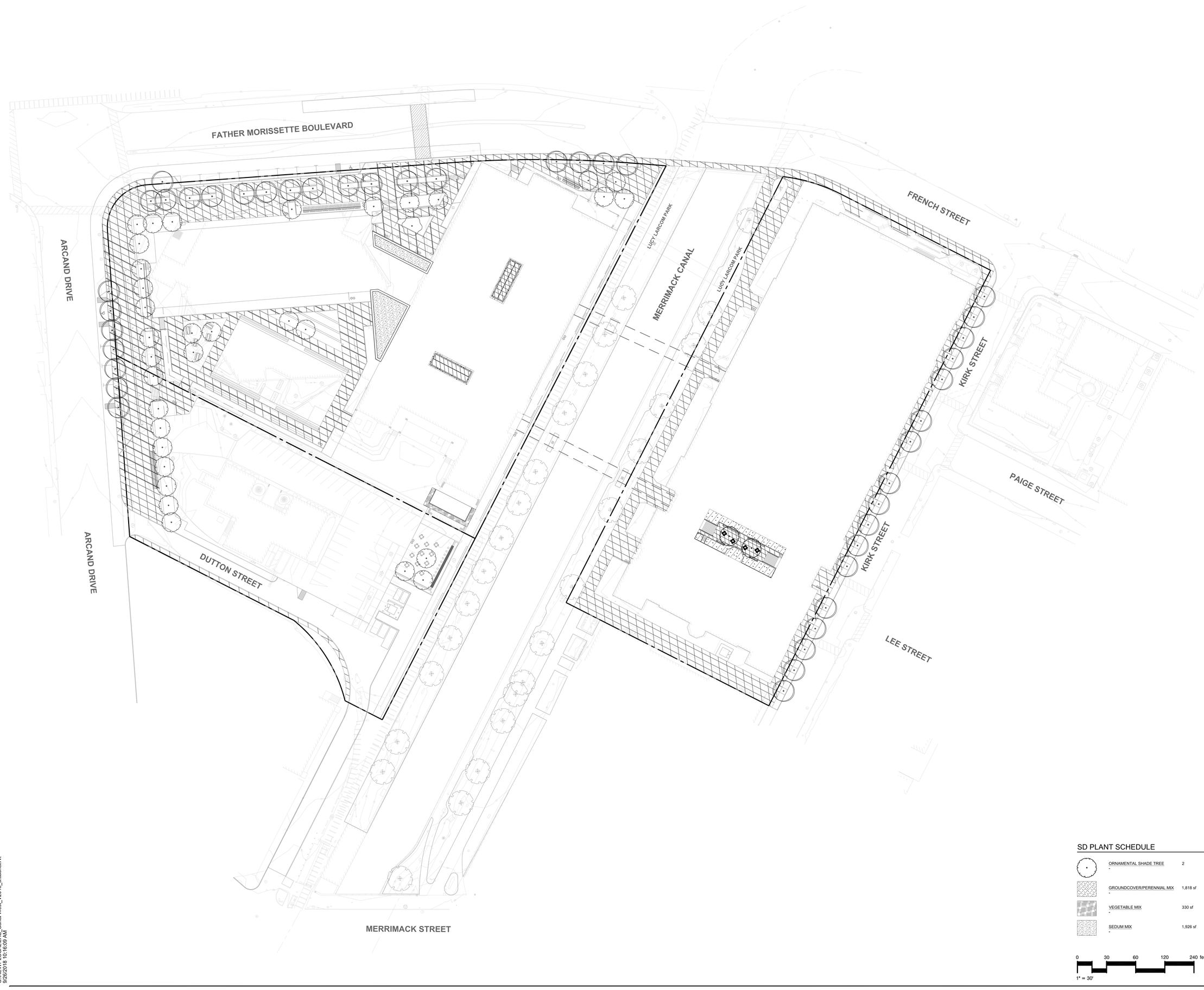
DRAWING TITLE:
PLANTING PLAN 4

SCALE: 1"=16'-0"

LP-2.4

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



SD PLANT SCHEDULE

	ORNAMENTAL SHADE TREE -	2
	GROUNDCOVER/PERENNIAL MIX -	1,818 sf
	VEGETABLE MIX -	330 sf
	SEDUM MIX -	1,926 sf

0 30 60 120 240 feet

1" = 30'

NO.	DATE	ISSUE
1	12.21.18	LEGIBILITY

NOTES

SEAL

KEY PLAN

PERKINS EASTMAN
115 Fifth Avenue
New York, NY 10003
T. +1 212 353 7200
F. +1 212 353 7676

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

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2150 Washington Street Newton, MA 02462

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Cavanagh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL PLANTING ROOF PLAN

SCALE: 1"=30'-0"

LP-2.7

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

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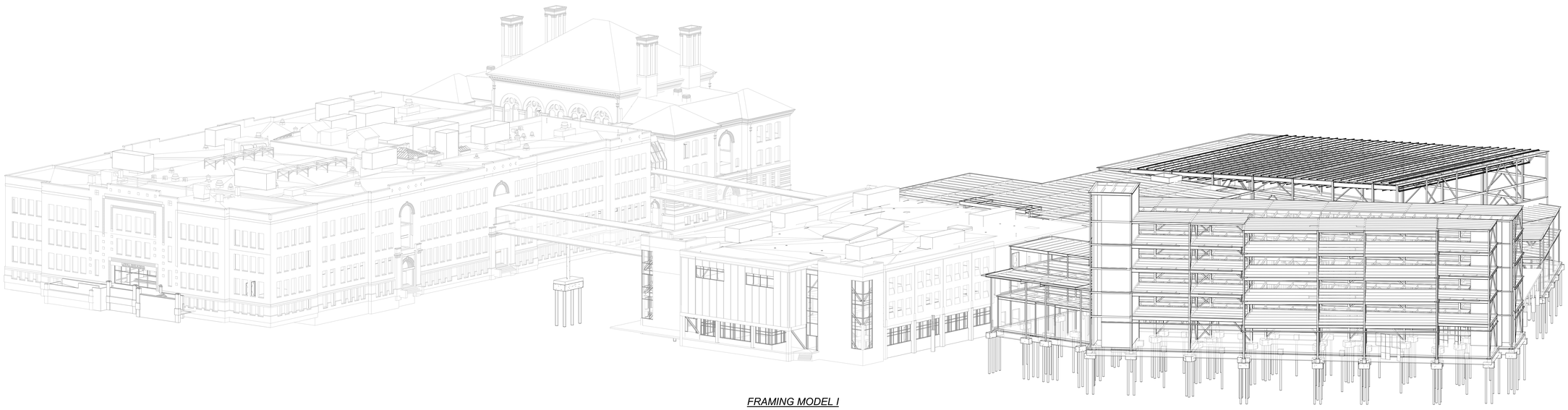


FRAMING MODEL I

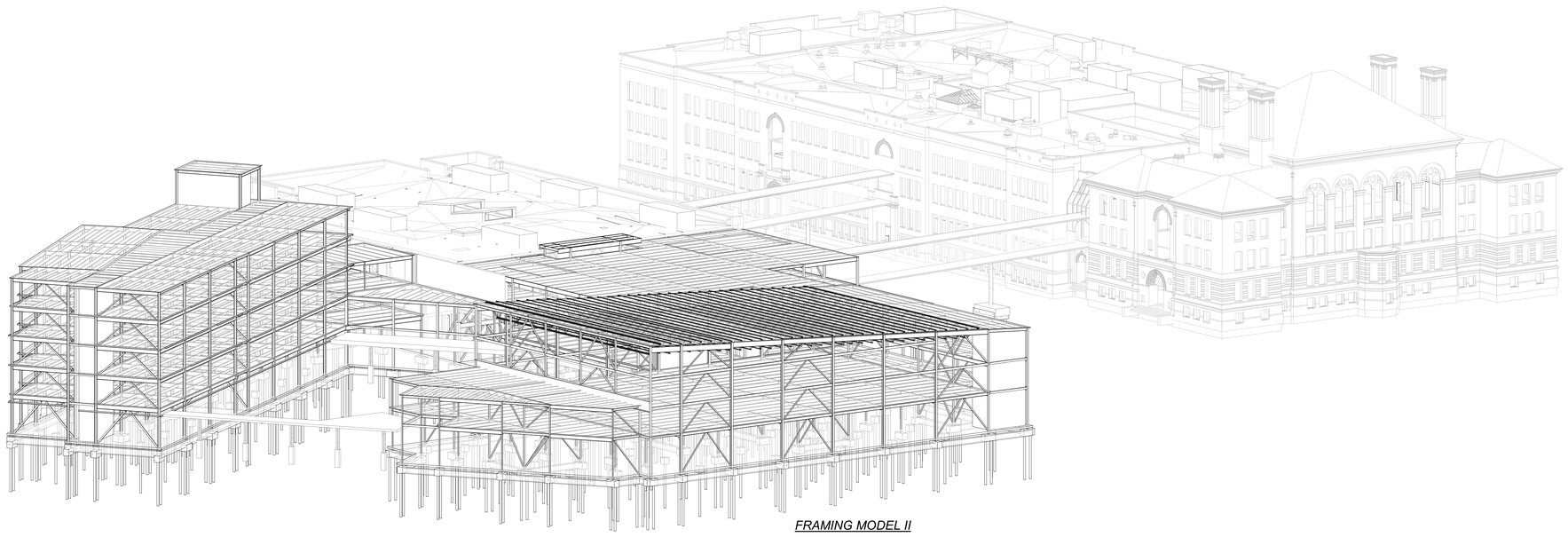
ESTIMATED WEIGHT OF STRUCTURAL STEEL:

FRESHMAN ACADEMY ADDITION: 785 TONS
GYMNASIUM ADDITION: 250 TONS (BAR JOISTS)
490 TONS (ALL OTHER STEEL)
1980 ADDITION: 395 TONS
BRIDGES: 120 TONS

THE ESTIMATED TOTAL WEIGHT OF STRUCTURAL STEEL (INCLUDING BEAMS, COLUMNS, JOISTS, BRACING, GIRTS, PLATES, ANGLES, CONNECTIONS, MISC. FRAMES, GALV. EQUIP. SCREENS, ETC., BUT EXCLUDING LOOSE LINTELS, SECONDARY EXTERIOR WALL FRAMING, ENTRY CANOPIES, ETC.) IS AS LISTED ABOVE. THIS ESTIMATED TONNAGE IS THE EXPECTED FINAL TONNAGE. IT IS RECOMMENDED THAT A STRUCTURAL STEEL UNIT PRICE CONTINGENCY BE INCLUDED TO ALLOW FOR POSSIBLE INCREASES IN STEEL COST.

FBRA STRUCTURAL DRAWING LIST

Drawing Number	*Drawing Name*
S-000	*STRUCTURAL FRAMING MODEL*
S-100	*OVERALL BASEMENT PLAN*
S-100A	*BASEMENT FOUNDATION PLAN - PART A*
S-100B	*BASEMENT FOUNDATION PLAN - PART B*
S-101	*OVERALL FIRST FLOOR PLAN*
S-101A	*FIRST FLOOR FRAMING PLAN - PART A*
S-101B	*FIRST FLOOR FRAMING PLAN - PART B*
S-101C	*FIRST FLOOR/FOUNDATION PLAN - PART C*
S-101D	*FIRST FLOOR/FOUNDATION PLAN - PART D*
S-101E	*FIRST FLOOR/FOUNDATION PLAN - PART E*
S-101F	*FIRST FLOOR/FOUNDATION PLAN - PART F*
S-101G	*FOUNDATION PLAN - PART G*
S-102	*OVERALL SECOND FLOOR PLAN*
S-102A	*SECOND FLOOR FRAMING PLAN - PART A*
S-102B	*SECOND FLOOR FRAMING PLAN - PART B*
S-102C	*SECOND FLOOR FRAMING PLAN - PART C*
S-102D	*SECOND FLOOR FRAMING PLAN - PART D*
S-102E	*SECOND FLOOR FRAMING PLAN - PART E*
S-102F	*SECOND FLOOR FRAMING PLAN - PART F*
S-102G	*SECOND FLOOR FRAMING PLAN - PART G*
S-103	*OVERALL THIRD FLOOR PLAN*
S-103A	*THIRD FLOOR FRAMING PLAN - PART A*
S-103B	*THIRD FLOOR FRAMING PLAN - PART B*
S-103C	*THIRD FLOOR FRAMING PLAN - PART C*
S-103D	*THIRD FLOOR FRAMING PLAN - PART D*
S-103E	*THIRD FLOOR FRAMING PLAN - PART E*
S-103F	*THIRD FLOOR FRAMING PLAN - PART F*
S-103G	*ROOF FRAMING PLAN - PART G*
S-104	*OVERALL FOURTH FLOOR/ATTIC PLAN*
S-104B	*ATTIC FRAMING PLAN - PART B*
S-104C	*ROOF FRAMING PLAN - PART C*
S-104D	*ROOF FRAMING PLAN - PART D*
S-104E	*FOURTH FLOOR FRAMING PLAN - PART E*
S-104F	*FOURTH FLOOR FRAMING PLAN - PART F*
S-105	*OVERALL FIFTH FLOOR/ROOF PLAN*
S-105A	*ROOF FRAMING PLAN - PART A*
S-105B	*ROOF FRAMING PLAN - PART B*
S-105E	*ROOF FRAMING PLAN - PART E*
S-105F	*FIFTH FLOOR FRAMING PLAN - PART F*
S-106	*OVERALL ROOF PLAN*
S-106F	*ROOF FRAMING PLAN - PART F*
S-201C.1	*BRACE FRAME ELEVATIONS I - PART C*
S-201C.2	*BRACE FRAME ELEVATIONS II - PART C*
S-201D	*BRACE FRAME ELEVATIONS - PART D*
S-201E	*BRACE FRAME ELEVATIONS - PART E*
S-201F	*BRACE FRAME ELEVATIONS - PART F*



FRAMING MODEL II

PROGRESS PRINT
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
12/12/18
NOT FOR CONSTRUCTION

SCHEMATIC FRAMING DIAGRAM
THREE DIMENSIONAL FRAMING DIAGRAM IS SCHEMATIC ONLY.
-REFER TO THE PLANS, SECTIONS AND ELEVATIONS FOR SPECIFIC DETAILS.

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NO. DATE ISSUE

SEAL

N

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
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VAV International
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Crabtree McGrath
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Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

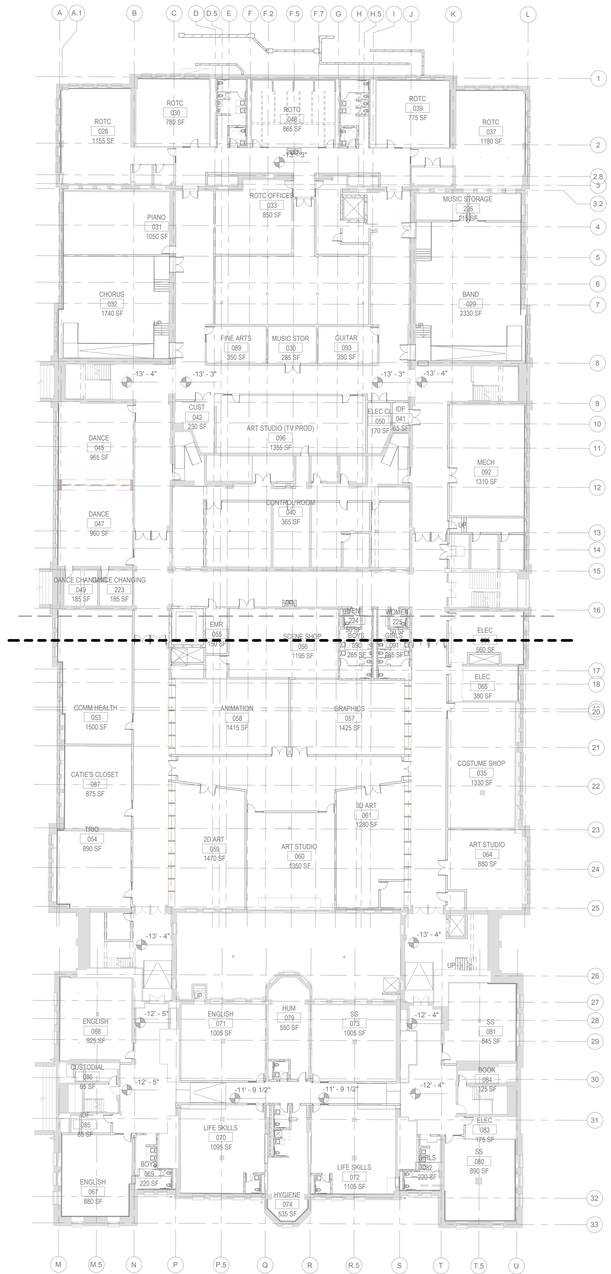
DRAWING TITLE:
STRUCTURAL FRAMING MODEL

SCALE: As indicated

S-000

SCHEMATIC DESIGN SUBMISSION

2/20/2019



OVERALL BASEMENT

3/64" = 1'-0"

NO.	DATE	ISSUE

SEAL

KEY PLAN

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20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

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375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

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2 Center Plaza Suite 430 Boston, MA 02108

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Acoustical Consultant:
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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL BASEMENT PLAN

SCALE: 3/64" = 1'-0"

S-100

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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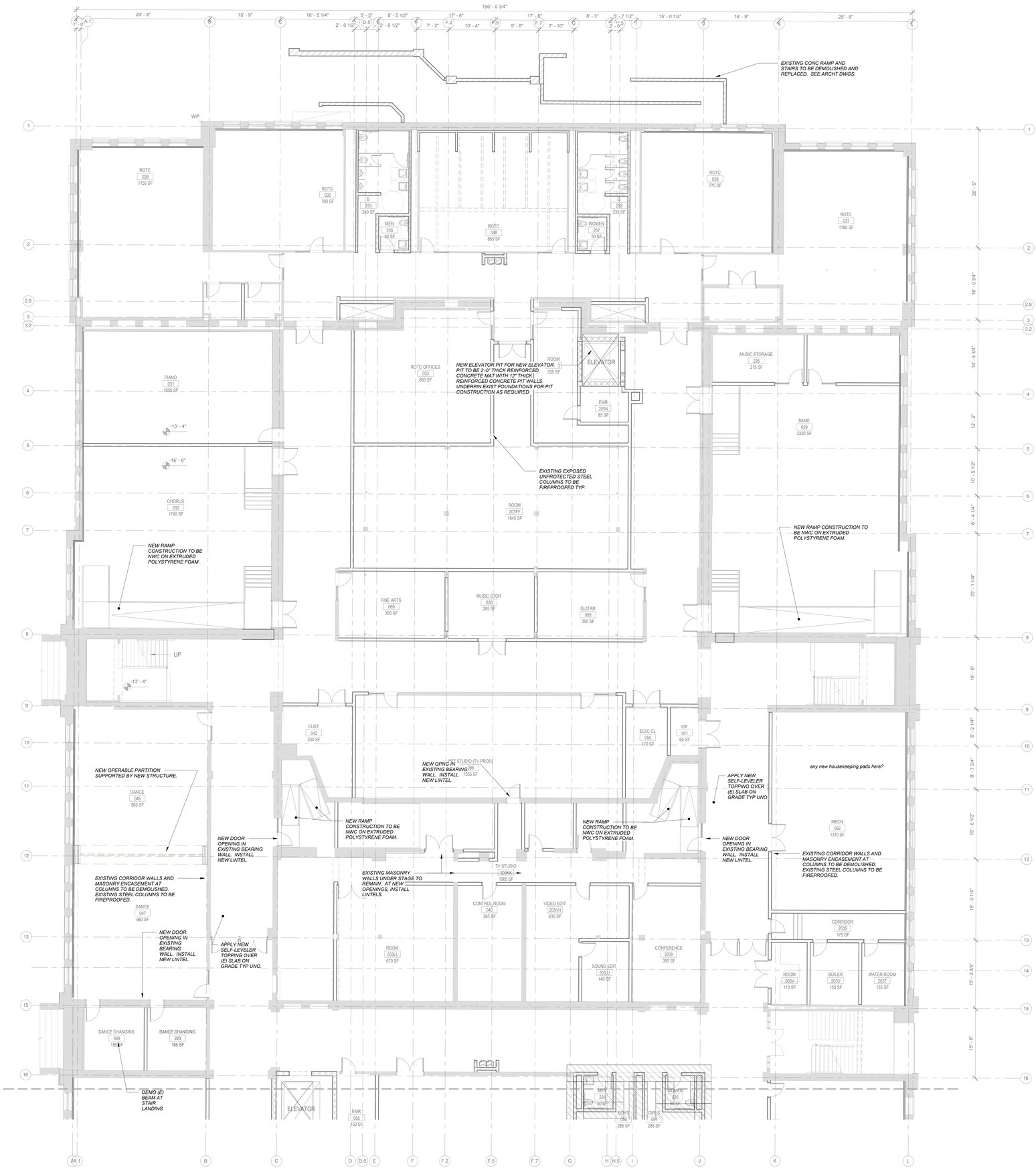

BASEMENT FLOOR PLAN - NORTH

1/8" = 1'-0"

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

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Code Consultant:
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142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

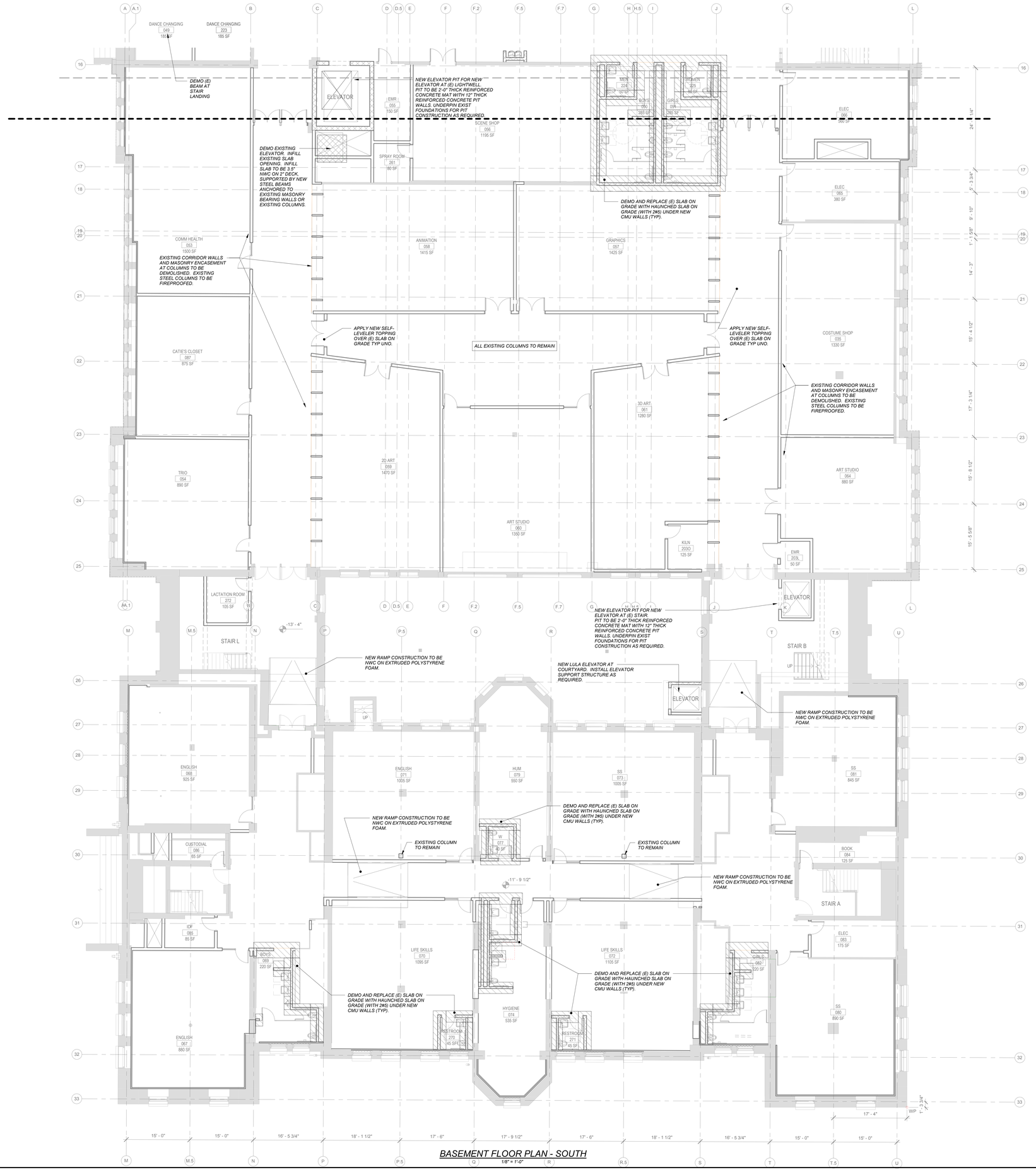
DRAWING TITLE:
BASEMENT FOUNDATION PLAN - PART A

SCALE: 1/8" = 1'-0"

S-100A

SCHEMATIC DESIGN SUBMISSION

2/20/2019



BASEMENT FLOOR PLAN - SOUTH
1/8" = 1'-0"

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

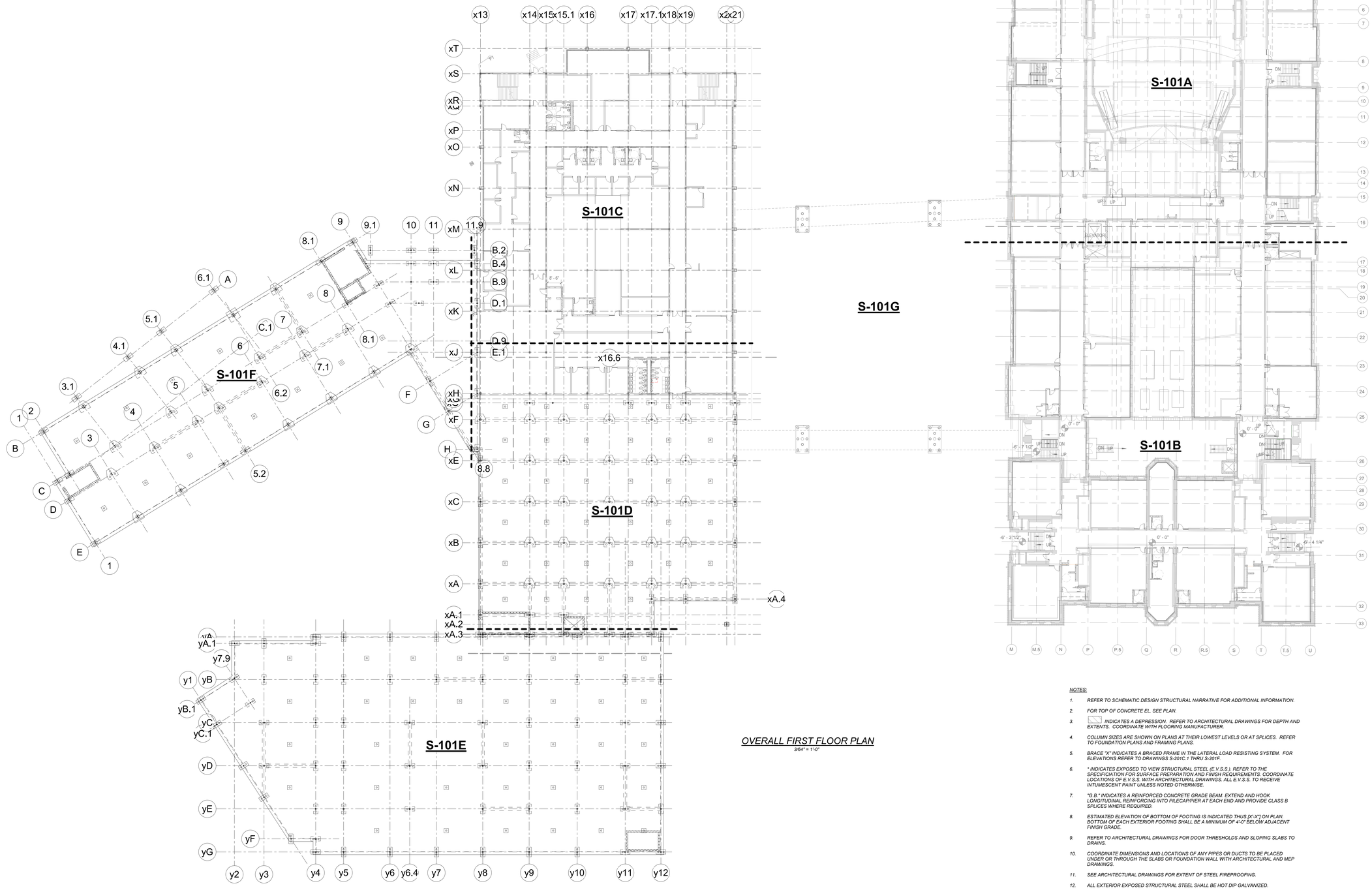
DRAWING TITLE:
BASEMENT FOUNDATION PLAN - PART B

SCALE: 1/8" = 1'-0"

S-100B

SCHEMATIC DESIGN SUBMISSION

2/20/2019



OVERALL FIRST FLOOR PLAN
3/64" = 1'-0"

NOTES:

1. *REFER TO SCHEMATIC DESIGN STRUCTURAL NARRATIVE FOR ADDITIONAL INFORMATION.*
2. *FOR TOP OF CONCRETE EL. SEE PLAN.*
3. *INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.*
4. *COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.*
5. *BRACE "X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS REFER TO DRAWINGS S-201C.1 THRU S-201F.*
6. *" INDICATES EXPOSED TO VIEW STRUCTURAL STEEL (E.V.S.S.). REFER TO THE SPECIFICATION FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF E.V.S.S. WITH ARCHITECTURAL DRAWINGS. ALL E.V.S.S. TO RECEIVE INTUMESCENT PAINT UNLESS NOTED OTHERWISE.*
7. *"G.B." INDICATES A REINFORCED CONCRETE GRADE BEAM. EXTEND AND HOOK LONGITUDINAL REINFORCING INTO PILECAP/PIER AT EACH END AND PROVIDE CLASS B SPLICES WHERE REQUIRED.*
8. *ESTIMATED ELEVATION OF BOTTOM OF FOOTING IS INDICATED THUS [X'-X"] ON PLAN. BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT FINISH GRADE.*
9. *REFER TO ARCHITECTURAL DRAWINGS FOR DOOR THRESHOLDS AND SLOPING SLABS TO DRAINS.*
10. *COORDINATE DIMENSIONS AND LOCATIONS OF ANY PIPES OR DUCTS TO BE PLACED UNDER OR THROUGH THE SLABS OR FOUNDATION WALL WITH ARCHITECTURAL AND MEP DRAWINGS.*
11. *SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.*
12. *ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

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20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
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142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL FIRST FLOOR PLAN

SCALE: As indicated

S-101

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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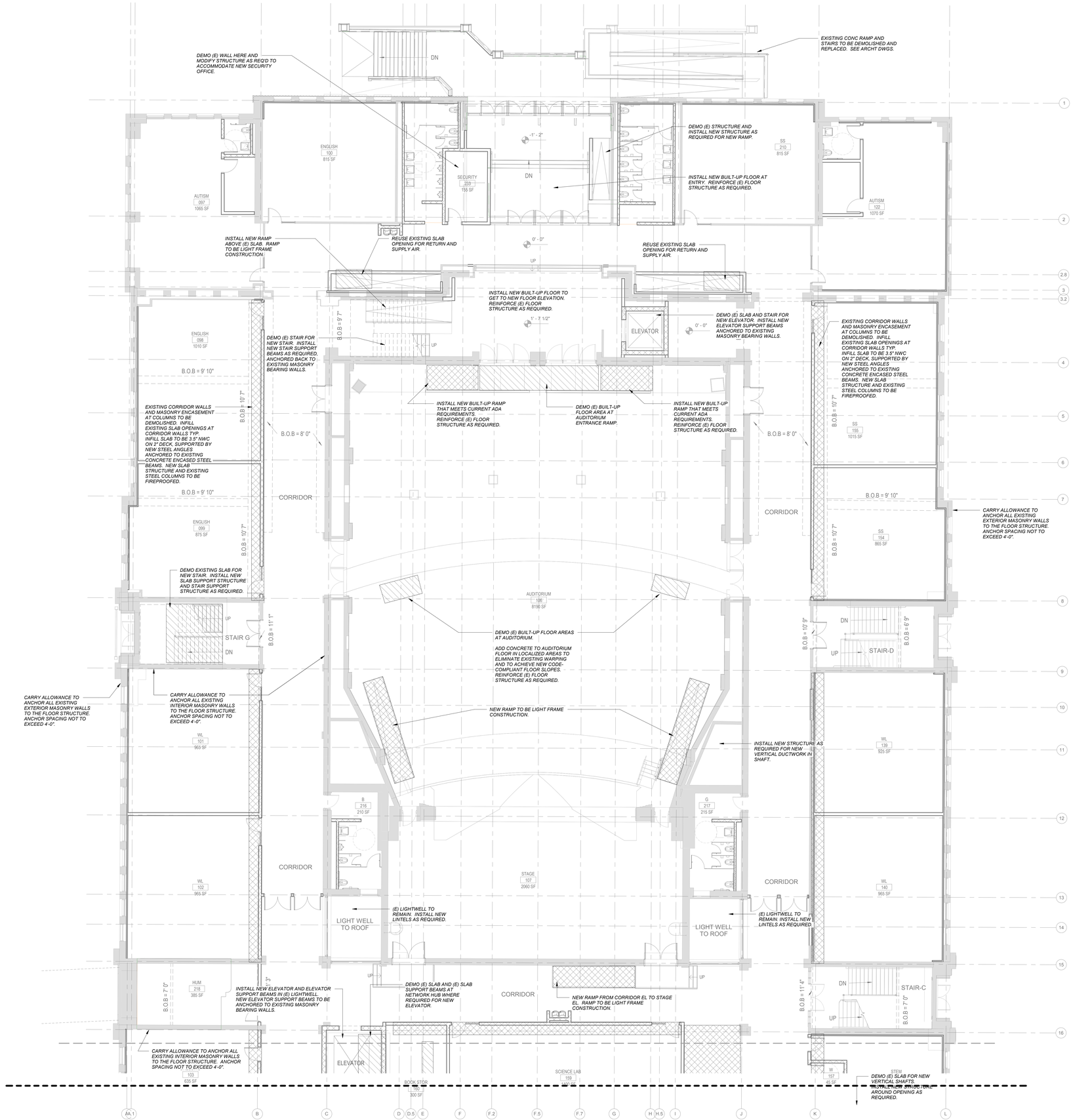

FIRST FLOOR FRAMING PLAN - PART A
1/8" = 1'-0"

1922 RENOVATION NOTES:

1. *CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED. (WHEREVER POSSIBLE, REUSE EXISTING SLAB OPENINGS.)*
2. *CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. AT 1922 BUILDING, INFILL EXISTING OPENINGS WITH 3.5" NWC ON TOP OF 2" DECK. AT 1890's BUILDING, INFILL EXISTING OPENINGS WITH PLYWOOD ON TOP OF ENGINEERED LUMBER. AT 1995 BUILDING, INFILL EXISTING OPENINGS WITH 2.5" NWC ON TOP OF 2" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. WHERE APPLICABLE, DRILL AND EPOXY #4 DOWELS INTO EXISTING CONCRETE SLAB AT ALL SIDES.*
3. *CARRY ALLOWANCE FOR NEW DUCT OPENINGS IN EXISTING MASONRY BEARING WALLS. INSTALL NEW STEEL LINTELS AS REQUIRED. (WHEREVER POSSIBLE, REROUTE DUCTS TO ELIMINATE OR MINIMIZE OPENINGS IN MASONRY BEARING WALLS. REUSE EXISTING OPENINGS WHERE POSSIBLE.)*

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR FRAMING PLAN - PART A

SCALE: 1/8" = 1'-0"

S-101A

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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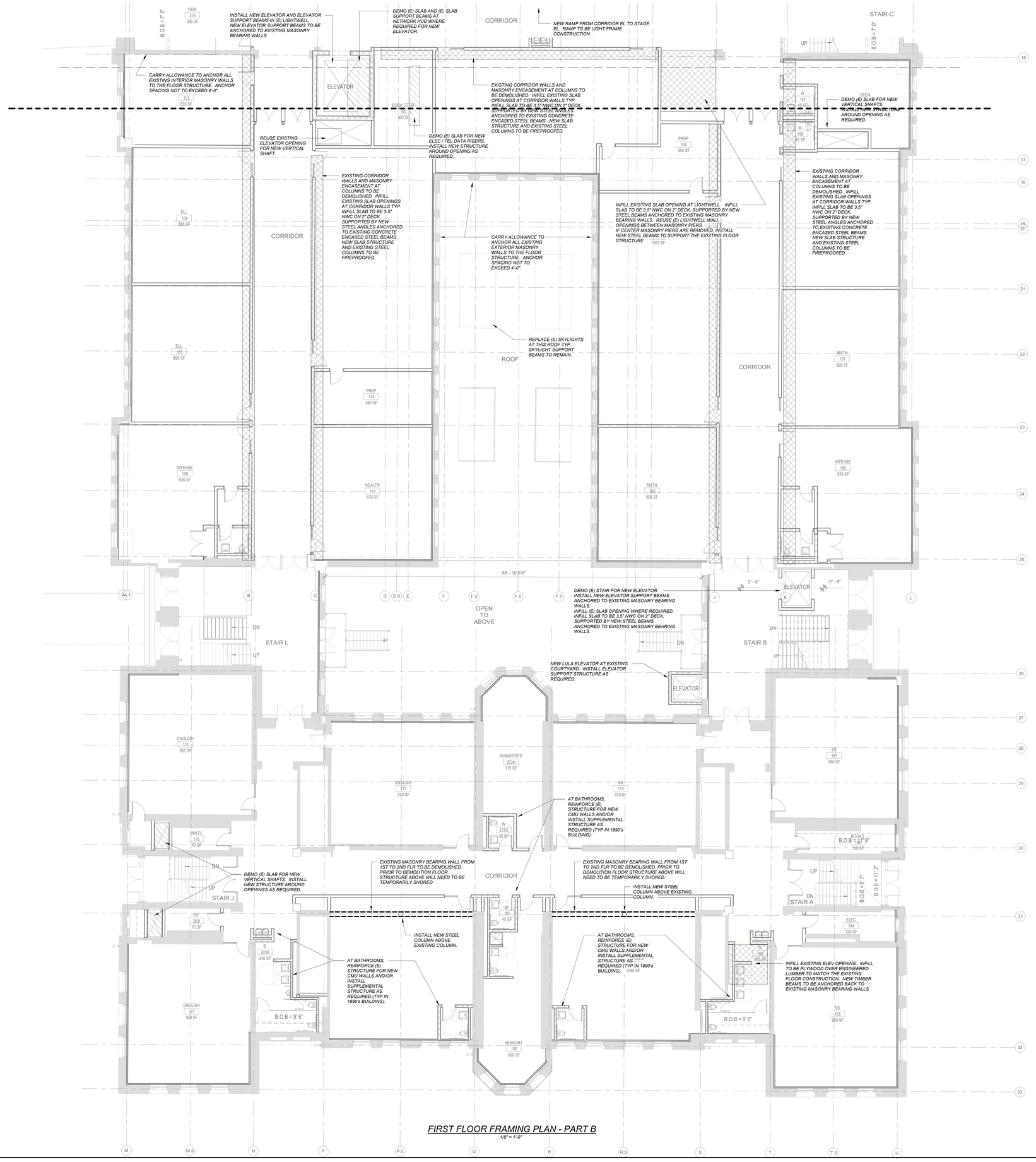

FIRST FLOOR FRAMING PLAN - PART B

1/8" = 1'-0"

1922 RENOVATION NOTES:

1. *CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED. (WHEREVER POSSIBLE, REUSE EXISTING SLAB OPENINGS.)*
2. *CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. AT 1922 BUILDING, INFILL EXISTING OPENINGS WITH 3.5" NWC ON TOP OF 2" DECK. AT 1890's BUILDING, INFILL EXISTING OPENINGS WITH PLYWOOD ON TOP OF ENGINEERED LUMBER. AT 1995 BUILDING, INFILL EXISTING OPENINGS WITH 2.5" NWC ON TOP OF 2" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. WHERE APPLICABLE, DRILL AND EPOXY #4 DOWELS INTO EXISTING CONCRETE SLAB AT ALL SIDES.*
3. *CARRY ALLOWANCE FOR NEW DUCT OPENINGS IN EXISTING MASONRY BEARING WALLS. INSTALL NEW STEEL LINTELS AS REQUIRED. (WHEREVER POSSIBLE, REROUTE DUCTS TO ELIMINATE OR MINIMIZE OPENINGS IN MASONRY BEARING WALLS. REUSE EXISTING OPENINGS WHERE POSSIBLE.)*

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Teaverra Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

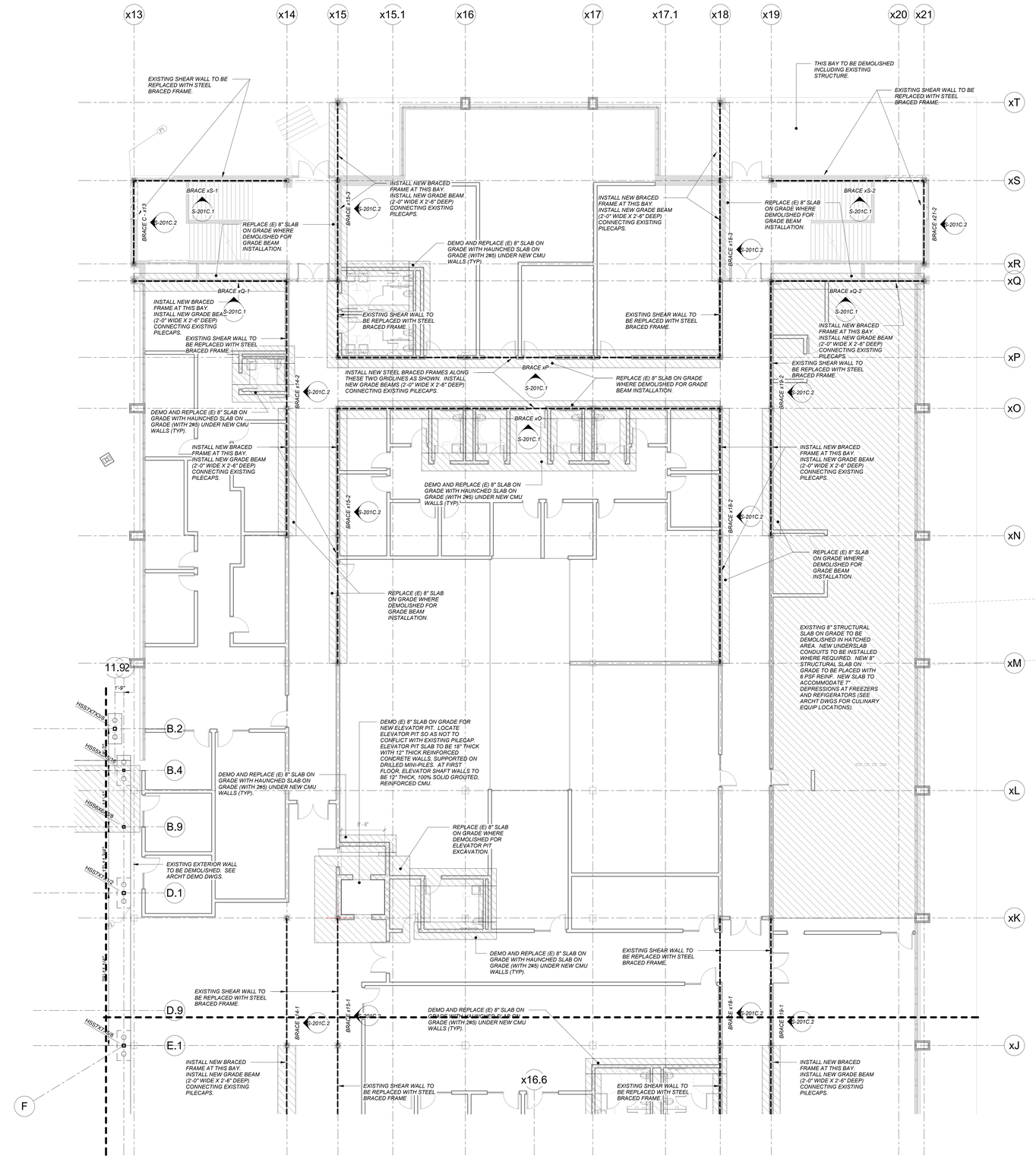
DRAWING TITLE:
FIRST FLOOR FRAMING PLAN - PART B

SCALE: 1/8" = 1'-0"

S-101B

SCHEMATIC DESIGN SUBMISSION

2/20/2019



FIRST FLOOR/FOUNDATION PLAN - PART C

1/8" = 1'-0"

1980 FIRST FLOOR RENOVATION NOTES:

1. *ALL NEW INTERIOR CMU WALLS TO BE BRACED AT THE TOP TO EXISTING STRUCTURE. ANCHOR SPACING TO BE 4'-0" ON CENTER MAX.*
2. *CARRY ALLOWANCE FOR NEW SLAB TRENCHES. EXISTING SLAB ON GRADE TO BE SUPPORTED WITH NEW GRADE BEAMS AS REQUIRED.*
3. *CARRY ALLOWANCE FOR NEW HOUSEKEEPING PADS ON EXISTING SLAB ON GRADE.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

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F. +1 617 449 4049

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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

FIRST FLOOR/FOUNDATION PLAN - PART C

SCALE: 1/8" = 1'-0"

S-101C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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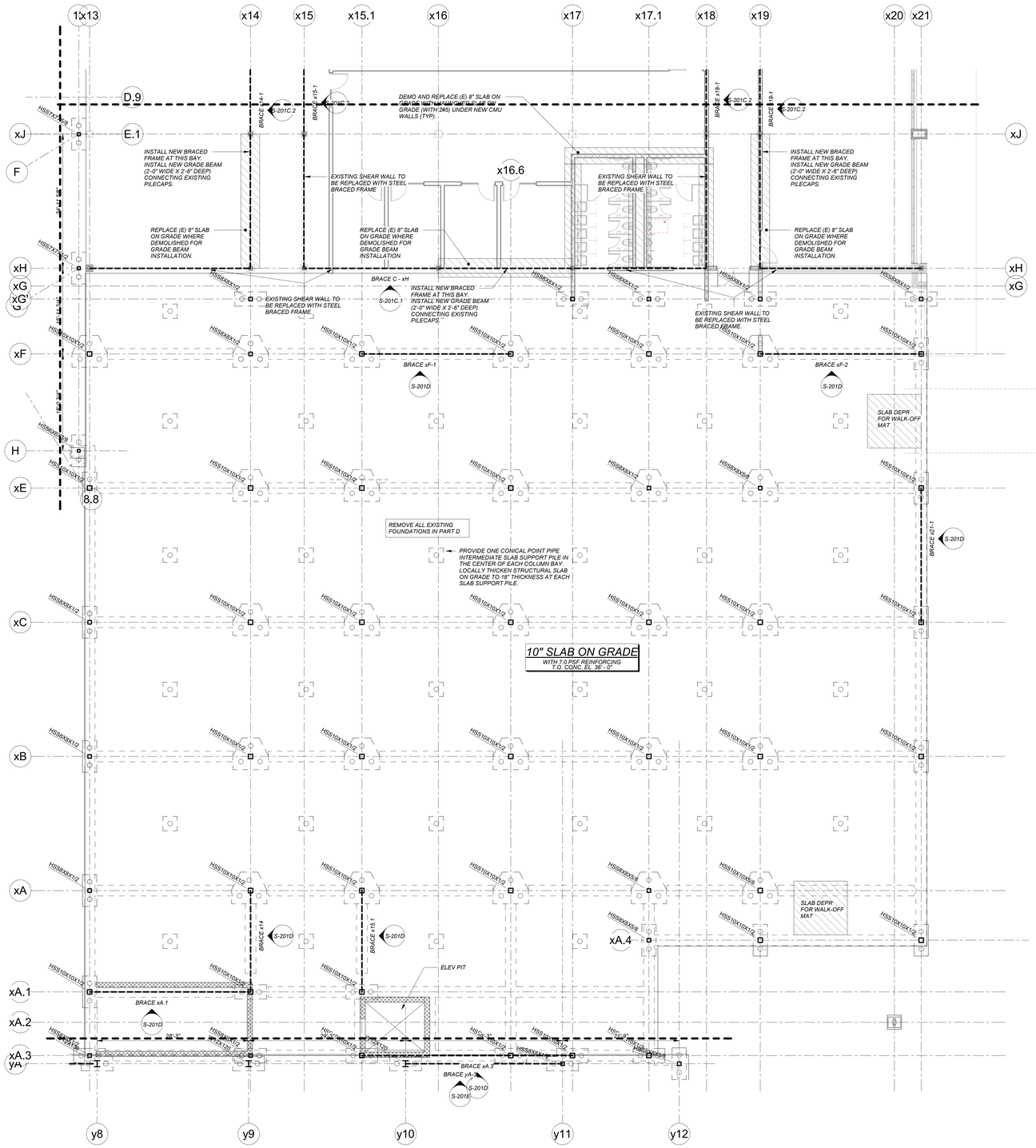

FIRST FLOOR/FOUNDATION PLAN - PART D

1/8" = 1'-0"

1980 FIRST FLOOR RENOVATION NOTES:

1. ALL NEW INTERIOR CMU WALLS TO BE BRACED AT THE TOP TO EXISTING STRUCTURE. ANCHOR SPACING TO BE 4'-0" ON CENTER MAX.
2. CARRY ALLOWANCE FOR NEW SLAB TRENCHES. EXISTING SLAB ON GRADE TO BE SUPPORTED WITH NEW GRADE BEAMS AS REQUIRED.
3. CARRY ALLOWANCE FOR NEW HOUSEKEEPING PADS ON EXISTING SLAB ON GRADE.

NO.	DATE	ISSUE

SEAL

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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR/FOUNDATION PLAN - PART D

SCALE: 1/8" = 1'-0"

S-101D

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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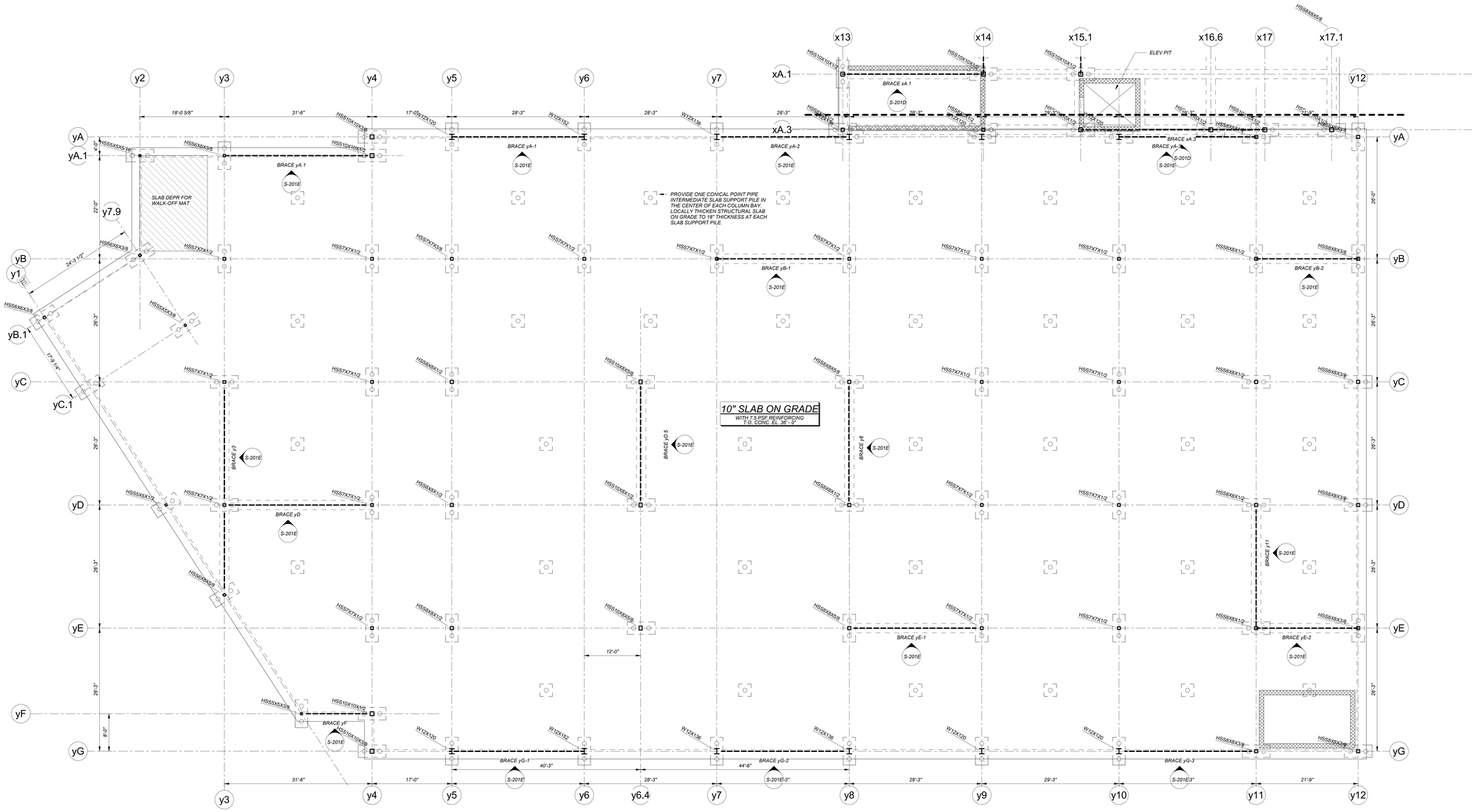

FIRST FLOOR/FOUNDATION PLAN - PART E

1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR/FOUNDATION PLAN - PART E

SCALE: 1/8" = 1'-0"

S-101E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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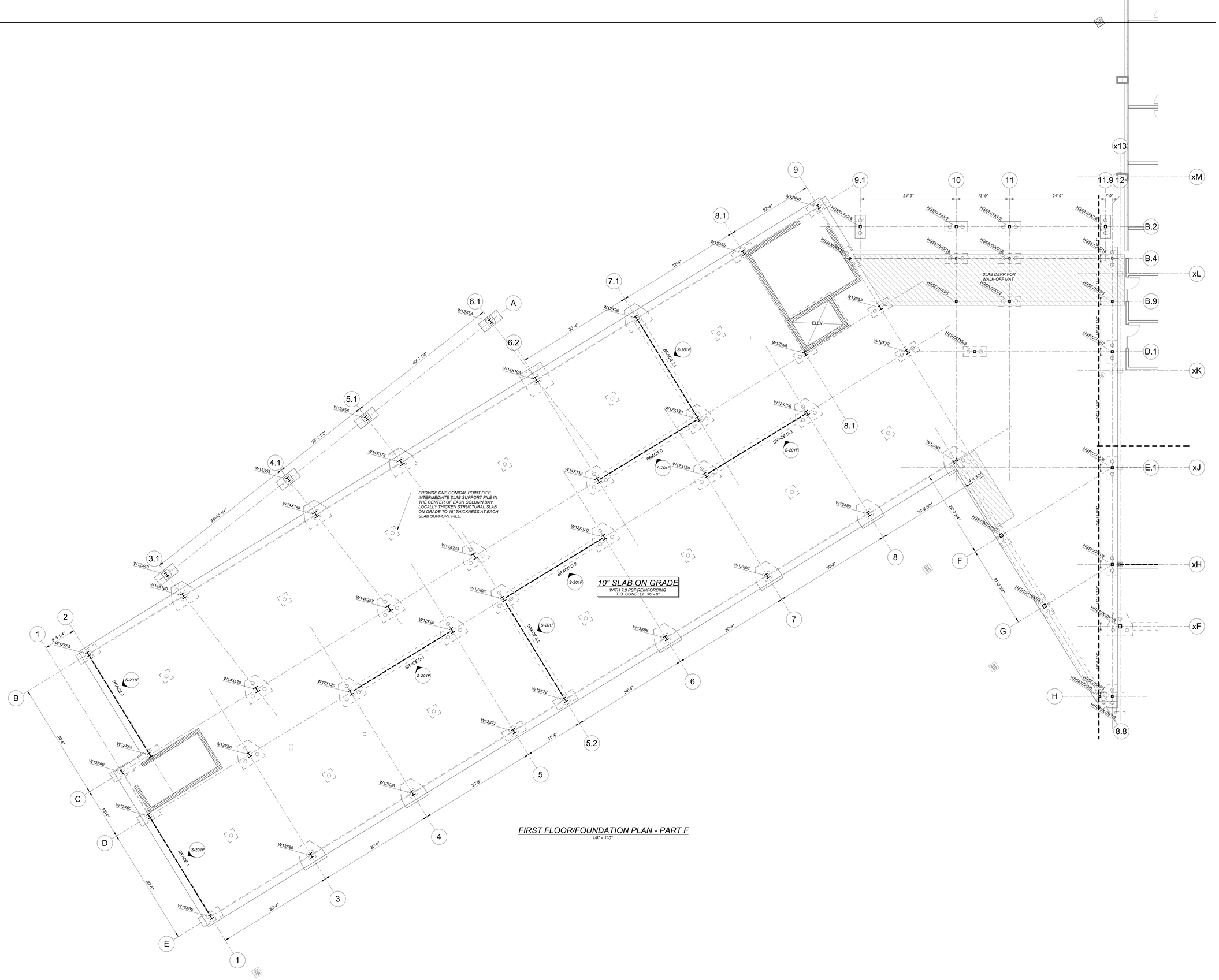

FIRST FLOOR/FOUNDATION PLAN - PART F
1/8" = 1'-0"

PROGRESS PRINT
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
12/12/18
NOT FOR CONSTRUCTION

NO.	DATE	ISSUE

SEAL

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR/FOUNDATION PLAN - PART F

SCALE: As indicated

S-101F

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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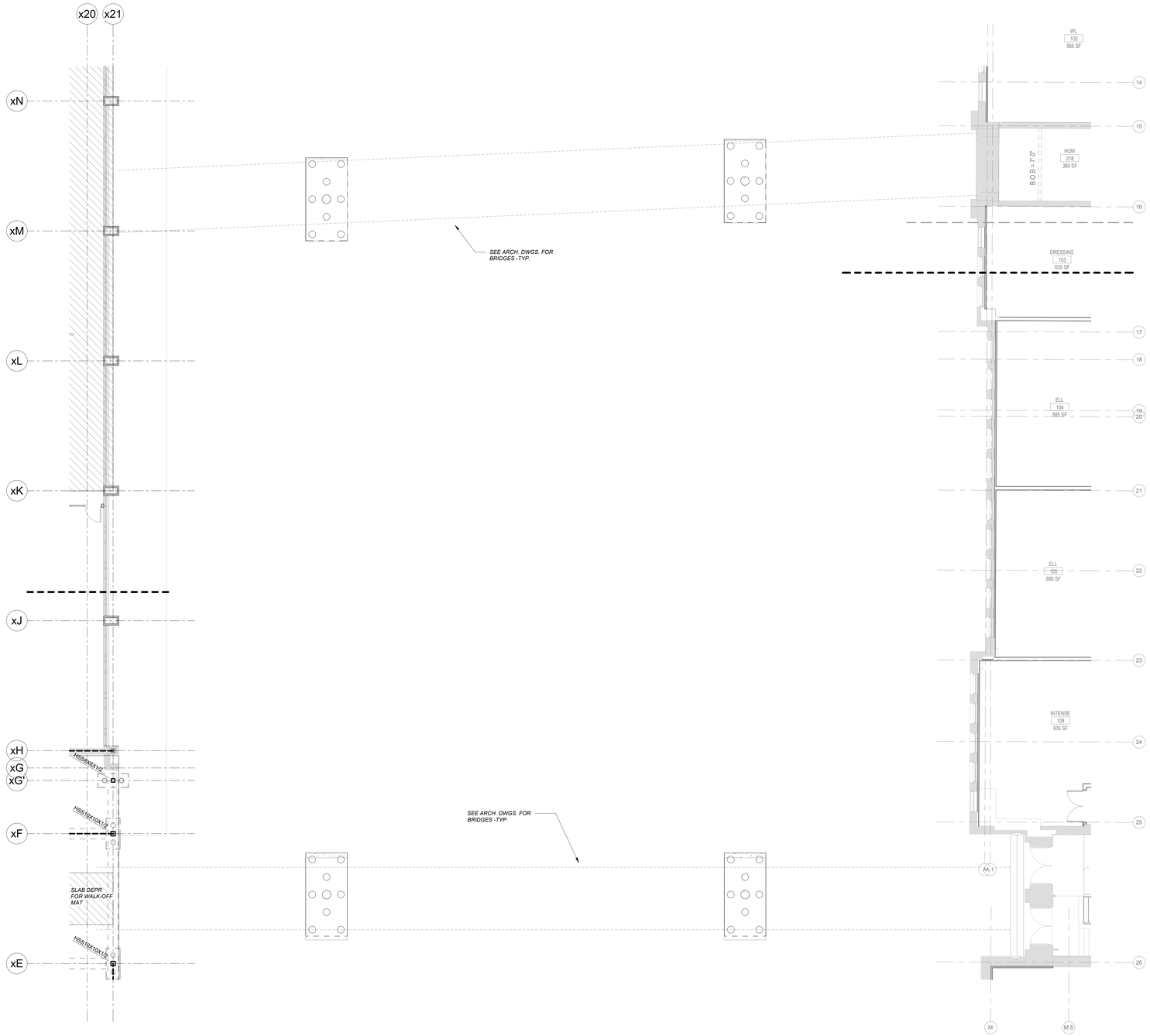

FOUNDATION PLAN - BRIDGE
1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FOUNDATION PLAN - PART G

SCALE: 1/8" = 1'-0"

S-101G

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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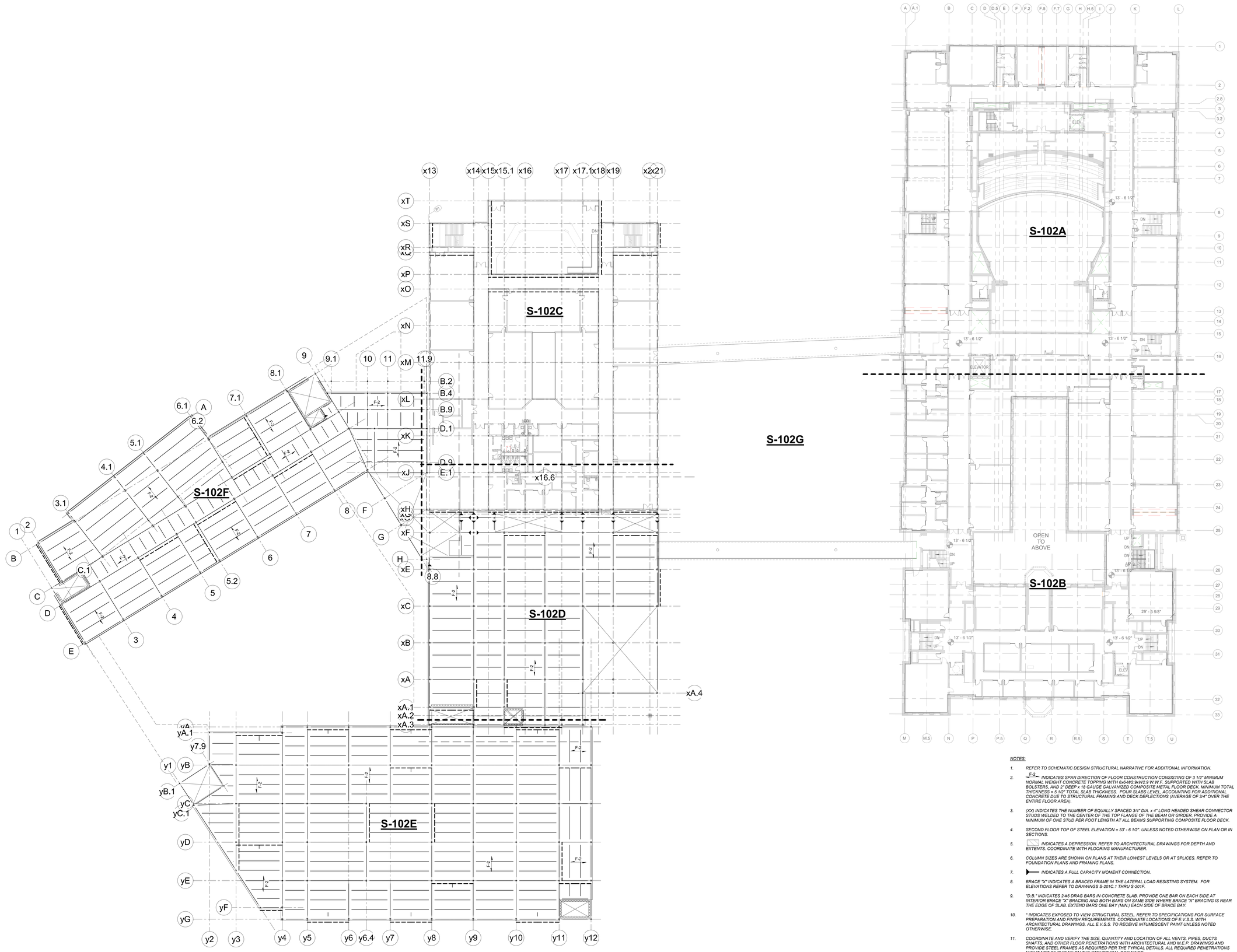

OVERALL SECOND FLOOR PLAN

3/64" = 1'-0"

NOTES:

1. *REFER TO SCHEMATIC DESIGN STRUCTURAL NARRATIVE FOR ADDITIONAL INFORMATION.*
2. *F-2 INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 3 1/2" MINIMUM NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 5 1/2" TOTAL SLAB THICKNESS. POUR SLABS LEVEL, ACCOUNTING FOR ADDITIONAL CONCRETE DUE TO STRUCTURAL FRAMING AND DECK DEFLECTIONS (AVERAGE OF 3/4" OVER THE ENTIRE FLOOR AREA).*
3. *(XX) INDICATES THE NUMBER OF EQUALLY SPACED 3/4" DIA. x 4" LONG HEADED SHEAR CONNECTOR STUDS WELDED TO THE CENTER OF THE TOP FLANGE OF THE BEAM OR GIRDER. PROVIDE A MINIMUM OF ONE STUD PER FOOT LENGTH AT ALL BEAMS SUPPORTING COMPOSITE FLOOR DECK.*
4. *SECOND FLOOR TOP OF STEEL ELEVATION = 53' - 6 1/2". UNLESS NOTED OTHERWISE ON PLAN OR IN SECTIONS.*
5. *INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.*
6. *COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.*
7. *INDICATES A FULL CAPACITY MOMENT CONNECTION.*
8. *BRACE "X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS REFER TO DRAWINGS S-201C.1 THRU S-201F.*
9. *"D.B." INDICATES 2-#5 DRAG BARS IN CONCRETE SLAB. PROVIDE ONE BAR ON EACH SIDE AT INTERIOR BRACE "X" BRACING AND BOTH BARS ON SAME SIDE WHERE BRACE "X" BRACING IS NEAR THE EDGE OF SLAB. EXTEND BARS ONE BAY (MIN.) EACH SIDE OF BRACE BAY.*
10. ** INDICATES EXPOSED TO VIEW STRUCTURAL STEEL. REFER TO SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF E.V.S.S. WITH ARCHITECTURAL DRAWINGS. ALL E.V.S.S. TO RECEIVE INTUMESCENT PAINT UNLESS NOTED OTHERWISE.*
11. *COORDINATE AND VERIFY THE SIZE, QUANTITY AND LOCATION OF ALL VENTS, PIPES, DUCTS SHAFTS, AND OTHER FLOOR PENETRATIONS WITH ARCHITECTURAL AND M.E.P. DRAWINGS AND PROVIDE STEEL FRAMES AS REQUIRED PER THE TYPICAL DETAILS. ALL REQUIRED PENETRATIONS MIGHT NOT BE SHOWN ON THE STRUCTURAL DRAWINGS.*
12. *ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.*
13. *SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL SECOND FLOOR PLAN

SCALE: As indicated

S-102

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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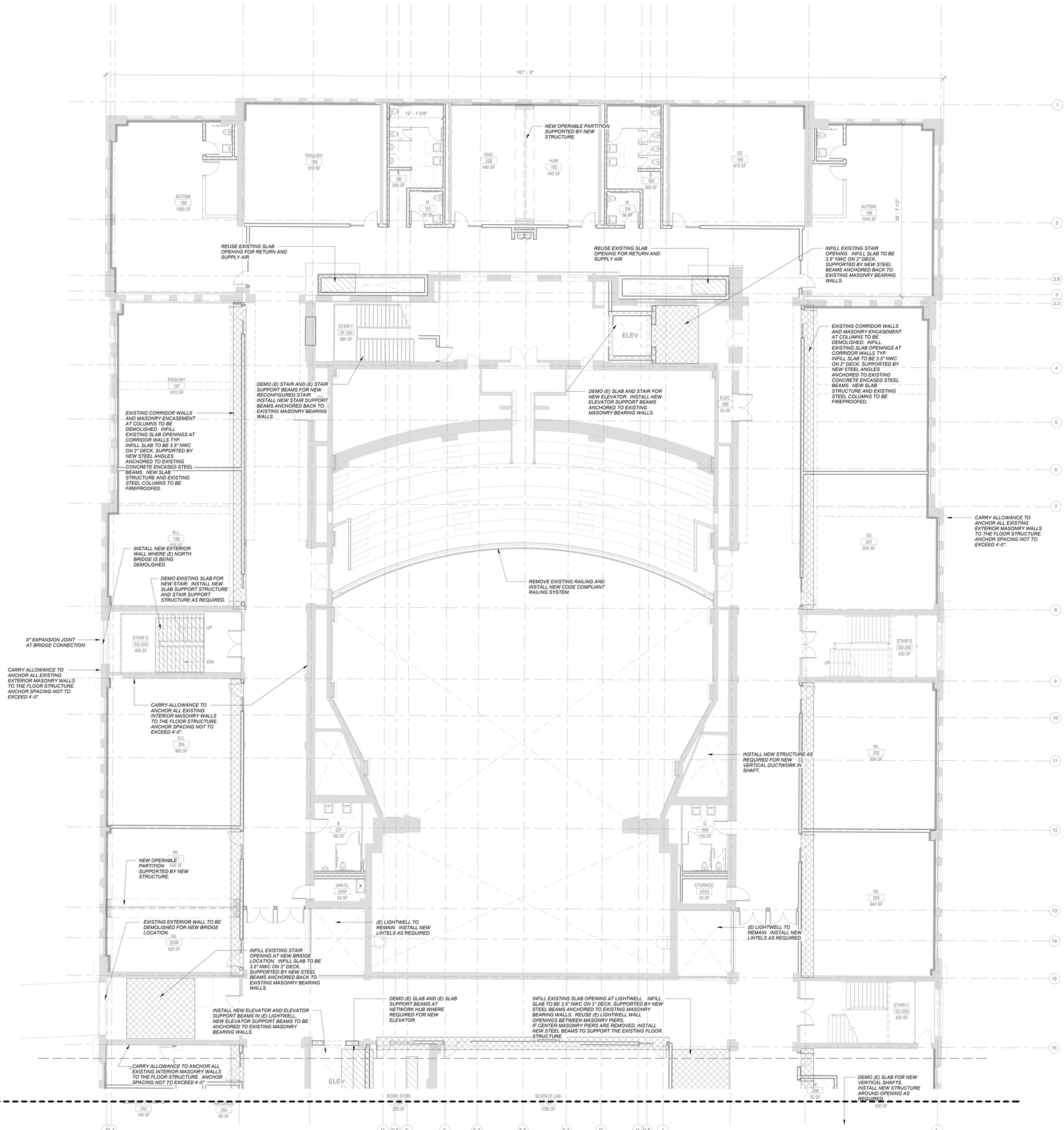

SECOND FLOOR PLAN - NORTH

1/8" = 1'-0"

1922 RENOVATION NOTES:

1. CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED. (WHEREVER POSSIBLE, REUSE EXISTING SLAB OPENINGS.)
2. CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. AT 1922 BUILDING, INFILL EXISTING OPENINGS WITH 3.5" NWC ON TOP OF 2" DECK. AT 1890'S BUILDING, INFILL EXISTING OPENINGS WITH PLYWOOD ON TOP OF ENGINEERED LUMBER. AT 1995 BUILDING, INFILL EXISTING OPENINGS WITH 2.5" NWC ON TOP OF 2" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. WHERE APPLICABLE, DRILL AND EPOXY #4 DOWELS INTO EXISTING CONCRETE SLAB AT ALL SIDES.
3. CARRY ALLOWANCE FOR NEW DUCT OPENINGS IN EXISTING MASONRY BEARING WALLS. INSTALL NEW STEEL LINTELS AS REQUIRED. (WHEREVER POSSIBLE, REROUTE DUCTS TO ELIMINATE OR MINIMIZE OPENINGS IN MASONRY BEARING WALLS. REUSE EXISTING OPENINGS WHERE POSSIBLE.)

NO.	DATE	ISSUE

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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FRAMING PLAN - PART A

SCALE: 1/8" = 1'-0"

S-102A

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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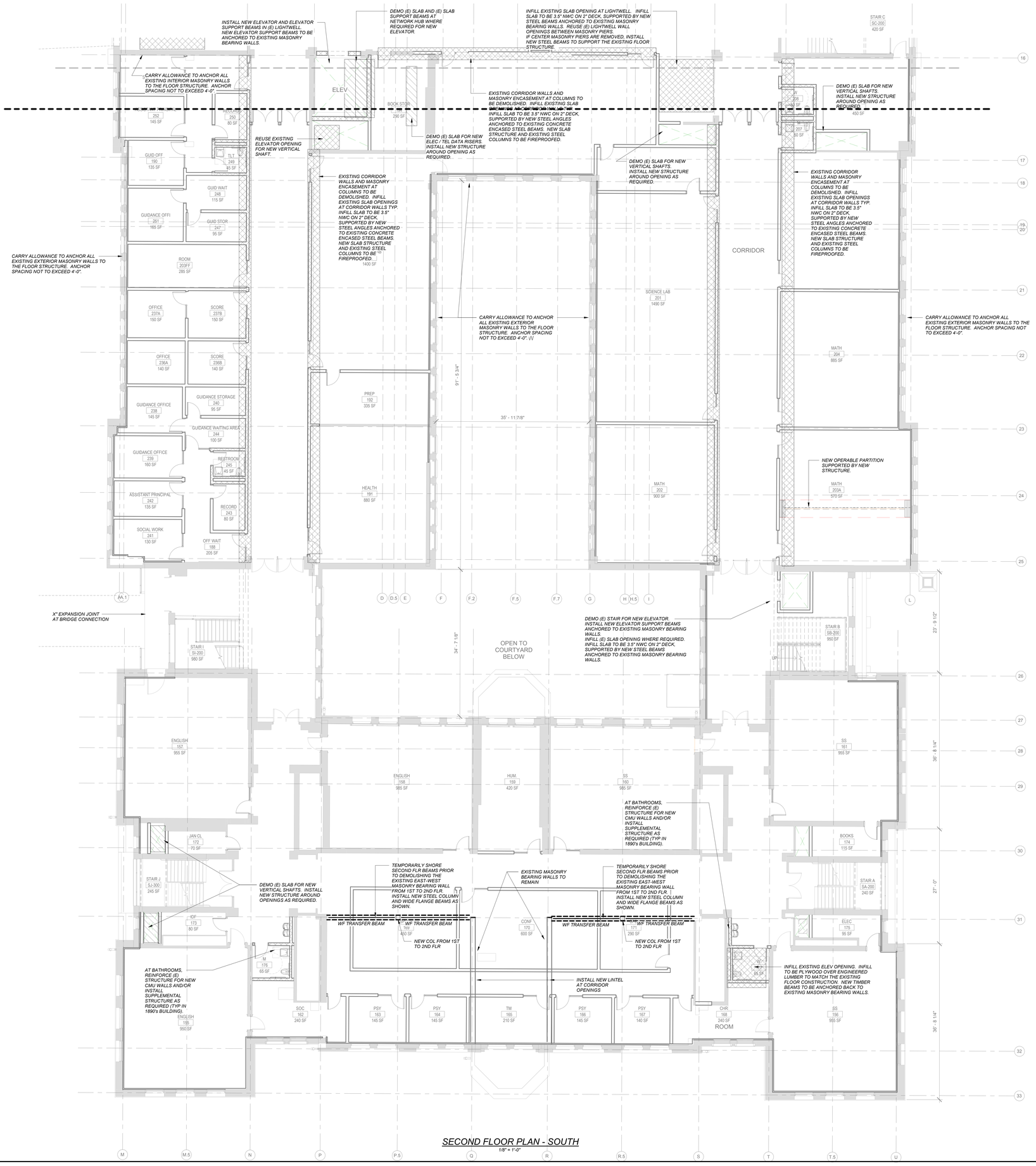

SECOND FLOOR PLAN - SOUTH

1/8" = 1'-0"

1922 RENOVATION NOTES:

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2. *CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. AT 1922 BUILDING, INFILL EXISTING OPENINGS WITH 3.5" NWC ON TOP OF 2" DECK. AT 1890's BUILDING, INFILL EXISTING OPENINGS WITH PLYWOOD ON TOP OF ENGINEERED LUMBER. AT 1995 BUILDING, INFILL EXISTING OPENINGS WITH 2.5" NWC ON TOP OF 3" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. WHERE APPLICABLE, DRILL AND EPOXY #4 DOWELS INTO EXISTING CONCRETE SLAB AT ALL SIDES.*
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PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FRAMING PLAN - PART B

SCALE: 1/8" = 1'-0"

S-102B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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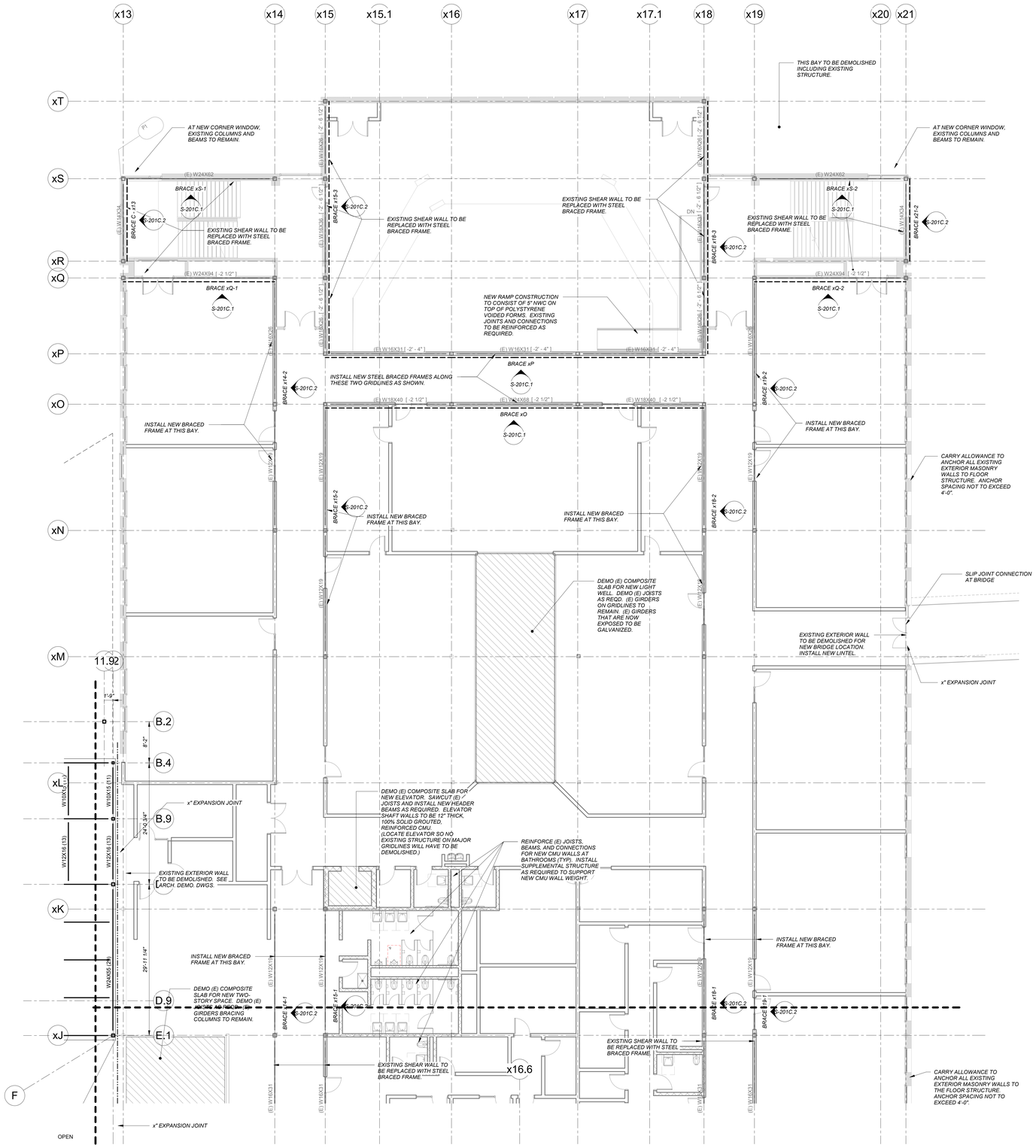

SECOND FLOOR FRAMING PLAN - PART C

1/8" = 1'-0"

1980 RENOVATION NOTES:

1. *ALL NEW INTERIOR CMU WALLS TO BE BRACED AT THE TOP TO EXISTING STRUCTURE. ANCHOR SPACING TO BE 4'-0" ON CENTER MAX.*
2. *CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING COMPOSITE SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED.*
3. *CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. INFILL EXISTING OPENINGS WITH X" NWC ON TOP OF X" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. DRILL AND EPOXY #4 DOWELS AT ALL SIDES.*
4. *SEE BRACE FRAME ELEVATIONS (SHEETS S-201C.1 AND S-201C.2) FOR EXISTING BEAMS THAT NEED TO BE REINFORCED OR REPLACED DUE TO INSTALLATION OF NEW STEEL LATERAL BRACE.*
5. *CARRY ALLOWANCE TO REPLACE ALL PRECAST LINTELS UNDER HUNG STEEL RELIEVING ANGLES AT SECOND AND THIRD FLOOR WINDOWS.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FRAMING PLAN - PART C

SCALE: 1/8" = 1'-0"

S-102C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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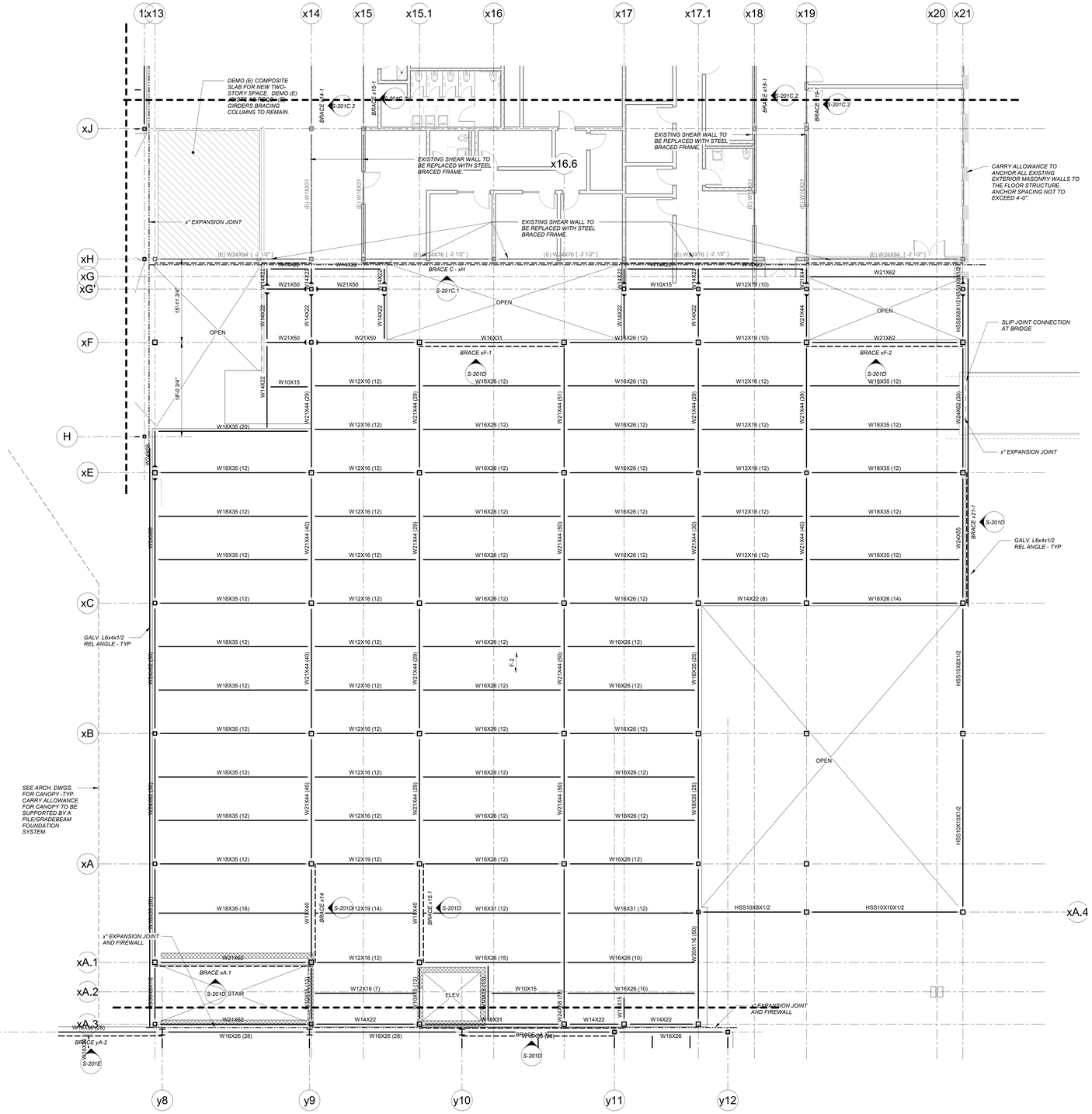

SECOND FLOOR FRAMING PLAN - PART D

1/8" = 1'-0"

1980 RENOVATION NOTES:

1. ALL NEW INTERIOR CMU WALLS TO BE BRACED AT THE TOP TO EXISTING STRUCTURE. ANCHOR SPACING TO BE 4'-0" ON CENTER MAX.
2. CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING COMPOSITE SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED.
3. CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. INFILL EXISTING OPENINGS WITH X" NWC ON TOP OF X" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. DRILL AND EPOXY #4 DOWELS AT ALL SIDES.
4. SEE BRACE FRAME ELEVATIONS (SHEETS S-201C.1 AND S-201C.2) FOR EXISTING BEAMS THAT NEED TO BE REINFORCED OR REPLACED DUE TO INSTALLATION OF NEW STEEL LATERAL BRACE.
5. CARRY ALLOWANCE TO REPLACE ALL PRECAST LINTELS UNDER HUNG STEEL RELIEVING ANGLES AT SECOND AND THIRD FLOOR WINDOWS.

NO.	DATE	ISSUE

SEAL

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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FRAMING PLAN - PART D

SCALE: 1/8" = 1'-0"

S-102D

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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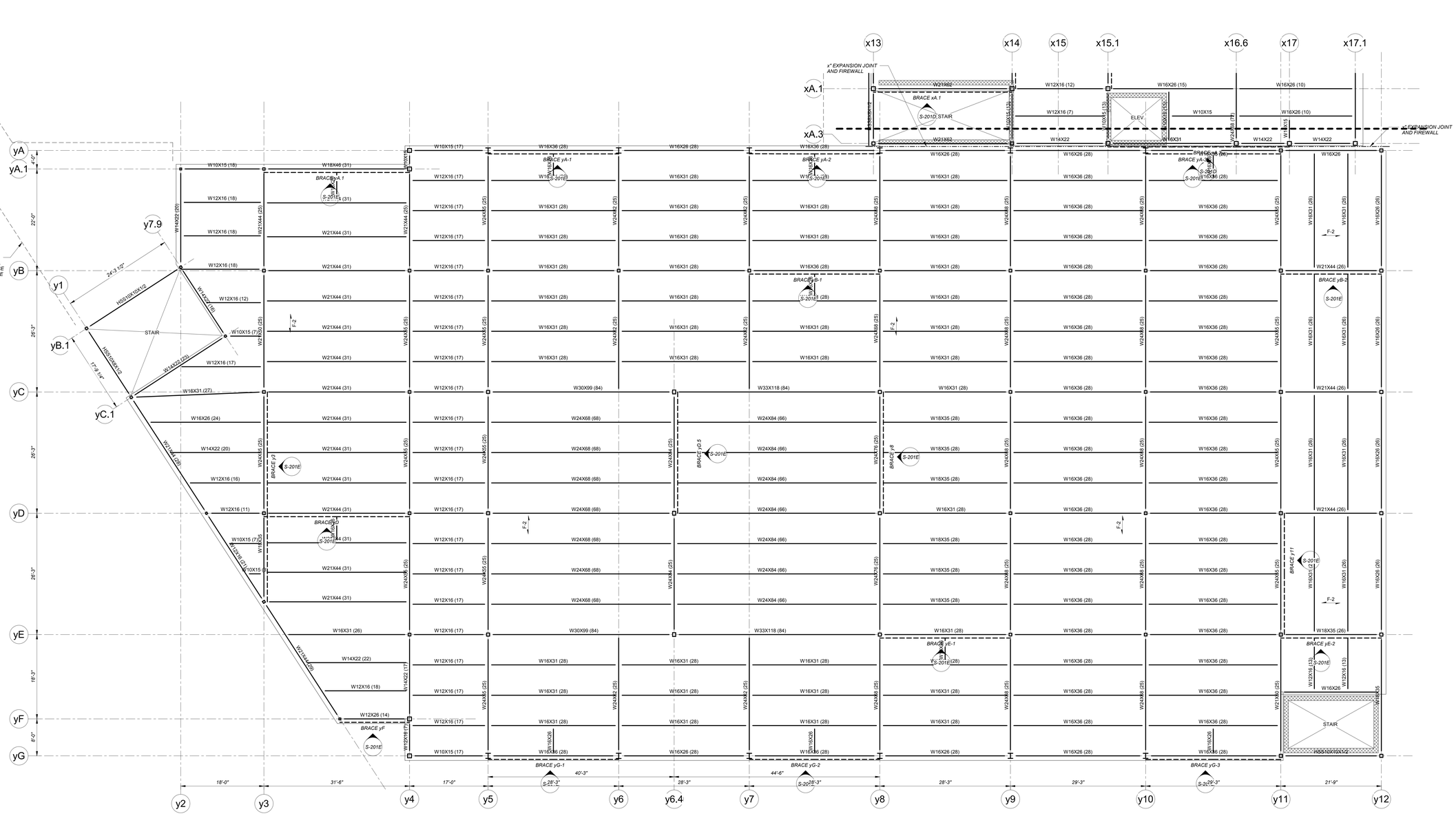

SECOND FLOOR FRAMING PLAN - PART E

1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

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Acoustical Consultant:
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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FRAMING PLAN - PART E

SCALE: 1/8" = 1'-0"

S-102E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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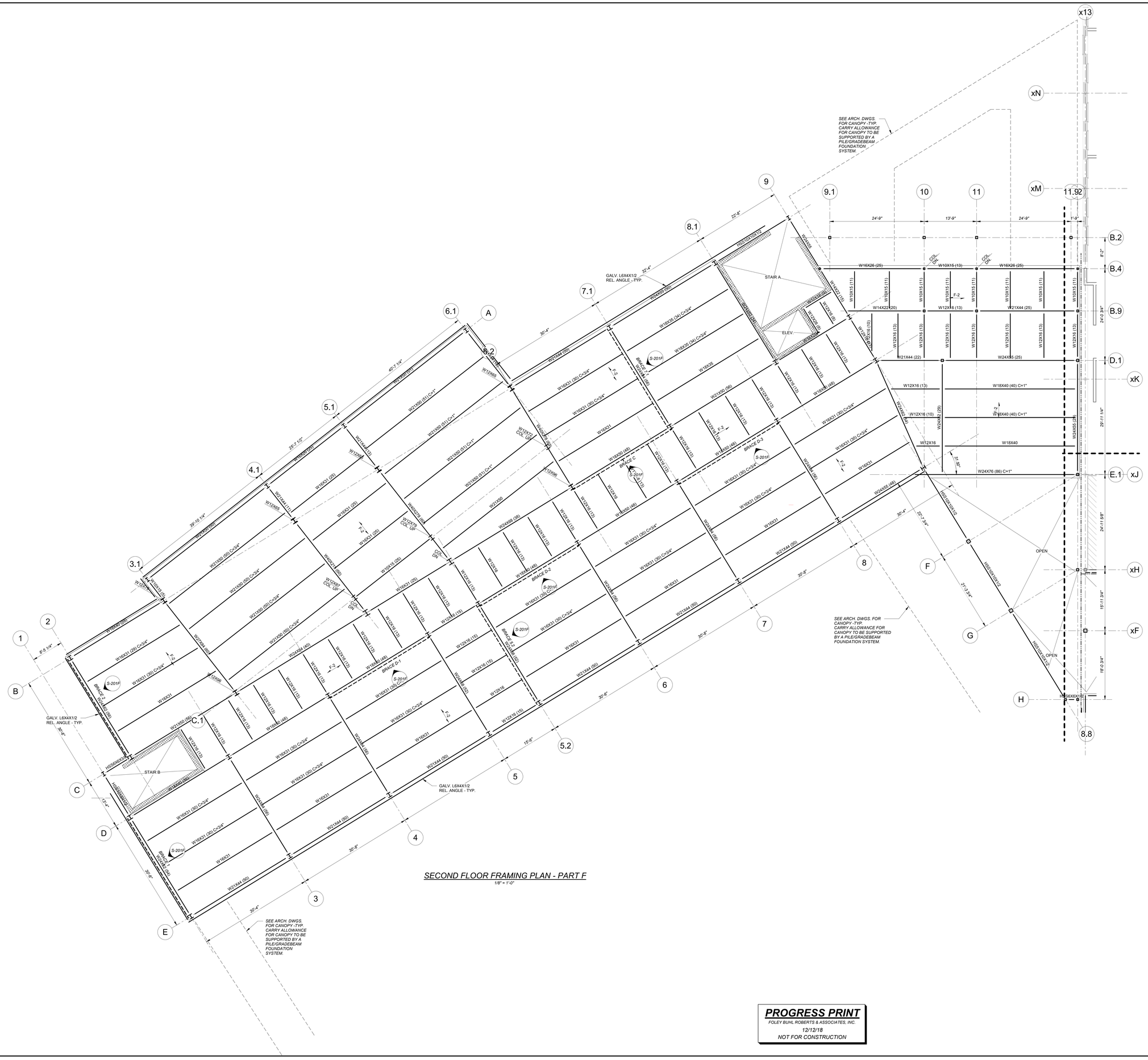

SECOND FLOOR FRAMING PLAN - PART F

1/8" = 1'-0"

PROGRESS PRINT

FOLEY BUHL ROBERTS & ASSOCIATES, INC.

12/12/18

NOT FOR CONSTRUCTION

NO.	DATE	ISSUE

SEAL

KEY PLAN

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Acoustical Consultant:
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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FRAMING PLAN - PART F

SCALE: As indicated

S-102F

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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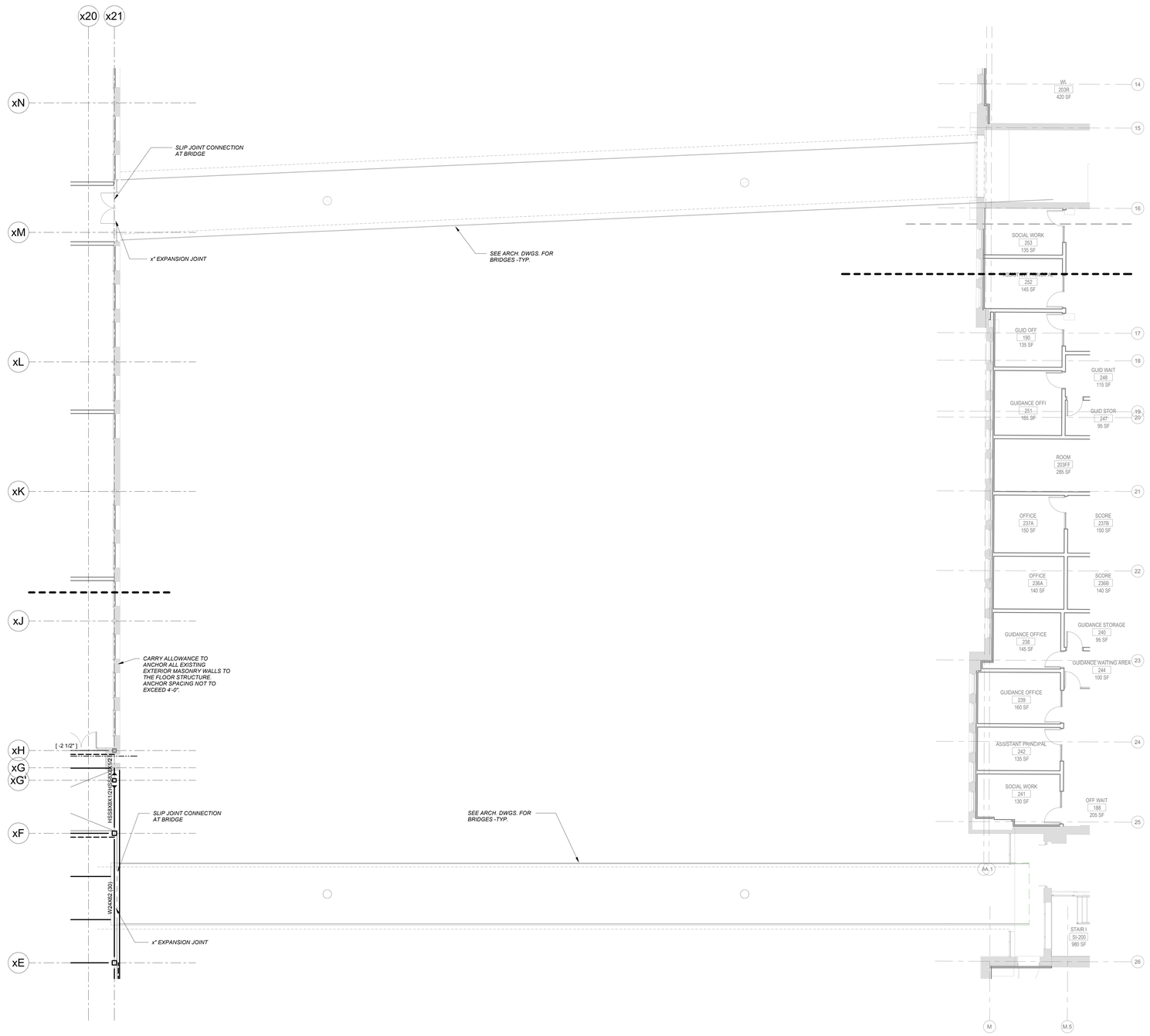

SECOND FLOOR FRAMING PLAN - PART G

1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

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Construction Manager Address

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FRAMING PLAN - PART G

SCALE: 1/8" = 1'-0"

S-102G

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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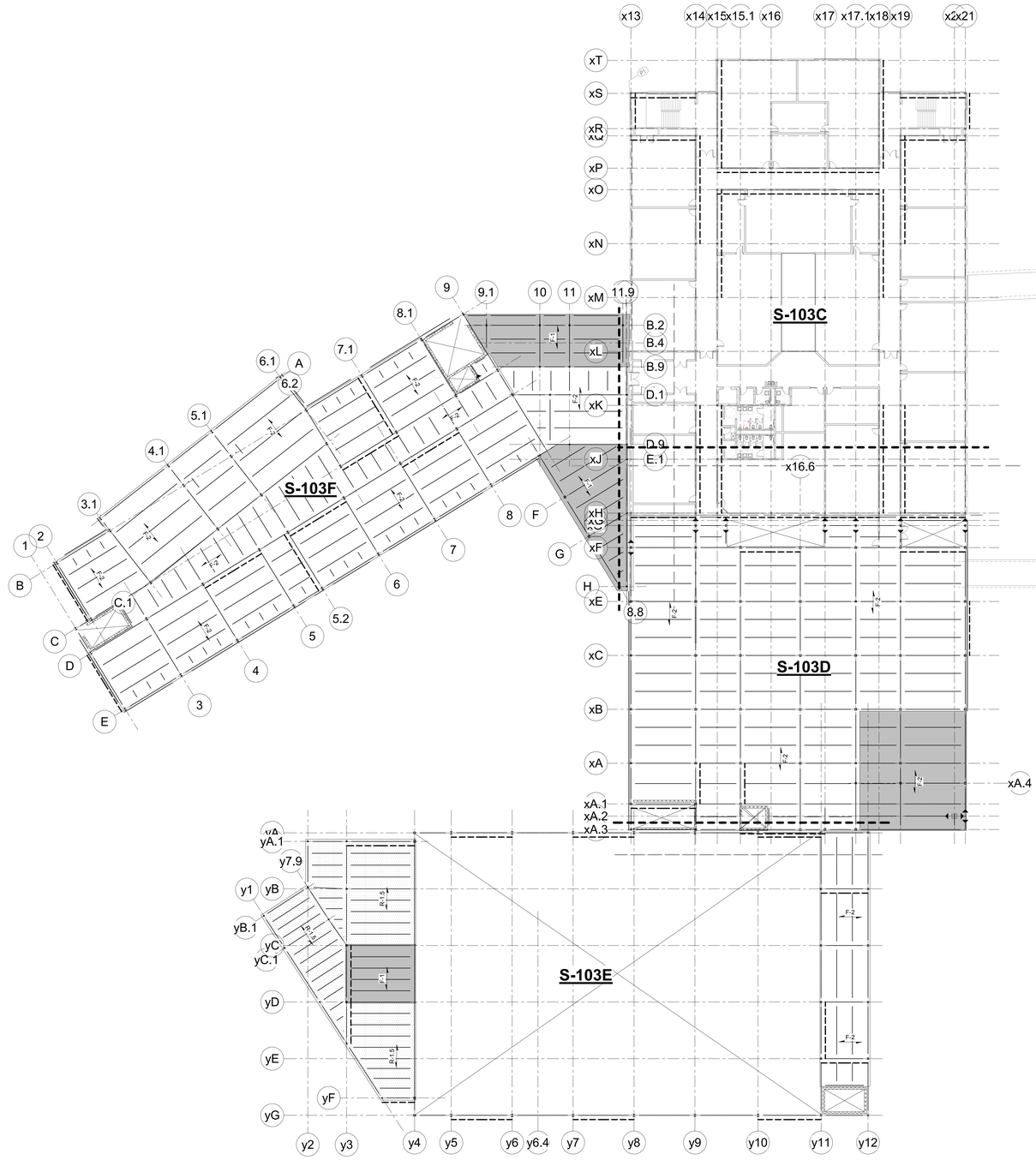

OVERALL THIRD FLOOR PLAN
3/64" = 1'-0"

NOTES:

1. *REFER TO SCHEMATIC DESIGN STRUCTURAL NARRATIVE FOR ADDITIONAL INFORMATION.*
2. *F-2 INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 3 1/2" MINIMUM NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 5 1/2" TOTAL SLAB THICKNESS. POUR SLABS LEVEL, ACCOUNTING FOR ADDITIONAL CONCRETE DUE TO STRUCTURAL FRAMING AND DECK DEFLECTIONS (AVERAGE OF 3/4" OVER THE ENTIRE FLOOR AREA).*
3. *F-1 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 3 1/2" MINIMUM NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 1 1/2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 5" TOTAL SLAB THICKNESS.*

   INDICATES THE EXTENT OF CONCRETE SLAB ON METAL DECK AT ROOF AREAS.
4. *(XX) INDICATES THE NUMBER OF EQUALLY SPACED 3/4" DIA. HEADED SHEAR CONNECTOR STUDS WELDED TO THE CENTER OF THE TOP FLANGE OF THE BEAM OR GIRDER. PROVIDE A MINIMUM OF ONE STUD PER FOOT LENGTH AT ALL BEAMS SUPPORTING COMPOSITE FLOOR DECK.*
5. *R1.5 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1 1/2" DEEP x 18 GAUGE GALVANIZED WIDE RIB METAL ROOF DECK.*

   INDICATES A ROOF AREA.
6. *FOURTH FLOOR TOP OF STEEL ELEVATION = 80' - 2 1/2". UNLESS NOTED OTHERWISE ON PLAN OR IN SECTIONS.*
7. *INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.*
8. *COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.*
9. *INDICATES A FULL CAPACITY MOMENT CONNECTION.*
10. *BRACE "X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS REFER TO DRAWINGS S-201C.1 THRU S-201F.*
11. *"D.B." INDICATES 2-#5 DRAG BARS IN CONCRETE SLAB. PROVIDE ONE BAR ON EACH SIDE AT INTERIOR BRACE "X" BRACING AND BOTH BARS ON SAME SIDE WHERE BRACE "X" BRACING IS NEAR THE EDGE OF SLAB. EXTEND BARS ONE BAY (MIN.) EACH SIDE OF BRACE BAY.*
12. *" INDICATES EXPOSED TO VIEW STRUCTURAL STEEL. REFER TO SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF E.V.S.S. WITH ARCHITECTURAL DRAWINGS. ALL E.V.S.S. TO RECEIVE INTUMESCENT PAINT UNLESS NOTED OTHERWISE.*
13. *COORDINATE AND VERIFY THE SIZE, QUANTITY AND LOCATION OF ALL VENTS, PIPES, DUCTS, SHAFTS, AND OTHER FLOOR PENETRATIONS WITH ARCHITECTURAL AND M.E.P. DRAWINGS AND PROVIDE STEEL FRAMES AS REQUIRED PER THE TYPICAL DETAILS. ALL REQUIRED PENETRATIONS MIGHT NOT BE SHOWN ON THE STRUCTURAL DRAWINGS.*
14. *ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.*
15. *SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

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T. +1 617 449 4000
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Owner:
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Construction Manager Address

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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL THIRD FLOOR PLAN

SCALE: As indicated

S-103

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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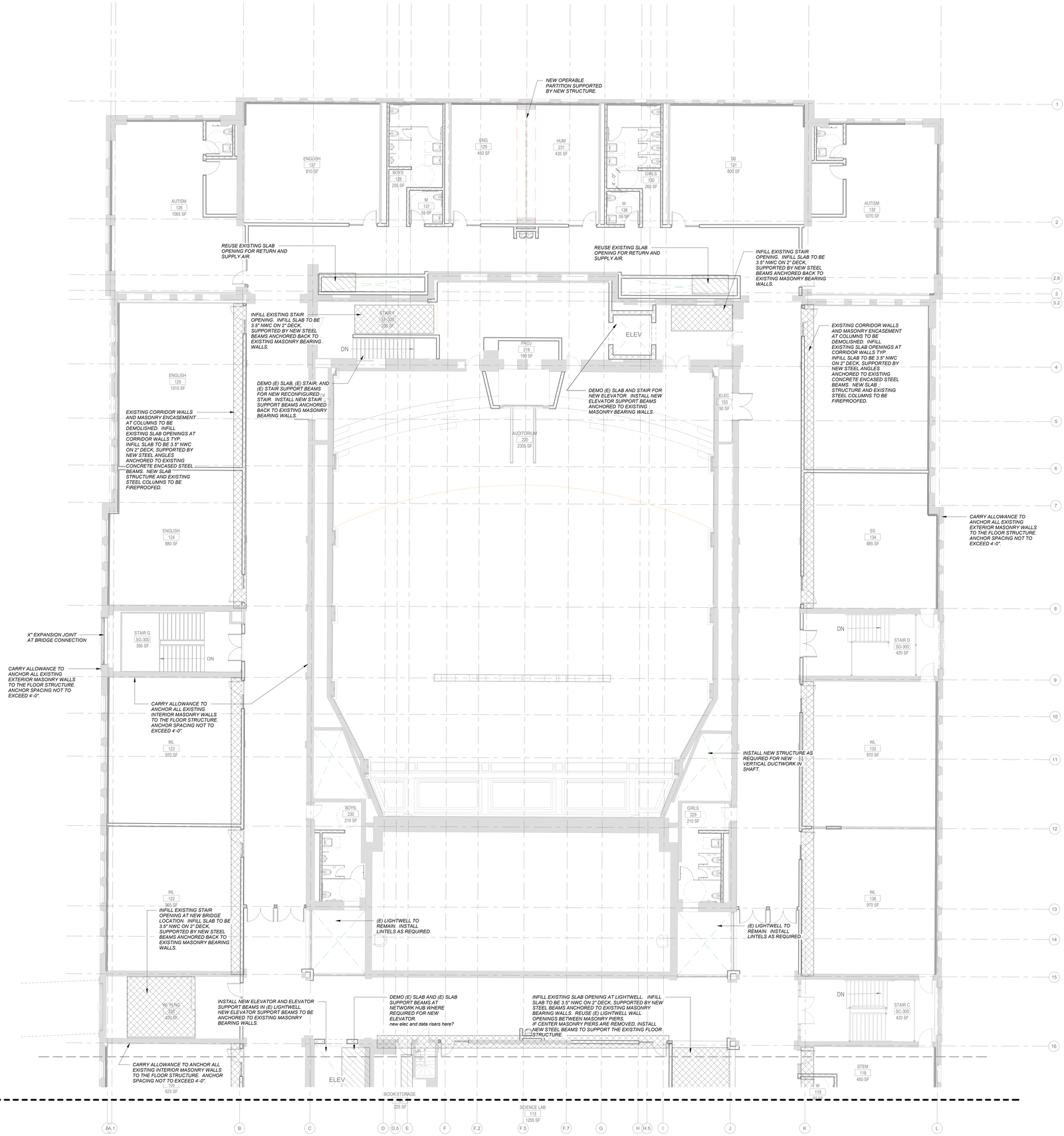

THIRD FLOOR PLAN - NORTH

1/8" = 1'-0"

1922 RENOVATION NOTES:

1. *CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED. (WHEREVER POSSIBLE, REUSE EXISTING SLAB OPENINGS.)*
2. *CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. AT 1922 BUILDING, INFILL EXISTING OPENINGS WITH 3.5" NWC ON TOP OF 2" DECK. AT 1890's BUILDING, INFILL EXISTING OPENINGS WITH PLYWOOD ON TOP OF ENGINEERED LUMBER. AT 1995 BUILDING, INFILL EXISTING OPENINGS WITH 2.5" NWC ON TOP OF 2" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. WHERE APPLICABLE, DRILL AND EPOXY #4 DOWELS INTO EXISTING CONCRETE SLAB AT ALL SIDES.*
3. *CARRY ALLOWANCE FOR NEW DUCT OPENINGS IN EXISTING MASONRY BEARING WALLS. INSTALL NEW STEEL LINTELS AS REQUIRED. (WHEREVER POSSIBLE, REROUTE DUCTS TO ELIMINATE OR MINIMIZE OPENINGS IN MASONRY BEARING WALLS. REUSE EXISTING OPENINGS WHERE POSSIBLE.)*

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

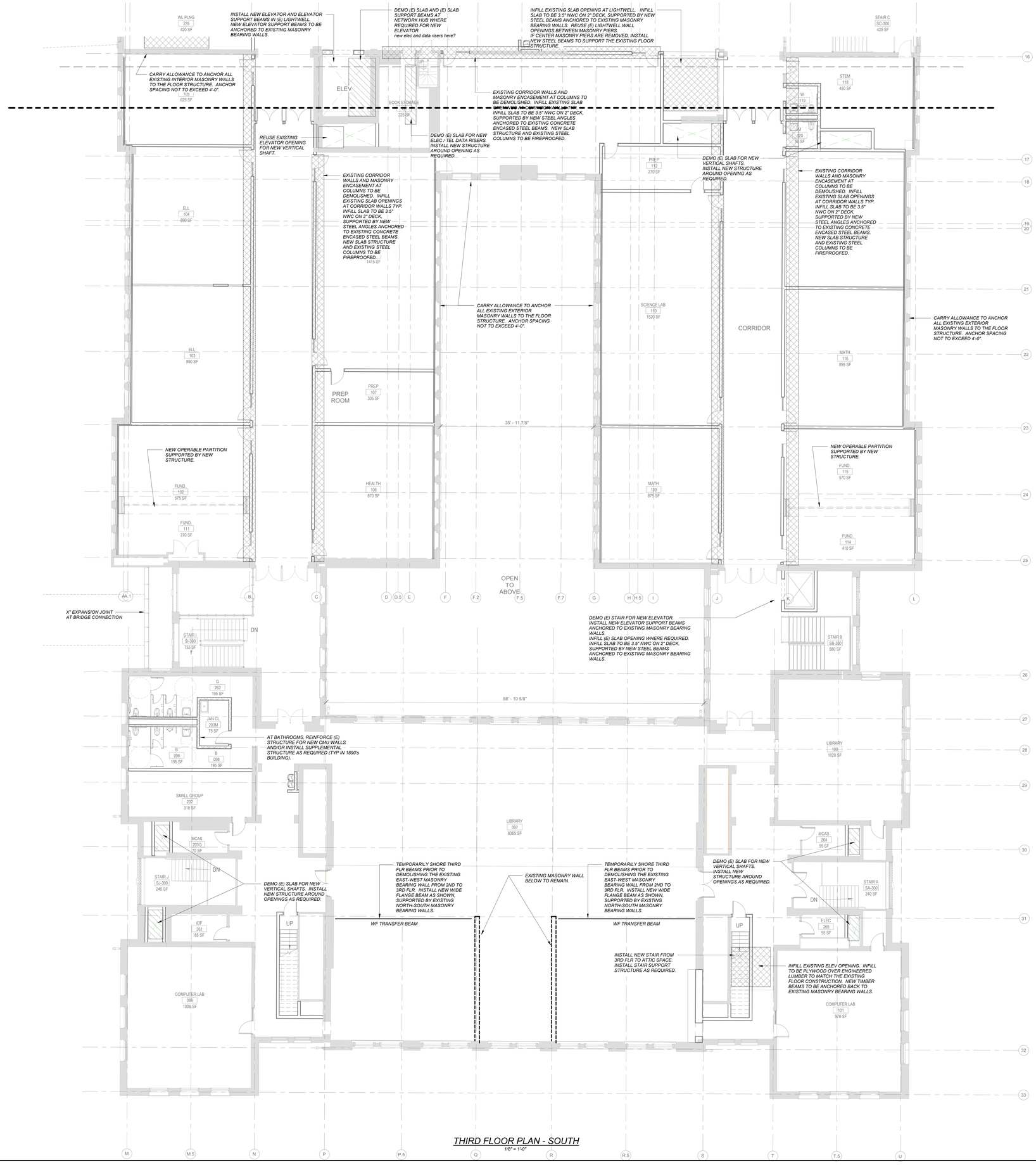
DRAWING TITLE:
THIRD FLOOR FRAMING PLAN - PART A

SCALE: 1/8" = 1'-0"

S-103A

SCHEMATIC DESIGN SUBMISSION

2/20/2019



THIRD FLOOR PLAN - SOUTH

1/8" = 1'-0"

1922 RENOVATION NOTES:

1. *CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED. (WHEREVER POSSIBLE, REUSE EXISTING SLAB OPENINGS.)*
2. *CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. AT 1922 BUILDING, INFILL EXISTING OPENINGS WITH 3.5" NWC ON TOP OF 2" DECK. AT 1890's BUILDING, INFILL EXISTING OPENINGS WITH PLYWOOD ON TOP OF ENGINEERED LUMBER. AT 1995 BUILDING, INFILL EXISTING OPENINGS WITH 2.5" NWC ON TOP OF 2" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. WHERE APPLICABLE, DRILL AND EPOXY #4 DOWELS INTO EXISTING CONCRETE SLAB AT ALL SIDES.*
3. *CARRY ALLOWANCE FOR NEW DUCT OPENINGS IN EXISTING MASONRY BEARING WALLS. INSTALL NEW STEEL LINTELS AS REQUIRED. (WHEREVER POSSIBLE, REROUTE DUCTS TO ELIMINATE OR MINIMIZE OPENINGS IN MASONRY BEARING WALLS. REUSE EXISTING OPENINGS WHERE POSSIBLE.)*

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PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

THIRD FLOOR FRAMING PLAN - PART B

SCALE: 1/8" = 1'-0"

S-103B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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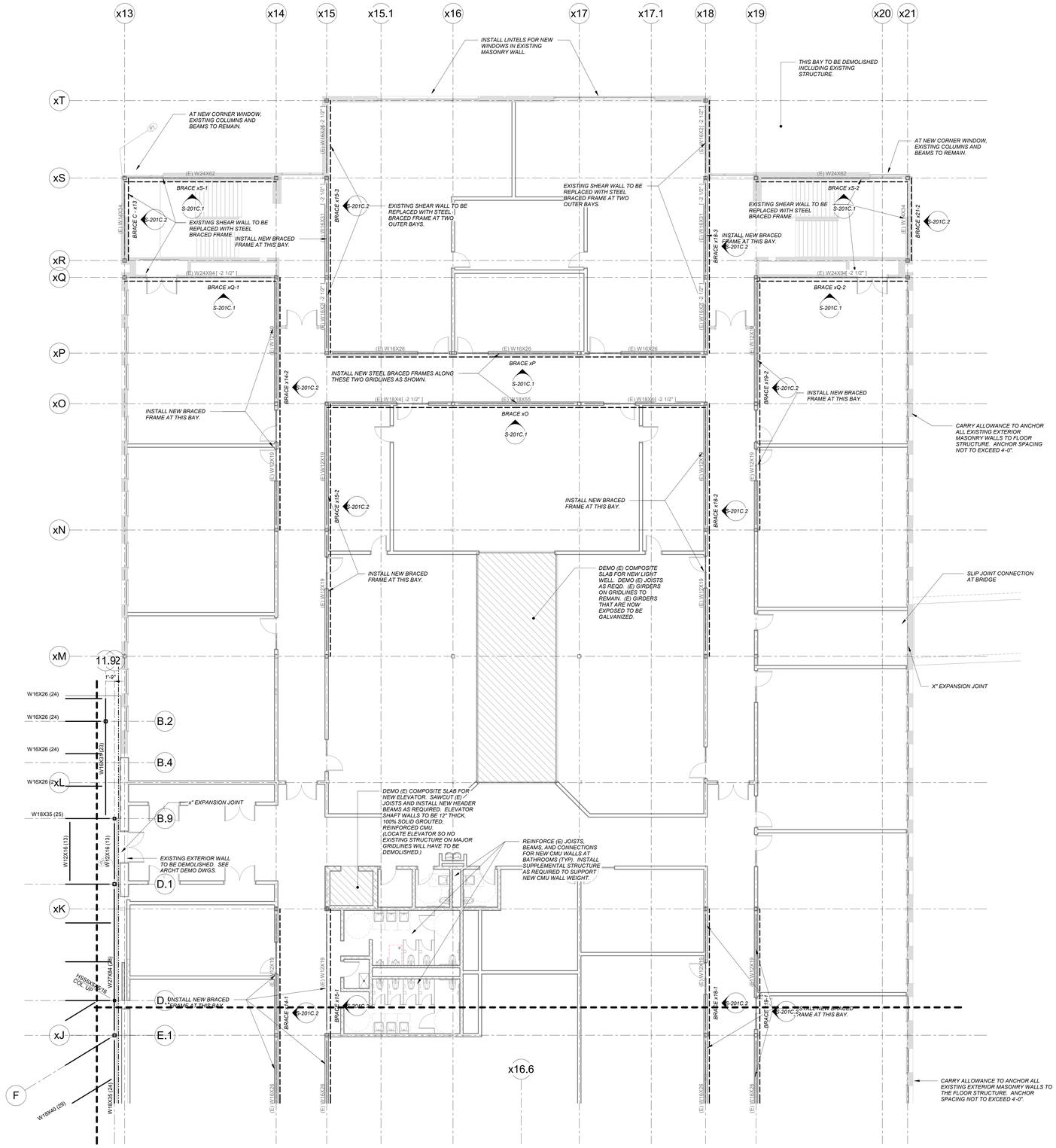

THIRD FLOOR PLAN PART C

1/8" = 1'-0"

1980 RENOVATION NOTES:

1. *ALL NEW INTERIOR CMU WALLS TO BE BRACED AT THE TOP TO EXISTING STRUCTURE. ANCHOR SPACING TO BE 4'-0" ON CENTER MAX.*
2. *CARRY ALLOWANCE FOR NEW SLAB OPENINGS. EXISTING COMPOSITE SLAB TO BE SAW CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED.*
3. *CARRY ALLOWANCE FOR INFILLS OF EXISTING SLAB OPENINGS. INFILL EXISTING OPENINGS WITH X" NWC ON TOP OF X" DECK. SUPPORT NEW SLAB INFILL WITH NEW BEAMS AS REQUIRED. DRILL AND EPOXY #4 DOWELS AT ALL SIDES.*
4. *SEE BRACE FRAME ELEVATIONS (SHEETS S-201C.1 AND S-201C.2) FOR EXISTING BEAMS THAT NEED TO BE REINFORCED OR REPLACED DUE TO INSTALLATION OF NEW STEEL LATERAL BRACE.*
5. *CARRY ALLOWANCE TO REPLACE ALL PRECAST LINTELS UNDER HUNG STEEL RELIEVING ANGLES AT SECOND AND THIRD FLOOR WINDOWS.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR FRAMING PLAN - PART C

SCALE: 1/8" = 1'-0"

S-103C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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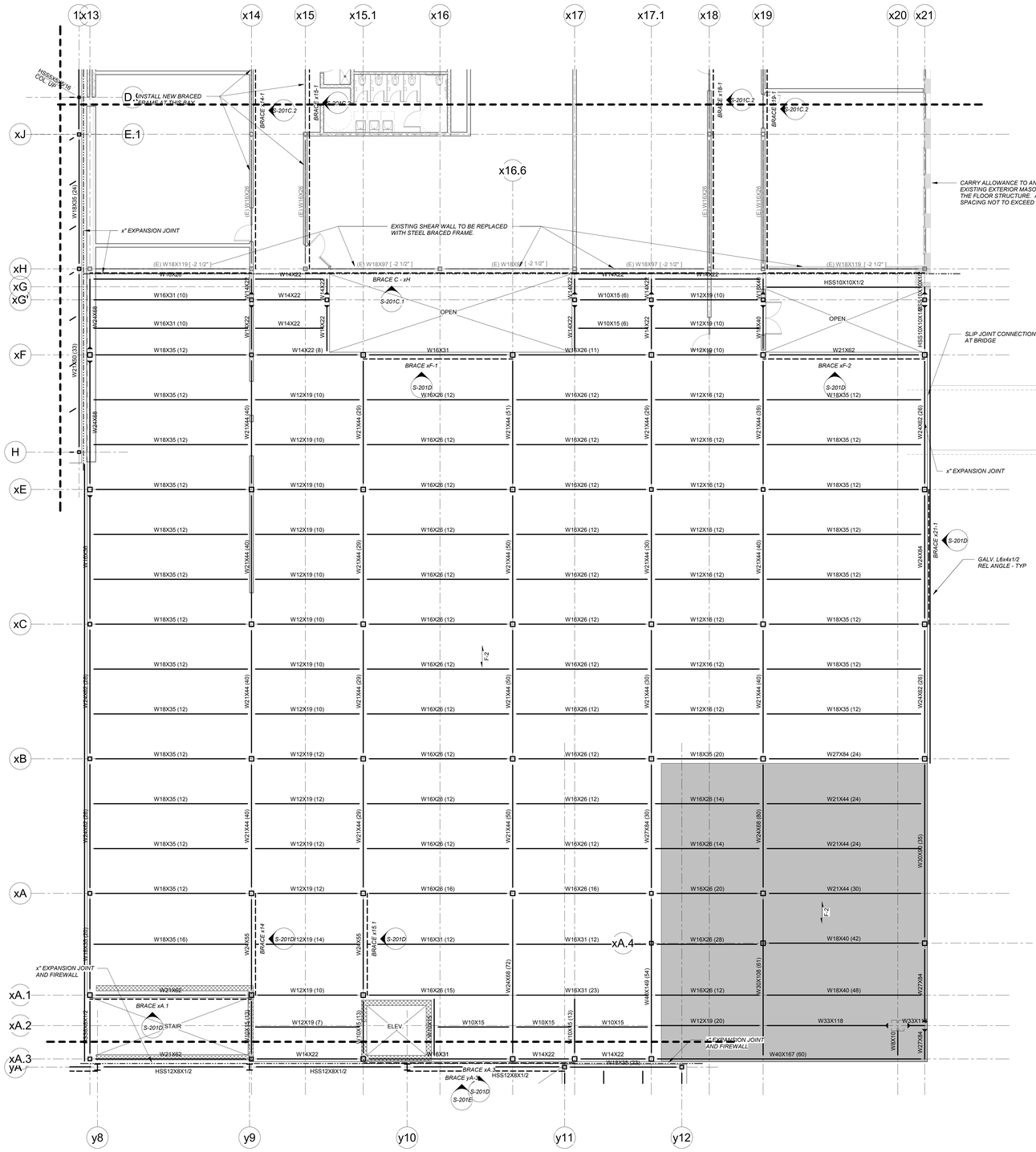
x13
x14
x15
x15.1
x16
x17
x17.1
x18
x19
x20
x21
xJ
xH
xG
xG'
xF
H
xE
xC
xB
xA
xA.1
xA.2
xA.3
yA
y8
y9
y10
y11
y12
D
E.1
x16.6
xA.4
HORIZONTAL COL. JOINT
D. INSTALL NEW BRACED FRAME AT THIS BAY
BRACE 14-1
BRACE 15-1
BRACE 18-1
BRACE 19-1
S-201C.2
S-201C.1
S-201D
F-2
(E) W10X26
(E) W14X26
(E) W18X35 (24)
x" EXPANSION JOINT
EXISTING SHEAR WALL TO BE REPLACED WITH STEEL BRACED FRAME.
CARRY ALLOWANCE TO ANCHOR ALL EXISTING EXTERIOR MASONRY WALLS TO THE FLOOR STRUCTURE. ANCHOR SPACING NOT TO EXCEED 4'-0".
(E) W18X119 [-2 1/2"]
(E) W18X97 [-2 1/2"]
(E) W18X71 [-2 1/2"]
FF 100.26
W14X22
BRACE C - xH
OPEN
W16X31 (10)
W14X22 (8)
W10X15 (6)
W12X19 (10)
HSS10X10X1/2
W24X68
W14X22
W14X68
W14X82
W14X48
W14X90
W14X53
W14X61
W14X74
W14X99
W14X109
W14X120
W14X132
W14X145
W14X159
W14X176
W14X193
W14X211
W14X233
W14X257
W14X283
W14X311
W14X342
W14X370
W14X398
W14X426
W14X455
W14X500
W14X550
W14X605
W14X665
W14X730
W14X808
W14X873
W14X932
W14X1000
W14X1082
W14X1176
W14X1269
W14X1370
W14X1500
W14X1627
W14X1730
W14X1808
W14X1906
W14X2053
W14X2257
W14X2445
W14X2668
W14X2851
W14X3034
W14X3257
W14X3500
W14X3730
W14X4016
W14X4257
W14X4500
W14X4730
W14X5000
W14X5257
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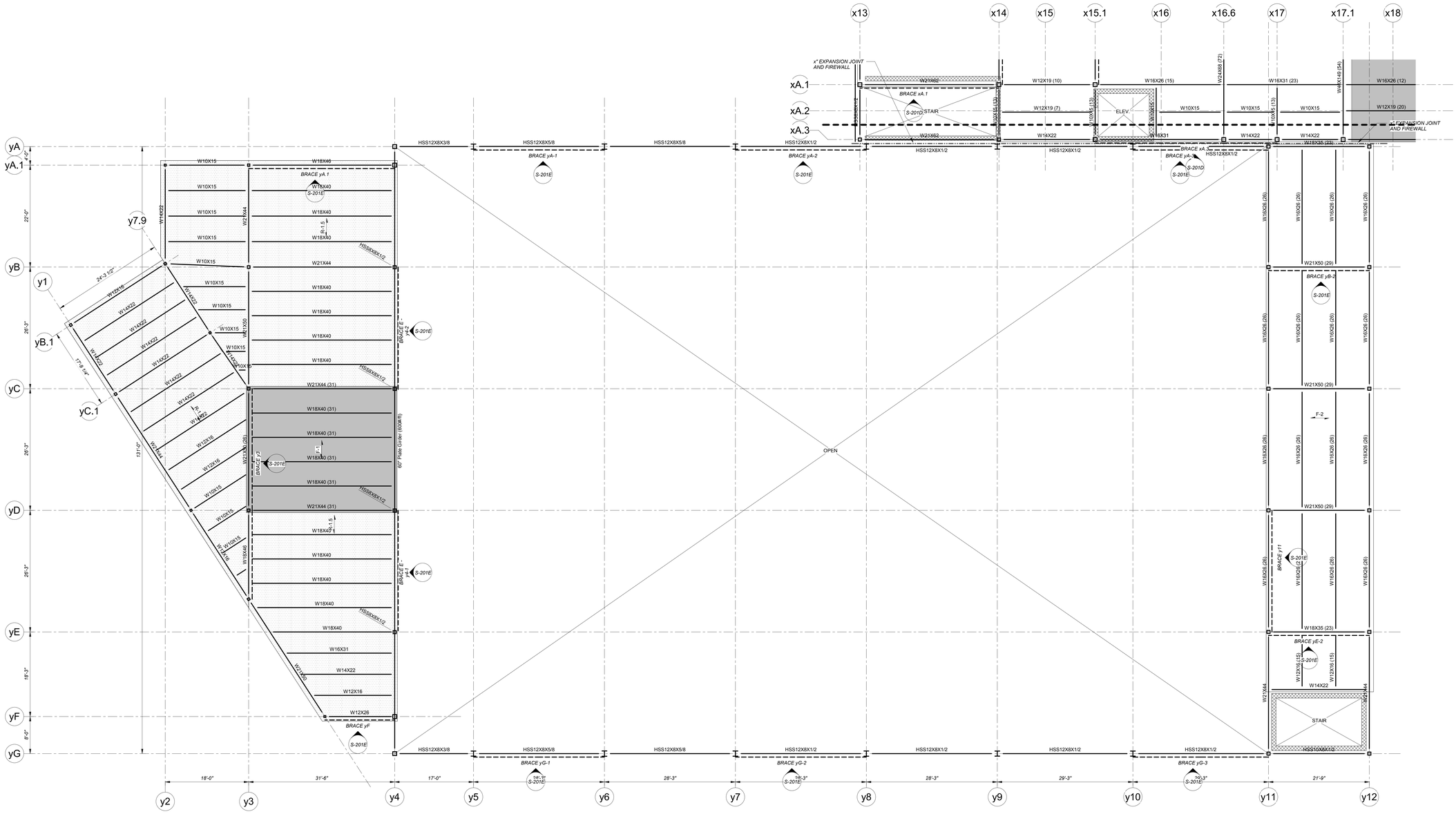

THIRD FLOOR FRAMING PLAN - PART E

1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

KEY PLAN

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142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR FRAMING PLAN - PART E

SCALE: 1/8" = 1'-0"

S-103E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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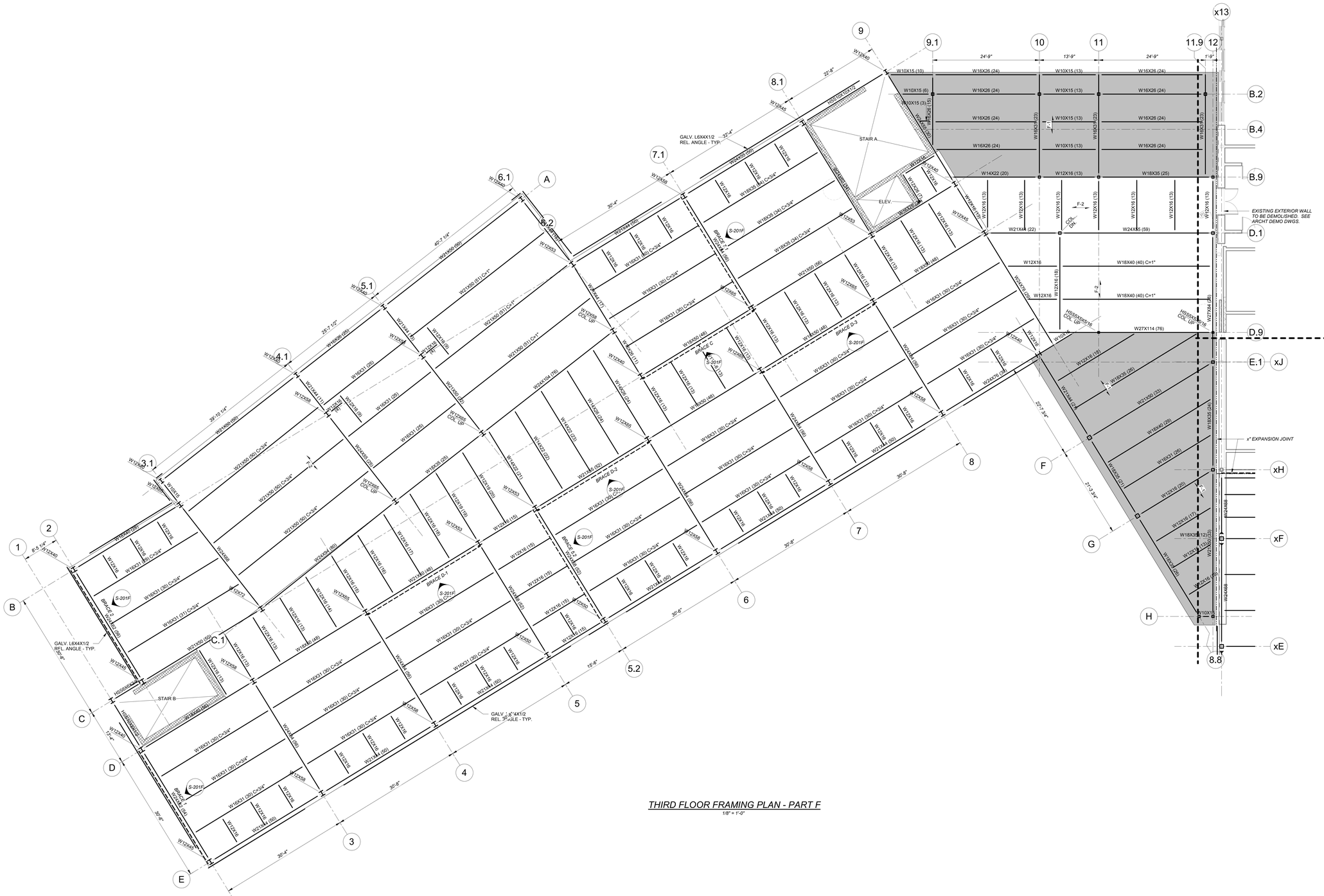

THIRD FLOOR FRAMING PLAN - PART F

1/8" = 1'-0"

NO. DATE ISSUE

SEAL

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR FRAMING PLAN - PART F

SCALE: 1/8" = 1'-0"

S-103F

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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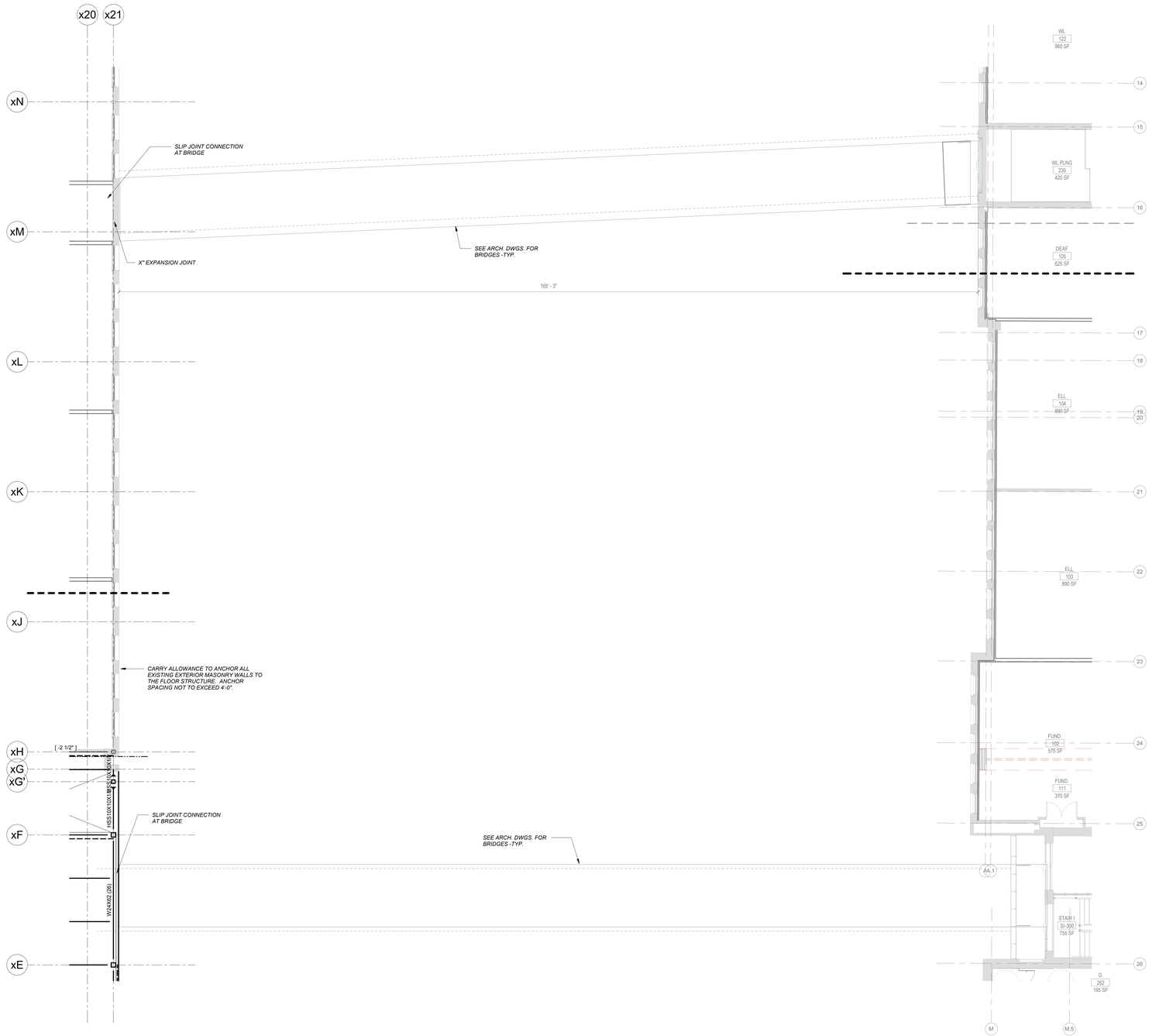

ROOF FRAMING - BRIDGE
1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF FRAMING PLAN - PART G

SCALE: 1/8" = 1'-0"

S-103G

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2/20/2019

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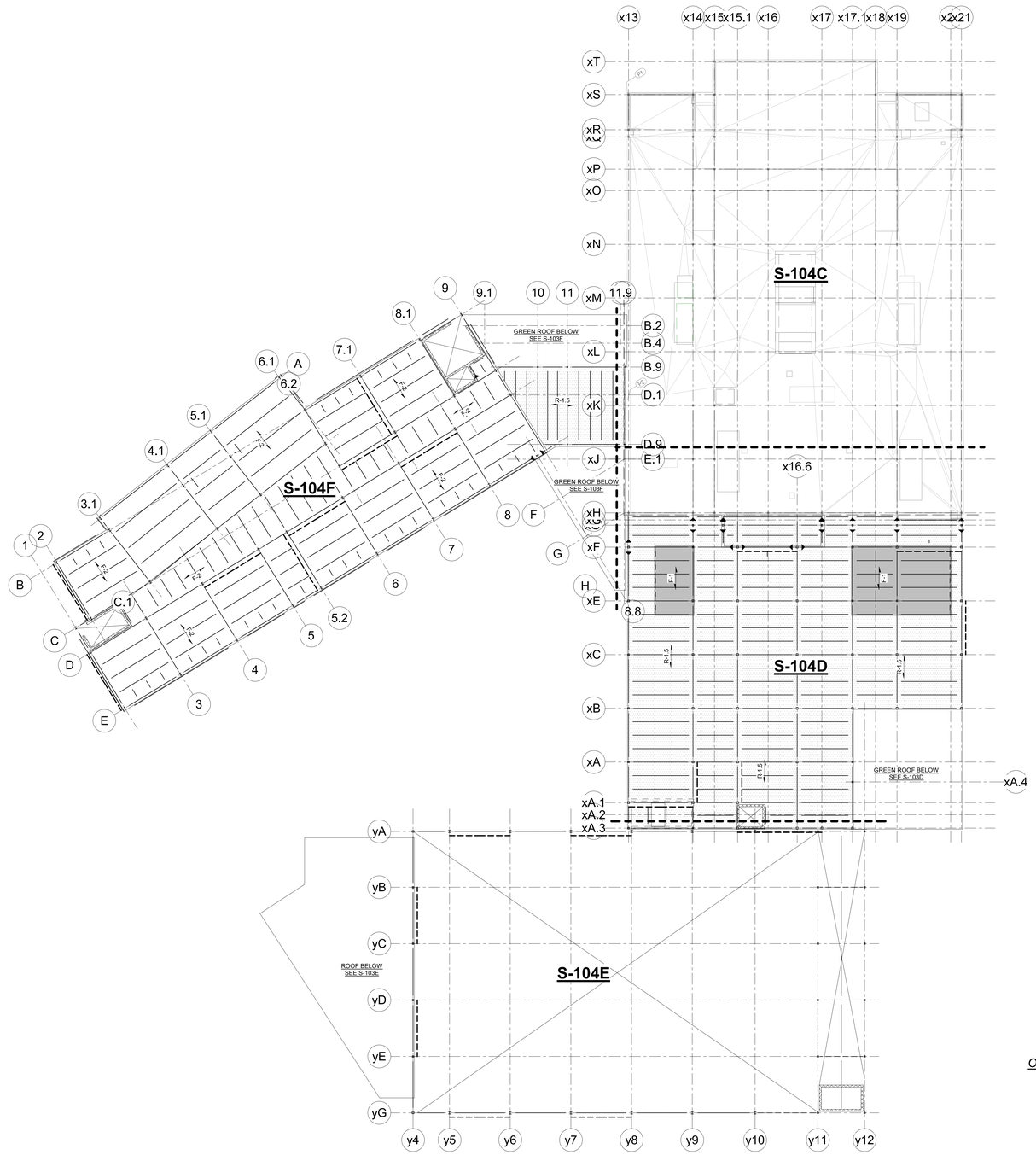
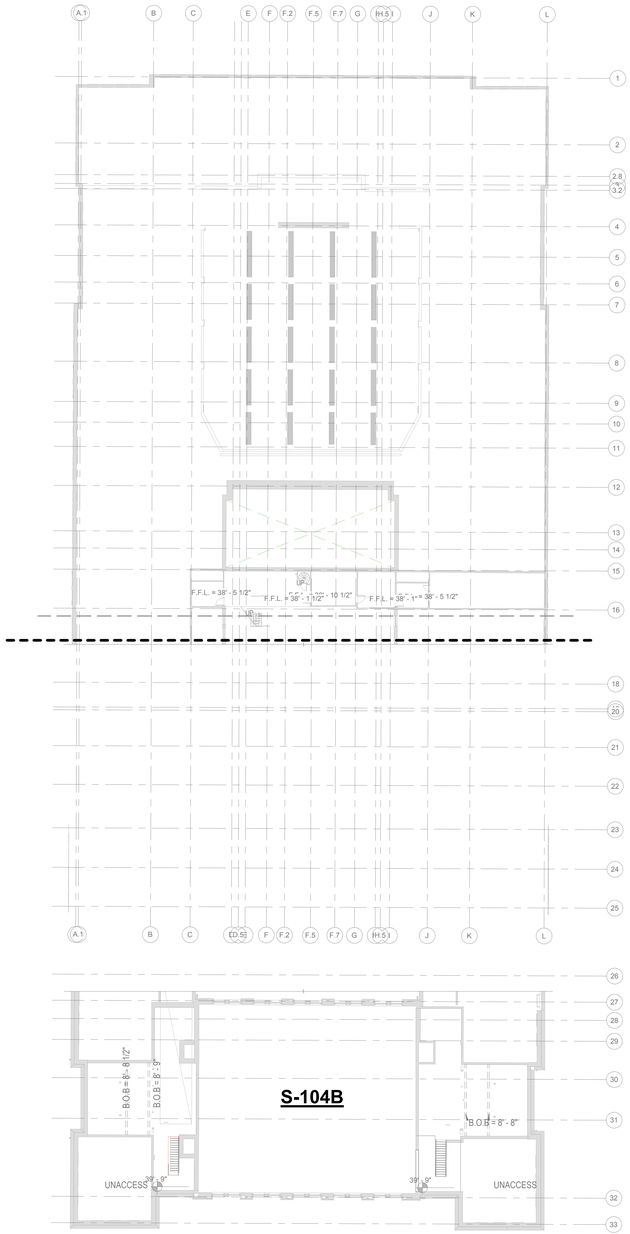


OVERALL FOURTH FLOOR/ATTIC PLAN

3/64" = 1'-0"



NOTES:

1. *REFER TO SCHEMATIC DESIGN STRUCTURAL NARRATIVE FOR ADDITIONAL INFORMATION.*
2. *F-2 INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 3 1/2" MINIMUM NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 5 1/2" TOTAL SLAB THICKNESS. POUR SLABS LEVEL, ACCOUNTING FOR ADDITIONAL CONCRETE DUE TO STRUCTURAL FRAMING AND DECK DEFLECTIONS (AVERAGE OF 3/4" OVER THE ENTIRE FLOOR AREA).*
3. *F-1 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 3 1/2" MINIMUM NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 1 1/2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 5" TOTAL SLAB THICKNESS.*

   INDICATES THE EXTENT OF CONCRETE SLAB ON METAL DECK AT ROOF AREAS.
4. *(XX) INDICATES THE NUMBER OF EQUALLY SPACED 3/4" DIA. HEADED SHEAR CONNECTOR STUDS WELDED TO THE CENTER OF THE TOP FLANGE OF THE BEAM OR GIRDER. PROVIDE A MINIMUM OF ONE STUD PER FOOT LENGTH AT ALL BEAMS SUPPORTING COMPOSITE FLOOR DECK.*
5. *R1.5 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1 1/2" DEEP x 18 GAUGE GALVANIZED WIDE RIB METAL ROOF DECK.*

   INDICATES A ROOF AREA.
6. *FOURTH FLOOR TOP OF STEEL ELEVATION = 80' - 2 1/2". UNLESS NOTED OTHERWISE ON PLAN OR IN SECTIONS.*
7. *INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.*
8. *COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.*
9. *INDICATES A FULL CAPACITY MOMENT CONNECTION.*
10. *BRACE "X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS REFER TO DRAWINGS S-201C.1 THRU S-201F.*
11. *"D.9." INDICATES 2-#5 DRAG BARS IN CONCRETE SLAB. PROVIDE ONE BAR ON EACH SIDE AT INTERIOR BRACE "X" BRACING AND BOTH BARS ON SAME SIDE WHERE BRACE "X" BRACING IS NEAR THE EDGE OF SLAB. EXTEND BARS ONE BAY (MIN.) EACH SIDE OF BRACE BAY.*
12. *" INDICATES EXPOSED TO VIEW STRUCTURAL STEEL. REFER TO SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF E.V.S.S. WITH ARCHITECTURAL DRAWINGS. ALL E.V.S.S. TO RECEIVE INTUMESCENT PAINT UNLESS NOTED OTHERWISE.*
13. *COORDINATE AND VERIFY THE SIZE, QUANTITY AND LOCATION OF ALL VENTS, PIPES, DUCTS SHAFTS, AND OTHER FLOOR PENETRATIONS WITH ARCHITECTURAL AND M.E.P. DRAWINGS AND PROVIDE STEEL FRAMES AS REQUIRED PER THE TYPICAL DETAILS. ALL REQUIRED PENETRATIONS MIGHT NOT BE SHOWN ON THE STRUCTURAL DRAWINGS.*
14. *ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.*
15. *SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL FOURTH FLOOR/ATTIC PLAN

SCALE: As indicated

S-104

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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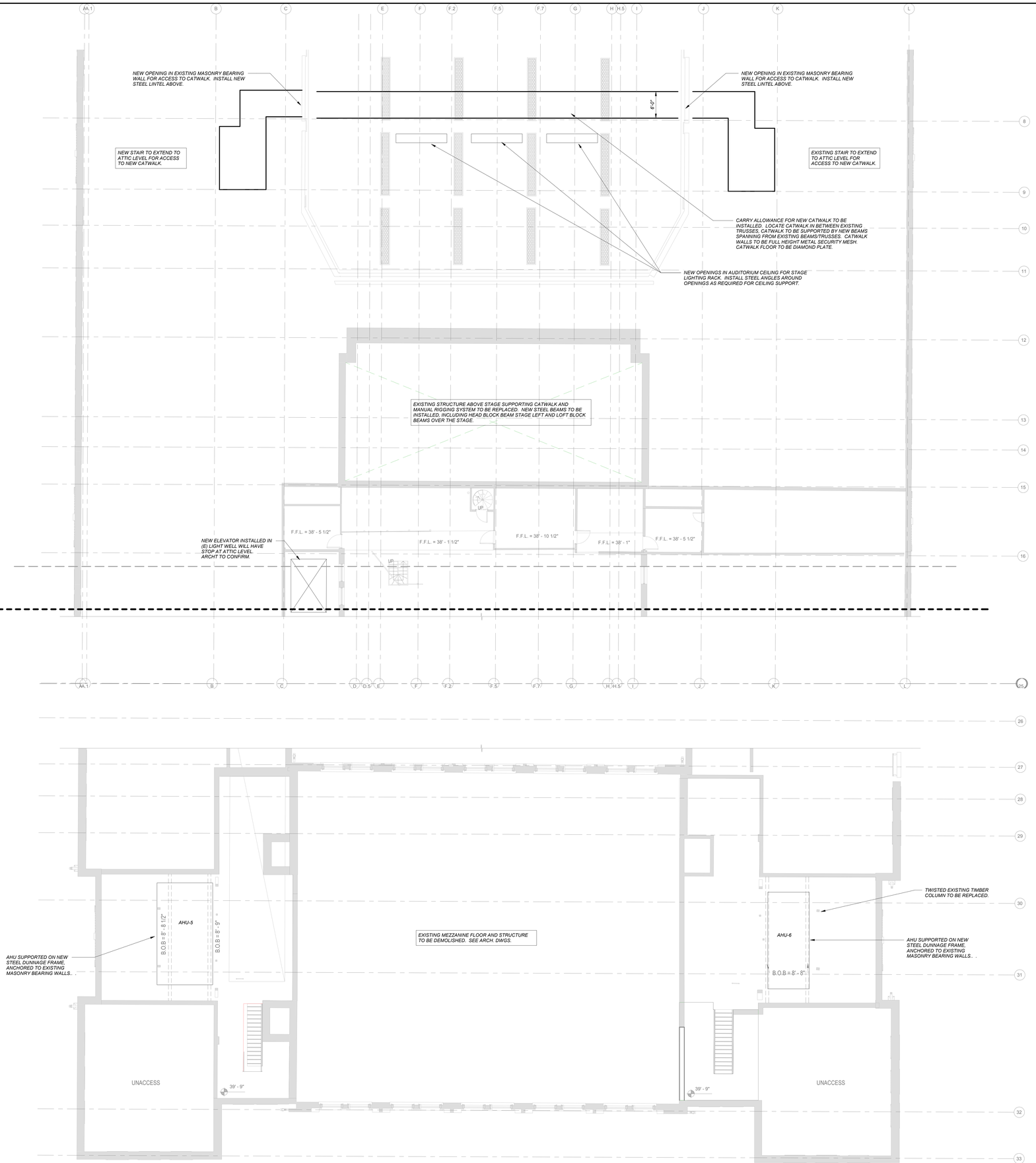

ATTIC FLOOR PLAN - SOUTH
1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

KEY PLAN

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ATTIC FRAMING PLAN - PART B

SCALE: 1/8" = 1'-0"

S-104B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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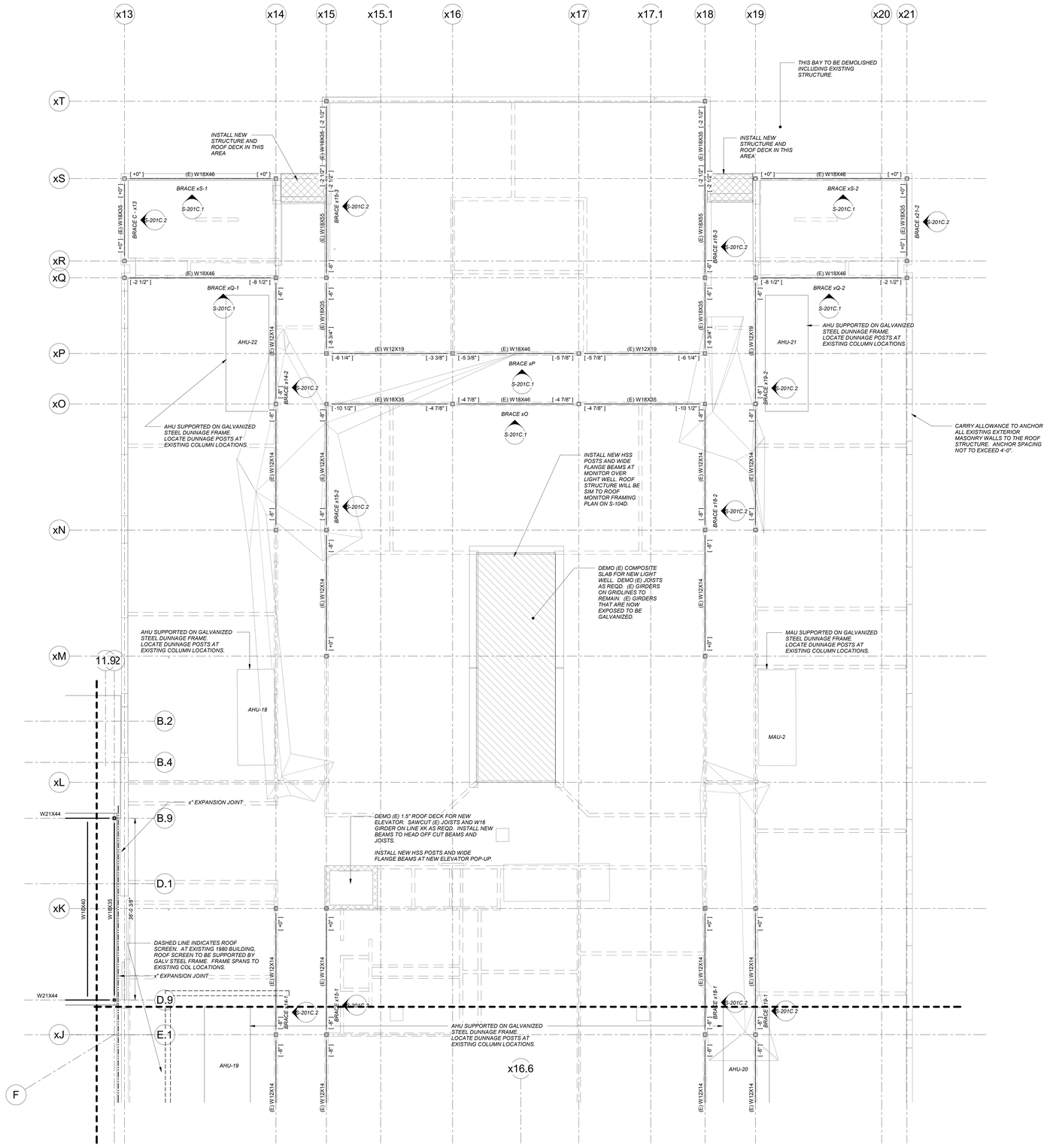

ROOF FRAMING PART C

1/8" = 1'-0"

1980 ROOF RENOVATION NOTES:

1. ALL NEW INTERIOR CMU WALLS TO BE BRACED AT THE TOP TO EXISTING STRUCTURE. ANCHOR SPACING TO BE 4'-0" ON CENTER MAX.
2. CARRY ALLOWANCE FOR NEW ROOF OPENINGS. EXISTING 1.5" METAL DECK TO BE CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED.
3. CARRY ALLOWANCE FOR INFILLS OF EXISTING ROOF OPENINGS. INFILL EXISTING OPENINGS WITH 1.5" ROOF DECK SUPPORTED BY NEW STRUCTURE AS REQUIRED.
4. SEE BRACE FRAME ELEVATIONS (SHEETS S-201C.1 AND S-201C.2) FOR EXISTING BEAMS THAT NEED TO BE REINFORCED OR REPLACED DUE TO INSTALLATION OF NEW STEEL LATERAL BRACE.

