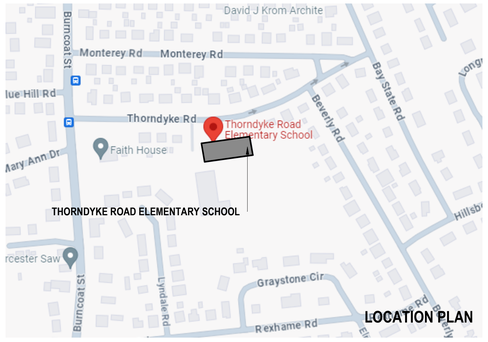
THORNDYKE ELEMENTARY SCHOOL

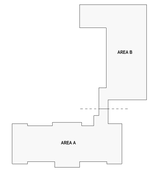




WORCESTER, MASSACHUSETTS

SEPTEMBER 18, 2024

BID SET



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
COVER SHEET

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	WT
CHECKED	BP/LA
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER
A0.00

OWNER
CITY OF WORCESTER
WORCESTER PUBLIC SCHOOLS
30 THORNDYKE RD, WORCESTER, MA 01606

ARCHITECT

MOUNT VERNON GROUP ARCHITECTS
178 ALBION STREET SUITE 240
WAKEFIELD, MA 01880
(781) 213-5030

CONSULTANTS

LANDSCAPE ARCHITECT
JAMES K. EMMANUEL LANDSCAPE
22 Carlton Rd
Marblehead, MA 01945
(781) 622-7487

MECHANICAL, PLUMBING, FIRE PROTECTION ENGINEERS
SEAMAN ENGINEERING
22 West St Ste 3
Millbury, MA 01527
(508) 865-1400

HAZARDOUS MATERIALS
UNIVERSAL ENVIRONMENTAL
12 Brewster Road
Framingham, MA 01702
(508) 628-5486

CODE CONSULTANT
WBA ASSOCIATES
36 River Ridge
Wellesley, MA 02481
(781) 237-8188

ELECTRICAL & TECHOLOGY ENGINEER
SHEPHERD ENGINEERING
1308 Grafton Street
Worcester, MA 01604
(508) 757-7793

STRUCTURAL ENGINEER
SOUZA TRUE & PARTNERS, INC.
265 Waltham Street, Third Floor
Waltham, MA 02451
(617) 926-6100

ROOF CONSULTANT
EWING ASSOCIATES
515 Converse St
Longmeadow, MA 01106
(413) 567-9544

COST ESTIMATOR
FENNESSY CONSULTING
27 Glen Street, Suite 8
Stoughton, MA 02072
(781)-344-4464

GEOTECHNICAL ENGINEER
LAHLAF GEOTECHNICAL CONSULTING, INC.
23 Mcginness Way
Billerica, MA 01821
(978) 330-5912

SURVEY, PERMITTING/ CIVIL ENGINEER
BRENNAN ASSOCIATES
24 RAY AVE, SUITE 203
Burlington, MA 01803
(781) 273-3434

ENVIRONMENTAL PERMITTING
LORD ASSOCIATES
1911 SW US-40
Blue Springs, MO 64015
(781) 255-5554

ELEVATOR CONSULTANT
SYSKA HENNESSY GROUP, INC.
10 Post Office Square #725
Boston, MA 02109
(617) 577-9900

SYMBOLS

MATERIAL SYMBOL KEY

- UNDISTURBED OR COMPACTED SOIL
- CONCRETE
- MASONRY (CMU OR BRICK)
- EXPOSED WOOD TRIM
- WOOD FRAMING
- WOOD SHIM
- PLYWOOD
- PLYWOOD
- GWB
- BATT INSULATION
- RIGID INSULATION
- 1/2" SEALANT JOINT WITH BACKER ROD

ROOM NAME, AND FINISH NUMBER (101 | A1)

WALL TYPE INDICATOR, SEE WALL TYPES SHEET

BUILDING SECTION (01 / A0.01)

WALL SECTION (01 / A0.01)

DETAIL CUT (01 / A0.01)

INTERIOR / EXTERIOR ELEVATION (0 / A01.01 / 0) OR

DETAIL (1 / A0.01)

FLOOR MATERIAL BREAK (CPT / E-VCT)

REFERENCE ELEVATION (T O SLAB 100'-6" OR 15'-8")

WORK POINT

SEMI - RECESSED FIRE EXTINGUISHER CABINET w/ FIRE EXTINGUISHER

SURFACE MOUNTED FIRE EXTINGUISHER

CORNER GUARD

EXPANSION JOINT

CONTROL JOINT

ICE/WATER SHIELD, MOISTURE BARRIER, AIR BARRIER, DAMP PROOFING, WATER PROOFING

DOOR TAG (101)

CURTAIN WALL, STOREFRONT OR FIBERGLASS WINDOW TYPE (W01)

LOUVER TYPE (L01)

BORROWED LIGH TYPE (101)

*NOTE: SEE INDIVIDUAL DRAWINGS FOR LEGENDS & DEFINITION OF POCHE USED TO REPRESENT LARGE AREAS OF REPETITIVE MATERIALS.

(XX.X)

1t 0'-0"

ABBREVIATIONS

@	AT
AB	ANCHOR BOLT
ACOUST	ACOUSTICAL
ACP	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADO	AUTO DOOR OPENER
ADJ	ADJUSTABLE
AED	AUTOMATIC EMERGENCY DEFIBRILLATOR/CABINET
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ANOD	ANODIZED
ASPH	ASPHALT
ASSY	ASSEMBLY
ATTACH	ATTACHMENT
ALT	ALTERNATE
BD OR BRD	BOARD
BF	BARRIER FREE
BITUM	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOD	BOTTOM OF DECK
BOTT	BOTTOM
BTWN	BETWEEN
CB	CATCH BASIN
CEM	CEMENT
CFMF	COLD FORM METAL FRAMING
CG	CORNER GUARD (SS)
CJ	CONTROL JOINT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CORR	CORRIDOR
CL	CENTER LINE
CLR	CLEAR
CONN	CONNECT
CONT	CONTINUOUS
CP	CEMENT PLASTER
CPT	CARPET
CSK	COUNTERSINK
CT	CERAMIC TILE
CW	CURTAINWALL
D	CLOTHES DRYER
DBL	DOUBLE
DEMO	DEMOLISH
DF	DRINKING FOUNTAIN
DIA, Ø	DIAMETER
DN	DOWN
DO	DITTO OR REPEAT ADJACENT ELEMENT
DR	DOOR
DS	DOWNSPOUT
DWGS	DRAWINGS
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELECT	ELECTRICAL
ELEV OR EL	ELEVATION
EMER	EMERGENCY
EMBED	EMBEDMENT
EN	ENAMEL
ENL	ENLARGED
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL
EQUIP	EQUIPMENT
EXP	EXPANSION
EXIST OR (E)	EXISTING
EXT	EXTERIOR
EXTR	EXTRUDED
FB	ELECTRICAL FLOOR BOX
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER - SEE SYMBOLS
FE-K	FIRE EXTINGUISHER - KITCHEN TYPE - SEE SYMBOLS
FEC	FIRE EXTINGUISHER CABINET - SEE SYMBOLS
FF	FACTORY FINISH
FH	FIRE HYDRANT
FIN	FINISH(ED)
FLASH(G)	FLASHING
FLR	FLOOR
FM	FACTORY MUTUAL
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER
FOM	FACE OF MASONRY
FO	FACE OF
FOB	FACE OF BRICK
FO CMU	FACE OF CMU
FP	FIREPLACE
FRMG	FRAMING
FRP	FIBERGLAS REINFORCED PANEL(S)
FT	FOOT OR FEET
FTR	FIN TUBE RADIATION
GA	GAUGE
GALV	GALVANIZED
GL	GLASS
GLB	GLUE LAMINATED BEAM
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HBD	HARDBOARD
HC	HANDICAP
HD	HOOD
HDW	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INT	INTERIOR
IFP	INTERACTIVE FLAT PANEL
INSUL	INSULATION
INSTALL OR INS	INSTALLATION
JAN	JANITOR
JT	JOINT
L	ANGLE
LAM	LAMINATE
LB OR #	POUND
LLH	LONG LEG HORIZONTAL
LOC	LOCATION
LLV	LONG LEG VERTICAL
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
M/E/P OR MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFR	MANUFACTURER
MH	MANHOLE
MIB	MOISTURE INFILTRATION BARRIER
MICRO	MICROWAVE
MIN	MINIMUM
MLDG	MOLDING
MTL	METAL
NATL	NATURAL
NC	NONCOMBUSTIBLE
NIC	NOT IN CONTRACT
NO	NUMBER
NP	NO PAINT
NR	NOT RATED
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
ODC	OVERFLOW DRAIN CAP
OHVD	OVERHEAD
OPER	OPERABLE
OPP	OPPOSITE HAND
OPNG	OPENING
OTS	OPEN TO STRUCTURE-PAINT TYP
OTA	OPEN TO ABOVE
OVHG	OVERHANG
PENE	PENETRATION
PERF	PERFORATED
PFMU	POLISHED FINISH MASONRY UNIT
PI	POST INDICATOR
PJSC	PROJECTION SCREEN
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNL	PANEL
PNT	PAINT
POLY	EXTRUDED POLYSTYRENE
PR	PAIR
PROT	PROTECTION
PSI	POUND PER SQUARE INCH
PT	PRESSURE TREATED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PW OR PLYWD	PLYWOOD
QT	QUARRY TILE
RCP	REFLECTED CEILING PLAN
RAD	RADIUS
RD	ROOF DRAIN
RE	REFER TO
REF	REFRIGERATOR
RES	RESILIENT FLOORING
REQD	REQUIRED
RM	ROOM
RUB	RUBBER FLOORING
RWL	RAIN WATER LEADER
SAC	SUSPENDED ACOUSTICAL CEILING
SAM	SELF ADHERED MEMBRANE
SCHED	SCHEDULE
SC	SOLID CORE
SD	SMOKE DETECTOR
SEC	SECURITY
SF	STOREFRONT
SG	STEEL CORNER GUARD
SHEATH	SHEATHING
SHT	SHEET
SHM	SECURITY HOLLOW METAL
SIM	SIMILAR
SPEC	SPECIFICATION
SPK	SPEAKER
SQ	SQUARE
S/S OR SS	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SLEEVE
T & G	TONGUE & GROOVE
TERM	TERMINATION
THRESH	THRESHOLD
TO	TOP OF
TOS	TOP OF SLAB
TRTD	TREATED
TYP	TYPICAL
TS	TUBE STEEL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
U/S	UNDER SIDE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
V PLAS	VENEER PLASTER
VERT	VERTICAL
VWC	VINYL WALL COVERING
W	WASHING MACHINE
W/	WITH
WB	WHITE BOARD
WC	WATER CLOSET
WF	WIDE FLANGE
WDO	WINDOW
WD	WOOD
WHS	WELDED HEAD STUD
WOM	WALK OFF MAT
WP	WALL PAD
WR	WATER RESISTANT
WWF	WELDED WIRE FABRIC

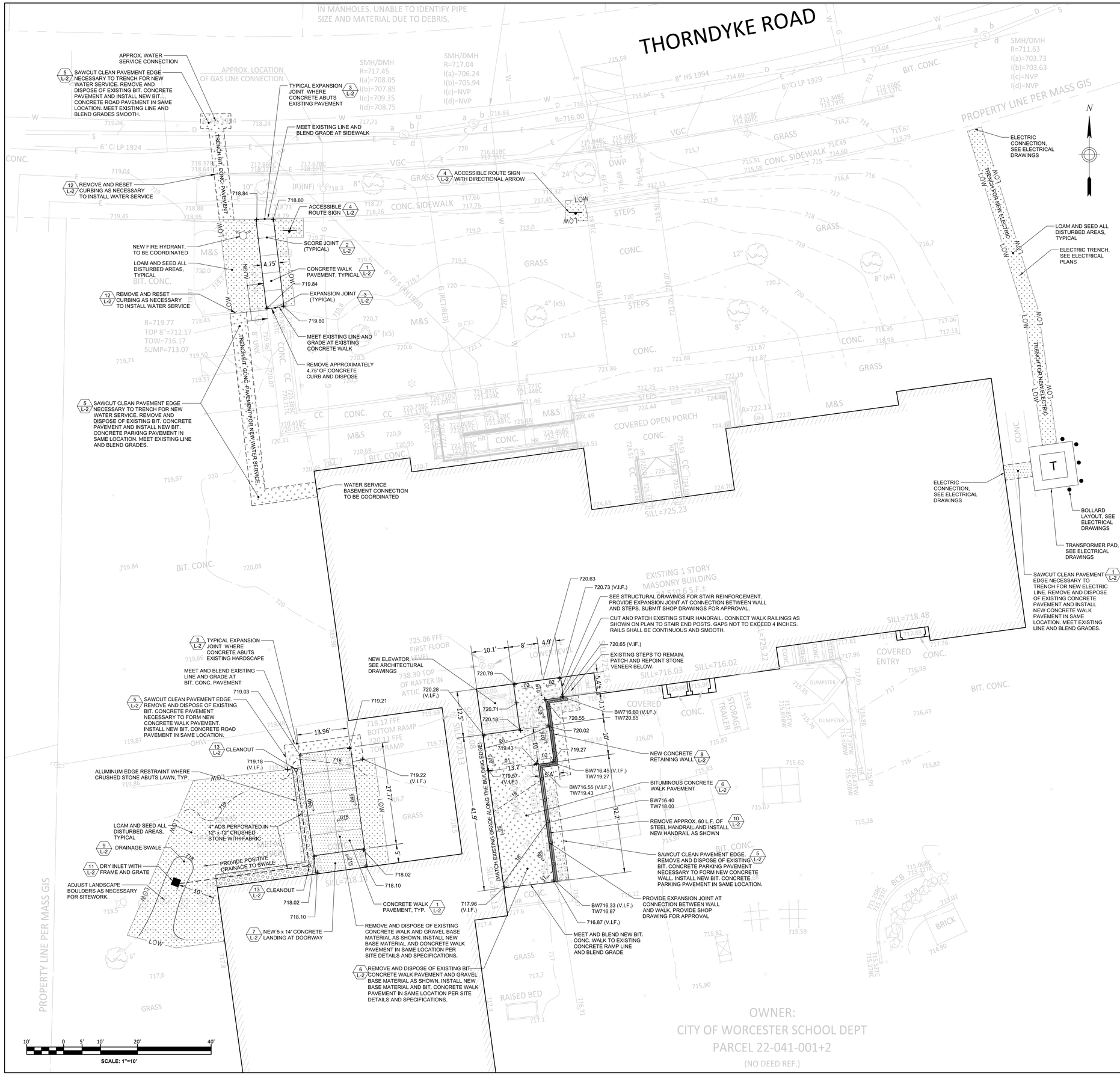
DRAWING LIST

GENERAL	
A0.00	COVER SHEET
CIVIL & LANDSCAPE	
L-1	SITE IMPROVEMENTS
L-2	SITE DETAILS AND NOTES
ARCHITECTURAL	
D1.01	DEMOLITION LOWER LEVEL & INTERMEDIATE LEVEL FLOOR PLANS
D1.02	DEMOLITION FIRST LEVEL FLOOR PLANS
D1.03	DEMOLITION ATTIC LEVEL FLOOR PLAN
D2.01	DEMOLITION ROOF PLANS
D3.01	DEMOLITION REFLECTED CEILING PLANS
D3.02	DEMOLITION REFLECTED CEILING PLANS
D4.01	DEMOLITION EXTERIOR ELEVATIONS
D6.01	DEMOLITION WALL SECTIONS
D7.01	DEMOLITION INTERIOR ELEVATIONS (ISSUED IN ADDENDA)
A1.01	LOWER LEVEL & INTERMEDIATE LEVEL FLOOR PLANS, ROOM FINISH LEGEND & GENERAL NOTES
A1.02	FIRST LEVEL FLOOR PLANS AREA B & PARTITION TYPES
A1.03	ATTIC LEVEL FLOOR PLANS
A2.01	ROOF PLANS
A2.02	ROOF DETAILS
A3.01	REFLECTED CEILING PLANS
A3.02	REFLECTED CEILING PLANS
A3.03	REFLECTED CEILING PLANS
A4.01	EXTERIOR ELEVATIONS
A5.01	BUILDING SECTIONS
A6.01	WALL SECTIONS (ISSUED IN ADDENDA)
A6.02	VERTICAL DETAILS (ISSUED IN ADDENDA)
A7.01	ENLARGED TOILET PLAN, HEIGHT FIXTURE LEGEND & GENERAL NOTES
A7.02	ENLARGED STAIR PLANS, SECTIONS & DETAILS
A7.03	ENLARGED ELEVATOR PLANS, SECTIONS, & GENERAL NOTES
A7.04	ENLARGED ELEVATOR DETAILS (ISSUED IN ADDENDA)
A8.01	PLAN DETAILS
A9.01	MISCELLANEOUS DETAILS (ISSUED IN ADDENDA)
A10.01	DOOR SCHEDULE, ELEVATIONS, DETAILS & GENERAL NOTES (ISSUED IN ADDENDA)
A12.01	INTERIOR ELEVATIONS (ISSUED IN ADDENDA)
STRUCTURAL	
S0.01	GENERAL NOTES
S0.02	TYPICAL DETAILS
S0.03	TYPICAL DETAILS
S1.01	PARTIAL FRAMING PLANS
S2.01	SECTIONS
S2.02	SECTIONS
FIRE PROTECTION	
FP1.01	LOWER & FIRST LEVEL REFLECTED CEILING PLANS - AREA A
FP1.02	FIRST LEVEL REFLECTED CEILING PLANS - AREA B
FP1.03	ATTIC REFLECTED CEILING PLAN - AREA A
PLUMBING	
DP1.01	LOWER LEVEL & FIRST FLOOR PLUMBING DEMOLITION PLANS AREA A
DP1.02	FIRST FLOOR PLANS AREA A
P1.01	PLUMBING FLOOR PLANS AREA A
P1.02	PROPOSED PLUMBING FLOOR PLANS AREA B
ELECTRICAL	
ES.1	SITE PLAN ELECTRICAL
ES.2	SITE PLAN ELECTRICAL DETAILS
ED.0	BASEMENT FLOOR PLAN AREA "A" ELECTRICAL DEMOLITION
ED.1	FIRST & ATTIC FLOOR PLAN AREA "A" ELECTRICAL DEMOLITION
ED.2	FIRST FLOOR PLAN AREA "B" ELECTRICAL DEMOLITION
E0.1	BASEMENT FLOOR PLAN AREA "A" LIGHTING & POWER
E1.1	FIRST FLOOR PLAN AREA "A" LIGHTING & POWER
E1.2	FIRST FLOOR PLAN AREA "B" LIGHTING & POWER
E2.1	ATTIC FLOOR PLAN AREA "A" LIGHTING & POWER
E3.1	LEGEND, SCHEDULES & DETAILS
FA.0	BASEMENT FLOOR PLAN A FIRE ALARM
FA.1	FIRST FLOOR & ATTIC FLOOR PLAN AREA A FIRE ALARM
FA.2	FIRST FLOOR PLAN AREA "B" FIRE ALARM
FA.3	FIRST FLOOR AREA "B" FIRE ALARM
MECHANICAL	
H1.01	FLOOR PLANS - AREA A
H1.02	HVCA FLOOR PLAN - AREA B
H1.03	ATTIC FLOOR AND LOW ROOF HVAC PLAN AREA A
ELEVATOR	
VT.02	PLANS AND SECTIONS

MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/16/2024 5:28:50 PM



GENERAL NOTES:

1. THE TOPOGRAPHY, SITE DETAIL, AND SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN ON-THE-GROUND INSTRUMENT SURVEY CONDUCTED BY BRENNAN CONSULTING, INC. ON JULY 19 AND AUGUST. 13, 2024.
2. ALTHOUGH CERTAIN UTILITY ITEMS AND EXISTING SITE ITEMS HAVE BEEN NOTED ON THIS DRAWING FOR DEMOLITION, NO ATTEMPT HAS BEEN MADE TO DELINEATE EACH AND EVERY EXISTING SITE CONDITION OR UTILITY ITEM THAT REQUIRES DEMOLITION OR RELOCATION FOR THE COMPLETION OF THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL NECESSARY DEMOLITION AND RELOCATION WORK TO COMPLETE THE PROJECT. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.

SITE PREPARATION AND DEMOLITION NOTES:

1. NO SOIL OR FILL MATERIAL IS PERMITTED TO BE REUSED ON-SITE, SEE EARTHWORK SPECIFICATIONS.
2. ALL SOIL AND FILL MATERAIL EXCAVATED DURING SITE WORK ACTIVITIES SHALL BE MANAGED AS SPECIFIED HEREIN.
3. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, RULES, ORDINANCES, AND GENERAL REGULATIONS OF THE FEDERAL GOVERNMENT, THE COMMONWEALTH OF MASSACHUSETTS, THE CITY OF WORCESTER, DEP, EPA, OSHA, AND OTHER REGULATORY AGENCIES GOVERNING EXCAVATING, STORING AND DISPOSING OF EARTH AND WATER.
4. THE SCOPE OF DEMOLITION CONSISTS OF REMOVING AND DISPOSING OF EXISTING CONCRETE PAVEMENT, BITUMINOUS CONCRETE PAVEMENT, CONCRETE RETAINING WALL WITH CAP AND PORTIONS OF HANDRAILS AS INDICATED ON THE DRAWING AND AS REQUIRED TO COMPLETE THE WORK AS SHOWN.
5. THE CONTRACTOR WILL FURNISH ALL MATERIALS, EQUIPMENT AND LABOR TO PERFORM ALL REQUIRED WORK AT THE DESIGNATED SITE. ANY BUILDINGS, GROUNDS AND SURROUNDING PROPERTY DAMAGED BY THE CONTRACTOR WILL BE RESTORED TO ITS ORIGINAL STATE, AT THE COST OF THE CONTRACTOR.
6. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO ANY DISRUPTION OF EXISTING INDIVIDUAL UTILITY SERVICE RESULTING FROM THE CONTRACTORS WORK.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE SITE MOBILIZATION, STEP AND SIDEWALK PROTECTION. STEPS AND SIDEWALKS ARE TO BE BLOCKED OFF WITH PHYSICAL BARRIERS TO PREVENT PEDESTRIAN ACCESS DURING ALL CONSTRUCTION WORK. CAUTION SIGNS SHOULD BE POSTED ON BARRIERS AT UPPER AND LOWER LOCATIONS TO INSURE PUBLIC SAFETY.
8. EXCAVATION FOR NEW CONCRETE PAVEMENT WILL BE TO A MINIMUM DEPTH OF 8" BELOW FINISH GRADE. ADDITIONAL EXCAVATION MAY BE REQUIRED TO PREPARE BASE IF UNSUITABLE BASE MATERIALS ARE ENCOUNTERED UPON EXCAVATION.
9. REMOVE ALL EXISTING SITE CONDITIONS AS REQUIRED TO CONSTRUCT THE COMPLETE PROJECT AS SHOWN ON ALL PLANS.

LAYOUT NOTES:

1. ALL DIMENSIONS ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD.
2. ALL LINES ARE PERPENDICULAR OR PARALLEL TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
3. WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT, MEET LINE AND BLEND GRADE OF EXISTING PAVEMENT WITH NEW CONSTRUCTION.
4. CONTRACTOR SHALL STAKE LAYOUT OF ALL IMPROVEMENTS FOR APPROVAL OF LANDSCAPE ARCHITECT PRIOR TO IMPLEMENTATION.
5. NEWLY POURED CONCRETE SHALL BE SEALED WITH 3 COATS OF AN APPROVED MASSDOT SECTION M 9.15.0 CONCRETE SEALER.
6. EXPANSION JOINTS TO BE INSTALLED WHERE NEW CONCRETE ABUTS ALL EXISTING MATERIALS.

GRADING NOTES:

1. NOTIFY LANDSCAPE ARCHITECT IN WRITING OF ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS PRIOR TO CONSTRUCTION AND DURING WORK. ALL FIELD ADJUSTMENTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO IMPLEMENTATION.
2. PROPOSED GRADES TO BLEND SMOOTHLY WITH EXISTING GRADES.
3. ALL SPOT ELEVATIONS SHOWN ARE APPROXIMATE AND REFER TO SURFACE GRADES ONLY AT TOP OF PAVEMENT. REFER TO CONCRETE PAVEMENT DETAIL FOR DEPTH BELOW GRADE.
4. ALL ACCESSIBLE WALKS SHALL CONFORM TO ADA AND MAAB REQUIREMENTS.
5. ALL LEVEL LANDINGS SHALL BE PITCHED AWAY FROM THE BUILDING AT A MAXIMUM OF 1.5% WITH A MAXIMUM CROSS PITCH OF 1.5%.
6. ALL WALKS SHALL HAVE A MAXIMUM SLOPE OF 4.5% WITH A MAXIMUM CROSS PITCH OF 1.5%. PITCH WALK TOWARD THE ROAD AND AWAY FROM THE BUILDING.
7. MAXIMUM SLOPE ON RAMP NOT TO EXCEED 8%, MAXIMUM CROSS-SLOPE PERPENDICULAR TO RAMP NOT TO EXCEED 2%.
8. LOAM AND SEED ALL DISTURBED AREAS NOT NOTED TO RECEIVE OTHER TREATMENT.

PAVEMENT MARKING NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING ALL PAVEMENT MARKINGS AT THE SITE IN ACCORDANCE WITH THE PROJECT PLANS.
2. ALL PAVEMENT MARKINGS, PARKING STALLS, PAINTED ISLANDS, FIRE LANE STRIPING, ETC SHALL BE INSTALLED IN THE SAME SIZE AND AT THE SAME LOCATIONS SURVEYED PRIOR TO THE START OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PROJECT PLANS.
3. THE CONTRACTOR SHALL INSPECT THE SUBSTRATE AND CONDITIONS PRIOR TO THE INSTALLATION OF THE PAVEMENT MARKINGS, AND NOTIFY THE ENGINEER IN WRITING OF CONDITIONS DETRIMENTAL TO THE COMPLETION OF THE WORK.
4. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN TWO (2) COATS. THE SECOND COAT SHALL BE INSTALLED 30 DAYS AFTER THE FIRST COAT.
5. ALL PAVEMENT MARKINGS SHALL COMPLY WITH THE MOST RECENT VERSION OF THE AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN.

LEGEND:

- LOW — LIMIT OF LANDSCAPE WORK AND GRADING
- REMOVE EXISTING CONCRETE PAVEMENT
- SAWCUT — REMOVE EXISTING BIT. CONC. PAVEMENT
- 6 INCH LOAM AND SEED
- 733 — EXISTING CONTOUR
- 732 — PROPOSED CONTOURS
- 741.08 (V.I.F.) — EXISTING SPOT GRADE
- 740.74 — PROPOSED SPOT GRADE
- .02 — APPROXIMATE SLOPE
- SIGN POLE 4 L-2
- CONCRETE WALK 1 L-2
- CONCRETE RETAINING WALL 8 L-2
- STEEL HANDRAIL 10 L-2
- BIT. CONCRETE WALK PAVEMENT 6 L-2
- CRUSHED STONE WITH ALUMINUM EDGING

REVISIONS		
	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
SITE IMPROVEMENTS

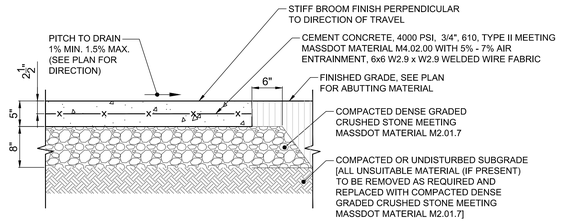
MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION	
SCALE	1" = 10'-0"
DRAWN BY	AZA
CHECKED	JKE
DATE	SEPTEMBER 18, 2024

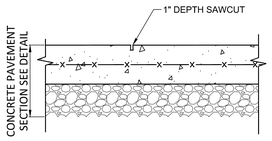
DRAWING NUMBER
L-1

NOTES:
1. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, FOR DEFORMED BAR AND ASTM A185 FOR SMOOTH WELDED WIRE FABRIC (WWF). REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 ANNEALED IRON WIRE. ALL DETAILING AND ACCESSORIES SHALL CONFORM TO ACI DETAILING MANUAL SP-66. PROVIDE CHAIRS, SPACERS, BOLSTERS, AND ITEMS IN CONTACT WITH FORMS WITH HOT-DIP GALVANIZED LEGS OR PLASTIC LEGS. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT BY FORMWORK CONSTRUCTION OR CONCRETE PLACEMENT OPERATIONS. "WET-STICKING" OF REINFORCING IS PROHIBITED.
2. EXTEND CRUSHED STONE BASE 6" BEYOND WIDTH OF WALK, EACH SIDE.
3. SCORE JOINT SPACING: MIN. = 4'-0", MAX. = 6'-0", UNLESS OTHERWISE SHOWN ON PLANS. SPACE JOINTS EQUALLY.
4. PROVIDE EXPANSION JOINTS WHERE CONCRETE ABUTS EXISTING PAVEMENT, STEPS WALLS. AND AT 30 FT. MAX. INTERVALS ALONG WALKWAYS AND AT ALL CHANGES IN DIRECTION.



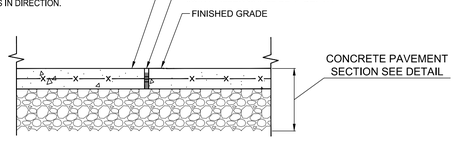
1 REINFORCED CONCRETE PAVEMENT
NOT TO SCALE

NOTE:
1. SCORE JOINT SPACING: MIN. = 4'-0", MAX. = 6'-0", UNLESS OTHERWISE SHOWN ON PLANS. SPACE JOINTS EQUALLY.

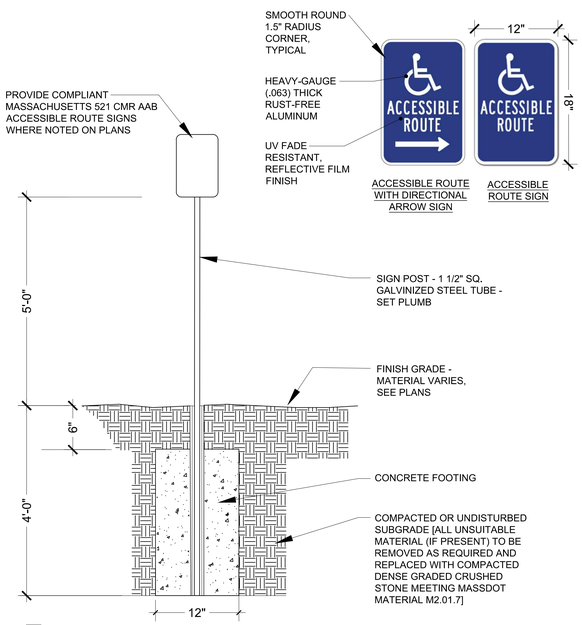


2 SCORE JOINT - SAWCUT
NOT TO SCALE

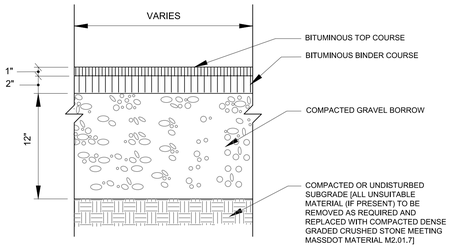
NOTES:
1. PROVIDE A PREFORMED EXPANSION JOINT AT ALL CONSTRUCTION JOINTS, SAWCUTS AND OTHER LOCATIONS WHERE CONCRETE ABUTS EXISTING PAVEMENT, STEPS AND WALLS.
2. PROVIDE EXPANSION JOINTS AT 30 FT. MAX. INTERVALS ALONG WALKS AND AT ALL CHANGES IN DIRECTION.



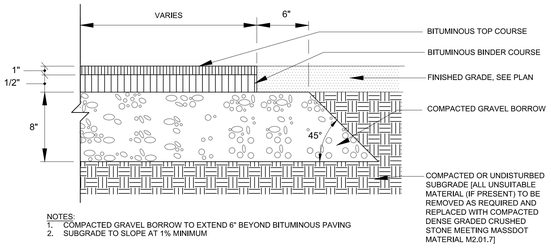
3 CONCRETE PAVEMENT EXPANSION JOINT
NOT TO SCALE



4 SIGN POLE FOOTING
SCALE: N.T.S.

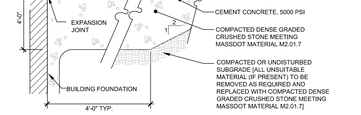


5 BITUMINOUS CONCRETE ROAD/PARKING PAVEMENT
SCALE: N.T.S.

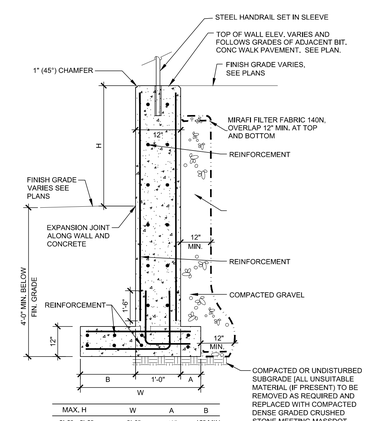


NOTES:
1. COMPACTED GRAVEL BORROW TO EXTEND 6" BEYOND BITUMINOUS PAVING
2. SUBGRADE TO SLOPE AT 1% MINIMUM

6 BITUMINOUS CONCRETE WALK PAVEMENT
SCALE: N.T.S.



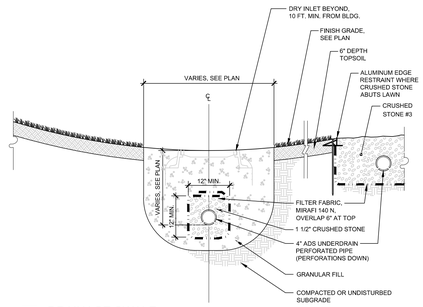
7 CONCRETE PAVEMENT AT DOORWAYS
SCALE: N.T.S.