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF FRAMING PLAN - PART C

SCALE: 1/8" = 1'-0"

S-104C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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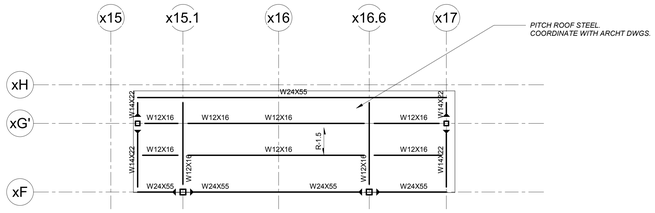
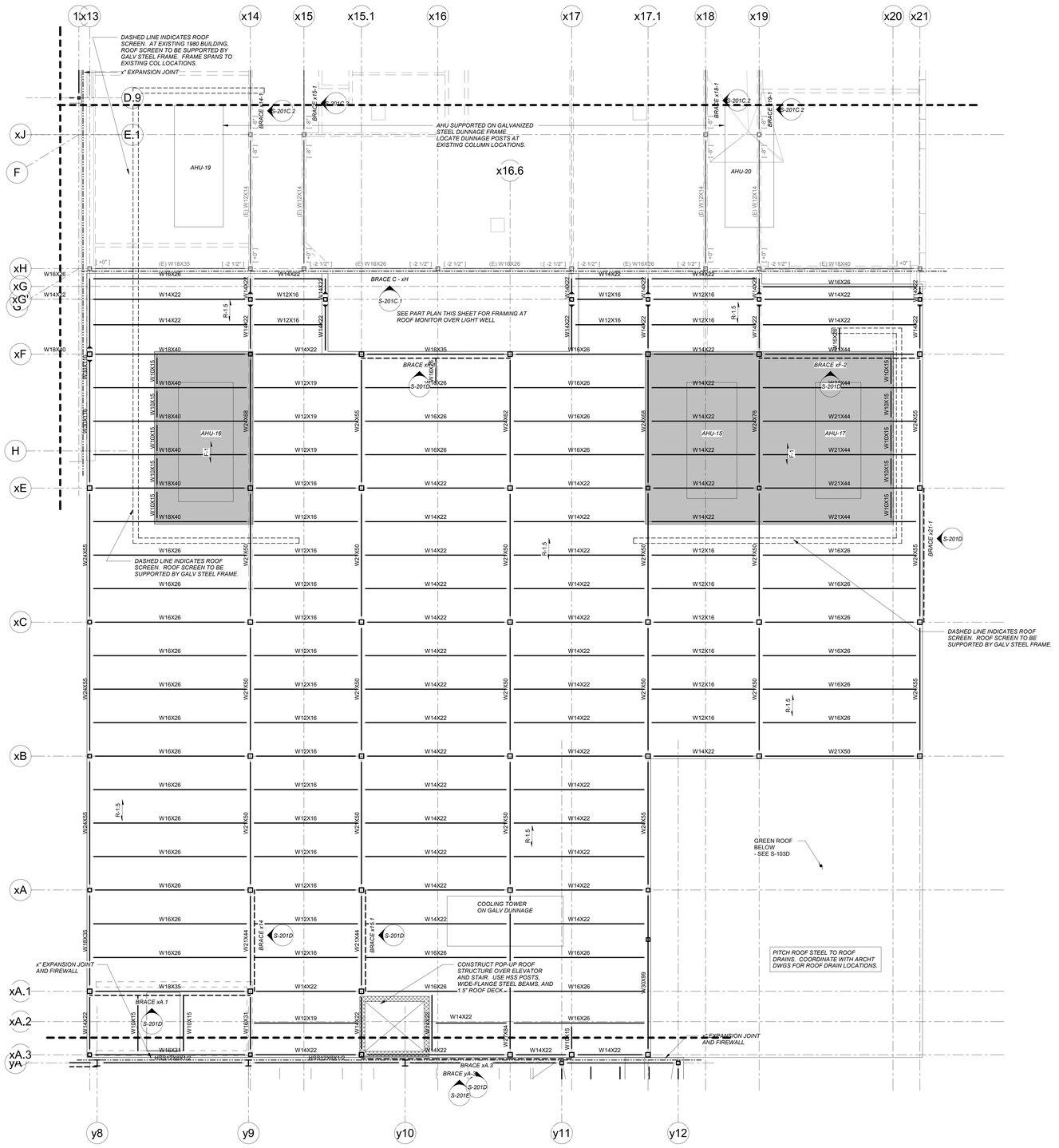


ROOF MONITOR FRAMING PLAN

1/8" = 1'-0"



ROOF FRAMING PART D

1/8" = 1'-0"

1980 ROOF RENOVATION NOTES:

1. ALL NEW INTERIOR CMU WALLS TO BE BRACED AT THE TOP TO EXISTING STRUCTURE. ANCHOR SPACING TO BE 4'-0" ON CENTER MAX.
2. CARRY ALLOWANCE FOR NEW ROOF OPENINGS. EXISTING 1.5" METAL DECK TO BE CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED.
3. CARRY ALLOWANCE FOR INFILLS OF EXISTING ROOF OPENINGS. INFILL EXISTING OPENINGS WITH 1.5" ROOF DECK SUPPORTED BY NEW STRUCTURE AS REQUIRED.
4. SEE BRACE FRAME ELEVATIONS (SHEETS S-201C.1 AND S-201C.2) FOR EXISTING BEAMS THAT NEED TO BE REINFORCED OR REPLACED DUE TO INSTALLATION OF NEW STEEL LATERAL BRACE.

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF FRAMING PLAN - PART D

SCALE: 1/8" = 1'-0"

S-104D

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2/20/2019

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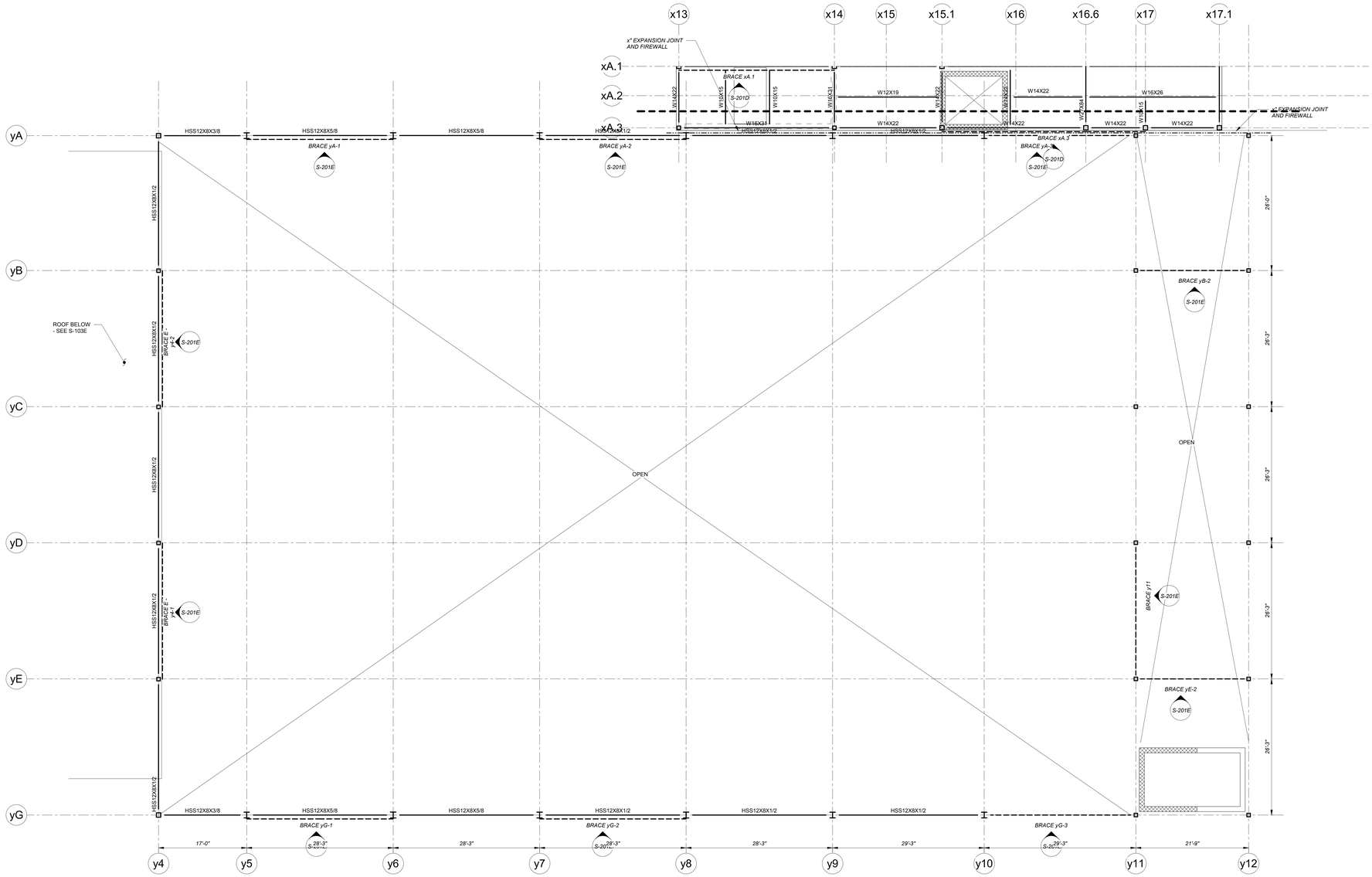

FOURTH FLOOR FRAMING PLAN - PART E

1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
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F. +1 617 449 4049

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Construction Manager Address

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Code Consultant:
Hastings Consulting
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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FOURTH FLOOR FRAMING PLAN - PART E

SCALE: 1/8" = 1'-0"

S-104E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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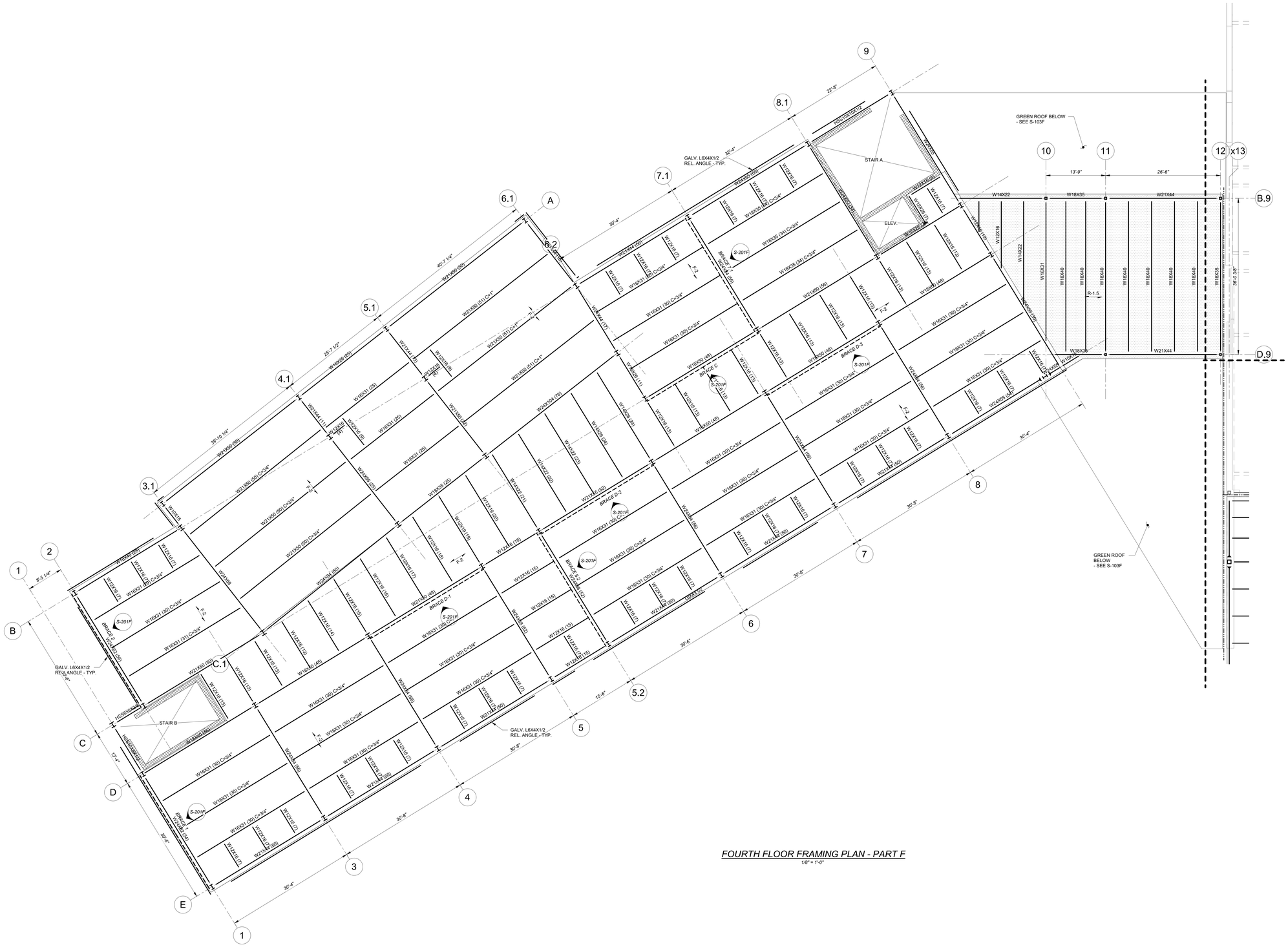
GREEN ROOF BELOW - SEE S-103F
STAIR A
ELEV.
STAIR B
GALV. L6X4X1/2 REL. ANGLE - TYP.
BRACE D-1
BRACE D-2
BRACE D-3
BRACE C
S-201F
W14X22
W18X35
W21X44
W18X40
W18X50
W18X55
W12X16
W16X31 (30) C=3/4"
W16X31 (31) C=3/4"
W21X50 (50) C=3/4"
W21X50 (51) C=1"
W21X50 (56)
W21X50 (61) C=1"
W21X50 (66)
W21X50 (68)
W24X55 (28)
W24X55 (30)
W24X55 (31)
W24X76 (68)
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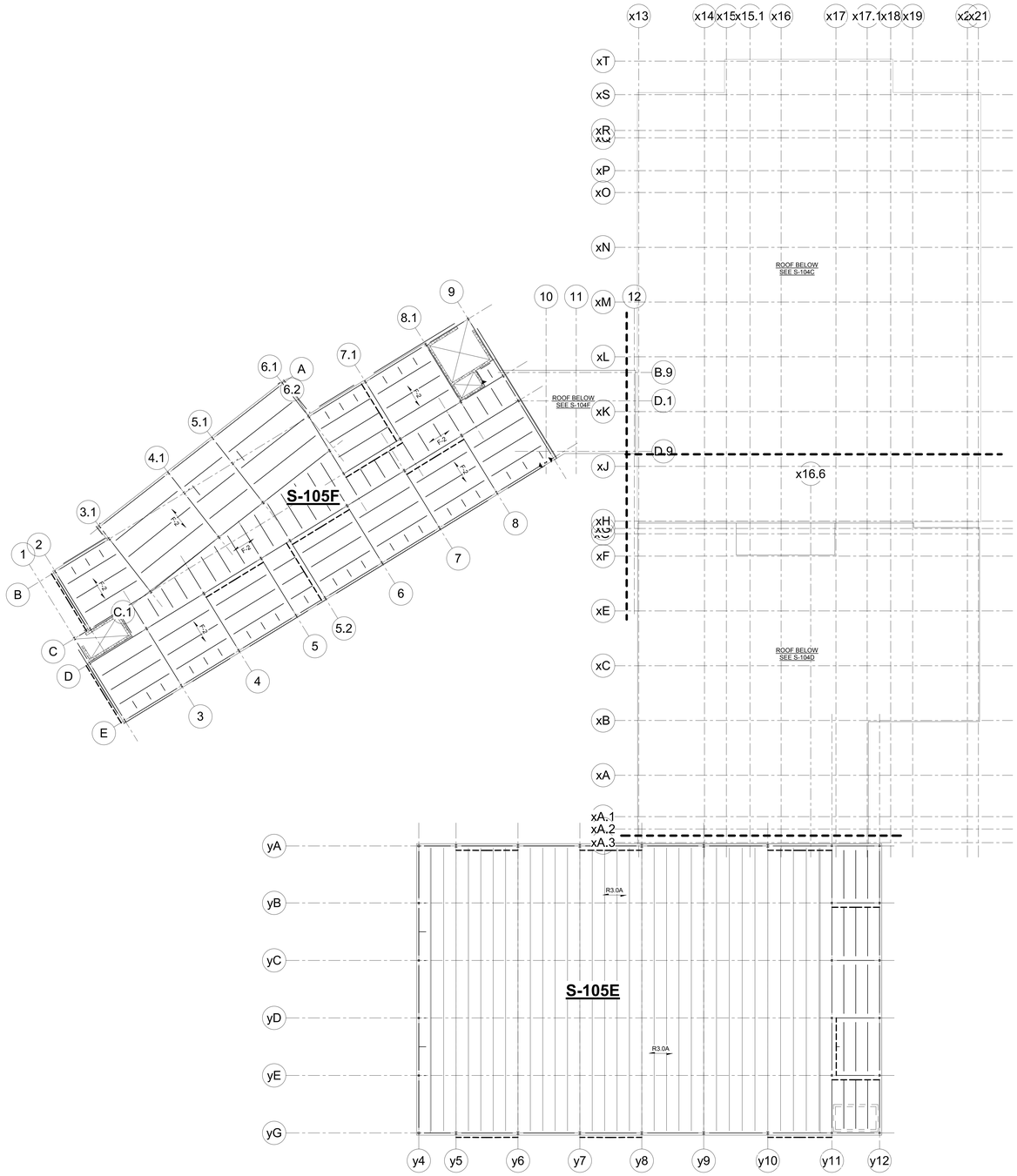

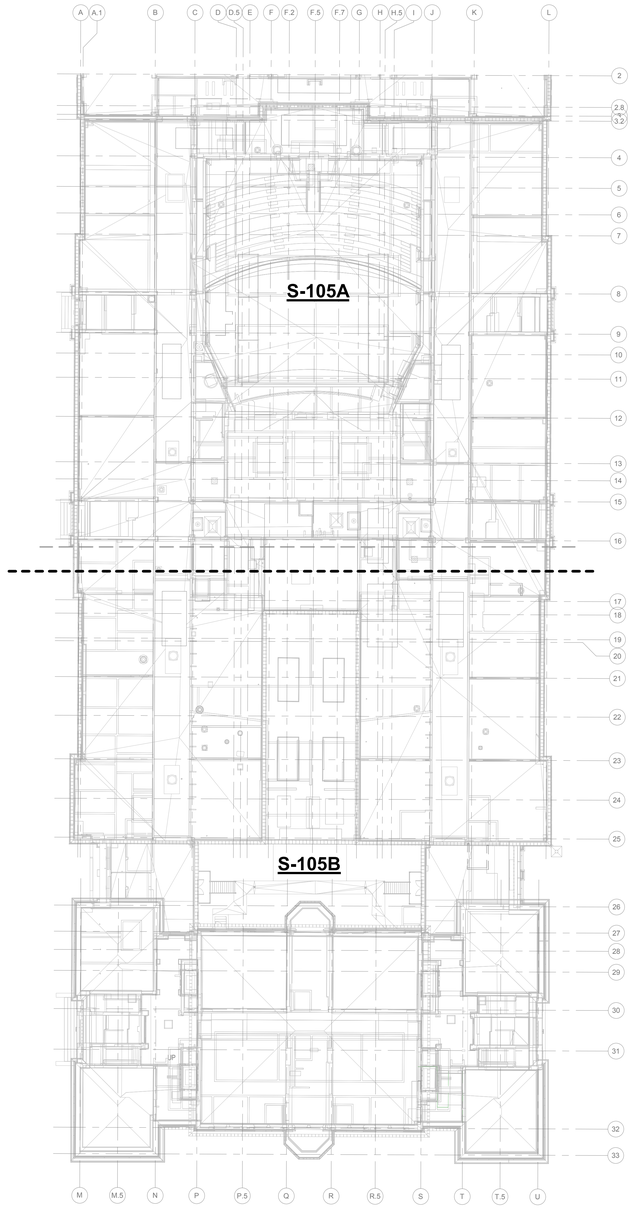

OVERALL FIFTH FLOOR/ROOF PLAN

3/64" = 1'-0"

NOTES:

1. *REFER TO SCHEMATIC DESIGN STRUCTURAL NARRATIVE FOR ADDITIONAL INFORMATION.*
2. *F-2 INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 3 1/2" MINIMUM NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 5 1/2" TOTAL SLAB THICKNESS. POUR SLABS LEVEL, ACCOUNTING FOR ADDITIONAL CONCRETE DUE TO STRUCTURAL FRAMING AND DECK DEFLECTIONS (AVERAGE OF 3/4" OVER THE ENTIRE FLOOR AREA).*
3. *(XX) INDICATES THE NUMBER OF EQUALLY SPACED 3/4" DIA. HEADED SHEAR CONNECTOR STUDS WELDED TO THE CENTER OF THE TOP FLANGE OF THE BEAM OR GIRDER. PROVIDE A MINIMUM OF ONE STUD PER FOOT LENGTH AT ALL BEAMS SUPPORTING COMPOSITE FLOOR DECK.*
4. *R3.0A INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 3" DEEP x 18/20 GAUGE GALVANIZED, WITH PRIMED UNDERSIDE, DEEP RIB CELLULAR ACOUSTIC METAL ROOF DECK.*

   INDICATES A ROOF AREA.
5. *FIFTH FLOOR TOP OF STEEL ELEVATION = 93' - 6 1/2". UNLESS NOTED OTHERWISE ON PLAN OR IN SECTIONS.*
6. *INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.*
7. *COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.*
8. *INDICATES A FULL CAPACITY MOMENT CONNECTION.*
9. *BRACE "X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS REFER TO DRAWINGS S-201C.1 THRU S-201F.*
10. *"D.8 " INDICATES 2-#5 DRAG BARS IN CONCRETE SLAB. PROVIDE ONE BAR ON EACH SIDE AT INTERIOR BRACE "X" BRACING AND BOTH BARS ON SAME SIDE WHERE BRACE "X" BRACING IS NEAR THE EDGE OF SLAB. EXTEND BARS ONE BAY (MIN.) EACH SIDE OF BRACE BAY.*
11. *BEAMS AND GIRDERS THAT SUPPORT DLH-SERIES JOISTS SHALL BE 7" LOWER IN ELEVATION TO ACCOUNT FOR STEEL JOIST SEAT DIMENSION.*
12. *T.J. INDICATES A BOLTED TIE JOIST.*
13. *ALL OPEN WEB STEEL JOISTS SHALL BE BRIDGED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE (SJI). ROOF JOISTS SHALL HAVE A LINE OF "UPLIFT" BRIDGING AT THE FIRST INTERIOR BOTTOM CHORD PANEL POINT AT EACH END.*
14. ** INDICATES EXPOSED TO VIEW STRUCTURAL STEEL. REFER TO SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF E.V.S.S. WITH ARCHITECTURAL DRAWINGS. ALL E.V.S.S. TO RECEIVE INTUMESCENT PAINT UNLESS NOTED OTHERWISE.*
15. *COORDINATE AND VERIFY THE SIZE, QUANTITY AND LOCATION OF ALL VENTS, PIPES, DUCTS SHAFTS, AND OTHER FLOOR PENETRATIONS WITH ARCHITECTURAL AND M.E.P. DRAWINGS AND PROVIDE STEEL FRAMES AS REQUIRED PER THE TYPICAL DETAILS. ALL REQUIRED PENETRATIONS MIGHT NOT BE SHOWN ON THE STRUCTURAL DRAWINGS.*
16. *ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.*
17. *SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.*

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NO.	DATE	ISSUE

SEAL

N

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

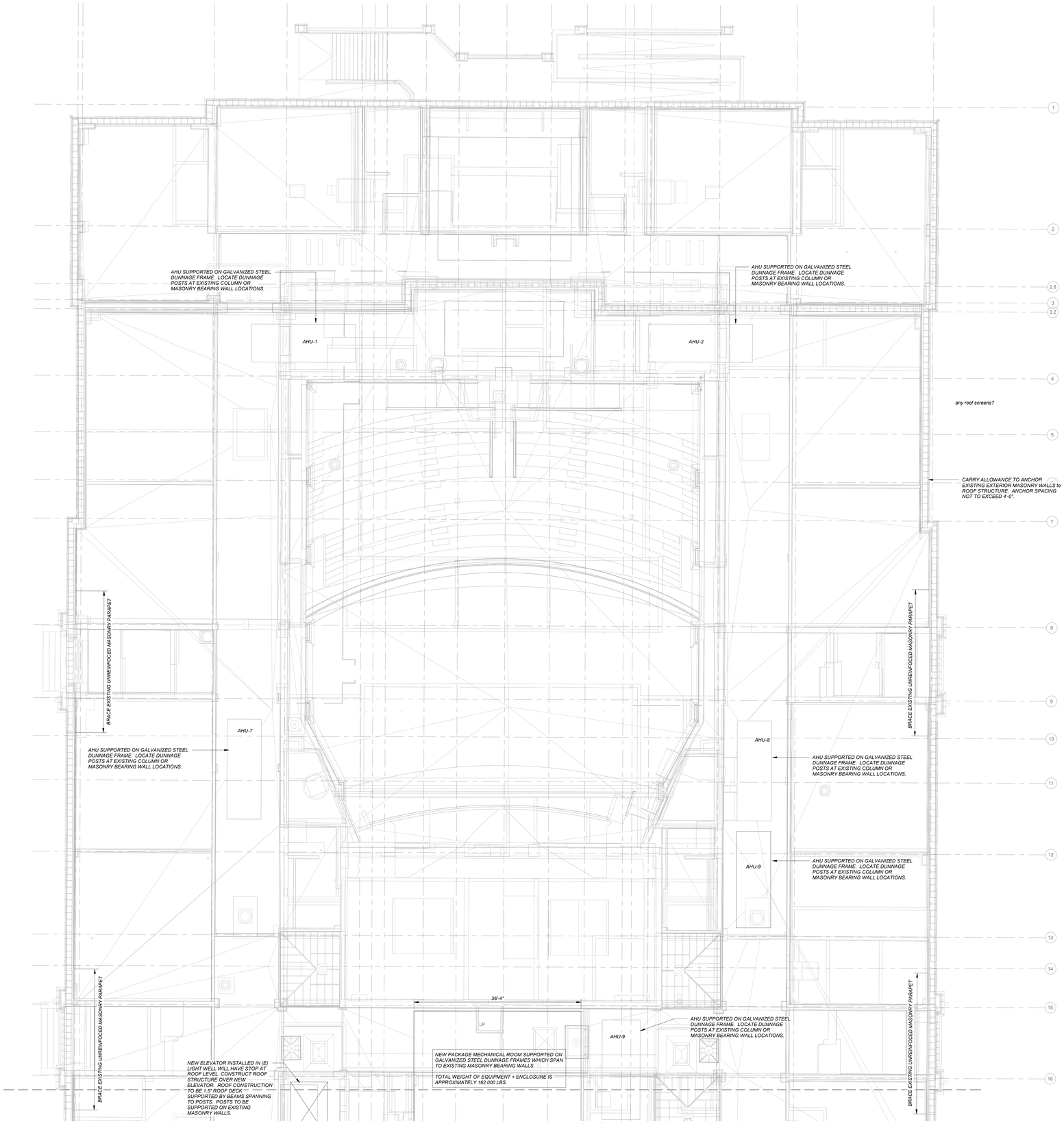
DRAWING TITLE:
OVERALL FIFTH FLOOR/ROOF PLAN

SCALE: As indicated

S-105

SCHEMATIC DESIGN SUBMISSION

2/20/2019



ROOF PLAN - NORTH
1/8" = 1'-0"

1922 ROOF RENOVATION NOTES:

1. CARRY ALLOWANCE FOR NEW ROOF OPENINGS. EXISTING 4" CONCRETE TOPPING AND METAL LATH DECKING TO BE CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED.
2. CARRY ALLOWANCE FOR INFILLS OF EXISTING ROOF OPENINGS. INFILL EXISTING OPENINGS WITH 1.5" ROOF DECK SUPPORTED BY NEW STRUCTURE AS REQUIRED.

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
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Owner:
375 Merrimack Street, Lowell, MA 08152

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Planning / Zoning Consultant Name
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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF FRAMING PLAN - PART A

SCALE: 1/8" = 1'-0"

S-105A

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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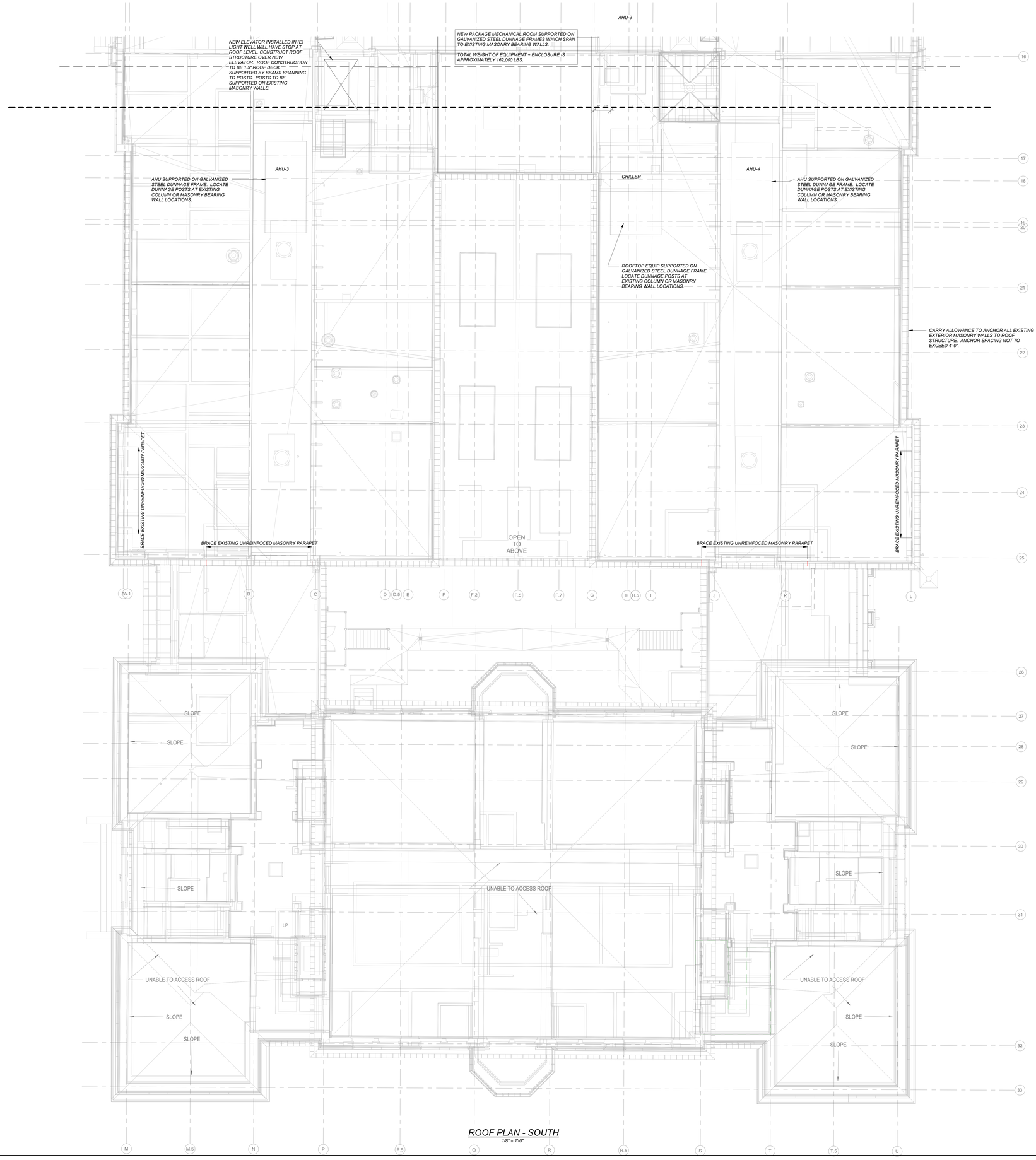

ROOF PLAN - SOUTH
1/8" = 1'-0"

1922 ROOF RENOVATION NOTES:

1. CARRY ALLOWANCE FOR NEW ROOF OPENINGS. EXISTING 4" CONCRETE TOPPING AND METAL LATH DECKING TO BE CUT AND SUPPORTED WITH NEW STRUCTURE AS REQUIRED.
2. CARRY ALLOWANCE FOR INFILLS OF EXISTING ROOF OPENINGS. INFILL EXISTING OPENINGS WITH 1.5" ROOF DECK SUPPORTED BY NEW STRUCTURE AS REQUIRED.

NO.	DATE	ISSUE

SEAL

KEY PLAN

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Boston, MA 02108
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Owner:
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Food Service:
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Security:
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Code Consultant:
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142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF FRAMING PLAN - PART B

SCALE: 1/8" = 1'-0"

S-105B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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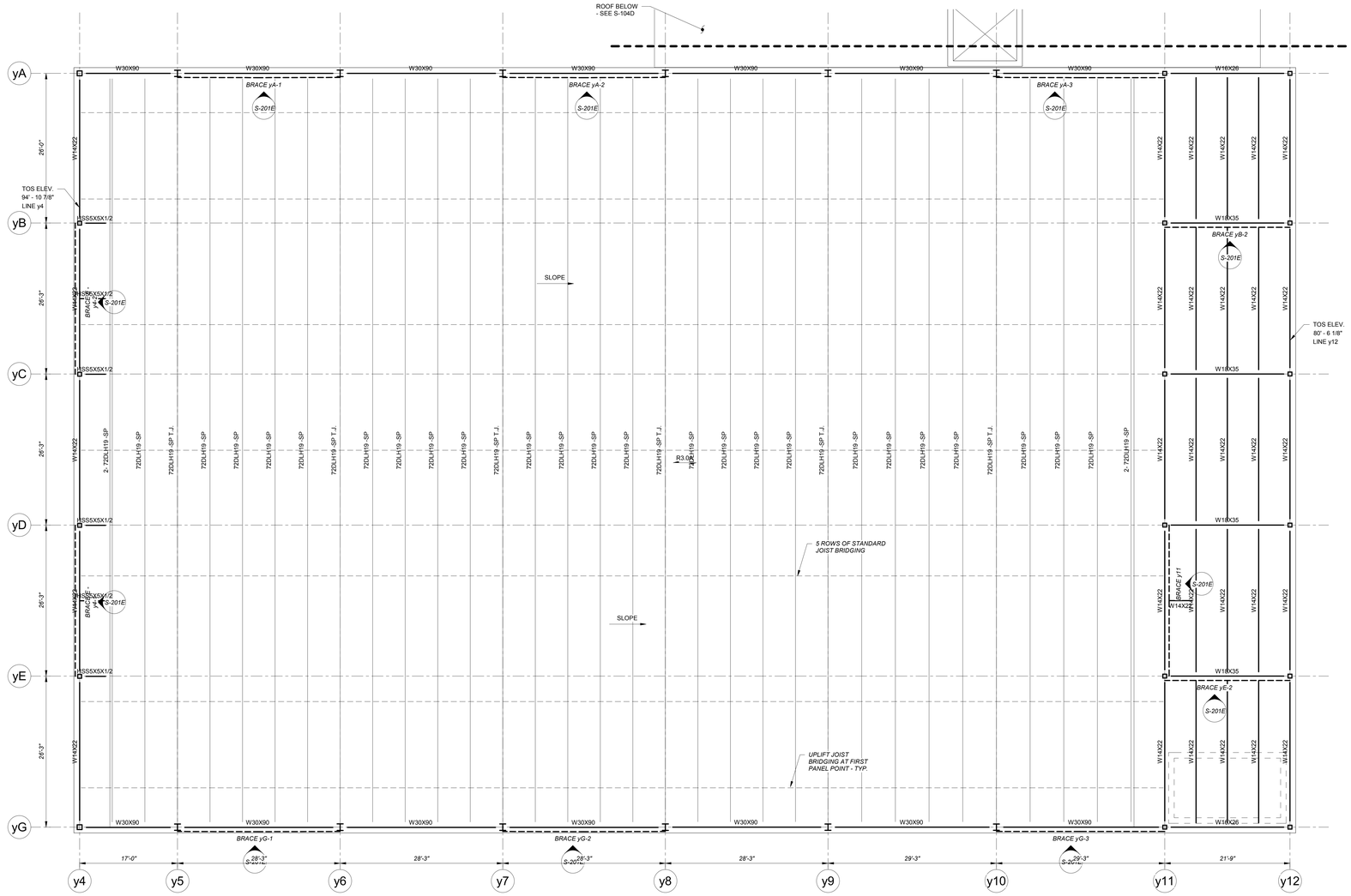

ROOF FRAMING PLAN - PART E

1/8" = 1'-0"

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SEAL

KEY PLAN

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Boston, MA 02108
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Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

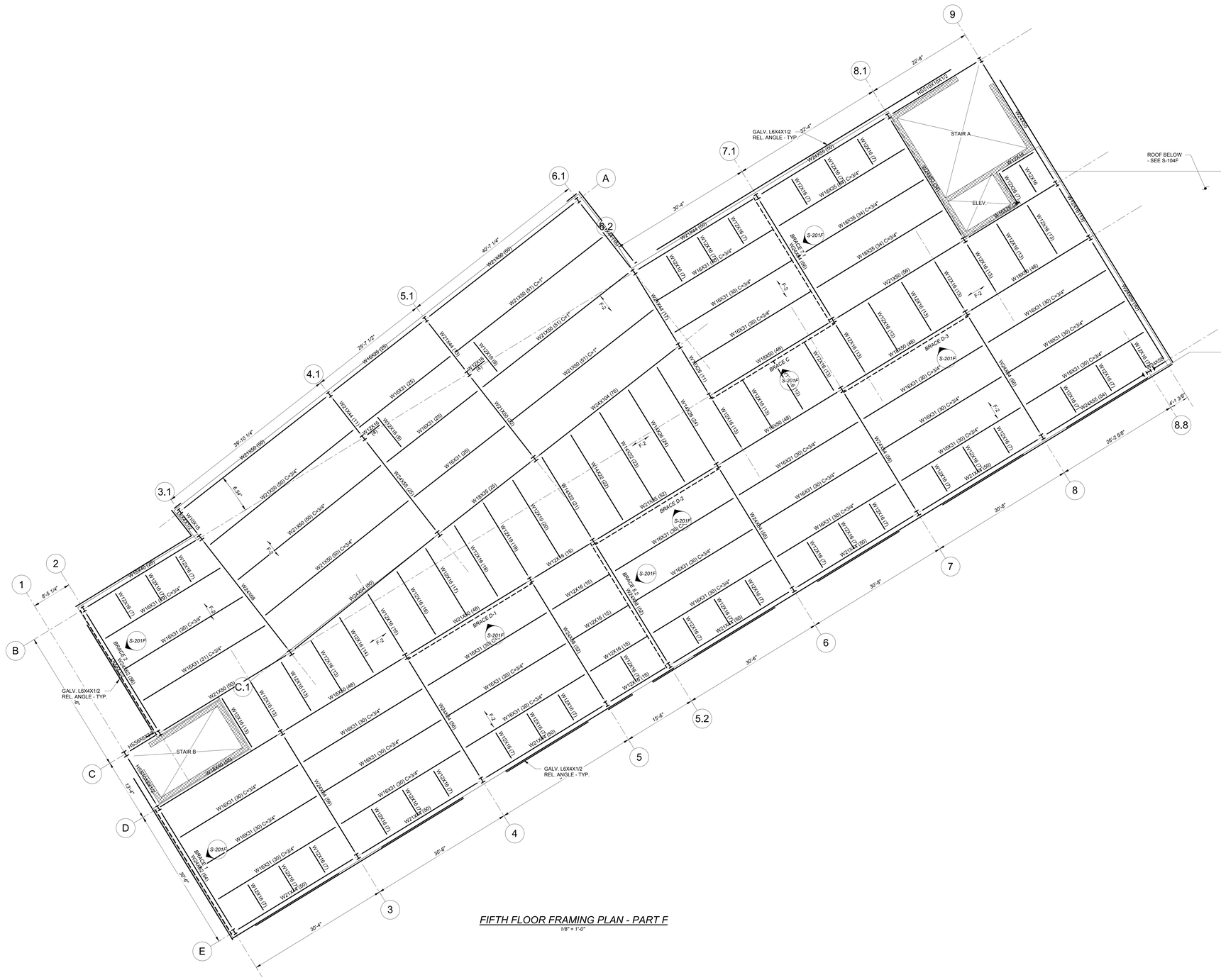
DRAWING TITLE:
ROOF FRAMING PLAN - PART E

SCALE: As indicated

S-105E

SCHEMATIC DESIGN SUBMISSION

2/20/2019


STAIR A
STAIR B
ELEV.
ROOF BELOW - SEE S-104F
GALV. L6X4X1/2 REL. ANGLE - TYP.
HSS10X10X1/2
W24X84 (60)
W21X50 (60)
W16X31 (30) C=3/4"
W16X31 (30) C=3/4" T-2
W16X31 (51) C=3/4"
W16X26 (48)
W16X50 (48)
W16X89 (48)
W12X16 (15)
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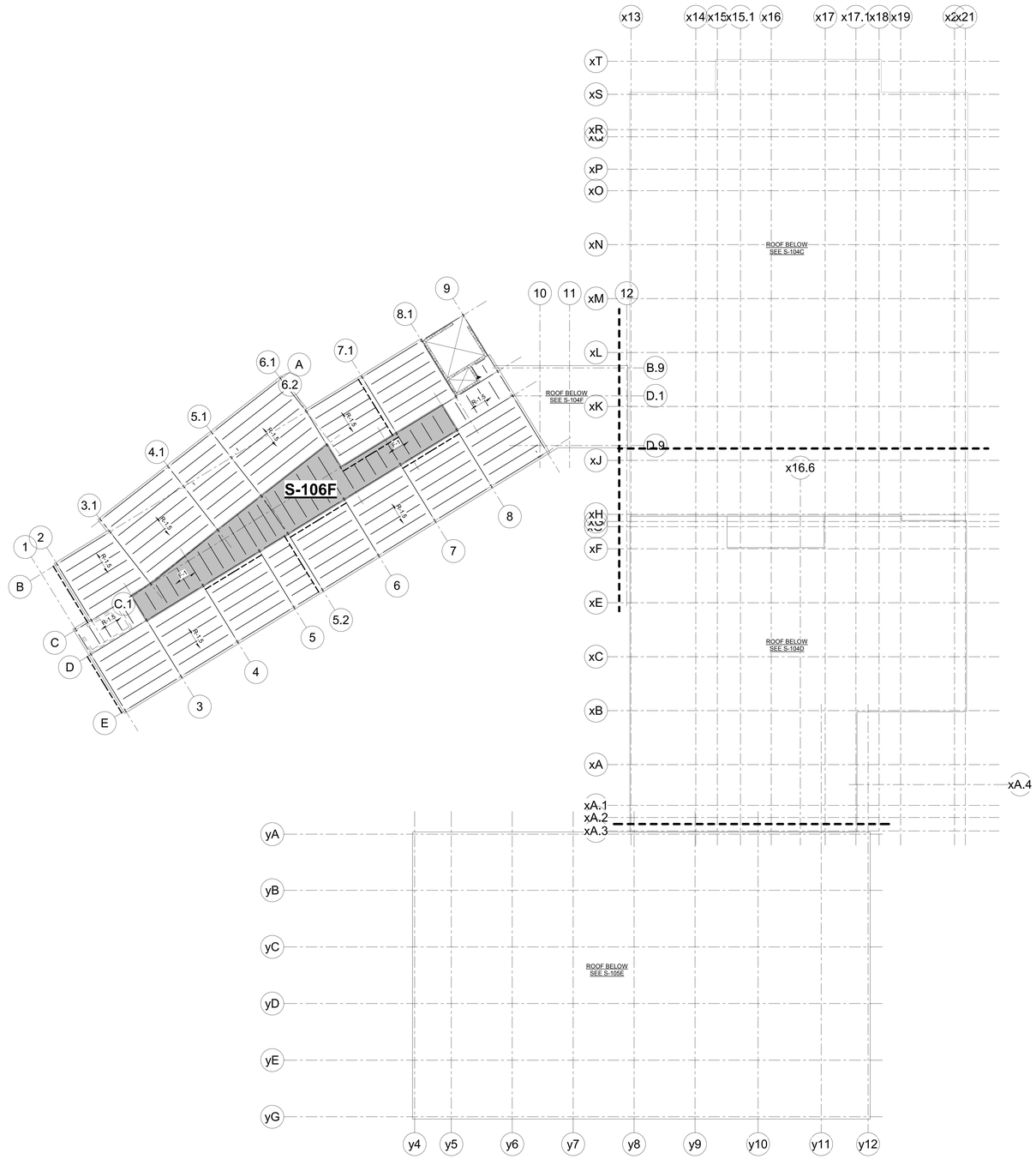

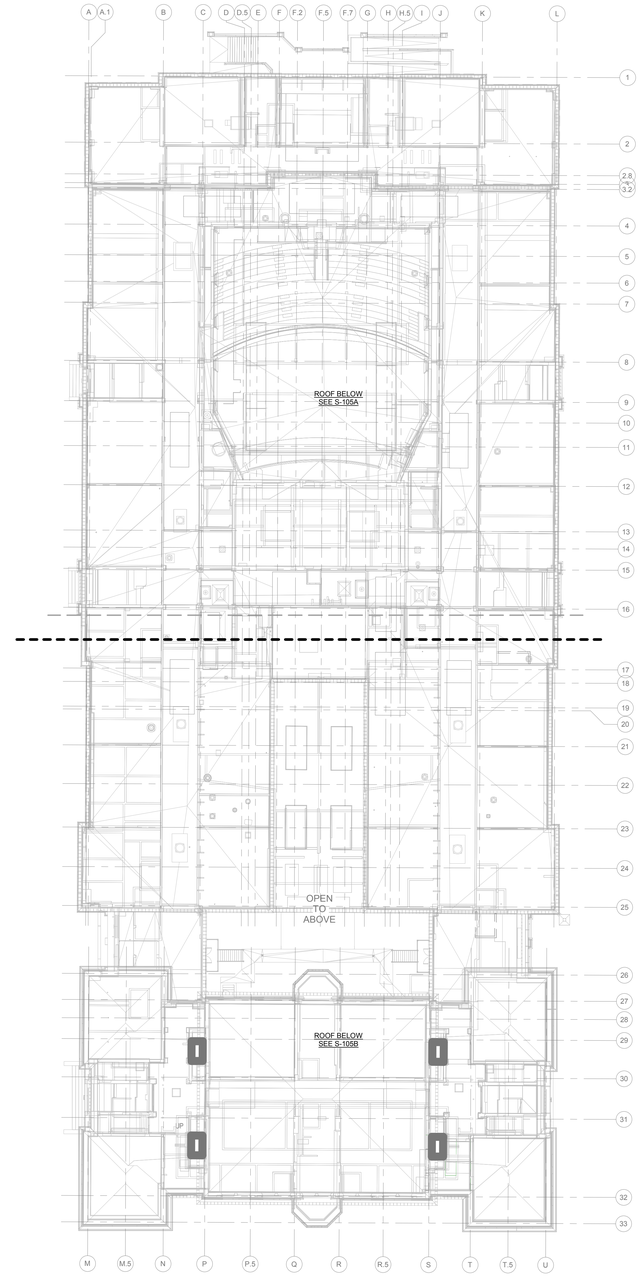

OVERALL ROOF PLAN

3/64" = 1'-0"

NOTES:

1. *REFER TO SCHEMATIC DESIGN STRUCTURAL NARRATIVE FOR ADDITIONAL INFORMATION..*
2. *R1.5 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1 1/2" DEEP x 18 GAUGE GALVANIZED WIDE RIB METAL ROOF DECK.*
3. *F-1 INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 3 1/2" MINIMUM NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 1-1/2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 5" TOTAL SLAB THICKNESS.*

   INDICATES THE EXTENT OF CONCRETE SLAB ON METAL DECK AT ROOF AREAS.
4. *ROOF TOP OF STEEL/UNDERSIDE OF METAL DECK ELEVATION VARIES. REFER TO PLANS AND SECTIONS.*
5. *INDICATES A FULL CAPACITY MOMENT CONNECTION.*
6. *BRACE "X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS REFER TO DRAWINGS S-201C.1 THRU S-201F.*
7. *" INDICATES EXPOSED TO VIEW STRUCTURAL STEEL. REFER TO SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF E.V.S.S. WITH ARCHITECTURAL DRAWINGS. ALL E.V.S.S. TO RECEIVE INTUMESCENT PAINT UNLESS NOTED OTHERWISE.*
8. *ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.*
9. *SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.*
10. *ALL OPEN WEB STEEL JOISTS SHALL BE BRIDGED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE (SJI). ROOF JOISTS SHALL HAVE A LINE OF "UPLIFT" BRIDGING AT THE FIRST INTERIOR BOTTOM CHORD PANEL POINT AT EACH END.*
11. *COORDINATE AND VERIFY THE SIZE, QUANTITY AND LOCATION OF ALL ROOF DRAINS. (NOTED ON PLAN AS "R.D."), VENTS, DUCTS, SKYLIGHTS AND OTHER ROOF PENETRATIONS WITH THE ARCHITECTURAL AND MEP DRAWINGS AND PROVIDE STEEL FRAMES AS REQUIRED PER THE TYPICAL DETAILS. ALL REQUIRED PENETRATIONS MIGHT NOT BE SHOWN ON THE STRUCTURAL DRAWINGS.*

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
OVERALL ROOF PLAN

SCALE: As indicated

S-106

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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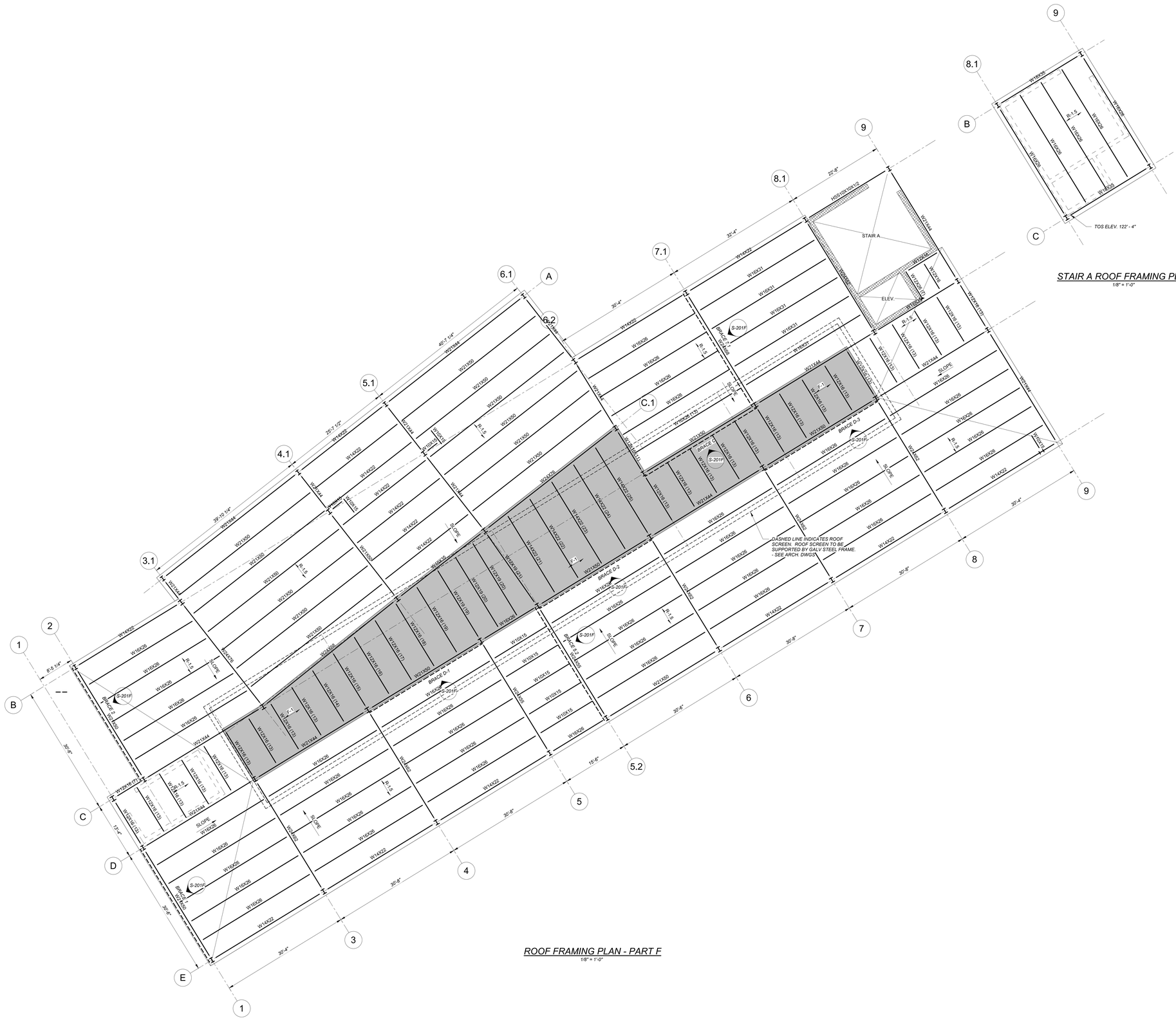
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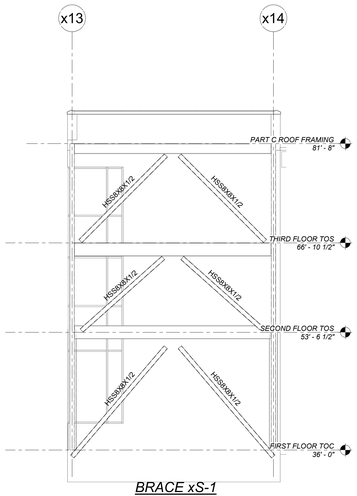
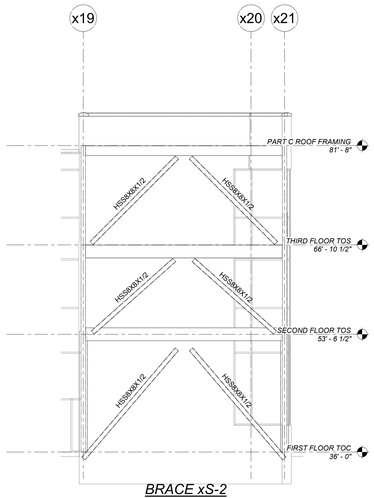


BRACE xS-1
1/8" = 1'-0"



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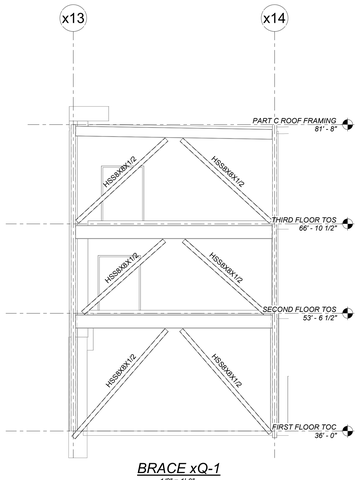

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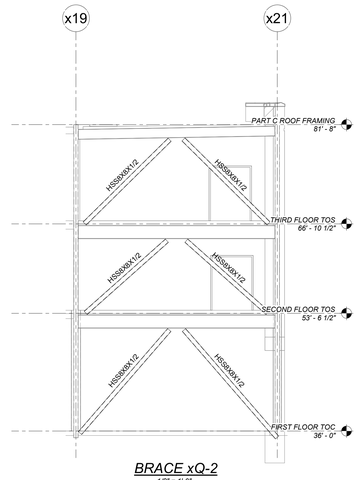
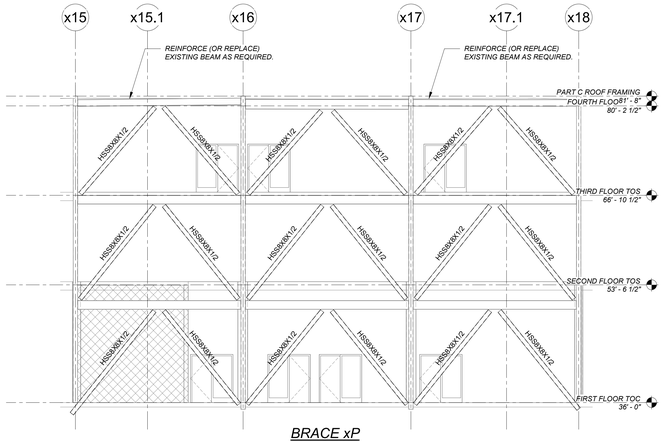


BRACE xQ-2
1/8" = 1'-0"



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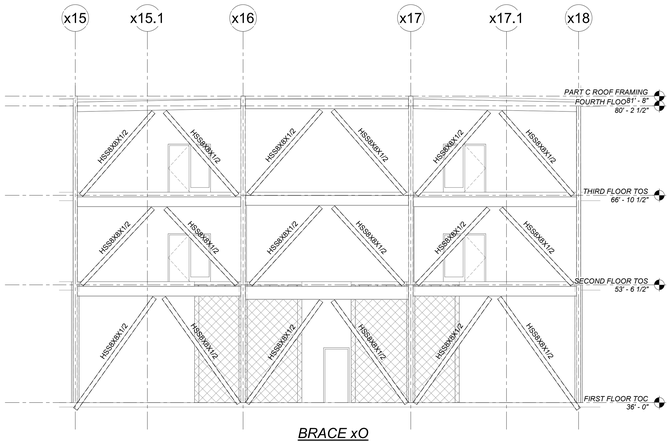

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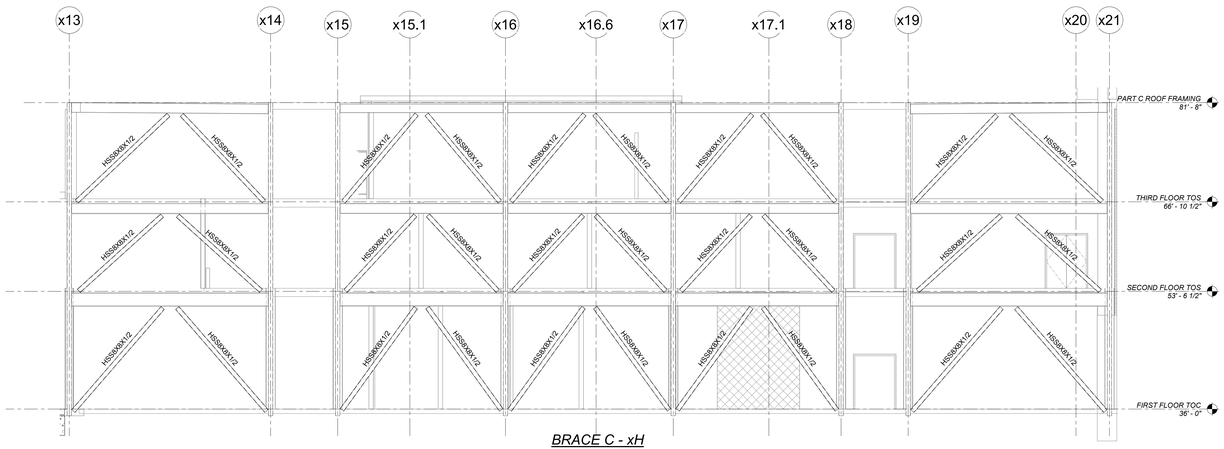

BRACE C - xH
1/8" = 1'-0"

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PROGRESS PRINT
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Harlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

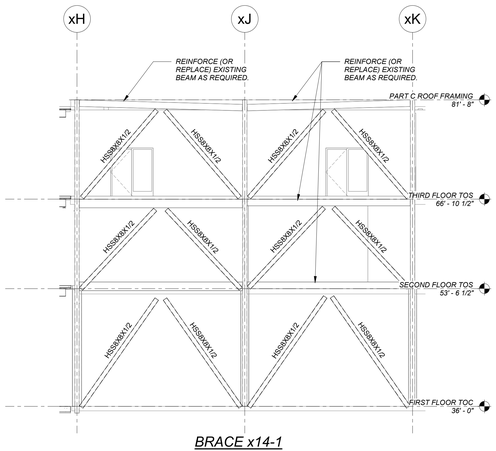
DRAWING TITLE:
BRACE FRAME ELEVATIONS I - PART C

SCALE: As indicated

S-201C.1

SCHEMATIC DESIGN SUBMISSION

2/20/2019



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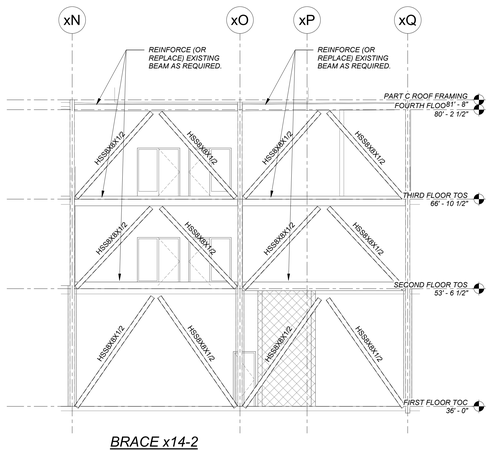

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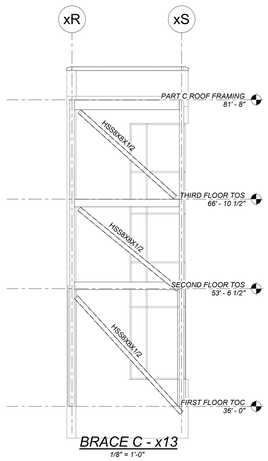

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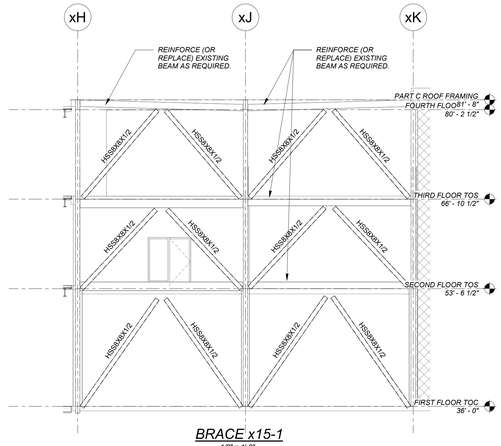

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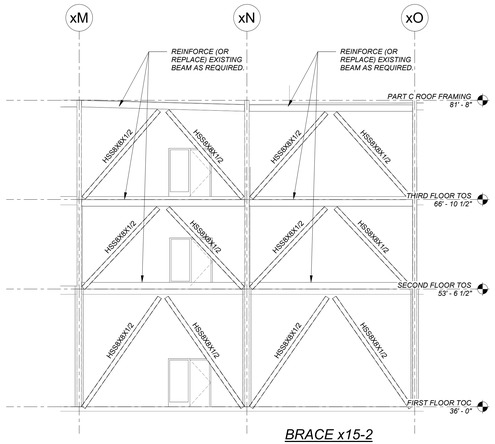

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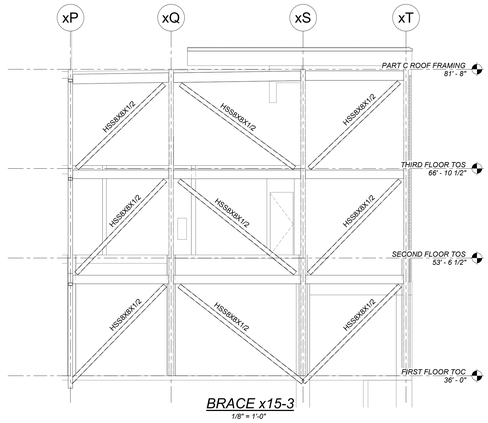

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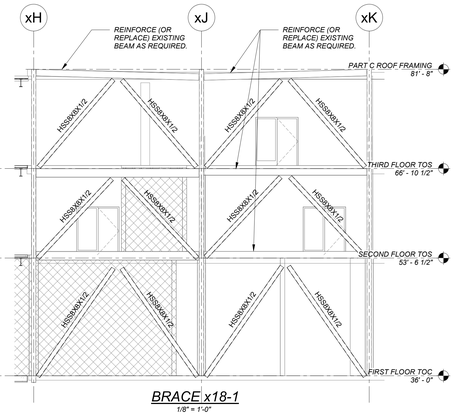

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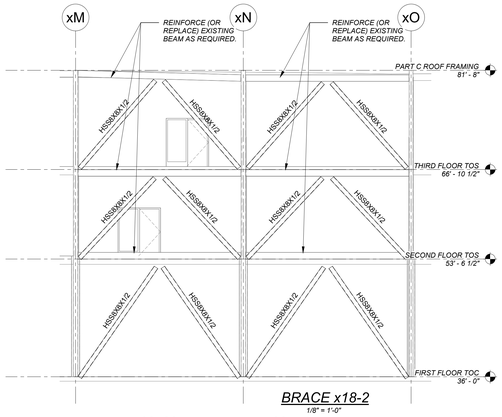

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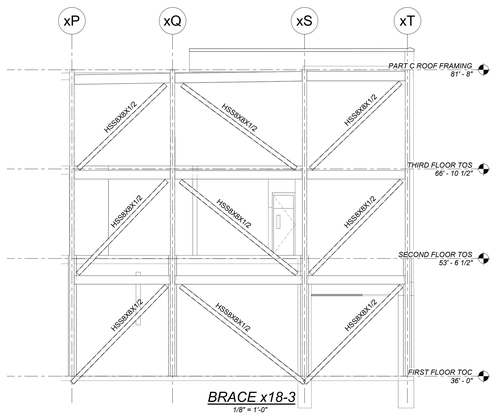
1/8" = 1'-0"



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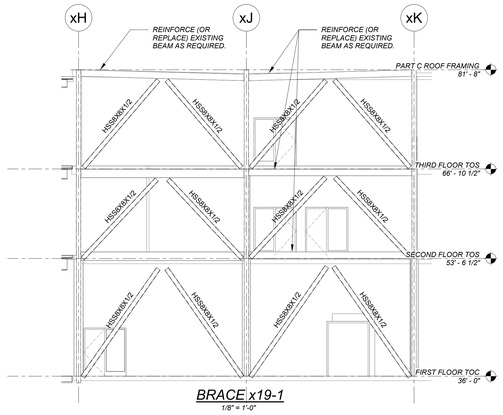

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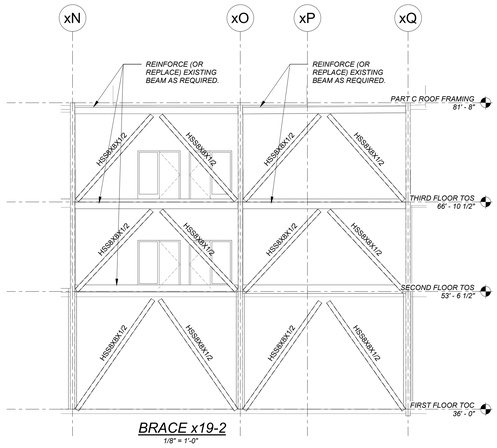

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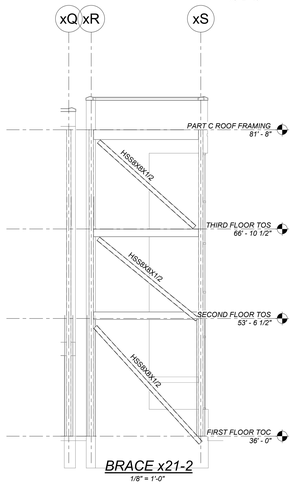

BRACE x21-2
1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
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Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

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370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
BRACE FRAME ELEVATIONS II - PART C

SCALE: As indicated

S-201C.2

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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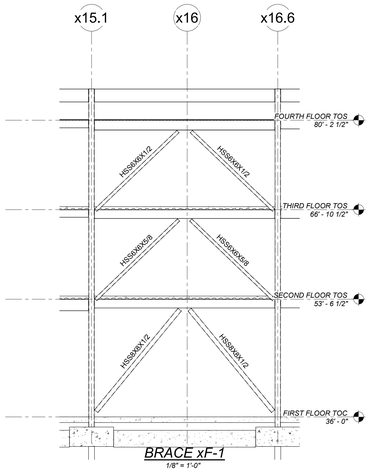

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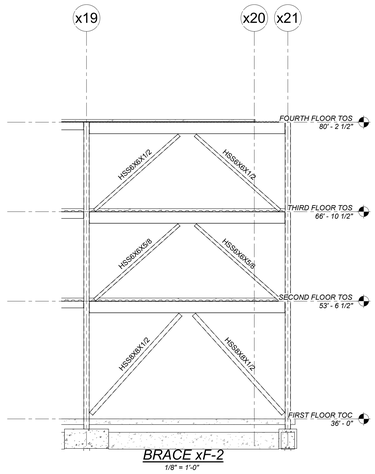

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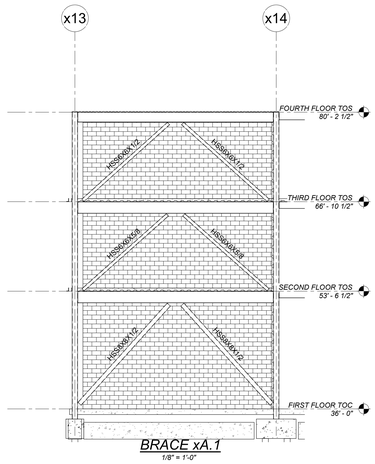

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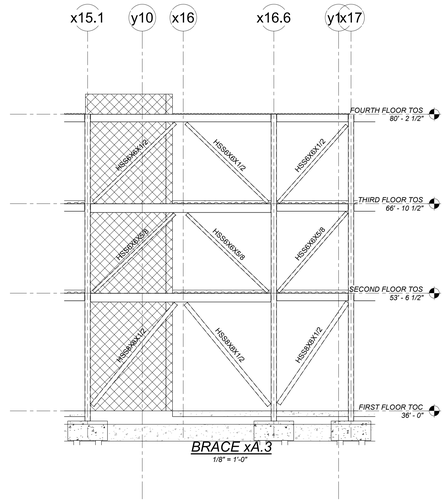

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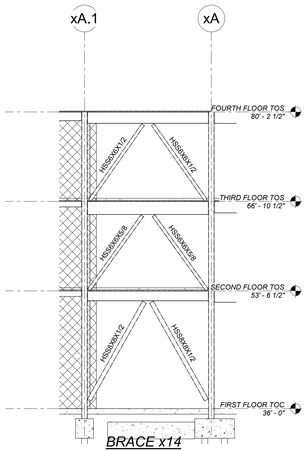

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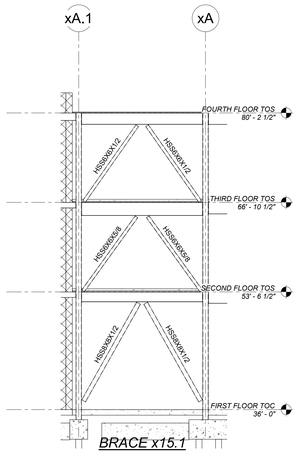

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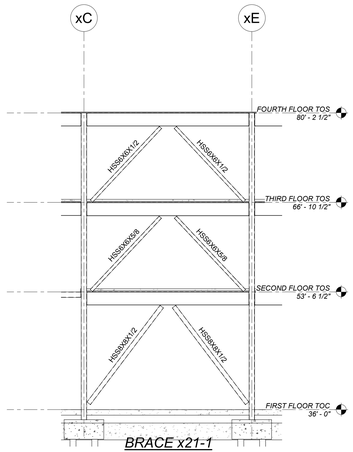

BRACE x21-1

1/8" = 1'-0"

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
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Boston, MA 02108
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370 Faunce Corner Road Dartmouth, MA 02747

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400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
BRACE FRAME ELEVATIONS - PART D

SCALE: As indicated

S-201D

SCHEMATIC DESIGN SUBMISSION

2/20/2019

PROGRESS PRINT
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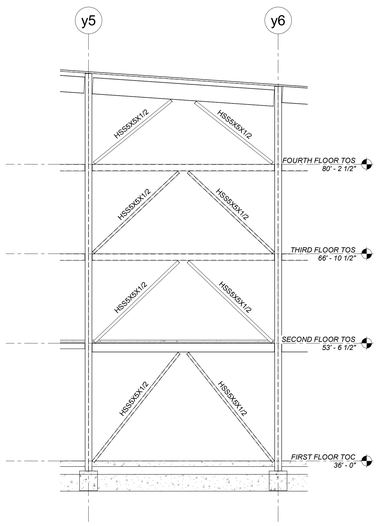

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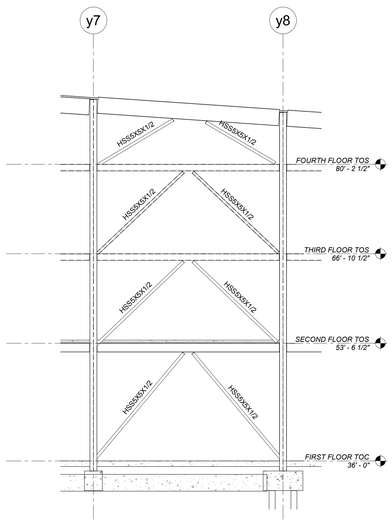

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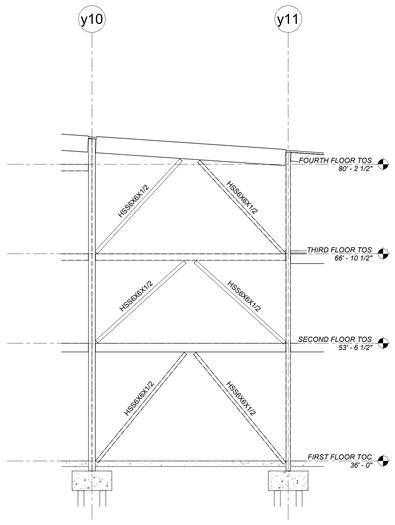

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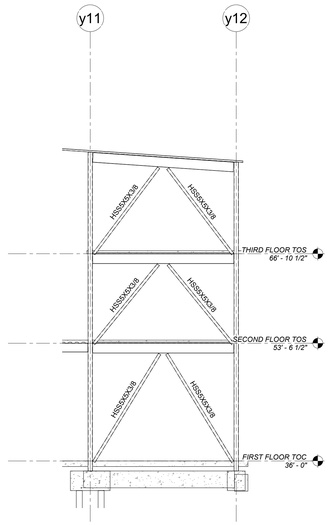

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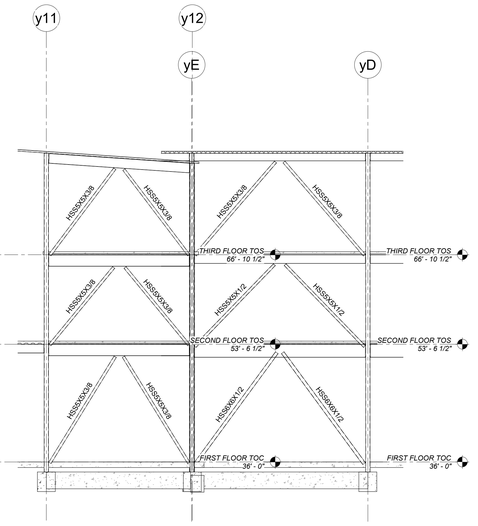
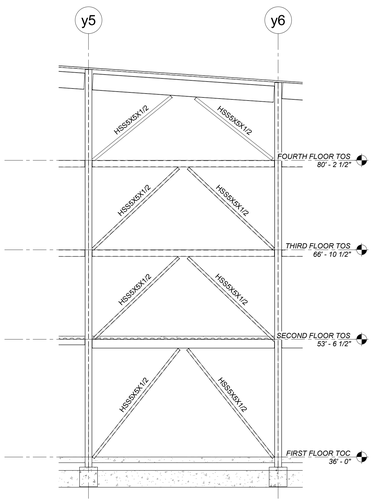


BRACE yB-2
1/8" = 1'-0"

BRACE y11
1/8" = 1'-0"



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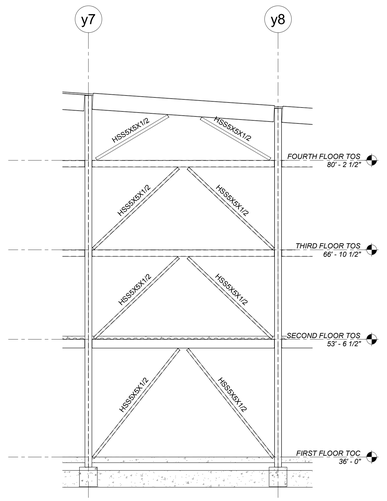

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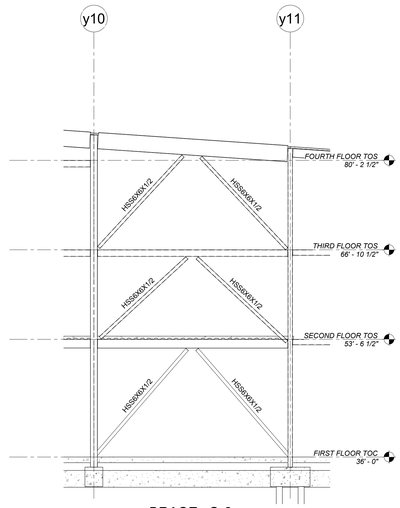

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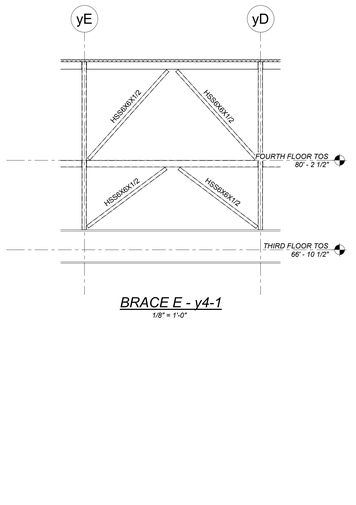

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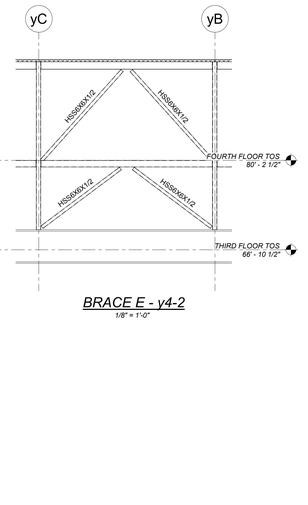

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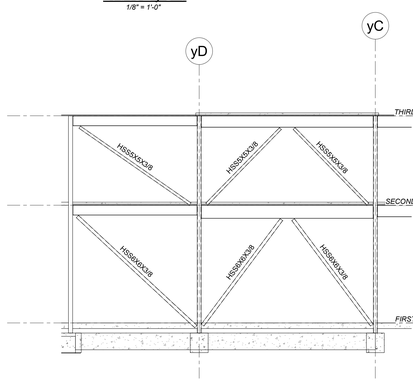

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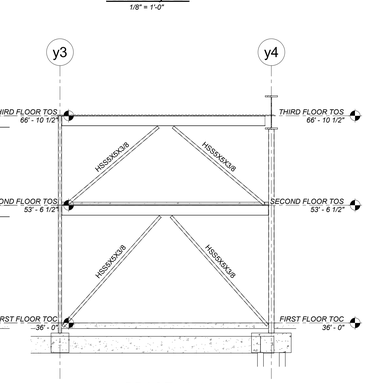

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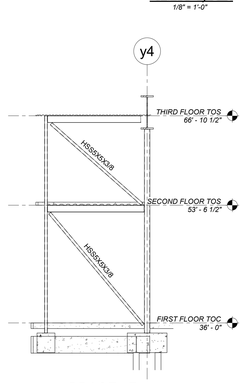

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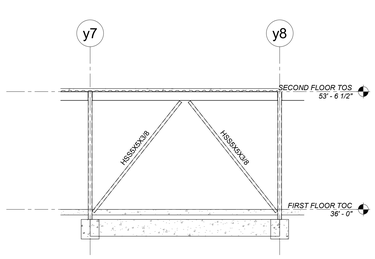

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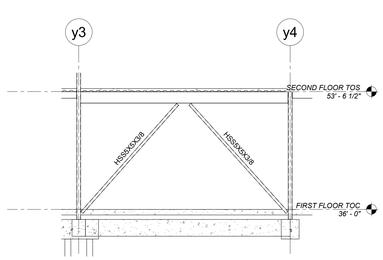

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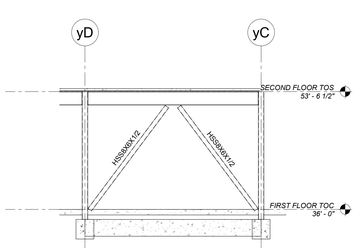

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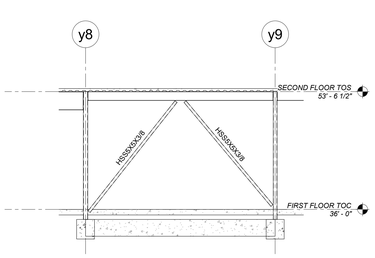

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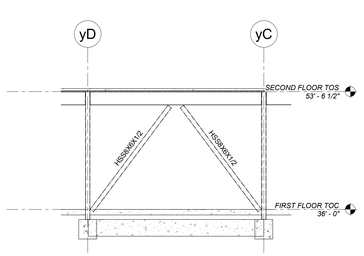

BRACE y8
1/8" = 1'-0"

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NO.	DATE	ISSUE

SEAL

KEY PLAN

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2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollaston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

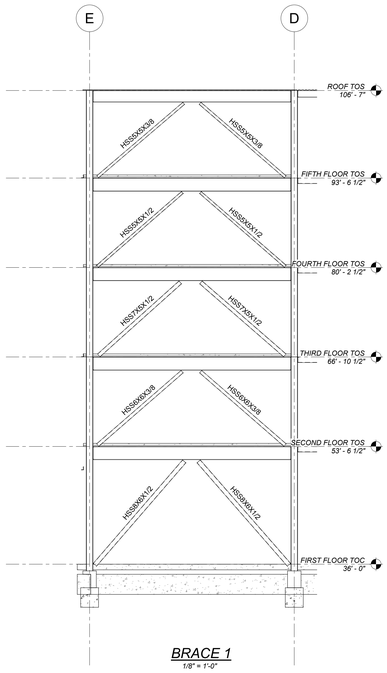
DRAWING TITLE:
BRACE FRAME ELEVATIONS - PART E

SCALE: 1/8" = 1'-0"

S-201E

SCHEMATIC DESIGN SUBMISSION

2/20/2019



BRACE 1
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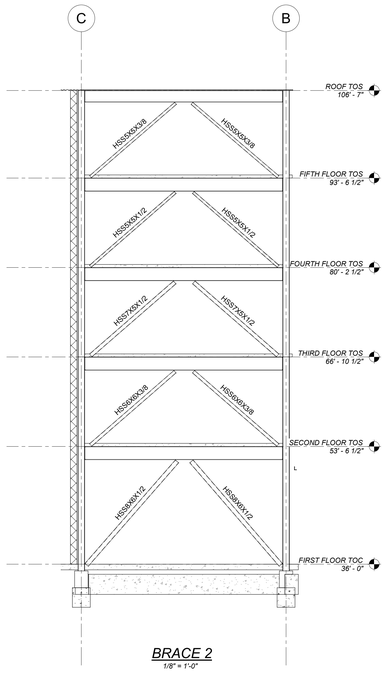

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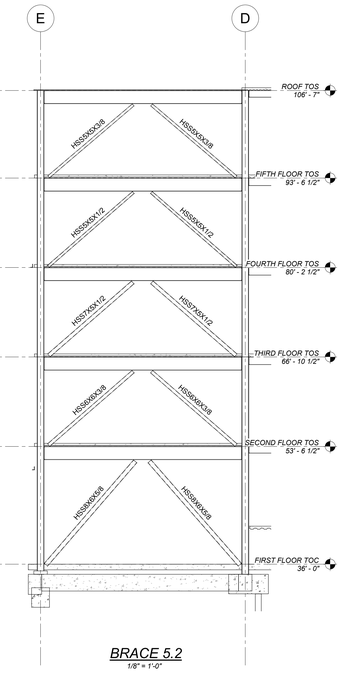

BRACE 5.2
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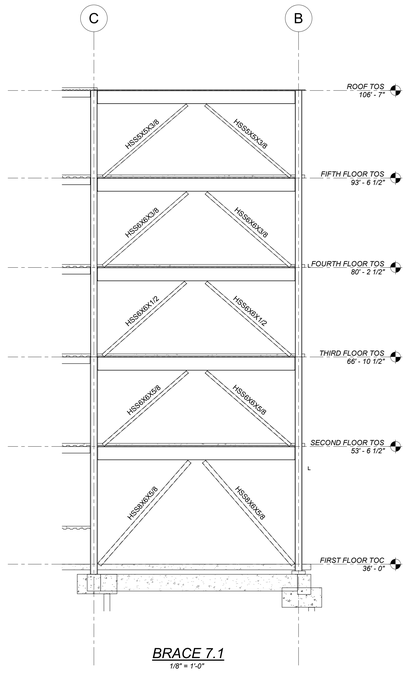
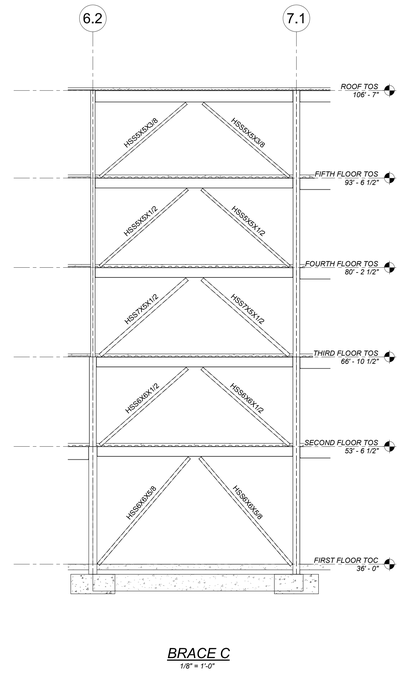
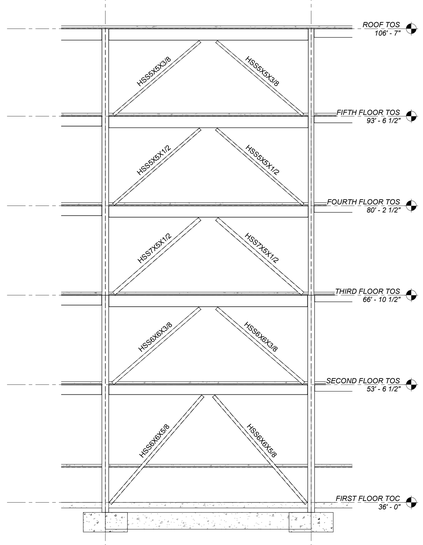


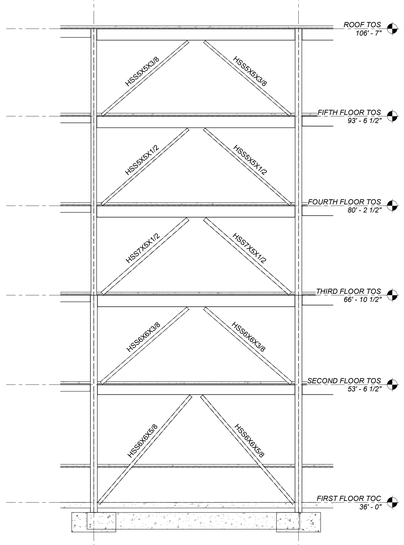
BRACE 7.1
1/8" = 1'-0"



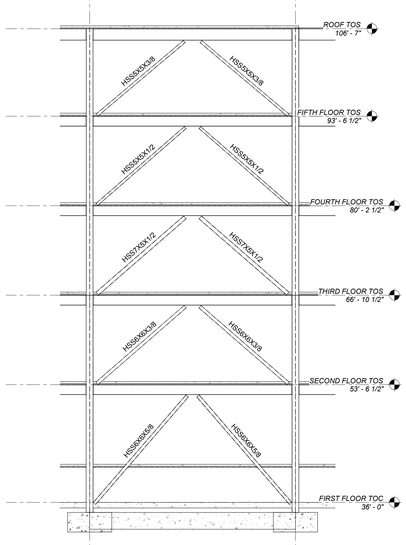
BRACE C
1/8" = 1'-0"



BRACE D-1
1/8" = 1'-0"



BRACE D-2
1/8" = 1'-0"



BRACE D-3
1/8" = 1'-0"

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NO. DATE ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street. 4th Floor Providence, RI 02903

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Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

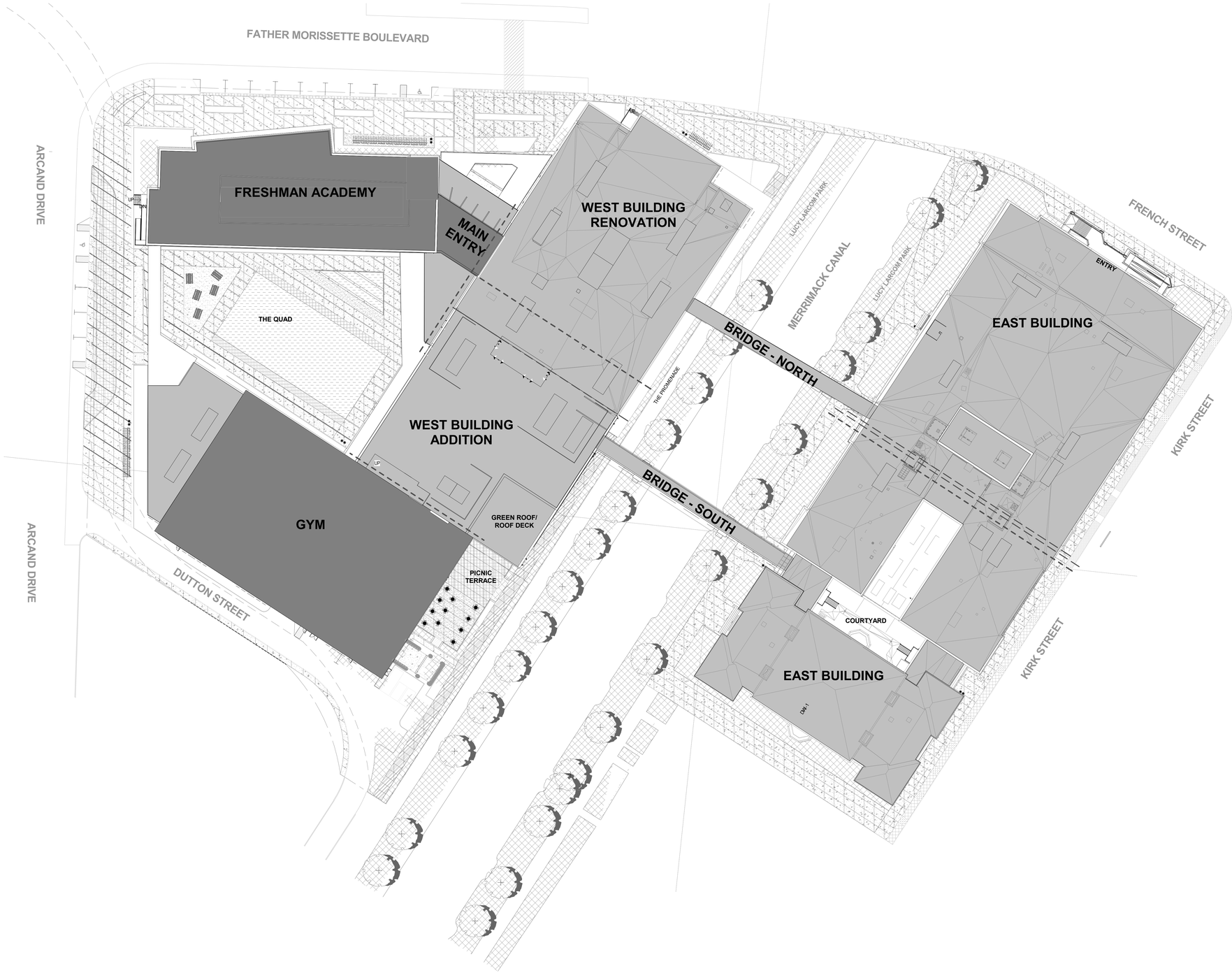
BRACE FRAME ELEVATIONS - PART F

SCALE: 1/8" = 1'-0"

S-201F

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 **SITE PLAN**
1" = 30'-0"

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NO.	DATE	ISSUE

SEAL

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Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

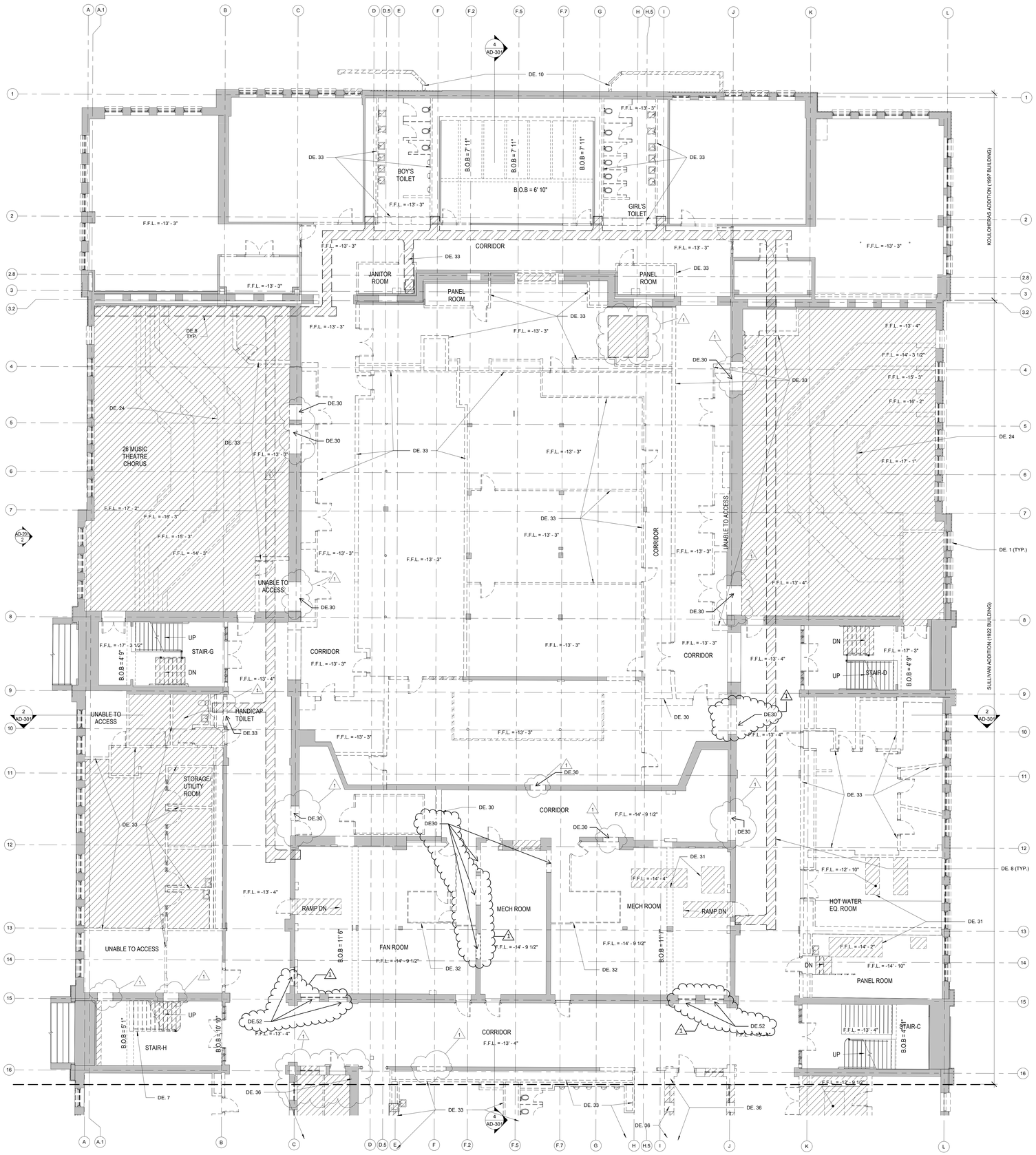
DRAWING TITLE:
SITE PLAN

SCALE: 1" = 30'-0"

AS-000

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **DEMO BASEMENT A**

1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

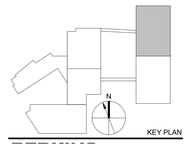
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE. TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL. INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2.SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HIC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

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Lighting Consultant:
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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
BASEMENT DEMO PLAN - EAST BLDG - PART A

SCALE: As indicated

AD-100A

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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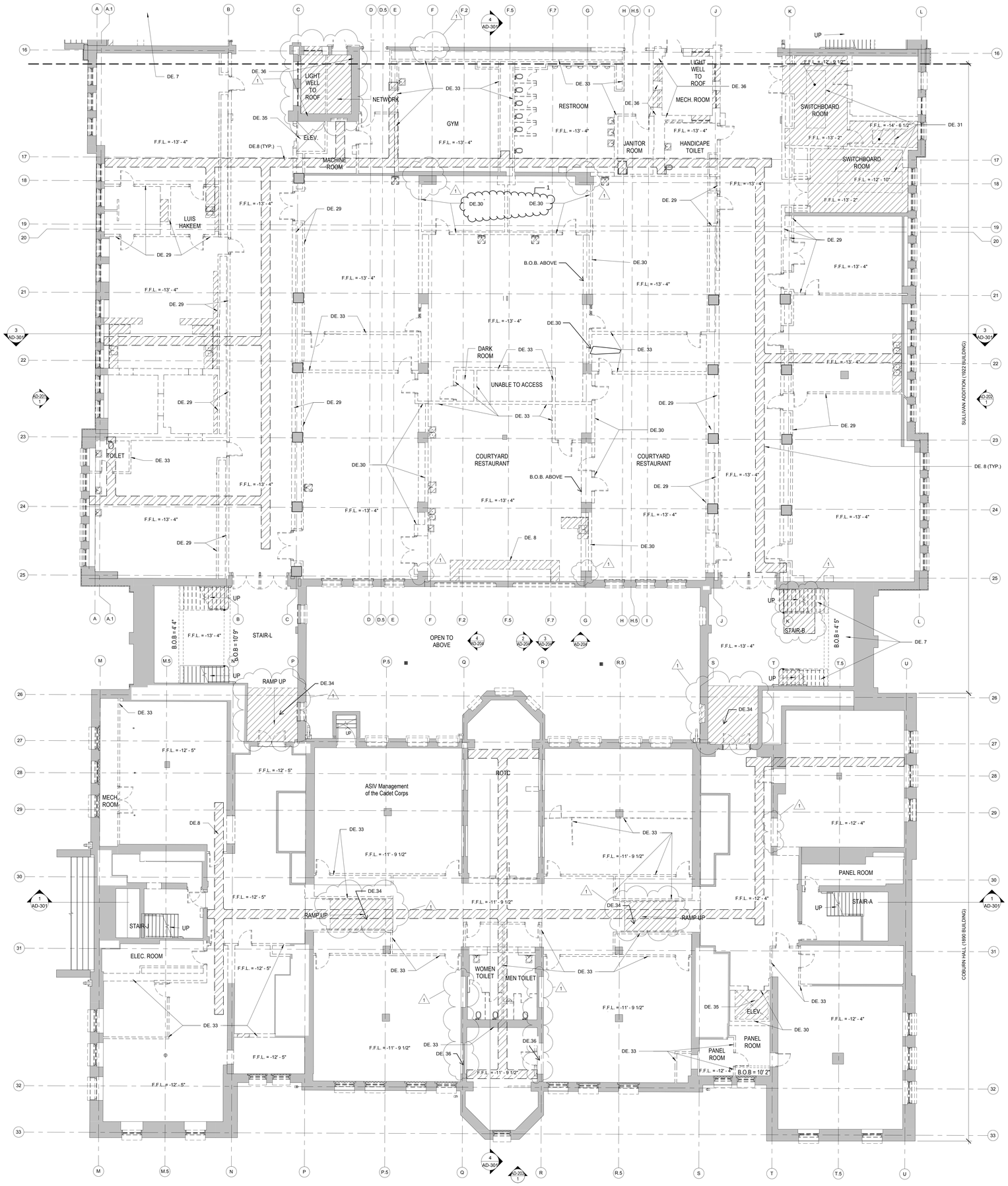

1 **DEMO BASEMENT B**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

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8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
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13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
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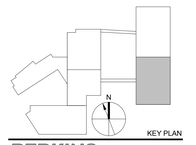
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP..
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2 L.F.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2 SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALLDUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
BASEMENT DEMO PLAN - EAST BLDG - PART B

SCALE: As indicated

AD-100B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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DEMOLITION LEGEND

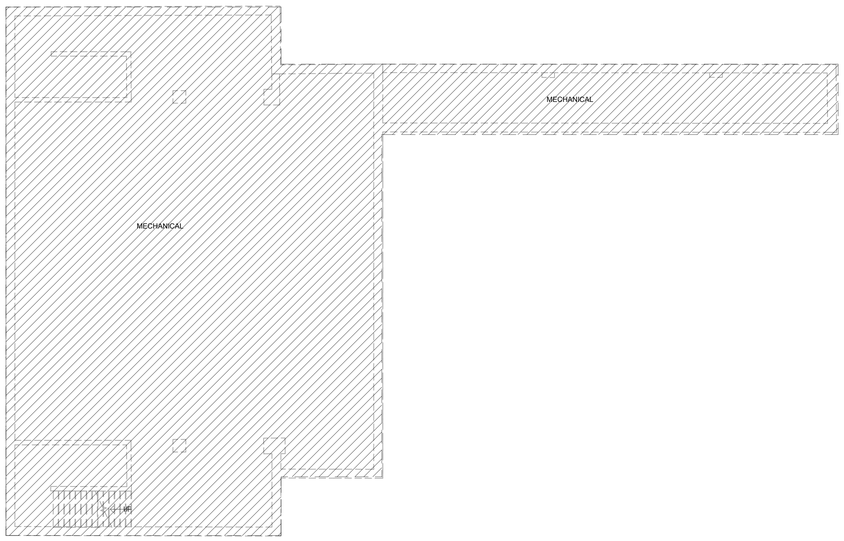
- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION NOTES

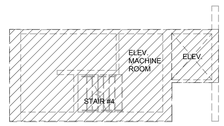
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O., REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
9. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DWGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
10. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
15. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS AND FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP.
16. REMOVE ALL (E) EXIT SIGNS, TYP.
17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP..
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN. REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 21.F.
DW.26 DEMO (E) SLAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2.SF.
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL



FIELD HOUSE BASEMENT



WEST BUILDING BASEMENT

1 **DEMO BASEMENT - WEST**
1/8" = 1'-0"

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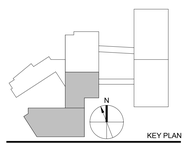
SEAL



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Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

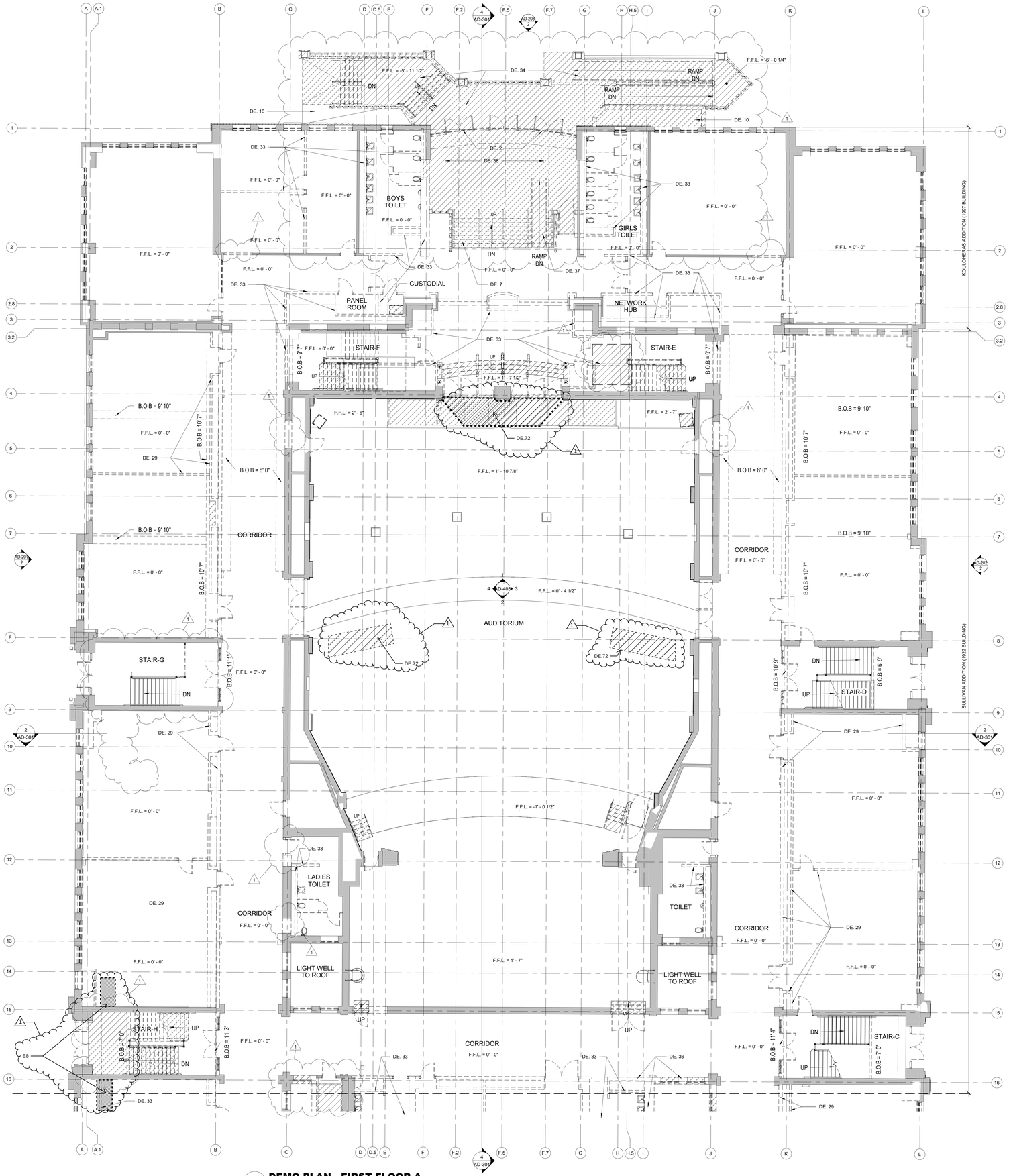
DRAWING TITLE:
BASEMENT DEMO PLAN - WEST BLDG & FIELD HOUSE

SCALE: As indicated

AD-100C

SCHEMATIC DESIGN SUBMISSION

2/20/2019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F.F.L. = -5' - 11 1/2"
F.F.L. = 6' - 0 1/4"
F.F.L. = 0' - 4 1/2"
F.F.L. = -1' - 0 1/2"
F.F.L. = 1' - 7"
F.F.L. = 1' - 10 7/8"
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F.F.L. = 2' - 7"
F.F.L. = 1' - 7 1/2"
F.F.L. = 0' - 11 3/4"
F.F.L. = 0' - 11 1/2"
F.F.L. = 0' - 11 3/8"
F.F.L. = 0' - 11 1/4"
DE. 10
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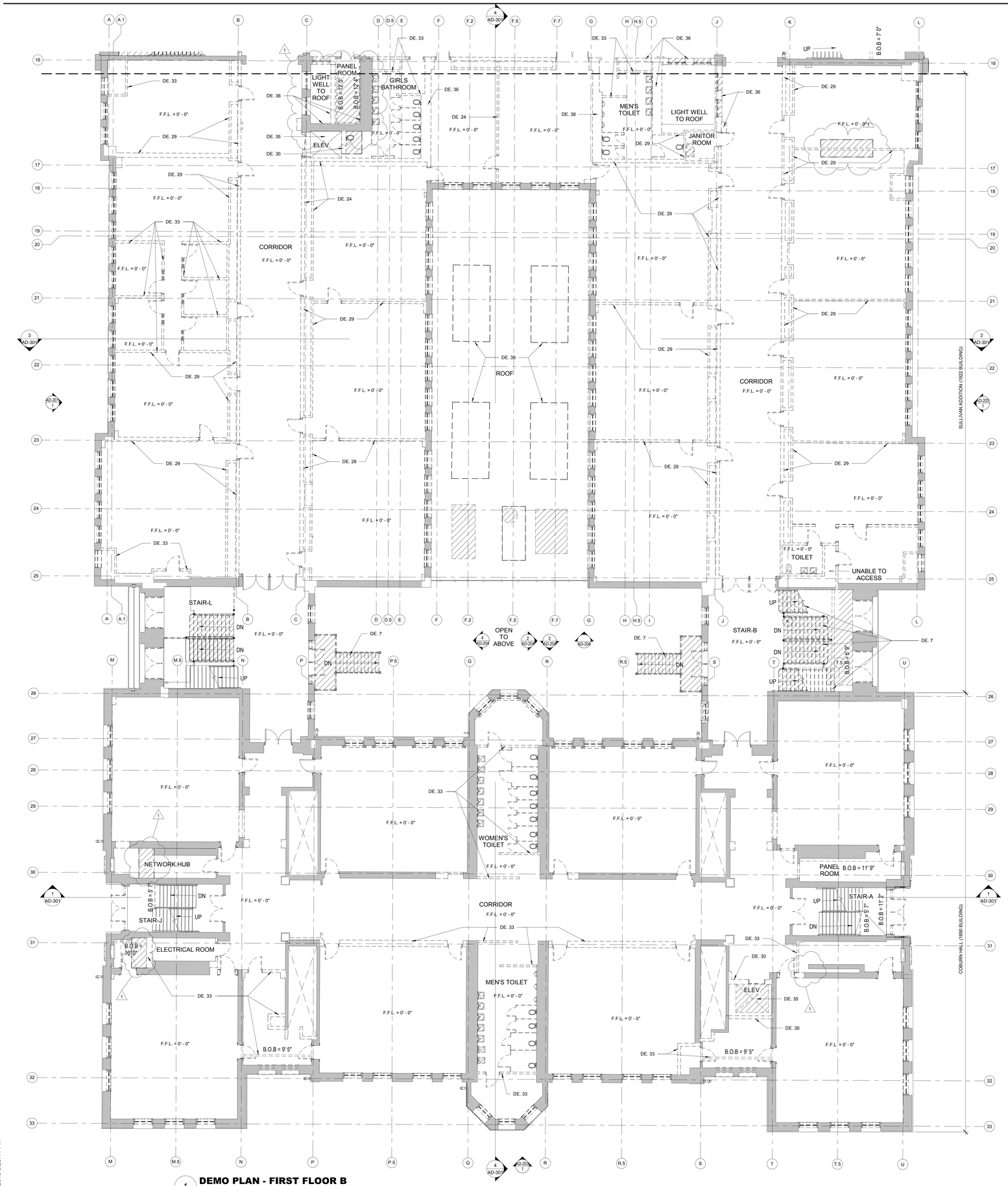


1 **DEMO PLAN - FIRST FLOOR B**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

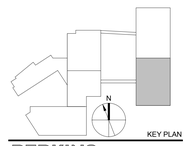
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED. TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL, INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL, INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2.SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP.
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

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370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR DEMO PLAN - EAST BLDG - PART B

SCALE: As indicated

AD-101B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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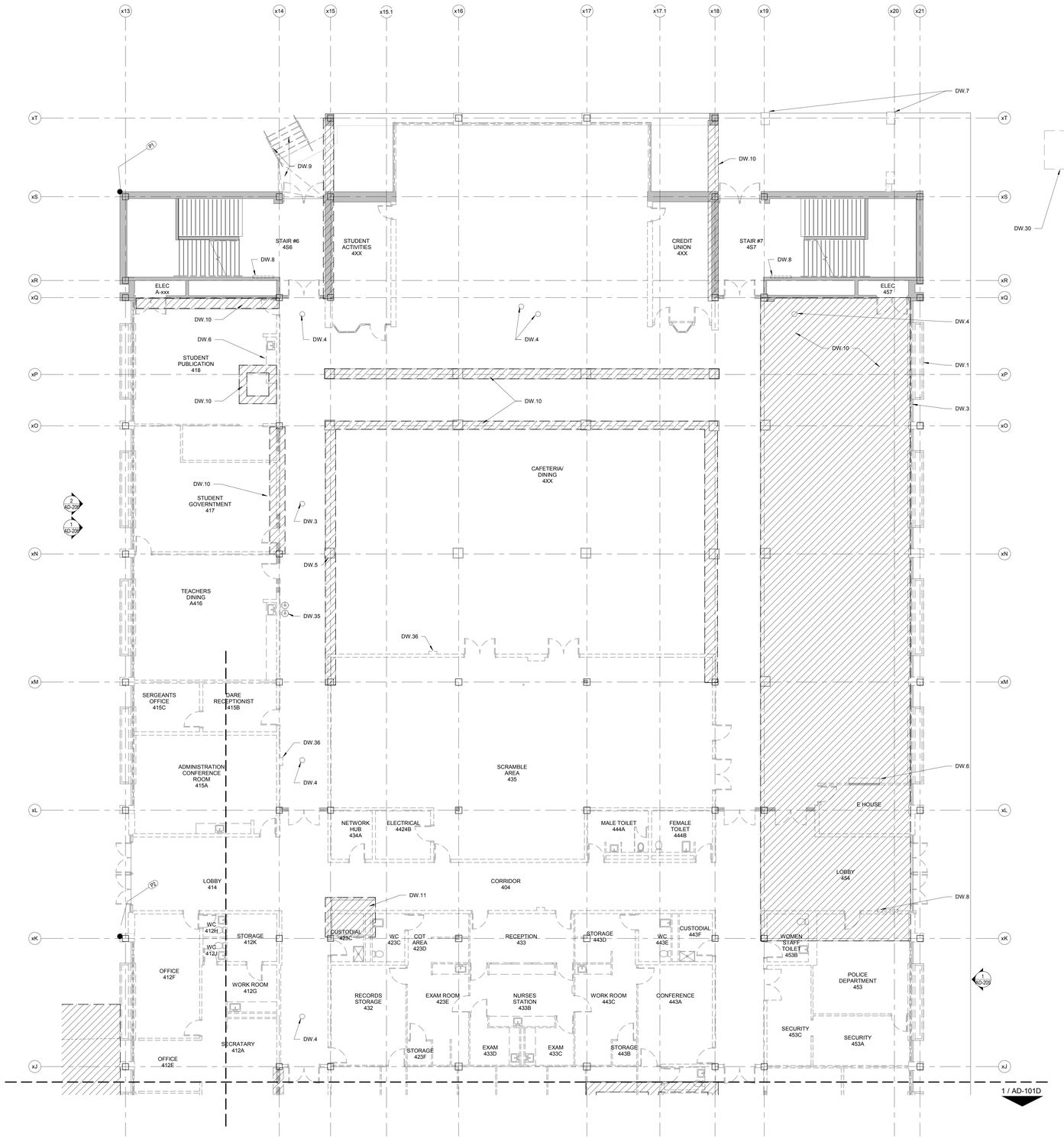

1 **DEMO FIRST FLOOR - WEST BLDG - PART C**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION NOTES

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O., REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
9. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DWGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
10. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
15. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS AND FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP.
16. REMOVE ALL (E) EXIT SIGNS, TYP.
17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN. REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
DW.26 DEMO (E) SLAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2.SF.
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

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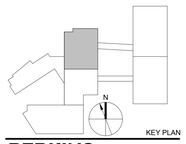

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VAV International
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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR DEMO PLAN - WEST BLDG - PART C

SCALE: As indicated

AD-101C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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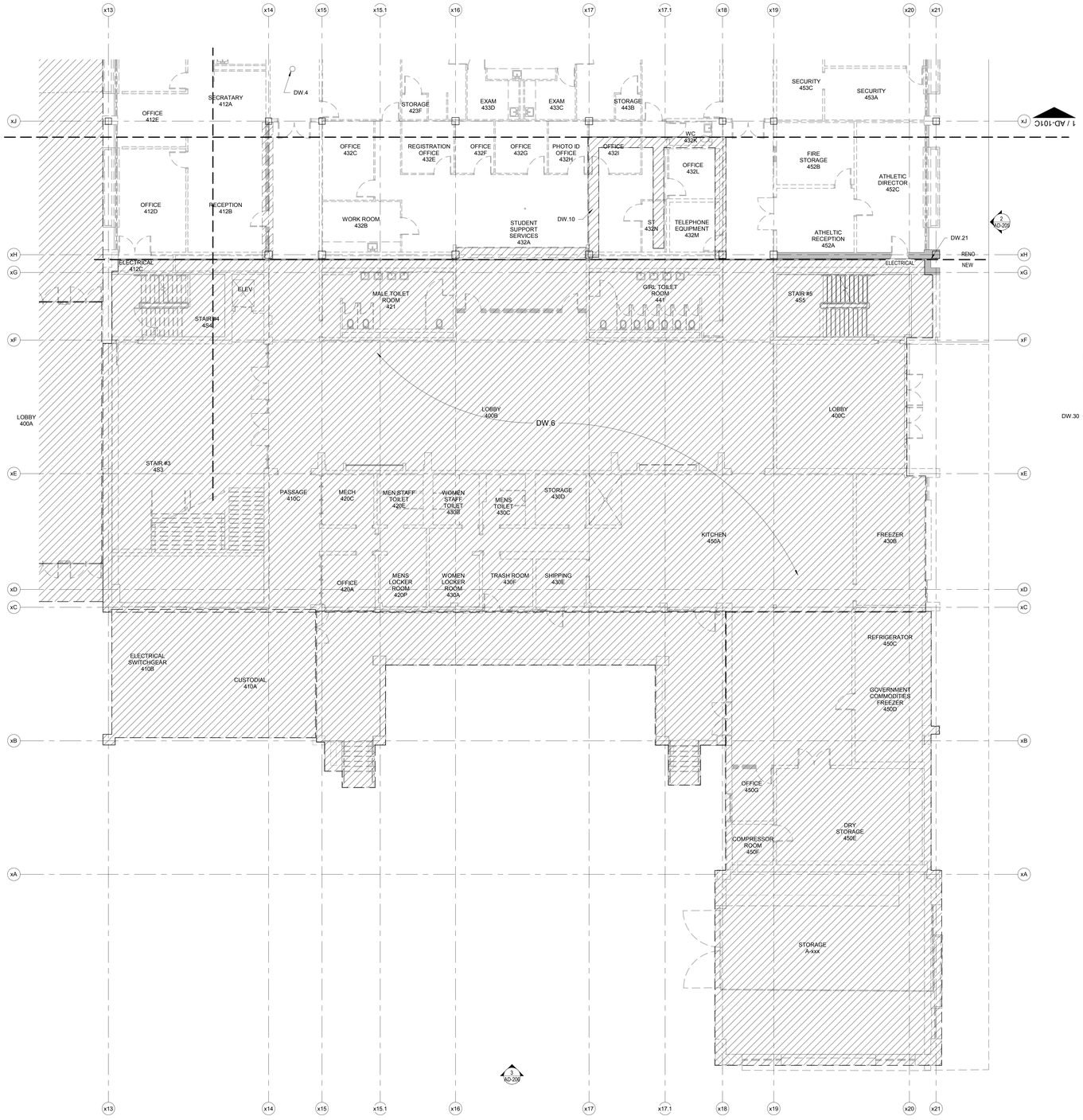

1 **DEMO FIRST FLOOR - WEST BLDG - PART D**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION NOTES

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
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5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
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11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
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17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

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DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
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DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
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NO. DATE ISSUE

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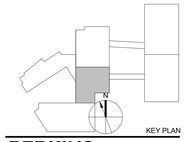

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR DEMO PLAN - WEST BLDG - PART D

SCALE: As indicated

AD-101D

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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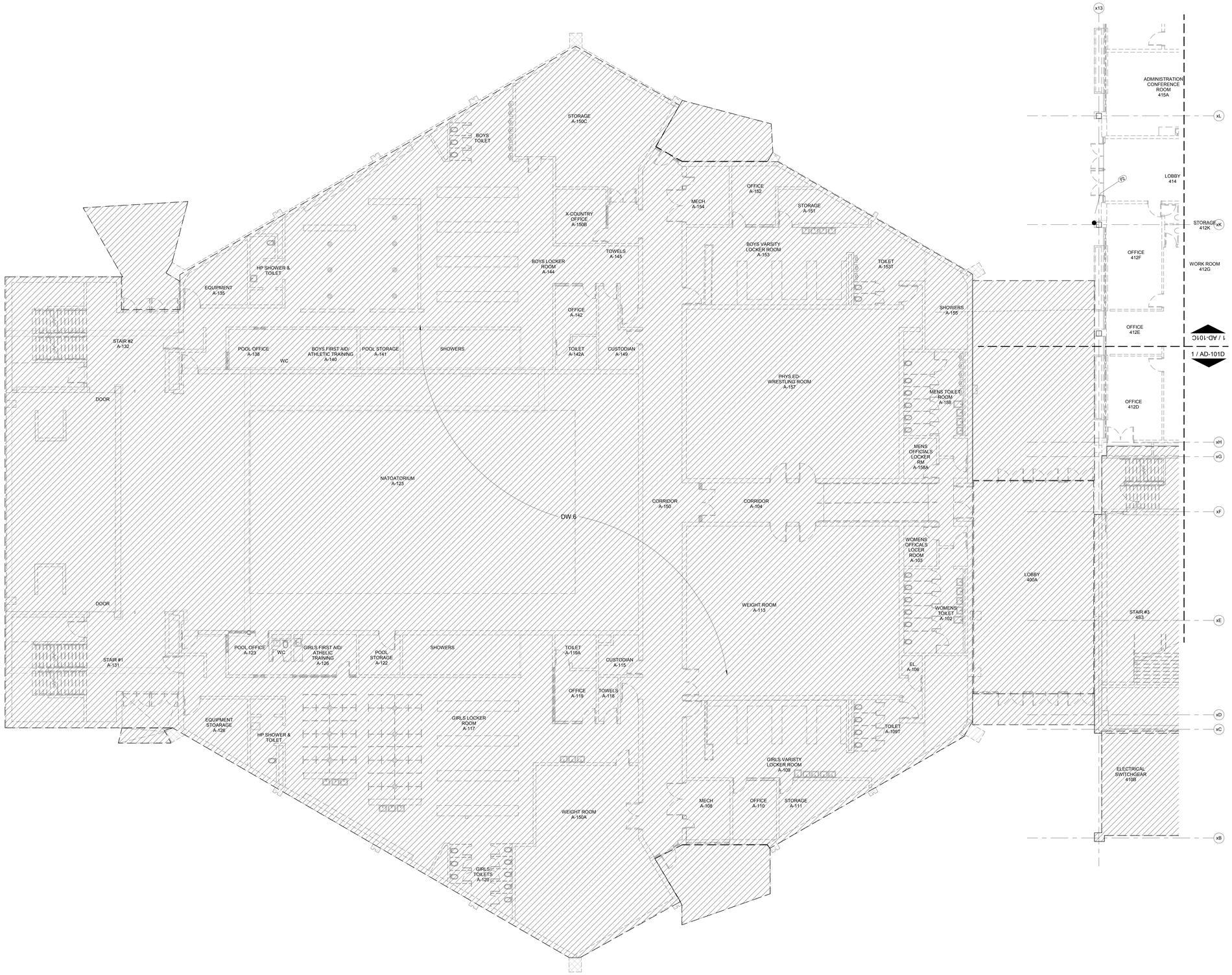

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DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2.SF.
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

1 **DEMO FIRST FLOOR - FIELD HOUSE**
1/8" = 1'-0"

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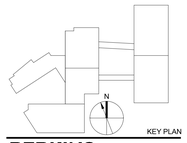
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollaston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

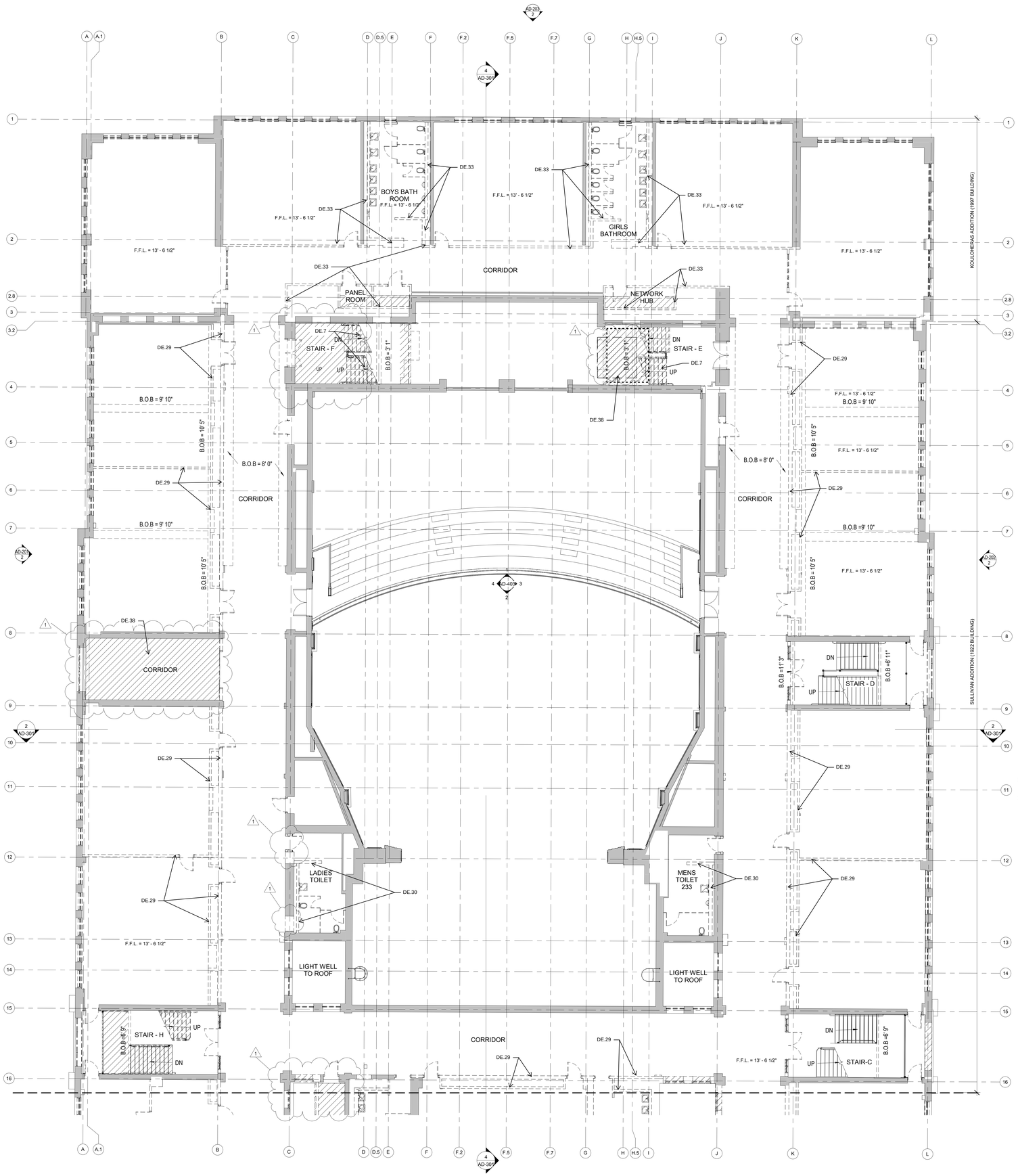
DRAWING TITLE:
FIRST FLOOR DEMO PLAN - FIELD HOUSE

SCALE: As indicated

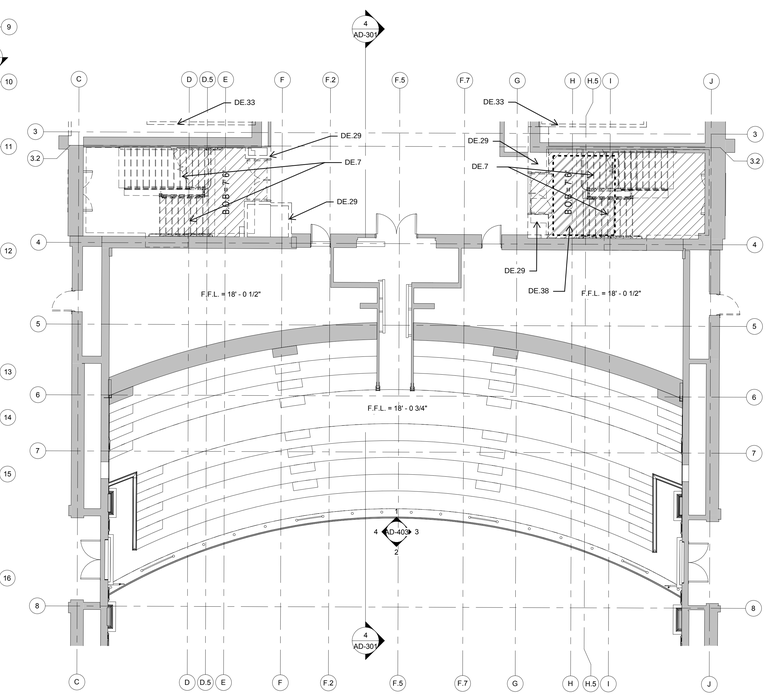
AD-101E

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 **DEMO PLAN - SECOND FLOOR A**
1/8" = 1'-0"



2 **DEMO PLAN - MEZZANINE**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

DEMOLITION NOTES - EAST CAMPUS

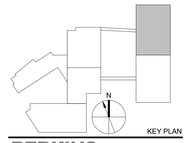
DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS.
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2.SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU INTERIOR WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR.
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH, REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

GENERAL DEMOLITION NOTES - EAST

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL, INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL, INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
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Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

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Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

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Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

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Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR DEMO PLAN - EAST BLDG - PART A

SCALE: As indicated

AD-102A

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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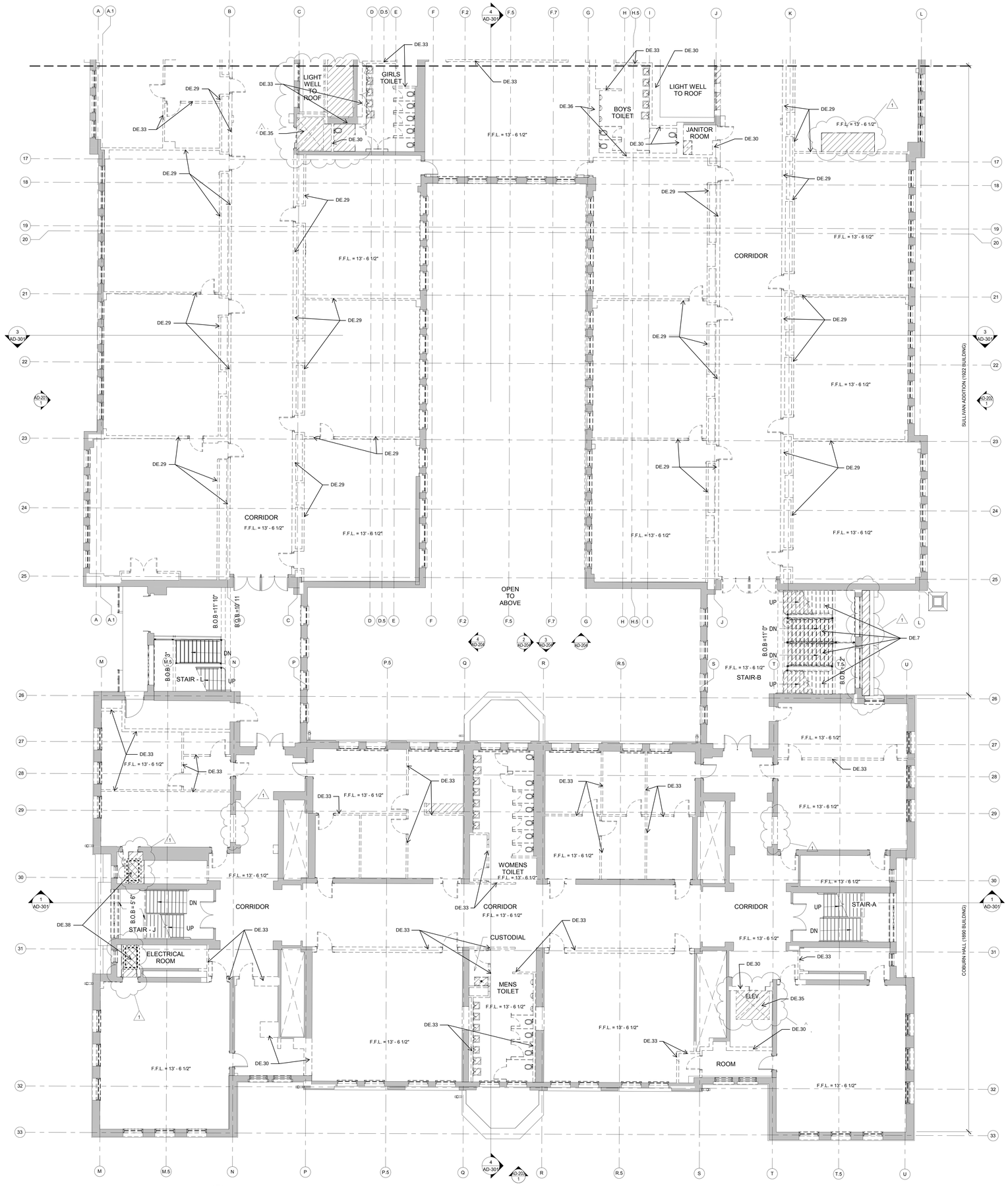

1 **DEMO PLAN - SECOND FLOOR B**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC), EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL. INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
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DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
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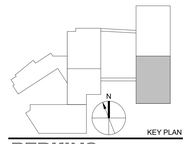
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



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Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR DEMO PLAN - EAST BLDG - PART B

SCALE: As indicated

AD-102B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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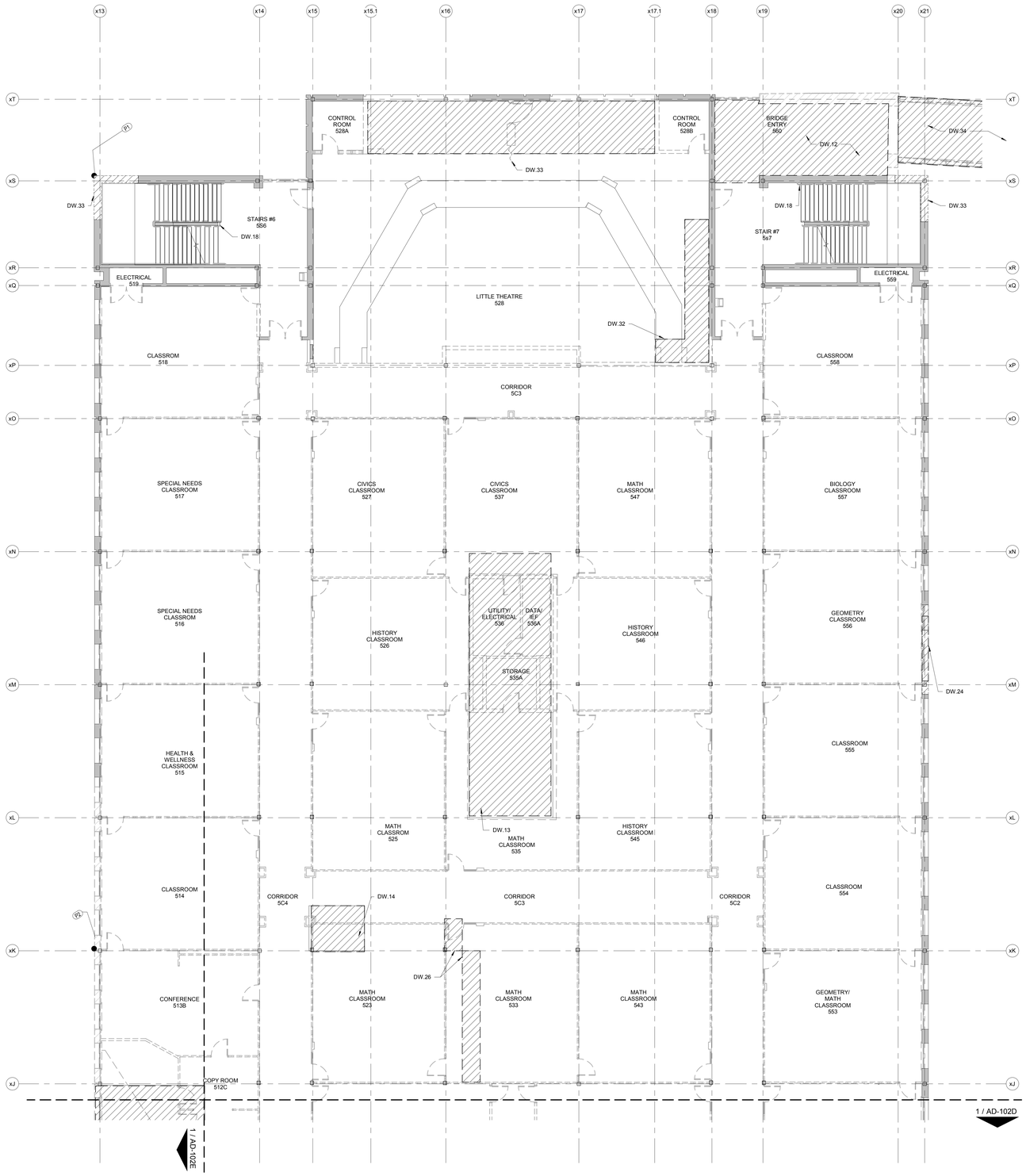


1 **DEMO SECOND FLOOR - WEST BLDG - PART C**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION NOTES

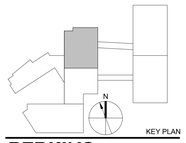
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O., REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
9. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DWGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
10. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
15. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS AND FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP.
16. REMOVE ALL (E) EXIT SIGNS, TYP.
17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN, REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DW.26 DEMO (E) SLAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2 SF.
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

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2 Center Plaza Suite 430 Boston, MA 02108

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LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR DEMO PLAN - WEST BLDG - PART C

SCALE: As indicated

AD-102C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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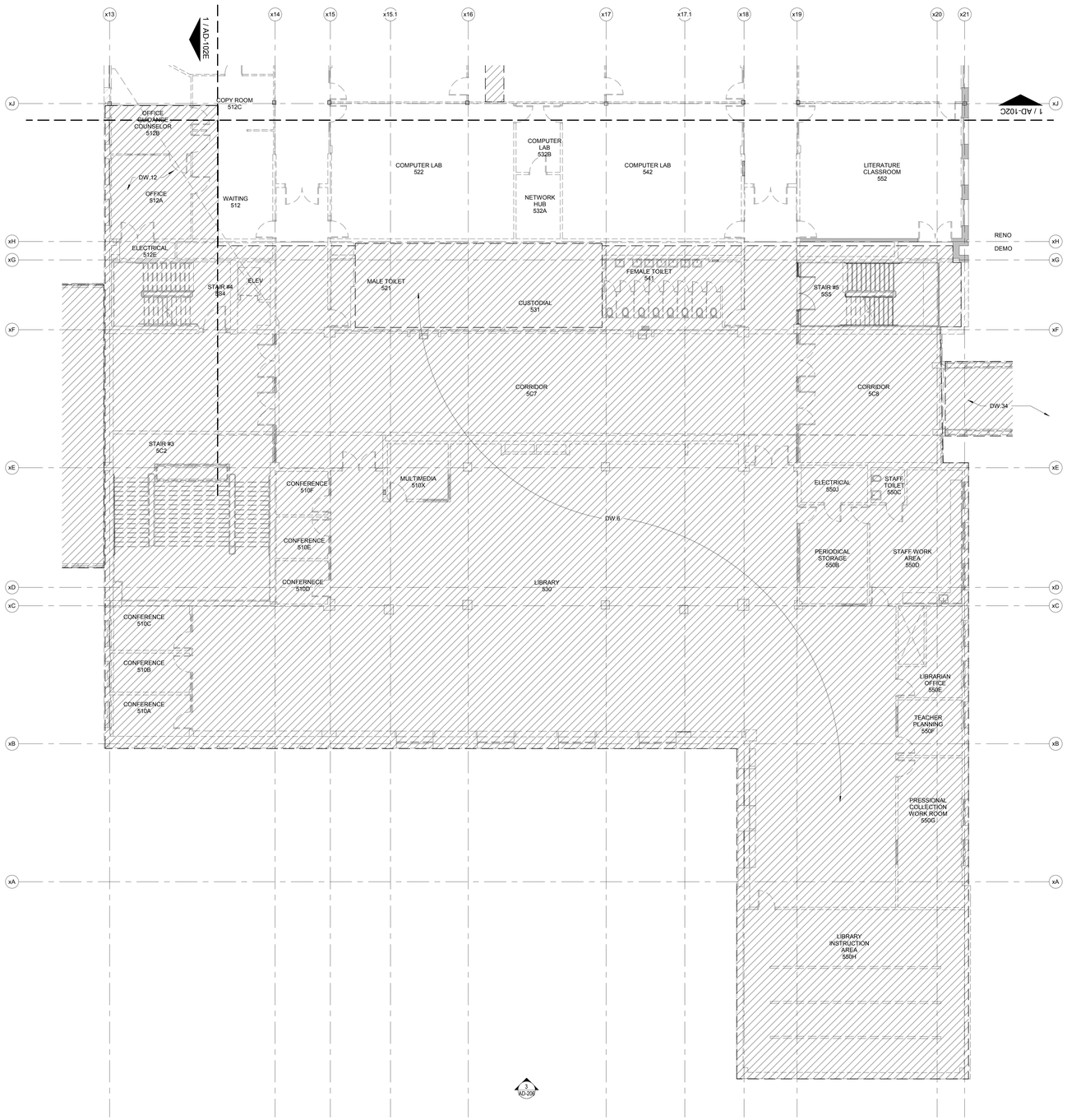

1 DEMO SECOND FLOOR - WEST BLDG - PART D

1/8" = 1'-0"

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DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION NOTES

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
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5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
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12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
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19. REMOVE ALL (E) LOCKERS, TYP.
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22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
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DEMOLITION NOTES - WEST CAMPUS

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DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB. SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL. SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
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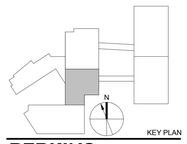
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
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T. +1 617 449 4000
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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

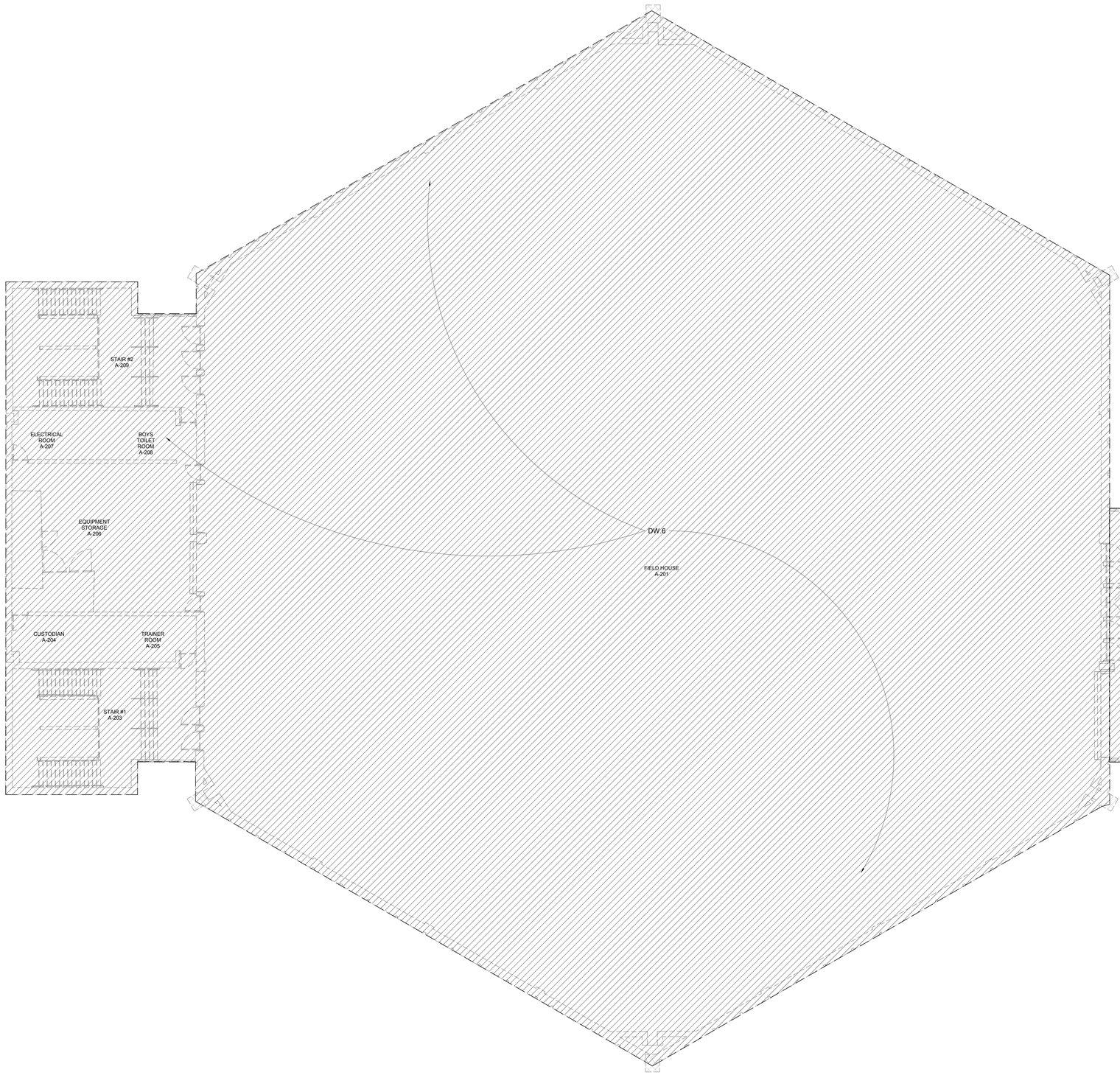
DRAWING TITLE:
SECOND FLOOR DEMO PLAN - WEST BLDG - PART D

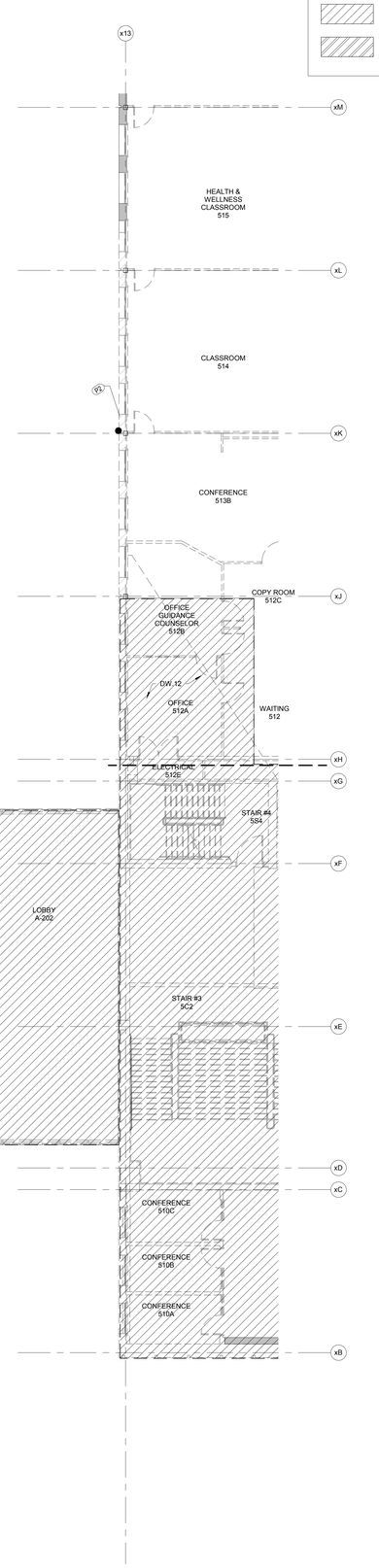
SCALE: As indicated

AD-102D

SCHEMATIC DESIGN SUBMISSION

2/20/2019





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1 **DEMO SECOND FLOOR - FIELD HOUSE**
1/8" = 1'-0"

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NO.	DATE	ISSUE

SEAL

KEY PLAN

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Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollaston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR DEMO PLAN - FIELD HOUSE

SCALE: As indicated

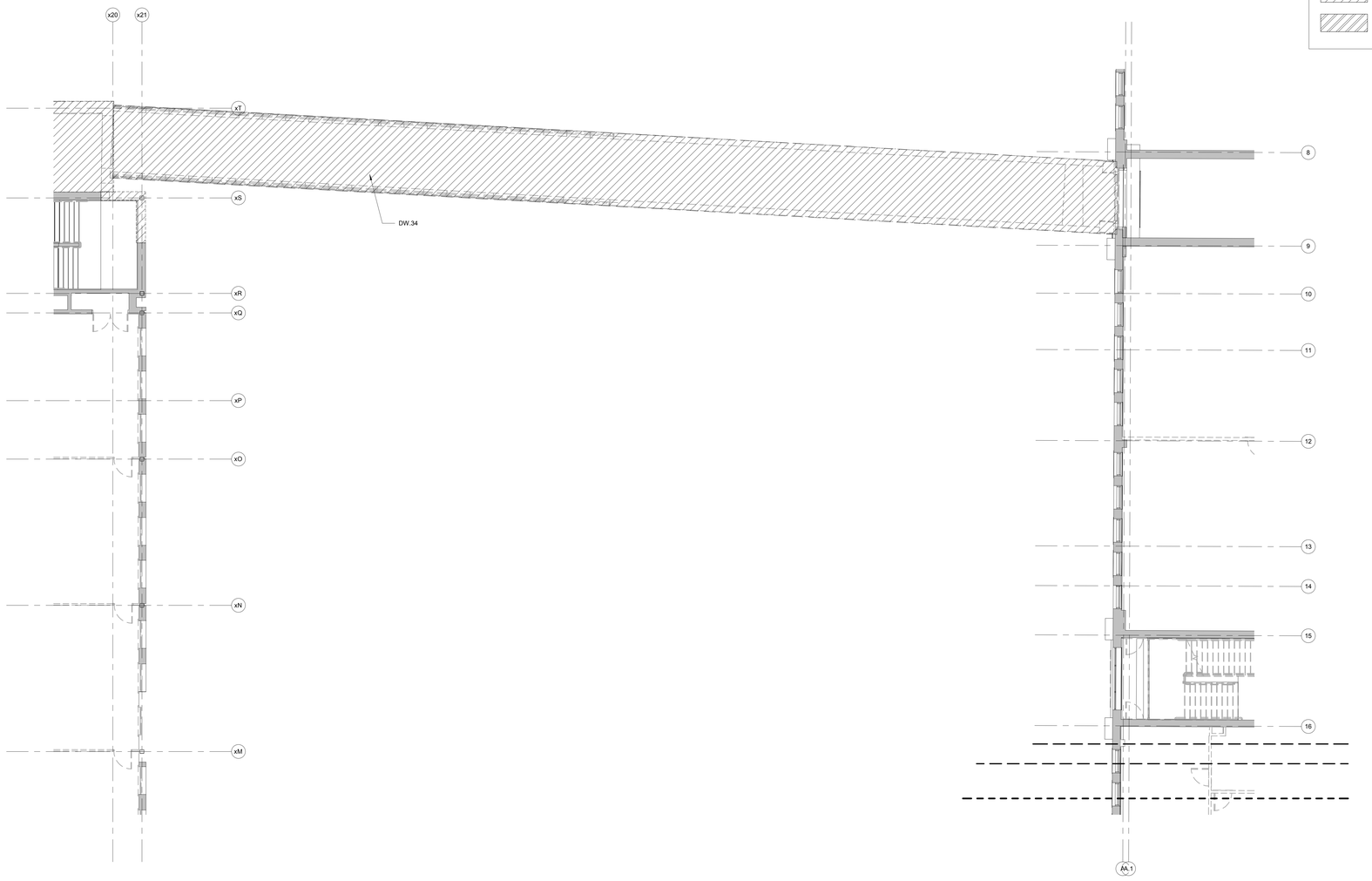
AD-102E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

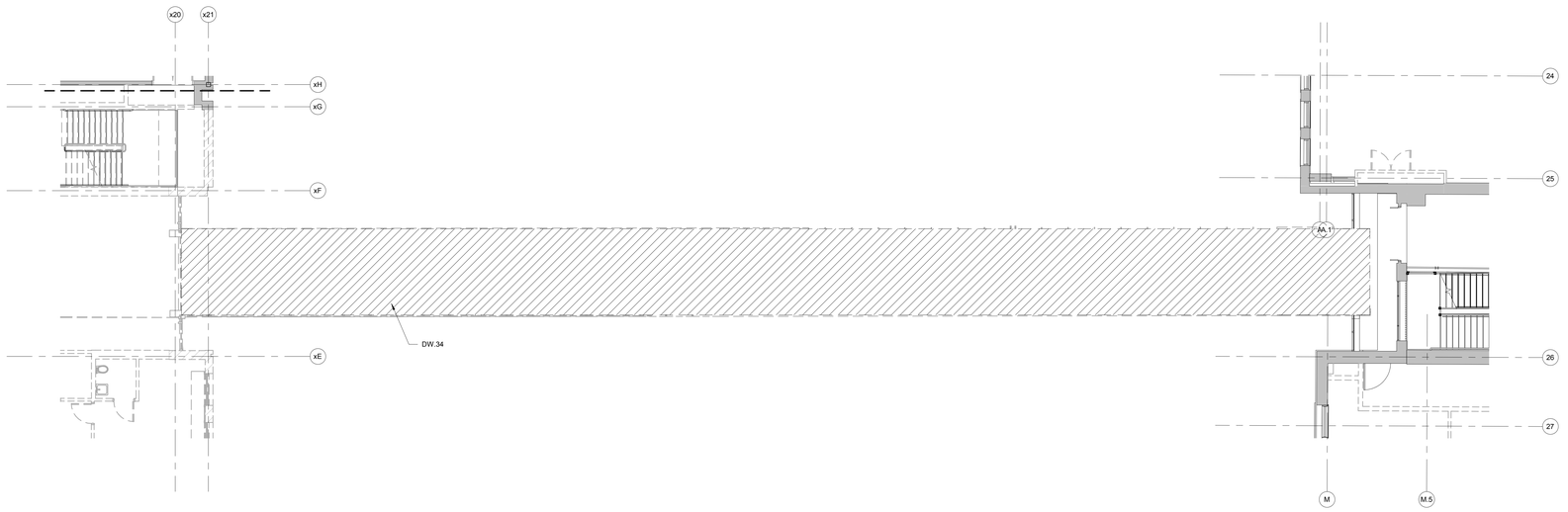
DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED



2 DEMO SECOND FLOOR - NORTH BRIDGE

1/8" = 1'-0"



1 DEMO SECOND FLOOR - SOUTH BRIDGE

1/8" = 1'-0"

GENERAL DEMOLITION NOTES

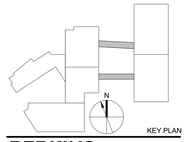
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O., REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
9. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DWGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
10. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
15. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS AND FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP.
16. REMOVE ALL (E) EXIT SIGNS, TYP.
17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT. SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN. REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DW.26 DEMO (E) SLAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2 SF.
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR DEMO PLAN - BRIDGES

SCALE: As indicated

AD-102F

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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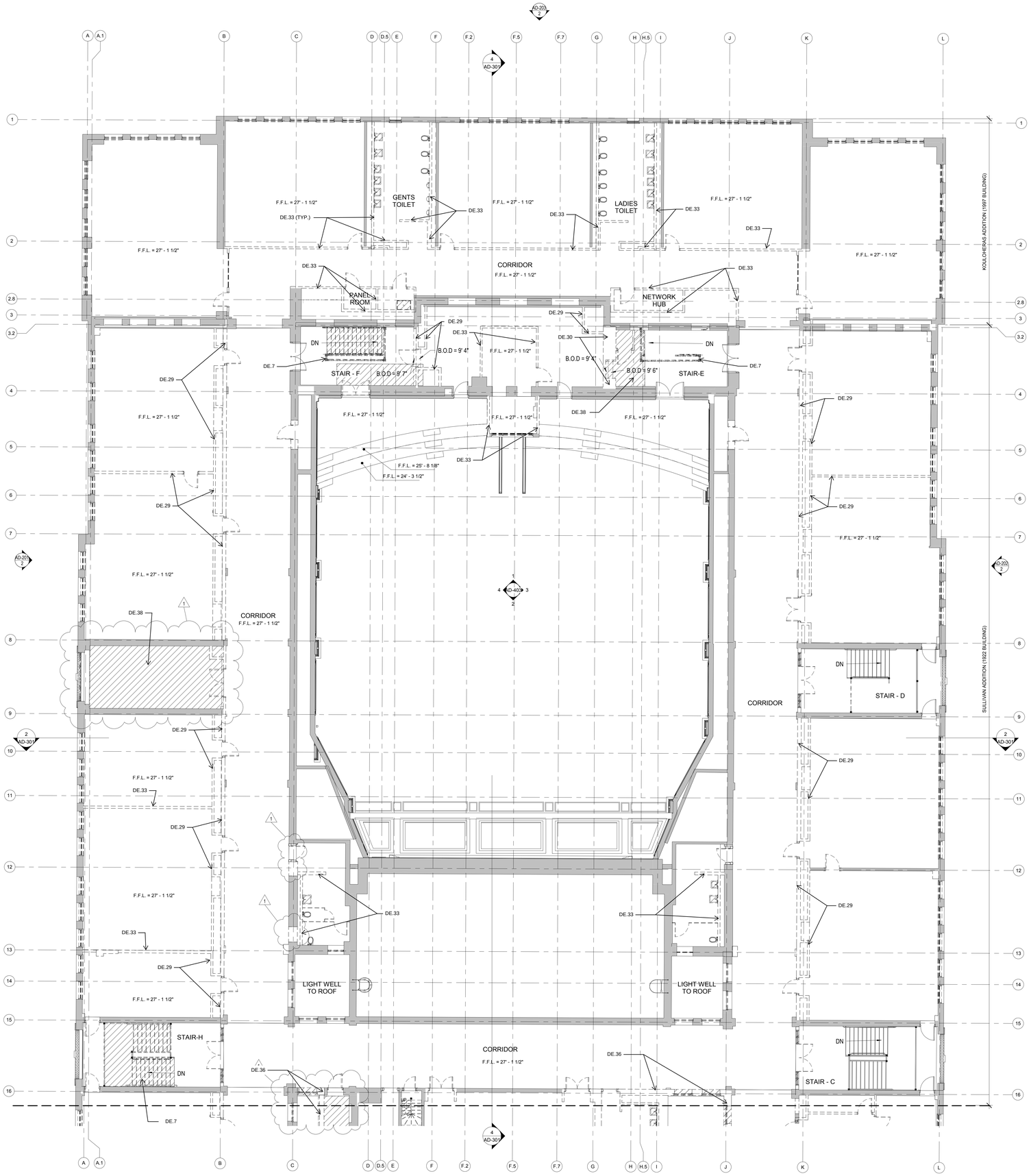

1 **DEMO PLAN - THIRD FLOOR A**
1/8" = 1'-0"

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DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

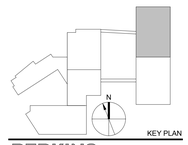
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED. TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2.I.F.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2.SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALLDUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH, REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

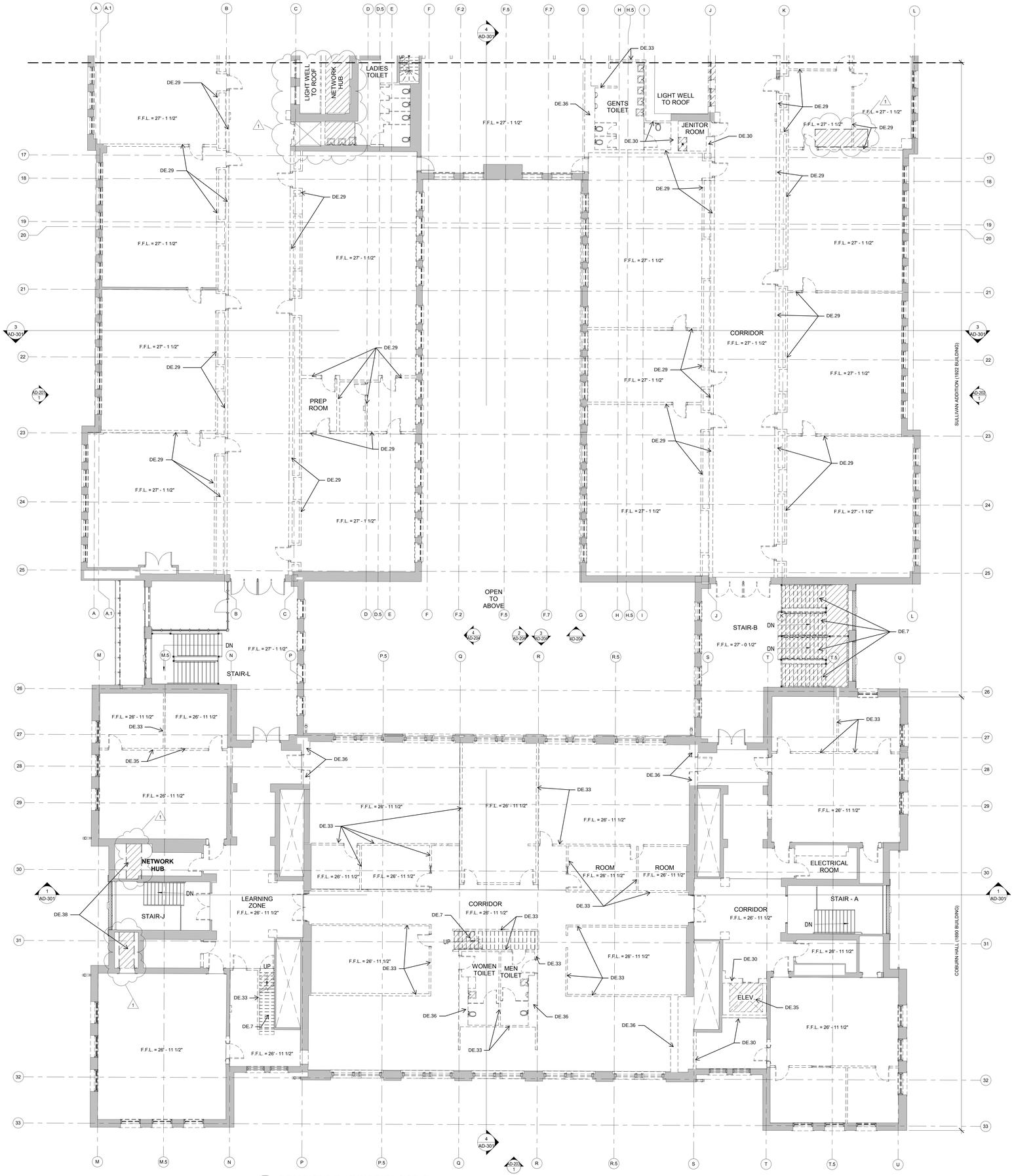
DRAWING TITLE:
THIRD FLOOR DEMO PLAN - EAST BLDG - PART A

SCALE: As indicated

AD-103A

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 **DEMO PLAN - THIRD FLOOR B**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

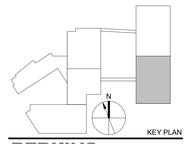
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O.
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO; DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO; GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2 SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR DEMO PLAN - EAST BLDG - PART B

SCALE: As indicated

AD-103B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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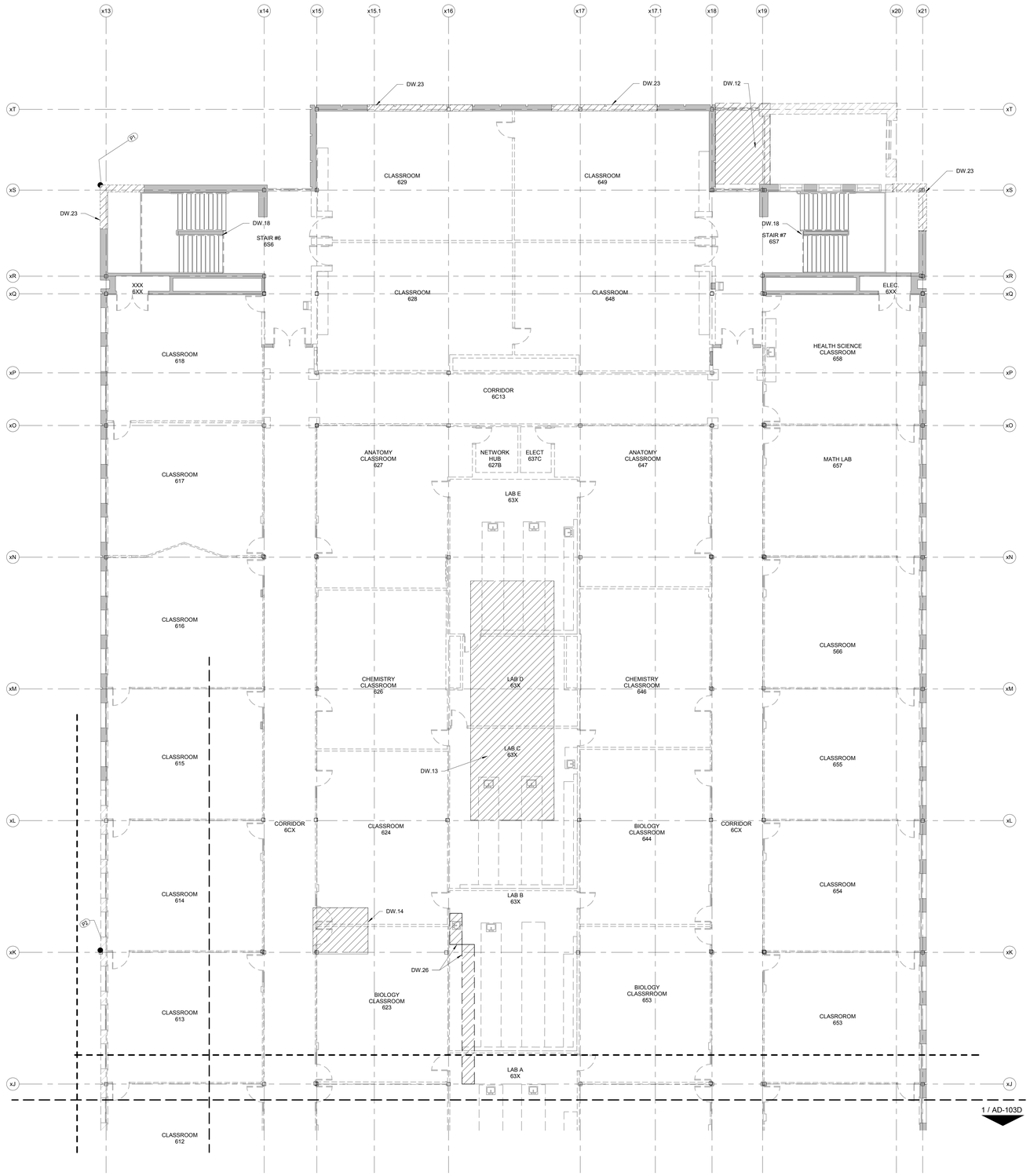

1 **DEMO THIRD FLOOR - WEST BLDG - PART C**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION NOTES

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD. FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O.. REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
9. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DWGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
10. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
15. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS AND FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP.
16. REMOVE ALL (E) EXIT SIGNS, TYP.
17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN. REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
DW.26 DEMO (E) SLAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2.SF.
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
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Construction Manager Address

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2150 Washington Street Newton, MA 02462

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370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR DEMO PLAN - WEST BLDG - PART C

SCALE: As indicated

AD-103C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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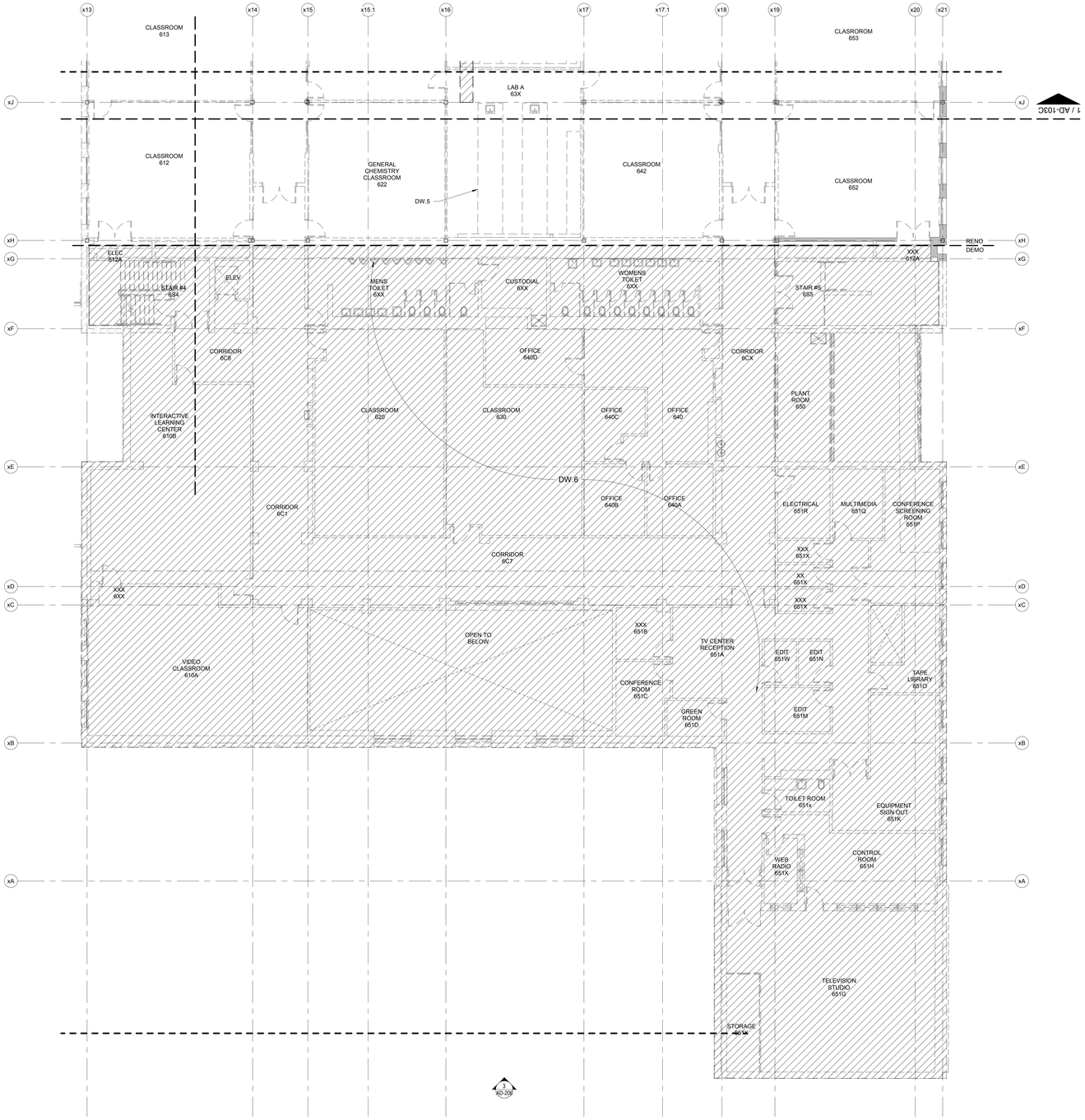

1 **DEMO THIRD FLOOR - WEST BLDG - PART D**
1/8" = 1'-0"

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DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION NOTES

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O., REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
9. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DWGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
10. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
15. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS AND FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP.
16. REMOVE ALL (E) EXIT SIGNS, TYP.
17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
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DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE; INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

SEAL

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

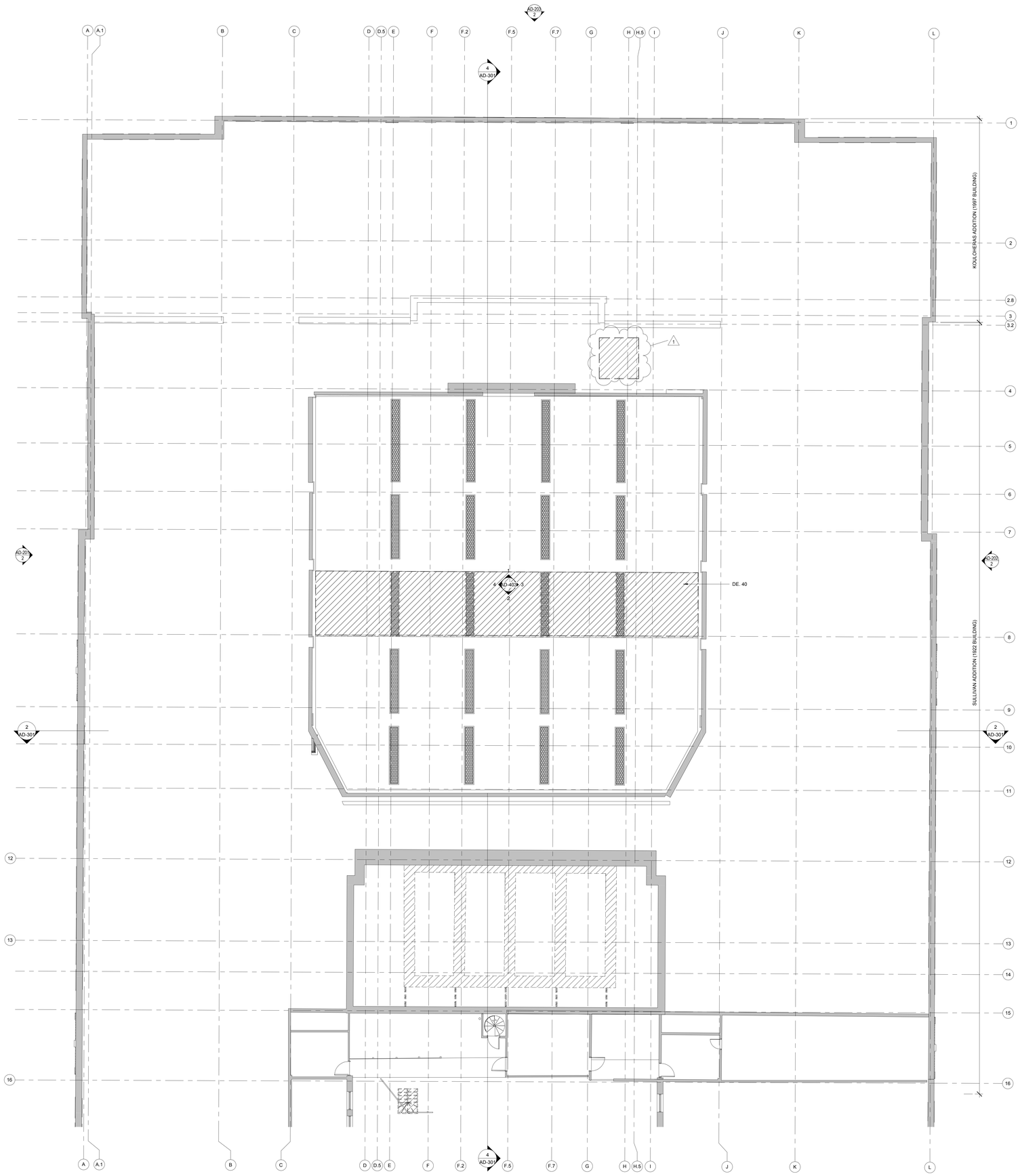
DRAWING TITLE:
THIRD FLOOR DEMO PLAN - WEST BLDG - PART D

SCALE: As indicated

AD-103D

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 DEMO PLAN - ATTIC A
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

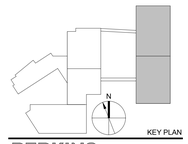
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AMD ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL. INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2.SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM. DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ATTIC DEMO PLAN - EAST BLDG - PART A

SCALE: As indicated

AD-104A

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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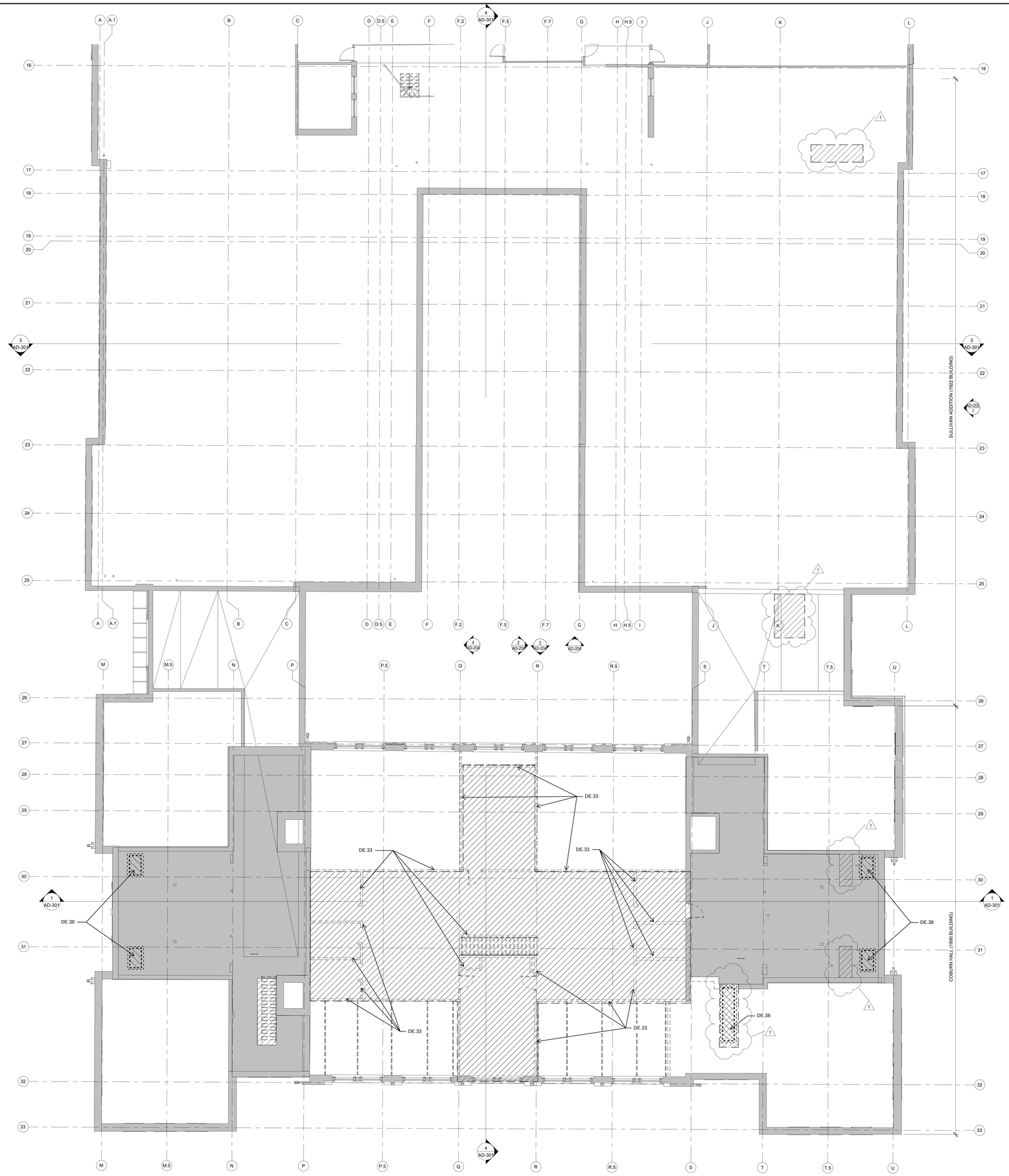

1 **DEMO PLAN - ATTIC B**
1/8" = 1'-0"

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DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O.
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
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20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
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31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
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34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
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DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2 SF
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
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DE.28 DEMO (E) LADDER, TYP.
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DE.30 DEMO (E) CMU WALL
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DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
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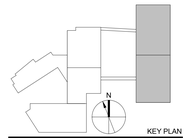
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

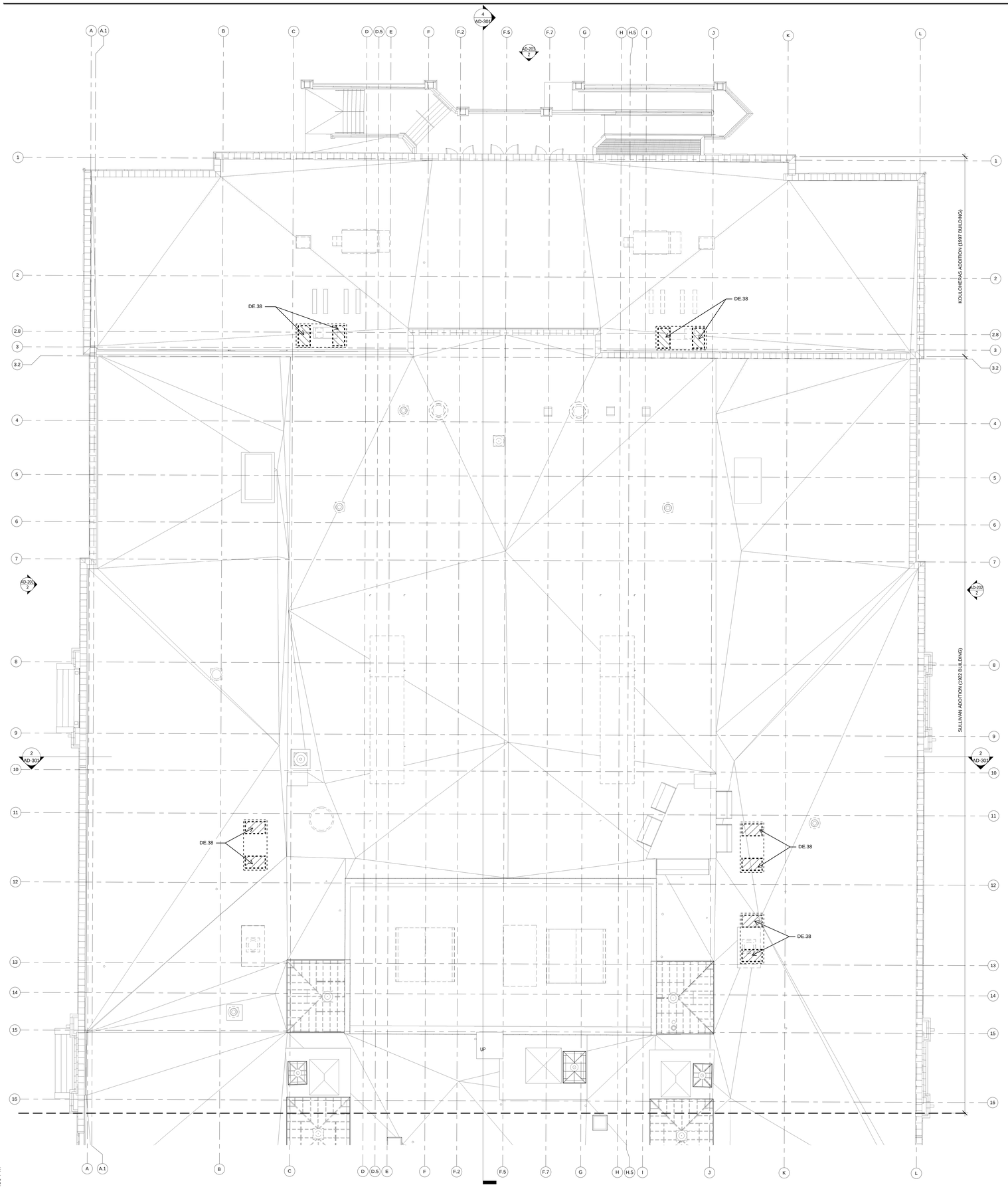
DRAWING TITLE:
ATTIC DEMO PLAN - EAST BLDG - PART B

SCALE: As indicated

AD-104B

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 DEMO ROOF A
1/8" = 1'-0"

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DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION ROOF NOTES - EAST

1. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
2. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
3. SEE DEMOLITION FLOOR PLANS FOR ADDITIONAL DEMO AND NOTES.
4. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
5. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
6. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
7. REMOVE ALL WINDOWS AND DOORS IN THE PROJECT.
8. REFER TO NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
9. REMOVE ALL (E) MECHANICAL EQUIPMENT AT ROOF, TYP.
10. REMOVE ALL (E) PIPE PENETRATIONS AT ROOF, TYP.
11. REMOVE SELECT AREAS OF LOW ROOF ROOF ASSEMBLY COMPLETELY TO DECK

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
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DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
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DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
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DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
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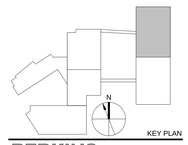
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT.
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Harlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

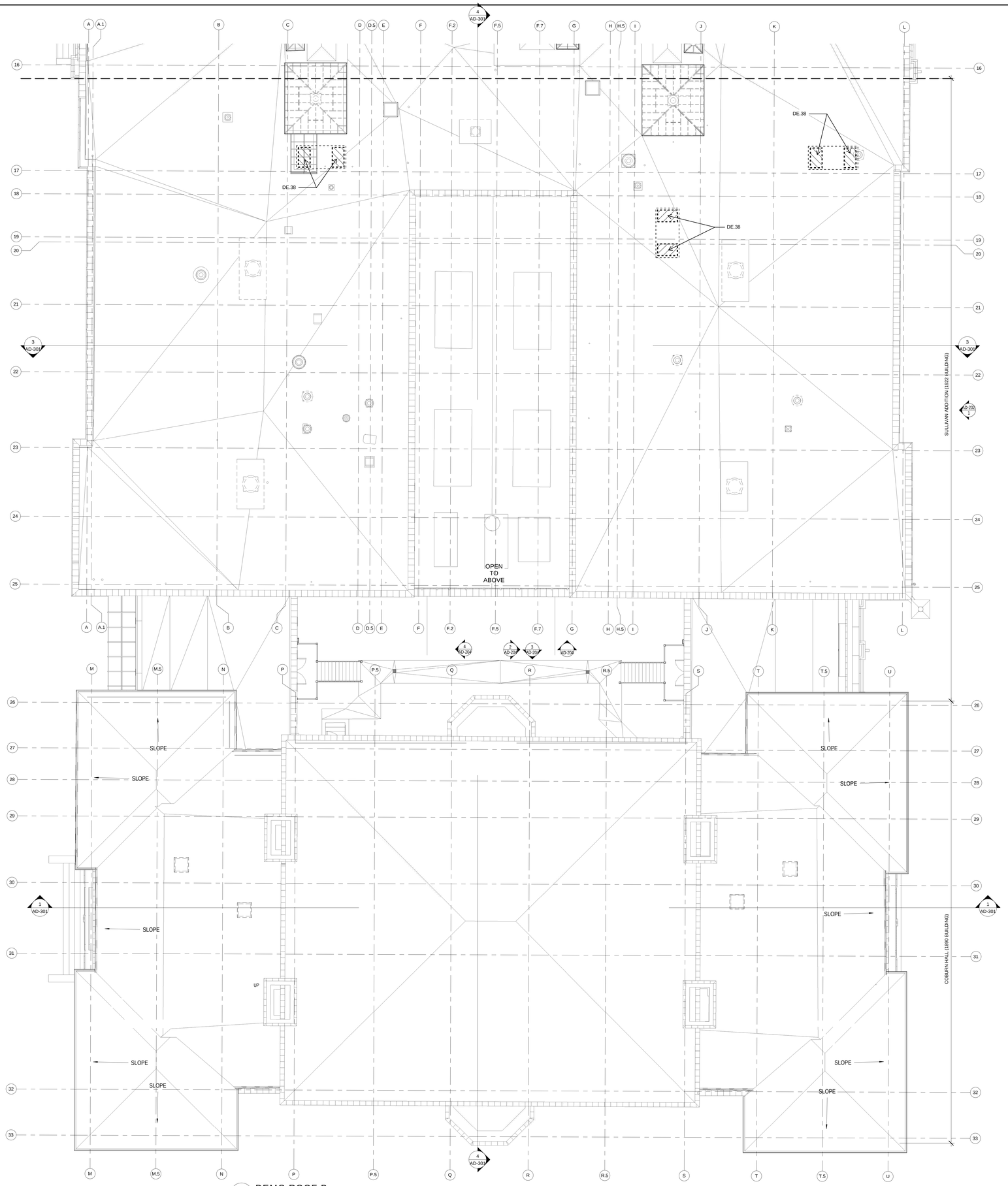
DRAWING TITLE:
ROOF DEMO PLAN - EAST BLDG - PART A

SCALE: As indicated

AD-106A

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 DEMO ROOF B
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION ROOF NOTES - EAST

1. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
2. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
3. SEE DEMOLITION FLOOR PLANS FOR ADDITIONAL DEMO AND NOTES.
4. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
5. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
6. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
7. REMOVE ALL WINDOWS AND DOORS IN THE PROJECT.
8. REFER TO NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
9. REMOVE ALL (E) MECHANICAL EQUIPMENT AT ROOF, TYP.
10. REMOVE ALL (E) PIPE PENETRATIONS AT ROOF, TYP.
11. REMOVE SELECT AREAS OF LOW ROOF ROOF ASSEMBLY COMPLETELY TO DECK

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL.
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2.LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2.SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
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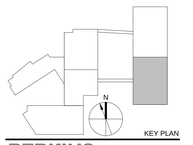

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50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF DEMO PLAN - EAST BLDG - PART B

SCALE: As indicated

AD-106B

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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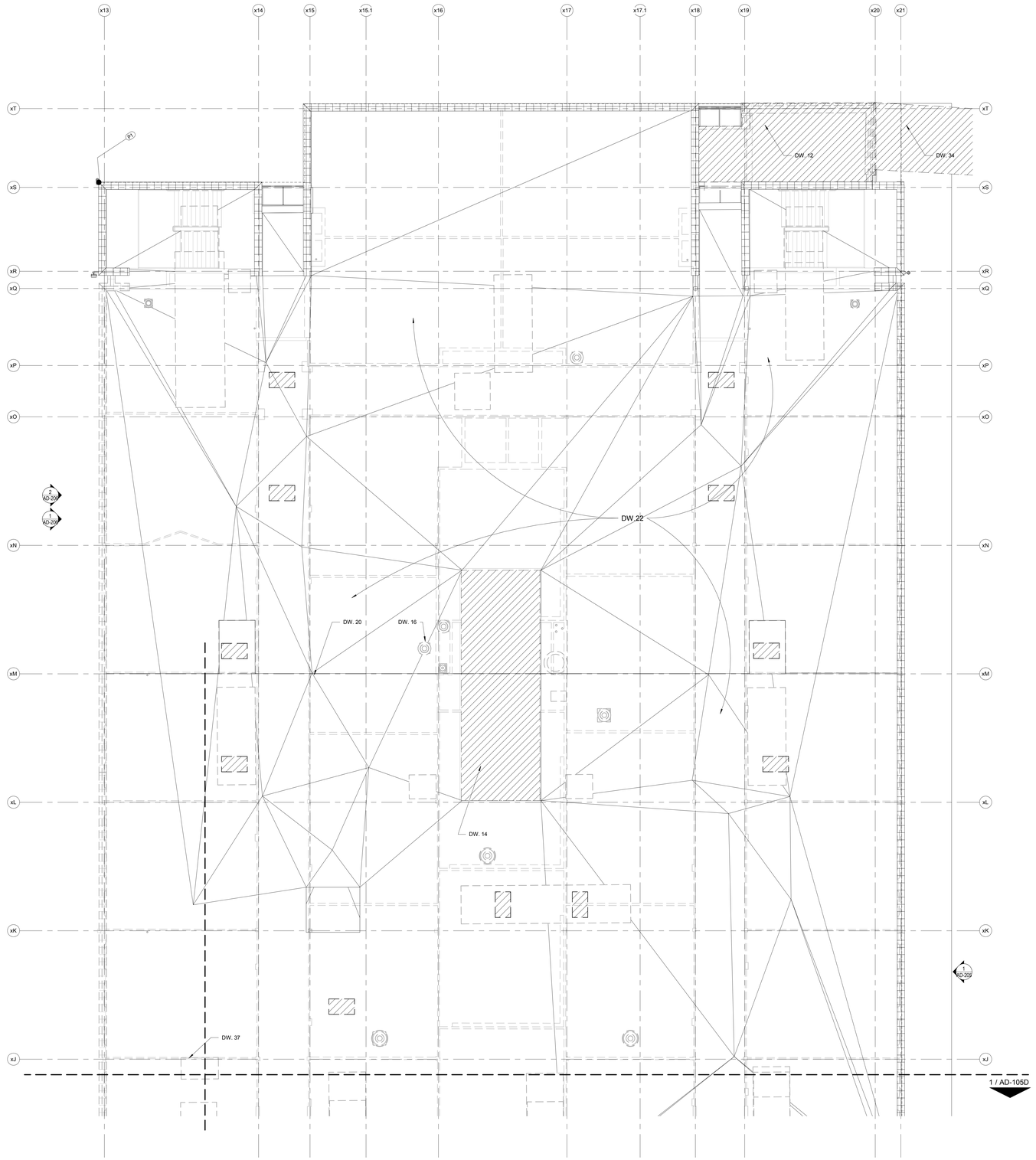

1 **DEMO ROOF PLAN - WEST BLDG - PART C**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION ROOF NOTES

1. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
2. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
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4. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
5. SEE DEMOLITION FLOOR PLANS FOR ADDITIONAL DEMO AND NOTES.
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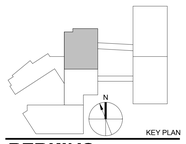
7. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
8. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
9. REFER TO NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
10. REMOVE LOW SLOPE ROOF ASSEMBLY COMPLETELY TO DECK, TYP.
    A. REMOVE MEMBRANE & WALKWAY UNITS.
    B. REMOVE INSULATION.
    C. REMOVE ROOF EXPANSION JOINT ASSEMBLY.
    D. REMOVE ROOFTOP VENTS AND STACKS.
    E. REMOVE ROOF TOP MECHANICAL UNITS ASSEMBLIES INCLUDING CURBS.
    F. REMOVE ROOF DRAIN ASSEMBLIES.
11. REMOVE PITCHED ROOF @ FIELD HOUSE, TYP.
12. ROOF SLOPES SHOWN ON RENOVATED PORTION OF THE WEST BUIDING ARE BASED ON FIELD SCANS BY NEW EXISTING CONDITIONS SURVEYS INC.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN. REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DW.26 DEMO (E) SLAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2 SF
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

SEAL



KEY PLAN

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370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
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161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollaston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF DEMO PLAN - WEST BLDG - PART C

SCALE: As indicated

AD-105C

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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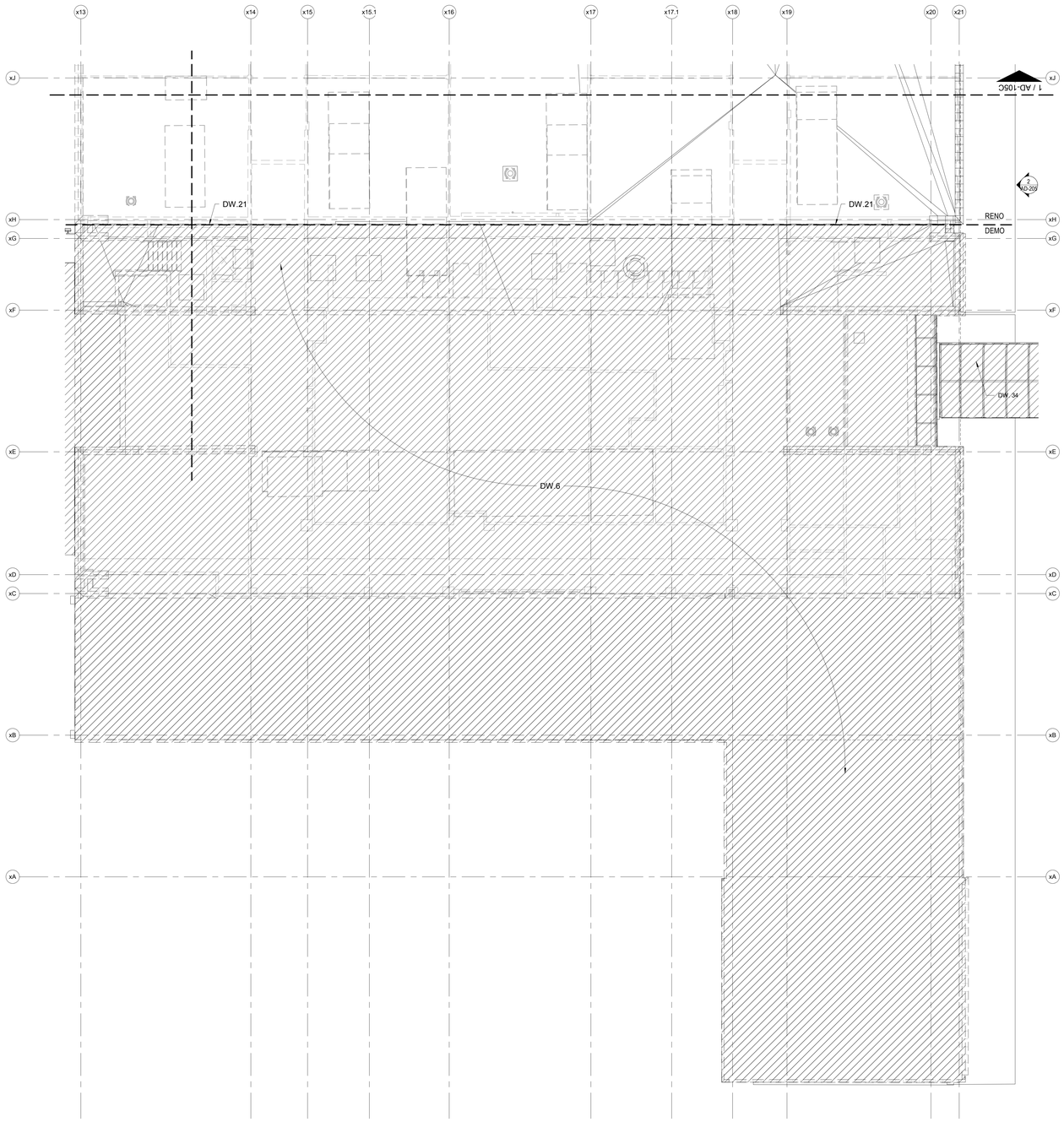

1 **DEMO ROOF PLAN - WEST BLDG - PART D**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED

GENERAL DEMOLITION ROOF NOTES

1. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
2. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
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5. SEE DEMOLITION FLOOR PLANS FOR ADDITIONAL DEMO AND NOTES.
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7. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
8. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
9. REFER TO NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
10. REMOVE LOW SLOPE ROOF ASSEMBLY COMPLETELY TO DECK, TYP.
    A. REMOVE MEMBRANE & WALKWAY UNITS.
    B. REMOVE INSULATION.
    C. REMOVE ROOF EXPANSION JOINT ASSEMBLY.
    D. REMOVE ROOFTOP VENTS AND STACKS.
    E. REMOVE ROOF TOP MECHANICAL UNITS ASSEMBLIES INCLUDING CURBS.
    F. REMOVE ROOF DRAIN ASSEMBLIES.
11. REMOVE PITCHED ROOF @ FIELD HOUSE, TYP.
12. ROOF SLOPES SHOWN ON RENOVATED PORTION OF THE WEST BUIDING ARE BASED ON FIELD SCANS BY NEW EXISTING CONDITIONS SURVEYS INC.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
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SCALE: As indicated

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SCHEMATIC DESIGN SUBMISSION

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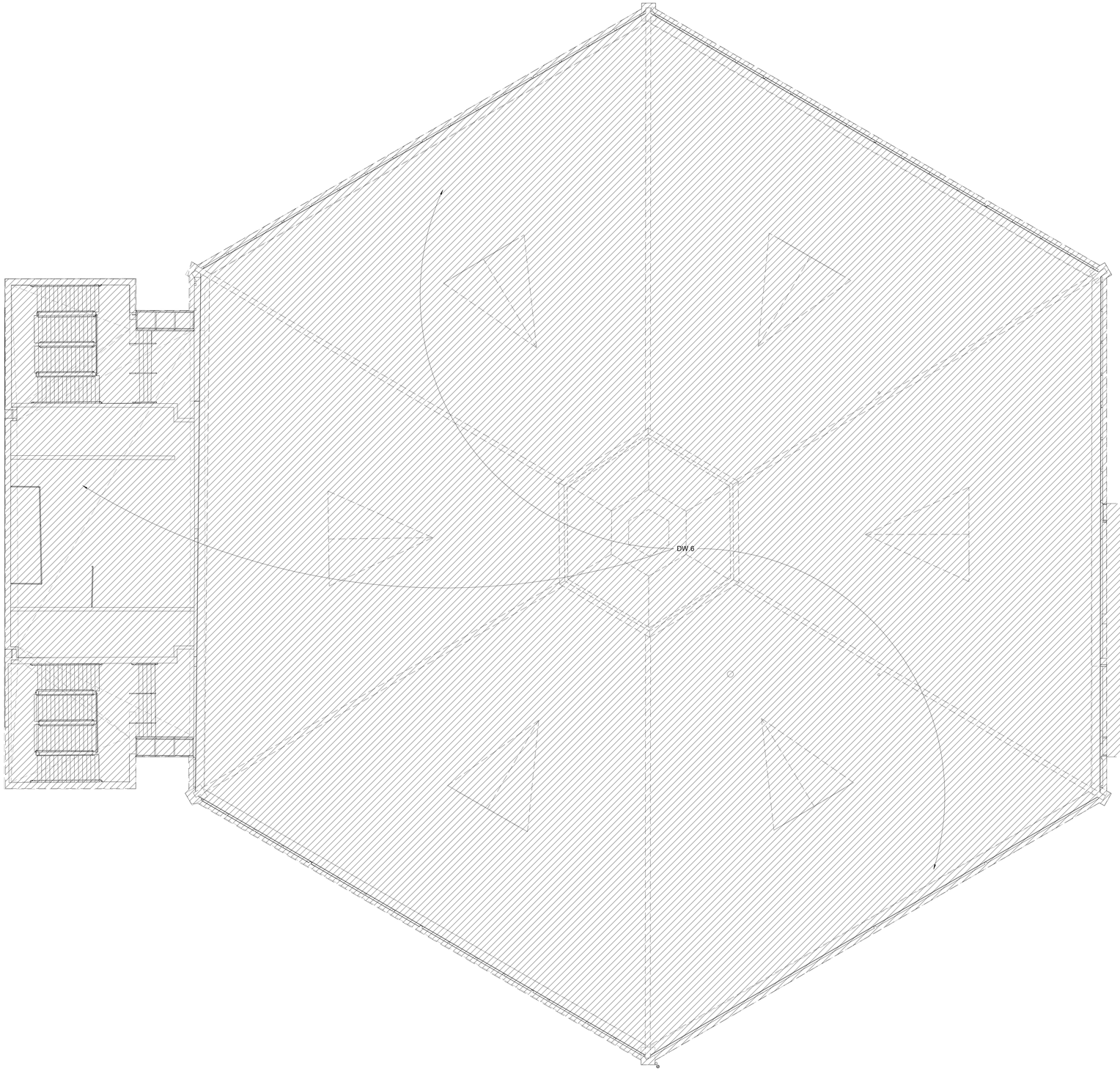
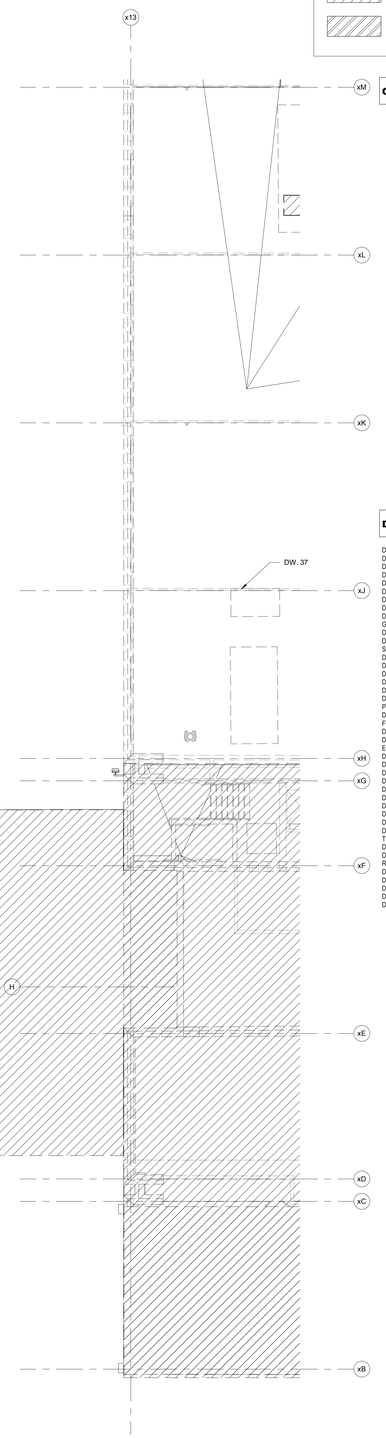


1 **DEMO ROOF PLAN - FIELD HOUSE**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND DOOR FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED
- DEMOUNTABLE WALLS TO BE REMOVED



GENERAL DEMOLITION ROOF NOTES

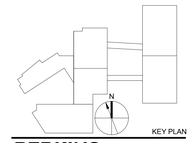
1. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
2. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
5. SEE DEMOLITION FLOOR PLANS FOR ADDITIONAL DEMO AND NOTES.
6. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
7. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
8. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
9. REFER TO NEW CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
10. REMOVE LOW SLOPE ROOF ASSEMBLY COMPLETELY TO DECK, TYP.
    A. REMOVE MEMBRANE & WALKWAY UNITS.
    B. REMOVE INSULATION.
    C. REMOVE ROOF EXPANSION JOINT ASSEMBLY.
    D. REMOVE ROOFTOP VENTS AND STACKS.
    E. REMOVE ROOF TOP MECHANICAL UNITS ASSEMBLIES INCLUDING CURBS.
    F. REMOVE ROOF DRAIN ASSEMBLIES.
11. REMOVE PITCHED ROOF @ FIELD HOUSE, TYP.
12. ROOF SLOPES SHOWN ON RENOVATED PORTION OF THE WEST BUIDING ARE BASED ON FIELD SCANS BY NEW EXISTING CONDITIONS SURVEYS INC.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN. REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DW.26 DEMO (E) SJAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2 SF.
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used.
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF DEMO PLAN - FIELD HOUSE

SCALE: As indicated

AD-105E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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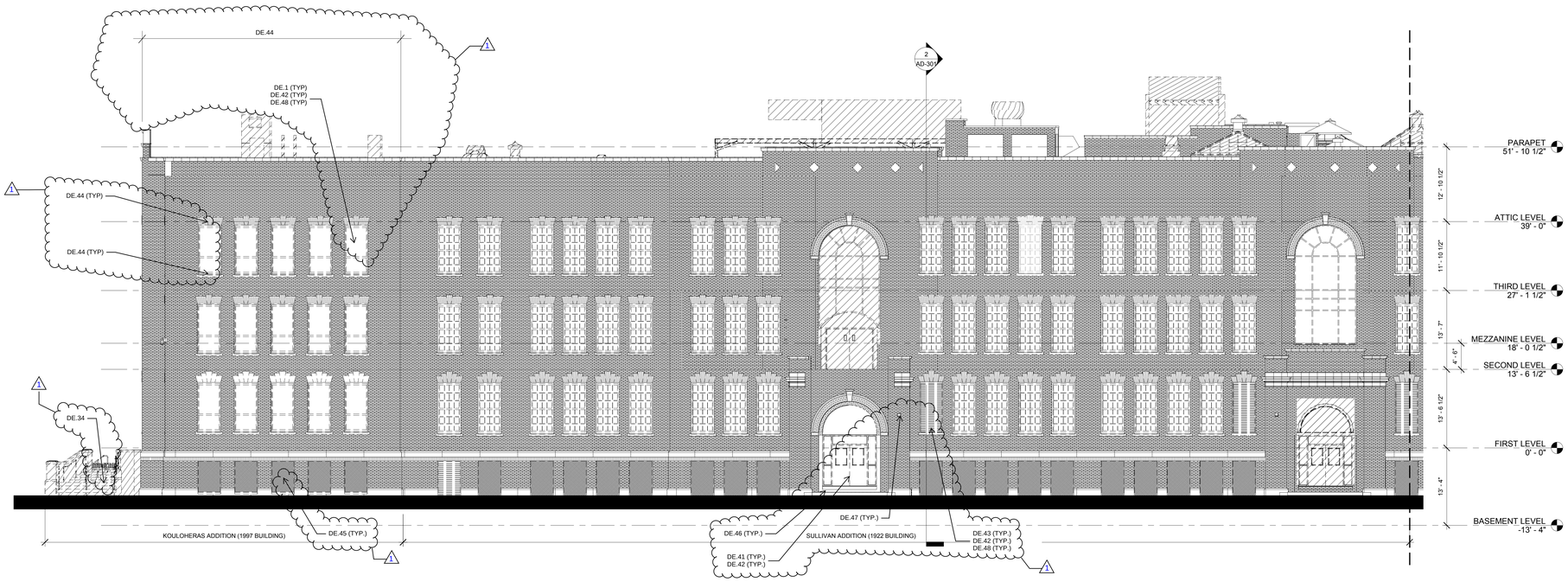
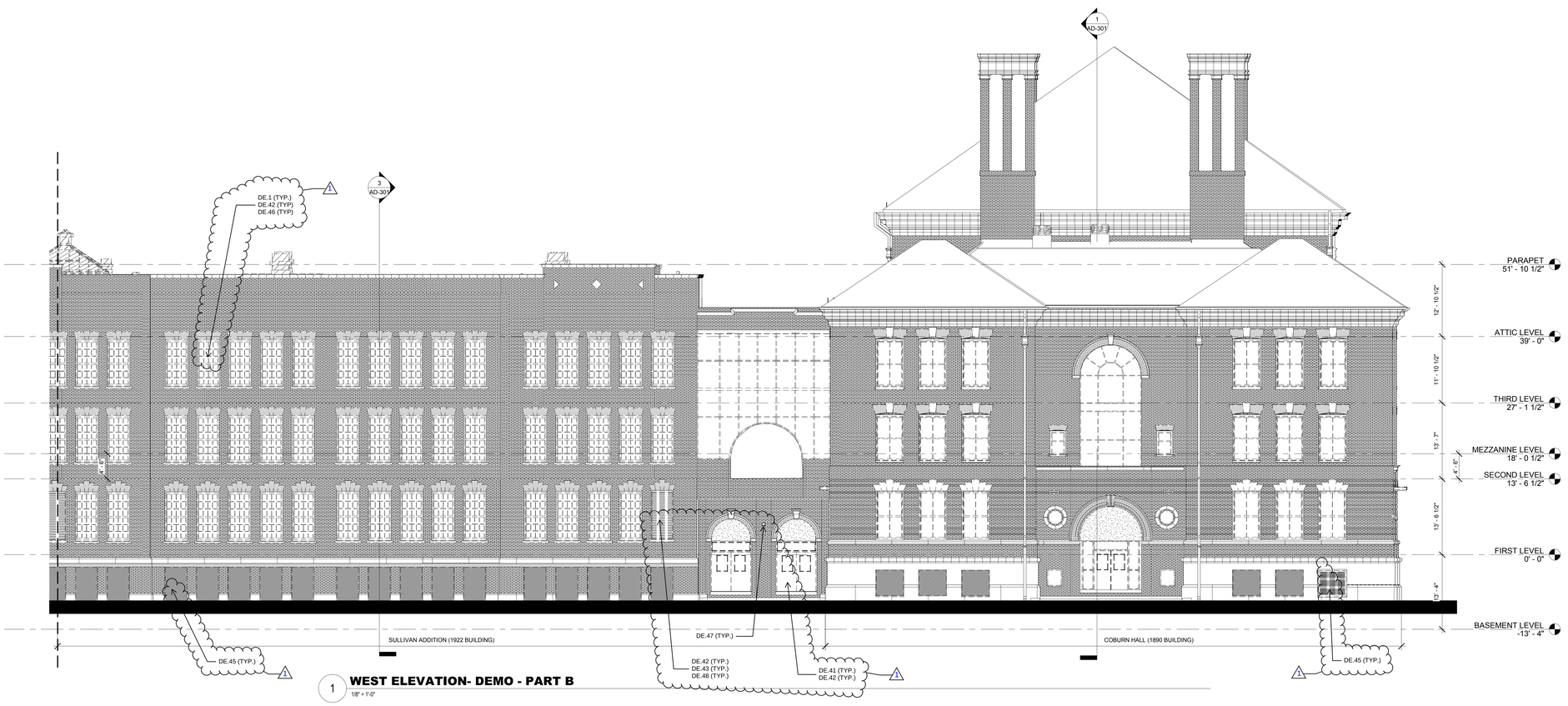


2 **WEST ELEVATION- DEMO - PART A**
1/8" = 1'-0"



1 **WEST ELEVATION- DEMO - PART B**
1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL. INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL (E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DE.8 DEMO (E) STRUCTURAL SLAB, S.S.D.
DE.9 DEMO (E) SLAB, S.S.D.
DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DE.12 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS
DE.13 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DE.14 DEMO (E) EXPANSION JOINT
DE.15 DEMO (E) ROOF ASSEMBLY
DE.16 DEMO (E) EXTERIOR ASSEMBLY @ WINDOW(s)
DE.17 DEMO (E) EXTERIOR ASSEMBLY @ BRIDGE
DE.18 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DE.19 DEMO (E) SECURITY CAMERAS, TYP.
DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DE.21 REPLACE (E) DAMAGED BRICK, 2 SF.
DE.22 DEMO (E) INTERCOM, TYP.
DE.23 DEMO (E) DOOR CONTROL BUTTON, TYP.
DE.24 DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP
DE.29 DEMO (E) PLASTER CLAYTILE WALL
DE.30 DEMO (E) CMU WALL
DE.31 DEMO (E) CONCRETE PAD
DE.32 DEMO (E) STEEL WALL/DUCTWORK
DE.33 DEMO (E) GWB WALL
DE.34 DEMO (E) CONCRETE AND MASONRY RAMPS AND STAIRS
DE.35 DEMO (E) ELEVATOR
DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
DE.39 DEMO (E) TRANSLUCENT FIBERGLASS SKYLIGHTS
DE.40 DEMO (E) PLASTER CEILING AND COFFERS
DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP.
DE.43 DEMO (E) LOUVER, FRAME & TRIM, TYP.
DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
DE.45 REMOVE (E) STEEL SECURITY SCREENS AT WINDOWS, TYP.
DE.46 REMOVE GROUT AT (E) STONE STEPS, TYP. PREP FOR NEW.
DE.47 REMOVE (E) LIGHT FIXTURE, TYP. AT EXTERIOR
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

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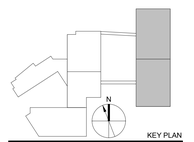

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
EXTERIOR DEMO ELEVATIONS - EAST BLDG

SCALE: As indicated

AD-201

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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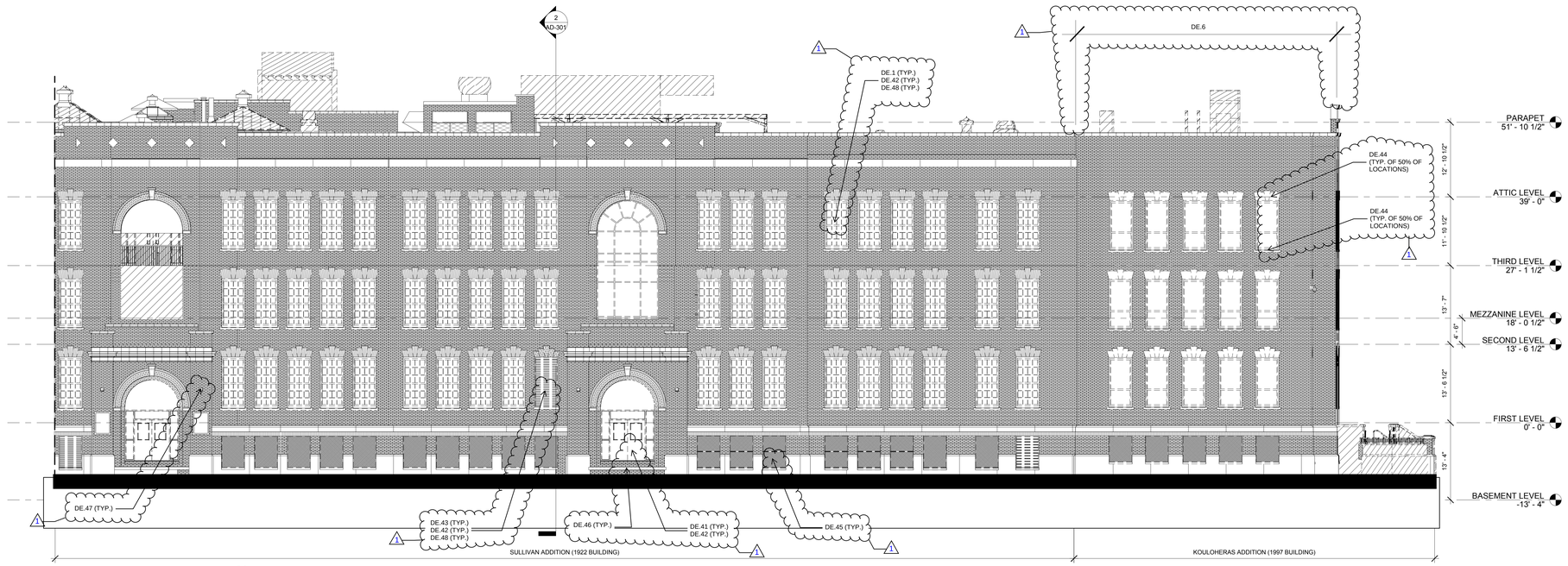
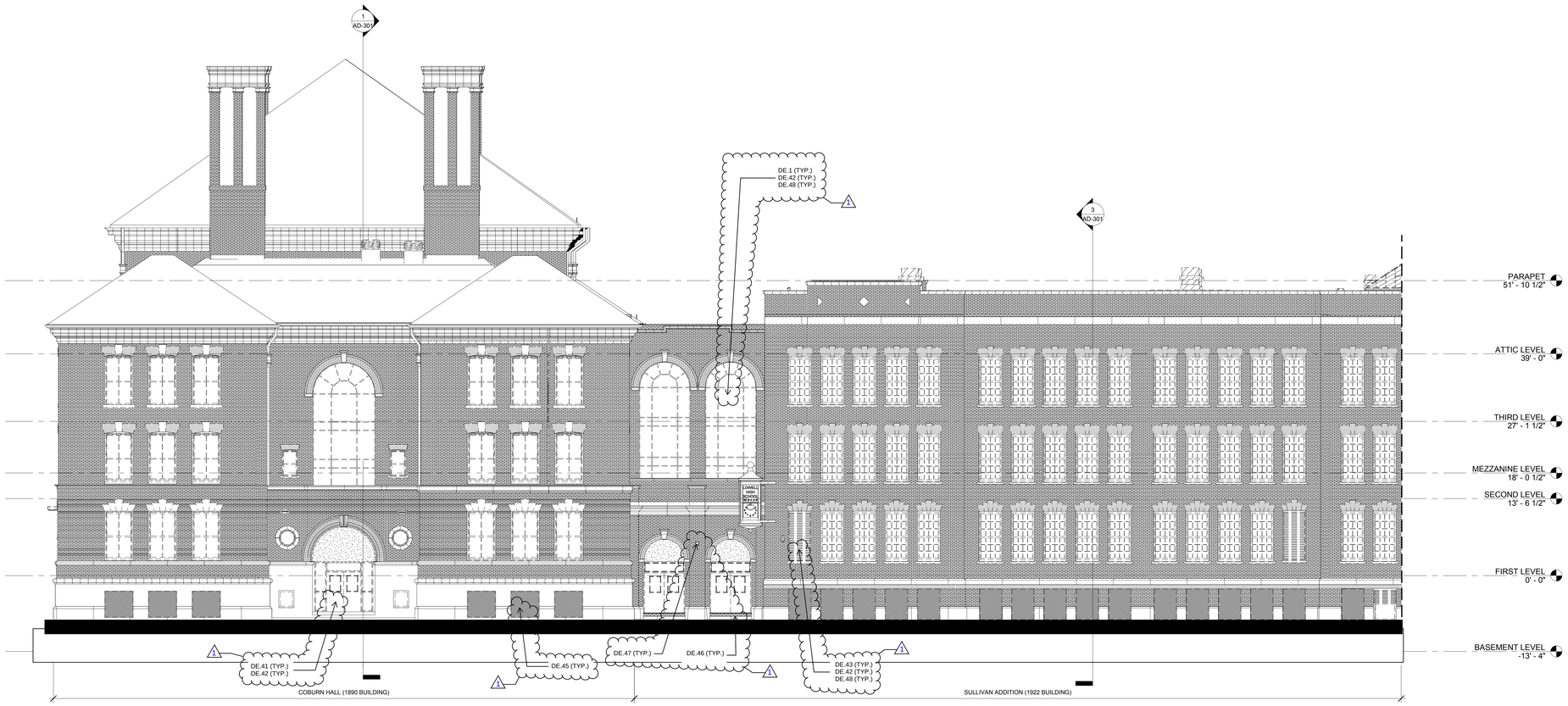


2 **EAST ELEVATION - DEMO - PART A**

1/8" = 1'-0"



1 **EAST ELEVATION - DEMO - PART B**

1/8" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL. INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHIMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
DE.2 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DE.3 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DE.4 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DE.5 DEMO (E) COUNTERTOP, TYP.
DE.6 DEMO (E) COLUMNS
DE.7 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
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DE.10 DEMO (E) SLAB @ LIGHTWELL, S.S.D.
DE.11 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
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DE.20 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
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DE.22 DEMO (E) INTERCOM, TYP.
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DE.25 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DE.26 DEMO (E) DRINK FOUNTAIN(S), TYP.
DE.27 DEMO (E) ROOF HATCH, TYP.
DE.28 DEMO (E) LADDER, TYP.
DE.29 DEMO (E) PLASTER CLAYTILE WALL
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DE.36 DEMO (E) BRICK MASONRY WALL
DE.37 DEMO (E) HC LIFT
DE.38 DEMO (E) CONCRETE AND METAL DECK FLOOR SYSTEM, DEMO STRUCTURAL STEEL FLOOR FRAMING
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DE.41 DEMO (E) DOOR, FRAME, TRIM & HARDWARE, TYP.
DE.42 REMOVE (E) SEALANT, TYP
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DE.44 REMOVE (E) BROKEN PRECAST CONCRETE CAPSTONES, TYP. AT 1990S ADDITION
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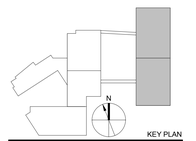
DE.48 SCRAP DOWN EXISTING LINTELS, TYP. PREP FOR NEW SCOPE. AT ALL MASONRY OPENINGS
DE.49 REMOVE (E) SHEETMETAL PANEL, TYP.
DE.50 REMOVE (E) TERRACOTTA, TYP.
DE.51 REMOVE (E) BRICKS AND FLASHING BEHIND EXISTING MASONRY TO ACCOMMODATE NEW EXTERIOR PORCH. REFER TO PROPOSED BUILDING ELEMENTS FOR LOCATION OF NEW FLASHING AND WEEP HOLES

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150f Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
EXTERIOR DEMO ELEVATIONS - EAST BLDG

SCALE: As indicated

AD-202

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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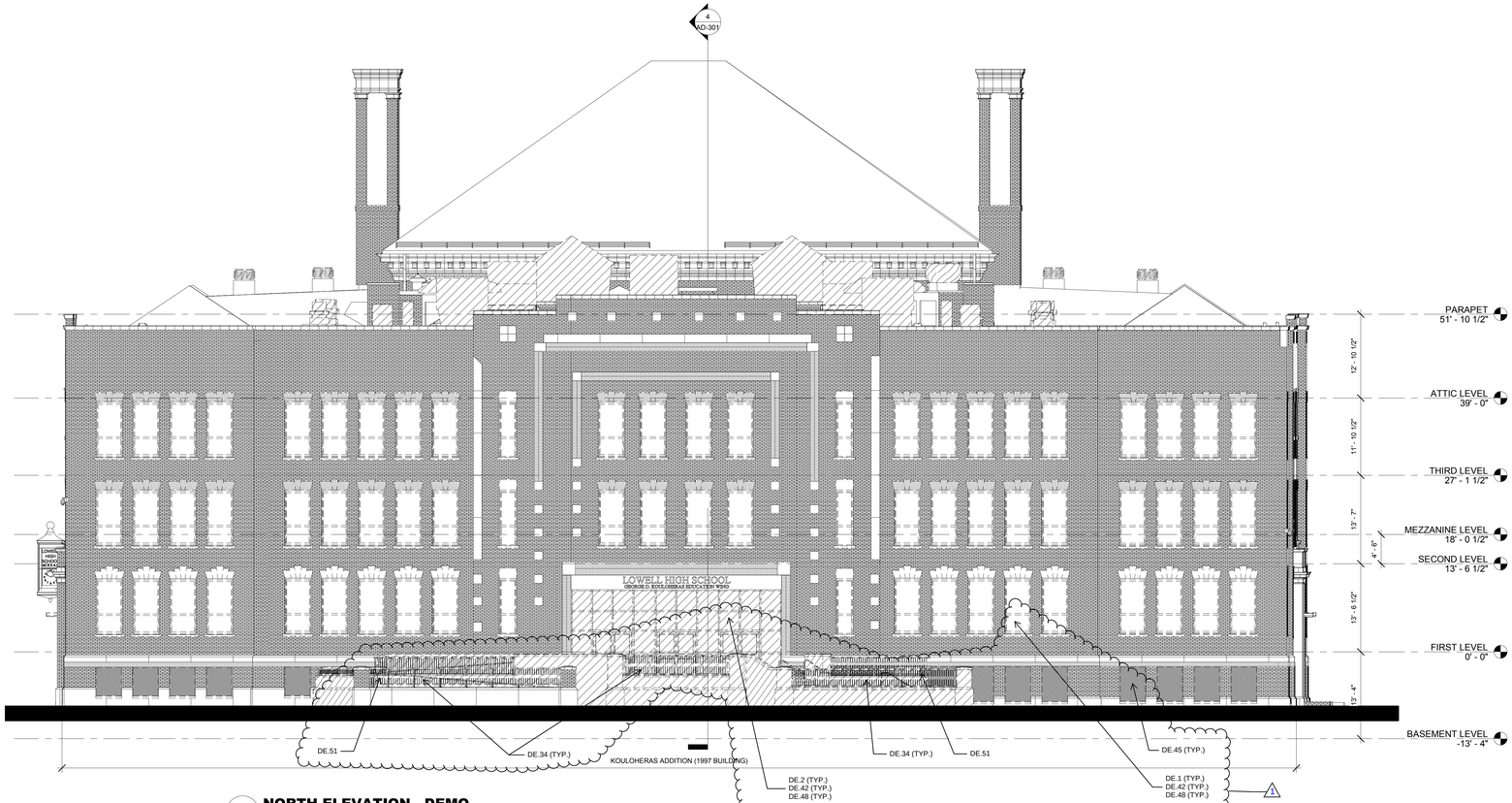
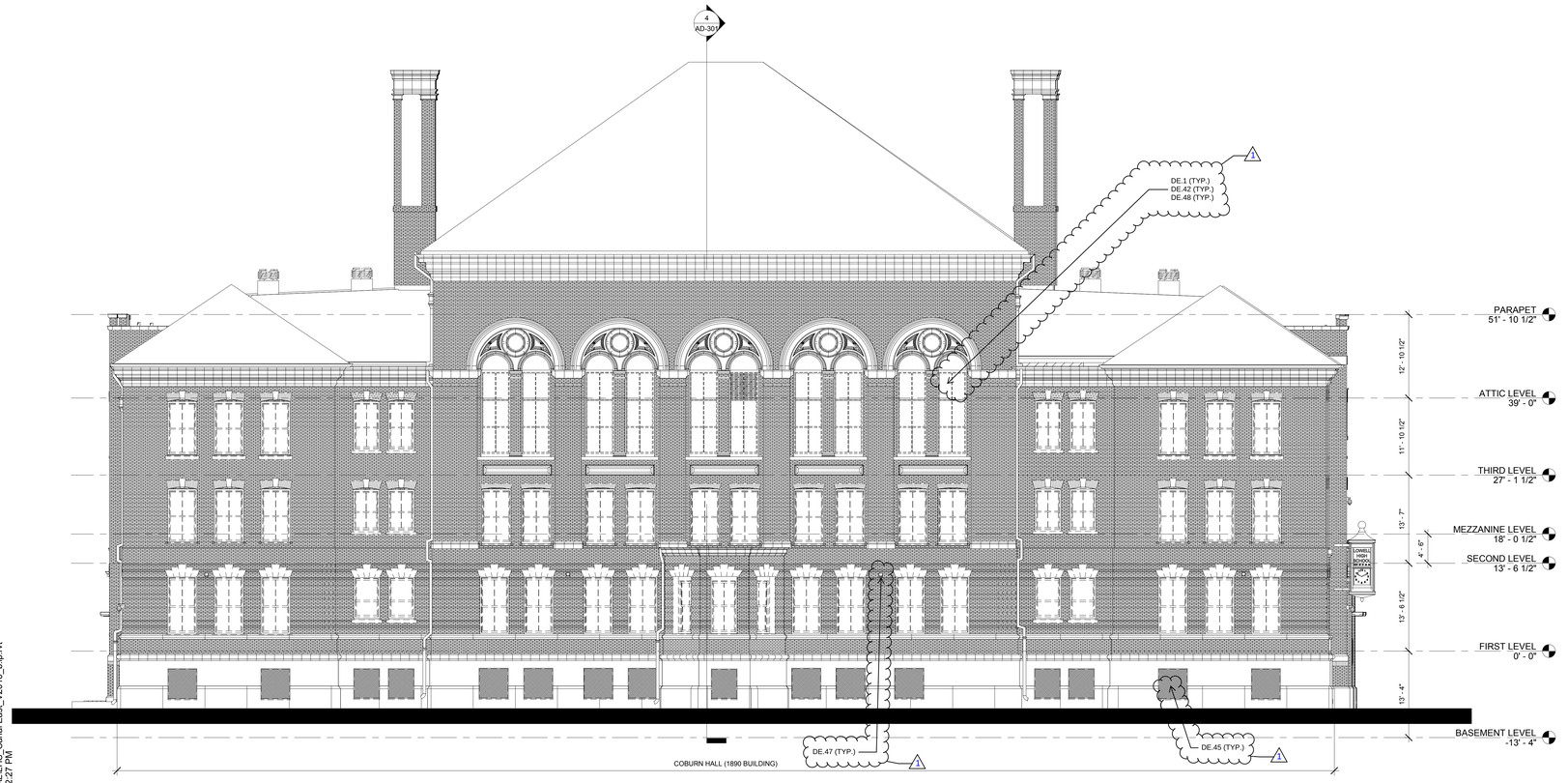


2 **NORTH ELEVATION - DEMO**
1/8" = 1'-0"



1 **SOUTH ELEVATION - DEMO**
1/8" = 1'-0"

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DEMOLITION LEGEND

- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED

GENERAL DEMOLITION NOTES - EAST

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO. AND NEW SCOPE OF WORK.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U.N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD. FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. REFER TO SPECIFICATIONS AND NARRATIVES ABOUT PATCHING EXISTING TO REMAIN WORK AT PLACES WHERE ITEMS HAVE BEEN REMOVED, TYP.
5. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O
6. DEMOLITION OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (INCLUDING BUT NOT LIMITED TO: DOORS, FRAMES, DOOR HARDWARE, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
7. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
8. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
9. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYPICAL. SALVAGE AND STORE ALL PLAQUES AND HISTORICAL MARKERS FOR FUTURE USE.
10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
14. REMOVE ALL (E) WINDOWS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL. INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL. INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
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NO.	DATE	ISSUE
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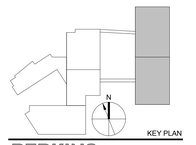

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
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Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
EXTERIOR DEMO ELEVATIONS - EAST BLDG

SCALE: As indicated

AD-203

SCHEMATIC DESIGN SUBMISSION

2/20/2019

DEMOLITION NOTES - EAST CAMPUS

DE.1 DEMO (E) ALUMINUM WINDOWS FRAME AND TRIM, TYP.
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GENERAL DEMOLITION NOTES - EAST

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10. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYPICAL.
11. REFERENCE ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
12. REFERENCE CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
13. REFERENCE STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION SCOPE.
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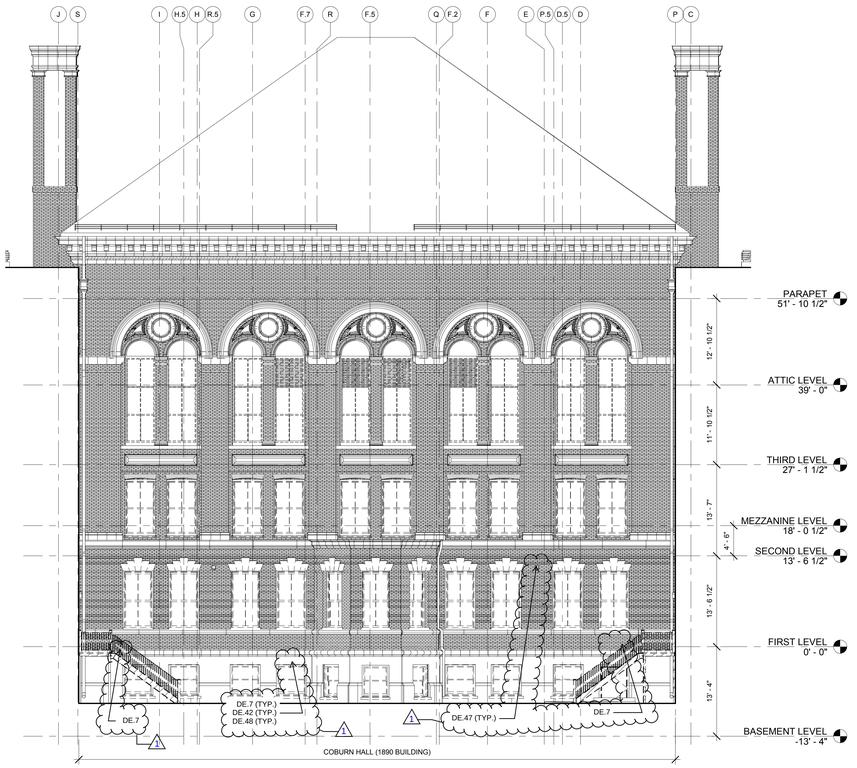
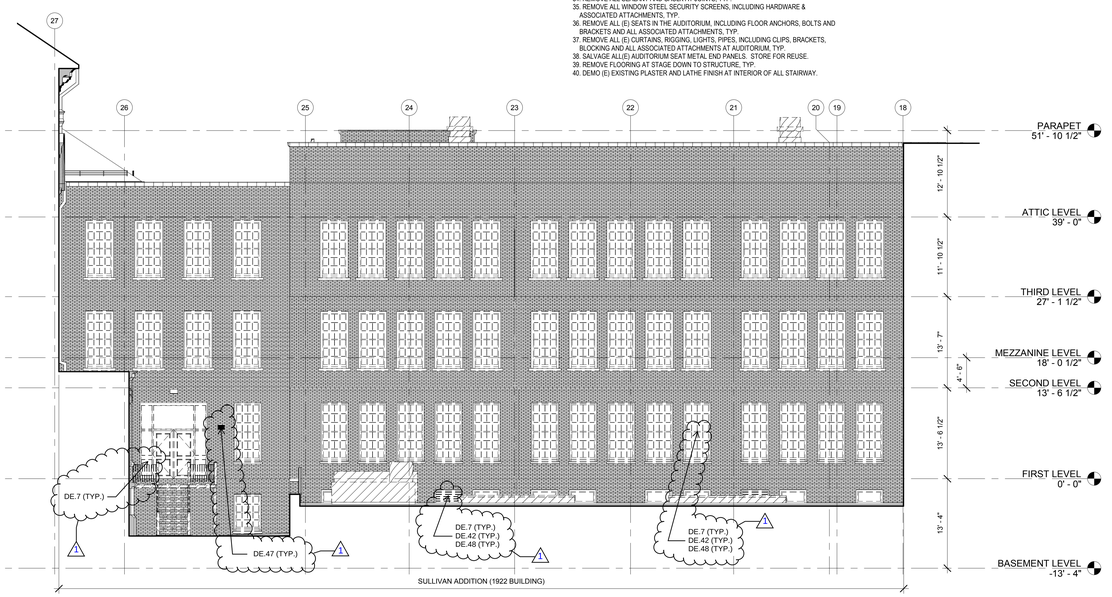
15. REMOVE ALL (E) STOREFRONT WINDOWS, DOORS, FRAMES AND SILLS, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
16. REMOVE ALL (E) INTERIOR AND EXTERIOR H.M. DOORS, FRAMES, AND HARDWARE, INCLUDING WINDOW TREATMENTS & ALL ASSOCIATED ATTACHMENTS, TYP.
17. REMOVE ALL (E) LOUVERS, FRAMES AND SILLS, INCLUDING ALL ASSOCIATED ATTACHMENTS, TYP.
18. REMOVE ALL (E) LIGHT FIXTURES, TYP. PREP FOR NEW.
19. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS, FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP. PREP FOR NEW.
20. REMOVE ALL (E) EXIT SIGNS, TYP.
21. REMOVE ALL (E) FLOORING AND UNDERLAYMENT DOWN TO STRUCTURE AT CLASSROOMS, TYP.
22. AT CORRIDORS FLOORS 1, 2 AND 3, PROTECT (E) TERRAZZO FLOORING TO REMAIN, MAKE NEAT SAWCUT REMOVAL AT (E) TERRAZZO BASE, TYP.
23. REMOVE ALL (E) ACT CEILING SYSTEMS INCLUDING TILE, GRIDS, CLIPS,TRIM AND ALL ASSOCIATED ATTACHMENTS, TYP.
24. REMOVE ALL (E) LOCKERS AND BASE, INCLUDING CLIPS, TRIM & ALL ASSOCIATED ATTACHMENTS, TYP.
25. REMOVE ALL (E) TOILET FIXTURES, PARTITIONS & ACCESSORIES, INCLUDING CLIPS, AND ALL ASSOCIATED ATTACHMENTS, TYP.
26. REMOVE ALL DISPLAY CASES, INCLUDING TRIM, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
27. REMOVE ALL CASEWORK & MILLWORK INCLUDING COUNTERTOPS, CABINETS, BACKSPLASH, TRIM, CAULK, BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
28. REMOVE ALL RADIATORS, TYPICAL, INCLUDING COVERS, GRILLS AND ASSOCIATED ATTACHMENTS.
29. REMOVE ALL CHALKBOARDS, TACKBOARDS AND MARKERBOARDS, TYPICAL, INCLUDING CLIPS AND ASSOCIATED ATTACHMENTS.
30. REMOVE ONE SIDE OF ALL EXISTING TO REMAIN INTERIOR WALLS. REFER TO FLOOR PLANS FOR EXTENT OF DEMOLITION.
31. REMOVE INTERIOR FINISH OF ALL EXTERIOR WALLS DOWN TO EXISTING STUDS, INCLUDING BUT NOT LIMITED TO: GWB, PLASTER, SHMS, BLOCKING, TRIM, BASE AND ALL ASSOCIATED ATTACHMENTS, TYP. AT THE BASEMENT, 1ST, 2ND, 3RD FLOORS OF 1893 & 1922 BUILDINGS.
32. REMOVE ALL HANDRAILS, GUARDRAILS, BRACKETS, BLOCKING AND ASSOCIATED ATTACHMENTS, TYP.
33. REMOVE ALL (E) DOOR HARDWARE IN THE BUILDING, TYP.
34. REMOVE ALL SEALANT AND CAULK AT JOINTS, TYP.
35. REMOVE ALL WINDOW STEEL SECURITY SCREENS, INCLUDING HARDWARE & ASSOCIATED ATTACHMENTS, TYP.
36. REMOVE ALL (E) SEATS IN THE AUDITORIUM, INCLUDING FLOOR ANCHORS, BOLTS AND BRACKETS AND ALL ASSOCIATED ATTACHMENTS, TYP.
37. REMOVE ALL (E) CURTAINS, RIGGING, LIGHTS, PIPES, INCLUDING CLIPS, BRACKETS, BLOCKING AND ALL ASSOCIATED ATTACHMENTS AT AUDITORIUM, TYP.
38. SALVAGE ALL(E) AUDITORIUM SEAT METAL END PANELS. STORE FOR REUSE.
39. REMOVE FLOORING AT STAGE DOWN TO STRUCTURE, TYP.
40. DEMO (E) EXISTING PLASTER AND LATHE FINISH AT INTERIOR OF ALL STAIRWAY.

DEMOLITION LEGEND

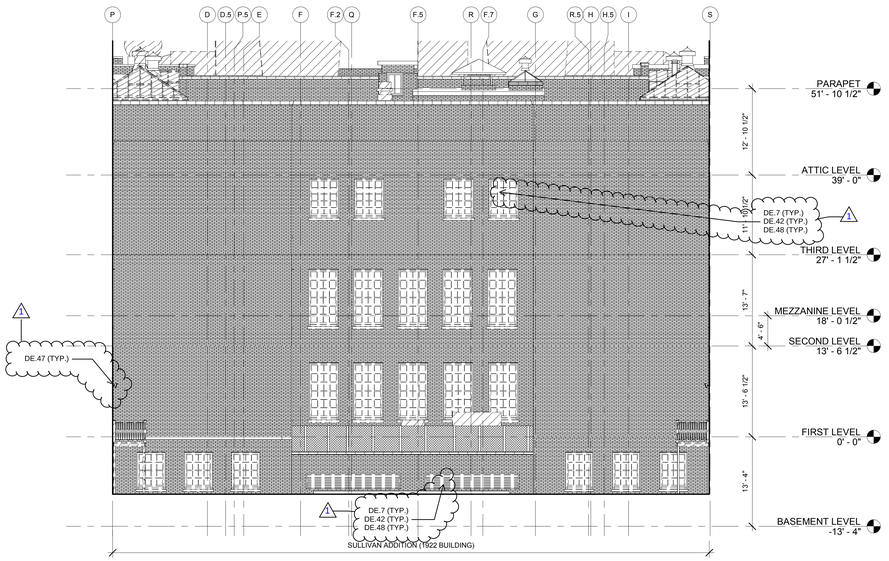
- EXISTING PARTITIONS, EQUIPMENT, ETC. (SHOWN DASHED) TO BE REMOVED
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- AREA TO BE REMOVED



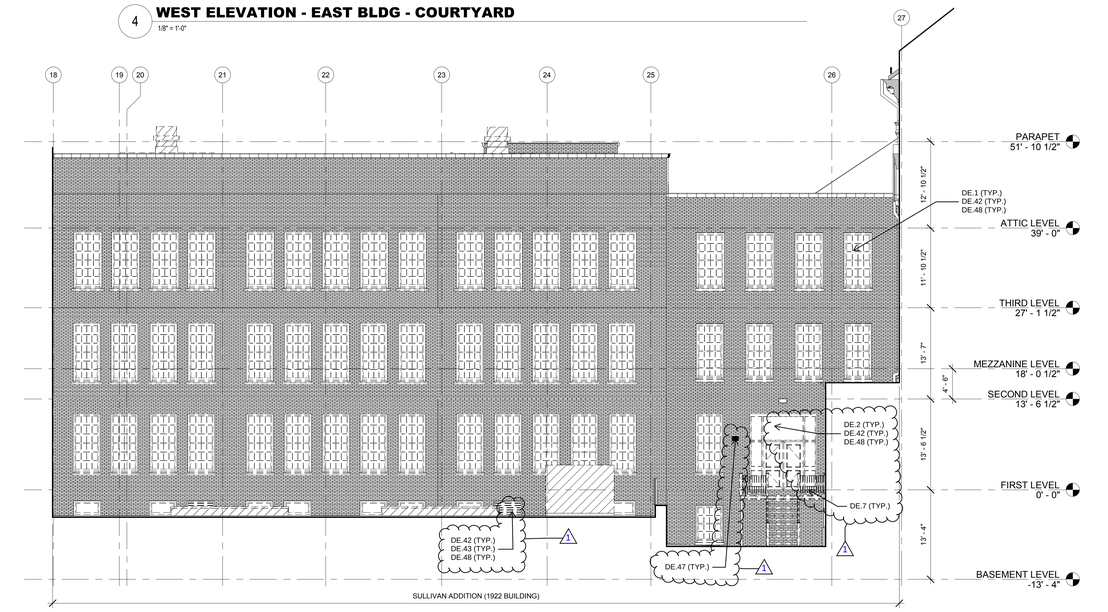
3 **SOUTH ELEVATION - EAST BLDG - COURTYARD**
1/8" = 1'-0"



4 **WEST ELEVATION - EAST BLDG - COURTYARD**
1/8" = 1'-0"



1 **NORTH ELEVATION - EAST BLDG - COURTYARD**
1/8" = 1'-0"



2 **EAST ELEVATION - EAST BLDG - COURTYARD**
1/8" = 1'-0"

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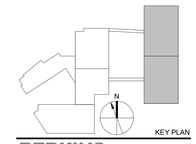
NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

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375 Merrimack Street, Lowell, MA 08152

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2 Center Plaza Suite 430 Boston, MA 02108

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Lighting Consultant Address

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

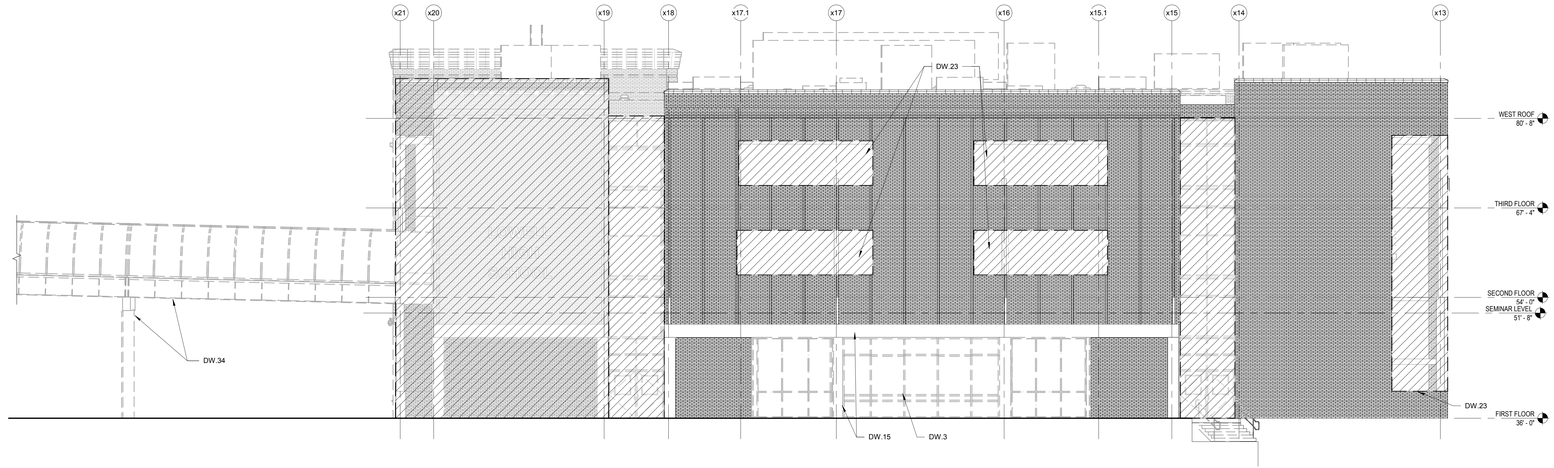
DRAWING TITLE:
EXTERIOR DEMO ELEVATIONS - EAST BLDG

SCALE: As indicated

AD-204

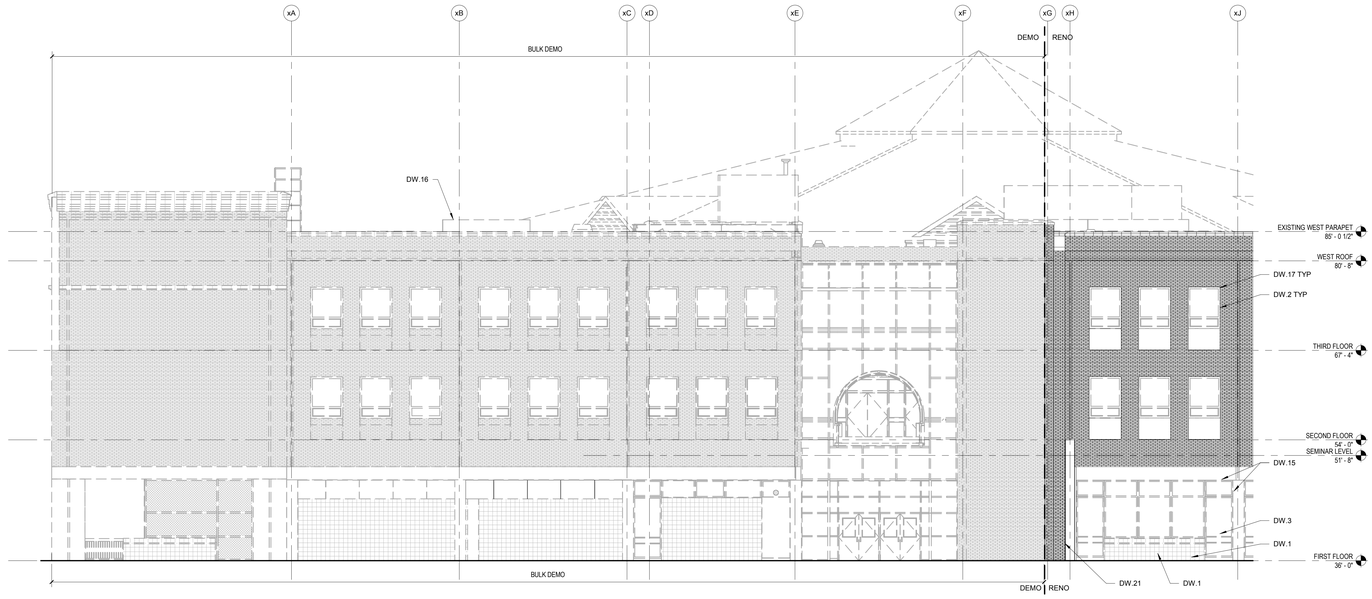
SCHEMATIC DESIGN SUBMISSION

2/20/2019



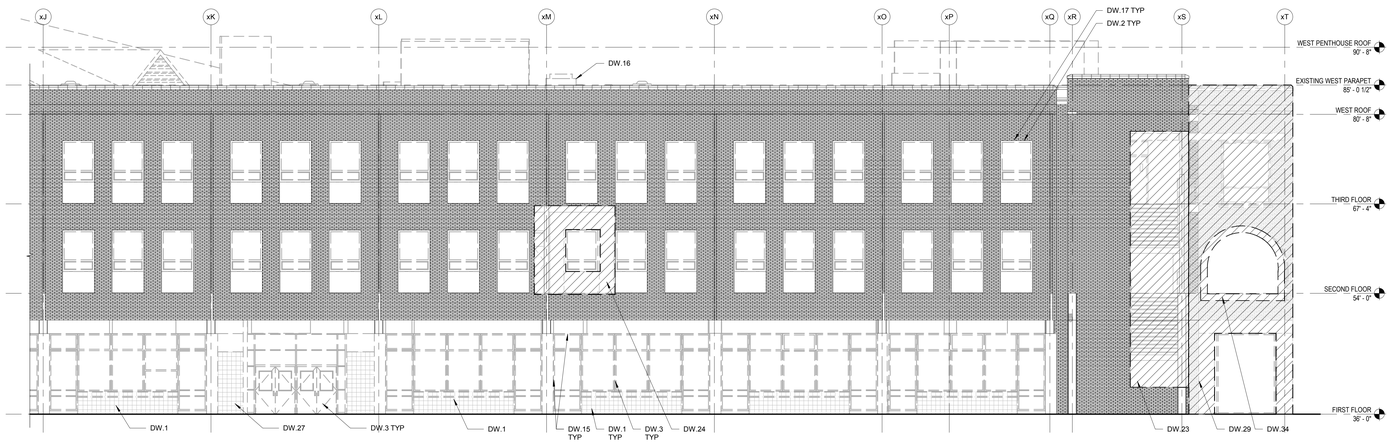
3 **WEST BLDG - NORTH ELEVATION - DEMO**

1/8" = 1'-0"



2 **WEST BLDG - EAST ELEVATION - DEMO - PART D**

1/8" = 1'-0"



1 **WEST BLDG - EAST ELEVATION - DEMO - PART C**

1/8" = 1'-0"

GENERAL DEMOLITION NOTES

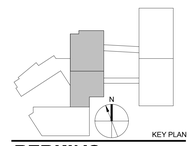
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL INFO.
2. ALL ITEMS IN THESE DEMOLITION DRAWINGS ARE EXISTING TO REMAIN (ETR) U/N.O.
3. REFER TO ALL HAZARDOUS MATERIALS REMOVAL PACKAGES, INCLUDING ASBESTOS CONTAINING MATERIAL (ACM), AND LEAD, FOR ALL HAZARDOUS WORK TO BE REMOVED PRIOR TO ANY DEMOLITION WORK TO BE DONE.
4. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O., REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.
5. SEE DEMOLITION EXTERIOR ELEVATIONS FOR ADDITIONAL DEMO AND NOTES.
6. SEE DEMOLITION ROOF PLAN FOR ADDITIONAL DEMO AND NOTES.
7. REMOVE ALL INTERIOR & EXTERIOR SIGNAGE, TYP. SAVE FOR REINSTALLATION ALL PLAQUES AND HISTORICAL MARKERS.
8. REMOVE ALL CLOCKS, SPEAKERS, TVs, PROJECTORS, AND PROJECTION SCREENS, TYP.
9. REFERENCE TO ELECTRICAL, PLUMBING, FIRE PROTECTION, AND MECHANICAL DWGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
10. REFERENCE TO CIVIL AND LANDSCAPE DRAWINGS AND NARRATIVES FOR ADDITIONAL DEMOLITION.
11. REFERENCE TO STRUCTURAL DRAWING AND NARRATIVES FOR ADDITIONAL DEMOLITION.
12. REMOVE ALL (E) WINDOWS, INCLUDING WINDOW TREATMENTS, TYP.
13. REMOVE ALL (E) STOREFRONTS, TYP.
14. REMOVE ALL (E) DOORS, DOOR FRAMES, AND HARDWARE, TYP.
15. REMOVE ALL (E) FIRE EXTINGUISHERS, SEMI-RECESSED CABINETS AND FULLY RECESSED CABINETS AND FIRE HOSES AND HOSE CABINETS, TYP.
16. REMOVE ALL (E) EXIT SIGNS, TYP.
17. REMOVE ALL (E) FLOORING, TYP.
18. REMOVE ALL (E) CEILINGS, TYP.
19. REMOVE ALL (E) LOCKERS, TYP.
20. REMOVE ALL (E) TOILET PARTITIONS & TOILET ACCESSORIES, TYP.
21. REMOVE ALL (E) DISPLAY CASES, TYP.
22. REMOVE ALL (E) MILLWORK INCLUDING COUNTERTOPS AND CABINETS, TYP.
23. REMOVE ALL (E) INTERIOR 1 HOUR RATED DEMOUNTABLE METAL PARTITIONS. SEE 1978 DWGS BY LEV ZETLIN FOR EXTENT.