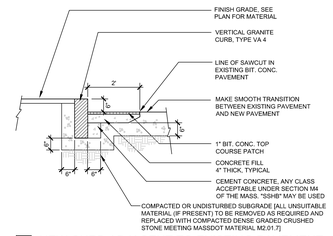
SECTION

NOTES:
1. SEE STRUCTURAL ENGINEER DRAWINGS FOR DESIGN OF WALL INCLUDING REINFORCEMENT.
2. CONTRACTOR SHALL FIELD MEASURE CONCRETE WALL AND PROVIDE STAMPED, ENGINEERED SHOP DRAWINGS INCLUDING REINFORCING, EXPANSION JOINTS WHERE THE WALL ABUTS HARDSCAPE AND DIMENSIONS OF ALL WALLS AND FOOTINGS.

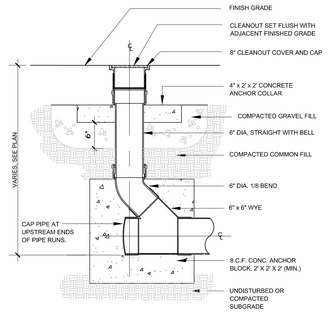
8 CONCRETE RETAINING WALL
NOT TO SCALE



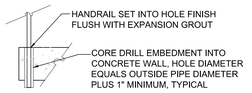
9 DRAINAGE SWALE
NOT TO SCALE



12 NEW CURB ADJACENT TO EXISTING PAVEMENT
SCALE: N.T.S.



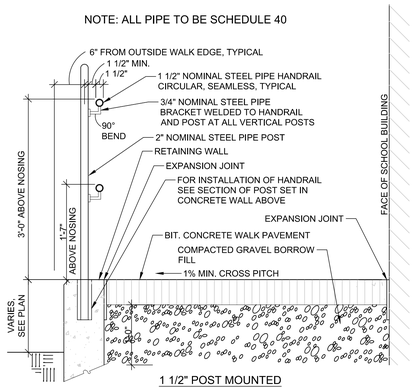
13 CLEANOUT
SCALE: N.T.S.



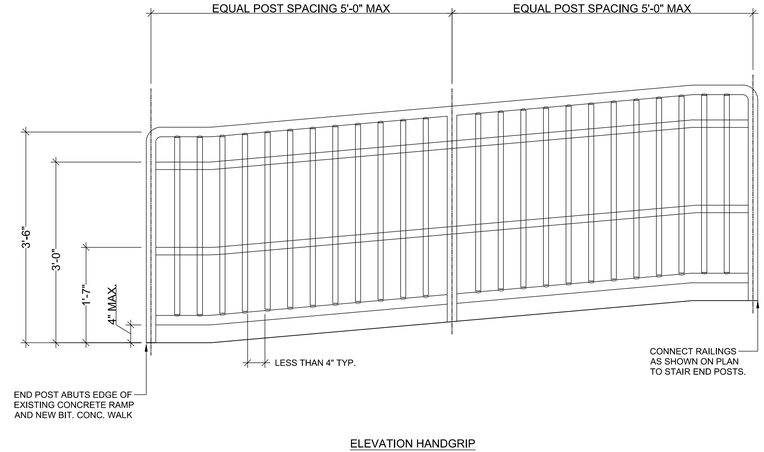
SECTION OF POST SET IN WALL

NOTES:
1. CONTRACTOR SHALL FIELD MEASURE NEW WALK AND CONCRETE RETAINING WALL AND SUBMIT LARGE SCALE SHOP DRAWINGS OF HANDRAILS AND ALL NECESSARY HARDWARE PER SPECIFICATIONS.
2. ALL WELDS SHALL BE SMOOTH GROUND TO PROVIDE SEAMLESS CONNECTIONS.
3. VERTICAL POSTS SHALL BE SET @ 5' O.C. MAXIMUM, EVENLY SPACED ALONG THE WALK LENGTH, UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS.
4. MAXIMUM SLOPE ON RAMP NOT TO EXCEED 7.5%, MAXIMUM CROSS-SLOPE PERPENDICULAR TO WALK NOT TO EXCEED 1.5%.
5. PROVIDE A MINIMUM 5' LANDING AT TOP AND BOTTOM OF WALKS, MAXIMUM SLOPE ON LANDING NOT TO EXCEED 1.5%. PROVIDE POSITIVE DRAINAGE TO PREVENT PONDING.
6. WHERE WALK RAILINGS ARE SHOWN ON PLAN CONNECTING TO STAIR END POSTS, TOP RAIL SHALL BE CONTINUOUS AND SMOOTH AND THE BOTTOM RAIL SHALL TERMINATE AT THE STAIR END POST.
7. RAILING SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. ARCHITECT/OWNER TO SELECT COLOR.
8. PROVIDE STAMPED, ENGINEERED SHOP DRAWING INCLUDING REINFORCING AND DIMENSIONS OF ALL RAILINGS, WALLS AND FOOTINGS.

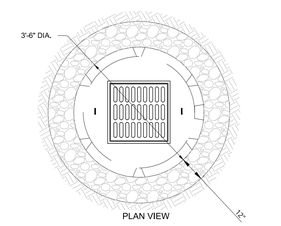
NOTE: ALL PIPE TO BE SCHEDULE 40



10 HANDRAIL IN CONCRETE RETAINING WALL WITH PICKETS
SCALE: NOT TO SCALE



ELEVATION HANDGRIP



NOTE:
CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.

11 CONCRETE DRY WELL 160 GALLON
NOT TO SCALE

GENERAL NOTES
1. NO SOIL OR FILL MATERIAL IS PERMITTED TO BE REUSED ON-SITE, SEE EARTHWORK SPECIFICATIONS.
2. ALL SOIL AND FILL MATERAIL EXCAVATED DURING SITE WORK ACTIVITIES SHALL BE MANAGED AS SPECIFIED HEREIN.
3. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, RULES, ORDINANCES, AND GENERAL REGULATIONS OF THE FEDERAL GOVERNMENT, THE COMMONWEALTH OF MASSACHUSETTS, THE CITY OF WORCESTER, DEP, EPA, OSHA, AND OTHER REGULATORY AGENCIES GOVERNING EXCAVATING, STORING AND DISPOSING OF EARTH AND WATER.

CONCRETE CONSTRUCTION NOTES
1. ALL CONCRETE USED FOR THE WORK SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,500 POUNDS PER SQUARE INCH.
2. THE CONCRETE MIX SHALL BE DESIGNED TO RESIST EXPOSURE TO FREEZING TEMPERATURES AND DE-ICING CHEMICALS.
3. THE CONCRETE MIX SHALL BE PROPORTIONED TO HAVE A MAXIMUM AGGREGATE SIZE OF 1-1/2", A MAXIMUM WATER CEMENT RATIO OF 0.45, A SLUMP OF 4" +/- 0.75", AND AN AIR CONTENT OF 6% +/- 1.5% AT THE TIME OF PLACEMENT.
4. THE CONTRACTOR SHALL SUBMIT A SUITABLE CONCRETE MIX DESIGN TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF THE WORK.
5. FORMWORK SHALL BE USED, WHEREVER NECESSARY, TO CONFINE THE CONCRETE AND TO SHAPE IT TO THE REQUIRED DIMENSIONS. THE FORMWORK SHALL BE RIGID ENOUGH TO WITHSTAND THE PRESSURES FROM PLACING, VIBRATION, AND FINISHING THE CONCRETE AND TO MAINTAIN ITS SHAPE AND SPECIFIED TOLERANCES.
6. FORMWORK SHALL NOT BE DISTURBED UNTIL THE CONCRETE HAS ADEQUATELY HARDENED.
7. ALL FORMWORK SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING AND/OR PAVING.

BITUMINOUS ASPHALT PAVEMENT NOTES
1. THE CONTRACTOR SHALL INSTALL NEW BITUMINOUS ASPHALT PAVEMENT, OVER THE PROOFROLLED AND APPROVED SUBGRADE, IN ALL PAVED PARKING, ROADWAY, AND ACCESS AREAS, UNLESS OTHERWISE NOTED ON THE PLANS. ALL BITUMINOUS PAVEMENTS SHALL BE INSTALLED ON ACCORDANCE WITH SECTION 460 - CLASS I BITUMINOUS CONCRETE PAVEMENT, OF THE CURRENT MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, UNLESS OTHERWISE NOTED .
2. THE FINAL FINISHED GRADES OF THE NEW BITUMINOUS PAVEMENTS SHALL BE INSTALLED TO THE LINE AND GRADE SHOWN ON THE PROJECT PLANS. THE FINAL FINISHED GRADES SHALL MATCH ADJACENT PAVEMENT SURFACES AND CONCRETE SLABS AND APRONS.
3. ALL SUBGRADE EXCAVATION AND BACKFILLING PROCEDURES SHALL BE COMPLETED PRIOR TO THE INSTALLATION OF THE HOT MIX ASPHALT COURSES. ABSOLUTELY NOT CUTTING AND PATCHING OF THE NEW ASPHALT SURFACE SHALL OCCUR AFTER PLACEMENT.
4. THE CONTRACTOR SHALL SEQUENCE THE INSTALLATION AND ORIENTATION OF ALL HOT MIX ASPHALT PAVEMENT SUCH THAT THE MINIMUM NUMBER OF LONGITUDINAL AND TRANSVERSE JOINTS ARE PRODUCED. THE CONTRACTOR SHALL SUBMIT A PAVING PLAN, INDICATING INTENDED DIRECTION OF PAVING, NUMBER OF PULLS, ETC. TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO THE START OF PAVING OPERATIONS.
5. THE NEW BITUMINOUS ASPHALT SHALL CONSIST OF A COMBINATION OF A HOT MIX ASPHALT BINDER COURSE AND A HOT MIX ASPHALT TOP COURSE PAVEMENTS MEETING THE MINIMUM REQUIREMENTS OF ITEM M3.11.00 OF THE CURRENT MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
6. THE HOT MIX SHALL BE INSTALLED IN TWO LIFTS WITH THE THICKNESS INDICATED ON THE PROJECT PLANS FOR THE REPAIR METHOD SPECIFIED. THE HOT MIX ASPHALTS SHALL BE INSTALLED IN GENERAL ACCORDANCE WITH SECTION 460 OF THE CURRENT MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER.
7. EACH COURSE OF THE HOT MIX ASPHALT SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 92 TO 97% OF THE MATERIALS THEORETICAL MAXIMUM DENSITY AS DETERMINED BY AASHTO METHOD T 209.
8. A BITUMINOUS TACK COAT CONSISTING OF AN ASPHALT EMULSION, GRADE RS-1, AND MEETING THE REQUIREMENTS OF ITEM M3.03.0 OF THE CURRENT MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, SHALL BE INSTALLED OVER ALL NEW AND EXISTING CONCRETE AND ASPHALT PAVEMENTS PRIOR TO THE INSTALLATION OF NEW HOT MIX ASPHALT COURSES.
9. THE BITUMINOUS TACK COAT SHALL BE APPLIED UNIFORMLY AND MECHANICALLY AT A RATE OF 0.05 TO 0.1 GALLONS PER SQUARE YARD TO PROVIDE COMPLETE COVERAGE OF THE AREA TO RECEIVE HOT MIX ASPHALT.
10. BITUMINOUS TACK COAT SHALL BE APPLIED ALONG ALL LONGITUDINAL AND TRANSVERSE VERTICAL EDGE OF ABUTTING PAVEMENT COURSES. TACK COAT SHALL NOT BE REQUIRED ON ABUTTING VERTICAL EDGES FOR PAVEMENTS PLACED ON THE SAME DAY.
11. EXISTING SURFACES TO RECEIVE THE BITUMINOUS TACK COAT SHALL BE CLEANED OF ALL FOREIGN MATTER AND LOOSE MATERIAL AND SHALL BE DRY BEFORE THE TACK COAT IS APPLIED.
12. THE CONTRACTOR SHALL NOT INSTALL HOT MIX ASPHALT MATERIALS OR BITUMINOUS TACK COAT MATERIALS IN THE RAIN, WITHOUT THE EXPRESS OF APPROVAL OF THE ENGINEER.

REVISIONS

	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
SITE DETAILS AND NOTES

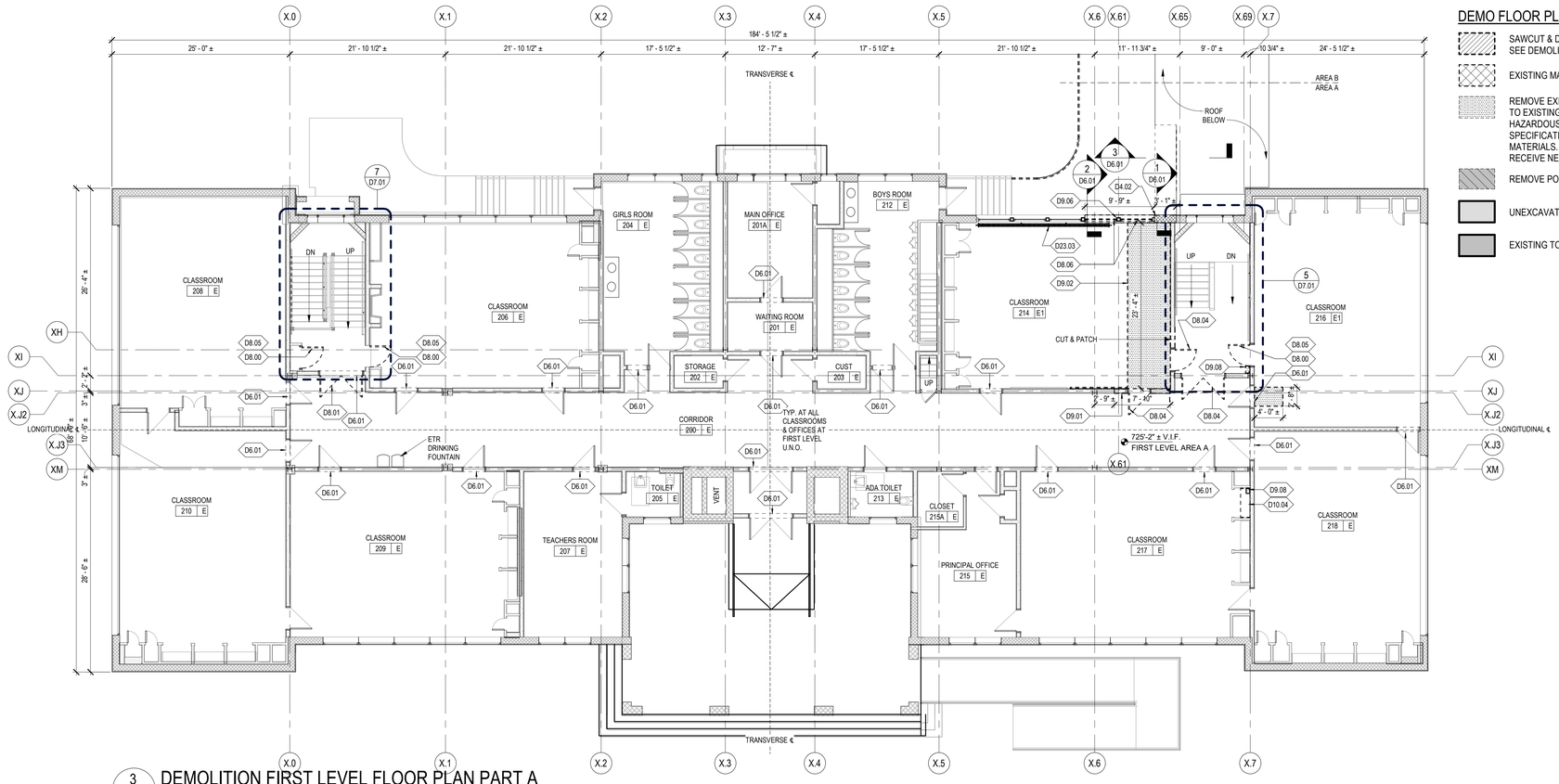
MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

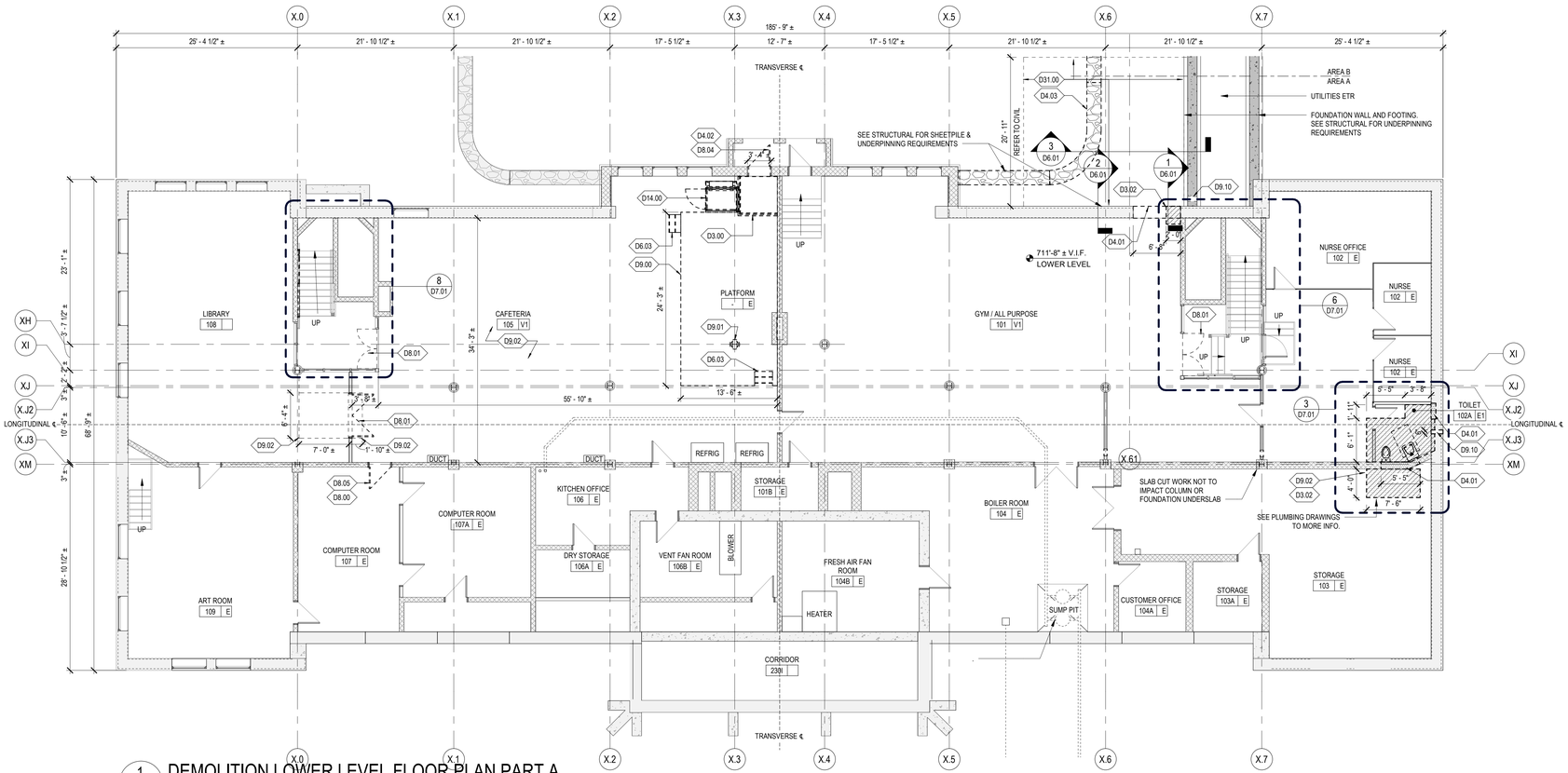
SCALE	AS NOTED
DRAWN BY	AZA
CHECKED	JKE
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER
L-2



3 D1.01 DEMOLITION FIRST LEVEL FLOOR PLAN PART A

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



1 D1.01 DEMOLITION LOWER LEVEL FLOOR PLAN PART A

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

DEMO FLOOR PLAN LEGEND

- SAWCUT & DEMOLISH 4" THICK CONCRETE SLAB SEE DEMOLITION FLOOR PLAN FOR DIMENSIONS
- EXISTING MASONRY AND CMU WALL TO BE REMOVED
- REMOVE EXISTING FLOOR FINISH AND SUBSTRATE DOWN TO EXISTING SLAB/FLOOR STRUCTURE. REFER TO HAZARDOUS MATERIALS REPORT AND ABATEMENT SPECIFICATION IN AREAS OF ASBESTOS CONTAINING MATERIALS. PREP EXISTING SLAB/FLOOR STRUCTURE TO RECEIVE NEW FINISH.
- REMOVE PORTION OF EXISTING ROOF SYSTEM.
- UNEXCAVATED
- EXISTING TO REMAIN

DEMO KEY NOTES

SECTION 3 - CONCRETE

D3.00 REMOVE CONCRETE PAD IN ITS' ENTIRETY

D3.01 REMOVE CONCRETE BLOCK WALLS AS INDICATED ON PLAN.

D3.02 REMOVE CONCRETE SLAB AS REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING SERVICES. SEE DEMOLITION LEGEND AND CONSULTANT DRAWINGS FOR MORE INFORMATION.

SECTION 4 - MASONRY

D4.01 SELECTIVE DEMOLITION OF MASONRY WALL AND/OR FOUNDATION WALL AS REQUIRED FOR NEW OPENING OR NEW PIPING. SEE STRUCTURAL OR PLUMBING FOR MORE INFO.

D4.02 CONTRACTOR TO PROVIDE TEMPORARY SUPPORT AND REMOVE PORTION OF MASONRY WALL FOR INSTALLATION OF NEW DOOR & FRAME, OR OTHER OPENING(S). MASON SHALL PERFORM SAW-TOOTH REMOVAL AND PATCHING TO MATCH EXISTING. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.

D4.03 CONTRACTOR TO TEMPORARY REMOVE STONE RETAINING WALL AND CONCRETE FOUNDATION WALL AS REQUIRED FOR ACCESS TO AREA & EXCAVATION WORK.

SECTION 6 - WOOD, PLASTIC, & COMPOSITE

D6.01 REMOVE WOOD THRESHOLD AND ALL RELATED ATTACHMENTS.

D6.02 REMOVE WOOD HANDRAILS AND ALL RELATED ATTACHMENTS

D6.03 REMOVE WOODEN STAIR AT PLATFORM

D6.04 REMOVE ANY ATTACHMENTS TO THE WALL AS SHOWN. SEE INTERIOR ELEVATION.

SECTION 7 - THERMAL AND MOISTURE PROTECTION

D7.01 REMOVE PORTION OF ROOF SYSTEM AS INDICATED.

D7.02 REMOVE PORTION OF SOFFIT BELOW ROOF SYSTEM AS INIDCATED.

D7.03 REMOVE PORTION OF ROOF FASCIA & FLASHING AS REQUIRED.

D7.04 REMOVE METAL DOWNSPOUT

D7.05 REMOVE METAL GUTTER

SECTION 8 - DOORS, WINDOWS, & OPENINGS

D8.01 REMOVE DOOR AND ASSCOCIATED HARDWARE IN ITS' ENTIRETY. E.T.R. FRAME, TYP. U.O.N.

D8.02 REMOVE HARDWARE AS REQUIRED. SEE HARDWARE SCHEDULE IN SPECS.

D8.03 REMOVE DOOR CLOSER IN ITS' ENTIRETY.

D8.04 REMOVE DOOR AND FRAME IN ITS' ENTIRETY.

D8.05 CAREFULLY REMOVE WOOD DOOR FRAME AS REQUIRED.

D8.06 SELECTIVELY REMOVE WINDOW AND MULLIANS AS INDICATED ON PLANS AND ELEVATIONS.

D8.07 REMOVE DOOR SILL IN ITS ENTIRETY.

SECTION 9 - FINISHES

D9.00 REMOVE RAISED FLOORING SYSTEM & SUPPORT STRUCTURE AND ALL ATTACHEMENTS.

D9.01 SELECTIVELY REMOVE WALL PARTITION & ATTACHMENTS AS REQUIRED.

D9.02 REMOVE EXISTING FLOOR FINISH AND SUBSTRATE DOWN TO EXISTING SLAB/FLOOR STRUCTURE. REFER TO HAZARDOUS MATERIALS REPORT AND ABATEMENT SPECIFICATION IN AREAS OF ASBESTOS CONTAINING MATERIALS. PREP EXISTING SLAB/FLOOR STRUCTURE TO RECEIVE NEW FINISH.

D9.03 REMOVE PLASTER CEILING AND SUSPENSION SYSTEM AND ALL RELATED ATTACHMENTS.

D9.04 REMOVE GWB SOFFIT, BATT INSULATION & ATTACHMENTS AS REQUIRED.

D9.05 REMOVE ACT CEILING AND GRID SYSTEM IN THEIR ENTIRETY.

D9.06 REMOVE BREAK METAL MULLION COVER. EXISTING SILL & STRUCTURAL TUBING TO REMAIN.

D9.07 REMOVE SECTION OF METAL RAILING AS REQUIRED AT AREA OF SITE DEMOLTION. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.

D9.08 CUT/CORE HOLE AS REQUIRED FOR NEW SPRINKLER PIPE & VENTING PIPING, PENETRATION AT MASONRY WALLS AND FLOORS. COORDINATE WITH PLUMBING DRWG'S.

D9.09 SCRAPE, CLEAN AND PREP FLOOR TO RECEIVE NEW PAINT.

D9.10 CUT HOLE AS REQUIRED FOR NEW PIPING OR DUCT

SECTION 10 - SPECIALTY EQUIPMENT

D10.01 REMOVE TIOLET PARTITIONS & OVERHEAD BRACKETS (IF REQUIRED) IN ENTIRETY.

D10.02 REMOVE METAL LOCKER UNITS WITH CARE AND RETURN TO OWNER.

D10.03 REMOVE MIRRORS & WALL MOUNTED ASSEMBLY IN ITS ENTIRETY.

D10.04 REMOVE CASEWORK AND ALL ATTACHEMENTS RELATED.

SECTION 14 - CONVEYING EQUIPMENT

D14.00 REMOVE HANDICAP LIFT IN ITS' ENTIRETY. COORDINATE WITH ELECTRICAL ENGINEER TO REMOVE ELECTRICAL IF REQUIRED.

SECTION 22 - PLUMBING (COORD. W/ PLUMBING DWGS.)

D22.01 REMOVE EXISTING TOILET FIXTURE IN ENTIRETY.

D22.02 REMOVE EXISTING SINKS IN ENTIRETY.

D22.03 REMOVE EXISTING URINAL FIXTURE AND PIPING AS REQUIRED FOR NEW WORK.

D22.04 REMOVE EXISTING SLOP SINK, URINAL AND PIPINGS IN ENTIRETY.

D22.05 REMOVE EXISTING FLOOR DRAIN IN ENTIRETY

SECTION 23 - MECHANICAL (COORD. W/ MECHANICAL DWGS.)

D23.01 REMOVE MECHANICAL FIXTURE AS INIDCATED. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.02 REMOVE & RELOCATE AIR HANDLING UNIT AS REQUIRED. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.03 REMOVE EXISTING RADIATOR, INCLUDING ALL ASSOCIATED PIPING AND VALVES, BACK TO MAIN SUPPLY LINES. CAP OFF SUPPLY LINES AT MAIN.

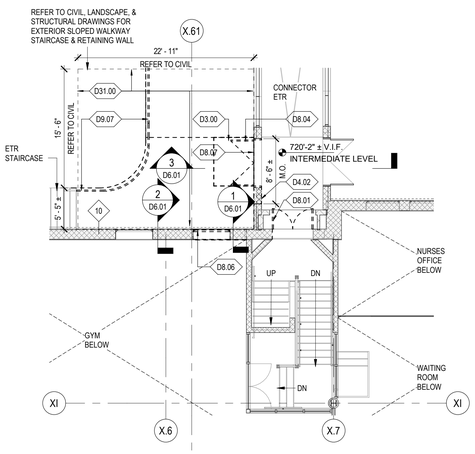
SECTION 26 - ELECTRICAL (COORD. W/ ELECTRICAL DWGS.)

D26 .01 REMOVE, SALVAGE AND REINSTALL LIGHTING FIXTURES AS INDICATED. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

D26.02 REMOVE RECESSED LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

SECTION 31 - EARTHWORK

D31.00 EXCAVATE AREA AS REQUIRED. REFER TO CIVIL & STRUCTURAL DRAWINGS FOR MORE INFORMATION.



2 D1.01 DEMO INTERMEDIATE LEVEL PLAN PART A

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



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

DEMOLITION LOWER LEVEL & INTERMEDIATE LEVEL FLOOR PLANS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

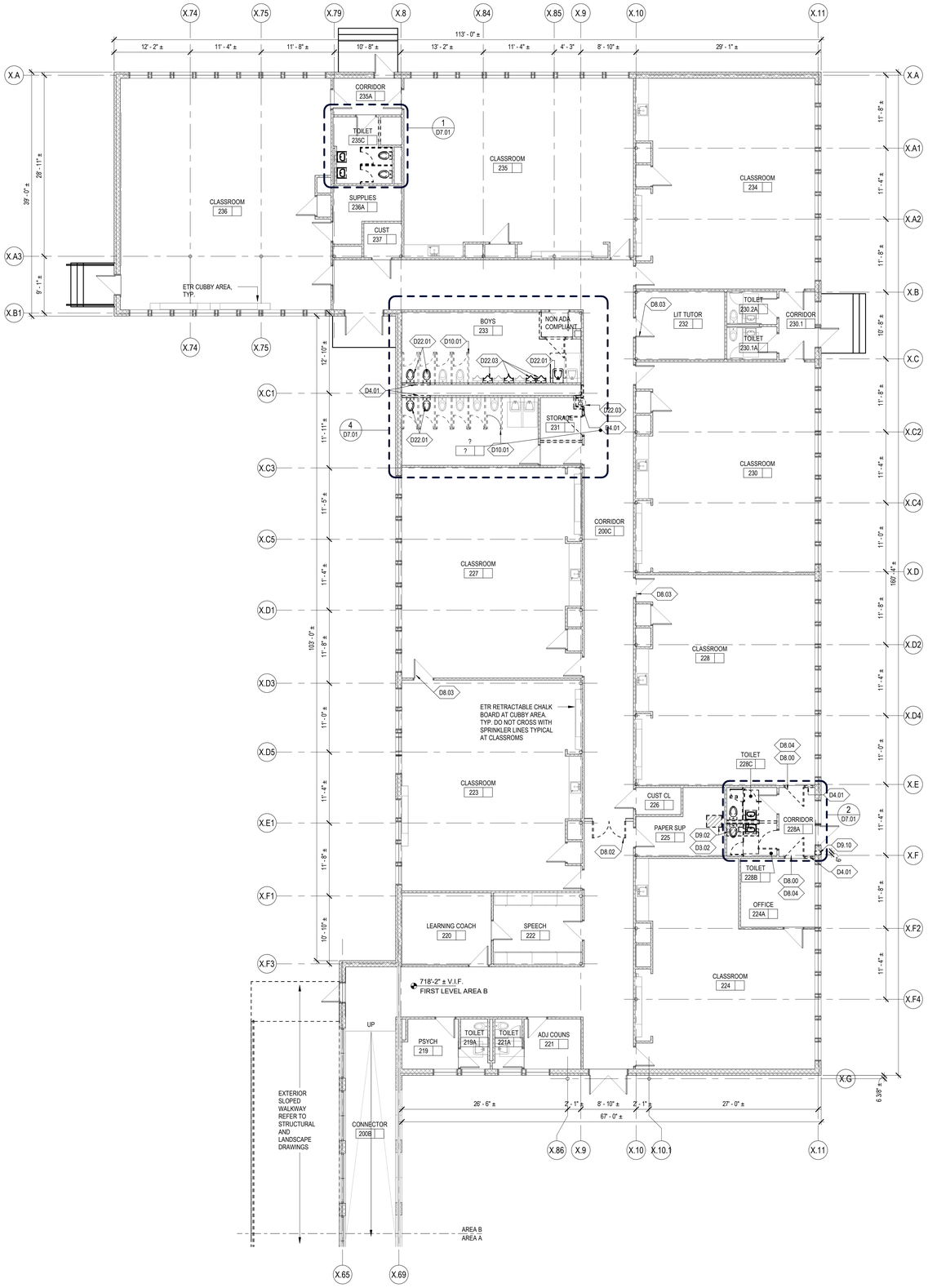
DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	WT
CHECKED	CHECKER
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

D1.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/17/2024 7:44:12 AM



1 D1.02 DEMOLITION FIRST LEVEL FLOOR PLAN AREA B

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

DEMO FLOOR PLAN LEGEND

- SAWCUT & DEMOLISH 4" THICK CONCRETE SLAB SEE DEMOLITION FLOOR PLAN FOR DIMENSIONS
- EXISTING MASONRY AND CMU WALL TO BE REMOVED
- REMOVE EXISTING FLOOR FINISH AND SUBSTRATE DOWN TO EXISTING SLAB/FLOOR STRUCTURE. REFER TO HAZARDOUS MATERIALS REPORT AND ABATEMENT SPECIFICATION IN AREAS OF ASBESTOS CONTAINING MATERIALS. PREP EXISTING SLAB/FLOOR STRUCTURE TO RECEIVE NEW FINISH.
- REMOVE PORTION OF EXISTING ROOF SYSTEM.
- UNEXCAVATED
- EXISTING TO REMAIN

DEMO KEY NOTES

SECTION 3 - CONCRETE

D3.00 REMOVE CONCRETE PAD IN ITS' ENTIRETY

D3.01 REMOVE CONCRETE BLOCK WALLS AS INDICATED ON PLAN.

D3.02 REMOVE CONCRETE SLAB AS REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING SERVICES. SEE DEMOLITION LEGEND AND CONSULTANT DRAWINGS FOR MORE INFORMATION.