DEMOLITION NOTES - WEST CAMPUS

DW.1 DEMO (E) CMU PLANTERS, TYP.
DW.2 DEMO (E) WINDOWS, TYP.
DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT, SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
DW.8 DEMO (E) CABINET UNIT HEATER, TYP.
DW.9 DEMO (E) CONCRETE STAIRS & LANDING, MTL RAILING & GUARDRAIL
DW.10 DEMO (E) STRUCTURAL SLAB, SEE STRUCTURAL DWGS
DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL, SEE STRUCTURAL DWGS
DW.14 DEMO (E) SLAB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.15 DEMO (E) CEMENTITIOUS PANELS @ WALL & SOFFIT
DW.16 DEMO (E) ROOFTOP MECHANICAL EQUIPMENT
DW.17 REPLACE ALL (E) MTL LINTEL @ WEST BLDG WDWS. REMOVE PRECAST FACE BRICK LINTEL FOR ACCESS
DW.18 DEMO (E) HANDRAILS & RESILIENT TREADS & RESILIENT FLOORING @ LANDINGS, DEMO DAMAGED CONCRETE FILL
DW.19 DEMO (E) EXTERIOR WALL FOR WDW OPNG
DW.20 REPLACE (E) ROOF DRAIN. REPLACEMENT DRAIN @ HIGHER ELEVATION w/ ROOF INSULATION
DW.21 (E) EXPANSION JOINT
DW.22 DEMO (E) ROOF ASSEMBLY TO STRUCTURE
DW.23 DEMO (E) EXTERIOR WALL ASSEMBLY @ WINDOW(s)
DW.24 DEMO (E) EXTERIOR WALL ASSEMBLY @ BRIDGE
DW.25 REPLACE (E) DAMAGED CORNER BRICKS, 2 LF.
DW.26 DEMO (E) SLAB @ CHASE/SHAFT
DW.27 DEMO BLOCK WALL
DW.28 DEMO (E) EXTERIOR WALL ASSEMBLY FOR BRIDGE
DW.29 REPLACE (E) DAMAGED BRICK, 2 SF
DW.30 DISCONNET (E) TROLLEY CABLES, COORDINATE WORK W/ TROLLEY OPERATOR
DW.31 DEMO CHAIN LINK FENCING
DW.32 SELECTIVE DEMO (E) WOOD FRAMED TIERED PLATFORMS FOR RAMP
DW.33 DEMO (E) FOLDING PARTITION & ASSOCIATED HARDWARE
DW.34 DEMO (E) BRIDGE, INCLUDING COLUMNS & FOOTINGS
DW.35 not used
DW.36 DEMO (E) FIRE EXTINGUISHER, TYP.
DW.37 DEMO (E) EXTERIOR BRICK & CMU WALL

NO.	DATE	ISSUE

SEAL



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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

EXTERIOR DEMO ELEVATIONS - WEST BLDG

SCALE: As indicated

AD-205

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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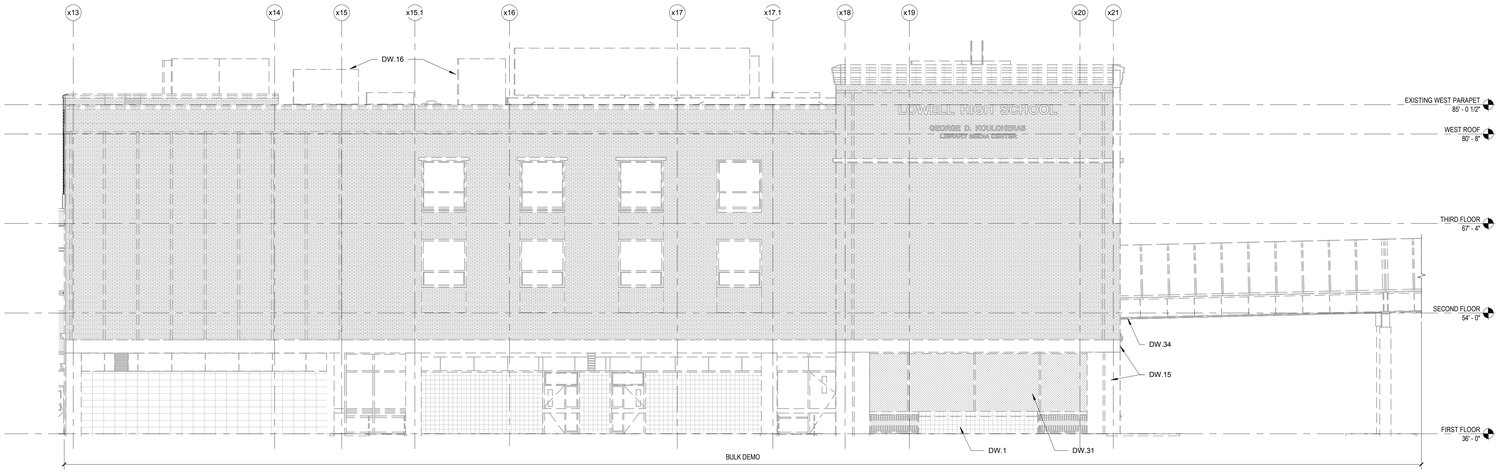
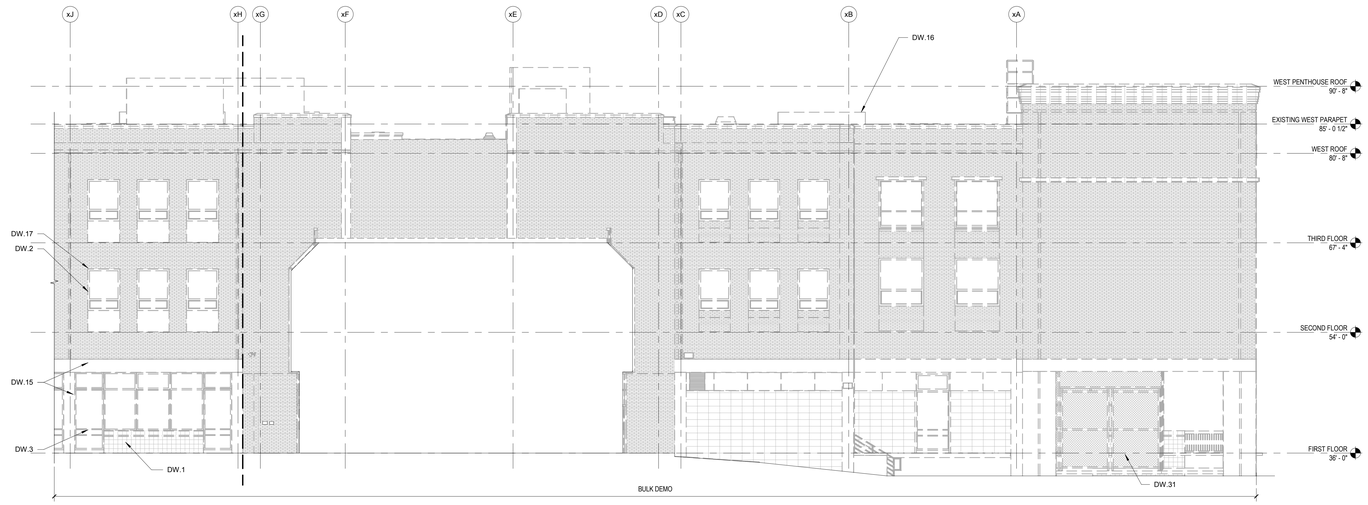


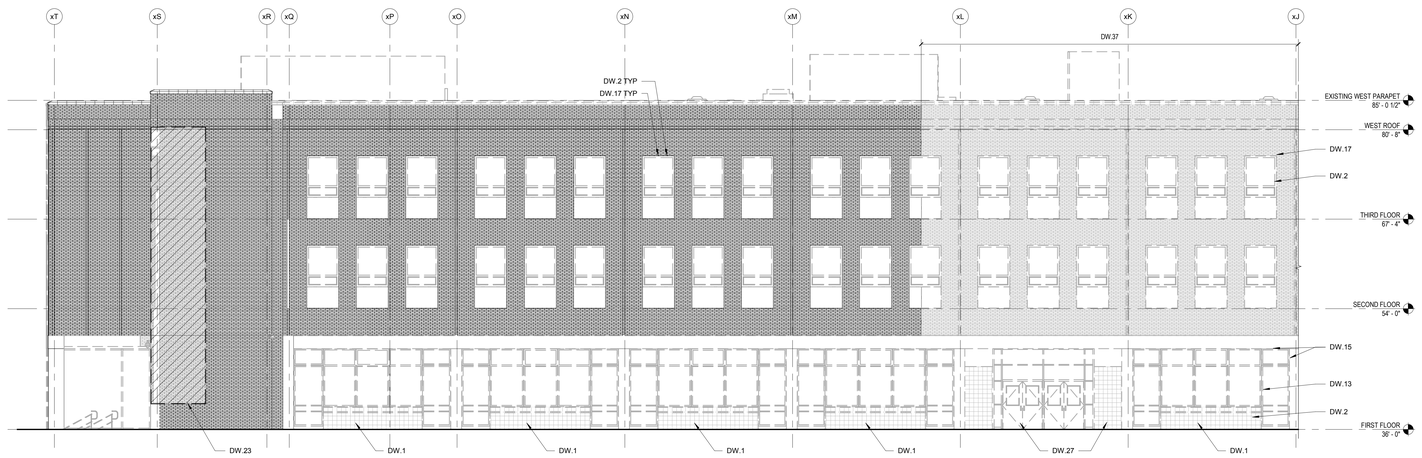
3 WEST BLDG - SOUTH ELEVATION - DEMO

1/8" = 1'-0"



2 WEST BLDG - WEST ELEVATION - DEMO - PART D

1/8" = 1'-0"



1 WEST BLDG - WEST ELEVATION - DEMO - PART C

1/8" = 1'-0"

GENERAL DEMOLITION NOTES

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DW.3 DEMO (E) STOREFRONT SYSTEM & DOORS, TYP.
DW.4 ETR CLEAN OUT. SEE (E) UNDERSLAB LAYOUT PLANS
DW.5 DEMO (E) WOOD WAINSCOT @ ETR COLUMNS, TYP.
DW.6 REMOVE PORTION OF BLDG IN ITS ENTIRETY
DW.7 DEMO (E) COLUMNS
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DW.11 DEMO (E) STRUCTURAL SALB @ ELEVATOR SHAFT, SEE STRUCTURAL DWGS
DW.12 DEMO (E) SLAB, SEE STRUCTURAL DWGS
DW.13 DEMO (E) SLAB @ LIGHTWELL. SEE STRUCTURAL DWGS
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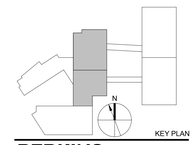

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PROJECT No: 67150

DRAWING TITLE:
EXTERIOR DEMO ELEVATIONS - WEST BLDG

SCALE: As indicated

AD-206

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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Americans with Disabilities Act Guidelines
The ADA Guidelines are not enforced by the Commonwealth of Massachusetts, they can only be enforced through a civil lawsuit or complaint filed with the U.S. Department of Justice. Compliance with the ADA Guidelines is triggered by renovations to the existing building. All renovations to the building must be made to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities (28 CFR Part 36 Section 36.402(a)). Alterations made to provide an accessible path of travel to altered areas and accessible facilities (i.e. provide accessible toilet facilities) are not required if the cost exceeds 20% of the total cost of the alteration (28 CFR Part 36 Section 36.403(f)). However, if the cost to meet these accessibility requirements does exceed 20%, alterations are still required to the maximum extent that the area can be made accessible without exceeding the 20% criteria (28 CFR Part 36 Section 36.403(g)). The ADA also contains less stringent dimensional requirements for some building elements in an existing building where it is infeasible to meet the requirements for new construction (ADA Section 4.1.6).

15. Minimum Number of Toilet Room Fixtures

The Massachusetts Plumbing Code (248 CMR) regulates the number of plumbing fixtures required throughout buildings. The minimum number of plumbing fixtures is established by 248 CMR 10.10(18) Table 1 based on the building use and the expected population as determined by the local Plumbing Inspector per 248 CMR 10.10 (18)(2). The Plumbing Inspector must approve the building population; however, the building population can generally be based on the designer's determination of the actual number of people expected within the building. The Plumbing Code expects that the building population will be divided evenly between male and female for the purpose of determining fixture counts. Any distribution other than 50/50 must be justified to the Plumbing Inspector.

If the existing number of toilet room fixtures are altered (i.e. to make existing toilet rooms accessible) the number provided is subject to the minimum requirements of 248 CMR. The following analysis was completed using the maximum expected population provided by the architect of 500 staff and 3,520 students for the entire complex.

Classification		Water Closets		Male Urinals [A]	Lavatories (Each Sex)	Drinking Fountains	Service Sink
		Female	Male				
Staff	250 Female 250 Male	1 per 20	1 per 25	33%	1 per 40	Not Required	
	Required fixtures	12.5	10	-	6.25	-	1 Per Floor
	Total Required Fixtures	13	7	3	7	-	
Students	1,760 Female 1,760 Male	1 per 30	1 per 90	1 per 90	1 per 90	1 per 75	
	Required fixtures	58.6	19.5	19.5	19.5	46.9	1 Per Floor
	Total Required Fixtures	59	20	20	20	50	

[A] Urinals may be substituted for toilets up to the percentage shown of the required number.

- Standpipe System (IBC): standpipe systems are required throughout the new Freshman Wing is has floors greater than 30 feet above the lowest level of fire department access (IBC 905.3.1).

- Fire extinguishers (527 CMR 1 Section 13.6 & IBC 906.1). Fire extinguishers must be located throughout the building so that the maximum travel distance to an extinguisher is less than 75 feet.

- Carbon Monoxide Detection: required in accordance with IBC 915 and 527 CMR 1 Chapter 13.

- Emergency responder radio coverage (IBC 916)

11. Energy Code Provisions for Existing Buildings

New work is subject to the 2015 International Energy Conservation Code (IECC) or ANSI/ASHRAE/IESNA 90.1 with Massachusetts Amendments (Massachusetts Energy Code). Level 3 alterations to existing buildings are permitted without requiring the entire building to comply with the energy requirements of the International Energy Conservation Code (IECC). The alterations (new elements) shall conform to the energy requirements of the IECC as they relate to new construction only (IEBC 811.1).

The Massachusetts Stretch Energy Code, as adopted by the City of Lowell, does not apply to existing buildings or additions to existing buildings. However it does apply to new buildings greater than 100,000 sqft. in area (780 CMR Appendix AA 101.2). Since the Gym is the only separate new building (not classified as an addition) and it is approximately 71,000 gross sqft., the Stretch Code will not apply to any of the buildings.

12. Ventilation Requirements

All reconfigured spaces must provide mechanical or natural ventilation in accordance with the International Mechanical Code, except that existing ventilation systems are permitted to remain provided they achieve not less than 5cfm of outdoor air per person and not less than 15 cfm of ventilation air per person (IEBC Section 809).

13. Structural Provisions for Existing Buildings

Structural alterations to the existing buildings must be evaluated by a registered structural engineer to determine compliance with the IEBC.

14. Accessibility for Persons with Disabilities

Massachusetts Architectural Access Board Regulations
Alterations to the building must comply with the requirements of the Massachusetts Architectural Access Board Regulations (521 CMR). For existing building alterations the requirements of 521 CMR are based on the cost of the proposed work:

A. If the cost of the proposed work is **less than $100,000,** only the new work must comply.

B. If the cost of the proposed work is **greater than $100,000** then all new work must comply and the existing building must include an accessible public entrance, toilet room, telephone and drinking fountain (if public phones and drinking fountains are provided) (521 CMR Section 3.3.1 (b)).

C. If the cost of the proposed work is **greater than 30% of the full and fair cash value** of the existing building, the entire building is required to comply with 521 CMR (521 CMR Section 3.3.2). There is no exempt work, i.e. the entire project costs apply to determining the 30% criteria.

The cost of all work performed on a building in any 36 month period must be added together in determining the applicability of 521 CMR (521 CMR Section 3.5). The full and fair cash value of the existing building is determined by using the 100% equalized assessed value of the building on record with the city assessor's office.

It is anticipated that the cost of the renovations and additions to the existing buildings will exceed the 30% threshold, and therefore all portions of the building open to the general public (students, visitors, etc) must be upgraded to comply in full with the current requirements of 521 CMR. Any employee-only areas such as staff lounges, staff bathrooms, and staff work areas are not required to comply with 521 CMR, as long as student and public access is not permitted. It should be noted that the Access Board expects to extend their jurisdiction to employee areas.

Major upgrades required to meet full compliance with the provisions of 521 CMR will likely include the following building features (note that a comprehensive accessibility survey was not conducted, but should be completed if 30% trigger is reached in any existing building):

- All public entrances must be accessible (521 CMR 25.1).

- All public and common use areas must be accessible and provided with an accessible route thereto (521 CMR Section 12.2.2 and 20.1). Existing elevators having a minimum car size of 4' x 4' can continue to be used as an accessible route provided they have compliant controls (521 CMR 28.7 Exception).

- Accessible toilet rooms are required in each toilet room location (521 CMR 30.1).

- Accessible Handrails & Stair Nosings (521 CMR 27.4). Handrails in many locations throughout the buildings were not compliant with the MAAB due to improper extensions at the top and bottom, or handrails were only provided on one side of the stair. Stairs must be provided with handrails on each side and must extend at least 12 inches beyond the top riser and parallel with the floor. At the bottom, handrails must extend at least 12 inches plus the width of one tread beyond the bottom riser. The handrail shall continue to slope for a distance of the width of one tread from the bottom riser; the remainder of the extension shall be horizontal. The ramp located in the basement of the East Building is also not provided with handrails.

  The majority of stairs throughout the East and West Buildings were provided with a compliant handrail on one side, however the handrail on the other side were typically not compliant with the extension requirements. Some stairs also included abrupt nosings that would have to be altered to comply.

- Accessible Wheelchair Seating (521 CMR 14.4). Designated wheelchair spaces are required to be provided based on the total number of seats in the assembly space. The Auditorium in the East Building is not currently provided with wheelchair spaces on the balcony level and they were not clearly designated on the main level, these will be addressed in the proposed plans.

- Accessible Door Hardware (521 CMR 26.11). In the East Building some doors are provided with knobs for opening devices. Doors must have operating devices that have a shape that is easy to operate with one hand and that does not require tight grasping (521 CMR 26.11.1). Lever operated mechanisms are required.

- Accessible Lab Benches (521 CMR 12.4). The science classrooms in the East Building were not provided with accessible lab benches (lacking knee clearance). At least 5% of each type of sink, counter or other work areas in classrooms and labs must be made accessible.

8. Interior Finishes:

The existing interior finish of walls and ceilings in the work area and in all exits and corridors serving the work area must comply with the code requirements for new construction (IEBC 803.4). All newly installed wall and ceiling finishes, and interior trim materials must also comply with IBC Table 803.11 (IEBC 702.1, 702.2, 702.3). The requirements are summarized below:

Walls & Ceilings (IBC Table 803.11)

Use Group:	E	A
Exit Enclosures	Class B	Class B
Exit Access Corridors	Class C	Class B
Rooms & Enclosed Spaces	Class C	Class C

Note that where exit stairs and exit access corridors serve more than one use group, the most restrictive interior finish is required. The existing interior finishes appeared to comply for all buildings.

9. Means of Egress:

The means of egress including the number of exits and egress capacity must be sufficient for the number of occupants on all floors (IBC 102.6.4). The means of egress for the existing buildings and proposed new structures appear sufficient on all levels based on the number of exits shown on the schematic plans.

General Egress Requirements
Existing means of egress stairs (including guardrails) and other elements can continue to serve as required egress regardless of their level of compliance with the code for new construction and regardless of the level of renovation (although see below for access code requirements for stair handrails and nosing improvement) (IBC 805.2 Exception 2).

The renovations and new buildings must be designed to comply with the following means of egress provisions for new construction, except where noted for existing conditions. No deficiencies with these requirements were identified in the proposed plans.

a. Maximum exit access travel distance must be less than 250 feet (IBC Table 1017.2):

b. Maximum dead-end corridor length must be less than 20 ft or 2.5 times the least width of space (up to 50 ft is permitted in Use Group E spaces or for existing dead-end corridors serving Use Group A areas) (IBC 1020.4, IEBC 805.6).

c. All rooms or spaces with an occupant load greater than 49 people or a common path of travel distance over 75 ft must be provided with two egress doors swinging in the direction of egress and illuminated exit signs at each exit (IBC Table 1006.2.1 & Sections 1010.1.2.1 & 1013.1). Boiler rooms require two means of egress if the room is greater than 500 sqft. and includes individual fuel-fired equipment greater than 400,000 Btuh input capacity, one of the two required exit access doorways is permitted to be a fixed ladder or alternating tread device (IBC Section 1006.2.2.1).

d. Doors serving rooms with more than 49 people and doors along the path of egress travel from such rooms must be provided with panic hardware (IBC 1010.1.10). Doors from main electrical rooms with equipment rated 1,200 amps and over 6 feet wide must swing in the direction of egress with panic hardware (IBC 1010.1.10).

e. All means of egress lighting and exit signs throughout the building must be provided with an emergency power supply to assure continued illumination for not less than 1.5 hours in case of primary power loss (IBC 1008.2 & 1008.3.4).

f. Remote means of egress must be separated by ½ of the diagonal dimension of the room or space they serve (IBC 1007.1.1). The distance between exits may be measured along 1-hour fire resistance rated corridors complying with IBC 1018 but must otherwise be measured in a straight line between exit doors. Additionally, high-rise buildings are required to have their interior exit stairways be separated by at least 30 feet or not less than one-fourth of the maximum overall diagonal dimension of the building floor (IBC 403.5.1).

g. A stair or alternating tread device must be provided to any main roof surface four or more stories above grade (IBC 1011.12). Roofs and penthouses containing elevator equipment that must be accessed for maintenance are required to be accessed by a stairway (IBC 1011.12.1). Permanent means of access to any roof containing mechanical equipment must be provided in accordance with the Mechanical Code. Permanent means of access to any roof containing mechanical equipment must be provided in accordance with the Mechanical Code. If the roof contains any gas-fired equipment access via a hatch and permanent or foldaway inside stairway or ladder is required in accordance with Section 9.4.3 of the National Fuel Gas Code (NFPA 54).

h. All exits must discharge to the exterior of the building except that a maximum of 50% of the number and capacity of the exit enclosures are allowed to exit through areas on the level of discharge if the exit enclosures discharge to a free and unobstructed path of travel to an exterior exit that is readily visible from the discharge of the exit enclosure; the entire area of the level of exit discharge is separated from areas below by construction consistent with the rating of the exit enclosure; and the egress path and all areas open to the egress path on the level of exit discharge must be fully sprinklered (IBC 1028.1).

i. For new additions or new buildings greater than four stories, at least one accessible means of egress must be an elevator complying with IBC 1009.4 unless a horizontal exit is provided (IBC 1009.2.1).

  - Standby power must be provided for the elevator to be considered an accessible means of egress (IBC 1009.4).

  Standby power will be required for the Freshman Wing elevators since the is 5 stories tall and a high-rise structure.

j. A two-way communication system is required at each elevator landing on accessible floors that are one or more stories above or below the level of exit discharge (IBC 1009.8).

k. An approved barrier must be provided at the level of exit discharge where a stair enclosure continues below its level of exit discharge (IBC 1023.8).

l. In each new building, at least one passenger elevator must be sized to accommodate the loading and transportation of an ambulance gurney or stretcher sized 24" wide by 84" long with 5" radius corners (524 CMR 17.40 (1)). Note that a stretcher-sized elevator is not required in existing buildings regardless of the level of renovation.

m. Unoccupied attic spaces only require a single means of egress (IBC 1209.2).

10. Required Fire Protection Systems:

The following fire protection systems are required:

- Automatic sprinkler system required throughout (MGL c. 148 s. 26G).

- Fire Alarm (IEBC 804.4.1 & 804.2): although the IEBC allows existing previously approved fire alarm systems to remain regardless of the level of renovation, full compliance with the MA Architectural Access Board's Regulations (see below) will require a compliant fire alarm system throughout the building. The existing buildings currently contain a fire alarm system with deficient notification device coverage (no strobes in classrooms). To comply with current code provisions, new and existing areas require a voice/alarm communication system (IBC 907.2.3).

Gymnasium
Since the Gym will be separated from the remainder of the West Building by a fire wall it is classified as a separate building and must independently comply with the height and area limitations for Type IIB construction:

Code Reference	Type IIB Use Group E		Type IIB Use Group A-3 & A-4	
	Height	Area	Height	Area
IBC Tables 504.3, 504.4 & 506.2 Tabular Value	3 St. (75 ft)	43,500 ft²	3 St. (75 ft)	28,500 ft²
IBC Section 506.2 Frontage Increase – 50% Open	-	+7,975 ft²	-	+5,225 ft²
Height and Footprint Area Allowed	**3 St. (75 ft)**	**51,475 ft²**	**3 St. (75 ft)**	**33,725 ft²**
Actual Height and Footprint Area	2 St.* (Approx. 53 ft) Approx. 33,000 ft² Footprint			

A. The Mechanical Mezzanine (1,970 ft²) is less than 1/3 of the room below (18,000 ft²) and therefore classified as a mezzanine rather than an additional building story (IBC 505).

5. Fire Resistance Ratings:

The following table summarizes the required fire resistance ratings for the buildings, based on IBC Table 601 and other applicable code provisions:

Structural Fire Ratings

Building Element	West Building Type IIB (Modified from IB)	Gymnasium Type IIB
	Fire Resistance Rating (Hrs)	
Primary Structural Frame	1^	0^
Exterior Bearing Walls including columns along the exterior wall	1^	0^
Exterior Non-Bearing Walls	Based on Fire Separation Distance	
Interior Bearing Walls	1^	0^
Floor Construction	1^	0^
Roof Construction	1	0

A. Not less than the rating supported (IBC 707.5.1, 708.4. and 711.2.3).

Building Element	Fire Resistance Rating (Hrs)	Opening Protectives (Hrs)
Exit Access Corridors (IBC Table 1020.1)	0	0
Existing shafts 3 stories or less (IEBC 803.2.1 Exc. 6)	Maintain Existing Enclosure	
Existing shafts 4 or more stories (IEBC 803.2.1)	1	1
New Shafts, connecting 4 stories or more (IBC 713.4)	2	1½
New Shafts, connecting less than 4 stories (IBC 713.4)	1	1
Elevator Machine Room (IBC 3005.4)	Same Rating As Shaft	
Pedestrian Walkway Separation (IBC 3104.5.2)	Smoke Resistant	Smoke Resistant
Storage Rooms Under Stairs (IBC 101.7.3)	1	¾
	Not Less Than Stair Rating	
Electrical rooms without sprinkler protection (NFPA 13)	2	1½
Fire Pump Room (IBC 913.2.1)^	2	1½
Fire Command Center (IBC 911.1.2)	1	¾

1 Location and access to the fire pump room shall be pre-planned with the fire department (NFPA 20 Section 4.12.2.1).

Incidental Accessory Occupancies (IBC Table 509)	
Room or Area	**Separation and/or Protection***
Furnace room where any piece of equipment is over 400,000 Btu per hour input	Smoke Resistant
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	Smoke Resistant
Refrigerant machinery room	Smoke Resistant
Laboratories and vocational shops not classified as Group H in Group E occupancies	Smoke Resistant

*Where an automatic fire-extinguishing system without a fire barrier is permitted, accessory occupancies shall be separated from the remainder of the building by construction capable of resisting the passage of smoke and doors shall be self- or automatic-closing upon detection of smoke.

Fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions, or any other wall required to have protected openings or penetrations must be identified with signs or stenciling within accessible concealed spaces (i.e. floor-ceiling, attic spaces) at 30 ft intervals (IBC 703.7).

6. High Rise Requirements:

Since the height of the new Freshman Wing is greater than 70 feet, the building will be classified as a high-rise structure (780 CMR Section 202). This classification requires the building be equipped with the following features.

a. Automatic sprinkler system (403.3). Since the building is in Seismic Design Category B, a secondary on-site water supply is not required for the sprinkler system (403.3.3).
b. Smoke detection (403.4.1)
c. Fire alarm system (403.4.2) & Emergency voice/alarm communicating system (403.4.3)
d. Emergency responder radio coverage or wired fire department communication system (403.4.4, 907.2.13, & 915.2)
e. Fire command center within a minimum area of 200 sqft and a minimum dimension of 10 ft (403.4.6 & 911.1.3)
f. Manual or automatic smoke removal system for fire department operations (403.4.6)
g. Standby power and emergency power systems for fire pump, elevators, fire command center, and stair pressurizing equipment (403.4.7 & 403.4.8).
h. Stair pressurization is NOT required since the elevation of the top occupied floor is less than 75 feet above the lowest level of fire department access (403.5.4).
i. Luminous egress path markings (IBC 403.5.5)
j. Elevator hoistway opening protection is required for elevator hoistways more than 75 feet in height, measured from the lowest floor to the highest floor served by the hoistway (IBC 3006.2(5)). Elevator hoistway protection must be provided by either elevator lobbies separated by smoke partitions, an additional door at each hoistway opening, or pressurization (IBC 3006.3). A lobby or additional hoistway doors are not required at the ground level however (IBC 3006.2 Exception 2).
k. A fire service access elevator is NOT required since the elevation of the top occupied floor is less than 120 feet above the lowest level of fire department access (IBC 403.6.1).
l. Sprayed fire-resistant materials must have a bond strength of 1,000 psf (403.2.4)
m. Structural Integrity of Exit Stairs and Elevator Hoistways (403.2.3). Since the building is in Risk Category III based on IBC Table 1604.5 (Use Group E with occupant load greater than 250), stair and elevator shaft walls must comply with the additional impact test provision in IBC Section 403.2.3.

7. Vertical Openings:

All existing vertical openings in the work area connecting two or more floors must be enclosed with 1 hour rated construction and approved opening protectives unless the openings meet one of the exceptions in IEBC 803.2.1. Existing floor openings connecting 3 stories or less are permitted to remain within a fully sprinklered building (IEBC 703.2.1 Exc.6). New vertical openings are required to comply with IBC Sections 712 & 713.

The proposed Life Safety plans indicate all floor openings will be enclosed with rated construction, with the exception of the following:

West Building
The main entrance between the new Freshman Wing and existing building is a two story space with an open stairway. There is also another two-story opening between the 1st and 2nd Floors in the Cafeteria. These two story openings are permitted without any additional protection and the open stair can be used as a means of egress from the 2nd Floor (IBC 712.1.9, 712.1.16 & 1019.3).

Gymnasium Building
The stair at the entrance to the Gymnasium is permitted to be open and serve as a required means of egress from the 2nd Floor (IBC 712.1.9, 712.1.16 & 1019.3).

Schematic Design
Code Report

Prepared By: Kevin S. Hastings, P.E., LEED AP

Date: December 11, 2018

Introduction
The existing Lowell High School is a campus-style high school consisting of multiple buildings, located on the East and West sides of a canal. The proposed scope of work involves renovations to the existing building, new additions, and new bridges connecting the buildings. The new Gymnasium building will also be separated from the remainder of the West building so that the school will consist of three separate buildings as defined by the building code:

1. East Building
2. West Building
3. Gymnasium

This code summary is based on the proposed schematic design architectural plans and various site visits to the building. Following is a list of applicable codes:

Code Type	Applicable Code (Model Code Basis)
Building	780 CMR: Massachusetts State Building Code, 9th Edition • Amended 2015 International Building Code (IBC) • Amended 2015 International Existing Building Code (IEBC)
Fire Prevention	527 CMR: Massachusetts Fire Prevention Regulation
Accessibility	521 CMR: Massachusetts Architectural Access Board Regulations
Electrical	527 CMR 12.00: Massachusetts Electrical Code • Amended 2017 National Electrical Code
Elevators	524 CMR: Massachusetts Elevator Code • Amended ASME A17.1-2015/CSA B44-13
Mechanical	2015 International Mechanical Code (IMC)
Plumbing	248 CMR: Massachusetts Plumbing Code
Energy Conservation	2015 International Energy Conservation Code

International Existing Building Code
The 2015 International Existing Building Code with Massachusetts amendments allows for 3 separate compliance methods, the Prescriptive Method, Work Area Method, and Performance Compliance Method. This report is based on the Work Area Method.

1. Work Area and Classification of Work:

The proposed work will include renovations throughout the entire interior of the buildings, installation of new MEP systems throughout, as well as new additions. Since the "work area", defined as the reconfigured area, will exceed 50% of the gross floor area in both the East and West buildings, both will be classified as Level 3 Alterations (IEBC 505). The work must therefore comply with IEBC Chapters 7, 8 and 9 in each building. The West building is also required to comply with IEBC Chapter 11 due to the additions.

2. Occupancy Classifications:

There is no change in occupancy classification for any of the existing buildings.

West Building
Non-Separated Mixed Uses:
- Use Group E (Secondary Education)
- Use Group A-2 (Cafeteria – non-school use)

New Gymnasium Wing
Non-Separated Mixed Uses:
- Use Group E (Secondary Education)
- Use Group A-3 (Exercise Areas and Locker Rooms – non-school use)
- Use Group A-4 (Gymnasium with Spectator Seating – non-school use)

East Building
Non-Separated Mixed Uses:
- Use Group E (Secondary Education)
- Use Group A-1 (Auditorium – non-school use)

In accordance with IBC Section 303.1.3, assembly spaces associated with the educational use can be classified as part of the Use Group E occupancy. However, spaces that may be used for other community events that are not related to the school function must be classified as Use Group A occupancies.

3. Construction Type:

West Building
Based on existing conditions observed, the 1980 Building appears to be constructed with CMU walls and unprotected structural steel members resulting in Type IIB construction (noncombustible, no fire-resistance rating). However, as part of the proposed scope of work (and in order to comply with the area limitations as discussed below), fireproofing will be added to increase the building's construction to Type IIA (1 hour, non-combustible)

East Building
The East Building includes multiple sections constructed at separate times (South original 1892 building, central addition in 1922, and the North addition in 1997). It appears to be constructed with various construction materials including concrete, wood and steel structure and masonry exterior wall resulting in a minimum of Type IIIB construction (combustible interior- no fire-resistance rating; 2-hour noncombustible exterior wall). The North addition at the front of the building is non-combustible with spray-on fireproofing on the structure.

Since there is no addition or change in use planned, the existing mixed construction type is permitted to remain without further improvements. However, any new structural elements must be 1 hour rated as would be required to achieve classification as Type IIA or IIIA which would be necessary to comply with the area limitations for new construction in IBC Table 506.2.

Gymnasium Building
This new building will be classified as Type IIB construction (unprotected, non-combustible)

4. Height and Area Limitations

The construction of an addition requires that the building size not exceed the limitations for new construction (IEBC 1102).

East Building
Since this building will not undergo an addition or change in use it is not required to comply with the height and area limitations for new construction. The new elevated pedestrian walkways connecting the East and West Buildings will comply with IBC Section 3104. This allows the two buildings to be considered as separate structures for the purposes of evaluating compliance with the height and area limitations for new construction.

West Building
Due to the new Freshman Wing addition which will increase the area and height of the building, it must comply with the limitations for new construction. Due to the 5 story height of the Freshman Wing, the building must be Type IB construction (IBC Table 504.4). However, since the building will exceed 70 feet in height above grade it will be classified as a high-rise structure. This allows the construction type to be modified to Type IIA, but comply with the height and area limitations for Type IB (IBC 403.2.1.1(2)). The height and area limitations are as follows:

Code Reference	Type IB (Modified to IIA) Use Group E		Type IB (Modified to IIA) Use Group A-2	
	Height	Area	Height	Area
IBC Tables 504.3, 504.4 & 506.2 Tabular Value	6 St. (160 ft)	Unlimited	12 St. (160 ft)	Unlimited
IBC Section 506.2 Frontage Increase	-	Not Required	-	Note Required
Height and Area Allowed	**6 St. (160 ft)**	**Unlimited**	**12 St. (160 ft)**	**Unlimited**
Actual Height and Area	5 St. (73'-4") Approx. 73,500 ft² Footprint			

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
CODE REVIEW

SCALE:

A-000

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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(N)	NEW
@	AT
A/C	AIR CONDITIONER / CONDITIONING
ACC	ACCESSIBLE
ACCSY	ACCESSORY
ACOUS INSUL	ACOUSTICAL INSULATION
ACOUS PNL	ACOUSTICAL PANELS
ACP	LAY-IN ACOUSTIC PANEL CEILING PADS
ACS DR	ACCESS DOOR
ACS FLR	ACCESS FLOOR
ACS PNL	ACCESS PANEL
ACST	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
ADDL	ADDITIONAL
ADDM	ADDENDUM
ADJ	ADJUSTABLE / ADJACENT
ADMIN	ADMINISTRATION
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AHR	ANCHOR
AHU	AIR HANDLING UNIT
ALNMT	ALIGNMENT
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATELY
APPVD	APPROVED
APT	APARTMENT
ARCH	ARCHITECT(URAL)
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
ATC	ACOUSTICAL TILE CEILING
AUTO	AUTOMATIC
AVG	AVERAGE
AWP	WALL-MOUNTED SOUND ABSORPTION PANEL
AWT	ACOUSTIC WALL TREATMENT
BD	BOARD
BITUM	BITUMINOUS
BL	BASELINE
BL	BLACK
BLDG	BUILDING
BM	BEAM
BO	BLOWOFF
BOT	BOTTOM
BR	BEDROOM
BRG	BEARING
BS	BOTH SIDES
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT UP ROOFING
BW	BOTH WAYS
C	CELSIUS
C	CHANNEL
C TO C	CENTER TO CENTER
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CEM PLAS	CEMENT PLASTER (STUCCO)
CER	CERAMIC
CG	CORNER GUARD
CH	CHILLER
CH	COAT HOOK
CHBD	CHALKBOARD
CHFR	CHAMFER
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CL D	CLOTHES DRYER
CLG	CEILING
CLG HT	CEILING HEIGHT
CLL	CONTRACT LIMIT LINE
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CARBON MONOXIDE
CO	CASED OPENING
CO	CERTIFICATE OF OCCUPANCY
CO	CLEANOUT
CO	COMPANY
CO	CUTOUT
COL	COLUMN
COMB	COMBINATION
CONC	CONCRETE
CONC FLR	SEALED CONCRETE FLOOR
CONSTR	CONSTRUCTION
CONT	CONTINUE
CONT	CONTROLLER
CONV	CONVERT
CORR	CORRIDOR / CORRUGATED
CPT	CARPET
CR	CLOSET ROD
CR	CONTROL RELAY
CR	CONTROL ROOM
CR	CRASH RAIL
CS	CAST STONE
CS	CONTROL SWITCH
CSWK	CASEWORK
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
CTR	CENTER
CU	COPPER
CU FT	CUBIC FOOT
CU YD	CUBIC YARD
CUB	CUBICLE CURTAIN
CURT	CURTAIN
CW	CASEMENT WINDOW
CW	CHEMICAL WASTE LINE
CW	CLOCKWISE
CW	COLD WATER PIPING
D	DEEP
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION
DET	DETAIL
DF	DRINKING FOUNTAIN
DH	DOUBLE HUNG
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DMPF	DAMPPROOFING
DR	DOOR / DRAIN
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
DWR	DRAWER
E	EAST
EA	EACH
EF	EACH FACE
EG	VERTICAL END GUARDS
EHD	ELECTRIC HAND DRYER
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EM	ELECTROMAGNETIC
EM	EXPANDED METAL
EMER	EMERGENCY
ENCL	ENCLOSED / ENCLOSURE
ENGR	ENGINEER
ENTR	ENTRANCE
EOS	EDGE OF SLAB
EPB	ELECTRIC PANEL BOARD
EQ	EQUAL(LY)
EQUIP	EQUIPMENT
ER	POURED EPOXY
ERF	POURED EPOXY FLOORING
ESCAL	ESCALATOR
EST	ESTIMATE
ETR	EXISTING TO REMAIN
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXF	EXTERIOR FINISH
EXH	EXHAUST
EXIST OR (E)	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FAB	FABRIC
FAI	FRESH AIR INTAKE
FBRK	FIREBRICK
FCP	PREFABRICATED FABRIC CEILING PANEL
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF EL	FINISH FLOOR ELEVATION
FGL	FIBERGLASS
FH	FIRE HOSE
FHC	FIRE HOSE CABINET
FIN	FINISH(ED)
FIN FLR	FINISHED FLOOR
FIN FLR	FINISH FLOOR
FIXT	FIXTURE
FLASH	FLASH(ING)
FLR	FLOOR
FLRSK	FLOOR SINK
FLUOR	FLUORESCENT
FM	FACTORY MUTUAL
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOW	FACE OF WALL
FP	FIREPROOF
FPL	FIREPLACE
FR	FRAME
FRG	FIBER REINFORCED GYPSUM
FRP	FIBERGLASS REINFORCED PLASTIC
FRT	FIRE RETARDANT TREATED
FSP	FIRE STAND PIPE
FSTNR	FASTENER
FTG	FOOTING
FURG	FURRING
FUT	FUTURE
FWC	FABRIC WALL COVER
FWP	NON-ACOUSTIC STRETCHED FABRIC PANEL WALL INSTALATION
G	GROUND
GA	GAGE
GALV	GALVANIZE(D)
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GDISP	GARBAGE DISPOSAL
GEN	GENERAL
GFP	GFRP OR GFRG FREESTANDING PANEL
GFRG	GLASS FIBER REINFORCED GYPSUM
GFRP	GLASS FIBER REINFORCED POLYMER
GL	GLASS / GLAZING
GL BLK	GLASS BLOCK
GLT	GLASS MOSIAC TILE
GLZ	GLAZING
GLZ CMU	GLAZED CONCRETE MASONRY UNIT
GPM	GALLONS PER MINUTE
GR	GROSS
GR LN	GRADE LINE
GRAN	GRANITE
GT	GREASE TRAP
GT	GROSS TON
GT	GROUT
GYP	GYPSUM
GYP BD	GYPSUM BOARD
H	HIGH
HC	HOLLOW CORE
HCP	HANDICAPPED
HD	HEAVY DUTY
HD	HAND DRYER
HDBD	HARDBOARD
HDR	HEADER
HDW	HARDWARE
HDWD	HARDWOOD
HDWL	HEADWALL
HM	HOLLOW METAL
HNDRL	HANDRAIL
HORIZ	HORIZONTAL
HP	HEAT PUMP
HP	HIGH PRESSURE
HP	HORSEPOWER
HR	HAND RAIL
HS	HAND SINK
HT	HEIGHT
HVAC	HEATING / VENTILATION / AIR CONDITIONING
HW	HOT WATER
HWP	HOT WATER PUMP
HYD	HYDRANT
IC	IRONING CABINET
ID	INSIDE DIAMETER
IN	INCH / INCHES
INCL	INCLUDE(D) / INCLUDING
INSUL	INSULATE / INSULATION
INT	INTERIOR
INV	INVERT
ITS	INTERTEK TESTING SERVICES
J-BOX	JUNCTION BOX
JAN CLO	JANITOR'S CLOSET
JS	JANITOR'S SINK
KIT	KITCHEN
L	ANGLE
L	LITER
LAB	LABORATORY
LAM	LAMINATE(D)
LAV	LAVATORY
LB(S)	POUND(S)
LC	LINEN CLOSET
LF	LINEAR FOOT (FEET)
LGMF	LIGHT-GAUGE METAL FRAMING
LH	LEFT HAND
LIB	LIBRARY
LINO	LINOLEUM
LKR	LOCKER
LNO	LINOLEUM
LPT	LOW POINT
LT	LIGHT
LTF	LINOLEUM TILE FLOORING
LTWT	LIGHT WEIGHT
LVR	LOUVER
m	METER
MACH	MACHINE
MAT	WALK-OFF MAT
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MB	MAIL BOX
MB	MIXING BOX
MBH	MOP/BROOM HOLDER
MC	MEDICINE CABINET
MCP	ACOUSTIC LAY-IN METAL CEILING PADS
ME	MECHANICAL ENGINEER
MECH	MECHANICAL
MED	MEDIUM
MEZZ	MEZZANINE
MFR	MANUFACTURER(R)
MH	MANHOLE
MIN	MINIMUM
MIRR	MIRROR
MISC	MISCELLANEOUS
MKR BD	MARKER BOARD
MLDG	MOULDING
mm	MILLIMETER
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MS	MOP SINK
MSB	MOP SERVICE BASIN
MTD	MOUNTED
MTL	METAL
MTS	METAL TRANSITION STRIP
MULL	MULLION
MVBL	MOVABLE
MW	MICROWAVE
N	NORTH
NA	NOT AVAILABLE / APPLICABLE
NAT	NATURAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OF / CI	OWNER FURNISHED / CONTRACTOR INSTALLED
OFF	OFFICE
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OZ	OUNCE
PAR	PARALLEL
PAR	PARAPET
PART	PARTIAL
PAT	PATTERN
PBD	PARTICLE BOARD
PCC	PRECAST CONCRETE
PED	PEDESTAL
PERF	PERFORATED
PERIM	PERIMETER
PERP	PERPENDICULAR
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTIC
PLAS	PLASTER
PLYWD	PLYWOOD
PR	PAIR
PREFAB	PREFABRICATED
PREFIN	PRE-FINISHED
PRF	POLYURETHANE SPORTS FLOORING
PROP	PROPERTY
PRST	PRESSURE TREATED
PS	POURED SEALANT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PAINT(ED)
PT/E	EPOXY PAINT
PT/F	FLAT PAINT
PT/HG	HIGH GLOSS PAINT
PT/SG	SEMIGLOSS PAINT
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PV	PAVED
PVC	POLYVINYL CHLORIDE
PVG	PAVING
Q	HEAT TRANSFER
Q	RATE OF FLOW
QT	QUARRY TILE
QTY	QUANTITY
QZF	QUARTZ FLOORING
QZR	QUARTZ RESIN
QZT	QUARTZ TILE
R	RISER
R	RADIUS
RA	RETURN AIR
RB	RUBBER BASE
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REC	RECESSED
RECPT	RECEPTACLE
REF	REFERENCE
REF	REFRIGERATOR
REFL	REFLECTED
REG	REGISTER
REINF	REINFORCE(D)
REQ	REQUIRED
RESIL	RESILIENT
REST	RESTROOM
RET	RETURN
REV	REVISE / REVISION
RF	RESILIENT FLOORING
RFG	ROOFING
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RR	RAILROAD
RR	ROLL ROOFING
RS	RAPID START
RS	ROUGH SAWN
RS	RUBBER SHEET
RSF	RUBBER SHEET FLOORING
RST	REINFORCING STEEL
RT	RIGHT
RTF	RUBBER TILE FLOORING
RTS	RUBBER TRANSITION STRIP
RWD	REDWOOD
RWL	RAIN WATER LEADER
S	SOUTH
SAN	SANITARY
SC	SOLID CORE
SCHED	SCHEDULE
SCRN	SCREEN
SCT	STRUCTURAL CLAY TILE
SD	SOAP DISPENSER
SECT	SECTION
SF	SQUARE FEET
SGL	SINGLE
SH	SINGLE HUNG
SHR	SHOWER
SHR HD	SHOWER HEAD
SHT	SHEET
SHTHG	SHEATHING
SIM	SIMILAR
SL	SEA LEVEL
SL	SPOT LIGHT
SLDG	SLIDING
SND	SANITARY NAPKIN DISPENSER
SNDU	SANITARY NAPKIN DISPOSAL UNIT
SPC	SUSPENDED PLASTER CEILING
SPEC	SPECIFY / SPECIFICATION
SPH	SOLID PHENOLIC POLYMER (TRESPA)
SPKR	SPEAKER
SPR	SOLID POLYMER RESIN (SFORM)
SQ	SQUARE
SQIN	SQUARE INCH(ES)
SSP	SOLID SURFACE POLYMER
SSPR	SOLID POLYMER RUB RAIL
SST	STAINLESS STEEL
SSTR	STAINLESS STEEL RUB RAIL
ST	SINGLE THROW
ST	STAIRS
ST	STREET
ST	STAIN
STA	STATION
STD	STANDARD
STIF	STIFFENER
STON	STONE
STOR	STORAGE
STRUCT	STRUCTURE / STRUCTURAL
SUH	SUSPENDED UNIT HEATER
SURF	SURFACE
SUSP	SUSPENDED
SVP	VINYL SOLID PANEL
SW	SWITCH
SYMM	SYMMETRICAL
SYNTH	SYNTHETIC
SYS	SYSTEM
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
T/S	TUB / SHOWER
TB	TOWEL BAR
TB	TACK BOARD
TC	TERRA COTTA
TCZ	CEMENTITIOUS TERRAZZO
TEL	TELEPHONE
TEMP	TEMPERATURE
TEMP	TEMPORARY
THK	THICKNESS
THRES	THRESHOLD
THRU	THROUGH
TK BD	TACK BOARD
TKP	TACKABLE PANELING
TOC	TOP OF CONCRETE
TOS	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TR	ACCENT RAIL
TRTD	TREATED
TRZ	INTERIOR POURED EPOXY RESIN TERRAZO
TV	TELEVISION
TYP	TYPICAL
UC	UNDERCUT
UGND	UNDERGROUND
UL	UNDERWRITER'S LABORATORY
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V	VOLT
VAC	VACUUM
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VENT	VENTILATE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
VP	VACUUM PUMP
VP	VANISHING POINT
VP	VAPOR PRESSURE
VP	VENEER PLASTER
VPC	VENEER PLASTIC CEILING/SOFFIT
VR	VAPOR RETARDER
VRR	VINYL RAIL
VS	VENT STACK
VS	VOLUMETRIC SWITCH
VS	SHEET VINYL
VT	SOLID VINYL TILE
VTR	VENT THRU ROOF
VTS	VINYL TRANSITION STRIP
VWC	VINYL WALLCOVERING
W	WIDE
W	WEST
W / W	WALL TO WALL
W/	WITH
W/D	WASHER / DRYER
W/O	WITHOUT
WB	WOOD BASE
WB	WHITEBOARD
WC	WATER CLOSET
WC	WALLCOVERING
WD	WOOD
WDH	WOOD HAND RAIL
WDM	WOOD WALL MOULDINGS
WDP	WOOD PANELING
WDR	WOOD CHAIR, CRASH, OR HAND RAIL
WDS	ATHLETIC/ACOUSTIC ISOLATED WOOD FLOORING
WDSHV	WOOD SHELVING
WDT	WOOD TILE OR PARQUET FLOORING
WDV	WOOD VENEER
WDW	WINDOW
WF	WIDE FLANGE
WGL	WIRED GLASS
WH	WALL HUNG
WI	WROUGHT IRON
WP	WATERPROOF
WP	WORKING POINT
WPM	WATERPROOF MEMBRANE
WR	WEATHER RESISTANT
WR	WIRE ROPE
WRP	WATER REPELLENT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
XPS	EXTRUDED POLYSTYRENE
YD	YARD

MATERIALS LEGEND

- ALUMINUM
- CONCRETE
- GLASS
- RIGID INSULATION
- BRICK IN SECTION
- CONCRETE MASONRY UNIT
- EARTH
- GYPSUM / PLASTER
- STEEL
- PEA GRAVEL
- STONE
- BATT INSULATION
- PRECAST
- GRAVEL
- SAND
- WOOD - SOLID
- PLYWOOD
- BRICK
- CULTURED STONE
- EXTERIOR COMPOSITE PANEL
- WOOD BLOCKING
- WOOD SHIM

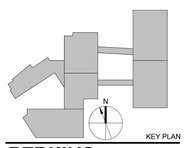
SYMBOLS LEGEND

SEE DISCIPLINE SHEETS FOR DISCIPLINE SPECIFIC SYMBOLS

- A 101 — Sheet No. Sequence: Sheet Type: Discipline; SHEET No.
- N — NORTH ARROW; SD / CD
- 0 — GRID LINE
- Name / 0-0000 / NET SF — ROOM No.
- 101 — DOOR No.
- ? — KEYNOTE
- A02 — WALL TYPE
- 000 — SPECIALTY EQUIPMENT / FURNITURE TAG
- 1 — SCOPE NOTE
- ℄ — CENTER LINE
- FLOW ARROW
- ? — KEYNOTE TAG
- DETAIL 1 / A201 SHEET — EXTERIOR ELEVATION
- DETAIL 4 / A211 2 / SHEET 3 — INTERIOR ELEVATION
- DETAIL 1 / A301 SHEET — BUILDING SECTION
- DETAIL 1 / A301 SHEET — WALL SECTION
- DETAIL 1 / A501 SHEET — DETAIL
- SPOT ELEVATION MARKERS
- SECTION MARKERS
- GYP BD 10'-0" AFF — CEILING TAG: A101 / TYPE1.1 / 10' - 0" AFF
- 1 — REVISION No.
- REVISION CLOUD
- W1 — WAINSCOTING TAG
- xx — WINDOW TAG
- SF1 9 — STOREFRONT TAG (SF)
- SF1 9 — CURTAINWALL TAG (CW)
- ? — GLAZING TAG
- BL-9 — BORROWED LITE TAG

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

NOTES, ABBREVIATIONS, LEGENDS

SCALE: As indicated

A-001

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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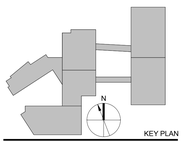
NO.	DATE	ISSUE

SEAL



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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

PARTITION TYPES

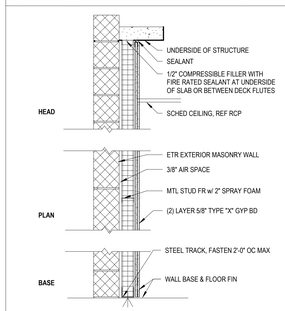
SCALE: As indicated

A-002

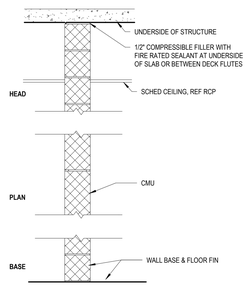
SCHEMATIC DESIGN SUBMISSION

02/20/2018

TYPE P - EXISTING MASONRY PARTITION

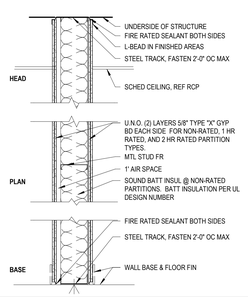


TYPE M - FULL HT. MASONRY PARTITION



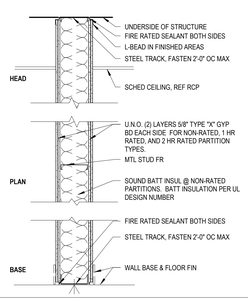
STC 45 MIN U.N.O. IN ACOUSTICAL NARRATIVE

TYPE CT-1 - FULL HEIGHT GWB PARTITION



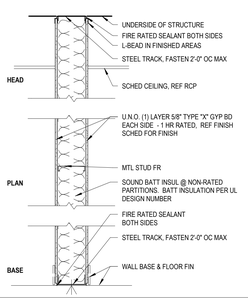
STC 60 MIN. U.N.O IN ACOUSTICAL NARRATIVE

TYPE B - FULL HEIGHT GWB PARTITION



STC 50 MIN. U.N.O IN ACOUSTICAL NARRATIVE

TYPE A - FULL HEIGHT GWB PARTITION



STC 45 MIN. U.N.O IN ACOUSTICAL NARRATIVE

PARTITION TYPE NOTES

1. REFER TO INTERIOR PARTITION TYPES SHEETS FOR PARTITION TYPE LOCATIONS.

2. SEE ARCHITECTURAL AND ACOUSTICAL NARRATIVES FOR ADDITIONAL INFORMATION.

3. IN ALL ROOMS OTHER THAN BATHROOMS WHICH CONTAIN SINKS OR OTHER PLUMBING FIXTURES PROVIDE MOISTURE RESISTANT GYP. BD. ON THE WET WALL AND RETURN 4'-0" ON THE SIDE WALLS UNLESS PARTITION IS C.M.U.U.N.O.

4. ALL GYPSUM BOARD SHALL BE 5/8" THICK, UNO. AT FIRE RATED ASSEMBLIES, PROVIDE TYPE 'X' GYP. BD. MINIMUM, OR AS REQUIRED BY FIRE RATED ASSEMBLY.

5. REFER TO REFLECTED CEILING PLANS FOR THE CEILING TYPE AND HEIGHT. COORDINATE HEIGHTS OF GYP. BD. WITH CEILING HEIGHTS AND WITH PARTITION DETAILS INDICATED. IN ALL BATHROOMS, PROVIDE MOISTURE RESISTANT GYP. BD. ON ALL CEILINGS U.N.O.

6. REFER TO STRUCTURAL DRAWINGS FOR SPECIFICATIONS & REINFORCEMENT REQUIREMENTS OF MASONRY PARTITIONS.

7. REFER TO WALL SECTIONS FOR EXTERIOR WALL CONSTRUCTION.

8. IN ALL ELECTRICAL ROOMS, INSTALL PAINTED FRT PLYWOOD FLOOR TO CEILING ON ALL WALLS IN ADDITION TO WALL TYPE REQUIREMENTS. COORDINATE WITH ELECTRICAL CONTRACTOR.

9. IN ALL LOW VOLTAGE & TELE/DATA ROOMS, INSTALL PAINTED FRT PLYWOOD FLOOR TO CEILING ON ALL WALLS IN ADDITION TO WALL TYPE REQUIREMENTS. COORDINATE WITH LOW VOLTAGE CONTRACTOR.

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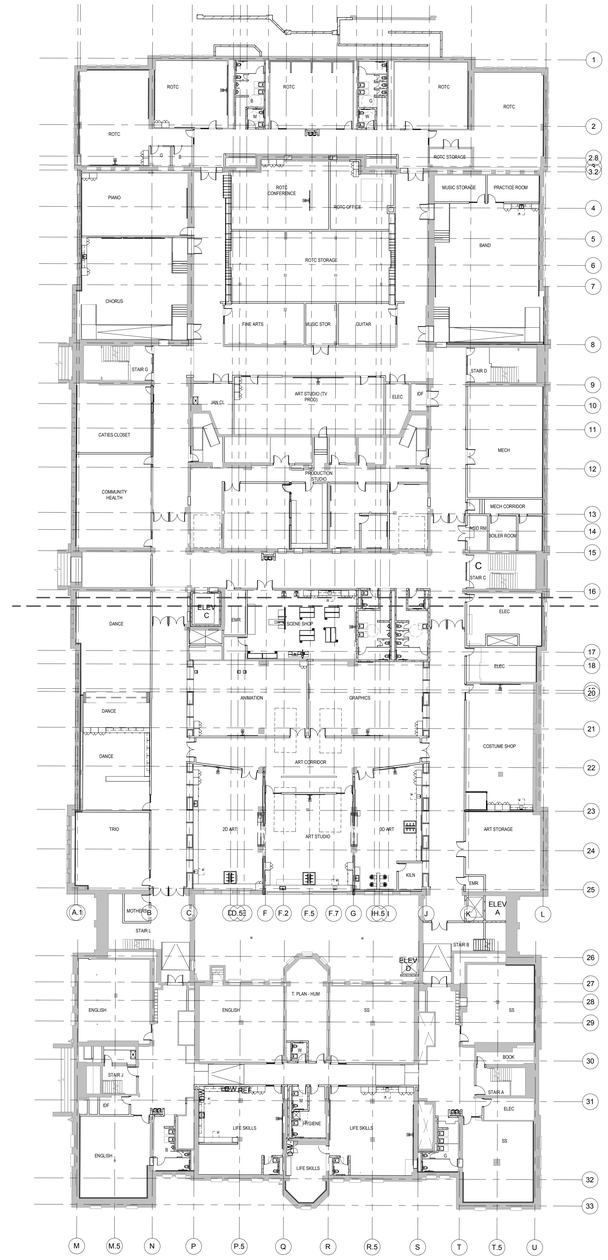

1 **BASEMENT - OVERALL**
3/64" = 1'-0"

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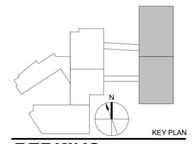
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

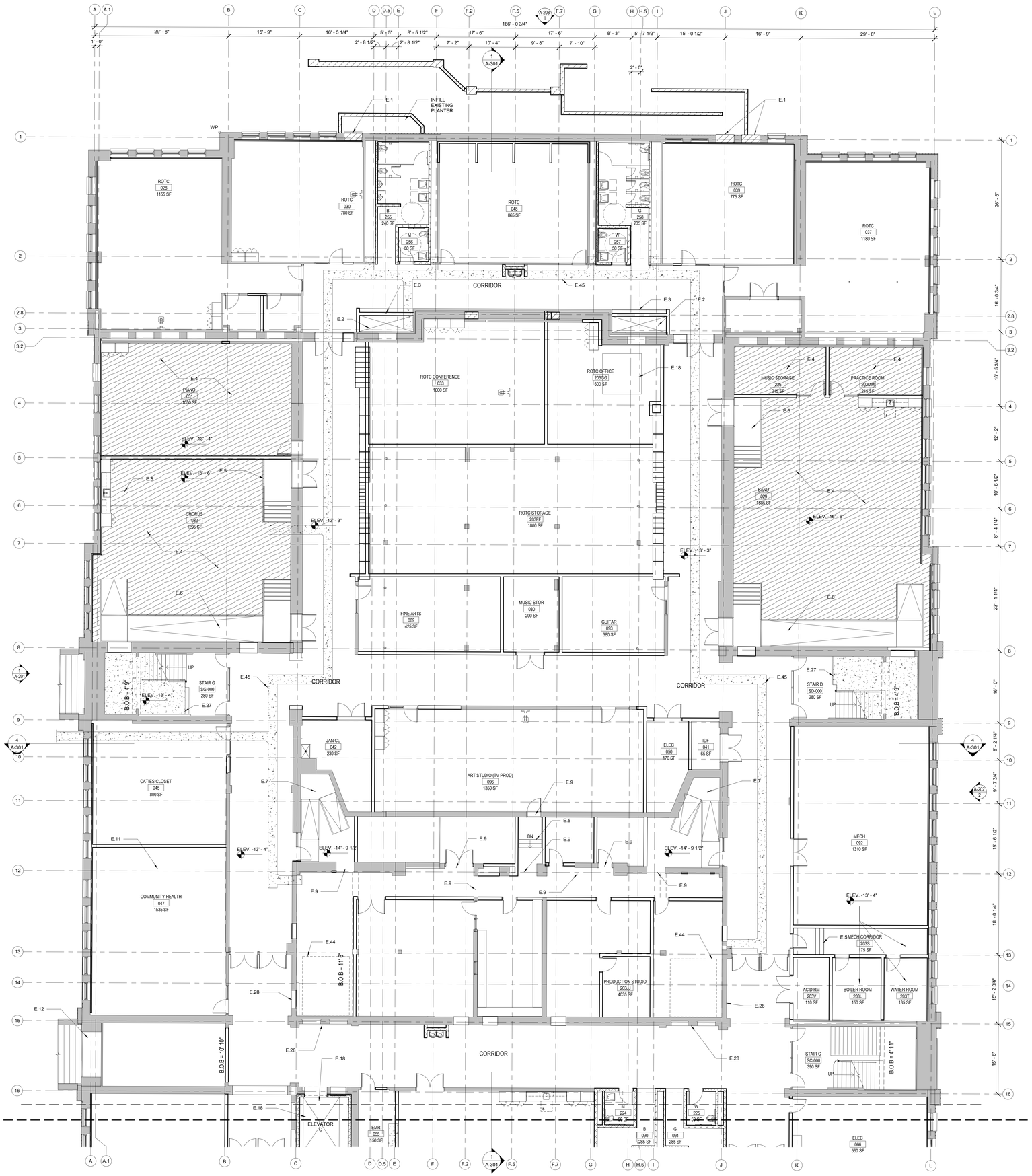
DRAWING TITLE:
OVERALL BASEMENT PLAN

SCALE: 3/64" = 1'-0"

A-100

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **BASEMENT - EAST BLDG - PART A**

1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

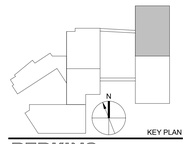
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL, REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS. EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @ 1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF: AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS.
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

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20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

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Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

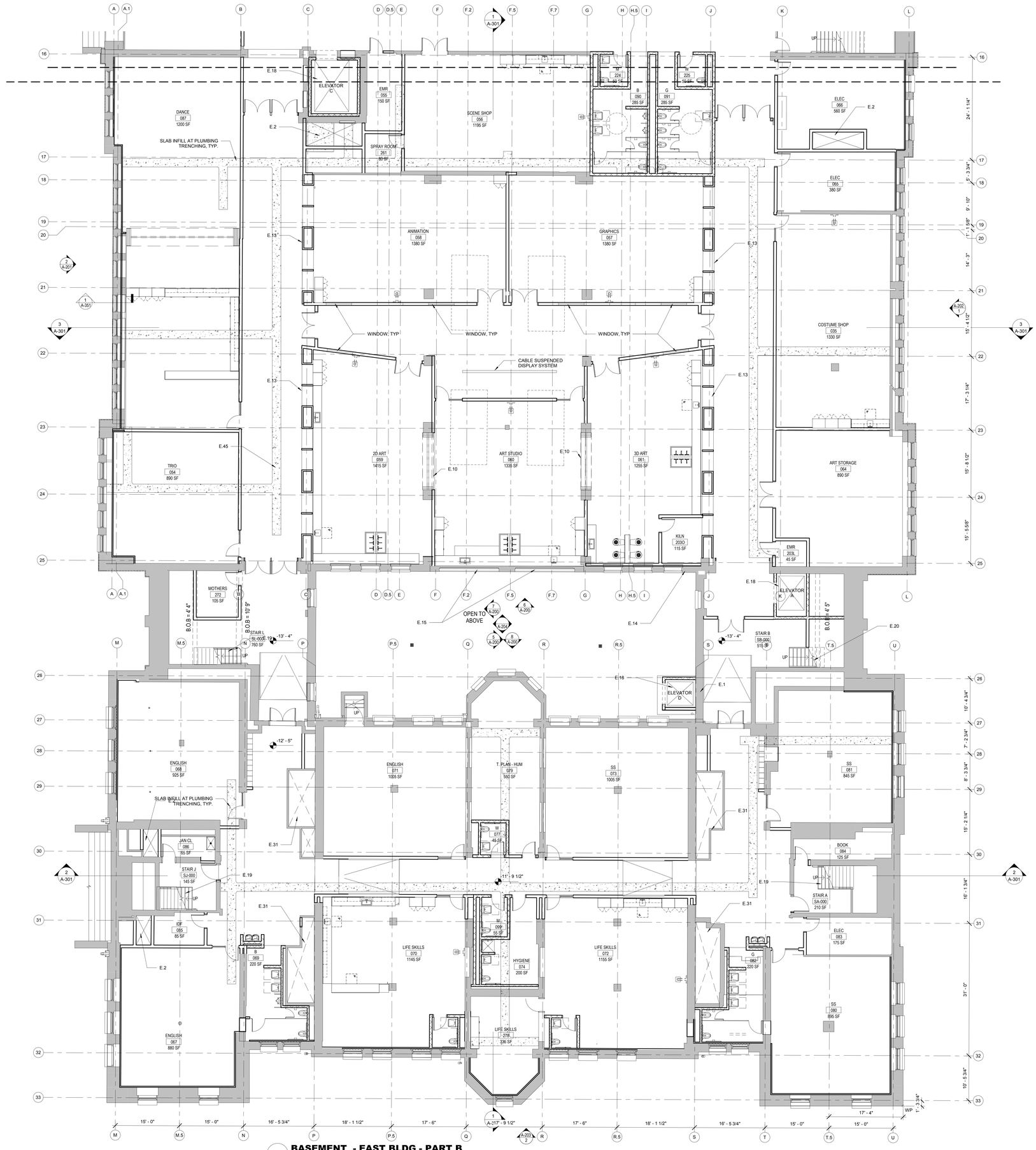
BASEMENT FLOOR PLAN - EAST BLDG - PART A

SCALE: As indicated

A-100A

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **BASEMENT - EAST BLDG - PART B**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING.
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL, REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
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E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA, REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE.
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS. EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK. PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
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E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50. NEW ROOF; AIR/ VAPOR BARRIER; TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55. MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
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E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

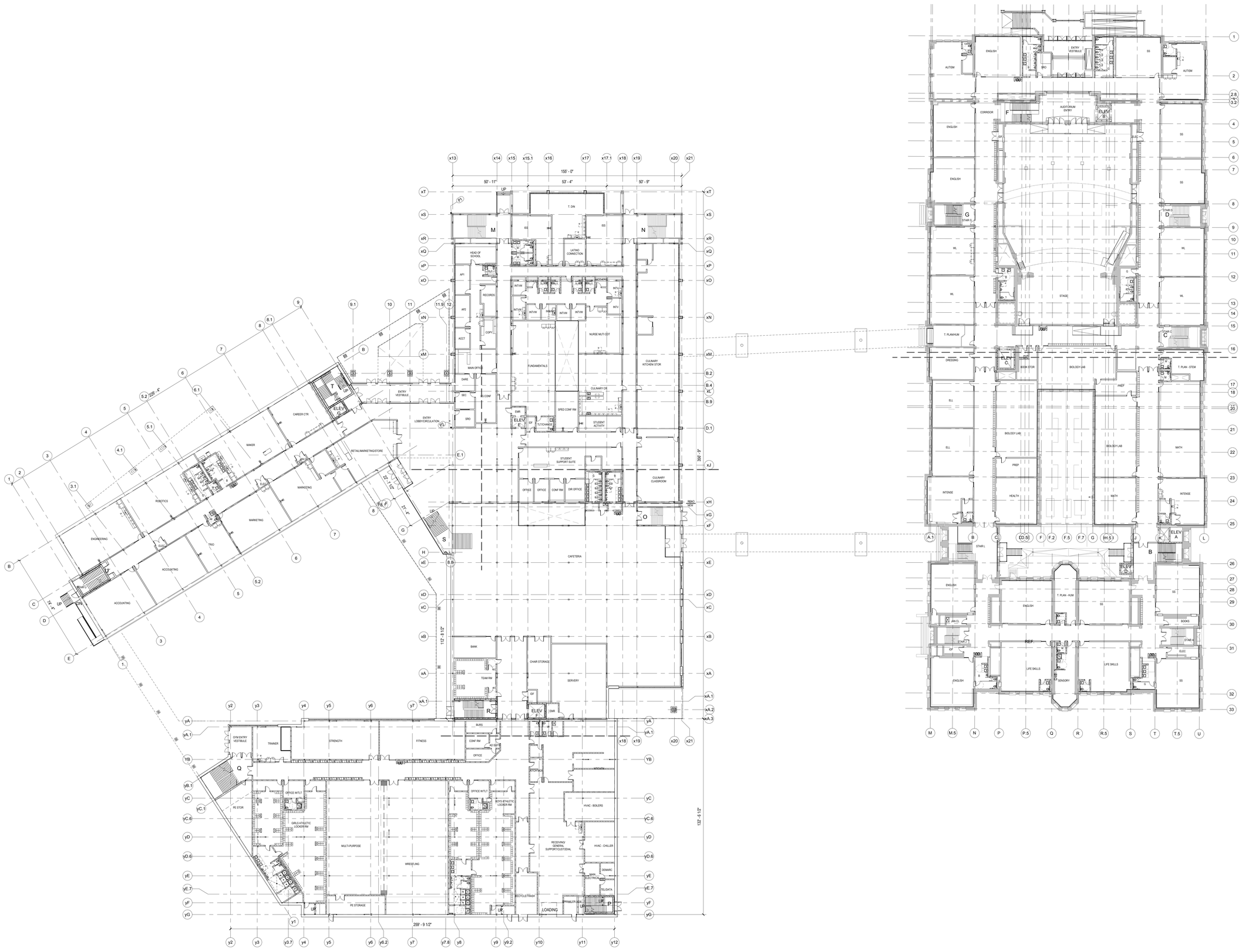
DRAWING TITLE:
BASEMENT FLOOR PLAN - EAST BLDG - PART B

SCALE: As indicated

A-100B

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **FIRST FLOOR - OVERALL**
3/64" = 1'-0"

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Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

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LOWELL, MA 08152

PROJECT No: 67150

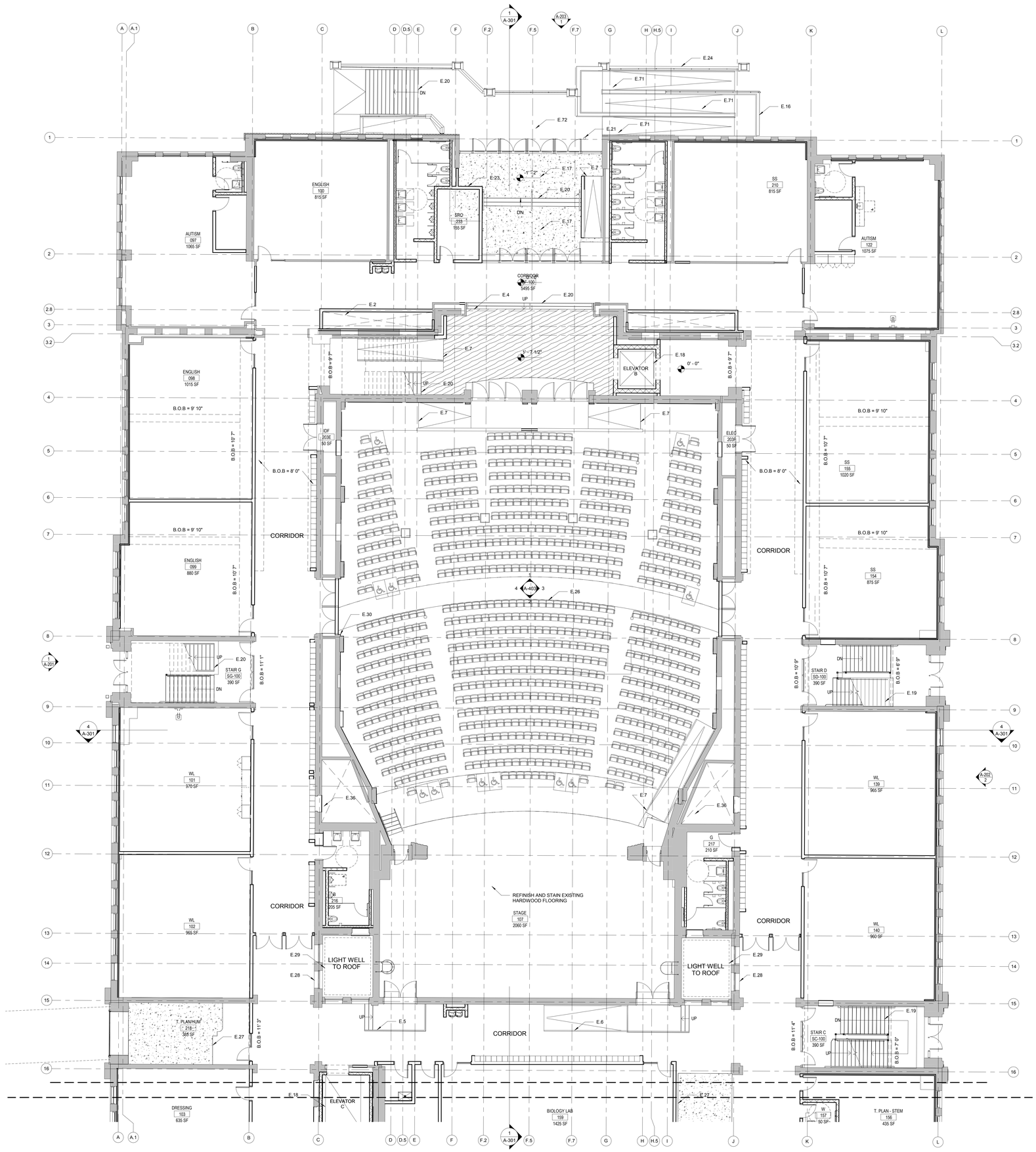
DRAWING TITLE:
OVERALL FIRST FLOOR PLAN

SCALE: 3/64" = 1'-0"

A-101

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **FIRST FLOOR - EAST BLDG - PART A**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

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E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
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E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL. INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
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E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
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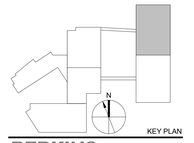

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50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

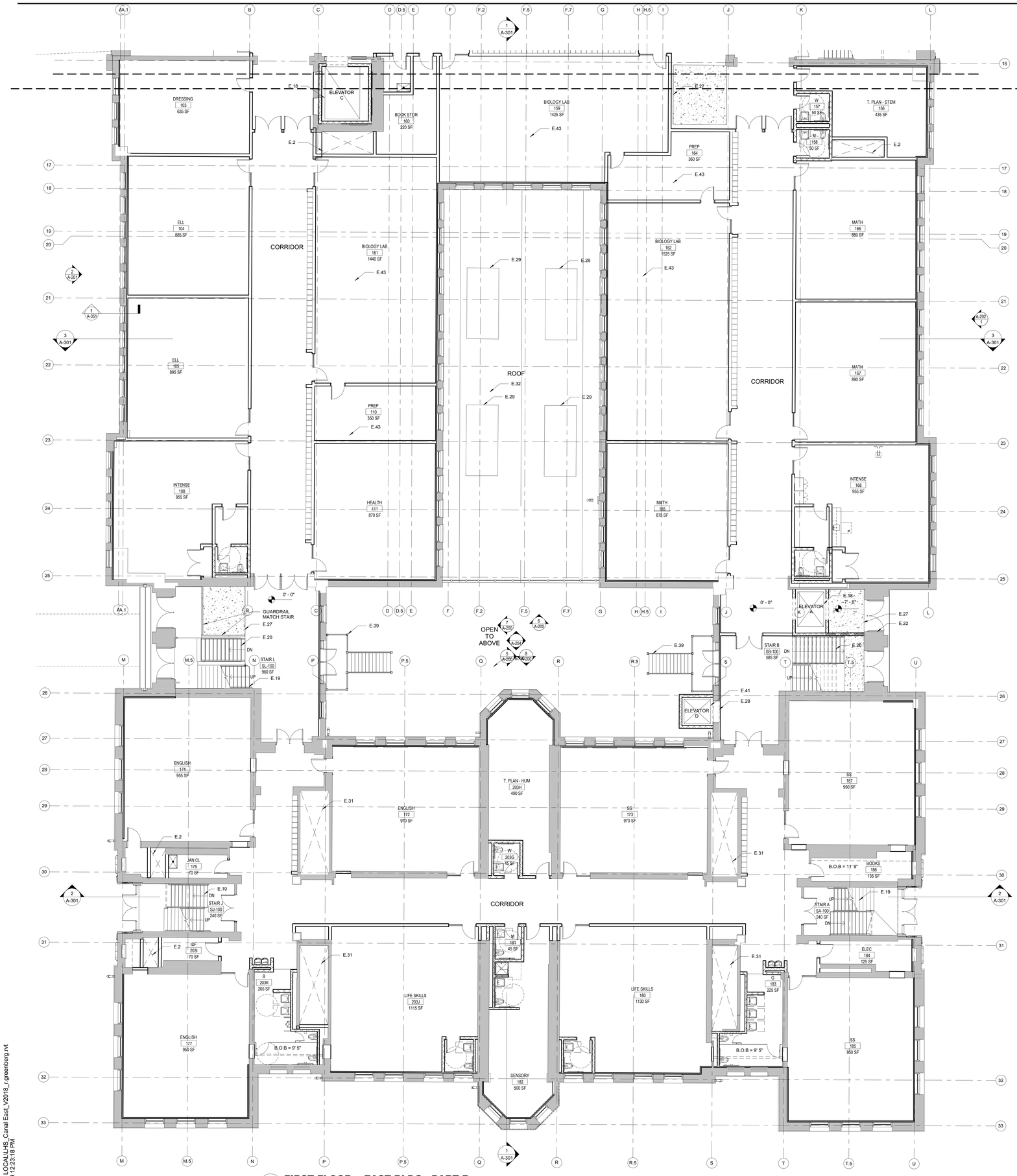
FIRST FLOOR FLOOR PLAN - EAST BLDG - PART A

SCALE: As indicated

A-101A

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **FIRST FLOOR - EAST BLDG - PART B**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
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- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
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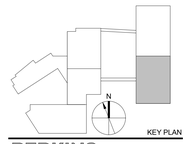
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF, AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER, MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
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Construction Manager Address

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Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

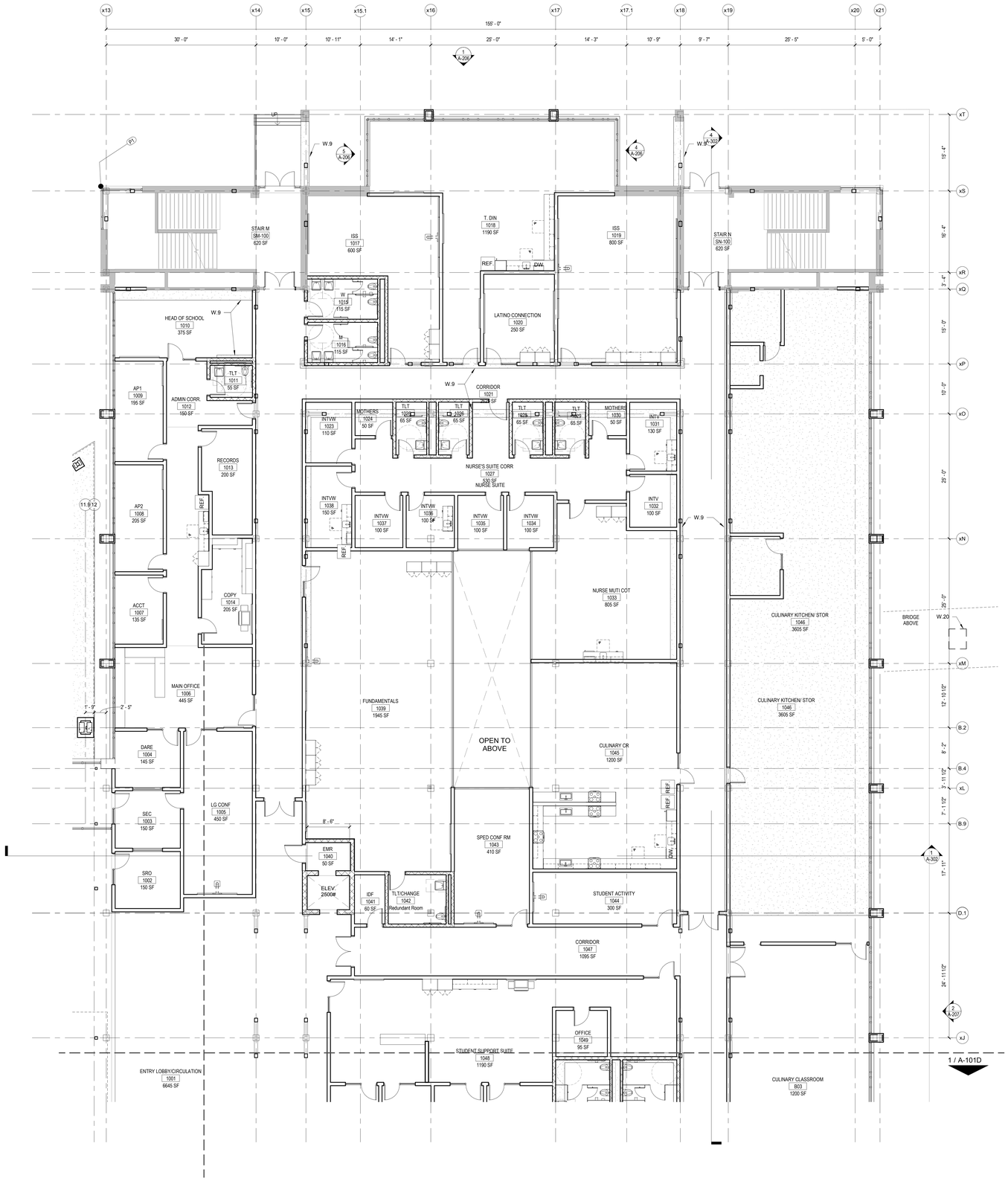
FIRST FLOOR FLOOR PLAN - EAST BLDG - PART B

SCALE: As indicated

A-101B

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 FIRST FLOOR - WEST BLDG - PART C

1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

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4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURESCENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS. REPLACE DAMAGED CONCRETE PAN. SEE NARATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
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W.8 EXPANSION JOINT @ FIRE WALL
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W.11 MECHANICAL UNIT. SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
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W.26 ELEVATOR OVERRUN

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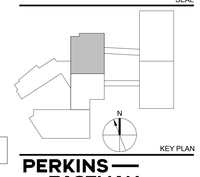

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

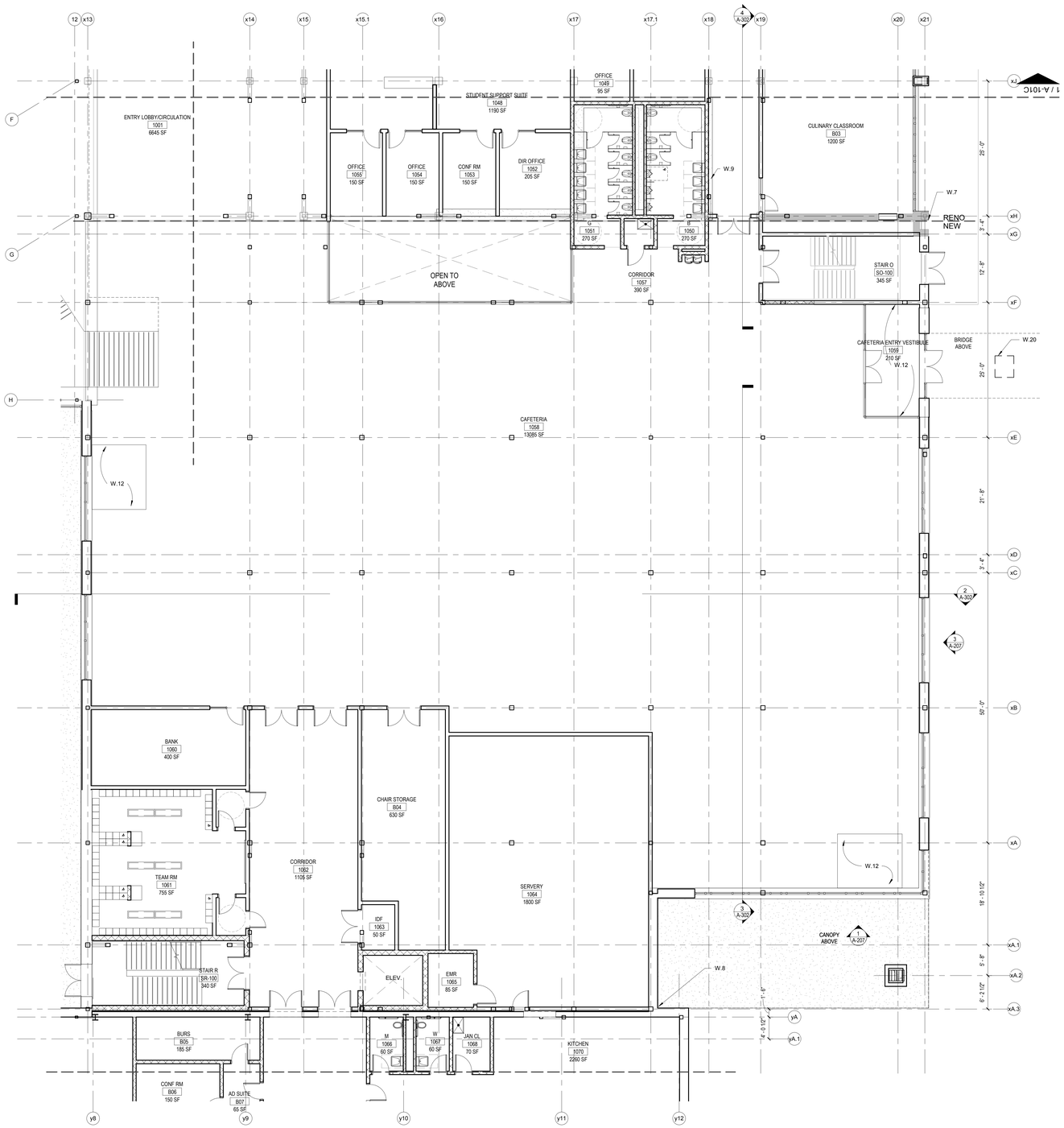
DRAWING TITLE:
FIRST FLOOR FLOOR PLAN - WEST BLDG - PART C

SCALE: As indicated

A-101C

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 FIRST FLOOR - WEST BLDG - PART D

1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
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- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

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5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURSECENCE.
9. REPOINT ETR MASONRY
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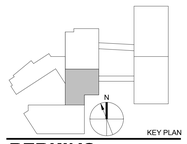
NO.	DATE	ISSUE

SEAL



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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR FLOOR PLAN - WEST BLDG - PART D

SCALE: As indicated

A-101D

SCHEMATIC DESIGN SUBMISSION

02/20/2018

NOTES - WEST CAMPUS

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
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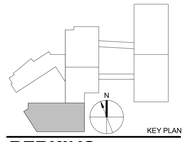

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50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR FLOOR PLAN - GYM

SCALE: As indicated

A-101E

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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1 FIRST FLOOR - GYM

1/8" = 1'-0"

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
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- NEW CONSTRUCTION - CMU PARTITION
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2 Center Plaza Suite 430 Boston, MA 02108

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Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR FLOOR PLAN - FRESHMAN ACADEMY

SCALE: As indicated

A-101F

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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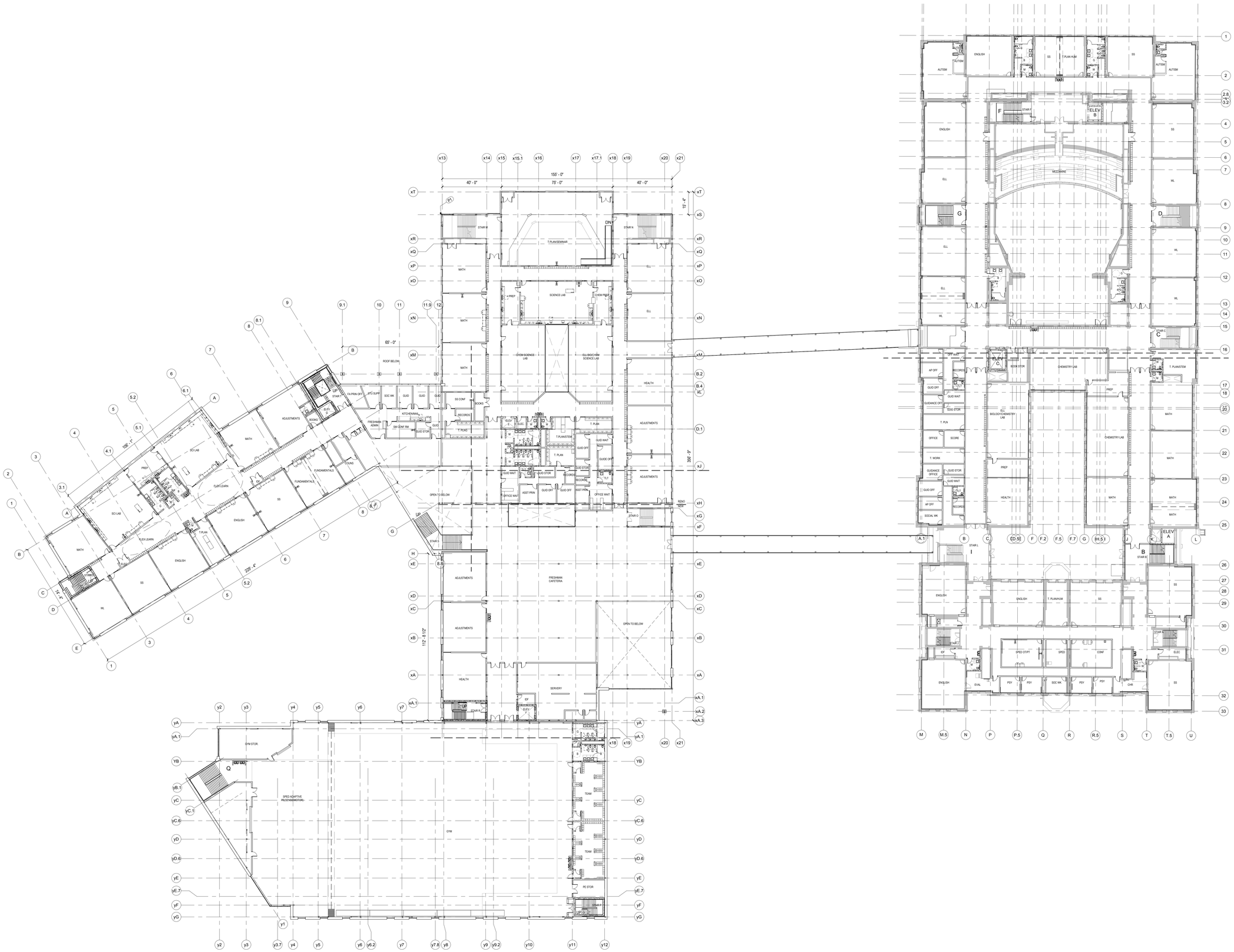
1 **FIRST FLOOR - FRESHMAN ACADEMY/MAIN ENTRY**
1/8" = 1'-0"



1 SECOND FLOOR - OVERALL

3/64" = 1'-0"

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
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Acoustical Consultant:
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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

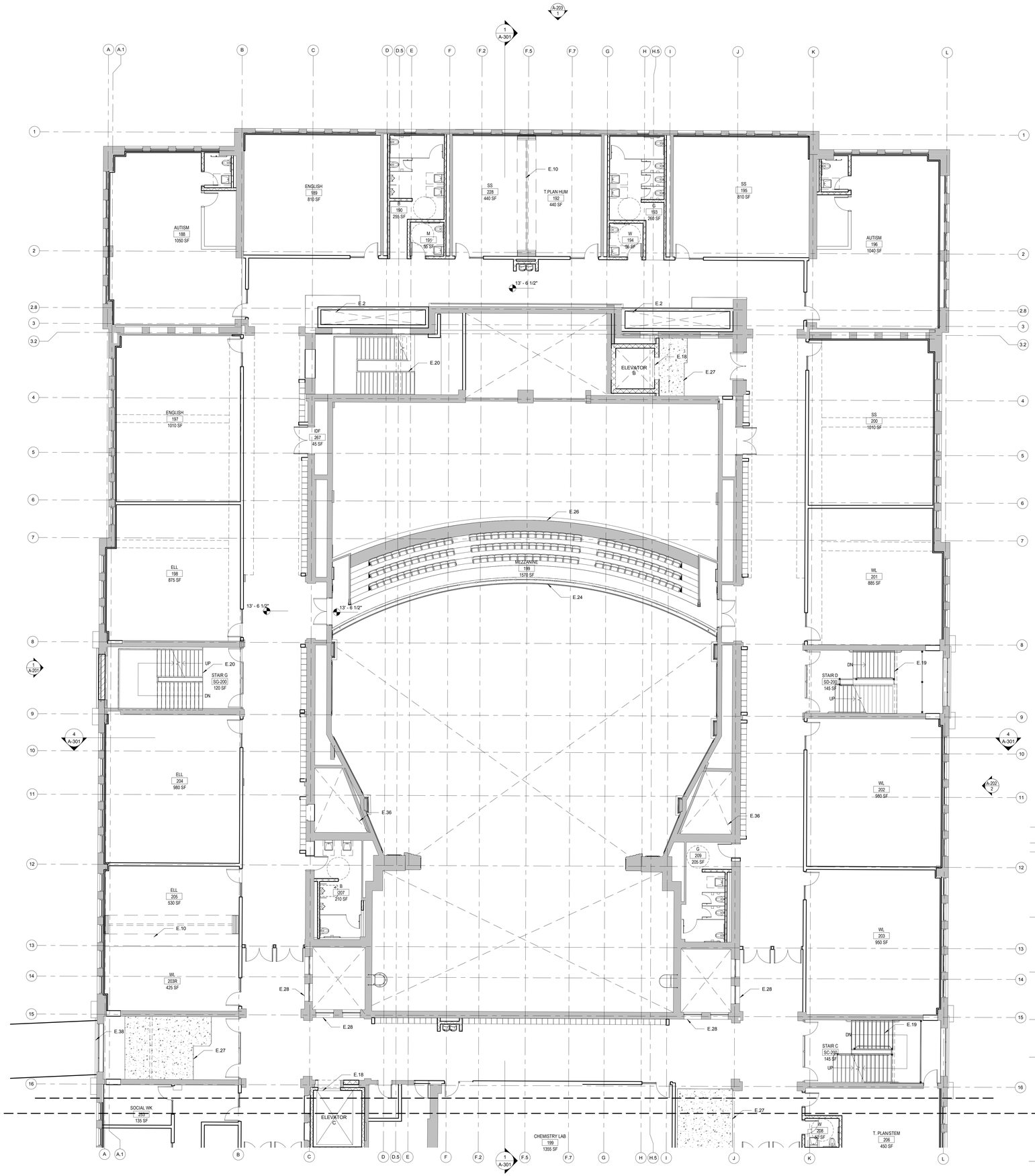
DRAWING TITLE:
OVERALL SECOND FLOOR PLAN

SCALE: 3/64" = 1'-0"

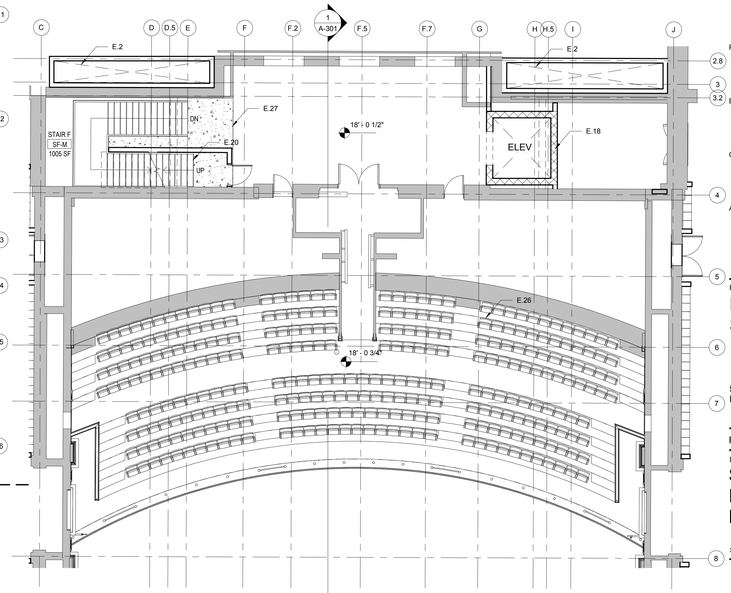
A-102

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **SECOND FLOOR - EAST BLDG - PART A**
1/8" = 1'-0"



2 **MEZZANINE - EAST BLDG - PART A**
1/8" = 1'-0"

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL, REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MAGE CODE COMPLIANT. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS. EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC.
E.34 NEW COUNTER-BALANCING RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

LEGEND

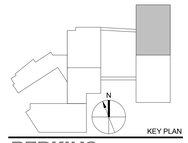
- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS. ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
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2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
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370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FLOOR PLAN - EAST BLDG - PART A

SCALE: As indicated

A-102A

SCHEMATIC DESIGN SUBMISSION

2/20/2018

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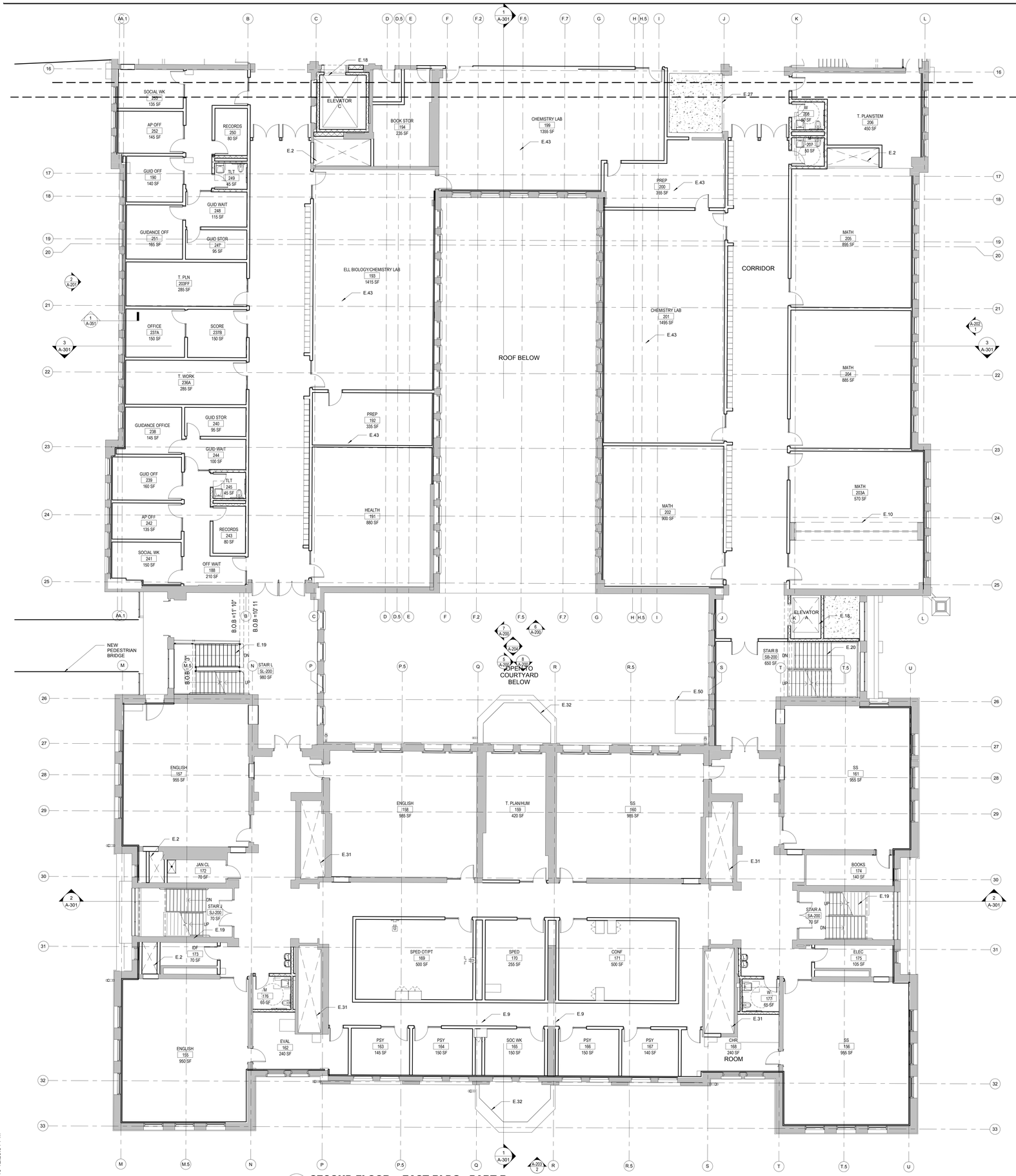

1 **SECOND FLOOR - EAST BLDG - PART B**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
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17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK
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E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
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E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT GLAZED AND WITH SPANDREL. REFER TO ELEVATIONS
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E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

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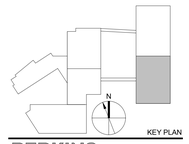

KEY PLAN

PERKINS EASTMAN
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Owner:

375 Merrimack Street, Lowell, MA 08152

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Construction Manager Address

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

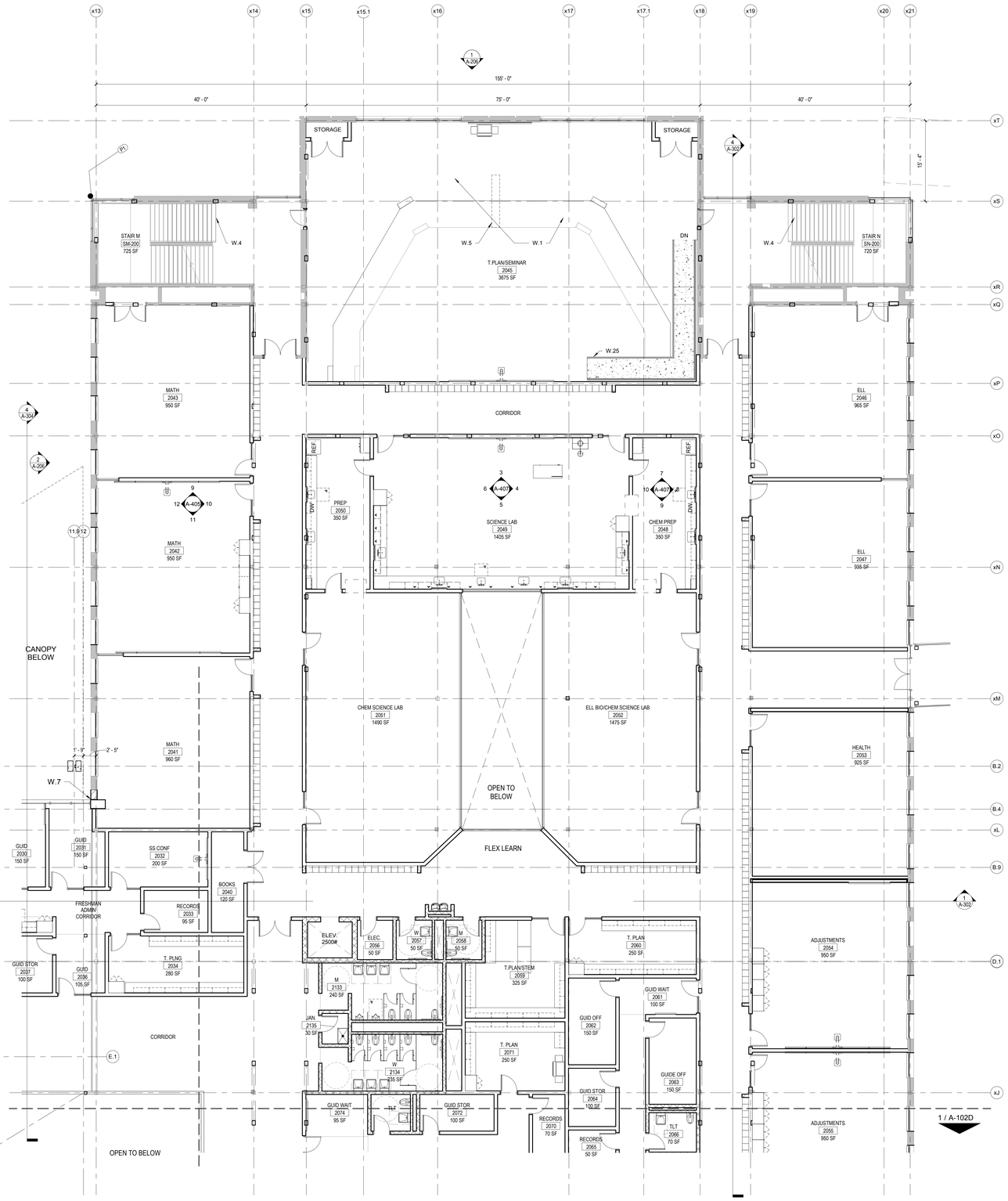
SECOND FLOOR FLOOR PLAN - EAST BLDG - PART B

SCALE: As indicated

A-102B

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **SECOND FLOOR - WEST BLDG - PART C**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

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3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITIARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURSECENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS, REPLACE DAMAGED CONCRETE PAN. SEE NARATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB. SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT. SEE MECH.DWGS
W.12 RECESSED ENTRY MAT.
W.13 POLISHED FINISHED C.M.U. TO 10'-0' AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT. TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY.
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.17 REPLACEMENT PRECAST FACE BRICK LINTEL. TYP @ ALL REPLACEMENT WINDOWS.
W.18 ROLL-UP MESH GYM DIVIDER CURTAIN
W.19 MECHANICAL EQUIPMENT SCREEN
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W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS. SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

NO.	DATE	ISSUE

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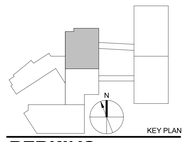

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

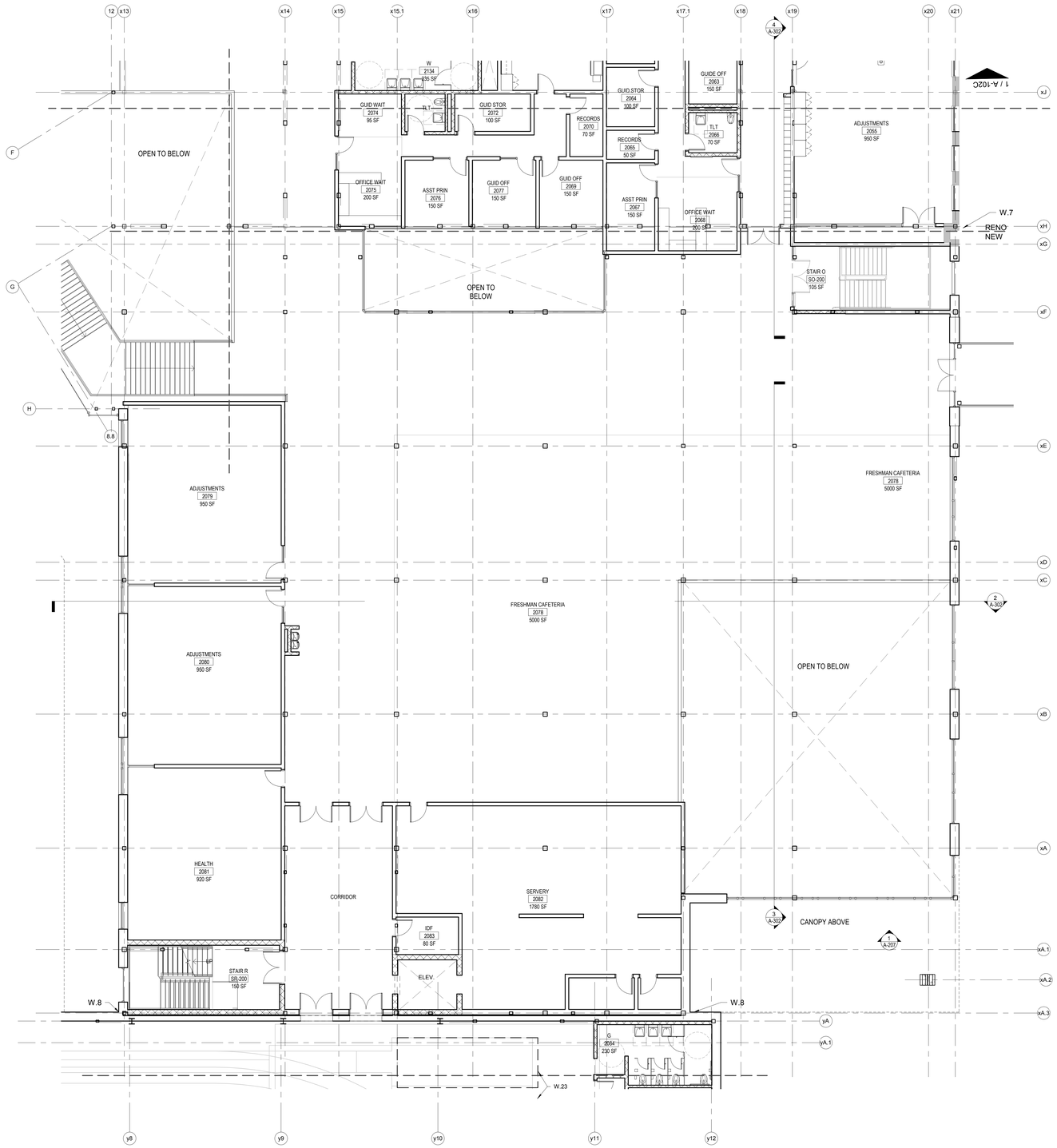
DRAWING TITLE:
SECOND FLOOR FLOOR PLAN - WEST BLDG - PART C

SCALE: As indicated

A-102C

SCHEMATIC DESIGN SUBMISSION

02/20/2018



LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
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5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURSECENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
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W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS, SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

1 **SECOND FLOOR - WEST BLDG - PART D**
1/8" = 1'-0"

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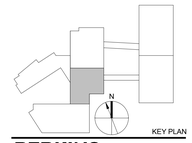

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Code Consultant:
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142 Hanlon Rd. Hollaston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FLOOR PLAN - WEST BLDG - PART D

SCALE: As indicated

A-102D

SCHEMATIC DESIGN SUBMISSION

02/20/2018

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
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W.26 ELEVATOR OVERRUN

GENERAL NOTES - WEST CAMPUS

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
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- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
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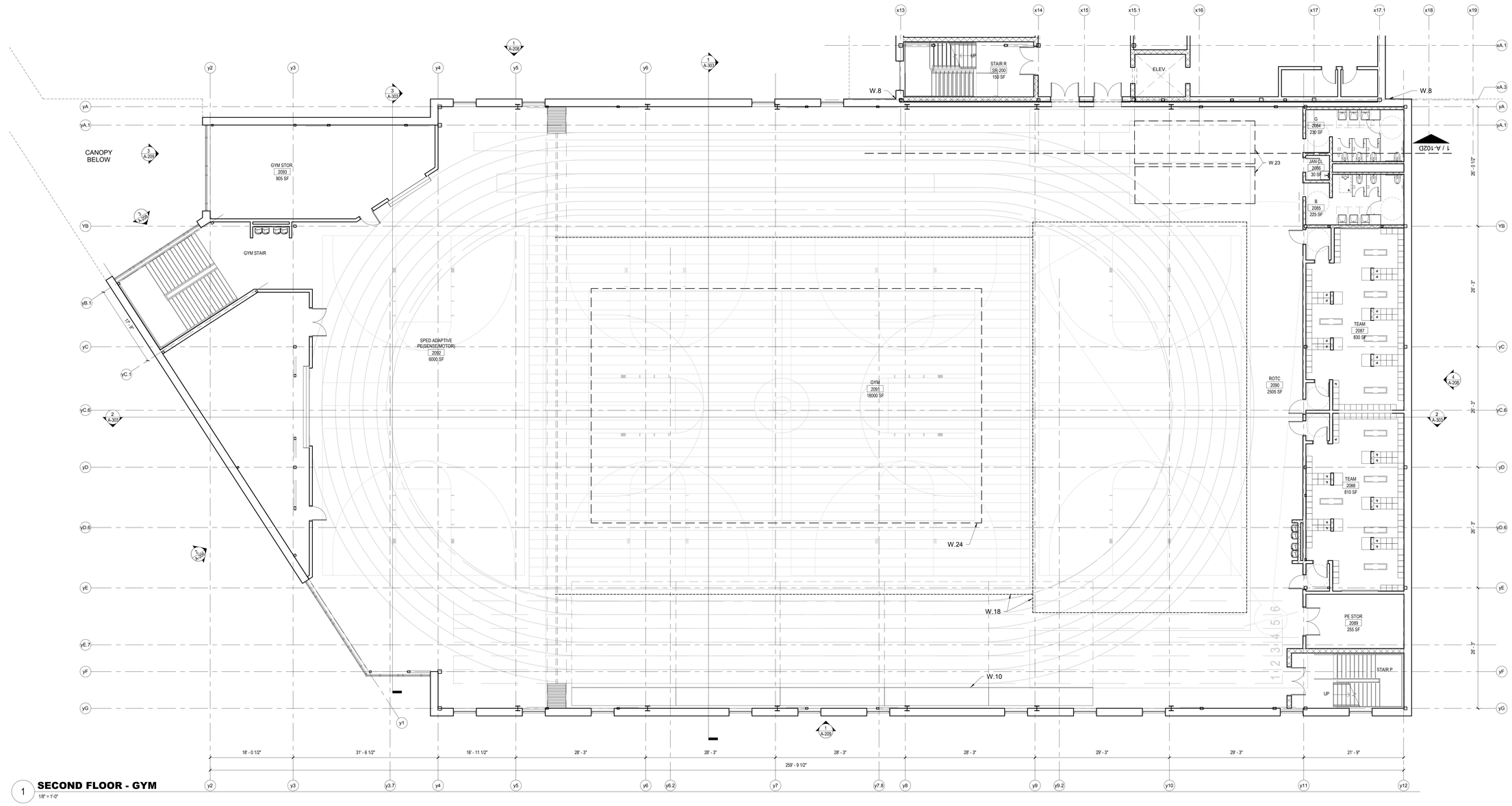

1 **SECOND FLOOR - GYM**
1/8" = 1'-0"

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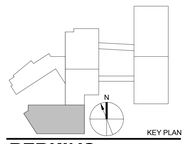

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LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FLOOR PLAN - GYM

SCALE: As indicated

A-102E

SCHEMATIC DESIGN SUBMISSION

02/20/2018

NOTES - WEST CAMPUS

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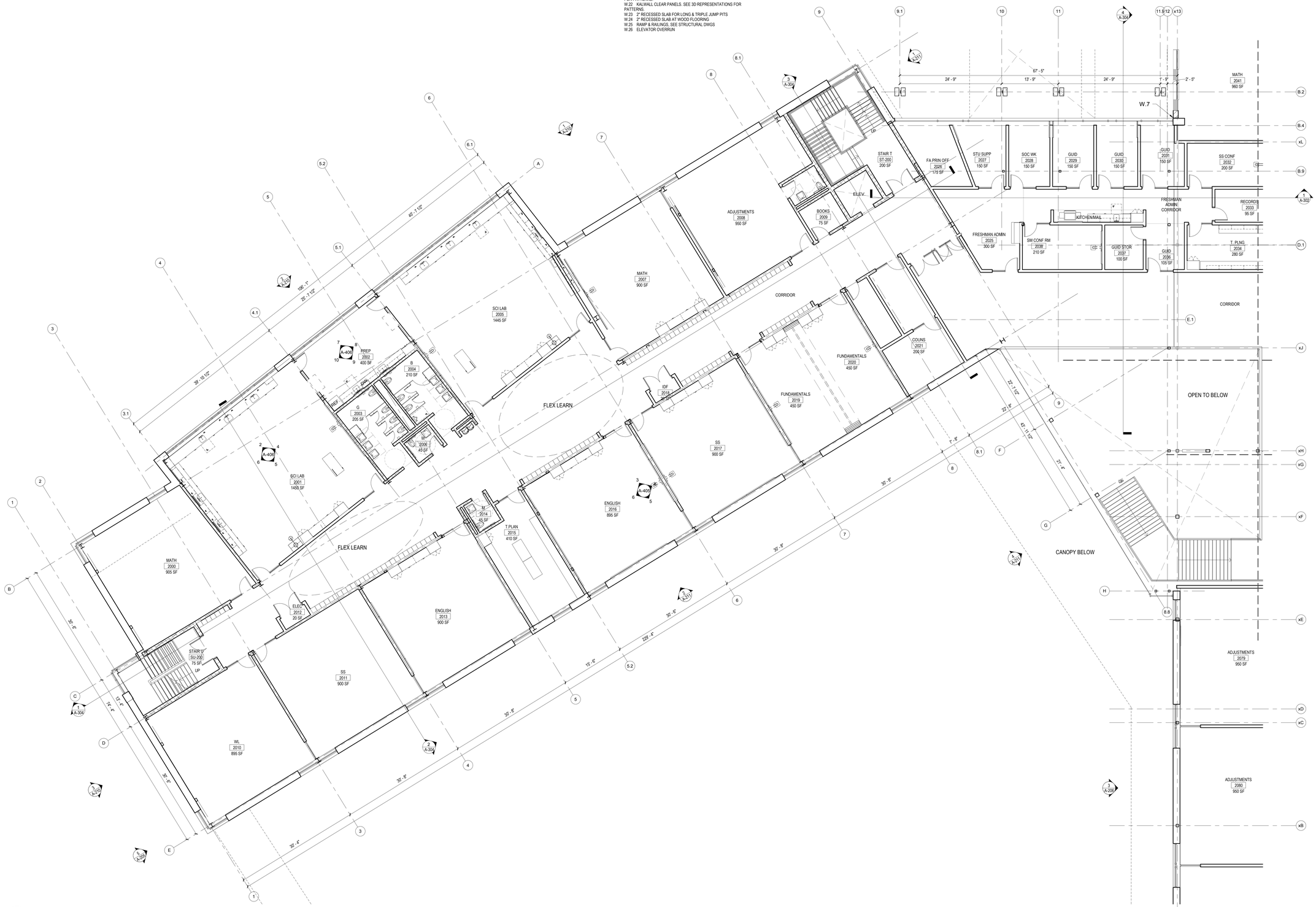

1 **SECOND FLOOR - FRESHMAN ACADEMY**
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SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

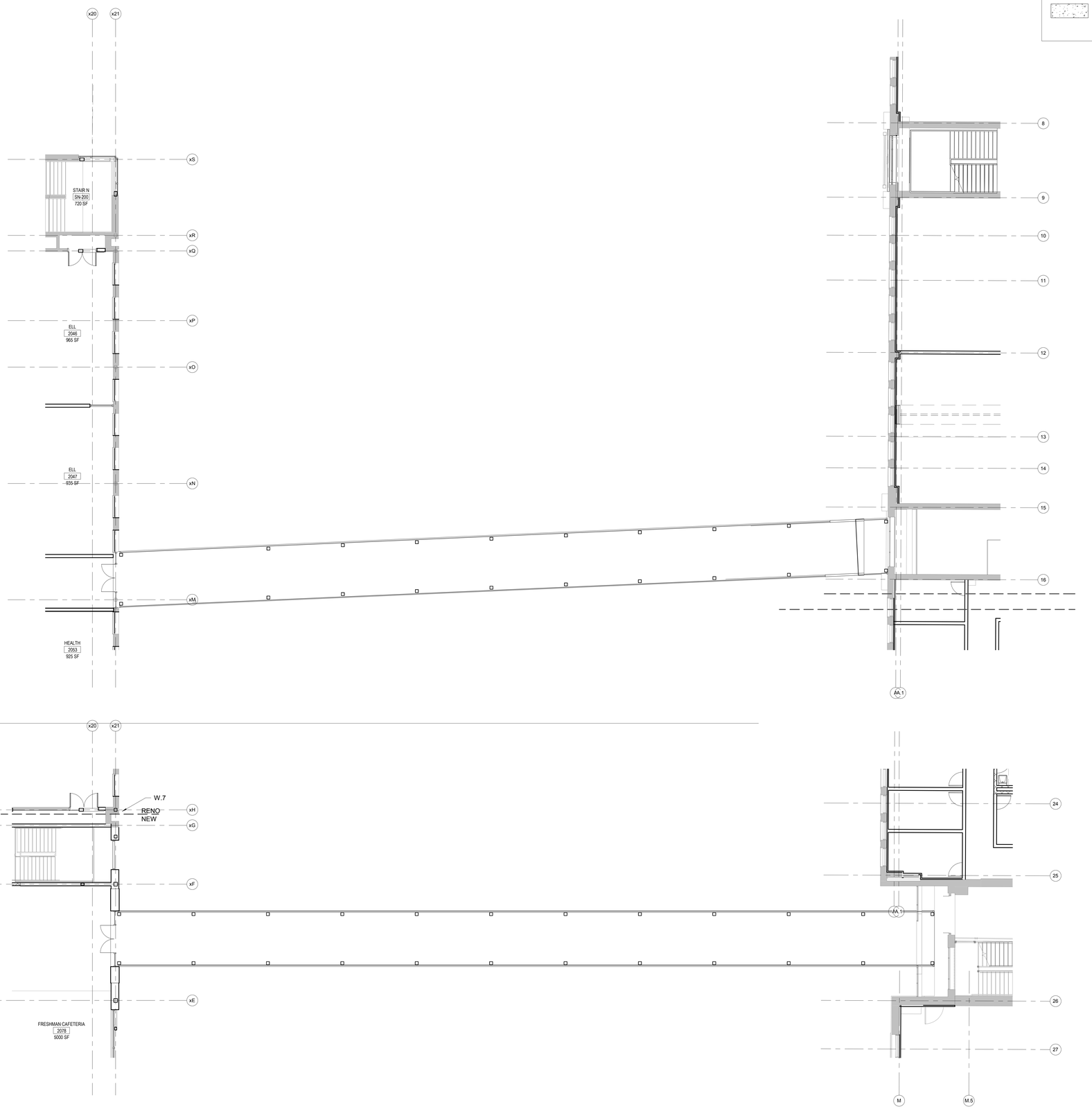
DRAWING TITLE:
SECOND FLOOR FLOOR PLAN - FRESHMAN ACADEMY

SCALE: As indicated

A-102F

SCHEMATIC DESIGN SUBMISSION

02/20/2018



2 SECOND FLOOR - NORTH BRIDGE

1/8" = 1'-0"

1 SECOND FLOOR - SOUTH BRIDGE

1/8" = 1'-0"

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

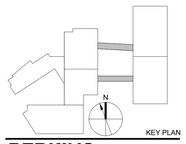
1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
2. ALL ITEMS IN THESE DRAWINGS ARE NEW (N) UNLESS NOTED AS EXISTING (E) OR EXISTING TO REMAIN (ETR).
3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURESCENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS. REPLACE DAMAGED CONCRETE PAN. SEE NARATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM.
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB. SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.17 REPLACEMENT PRECAST FACE BRICK LINTEL. TYP @ ALL REPLACEMENT WINDOWS.
W.18 ROLL-UP MESH GYM DIVIDER CURTAIN
W.19 MECHANICAL EQUIPMENT SCREEN
W.20 CONNECT TROLLEY CABLES @ UNDERSIDE OF BRIDGE. COORDINATE W/ TROLLEY OPERATOR.
W.21 KALWALL TRANSLUCENT PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.22 KALWALL CLEAR PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.23 2" RECESSED SLAB FOR LONG & TRIPLE JUMP PITS
W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS, SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

NO.	DATE	ISSUE

SEAL



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LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR FLOOR PLANS - BRIDGES

SCALE: As indicated

A-102G

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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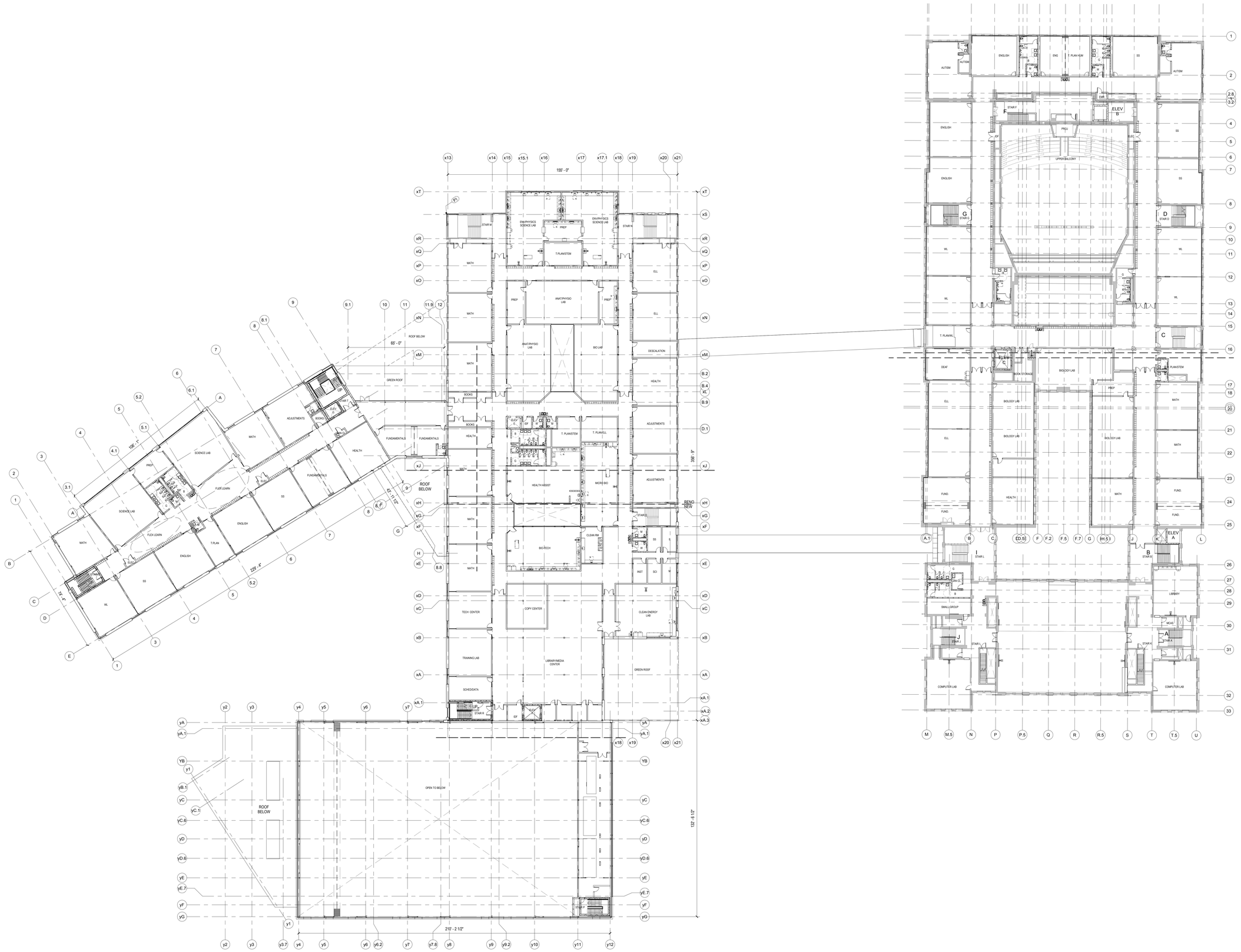

1 **THIRD FLOOR - OVERALL**
3/64" = 1'-0"

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

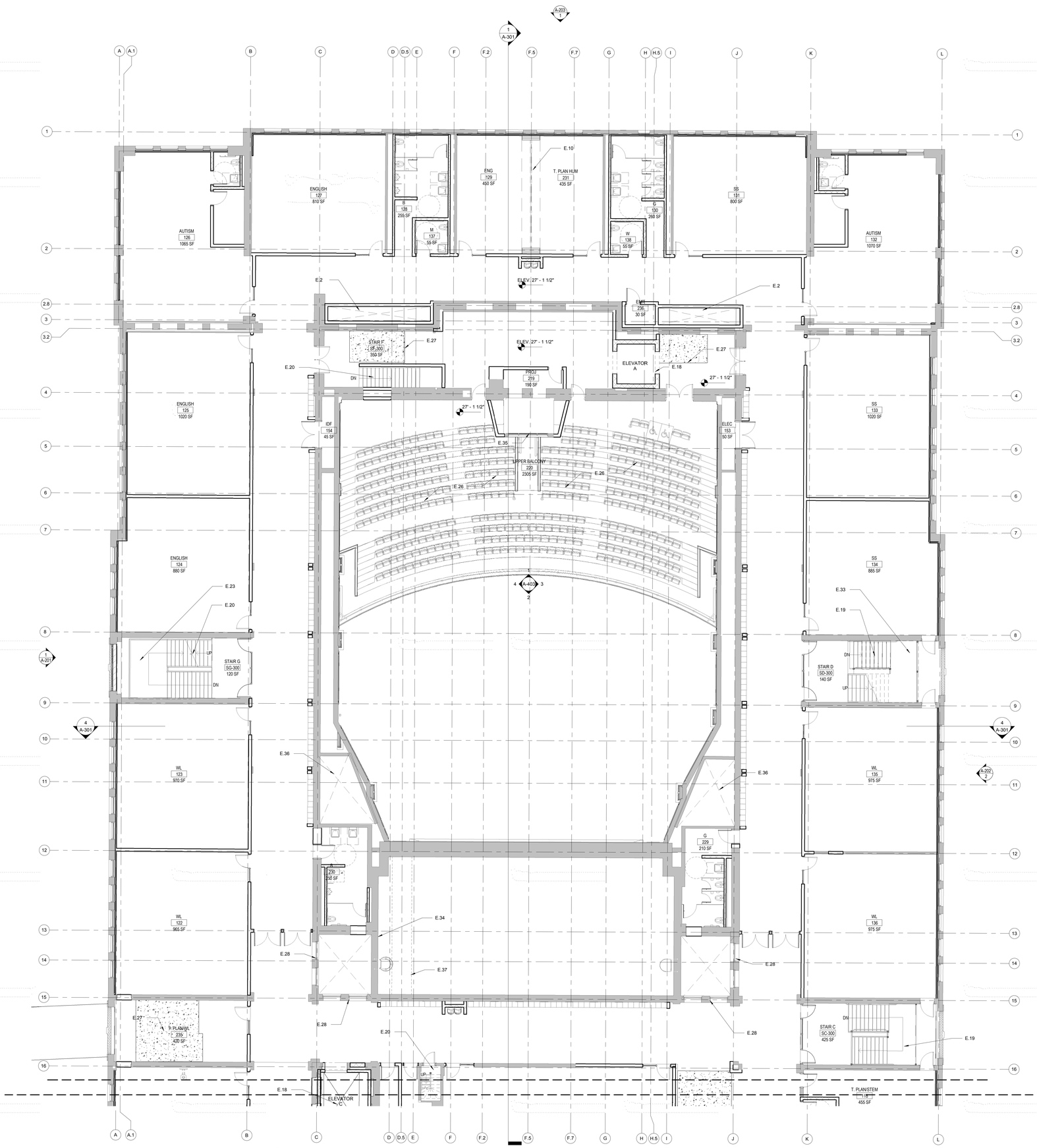
DRAWING TITLE:
OVERALL THIRD FLOOR PLAN

SCALE: 3/64" = 1'-0"

A-103

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **THIRD FLOOR - EAST BLDG - PART A**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

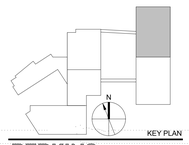
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS.
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR. (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL, REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EFROM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF: AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE. THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER, MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



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50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

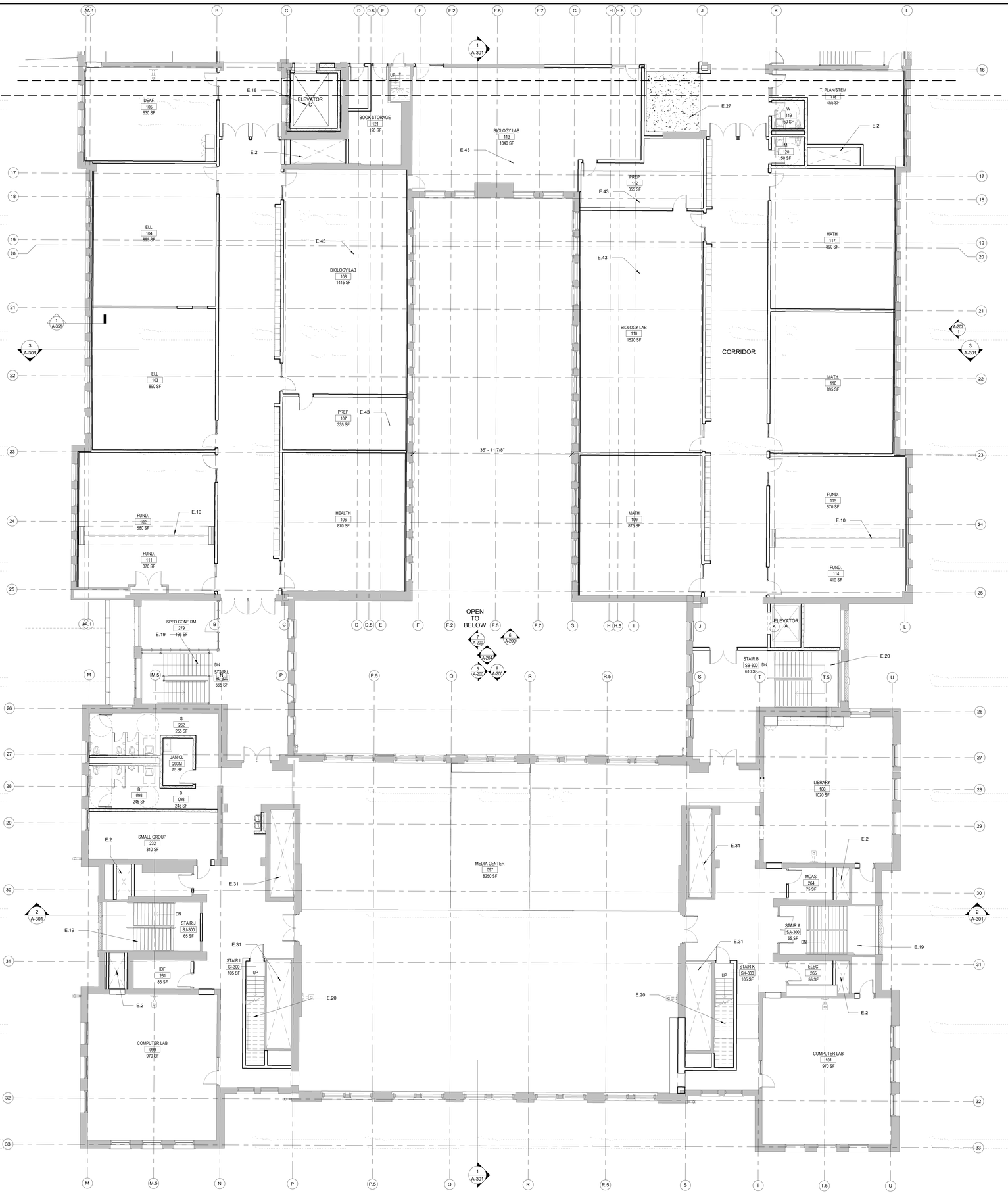
DRAWING TITLE:
THIRD FLOOR FLOOR PLAN - EAST BDLG - PART A

SCALE: As indicated

A-103A

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **THIRD FLOOR - EAST BLDG - PART B**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
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6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING.
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR. (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL; REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS. EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53.
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

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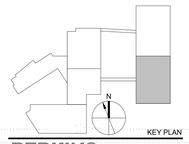


KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

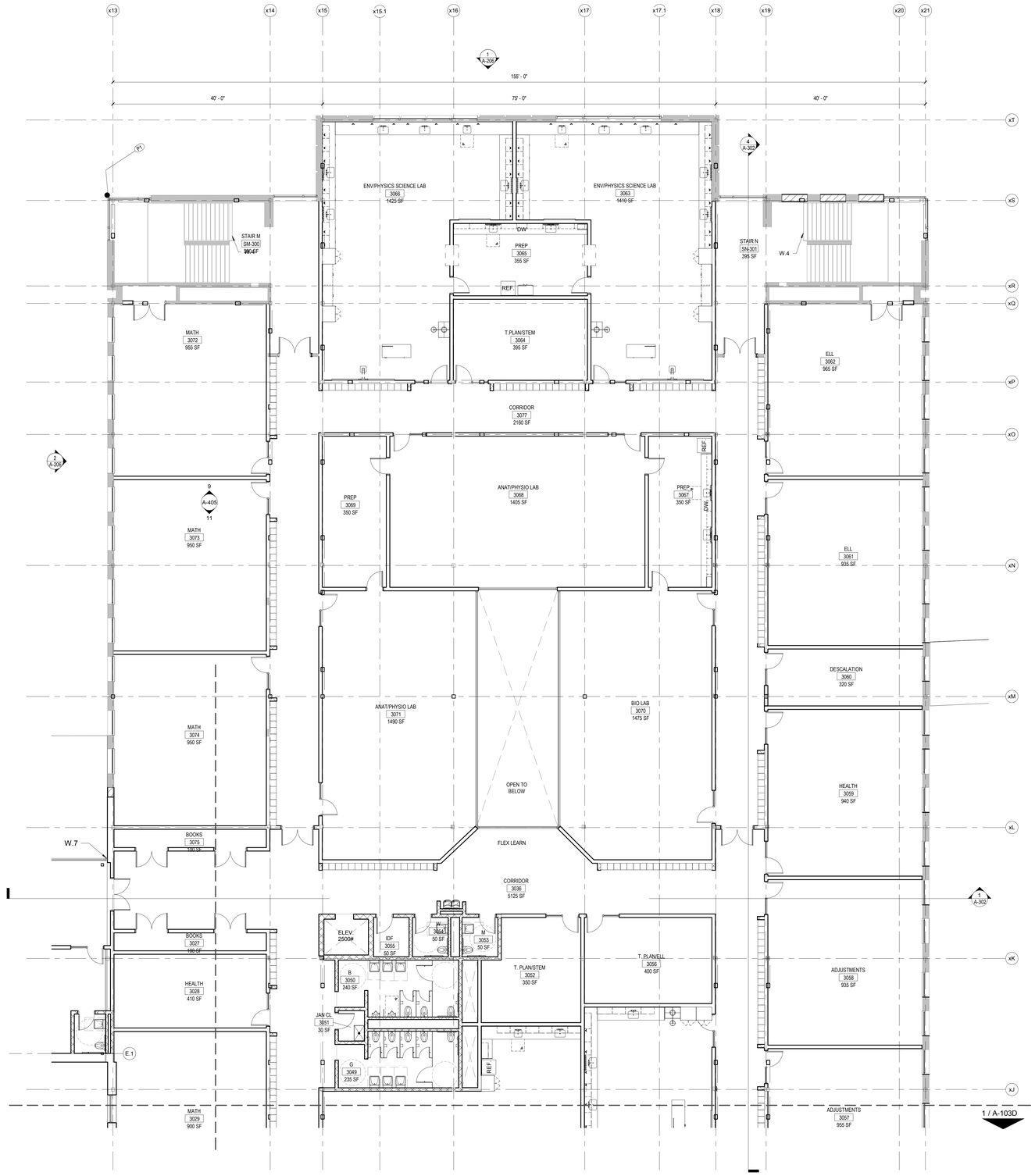
DRAWING TITLE:
THIRD FLOOR FLOOR PLAN - EAST BLDG - PART B

SCALE: As indicated

A-103B

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 THIRD FLOOR - WEST BLDG - PART C

1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
2. ALL ITEMS IN THESE DRAWINGS ARE NEW (N) UNLESS NOTED AS EXISTING (E) OR EXISTING TO REMAIN (ETR).
3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURESCENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS. REPLACE DAMAGED CONCRETE PAN. SEE NARATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB, SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.17 REPLACEMENT PRECAST FACE BRICK LINTEL. TYP @ ALL REPLACEMENT WINDOWS.
W.18 ROLL-UP MESH GYM DIVIDER CURTAIN
W.19 MECHANICAL EQUIPMENT SCREEN
W.20 CONNECT TROLLEY CABLES @ UNDERSIDE OF BRIDGE. COORDINATE W/ TROLLEY OPERATOR.
W.21 KALWALL TRANSLUCENT PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.22 KALWALL CLEAR PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.23 2" RECESSED SLAB FOR LONG & TRIPLE JUMP PITS
W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS. SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

NO.	DATE	ISSUE

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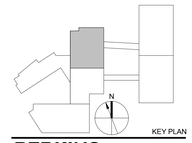

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
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T. +1 617 449 4000
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Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

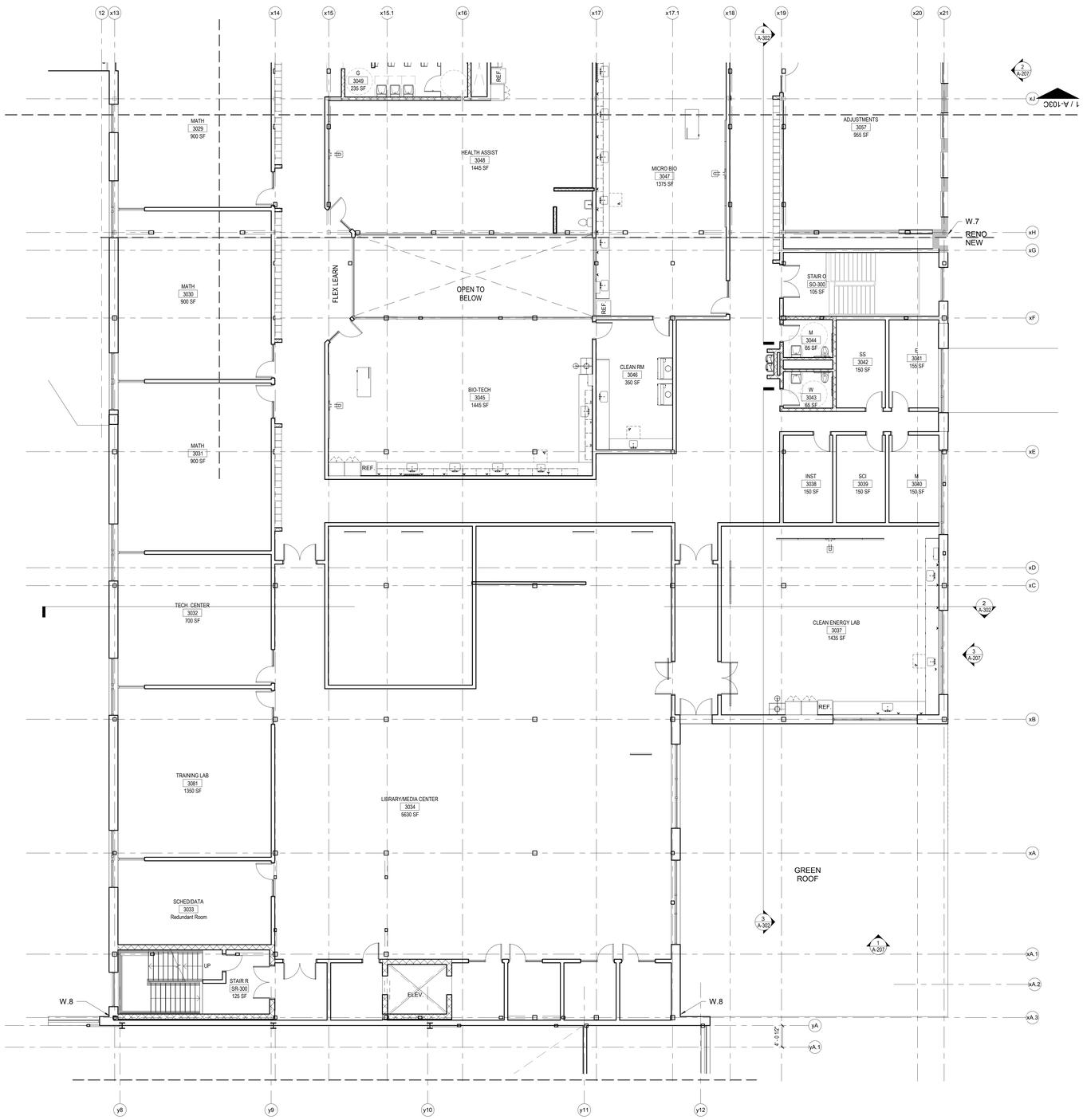
DRAWING TITLE:
THIRD FLOOR FLOOR PLAN - WEST BLDG - PART C

SCALE: As indicated

A-103C

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **THIRD FLOOR - WEST BLDG - PART D**
1/8" = 1'-0"

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
2. ALL ITEMS IN THESE DRAWINGS ARE NEW (N) UNLESS NOTED AS EXISTING (E) OR EXISTING TO REMAIN (ETR).
3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURSECENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS. REPLACE DAMAGED CONCRETE PAN. SEE NARATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
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W.9 PATCH (E) CONCRETE SLAB, SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
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W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS, SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

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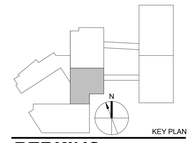

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LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR FLOOR PLAN - WEST BLDG - PART D

SCALE: As indicated

A-103D

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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NOTES - WEST CAMPUS

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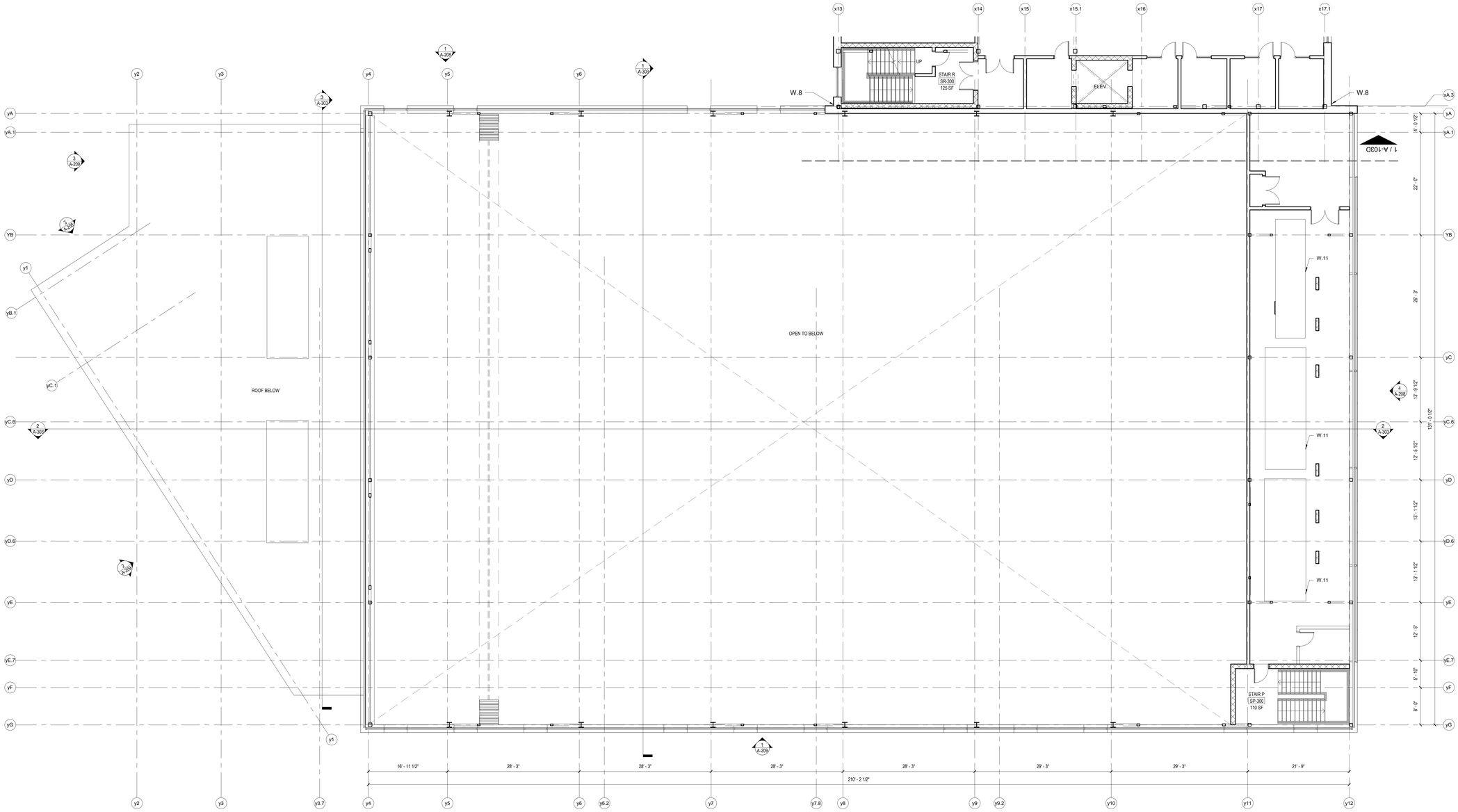
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB



1 **THIRD FLOOR - GYM**
1/8" = 1'-0"

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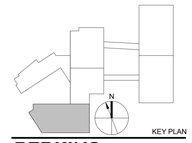
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollaston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR FLOOR PLAN - GYM

SCALE: As indicated

A-103E

SCHEMATIC DESIGN SUBMISSION

02/20/2018

NOTES - WEST CAMPUS

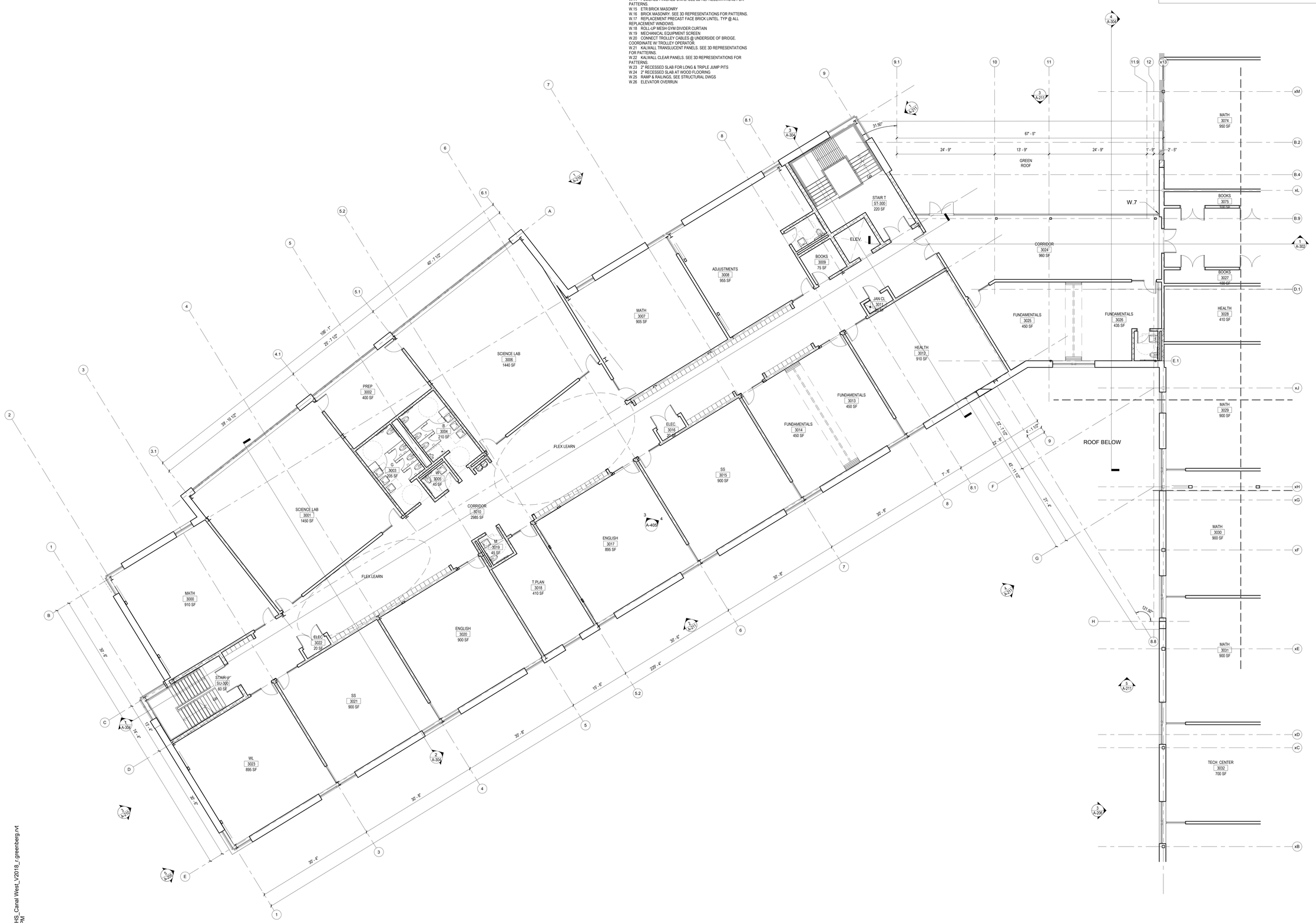
W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS. REPLACE DAMAGED CONCRETE PAN. SEE NARRATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB, SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.17 REPLACEMENT PRECAST FACE BRICK LINTEL. TYP @ ALL REPLACEMENT WINDOWS.
W.18 ROLL-UP MESH GYM DIVIDER CURTAIN
W.19 MECHANICAL EQUIPMENT SCREEN
W.20 CONNECT TROLLEY CABLES @ UNDERSIDE OF BRIDGE. COORDINATE W/ TROLLEY OPERATOR.
W.21 KALWALL TRANSLUCENT PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.22 KALWALL CLEAR PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.23 2" RECESSED SLAB FOR LONG & TRIPLE JUMP PITS
W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS, SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

GENERAL NOTES - WEST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
2. ALL ITEMS IN THESE DRAWINGS ARE NEW (N) UNLESS NOTED AS EXISTING (E) OR EXISTING TO REMAIN (ETR).
3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITIARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURSECENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB



1 **THIRD FLOOR - FRESHMAN ACADEMY**
1/8" = 1'-0"

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SEAL

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50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

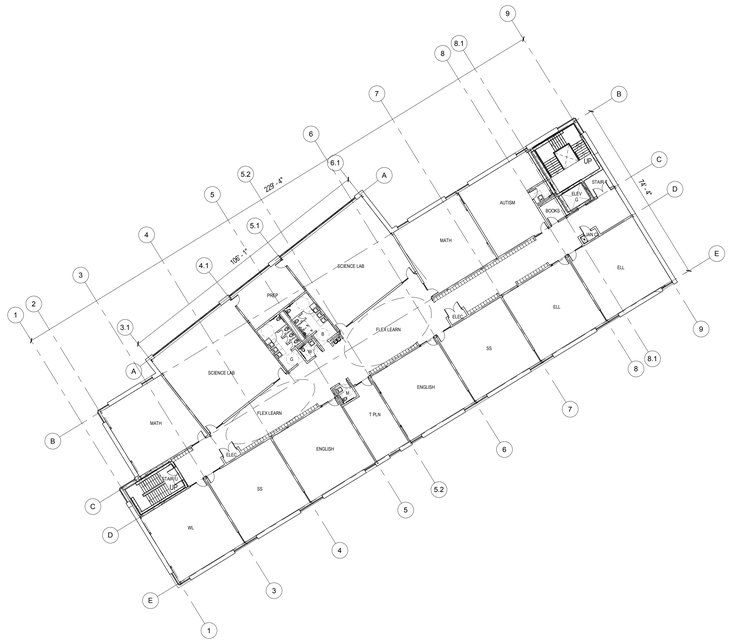
DRAWING TITLE:
THIRD FLOOR FLOOR PLAN - FRESHMAN ACADEMY

SCALE: As indicated

A-103F

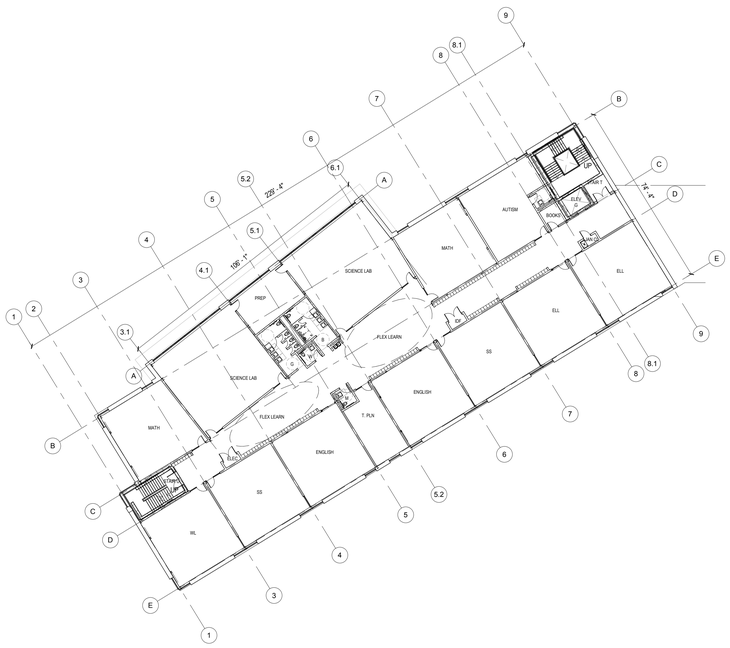
SCHEMATIC DESIGN SUBMISSION

02/20/2018



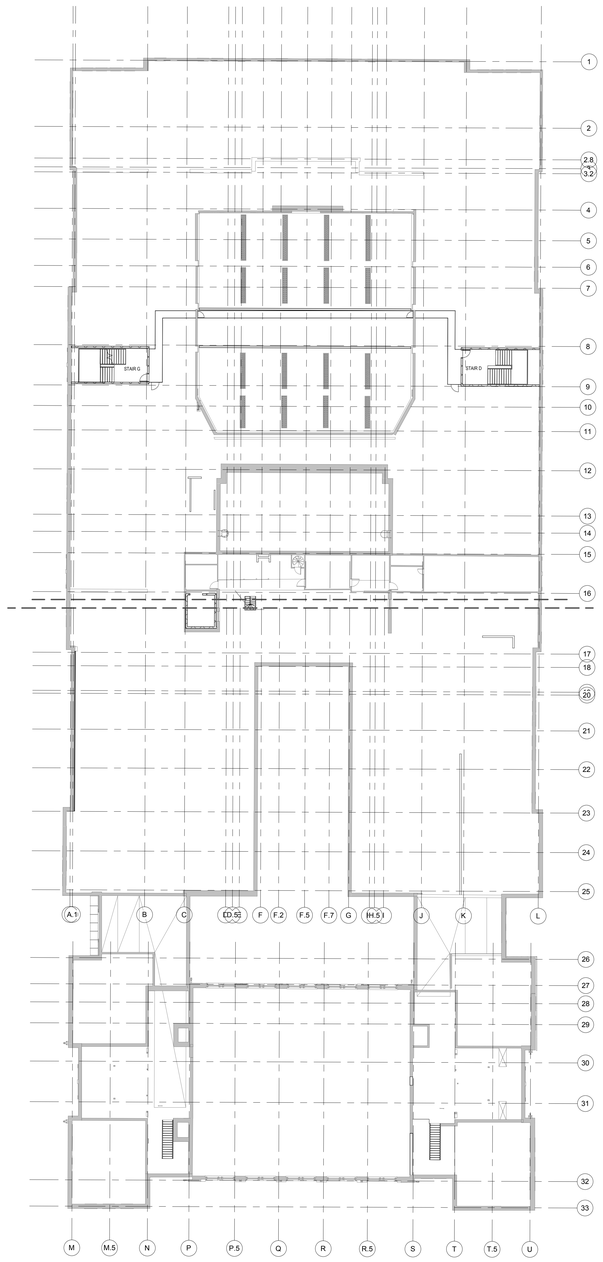
2 FIFTH FLOOR - OVERALL

3/64" = 1'-0"



1 FOURTH FLOOR - OVERALL

3/64" = 1'-0"



3 ATTIC FLOOR

3/64" = 1'-0"

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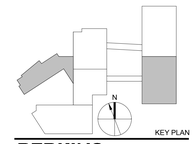
NO.	DATE	ISSUE

SEAL



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PROJECT TITLE:

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50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

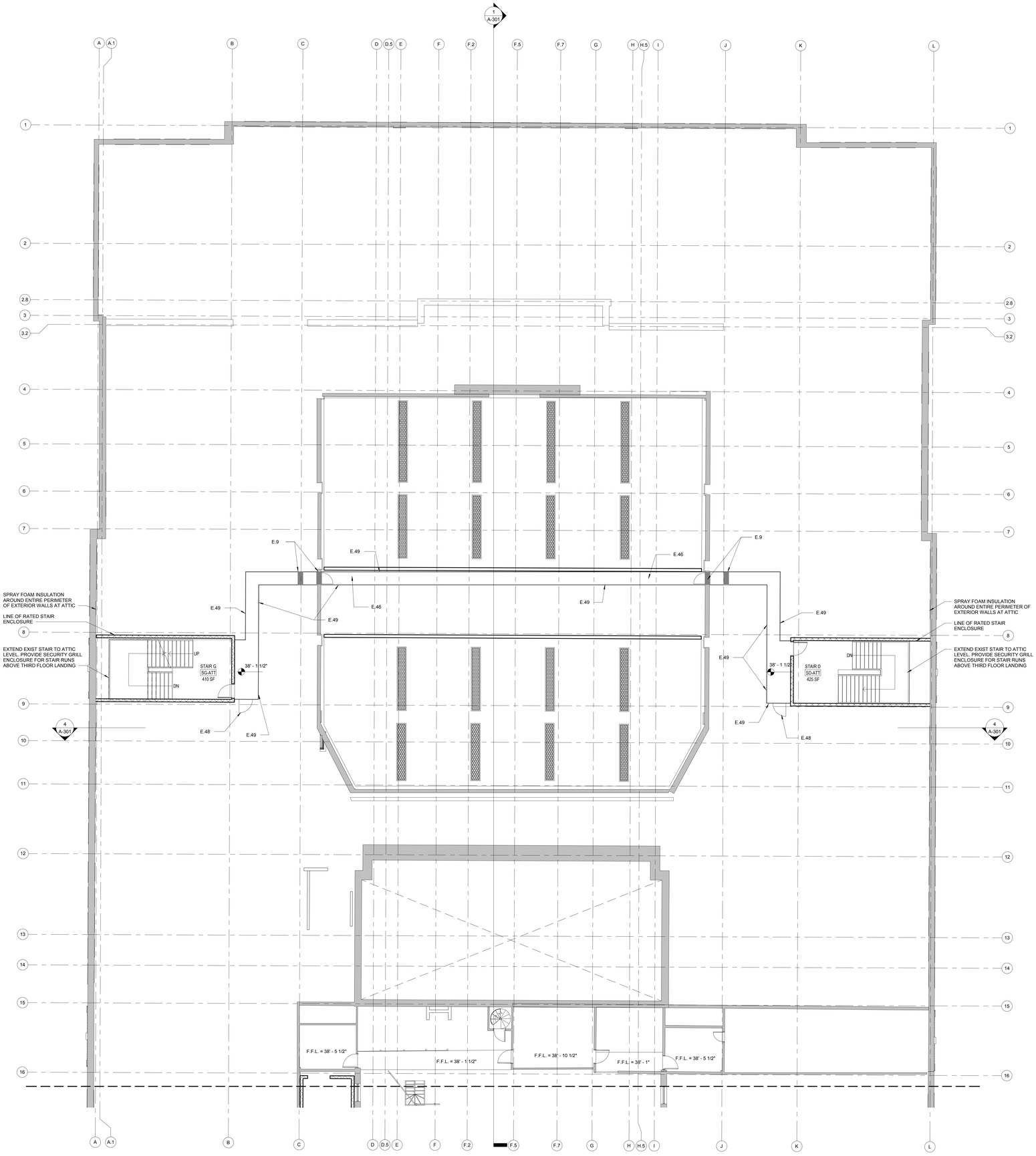
OVERALL ATTIC, FOURTH & FIFTH FLOOR PLANS

SCALE: 3/64" = 1'-0"

A-104

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **ATTIC - EAST BLDG - PART A**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

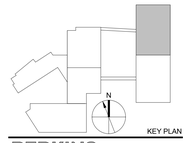
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL. REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK. 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF, AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



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PROJECT No: 67150

DRAWING TITLE:

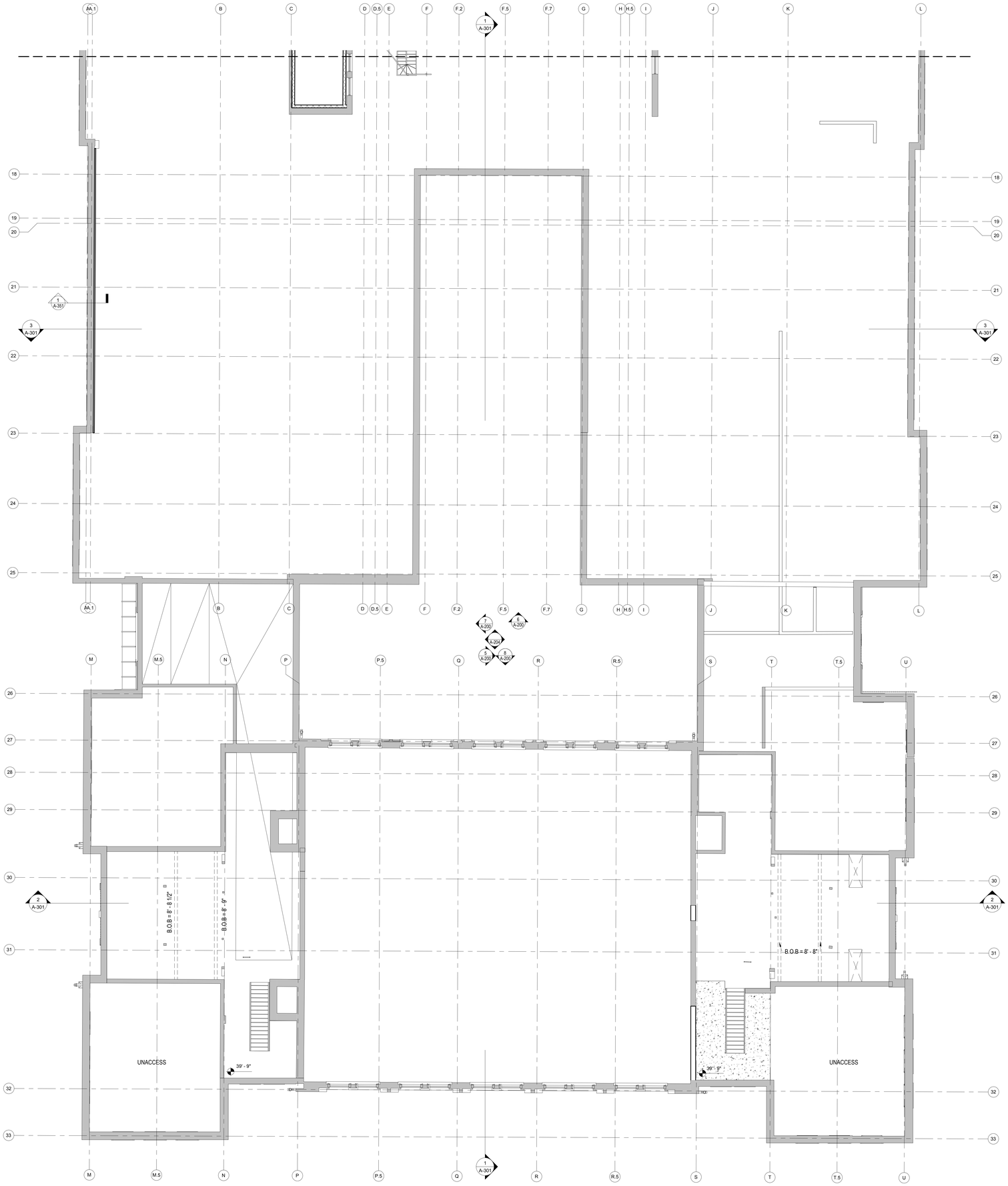
ATTIC FLOOR FLOOR PLAN - EAST BLDG - PART A

SCALE: As indicated

A-104A

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **ATTIC - EAST BLDG - PART B**

1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

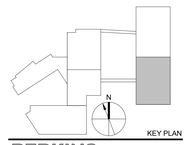
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FILL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING.
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS.
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR. (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL. REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED; MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING.
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF: AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE

SEAL



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375 Merrimack Street, Lowell, MA 08152

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Construction Manager Address

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2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
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Electrical:
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Lighting Consultant:
Lighting Consultant Name
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Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

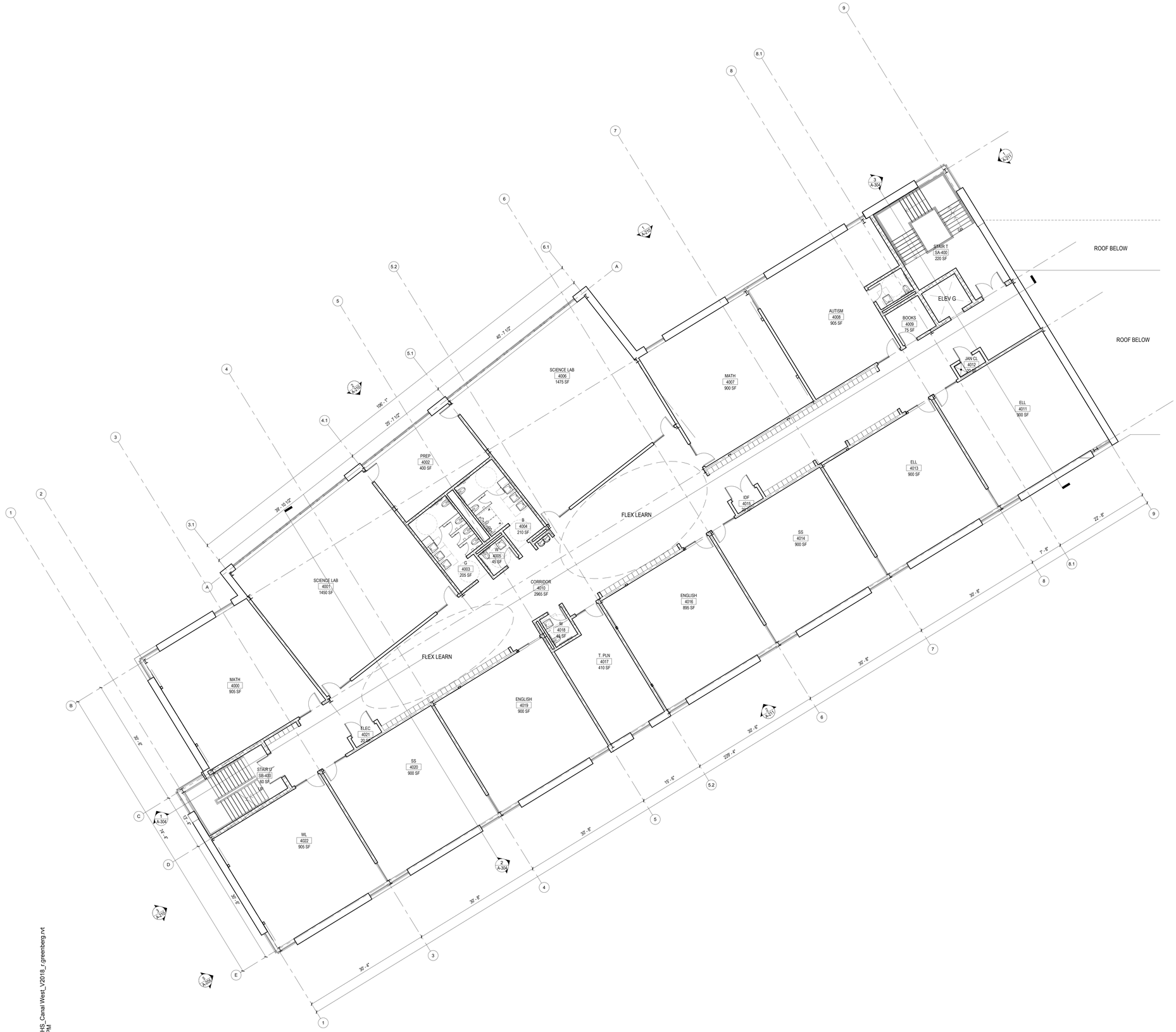
ATTIC FLOOR FLOOR PLAN - EAST BLDG - PART B

SCALE: As indicated

A-104B

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 FOURTH FLOOR - FRESHMAN ACADEMY

1/8" = 1'-0"

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

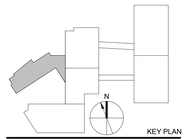
1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
2. ALL ITEMS IN THESE DRAWINGS ARE NEW (N) UNLESS NOTED AS EXISTING (E) OR EXISTING TO REMAIN (ETR).
3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURSECENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS, REPLACE DAMAGED CONCRETE PAN. SEE NARATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB, SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0 AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.17 REPLACEMENT PRECAST FACE BRICK LINTEL. TYP @ ALL REPLACEMENT WINDOWS.
W.18 ROLL-UP MESH GYM DIVIDER CURTAIN
W.19 MECHANICAL EQUIPMENT SCREEN
W.20 CONNECT TROLLEY CABLES @ UNDERSIDE OF BRIDGE. COORDINATE W/ TROLLEY OPERATOR.
W.21 KALWALL TRANSLUCENT PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.22 KALWALL CLEAR PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.23 2" RECESSED SLAB FOR LONG & TRIPLE JUMP PITS
W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS. SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
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Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
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Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
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150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
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Electrical:
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Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

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181 West Main Street Georgetown, MA 01833

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Security Consultant Address

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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FOURTH FLOOR FLOOR PLAN - FRESHMAN ACADEMY

SCALE: As indicated

A-104F

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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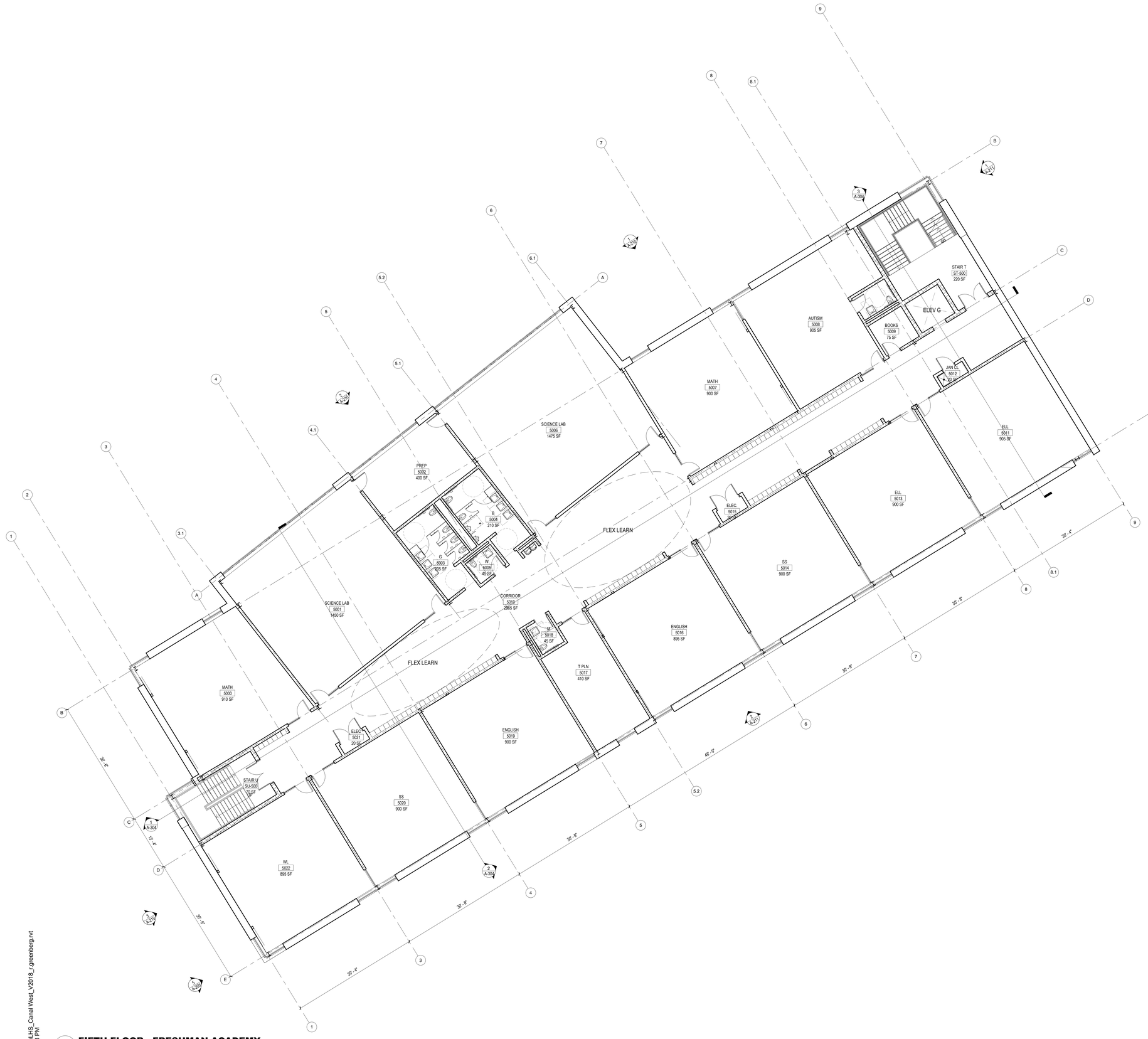

1 **FIFTH FLOOR - FRESHMAN ACADEMY**
1/8" = 1'-0"

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LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB

GENERAL NOTES - WEST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
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3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURISCENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS, REPLACE DAMAGED CONCRETE PAN. SEE NARRATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB, SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
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W.26 ELEVATOR OVERRUN

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

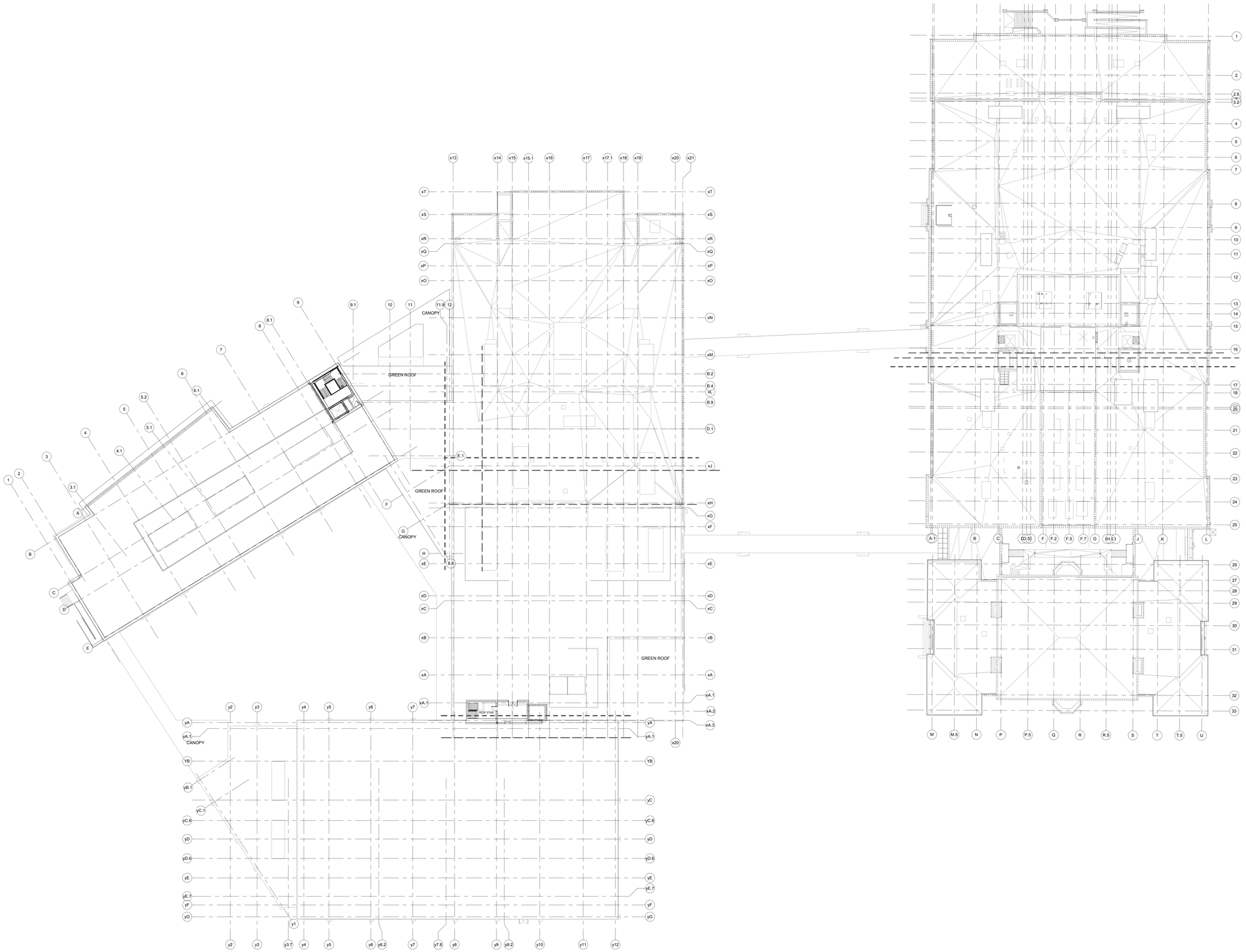
DRAWING TITLE:
FIFTH FLOOR FLOOR PLAN - FRESHMAN ACADEMY

SCALE: As indicated

A-105F

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **ROOF LEVEL - OVERALL**
3/64" = 1'-0"

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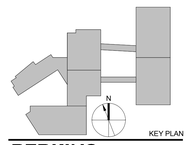

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

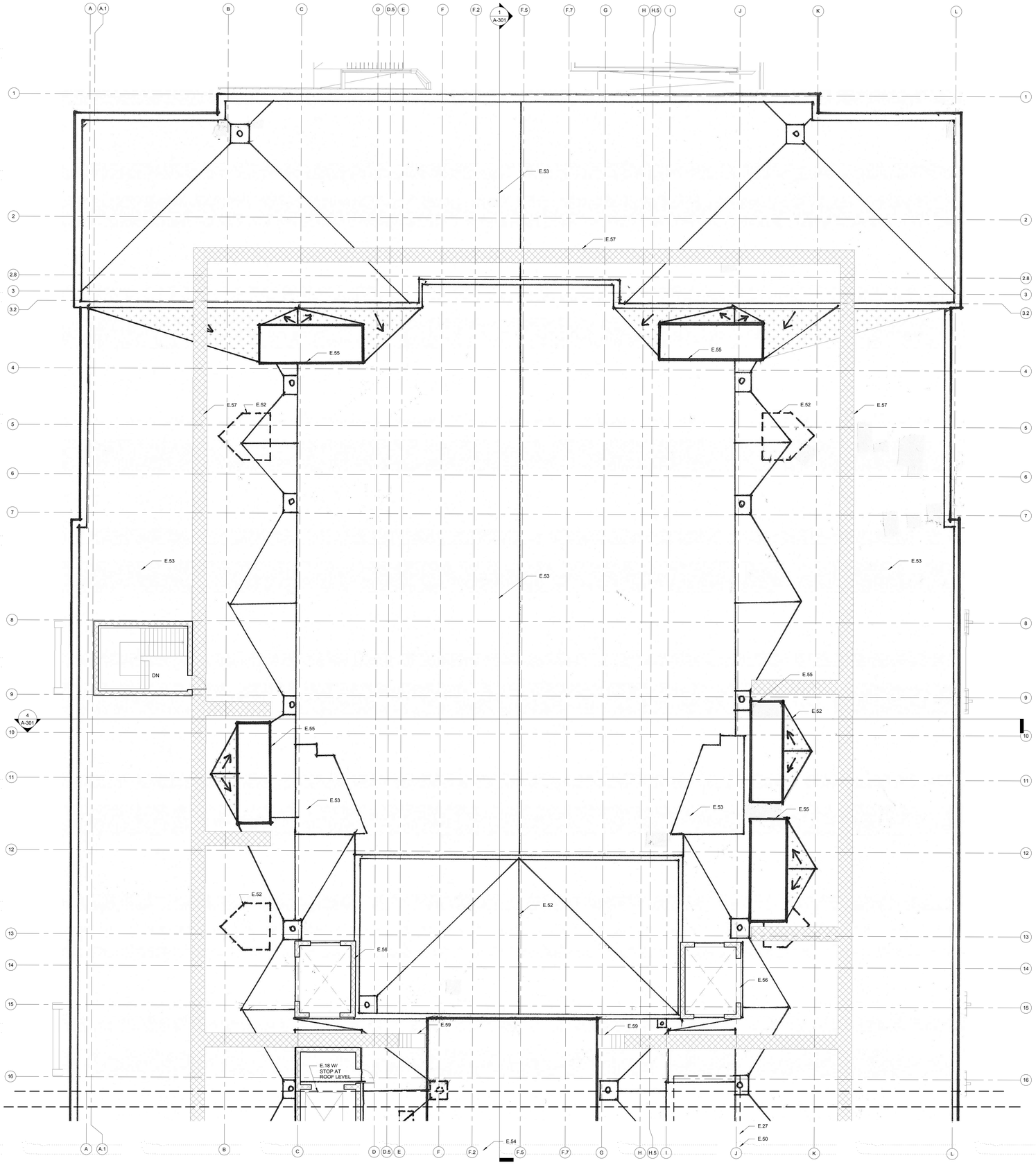
DRAWING TITLE:
OVERALL ROOF PLAN

SCALE: 3/64" = 1'-0"

A-106

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **ROOF PLAN - EAST BLDG - PART A**
1/8" = 1'-0"

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSSETS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL. REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
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E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
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E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
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E.48 MTL MESH SECURITY DOOR
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E.50 NEW ROOF, AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
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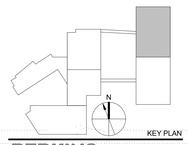
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

ROOF PLAN - EAST BLDG - PART A

SCALE: As indicated

A-106A

SCHEMATIC DESIGN SUBMISSION

2/20/2018

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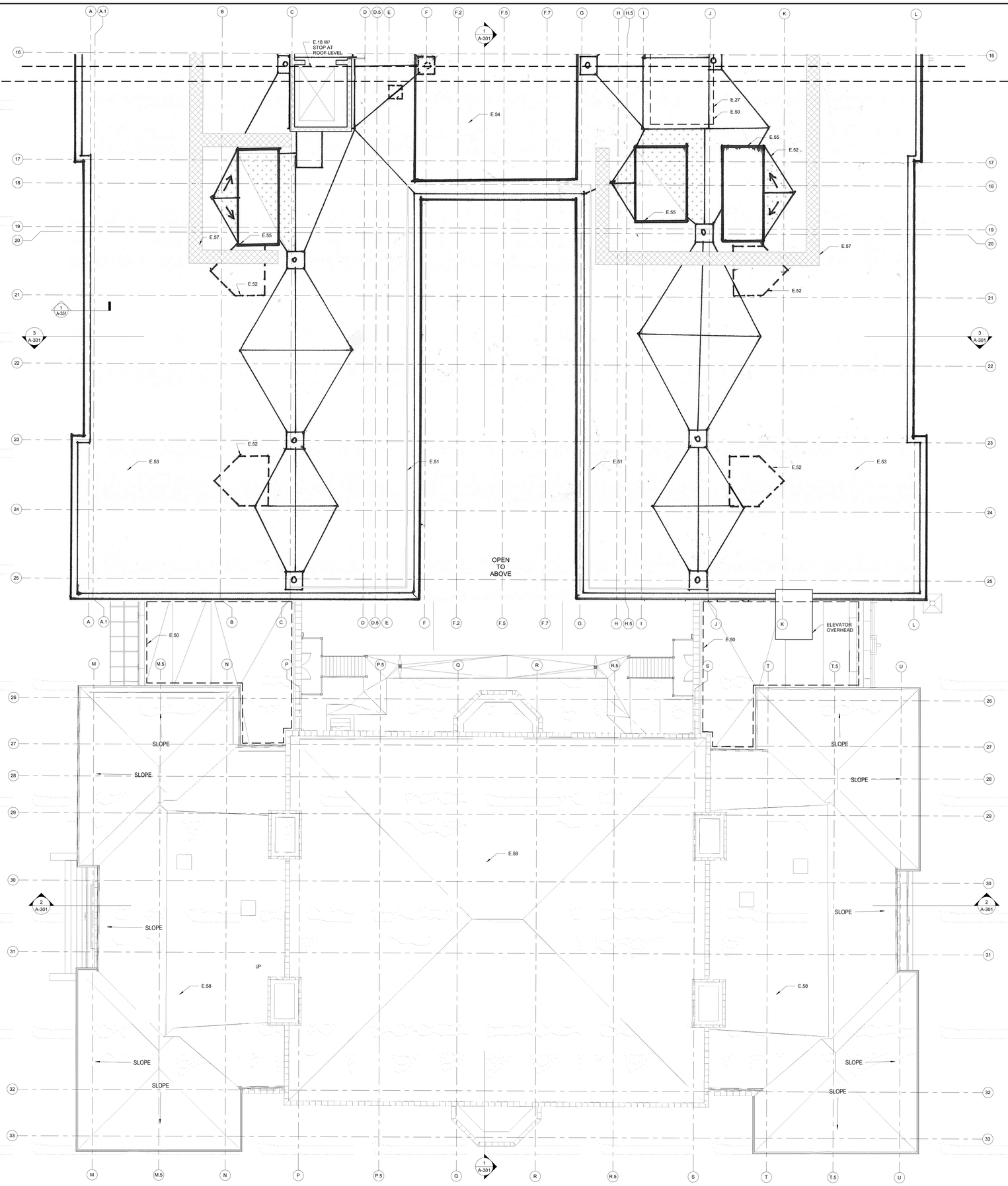

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1/8" = 1'-0"

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
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2150 Washington Street Newton, MA 02462

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Electrical:
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Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF PLAN - EAST BLDG - PART B

SCALE: As indicated

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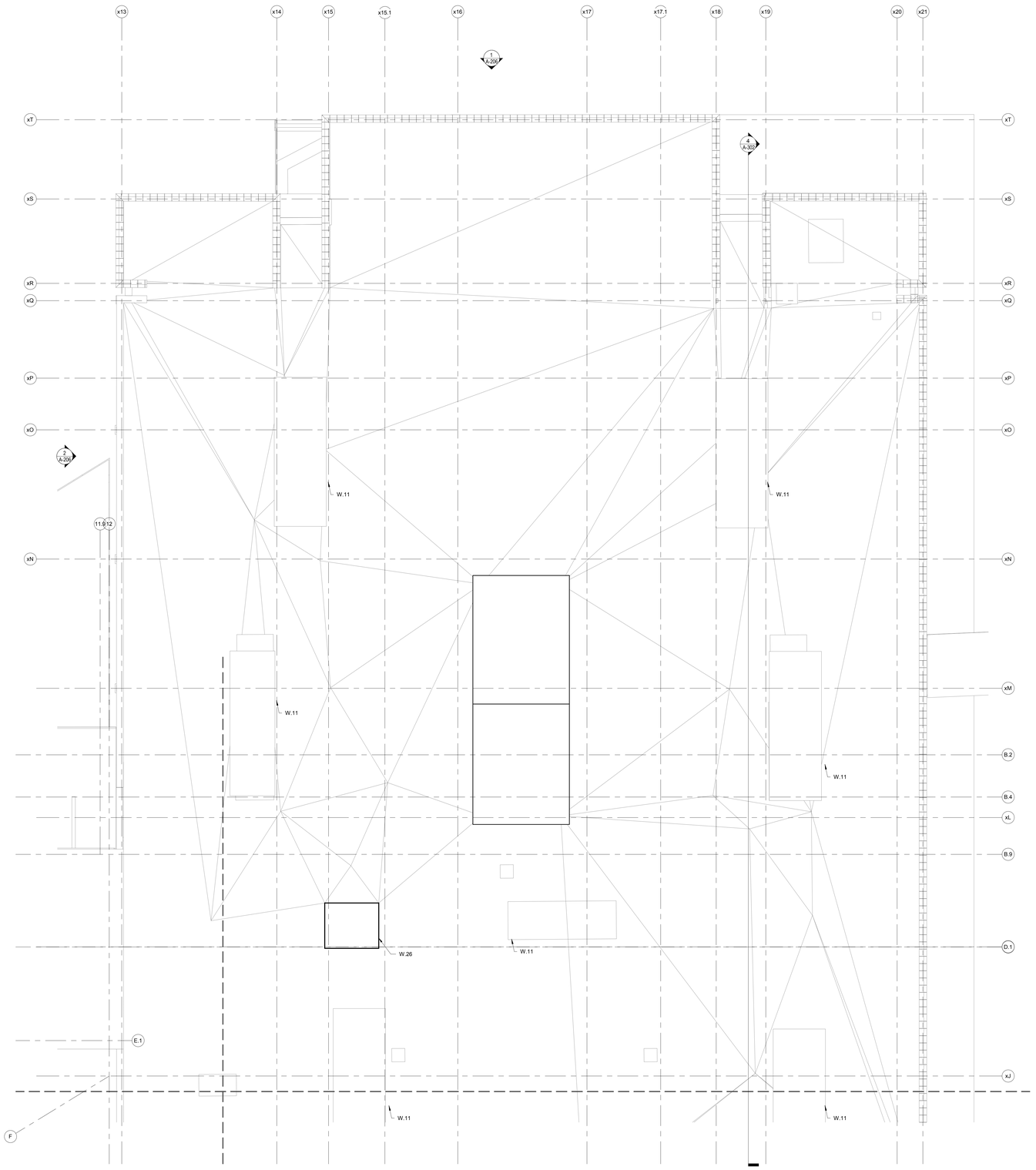

GENERAL ROOF NOTES - WEST CAMPUS

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W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS, SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

1 **ROOF PLAN - WEST BLDG - PART C**
1/8" = 1'-0"

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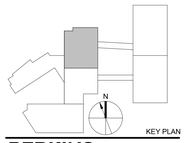

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF PLAN - WEST BLDG - PART C

SCALE: As indicated

A-106C

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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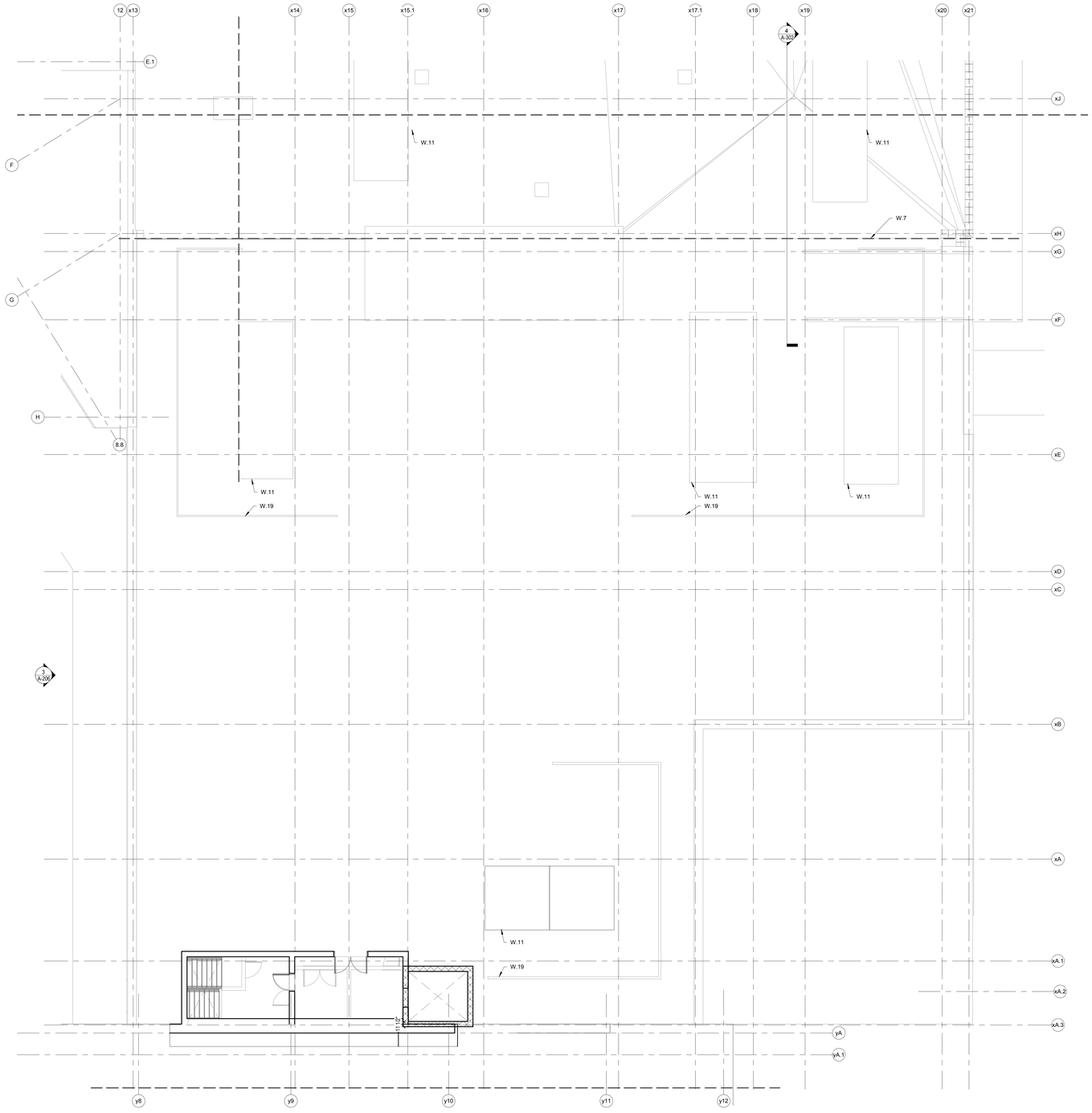
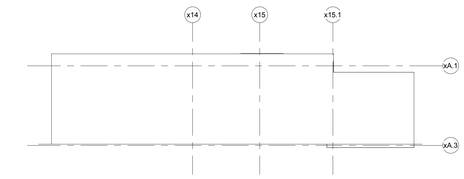


1 **ROOF PLAN - WEST BLDG - PART D**
1/8" = 1'-0"



2 **WEST PENTHOUSE ROOF**
1/8" = 1'-0"

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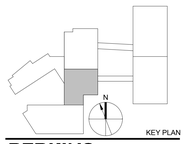

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PROJECT TITLE:
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50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF PLAN - WEST BLDG - PART D

SCALE: As indicated

A-106D

SCHEMATIC DESIGN SUBMISSION

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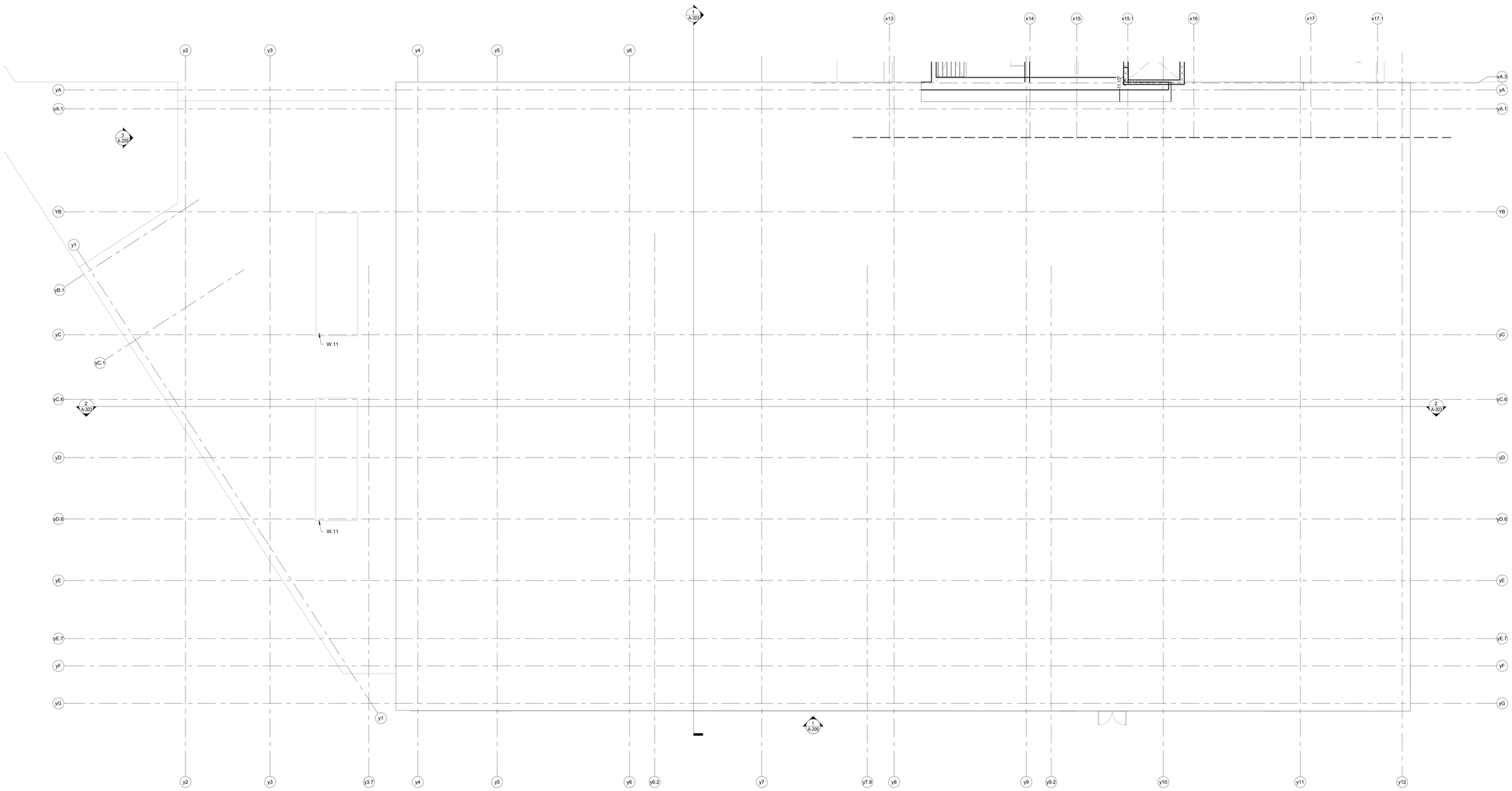

1 **ROOF PLAN - GYM**
1/8" = 1'-0"

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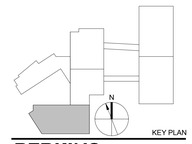

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LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF PLAN - GYM

SCALE: As indicated

A-106E

SCHEMATIC DESIGN SUBMISSION

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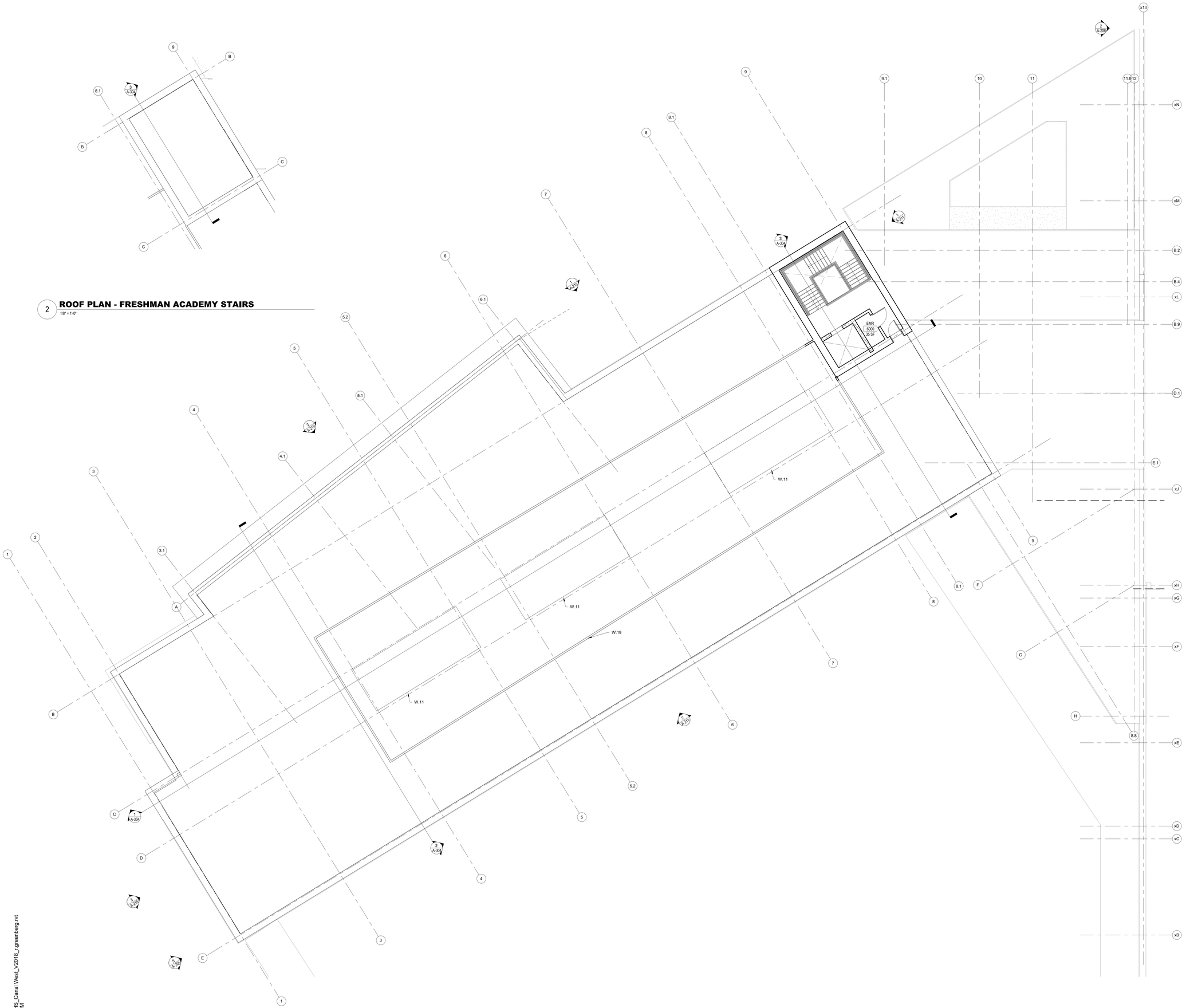

2 ROOF PLAN - FRESHMAN ACADEMY STAIRS
1/8" = 1'-0"

1 ROOF PLAN - FRESHMAN ACADEMY
1/8" = 1'-0"

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LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ROOF PLAN - FRESHMAN ACADEMY

SCALE: As indicated

A-106F

SCHEMATIC DESIGN SUBMISSION

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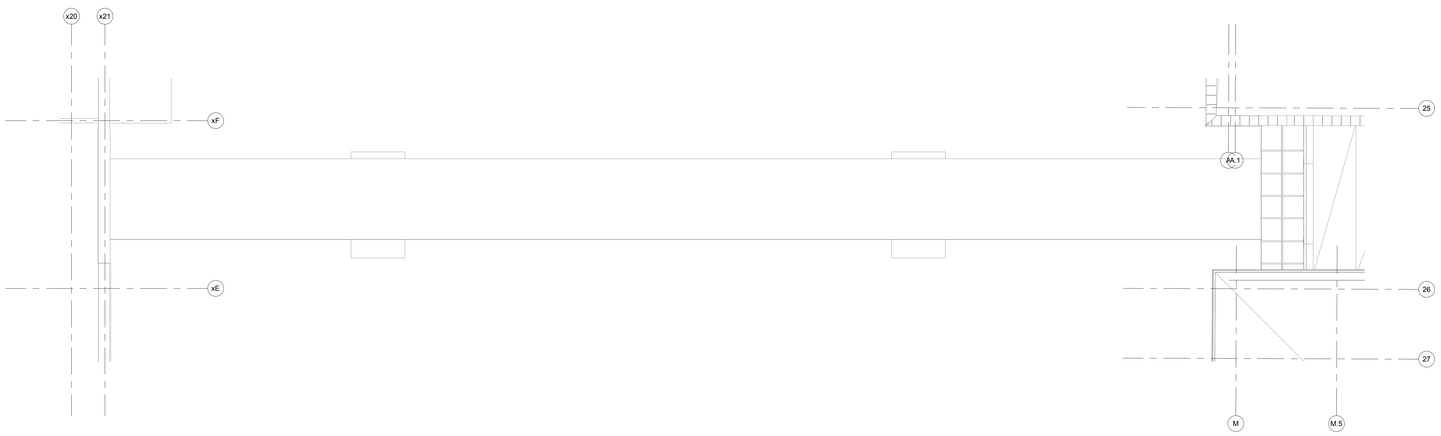
2 **ROOF LEVEL - NORTH BRIDGE**
1/8" = 1'-0"



1 **ROOF LEVEL - SOUTH BRIDGE**
1/8" = 1'-0"

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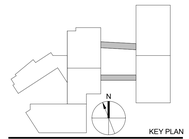

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Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

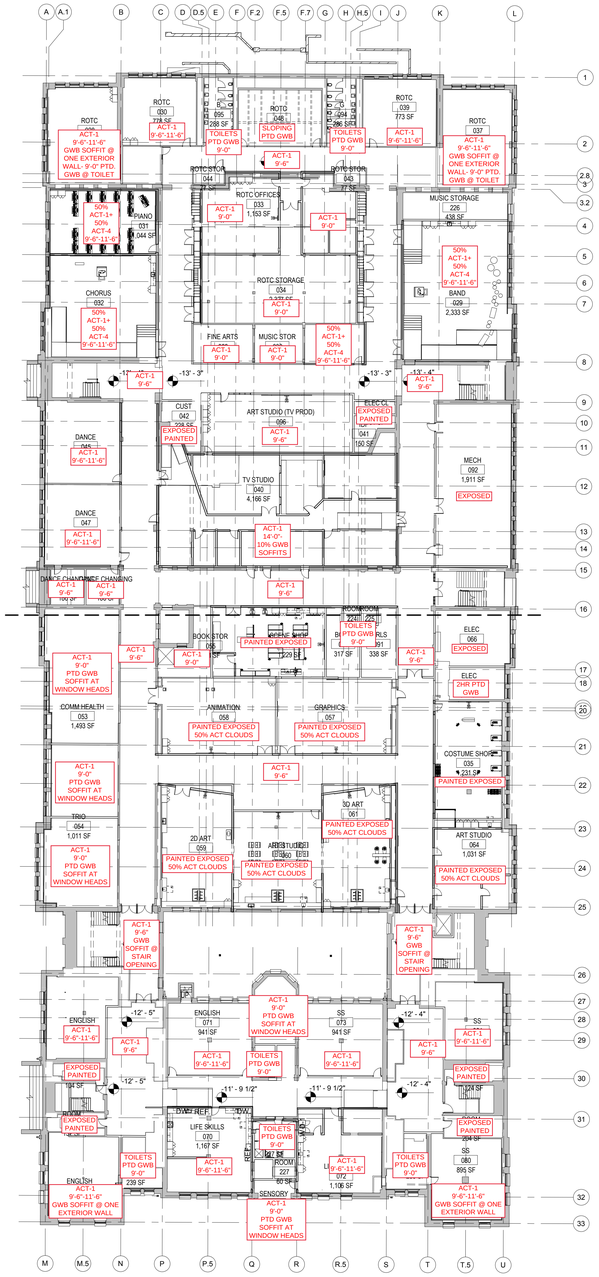
DRAWING TITLE:
ROOF PLAN - BRIDGES

SCALE: As indicated

A-106G

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 BASEMENT FLOOR PLAN

3/64" = 1'-0"

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NO.	DATE	ISSUE

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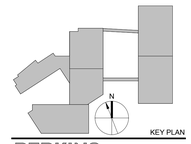


KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL - EAST CAMPUS

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

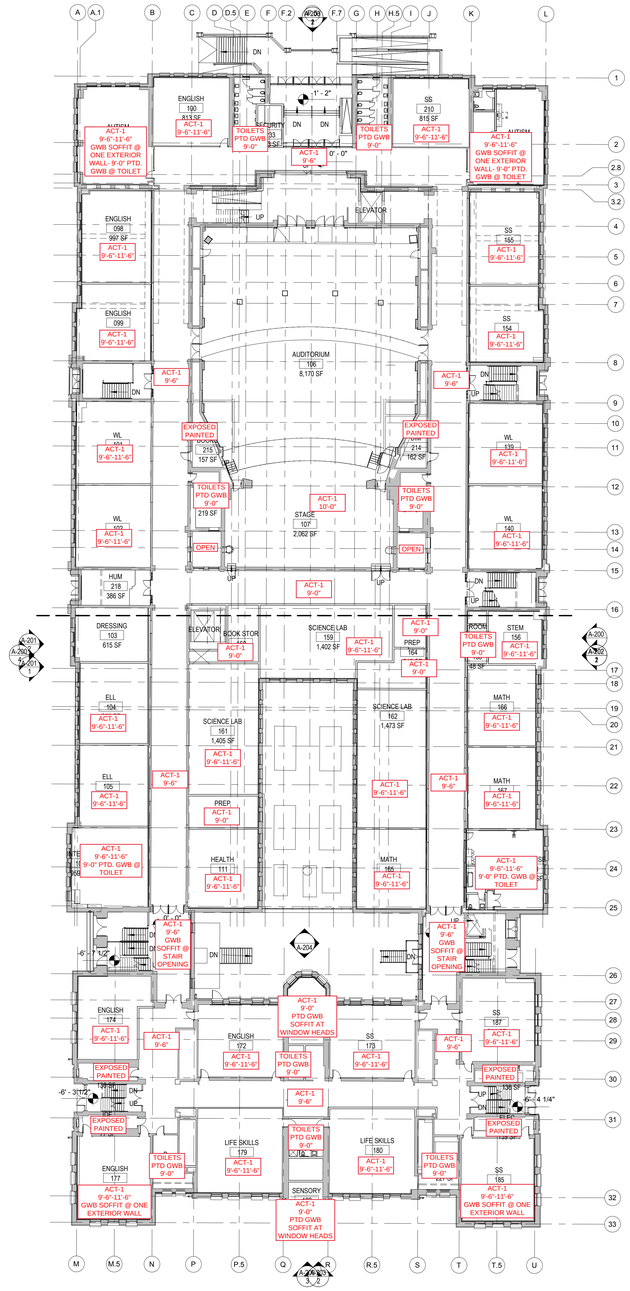
BASEMENT FLOOR PLAN RCP - EAST

SCALE: 3/64" = 1'-0"

A-150E

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



1 **FIRST FLOOR PLAN**
3/64" = 1'-0"

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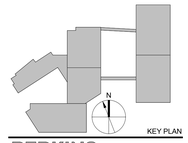
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
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Construction Manager Address

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Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

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Traverse Landscape Architects
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370 Faunce Corner Road Dartmouth, MA 02747

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370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL - EAST CAMPUS

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

FIRST FLOOR PLAN

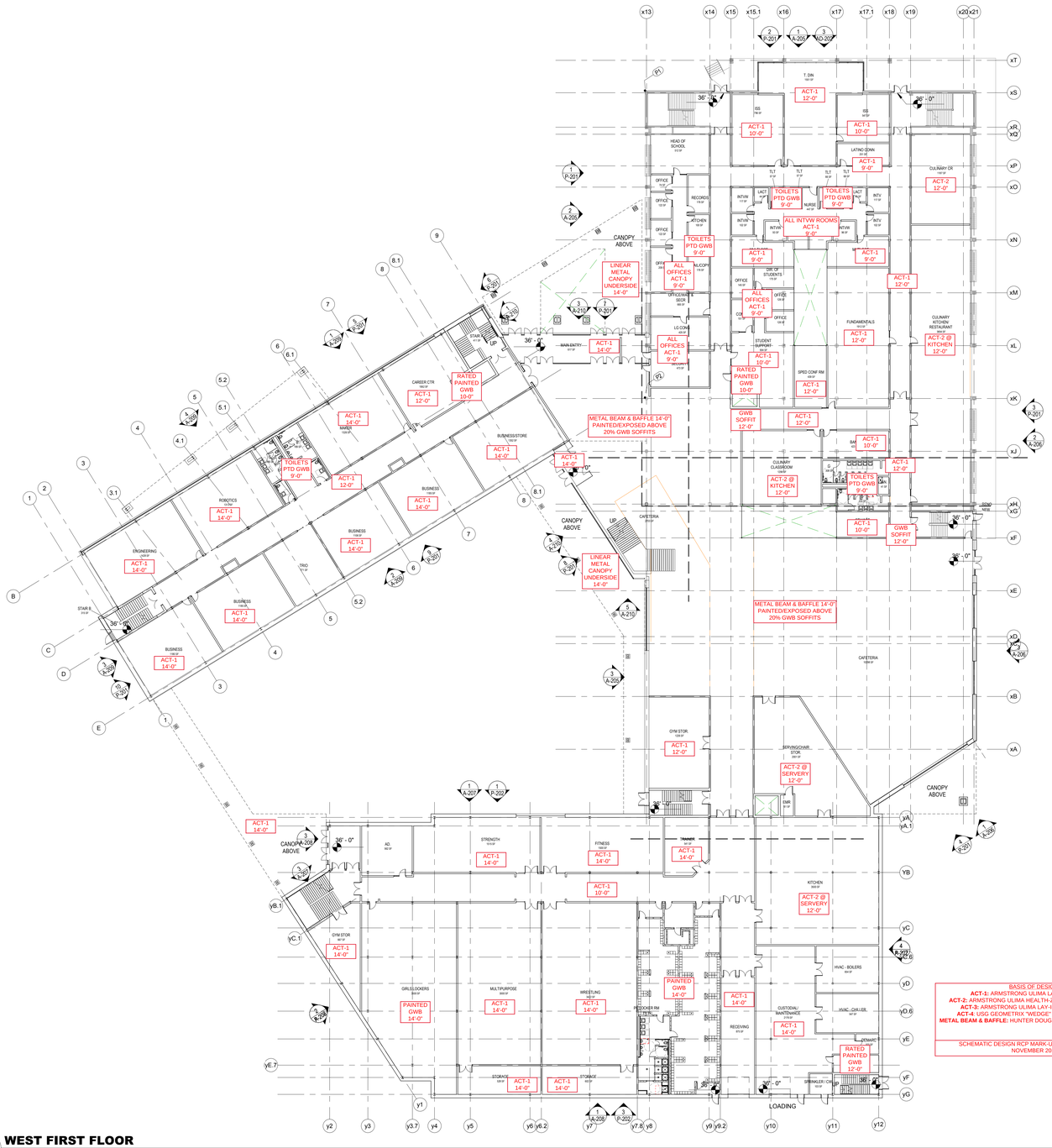
RCP - EAST

SCALE: 3/64" = 1'-0"

A-151E

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



1 **WEST FIRST FLOOR**
3/64" = 1'-0"

BASIS OF DESIGN/ LEGEND
ACT-1: ARMSTRONG ULIMA LAY-IN TEGULAR (1915) 2X4
ACT-2: ARMSTRONG ULIMA HEALTH-ZONE LAY-IN (1938) TEGULAR 2X4
ACT-3: ARMSTRONG ULIMA LAY-IN TEGULAR PLANK (1998) 1X6
ACT-4: USG GEOMETRIX "WEDGE" LAY IN 2x2 PANEL- 3 1/4" DROP
METAL BEAM & BAFFLE: HUNTER DOUGLAS TAVOLA BEAM & BAFFLE SERIES

SCHEMATIC DESIGN RCP MARK-UPS- LOWELL HIGH WEST SIDE NOVEMBER 20,2018. DMG

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NO. DATE ISSUE

SEAL

KEY PLAN

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20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

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VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL - WEST CAMPUS

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

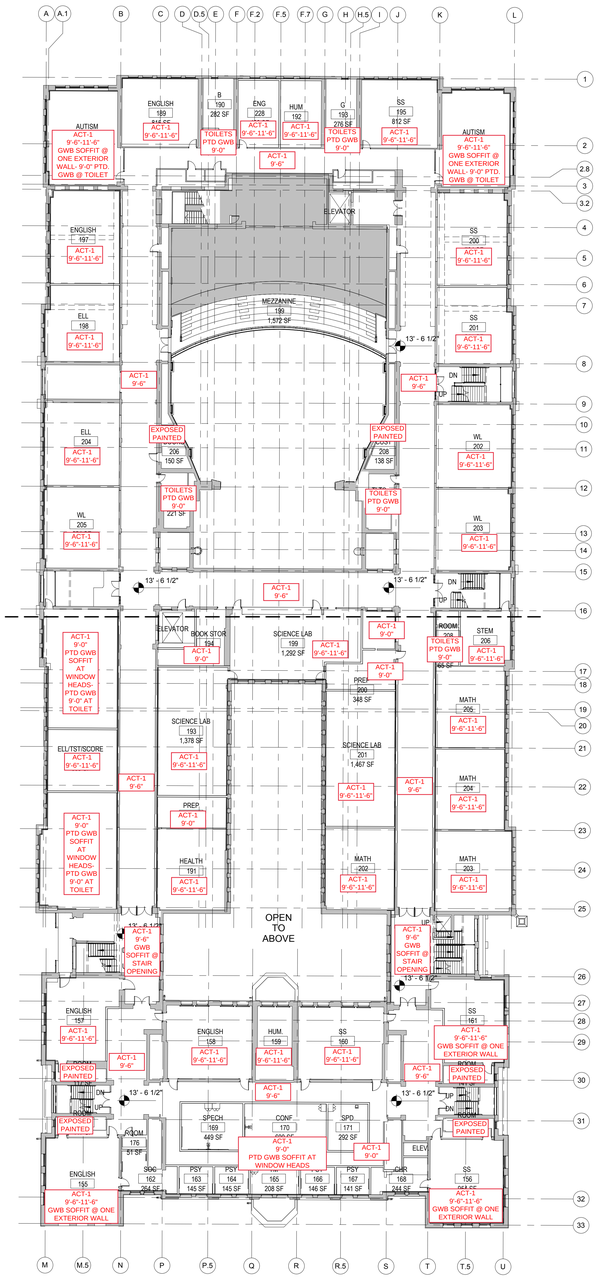
DRAWING TITLE:
FIRST FLOOR PLAN
RCP - WEST

SCALE: 3/64" = 1'-0"

A-151W

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 **SECOND FLOOR PLAN**
3/64" = 1'-0"

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NO.	DATE	ISSUE

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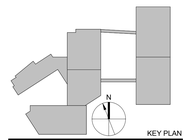

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

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Construction Manager Address

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2 Center Plaza Suite 430 Boston, MA 02108

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Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
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2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL - EAST CAMPUS

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

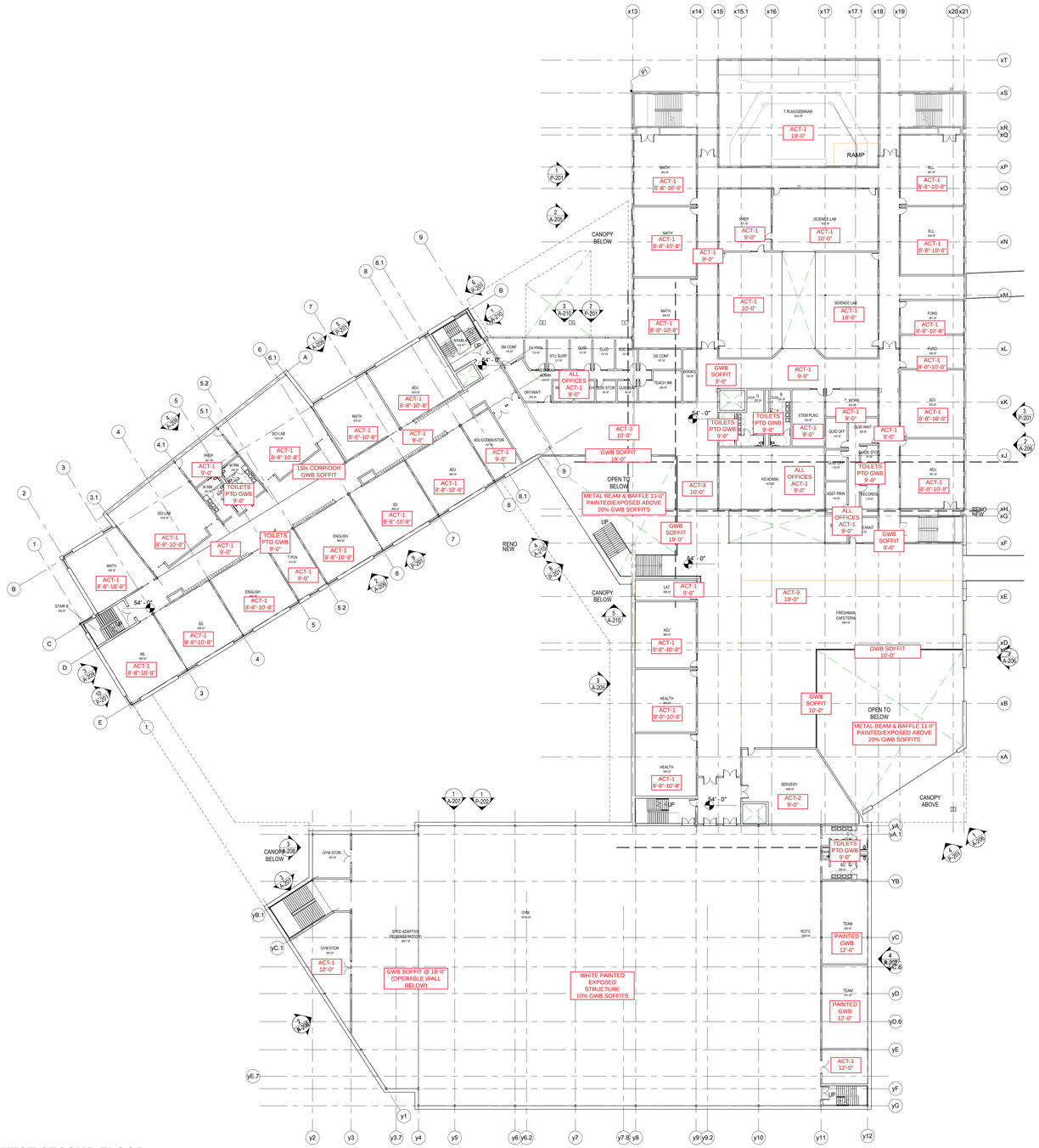
SECOND FLOOR PLAN RCP - EAST

SCALE: 3/64" = 1'-0"

A-152E

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019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x14
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x18
x19
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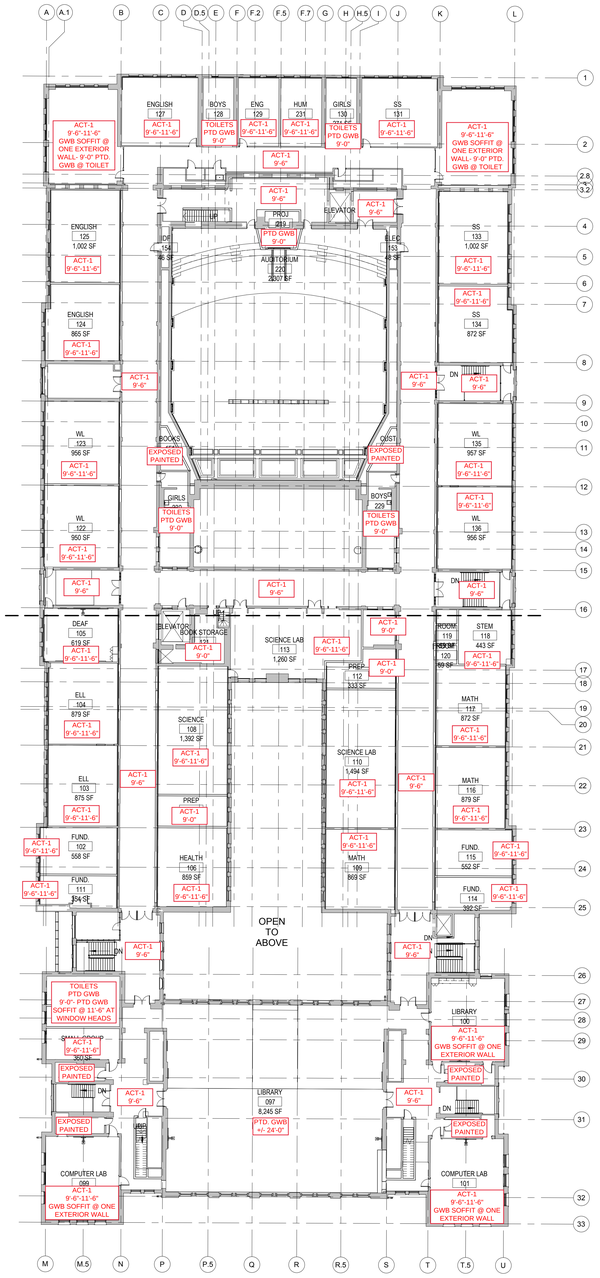
xP
xO
xN
xM
xL
xK
xJ
xH
xG
xF
xE
xD
xB
xA
yA
yA.1
yB
yB.1
yC
yC.1
yD
yD.6
yE
yE.7
yF
yG
y1
y2
y3
y3.7
y4
y5
y6
y6.2
y7
y7.8
y8
y9
y9.2
y10
y11
y12
1
2
3
4
5
6
6.1
7
8
8.1
9
A
B
C
D
E
5.2
5.1
4.1
3.1
RAMP
CANOPY BELOW
CANOPY ABOVE
OPEN TO BELOW
UP
RENO NEW
ACT-1 10'-0"
ACT-1 9'-0"
ACT-1 8'-8"-10'-8"
ACT-1 8'-8"-10'-0"
ACT-1 12'-0"
ACT-2 9'-0"
ACT-3 10'-0"
GWB SOFFIT 10'-0"
GWB SOFFIT 9'-0"
ALL OFFICES ACT-1 9'-0"
TOILETS PTD GWB 9'-0"
15% CORRIDOR GWB SOFFIT
METAL BEAM & BAFFLE 11'-0" PAINTED/EXPOSED ABOVE 20% GWB SOFFITS
WHITE PAINTED EXPOSED STRUCTURE 10% GWB SOFFITS
GWB SOFFIT @ 18'-0" (OPERABLE WALL BELOW)
PAINTED GWB 12'-0"
54' - 0"
T.PLNG/SEMINAR
MATH
PREP
SCIENCE LAB
ELL
FUND
SCIENCE LAB
SCIENCE LAB
MATH
MATH
SS CONF
TEACH RM
STEM PLNG
T_WORK
ADJ
ADJ
ADJ



1 **THIRD FLOOR PLAN**
3/64" = 1'-0"

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NO.	DATE	ISSUE

SEAL

N

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL - EAST CAMPUS

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

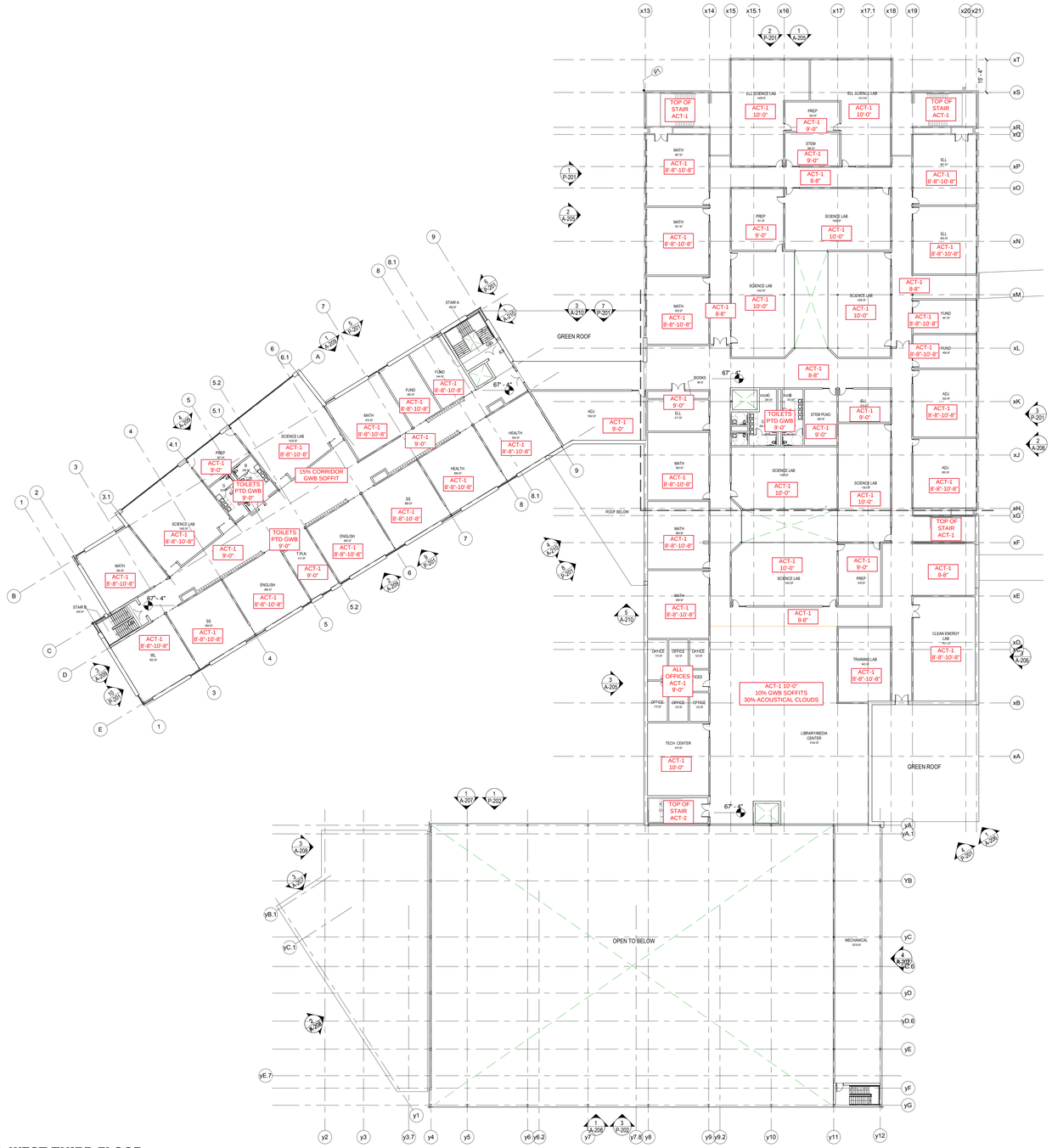
DRAWING TITLE:
THIRD FLOOR PLAN
RCP - EAST

SCALE: 3/64" = 1'-0"

A-153E

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



1 **WEST THIRD FLOOR**
3/64" = 1'-0"

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL - WEST CAMPUS

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

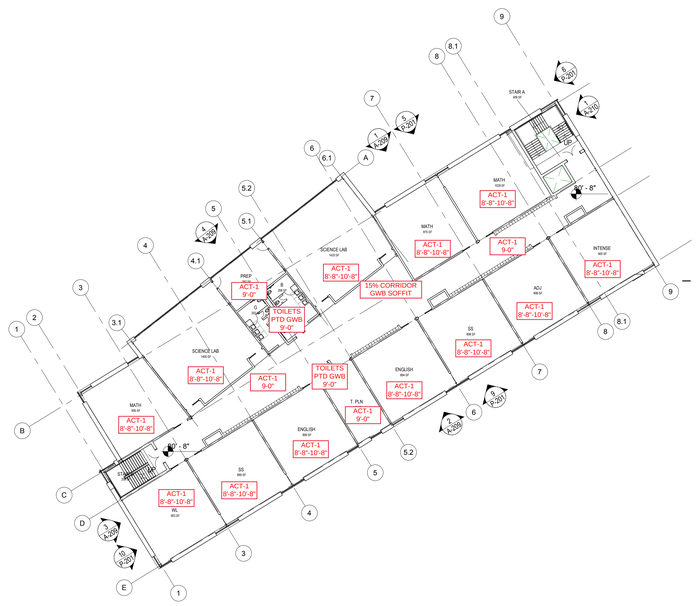
DRAWING TITLE:
THIRD FLOOR PLAN
RCP - WEST

SCALE: 3/64" = 1'-0"

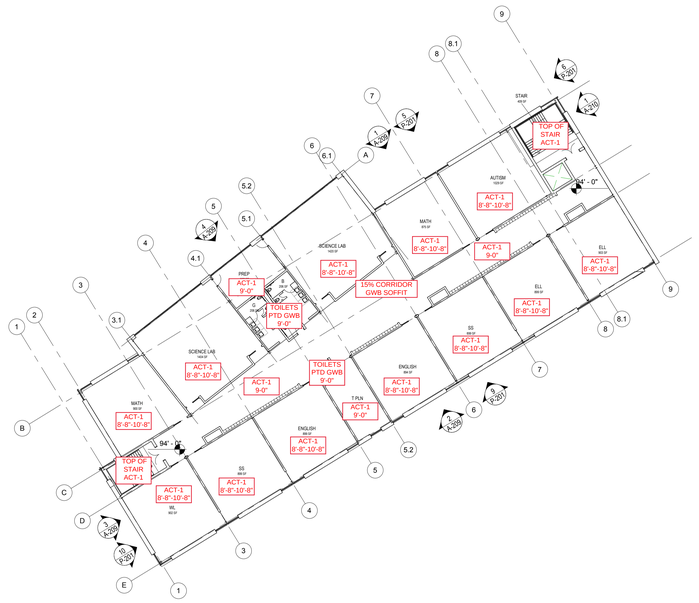
A-153W

SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 **WEST FOURTH FLOOR**
3/64" = 1'-0"



2 **WEST FIFTH FLOOR**
3/64" = 1'-0"

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NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

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161 West Main Street Georgetown, MA 01833

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Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL - WEST CAMPUS

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

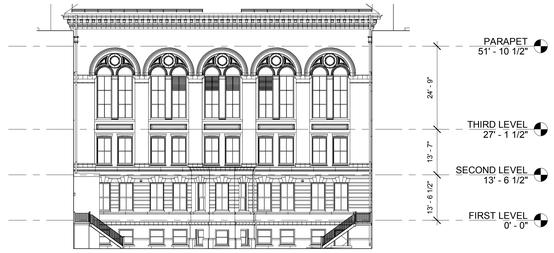
DRAWING TITLE:
FOURTH & FIFTH FLOOR PLANS
RCP - WEST

SCALE: 3/64" = 1'-0"

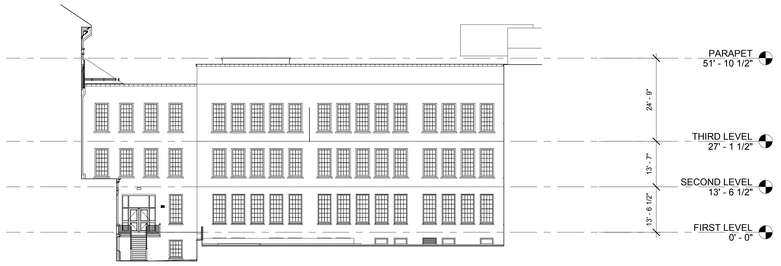
A-154W

SCHEMATIC DESIGN SUBMISSION

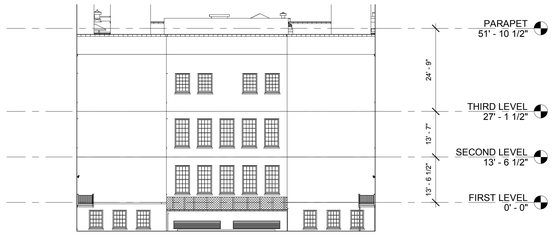
2/20/2019



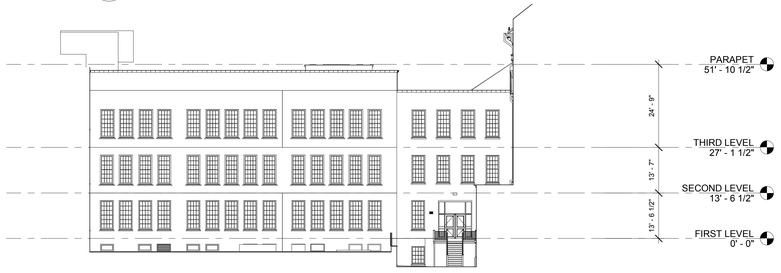
8 **SOUTH ELEVATION - EAST BLDG - COURTYARD**
1/16" = 1'-0"



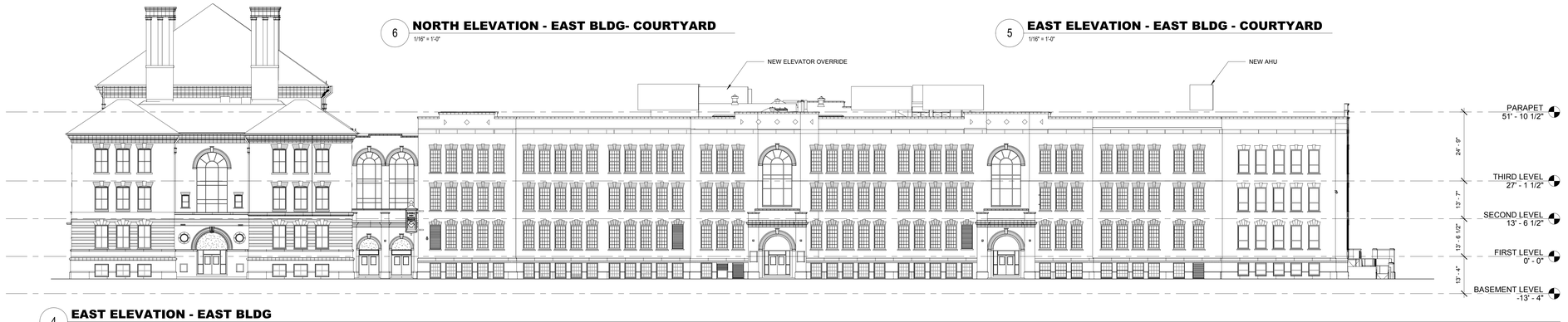
7 **WEST ELEVATION - EAST BLDG - COURTYARD**
1/16" = 1'-0"



6 **NORTH ELEVATION - EAST BLDG- COURTYARD**
1/16" = 1'-0"



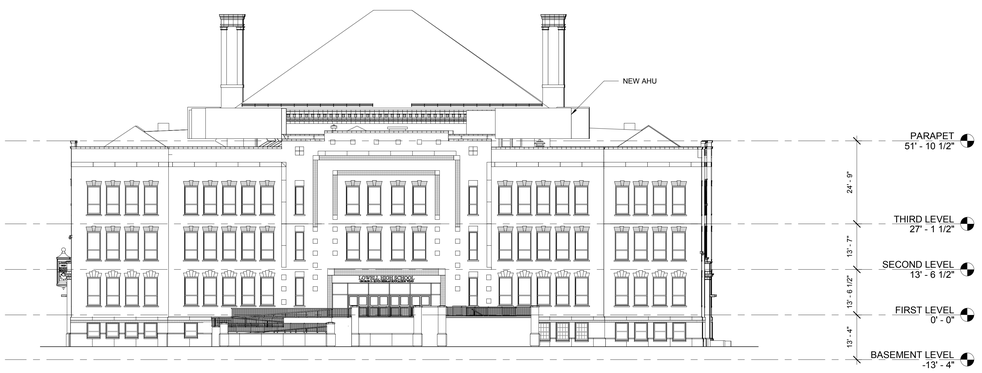
5 **EAST ELEVATION - EAST BLDG - COURTYARD**
1/16" = 1'-0"



4 **EAST ELEVATION - EAST BLDG**
1/16" = 1'-0"



3 **SOUTH ELEVATION - EAST BLDG**
1/16" = 1'-0"



2 **NORTH ELEVATION - EAST BLDG**
1/16" = 1'-0"



1 **WEST ELEVATION - OVERALL**
1/16" = 1'-0"

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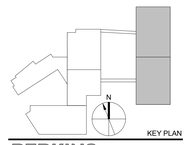
NO.	DATE	ISSUE

SEAL



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2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

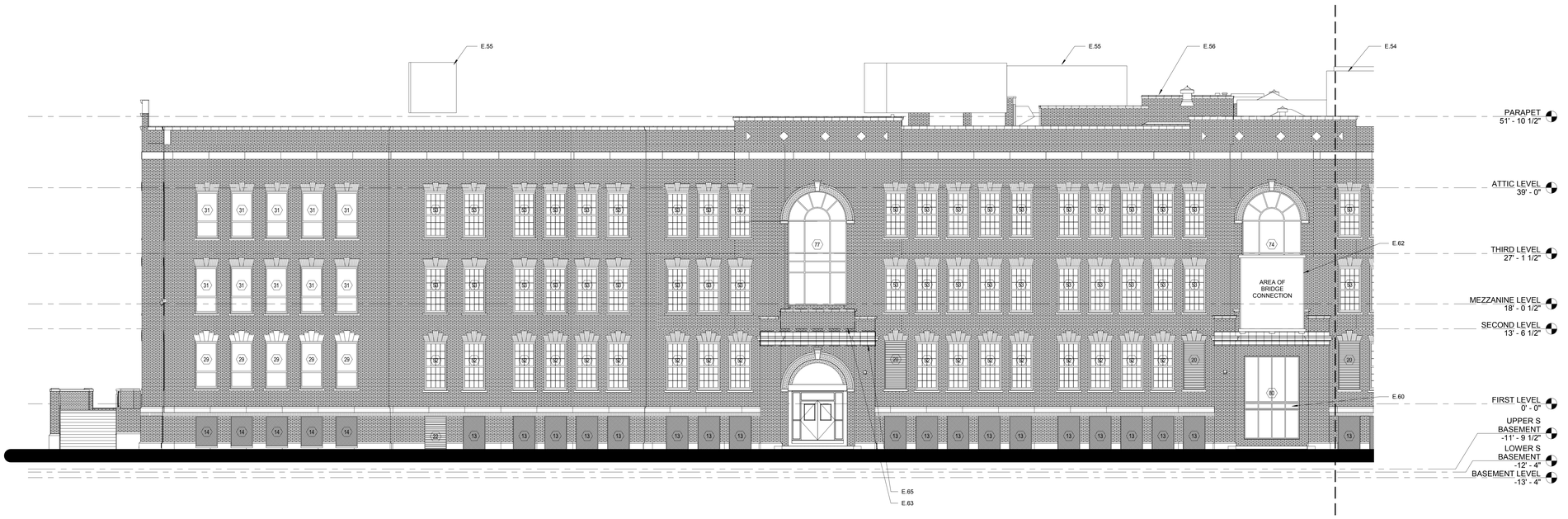
PROJECT No: 67150

DRAWING TITLE:
EXTERIOR ELEVATIONS - OVERALL EAST BLDG
SCALE: 1/16" = 1'-0"

A-200

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **WEST ELEVATION - PART A**
1/8" = 1'-0"



2 **WEST ELEVATION - PART B**
1/8" = 1'-0"

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EXTERIOR ELEVATION GENERAL NOTES - EAST CAMPUS

1. REPLACE ALL WINDOWS FRAMES AND SASHES AS INDICATED ON ELEVATIONS W/ ALUMINUM THERAMILY BROKEN WINDOWS W/ LOW-GLAZING, INSECT SCREENS AND OPERABLE BOTTOM SASH (AWNING). WINDOW SHALL HAVE HISTORIC PATTERN (FOR MUNTINS AND FRAME PROFILES REFER TO WINDOW TYPE SCHEDULE.)
2. REPLACE ALL EXTERIOR DOORS AND LOCKSETS.
3. REPLACE ALL EXTERIOR CAULKING AND SEALANTS.
4. REPAIR & PAINT EXISTING WOOD TRIM AT 1892 & 1922 BUILDING.
5. REPOINT AND CLEAN ALL EXISTING MASONRY. REMOVE ANY EFFLOURESCENCE.
6. REPOINT ALL STONE STEPS
7. REPLACE ALL LOUVERS AND MTL HOODS
8. REPAIR TERRA COTTA TRIM. REPLACE WHERE NECESSARY.
9. REPAIR/ REPLACE PRECAST CORNICE.
10. REPAIR/ REPLACE PRE-CAST SILLS
11. REPLACE ALL METAL SECURITY SCREENS IN KIND AT BASEMENT WINDOWS
12. REPLACE BROKEN BRICKS
13. PROVIDE FULL FRITTING AT TOILET ROOM WINDOWS, ALL LEVELS

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

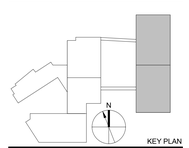
1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING.
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS.
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL, REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA, REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY BAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
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Lighting Consultant:
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Crabtree McGarth
161 West Main Street Georgetown, MA 01833

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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollisto, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

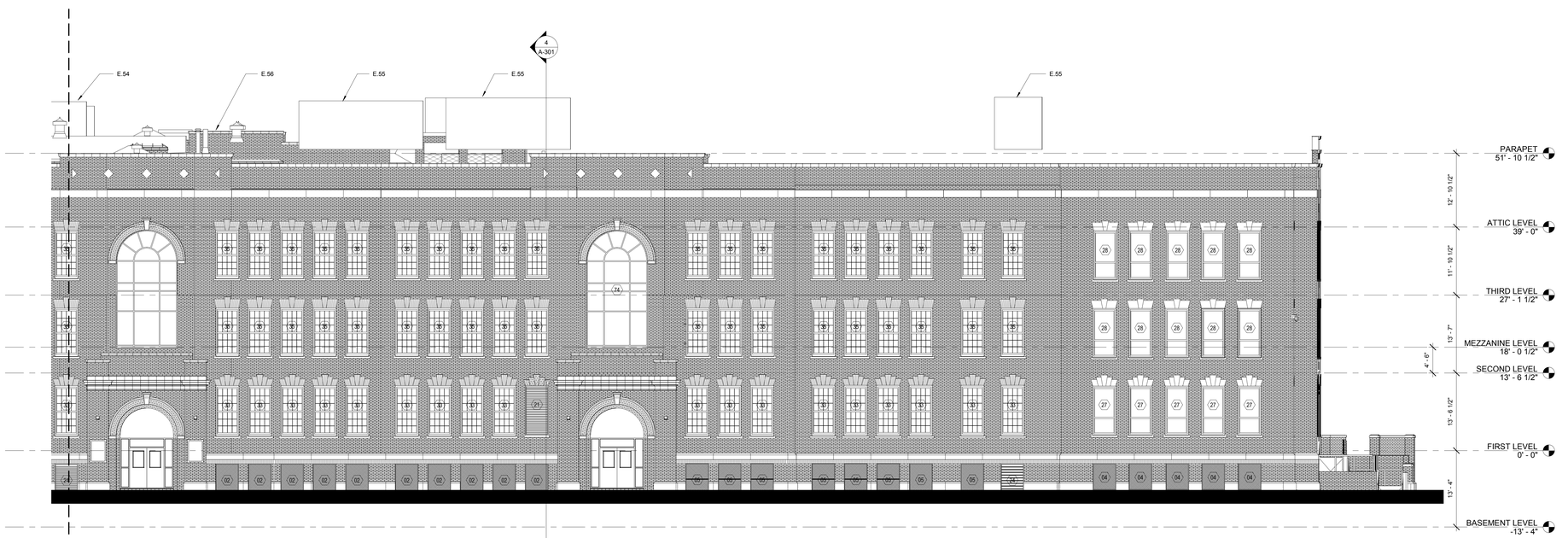
DRAWING TITLE:
EXTERIOR ELEVATIONS - EAST BLDG

SCALE: As indicated

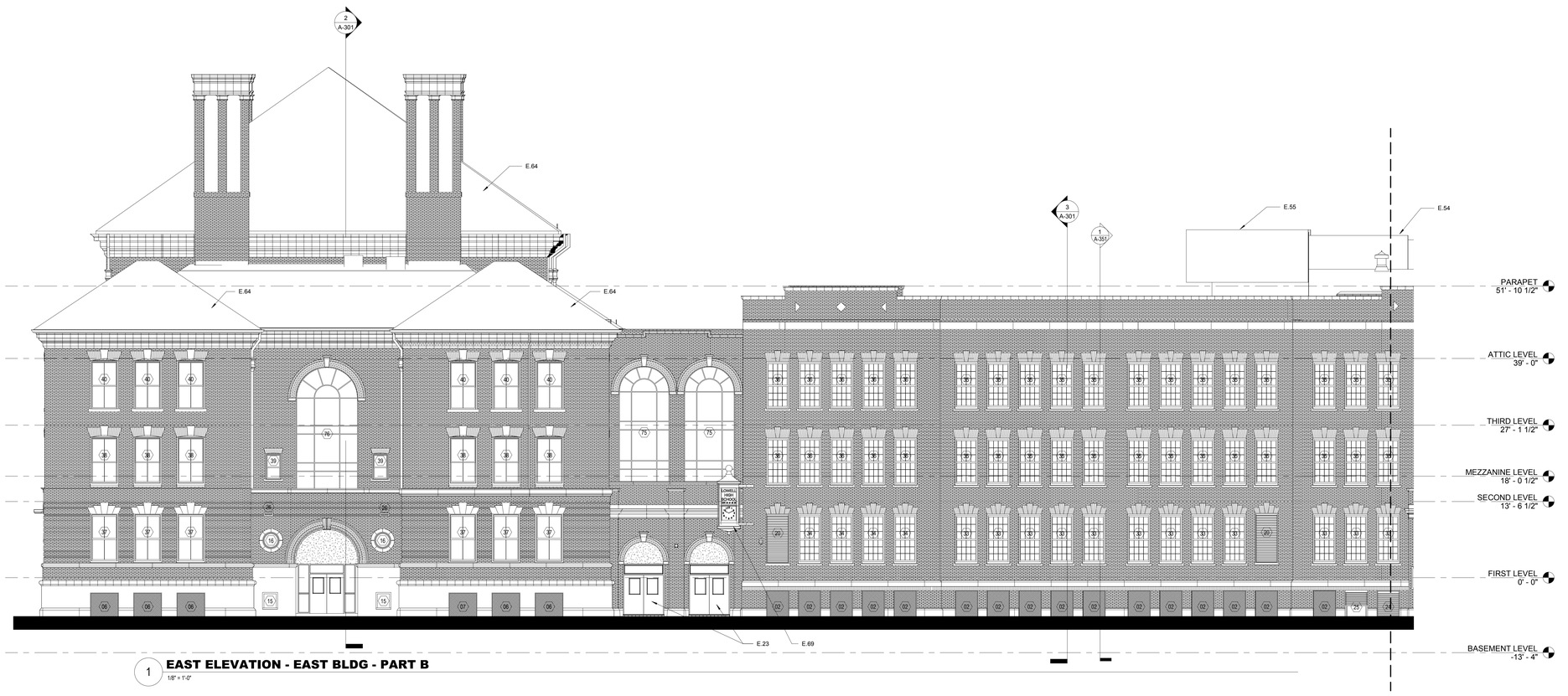
A-201

SCHEMATIC DESIGN SUBMISSION

2/20/2018



2 **EAST ELEVATION - EAST BLDG - PART A**
1/8" = 1'-0"



1 **EAST ELEVATION - EAST BLDG - PART B**
1/8" = 1'-0"

EXTERIOR ELEVATION GENERAL NOTES - EAST CAMPUS

1. REPLACE ALL WINDOWS FRAMES AND SASHES AS INDICATED ON ELEVATIONS W/ ALUMINUM THERAMILLY BROKEN WINDOWS W/ LOW-GLAZING, INSECT SCREENS AND OPERABLE BOTTOM SASH (AWNING). WINDOW SHALL HAVE HISTORIC PATTERN (FOR MUNTINS AND FRAME PROFILES REFER TO WINDOW TYPE SCHEDULE.)
2. REPLACE ALL EXTERIOR DOORS AND LOCKSETS.
3. REPLACE ALL EXTERIOR CAULKING AND SEALANTS.
4. REPAIR & PAINT EXISTING WOOD TRIM AT 1892 & 1922 BUILDING.
5. REPOINT AND CLEAN ALL EXISTING MASONRY. REMOVE ANY EFFLOURESCENCE.
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7. REPLACE ALL LOUVERS AND MTL HOODS
8. REPAIR TERRA COTTA TRIM. REPLACE WHERE NECESSARY.
9. REPAIR/ REPLACE PRECAST CORNICE.
10. REPAIR/ REPLACE PRE-CAST SILLS
11. REPLACE ALL METAL SECURITY SCREENS IN KIND AT BASEMENT WINDOWS
12. REPLACE BROKEN BRICKS
13. PROVIDE FULL FRITTING AT TOILET ROOM WINDOWS, ALL LEVELS

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
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8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
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16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSETS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
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E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
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E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR. (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL. REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK. 35" AFF TO 96" AFF THRU WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
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E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
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E.24 STAINLESS STEEL GUARD AND RAILS
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E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK. PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
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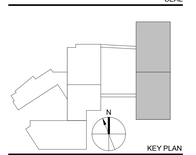
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE ES3
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE ES3
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL, STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER, MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRIOKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollisto, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

EXTERIOR ELEVATIONS - EAST BLDG

SCALE: As indicated

A-202

SCHEMATIC DESIGN SUBMISSION

2/20/2018

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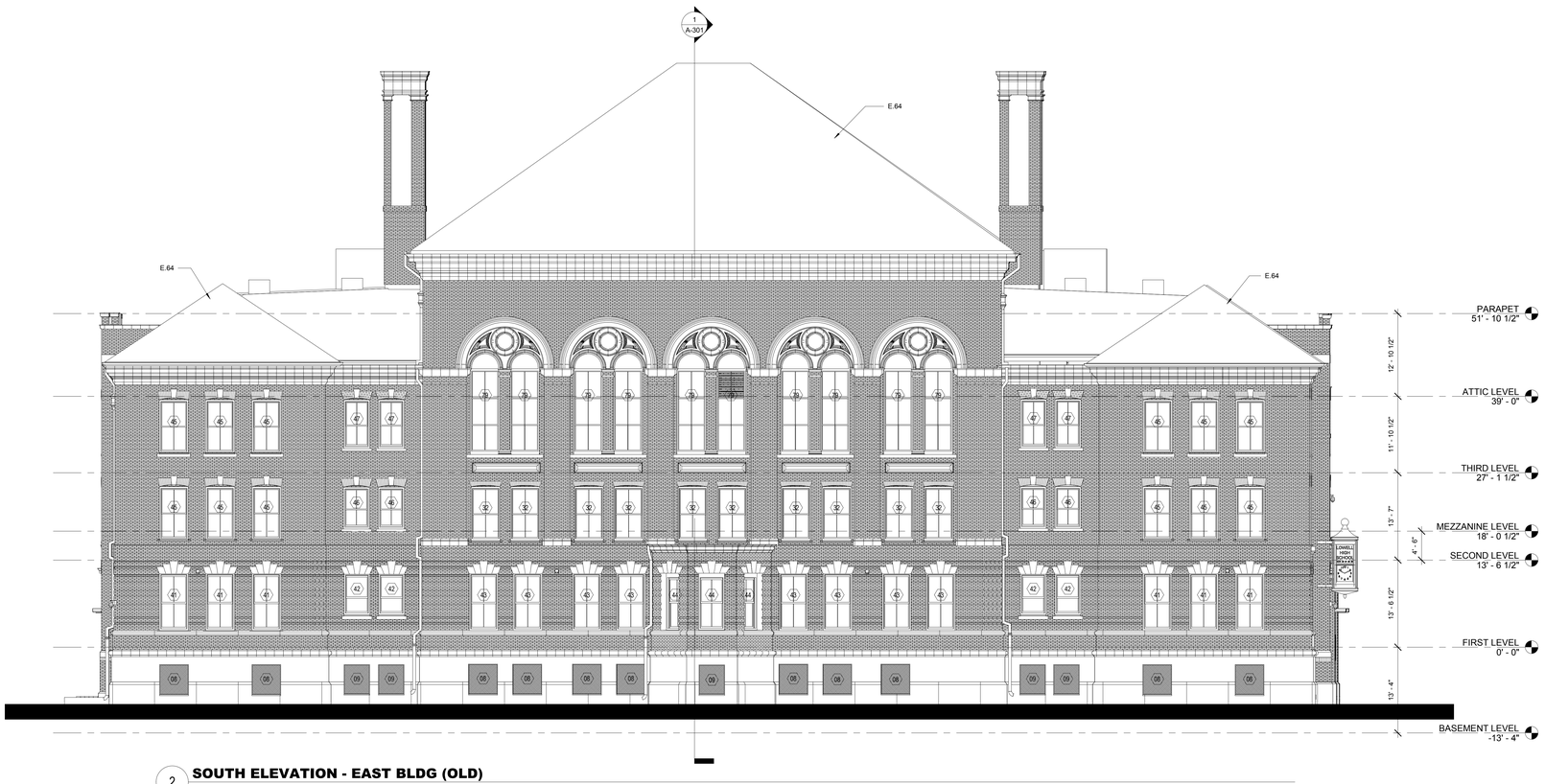
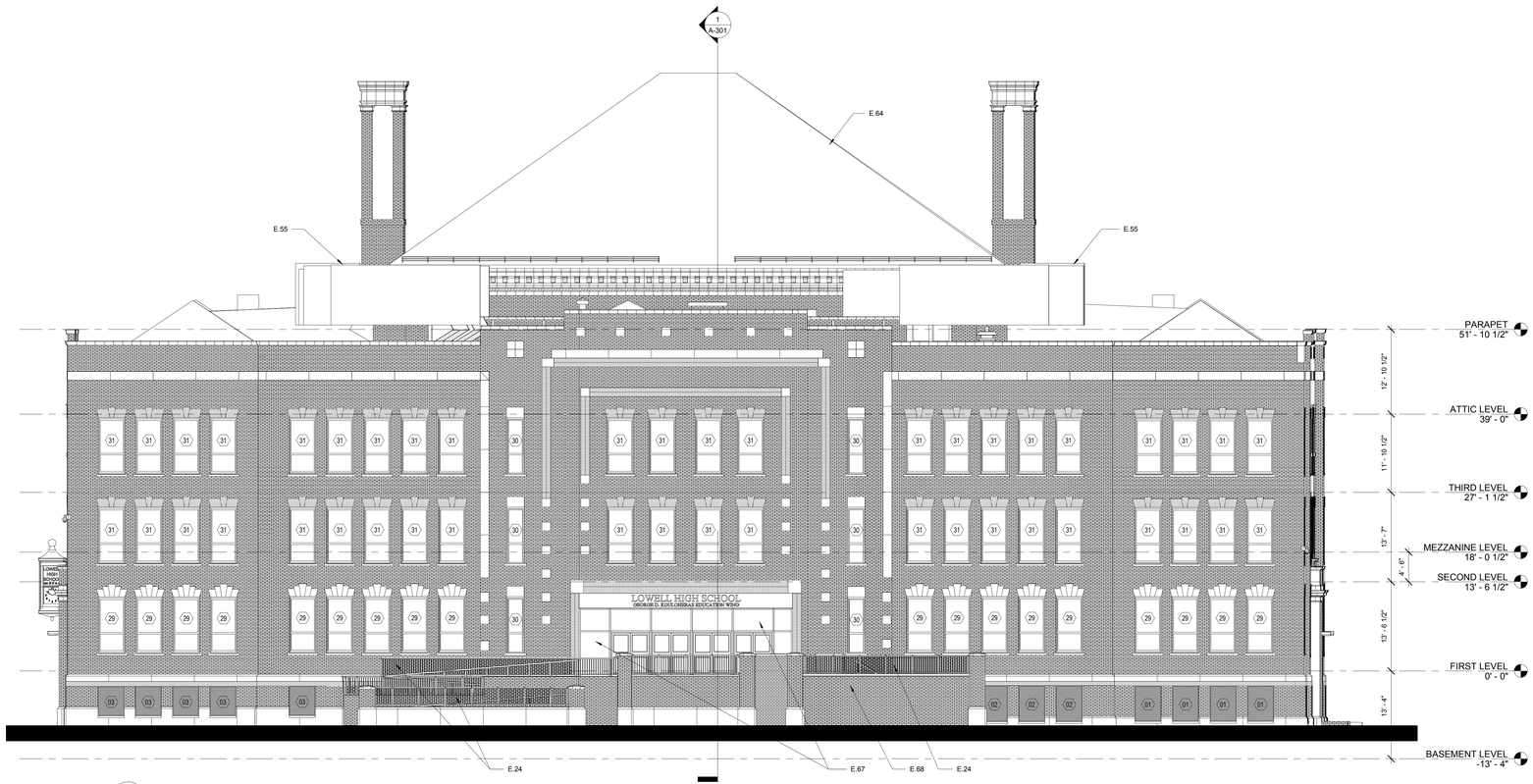


2 **SOUTH ELEVATION - EAST BLDG (OLD)**
1/8" = 1'-0"



1 **NORTH ELEVATION -EAST BLDG (OLD)**
1/8" = 1'-0"

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EXTERIOR ELEVATION GENERAL NOTES - EAST CAMPUS

1. REPLACE ALL WINDOWS FRAMES AND SASHES AS INDICATED ON ELEVATIONS W/ ALUMINUM THERMALLY BROKEN WINDOWS W/ LOW-GLAZING, INSECT SCREENS AND OPERABLE BOTTOM SASH (AWNING). WINDOW SHALL HAVE HISTORIC PATTERN (FOR MUNTINS AND FRAME PROFILES REFER TO WINDOW TYPE SCHEDULE.)
2. REPLACE ALL EXTERIOR DOORS AND LOCKSETS.
3. REPLACE ALL EXTERIOR CAULKING AND SEALANTS.
4. REPAIR & PAINT EXISTING WOOD TRIM AT 1892 & 1922 BUILDING.
5. REPOINT AND CLEAN ALL EXISTING MASONRY. REMOVE ANY EFFLOURESCENCE.
6. REPOINT ALL STONE STEPS.
7. REPLACE ALL LOUVERS AND MTL HOODS
8. REPAIR TERRA COTTA TRIM. REPLACE WHERE NECESSARY.
9. REPAIR/ REPLACE PRECAST CORNICE.
10. REPAIR/ REPLACE PRE-CAST SILLS
11. REPLACE ALL METAL SECURITY SCREENS IN KIND AT BASEMENT WINDOWS
12. REPLACE BROKEN BRICKS
13. PROVIDE FULL FRITTING AT TOILET ROOM WINDOWS, ALL LEVELS

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS.
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA. CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL. REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC.MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERSOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
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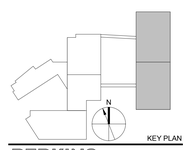
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE

SEAL



KEY PLAN

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20 Ashburton Place, Floor 8
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T: +1 617 449 4000
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Owner:

375 Merrimack Street, Lowell, MA 08152

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Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
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370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
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Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

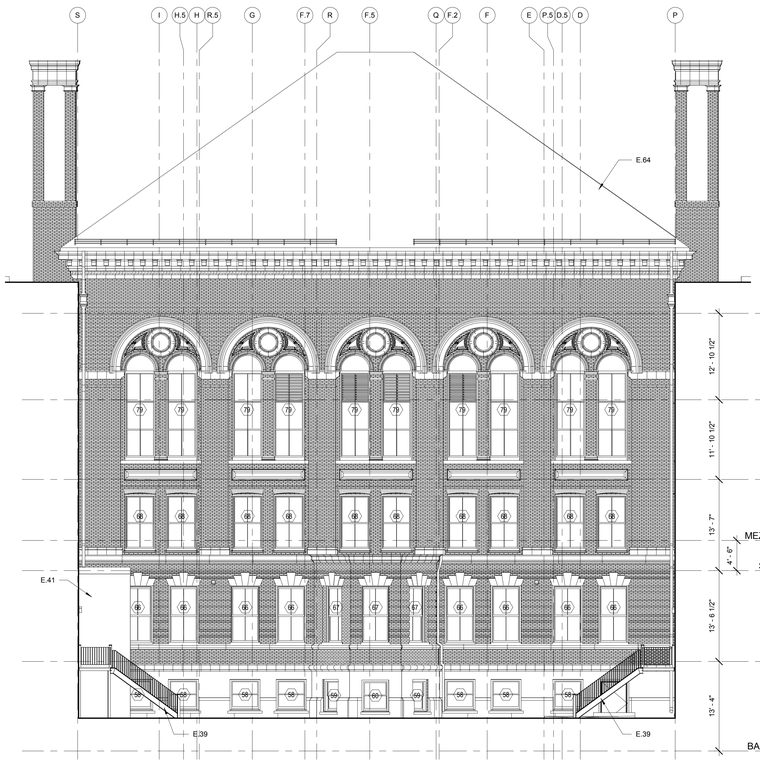
EXTERIOR ELEVATIONS - EAST BLDG

SCALE: As indicated

A-203

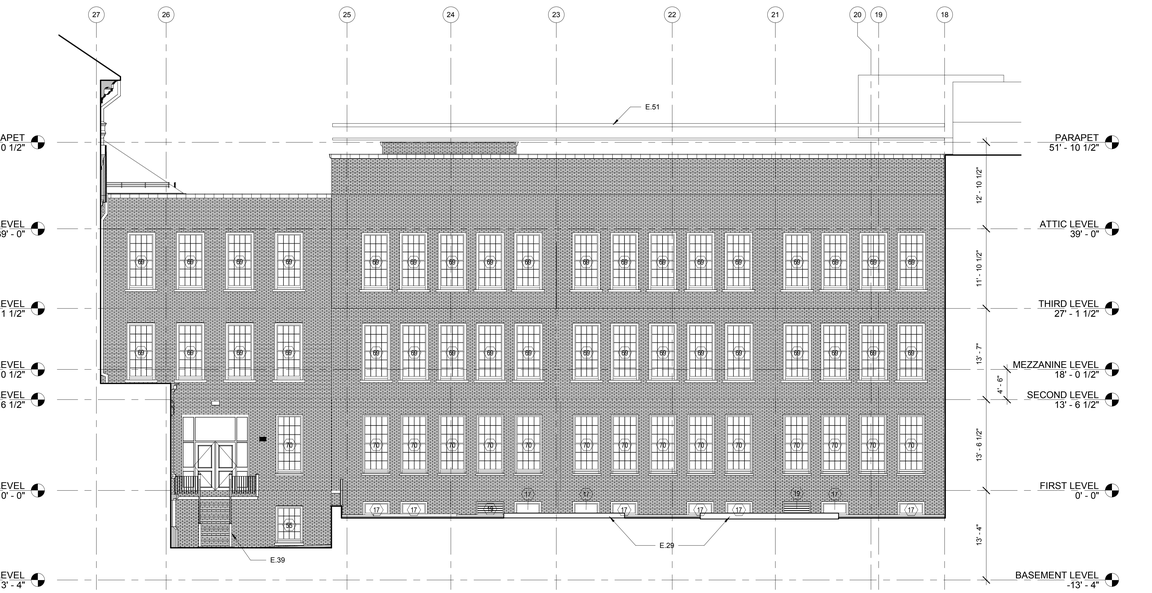
SCHEMATIC DESIGN SUBMISSION

2/20/2018



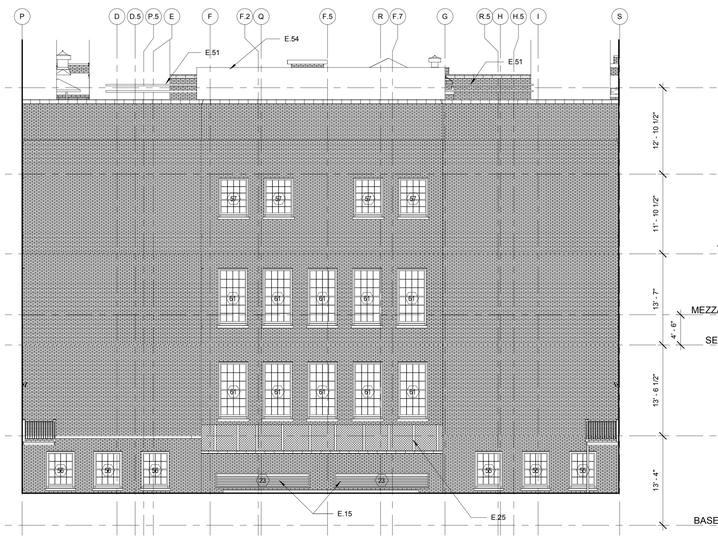
3 **SOUTH ELEVATION - EAST BLDG - COURTYARD**

1/8" = 1'-0"