SECTION 4 - MASONRY

D4.01 SELECTIVE DEMOLITION OF MASONRY WALL AND/OR FOUNDATION WALL AS REQUIRED FOR NEW OPENING OR NEW PIPING. SEE STRUCTURAL OR PLUMBING FOR MORE INFO.

D4.02 CONTRACTOR TO PROVIDE TEMPORARY SUPPORT AND REMOVE PORTION OF MASONRY WALL FOR INSTALLATION OF NEW DOOR & FRAME, OR OTHER OPENING(S). MASON SHALL PERFORM SAW-TOOTH REMOVAL AND PATCHING TO MATCH EXISTING. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.

D4.03 CONTRACTOR TO TEMPORARY REMOVE STONE RETAINING WALL AND CONCRETE FOUNDATION WALL AS REQUIRED FOR ACCESS TO AREA & EXCAVATION WORK.

SECTION 6 - WOOD, PLASTIC, & COMPOSITE

D6.01 REMOVE WOOD THRESHOLD AND ALL RELATED ATTACHMENTS.

D6.02 REMOVE WOOD HANDRAILS AND ALL RELATED ATTACHMENTS

D6.03 REMOVE WOODEN STAIR AT PLATFORM

D6.04 REMOVE ANY ATTACHMENTS TO THE WALL AS SHOWN. SEE INTERIOR ELEVATION.

SECTION 7 - THERMAL AND MOISTURE PROTECTION

D7.01 REMOVE PORTION OF ROOF SYSTEM AS INDICATED.

D7.02 REMOVE PORTION OF SOFFIT BELOW ROOF SYSTEM AS INIDCATED.

D7.03 REMOVE PORTION OF ROOF FASCIA & FLASHING AS REQUIRED.

D7.04 REMOVE METAL DOWNSPOUT

D7.05 REMOVE METAL GUTTER

SECTION 8 - DOORS, WINDOWS, & OPENINGS

D8.01 REMOVE DOOR AND ASSOCIATED HARDWARE IN ITS' ENTIRETY. E.T.R. FRAME, TYP. U.O.N.

D8.02 REMOVE HARDWARE AS REQUIRED. SEE HARDWARE SCHEDULE IN SPECS.

D8.03 REMOVE DOOR CLOSER IN ITS' ENTIRETY.

D8.04 REMOVE DOOR AND FRAME IN ITS' ENTIRETY.

D8.05 CAREFULLY REMOVE WOOD DOOR FRAME AS REQUIRED.

D8.06 SELECTIVELY REMOVE WINDOW AND MULLIANS AS INDICATED ON PLANS AND ELEVATIONS.

D8.07 REMOVE DOOR SILL IN ITS ENTIRETY.

SECTION 9 - FINISHES

D9.00 REMOVE RAISED FLOORING SYSTEM & SUPPORT STRUCTURE AND ALL ATTACHEMENTS.

D9.01 SELECTIVELY REMOVE WALL PARTITION & ATTACHMENTS AS REQUIRED.

D9.02 REMOVE EXISTING FLOOR FINISH AND SUBSTRATE DOWN TO EXISTING SLAB/FLOOR STRUCTURE. REFER TO HAZARDOUS MATERIALS REPORT AND ABATEMENT SPECIFICATION IN AREAS OF ASBESTOS CONTAINING MATERIALS. PREP EXISTING SLAB/FLOOR STRUCTURE TO RECEIVE NEW FINISH.

D9.03 REMOVE PLASTER CEILING AND SUSPENSION SYSTEM AND ALL RELATED ATTACHMENTS.

D9.04 REMOVE GWB SOFFIT, BATT INSULATION & ATTACHMENTS AS REQUIRED.

D9.05 REMOVE ACT CEILING AND GRID SYSTEM IN THEIR ENTIRETY.

D9.06 REMOVE BREAK METAL MULLION COVER. EXISTING SILL & STRUCTURAL TUBING TO REMAIN.

D9.07 REMOVE SECTION OF METAL RAILING AS REQUIRED AT AREA OF SITE DEMOLTION. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.

D9.08 CUT/CORE HOLE AS REQUIRED FOR NEW SPRINKLER PIPE & VENTING PIPING, PENETRATION AT MASONRY WALLS AND FLOORS. COORDINATE WITH PLUMBING DRWG'S.

D9.09 SCRAPE, CLEAN AND PREP FLOOR TO RECEIVE NEW PAINT.

D9.10 CUT HOLE AS REQUIRED FOR NEW PIPING OR DUCT

SECTION 10 - SPECIALTY EQUIPMENT

D10.01 REMOVE TIOLET PARTITIONS & OVERHEAD BRACKETS (IF REQUIRED) IN ENTIRETY.

D10.02 REMOVE METAL LOCKER UNITS WITH CARE AND RETURN TO OWNER.

D10.03 REMOVE MIRRORS & WALL MOUNTED ASSEMBLY IN ITS ENTIRETY.

D10.04 REMOVE CASEWORK AND ALL ATTACHEMENTS RELATED.

SECTION 14 - CONVEYING EQUIPMENT

D14.00 REMOVE HANDICAP LIFT IN ITS' ENTIRETY. COORDINATE WITH ELECTRICAL ENGINEER TO REMOVE ELECTRICAL IF REQUIRED.

SECTION 22 - PLUMBING (COORD. W/ PLUMBING DWGS.)

D22.01 REMOVE EXISTING TOILET FIXTURE IN ENTIRETY.

D22.02 REMOVE EXISTING SINKS IN ENTIRETY.

D22.03 REMOVE EXISTING URINAL FIXTURE AND PIPING AS REQUIRED FOR NEW WORK.

D22.04 REMOVE EXISTING SLOP SINK, URINAL AND PIPINGS IN ENTIRETY.

D22.05 REMOVE EXISTING FLOOR DRAIN IN ENTIRETY

SECTION 23 - MECHANICAL (COORD. W/ MECHANICAL DWGS.)

D23.01 REMOVE MECHANICAL FIXTURE AS INIDCATED. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.02 REMOVE & RELOCATE AIR HANDLING UNIT AS REQUIRED. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.03 REMOVE EXISTING RADIATOR, INCLUDING ALL ASSOCIATED PIPING AND VALVES, BACK TO MAIN SUPPLY LINES. CAP OFF SUPPLY LINES AT MAIN.

SECTION 26 - ELECTRICAL (COORD. W/ ELECTRICAL DWGS.)

D26 .01 REMOVE, SALVAGE AND REINSTALL LIGHTING FIXTURES AS INDICATED. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

D26.02 REMOVE RECESSED LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

SECTION 31 - EARTHWORK

D31.00 EXCAVATE AREA AS REQUIRED. REFER TO CIVIL & STRUCTURAL DRAWINGS FOR MORE INFORMATION.

DEMO GENERAL NOTES

(E) = EXISTING

THESE PLANS DELINEATE THE BASIC SCOPE OF WORK FOR THE REMOVAL OF EXISTING MATERIALS. THESE PLANS HAVE BEEN DEVELOPED FROM OWNER PROVIDED AS-BUILTS AND MAY VARY FROM ACTUAL FIELD CONDITIONS. THE DEMOLITION DRAWINGS AND NOTES ARE PROVIDED WITH THE INTENT TO GENERALLY DESCRIBE AREA AND LIMITS OF WORK. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SITE AND CONDITIONS THEREON.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO ANY DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES RELATING TO THE DRAWINGS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY.

2. THE CONTRACTOR SHALL BE AWARE OF SELECTIVE DEMOLITION AT ALL SECTIONS OF WORK. REVIEWING ALL NEW RENOVATION DETAILS TO DETERMINE WHAT IS TO BE REMOVED OR TO REMAIN AND WILL BE RESPONSIBLE FOR REPLACEMENT IN-KIND ALL WORK INADVERTENTLY REMOVED.

3. ALL REQUIRED DEMOLITION NOT SPECIFICALLY DESIGNATED AS BEING THE WORK OF OTHER TRADES SHALL BE PERFORMED BY THE GENERAL CONTRACTOR.

4. CONTRACTORS TO RELEASE, REMOVE AND LOWER TO THE FLOOR ALL COMPONENTS, SYSTEMS AND ASSEMBLIES AS INDICATED, SPECIFIED, OR AS REQUIRED TO DO THEIR RESPECTIVE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DISASSEMBLING / CUTTING OR OTHERWISE MODIFYING EQUIPMENT AS REQUIRED TO PASS THROUGH EXISTING OPENINGS. G.C. SHALL ALSO BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING OF ALL MATERIALS SO TREATED.

5. THE CONTRACTOR SHALL REMOVE ITEMS TO BE DEMOLISHED AS INDICATED ON THE DRAWINGS WITH CARE BEING TAKEN NOT TO DAMAGE ADJACENT WALLS, CEILINGS, FLOORS, FINISHES, CASEWORK OR MILLWORK SCHEDULED TO REMAIN. THE WORK AREA WILL BE LEFT CLEAN AND READY TO RECEIVE NEW WORK.

6. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BARRICADES TO DIVIDE AREAS (CONSTRUCTION AND NORMAL USE) TO PROTECT USERS DURING CONSTRUCTION.

7. G.C. SHALL COORDINATE AND PERFORM ALL ASSOCIATED WORK WITH M / E/ P CONTRACTORS FOR ALL REQUIRED PENETRATIONS REQUIRING MISCELLANEOUS BLOCKING OR INFILL TO ACCOMMODATE M / E / P WORK.

8. REMOVE AND REPLACE ALL HARDWARE TO CLASSROOMS AND OFFICES AT ALL FLOOR LEVELS U.N.O. TYP. SEE SPECIFICATIONS FOR HARDWARE SCHEDULE.

9. REMOVE & REPLACE ALL WOODEN THRESHOLDS TO CLASSROOMS AND OFFICES AT FIRST FLOOR LEVEL U.N.O. TYP. SEE D1/A10.01 FOR TYPCIAL DEMOLITION DETAIL.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

DEMOLITION FIRST LEVEL FLOOR PLANS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

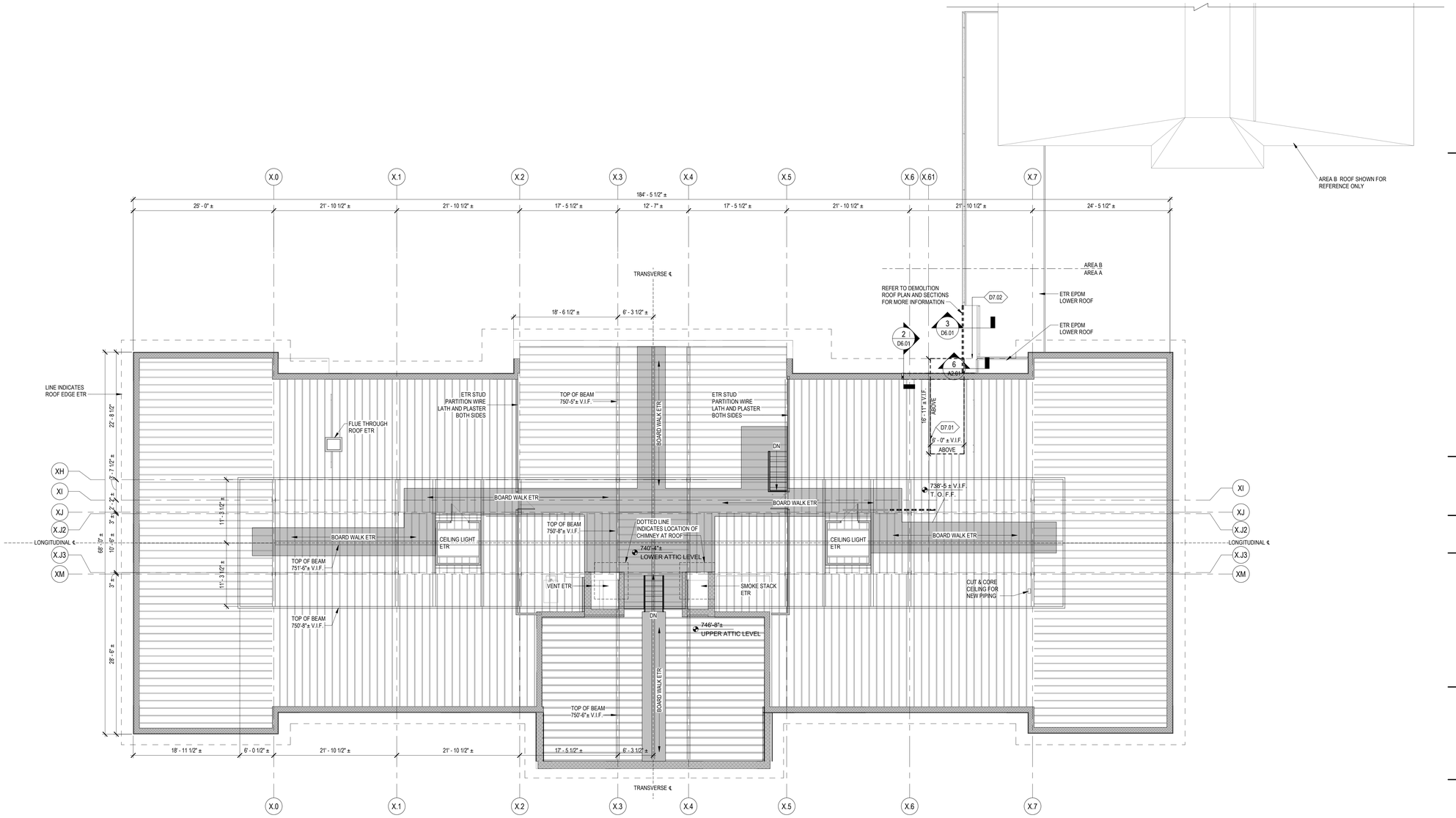
SCALE	As indicated
DRAWN BY	RS / WL
CHECKED	WL
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

D1.02

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

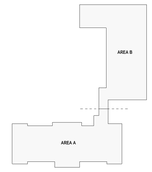
9/17/2024 7:44:50 AM



1 / D1.03 DEMOLITION ATTIC LEVEL FLOOR PLAN AREA A

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

GENERAL NOTE:
ETR WOOD AND STEEL FRAMING SYMETRICAL ABOUT CENTERLINE, UNLESS NOTED OTHERWISE



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
DEMOLITION ATTIC LEVEL FLOOR PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

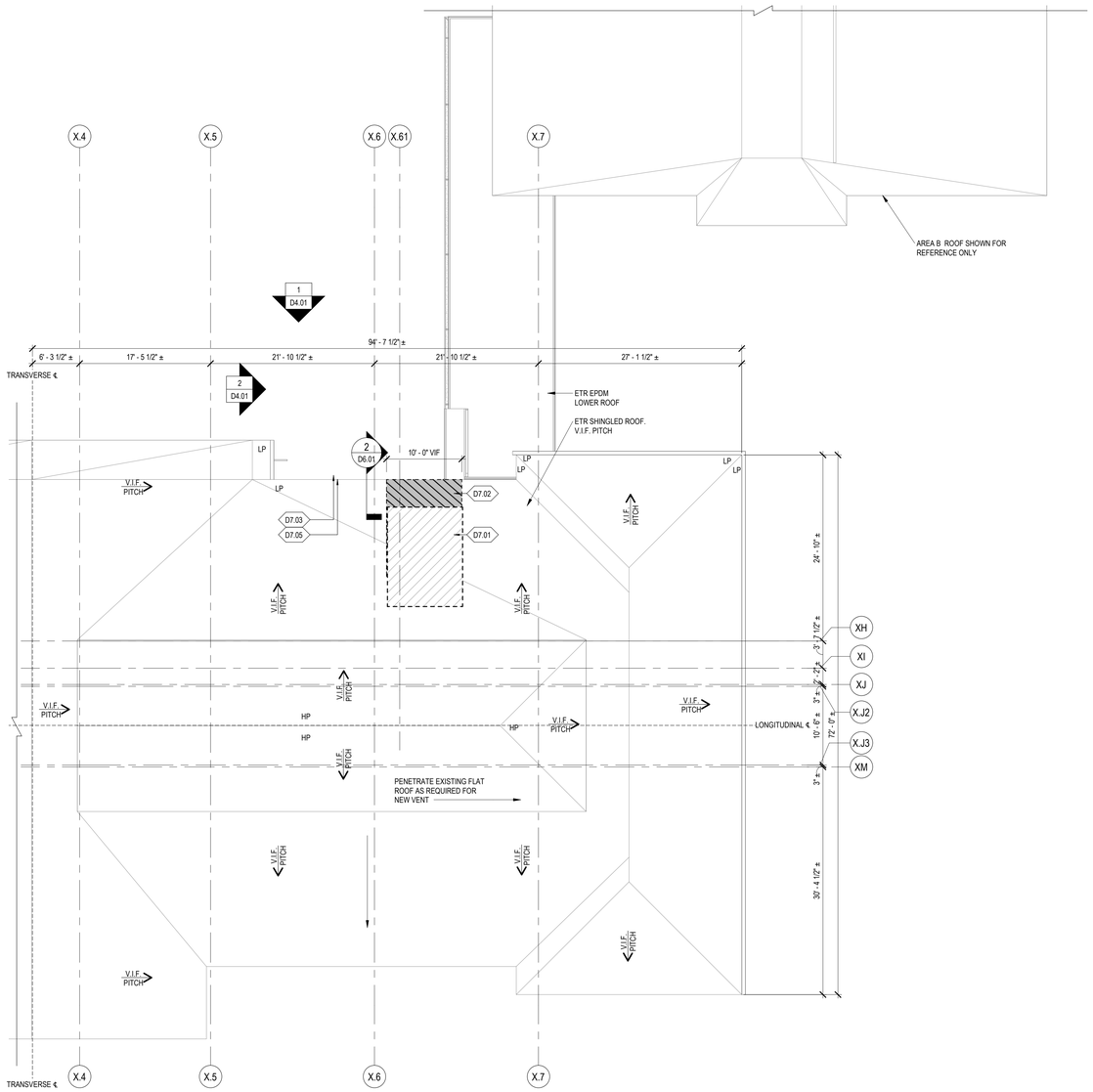
SCALE	1/8" = 1'-0"
DRAWN BY	DKN
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

D1.03

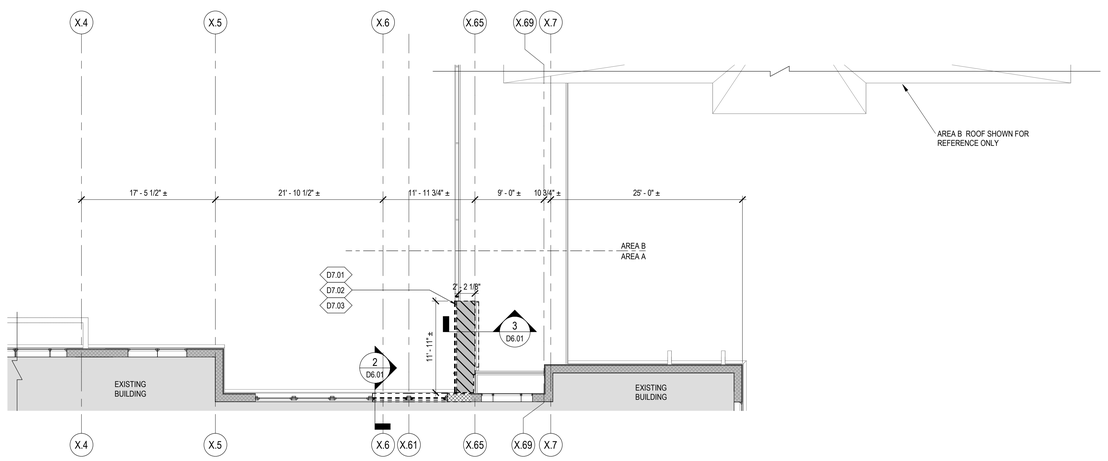
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

9/17/2024 7:45:19 AM



1 D2.01 DEMOLITION PARTIAL ROOF PLAN AREA A

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



2 D2.01 DEMOLITION PARTIAL LOWER ROOF PLAN AREA A & B

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

DEMO FLOOR PLAN LEGEND

- SAWCUT & DEMOLISH 4" THICK CONCRETE SLAB SEE DEMOLITION FLOOR PLAN FOR DIMENSIONS
- EXISTING MASONRY AND CMU WALL TO BE REMOVED
- REMOVE EXISTING FLOOR FINISH AND SUBSTRATE DOWN TO EXISTING SLAB/FLOOR STRUCTURE. REFER TO HAZARDOUS MATERIALS REPORT AND ABATEMENT SPECIFICATION IN AREAS OF ASBESTOS CONTAINING MATERIALS. PREP EXISTING SLAB/FLOOR STRUCTURE TO RECEIVE NEW FINISH.
- REMOVE PORTION OF EXISTING ROOF SYSTEM.
- UNEXCAVATED
- EXISTING TO REMAIN

DEMO KEY NOTES

SECTION 3 - CONCRETE

D3.00 REMOVE CONCRETE PAD IN ITS' ENTIRETY

D3.01 REMOVE CONCRETE BLOCK WALLS AS INDICATED ON PLAN.

D3.02 REMOVE CONCRETE SLAB AS REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING SERVICES. SEE DEMOLITION LEGEND AND CONSULTANT DRAWINGS FOR MORE INFORMATION.

SECTION 4 - MASONRY

D4.01 SELECTIVE DEMOLITION OF MASONRY WALL AND/OR FOUNDATION WALL AS REQUIRED FOR NEW OPENING OR NEW PIPING. SEE STRUCTURAL OR PLUMBING FOR MORE INFO.

D4.02 CONTRACTOR TO PROVIDE TEMPORARY SUPPORT AND REMOVE PORTION OF MASONRY WALL FOR INSTALLATION OF NEW DOOR & FRAME, OR OTHER OPENING(S). MASON SHALL PERFORM SAW-TOOTH REMOVAL AND PATCHING TO MATCH EXISTING. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.

D4.03 CONTRACTOR TO TEMPORARY REMOVE STONE RETAINING WALL AND CONCRETE FOUNDATION WALL AS REQUIRED FOR ACCESS TO AREA & EXCAVATION WORK.

SECTION 6 - WOOD, PLASTIC, & COMPOSITE

D6.01 REMOVE WOOD THRESHOLD AND ALL RELATED ATTACHMENTS.

D6.02 REMOVE WOOD HANDRAILS AND ALL RELATED ATTACHMENTS

D6.03 REMOVE WOODEN STAIR AT PLATFORM

D6.04 REMOVE ANY ATTACHMENTS TO THE WALL AS SHOWN. SEE INTERIOR ELEVATION.

SECTION 7 - THERMAL AND MOISTURE PROTECTION

D7.01 REMOVE PORTION OF ROOF SYSTEM AS INDICATED.

D7.02 REMOVE PORTION OF SOFFIT BELOW ROOF SYSTEM AS INIDCATED.

D7.03 REMOVE PORTION OF ROOF FASCIA & FLASHING AS REQUIRED.

D7.04 REMOVE METAL DOWNSPOUT

D7.05 REMOVE METAL GUTTER

SECTION 8 - DOORS, WINDOWS, & OPENINGS

D8.01 REMOVE DOOR AND ASSCOCIATED HARDWARE IN ITS' ENTIRETY. E.T.R. FRAME, TYP. U.O.N.

D8.02 REMOVE HARDWARE AS REQUIRED. SEE HARDWARE SCHEDULE IN SPECS.

D8.03 REMOVE DOOR CLOSER IN ITS' ENTIRETY.

D8.04 REMOVE DOOR AND FRAME IN ITS' ENTIRETY.

D8.05 CAREFULLY REMOVE WOOD DOOR FRAME AS REQUIRED.

D8.06 SELECTIVELY REMOVE WINDOW AND MULLIANS AS INDICATED ON PLANS AND ELEVATIONS.

D8.07 REMOVE DOOR SILL IN ITS ENTIRETY.

SECTION 9 - FINISHES

D9.00 REMOVE RAISED FLOORING SYSTEM & SUPPORT STRUCTURE AND ALL ATTACHEMENTS.

D9.01 SELECTIVELY REMOVE WALL PARTITION & ATTACHMENTS AS REQUIRED.

D9.02 REMOVE EXISTING FLOOR FINISH AND SUBSTRATE DOWN TO EXISTING SLAB/FLOOR STRUCTURE. REFER TO HAZARDOUS MATERIALS REPORT AND ABATEMENT SPECIFICATION IN AREAS OF ASBESTOS CONTAINING MATERIALS. PREP EXISTING SLAB/FLOOR STRUCTURE TO RECEIVE NEW FINISH.

D9.03 REMOVE PLASTER CEILING AND SUSPENSION SYSTEM AND ALL RELATED ATTACHMENTS.

D9.04 REMOVE GWB SOFFIT, BATT INSULATION & ATTACHMENTS AS REQUIRED.

D9.05 REMOVE ACT CEILING AND GRID SYSTEM IN THEIR ENTIRETY.

D9.06 REMOVE BREAK METAL MULLION COVER. EXISTING SILL & STRUCTURAL TUBING TO REMAIN.

D9.07 REMOVE SECTION OF METAL RAILING AS REQUIRED AT AREA OF SITE DEMOLTION. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.

D9.08 CUT/CORE HOLE AS REQUIRED FOR NEW SPRINKLER PIPE & VENTING PIPING, PENETRATION AT MASONRY WALLS AND FLOORS. COORDINATE WITH PLUMBING DRWG'S.

D9.09 SCRAPE, CLEAN AND PREP FLOOR TO RECEIVE NEW PAINT.

D9.10 CUT HOLE AS REQUIRED FOR NEW PIPING OR DUCT

SECTION 10 - SPECIALTY EQUIPMENT

D10.01 REMOVE TIOLET PARTITIONS & OVERHEAD BRACKETS (IF REQUIRED) IN ENTIRETY.

D10.02 REMOVE METAL LOCKER UNITS WITH CARE AND RETURN TO OWNER.

D10.03 REMOVE MIRRORS & WALL MOUNTED ASSEMBLY IN ITS ENTIRETY.

D10.04 REMOVE CASEWORK AND ALL ATTACHEMENTS RELATED.

SECTION 14 - CONVEYING EQUIPMENT

D14.00 REMOVE HANDICAP LIFT IN ITS' ENTIRETY.
COORDINATE WITH ELECTRICAL ENGINEER TO REMOVE ELECTRICAL IF REQUIRED.

SECTION 22 - PLUMBING (COORD. W/ PLUMBING DWGS.)

D22.01 REMOVE EXISTING TOILET FIXTURE IN ENTIRETY.

D22.02 REMOVE EXISTING SINKS IN ENTIRETY.

D22.03 REMOVE EXISTING URINAL FIXTURE AND PIPING AS REQUIRED FOR NEW WORK.

D22.04 REMOVE EXISTING SLOP SINK, URINAL AND PIPINGS IN ENTIRETY.

D22.05 REMOVE EXISTING FLOOR DRAIN IN ENTIRETY

SECTION 23 - MECHANICAL (COORD. W/ MECHANICAL DWGS.)

D23.01 REMOVE MECHANICAL FIXTURE AS INIDCATED.
SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.02 REMOVE & RELOCATE AIR HANDLING UNIT AS REQUIRED.
SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.03 REMOVE EXISTING RADIATOR, INCLUDING ALL ASSOCIATED PIPING AND VALVES, BACK TO MAIN SUPPLY LINES. CAP OFF SUPPLY LINES AT MAIN.

SECTION 26 - ELECTRICAL (COORD. W/ ELECTRICAL DWGS.)

D26 .01 REMOVE, SALVAGE AND REINSTALL LIGHTING FIXTURES AS INDICATED.
SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

D26.02 REMOVE RECESSED LIGHT FIXTURE.
SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

SECTION 31 - EARTHWORK

D31.00 EXCAVATE AREA AS REQUIRED.
REFER TO CIVIL & STRUCTURAL DRAWINGS FOR MORE INFORMATION.

DEMO GENERAL NOTES

(E) = EXISTING

THESE PLANS DELINEATE THE BASIC SCOPE OF WORK FOR THE REMOVAL OF EXISTING MATERIALS. THESE PLANS HAVE BEEN DEVELOPED FROM OWNER PROVIDED AS-BUILTS AND MAY VARY FROM ACTUAL FIELD CONDITIONS. THE DEMOLITION DRAWINGS AND NOTES ARE PROVIDED WITH THE INTENT TO GENERALLY DESCRIBE AREA AND LIMITS OF WORK. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SITE AND CONDITIONS THEREON.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO ANY DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES RELATING TO THE DRAWINGS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY.

2. THE CONTRACTOR SHALL BE AWARE OF SELECTIVE DEMOLITION AT ALL SECTIONS OF WORK, REVIEWING ALL NEW RENOVATION DETAILS TO DETERMINE WHAT IS TO BE REMOVED OR TO REMAIN AND WILL BE RESPONSIBLE FOR REPLACEMENT IN-KIND ALL WORK INADVERTENTLY REMOVED.

3. ALL REQUIRED DEMOLITION NOT SPECIFICALLY DESIGNATED AS BEING THE WORK OF OTHER TRADES SHALL BE PERFORMED BY THE GENERAL CONTRACTOR.

4. CONTRACTORS TO RELEASE, REMOVE AND LOWER TO THE FLOOR ALL COMPONENTS, SYSTEMS AND ASSEMBLIES AS INDICATED, SPECIFIED, OR AS REQUIRED TO DO THEIR RESPECTIVE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DISASSEMBLING / CUTTING OR OTHERWISE MODIFYING EQUIPMENT AS REQUIRED TO PASS THROUGH EXISTING OPENINGS. G.C. SHALL ALSO BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING OF ALL MATERIALS SO TREATED.

5. THE CONTRACTOR SHALL REMOVE ITEMS TO BE DEMOLISHED AS INDICATED ON THE DRAWINGS WITH CARE BEING TAKEN NOT TO DAMAGE ADJACENT WALLS, CEILINGS, FLOORS, FINISHES, CASEWORK OR MILLWORK SCHEDULED TO REMAIN. THE WORK AREA WILL BE LEFT CLEAN AND READY TO RECEIVE NEW WORK.

6. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BARRICADES TO DIVIDE AREAS (CONSTRUCTION AND NORMAL USE) TO PROTECT USERS DURING CONSTRUCTION.

7. G.C. SHALL COORDINATE AND PERFORM ALL ASSOCIATED WORK WITH M / E/ P CONTRACTORS FOR ALL REQUIRED PENETRATIONS REQUIRING MISCELLANEOUS BLOCKING OR INFILL TO ACCOMMODATE M / E / P WORK.

8. REMOVE AND REPLACE ALL HARDWARE TO CLASSROOMS AND OFFICES AT ALL FLOOR LEVELS U.N.O. TYP. SEE SPECIFICATIONS FOR HARDWARE SCHEDULE.