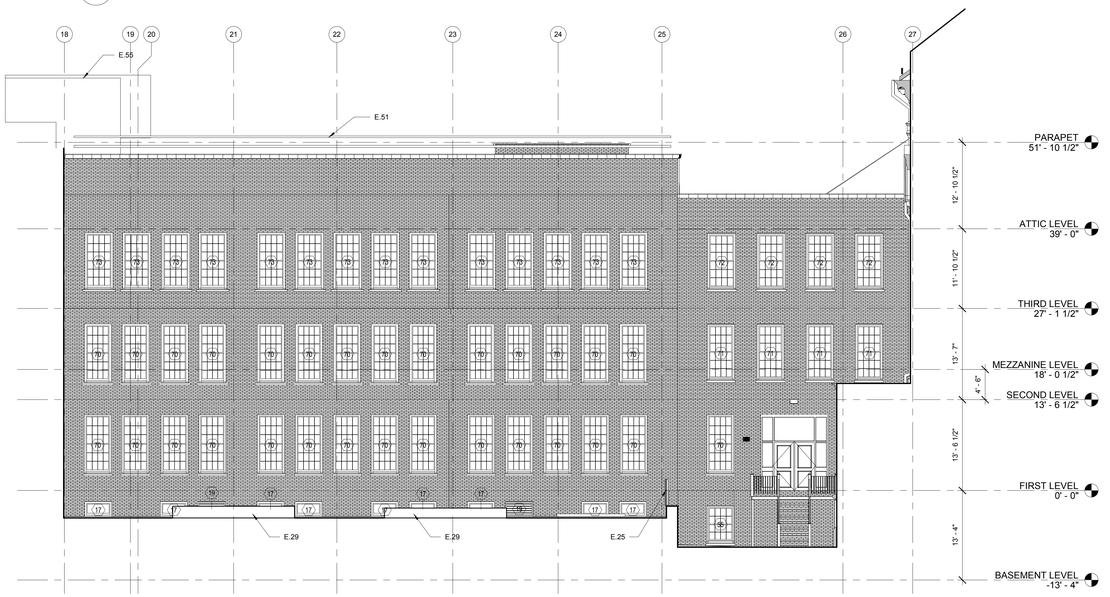
4 **WEST ELEVATION - EAST BLDG - COURTYARD**

1/8" = 1'-0"



1 **NORTH ELEVATION - EAST BLDG- COURTYARD**

1/8" = 1'-0"



2 **EAST ELEVATION - EAST BLDG - COURTYARD**

1/8" = 1'-0"

EXTERIOR ELEVATION GENERAL NOTES - EAST CAMPUS

1. REPLACE ALL WINDOWS FRAMES AND SASHES AS INDICATED ON ELEVATIONS W/ ALUMINUM THERMALLY BROKEN WINDOWS W/ LOW-GLAZING, INSECT SCREENS AND OPERABLE BOTTOM SASH (AWNING). WINDOW SHALL HAVE HISTORIC PATTERN (FOR MUNTINS AND FRAME PROFILES REFER TO WINDOW TYPE SCHEDULE.)
2. REPLACE ALL EXTERIOR DOORS AND LOCKSETS.
3. REPLACE ALL EXTERIOR CAULKING AND SEALANTS.
4. REPAIR & PAINT EXISTING WOOD TRIM AT 1892 & 1922 BUILDING.
5. REPOINT AND CLEAN ALL EXISTING MASONRY. REMOVE ANY EFFLOURESCENCE.
6. REPOINT ALL STONE STEPS
7. REPLACE ALL LOUVERS AND MTL HOODS
8. REPAIR TERRA COTTA TRIM. REPLACE WHERE NECESSARY.
9. REPAIR/ REPLACE PRECAST CORNICE.
10. REPAIR/ REPLACE PRE-CAST SILLS
11. REPLACE ALL METAL SECURITY SCREENS IN KIND AT BASEMENT WINDOWS
12. REPLACE BROKEN BRICKS
13. PROVIDE FULL FRITTING AT TOILET ROOM WINDOWS, ALL LEVELS

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-902 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL, REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK: 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MADE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRE-LITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK. PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS RECQD
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR PLATE CURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE ES3
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE ES3
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTIECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

NO.	DATE	ISSUE

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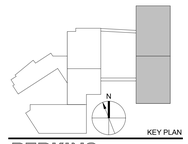

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2150 Washington Street Newton, MA 02462

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Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
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Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

EXTERIOR ELEVATIONS - EAST BLDG

SCALE: As indicated

A-204

SCHEMATIC DESIGN SUBMISSION

2/20/2018

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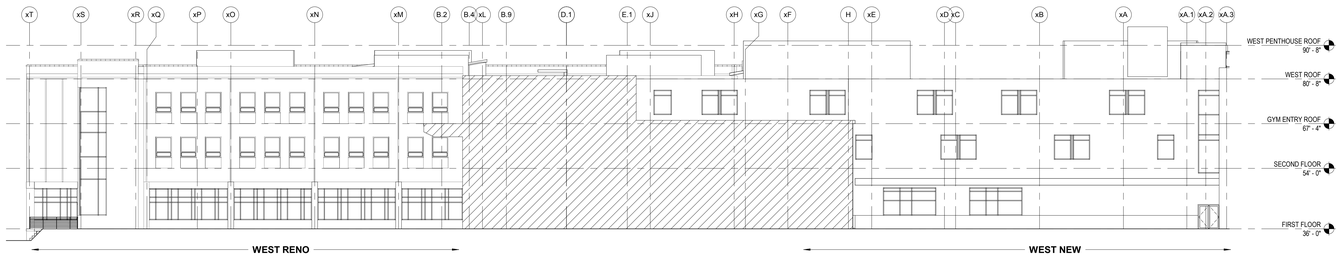
4 **WEST BLDG - SOUTH ELEVATION**
1/16" = 1'-0"

5 **FRESHMAN ACADEMY & GYMNASIUM - WEST ELEVATION**
1/16" = 1'-0"



3 **WEST BLDG & MAIN ENTRY - NORTH ELEVATION**
1/16" = 1'-0"



2 **WEST BLDG - WEST ELEVATION**
1/16" = 1'-0"



1 **WEST BLDG & GYM - EAST ELEVATION**
1/16" = 1'-0"

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NO.	DATE	ISSUE

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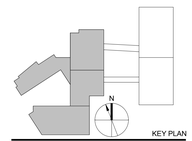

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

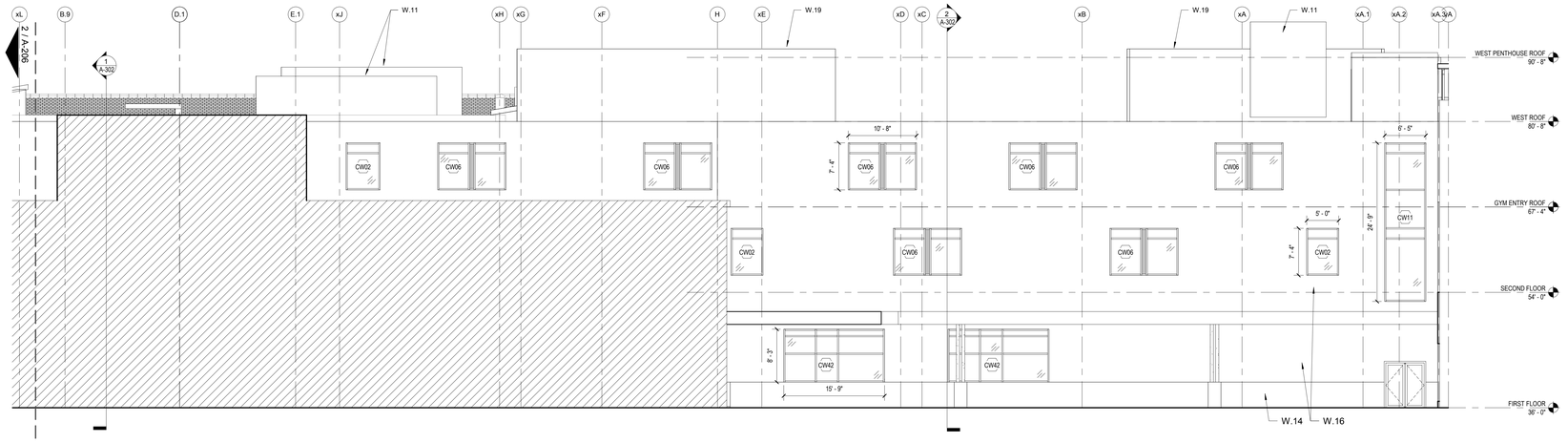
DRAWING TITLE:
EXTERIOR ELEVATIONS - OVERALL WEST BLDG

SCALE: 1/16" = 1'-0"

A-205

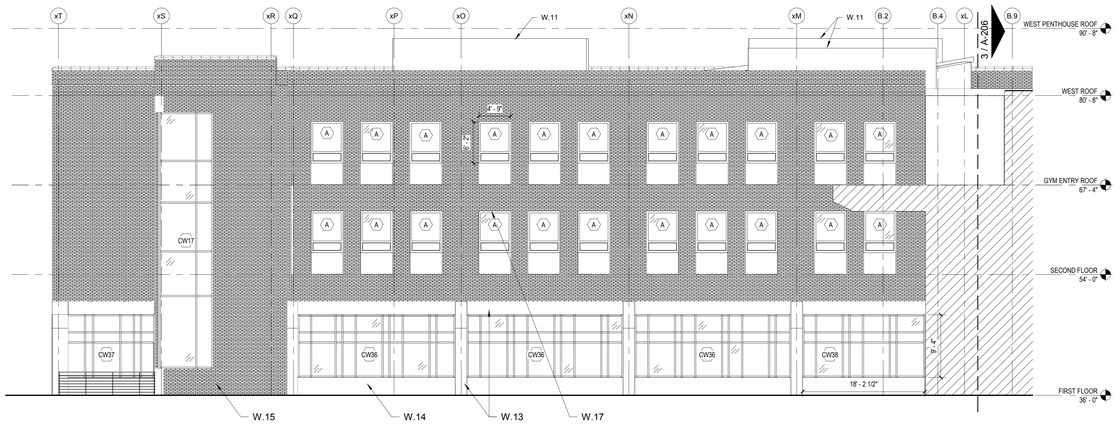
SCHEMATIC DESIGN SUBMISSION

02/20/2018



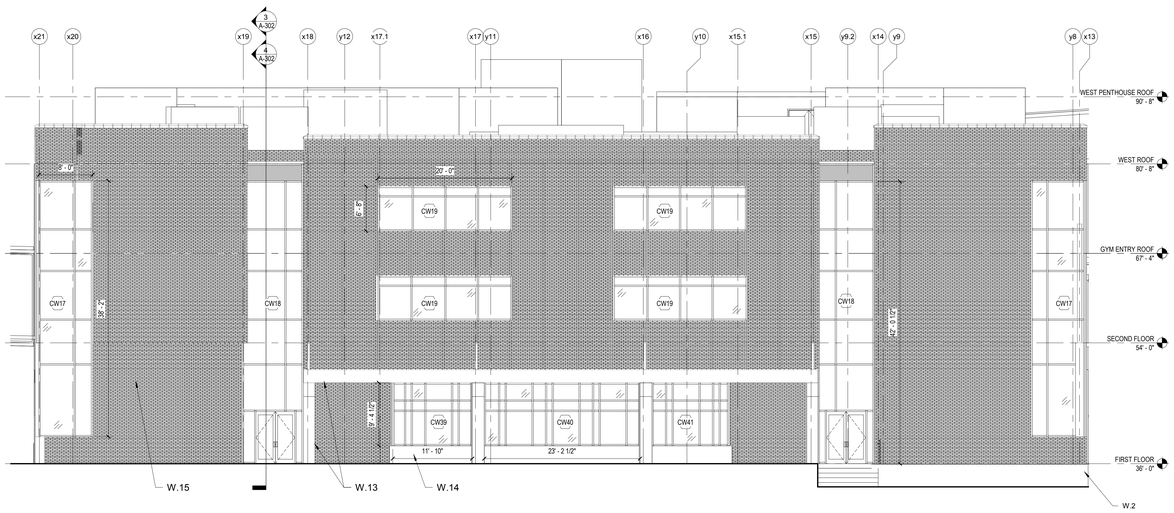
3 WEST BLDG - WEST ELEVATION - PART D

1/8" = 1'-0"



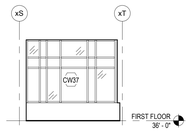
2 WEST BLDG - WEST ELEVATION - PART C

1/8" = 1'-0"



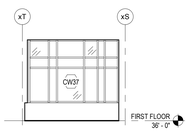
1 WEST BLDG - NORTH ELEVATION

1/8" = 1'-0"



4 WEST BLDG - NORTH ELEVATION A

1/8" = 1'-0"



5 WEST BLDG - NORTH ELEVATION B

1/8" = 1'-0"

GENERAL NOTES - WEST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
2. ALL ITEMS IN THESE DRAWINGS ARE NEW (N) UNLESS NOTED AS EXISTING (E) OR EXISTING TO REMAIN (ETR).
3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURESCENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS. REPLACE DAMAGED CONCRETE PAN. SEE NARRATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB. SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT. SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.17 REPLACEMENT PRECAST FACE BRICK LINTEL TYP @ ALL REPLACEMENT WINDOWS.
W.18 ROLL-UP MESH GYM DIVIDER CURTAIN
W.19 MECHANICAL EQUIPMENT SCREEN
W.20 CONNECT TROLLEY CABLES @ UNDERSIDE OF BRIDGE. COORDINATE W/ TROLLEY OPERATOR.
W.21 KALWALL TRANSLUCENT PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.22 KALWALL CLEAR PANELS. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.23 2" RECESSED SLAB FOR LONG & TRIPLE JUMP PITS
W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS. SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

NO.	DATE	ISSUE

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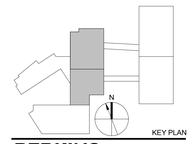

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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
EXTERIOR ELEVATIONS - WEST BLDG

SCALE: As indicated

A-206

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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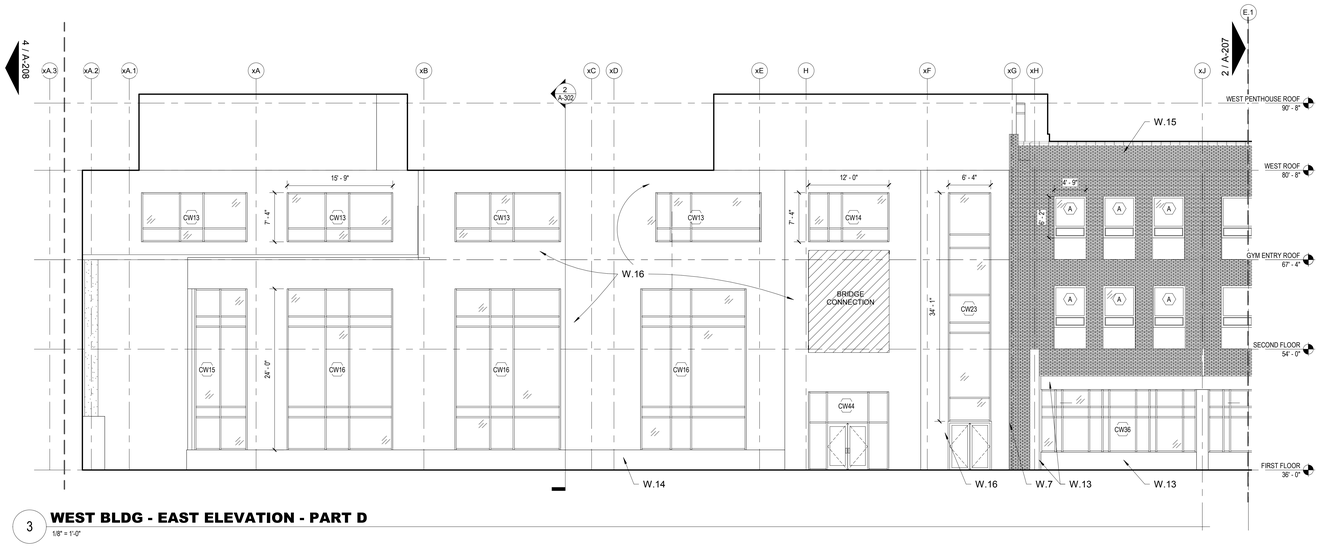
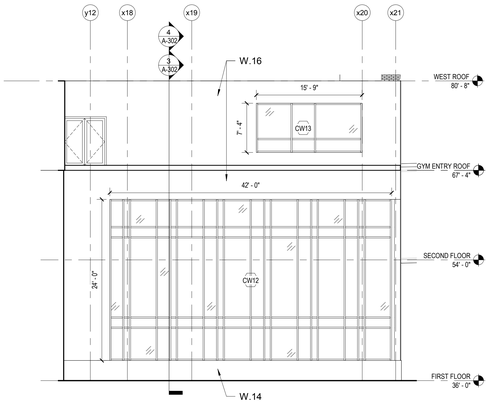


3 **WEST BLDG - EAST ELEVATION - PART D**
1/8" = 1'-0"



2 **WEST BLDG - EAST ELEVATION - PART C**
1/8" = 1'-0"



1 **WEST BLDG - SOUTH ELEVATION**
1/8" = 1'-0"

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GENERAL NOTES - WEST CAMPUS

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W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT.
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W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS, SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN

NO.	DATE	ISSUE
1	12/28/18	SD Estimating - Revision 1

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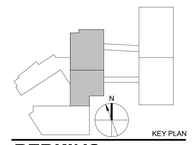

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Acoustical Consultant:
Cavanagh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
EXTERIOR ELEVATIONS - WEST BLDG

SCALE: As indicated

A-207

SCHEMATIC DESIGN SUBMISSION

02/20/2018

GENERAL NOTES - WEST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE AND ROOM DATA SHEETS FOR ADDITIONAL INFO INCLUDING FOR SPECIALITY GLAZING.
2. ALL ITEMS IN THESE DRAWINGS ARE NEW (N) UNLESS NOTED AS EXISTING (E) OR EXISTING TO REMAIN (ETR).
3. SEE LIFE SAFETY PLANS FOR WALL RATINGS.
4. SEE SHEET A-002 FOR PARTITION TYPES. SEE SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
5. PATCH (E) SLABS @ ABANDONED PENETRATIONS & TRENCHES FOR NEW SANITITARY LINES.
6. REPLACE ALL EXTERIOR (E) SEALANT.
7. REPLACE (E) BROKEN BRICK.
8. REMOVE EFFLOURESCENCE.
9. REPOINT ETR MASONRY.
10. PROVIDE INSULATED METAL PANEL WHERE CURTAINWALL CROSSES PARTITIONS. PROVIDE SPANDREL PANELS WHERE CURTAINWALL CROSSES FLOOR SLABS.
11. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - WEST CAMPUS

W.1 PROVIDE SPRINKLERS UNDER (E) WOOD FRAMED RISERS
W.2 REPAIR (E) CRACK IN EXPOSED FOUNATION WALL w/ EPOXY INJECTION
W.3 REPLACEMENT ROOF ASSEMBLY
W.4 PROVIDE RESILIENT FLOORING TREADS/RISERS AND LANDINGS. PROVIDE REPLACEMENT MTL RAILINGS & GUARDRAILS. REPLACE DAMAGED CONCRETE PAN. SEE NARATIVE FOR ADDITIONAL INFO.
W.5 PROVIDE WOOD FRAMED INFILL OF TIERED PLATFORM
W.6 PROVIDE SEALANT @ RELIEVING ANGLE
W.7 EXPANSION JOINT BTWN (E) & (N) CONSTRUCTION
W.8 EXPANSION JOINT @ FIRE WALL
W.9 PATCH (E) CONCRETE SLAB, SEE STRUCTURAL DWGS
W.10 TELESCOPIC BLEACHERS
W.11 MECHANICAL UNIT, SEE MECH.DWGS
W.12 RECESSED ENTRY MAT
W.13 POLISHED FINISHED C.M.U. TO 10'-0" AFF, MTL PANEL ABOVE @ COLUMNS & SOFFIT, TYP.
W.14 POLISHED FINISHED C.M.U. SEE 3D REPRESENTATIONS FOR PATTERNS.
W.15 ETR BRICK MASONRY
W.16 BRICK MASONRY. SEE 3D REPRESENTATIONS FOR PATTERNS.
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W.20 CONNECT TROLLEY CABLES @ UNDERSIDE OF BRIDGE. COORDINATE W/ TROLLEY OPERATOR.
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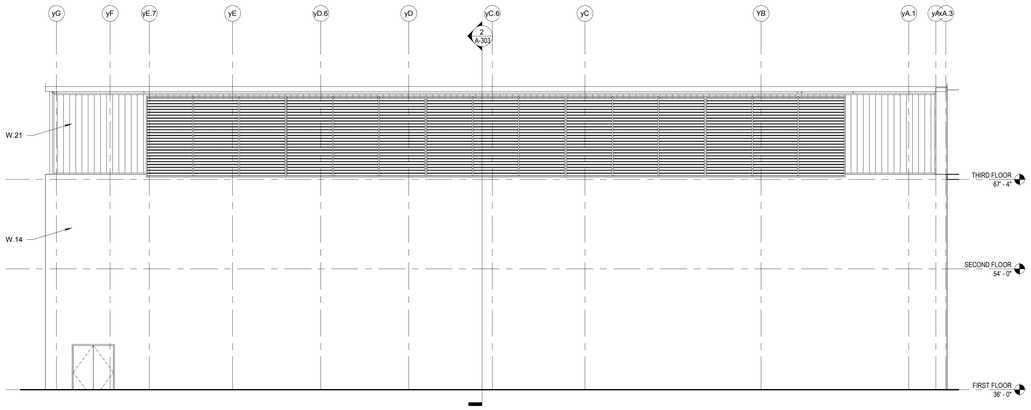
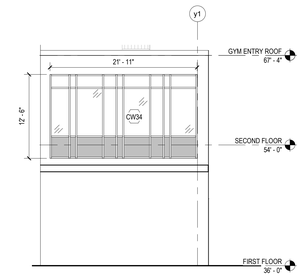
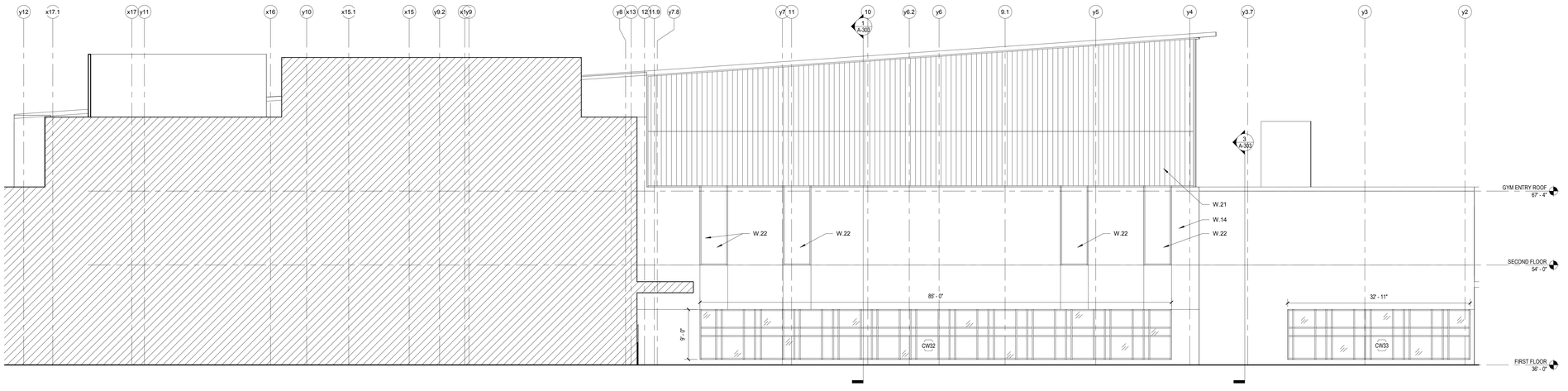
W.23 2" RECESSED SLAB FOR LONG & TRIPLE JUMP PITS
W.24 2" RECESSED SLAB AT WOOD FLOORING
W.25 RAMP & RAILINGS, SEE STRUCTURAL DWGS
W.26 ELEVATOR OVERRUN



4 **GYM - EAST ELEVATION**
1/8" = 1'-0"



3 **GYM - NORTH ELEVATION**
1/8" = 1'-0"



1 **GYM - NORTH ELEVATION**
1/8" = 1'-0"

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NO.	DATE	ISSUE

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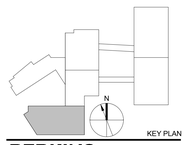

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
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T. +1 617 449 4000
F. +1 617 449 4049

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Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
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2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
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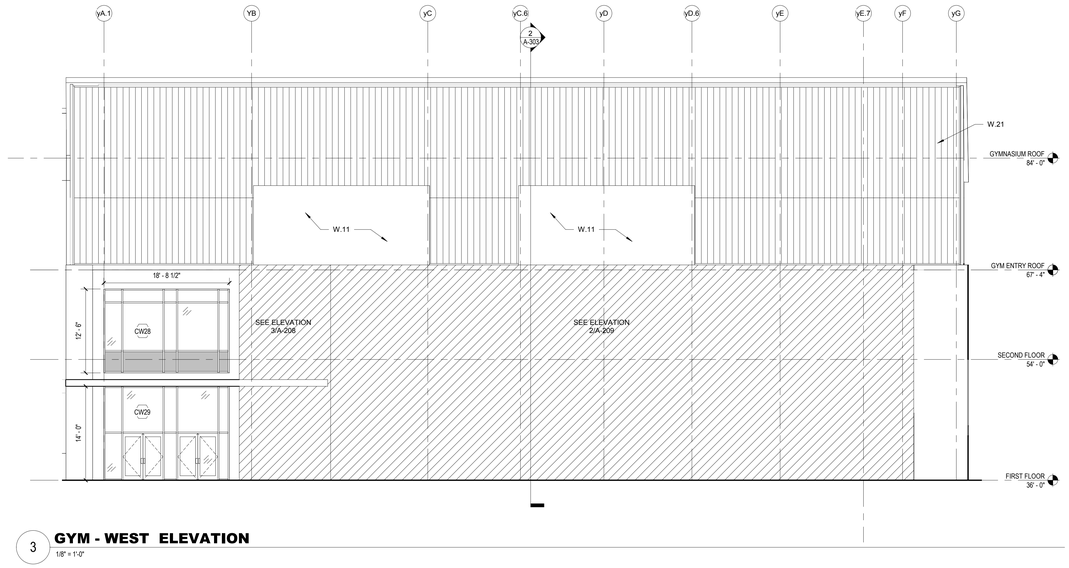
SCALE: As indicated

A-208

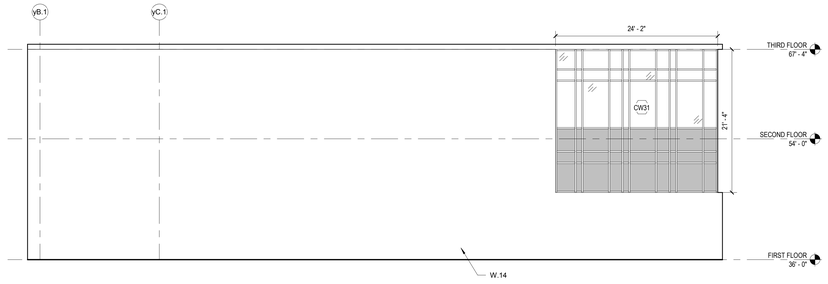
SCHEMATIC DESIGN SUBMISSION

02/20/2018



3 GYM - WEST ELEVATION

1/8" = 1'-0"



2 GYM - WEST ELEVATION

1/8" = 1'-0"



1 GYM - SOUTH ELEVATION

1/8" = 1'-0"

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W.26 ELEVATOR OVERRUN

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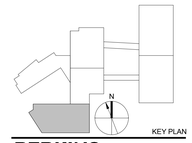

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PROJECT No: 67150

DRAWING TITLE:
EXTERIOR ELEVATIONS - GYM

SCALE: As indicated

A-209

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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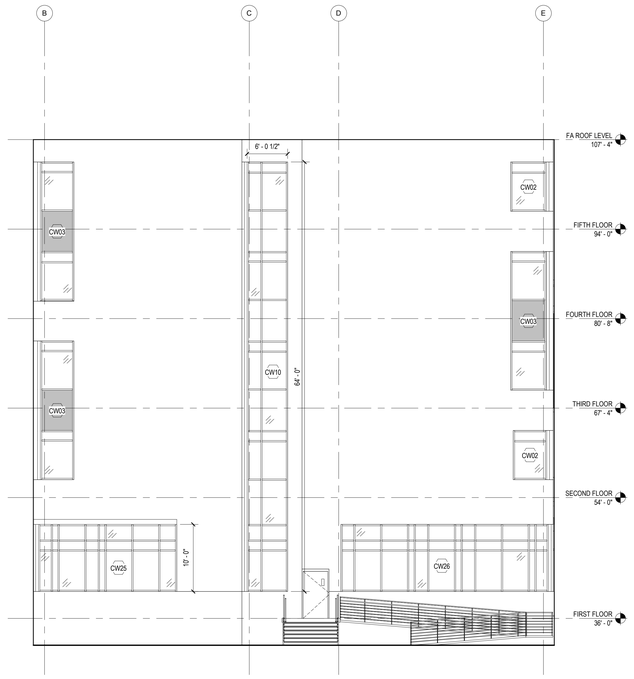
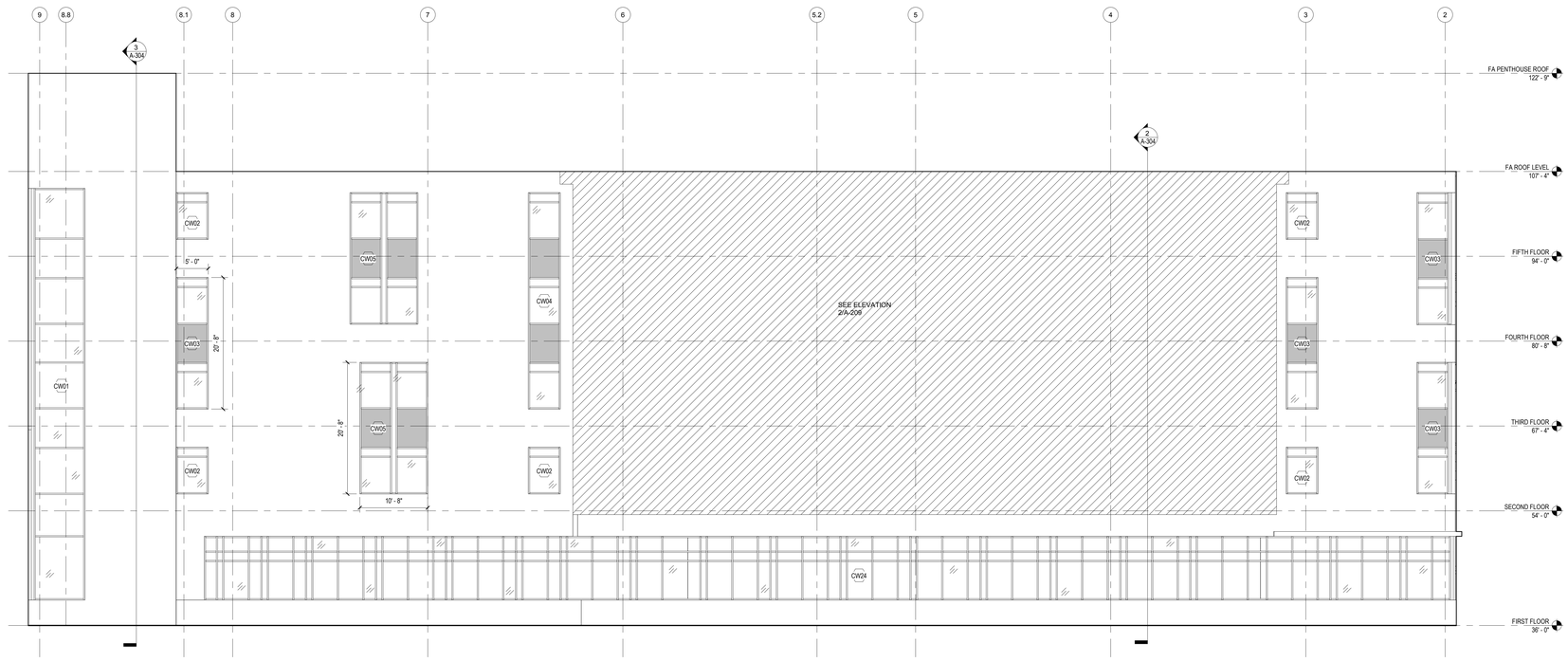
2 **FRESHMAN ACADEMY - PARTIAL NORTH ELEVATION**
1/8" = 1'-0"



3 **FRESHMAN ACADEMY - WEST ELEVATION**
1/8" = 1'-0"



1 **FRESHMAN ACADEMY - NORTH ELEVATION**
1/8" = 1'-0"

LEGEND - ELEVATION

SPANDREL PANEL

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W.26 ELEVATOR OVERRUN

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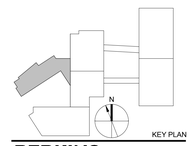

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PROJECT No: 67150

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EXTERIOR ELEVATIONS - FRESHMAN ACADEMY

SCALE: As indicated

A-210

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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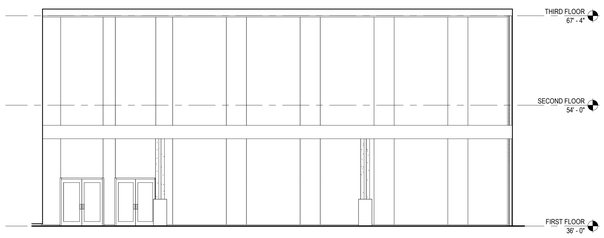
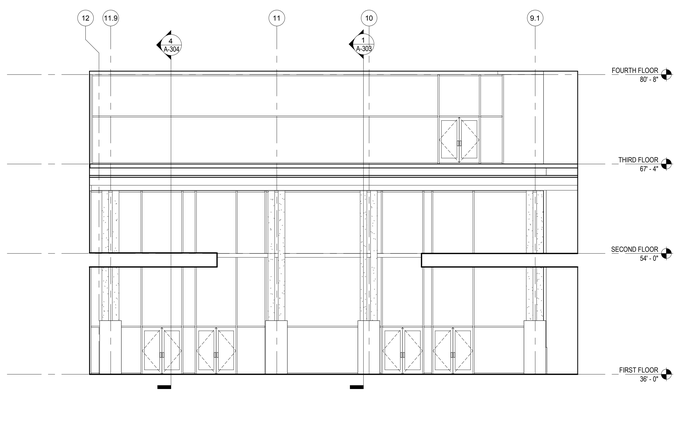


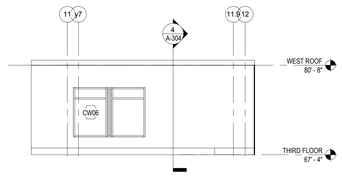
4 MAIN ENTRY - WEST ELEVATION

1/8" = 1'-0"



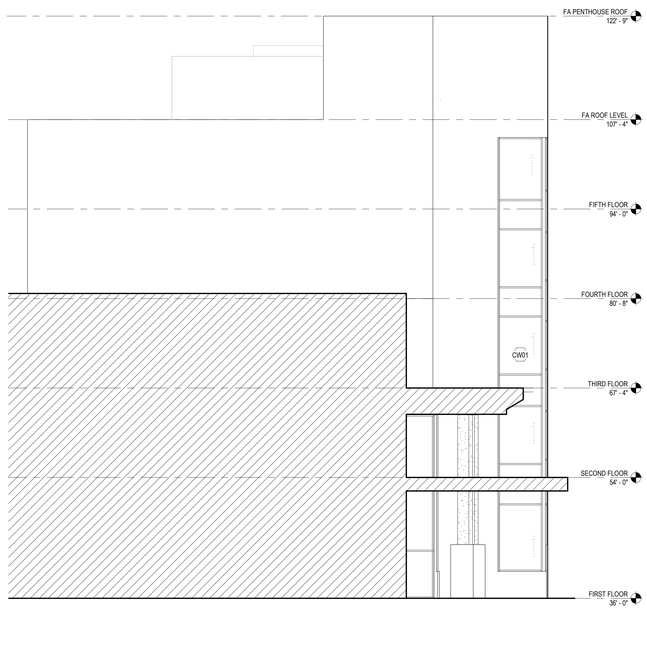
3 MAIN ENTRY - NORTH ELEVATION

1/8" = 1'-0"



5 MAIN ENTRY - SOUTH ELEVATION

1/8" = 1'-0"



1 FRESHMAN ACADEMY - EAST ELEVATION

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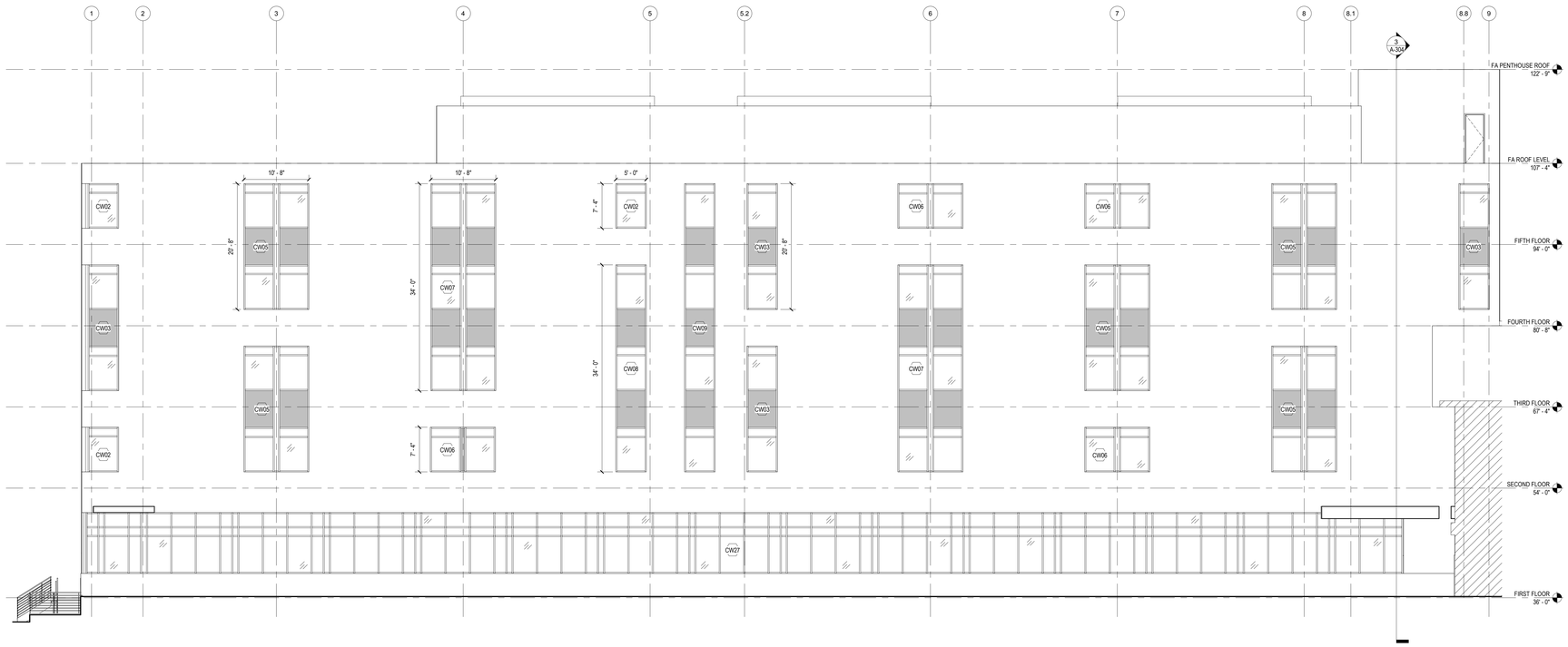

2 FRESHMAN ACADEMY - SOUTH ELEVATION

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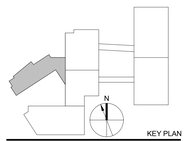

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150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

EXTERIOR ELEVATIONS - FRESHMAN ACADEMY

SCALE: As indicated

A-211

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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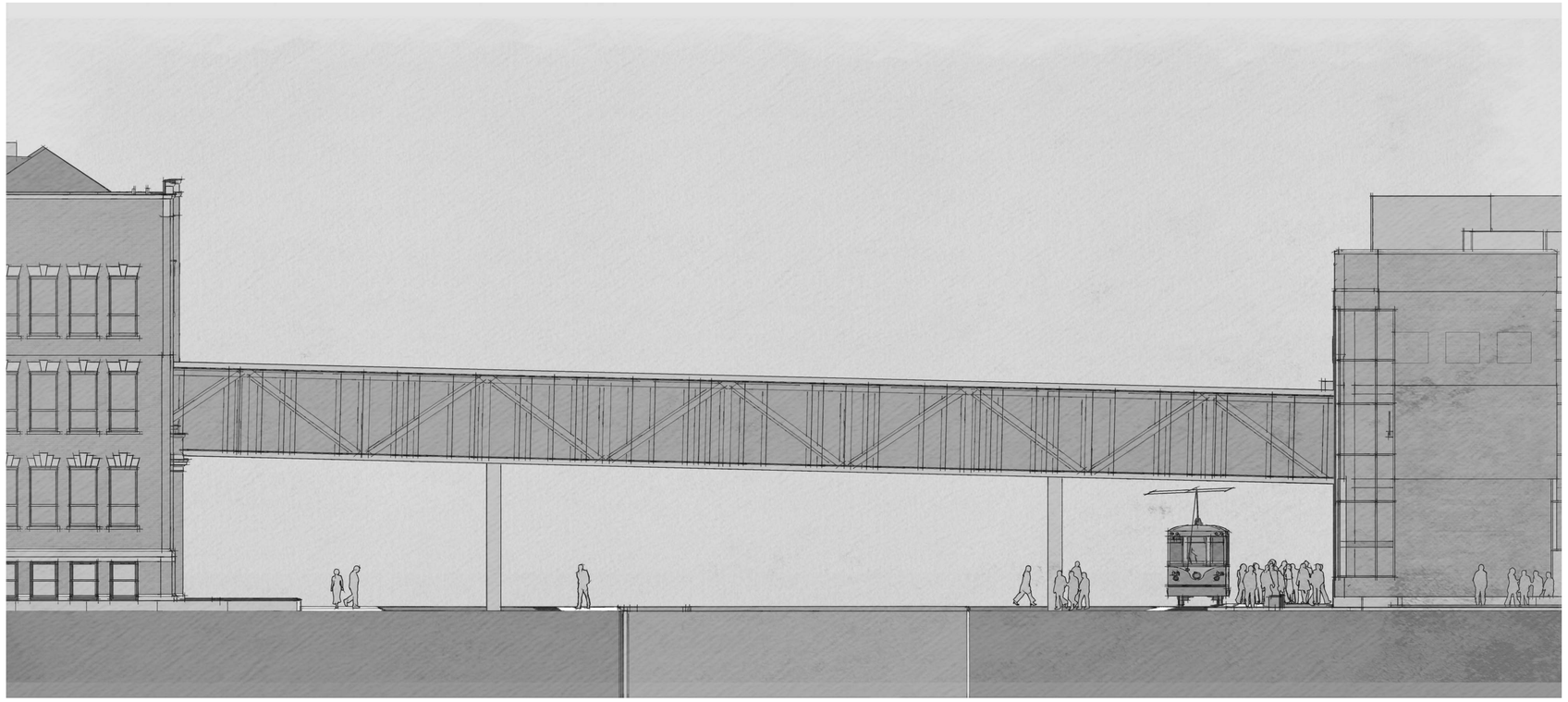
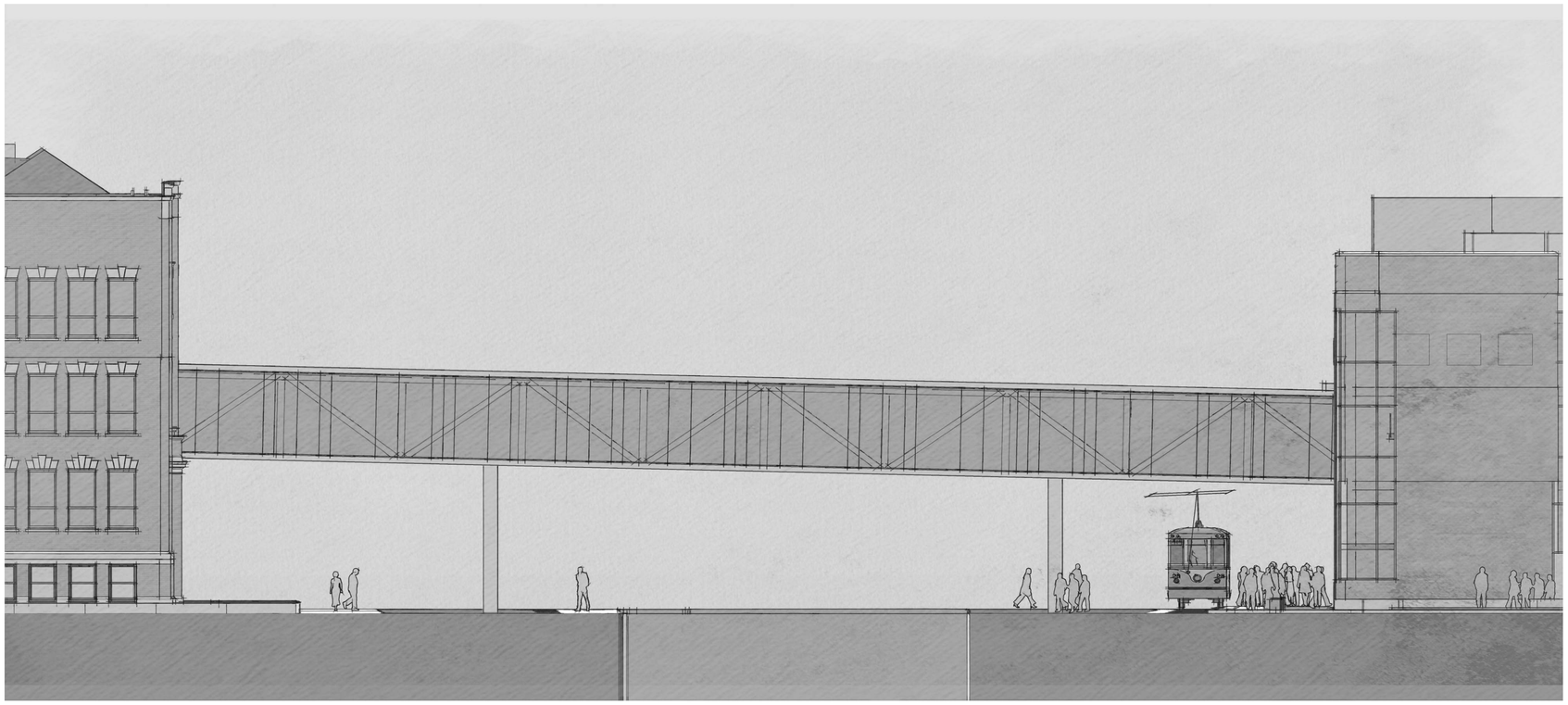


2 **NORTH BRIDGE ELEVATION - 3D RENDERING**
12" = 1'-0"



1 **SOUTH BRIDGE ELEVATION - 3D RENDERING**
12" = 1'-0"

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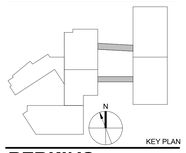

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
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T. +1 617 449 4000
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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

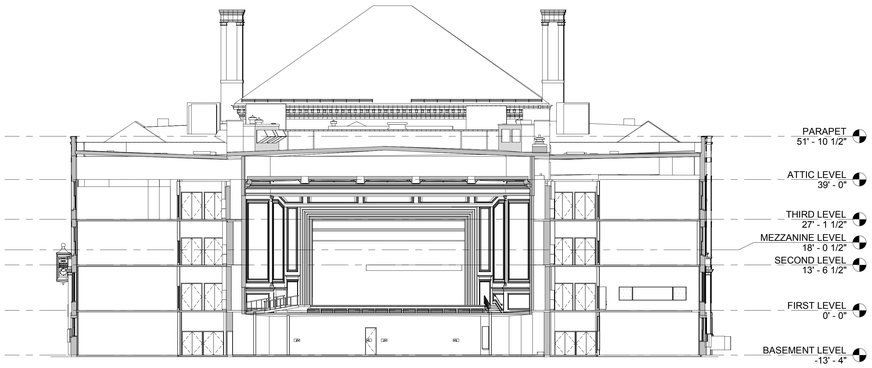
DRAWING TITLE:
EXTERIOR ELEVATIONS - BRIDGES

SCALE: 12" = 1'-0"

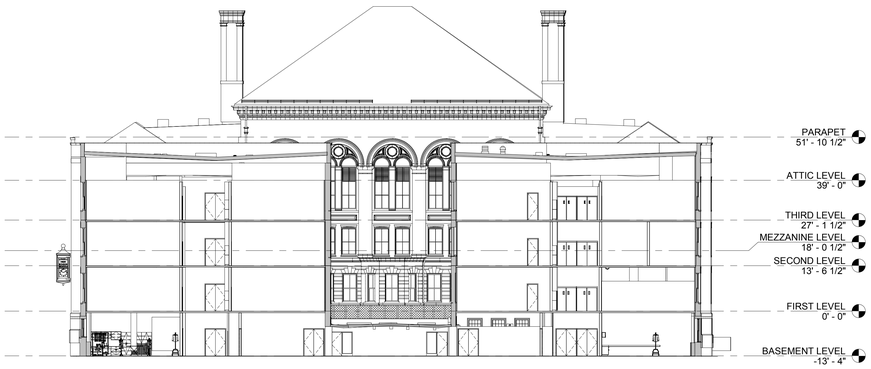
A-212

SCHEMATIC DESIGN SUBMISSION

02/20/2018



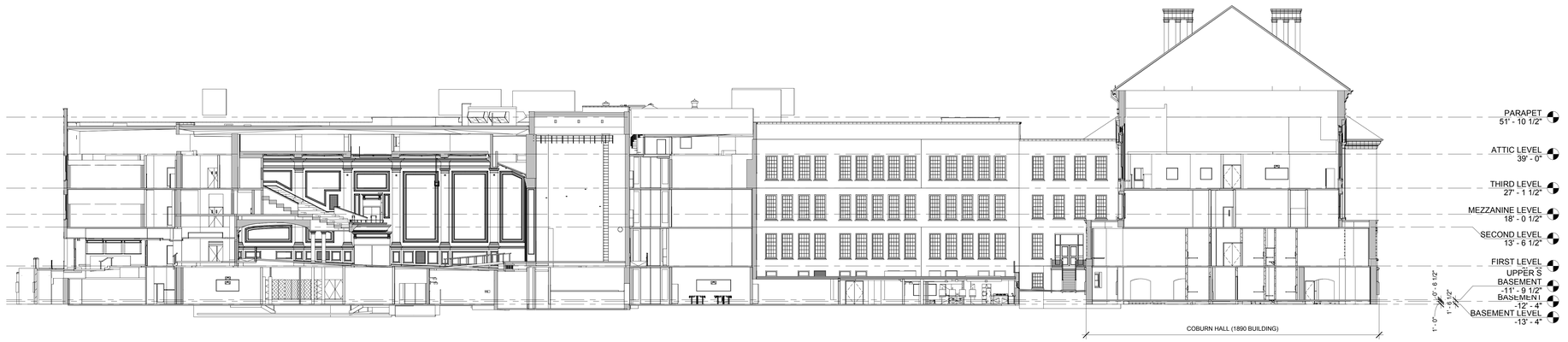
4 **CROSS SECTION - 1922 BUILDING**
1/16" = 1'-0"



3 **CROSS SECTION - 1922 BUILDING COURTYARD**
1/16" = 1'-0"



2 **CROSS SECTION - 1890 BUILDING**
1/16" = 1'-0"



1 **LONGITUDINAL SECTION**
1/16" = 1'-0"

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR AND DOOR FRAME
- NEW CONSTRUCTION
- NEW CONSTRUCTION - CMU PARTITION
- INFILL CONCRETE SLAB
- ADDITIONAL TAPERED INSULATION
- RAISED FLOOR W/ LGMF AND TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING

GENERAL NOTES - EAST CAMPUS

1. SEE ARCHITECTURAL NARRATIVE FOR ADDITIONAL SCOPE INFORMATION.
2. REFER TO LIFE SAFETY PLANS FOR WALL RATINGS
3. REFER TO SHEET A-002 FOR PARTITION TYPES. REFER TO SEPARATE FLOOR PLANS FOR LOCATION AND EXTENT OF PARTITION TYPES.
4. APPLY SELF-LEVELING TOPPING IN ALL AREAS OF BASEMENT LEVEL UNLESS OTHERWISE NOTED.
5. AT EXISTING STAIRWAYS TO REMAIN PROVIDE NEW CODE-COMPLIANT GALVANIZED GUARDS AND HANDRAILS TO ALL STAIRS UNLESS OTHERWISE NOTED. PROVIDE CONCRETE FILL TO DAMAGED CONCRETE TREADS AND RISERS AS NECESSARY. PROVIDE NEW METAL ANGLE NOSING AT EXISTING STAIRS. PROVIDE RUBBER FINISHED SURFACE ON TREADS, RISERS, AND LANDINGS.
6. UNDER NEW CMU WALLS CUT OUT EXISTING SLAB AND REPLACE WITH NEW THICKENED MAT. REFER TO STRUCTURAL FOR DETAIL.
7. NEW RAMPS AND STAIRS AT BAND AND CHORUS ROOMS TO BE BUILT OF LIGHT-GAUGE MTL FRAMING. COMPLETELY SEAL AND MAKE CAVITY BELOW INACCESSIBLE.
8. AT ALL CLASSROOMS ON FLOORS 1-3 WITH EXISTING T&G WOOD FLOORING, REPLACE WITH FIRE-TREATED PLYWOOD UNDERLAYMENT OVER FIRE TREATED SLEEPERS ON THE EXISTING STRUCTURAL DECK TO AN ELEVATION MATCHING THE ADJACENT CORRIDOR TERRAZZO FLOORING. PREPARE PLYWOOD TO RECEIVE LINOLEUM FINISH FLOORING
9. REPLACE ALL DOORS & FRAMES.
10. ALL GWB & PLASTER WALLS ARE PAINTED / REPAINTED.
11. PROVIDE ALL DOOR HARDWARE SETS.
12. INSTALL NEW TOILET ACCESSORIES THROUGHOUT.
13. REPAIR AND CLEAN ALL EXISTING TERRAZZO
14. REPLACE ALL EXISTING CORRIDOR AND CLASSROOM CEILINGS
15. PROVIDE ENTRY MATS AT ALL EXTERIOR DOORS
16. FULL FITTING AT TOILET ROOM WINDOWS, ALL LEVELS
17. PROVIDE SLOP SINK @ ALL JANITOR CLOSESTS.

NOTES - EAST CAMPUS

E.1 INFILL EXISTING WINDOW OPENINGS WITH MASONRY TO MATCH EXISTING
E.2 VERTICAL SHAFT FOR DUCTWORK.
E.3 TROPHY DISPLAY CASE W/ ADJUSTABLE SHELVES WITH RECESSED LIGHTING
E.4 RAISED FLOOR THIS AREA, CONSTRUCTED WITH LGMF W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.5 NEW LGMF STAIR AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.6 NEW LGMF RAMP, STAIR, AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.7 NEW LGMF RAMP AND LANDING W/ TWO LAYERS OF FIRE RATED PLYWOOD SUBFLOORING
E.8 PROVIDE MOTORIZED WINDOW SHADES ALL WINDOWS THIS ROOM
E.9 NEW OPENING AT EXISTING MASONRY WALL. MISC. METALS LINTEL ABOVE NEW OPENINGS
E.10 OPERABLE PARTITION WALL W/ ACOUSTICAL FABRIC FINISH (SEE STRUCTURAL DWGS FOR ADDITIONAL SCOPE)
E.11 OPERABLE PARTITION WALL W/ MIRROR (SEE STRUCTURAL DWGS FOR SCOPE)
E.12 REPLACE EXISTING CURTAINWALL AND EXTERIOR DOORS WITH NEW FIXED STORE FRONT -GLAZED AND WITH SPANDREL, REFER TO ELEVATIONS
E.13 SPECIALTY MILLWORK. 36" AFF TO 96" AFF THRU-WALL DISPLAY CABINETS WITH ONE SIDE LAMINATED GLASS BUTT-JOINTED, OTHER SIDE WITH FULL VISION MILLWORK DOORS, ADJUSTABLE SHELVING, AND RECESSED LIGHTING
E.14 SIDEWALL VENT
E.15 NEW CLEARSTORY WINDOW
E.16 NEW RAMP WITH CONCRETE TOPPING OVER STYROFOAM FILLER
E.17 NEW RAISED STRUCTURAL FLOORS THIS AREA. REFER TO STRUCT DWGS
E.18 NEW MULTI-STOP TRACTION ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.19 EXISTING STAIR TO BE RENOVATED, MAOE CODE COMPLIANT REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.20 NEW STAIR. REFER TO ARCH. NARRATIVE FOR COMPLETE SCOPE
E.21 AUTOMATIC DOOR OPERATOR AND CONTROL ON PEDESTAL
E.22 AUTOMATIC DOOR OPERATOR AND CONTROL
E.23 ALUM. STOREFRONT W/ BALLISTIC-RESISTANT GLAZING. INCLUDE TRANSACTION WINDOW
E.24 STAINLESS STEEL GUARD AND RAILS
E.25 GALVANIZED GUARD AND RAILS
E.26 NEW THEATER SEATING REFER TO AUDITORIUM PARTIAL PLAN
E.27 NEW FLOOR IN-FILL. REFER TO STRUCTURAL
E.28 CUT EXISTING MASONRY OPENING TO FLOOR LEVEL. INFILL OPENING WITH HOLLOW METAL FRAME AND FIRELITE GLAZING
E.29 STRUCTURAL SKYLIGHT W/ FIRE RATED GLAZING
E.30 REFURBISH ALL WALLS AND CEILINGS, SAND, PATCH, AND PAINT
E.31 EXISTING STRUCTURAL BEARING MASONRY CHIMNEY STACK W/ MULTI-FLUE TO REMAIN. WRAP WITH NEW PARTITION
E.32 NEW EPDM MEMBRANE OVER EXISTING COVERBOARD AND INSULATION. INFILL NEW INSULATION TO MATCH EXISTING TAPER PROFILE WHERE EXISTING MECHANICAL EQUIPMENT OR OTHER ROOF APPURTENANCES HAS BEEN REMOVED
E.33 CONCRETE FILLED STEEL PAN STAIRS, EXTENSION TO ATTIC LEVEL INCL. LANDING. PROVIDE MTL GRILL "CAGE" WITH LOCKABLE SECURITY DOOR TO LIMIT ACCESS TO ATTIC
E.34 NEW COUNTER-BALANCED RIGGING SYSTEM. REFER TO THEATER NARRATIVE FOR SCOPE
E.35 TILTED FIRE TREATED WOOD FRAME WITH FRAMED TEMPERED GLAZING ON SLIDING TRACK, PAINTED
E.36 USE EXISTING VERTICAL SHAFT FOR DUCTWORK SERVING AUDITORIUM. PROVIDE MISC. MTL SUPPORTS AS REQ'D
E.37 NEW WALL-MOUNTED LADDER W/ CAGE AND CATWALK PLATFORM BELOW CEILING
E.38 PROVIDE NEW WEATHER-TIGHT ENCLOSURE TO CONNECT NEW BRIDGE TO BUILDING
E.39 PROVIDE NEW METAL STAIR AND LANDING TO MEET CODE DIMENSIONAL REQUIREMENTS (MISC MTL)
E.40 INTERIOR COURTYARD. REFER TO LANDSCAPE PLANS FOR DETAILS
E.41 NEW LIMITED USE-LIMITED ACCESS ELEVATOR. REFER TO ELEVATOR SCHEDULE IN ARCHITECTURAL NARRATIVE
E.42 FIRE ALARM ACTIVATED ROLL DOWN FIRE SHUTTER
E.43 REFER TO ROOM DATA SHEETS FOR CASEWORK AND SINK LAYOUT
E.44 LIGHT WELL ABOVE. STRUCTURAL SKYLIGHT @1ST FLOOR FRAMING PLANE
E.45 CONCRETE INFILL AT PLUMBING TRENCHES
E.46 DIAMOND PLATE FLOORING
E.47 FRAMED OPENINGS THRU AUDITORIUM CEILING FOR STAGE LIGHTING RACK. PROVIDE MTL ANGLES AROUND PERIMETER OF OPENING FOR CEILING SUPPORT. TIE-BACK FRAMES TO EXISTING STRUCTURAL GRID
E.48 MTL MESH SECURITY DOOR
E.49 MTL SECURITY MESH AT ENTIRE LENGTH OF CATWALK SIDES; FROM DIAMOND PLATE FLOORING TO UNDERSIDE OF ROOF FRAMING
E.50 NEW ROOF; AIR/ VAPOR BARRIER, TAPERED RIGID INSULATION, COVERBOARD, AND EPDM MEMBRANE OVER ROOF DECK
E.51 MTL GALVANIZED SECURITY PIPE RAIL GUARD
E.52 NEW TAPERED INSULATION AND AIR VAPOR BARRIER TO MATCH ADJACENT PROFILE. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.53 NEW COVERBOARD AND EPDM MEMBRANE ROOFING
E.54 NEW PACKAGED MECHANICAL PENTHOUSE UNIT OVER SUPPORTING STEEL. REFER TO MECHANICAL AND STRUCTURAL DOCUMENTS FOR SCOPE
E.55 MECHANICAL ROOF-TOP UNIT ON GALVANIZED STEEL DUNNAGE SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR SCOPE
E.56 STEEL FRAMED, GLAZED INFILL ROOF MONITOR OVER LIGHT WELLS. PROVIDE STRUCTURAL ROOF DECK WITH TAPERED INSULATION AND AIR VAPOR BARRIER. PROVIDE NEW COVERBOARD, AND EPDM ROOF MEMBRANE THIS AREA AS PER NOTE E53
E.57 PATH OF NEW EPDM MEMBRANE ROOF PADS
E.58 EXISTING ROOFING TO REMAIN
E.59 NEW METAL STAIR, RAILING, AND LANDING. PROCURE WITH ROOF TOP PACKAGED MECHANICAL UNIT
E.60 AREA OF SPANDREL GLASS
E.61 INSTALL SALVAGED CORNICE TO BE PROVIDED BY OWNER. MATCH EXISTING INSTALLATION PROFILE AT SIMILAR ENTRY BAYS
E.62 NEW EXPANSION JOINTS AROUND UNDERSIDE, SIDES AND ROOF OF NEW PEDESTRIAN BRIDGE (TYP.)
E.63 INSTALL NEW MASONRY TO MATCH EXISTING. RECREATE ENTRY BAY MASONRY CONFIGURATION AND PROFILES SIMILAR AT OTHER ENTRY WAYS IN 1922 ADDITION.
E.64 EXISTING ROOF TO REMAIN
E.65 MODIFY MASONRY TO ACCEPT NEW PEDESTRIAN BRIDGE CONFIGURATION. ADD ADDITIONAL NEW BRICK TO MATCH EXISTING TO INFILL AS MAY BE REQUIRED. MAINTAIN MASONRY PROFILES AND CONFIGURATION TO MATCH SIMILAR ENTRY AT KIRK STREET.
E.66 NEW ELEVATOR HEADHOUSE. MASONRY TO MATCH EXISTING OVER NEW CMU BLOCK WALL.
E.67 NEW STOREFRONT SYSTEM WITH BALLISTIC RESISTANT GLAZING INCLUDING AT DOOR LIGHTS
E.68 MODIFY MASONRY TO ALLOW NEW FLASHING AND NEW WEEPHOLES AT RAISED ELEVATION TO ACCOMMODATE NEW HIGHER EXTERIOR ENTRY PLATFORM FINISHED ELEVATION
E.69 PROTECT AND PRESERVE EXISTING HISTORIC CLOCK. ASSESS AND PROVIDE MAINTENANCE ON UNIT REPAIR OR REPLACE ANY MISSING OR BROKEN ELEMENTS. CLEAN UNIT
E.70 INFILL EXISTING BRICK MASONRY OPENING WITH NEW BRICK
E.71 NEW CIP CONCRETE WALL FACED WITH STONE BASE AND BRICK MASONRY UNITS TO MATCH EXISTING TYPE AND COLOR BRICKS. REFER TO ELEVATIONS FOR EXTENT
E.72 CONCRETE PLATFORM OVER STYROFOAM FILLER

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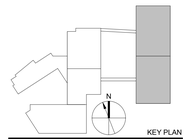

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
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PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

BUILDING SECTIONS - EAST BLDG

SCALE: As indicated

A-301

SCHEMATIC DESIGN SUBMISSION

2/20/2018

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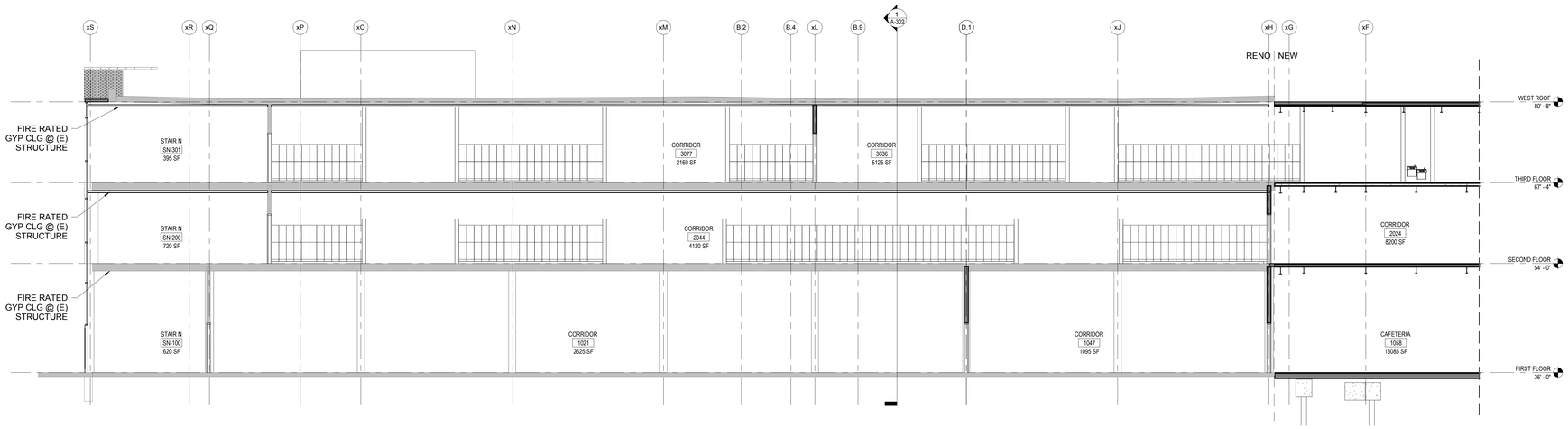
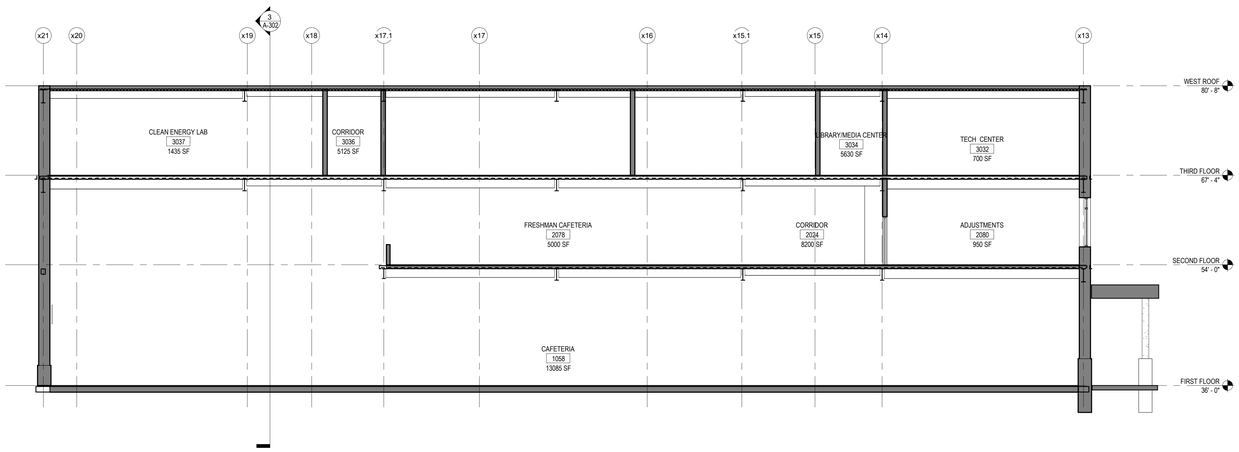


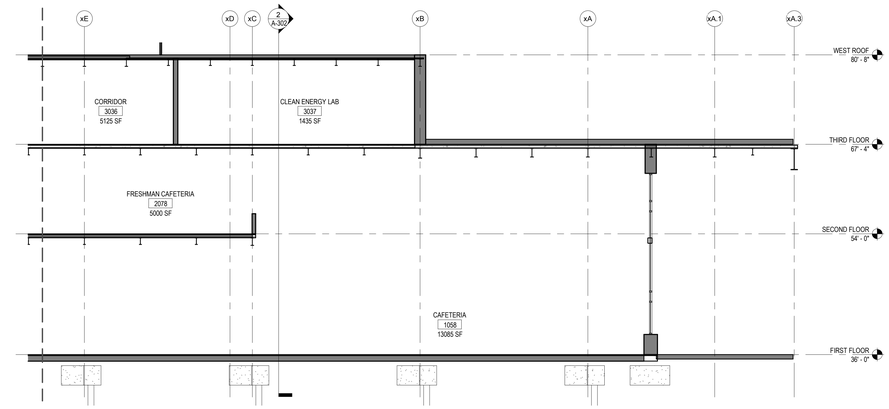
4 BUILDING SECTION - WEST BLDG LONGITUDINAL - PART C

1/8" = 1'-0"



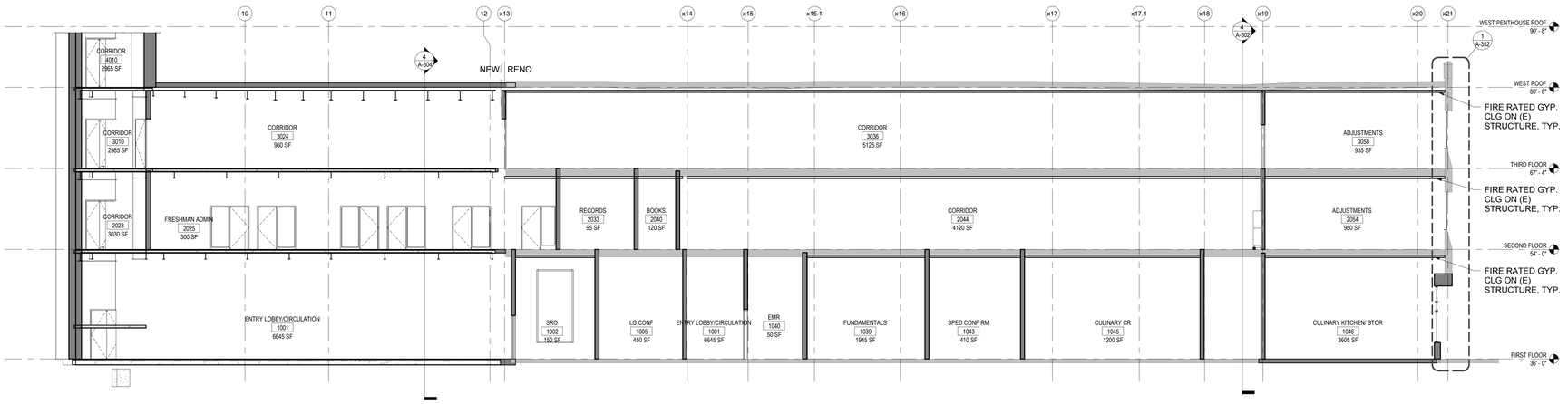
2 BUILDING SECTION - WEST BLDG 2

1/8" = 1'-0"



3 BUILDING SECTION - WEST BLDG LONGITUDINAL - PART D

1/8" = 1'-0"



1 BUILDING SECTION - WEST BLDG 1

1/8" = 1'-0"

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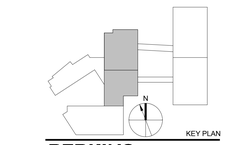

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LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
BUILDING SECTIONS - WEST BLDG

SCALE: 1/8" = 1'-0"

A-302

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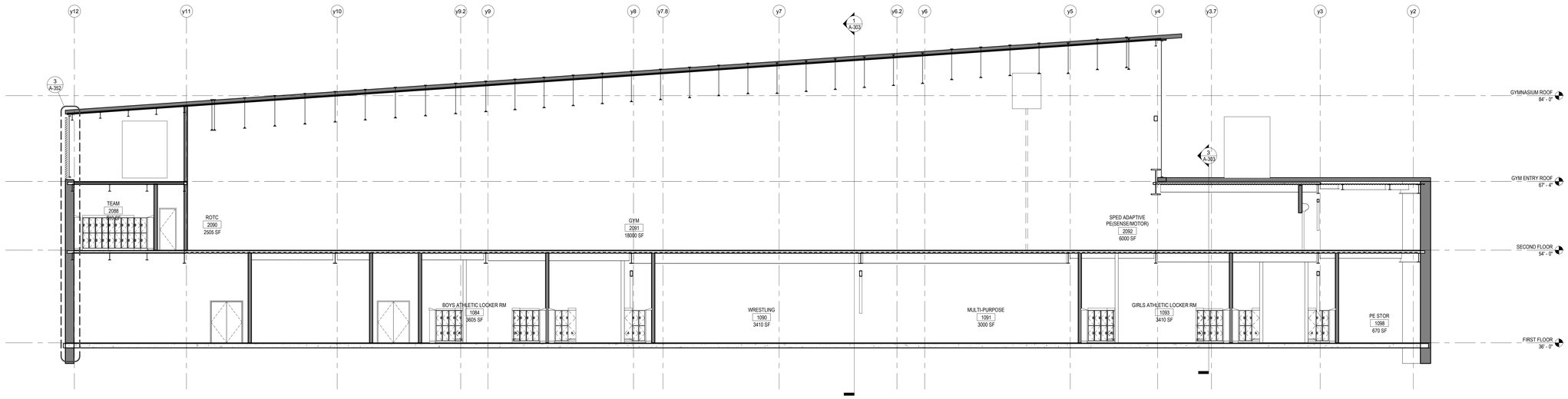
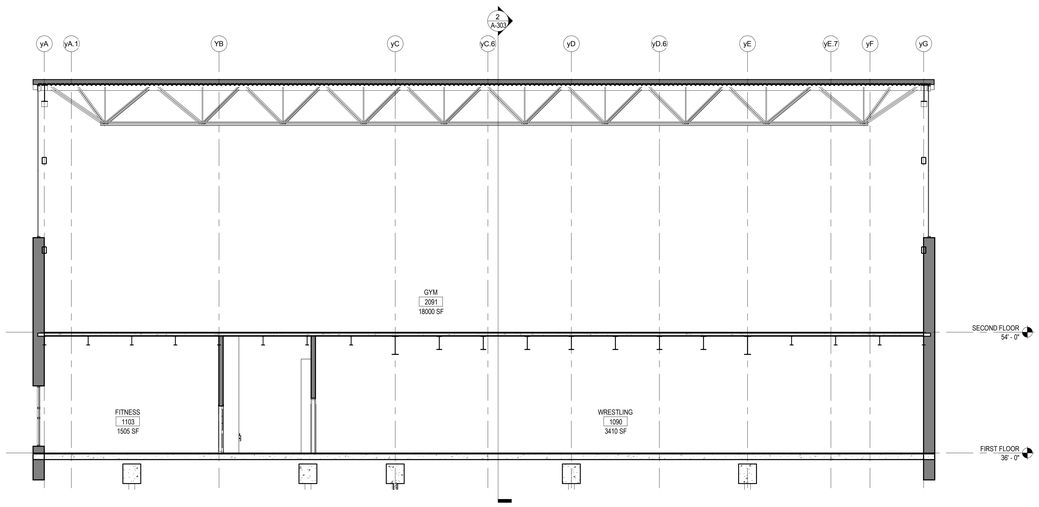


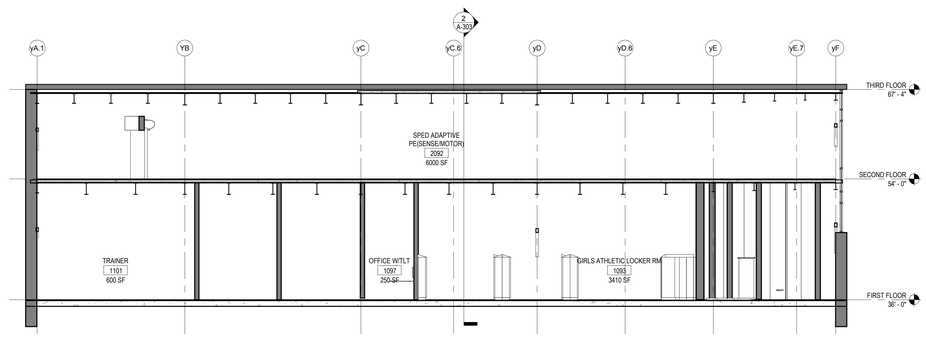
2 BUILDING SECTION - GYM LONGITUDINAL

1/8" = 1'-0"



1 BUILDING SECTION - GYM

1/8" = 1'-0"



3 BUILDING SECTION - GYM 2

1/8" = 1'-0"

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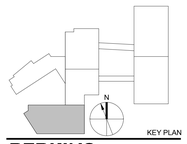

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161 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

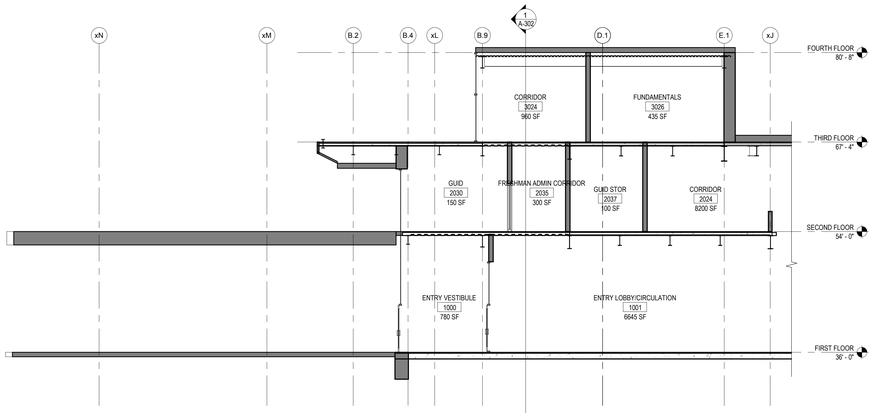
BUILDING SECTIONS - GYM

SCALE: 1/8" = 1'-0"

A-303

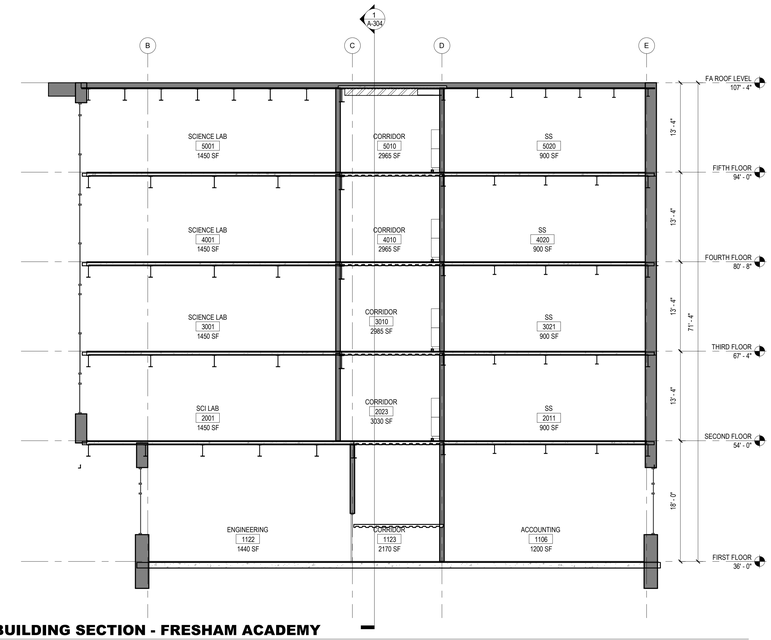
SCHEMATIC DESIGN SUBMISSION

02/20/2018



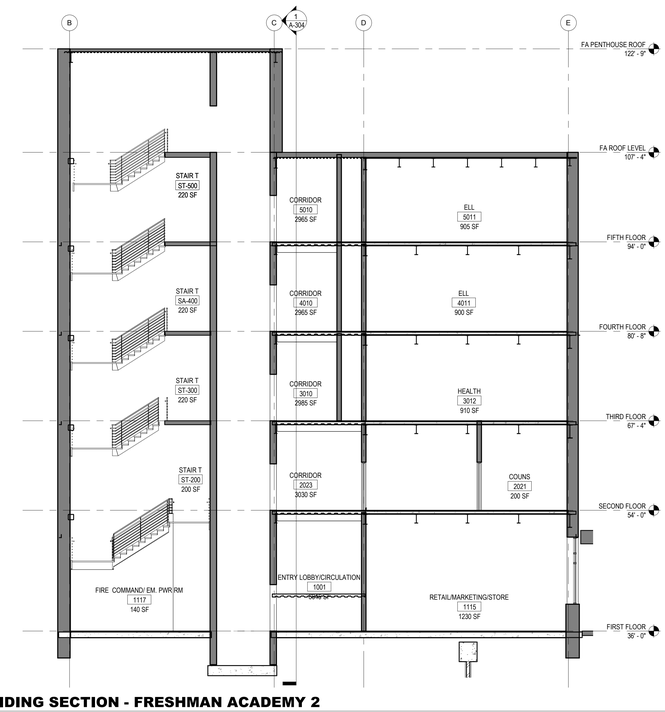
4 BUILDING SECTION - MAIN ENTRY

1/8" = 1'-0"



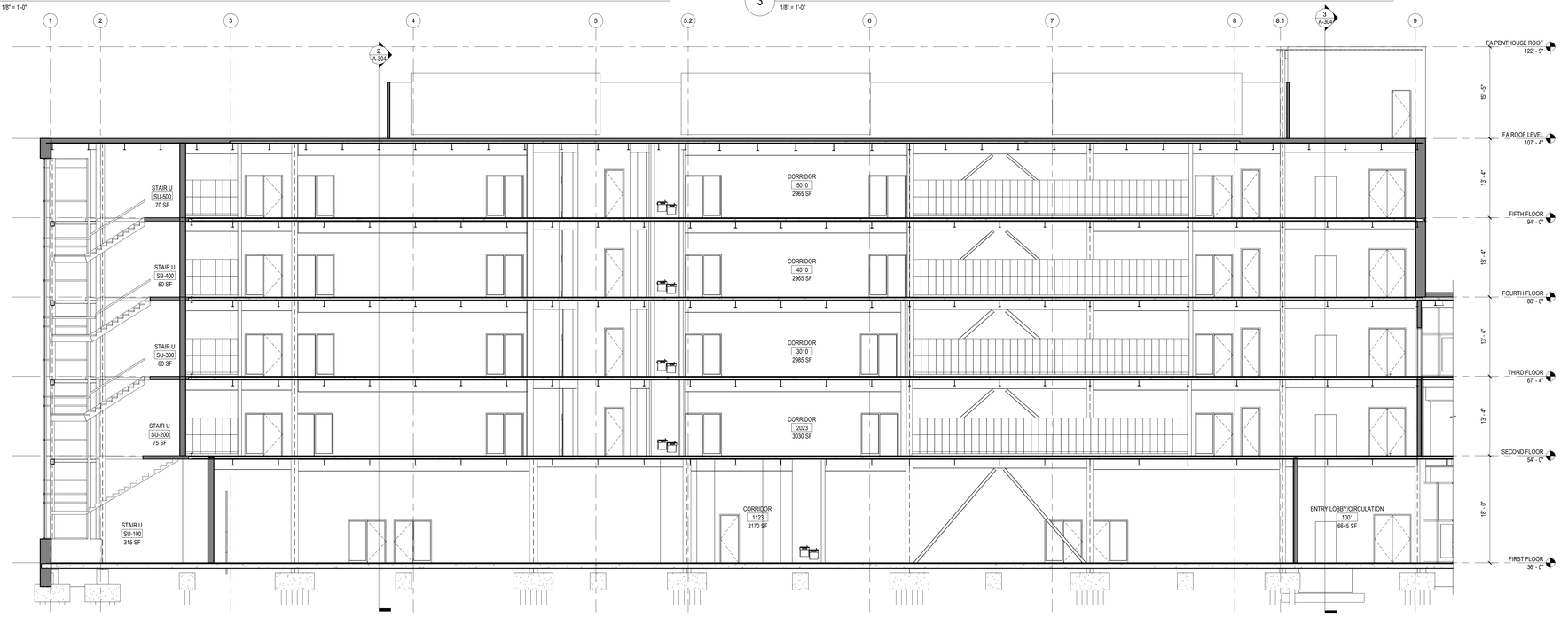
2 BUILDING SECTION - FRESHAM ACADEMY

1/8" = 1'-0"



3 BUIDING SECTION - FRESHMAN ACADEMY 2

1/8" = 1'-0"



1 BUILDING SECTION - FRESHMAN ACADEMY LONGITUDINAL

1/8" = 1'-0"

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NO.	DATE	ISSUE

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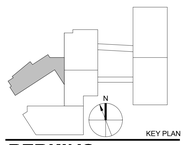


PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

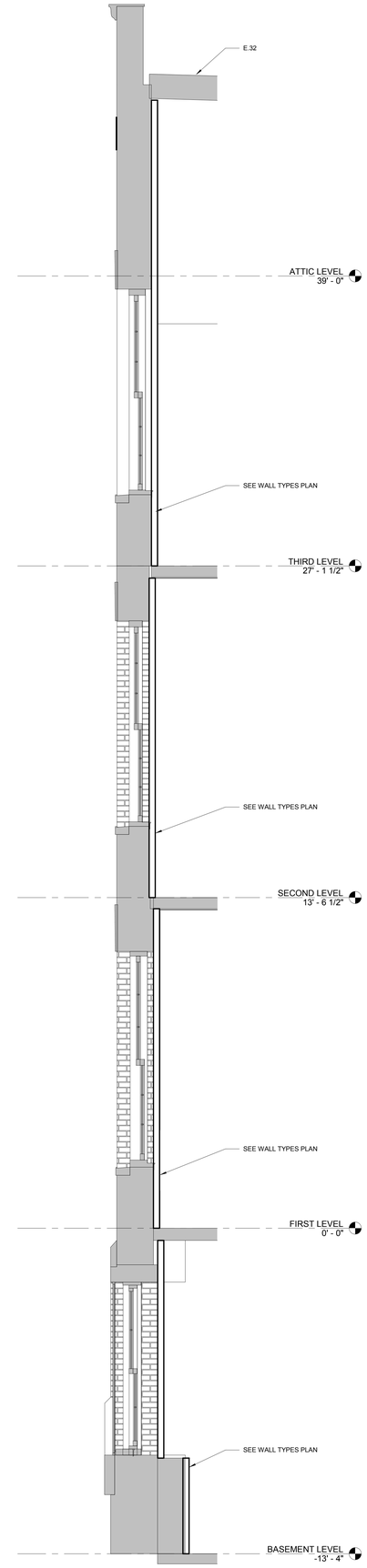
BUILDING SECTIONS - FRESHMAN ACADEMY

SCALE: 1/8" = 1'-0"

A-304

SCHEMATIC DESIGN SUBMISSION

02/20/2018



1 **TYPICAL WALL SECTION**
1/2" = 1'-0"

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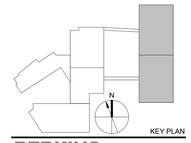
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

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Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

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Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

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Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

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Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

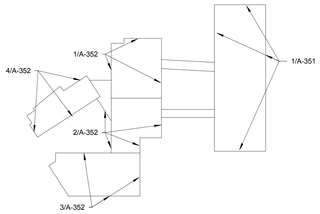
DRAWING TITLE:
WALL SECTIONS - EAST BLDG

SCALE: 1/2" = 1'-0"

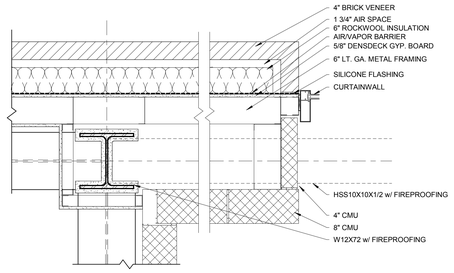
A-351

SCHEMATIC DESIGN SUBMISSION

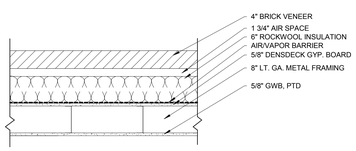
2/20/2018



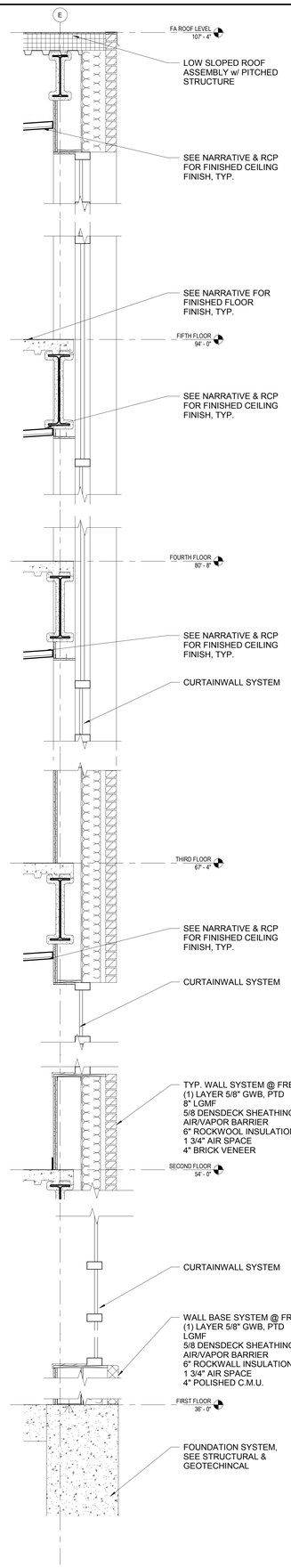
KEY PLAN - EXT. WALL SECTIONS



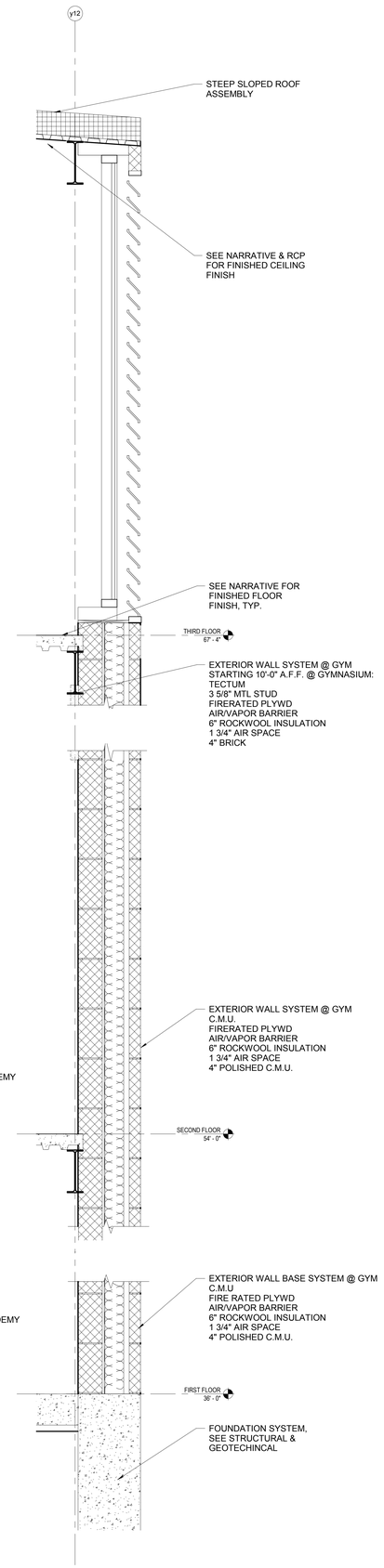
5 **DETAIL SECTION - EXTERIOR WALL @ FA STAIRS**
1" = 1'-0"



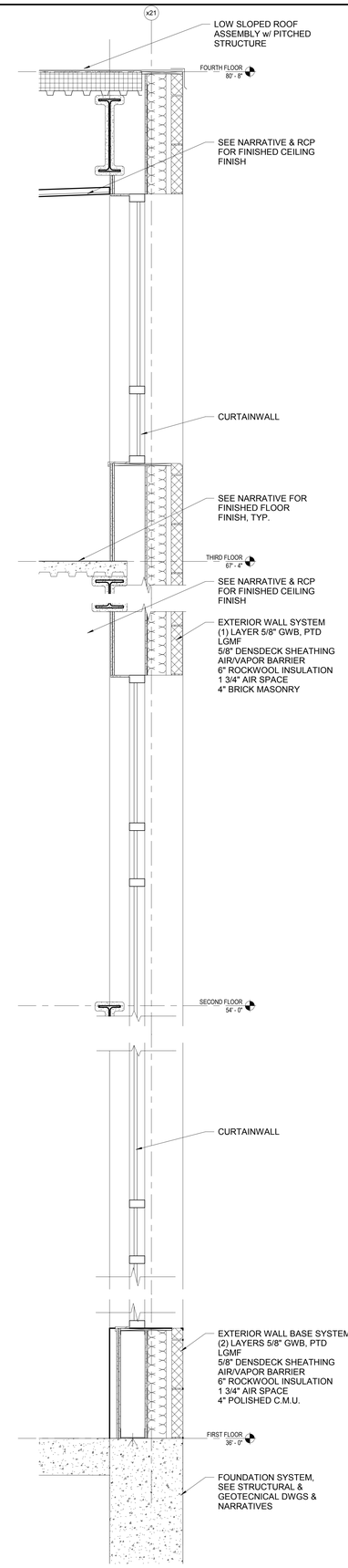
6 **DETAIL SECTION - TYP. EXTERIOR WALL @ FA**
1" = 1'-0"



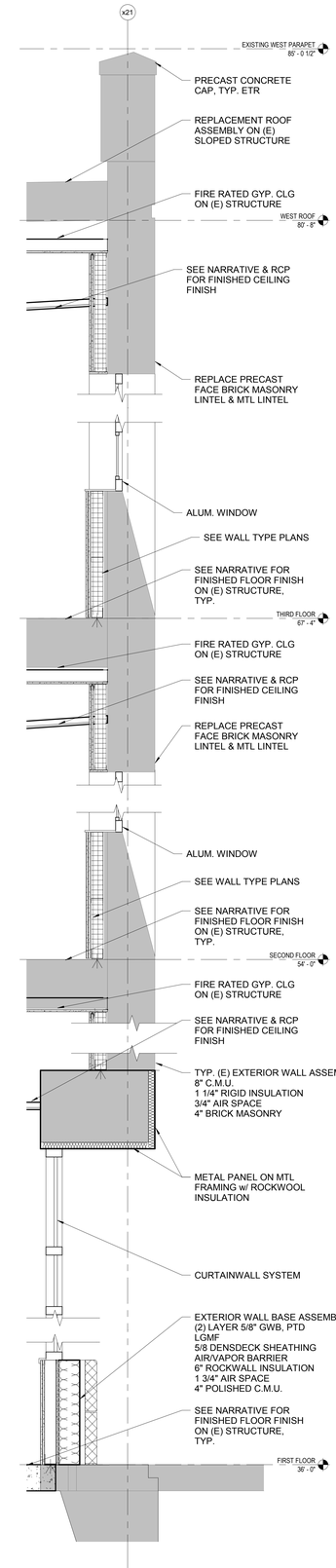
4 **WALL SECTION @ FA, TYP.**
3/4" = 1'-0"



3 **WALL SECTION @ GYM, TYP.**
3/4" = 1'-0"



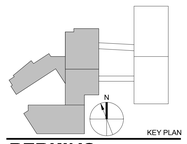
2 **WALL SECTION @ WEST BLDG - NEW, TYP.**
3/4" = 1'-0"



1 **WALL SECTION @ WEST BLDG - RENO, TYP.**
3/4" = 1'-0"

NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
155 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
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VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
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161 West Main Street Georgetown, MA 01833

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Security Consultant Name
Security Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
WALL SECTIONS - WEST

SCALE: As indicated

A-352

SCHEMATIC DESIGN SUBMISSION

02/20/2018

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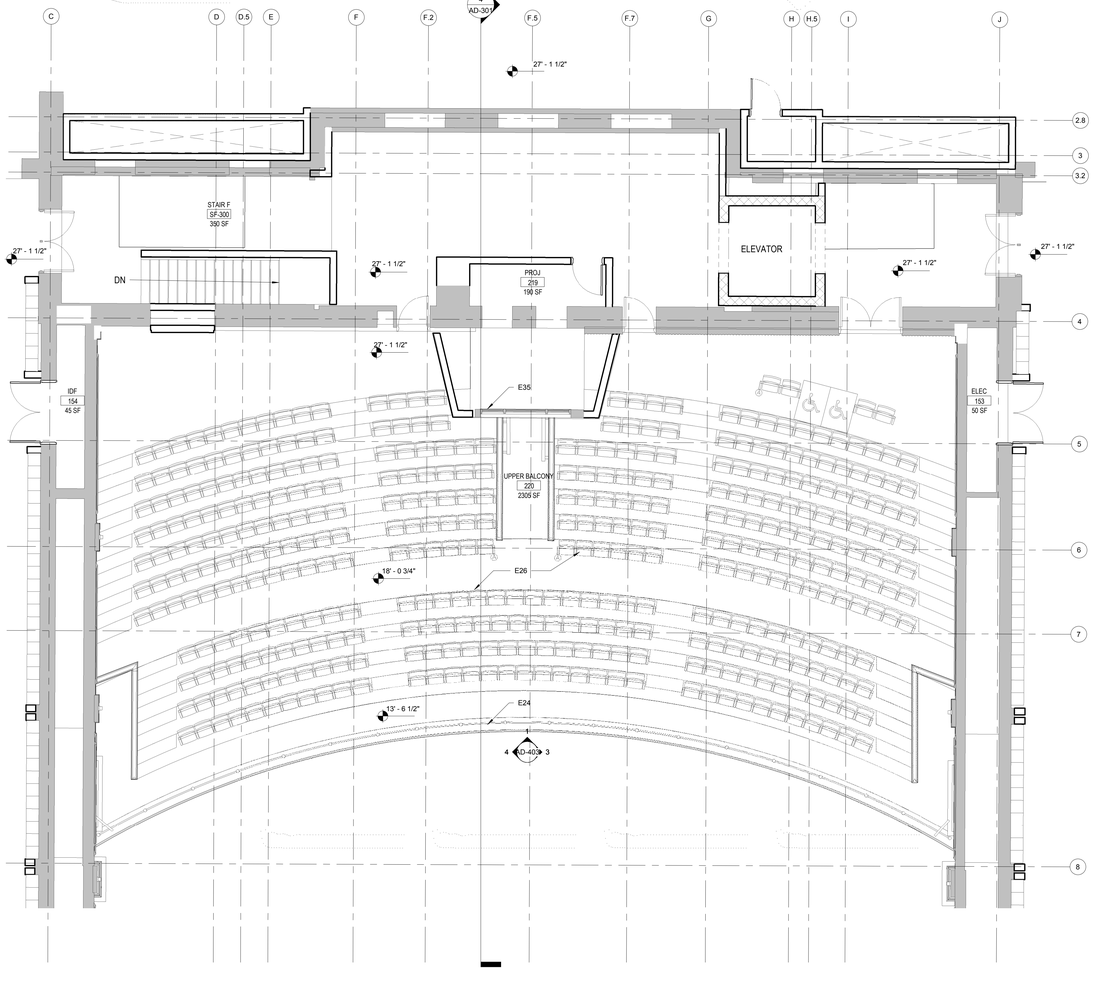
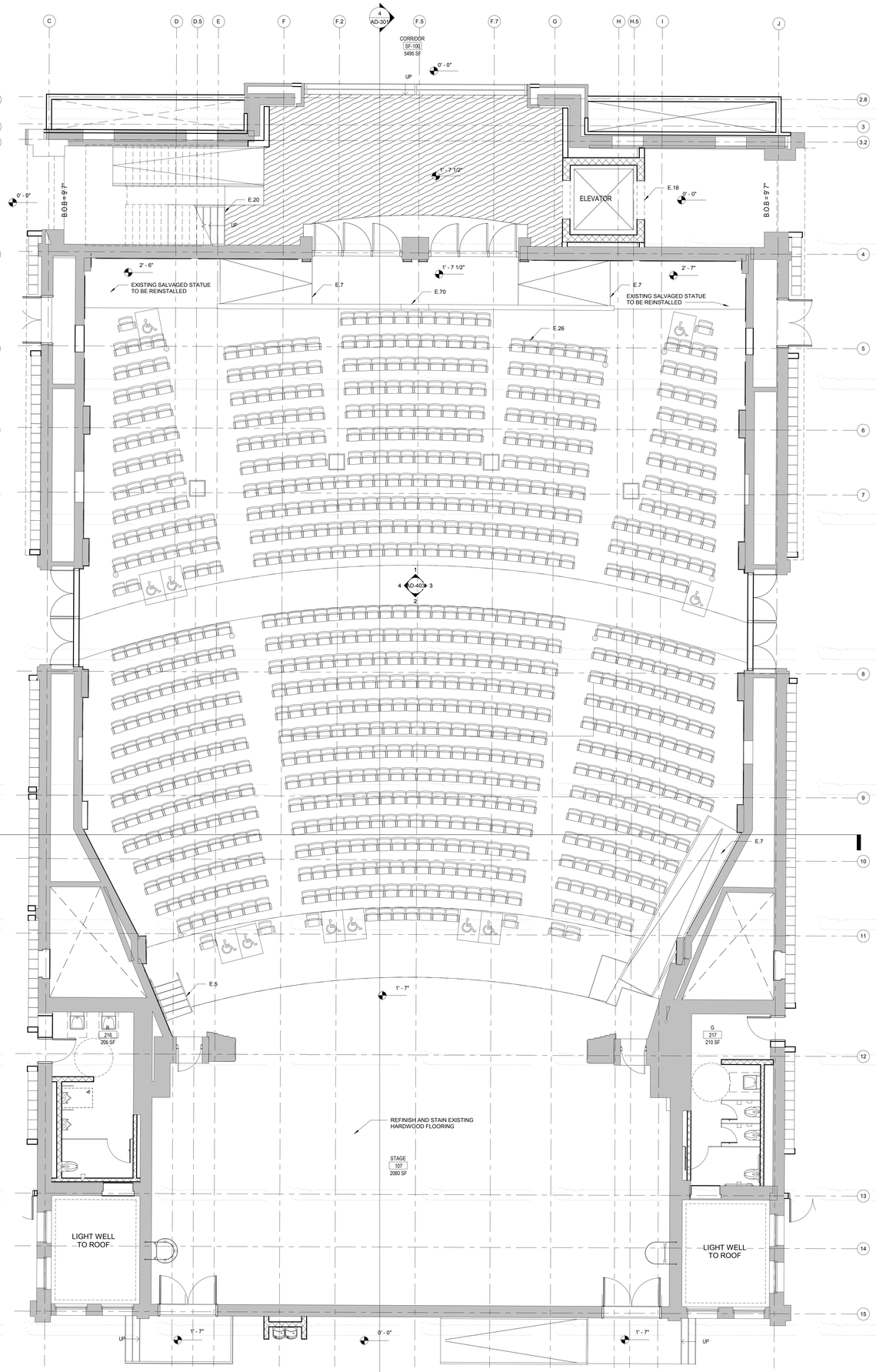


2 THIRD FLOOR PLAN - AUDITORIUM

3/16" = 1'-0"



1 FIRST FLOOR PLAN - AUDITORIUM

3/16" = 1'-0"

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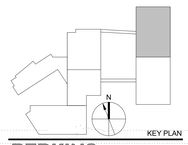
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

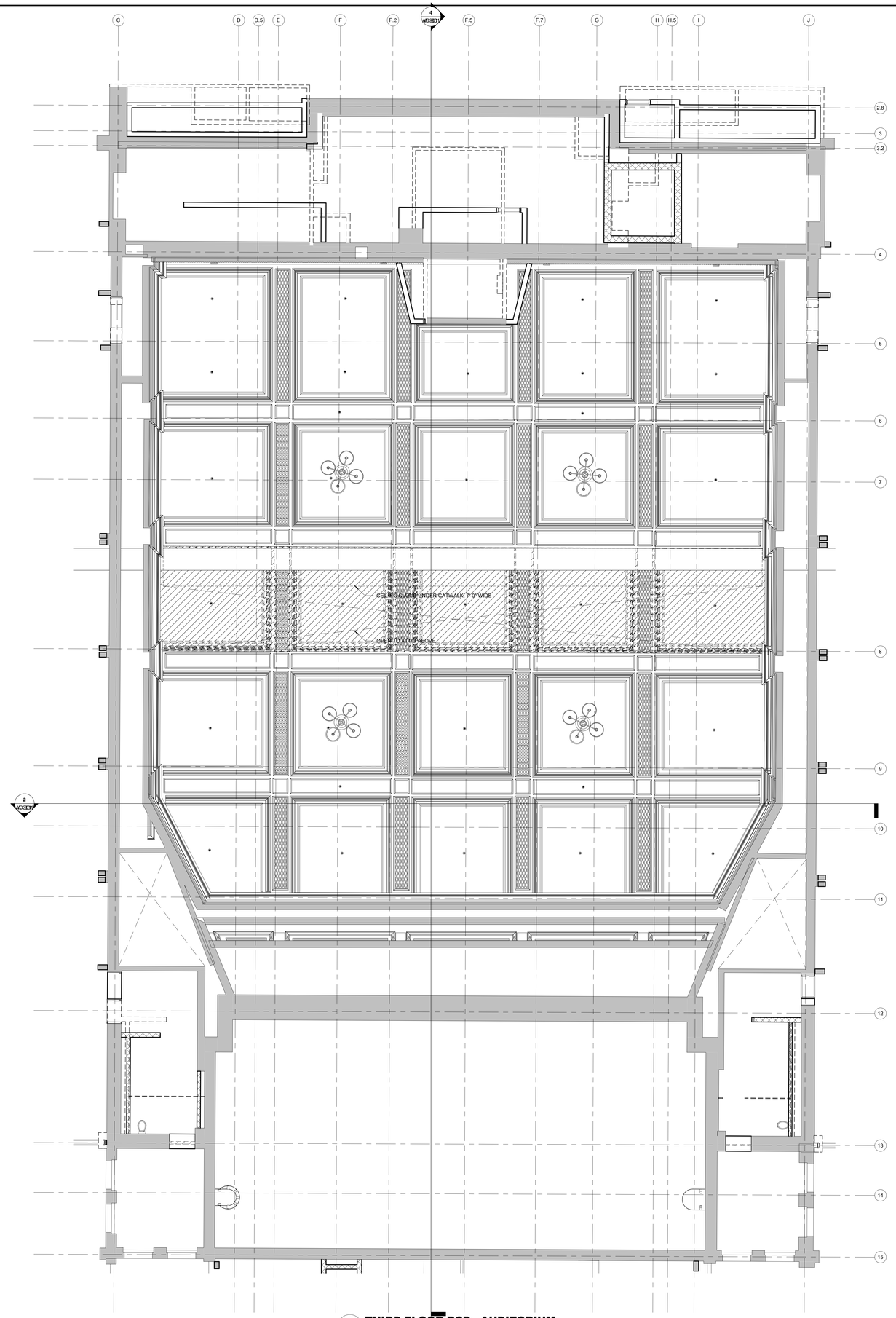
AUDITORIUM PLANS - LEVEL 1 & 3

SCALE: 3/16" = 1'-0"

A-401

SCHEMATIC DESIGN SUBMISSION

2/20/2018



1 **THIRD FLOOR RCP - AUDITORIUM**
3/16" = 1'-0"

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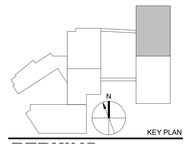
NO.	DATE	ISSUE

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical & Plumbing:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Lighting Consultant:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Planning / Zoning:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

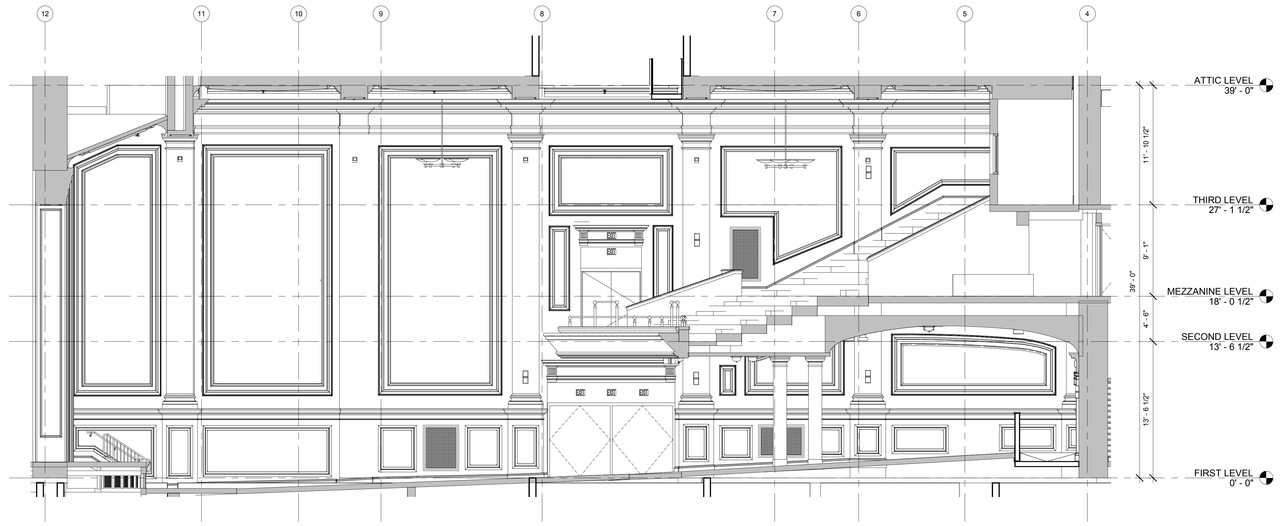
DRAWING TITLE:
AUDITORIUM RCP

SCALE: 3/16" = 1'-0"

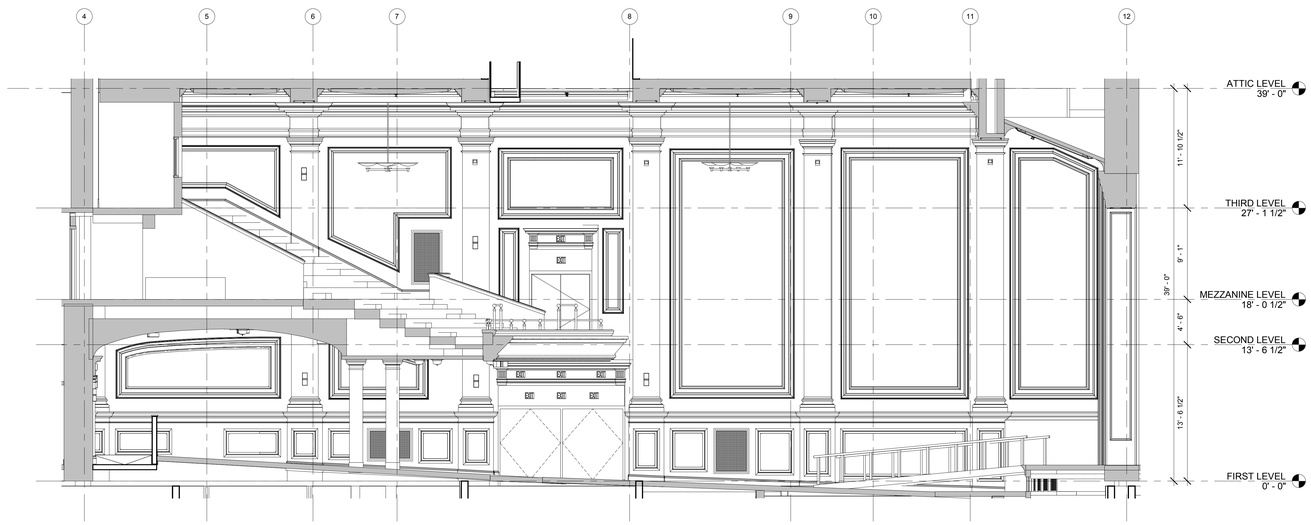
A-402

SCHEMATIC DESIGN SUBMISSION

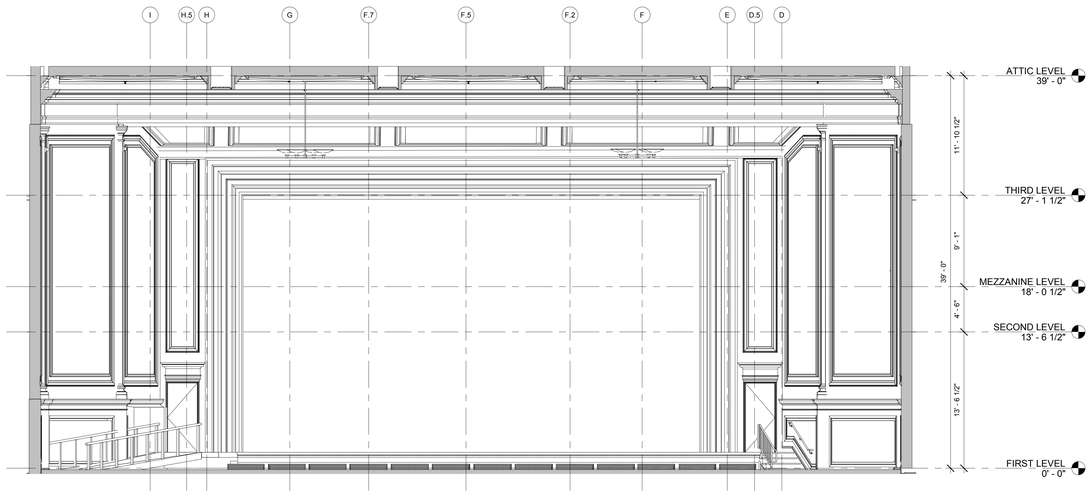
2/20/2018



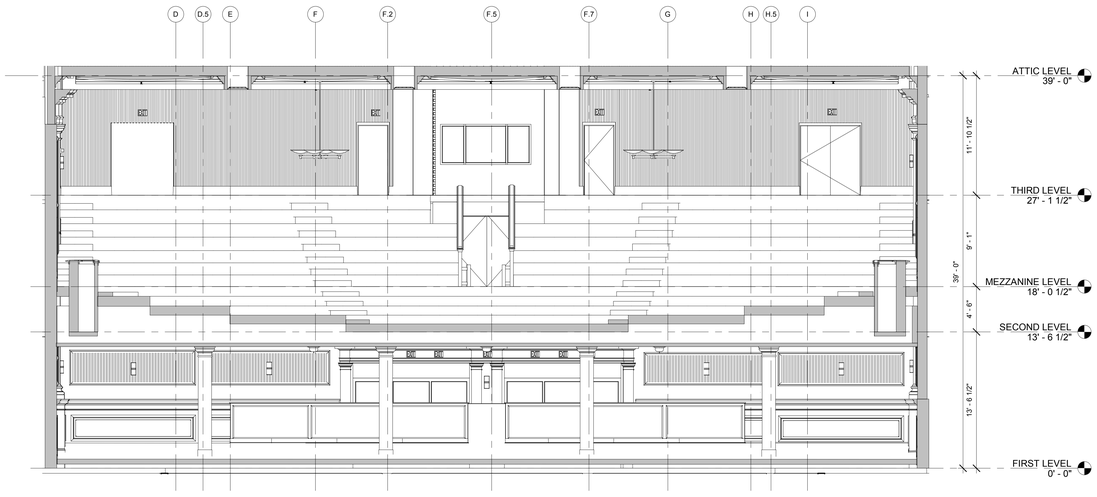
4 **AUDITORIUM - WEST**
3/16" = 1'-0"



3 **AUDITORIUM - EAST**
3/16" = 1'-0"



2 **AUDITORIUM - SOUTH**
3/16" = 1'-0"



1 **AUDITORIUM - NORTH**
3/16" = 1'-0"

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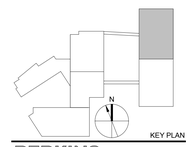
NO.	DATE	ISSUE
1	12/28/2018	SD estimating - Revision 1

SEAL



KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T: +1 617 449 4000
F: +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
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Construction Manager Address

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Envelope onsultant Address

Code Consultant:
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142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD
LOWELL, MA 08152

PROJECT No: 67150

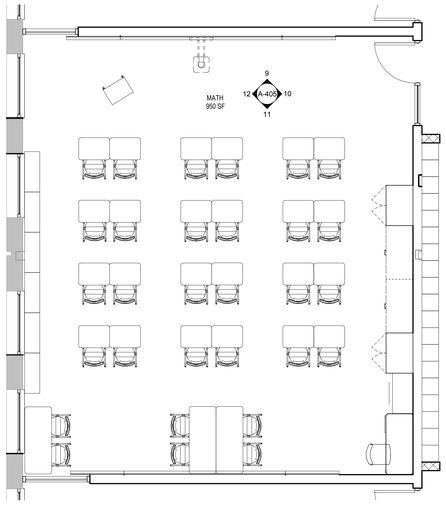
DRAWING TITLE:
AUDITORIUM INTERIOR ELEVATIONS

SCALE: 3/16" = 1'-0"

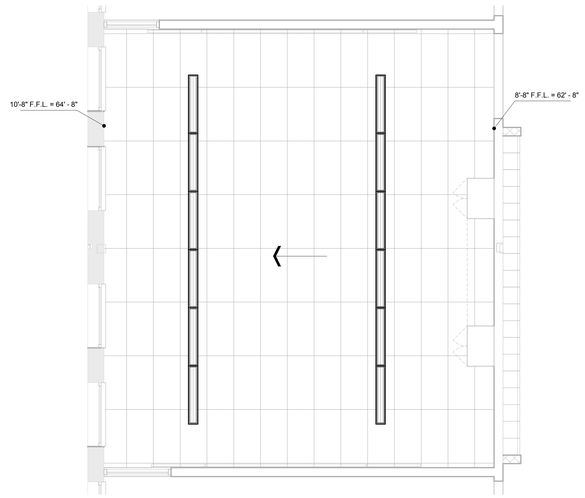
A-403

SCHEMATIC DESIGN SUBMISSION

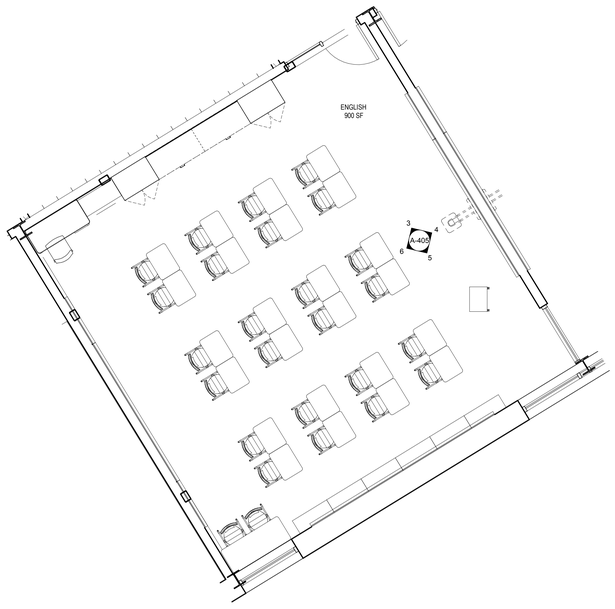
2/20/2018



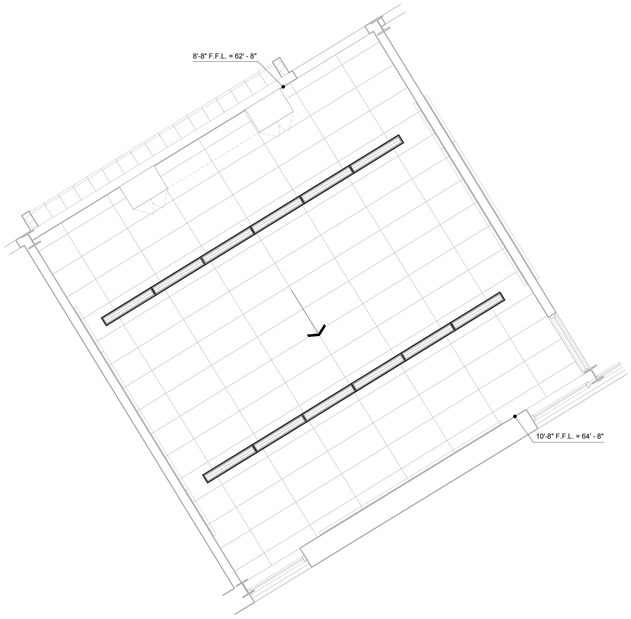
7 **TYPICAL CLASSROOM - GR. 10-12 - RENOVATION**
1/4" = 1'-0"



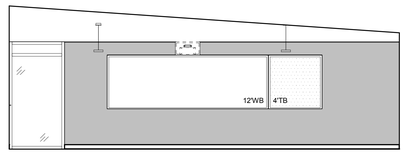
8 **TYPICAL CLASSROOM RCP - GR. 10-12 - RENOVATION**
1/4" = 1'-0"



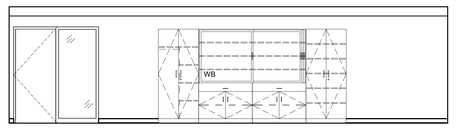
1 **TYPICAL CLASSROOM - GR. 9 - NEW CONST.**
1/4" = 1'-0"



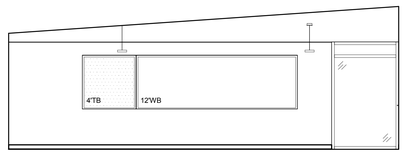
2 **TYPICAL CLASSROOM RCP - GR. 9 - NEW CONST.**
1/4" = 1'-0"



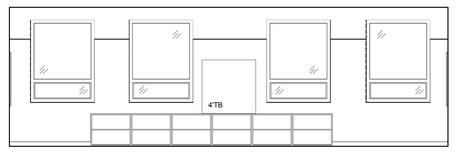
9 **TYPICAL CLASSROOM RENOVATION - ELEVATION A**
1/4" = 1'-0"



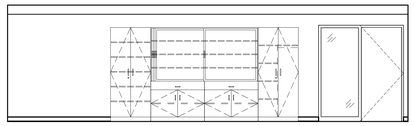
10 **TYPICAL CLASSROOM RENOVATION - ELEVATION B**
1/4" = 1'-0"



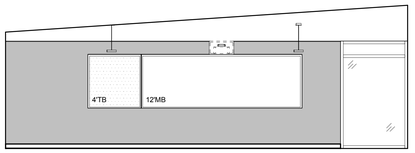
11 **TYPICAL CLASSROOM RENOVATION - ELEVATION C**
1/4" = 1'-0"



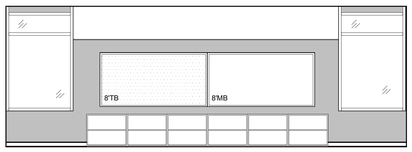
12 **TYPICAL CLASSROOM RENOVATION - ELEVATION D**
1/4" = 1'-0"



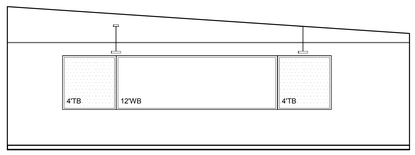
3 **TYPICAL CLASSROOM ELEVATION A**
1/4" = 1'-0"



4 **TYPICAL CLASSROOM ELEVATION B**
1/4" = 1'-0"



5 **TYPICAL CLASSROOM ELEVATION C**
1/4" = 1'-0"



6 **TYPICAL CLASSROOM ELEVATION D**
1/4" = 1'-0"

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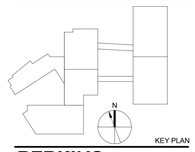
NO.	DATE	ISSUE

SEAL



KEY PLAN

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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

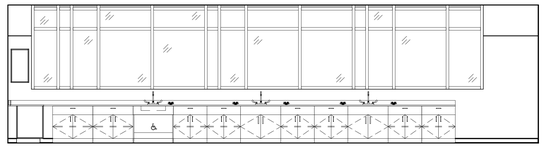
DRAWING TITLE:
GENERAL CLASSROOM COMPILATION

SCALE: 1/4" = 1'-0"

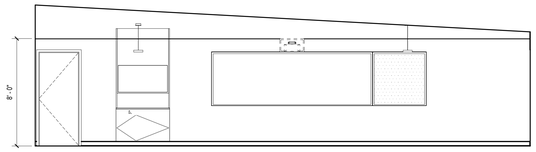
A-405

SCHEMATIC DESIGN SUBMISSION

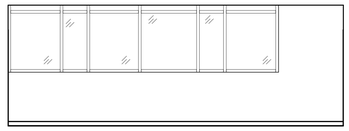
02/20/2018



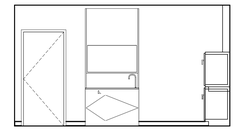
2 TYPICAL SCIENCE LAB ELEVATION A
1/4" = 1'-0"



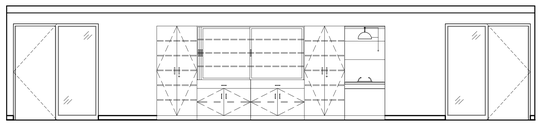
4 TYPICAL SCIENCE LAB & PREP RM ELEVATION B
1/4" = 1'-0"



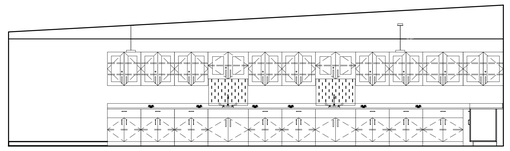
7 PREP ROOM ELEVATION A
1/4" = 1'-0"



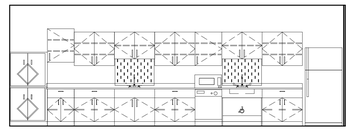
8 PREP RM ELEVATION B
1/4" = 1'-0"



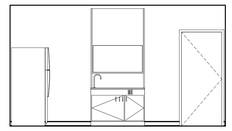
5 TYPICAL SCIENCE LAB & PREP RM ELEVATION C
1/4" = 1'-0"



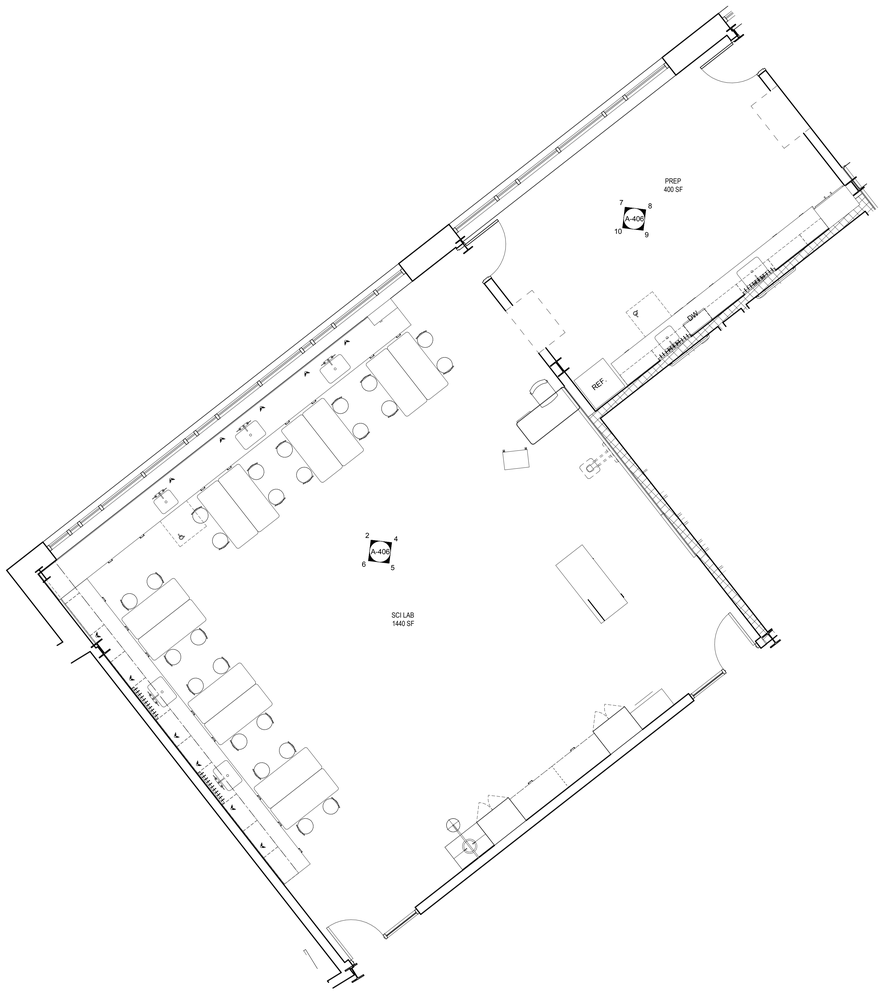
6 SCIENCE LAB ELEVATION D
1/4" = 1'-0"



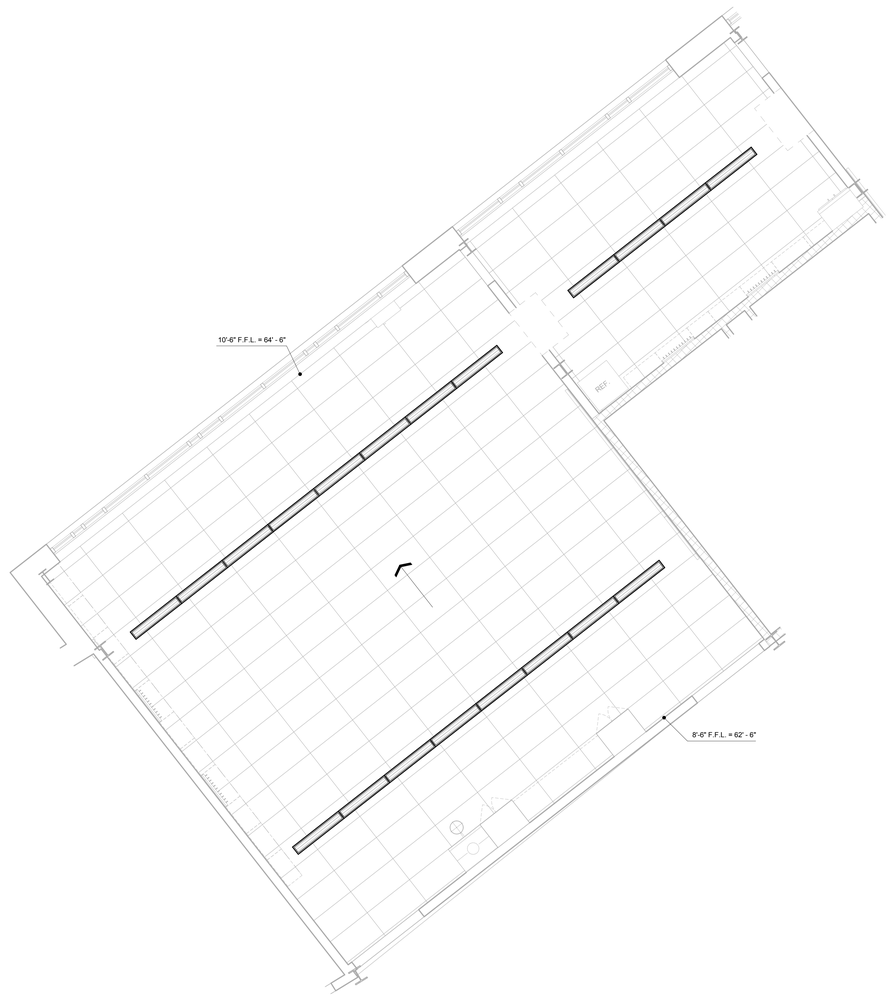
9 PREP ROOM ELEVATION C
1/4" = 1'-0"



10 PREP RM ELEVATION D
1/4" = 1'-0"



1 TYPICAL SCIENCE & PREP ROOM - GR. 9
1/4" = 1'-0"



3 TYPICAL SCIENCE & PREP ROOM RCP - GR. 9
1/4" = 1'-0"

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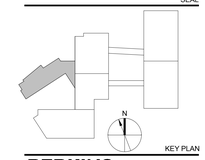
NO.	DATE	ISSUE

SEAL



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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD, LOWELL, MA 08152

PROJECT No: 67150

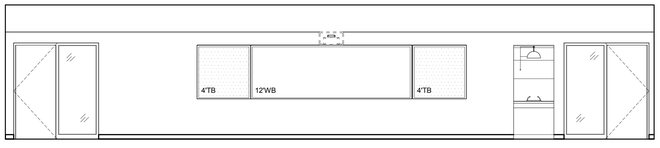
DRAWING TITLE:
SCIENCE LAB COMPILATION

SCALE: 1/4" = 1'-0"

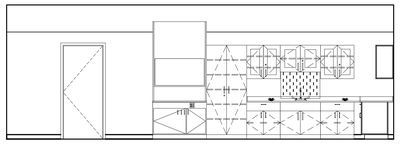
A-406

SCHEMATIC DESIGN SUBMISSION

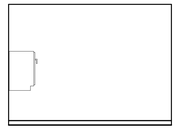
02/20/2018



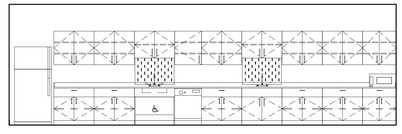
3 **SCIENCE LAB GR. 10-12 ELEVATION A**
1/4" = 1'-0"



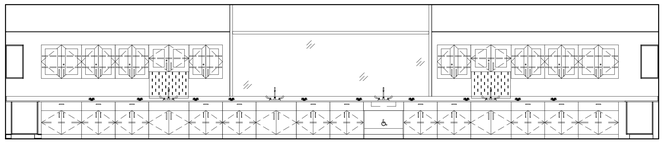
4 **SCIENCE LAB GR. 10-12 ELEVATION B**
1/4" = 1'-0"



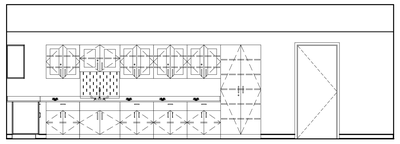
7 **PREP RM GR. 10-12 ELEVATION A**
1/4" = 1'-0"



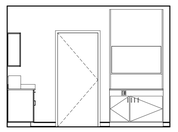
8 **PREP ROOM GR. 10-12 ELEVATION B**
1/4" = 1'-0"



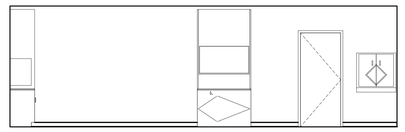
5 **SCIENCE LAB GR. 10-12 ELEVATION C**
1/4" = 1'-0"



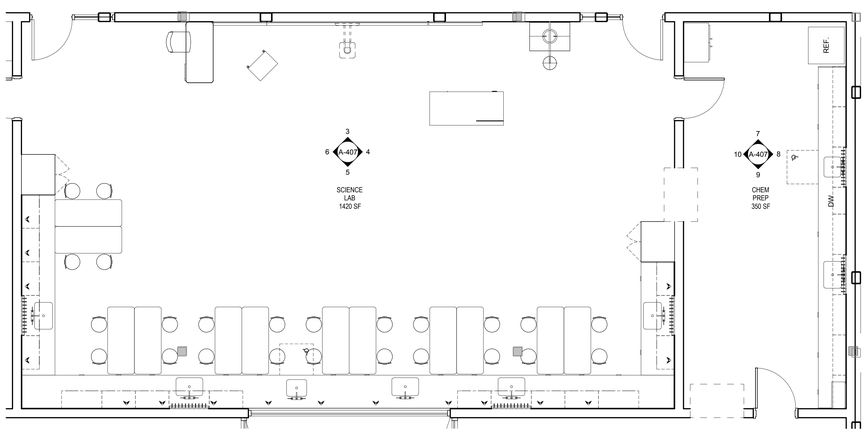
6 **SCIENCE LAB GR. 10-12 ELEVATION D**
1/4" = 1'-0"



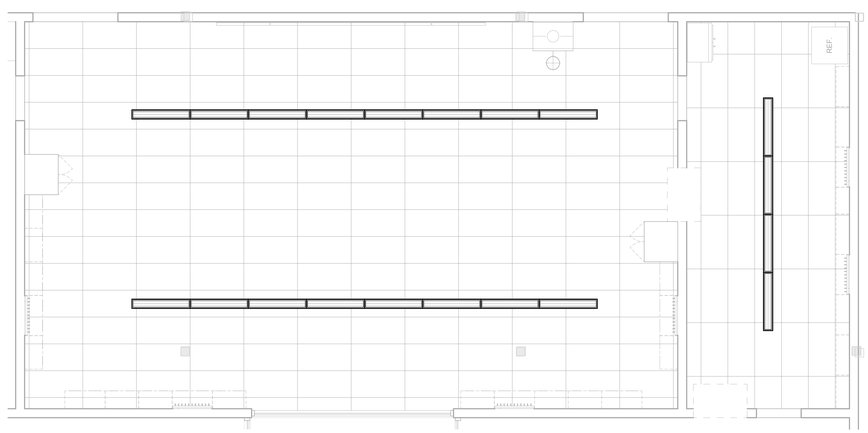
9 **PREP ROOM GR. 10-12 ELEVATION C**
1/4" = 1'-0"



10 **PREP ROOM GR. 10-12 ELEVATION D**
1/4" = 1'-0"



1 **TYPICAL SCIENCE & PREP ROOM - GR. 10-12 - RENOVATION**
1/4" = 1'-0"



2 **TYPICAL SCIENCE & PREP ROOM RCP - GR. 10-12**
1/4" = 1'-0"

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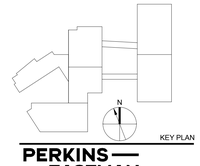