9. REMOVE & REPLACE ALL WOODEN THRESHOLDS TO CLASSROOMS AND OFFICES AT FIRST FLOOR LEVEL U.N.O. TYP. SEE D1/A10.01 FOR TYPCIAL DEMOLITION DETAIL.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

DEMOLITION ROOF PLANS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

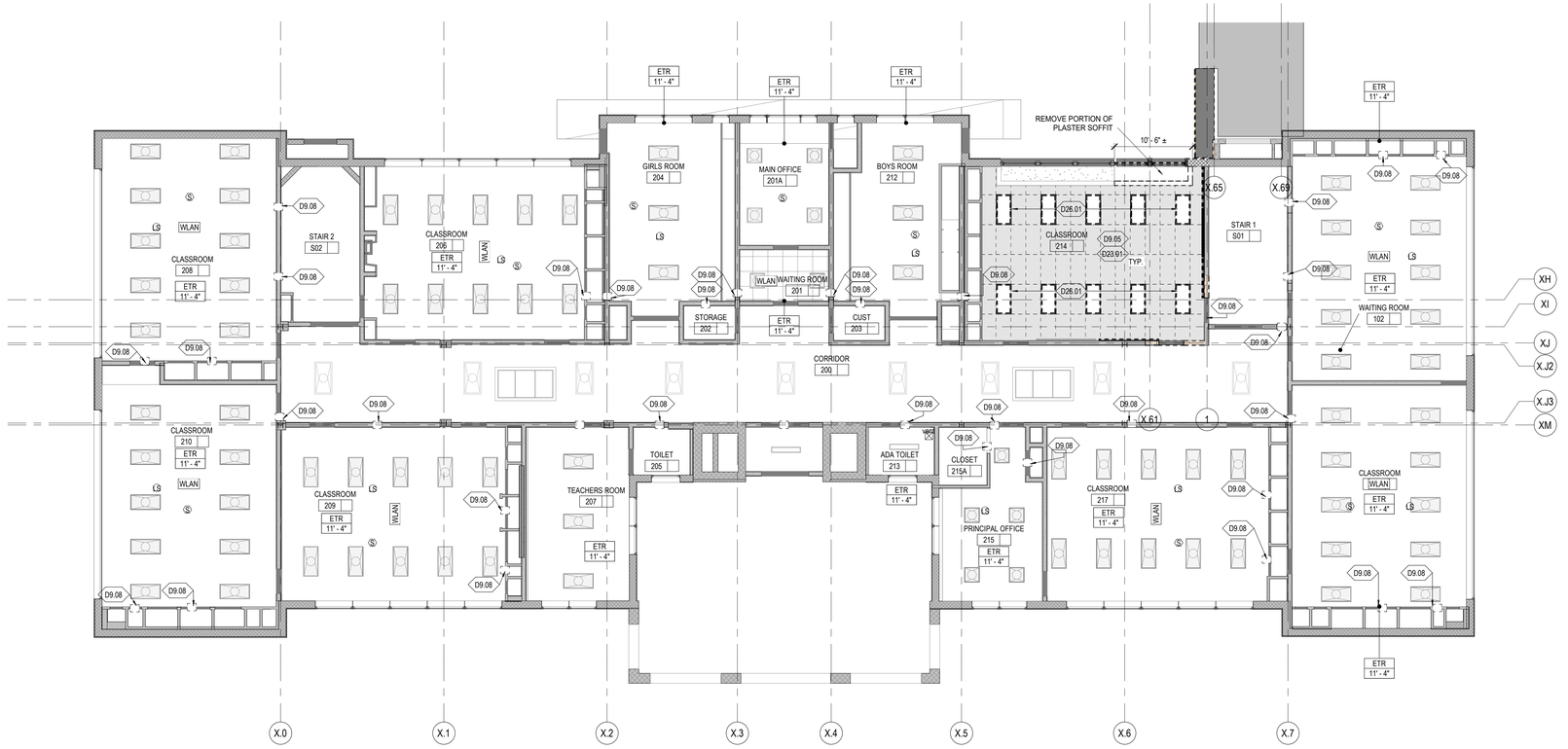
DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DKN
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

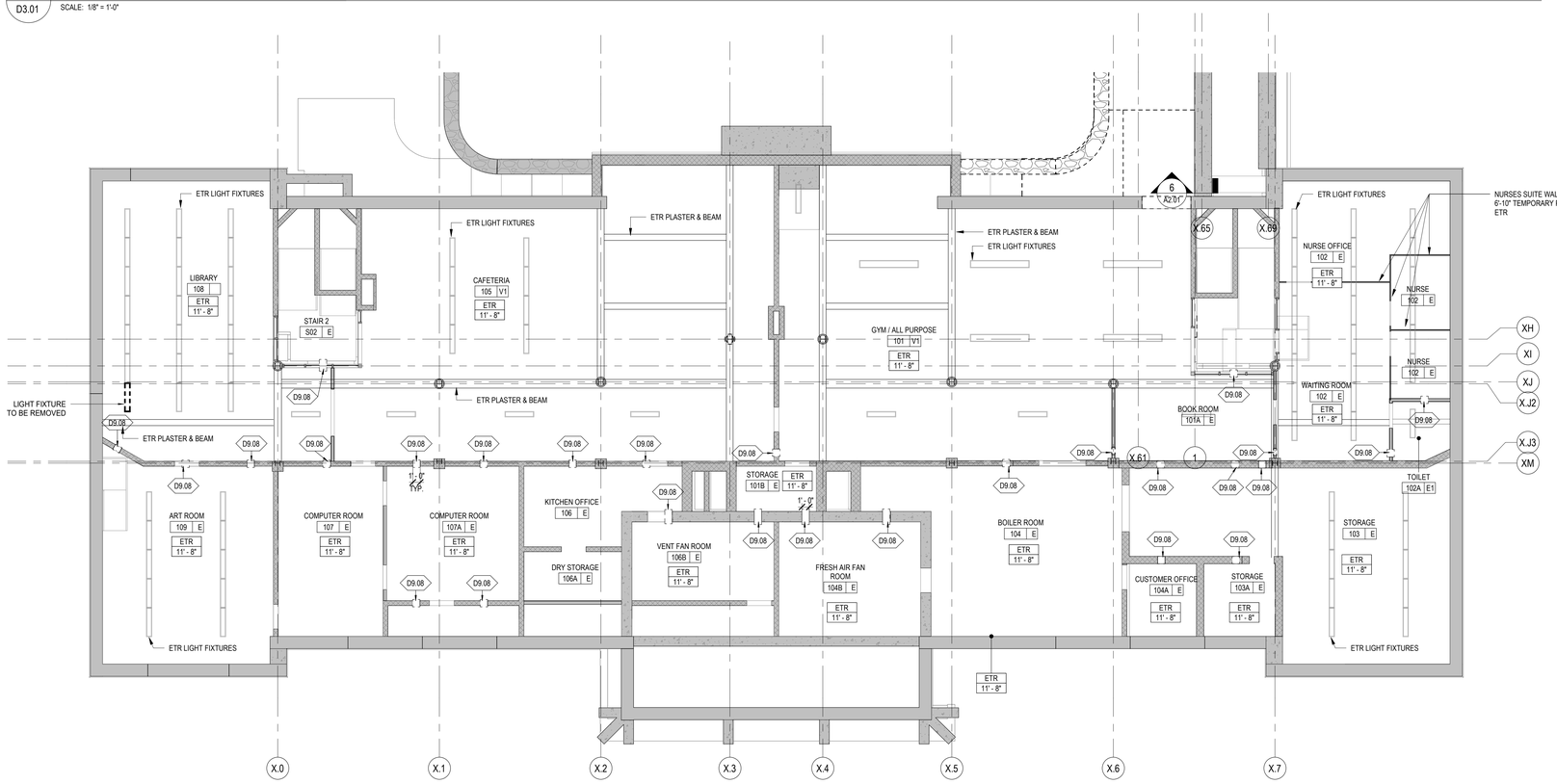
D2.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/17/2024 7:51:29 AM



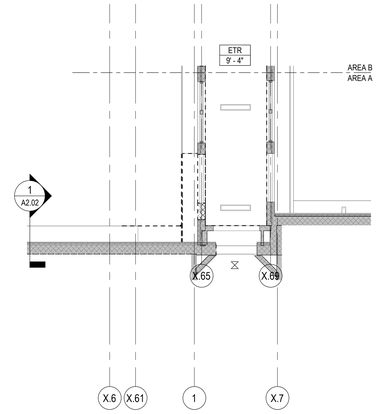
DEMOLITION FIRST LEVEL REFLECTED CEILING PLAN PART A

2 / D3.01 — SCALE: 1/8" = 1'-0"



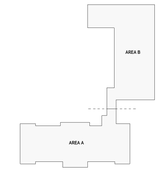
DEMOLITION LOWER LEVEL REFLECTED CEILING PLAN PART A

1 / D3.01 — SCALE: 1/8" = 1'-0"



3 / D3.01 DEMO RCP INTERMEDIATE - AREA A

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



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
DEMOLITION REFLECTED CEILING PLANS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

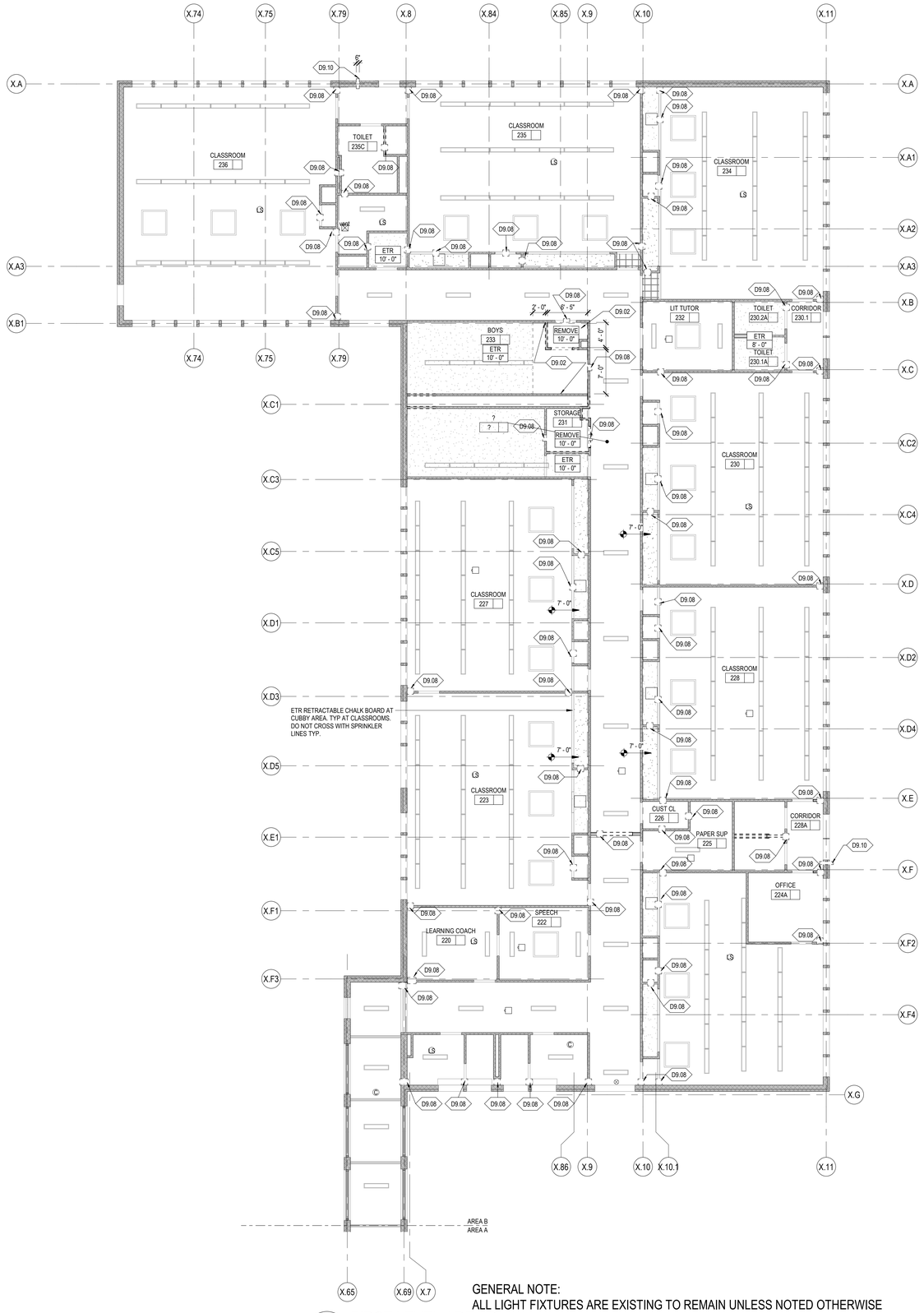
DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	JL
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

D3.01

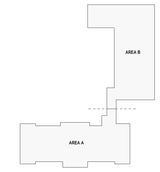
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/17/2024 7:33:39 AM



GENERAL NOTE:
ALL LIGHT FIXTURES ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE

2 / D3.02 FIRST LEVEL AREA B

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



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
DEMOLITION REFLECTED CEILING PLANS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

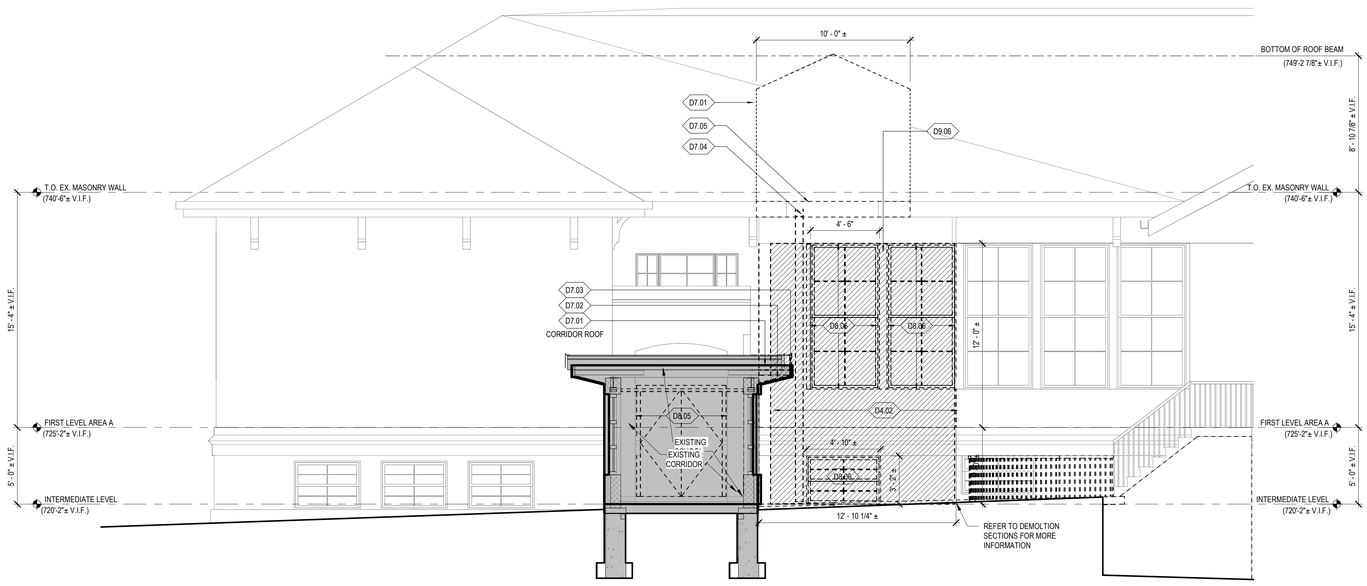
DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	JL
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

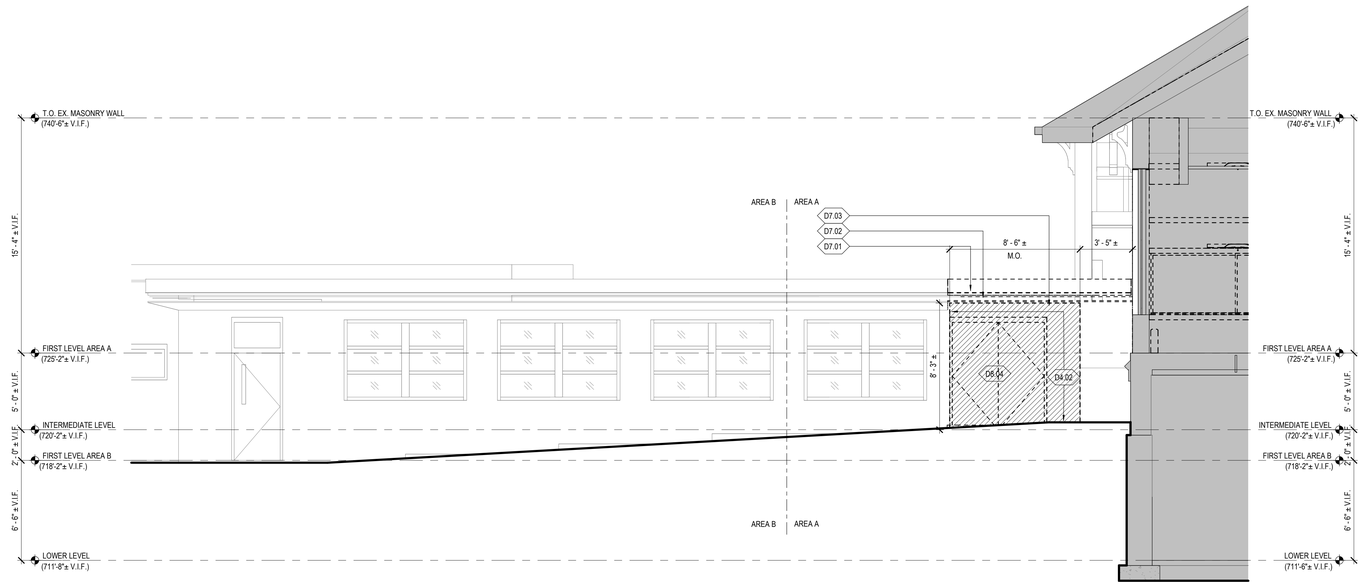
D3.02

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/17/2024 7:54:42 AM



1 DEMOLITION SOUTH ELEVATION

1/4" = 1'-0"



2 DEMOLITION EAST ELEVATION AT CONNECTING CORRIDOR

1/4" = 1'-0"

DEMO KEY NOTES

SECTION 3 - CONCRETE

D3.00 REMOVE CONCRETE PAD IN ITS' ENTIRETY

D3.01 REMOVE CONCRETE BLOCK WALLS AS INDICATED ON PLAN.

D3.02 REMOVE CONCRETE SLAB AS REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING SERVICES. SEE DEMOLITION LEGEND AND CONSULTANT DRAWINGS FOR MORE INFORMATION.

SECTION 4 - MASONRY

D4.01 SELECTIVE DEMOLITION OF MASONRY WALL AND/OR FOUNDATION WALL AS REQUIRED FOR NEW OPENING OR NEW PIPING. SEE STRUCTURAL OR PLUMBING FOR MORE INFO.

D4.02 CONTRACTOR TO PROVIDE TEMPORARY SUPPORT AND REMOVE PORTION OF MASONRY WALL FOR INSTALLATION OF NEW DOOR & FRAME, OR OTHER OPENING(S). MASON SHALL PERFORM SAW-TOOTH REMOVAL AND PATCHING TO MATCH EXISTING. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.

D4.03 CONTRACTOR TO TEMPORARY REMOVE STONE RETAINING WALL AND CONCRETE FOUNDATION WALL AS REQUIRED FOR ACCESS TO AREA & EXCAVATION WORK.

SECTION 6 - WOOD, PLASTIC, & COMPOSITE

D6.01 REMOVE WOOD THRESHOLD AND ALL RELATED ATTACHMENTS.

D6.02 REMOVE WOOD HANDRAILS AND ALL RELATED ATTACHMENTS

D6.03 REMOVE WOODEN STAIR AT PLATFORM

D6.04 REMOVE ANY ATTACHMENTS TO THE WALL AS SHOWN. SEE INTERIOR ELEVATION.

SECTION 7 - THERMAL AND MOISTURE PROTECTION

D7.01 REMOVE PORTION OF ROOF SYSTEM AS INDICATED.

D7.02 REMOVE PORTION OF SOFFIT BELOW ROOF SYSTEM AS INIDCATED.

D7.03 REMOVE PORTION OF ROOF FASCIA & FLASHING AS REQUIRED.

D7.04 REMOVE METAL DOWNSPOUT

D7.05 REMOVE METAL GUTTER

SECTION 8 - DOORS, WINDOWS, & OPENINGS

D8.01 REMOVE DOOR AND ASSCOCIATED HARDWARE IN ITS' ENTIRETY. E.T.R. FRAME, TYP. U.O.N.

D8.02 REMOVE HARDWARE AS REQUIRED. SEE HARDWARE SCHEDULE IN SPECS.

D8.03 REMOVE DOOR CLOSER IN ITS' ENTIRETY.

D8.04 REMOVE DOOR AND FRAME IN ITS' ENTIRETY.

D8.05 CAREFULLY REMOVE WOOD DOOR FRAME AS REQUIRED.

D8.06 SELECTIVELY REMOVE WINDOW AND MULLIANS AS INDICATED ON PLANS AND ELEVATIONS.

D8.07 REMOVE DOOR SILL IN ITS ENTIRETY.

SECTION 9 - FINISHES

D9.00 REMOVE RAISED FLOORING SYSTEM & SUPPORT STRUCTURE AND ALL ATTACHEMENTS.

D9.01 SELECTIVELY REMOVE WALL PARTITION & ATTACHMENTS AS REQUIRED.

D9.02 REMOVE EXISTING FLOOR FINISH AND SUBSTRATE DOWN TO EXISTING SLAB/FLOOR STRUCTURE. REFER TO HAZARDOUS MATERIALS REPORT AND ABATEMENT SPECIFICATION IN AREAS OF ASBESTOS CONTAINING MATERIALS. PREP EXISTING SLAB/FLOOR STRUCTURE TO RECEIVE NEW FINISH.

D9.03 REMOVE PLASTER CEILING AND SUSPENSION SYSTEM AND ALL RELATED ATTACHMENTS.

D9.04 REMOVE GWB SOFFIT, BATT INSULATION & ATTACHMENTS AS REQUIRED.

D9.05 REMOVE ACT CEILING AND GRID SYSTEM IN THEIR ENTIRETY.

D9.06 REMOVE BREAK METAL MULLION COVER. EXISTING SILL & STRUCTURAL TUBING TO REMAIN.

D9.07 REMOVE SECTION OF METAL RAILING AS REQUIRED AT AREA OF SITE DEMOLTION. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.

D9.08 CUT/CORE HOLE AS REQUIRED FOR NEW SPRINKLER PIPE & VENTING PIPING, PENETRATION AT MASONRY WALLS AND FLOORS. COORDINATE WITH PLUMBING DRWG'S.

D9.09 SCRAPE, CLEAN AND PREP FLOOR TO RECEIVE NEW PAINT.

D9.10 CUT HOLE AS REQUIRED FOR NEW PIPING OR DUCT

SECTION 10 - SPECIALTY EQUIPMENT

D10.01 REMOVE TIOLET PARTITIONS & OVERHEAD BRACKETS (IF REQUIRED) IN ENTIRETY.

D10.02 REMOVE METAL LOCKER UNITS WITH CARE AND RETURN TO OWNER.

D10.03 REMOVE MIRRORS & WALL MOUNTED ASSEMBLY IN ITS ENTIRETY.

D10.04 REMOVE CASEWORK AND ALL ATTACHEMENTS RELATED.

SECTION 14 - CONVEYING EQUIPMENT

D14.00 REMOVE HANDICAP LIFT IN ITS' ENTIRETY. COORDINATE WITH ELECTRICAL ENGINEER TO REMOVE ELECTRICAL IF REQUIRED.

SECTION 22 - PLUMBING (COORD. W/ PLUMBING DWGS.)

D22.01 REMOVE EXISTING TOILET FIXTURE IN ENTIRETY.

D22.02 REMOVE EXISTING SINKS IN ENTIRETY.

D22.03 REMOVE EXISTING URINAL FIXTURE AND PIPING AS REQUIRED FOR NEW WORK.

D22.04 REMOVE EXISTING SLOP SINK, URINAL AND PIPINGS IN ENTIRETY.

D22.05 REMOVE EXISTING FLOOR DRAIN IN ENTIRETY

SECTION 23 - MECHANICAL (COORD. W/ MECHANICAL DWGS.)

D23.01 REMOVE MECHANICAL FIXTURE AS INIDCATED. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.02 REMOVE & RELOCATE AIR HANDLING UNIT AS REQUIRED. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

D23.03 REMOVE EXISTING RADIATOR, INCLUDING ALL ASSOCIATED PIPING AND VALVES, BACK TO MAIN SUPPLY LINES. CAP OFF SUPPLY LINES AT MAIN.

SECTION 26 - ELECTRICAL (COORD. W/ ELECTRICAL DWGS.)

D26 .01 REMOVE, SALVAGE AND REINSTALL LIGHTING FIXTURES AS INDICATED. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

D26.02 REMOVE RECESSED LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION

SECTION 31 - EARTHWORK

D31.00 EXCAVATE AREA AS REQUIRED. REFER TO CIVIL & STRUCTURAL DRAWINGS FOR MORE INFORMATION.

DEMO ELEVATION LEGEND

CONTRACTOR TO PROVIDE TEMPORARY SUPPORT AND REMOVE PORTION OF EXISTING WALL. EXISTING BUILDING TO REMAIN WEATHERTIGHT AND SECURE.

EXISTING BUILDING



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

DEMOLITION EXTERIOR ELEVATIONS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

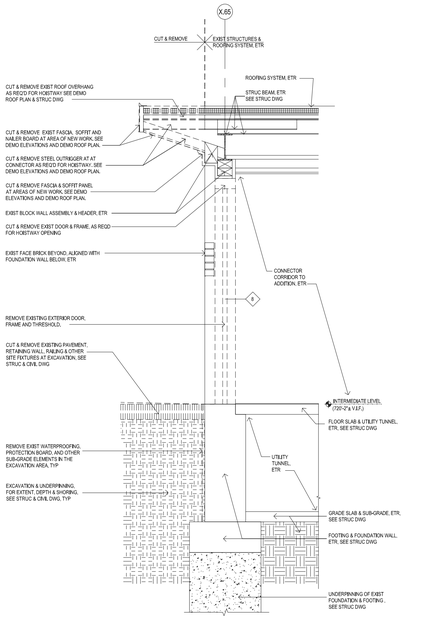
DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DKN
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

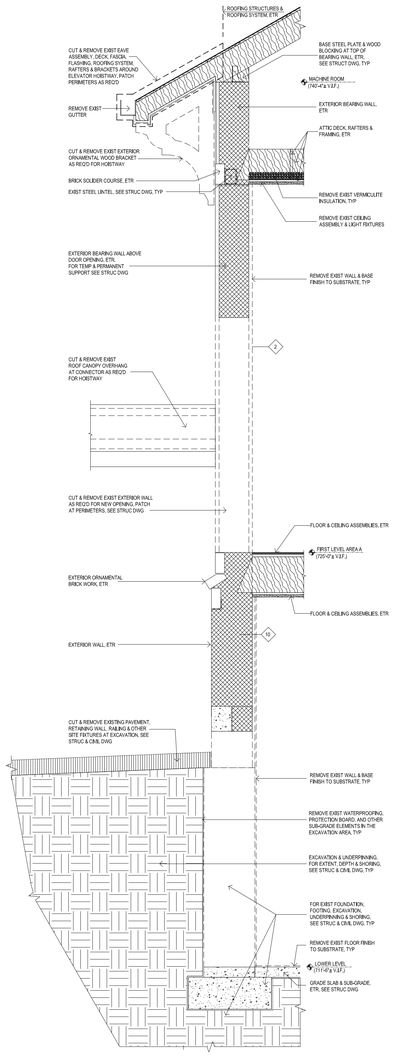
D4.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/17/2024 8:00:23 AM



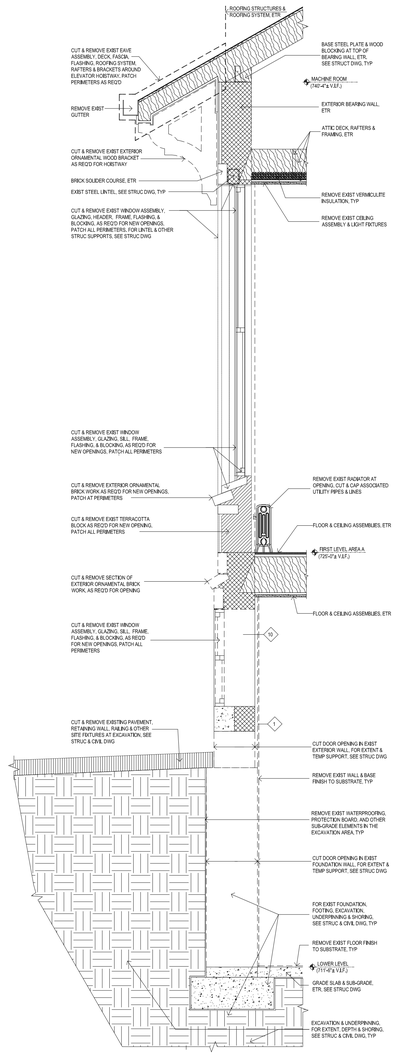
5 D6.01 DEMOLITION SECTION AT CONNECTOR

SCALE: 1/2" = 1'-0"



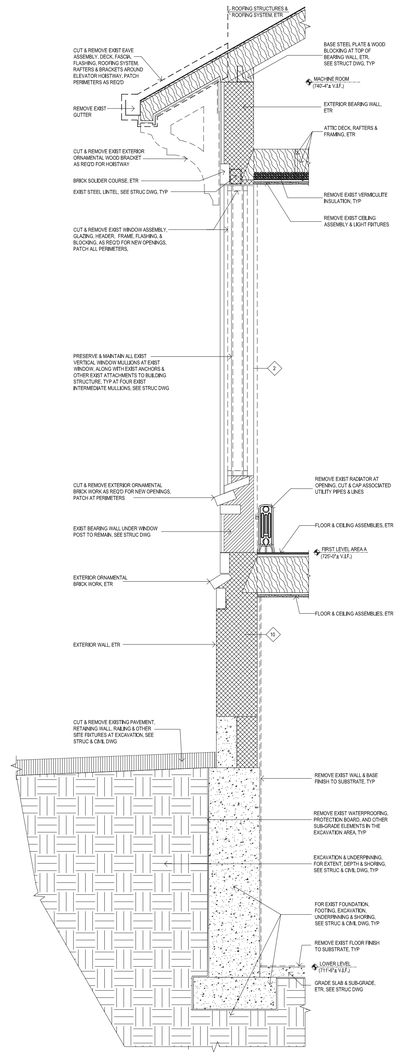
1 D6.01 DEMOLITION SECTION

SCALE: 1/2" = 1'-0"



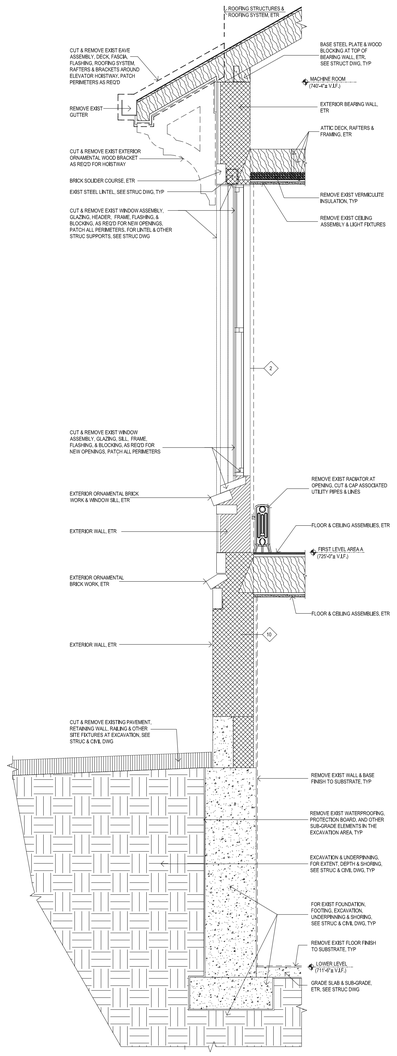
2 D6.01 DEMOLITION SECTION

SCALE: 1/2" = 1'-0"



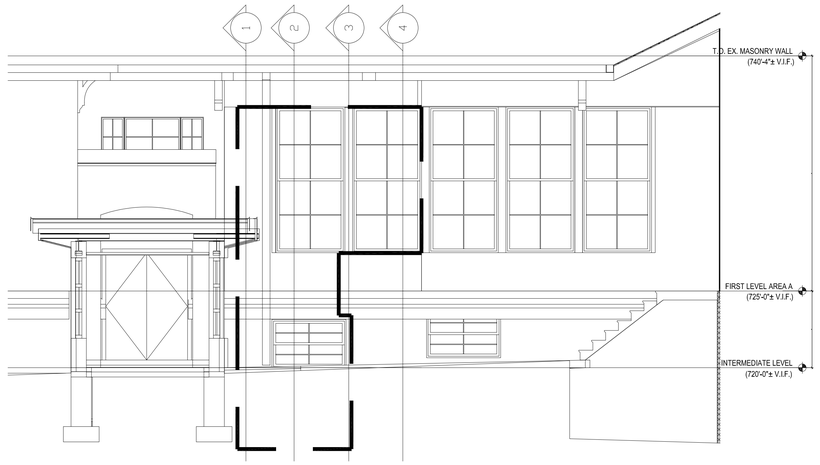
3 D6.01 DEMOLITION SECTION

SCALE: 1/2" = 1'-0"



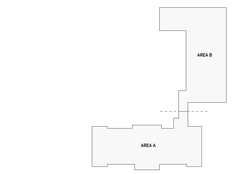
4 D6.01 DEMOLITION SECTION

SCALE: 1/2" = 1'-0"



- D6.01 KEY ELEVATION

SCALE: 1/4" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

SELECTIVE DEMOLITION WALL SECTIONS & KEY ELEVATION

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

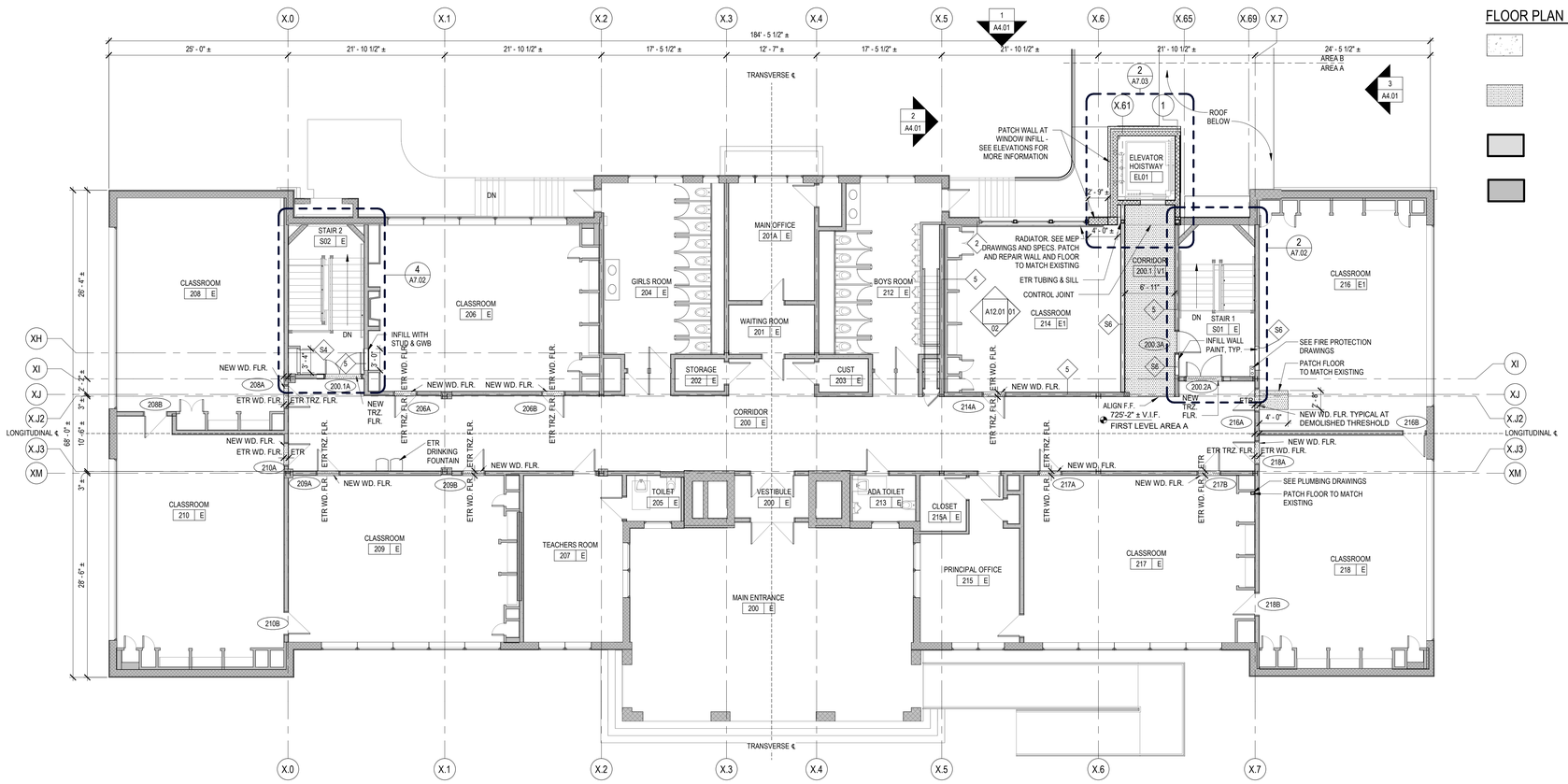
SCALE	As Indicated
DRAWN BY	EA
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

D6.01

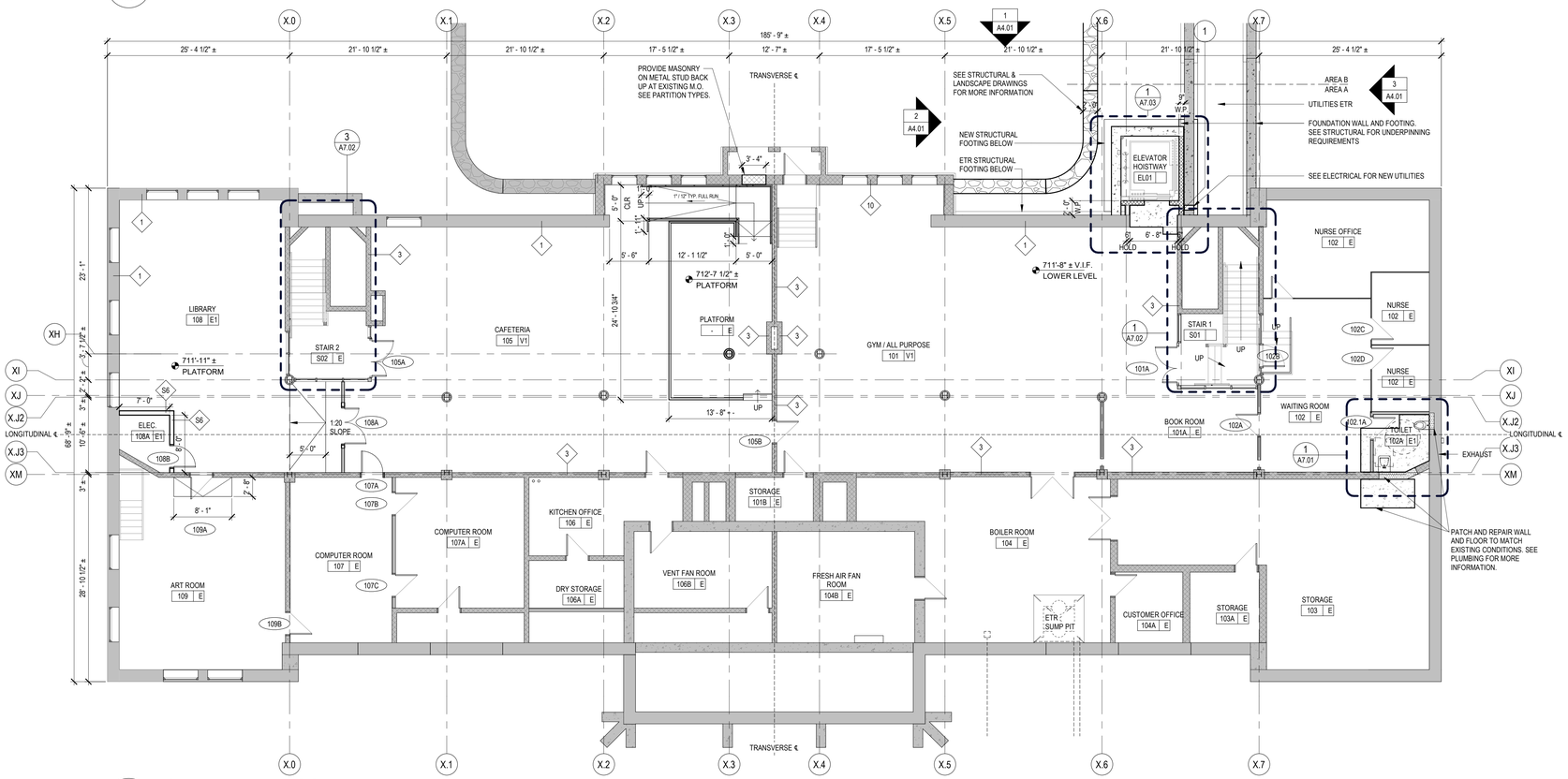
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

9/4/2024 10:30:23 AM



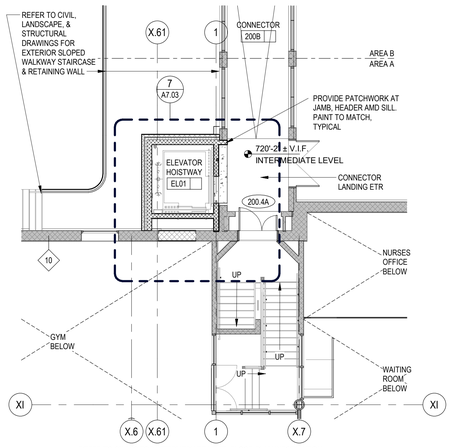
3 FIRST FLOOR PLAN - AREA A

A1.01 SCALE: 1/8" = 1'-0"



1 LOWER LEVEL FLOOR PLAN - AREA A

A1.01 SCALE: 1/8" = 1'-0"



2 INTERMEDIATE LEVEL FLOOR PLAN

A1.01 SCALE: 1/8" = 1'-0"

FLOOR PLAN LEGEND

- PORTION OF FLOOR SLAB TO BE INFILLED. COORDINATE WITH ALL TRADES.
- PROVIDE NEW VCT TILE FLOOR FINISH. SEE FINISH SCHEDULE
- UNEXCAVATED
- EXISTING TO REMAIN

GENERAL NOTES - FLOOR PLANS

1. THE CONTRACTOR SHALL FIELD CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ARCHITECT OF ANY DISCREPANCY PRIOR TO COMMENCEMENT OF ANY NEW WORK.

2. DIMENSION STRINGS ARE FROM COLUMN LINES TO CENTER LINE OF INTERIOR METAL STUD WALLS AND TO FACE OF MASONRY, UNLESS NOTED OTHERWISE.

3. REFER TO ROOM FINISH LEGEND AND ROOM TAGS FOR FLOOR, WALL AND BASE FINISHES. PAINT ALL EXPOSED SURFACES UNLESS NOTED OTHERWISE.

4. PROVIDE AND INSTALL WOOD BLOCKING IN METAL STUD PARTITIONS FOR WALL MOUNTED ASSEMBLIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: INTERACTIVE FLAT PANELS, TOILET ACCESSORIES, TOILET PARTITIONS, FIRE EXTINGUISHERS, CASEWORK AND CUSTOM MILLWORK.

5. PROVIDE AND INSTALL METAL FLAT STOCK AT ALL TACKBOARDS AND MARKERBOARDS.

6. INSTALL J BEAD AND SEALANT AT INTERSECTIONS OF DISSIMILAR MATERIALS.

7. PROVIDE AND INSTALL CORNER GUARDS AT ALL OUTSIDE GYPSUM BOARD CORNERS IN CORRIDORS AND BREAK OUT AREAS.

8. SEE STRUCTURAL DRAWINGS FOR STABILIZING ANGLES SIZES, SPACING, AND LOCATIONS. SEE STRUCTURAL DRAWINGS FOR C.M.U. REINFORCING AND STEEL CROSS BRACING.

GENERAL NOTES - INTERIOR FINISHES

1. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISHES.

2. SEE INTERIOR ELEVATIONS FOR MATERIAL AND FINISH HEIGHTS.

3. SEE INTERIOR ELEVATIONS FOR ACOUSTICAL WALL PANEL SIZES AND PLACEMENT.

4. UNLESS NOTED OTHERWISE, CLOSETS SHALL HAVE SAME FINISH AS THEIR RESPECTIVE ROOM.

5. PROVIDE CERAMIC TILE TYPE 1 (SEE SPECIFCATIONS) AT CASEWORK WHERE THERE ARE SINKS BETWEEN THE UPPER AND LOWER CABINET FOR THE FULL RUN OF CABINETS. CERAMIC TILE AT END RETURNS IS NOT REQUIRED

6. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISHES.

7. CHANGES IN CERAMIC TILE PATTERNS AND CHANGES IN PAINT COLORS TO OCCUR AT INSIDE CORNERS.

FLOOR FINISH COLOR LEGEND

KEY	FLOOR FINISH	BASE FINISH	WALL FIINISH
E	ETR	ETR	ETR
E1	ETR / PARTIAL PATCH	ETR/ PARTIAL PATCH	ETR / PARTIAL PATCH
V1	VCT	RESILIENT	PAINT/ETR FINISHES
C	CEMENTITIOUS	RESILIENT	ETR



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

LOWER LEVEL & INTERMEDIATE LEVEL FLOOR PLANS, ROOM FINISH LEGEND & GENERAL NOTES

MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

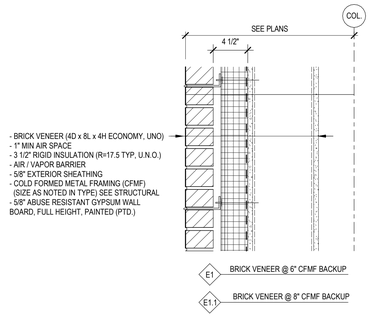
DRAWING INFORMATION

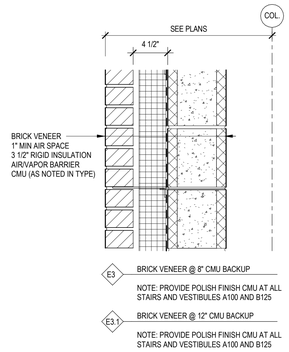
SCALE	1/8" = 1'-0"
DRAWN BY	WT
CHECKED	CHECKER
DATE	SEPTEMBER 18, 2024

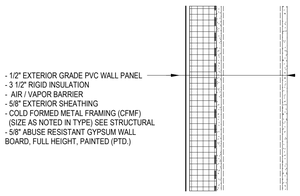
DRAWING NUMBER

A1.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/18/2024 7:31:31 PM

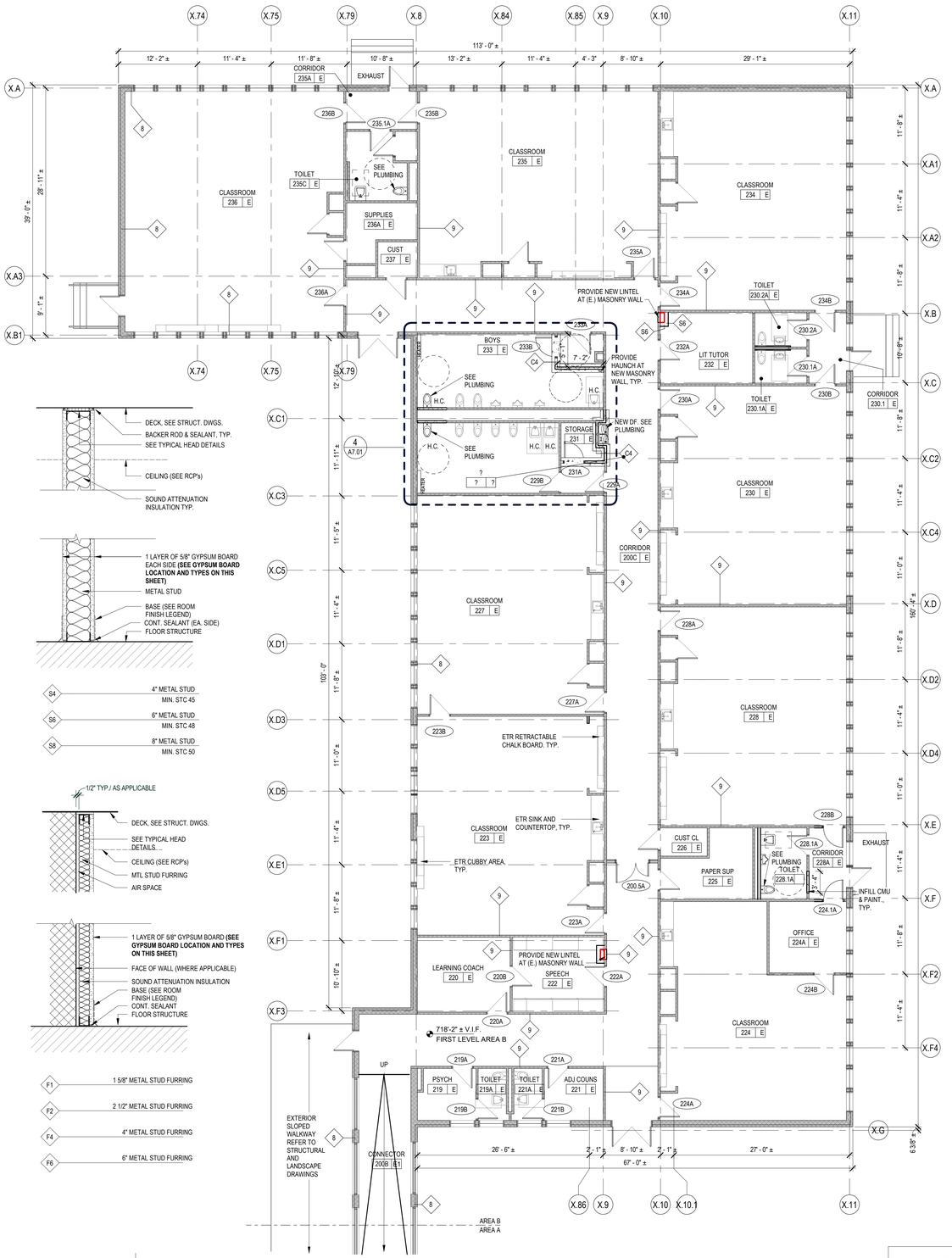


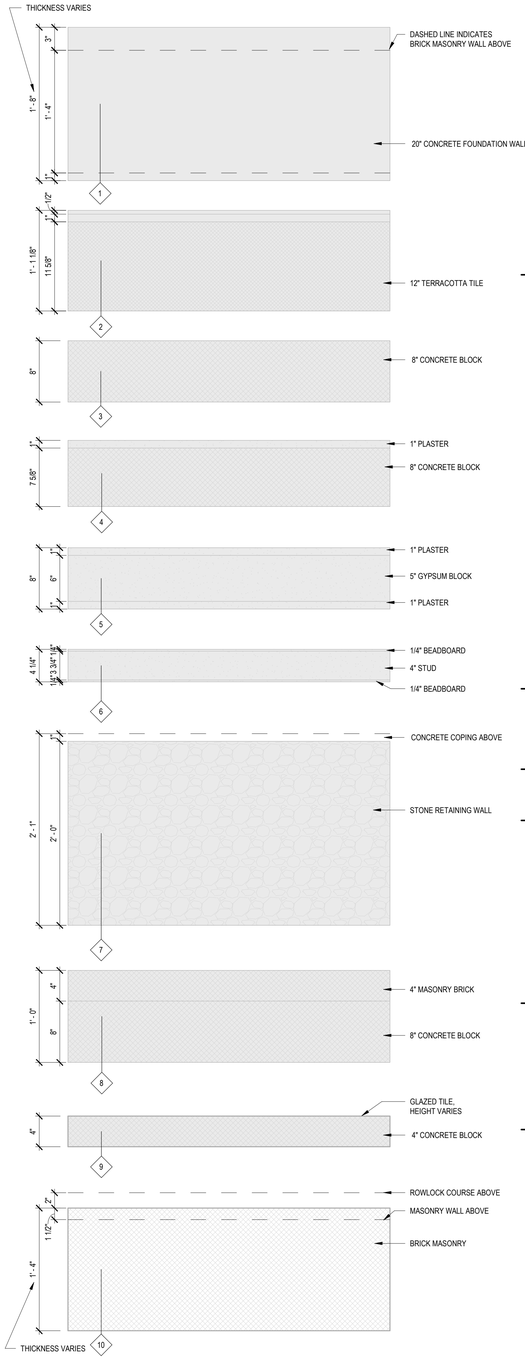




NOTES:

1. SEE WALL SECTIONS & WALL TYPE FOR SIZE OF STUD OR CMU, TYPICAL
2. CODDINATE CAST STONE PROFILE / SHAPES w WALL SECTIONS & DETAILS.

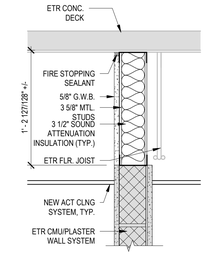




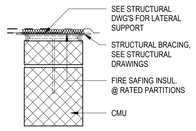


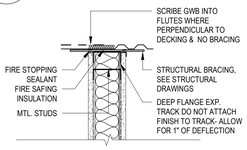
KEY PLAN

EXISTING PARTITION TYPES

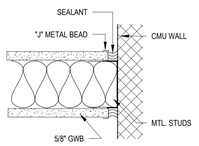


5 A1.02 **HEAD DETAIL**
SCALE: 1 1/2" = 1'-0"





7 A1.02 **HEAD DETAIL**
SCALE: 1 1/2" = 1'-0"



8 A1.02 **STUD TO CMU**
SCALE: 1 1/2" = 1'-0"

1 A1.02 **FIRST LEVEL FLOOR PLAN AREA B**
SCALE: 1/8" = 1'-0"

PARTITION TYPE GENERAL NOTES

1. SEE STRUCTURAL DRAWINGS FOR C.M.U. REINFORCING AND STEEL CROSS BRACING.
2. SEE STRUCTURAL DRAWINGS FOR STABILIZING ANGLES SIZES, SPACING, AND LOCATIONS.
3. INSTALL WOOD BLOCKING IN METAL STUD PARTITIONS FOR WALL MOUNTED ASSEMBLIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: INTERACTIVE FLAT PANELS, TOILET ACCESSORIES. TOILET PARTITIONS, FIRE EXTINGUISHERS AND ALL MILLWORK.
4. SEE EXTERIOR ELEVATIONS ON A4 SERIES FOR BRICK VENEER TYPES.
5. REFER TO ROOM FINISH LEGEND FOR WALL AND BASE FINISHES PAINT ALL EXPOSED SURFACES UNLESS OTHERWISE NOTED.
6. ALL PARTITIONS EXTEND TO STRUCTURE ABOVE.
7. SEE INTERIOR ELEVATIONS FOR MASONRY PATTERNS.

GYPSUM WALL BOARD LOCATIONS AND TYPE

AT SINGLE LAYER OF ALL GYPSUM BOARD PARTITIONS USE: 5/8" ABUSE RESISTANT GYPSUM WALLBOARD, FULL HEIGHT

AT DOUBLE LAYER OF ALL GYPSUM WALLBOARD PARTITIONS:
INNER LAYER - USE 5/8" GYPSUM WALLBOARD, FULL HEIGHT
OUTER LAYER - USE 5/8" ABUSE RESISTANT WALLBOARD, FULL HEIGHT

GENERAL NOTE:

FOR FLOOR FINISH TRANSITIONS INDICATED ON THE FLOOR PLANS SEE TYPICAL TRANSITION DETAILS ON DRAWING A10.21

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
FIRST LEVEL FLOOR PLANS AREA B & PARTITION TYPES

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

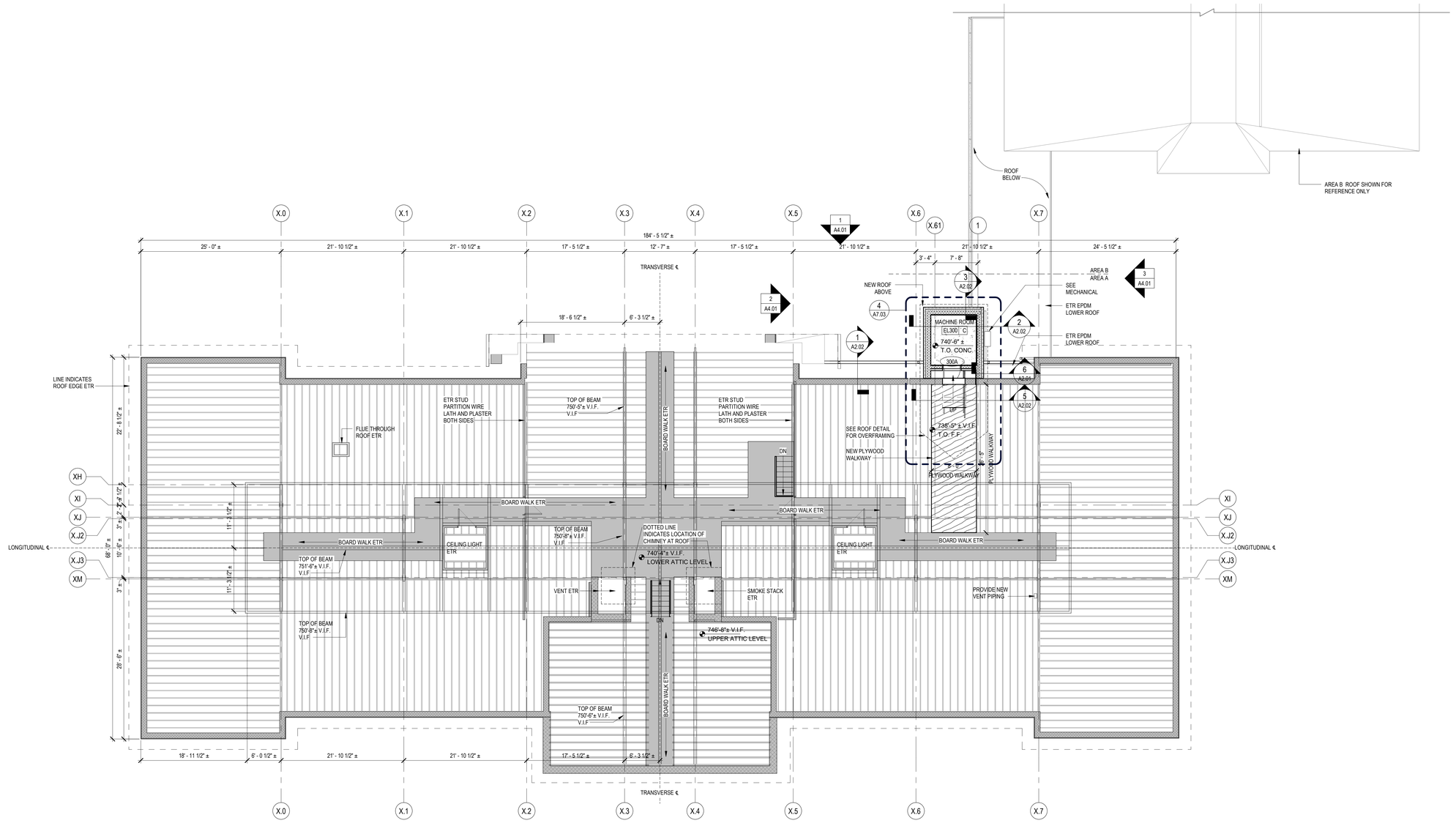
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	RS / WL
CHECKED	WL
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER
A1.02

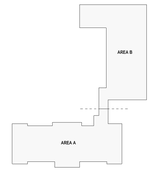
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/18/2024 7:41:46 PM



1 / A1.03 ATTIC LEVEL FLOOR PLAN AREA A

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

GENERAL NOTE:
ETR WOOD AND STEEL FRAMING SYMETRICAL ABOUT CENTERLINE, UNLESS NOTED OTHERWISE



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
ATTIC LEVEL FLOOR PLANS

MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

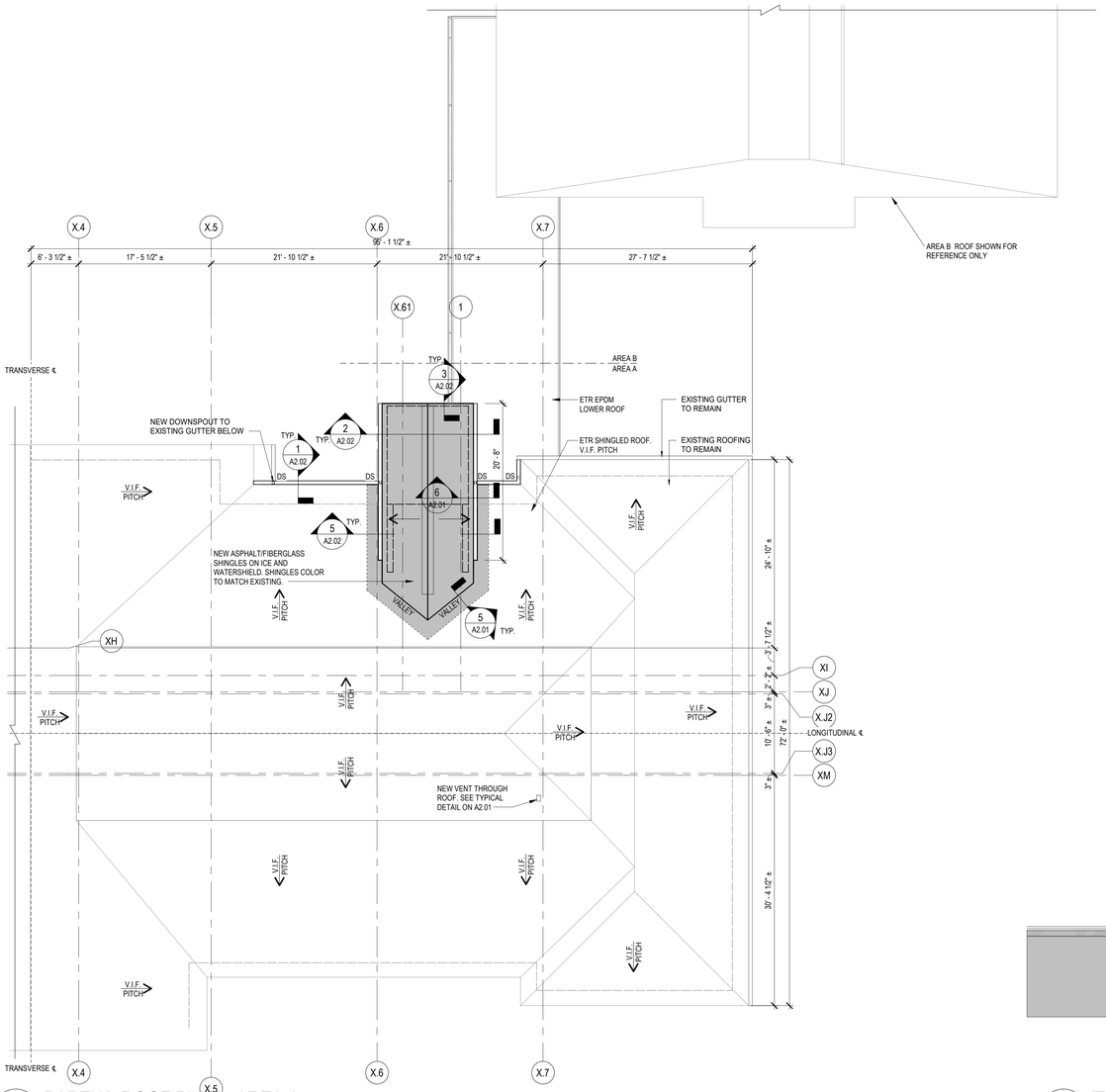
SCALE	1/8" = 1'-0"
DRAWN BY	DKN
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

A1.03

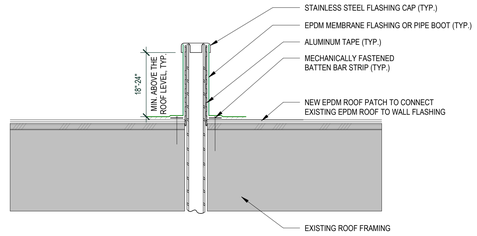
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

9/19/2024 7:45:11 PM



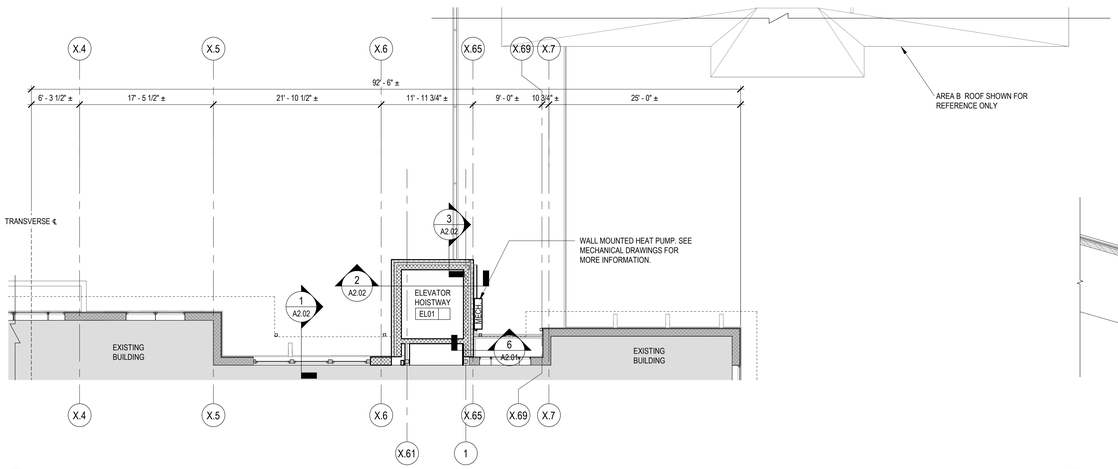
1 A2.01 PARTIAL ROOF PLAN - AREA A

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



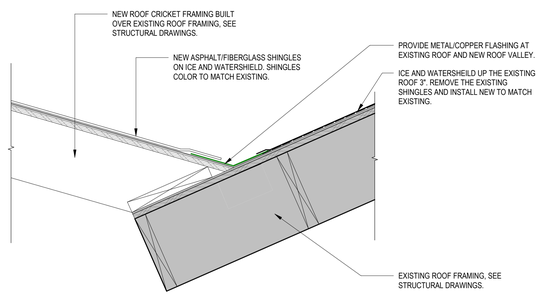
4 A2.01 TYP VENT THRU EXISTING EPDM ROOF

SCALE: 1 1/2" = 1'-0"



2 A2.01 LOWER ROOF PLAN - AREA A

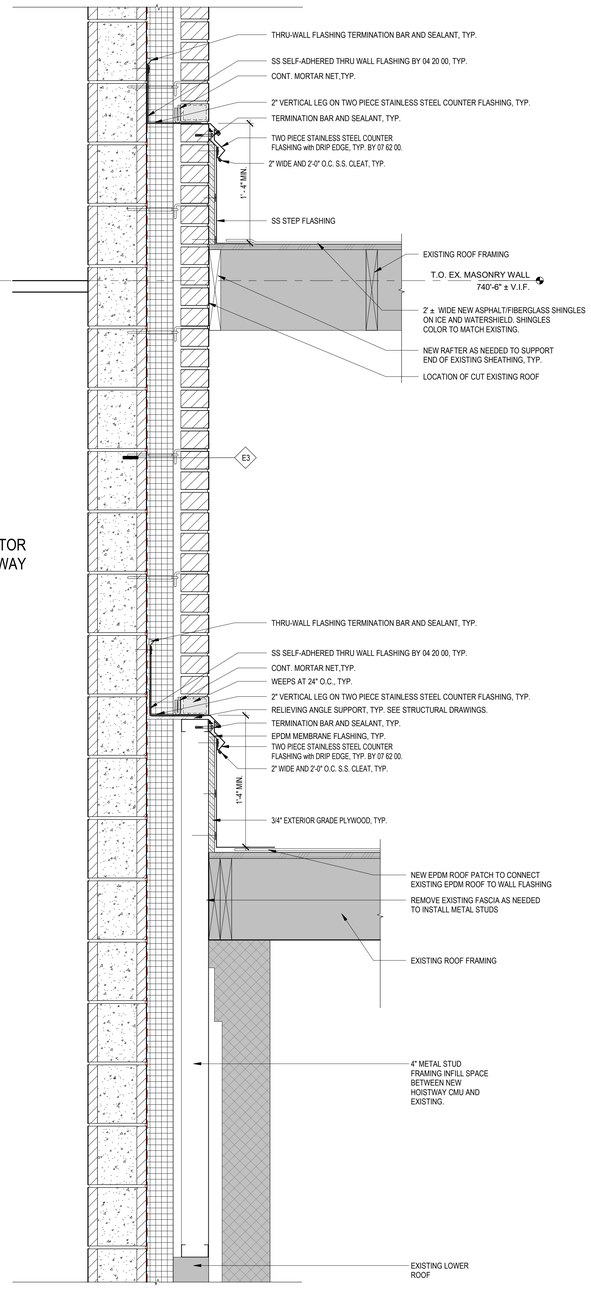
SCALE: 1/8" = 1'-0"



5 A2.01 TYPICAL ROOF VALLEY DETAIL

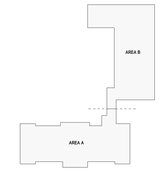
SCALE: 1 1/2" = 1'-0"

ELEVATOR HOISTWAY



6 A2.01 TYPICAL ROOF DETAIL

SCALE: 1 1/2" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE
SKA-3	Revision 4	Date 4