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PROJECT TITLE:
LOWELL HIGH SCHOOL

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LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SCIENCE LAB COMPILATION

SCALE: 1/4" = 1'-0"

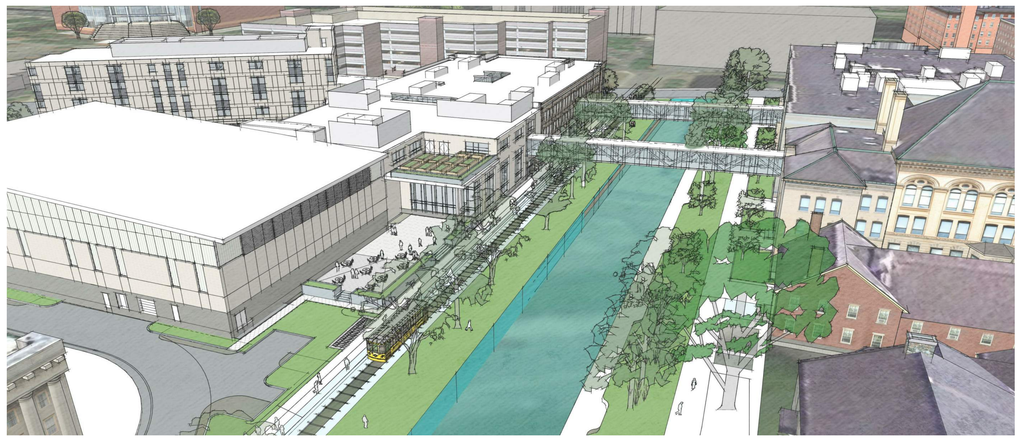
A-407

SCHEMATIC DESIGN SUBMISSION

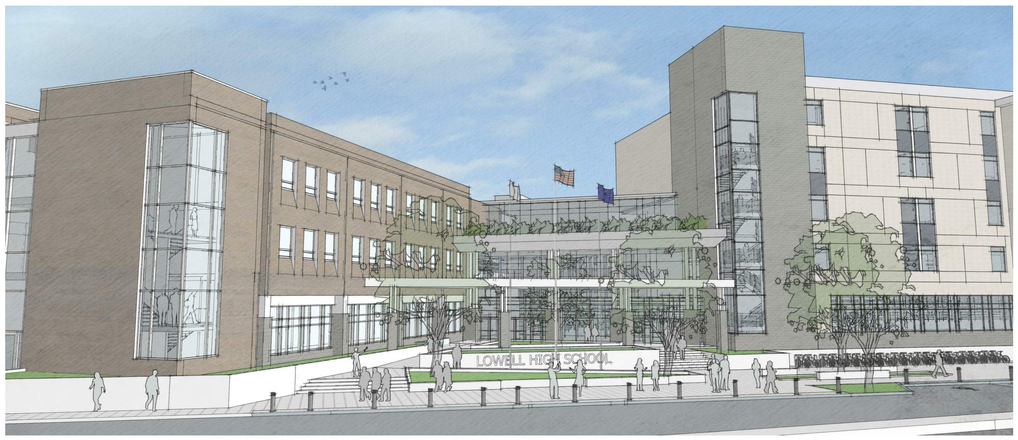
02/20/2018



6 **EXTERIOR VIEW OF EAST BUILDING**
1" = 10'-0"



5 **ARIEL VIEW OF LOWELL HIGH SCHOOL LOOKING NORTH**
1" = 10'-0"



4 **EXTERIOR VIEW OF MAIN ENTRY**
1" = 10'-0"



3 **EXTERIOR VIEW LOOKING OF GYMNASIUM**
1" = 10'-0"



2 **EXTERIOR VIEW OF FRESHMAN ACADEMY**
1" = 10'-0"



1 **EXTERIOR VIEW FROM ARCAND DRIVE**
1" = 10'-0"

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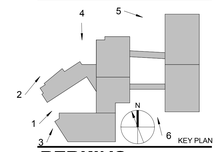
NO.	DATE	ISSUE

SEAL



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PROJECT TITLE:
LOWELL HIGH SCHOOL

50 FATHER MORISSETTE BOULEVARD,
LOWELL, MA 08152

PROJECT No: 67150

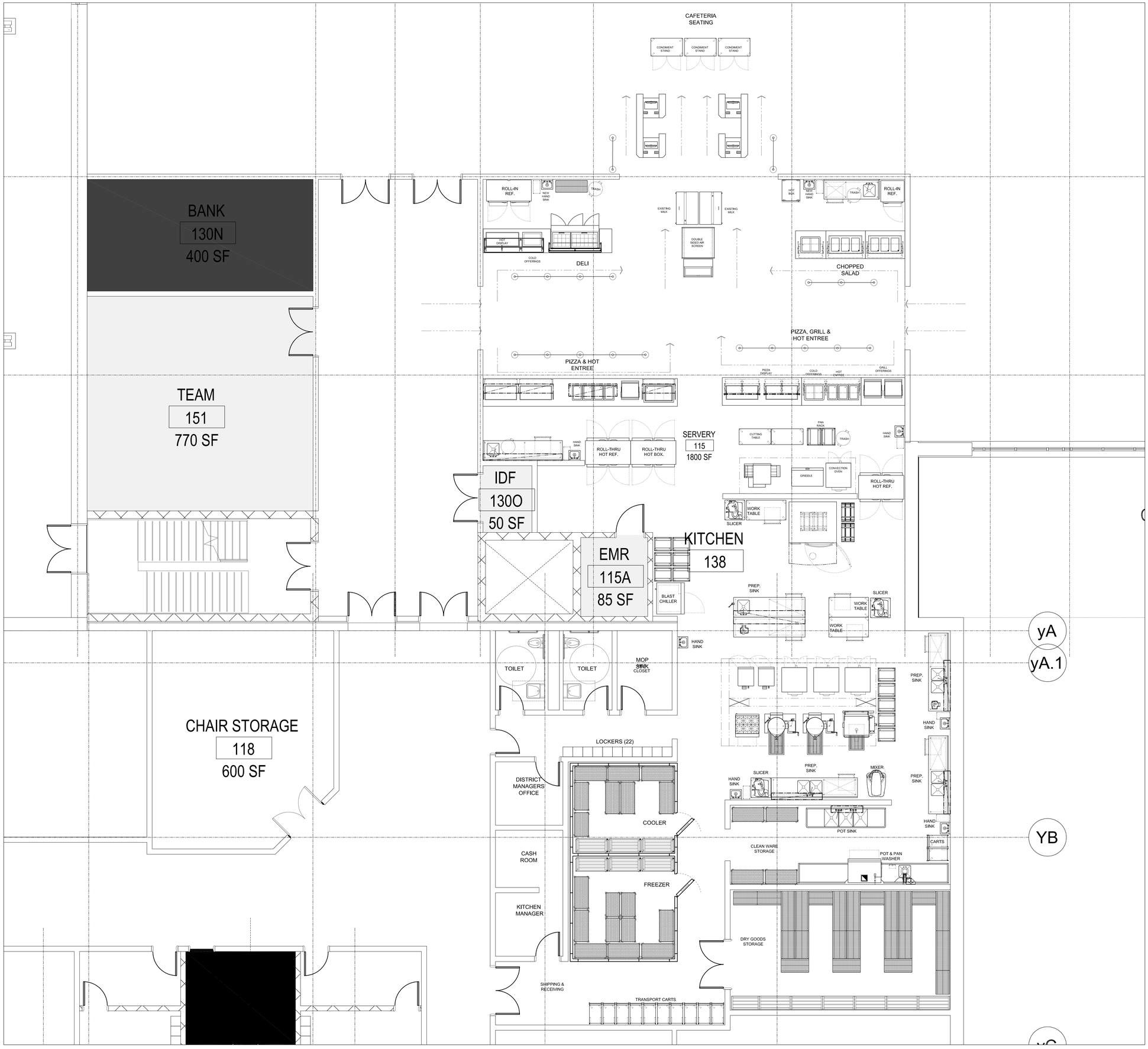
DRAWING TITLE:
3D REPRESENTATIONS - EXTERIOR

SCALE: 1" = 10'-0"

A-901

SCHEMATIC DESIGN SUBMISSION

02/20/2018



FOODSERVICE EQUIPMENT PLAN

Scale: 1/4" = 1'-0"

NO.	DATE	ISSUE

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Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

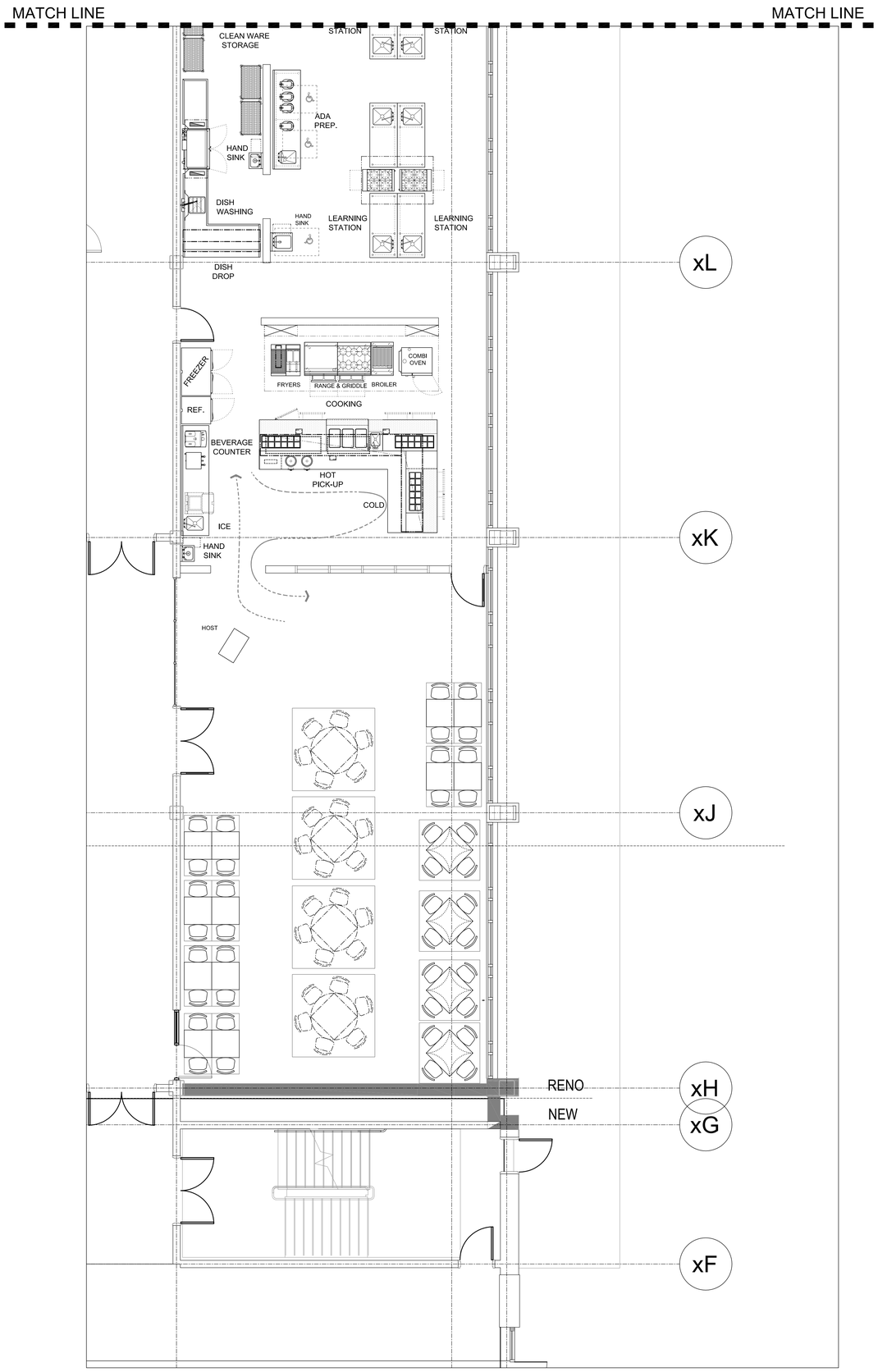
DRAWING TITLE:
Foodservice Equipment Plan

SCALE:

K101

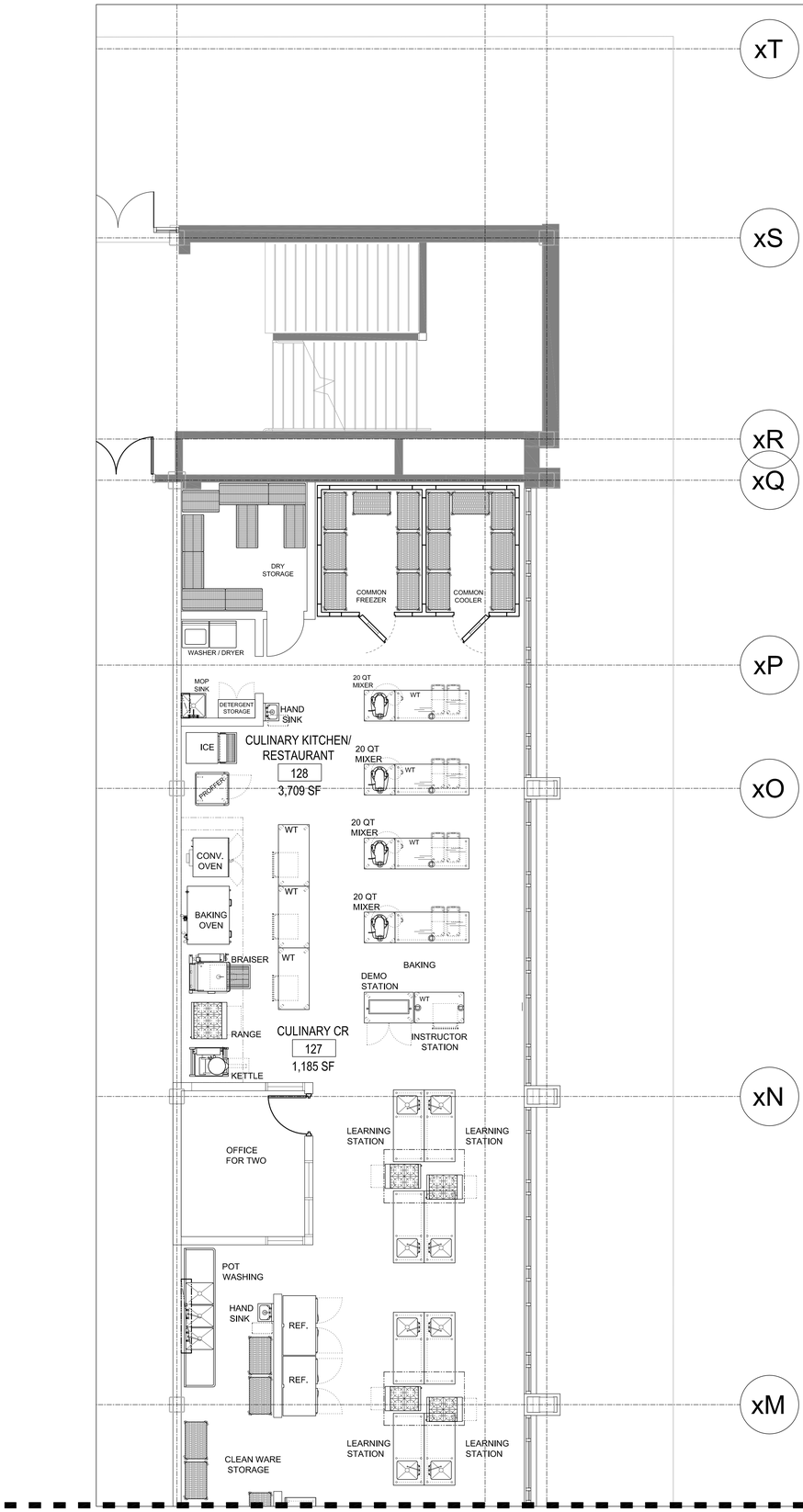
SCHEMATIC DESIGN SUBMISSION

2/20/2019



FOODSERVICE EQUIPMENT PLAN

Scale: 1/4" = 1'-0"



NO. DATE ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

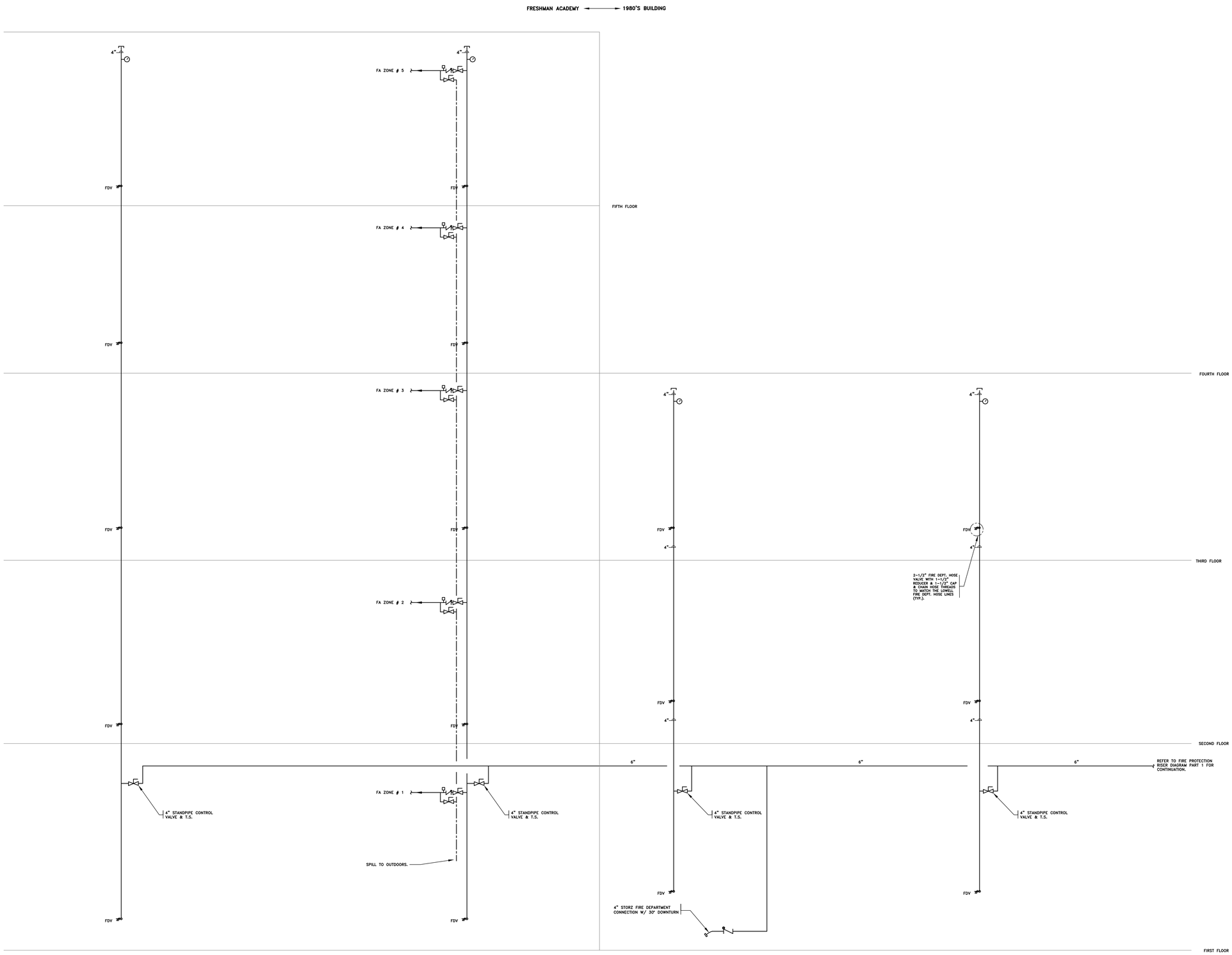
DRAWING TITLE:
Culinary Arts Foodservice Equipment Plan

SCALE:

K102

SCHEMATIC DESIGN SUBMISSION

2/20/2019



A FP0.2 *FIRE PUMP/ STANDPIPE RISER DIAGRAM PART 2*

NOT TO SCALE

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
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T. +1 617 449 4000
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Owner:

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Construction Manager:
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Construction Manager Address

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2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
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400 West Cummings Park #400 Woburn, MA 01801

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161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd, Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

FIRE PROTECTION RISE DIAGRAM WEST BUILDING

SCALE: As Indicated

FP0.0

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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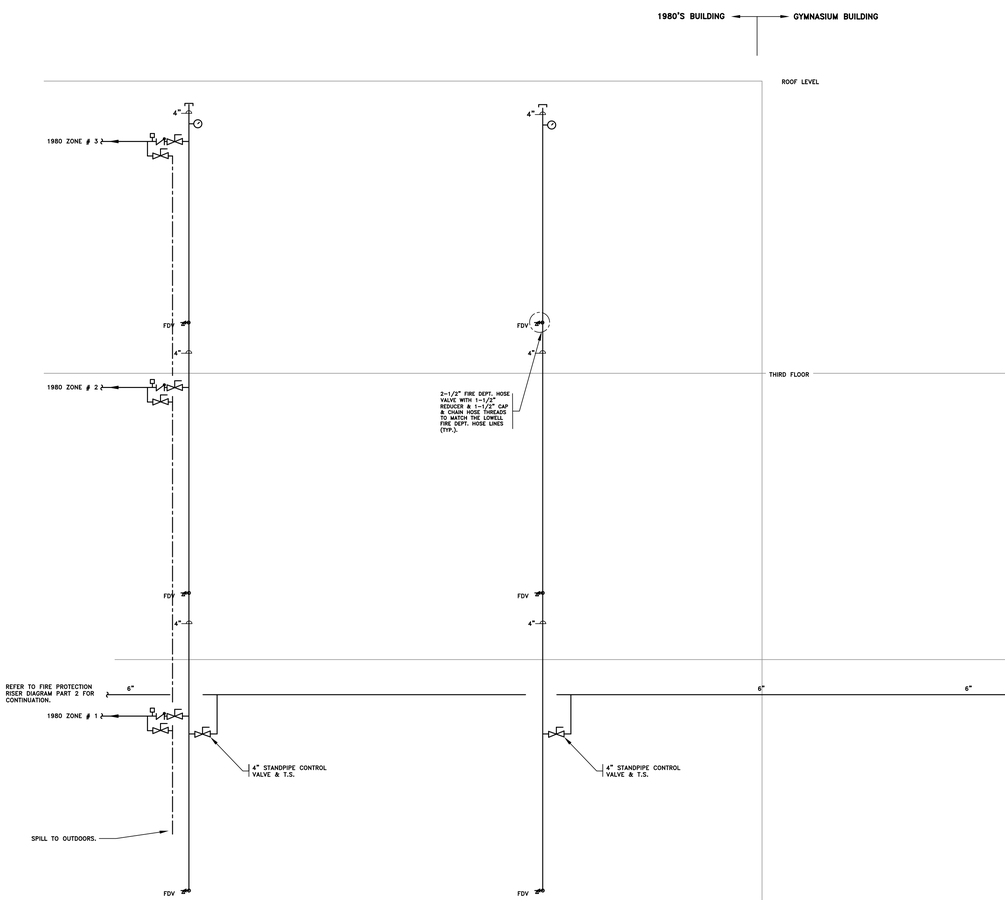

A FP0.0 *FIRE PUMP/ STANDPIPE RISER DIAGRAM PART 1*

NOT TO SCALE

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1

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
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Owner:
375 Merrimack Street, Lowell, MA 08152

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Construction Manager Address

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400 West Cummings Park #400 Woburn, MA 01801

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161 West Main Street Georgetown, MA 01833

Security:
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Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

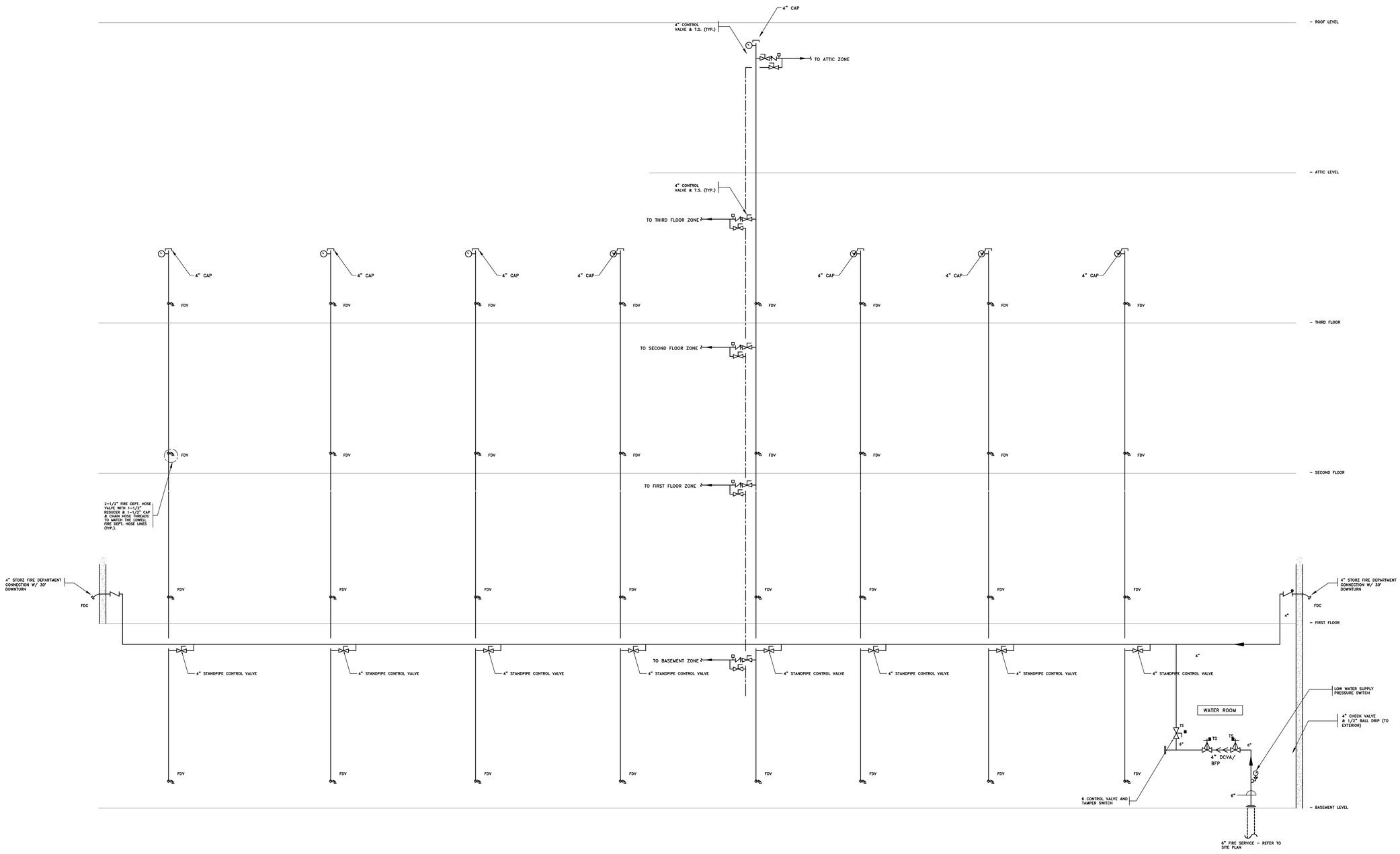
DRAWING TITLE:
FIRE PROTECTION RISE DIAGRAM WEST BUILDING

SCALE: As Indicated

FP0.1

SCHEMATIC DESIGN SUBMISSION

2/20/2019



A FP0.3 *STANDPIPE RISER DIAGRAM*

NOT TO SCALE

NO.	DATE	ISSUE

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T.: +1 617 449 4000
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Owner:

375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
VAV International
400 West Cummings Park #400 Woburn, MA 01801

Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd, Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:

LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:

FIRE PROTECTION RISE DIAGRAM EAST BUILDING

SCALE: As Indicated

FP0.3

SCHEMATIC DESIGN SUBMISSION

2/20/2019

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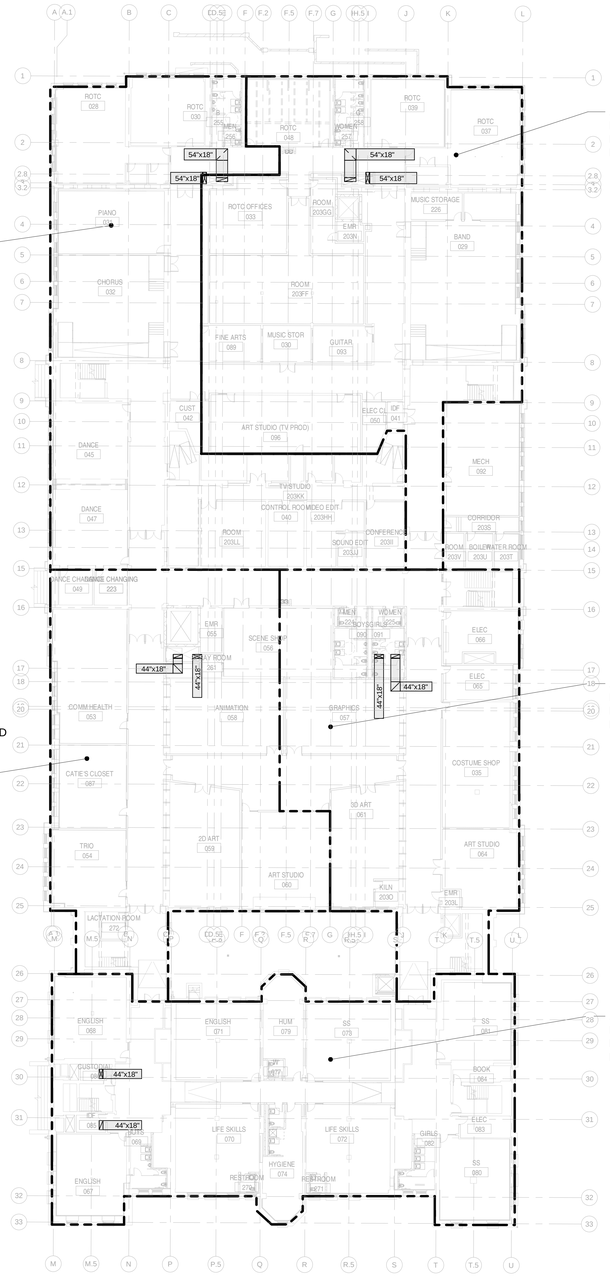

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-1, AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-2. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-3. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-4. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-5. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

1 HVAC - BASEMENT PLAN - EAST BUILDING
3/64" = 1'-0"

NOTES:
1. ALL VESTIBULES AND STAIRWELLS SHALL BE PROVIDED WITH HOT WATER UNIT HEATERS.

2. ALL ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS AND IDF ROOMS SHALL BE PROVIDED WITH SPLIT DUCTLESS COOLING UNIT SYSTEMS.

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
370 Faunce Corner Road, Dartmouth, MA 02747-1371
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

SEAL

KEY PLAN

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20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - BASMENT PLAN - EAST BUILDING

SCALE: As indicated

M1-1

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LOWELL HIGH SCHOOL M1-1 HVAC - BASMENT PLAN - EAST BUILDING
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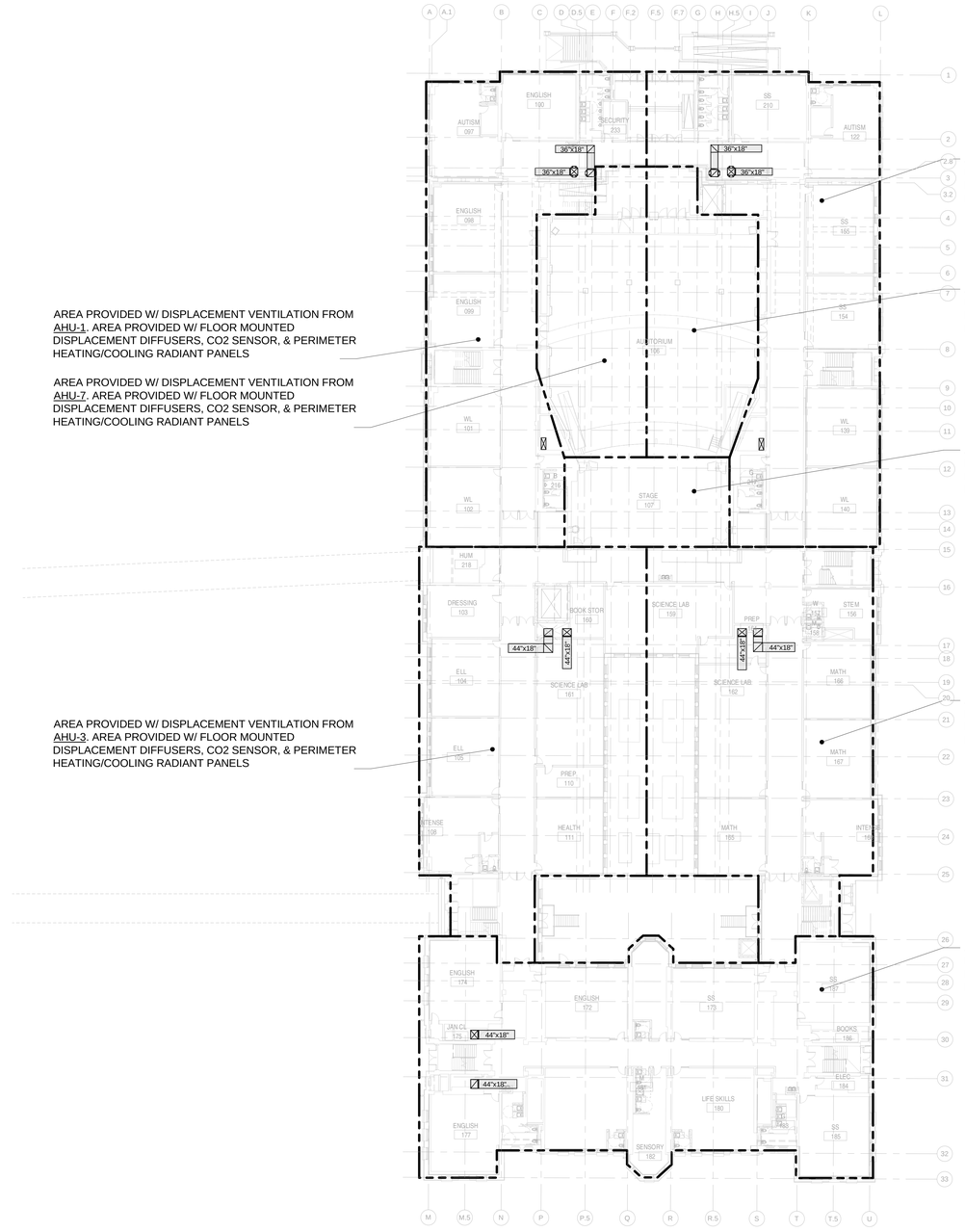

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-1. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-7. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-3. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-2. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-8. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-9. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-4. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-5. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS

1 HVAC - FIRST FLOOR PLAN - EAST BUILDING
3/64" = 1'-0"

NOTES:
1. ALL VESTIBULES AND STAIRWELLS SHALL BE PROVIDED WITH HOT WATER UNIT HEATERS.

2. ALL ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS AND IDF ROOMS SHALL BE PROVIDED WITH SPLIT DUCTLESS COOLING UNIT SYSTEMS.

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
370 Faunce Corner Road, Dartmouth, MA 02747 (t. 1271
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

SEAL

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - FIRST FLOOR PLAN - EAST BUILDING

SCALE: As indicated

M1-2

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LOWELL HIGH SCHOOL M1-2 HVAC - FIRST FLOOR PLAN - EAST BUILDING
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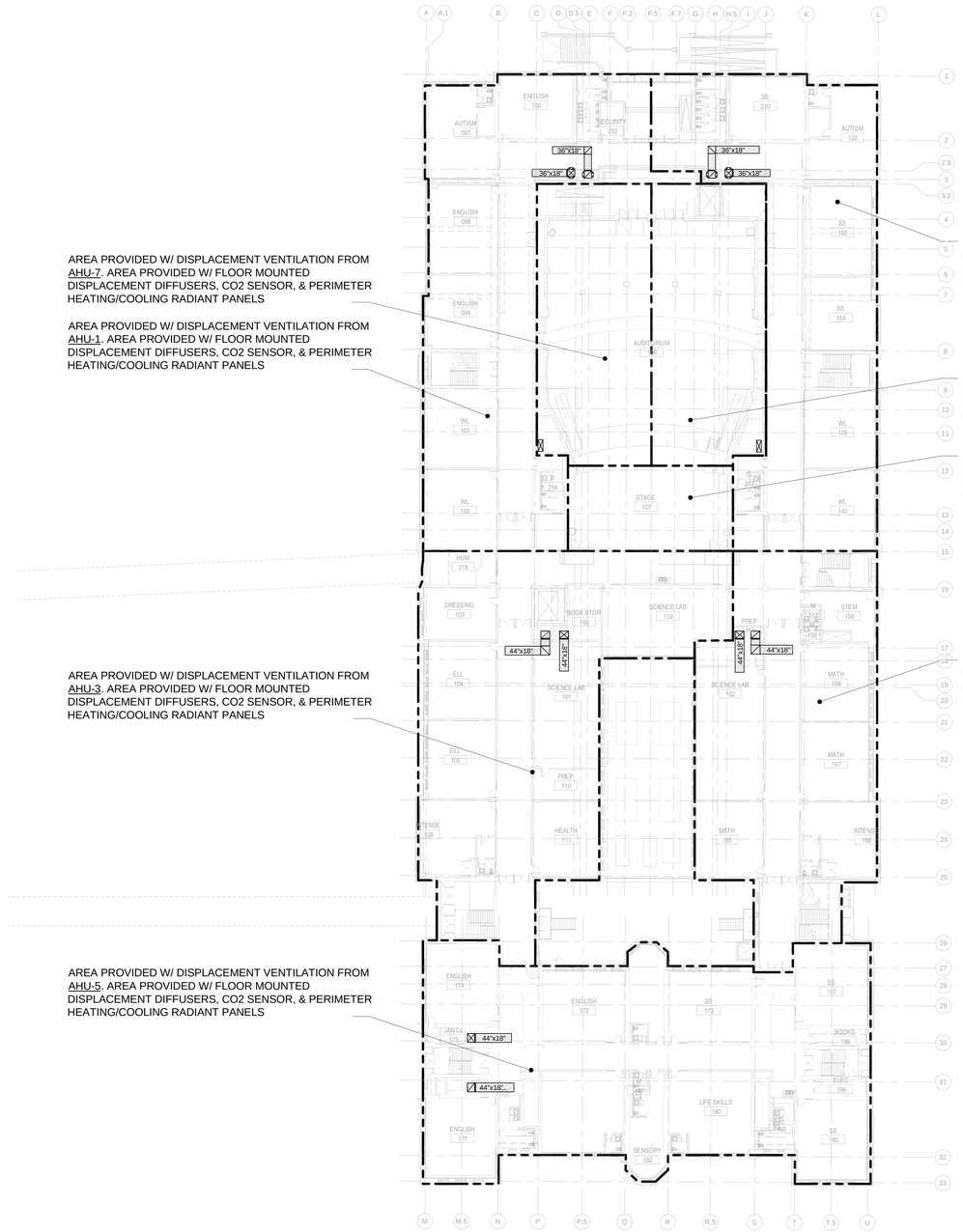

1 HVAC - SECOND FLOOR PLAN - EAST BUILDING
3/64" = 1'-0"

NOTES:
1. ALL VESTIBULES AND STAIRWELLS SHALL BE PROVIDED WITH HOT WATER UNIT HEATERS.

2. ALL ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS AND IDF ROOMS SHALL BE PROVIDED WITH SPLIT DUCTLESS COOLING UNIT SYSTEMS.

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
370 Faunce Corner Road, Dartmouth, MA 02747 | 371
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

SEAL

KEY PLAN

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Code Consultant:
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142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - SECOND FLOOR PLAN - EAST BUILDING

SCALE: As indicated

M1-3

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LOWELL HIGH SCHOOL M1-3 HVAC - SECOND FLOOR PLAN - EAST BUILDING
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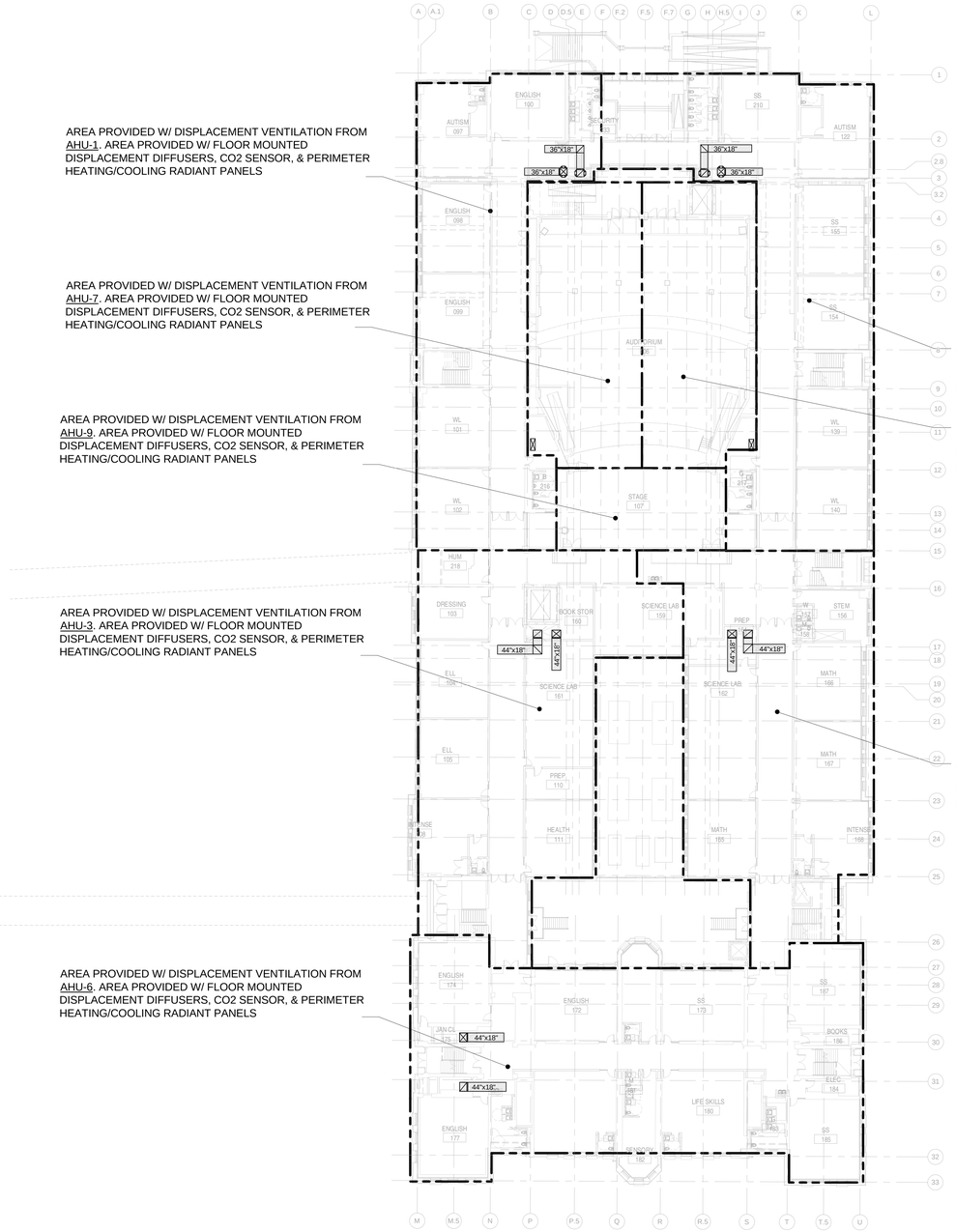

1 HVAC - THIRD FLOOR PLAN - EAST BUILDING
3/64" = 1'-0"

NOTES:
1. ALL VESTIBULES AND STAIRWELLS SHALL BE PROVIDED WITH HOT WATER UNIT HEATERS.

2. ALL ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS AND IDF ROOMS SHALL BE PROVIDED WITH SPLIT DUCTLESS COOLING UNIT SYSTEMS.

NO. DATE ISSUE

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
370 Faunce Corner Road, Dartmouth, MA 02747 | 371
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

SEAL

KEY PLAN

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Lighting Consultant Address

Food Service:
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Code Consultant:
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142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - THIRD FLOOR PLAN - EAST BUILDING

SCALE: As indicated

M1-4

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LOWELL HIGH SCHOOL M1-4 HVAC - THIRD FLOOR PLAN - EAST BUILDING
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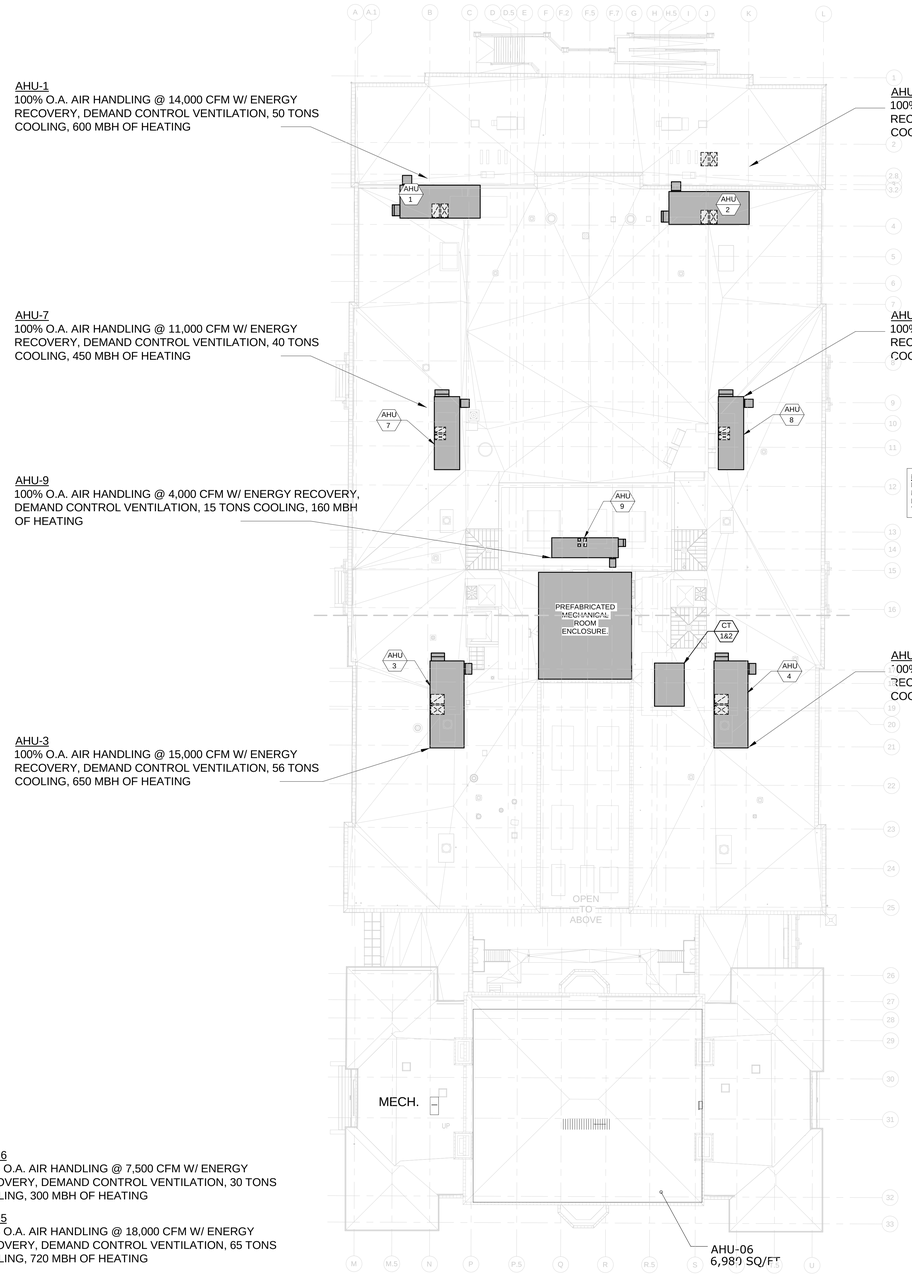


AHU-1
100% O.A. AIR HANDLING @ 14,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 50 TONS COOLING, 600 MBH OF HEATING

AHU-2
100% O.A. AIR HANDLING @ 14,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 50 TONS COOLING, 600 MBH OF HEATING

AHU-7
100% O.A. AIR HANDLING @ 11,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 40 TONS COOLING, 450 MBH OF HEATING

AHU-8
100% O.A. AIR HANDLING @ 11,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 40 TONS COOLING, 450 MBH OF HEATING

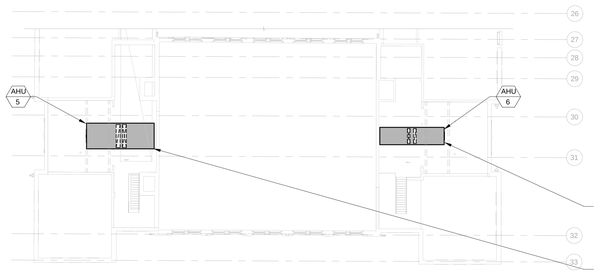
AHU-9
100% O.A. AIR HANDLING @ 4,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 15 TONS COOLING, 160 MBH OF HEATING

NOTE:
PREFABRICATED MECHANICAL ROOM ENCLOSURE SHALL BE MOUNTED ON A STRUCTURAL STEEL FRAME. PROVIDE MECHANICAL ROOM ENCLOSURE WITH STAIR AND RAILING SYSTEMS FOR ACCESS TO THE ENCLOSURE FROM THE ROOF.

AHU-4
100% O.A. AIR HANDLING @ 16,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 56 TONS COOLING, 650 MBH OF HEATING

AHU-3
100% O.A. AIR HANDLING @ 15,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 56 TONS COOLING, 650 MBH OF HEATING

1 HVAC - ROOF PLAN - EAST BUILDING
3/64" = 1'-0"



AHU-6
100% O.A. AIR HANDLING @ 7,500 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 30 TONS COOLING, 300 MBH OF HEATING

AHU-5
100% O.A. AIR HANDLING @ 18,000 CFM W/ ENERGY RECOVERY, DEMAND CONTROL VENTILATION, 65 TONS COOLING, 720 MBH OF HEATING

2 HVAC - ATTIC PLAN - EAST BUILDING
3/64" = 1'-0"

LOWELL HIGH SCHOOL M1-5 HVAC - ROOF AND ATTIC PLAN - EAST BUILDING
12/12/2018 7:13:55 PM

NO. DATE ISSUE

GARCIA GALUSKA DESOUSA
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370 Faunce Corner Road, Dartmouth, MA 02747 | 327
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

SEAL

KEY PLAN

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20 Ashburton Place, Floor 8
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T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
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Plumbing & Fire Protection:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
181 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
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Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

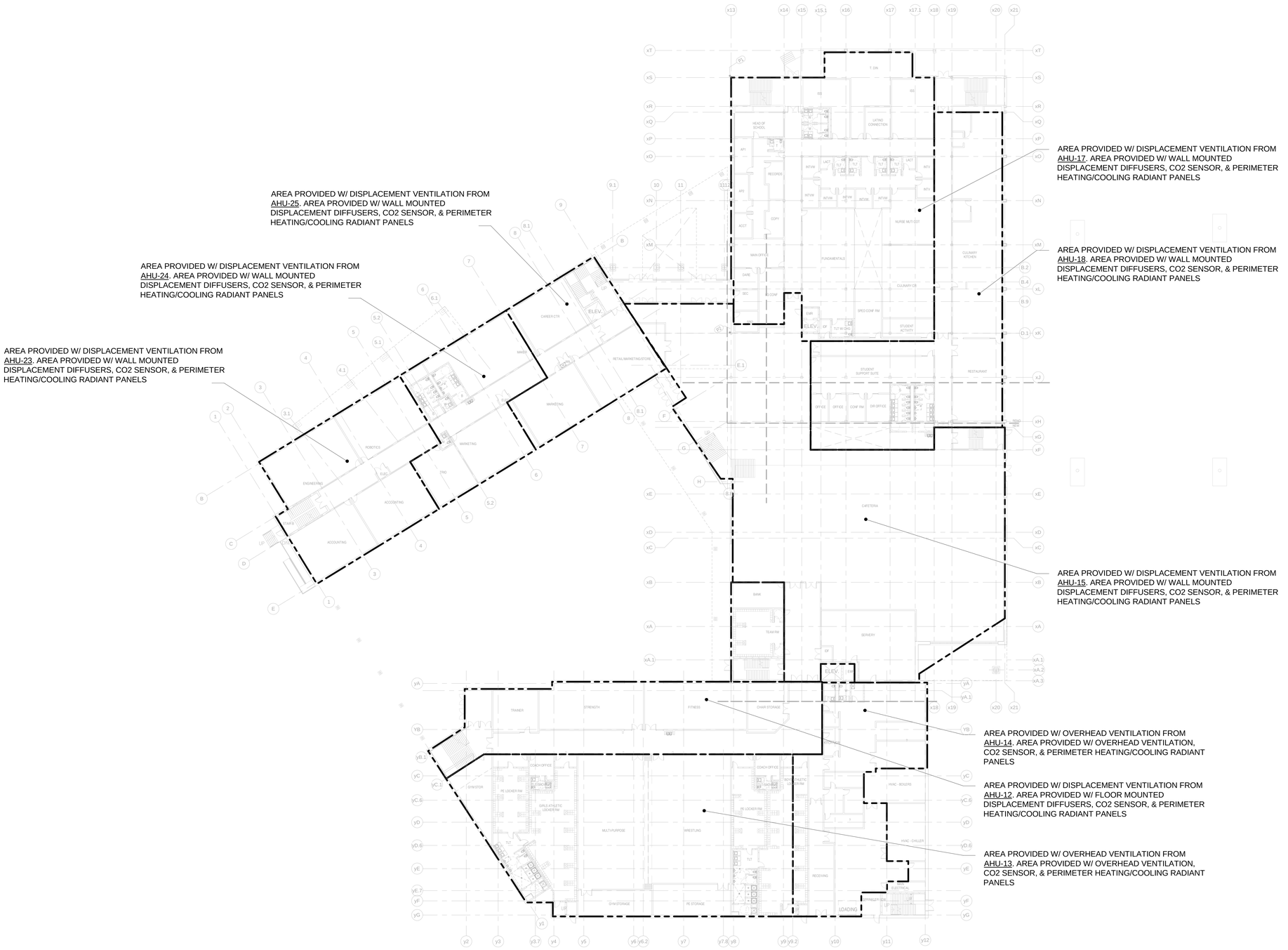
DRAWING TITLE:
HVAC - ROOF AND ATTIC PLAN - EAST BUILDING

SCALE: 3/64" = 1'-0"

M1-5

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



1 HVAC - FIRST FLOOR PLAN - WEST BUILDING
3/64" = 1'-0"

NOTES:
1. ALL VESTIBULES AND STAIRWELLS SHALL BE PROVIDED WITH HOT WATER UNIT HEATERS.

2. ALL ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS AND IDF ROOMS SHALL BE PROVIDED WITH SPLIT DUCTLESS COOLING UNIT SYSTEMS.

NO.	DATE	ISSUE

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Acoustical Consultant:
Cavanaugh Tocci
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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - FIRST FLOOR PLAN - WEST BUILDING

SCALE: As indicated

M2-1

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LOWELL HIGH SCHOOL M2-1 HVAC - FIRST FLOOR PLAN - WEST BUILDING
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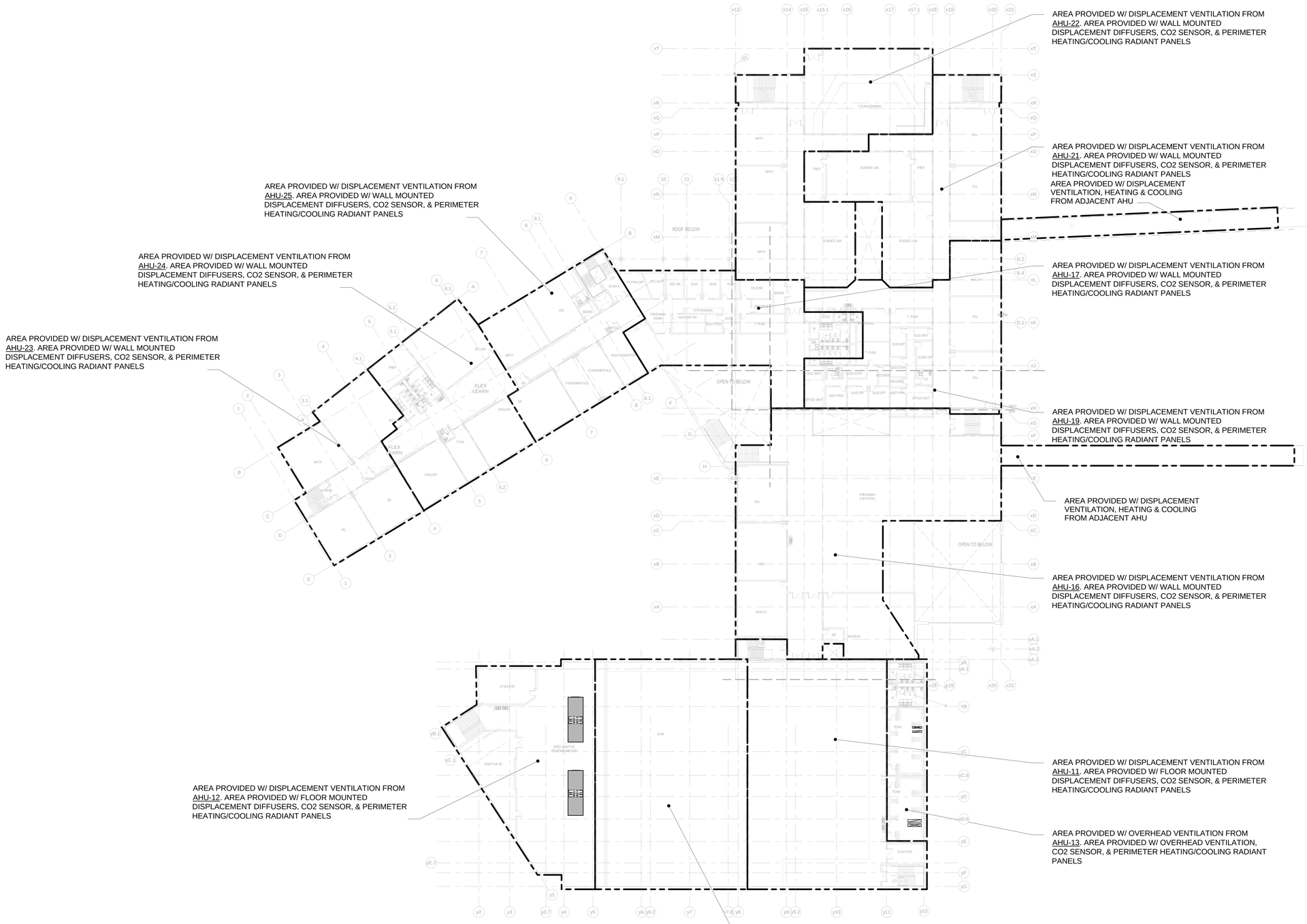
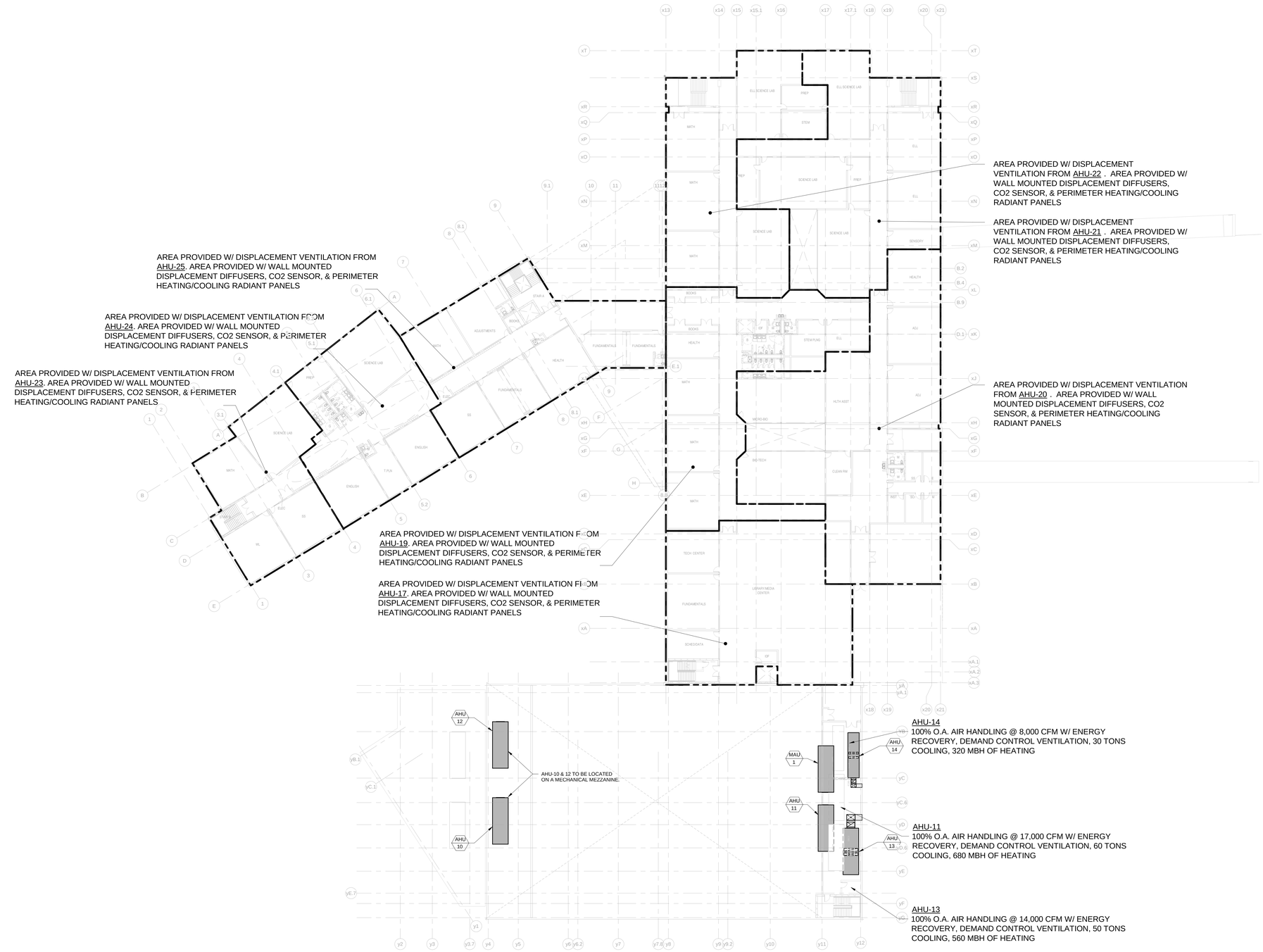

AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-22. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-21. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION, HEATING & COOLING FROM ADJACENT AHU
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-17. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-25. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-24. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-23. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-19. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION, HEATING & COOLING FROM ADJACENT AHU
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-16. AREA PROVIDED W/ WALL MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-11. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ OVERHEAD VENTILATION FROM AHU-13. AREA PROVIDED W/ OVERHEAD VENTILATION, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-12. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
AREA PROVIDED W/ DISPLACEMENT VENTILATION FROM AHU-10. AREA PROVIDED W/ FLOOR MOUNTED DISPLACEMENT DIFFUSERS, CO2 SENSOR, & PERIMETER HEATING/COOLING RADIANT PANELS
ROOF BELOW
OPEN TO BELOW
FLEX LEARN
FLEX LEARN
T.PLNG/SEMINAR
SCIENCE LAB
SCIENCE LAB
SCIENCE LAB
MATH
MATH
MATH
MATH
ELL
ELL
HEALTH
HEALTH
FRESHMAN CAFETERIA
FRESHMAN ADMIN
KITCHEN/MAIL
SM CONF RM
T. PLNG
T. PLNG
T. PLNG
T. PLNG
BOOKS
BOOKS
RECORDS
RECORDS
GUID STOR
GUID STOR
GUID WAIT
GUID WAIT
GUID OFF
GUID OFF
ASST PRIN
ASST PRIN
OFFICE WAIT
OFFICE WAIT
SECURITY
SERVERY
IDF
GYM STOR
GYM
SPED ADAPTIVE PE/REVIEW/MEDIAL
ADAPTIVE PE
TEAM
TEAM
TEAM
TEAM
ADJ
ADJ
ADJ



1 HVAC - THIRD FLOOR PLAN - WEST BUILDING
3/64" = 1'-0"

NOTES:
1. ALL VESTIBULES AND STAIRWELLS SHALL BE PROVIDED WITH HOT WATER UNIT HEATERS.

2. ALL ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS AND IDF ROOMS SHALL BE PROVIDED WITH SPLIT DUCTLESS COOLING UNIT SYSTEMS.

LOWELL HIGH SCHOOL M2-3 HVAC - THIRD FLOOR PLAN - WEST BUILDING
12/12/2018 7:14:08 PM

NO. DATE ISSUE

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SEAL

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Construction Manager Address

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150 Chestnut Street, 4th Floor Providence, RI 02903

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Electrical:
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Plumbing & Fire Protection:
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Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

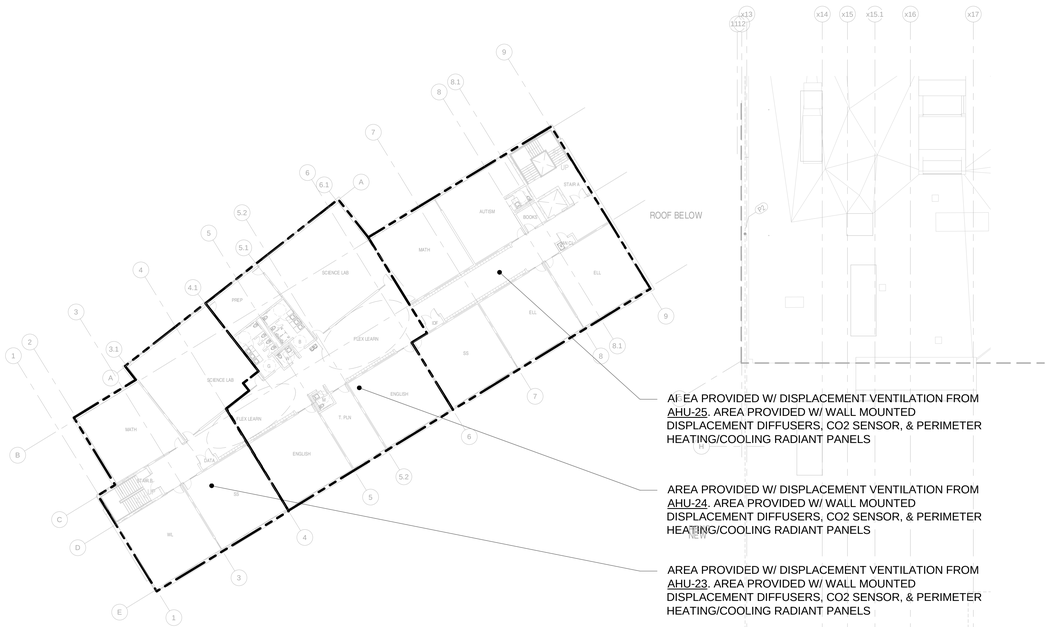
DRAWING TITLE:
HVAC - THIRD FLOOR PLAN - WEST BUILDING

SCALE: As indicated

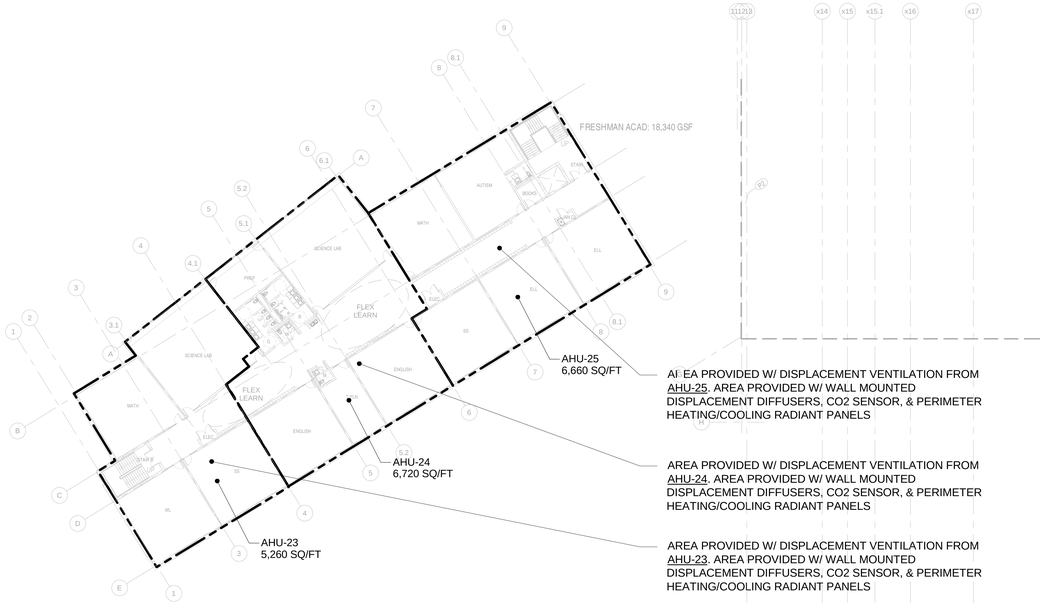
M2-3

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



1 HVAC - FOURTH FLOOR PLAN - WEST BUILDING
3/64" = 1'-0"



2 HVAC -FIFTH FLOOR PLAN - WEST BUILDING
3/64" = 1'-0"

NOTES:
1. ALL VESTIBULES AND STAIRWELLS SHALL BE PROVIDED WITH HOT WATER UNIT HEATERS.

2. ALL ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS AND IDF ROOMS SHALL BE PROVIDED WITH SPLIT DUCTLESS COOLING UNIT SYSTEMS.

LOWELL HIGH SCHOOL M2-4 HVAC - FOURTH AND FIFTH FLOOR PLANS - WEST BUILDING
12/12/2018 7:14:11 PM

NO. DATE ISSUE

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370 Faunce Corner Road, Dartmouth, MA 02747
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Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
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2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

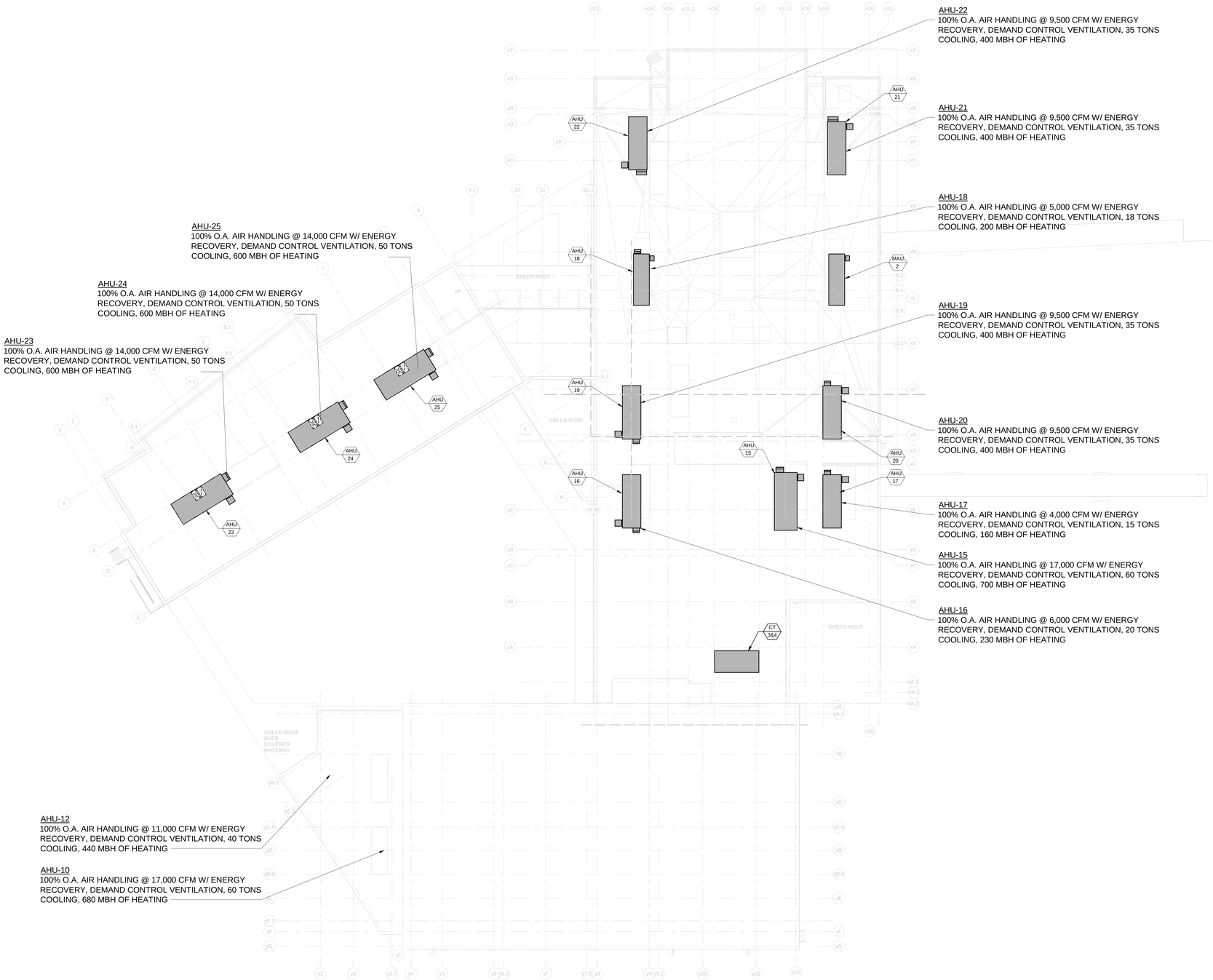
DRAWING TITLE:
HVAC - FOURTH AND FIFTH FLOOR PLANS - WEST BUILDING

SCALE: As indicated

M2-4

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



1 HVAC - ROOF PLAN - WEST BUILDING
3/64" = 1'-0"

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
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370 Faunce Corner Road, Dartmouth, MA 02747 - 1271
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Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

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Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

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370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
Lighting Consultant Name
Lighting Consultant Address

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Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - ROOF PLAN - WEST BUILDING

SCALE: 3/64" = 1'-0"

M2-5

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LOWELL HIGH SCHOOL M2-5 HVAC - ROOF PLAN - WEST BUILDING
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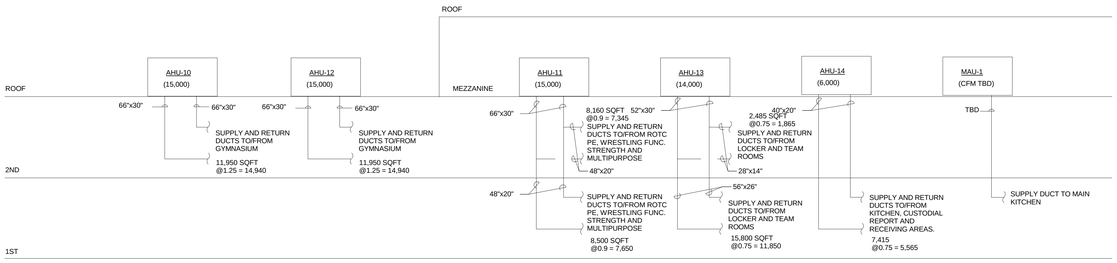
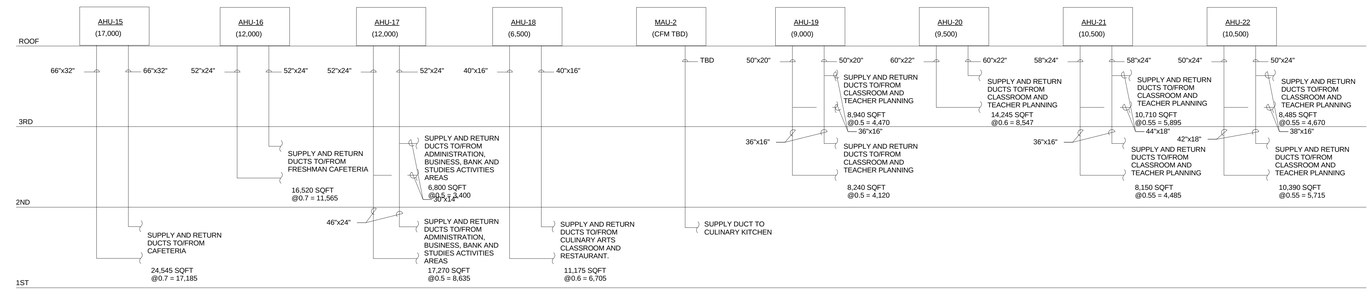


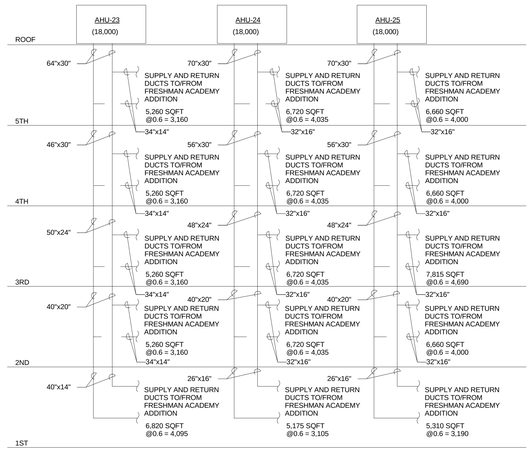
WEST BUILDING - NEW AHU RISER DIAGRAM - GYM BUILDING

SCALE: NO SCALE



WEST BUILDING - NEW AHU RISER DIAGRAM - MAIN BUILDING

SCALE: NO SCALE



WEST BUILDING - NEW AHU RISER DIAGRAM - FRESHMAN ACADEMY

SCALE: NO SCALE

LOWELL HIGH SCHOOL M3-1 HVAC - AIRFLOW RISER DIAGRAM - EAST BUILDING
12/12/2018 7:14:20 PM

NO.	DATE	ISSUE

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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

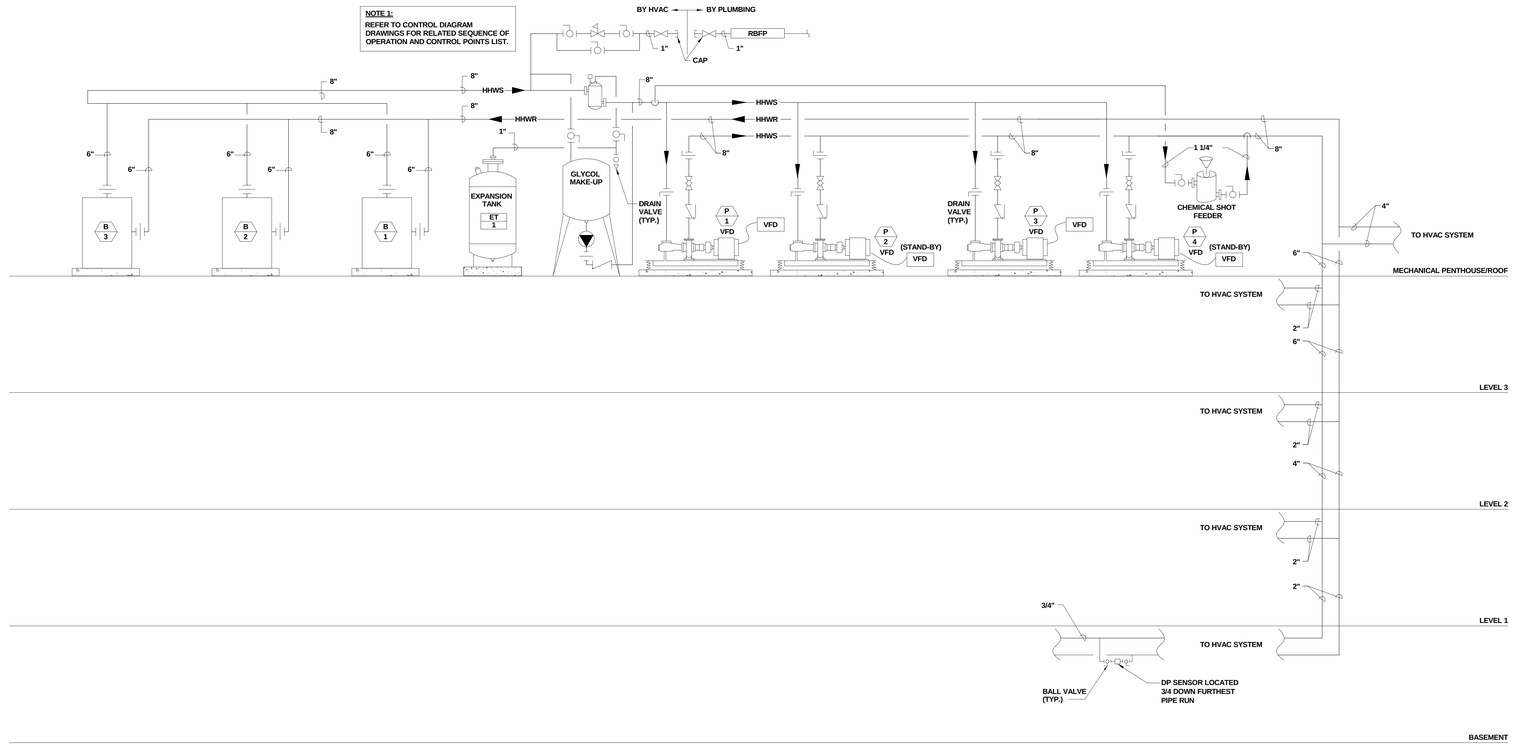
DRAWING TITLE:
HVAC - AIRFLOW RISER DIAGRAM - EAST BUILDING

SCALE: 1/8" = 1'-0"

M3-1

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



HVAC HOT WATER FLOW DIAGRAM - EAST BUILDING

(NOT TO SCALE)

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
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370 Faunce Corner Road, Dartmouth, MA 02747 - 1371
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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - HOT WATER FLOW DIAGRAMS - EAST BUILDING

SCALE: 1/8" = 1'-0"

M3-2

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LOWELL HIGH SCHOOL M3-2 HVAC - HOT WATER FLOW DIAGRAMS - EAST BUILDING
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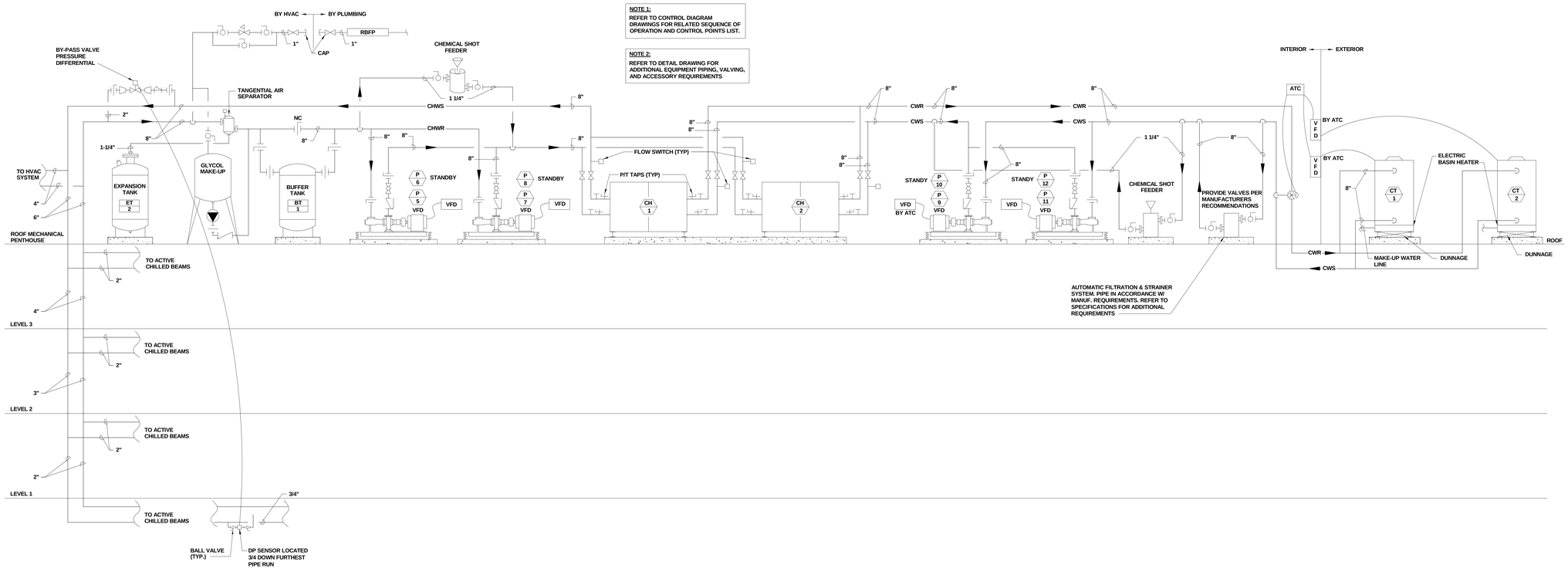

NOTE 1:
REFER TO CONTROL DIAGRAM DRAWINGS FOR RELATED SEQUENCE OF OPERATION AND CONTROL POINTS LIST.

NOTE 2:
REFER TO DETAIL DRAWING FOR ADDITIONAL EQUIPMENT PIPING, VALVING, AND ACCESSORY REQUIREMENTS

HVAC CHILLED/CONDENSER WATER FLOW DIAGRAM - EAST BUILDING

(NOT TO SCALE)

LOWELL HIGH SCHOOL M3-3 HVAC - CHILLED WATER FLOW DIAGRAMS - EAST BUILDINGS
12/12/2018 7:14:20 PM

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
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Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Plumbing & Fire Protection:
Lighting Consultant Name
Lighting Consultant Address

Food Service:
Crabtree McGarth
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

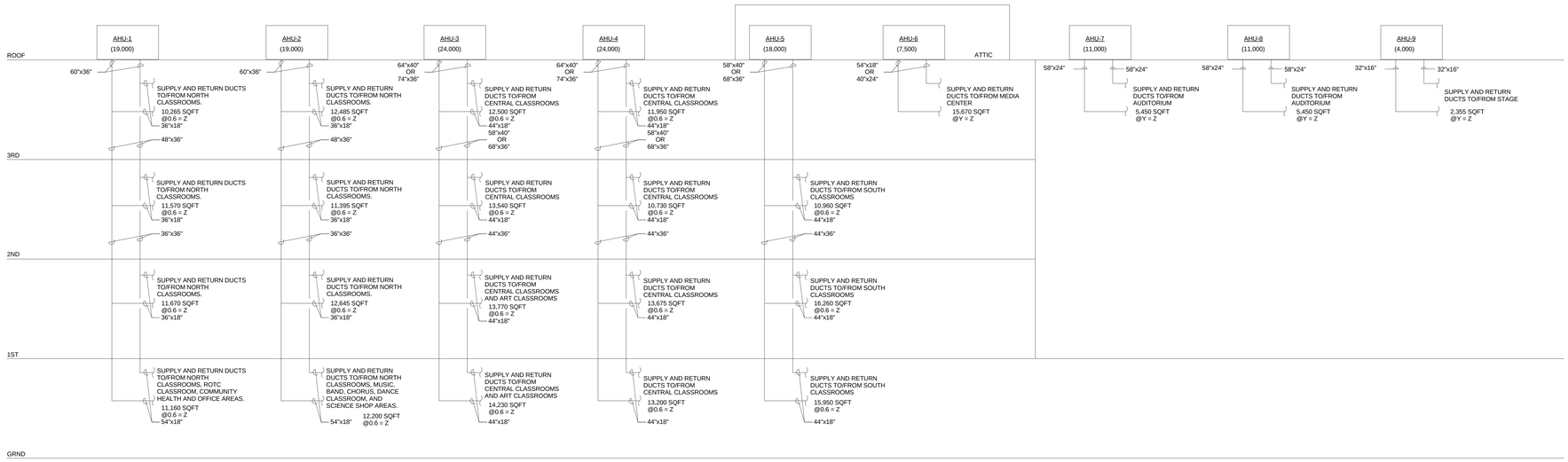
DRAWING TITLE:
HVAC - CHILLED WATER FLOW DIAGRAMS - EAST BUILDINGS

SCALE: 1/8" = 1'-0"

M3-3

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



EAST BUILDING - NEW AHU RISER DIAGRAM

SCALE: NO SCALE

LOWELL HIGH SCHOOL M3-4 HVAC - AIRFLOW RISER DIAGRAMS - WEST BUILDING
12/12/2018 7:14:21 PM

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
370 Faunce Corner Road, Dartmouth, MA 02747 - 1271
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

SEAL

N

KEY PLAN

PERKINS EASTMAN
20 Ashburton Place, Floor 8
Boston, MA 02108
T. +1 617 449 4000
F. +1 617 449 4049

Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

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SCALE: 1/8" = 1'-0"

M3-4

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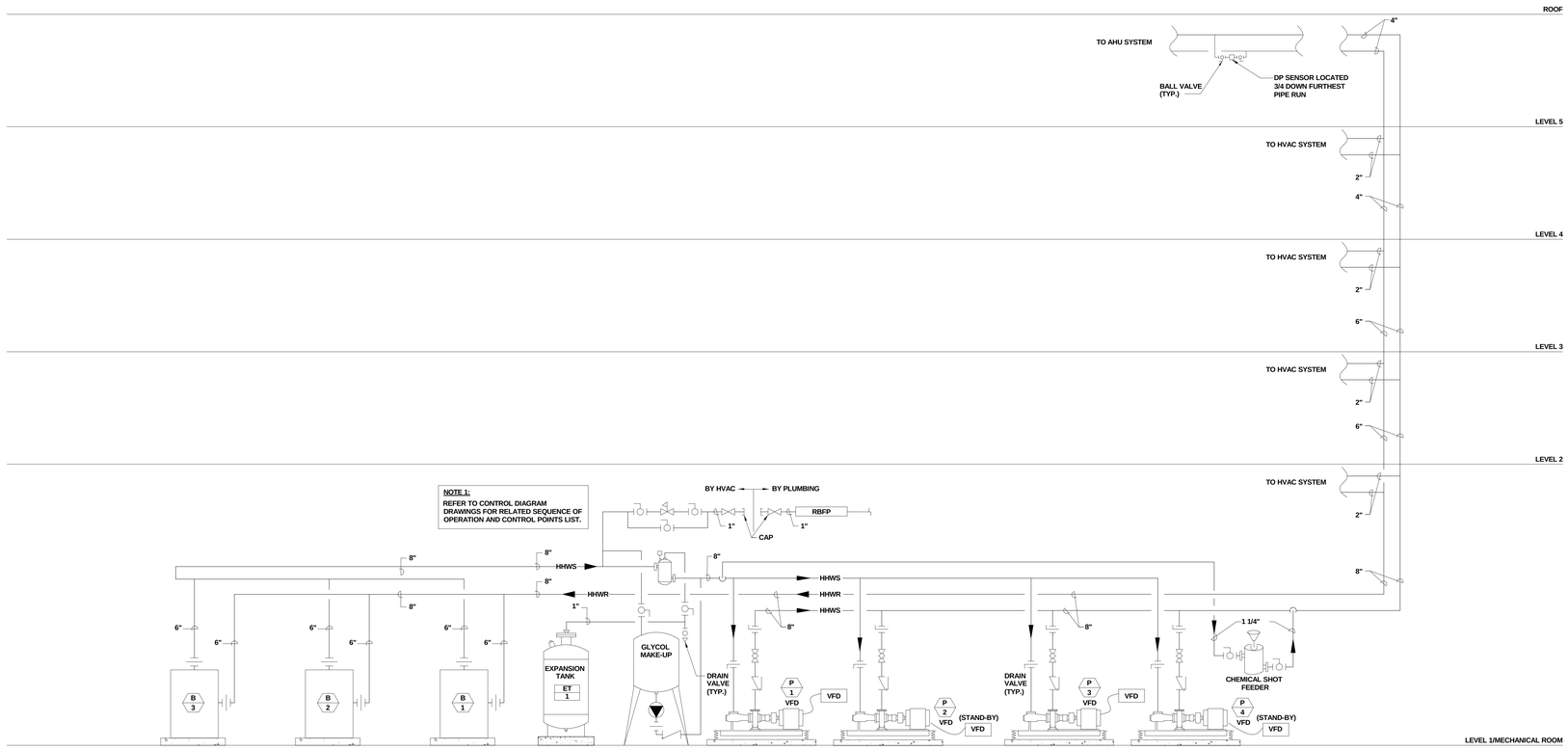
Project Issue Date 2/20/2019



HVAC HOT WATER FLOW DIAGRAM - WEST BUILDING

(NOT TO SCALE)

LOWELL HIGH SCHOOL M3-5 HVAC - HOT WATER FLOW DIAGRAMS - WEST BUILDING
12/12/2018 7:14:21 PM

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PROJECT TITLE:
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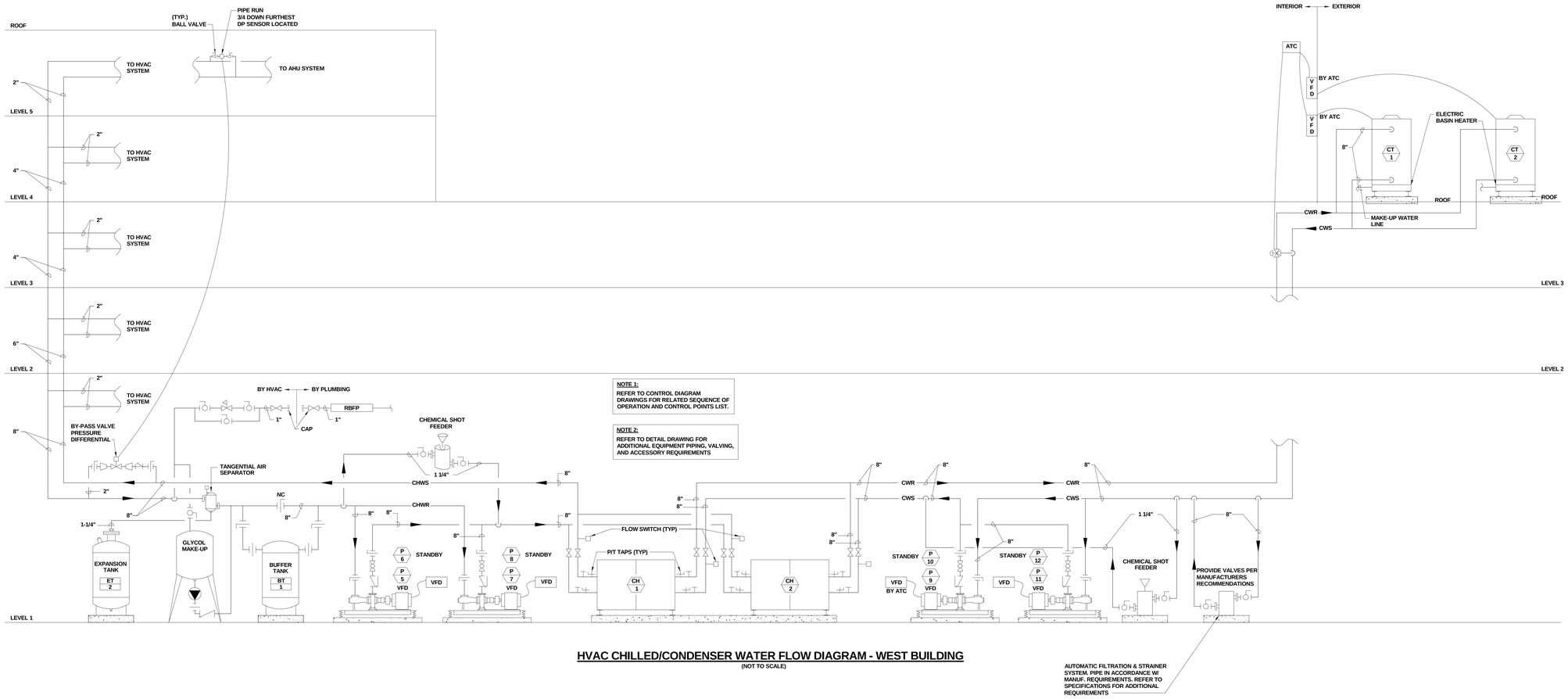
DRAWING TITLE:
HVAC - HOT WATER FLOW DIAGRAMS - WEST BUILDING

SCALE: 1/8" = 1'-0"

M3-5

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019



NOTE 1:
REFER TO CONTROL DIAGRAM DRAWINGS FOR RELATED SEQUENCE OF OPERATION AND CONTROL POINTS LIST.

NOTE 2:
REFER TO DETAIL DRAWING FOR ADDITIONAL EQUIPMENT PIPING, VALVING, AND ACCESSORY REQUIREMENTS

AUTOMATIC FILTRATION & STRAINER SYSTEM. PIPE IN ACCORDANCE W/ MANUF. REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

HVAC CHILLED/CONDENSER WATER FLOW DIAGRAM - WEST BUILDING

(NOT TO SCALE)

LOWELL HIGH SCHOOL M3-6 HVAC - CHILLED WATER FLOW DIAGRAMS - WEST BUILDINGS
12/12/2018 7:14:21 PM

NO. DATE ISSUE

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155 MERRIMACK STREET LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
HVAC - CHILLED WATER FLOW DIAGRAMS - WEST BUILDINGS
SCALE: 1/8" = 1'-0"

M3-6

SCHEMATIC DESIGN SUBMISSION

Project Issue Date 2/20/2019

LIGHTING FIXTURES

(see lighting fixture schedule)

- LED LIGHT FIXTURE, CEILING MOUNTED SURFACE OR RECESSED.
- FIXTURE WIRED TO NORMAL/EMERGENCY CIRCUIT.
- FLUORESCENT BARE LAMP CHANNEL STRIP OR INDUSTRIAL STRIP.
- SINGLE FACE INTERNALLY LIT EXIT SIGN, DIRECTIONAL INDICATORS OF THE 'CHEVRON' TYPE AS INDICATED ON DRAWINGS.
- DOUBLE FACE INTERNALLY LIT EXIT SIGN, DIRECTIONAL INDICATORS OF THE 'CHEVRON' TYPE AS INDICATED ON DRAWINGS.
- CEILING MOUNTED FIXTURE-RECESSED, SURFACE OR PENDANT.
- WALL MOUNTED FIXTURE.
- FIXTURE KEYING SYSTEM
- A1 = FIXTURE TYPE 32= CIRCUIT #, b= SWITCH CONTROL a= OCCUPANCY SENSOR ZONE
- EMERGENCY BATTERY UNIT WITH INTEGRAL HEADS.
- TRACK MOUNTED FIXTURES-LENGTH OF TRACK AS INDICATED ON DRAWINGS.
- POLE MOUNTED FIXTURE-DOUBLE OR SINGLE HEAD.

SWITCHES

(typically mtd 48" AFF ç u.n.o)

- S_a SINGLE POLE SWITCH-"a" DESIGNATES SWITCH CONTROL (LOWER CASE).
- S_2 TWO POLE SWITCH
- S_3 THREE-WAY SWITCH.
- S_P SINGLE POLE SWITCH WITH PILOT LIGHT-GLOWS IN "OFF" POSITION WHEN IN VIEW OF LIGHTS. GLOWS IN "ON" POSITION WHEN REMOTE FROM LIGHTS.
- S_4 FOUR-WAY SWITCH.
- S_D DIMMER SWITCH; 0-10V TYPE.
- S_K KEY OPERATED SWITCH.
- S_T TIMER SWITCH-DIGITAL PROGRAMMABLE TYPE.
- S_{WP} WEATHERPROOF SINGLE POLE SWITCH.
- S_{XP} EXPLOSION PROOF SINGLE POLE SWITCH.
- S_{DT} SINGLE POLE/DOUBLE THROW SWITCH.
- S_F FAN SPEED SWITCH.
- S_{MC} THREE POSITION MOMENTARY CONTACT SWITCH-UP/DOWN/CENTER OFF.

LIGHTING CONTROLS

- SSU ALCS SYSTEM SERVER UNIT - REFER TO ALCS ONE-LINE DIAGRAM.
- ECU ALCS ENERGY CONTROL UNIT - REFER TO ALCS ONE-LINE DIAGRAM.
- NES ALCS NETWORK ETHERNET SWITCH - REFER TO ALCS ONE-LINE DIAGRAM.
- L ALCS LOCAL SWITCHING / DIMMING STATION - REFER TO ALCS RISER DIAGRAM
- L_K ALCS KEYED LOCAL SWITCHING STATION - REFER TO ALCS RISER DIAGRAM
- L_V ALCS VANDAL RESISTANT LOCAL SWITCHING STATION - REFER TO ALCS RISER DIAGRAM
- M ALCS MASTER SWITCHING / DIMMING STATION - REFER TO ALCS RISER DIAGRAM
- MTS ALCS MASTER TOUCH SCREEN - REFER TO ALCS ONE-LINE DIAGRAM.
- LTS ALCS LOCAL TOUCH SCREEN - REFER TO ALCS ONE-LINE DIAGRAM.
- I/O DMX ALCS DMX512 CONTROL INTERFACE - REFER TO ALCS ONE-LINE DIAGRAM.
- PC ALCS EXTERIOR PHOTOCELL - REFER TO ALCS ONE-LINE DIAGRAM.
- OS ALCS CEILING OCCUPANCY SENSOR - REFER TO ALCS ONE-LINE DIAGRAM. X = SPECIAL TYPE DESIGNATION E.G.("WG" WIRE GUARD) a = OCCUPANCY SENSOR ZONE CONTROL
- PS ALCS CEILING PHOTO SENSOR - REFER TO ALCS ONE-LINE DIAGRAM.
- OS ALCS WALL OCCUPANCY SENSOR - REFER TO ALCS ONE-LINE DIAGRAM.
- IO ALCS INPUT/OUTPUT MODULE - REFER TO ALCS ONE-LINE DIAGRAM.

FIRE ALARM SYSTEM

- F MANUAL PULL STATION - MTD 48" AFF TO ç.
- F SPEAKER / VISUAL "ADA" COMPLIANT SIGNAL - MTD 80" AFF TO .
- F VISUAL "ADA" COMPLIANT SIGNAL - MTD 80" AFF TO ç.
- F S SPEAKER/VISUAL "ADA" COMPLIANT SIGNAL - MTD 80" AFF TO ç.
- F SPEAKER / VISUAL "ADA" COMPLIANT SIGNAL - CEILING MTD.
- S CEILING MOUNTED PHOTOELECTRIC SMOKE DETECTOR.
- S_E SMOKE DETECTOR ALSO USED FOR ELEVATOR RECALL.
- S_{SC} SELF-CONTAINED 120 VOLT SMOKE DETECTOR.
- S_D DUCT TYPE SMOKE DETECTOR WITH SAMPLING TUBE. FURNISHED BY EC, INSTALLED BY HVAC, WIRED BY EC.
- S_{DFSD} DUCT TYPE SMOKE DETECTOR WITH SAMPLING TUBE FOR CONTROL OF ASSOCIATED FSD AND UNIT SHUTDOWN FURNISHED BY EC, INSTALLED BY HVAC, WIRED BY EC.
- F (H) 135° THERMAL DETECTOR - 135 °F FIXED TEMPERATURE AND RATE OF RISE. "F" INDICATES FIXED TEMPERATURE ONLY.
- (H) 200° THERMAL DETECTOR - 200 °F FIXED TEMPERATURE.
- REMOTE ALARM INDICATOR-LABEL.
- T BD BEAM SMOKE DETECTOR -"T" DESIGNATES TRANSMITTER, "R" RECEIVER.
- RT KEY OPERATED REMOTE TEST STATION WITH LED-LABEL.
- FS SPRINKLER FLOW SWITCH - F&I BY F.P.C. WIRED BY E.C.
- TS SPRINKLER TAMPER SWITCH - F&I BY F.P.C. WIRED BY E.C.
- PS SPRINKLER PRESSURE SWITCH - F&I BY F.P.C. WIRED BY E.C.
- LPS SPRINKLER LOW PRESSURE SWITCH - F&I BY F.P.C. WIRED BY E.C.
- FSD FIRE SMOKE DAMPER - F&I BY HVAC CONTRACTOR, WIRED BY E.C. CONTROL MODULE AND FIRE ALARM INTERLOCK WIRED BY ELECTRICAL CONTRACTOR.
- DH MAGNETIC DOOR HOLDER - MTD 80" AFF TO ç.
- DC ELECTRIC DOOR CLOSER-F&I BY HARDWARE, WIRED BY E.C.
- FACP FIRE ALARM CONTROL PANEL.
- ANN FIRE ALARM ANNUNCIATOR.
- R RED FIRE ALARM BEACON-WEATHERPROOF.
- W WHITE FIRE ALARM BEACON-WEATHERPROOF.
- F RED FIRE ALARM LIGHT OVER MASTER BOX-WEATHERPROOF.
- MM MONITOR MODULE
- CM CONTROL MODULE
- IM ISOLATION MODULE
- K KEY REPOSITORY BOX (KNOX BOX)
- FATC FIRE ALARM TERMINAL CABINET
- PIV POST INDICATOR VALVE-F&I BY FPC, WIRED BY EC.
- CO WALL MOUNTED CARBON MONOXIDE DETECTOR, MOUNTING HEIGHT PER MANUFACTURERS RECOMMENDATION. PROVIDE ONE MONITOR MODULE PER SENSOR.
- GD WALL MOUNTED COMBUSTIBLE GAS DETECTOR (CH4) . PROVIDE A FIRE ALARM CONTROL MODULE PER DETECTOR FOR MONITORING BY THE FACP. MOUNT 1' BELOW CEILING.
- E FIRE ALARM ELECTRIC BELL (120 VOLTS), MOUNTED ABOVE FIRE DEPARTMENT SPRINKLER CONNECTION. FURNISHED BY F.P.C., INSTALLED & WIRED BY E.C.

TECHNOLOGY

- W VOICE OUTLET - AT 18" A.F.F., UNO - SINGLE GANG OPENING WITH SINGLE GANG PLASTER RING AND PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. MOUNTING DESIGNATIONS: "C"=ABOVE COUNTER, "W" WALL PHONE AT 48" A.F.F. WIRING AND JACKS BY I.T. SUBCONTRACTOR
- VOICE/DATA OUTLET - AT 18" A.F.F., UNO - SINGLE GANG OPENING WITH SINGLE GANG PLASTER RING AND PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. MOUNTING DESIGNATIONS: "C"=ABOVE COUNTER. WIRING AND JACKS BY I.T. SUBCONTRACTOR.
- DATA OUTLET - AT 18" A.F.F. UNO-SINGLE GANG OPENING WITH SINGLE GANG PLASTER RING AND PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. MOUNTING DESIGNATIONS: "C"=ABOVE COUNTER, "AN"=WIRELESS ACCESS POINT MTD. ABOVE CEILING U.N.O. JACKS AND WIRING BY I.T. SUBCONTRACTOR.
- DATA OUTLET FLUSH FLOOR MOUNTED - PROVIDE FLOOR BOX WITH SINGLE GANG OPENING WITH 1"C. WITH PULL LINE TO NEAREST ACCESSIBLE CEILING OF SAME FLOOR. WIRING AND JACKS BY I.T. SUBCONTRACTOR.
- CLOCK, WALL MOUNTED - 120V PIGTAIL CONNECTOR FURNISHED BY I.T. SUBCONTRACTOR AND CONNECTED BY E.C. COORDINATE M.H. WITH I.T. SUBCONTRACTOR. CONNECT TO NEAREST 120V RECEPTACLE CIRCUIT OR AS SHOWN ON DRAWINGS. CLOCK FURNISHED & INSTALLED BY I.T. SUBCONTRACTOR.
- 54" TVC VIDEO OUTLET & (2) 20AMP 120VOLT DUPLEX RECEPTACLE OUTLET PROVIDE W/REMOLD SERIES EFSB4 WALL BOX MODEL# EFSB4 OR EQUAL- AT 54"A.F.F., UNO-WITH (1)1"C. FOR DATA AND (1)2"C.FOR FUTURE A/V WIRING WITH PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. DATA WIRING AND JACK BY I.T. SUBCONTRACTOR. SEE DETAIL 6/E4.4.
- 54" TVE VIDEO OUTLET & (2) 20AMP 120VOLT DUPLEX RECEPTACLE OUTLET PROVIDE W/REMOLD SERIES EFSB4 WALL BOX MODEL# EFSB4 OR EQUAL- AT 54"A.F.F., UNO-WITH (1)1"C. FOR DATA AND (1)2"C.FOR FUTURE A/V WIRING WITH PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. DATA WIRING AND JACK BY I.T. SUBCONTRACTOR. SEE DETAIL 6/E4.4.
- T VOICE/DATA OUTLET - AT 18" A.F.F., UNO - (1)DOUBLE GANG OPENING AND (1) 4"SQ.X4"DEEP J.B. WITH (2) 1 1/4"C. WITH PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. (2) SINGLE GANG OPENINGS AND (2) 4"SQ. X 2 1/2"DP J.B. WITH (2) 1"C. WITH PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. MOUNTING DESIGNATIONS. "C"=ABOVE COUNTER. WIRING AND JACKS BY I.T. SUBCONTRACTOR.
- S CEILING FLUSH MOUNTED SPEAKER. BACKBOX FURNISHED BY IT SUBCONTRACTOR, INSTALLED BY E.C.
- S FLUSH MOUNTED WALL MOUNTED SPEAKER. BACKBOX FURNISHED BY IT SUBCONTRACTOR, INSTALLED BY E.C.
- S WP FLUSH MOUNTED EXTERIOR SPEAKER - BACKBOX FURNISHED BY I.T. CONTRACTOR, INSTALLED BY E.C.
- S_S CEILING SURFACE MOUNTED SPEAKER. BACKBOX FURNISHED BY IT SUBCONTRACTOR, INSTALLED BY E.C.
- V WALL MOUNTED VOLUME CONTROL OUTLET AS DESIGNATED- SINGLE GANG FACE PLATE WITH SINGLE GANG PLASTER RING AND PULL LINE TO ACCESSIBLE CEILING SPACE. MOUNTING HEIGHT AT 48" A.F.F. UNLESS OTHERWISE NOTED. WIRING AND JACKS BY I.T. SUBCONTRACTOR.
- SRP SMART RESCUE PHONE. CUSTOM BACK BOX FURNISHED BY IT SUBCONTRACTOR AND INSTALL BY E.C. 1" CONDUIT W/PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.. DEVICE AND WIRING BY I.T. SUBCONTRACTOR.
- ARA AREA OF RESCUE ASSISTANCE BUTTON. CUSTOM BACK BOX FURNISHED BY IT SUBCONTRACTOR AND INSTALL BY E.C. 1" CONDUIT W/PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.. DEVICE AND WIRING BY I.T. SUBCONTRACTOR.
- LFM VOICE LINE FAULT MONITOR. DEVICE AND WIRING BY I.T. SUBCONTRACTOR.

SECURITY SYSTEM

- DOME IP CAMERA. E.C. TO PROVIDE SINGLE GANG OPENING AND 4"SQ.X2 1/2"DP. J.B. & 3/4" CONDUIT WITH PULL STRING TO ACCESSIBLE ABOVE CEILING SPACE AT EACH LOCATION.
  WP = WEATHERPROOF — 180°= 180° COVERAGE CAMERA
  PTZ = PAN/TILT/ZOOM — 360°= 360° COVERAGE CAMERA
- FC FUTURE INTERIOR DOME IP CAMERA BY OWNER'S VENDOR. E.C. TO PROVIDE SINGLE GANG OPENING AND 4"SQ.x2 1/2"DP. J.B. & 3/4" CONDUIT WITH PULL STRING TO ACCESSIBLE ABOVE CEILING SPACE AT EACH LOCATION. WIRING UNDER THIS CONTRACT.
- K PT INTRUSION ALARM LCD KEYPAD @48"A.F.F. SINGLE GANG BOX, 3/4" CONDUIT W/ PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- POWER SUPPLY FOR ELECTRIFIED HARDWARE FURNISHED BY DOOR HARDWARE CONTRACTOR. INSTALLED & WIRED BY E.C. 120VAC EMERGENCY BY E.C. INTERFACE WIRING BY E.C.
- REX REQUEST TO EXIT PANIC DEVICE SHALL BE CRASH BAR W/BUILT IN MICROSWITCH. CRASH BAR FURNISHED AND INSTALLED BY DOOR HARDWARE CONTRACTOR AND WIRED BY E.C. PROVIDE 3/4" CONDUIT W/ PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- DC DOOR POSITION SWITCH - GE/SENTROL 1076DB DOUBLE POLE DEVICE ONE POLE TO ACCESS CONTROL, SECOND POLE TO INTRUSION, COORDINATE HOLE WITH DOOR HARDWARE. PROVIDE 3/4" CONDUIT w/ PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- CR HID iCLASS RPK40 COMBINATION iCLASS READER AND KEYPAD @ 48" A.F.F. CUSTOM BACK BOX FURNISHED AND INSTALL BY E.C. 3/4" CONDUIT W/PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C..
- EFS EYE WASH FOW SWITH- F&I BY PLUMBING CONTRACTOR WIRED TO SECURITY SYSTEM BY E.C. SINGLE GANG BOX, 3/4" CONDUIT W/ PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- AM ADDRESSABLE INPUT MODULE - SEE ONE LINE FOR REQUIRED ADDRESSING - EACH DEVICE COMES WITH THE APPROPRIATE EOL RESISTOR. DOES NOT REQ/ BACK BOX
- M MOTION SENSOR - WALL MOUNTED SINGLE GANG BACK BOX W/3/4"C WITH PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C. WIRING BY E.C.
- M MOTION SENSOR - CEILING MOUNTED, 360° SINGLE GANG BACK BOX AND 3/4"C WITH PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C. WIRING BY E.C.
- M MOTION SENSOR - CORNER MOUNTED FOR 90° PATTERN SINGLE GANG BACK BOX AND 3/4"C WITH PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C. WIRING BY E.C.
- M MOTION SENSOR - FOR LONG RANGE, CEILING MOUNTED SINGLE GANG BACK BOX AND 3/4"C WITH PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C. WIRING BY E.C.
- M MOTION SENSOR - FOR 360° PATTERN SINGLE GANG BACK BOX AND 3/4"C WITH PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C. WIRING BY E.C.
- 716 INTRUSION ALARM REMOTE ADDRESSABLE MODULE IN ENCLOSURE SURFACE MOUNT ENCLOSURE - INCLUDE IN LOOP AS REQUIRED/AS SHOWN
- IACP INTRUSION ALARM CONTROL PANEL WITH BUILD IN DIGITAL COMMUNICATOR DMP XR500-L-G, REQUIRES 120VAC, INTERFACE TO ACCESS CONTROL AND TELEPHONE CONNECTION TO POD WITH BATTERIES BY E.C.
- IAPS INTRUSION ALARM POWER SUPPLY - ONE LOCATED AT EACH IDF DESIGNATED - SUPPORT MOTION DETECTOR VOLTAGE - REQUIRED 120VAC, MODEL DMP 502-12-G W/ BATTERIES BY E.C.
- B BLUE SECURITY ALARM BEACON, WEATHERPROOF, PROVIDED BY E.C. SINGLE GANG BOX, 3/4" CONDUIT W/ PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- SECURITY PANIC BUTTON, PROVIDED BY E.C. SINGLE GANG BOX, 3/4" CONDUIT & PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- IESS INTEGRATED ELECTRONIC SAFETY & SECURITY SYSTEM HEADEND
- ACP WALL MOUNTED ACCESS CONTROLLER. E.C. SHALL PROVIDE 20A EMERGENCY CIRCUIT AND DOUBLE DUPLEX RECEPTACLE. (SEE SPECS)
- KVM RACK MOUNTED MONITOR AND KVM SWITCH
- ACS ACCESS CONTROL SYSTEM SERVER RACK MOUNT. E.C. SHALL PROVIDE 20A EMERGENCY CIRCUIT AND DOUBLE DUPLEX RECEPTACLE. (SEE SPECIFICATIONS)
- TVM 42" LCD CCTV COLOR MONITOR W/ WALL/CEILING MOUNT BRACKET BY E.C. E.C. TO PROVIDE 120 VAC EMERGENCY POWER RECEPTACLE, & 3/4" CONDUIT IN SINGLE GANG BOX W/ PULL STRING. MOUNT OUTLET AND BOX AT 96" A.F.F. U.N.O.
- IC EXTERIOR DOOR VIDEO INTERCOM STATION BY E.C. INTERFACE TO INTERCOM SYSTEM TO ALLOW FOR RECORDING, CAMERA CALL-UP IF EXTERIOR INTERCOM STATIONS ARE ACTIVATED. COORDINATE AS REQUIRED WITH SUPPLIER. DUAL GANG BOX, 3/4" CONDUIT & PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- IMS DOOR INTERCOM MASTER STATION, PROVIDED BY E.C. SINGLE GANG BOX, 3/4" CONDUIT & PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- EH ELECTRIC HINGE OR ELECTRONIC POWER TRANSFER BETWEEN DOOR AND FRAME. FURNISHED AND INSTALLED BY DOOR HARDWARE CONTRACTOR (SEE DOOR HARDWARE SECTIONS FOR DETAILS). WIRED BY E.C. 4"SQ.X2 1/2"DP. J.B. WITH 3/4" CONDUIT W/ PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- EL ELECTRIC LOCK FURNISHED AND INSTALLED BY HARDWARE CONTRACTOR, WIRED BY E.C. 4"SQ.X2 1/2"DP. J.B. WITH 3/4" CONDUIT W/ PULL STRING TO NEAREST ACCESSIBLE CEILING SPACE BY E.C.
- DJ 4" SQ. DOOR JUNCTION BOX BY E.C.
- SC SECURITY MONITOR MODULE
- UPS RACK MOUNTED UNINTERRUPTIBLE POWER SUPPLY
- TS HORSEPOWER RATED THERMAL SWITCH WITH PILOT LIGHT BY E.C.

SYMBOL LIST

LEGEND NOTES:

A. THIS SHEET IS A GENERAL LIST OF SYMBOLS AND ABBREVIATIONS AND SHALL BE USED AS A DICTIONARY TO DEFINE ITEMS INDICATED ON DRAWINGS. NOT ALL SYMBOLS OR ABBREVIATIONS ARE NECESSARILY USED ON THIS PROJECT. ALL EQUIPMENT IS TO BE PROVIDED UNDER THIS SECTION UNLESS SPECIFICALLY INDICATED OTHERWISE.

RECEPTACLES

(typically mtd. at 18" a.f.f., uno)

TYPICAL OUTLET NOTATIONS

- "a" =SWITCHED OUTLET, "a" - INDICATES SWITCH CONTROL.
- "C" = MOUNTED 6" ABOVE COUNTER OR 42" AFF. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
- "F" =FURNITURE MTD, COORDINATE EXACT LOCATION WITH FURNITURE PLANS.
- "GFC" =GROUND FAULT INTERRUPTER TYPE MOUNTED AT 42" AFF.
- "GFI" = GROUND FAULT INTERRUPTER TYPE.
- "H" =HORIZONTALLY MOUNTED.
- "IG" = ISOLATED GROUND RECEPTACLE WITH SEPARATE GREEN GROUND CONDUCTOR WITH YELLOW STRIPE TO ISOLATED GROUND BUS IN PANEL.
- "M" = MODULAR FURNITURE SERVICE - PROVIDE FLEXIBLE CONNECTION. COORDINATE EXACT LOCATION WITH FURNITURE PLANS.
- "SP" = SURGE PROTECTION RECEPTACLE
- "T" = TAMPER RESISTANT SAFETY RECEPTACLE.
- "TL" = TWIST LOCK TYPE.
- "WP" = WEATHERPROOF RECEPTACLE WITH "NRTL" LISTED COVERPLATE FOR WET LOCATION WITH GFI TYPE RECEPTACLE INSTALLED IN NEMA 4 ENCLOSURE W/KEY LOCK.
- "CD" = CABLE DROP RECEPTACLE - REFER TO CABLE DROP DETAIL.
- "CR" = CORD REEL RECEPTACLE (WHITE) - REFER TO CORD REEL DETAIL.
- "P" = PEDESTAL MOUNTED ON CASEWORK WITH GFI RECEPTACLE. COORDINATE WITH EQUIPMENT DRAWINGS FOR EXACT LOCATION.
- "E" = RECEPTACLE CONNECTED TO NORMAL/EMERGENCY CIRCUIT.
- "G" = OUTLET FOR GOGGLE CABINET, MOUNTED 6'-6" A.F.F. (REFER TO ARCHITECTURAL ELEVATIONS)

- 20AMP, 120 VOLT SINGLE RECEPTACLE
- 2 20 AMP, 120 VOLT DUPLEX RECEPTACLE; "2" INDICATES CIRCUIT NUMBER.
- 20AMP, 120 VOLT DOUBLE DUPLEX RECEPTACLE.
- SPECIAL PURPOSE OUTLET - RATING AS INDICATED ON DRAWINGS. EXAMPLE: ELECTRIC DRYER= 30A, 125/250V, 3 POLE, 4 WIRE, NEMA 14-30R ELECTRIC RANGE= 50A, 125/250V, 3 POLE, 4 WIRE, NEMA 14-50R
- 20 AMP, 120 VOLT DUPLEX RECEPTACLE FLUSH FLOOR MOUNTED WITH COVER.
- 20 AMP, 120 VOLT DOUBLE DUPLEX RECEPTACLE FLUSH FLOOR MOUNTED WITH COVER.
- EWC J ELECTRIC WATER COOLER OUTLET OR BOTTLE FILLING STATION - 20 AMP, 120 VOLT. PROVIDE GROUND FAULT INTERRUPTER TYPE CIRCUIT BREAKER & LOCAL TOGGLE SWITCH.
- 20AMP, 120VOLT DUPLEX RECEPTACLE CONNECTED TO NORMAL/ EMERGENCY CIRCUIT.
- SURFACE RACEWAY WITH BASE, COVER, AND DIVIDER "B,C&D". IVORY FINISH. PROVIDE FIBER READY 2" RADIUS FITTINGS. SOLID END INDICATES RISE TO ABOVE ACCESSIBLE CEILING SPACE WITH B,C&D.
- 20 AMP, 120 VOLT GFI, HORIZONTALLY MOUNTED ON FURNITURE DUPLEX RECEPTACLE INTENDED FOR COMPUTER USE. COLOR OF OUTLET TO BE SELECTED BY ARCHITECT.
- 20 AMP, 120 VOLT DUPLEX RECEPTACLE INTENDED FOR COMPUTER USE. COLOR OF OUTLET TO BE SELECTED BY ARCHITECT.
- 20AMP, 120VOLT DOUBLE DUPLEX RECEPTACLE INTENDED FOR COMPUTER USE. COLOR OF OUTLET TO BE SELECTED BY ARCHITECT.
- TWO DUPLEX RECEPTACLES, MOUNTED AT 18" AFF AND 84" AFF.
- USB 20 AMP, 120 VOLT DUPLEX RECEPTACLE w/ USB OUTLETS INTENDED FOR COMPUTER USE. COLOR OF OUTLET TO BE SELECTED BY ARCHITECT.
- RECESSED FLOOR BOX WITH (2) 20A, 120V DUPLEX RECEPTACLES AND PROVISIONS FOR (4) RJ45 JACKS EQUAL TO WIREMOLD #RFB4-XX - FPCTCBS (CARPET), FPBTCBS (WOOD FLOOR). AND (2) RFB-4TKO-SS PLATES. PROVIDE 1"C FOR TEL/DATA TO NEAREST ACCESSIBLE CEILING SPACE.
- 1V/3D FLUSH MOUNTED 2 HOUR RATED POKE-THRU ASSEMBLY WITH (2) DUPLEX RECEPTACLES & (4) COMMUNICATION DEVICES WITH SOLID BRASS FINISH RING. REQUIRES 6" CORED HOLE.
- 2V/4D FLUSH MOUNTED 2 HOUR RATED POKE-THRU ASSEMBLY WITH (2) DUPLEX RECEPTACLES & (4) COMMUNICATION DEVICES WITH SOLID BRASS FINISH RING. REQUIRES 6" CORED HOLE.
- T FLUSH MOUNTED 2 HOUR RATED POKE-THRU ASSEMBLY WITH (2) DUPLEX RECEPTACLES & (2) COMMUNICATION DEVICES WITH SOLID BRASS FINISH RING. REQUIRES 8" CORED HOLE.

POWER

- 120/208 VOLT, 3 PHASE, 4 WIRE PANELBOARD.
- 277/480 VOLT, 3 PHASE, 4 WIRE, PANELBOARD.
- 120/208 VOLT, 3 PHASE, 4 WIRE NORMAL/EMERGENCY SYSTEM PANELBOARD.
- 277/480 VOLT 3 PHASE, 4 WIRE NORMAL/EMERGENCY SYSTEM PANELBOARD.
- PANELBOARD FLUSH MOUNTED.
- TS T DRY TYPE TRANSFORMER - REFER TO TRANSFORMER SCHEDULE FOR RATINGS "TS"-INDICATES 45kVA TRANSFORMER. "K13" INDICATES TRANSFORMER WITH A K13 RATING.
- E ELECTRIC MANHOLE
- T TELEPHONE MANHOLE
- C CATV MANHOLE
- M METER SOCKET
- J JUNCTION BOX - SIZE AS REQUIRED.
- DW J JUNCTION BOX - WITH FLEXIBLE CONNECTION TO EQUIPMENT-"DW" DENOTES DISHWASHER, "H" HOOD, "WO" WALL OVEN, "D" DISPOSER, "HD" HAND DRYER.
- 3R FUSED DISCONNECT SWITCH HEAVY DUTY TYPE-"3R" INDICATES NEMA 3R
  20 — INDICATES TIME DELAY FUSE SIZE.
  30 — INDICATES SAFETY SWITCH SIZE
- 3R UNFUSED DISCONNECT SWITCH HEAVY DUTY TYPE-"3R" INDICATES NEMA 3R
- RV MAGNETIC MOTOR STARTER, "RV" INDICATES REDUCED VOLTAGE.
- COMBINATION FUSED DISCONNECT AND MOTOR STARTER
- TS HORSEPOWER RATED THERMAL SWITCH WITH PILOT LIGHT
- VFD VARIABLE FREQUENCY DRIVE.
- C MULTI-POLE CONTACTOR IN NEMA I ENCLOSURE-RATINGS AND NUMBER OF POLES AS REQUIRED.
- CP EQUIPMENT CONTROL PANEL.
- UCP UTILITY CONTROL PANEL (LABS)
- ATS AUTOMATIC TRANSFER SWITCH.
- HOA HAND-OFF-AUTOMATIC SELECTOR SWITCH.
- THREE FUNCTION PUSHBUTTON SWITCH (UP/DOWN/STOP)-FURNISHED BY EQUIPMENT SUPPLIER, INST. & WIRED BY EC.
- ON/OFF PUSHBUTTON SWITCH.
- 70AT 100AF CB ENCLOSED CIRCUIT BREAKER-"70AT" INDICATES 70 AMP TRIP; "100AF" INDICATES 100 AMP FRAME.
- PB PULL BOX-SIZE AS REQUIRED.
- G GENERATOR.

ONE LINE POWER

- LOAD-BREAK SWITCH.
- CIRCUIT BREAKER.
- CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER.
- LA LIGHTNING ARRESTER AND GROUNDING TO PROTECT ALL PHASES.
- CONTACT, NORMALLY OPEN (NO).
- CONTACT, NORMALLY CLOSED (NC).
- ST SHUNT TRIP COIL.
- CM CUSTOMER METERING, ELECTRONIC SOLID STATE, UNLESS OTHERWISE INDICATED.
- POWER TRANSFORMER.
- FUSE, SIZE AS INDICATED.
- GF GROUND FAULT SENSOR & RELAY.
- 400A / 300A SWITCH AND FUSE "400A" - INDICATES AMPERE SWITCH SIZE. "300A" - INDICATES AMPERE FUSE SIZE.
- SYSTEM GROUND OR EQUIPMENT GROUND.
- N NORMAL / E EMERGENCY / LOAD AUTOMATIC TRANSFER SWITCH.
- K_1 KIRK-KEY INTERLOCK

MISCELLANEOUS-DEVICES

- EPO EMERGENCY POWER SHUNT TRIP - RED MUSHROOM HEAD WITH EXTENDED GUARD WITH EMERGENCY OFF LEGEND. MOUNT AT 48"AFF., U.O.I. PROVIDE NAMEPLATE INDICATING LOAD CONTROLLED "B" - INDICATES BREAK GLASS STATION WITH HAMMER SUPPORT CLIP AND FIVE REPLACEMENT DISCS STORED INSIDE BOX SUPPORTING DEVICE.
- HANDICAP DOOR ACTIVATE SWITCH-FURN. & INST. BY SYSTEM SUPPLIER. PROVIDE 4"SQ X 2 1/2"DP JB AND 1"C WITH PULL LINE TO ELECTRIC DOOR OPERATOR.
- SV SOLENOID VALVE - F&I BY P.C., WIRED BY E.C.
- TC TIMECLOCK - 7 DAY DIGITAL WITH BATTERY BACK-UP.
- EFS EYE WASH FLOW SWITCH - F&I BY P.C., CONNECT TO BMS SYSTEM WITH 2#14AWG TO NEAREST IDF ROOM
- TPD TEMPERATURE SENSOR - CONNECT TO SECURITY SYSTEM.
- LS LIMIT SWITCH.
- B DOOR BELL-COORDINATE MH WITH ARCHITECT.
- LOW VOLTAGE PUSHBUTTON.
- 1 / E-3 DETAIL IDENTIFIER-INDICATES DETAIL #1 ON DWG. E-3.
- GROUND BAR 24W" X 1/8" THICK X 18" LONG COPPER BUS, U.N.O.
- A A / E-3 SECTION IDENTIFIER- INDICATES SECTION A-A, DETAIL #2 ON DWG. E-3.
- K2 EQUIPMENT TAG NUMBER, REFER TO EQUIPMENT SCHEDULE, "K" INDICATES KITCHEN "C" INDICATES COMPUTER.
- 1 KEYED SHEET NOTE SYMBOL, "1" INDICATES TO REFER TO NOTE #1
- 3 CIRCUIT SIZE NUMBER, REFER TO "CIRCUIT SIZE SCHEDULE".
- SB SCOREBOARD CONTROL OUTLET - WALL MOUNTED AT 18" A.F.F. OR FLOOR BOX, UNO - SINGLE GANG OPENING AND 4"SQ. X 2 1/2"DP J.B. WITH 1"C. WIRING AND JACKS BY I.T. CONTRACTOR.
- ADA CS ADA "CALL STATION", HANDS FREE. MOUNT AT 48"AFF.
- ADA MCS ADA "MASTER CALL STATION", HANDS FREE. MOUNT AT 48"AFF.
- P EMERGENCY CALL STATION - LOCATE WITHIN 3' OF WATER CLOSET WITH PULL CORD EXTENDING TO WITHIN 12" OF THE FLOOR.
- AV AUDIO/VISUAL SIGNAL FOR SINGLE TOILETS. MOUNT OVER DOOR.
- E ELECTRIC DOOR-OPERATOR. FURN. & INST. BY GC, WIRED BY EC.
- LS LIMIT SWITCH FURNISHED BY SYSTEM SUPPLIER, WIRED BY E.C.

WIRE AND RACEWAYS

- WIRING AND RACEWAY - NO. OF DIAGONAL LINES INDICATES NO. #12 AWG CONDUCTORS. ABSENCE OF DIAGONAL LINES INDICATES 2 #12 AWG+#12AWG GROUND UNLESS NOTED OTHERWISE. GROUND WIRE IS NOT SHOWN IN COUNT BUT SHALL BE PROVIDED.
- HOMERUN TO PANEL - NO. OF ARROWS INDICATES NO. OF 20 AMP/1 POLE CIRCUITS TO PANEL - UNLESS NOTED OTHERWISE.
- NE NORMAL/EMERGENCY WIRING - MIN. 2#10 AWG + #10 AWG GROUND. RUN IN SEPARATE RACEWAY.
- 4F FIRE ALARM WIRING - "4F" INDICATES 4 #14 THHN SOLID IN 3/4" MIN. SIZE CONDUIT.
- E EMERGENCY ONLY WIRING-MINIMUM 2#10 AWG IN SEPARATE RACEWAY.
- P UNDERGROUND PRIMARY ELECTRIC SERVICE
- SE UNDERGROUND SECONDARY ELECTRIC SERVICE
- T UNDERGROUND TELEPHONE SERVICE
- CTV UNDERGROUND CABLE TV SERVICE
- F UNDERGROUND FIRE ALARM SERVICE
- 4" CONDUIT SLEEVE THRU-WAY, ACROSS CORRIDOR OR BETWEEN ROOMS FOR TEL/DATA - LOCATE ABOVE CEILING.
- 1" CONDUIT SLEEVE THRU-WAY, ACROSS CORRIDOR OR BETWEEN ROOMS FOR TEL/DATA - LOCATE ABOVE CEILING.
- CONDUIT SLEEVE EXTENDED TO NEAREST ACCESSIBLE CEILING-TERMINATE WITH INSULATED BUSHING.
- FLEXIBLE CONNECTION TO EQUIPMENT
- CABLE TRAY-CONCEALED ABOVE CEILING IN FINISHED AREAS. PROVIDE LATERAL SUPPORT AS REQUIRED.
- WW WIREWAY-SIZE AS REQUIRED.