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

ROOF PLANS

MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

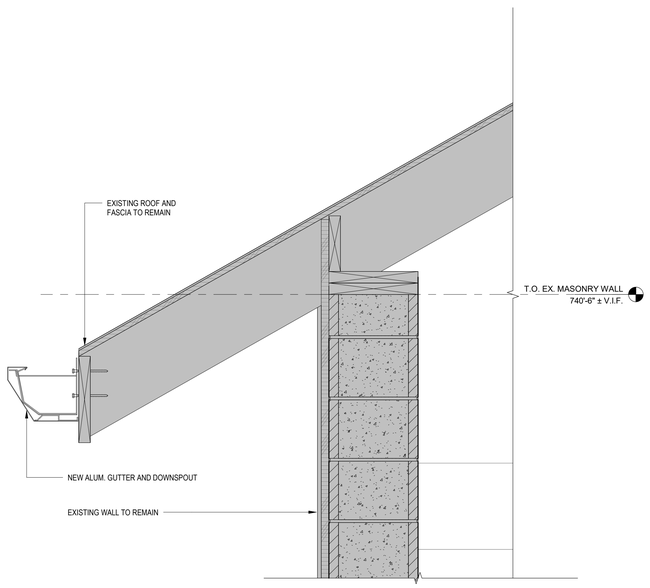
SCALE	As indicated
DRAWN BY	DKN
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

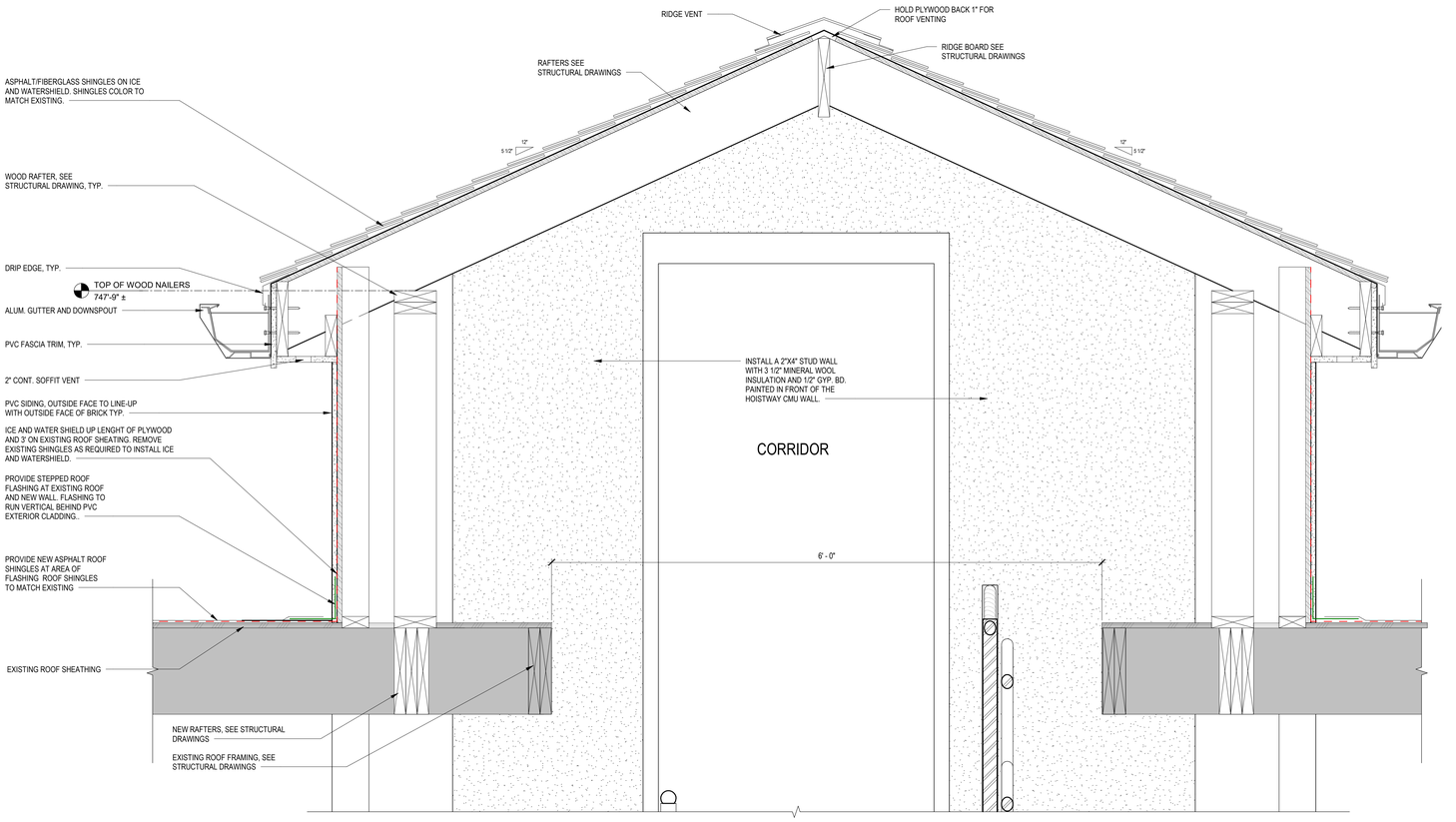
A2.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

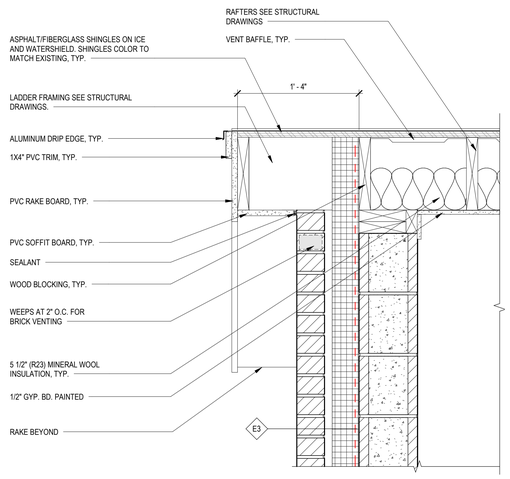
9/19/2024 7:46:37 PM



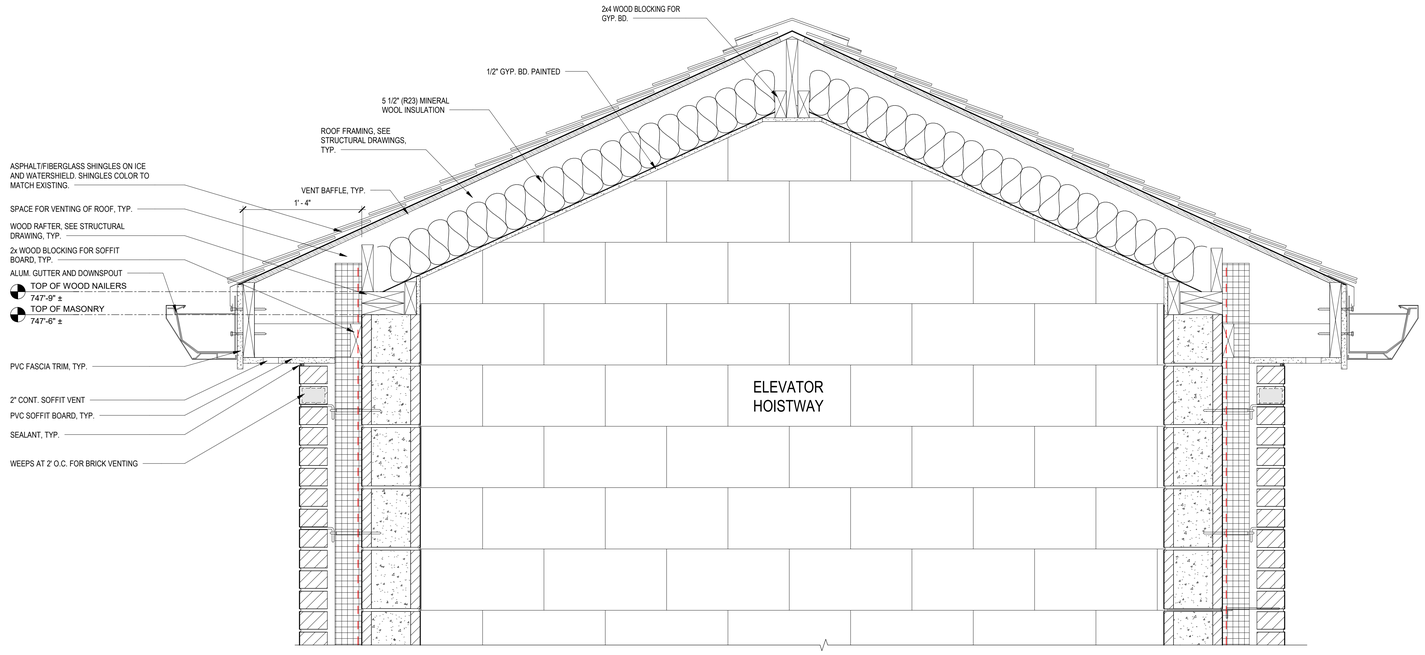
1 A2.02 **TYPICAL ROOF DETAIL**
SCALE: 1 1/2" = 1'-0"



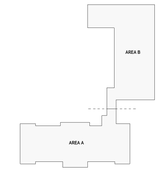
5 A2.02 **TYPICAL ROOF DETAIL**
SCALE: 1 1/2" = 1'-0"



3 A2.02 **TYPICAL ROOF DETAIL**
SCALE: 1 1/2" = 1'-0"



2 A2.02 **TYPICAL ROOF DETAIL**
SCALE: 1 1/2" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA
UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
ROOF DETAILS

MVG
MOUNT VERNON GROUP
ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

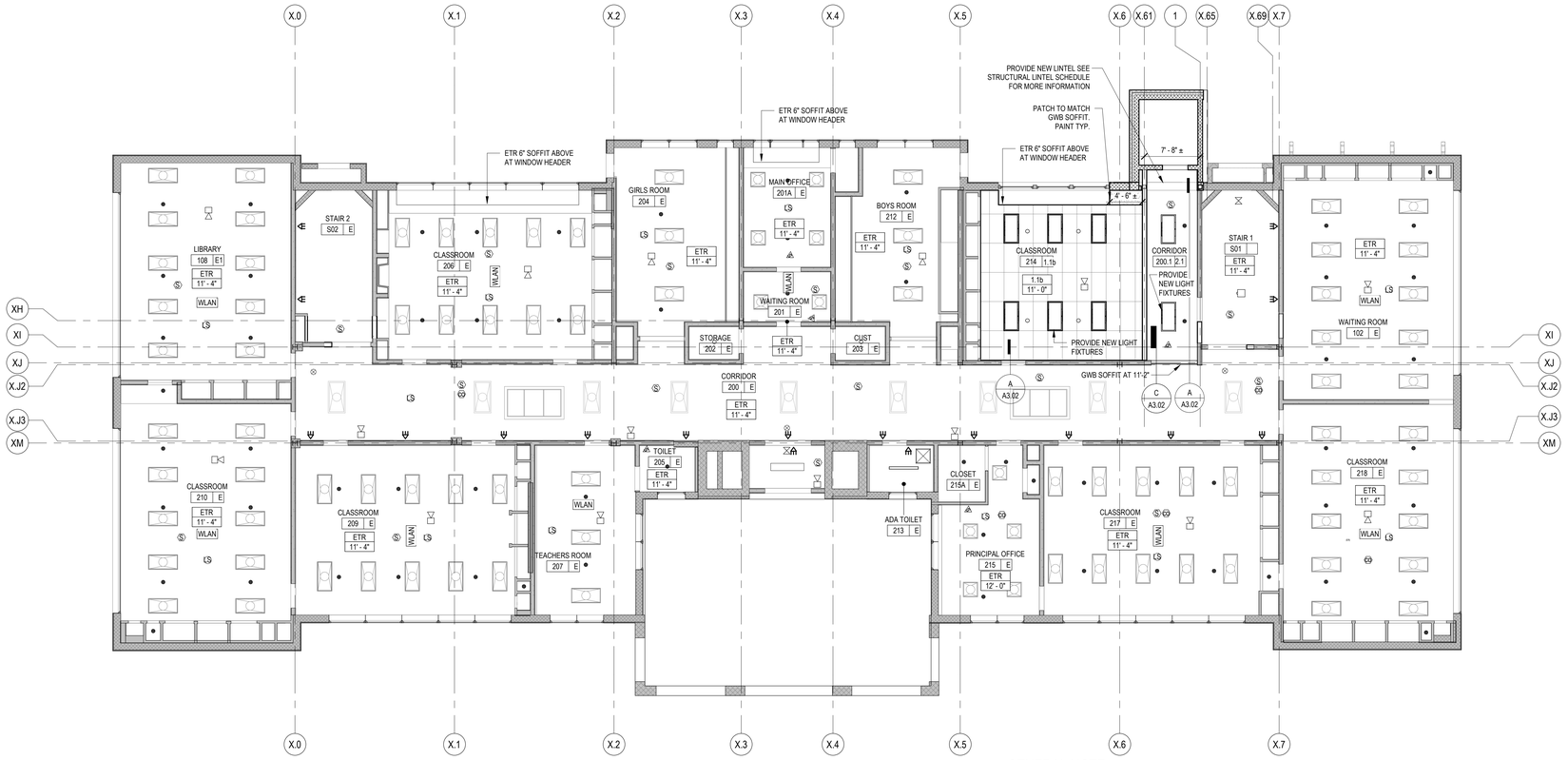
SCALE	1 1/2" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

A2.02

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

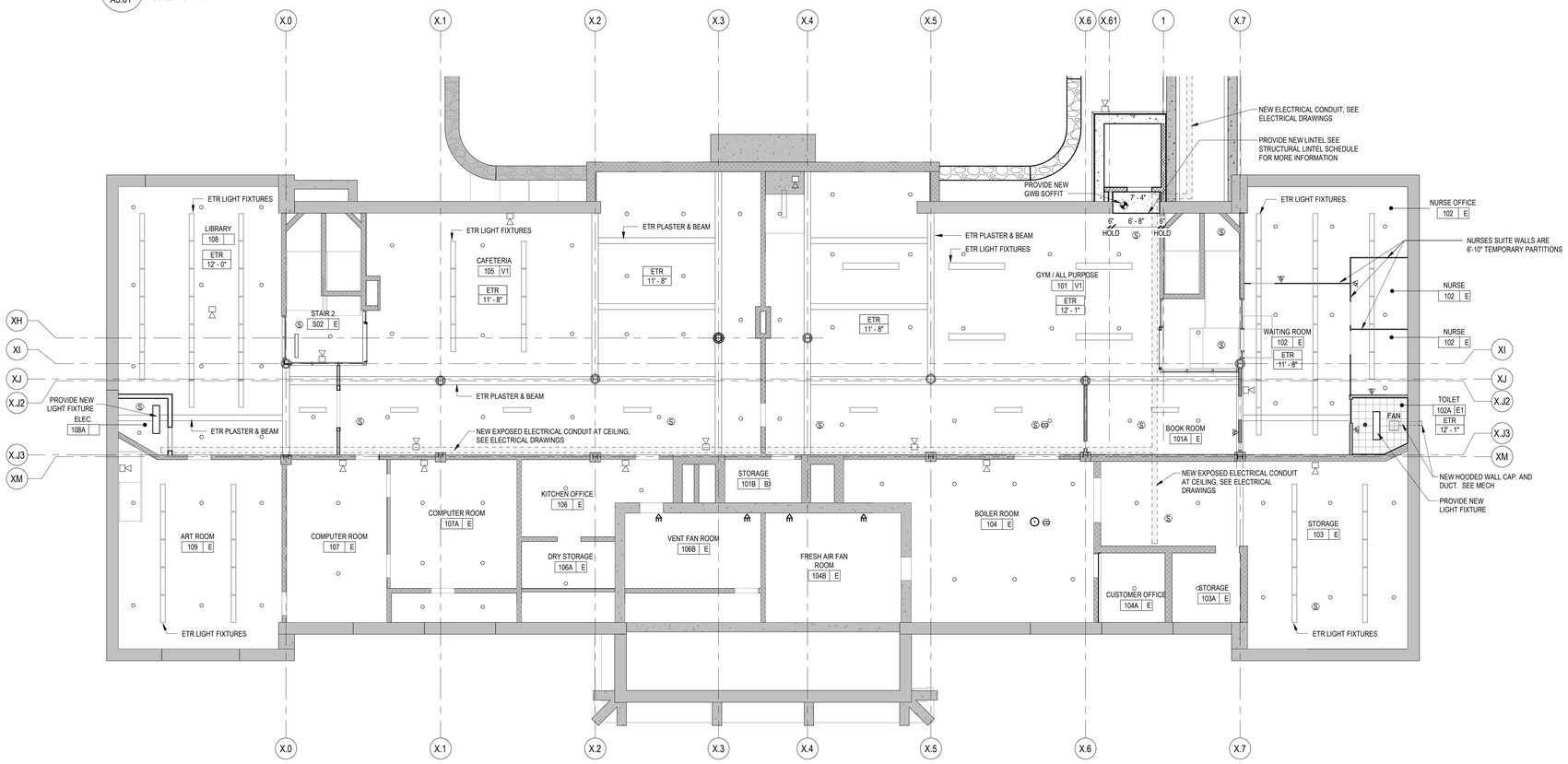
9/18/2024 7:47:26 PM



3 A3.01 FIRST LEVEL REFLECTED CEILING PLAN AREA A

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

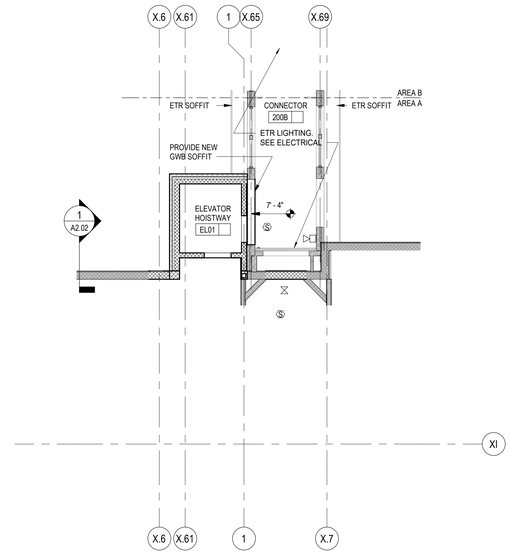
GENERAL NOTE:
ALL LIGHT FIXTURES ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE



1 A3.01 LOWER LEVEL REFLECTED CEILING PLAN AREA A

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

GENERAL NOTE:
ALL LIGHT FIXTURES ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE



2 A3.01 INTERMEDIATE

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

CEILING TYPES:

TYPE 1- ACOUSTICAL CEILING SYSTEM

1.1a 24" x 24" TILES, WHITE.
1.1b 24" x 48" TILES, WHITE.

TYPE 2 - GWB

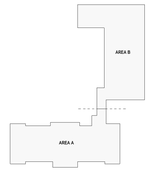
2.1 GWB ON METAL STUDS.
2.2 GWB ON SUSPENSION SYSTEM.
2.3 GWB, 2 HOUR FIRE RATED, UL#G510 WITH PAINTED METAL FRAMING AT 24" ON CENTER MAXIMUM, SECURED TO STRUCTURE.

TYPE 3 - ETR PLASTER

3.1 ETR PLASTER, UNPAINTED.
3.2 OPEN TO STRUCTURE, SURFACES EXPOSED TO VIEW TO BE PAINTED ONE COLOR.

CEILING SYMBOL LEGEND

- 1t 0'-0" — ROOM NUMBER, CEILING TYPE - SEE SPECIFICATIONS, FINISHED HEIGHT
- GYPSUM WALLBOARD CEILING, PAINTED
- ACOUSTICAL CEILING 12" x 12" PANELS
- SUSPENDED ACOUSTICAL CEILING 24" x 24" GRID 24" x 24" PANELS
- SUSPENDED ACOUSTICAL CEILING 24" x 24" GRID 24" x 48" PANELS
- HVAC ITEMS - FOR COORDINATION ONLY, SEE HVAC DRAWINGS AND SPECIFICATIONS FOR TYPES AND QUANTITIES
- ELECTRICAL ITEMS - FOR COORDINATION ONLY, SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITIES
- CS CP
- FIRE PROTECTION - FOR COORDINATION ONLY, SEE FIRE PROTECTION DRAWINGS AND SPECIFICATIONS FOR SPRINKLER HEAD TYPES AND QUANTITIES
- TUBULAR SKYLIGHT DIFFUSER
- S IR SP SP HS — TECHNOLOGY ITEMS - FOR COORDIATION ONLY, SEE HVAC DRAWINGS AND SPECIFICATIONS FOR TYPES AND QUANTITIES
- BELL
- LIGHT SENSOR
- SMOKE SENSOR
- WLAN WIRELESS ACCESS POINT
- CARBON MONOXIDE DETECTORS
- HEAT DETECTOR
- SPEAKER/VISUAL
- STROBE
- EMERGENCY LIGHT
- CEILING MOUNTED EXIT SIGN
- WALL MOUNTED EXIT SIGN



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
REFLECTED CEILING PLANS

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

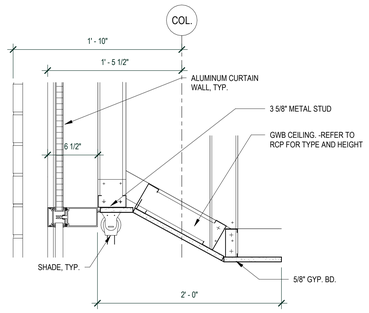
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	JL
CHECKED	WT
DATE	SEPTEMBER 18, 2024

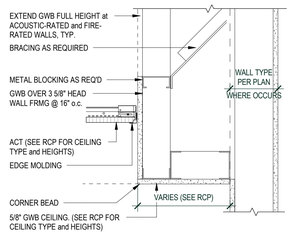
DRAWING NUMBER
A3.01

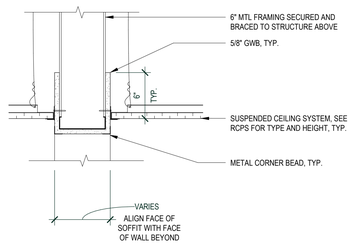
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/18/2024 7:50:12 PM



D A3.02 DETAIL @ EXTERIOR WINDOWS

SCALE: 1 1/2" = 1'-0"



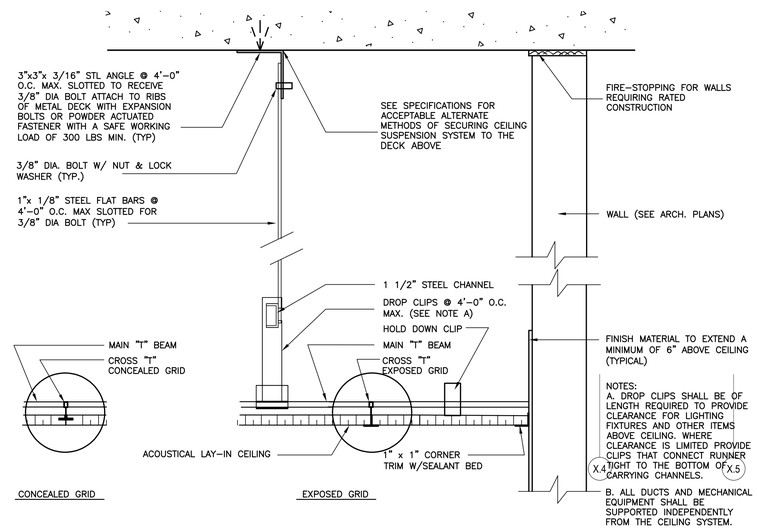


B A3.02 DETAIL at ACT TO GWB SOFFIT

SCALE: 1 1/2" = 1'-0"

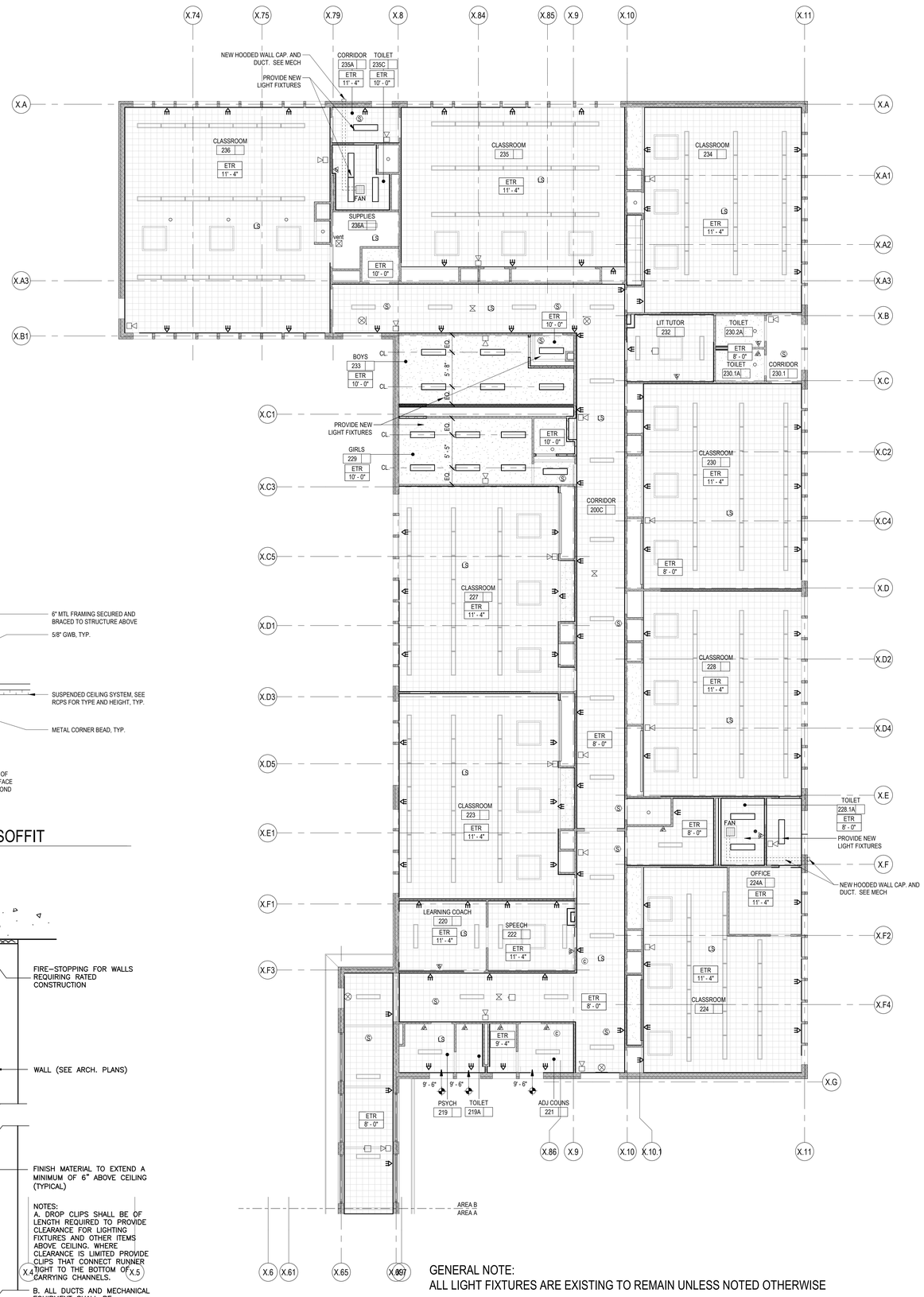
C A3.02 DETAIL @ GWB SOFFIT

SCALE: 1 1/2" = 1'-0"



A A3.02 ACT LAY-IN TILE SUSPENDED CEILING

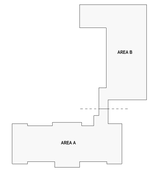
SCALE: 3" = 1'-0"



GENERAL NOTE:
ALL LIGHT FIXTURES ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE

1 A3.02 FIRST LEVEL REFLECTED CEILING PLAN AREA B

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



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
REFLECTED CEILING PLANS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

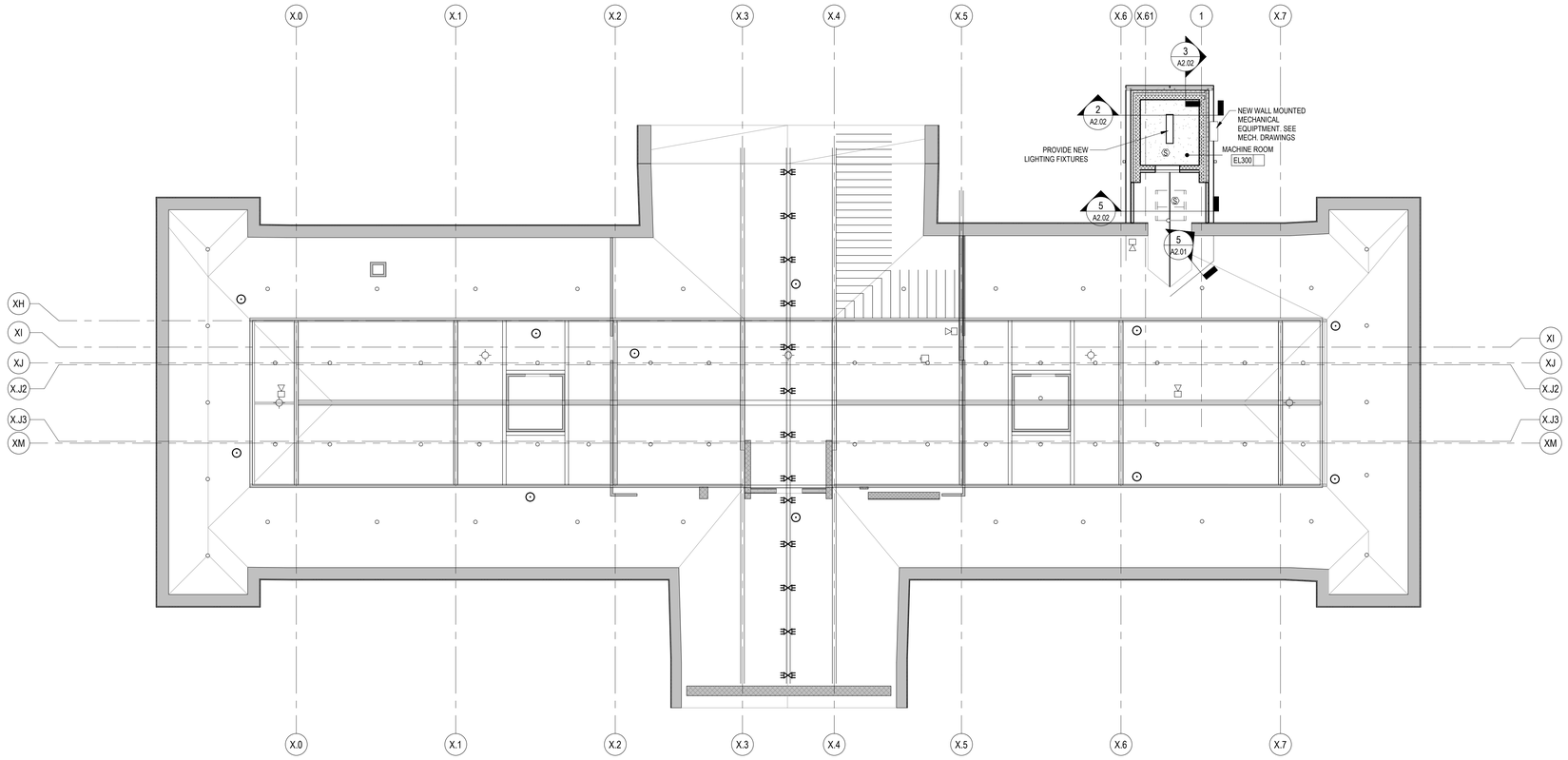
DRAWING INFORMATION

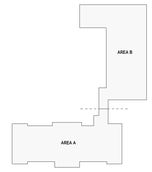
SCALE	As indicated
DRAWN BY	JL
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

A3.02

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/18/2024 7:43:19 PM





KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

REFLECTED CEILING PLANS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

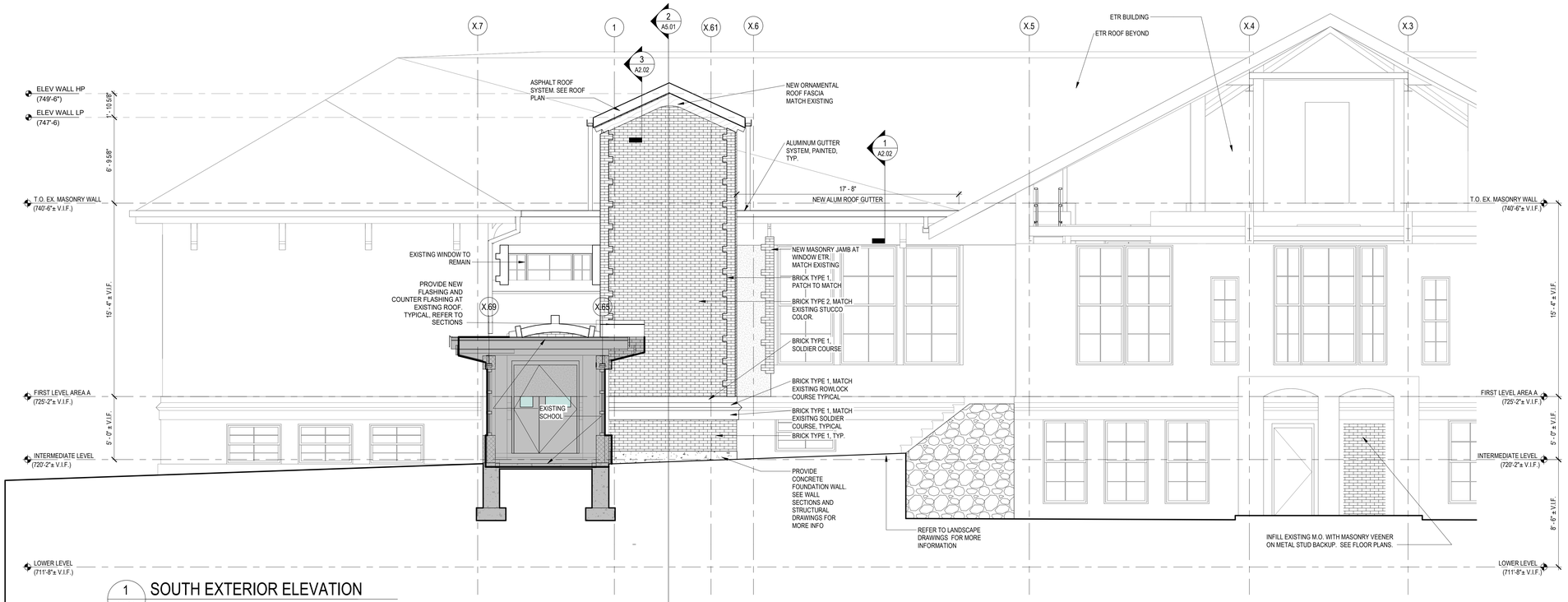
SCALE	1/8" = 1'-0"
DRAWN BY	JL
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