MECHANICAL EQUIPMENT

(REFER TO MECHANICAL EQUIPMENT SCHEDULE)

- BB ELECTRIC BASEBOARD-FURNISHED BY HVAC, INSTALLED AND WIRED BY EC.
- CH CABINET HEATER - F & I BY HVAC, WIRED BY E.C.
- UH UNIT HEATER - F & I BY HVAC, WIRED BY E.C.
- EF EXHAUST FAN - F & I BY HVAC, WIRED BY E.C

LIGHTING FIXTURE SCHEDULE (1) (9) (10) (11) (12) (13)

TYPE	MANUFACTURER	MODEL / SERIES	MTG.	VOLTAGE	LIGHT SOURCE			DESCRIPTION	EQUAL MFG.	SCHEDULE NOTES
					LUMENS	WATTS	TYPE			
EL	BIRCHWOOD	VAN-LED-400-SLO-30-4-DR-WM-EFL -MW-FW-277-D10-XX	S	UNIVERSAL			LED/3000K	4' LINEAR UTILITY FIXTURE WITH PRISMATIC POLYCARBONATE LENS AND WET LOCATION GASKETING.		6 8
HR	QTRAN	IQ20-30-50-90-6-0 - / IQA-45-DN-60	S	UNIVERSAL			LED/3000K	LED FIXTURE MOUNTED IN NOTCH PROVIDED IN HANDRAIL BY ARCHITECT. REFER ARCHITECTURAL DRAWINGS FOR EXACT RUNS.		6 8
J	PHOENIX	VA-W-LED-13-NW-GPC-G-DC	W	UNIVERSAL			LED/4100K	LED UTILITY FIXTURE WITH PRISMATIC GLASS GLOBE AND GUARD. CAPABLE OF 0-10V DIMMING.		6 8
LC4	FINELITE	HP-LWS SERIES	R	UNIVERSAL			LED/3000K	LED COVE FIXTURE LENGTHS AS SHOWN ON ARCHITECTURAL PLANS. PROVIDE ALL FIXTURES WITH 0-10V DIMMING CAPABILITY. LED FIXTURE WITH ADJUSTABLE BASE: LENGTHS TO BE AS SHOWN ON PLANS. PROVIDE ALL NECESSARY INSTALLATION HARDWARE.		6 8
LC6	FINELITE	HP-LWS SERIES	R	UNIVERSAL			LED/3000K	LED FIXTURE WITH ADJUSTABLE BASE: LENGTHS TO BE AS SHOWN ON PLANS. PROVIDE ALL NECESSARY INSTALLATION HARDWARE.		6 8
LC8	FINELITE	HP-LWS SERIES	R	UNIVERSAL			LED/3000K			6 8
LP4	FINELITE	S16 SERIES	AC	UNIVERSAL			LED/3000K	4' LED PENDANT FIXTURE WITH DIRECT/INDIRECT DISTRIBUTION AND FROSTED ACRYLIC LENS. CONFIRM FINISH WITH ARCHITECT.		6 8
LP8	FINELITE	S16 SERIES	AC	UNIVERSAL			LED/3000K	8' LED PENDANT FIXTURE WITH DIRECT/INDIRECT DISTRIBUTION AND FROSTED ACRYLIC LENS. CONFIRM FINISH WITH ARCHITECT.		6 8
LPG	METEOR	WHIZ SERIES	P	UNIVERSAL			LED/3000K	4' LED UTILITY FIXTURE MOUNTED ON PIPE GRID PROVIDE ALL NECESSARY MOUNTING HARDWARE.		6 8
LR4	FINELITE	HP-2R SERIES	R	UNIVERSAL			LED/3000K	4' LED RECESSED FIXTURE WITH FROSTED LENS. CONFIRM ALL FINISH SELECTIONS WITH ARCHITECT.		6 8
LR8	FINELITE	HP-2R SERIES	R	UNIVERSAL			LED/3000K	8' LED RECESSED FIXTURE WITH FROSTED LENS. CONFIRM ALL FINISH SELECTIONS WITH ARCHITECT.		6 8
LR24	CREE	FP24 SERIES	R	UNIVERSAL			LED/3000K	2'X4' LED RECESSED LIGHT PANEL FIXTURE. CONFIRM ALL CEILING TYPES WITH ARCHITECTURAL DRAWINGS.		6 8
LS8	CREE	(2) LS4 SERIES	S	UNIVERSAL			LED/3000K	8' LED UTILITY FIXTURE WITH FROSTED DIFFUSING LENS CAPABLE OF 0-10V DIMMING. PROVIDED WITH CHAIN MOUNTING KIT.		6 8
LS8B	CREE	(2) LS4 SERIES	S	UNIVERSAL			LED/3000K	8' LED UTILITY FIXTURE WITH FROSTED DIFFUSING LENS CAPABLE OF 0-10V DIMMING. PROVIDED WITH CHAIN MOUNTING KIT.		6 8
LV4	HE WILLIAMS	96 SERIES	S	UNIVERSAL			LED/3000K	4' LED GASKETED FIXTURE SUITABLE FOR USE IN A DAMP LOCATION AND CAPABLE OF 0-10V DIMMING.		6 8
LV8	HE WILLIAMS	96 SERIES	S	UNIVERSAL			LED/3000K	8' LED GASKETED FIXTURE SUITABLE FOR USE IN A DAMP LOCATION AND CAPABLE OF 0-10V DIMMING.		6 8
P48	TARGETTI	THREESIXTY SERIES	P	UNIVERSAL			LED/3000K	48" DIAMETER LED PENDANT CYLINDER FIXTURE CONFIRM FINISH AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.		6 8
PC1	INTENSE LIGHTING	IH SERIES	P	UNIVERSAL			LED/3000K	6" DIAMETER LED PENDANT CYLINDER FIXTURE CONFIRM FINISH AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.		6 8
RC1	CONTECH	R6 SERIES	R	UNIVERSAL			LED/3000K	6" APERTURE LED DOWNLIGHT FIXTURE WITH SEMI-SPECULAR FINISH PROVIDED WITH 0-10V DIMMING CAPABILITY.		6 8
RSH	ELITE LIGHTING	LED2 SERIES	R	UNIVERSAL			LED/3000K	6" APERTURE LED DOWNLIGHT FIXTURE WITH FROSTED ACRYLIC DIFFUSER AND DEAD-FRONT HOUSING.		6 8
SL1	LANDSCAPE FORMS	RM SERIES	POLE	UNIVERSAL			LED/4000K	SINGLE HEAD POLE MTD FIXTURE WITH TYPE II DISTRIBUTION MOUNTED ON 25' TALL ROUND ALUMINUM POLE.DIMMING CAPABLE		- 6 8
SL2	LANDSCAPE FORMS	RM SERIES	POLE	UNIVERSAL			LED/4000K	DOUBLE HEAD POLE MTD FIXTURE WITH TYPE III DISTRIBUTION MOUNTED ON 25' TALL ROUND ALUMINUM POLE.DIMMING CAPABLE		- 6 8
SL3	US ARCHITECTURAL	RZR-WM SERIES	W	UNIVERSAL			LED/4000K	LED WALL MOUNTED SCONCE, DAMP LOCATION RATED, 0-10V DIMMING CABLE		- 6 8
SL4	US ARCHITECTURAL	RZR-WM SERIES	W	UNIVERSAL			LED/4000K	LED WALL MOUNTED SCONCE, DAMP LOCATION RATED, 0-10V DIMMING CAPABLE		- 6 8
SL5	ELITE LIGHTING	HH4 SERIES	R	UNIVERSAL			LED/4000K	4" LED RECESSED DOWNLIGHT, DAMP LOCATION RATED. 0-10V DIMMING CAPABLE		- 6 8
TH1	INTENSE LIGHTING	GRAVITY SERIES	R	UNIVERSAL			LED/3000K	LED TRACKHEAD FIXTURE, 0-10V DIMMING CAPABLE		6 8
	EVENLITE	TEX-AC-G-1C	U	UNIVERSAL	-	2	LED	SINGLE FACED LED EDGE LIT EXIT SIGN WITH GREEN LETTERING AND INTERNAL BATTERY DIAGNOSTIC CAPABILITY.		2 6 7
	EVENLITE	TEX-AC-G-2M	U	UNIVERSAL	-	2	LED	DOUBLE FACED LED EDGE LIT EXIT SIGN WITH GREEN LETTERING AND INTERNAL BATTERY DIAGNOSTIC CAPABILITY.		2 3 6 7
/SL	EVENLITE	RZMR-AC-G-1-WW-W-LL	U	UNIVERSAL	-	2	LED	(2)SINGLE FACED LED EXIT SIGNS IN A MASTER/SLAVE CONFIGURATION WITH GREEN LETTERING.		2 6 7
HC	EVENLITE	TRE-AC-G-2M-XX-XX	U	UNIVERSAL	-	2	LED	SINGLE FACED LED EDGE LIT EXIT SIGN WITH WHEEL CHAIR GRAPHIC AND INTERNAL BATTERY DIAGNOSTIC CAPABILITY.		2 6 7
MM	EVENLITE	RZR-AC-G-1-XX-W-RS	U	UNIVERSAL	-	2	LED	SINGLE FACED LED EXIT SIGN WITH WITH GREEN LETTERING AND INTENDED FOR SUITABLE FOR MOUNTING TO MULLWION		2 6 7
RS	EVENLITE	RZR-AC-G-1-XX-W-RS	U	UNIVERSAL	-	2	LED	SINGLE FACED LED EXIT SIGN WITH WITH GREEN LETTERING AND POLYCARBONATE LENS INTENDED FOR HIGH ABUSE.		2 6 7
EB	EVENLITE	TCL-4W-SD	U	UNIVERSAL	-	10	LED	LED EMERGENCY BATTERY UNIT FIXTURE TYPICALLY MOUNTED AT 7'-6" A.F.F.		-

LIGHTING FIXTURE SCHEDULE NOTES (-)

1. LIGHTING FIXTURE PACKAGE SUBMITTALS SHALL BE FULLY COORDINATED BETWEEN THE ELECTRICAL CONTRACTOR, LIGHTING FIXTURE REPRESENTATIVE(S), AND LIGHTING MANUFACTURERS TO ENSURE ALL PRODUCT, INSTALLATION, AND CONTROL REQUIREMENTS ARE MET PRIOR TO SUBMISSION FOR REVIEW. IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO PROVIDE A PACKAGE MEETING ALL REQUIREMENTS OF THE PROJECT FOR A COMPLETE AND FULLY FUNCTIONAL LIGHTING SYSTEM.
2. PROVIDE EXIT SIGN THAT COMPLIES WITH NFPA 101, UL 924, 521 CMR 26.1.2 AND ALL REFERENCED STANDARDS AND CODES.
3. PROVIDE FLOOR PROXIMITY SIGN IN ADDITION TO STANDARD SIGN ABOVE DOOR; MOUNT SIGN AT 18" A.F.F. TO THE TOP ON THE STRIKE SIDE OF DOOR. SIGN SHALL BE RECESSED MOUNTED AND PROVIDED WITH FLUSH POLYCARBONATE SHIELD.
4. SITE LIGHTING HAS BEEN SPECIFIED WITH THE FOLLOWING BACKLIGHT, UPLIGHT, AND GLARE RATINGS AS DEFINED BY IES TM-15-07:

   SL1/3H = B1/U0/G1, SL1/3L = B1/U0/G1, SL3 = B0/U0/G1, SL4 = B1/U0/G1, SL2 = B0/U0/G1
5. SITE LIGHTING POLES SHALL BE PROVIDED WITH FULL BASE COVERS TO MATCH PROFILE OF POLE; NUT COVERS ONLY ARE NOT ACCEPTABLE.
6. UNLESS OTHER NOTED, PROVIDE ALL FIXTURES WITH 0-10V DIMMING BALLAST, DRIVER, TRANSFORMER, OR LIGHT ENGINE REQUIRED FOR LAMP OR LED SOURCE SPECIFIED.
7. E.C. SHALL PROVIDE ADDITIONAL EXIT SIGNS (TO INCLUDE 100' OF MC CABLE BRANCH CIRCUITING) FOR FIELD PLACEMENT DURING CONSTRUCTION. REFER TO SPECIFICATIONS FOR QUANTITIES.
8. PROVIDE ALCS ADDRESSABLE INPUT/OUTPUT (I/O) MODULE FOR EACH FIXTURE UNLESS OTHERWISE NOTED. APPLICATIONS NOT REQUIRING INDIVIDUAL CONTROL (WHERE NOTED ON PLANS) SHALL BE PROVIDED WITH I/O MODULES ON A FIXTURE GROUPING BASIS. WHERE FIXTURES ARE LOCATED IN HARD CEILING AREAS THE I/O MODULE SHALL BE REMOTE MOUNTED IN ACCESSIBLE AREA ABOVE AN A.C.T. CEILING. WHERE FIXTURES ARE LOCATED OUTDOORS THE I/O MODULE SHALL BE LOCATED IN THE MAIN ELECTRICAL ROOM ADJACENT TO THE PANEL SERVING THE LIGHTING. REFER TO "AUTOMATED LIGHTING CONTROL SYSTEM - TYPICAL ONE-LINE DIAGRAM" AND SPECIFICATIONS FOR FURTHER INFORMATION.
9. PROVIDE LED SOURCES WITH MAXIMUM A MAXIMUM COLOR VARIATION OF 3-STEP MCADAM ELLIPSE. PROVIDE STATEMENT OF COMPLIANCE WITH SUBMITTALS.
10. PROVIDE FIXTURES WITH A MINIMUM WARRANTY COVERAGE OF 5 YEARS ON ALL PARTS. MANUFACTURER SHALL PROVIDE WRITTEN WARRANTY TO PROVIDE REPLACEMENT PARTS, INCLUDING BUT NOT LIMITED TO, LED SOURCE MODULE AND DRIVER FOR A MINIMUM OF TEN YEARS. PARTS SHALL BE FULLY COMPATIBLE WITH FIXTURE TO PROVIDE SAME LIGHT OUTPUT, DISTRIBUTION, COLOR, AND COLOR RENDERING AT OR BELOW THE ORIGINAL WATTAGE. PROVIDE STATEMENT OF COMPLIANCE WITH SUBMITTALS.
11. PROVIDE DRIVERS (INTEGRAL OR REMOTE) WITH END OF LIFE WARNING / SHUTDOWN FEATURE WHEN OUTPUT REACHES 70% OF RATED OUTPUT. PROVIDE STATEMENT OF COMPLIANCE WITH SUBMITTALS.
12. PROVIDE FIXTURES WITH PROJECT SPECIFIC LABELS CLEARLY INDICATING THE FIXTURE TYPE, SERVICE CONTACT INFORMATION, AND REPLACEMENT PARTS (INCLUDING BUT NOT LIMITED TO SOURCE, DRIVER, AND LENS). MANUFACTURER STANDARD OFFERING OF QR CODE OR BAR CODE CONTAINING REQUIRED INFORMATION WILL BE ACCEPTABLE. PROVIDE STATEMENT OF COMPLIANCE WITH SUBMITTALS.
13. PROVIDE FIXTURES FROM MANUFACTURERS WITH A DOCUMENTED HISTORY OF SUPPLYING PRODUCTS SPECIFIED FOR A MINIMUM OF 5 YEARS. PROVIDE STATEMENT OF COMPLIANCE WITH SUBMITTALS.

MOUNTING DESIGNATIONS

C	COVE	U	UNIVERSAL
P	PENDANT	W	WALL
R	RECESSED	AC	AIRCRAFT CABLE
S	SURFACE	BOL	BOLLARD
T	TRACK / RAIL / CABLE	POLE	POLE

FIXTURE MANUFACTURER (OR EQUAL)

- (A) KENALL, PINNACLE, BIRCHWOOD
- (B) ACCLAIM, ACOLYTE, FEELUX
- (C) CREE, LITHONIA, ACCULITE
- (D) ACCLAIM, SSL, XELUM LIGHTING
- (E) PINNACLE, FINELITE, AXIS
- (F) BETA-CALCO, ZANEEN, INTERLUX
- (G) WILLIAMS, SELUX, KENALL
- (H) PINNACLE, AXIS, WILLIAMS
- (I) FOCAL POINT, WILLIAMS, ZUMTOBEL
- (J) LITHONIA, COLOMBIA, KENALL
- (K) BK LIGHTING, HYDRELL, CONTECH
- (L) WILLIAMS, LITHONIA, COLUMBIA
- (M) ACCULITE, WILLIAMS, LITHONIA
- (N) ATLANTIC , PHILLIPS, CREE
- (O) INDY, CONTECH, USAI
- (P) INTENSE LIGHTING, CONTECH, LUCIFER
- (Q) INDY, GOTHAM, CREE
- (R) LUMEC, US ARCH., ANTIQUE STREET LAMPS
- (S) STERNBURG, ANTIQUE STREET LAMPS,LUMEC
- (T) BEGA, BK LIGHTING, TARGETTI
- (U) DUAL-LITE, LITHONIA, CONTECH
- (V) INDY, CREE, INTENSE LIGHTING
- (W) HESS AMERICA, STRUCTURA, LUMEC

LIGHTING GENERAL NOTES

1. MANUFACTURERS AND CATALOG NUMBERS IDENTIFIED IN THE "LIGHTING FIXTURE SCHEDULE" SHALL SERVE TO ESTABLISH THE BASIS OF DESIGN FOR EACH LIGHTING FIXTURE TYPE. PRODUCTS OF EQUAL APPEARANCE, CONSTRUCTION, PERFORMANCE, AND WARRANTY COVERAGE FROM MANUFACTURERS OTHER THAN THOSE IDENTIFIED MAY BE PROPOSED FOR USE ON THIS PROJECT, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND ENGINEER. THE "FIXTURE MANUFACTURER OPTIONS (OR EQUAL)" LISTING IS PROVIDED FOR GUIDANCE IN IDENTIFYING MANUFACTURERS CAPABLE OF PROVIDING EQUAL PRODUCTS, BUT IN NO WAY LIMITS MANUFACTURERS OR PRODUCTS THAT MAY BE PROPOSED AS EQUALS FOR THE PROJECT.
2. "LIGHTING FIXTURE SCHEDULE" REMARKS, "LIGHTING FIXTURE SCHEDULE NOTES", "LIGHTING GENERAL NOTES", AND NOTATIONS ELSEWHERE MAY INDICATE FEATURES AND ACCESSORIES THAT ARE NOT INDICATED IN THE CATALOG NUMBER BUT ARE REQUIRED FOR THE PROJECT. PRODUCTS OTHER THAN THOSE SPECIFIED SUBMITTED SHALL BE DOCUMENTED FOR CONFORMANCE IN PERFORMANCE, CONSTRUCTION, AND APPEARANCE WITH THE CRITERIA ESTABLISHED BY THE SPECIFIED PRODUCT.
3. FURNISH ALL LIGHTING FIXTURES COMPLETE WITH MOUNTING ACCESSORIES TO MEET THE JOB REQUIREMENTS. VERIFY ROOM SURFACE CONSTRUCTION AND FINISHES PRIOR TO ORDERING FIXTURES TO ENSURE PROPER MOUNTING PROVISIONS AND FIXTURE FITTINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS.
4. VERIFY ALL FIXTURE MOUNTING HEIGHTS AND LOCATIONS WITH LATEST ARCHITECTURAL DRAWINGS. EXACT LOCATION OF FIXTURES SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO START OF ROUGHING.
5. LED ARRAYS, MODULES, AND LIGHT ENGINES SHALL HAVE KELVIN COLOR TEMPERATURE AS SCHEDULED HAVING A MINIMUM COLOR RENDERING INDEX (CRI) OF 82 AND A MINIMUM L70 LIFETIME RATING OF 50,000 HOURS AT 25°C AMBIENT. LED DRIVERS SHALL HAVE 0-10V DIMMING CONTROL WITH FULLY ISOLATED CONTROL INPUTS AND MINIMUM POWER LEVEL OF 10%. LED FIXTURES WITH ARRAY / MODULE AND DRIVER PACKAGES OR LIGHT ENGINES SHALL HAVE PUBLISHED IESNA LM-79 AND LM-80 TESTING DATA AS A STANDARD MANUFACTURED OFFERING. INDIVIDUAL COMPONENT TESTING DATA WILL NOT BE ACCEPTED. ALL FIXTURES SHALL BE "DESIGN LIGHTS CONSORTIUM" (DLC) OR "ENERGYSTAR" LISTED, OR FURNISHED WITH DATA INDICATING CONFORMANCE WITH LATEST APPLICABLE LISTING CRITERIA.
6. FIXTURE LETTERS SHOWN ONCE ON A CONTINUOUS ROW OF FIXTURES SHALL BE TYPICAL FOR THAT ROW UNLESS OTHERWISE INDICATED. PROVIDE RUN LENGTH AS INDICATED (NUMERICALLY OR GRAPHICALLY) OR CONTINUOUS WHERE SHOWN BETWEEN TWO ARCHITECTURAL ELEMENTS (WALLS, SOFFITS, COLUMNS, ETC.).
7. LINEAR ROWS OF RECESSED, SURFACE, OR SUSPENDED FIXTURES SHALL BE INSTALLED TO PROVIDE CONTINUOUS RUN LENGTHS AS INDICATED ON THE DRAWINGS. PROVIDE ALL REQUIRED FITTINGS, CONNECTORS, SUPPORTS, TRIMS, ETC. SO THAT RUNS ARE A COMPLETE ASSEMBLY WITH THE APPEARANCE OF A SINGLE UNIT. ROWS SHALL BE CONFIGURED FOR MINIMUM NUMBER OF FEEDS, JOINTS, AND MOUNTINGS. PROVIDE ROW AND PATTERN CONFIGURATION DRAWINGS FOR REVIEW PRIOR AND APPROVAL PRIOR TO RELEASE OF MATERIAL ORDER.
8. PROVIDE FLAT ROUND CANOPIES FOR SUSPENDED FIXTURE LOCATIONS WHERE SUSPENSIONS MOUNTS TO UNFINISHED CEILING STRUCTURE (WHERE LOCATED IN FINISHED SPACES) AND WHERE PASSING THROUGH SUSPENDED CEILINGS (CONFIRM WHETHER IN TILE OR AT GRID). PROVIDE SWIVEL ALIGNERS FOR SUSPENSIONS WHERE REQUIRED FOR SLOPED CEILINGS. ENTIRE SUSPENSION ASSEMBLY SHALL BE SUPPLIED BY MANUFACTURER OF FIXTURES.
9. FIXTURES WITH LOUVERS SHALL BE PROVIDED WITH HIGH TRANSMISSION (95% OR BETTER) DIFFUSING LENSES OR FILMS TO OBSCURE DIRECT LAMP VIEWING.
10. FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE, INDEPENDENT OF HUNG CEILINGS. DO NOT TAP METAL ROOF DECK FOR SUPPORT OF ANY ELECTRICAL EQUIPMENT. PROVIDE UNISTRUT AS REQUIRED FOR SUPPORT OF ALL ELECTRICAL EQUIPMENT.
11. REFER TO SPECIFICATIONS FOR SEISMIC SUPPORT, RESTRAINT, AND BRACING REQUIREMENTS OF THIS PROJECT.
12. PROVIDE TYPE AND QUANTITY OF DRIVERS AND TRANSFORMERS AS REQUIRED TO PROVIDE CONTROL METHOD INDICATIONS ON THE PLANS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SWITCHING SUBSCRIPTS, NOTES, SCHEDULE REMARKS / DESCRIPTIONS, AND DETAILS. QUANTITY OF DRIVERS AND TRANSFORMERS SHALL BE THE MINIMUM REQUIRED TO PROVIDE CONTROL INDICATED TO MAINTAIN THE LOWEST CONNECTED LOAD OF LIGHTING SYSTEM POSSIBLE. TANDEM WIRING OF FIXTURES SHALL BE PROVIDED WHERE NECESSARY AND WITHIN THE WIRING DISTANCE RESTRICTIONS OF THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
13. ALL LAMPS, LED SOURCES, DRIVERS, AND CONTROLS SHALL MEET THE LATEST UTILITY COMPANY INCENTIVE REQUIREMENTS. REFER TO THE LATEST PROGRAM REQUIREMENTS DOCUMENTATION AND COORDINATE WITH THE UTILITY COMPANY TO ENSURE COMPLIANCE.
14. ALL EXIT SIGN LIGHTING SHALL BE CIRCUITED AHEAD OF ANY SWITCH CONTROL FOR CONSTANT "ON" OPERATION. PROVIDE LOCKING DEVICE ON CIRCUIT BREAKER SERVING EXIT SIGNS.
15. EXIT SIGNS TO BE PROVIDED WITH ARROWS AS INDICATED ON DRAWINGS. TYPICALLY MOUNT ON CEILING WHERE VISIBLE OR ON WALL WHERE CEILING MOUNTING IS NOT PRACTICAL. EDGE-LIT SIGNS SHALL GENERALLY HAVE CLEAR PANELS EXCEPT FOR DOUBLE FACED UNITS AND SINGLE FACED UNITS ABLE TO BE VIEWED FROM BEHIND WHICH SHALL HAVE OPAQUE / MIRRORED PANELS. REFER TO ARCHITECTURAL DRAWINGS FOR INDICATION OF MOUNTING REQUIREMENTS.
16. EXIT SIGNS SHALL BE THE SELF-CONTAINED TYPE WITH INTEGRAL BATTERY BACK-UP AND SELF-DIAGNOSTICS WHERE NO LIFE SAFETY POWER SOURCE IS AVAILABLE, REGARDLESS OF MODEL / SERIES SPECIFIED.
17. EXIT SIGNS INSTALLED IN GYMNASIUMS, LOCKER ROOMS, AND ANY OTHER DESIGNATED AREAS SHALL BE PROVIDED WITH POLYCARBONATE FACE PLATE / SHIELD AS PART OF EXIT SIGN PACKAGE FROM SAME MANUFACTURER.
18. PROVIDE A SELF CONTAINED EMERGENCY LIGHTING UNIT WITH TWIN ADJUSTABLE HEADS (TYPE "EB" WHERE SCHEDULED) AT EACH FIRE ALARM CONTROL PANEL , REMOTE FIRE ALARM ANNUNCIATOR, @ THE LIFE SAFETY TRANSFER SWITCH AND IN THE GENERATOR ROOM. EXACT MOUNTING TO BE COORDINATED IN FIELD WITH ARCHITECT OR ENGINEER.
19. FIXTURES WITH MULTI WATTAGE BALLASTS OR DRIVERS SHALL BE LABELED FROM THE FACTORY FOR THE WATTAGE SPECIFIED TO ENSURE COMPLIANCE WITH ENERGY CODE CALCULATIONS.
20. FINISH FOR ALL FIXTURES SHALL BE SELECTED BY THE ARCHITECT FROM THE MANUFACTURER'S CATALOG OPTIONS.
21. WHERE FIXTURES OTHER THAN THE SPECIFIED PRODUCTS ARE PROPOSED, THE CONTRACTOR SHALL PROVIDE LIGHT LEVEL CALCULATIONS IN ACCORDANCE WITH IESNA STANDARDS TO JUSTIFY THAT THE SUBSTITUTED FIXTURES ARE OF EQUAL PERFORMANCE (WITH EQUAL OR LOWER INPUT WATTAGE) TO THE SPECIFIED PRODUCTS (APPLIES TO ALL FIXTURES IN ALL SPACES.)
22. EVERY SPACE ENCLOSED BY FLOOR TO CEILING WALLS SHALL BE PROVIDED WITH A MINIMUM OF ONE MANUAL LIGHTING SWITCH AND ONE CEILING MOUNTED OCCUPANCY SENSOR. ADDITIONAL CONTROLS SHALL BE AS INDICATED ON THE PLAN OR AS SPECIFIED ELSEWHERE.

ELECTRICAL GENERAL NOTES

1. THE SCOPE OF WORK SHALL INCLUDE PROVIDING ALL WORK INDICATED, AND COORDINATION WITH ALL TRADES. SCOPE OF WORK IS INDICATED ON THE CONTRACT DOCUMENTS INCLUDING THE DRAWINGS AND THE SPECIFICATIONS, WHICH ARE COMPLIMENTARY. WORK INDICATED IN ANY CONTRACT DOCUMENT SHALL BE CONSIDERED PART OF THE SCOPE OF WORK. IN GENERAL, WORK REQUIREMENTS ARE NOT INDICATED IN BOTH DOCUMENTS . WHERE DOCUMENTS CONFLICT WITHIN THEMSELVES OR WITH CODES AND REGULATIONS, PROVIDE THE HIGHER QUANTITY AND QUALITY AND FOLLOW THE STRICTER REQUIREMENTS.
2. COORDINATE WITH THE GENERAL CONTRACTOR, OTHER TRADES AND OF MANUFACTURERS EQUIPMENT, AND MAKE ALL FINAL CONNECTIONS AS REQUIRED, I.E., POWER, CONTROL, INTERLOCK, ETC.
3. ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH OSHA, NFPA STANDARDS, THE ELECTRICAL CODE AND THE LOCAL GOVERNING AUTHORITIES. THE DRAWINGS AND SPECIFICATIONS DO NOT ATTEMPT TO INDICATE ALL WORK REQUIRED BY CODES AND AUTHORITIES.
4. TEST ALL EQUIPMENT AND SYSTEMS INSTALLED TO CERTIFY COMPLIANCE WITH DRAWINGS, SPECIFICATIONS, CODES, LOCAL AUTHORITIES AND REGULATIONS. INCLUDE LABOR AND COSTS FOR TESTING, REVIEWS, APPROVALS AND CERTIFICATIONS.
5. DRAWINGS ARE DIAGRAMMATIC ONLY. EXACT LOCATION, MOUNTING HEIGHTS OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS AND FIELD CONDITIONS.
6. FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE AND READY FOR OPERATION.
7. SUPPORT ALL WORK FROM THE BUILDING STRUCTURE.
8. ALL MOUNTING HEIGHTS ARE TO CENTERLINE UNLESS OTHERWISE INDICATED.
9. IF EXACT MOUNTING OR RACEWAY ROUTINGS ARE NOT INDICATED (LOCATION OR HEIGHT) REQUEST CLARIFICATION PRIOR TO ROUGHING, OR INSTALLATION.
10. ELECTRICAL WORK SHALL BE RECESSED INTO WALLS OR INSTALLED ABOVE HUNG CEILINGS UNLESS OTHERWISE INDICATED.
11. DO NOT INSTALL OUTLETS BACK TO BACK. PROVIDE 24 INCH SPACING IN FIRE RATED WALLS. SEE ARCHITECTURAL DRAWING FOR ADDITIONAL INFORMATION.
12. PROVIDE ELECTRICAL OUTLET PLATE GASKET SEALS AT RECEPTACLES, SWITCHES AND OTHER ELECTRICAL BOXES ON EXTERIOR WALLS AND INTERIOR WALLS BETWEEN CONDITIONED AND NON-CONDITIONED SPACES.
13. WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL BE CONTINUOUS THROUGHOUT CIRCUIT.
14. FURNISH AND INSTALL CODE REQUIRED DISCONNECTS WHICH ARE NOT FURNISHED BY THE HVAC OR PLUMBING CONTRACTORS.
15. INSTALL A GREEN GROUNDING CONDUCTOR WITHIN EACH RACEWAY SIZED IN ACCORDANCE WITH THE ELECTRIC CODE.
16. PROVIDE WATERTIGHT AND GAS TIGHT SEALS INSIDE AND OUTSIDE OF CONDUITS THAT PENETRATE THE BUILDING BELOW GRADE, O.Z. GEDNEY OR APPROVED EQUAL. PROVIDE WEATHER TIGHT SEAL AT PENETRATIONS ABOVE GRADE.
17. PROVIDE NRTL LISTED SMOKE AND FIRE SEALS AT ALL PENETRATIONS THROUGH FLOORS OR FULL HEIGHT (SLAB TO SLAB) WALLS.
18. USE CAUTION TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL WORKING IN THESE AREAS.
19. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER MINIMUM #12 AWG. SIZE UNLESS OTHERWISE INDICATED.
20. PROVIDE A PULL LINE IN EVERY EMPTY CONDUIT PROVIDED UNDER THIS SECTION.
21. WIRING IS INDICATED ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
22. WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
23. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE PROVIDED.
24. ALL SWITCH CONTROLS SHALL BE PROVIDED WITH WIRING AND CONDUIT AS REQUIRED.
25. RACEWAYS SHALL BE LIMITED TO SIX CURRENT CARRYING CONDUCTORS (THREE PHASE AND THREE NEUTRALS) AND GROUNDING CONDUCTOR, UNLESS OTHERWISE INDICATED. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH SINGLE PHASE RECEPTACLE CIRCUIT UNLESS AN OVERSIZED NEUTRAL IS SPECIFICALLY INDICATED.

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
LIGHTING FIXTURE SCHEDULE AND DETAILS

SCALE:

E002

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E002 LIGHTING FIXTURE SCHEDULE AND DETAILS
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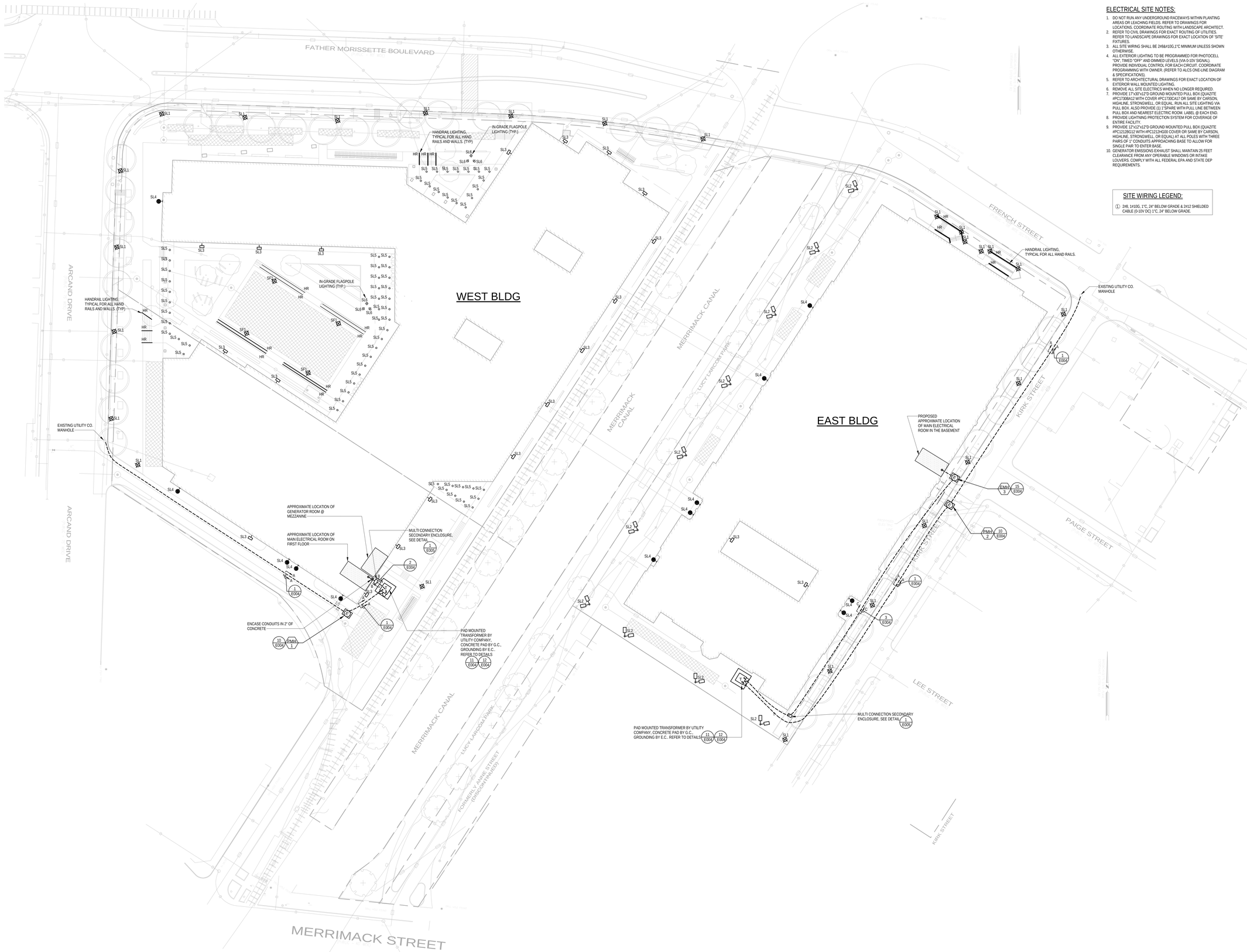

1 E003 ELECTRICAL SITE PLAN - POWER
SCALE: 1" = 30'-0"

ELECTRICAL SITE NOTES:

1. DO NOT RUN ANY UNDERGROUND RACEWAYS WITHIN PLANTING AREAS OR LEACHING FIELDS. REFER TO DRAWINGS FOR LOCATIONS. COORDINATE ROUTING WITH LANDSCAPE ARCHITECT.
2. REFER TO CIVIL DRAWINGS FOR EXACT ROUTING OF UTILITIES. REFER TO LANDSCAPE DRAWINGS FOR EXACT LOCATION OF SITE FIXTURES.
3. ALL SITE WIRING SHALL BE 2#8&#10G,1"C MINIMUM UNLESS SHOWN OTHERWISE.
4. ALL EXTERIOR LIGHTING TO BE PROGRAMMED FOR PHOTOCELL "ON", TIMED "OFF" AND DIMMED LEVELS (VIA 0-10V SIGNAL). PROVIDE INDIVIDUAL CONTROL FOR EACH CIRCUIT. COORDINATE PROGRAMMING WITH OWNER. (REFER TO ALCS ONE-LINE DIAGRAM & SPECIFICATIONS).
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF EXTERIOR WALL MOUNTED LIGHTING.
6. REMOVE ALL SITE ELECTRICS WHEN NO LONGER REQUIRED.
7. PROVIDE 17"x30"x12"D GROUND MOUNTED PULL BOX (QUAZITE #PC1730BA12 WITH COVER #PC1730CA17 OR SAME BY CARSON, HIGHLINE, STRONGWELL, OR EQUAL. RUN ALL SITE LIGHTING VIA PULL BOX. ALSO PROVIDE (1) 1"SPARE WITH PULL LINE BETWEEN PULL BOX AND NEAREST ELECTRIC ROOM. LABEL @ EACH END.
8. PROVIDE LIGHTNING PROTECTION SYSTEM FOR COVERAGE OF ENTIRE FACILITY.
9. PROVIDE 12"x12"x12"D GROUND MOUNTED PULL BOX (QUAZITE #PC1212BG12 WITH #PC1212HG00 COVER OR SAME BY CARSON, HIGHLINE, STRONGWELL, OR EQUAL) AT ALL POLES WITH THREE PAIRS OF 1" CONDUITS APPROACHING BASE TO ALLOW FOR SINGLE PAIR TO ENTER BASE.
10. GENERATOR EMISSIONS EXHAUST SHALL MAINTAIN 25 FEET CLEARANCE FROM ANY OPERABLE WINDOWS OR INTAKE LOUVERS. COMPLY WITH ALL FEDERAL EPA AND STATE DEP REQUIREMENTS.

SITE WIRING LEGEND:

① 2#8, 1#10G, 1"C, 24" BELOW GRADE & 2#12 SHIELDED CABLE (0-10V DC) 1"C, 24" BELOW GRADE.

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
ELECTRICAL SITE PLAN - POWER

SCALE: As indicated

E003

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E003 ELECTRICAL SITE PLAN - POWER
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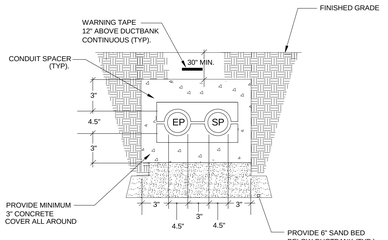
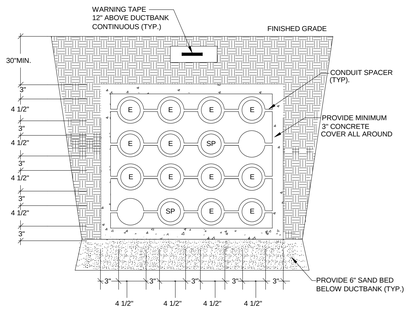


1 E004 PRIMARY DUCT BANK SECTION "A-A"

SCALE: N.T.S.

EP 4" PRIMARY- SCHEDULE 40 P.V.C. PROVIDE 3/16" PULL LINE IN CONDUIT.

SP 4" SPARE - SCHEDULE 40 P.V.C. PROVIDE 3/16" PULL LINE IN CONDUIT.

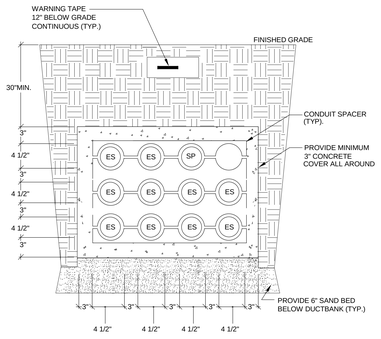


2 E004 SECONDARY DUCT BANK SECTION "B-B"

SCALE: N.T.S.

ES 4" ELECTRICAL SECONDARY - SCHEDULE 40 P.V.C.

SP 4" SPARE - SCHEDULE 40 P.V.C. WITH PULL LINE.



3 E004 SECONDARY DUCT BANK SECTION "C-C"

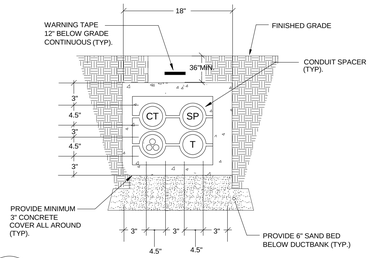
SCALE: N.T.S.

ES 4" ELECTRICAL SECONDARY - SCHEDULE 40 P.V.C.

SP 4" SPARE - SCHEDULE 40 P.V.C. WITH PULL LINE.

4 E004 NOT USED

SCALE: N.T.S.



5 E004 COMM DUCT BANK SECTION "E-E"

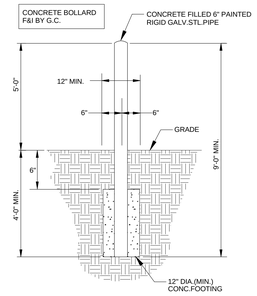
SCALE: N.T.S.

SP 4" SPARE - SCHEDULE 40 P.V.C. PROVIDE 3/16" PULL ROPE.

T 4" TELEPHONE - SCHEDULE 40 P.V.C. PROVIDE 3/16" PULL ROPE.

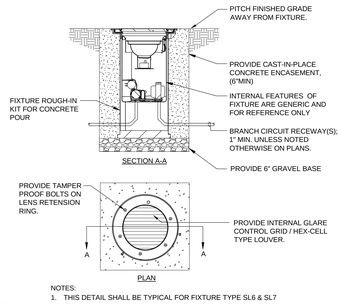
4" FIBER - SCHEDULE 40 P.V.C. PROVIDE (3) 1 1/4" INNERDUCTS w/ PULL WIRES.

CT 4" CABLE TV - SCHEDULE 40 P.V.C. PROVIDE 3/16" PULL ROPE.



6 E004 TYPICAL BOLLARD DETAIL

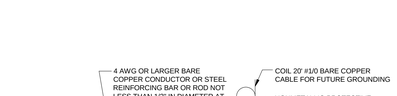
SCALE: N.T.S



NOTES:
1. THIS DETAIL SHALL BE TYPICAL FOR FIXTURE TYPE SL6 & SL7

7 E004 GROUND MOUNTED LIGHTING DETAIL

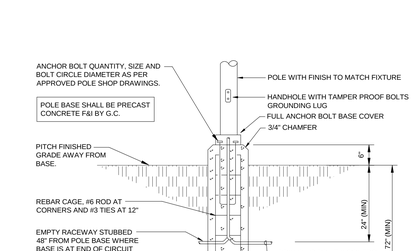
SCALE: N.T.S.



NOTE:
PROVIDE NEW SLAB GROUNDING IN NEW SLAB.

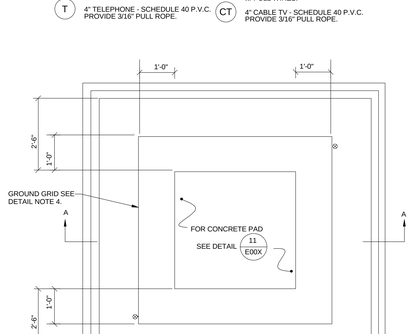
8 E004 UFER GROUNDING DETAIL

SCALE: N.T.S.



9 E004 LIGHTING POLE BASE DETAIL

SCALE: N.T.S.



PLAN

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Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

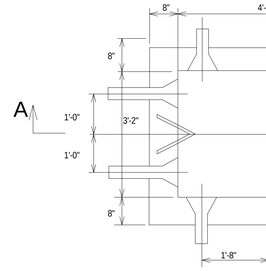
DRAWING TITLE:
ELECTRICAL SITE DETAILS

SCALE:

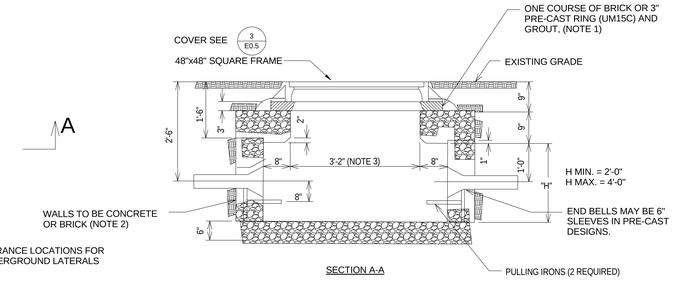
E004

SCHEMATIC DESIGN SUBMISSION

2/20/2019



PLAN VIEW



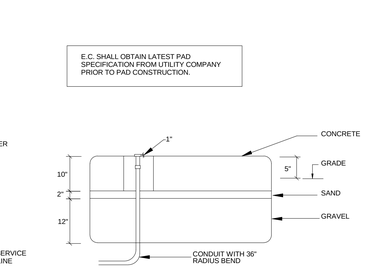
H MIN. = 2'-0"
H MAX. = 4'-0"

SECTION A-A

NOTES:
1. CHIMNEY HEIGHT IS KEPT TO A MINIMUM TO FACILITATE PLACING COMPLETED SPLICES IN HANDHOLE FROM ABOVE GRADE.
2. CONCRETE MINIMUM STRENGTH - SEE UTILITY COMPANY STANDARDS.
3. ROOF OPENING 3'-2" X 3'-2".
4. HANDHOLE FRAME, RING AND COVER ARE TYPICALLY PROVIDED BY THE CUSTOMER.

10 E004 HEAVY DUTY PRIMARY HANDHOLE DETAIL

SCALE: N.T.S.



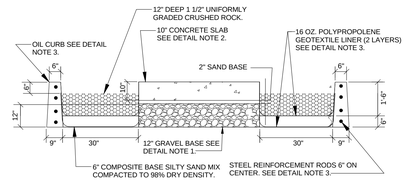
PLAN

E.C. SHALL OBTAIN LATEST PAD SPECIFICATION FROM UTILITY COMPANY PRIOR TO PAD CONSTRUCTION.

SECTION A-A

11 E004 PADMOUNT TRANSFORMER PAD DETAIL

SCALE: N.T.S.

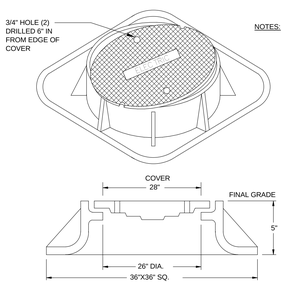


SECTION A-A

DETAIL NOTES:
1. PLACE CONCRETE SLAB ON A BASE OF 2" SAND AND 12" GRAVEL. THE GRAVEL SHALL BE THOROUGHLY PACKED AND SAND THOROUGHLY WETTED IMMEDIATELY BEFORE PLACING CONCRETE.
2. UPON COMPLETION OF THE SLAB AND THE INSTALLATION OF CONDUIT, FILL THE OPEN AREA AROUND THE CONDUIT WITH CONCRETE AND GROUT AROUND THE CONDUIT TO SEAL THIS AREA.
3. REINFORCE WITH FOUR 1/2" RODS, SIX INCHES ON CENTER AS SHOWN. BEND RODS AROUND CORNERS, FILL AREA BETWEEN SLAB AND CURB WITH 1-1/2" UNIFORMLY GRADED CRUSHED ROCK AND LINE WITH 2 LAYERS OF GEOTEXTILE LINER AS SHOWN. GEOTEXTILE LINERS (16 OZ.) TO BE SEPARATED BY A 6" LAYER OF COMPACTED, SILTY SAND AND GRAVEL MIX. ALL SEAMS TO OVERLAP 12" MINIMUM.
4. GROUND GRID TO BE INSTALLED 1' BELOW UNDISTURBED EARTH AND THE GROUND GRID SHALL BE PLACED 1" IN FRONT OF THE SLAB RATHER THAN 2". IN NO CASE SHALL ANY PORTION OF GROUND GRID OR GROUND RODS LIE WITHIN THE GRAVEL OR STONE LAYERS.
5. REFER TO MASS. ELECTRIC CO. STANDARD GS2581 FOR OIL CONTAINMENT BARRIER STANDARDS AND REQUIREMENTS.

12 E004 OIL CONTAINMENT DETAIL

SCALE: N.T.S.

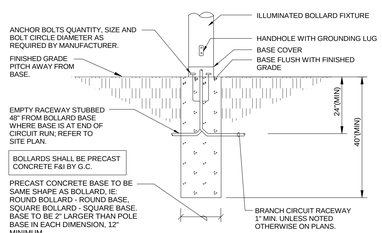


NOTES:
1. COVERS WILL HAVE "ELECTRIC", "TELEPHONE", OR "CATV" CAST IN THEM IN 3 INCH LETTERS.
2. FRAME AND COVER TO SUPPORT H2O WHEEL LOAD.
3. NO VAULT MANHOLE SHALL BE BURIED DEEPER THAN 18" BELOW FINISHED GRADE.
4. COVER SHALL BE FLUSH TO FINAL GRADE (CONCRETE, ASPHALT, GRAVEL, GRASS, ETC..)

	SUPPLIER & CATALOG#	STOCK CODE
FRAME	NACIP AE 124 LEBARON LE-28SL OR APPROVED EQUAL	07-29-229
COVER	NACIP LEBARON LE-28C5 ELECTRIC OR APPROVED EQUAL	07-15-530

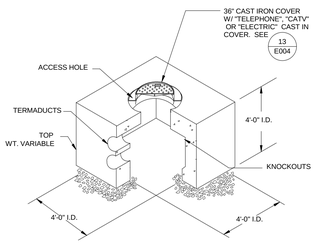
13 E004 FRAME AND COVER DETAIL

SCALE: N.T.S.



14 E004 SITE LIGHTING BOLLARD DETAIL

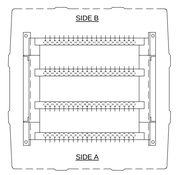
SCALE: N.T.S.



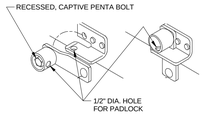
15 E004 TELE., C.A.T.V., & ELECTRIC HAND HOLE

SCALE: N.T.S.

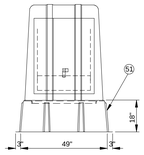
LOWELL HIGH SCHOOL E004 ELECTRICAL SITE DETAILS
12/12/2018 5:40:18 PM



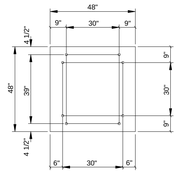
TOP VIEW



LATCH DETAIL

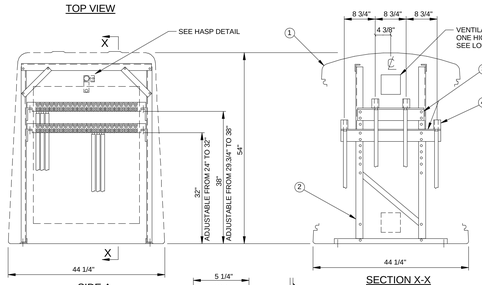


ENCLOSURE WITH OPTIONAL BOX PAD



PAD AND ANCHOR BOLT DIMENSIONS

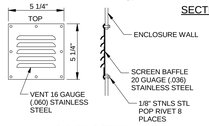
ANCHOR BOLT TO BE 5/8" DIA. AND TO EXTEND 1.1/2" MIN. PROVIDE CABLE ENTRY AS REQUIRED.



SIDE A

SECTION X-X

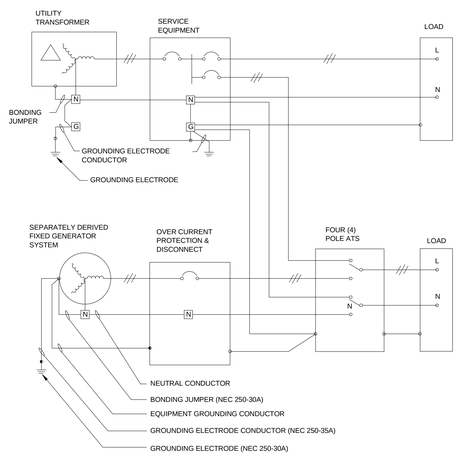
MATERIAL LIST - STANDARD UNIT	
ITEM	DESCRIPTION
1	FIBERGLASS EQUIPMENT ENCLOSURE - 2 DOOR - MUNSELL GREEN STAINLESS HARDWARE - PDI MODEL PE2-44-0-L2
2	ALUMINUM FREE STANDING FRAME
3	FIBERGLASS ANGLE INSULATOR GP0-3
4	ALUMINUM SET SCREW CONNECTOR - 22 POSITION - #2 - 750MCM CONDUCTOR RANGE
OPTIONAL EQUIPMENT	
51	BP-46W46M18-MG BOX PAD - ALSO AVAILABLE IN 30" & 36" HEIGHTS



LOUVER DETAIL

1 E005 MULTI CONNECTION SECONDARY ENCLOSURE DETAIL

SCALE: N.T.S.

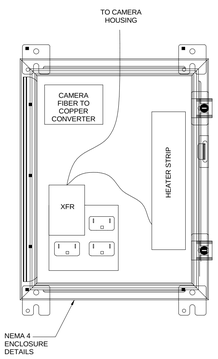


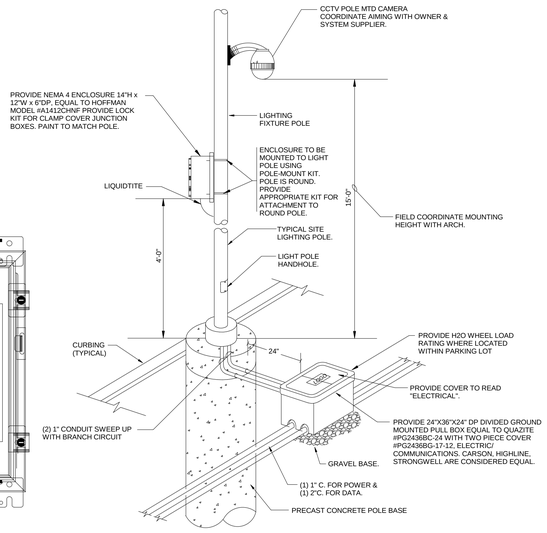
5 E005 SEPARATELY DERIVED GENERATOR SYSTEM

SCALE: N.T.S.

SECURITY NOTES

1. E.C. SHALL INTERFACE IESS TO NETWORK TO ALLOW ANY NETWORKED PC TO VIEW ALARM EVENTS, LIVE OR RECORDED VIDEO AND SYSTEM SCHEDULES. VIEWING SOFTWARE TO BE WEB-BASED.
2. ALL DOOR CONTACTS SHALL BE INDIVIDUALLY ADDRESSED AND ANNUNCIATED ON CONTROL PANEL.
3. TYPICALLY EXTERIOR CAMERA LOCATIONS FURNISH AND INSTALL DAY/NIGHT DOME CAMERAS WITH HEATER BLOWERS AT THESE LOCATIONS. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.
4. INTERFACE IESS TO INTERCOM SYSTEM TO ALLOW FOR RECORDING, CAMERA CALL-UP IF EXTERIOR INTERCOM STATIONS ARE ACTIVATED. COORDINATE AS REQUIRED WITH SUPPLIER.
5. PROVIDE DIGITAL COMMUNICATOR CONNECTION TO UL CENTRAL STATION. PROVIDE CONTACT ID FOR ALL POINTS TO MONITORING STATION. PROVIDE 4 YEARS MONITORING WITH CONTRACT.
6. PROVIDE FIRE ALARM INTERFACE. PROVIDE FIRE ALARM OVERRIDE AS REQUIRED. (2#18GAUGE WIRES BY E.C.)
7. PROVIDE INTEGRATED ELECTRONIC SECURITY SERVER COMPLETE WITH 4 HOUR UPS BACK-UP. PROVIDE SOFTWARE FOR UNLIMITED NUMBER OF USERS, DOORS, AND 100 WORKSTATIONS.
8. INTERFACE TO AUTOMATED LIGHTING SYSTEM. WHEN INTRUSION SYSTEM GOES INTO ALARM ALL HALLWAY LIGHTS SHALL TURN-ON.
9. PROVIDE (3) KEYFOBS/PROX CARDS IN ADDITION TO THE AMOUNT SPECIFIED IN EACH KNOX BOX FOR FIRE DEPT. USE. FOBS/CARDS SHALL BE PROGRAMMED FOR FULL ACCESS TO THE BUILDING.
10. PROVIDE CONTACT CLOSURE INTERFACE TO AUTOMATED LIGHTING CONTROL SYSTEM (ALCS) VIA A SINGLE PAIR OF 2#18 CONDUCTORS. WHEN INTRUSION SYSTEM GOES INTO ALARM A SIGNAL SHALL BE ISSUED TO DIRECT THE ALCS TO TURN ALL INTERIOR AND EXTERIOR LIGHTING "ON".
11. PROVIDE INTEGRATION WITH FIRE ALARM SYSTEM TO RELEASE DOOR HOLDERS DURING LOCK DOWN AND ON A SCHEDULE.
12. SECURITY INTEGRATOR SHALL COORDINATE LOCK DOWN PROCEDURE w/ OWNER AND PROGRAM THE SYSTEM ACCORDINGLY.
13. INTEGRATE THE INTRUSION SYSTEM WITH THE ACCESS CONTROL SYSTEM SO THAT THE KEY FOB PRESENTED AT THE EXTERIOR CARD READER CAN DISARM THE COMMON ZONE, AND INTERIOR CARD READERS WILL DISARM THE ZONE THAT ARE ASSOCIATED WITH THEIR LOCATION. THE SYSTEM SHALL BE CAPABLE OF MINIMUM OF EIGHT (8) PARTITIONS.
14. INTEGRATE THE ACCESS CONTROL SYSTEM WITH THE BUILDING PAGING SYSTEM TO GIVE (5) DISTINCT INPUTS TO TONE GENERATOR (PART OF PAGING SYSTEM) FOR ALARMS TO BE SELECTED BY OWNER SUCH AS PANIC AND LOCK DOWN.
15. FACILITATE AND PROVIDE REMOTE ACCESS TO SYSTEM FOR POLICE DEPT. AND FIRE DEPT.
16. PANIC BUTTONS SHALL ALSO TIE INTO A ZONE ON THE FIRE ALARM DET RADIO BOX TO TRANSMIT TO FIRE DEPT.
17. PROGRAM PROPPED DOOR ALARM SO THAT ANY DOOR PROPPED OPEN BEYOND A SET TIME WILL SEND AN AUDIBLE ALARM TO STAFF AND A TEXT MESSAGE TO THE SECURITY OFFICER.



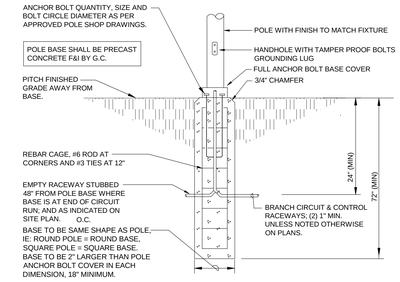


NOTES:

1. INSTALLATION TYPICAL FOR LANDSCAPED AREAS. HANDHOLE SHALL NOT BE LOCATED IN TRAFFIC AREAS. COORDINATE COVER AND FRAME COLOR OF HANDHOLE WITH ARCHITECT.
2. REFER TO TYPICAL LIGHT POLE BASE DETAIL.
3. WHERE CAMERA IS NOT MOUNTED TO A LIGHTING POLE PROVIDE A 15' ROUND ALUMINUM POLE THAT MATCHES ALL OTHER SITE POLE FOR MOUNTING OF CAMERAS.
4. WHERE CAMERA IS MOUNTED TO SPORTS FIELD LIGHTING POLE MOUNTING HEIGHT SHALL BE 25' ABOVE FIELD.

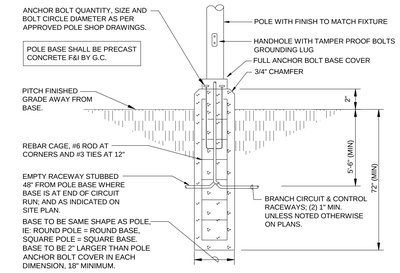
2 E005 POLE MOUNTED CCTV CAMERA AND LIGHTING POLE UNDERGROUND DETAIL

SCALE: N.T.S.



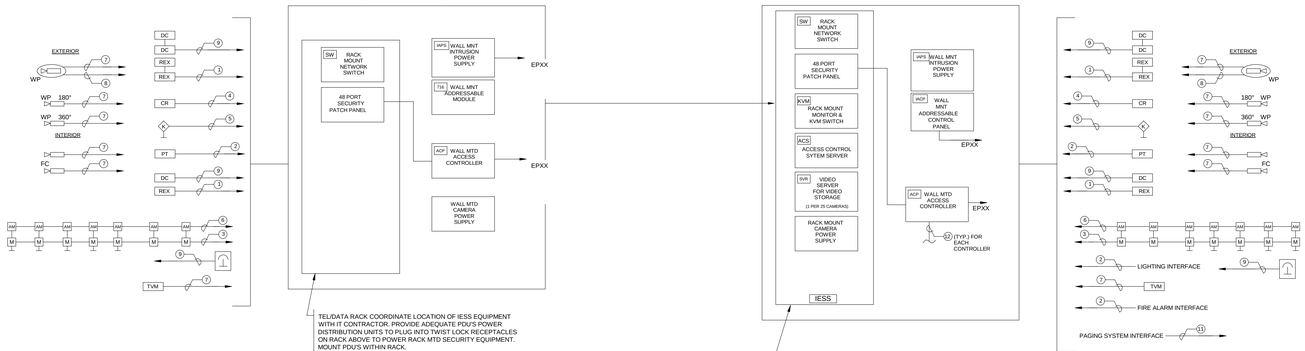
3 E005 LIGHTING POLE BASE DETAIL

SCALE: N.T.S.



4 E005 LIGHTING POLE BASE DETAIL

SCALE: N.T.S.



SECURITY WIRING LEGEND

1. INPUT - CABLE REQUIREMENTS 18AWG FOUR CONDUCTOR STRANDED NON-SHIELDED FOR DPS ONE PAIR PER POLE, FOR REX ONE PAIR SPARE
2. OUTPUT - CABLE REQUIREMENTS 18AWG TWO CONDUCTOR STRANDED, NON-SHIELDED
3. MOTION DETECTOR - CABLE REQUIREMENTS 18AWG TWO CONDUCTOR STRANDED NON SHIELDED (THIS IS FOR DC POWER ONLY IN DESIGN)
4. READER - CABLE REQUIREMENTS 20AWG THREE PAIR SHIELDED REFERENCE MODEL BELDEN 82777 FOR PLENUM RATED APPLICATIONS
5. KEYPAD - CABLE REQUIREMENTS 18AWG FOUR CONDUCTOR STRANDED NON SHIELDED
6. INTRUSION ALARM BUS - CABLE REQUIREMENT 18AWG FOUR CONDUCTOR STRANDED NON SHIELDED
7. CAT 6A NON-PLENUM RATED UTP CABLE TO SECURITY PATCH PANEL
8. POWER SUPPLY CABLE AND CONTROL FOR EXTERIOR PTZ CAMERA. 2#18&2#18TSP.
9. INPUT - CABLE REQUIREMENTS 18AWG TWO CONDUCTOR STRANDED NON-SHIELDED
10. (2)CAT 6A NON-PLENUM RATED UTP CABLE TO SECURITY PATCH PANEL
11. OUTPUT - CABLE REQUIREMENTS 14AWG TWO CONDUCTOR STRANDED, NON-SHIELDED
12. (2) 24AWG TWISTED PAIR STRANDED (BELDEN 9501)

6 E005 INTEGRATED ELECTRONIC SECURITY SYSTEM PARTIAL RISER DIAGRAM

SCALE: N.T.S.

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
370 Faunce Corner Road, Dartmouth, MA 02747-1371
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

SEAL

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T. +1 617 449 4000
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Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
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Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
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2150 Washington Street Newton, MA 02462

Mechanical:
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370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
Garcia, Galuska, DeSousa, Inc.
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Plumbing & Fire Protection:
VAV International
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Food Service:
Crabtree McGrath
161 West Main Street Georgetown, MA 01833

Security:
Planning / Zoning Consultant Name
Planning / Zoning Consultant Address

Envelope Consultant:
Envelope Consultant Name
Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

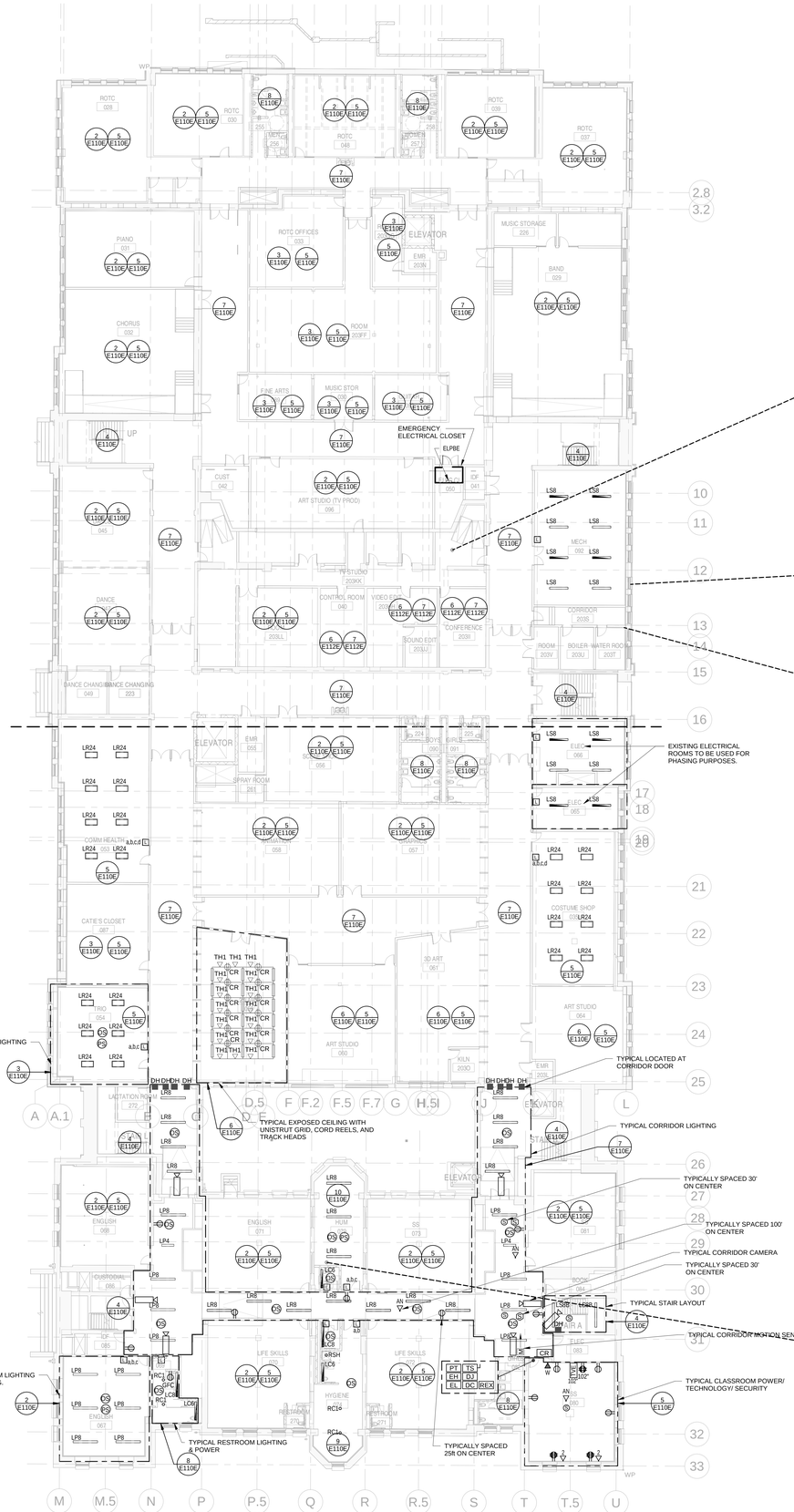
DRAWING TITLE:
ELECTRICAL SITE DETAILS

SCALE:

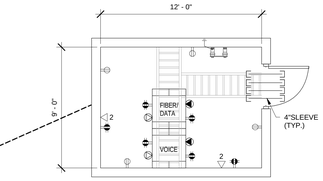
E005

SCHEMATIC DESIGN SUBMISSION

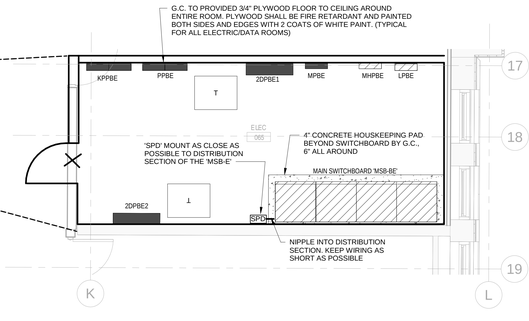
2/20/2019



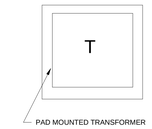
1 E110E BASEMENT FLOOR PLAN - EAST BLDG - ELECTRICAL
SCALE: 1/16" = 1'-0"

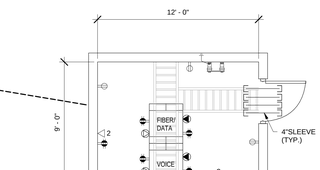


4 E110E DATA CLOSET IDF
SCALE: 1/4" = 1'-0"



3 E110E BASEMENT FLOOR PLAN - EAST BLDG - MAIN ELECTRIC ROOM 066
SCALE: 1/4" = 1'-0"





2 E110E DATA CLOSET IDF2
SCALE: 1/4" = 1'-0"

GENERAL POWER NOTES:

1. COORDINATE EXACT LOCATION OF ALL DEVICES AND EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION.
2. REFER TO MECHANICAL PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL HVAC EQUIPMENT.
3. WIRING IS SHOWN ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
4. WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
5. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
6. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE 98% CONDUCTIVITY, COPPER MINIMUM #12 AWG SIZE, THWN/THHN INSULATION, 600 VOLTS RATED UNLESS OTHERWISE NOTED.
7. REFER TO FIRE PROTECTION PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL FLOW SWITCH, TAMPER SWITCH, ETC..
8. DO NOT PENETRATE STAIRS WITH ANY UTILITIES EXCEPT FOR UTILITIES SPECIFICALLY SERVING THAT STAIR.
9. WHERE CONDUITS AND/OR BOXES CANNOT BE FLUSH MOUNTED IN BUILDING PROVIDE A SYSTEM OF SURFACE METAL RACEWAYS AND BOXES IN ACCORDANCE WITH ARTICLE 386, EQUAL TO WIREMOLD FOR ALL FINISH SPACES WHERE PUBLIC HAS ACCESS, INCLUDING CORRIDORS, CLASSROOMS, OFFICES, ETC.
10. CONFIRM RATINGS & FINAL LOCATIONS OF EQUIPMENT WITH OWNER PRIOR TO ROUGHING.
11. ALL OUTLETS ON EXTERIOR WALLS WITH CASEWORK SHALL BE MOUNTED 6" ABOVE CASEWORK. CONFIRM HEIGHT OF CASEWORK WITH HVAC AND ARCHITECT PRIOR TO ROUGHING.
12. TYPICALLY PROVIDE GROUND FAULT INTERRUPTER TYPE RECEPTACLES WITHIN 6 FEET OF WATER SOURCES.
13. PROVIDE ALL EMPTY CONDUITS WITH PULL-STRINGS.
14. TYPICALLY PROVIDE (2) 4" SLEEVES OVER EACH CORRIDOR DOOR.
15. ROVIDE (2) 2" THROUGH-WALL SLEEVE ABOVE CEILING OVER THE DOORS INTO EACH ROOM LEADING FROM THE CORRIDOR FOR COMMUNICATIONS/DATA WIRING.
16. LOCATE ALL WALL TELEPHONE OUTLETS 12 INCHES AWAY FROM ALL OTHER OUTLETS/DEVICES.
17. PROVIDE (2) 1" SLEEVES OVER EACH DOOR FOR TEL./DATA SECURITY AND SOUND SYSTEM WIRING. TEL/DATA SHALL BE DEDICATED TO (1) OF THE CONDUITS.
18. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL BOXES AND CONDUITS REQUIRED FOR AUDIO/VISUAL SYSTEMS SECTION 274100 DEVICES AS SHOWN ON AV DRAWINGS. ALL LOCATIONS OF POWER AND A/V OUTLET BOXES SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGHING.
19. E.C. SHALL PROVIDE EMERGENCY BOILER & WATER HEATER SHUT-OFF MOUNTED IN STOPPER II COVER. INTERLOCK w/ BOILER & WATER HEATER CONTROL PANELS. MOUNT @ 72" A.F.F. TYPICAL.

NO.	DATE	ISSUE

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SEAL

KEY PLAN

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T. +1 617 449 4000
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Owner:
375 Merrimack Street, Lowell, MA 08152

Construction Manager:
Construction Manager Name
Construction Manager Address

Civil / Site:
Nitsch Engineering
2 Center Plaza Suite 430 Boston, MA 02108

Landscape:
Traverse Landscape Architects
150 Chestnut Street, 4th Floor Providence, RI 02903

Structural:
Foley Buhl Roberts & Associates, Inc.
2150 Washington Street Newton, MA 02462

Mechanical:
Garcia, Galuska, DeSousa, Inc.
370 Faunce Corner Road Dartmouth, MA 02747

Electrical:
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Plumbing & Fire Protection:
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Food Service:
Crabtree McGrath
181 West Main Street Georgetown, MA 01833

Security:
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Envelope Consultant:
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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
BASEMENT FLOOR PLAN - EAST BLDG - ELECTRICAL

SCALE: As indicated

E110E

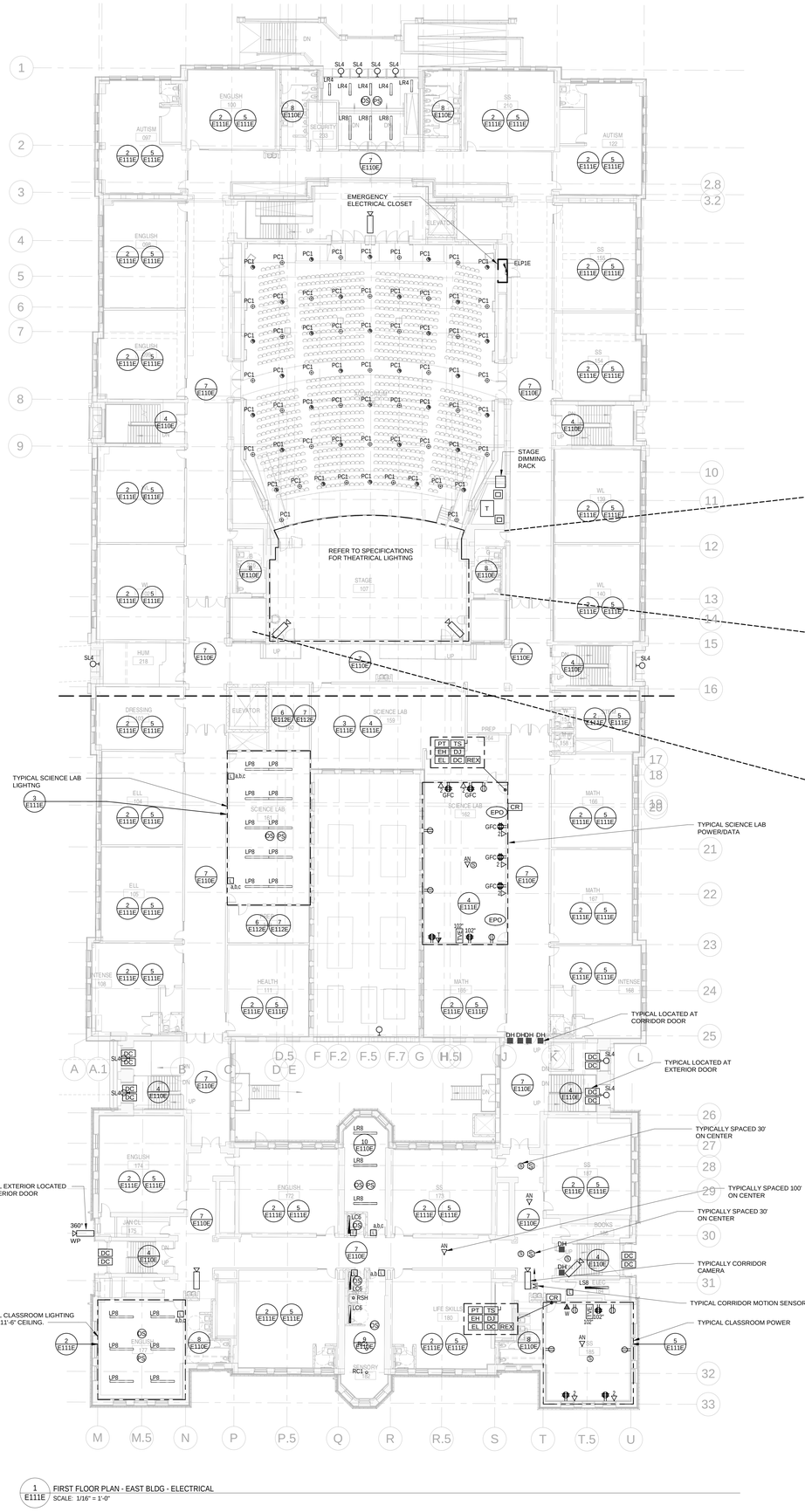
SCHEMATIC DESIGN SUBMISSION

2/20/2019

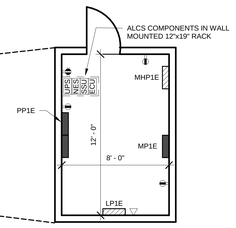
LOWELL HIGH SCHOOL E110E BASEMENT FLOOR PLAN - EAST BLDG - ELECTRICAL
12/12/2018 5:40:20 PM

GENERAL POWER NOTES:

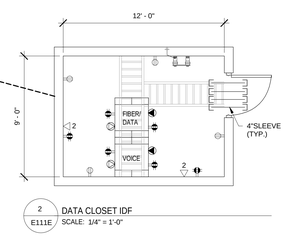
1. COORDINATE EXACT LOCATION OF ALL DEVICES AND EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION.
2. REFER TO MECHANICAL PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL HVAC EQUIPMENT.
3. WIRING IS SHOWN ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
4. WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
5. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
6. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE 98% CONDUCTIVITY, COPPER MINIMUM #12 AWG SIZE, THWN/THHN INSULATION, 600 VOLTS RATED UNLESS OTHERWISE NOTED.
7. REFER TO FIRE PROTECTION PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL FLOW SWITCH, TAMPER SWITCH, ETC.
8. DO NOT PENETRATE STAIRS WITH ANY UTILITIES EXCEPT FOR UTILITIES SPECIFICALLY SERVING THAT STAIR.
9. WHERE CONDUITS AND/OR BOXES CANNOT BE FLUSH MOUNTED IN BUILDING PROVIDE A SYSTEM OF SURFACE METAL RACEWAYS AND BOXES IN ACCORDANCE WITH ARTICLE 386, EQUAL TO WIREMOLD FOR ALL FINISH SPACES WHERE PUBLIC HAS ACCESS, INCLUDING CORRIDORS, CLASSROOMS, OFFICES, ETC.
10. CONFIRM RATINGS & FINAL LOCATIONS OF EQUIPMENT WITH OWNER PRIOR TO ROUGHING.
11. ALL OUTLETS ON EXTERIOR WALLS WITH CASEWORK SHALL BE MOUNTED 6" ABOVE CASEWORK. CONFIRM HEIGHT OF CASEWORK. WITH HVAC AND ARCHITECT PRIOR TO ROUGHING.
12. TYPICALLY PROVIDE GROUND FAULT INTERRUPTER TYPE RECEPTACLES WITHIN 6 FEET OF WATER SOURCES.
13. PROVIDE ALL EMPTY CONDUITS WITH PULL-STRINGS.
14. TYPICALLY PROVIDE (2) 4" SLEEVES OVER EACH CORRIDOR DOOR.
15. ROVIDE (2) 2" THROUGH-WALL SLEEVE ABOVE CEILING OVER THE DOORS INTO EACH ROOM LEADING FROM THE CORRIDOR FOR COMMUNICATIONS/DATA WIRING.
16. LOCATE ALL WALL TELEPHONE OUTLETS 12 INCHES AWAY FROM ALL OTHER OUTLETS/DEVICES.
17. PROVIDE (2) 1" SLEEVES OVER EACH DOOR FOR TEL./DATA SECURITY AND SOUND SYSTEM WIRING. TEL./DATA SHALL BE DEDICATED TO (1) OF THE CONDUITS.
18. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL BOXES AND CONDUITS REQUIRED FOR AUDIO/VISUAL SYSTEMS SECTION 274100 DEVICES AS SHOWN ON AV DRAWINGS. ALL LOCATIONS OF POWER AND A/V OUTLET BOXES SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGHING.
19. E.C. SHALL PROVIDE EMERGENCY BOILER & WATER HEATER SHUT-OFF MOUNTED IN STOPPER II COVER. INTERLOCK w/ BOILER & WATER HEATER CONTROL PANELS. MOUNT @ 72" A.F.F. TYPICAL.



1 E111E FIRST FLOOR PLAN - EAST BLDG - ELECTRICAL
SCALE: 1/16" = 1'-0"



3 E111E ELECTRICAL ROOM - EAST BLDG - FIRST FLOOR - POWER
SCALE: 1/4" = 1'-0"



2 E111E DATA CLOSET IDF
SCALE: 1/4" = 1'-0"

GARCIA GALUSKA DESOUSA
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NO.	DATE	ISSUE

SEAL

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR PLAN - EAST BLDG - ELECTRICAL

SCALE: As indicated

E111E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E111E FIRST FLOOR PLAN - EAST BLDG - ELECTRICAL
12/12/2018 3:40:24 PM

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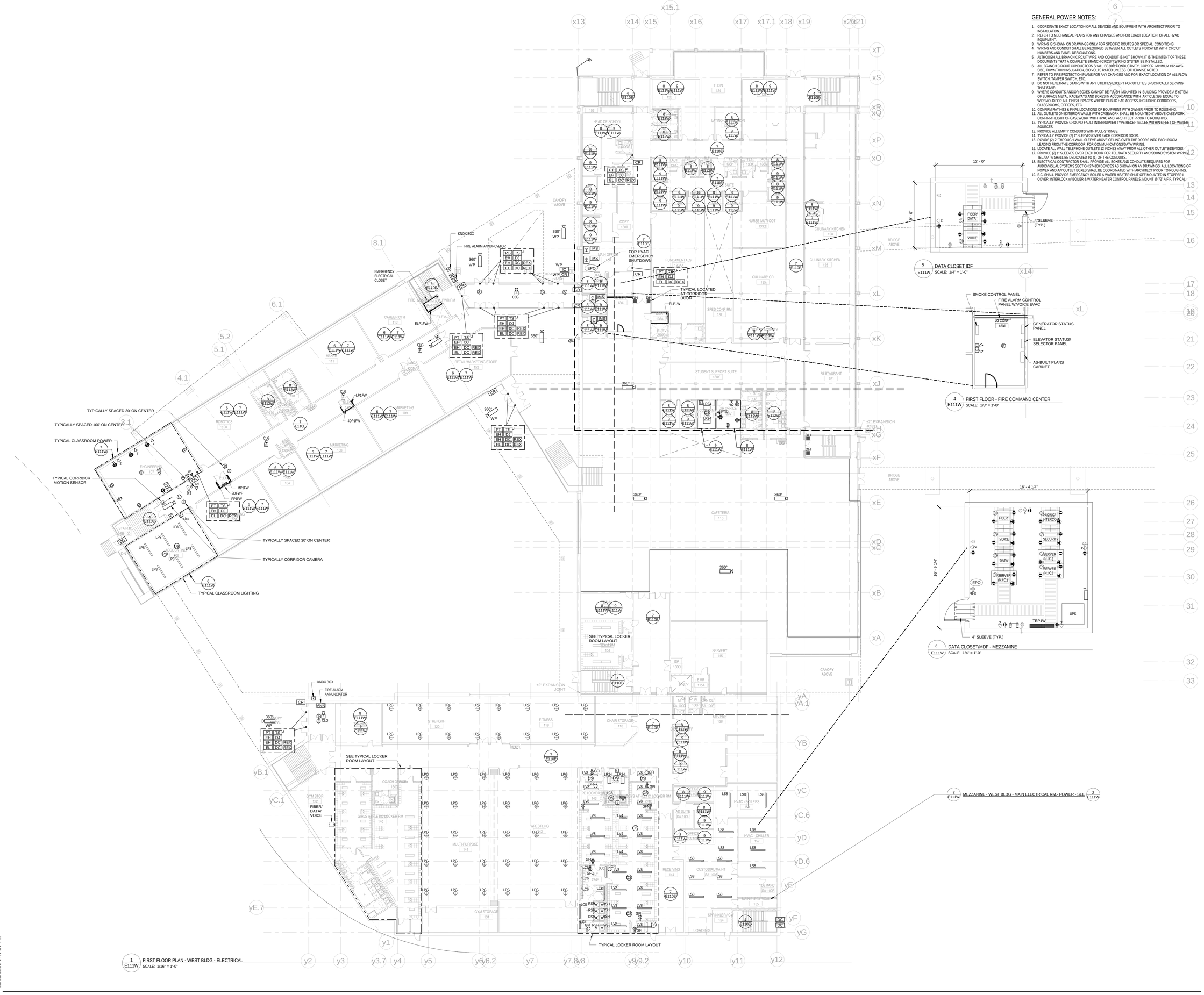

1 E111W FIRST FLOOR PLAN - WEST BLDG - ELECTRICAL
SCALE: 1/16" = 1'-0"

5 E111W DATA CLOSET IDF
SCALE: 1/4" = 1'-0"

4 E111W FIRST FLOOR - FIRE COMMAND CENTER
SCALE: 1/8" = 1'-0"

3 E111W DATA CLOSET/MDF - MEZZANINE
SCALE: 1/4" = 1'-0"

NO.	DATE	ISSUE

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SEAL

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327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FIRST FLOOR PLAN - WEST BLDG - ELECTRICAL

SCALE: As indicated

E111W

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E111W FIRST FLOOR PLAN - WEST BLDG - ELECTRICAL
12/12/2018 9:40:26 PM

GENERAL POWER NOTES:

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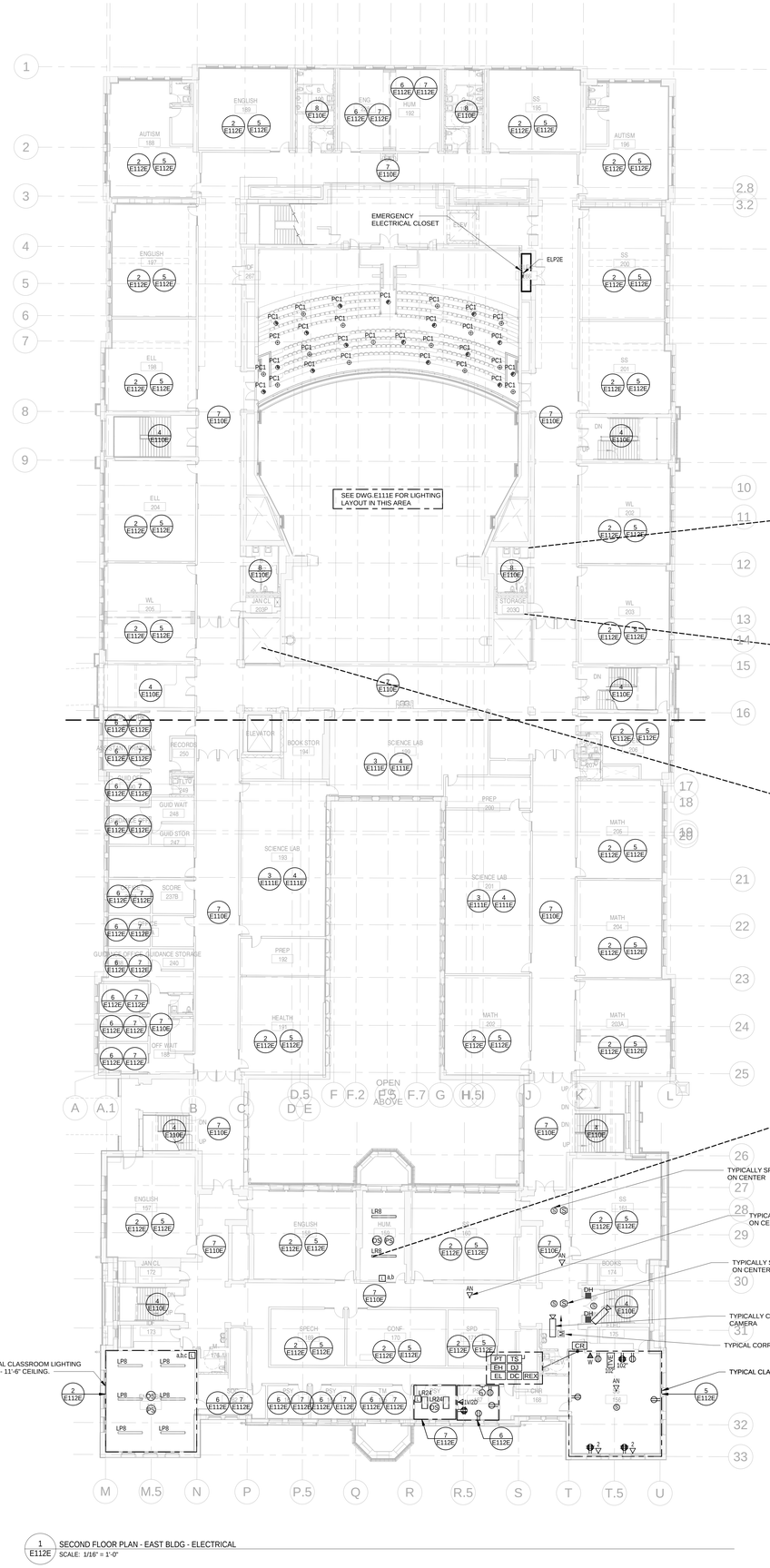
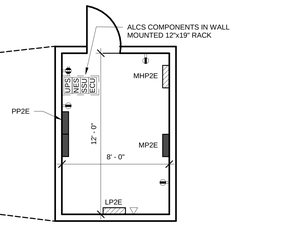
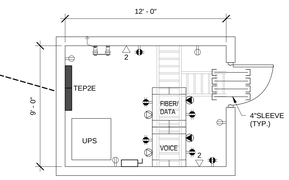


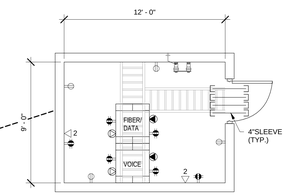
1 E112E SECOND FLOOR PLAN - EAST BLDG - ELECTRICAL
SCALE: 1/16" = 1'-0"



4 E112E ELECTRICAL ROOM - EAST BLDG - SECOND FLOOR - POWER
SCALE: 1/4" = 1'-0"



3 E112E DATA CLOSET IDF4
SCALE: 1/4" = 1'-0"



2 E112E DATA CLOSET IDF2
SCALE: 1/4" = 1'-0"

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS, INC.
370 Faunce Corner Road, Dartmouth, MA 02747 - 1371
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

NO.	DATE	ISSUE

SEAL

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR PLAN - EAST BLDG - ELECTRICAL

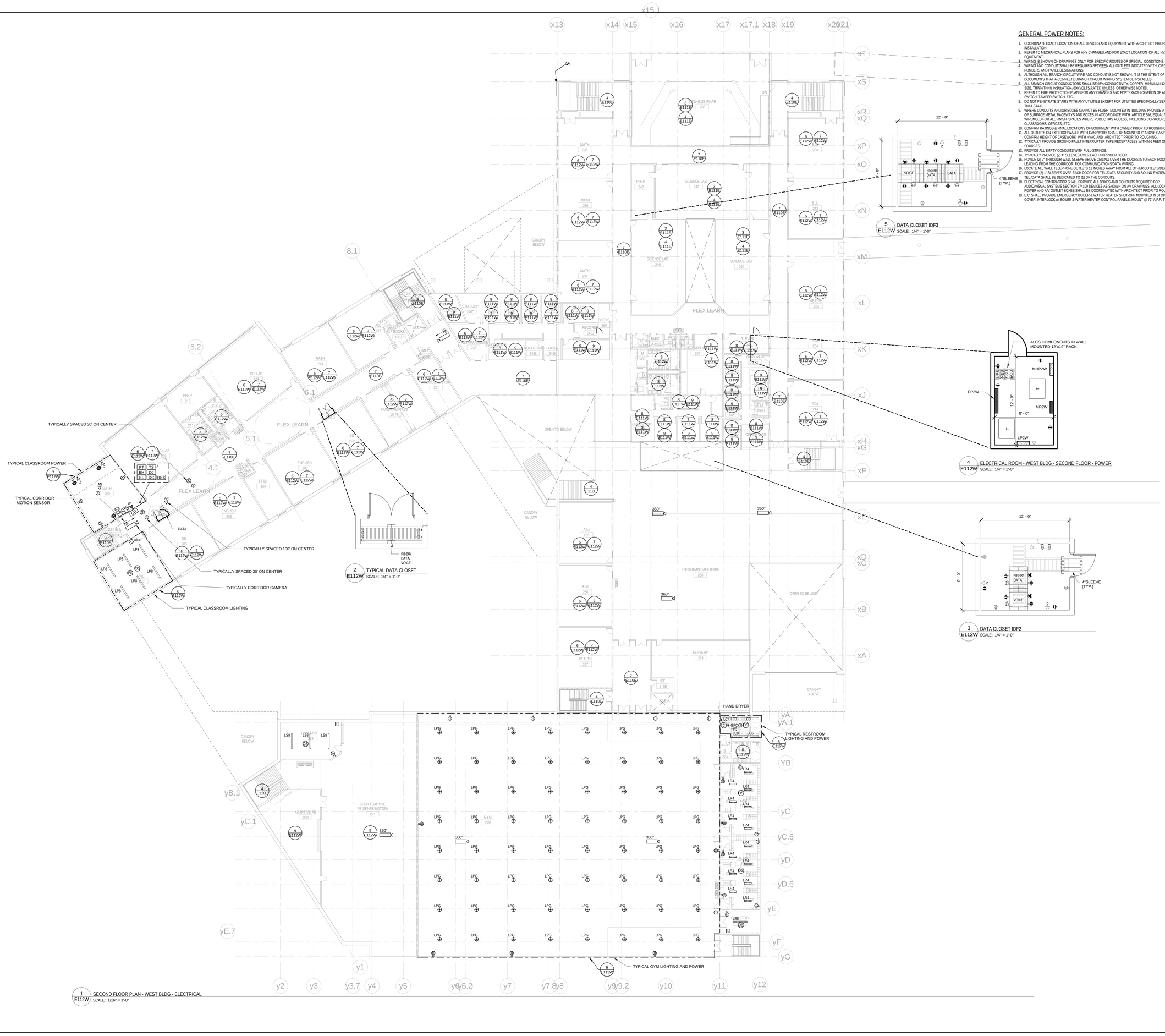
SCALE: As indicated

E112E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E112E SECOND FLOOR PLAN - EAST BLDG - ELECTRICAL
12/12/2018 5:40:30 PM



1 E112W SECOND FLOOR PLAN - WEST BLDG - ELECTRICAL
SCALE: 1/16" = 1'-0"

2 E112W TYPICAL DATA CLOSET
SCALE: 1/4" = 1'-0"

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5 E112W DATA CLOSET IDF3
SCALE: 1/4" = 1'-0"

4 E112W ELECTRICAL ROOM - WEST BLDG - SECOND FLOOR - POWER
SCALE: 1/4" = 1'-0"

3 E112W DATA CLOSET IDF2
SCALE: 1/4" = 1'-0"

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
SECOND FLOOR PLAN - WEST BLDG - ELECTRICAL

SCALE: As indicated

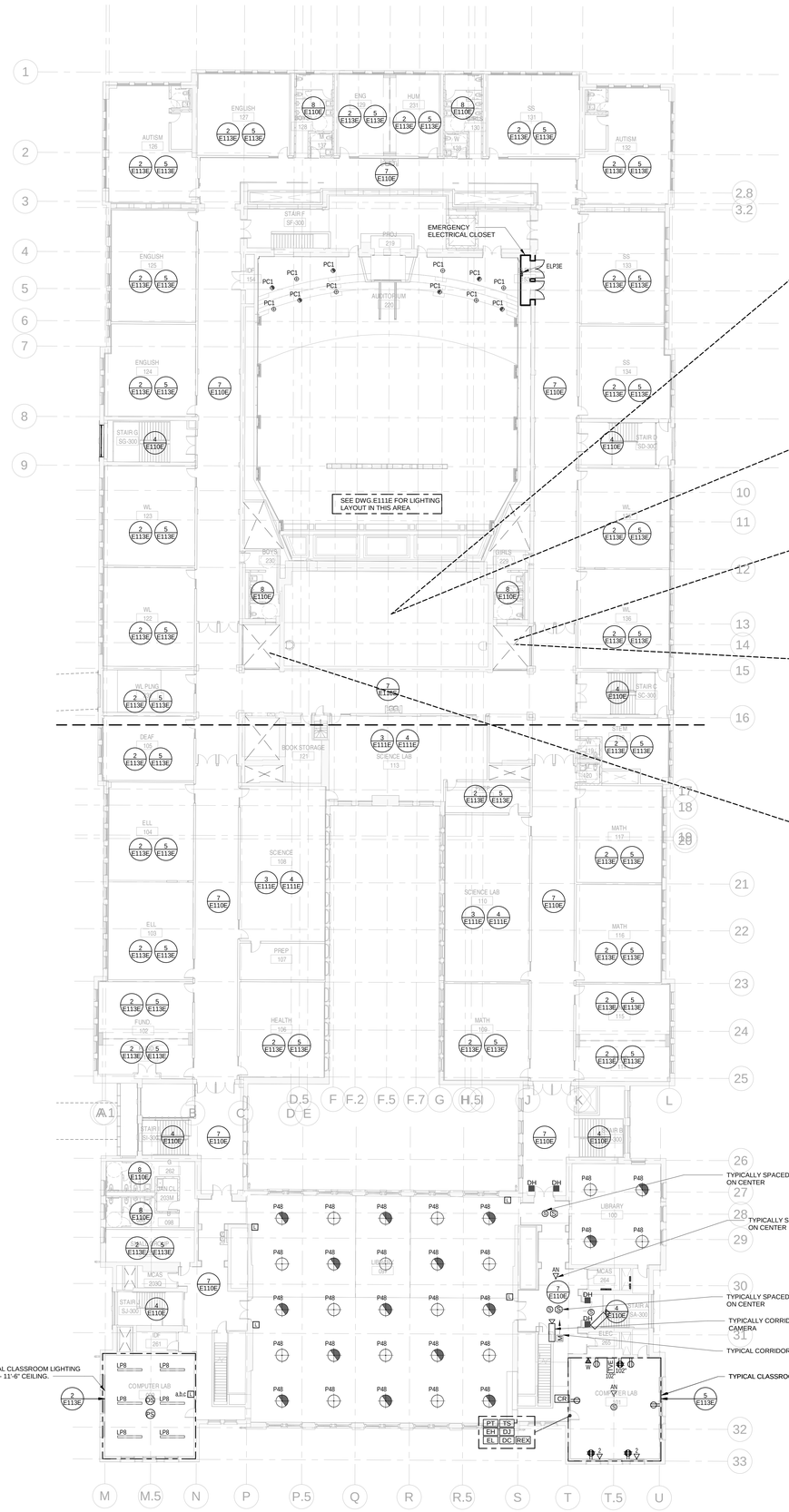
E112W

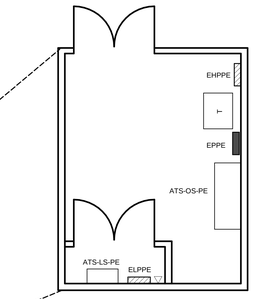
SCHEMATIC DESIGN SUBMISSION

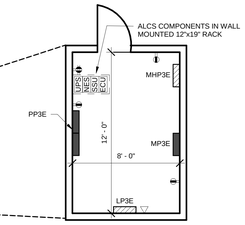
2/20/2019

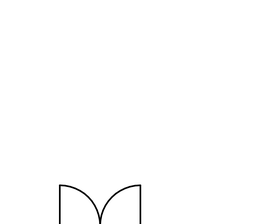
NO. DATE ISSUE

LOWELL HIGH SCHOOL E112W SECOND FLOOR PLAN - WEST BLDG - ELECTRICAL
12/12/2018 5:40:32 PM









GENERAL POWER NOTES:

1. COORDINATE EXACT LOCATION OF ALL DEVICES AND EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION.
2. REFER TO MECHANICAL PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL HVAC EQUIPMENT.
3. WIRING IS SHOWN ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
4. WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
5. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
6. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE 99% CONDUCTIVITY, COPPER MINIMUM #12 AWG SIZE, THWN/THHN INSULATION, 600 VOLTS RATED UNLESS OTHERWISE NOTED.
7. REFER TO FIRE PROTECTION PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL FLOW SWITCH, TAMPER SWITCH, ETC.
8. DO NOT PENETRATE STAIRS WITH ANY UTILITIES EXCEPT FOR UTILITIES SPECIFICALLY SERVING THAT STAIR.
9. WHERE CONDUITS AND/OR BOXES CANNOT BE FLUSH MOUNTED IN BUILDING PROVIDE A SYSTEM OF SURFACE METAL RACEWAYS AND BOXES IN ACCORDANCE WITH ARTICLE 386, EQUAL TO WIREMOLD FOR ALL FINISH SPACES WHERE PUBLIC HAS ACCESS, INCLUDING CORRIDORS, CLASSROOMS, OFFICES, ETC.
10. CONFIRM RATINGS & FINAL LOCATIONS OF EQUIPMENT WITH OWNER PRIOR TO ROUGHING.
11. ALL OUTLETS ON EXTERIOR WALLS WITH CASEWORK SHALL BE MOUNTED 6" ABOVE CASEWORK. CONFIRM HEIGHT OF CASEWORK WITH HVAC AND ARCHITECT PRIOR TO ROUGHING.
12. TYPICALLY PROVIDE GROUND FAULT INTERRUPTER TYPE RECEPTACLES WITHIN 6 FEET OF WATER SOURCES.
13. PROVIDE ALL EMPTY CONDUITS WITH PULL-STRINGS.
14. TYPICALLY PROVIDE (2) 4" SLEEVES OVER EACH CORRIDOR DOOR.
15. ROVIDE (2) 2" THROUGH-WALL SLEEVE ABOVE CEILING OVER THE DOORS INTO EACH ROOM LEADING FROM THE CORRIDOR FOR COMMUNICATIONS/DATA WIRING.
16. LOCATE ALL WALL TELEPHONE OUTLETS 12 INCHES AWAY FROM ALL OTHER OUTLETS/DEVICES.
17. PROVIDE (2) 1" SLEEVES OVER EACH DOOR FOR TEL./DATA SECURITY AND SOUND SYSTEM WIRING. TEL./DATA SHALL BE DEDICATED TO (1) OF THE CONDUITS.
18. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL BOXES AND CONDUITS REQUIRED FOR AUDIO/VISUAL SYSTEMS SECTION 274100 DEVICES AS SHOWN ON AV DRAWINGS. ALL LOCATIONS OF POWER AND AV OUTLET BOXES SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGHING.
19. E.C. SHALL PROVIDE EMERGENCY BOILER & WATER HEATER SHUT-OFF MOUNTED IN STOPPER II COVER. INTERLOCK w/ BOILER & WATER HEATER CONTROL PANELS. MOUNT @ 72" A.F.F. TYPICAL.

NO.	DATE	ISSUE

GARCIA GALUSKA DESOUSA
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370 Faunce Corner Road, Dartmouth, MA 02747 - 1371
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SEAL

KEY PLAN

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Owner:
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Construction Manager Address

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2 Center Plaza Suite 430 Boston, MA 02108

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Envelope onsultant Address

Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR PLAN - EAST BLDG - ELECTRICAL

SCALE: As indicated

E113E

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E113E THIRD FLOOR PLAN - EAST BLDG - ELECTRICAL
12/12/2018 5:40:35 PM

GENERAL POWER NOTES:

1. COORDINATE EXACT LOCATION OF ALL DEVICES AND EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION.
2. REFER TO MECHANICAL PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL HVAC EQUIPMENT.
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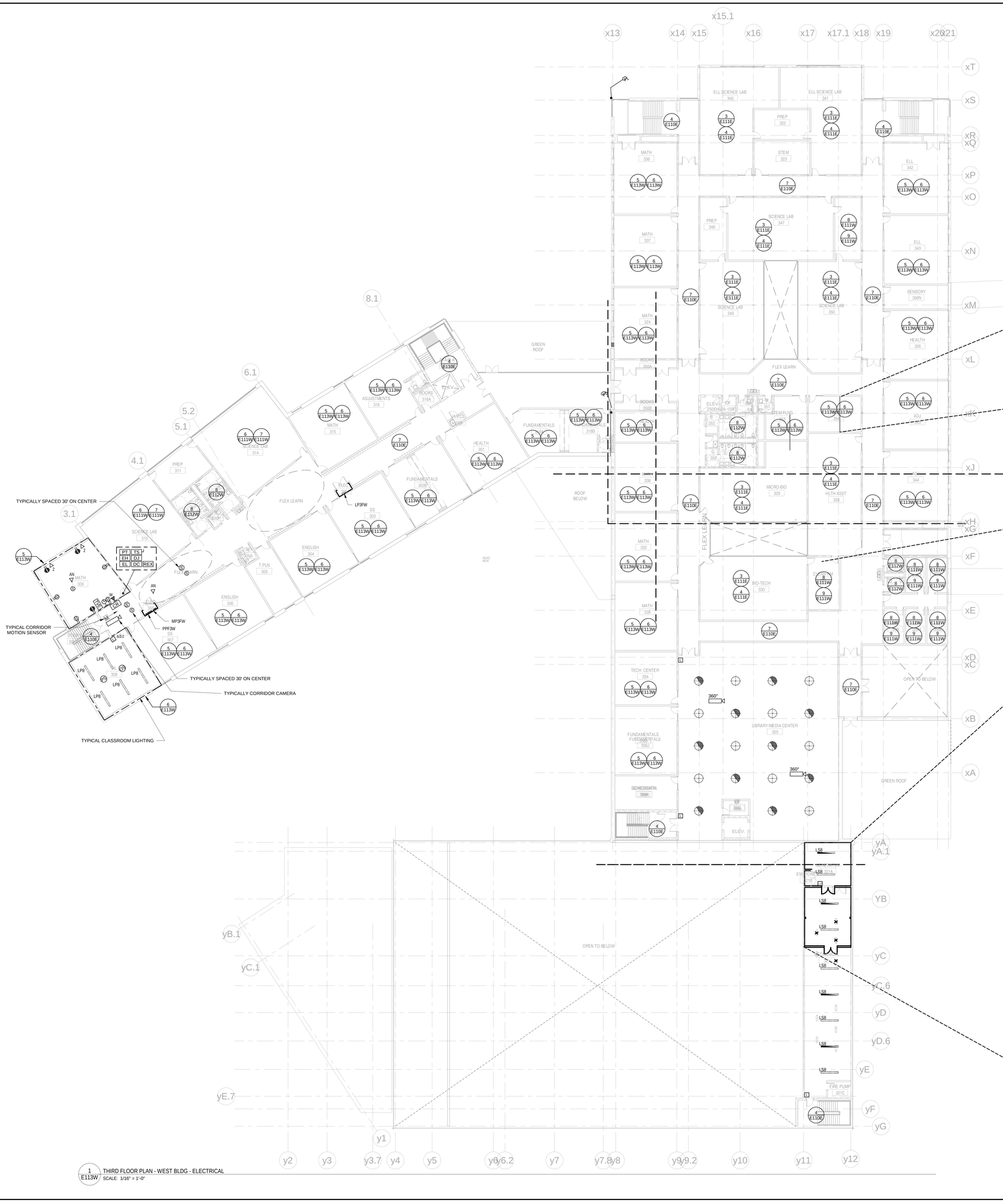
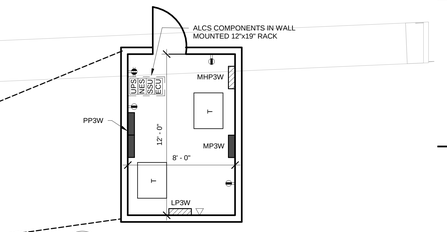
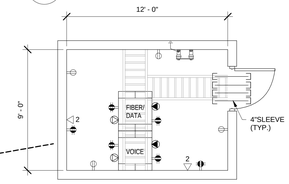
7. REFER TO FIRE PROTECTION PLANS FOR ANY CHANGES AND FOR EXACT LOCATION OF ALL FLOW SWITCH, TAMPER SWITCH, ETC.
8. DO NOT PENETRATE STAIRS WITH ANY UTILITIES EXCEPT FOR UTILITIES SPECIFICALLY SERVING THAT STAIR.
9. WHERE CONDUITS AND/OR BOXES CANNOT BE FLUSH MOUNTED IN BUILDING PROVIDE A SYSTEM OF SURFACE METAL RACEWAYS AND BOXES IN ACCORDANCE WITH ARTICLE 386, EQUAL TO WIREMOLD FOR ALL FINISH SPACES WHERE PUBLIC HAS ACCESS, INCLUDING CORRIDORS, CLASSROOMS, OFFICES, ETC.
10. CONFIRM RATINGS & FINAL LOCATIONS OF EQUIPMENT WITH OWNER PRIOR TO ROUGHING.
11. ALL OUTLETS ON EXTERIOR WALLS WITH CASEWORK SHALL BE MOUNTED 8" ABOVE CASEWORK. CONFIRM HEIGHT OF CASEWORK WITH HVAC AND ARCHITECT PRIOR TO ROUGHING.
12. TYPICALLY PROVIDE GROUND FAULT INTERRUPTER TYPE RECEPTACLES WITHIN 6 FEET OF WATER SOURCES.
13. PROVIDE ALL EMPTY CONDUITS WITH PULL-STRINGS.
14. TYPICALLY PROVIDE (2) 4" SLEEVES OVER EACH CORRIDOR DOOR.
15. ROVIDE (2) 2" THROUGH-WALL SLEEVE ABOVE CEILING OVER THE DOORS INTO EACH ROOM LEADING FROM THE CORRIDOR FOR COMMUNICATIONS/DATA WIRING.
16. LOCATE ALL WALL TELEPHONE OUTLETS 12 INCHES AWAY FROM ALL OTHER OUTLETS/DEVICES.
17. PROVIDE (2) 1" SLEEVES OVER EACH DOOR FOR TEL./DATA SECURITY AND SOUND SYSTEM WIRING. TEL./DATA SHALL BE DEDICATED TO (1) OF THE CONDUITS.
18. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL BOXES AND CONDUITS REQUIRED FOR AUDIO/VISUAL SYSTEMS SECTION 274100 DEVICES AS SHOWN ON AV DRAWINGS. ALL LOCATIONS OF POWER AND A/V OUTLET BOXES SHALL BE COORDINATED WITH ARCHITECT PRIOR TO ROUGHING.
19. E.C. SHALL PROVIDE EMERGENCY BOILER & WATER HEATER SHUT-OFF MOUNTED IN STOPPER II COVER. INTERLOCK w/ BOILER & WATER HEATER CONTROL PANELS. MOUNT @ 72" A.F.F. TYPICAL.



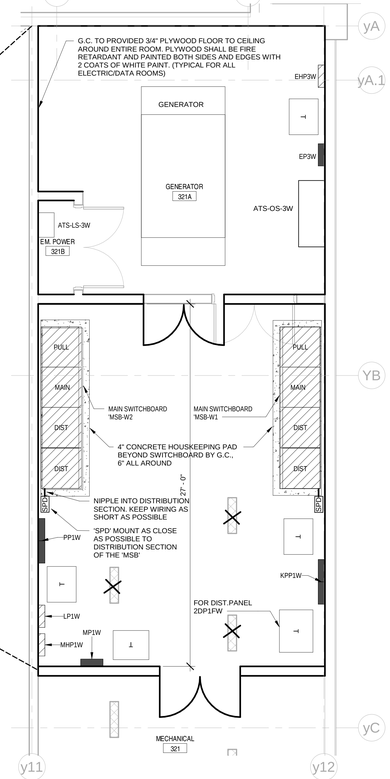
1 E113W THIRD FLOOR PLAN - WEST BLDG - ELECTRICAL
SCALE: 1/16" = 1'-0"



4 E113W ELECTRICAL ROOM - WEST BLDG -THIRD FLOOR - POWER
SCALE: 1/4" = 1'-0"



3 E113W DATA CLOSET IDF
SCALE: 1/4" = 1'-0"



2 E113W MEZZANINE (THIRD FLOOR) - WEST BLDG - GENERATOR & MAIN ELECTRIC ROOMS - POWER
SCALE: 1/4" = 1'-0"

NO.	DATE	ISSUE

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Cavanaugh Tocci
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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
THIRD FLOOR PLAN - WEST BLDG - ELECTRICAL

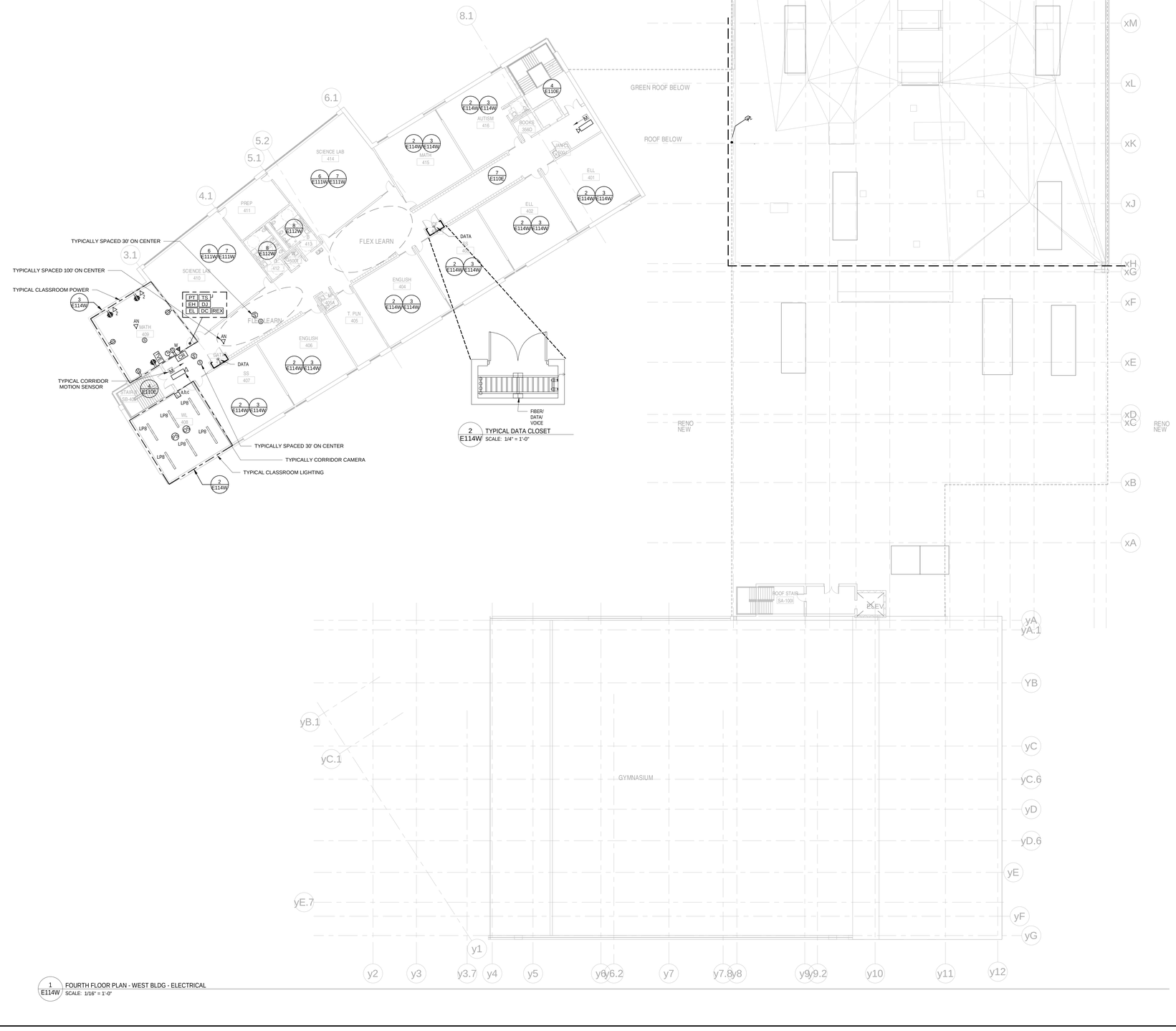
SCALE: As indicated

E113W

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E113W THIRD FLOOR PLAN - WEST BLDG - ELECTRICAL
12/12/2018 5:40:36 PM



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370 Faunce Corner Road, Dartmouth, MA 02747 - 1271
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Hastings Consulting
142 Hanlon Rd. Holliston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

DRAWING TITLE:
FOURTH FLOOR PLAN - WEST BLDG - ELECTRICAL

SCALE: As indicated

E114W

SCHEMATIC DESIGN SUBMISSION

2/20/2019

LOWELL HIGH SCHOOL E114W FOURTH FLOOR PLAN - WEST BLDG - ELECTRICAL
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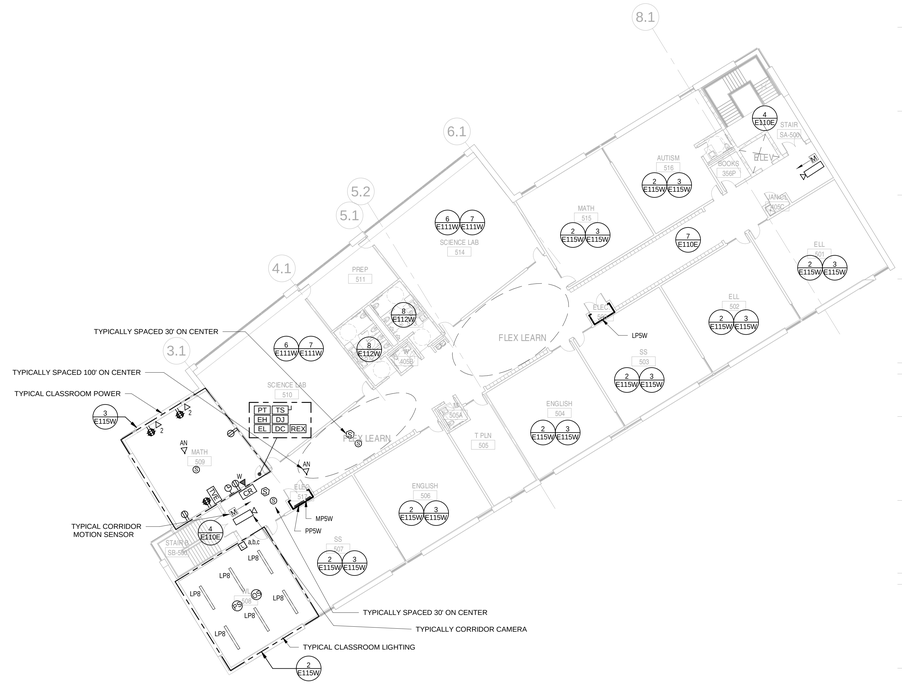

1 E115W FIFTH FLOOR PLAN - WEST BLDG - ELECTRICAL
SCALE: 1/16" = 1'-0"

LOWELL HIGH SCHOOL E115W FIFTH FLOOR PLAN - WEST BLDG - ELECTRICAL
12/12/2018 5:40:38 PM

GENERAL POWER NOTES:

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PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

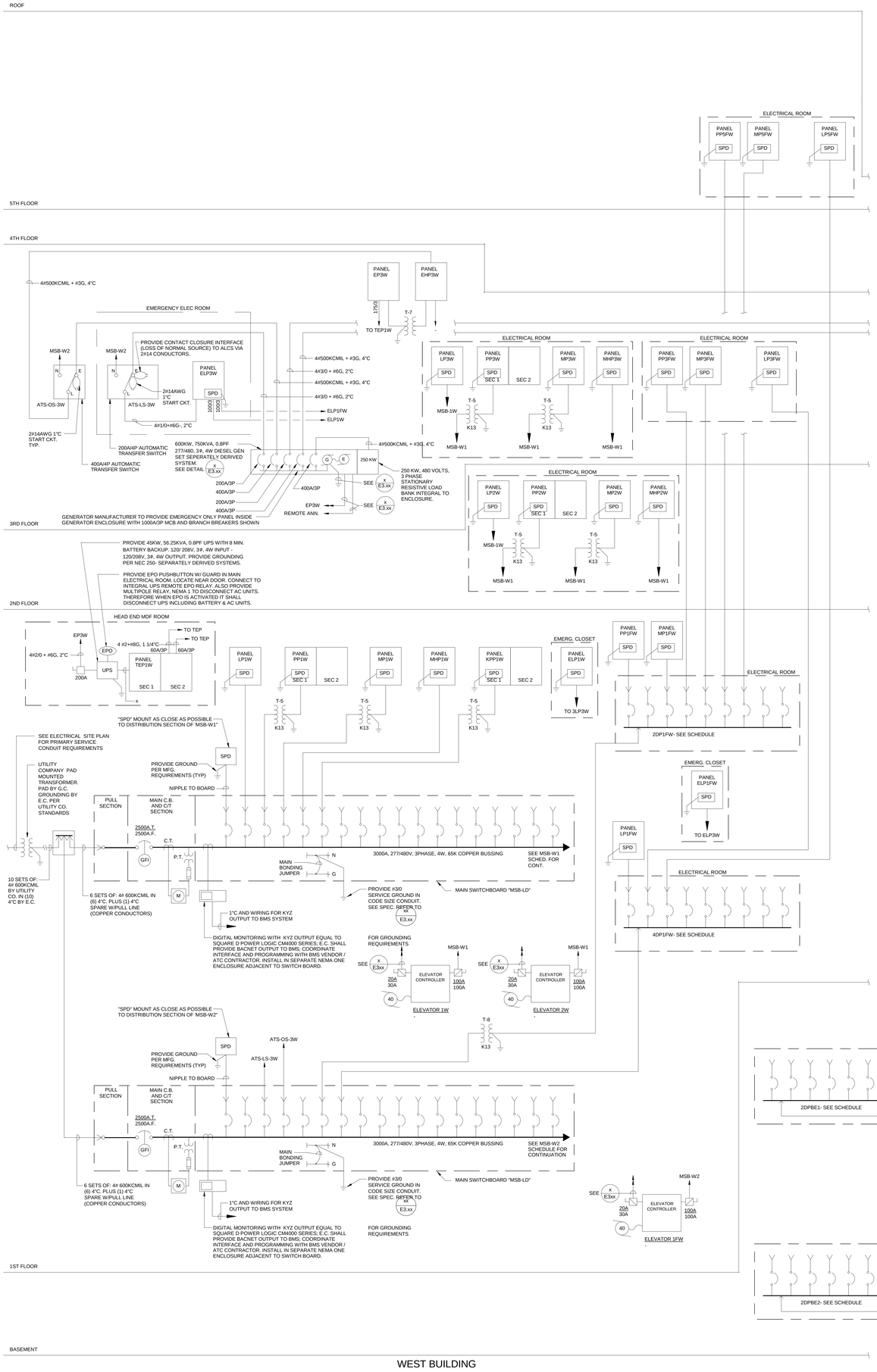
DRAWING TITLE:
FIFTH FLOOR PLAN - WEST BLDG - ELECTRICAL

SCALE: As indicated

E115W

SCHEMATIC DESIGN SUBMISSION

2/20/2019



LOWELL HIGH SCHOOL E301 ONE-LINE POWER RISER
12/12/2018 9:40:38 PM

NO.	DATE	ISSUE

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SEAL

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Mechanical:
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161 West Main Street Georgetown, MA 01833

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Code Consultant:
Hastings Consulting
142 Hanlon Rd. Hollston, MA 01746

Acoustical Consultant:
Cavanaugh Tocci
327 F Boston Post Road Sudbury, MA 01776

PROJECT TITLE:
LOWELL HIGH SCHOOL

155 MERRIMACK STREET, LOWELL, MA 08152

PROJECT No: 67150

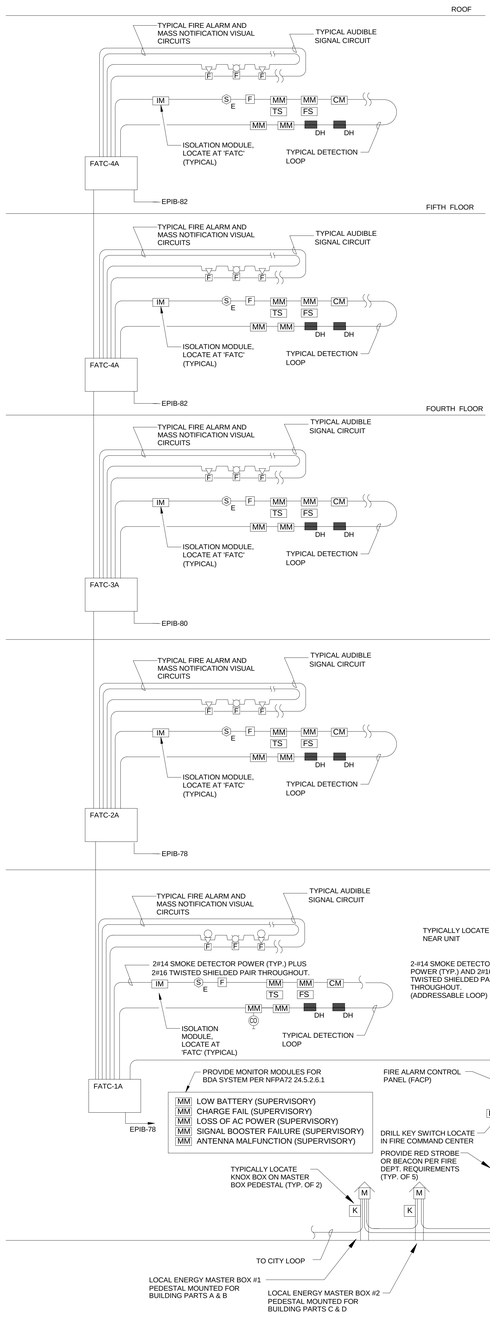
DRAWING TITLE:
ONE-LINE POWER RISER

SCALE:

E301

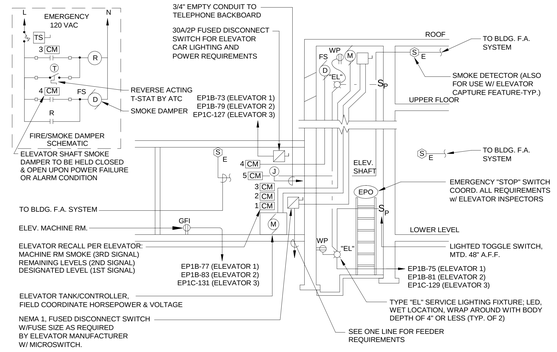
SCHEMATIC DESIGN SUBMISSION

2/20/2019



1 E400 FIRE ALARM RISER DIAGRAM

N.T.S.



SEQUENCE OF OPERATION

1. SMOKE DETECTORS LOCATED IN EACH ELEVATOR LOBBY, MACHINE ROOM AND A FIXED TEMPERATURE HEAT DETECTOR AT TOP OF HOISTWAY SHALL INITIATE ELEVATOR RECALL IN ADDITION TO SENDING SYSTEM INTO "AUTO" ALARM MODE FOR FIRE FIGHTERS SERVICE.
2. FIVE (5) CONTROL MODULES WILL BE LOCATED IN THE ELEVATOR MACHINE ROOM.
3. THE SMOKE DETECTOR LOCATED ON THE DESIGNATED LEVEL WILL ACTUATE THE FIRST CONTROL MODULE OF EACH ELEVATOR AND INITIATE THE ALTERNATE LEVEL RECALL.
4. THE SMOKE DETECTORS ON THE REMAINING ELEVATOR LEVELS WILL ACTUATE THE SECOND CONTROL MODULE FOR DESIGNATED LEVEL RECALL FOR EACH ELEVATOR.
5. THE THIRD CONTROL MODULE WILL BE ACTUATED BY A FIRE ALARM INITIATING DEVICE IN THE MACHINE ROOM, CONTROL SPACE, CONTROL ROOM AND/OR HOISTWAY AND WILL ILLUMINATE THE ASSOCIATED FIREFIGHTERS HAT.
6. WHERE THE ELEVATOR MACHINE ROOM IS LOCATED AT THE DESIGNATED LEVEL, THAT MACHINE ROOM SMOKE DETECTOR WILL ALSO ACTUATE THE FIRST CONTROL MODULE TO RECALL ELEVATOR TO THE ALTERNATE LEVEL.
7. THE FOURTH CONTROL MODULE WILL BE ACTUATED BY A FIRE ALARM INITIATING DEVICE IN THE MACHINE ROOM, CONTROL SPACE, CONTROL ROOM AND/OR HOISTWAY AND WILL ENERGIZE THE MACHINE ROOM EXHAUST FAN.
8. THE FIFTH CONTROL MODULE WILL BE ACTUATED BY A FIRE ALARM INITIATING DEVICE IN THE MACHINE ROOM, CONTROL SPACE, CONTROL ROOM AND/OR HOISTWAY AND WILL DE-ENERGIZE THE FIRE/SMOKE DAMPER CAUSING IT TO OPEN.

2 E400 ELEVATOR SHAFT AND MACHINE ROOM (NO SPRINKLER) DETAIL

N.T.S.

LOOP NUMBER	ADDRESSABLE LOOP SCHEDULE
1	FIRST FLOOR A
2	FIRST FLOOR B
3	FIRST FLOOR C
4	SECOND FLOOR A
5	SECOND FLOOR B
6	THIRD FLOOR A
7	THIRD FLOOR B
8	FOURTH FLOOR A
9	FOURTH FLOOR B
10	SPARE

ROOM SPACING FOR WALL-MOUNTED VISIBLE APPLIANCES			
	MINIMUM REQUIRED LIGHT OUTPUT EFFECTIVE INTENSITY (cd)		
MAXIMUM ROOM SIZE	ONE LIGHT PER ROOM (CEILING HEIGHT)	TWO LIGHTS PER ROOM (LOCATED ON OPPOSITE WALLS)	FOUR LIGHTS PER ROOM ONE LIGHT PER WALLS
20' x 20'	15	NA	NA
28' x 28'	30	UNKNOWN	NA
30' x 30'	34	15	NA
40' x 40'	60	30	15
45' x 45'	75	UNKNOWN	19
50' x 50'	94	60	30
54' x 54'	110	UNKNOWN	30
55' x 55'	115	UNKNOWN	28
60' x 60'	135	95	30
63' x 63'	150	UNKNOWN	37
68' x 68'	177	UNKNOWN	43
70' x 70'	184	95	60
80' x 80'	240	135	60
90' x 90'	304	185	95
100' x 100'	375	240	95
110' x 110'	455	240	135
120' x 120'	540	305	135
130' x 130'	635	375	185

ROOM SPACING FOR CEILING-MOUNTED VISIBLE APPLIANCES		
MAXIMUM ROOM SIZE	MAXIMUM LENS HEIGHT	MINIMUM REQUIRED LIGHT OUTPUT (EFFECTIVE INTENSITY') ; ONE LIGHT (cd)
20' x 20'	10	15
30' x 30'	10	30
40' x 40'	10	60
44' x 44'	10	75
50' x 50'	10	95
53' x 53'	10	110
55' x 55'	10	115
59' x 59'	10	135
63' x 63'	10	150
68' x 68'	10	177
70' x 70'	10	185
20' x 20'	20	30
30' x 30'	20	45
44' x 44'	20	75
46' x 46'	20	80
50' x 50'	20	95
53' x 53'	20	110
55' x 55'	20	115
59' x 59'	20	135
63' x 63'	20	150
68' x 68'	20	177
70' x 70'	20	185
20' x 20'	30	55
30' x 30'	30	75
50' x 50'	30	95
53' x 53'	30	110
55' x 55'	30	115
59' x 59'	30	135
63' x 63'	30	150
68' x 68'	30	177
70' x 70'	30	185

NOTES

1. E.C. SHALL REFER TO SPECIFICATIONS AND DRAWINGS FOR QUANTITY OF DEVICES, SPARE CAPACITY, PARTS, ETC.
2. E.C. SHALL REFER TO HVAC DRAWINGS FOR EXACT LOCATION OF UNITS AND FOR LOCATIONS OF DUCT MOUNTED SMOKE DETECTORS. DUCT DETECTORS FURNISHED AND WIRED BY E.C.; INSTALLED BY HVAC.
3. TYPICALLY FIRE ALARM SYSTEM SIGNAL CONDUCTORS SHALL BE #14 AWG MINIMUM, TYPE THHN SOLID. ALL WIRING SHALL BE CONCEALED. PROVIDE A SYSTEM OF RACEWAYS EQUAL TO WIREMOLD WHERE EXPOSED TO PUBLIC SPACES.
4. TYPICALLY ALL SPEAKER/STROBE UNITS SHALL BE WIRED SO THAT THE SPEAKERS AND THE STROBES CAN BE SILENCED SIMULTANEOUSLY.
5. ALL SPEAKERS/STROBES WITHIN ALL CLASSROOMS SHALL BE MULTI-TAPPED TYPE. E.C. SHALL OWN dB ADJUSTING DURING FIRE DEPARTMENT TESTING.
6. ALL SPEAKERS/STROBES SHALL BE MOUNTED IN ACCORDANCE WITH ADA ROOM SPACING ALLOCATION TABLES FOR VISUAL SIGNALING DEVICES.
7. PROVIDE CONTROL MODULES TO OVERRIDE ALL MAGLOCKS AND ELECTRIC LOCK ON STAIRWELL DOORS THAT CONTAIN ACCESS CONTROL. REFER TO FLOOR PLAN FOR EXACT LOCATION AND QUANTITIES. COORDINATE WITH DOOR HARDWARE.
8. ALL DEVICES SHALL BE LABELED WITH CLEAR TAPE WITH BLACK INK. LABEL SHALL IDENTIFY LOOP# AND DEVICE NUMBER.
9. ALL REMOTE TEST STATIONS SHALL BE KEYED AND MOUNTED NEAR HVAC UNIT. PROVIDE REMOTE LED WHERE DUCT SMOKE IS CONCEALED.
10. PULL STATIONS SHALL BE DOUBLE ACTION. PROVIDE TAMPER RESISTANT PLASTIC COVERS WITH INTEGRAL AUDIBLE ALARM, EQUAL TO STOPPER II ON ALL PULL STATIONS IN GYMNASIUM AND WHERE INDICATED ON PLANS.
11. A/V DEVICES SHALL NOT BE INSTALLED WITHIN MARKER BOARDS. COORDINATE EXACT LOCATION OF ALL A/V DEVICES W/ARCH. PRIOR TO INSTALLING.
12. ALL TAMPER AND SUPERVISORY SWITCHES SHALL BE WIRED AS LOCAL SUPERVISORY ALARM CONDITION UPON ACTIVATION. TROUBLE OR SUPERVISORY SHALL BE SELF RESTORING. TRANSMIT SIGNAL TO BMS SYSTEM. BUT DO NOT ALARM BUILDING.
13. PRIOR TO SUBMITTING SHOP DRAWINGS, COORDINATE WITH LOCAL FIRE DEPT. FOR EXACT REQUIREMENTS. OBTAIN FIRE PREVENTION RULES AND REGULATIONS AND COMPLY IN FULL.
14. COORDINATE WITH SELECTED SYSTEM MANUFACTURER FOR WIRING REQUIREMENTS.
15. ALL DETECTION &SIGNAL WIRING SHALL BE CLASS "A".
16. SUBMIT AS PART OF SHOP DRAWINGS COMPLETE FLOOR PLANS & RISERS WITH ALL DEVICES SHOWN AND WITH DEVICE ADDRESSES.
17. PROVIDE ONE ISOLATION MODULE FOR EVERY 20 DEVICES.TYPICAL.
18. ALL POWER SUPPLIES SHALL BE INTERLOCKED SO THAT ALL DEVICES FROM SAME OR ADJACENT POWER SUPPLIES ARE SYNCHRONIZED.
19. PROVIDE MONITOR MODULES TO CONNECT 10 ZONES IN EXISTING FACP TO REPORT TO NEW FACP BY ZONE.
20. PROVIDE CONTROL MODULE TO RELEASE DELAYED EGRESS DOORS. COORDINATE WITH HARDWARE & ARCHITECT.
21. MUTE LOCAL SOUND SYSTEMS. PROVIDE CONTROL MODULE FOR EACH LOCAL SOUND SYSTEM. REFER TO AV DWGS FOR LOCAL SOUND SYSTEM QUANTITY & LOCATIONS.
22. MECHANICAL EQUIPMENT, MOTORIZED FIRE/SMOKE DAMPER - FURNISHED & INSTALLED BY HVAC, WIRED BY E.C. FIRE ALARM INTERLOCK WIRING BY E. C. PROVIDE A CONTROL MODULE, FOR EACH UNIT AND INTERLOCK EACH DAMPER SO THAT DAMPER IS POWERED OPEN AND IS SPRING CLOSED. LOCATE CONTROL MODULES ADJACENT TO DAMPERS. REFER TO HVAC DRAWINGS FOR DAMPER LOCATIONS. CONNECT TO THE NEAREST 120V, 1Ø BRANCH CIRCUIT. PROVIDE CONNECTIONS FOR A TOTAL OF (15) DAMPERS TO BE FIELD LOCATED.
23. PROVIDE CONTACT CLOSURE INTERFACE TO AUTOMATED LIGHTING CONTROL SYSTEM (ALCS) VIA A SINGLE PAIR OF 2#18 CONDUCTORS. WHEN FIRE ALARM SYSTEM GOES INTO ALARM A SIGNAL SHALL BE ISSUED TO ALLOW THE ALCS TO TURN ALL INTERIOR AND EXTERIOR LIGHTING "ON".
24. CARBON MONOXIDE DETECTORS SHALL INITIATE SUPERVISORY SIGNAL AND NOTIFY THE FIRE DEPARTMENT.
25. PROVIDE LOCK-ON BREAKER ON FIRE ALARM CONTROL PANEL BRANCH CIRCUIT OVER-CURRENT DEVICE.
26. THE FOLLOWING EQUIPMENT AND CONTROLS SHALL BE PROVIDED IN THE FIRE COMMAND CENTER:
    1. FACP WITH VOICE/ALARM COMMUNICATIONS
    2. BDA SYSTEM
    3. ELEVATOR STATUS PANEL AND SELECTOR SWITCH
    4. CONTROL OF ROOF HATCHES FOR AUDITORIUM
    5. CONTROLS FOR UNLOCKING STAIRWELL DOORS SIMULTANEOUSLY
    6. A TELEPHONE FOR FIRE DEPARTMENT USE
    7. GENERATOR ANNUNCIATOR PANEL
    8. FIRE PUMP STATUS INDICATORS
    9. SCHEMATIC BUILDING PLANS INDICATING THE TYPICAL FLOOR PLAN AND DETAILING THE BUILDING CORE, MEANS OF EGRESS, FIRE PROTECTION SYSTEMS, FIRE-FIGHTING EQUIPMENT AND FIRE DEPARTMENT ACCESS AND THE LOCATION OF FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS.
    10. GENERATOR MANUAL START, TRANSFER AND EMERGENCY STOP CONTROLS
    11. ELEVATOR FIRE RECALL SWITCH IN ACCORDANCE WITH ASME A17.1
    12. BUILDING POWER SHUTTRIP BUTTON
27. C.O. DETECTION SHALL BE WIRED AND PROGRAMMED AS SUPERVISORY AND SHALL ALARM THE BUILDING IN A UNIQUE TEMPORAL 4 PATTERN AND SHALL NOT TRIP THE MASTER BOX TO NOTIFY THE FIRE DEPARTMENT.
28. ALARM CONDITION IN BUILDING SECTIONS A & B SHALL TRIP MASTERBOX #1 AND TRANSMIT ALARM THROUGHOUT THE ENTIRE BUILDING. ALARM CONDITION IN BUILDING SECTIONS C & D SHALL TRIP MASTER #2 AND TRANSMIT ALARM THROUGHOUT ENTIRE BUILDING
29. ALL FIRE ALARM DEVICES SHALL HAVE WHITE FINISH / HOUSING.
30. FIRE ALARM EXTERIOR BEACONS / STROBES SHALL BE CANOPY MOUNTED.
31. DUCT SMOKE DETECTORS SHALL INITIATE ALARM SIGNAL AND NOTIFY THE FIRE DEPARTMENT.

NO.	DATE	ISSUE

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SEAL

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Construction Manager Address

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LOWELL HIGH SCHOOL E400 FIRE ALARM RISER
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