A3.03

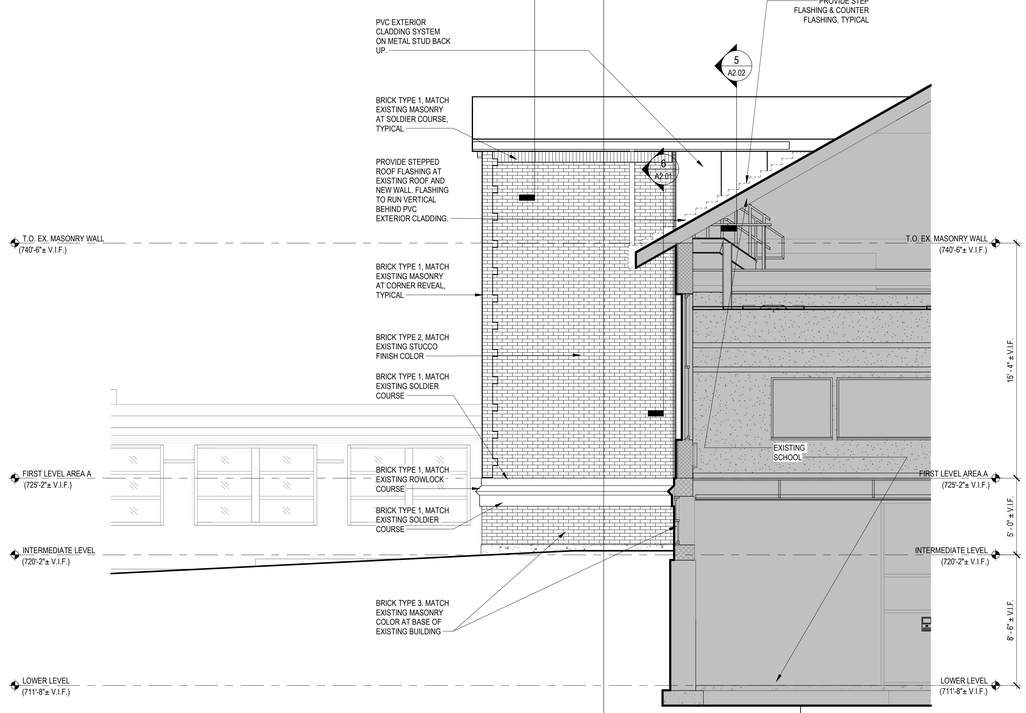
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

9/18/2024 7:52:55 PM



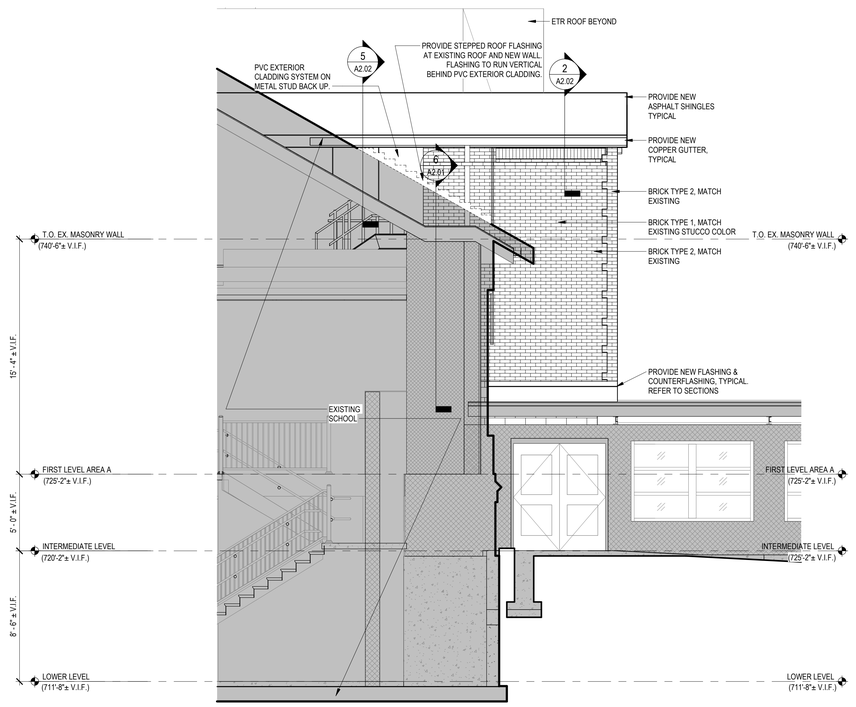
1 A4.01 SOUTH EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"



2 A4.01 EAST EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"



3 A4.01 WEST EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/17/2024 7:38:51 AM



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

EXTERIOR ELEVATIONS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

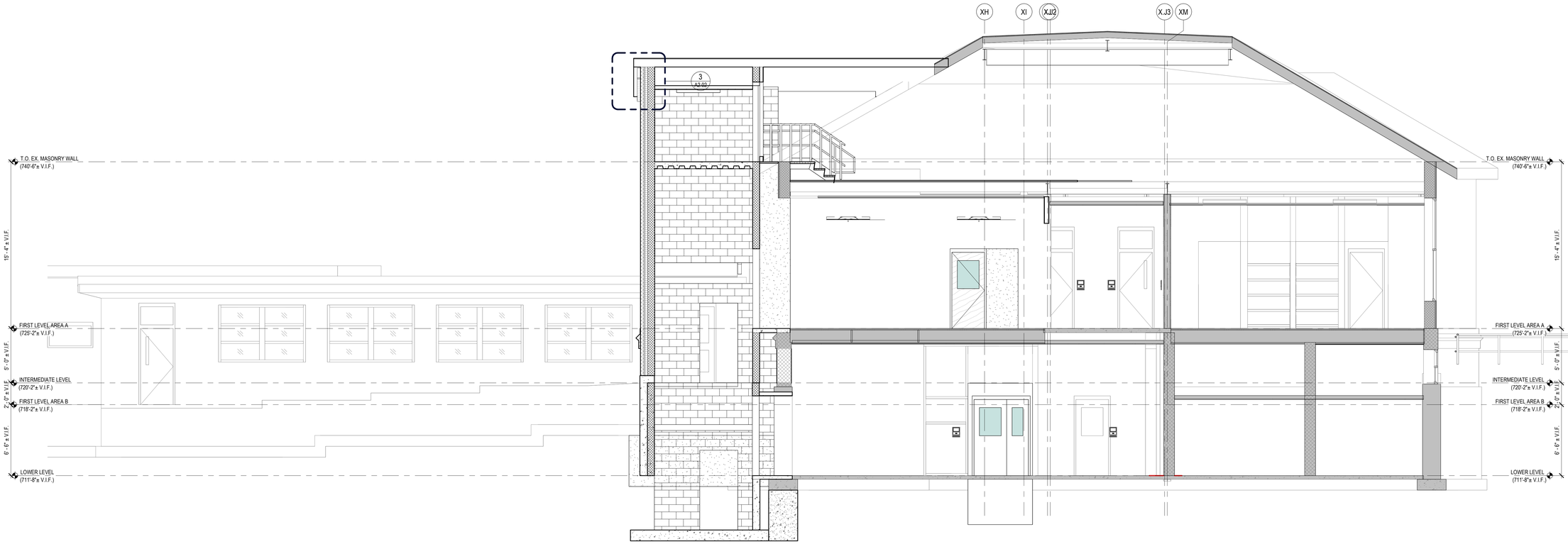
STAMP

DRAWING INFORMATION

SCALE	1/4" = 1'-0"
DRAWN BY	WT
CHECKED	CHECKER
DATE	SEPTEMBER 18, 2024

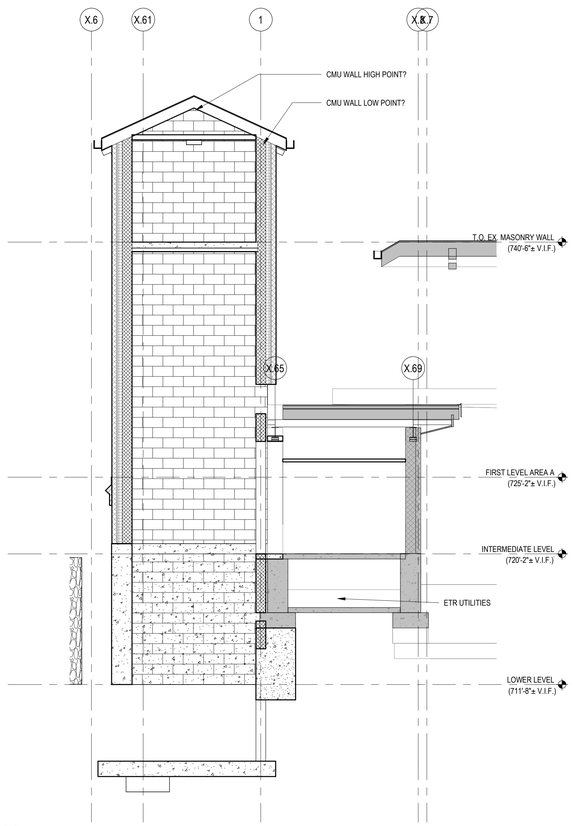
DRAWING NUMBER

A4.01



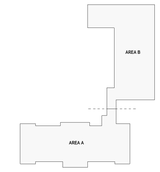
2 A5.01 **Section 2**

SCALE: 1/4" = 1'-0"



1 A5.01 **Section 1**

SCALE: 1/4" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

BUILDING SECTIONS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

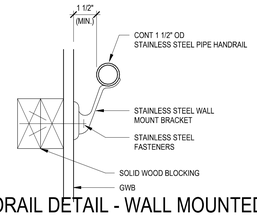
DRAWING INFORMATION

SCALE	1/4" = 1'-0"
DRAWN BY	DKN
CHECKED	WT
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

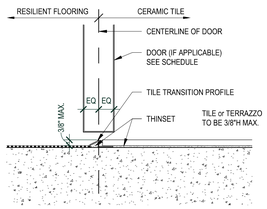
A5.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/17/2024 7:43:01 AM



10 A7.01 HANDRAIL DETAIL - WALL MOUNTED @STUD WALL TYP.

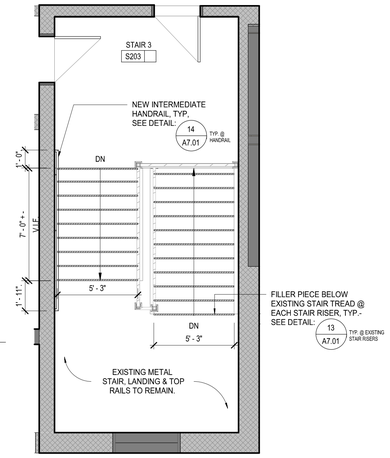
SCALE: 3" = 1'-0"

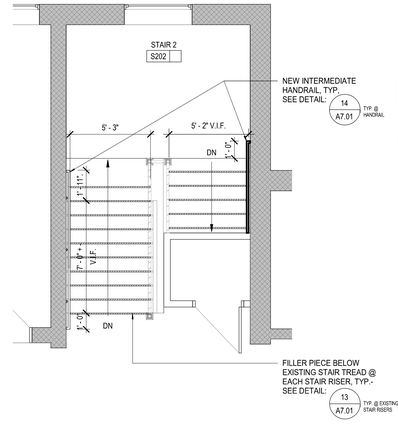


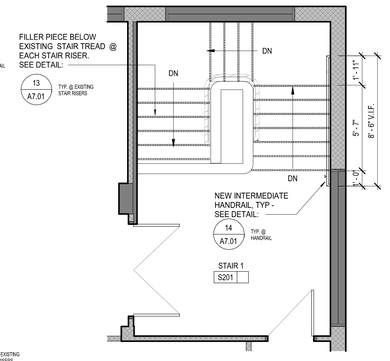
RESILIENT TO PORCELAIN TILE & RESILIENT TO (3/8") TERRAZZO

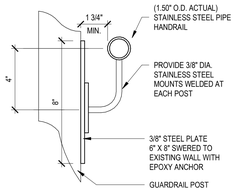
15 A7.01 TYPICAL FLOOR FINISH TRANSITION DETAIL

SCALE: 3" = 1'-0"



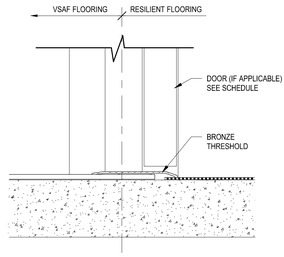






12 A7.01 HANDRAIL DETAIL - @MASONRY POST MOUNTED TYP.

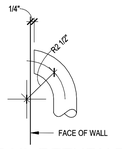
SCALE: 3" = 1'-0"



VSAF TO RESILIENT

16 A7.01 TYPICAL FLOOR FINISH TRANSITION DETAIL

SCALE: 3" = 1'-0"

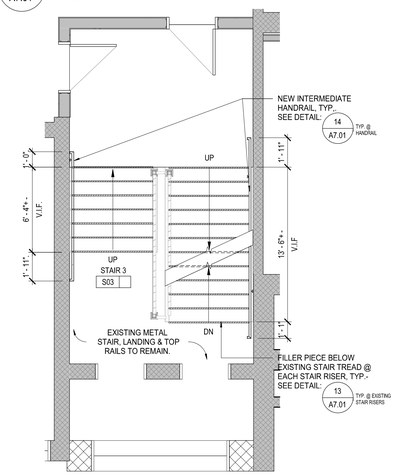


11 A7.01 HANDRAIL RETURN TO WALL DETAIL TPY.

SCALE: 3" = 1'-0"

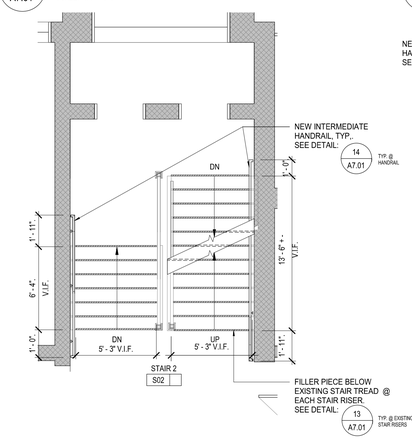
9 A7.01 STAIR 3 ENLARGED 2ND LEVEL PLAN

SCALE: 1/4" = 1'-0"



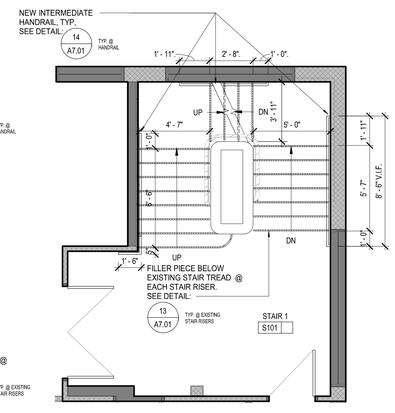
6 A7.01 STAIR 2 ENLARGED 2ND LEVEL PLAN

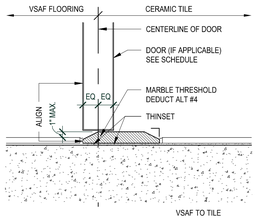
SCALE: 1/4" = 1'-0"

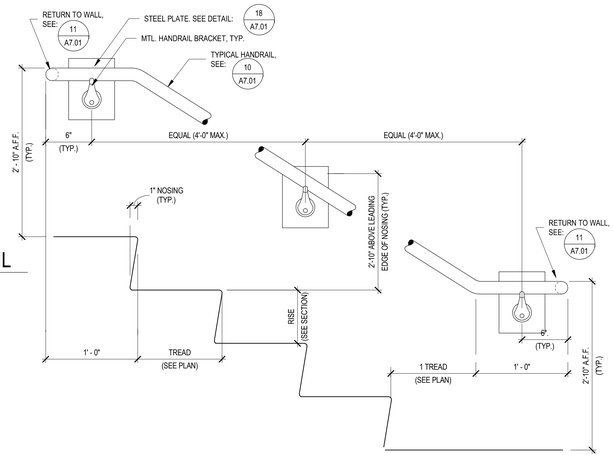


3 A7.01 STAIR 1 ENLARGED 2ND LEVEL PLAN

SCALE: 1/4" = 1'-0"

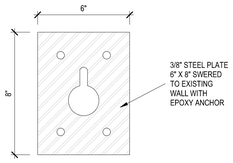






17 A7.01 TYPICAL FLOOR FINISH TRANSITION DETAIL

SCALE: 3" = 1'-0"

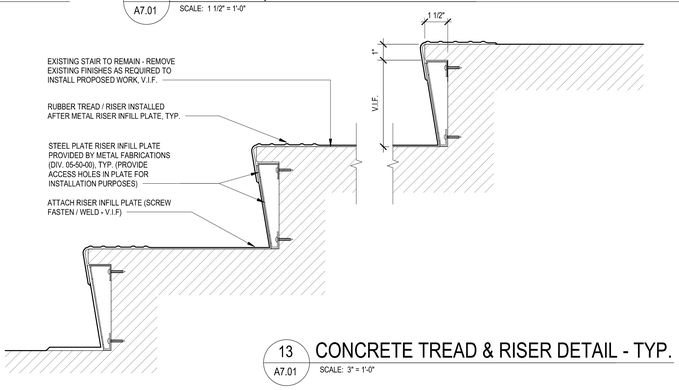


18 A7.01 STEEL PLATE

SCALE: 3" = 1'-0"

14 A7.01 HAND/GUARDRAIL SECTION ASSEMBLY (SINGLE HANDRAIL) TYP.

SCALE: 1 1/2" = 1'-0"

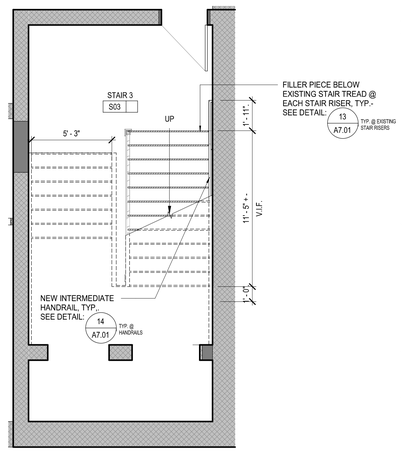


13 A7.01 CONCRETE TREAD & RISER DETAIL - TYP.

SCALE: 3" = 1'-0"

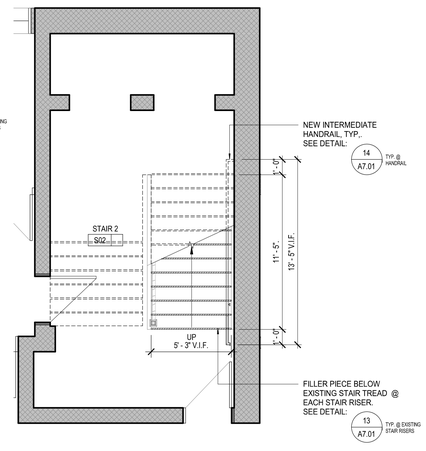
8 A7.01 STAIR 3 ENLARGED 1ST FLOOR PLAN

SCALE: 1/4" = 1'-0"



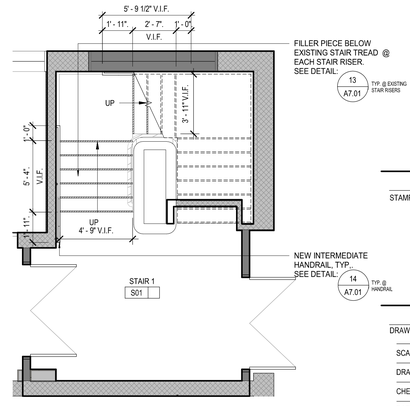
5 A7.01 STAIR 2 ENLARGED 1ST LEVEL PLAN

SCALE: 1/4" = 1'-0"



2 A7.01 STAIR 1 ENLARGED 1ST LEVEL PLAN

SCALE: 1/4" = 1'-0"



13 A7.01 CONCRETE TREAD & RISER DETAIL - TYP.

SCALE: 3" = 1'-0"

7 A7.01 STAIR 3 ENLARGED LOWER LEVEL PLAN

SCALE: 1/4" = 1'-0"

4 A7.01 STAIR 2 ENLARGED LOWER LEVEL PLAN

SCALE: 1/4" = 1'-0"

1 A7.01 STAIR 1 ENLARGED LOWER LEVEL PLAN

SCALE: 1/4" = 1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.07

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

CHALLENGE & REACH ACADEMY - ADA UPGRADES
WORCESTER, MA

DRAWING TITLE

ENLARGED STAIR PLAN, SECTIONS & DETAILS

MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

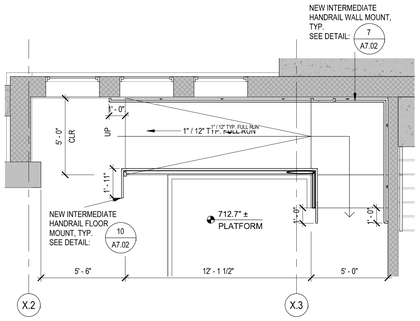
DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

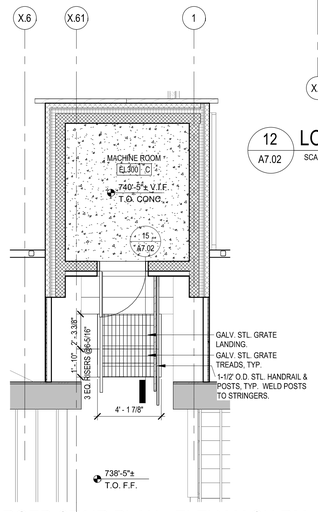
A7.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/16/2024 9:48:13 PM



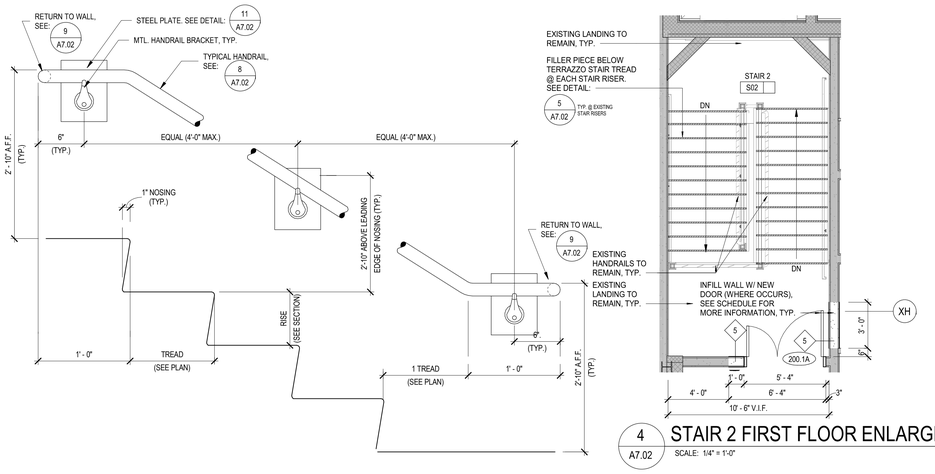
12 A7.02 LOWER LEVEL ACCESSIBLE RAMP AT PLATFORM

SCALE: 1/4" = 1'-0"



13 A7.02 ENLARGED STAIR PLAN - ELEV MACH RM

SCALE: 1/4" = 1'-0"

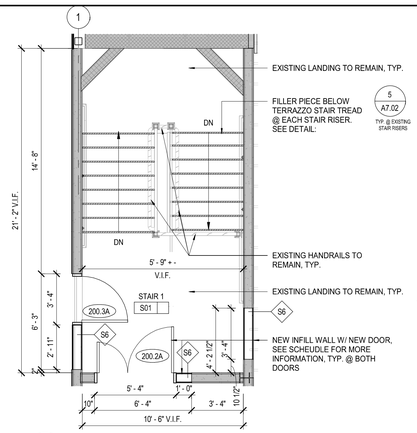


7 A7.02 TYPICAL WALL MOUNTED HANDRAIL (SINGLE)

SCALE: 1 1/2" = 1'-0"

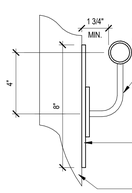
4 A7.02 STAIR 2 FIRST FLOOR ENLARGED PLAN

SCALE: 1/4" = 1'-0"



2 A7.02 STAIR 1 FIRST FLOOR ENLARGED PLAN

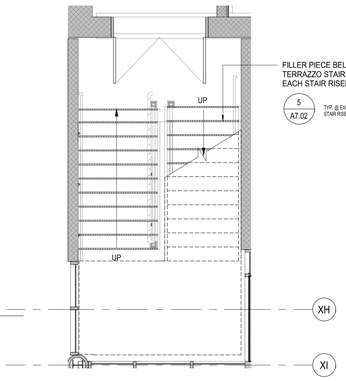
SCALE: 1/4" = 1'-0"



TYPICAL HANDRAIL DETAIL @ MASONRY POST MOUNTED

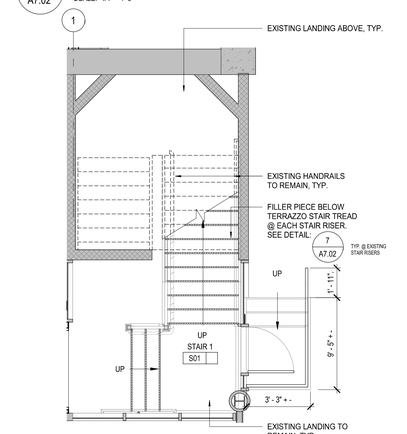
8 A7.02

SCALE: 3" = 1'-0"



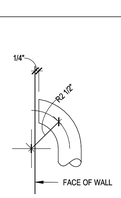
3 A7.02 STAIR 2 LOWER LEVEL ENLARGED PLAN

SCALE: 1/4" = 1'-0"



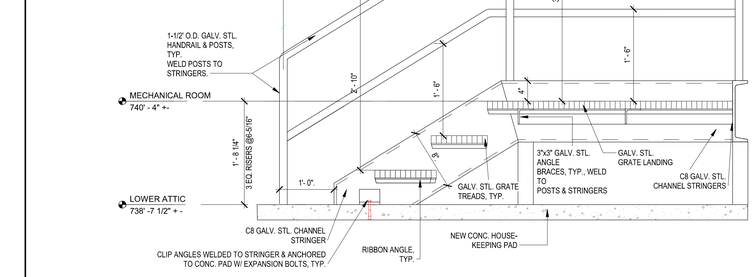
1 A7.02 STAIR 1 LOWER LEVEL ENLARGED PLAN

SCALE: 1/4" = 1'-0"



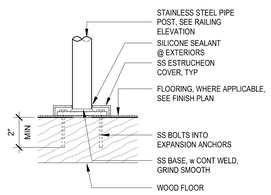
9 A7.02 HANDRAIL RETURN TO WALL DETAIL TPY.

SCALE: 3" = 1'-0"



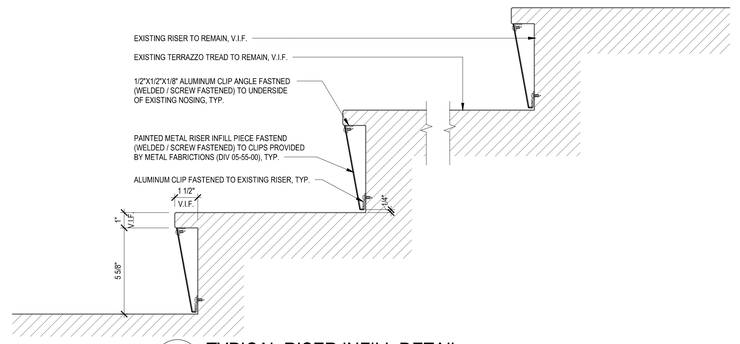
15 A7.02 METAL GRATE STAIR/LANDING SECTION

SCALE: 1" = 1'-0"



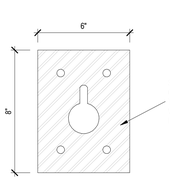
10 A7.02 STAIR POST MOUNT @ WOOD PLATFORM DETAIL

SCALE: 3" = 1'-0"



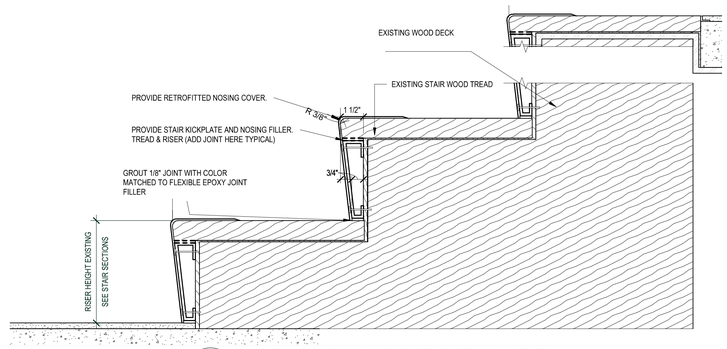
5 A7.02 TYPICAL RISER INFILL DETAIL

SCALE: 3" = 1'-0"



11 A7.02 STEEL PLATE

SCALE: 3" = 1'-0"



6 A7.02 WOOD TREAD & RISER DETAIL - TYP.

SCALE: 3" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

ENLARGED STAIR PLANS, SECTIONS & DETAILS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DG
CHECKED	WT
DATE	SEPTEMBER 18, 2024

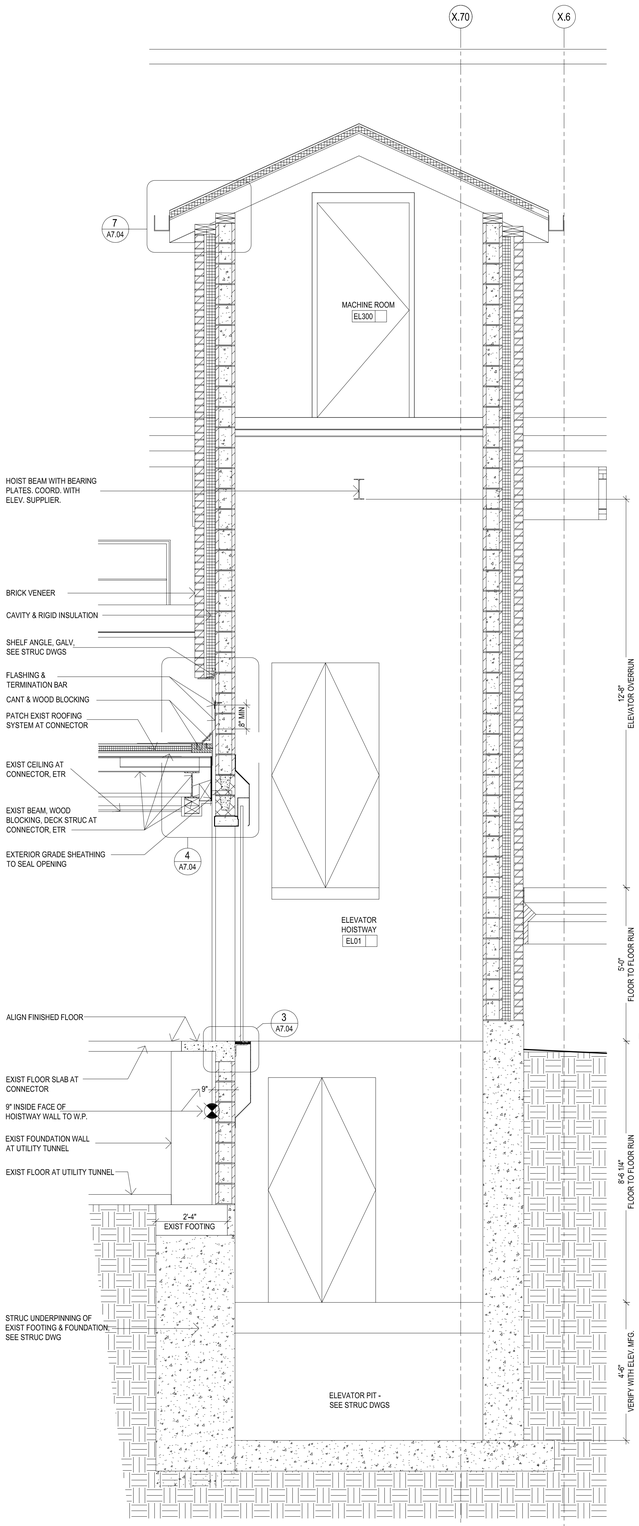
DRAWING NUMBER

A7.02

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/18/2024 9:47:51 PM

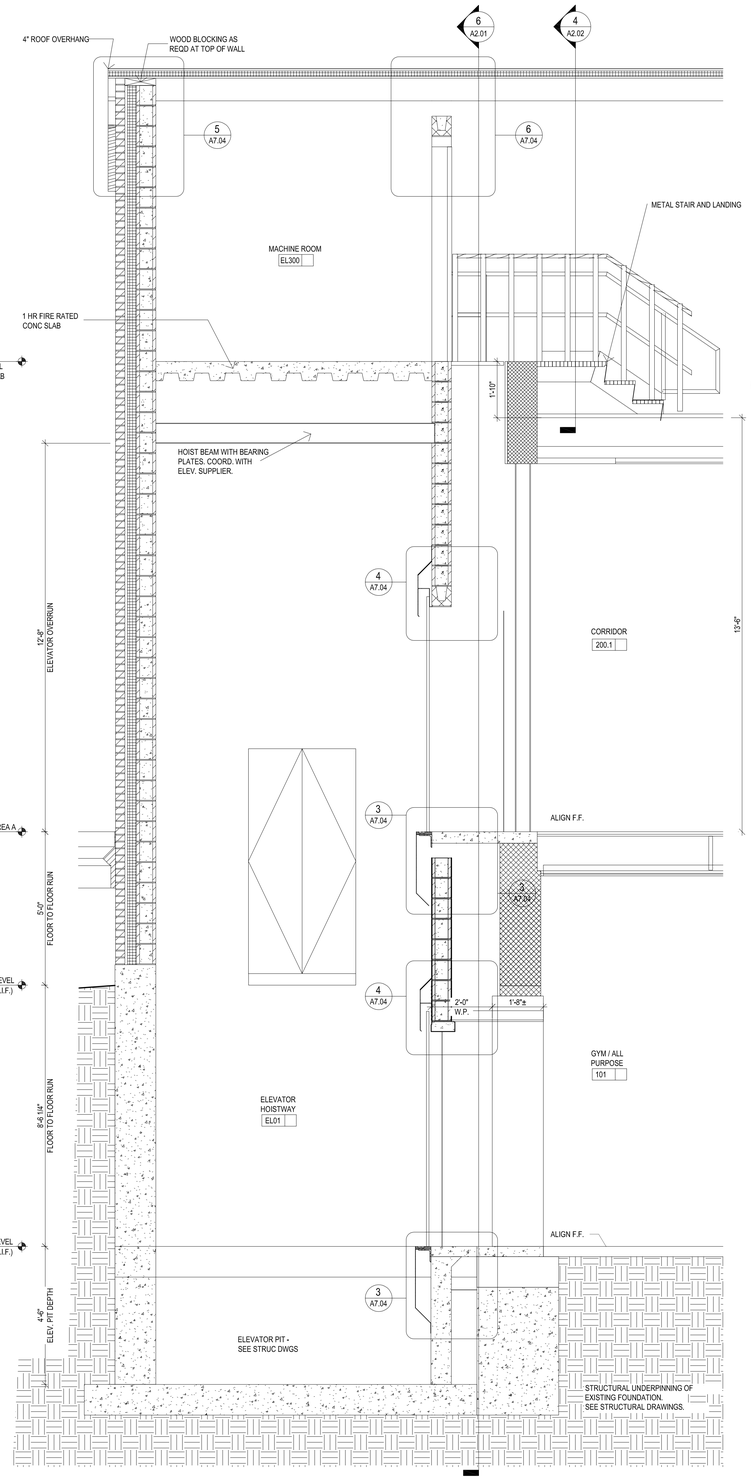
ELEVATOR GENERAL NOTES

1. **G.C. TO VERIFY ELEVATOR HOISTWAY DIMENSIONS MEET REQUIRED MINIMUM CLEAR DIMENSION OF ELEVATOR MFR.**
2. **G.C. TO VERIFY DIMENSIONS REQUIRED TO HOIST BEAM PER THE SELECTED ELEVATOR MFR.**
3. **G.C. TO VERIFY MACHINE ROOM DIMENSIONS AS REQUIRED BY ELEVATOR MFR.**
4. **SEE: FOR HOISTWAY AND ELEVATOR ENTRANCE.**
5. SEE: FOR ELEVATOR PANEL DETAIL.
6. G.C. TO VERIFY ELEVATOR LADDER LOCATION WITH ELEVATOR MFR.



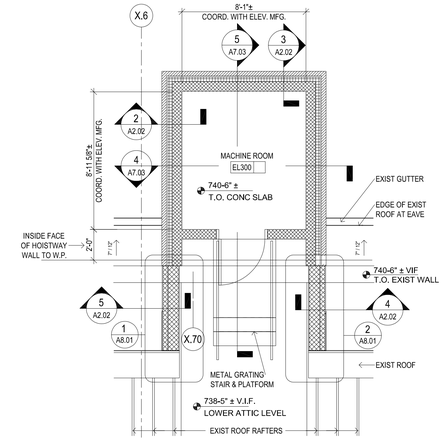
5 A7.03 ELEVATOR SECTION B

SCALE: 1/2" = 1'-0"



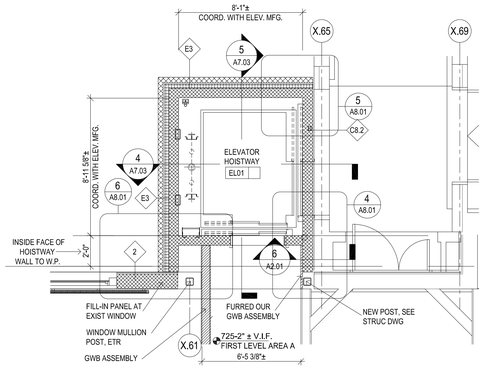
4 A7.03 ELEVATOR SECTION A

SCALE: 1/2" = 1'-0"



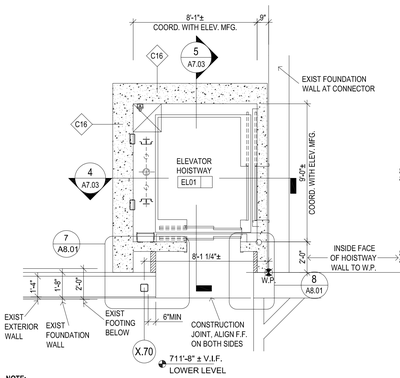
3 A7.03 ENLARGED PLAN AT ATTIC LEVEL - NEW ELEVATOR AT AREA A

SCALE: 1/4" = 1'-0"



2 A7.03 ENLARGED PLAN AT FIRST LEVEL - NEW ELEVATOR AT AREA A

SCALE: 1/4" = 1'-0"

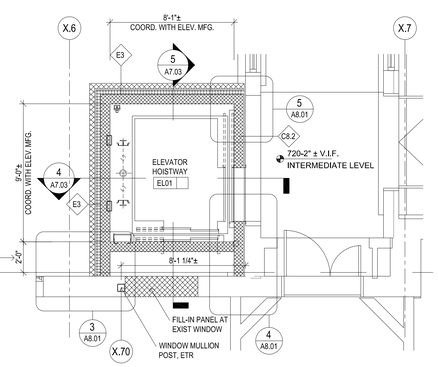


NOTE:

1. **THE WORKING POINT (W.P.) FOR THE ELEVATOR HOISTWAY IS ESTABLISHED AT THE INTERSECTION OF THE EXISTING FOUNDATION WALLS AT THE SCHOOL BUILDING & THE CONNECTOR TO THE ADDITION**
2. **THE FINAL INSIDE CLEAR DIMENSIONS OF THE HOISTWAY SHALL BE COORDINATED WITH THE ELEVATOR MANUFACTURER & INDICATED ON THE SHOP DRAWINGS, SUBJECT TO REVIEW & APPROVAL BY THE A.O.R**

1 A7.03 ENLARGED PLAN AT LOWER LEVEL - NEW ELEVATOR AT AREA A

SCALE: 1/4" = 1'-0"



7 A7.03 ENLARGED PLAN AT INTERMEDIATE LEVEL - NEW ELEVATOR AT AREA A

SCALE: 1/4" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

ENLARGED ELEVATOR PLANS, SECTIONS, & DETAILS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

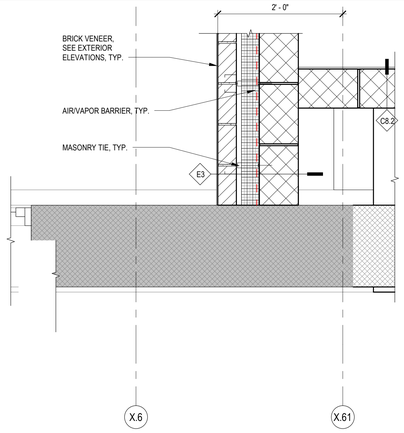
DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	EA
CHECKED	WT
DATE	SEPTEMBER 18, 2024

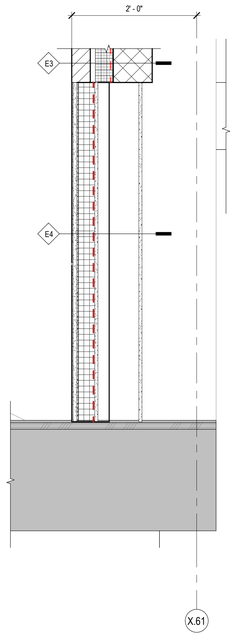
DRAWING NUMBER

A7.03

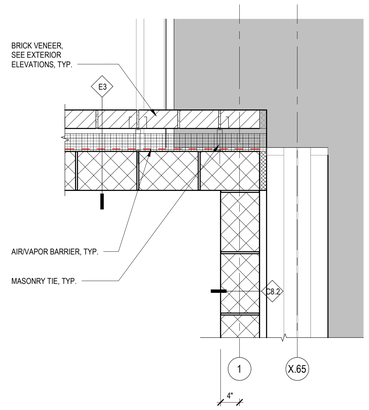
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
9/4/2024 10:30:23 AM



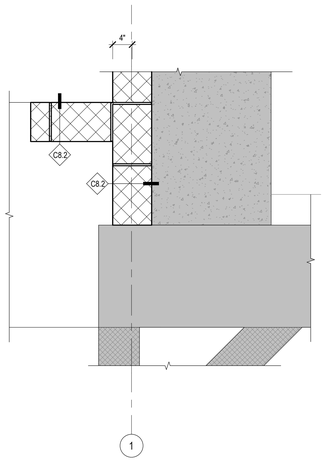
3 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



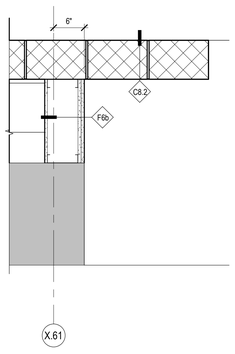
1 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



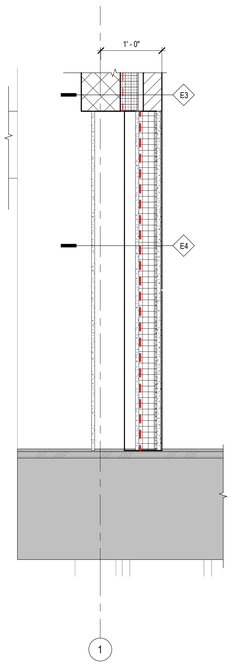
5 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



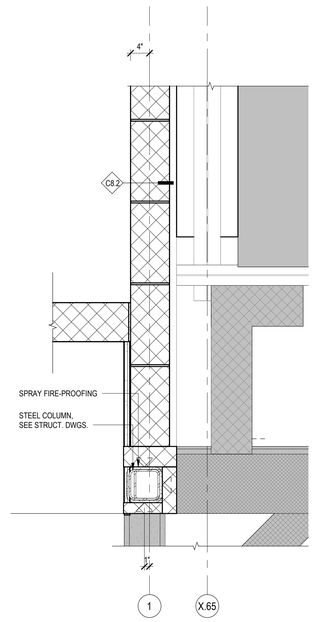
8 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



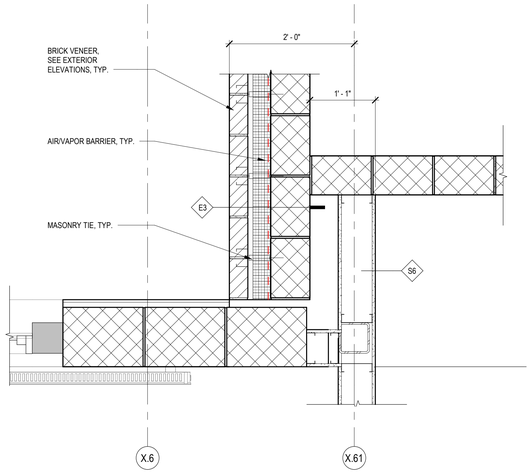
7 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



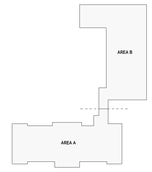
2 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



4 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



6 A8.01 PLAN DETAIL
SCALE: 1" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
PLAN DETAILS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER

A8.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

9/18/2024 3:56:43 PM

9/16/2024 5:23 PM

GENERAL NOTES

GENERAL:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS, ALONG WITH VENDOR DRAWINGS AND EXISTING CONDITIONS.
2. REFER TO EXISTING CONDITIONS AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND/OR ELEVATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
3. IN CASE OF CONFLICT AMONG CONTRACT DOCUMENTS, THE MORE SPECIFIC AND LOCALIZED INFORMATION IN THE FOLLOWING ASCENDING ORDER SHALL GOVERN: NOTES, PLANS, SCHEDULE, AND DETAILS.
4. UNLESS OTHERWISE NOTED, DETAILS SHOWN ON ANY DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.
5. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
6. SHOP DRAWINGS FOR REINFORCING STEEL (INCLUDING ALL ACCESSORIES), REINFORCED MASONRY, ENGINEERED LUMBER, AND STRUCTURAL STEEL, SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND A STAMPED ACCEPTANCE RECEIVED BEFORE FABRICATION CAN PROCEED. ERECTION SHALL BE EXECUTED FROM ACCEPTED SHOP DRAWINGS ONLY.
7. A COMPLETE CONCRETE SLAB-ON-GRADE PLACEMENT SCHEDULE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND A STAMPED ACCEPTANCE RECEIVED BEFORE ANY CONCRETE PLACEMENT CAN BE MADE.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING AND BRACING FOR THE BUILDING DURING THE ENTIRE CONSTRUCTION PERIOD.
9. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITIONS (UNLESS OTHERWISE NOTED) OF THE FOLLOWING BUILDING CODES AND STANDARDS:
   a. THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE, 9TH EDITION
   b. THE INTERNATIONAL BUILDING CODE, 2015 EDITION
   c. THE INTERNATIONAL EXISTING BUILDING CODE, 2015 EDITION
   d. NDS-2015 - "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (INCLUDING ALL SUPPLEMENTS)
   e. "TMS 402/602" - BUILDING CODE REQUIREMENTS & SPECIFICATIONS FOR MASONRY STRUCTURES

EXISTING CONSTRUCTION:

1. ALL INFORMATION RELATING TO THE EXISTING STRUCTURAL CONDITIONS HAS BEEN DERIVED FROM AN OBSERVATIONAL SITE VISIT.
2. NEW WORK SHALL BE COORDINATED WITH EXISTING CONDITIONS
3. (e) INDICATES AN EXISTING STRUCTURAL ELEMENT.
4. V.I.F. OR F.V. = VERIFY IN FIELD OR FIELD VERIFY
5. ANY DIMENSION NOTED (±) SHALL BE COORDINATED AND VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO SHOP DRAWING SUBMISSIONS.
6. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING AND BRACING FOR THE BUILDING DURING THE ENTIRE CONSTRUCTION PERIOD.

DESIGN LOADS:

(2015 INTERNATIONAL BUILDING CODE WITH MA BUILDING CODE SUPPLEMENT, 9TH ED.)

1. BUILDING ROOF LOADS (PER SECTIONS 1606 THRU 1608)
   A. GROUND SNOW LOAD, Pg = 50 PSF (PER SECTION 1608)
      - FLAT-ROOF SNOW LOAD, Pf = 39 PSF (MIN.) PLUS SNOWDRIFT LOADING WHERE APPLICABLE
      - SNOW EXPOSURE FACTOR, Ce = 1.0
      - SNOW LOAD IMPORTANCE FACTOR, Is = 1.10
      - THERMAL FACTOR, Ct = 1.0
2. BUILDING FLOOR LOADS (PER SECTIONS 1606 & 1607)
   A. LIVE LOAD: S-O-O/1ST FLOOR .....100 PSF; CLASSROOMS .....50 PSF; CORRIDORS (ABOVE FIRST FLOOR) ... 80 PSF
   B. CEILING: 3 PSF
   C. SERVICES: 2 PSF
   D. STRUCTURE: ACTUAL WEIGHTS OF MATERIALS
3. WIND DESIGN (PER SECTION 1609 AND IEBC 2015)
   A. ULTIMATE DESIGN WIND SPEED, Vult (3-SECOND GUST) = 134 MPH
   B. NOMINAL DESIGN WIND SPEED, Vasd = 104 MPH
   C. RISK CATEGORY = 3
   D. IMPORTANCE FACTOR, Iw = 1.00 FOR MWFRS
   E. WIND EXPOSURE CATEGORY = B
      - APPLICABLE INTERNAL PRESSURE COEFFICIENT, GCpi = ±0.18
4. EARTHQUAKE DESIGN (PER SECTION 1613)
   A. RISK CATEGORY 3
   B. SEISMIC IMPORTANCE FACTOR, Ie = 1.25
   C. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS
      - Ss = 0.180
      - S1 = 0.066
   D. SITE CLASS ..... D (PRESUMED)
   E. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS
      - Sds = 0.192
      - Sd1 = 0.108
   F. SEISMIC DESIGN CATEGORY ..... B
   G. BASIC SEISMIC FORCE-RESISTING SYSTEM(S): EXISTING BRICK MASONRY BEARING WALLS
5. DESIGN LOAD-BEARING VALUES OF SOILS (PER SECTION 1610)
   a. ACTIVE LATERAL EARTH PRESSURE = 39 PSF/FT
   b. AT REST LATERAL EARTH PRESSURE = 59 PSF/FT
   c. PASSIVE LATERAL EARTH PRESSURE = 406 PSF/FT
   d. EXCAVATION SLOPE = 1.5H MAX: 1 VERTICAL
   e. SURCHARGE LOADING: 100 PSF MIN. FOR CONSTRUCTION LOADS
6. SPECIAL LOADS
   a. GUARDRAILS / HANDRAILS: 200 POUND CONCENTRATED LOAD, OR 50 PLF IN ANY DIRECTION (NOT SIMULTANEOUS)
7. ALTERATIONS: LEVEL 2 WORK

FOUNDATIONS:

1. FOR COMPLETE GEOTECHNICAL REQUIREMENTS, REFER TO "GEOTECHNICAL REPORT: PROPOSED IMPROVEMENTS - THORNDYKE ROAD ELEMENTARY SCHOOL, WORCESTER, MASSACHUSETTS," PREPARED BY LAHLAF GEOTECHNICAL CONSULTING, INC. DATED SEPTEMBER 6, 2024.
2. THE ESTIMATED ELEVATION OF THE BOTTOM OF EACH FOOTING IS INDICATED THUS [0'-0"]. THE BOTTOM OF EACH EXTERIOR FOOTING BEARING ON SOIL SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT FINISHED GRADE.
3. NEW FOOTINGS SHALL BEAR ON COMPACTED STRUCTURAL FILL WITH A DESIGN BEARING VALUE OF 4000 PSF.
4. THE EXPOSED SUBGRADE SHALL BE COMPACTED WITH A DYNAMIC VIBRATORY ROLLER IMPARTING A MINIMUM OF 10 KIPS FORCE TO THE NATURAL SOIL / STRUCTURAL FILL AND IMPARTING A MINIMUM OF 4 KIPS TO GRANULAR SOIL UNDER FOOTINGS. THE EXCAVATION SHALL BE BACKFILLED WITH STRUCTURAL FILL (AS DESCRIBED IN THE GEOTECHNICAL REPORT) UP TO THE UNDERSIDE OF THE BASE COURSE ELEVATION (SEE NOTE #5).
5. BELOW TYPICAL SLAB-ON-GRADE CONSTRUCTION, PROVIDE A MINIMUM OF 12" OF STRUCTURAL FILL PLACED ON TOP OF THE SAND AND GRAVEL (SEE NOTE #4) AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
6. WHERE EXTERIOR DOORS OPEN TO UNHEATED SPACES, PROVIDE A MINIMUM OF 24" OF 3/4" CRUSHED STONE PLACED OVER A PROPERLY PREPARED SUBGRADE (TO REDUCE THE POTENTIAL FOR FROST HEAVE AT DOORWAY LOCATIONS).
7. WHERE REQUIRED WITHIN THE FOOTPRINT OF THE PROPOSED BUILDING AREA, STRUCTURAL FILL SHALL BE COMPACTED IN 9" LAYERS (MAXIMUM) TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
8. FOUNDATION WALL BACKFILL SHALL BE COMPACTED IN 9" LAYERS (MAXIMUM) TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
9. EXISTING PAVEMENT, CONCRETE FOUNDATION ELEMENTS, AND ABANDONED UTILITIES TO BE SHALL BE REMOVED IN THEIR ENTIRETY FROM THE PROPOSED BUILDING FOOTPRINT.
10. FOR CONSTRUCTION UNDER WINTER CONDITIONS, FOUNDATION AND FLOOR SLABS SHALL BE PROTECTED FROM FREEZING TEMPERATURES UNTIL THE BUILDING IS ENCLOSED AND HEATED.
11. NO CONCRETE SHALL BE PLACED IN WATER, ICE, FROST, OR ON FROZEN SUBGRADE MATERIAL. PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT FROST FROM PENETRATING ANY FOOTING OR SUBGRADE MATERIAL (BEFORE AND AFTER CONCRETE PLACEMENT) UNTIL SUCH SUBGRADE MATERIAL IS FULLY PROTECTED BY THE PERMANENT STRUCTURAL SYSTEM.
12. UNLESS OTHERWISE NOTED, NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS RETAINING EARTH UNLESS WALLS ARE SUFFICIENTLY BRACED TO PREVENT MOVEMENT OR STRUCTURAL DAMAGE AND THE SLAB-ON-GRADE IS IN PLACE.
13. THE DESIGN AND EXECUTION OF ALL TEMPORARY EARTH RETENTION SYSTEMS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
14. FOUNDATIONS SHALL BE CENTERED ON GRID INTERSECTIONS, UNLESS OTHERWISE NOTED ON PLAN.
15. PER RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER, UNDERSLAB AND PERIMETER DRAINS ARE NOT REQUIRED.

CONCRETE:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ALL CONCRETE SHALL BE NORMAL WEIGHT (150 PCF MAXIMUM).
2. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 (DEFORMED), AND SHALL BE FREE FROM LOOSE RUST AND SCALE. LAP ALL CONTINUOUS BARS IN 42 BAR DIAMETERS MINIMUM.
3. ALL WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM A 1064 WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 70 KSI. LAP (2) SQUARES AT ALL JOINTS AND TIE @ 3'-0" ON CENTER.
4. CLEAR CONCRETE PROTECTION FOR REINFORCING SHALL CONFORM TO THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE NOTED:
   a. FOOTINGS AND OTHER CONCRETE ELEMENTS CAST AGAINST EARTH: 3"
   b. FOUNDATION WALLS AND OTHER CONCRETE ELEMENTS EXPOSED TO EARTH: 2"
   c. SLABS-ON-GRADE: 1 1/4" FROM TOP
   d. SLABS-ON-DECK: 1 1/4" FROM TOP
5. DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI DETAILING MANUAL 315.
6. CONCRETE SHALL BE CAST MONOLITHICALLY, EXCEPT AS INDICATED ON THE DRAWINGS.
7. ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED (6% ± 1.5%). AIR ENTRAINMENT VALUE SHALL BE MEASURED AT THE HOSE OUTLET IF CONCRETE IS PUMPED.
8. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD BECAUSE OF SLEEVES, DUCT OPENINGS OR RECESSES. BARS MAY BE MOVED ASIDE WITHOUT CHANGE IN LEVEL WITH THE APPROVAL OF THE ENGINEER.
9. CONTROL JOINT SPACING SHALL NOT EXCEED 12'-0" IN EITHER DIRECTION AT SLABS-ON-GRADE AND NOT MORE THAN 1.5:1 SPACING. REFER TO PLANS FOR ADDITIONAL CONTROL JOINT SPACING REQUIREMENTS.
9. ALUMINUM CONDUITS AND PIPES SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE UNLESS EFFECTIVELY COATED OR COVERED TO PREVENT ALUMINUM- CONCRETE REACTION OR ELECTROLYTIC ACTION BETWEEN ALUMINUM AND STEEL.
10. ALL CONDUIT SHALL RUN BETWEEN WALL REINFORCING AND BELOW SLAB W.W.F. LINES OF CONDUIT SHALL BE SPACED NOT CLOSER THAN THREE CONDUIT DIAMETERS ON CENTER. MAXIMUM SIZE OF CONDUIT IN SLAB SHALL BE EQUAL TO 1/3 OF THE SLAB OR WALL THICKNESS.
11. PIPE PENETRATIONS THROUGH CONCRETE ARE NOT ALLOWED WITHOUT THE PERMISSION OF THE ENGINEER. STEEL PIPE SLEEVES SHALL BE PROVIDED AND SPACED A MINIMUM OF THREE PIPE DIAMETERS APART. ALL OTHER SLEEVE LOCATIONS MUST BE SUBMITTED FOR REVIEW. IN NO CASE SHALL SLEEVES BE PLACED IN CONCRETE BEAMS WITHOUT WRITTEN ACCEPTANCE FROM THE STRUCTURAL ENGINEER.
12. SUPPORT BARS FOR SLAB REINFORCING SHALL BE #5 OR GREATER, AND SHALL BE SPACED NOT MORE THAN 4'-0" O.C. SUPPORT BARS AND ENDS OF MAIN REINFORCING BARS SHALL NOT EXTEND MORE THAN 1'-6" PAST THE OUTERMOST CHAIR OR SUPPORT BAR.
13. ALL REINFORCING ACCESSORIES FOR EXPOSED SURFACES SHALL HAVE UPTURNED LEGS AND BE PLASTIC DIPPED AFTER FABRICATION. ACCESSORIES FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI STANDARDS, LATEST EDITION.
14. ALL DOWELS FOR WALL REINFORCEMENT SHALL MATCH LAPPING BAR SIZE AND SPACING, UNLESS OTHERWISE NOTED.
15. ALL KEYS SHALL BE FORMED BY A 2X4 WITH BEVELED SIDES (UNLESS OTHERWISE NOTED).
16. SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN FIVE A DAY (FOR 1,3,7, 28, AND 56 DAY COMPRESSIVE STRENGTH TESTS).

REINFORCED CONCRETE MASONRY UNITS:

1. ALL REINFORCED CONCRETE MASONRY SHALL CONFORM TO TMS 402 / 602-16.
2. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT.
3. MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR S, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI.
4. GROUT SHALL CONFORM TO ASTM C476, FINE TYPE, AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
5. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED.
6. COMPRESSIVE STRENGTH OF MASONRY ASSEMBLY SHALL BE EQUAL TO OR EXCEED f'm = 2000 PSI.
7. CONCRETE MASONRY UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ON THE NET AREA WITH TYPE M OR S MORTAR.
8. COMPRESSIVE STRENGTH OF MASONRY SHALL BE DETERMINED BY THE PRISM TEST METHOD IN ACCORDANCE WITH ASTM C1314.
9. PROVIDE HORIZONTAL AND VERTICAL REINFORCING AS NOTED ON THE DRAWINGS AND FILL ALL REINFORCED BLOCK CELLS WITH GROUT. REFER TO "MINIMUM MASONRY WALL REINFORCING SCHEDULE", OR SECTIONS, FOR REQUIRED WALL REINFORCEMENT. HORIZONTAL LADDER-TYPE REINFORCEMENT SHALL BE CONTINUOUS THRU CORNERS, INTERSECTIONS, AND PILASTERS.
10. GROUTING SHALL BE LIMITED TO A MAXIMUM WALL HEIGHT OF 5'-4" PER LIFT.

WOOD FRAMING:

1. ALL STRUCTURAL LUMBER SHALL CONFORM TO THE REQUIREMENTS OF NDS-2015 AND THE ASSOCIATED SUPPLEMENT "DESIGN VALUES FOR WOOD CONSTRUCTION."
2. DIMENSIONAL LUMBER NOT INDICATED TO BE PRESSURE-TREATED SHALL BE SPRUCE-PINE-FIR NO. 1/NO. 2 OR BETTER WITH THE FOLLOWING DESIGN VALUES:
   ALL SIZES: Fb = 875 PSI Fv = 135 PSI E = 1,400,000 PSI
3. DIMENSIONAL LUMBER INDICATED TO BE PRESSURE-TREATED SHALL BE SOUTHERN PINE NO. 2 OR BETTER WITH THE FOLLOWING DESIGN VALUES:
   2X4: Fb = 1100 PSI Fv = 175 PSI E = 1,400,000 PSI
   2X6: Fb = 1000 PSI Fv = 175 PSI E = 1,400,000 PSI
4. STRUCTURAL COMPOSITE LUMBER SHALL BE PROVIDED BY TRUS JOIST BY WEYERHAUSER (OR APPROVED EQUAL) WITH THE FOLLOWING DESIGN VALUES:
   LVLs: Fb = 2600 PSI Fv = 285 PSI E = 2,000,000 PSI
   PSL POSTS: Fb = 2400 PSI Fv = 190 PSI E = 1,800,000 PSI
   PSL BEAMS: Fb = 2900 PSI Fv = 290 PSI E = 2,000,000 PSI
5. FLOOR AND ROOF SHEATHING SHALL BE APA-RATED TONGUE AND GROOVE PLYWOOD AND SHALL BE GLUED AND NAILED WITH 8d NAILS AT 6" ON CENTER ALONG DIAPHRAGM BOUNDARIES AND SUPPORTED EDGES AND 8d NAILS AT 12" ON CENTER AT ALL INTERMEDIATE SUPPORTS. PLYWOOD SHEATHING AT FLOORS AND ROOFS SHALL SPAN WITH THE STRENGTH AXIS PERPENDICULAR TO THE SUPPORTING MEMBERS.
6. SHEATHING AT EXTERIOR WALLS AND INTERIOR SHEAR WALLS SHALL BE APA-RATED PLYWOOD OR STRUCTURAL 1 GRADE PLYWOOD AS INDICATED ON THE SHEAR WALL SCHEDULES. PROVIDE 2X BLOCKING AT ALL UNSUPPORTED EDGES AT SHEAR WALL SHEATHING.
7. ALL FLUSH (SIDE-MOUNTED) CONNECTIONS SHALL HAVE BEAM OR JOIST HANGERS CAPABLE OF SUPPORTING THE MAXIMUM REACTION OF THE MEMBER INDICATED ON PLAN.
8. ALL CONNECTIONS SHALL CONFORM TO NDS-2015 AND THE CONTRACT DOCUMENTS. ALL FASTENING SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE PER THE MASSACHUSETTS STATE BUILDING CODE.
9. PROVIDE DOUBLE STUDS (MINIMUM) UNDER ALL HEADERS AND BUILT-UP BEAMS, UNLESS OTHERWISE NOTED. SUCH STUDS SHALL CONTINUE FROM THE POINT OF APPLICATION OF THE LOAD TO THE FOUNDATION OR TO THE COMPOSITE STEEL PODIUM LEVEL, UNLESS OTHERWISE INDICATED.
10. ALL STEEL HARDWARE SHALL BE HOT-DIPPED GALVANIZED. PROVIDE AND INSTALL STAMPED AND FABRICATED STEEL OF THE TYPE AS REQUIRED IN THE CONTRACT DOCUMENTS OR CONNECTION SHOP DRAWINGS. NAILS SHALL BE THOSE FURNISHED BY THE MANUFACTURER FOR THE SPECIFIC USE AND SHALL BE FULLY DRIVEN IN ALL HOLES IN THE HANGER OR ANCHOR. METAL HANGERS, BY SIMPSON STRONG-TIE OR APPROVED EQUAL AND CONFORMING TO THE INDICATED REQUIREMENTS, SHALL BE PROVIDED. HARDWARE FOR ALL STRUCTURAL COMPOSITE LUMBER SHALL BE NOTED ON THE SHOP DRAWINGS.
11. STRUCTURAL WOOD MEMBERS SHALL NOT BE CUT, NOTCHED, OR PIERCED IN EXCESS OF THE LIMITATIONS SPECIFIED IN THE MASSACHUSETTS STATE BUILDING CODE OR IN THE MANUFACTURER'S SPECIFICATIONS.
12. UNLESS OTHERWISE NOTED ON PLAN, ALL STUD WALLS SHALL BE PROVIDED WITH DOUBLE SILL PLATES AND TRIPLE TOP PLATES INSTALLED TO PROVIDE OVERLAPPING CORNERS AND WALL INTERSECTIONS. TOP PLATE SPLICES SHALL BE OFFSET NOT LESS THAN 48" ON CENTER.

QUALITY ASSURANCE:

1. THE OWNER WILL EMPLOY AND PAY FOR THE SERVICES OF AN INDEPENDENT TESTING AGENCY TO PROVIDE QUALITY ASSURANCE TESTING AND INSPECTIONS FOR WORK SPECIFIED IN CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE, INCLUDING MASSACHUSETTS AMENDMENTS. THE TESTING AGENCY SHALL BE LICENSED IN MASSACHUSETTS AND ALL TESTING AND INSPECTIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF AN ENGINEER REGISTERED IN MASSACHUSETTS.
2. FAILURE OF QUALITY ASSURANCE TESTING AND INSPECTIONS TO DETECT ANY DEFECTIVE WORK OR MATERIAL SHALL NOT IN ANY WAY PREVENT LATER REJECTION WHEN SUCH DEFECT IS NOTED, NOR SHALL IT OBLIGATE THE OWNER'S REPRESENTATIVE FOR FINAL ACCEPTANCE.
3. THE TESTING AGENCY AND ITS REPRESENTATIVES ARE NOT AUTHORIZED TO REVOKE, ALTER, RELAX, ENLARGE OR RELEASE ANY PORTION OF THE WORK, PERFORM ANY DUTIES OF THE CONTRACTOR, OR BE A PARTY TO SCHEDULING OF WORK.
4. RECORDS OF INSPECTIONS SHALL BE KEPT AVAILABLE TO THE BUILDING OFFICIAL DURING PROGRESS OF THE WORK AND FOR TWO YEARS AFTER COMPLETION OF THE PROJECT. RECORDS SHALL BE PRESERVED BY THE INDEPENDENT TESTING AGENCY.
5. REFER TO LIST OF REQUIRED SPECIAL INSPECTIONS BELOW:

LIST OF SPECIAL INSPECTIONS:

1. CONCRETE:
   A. CONCRETE MIX
   B. COMPRESSIVE STRENGTH
   C. MESH
   D. REBAR
   E. CURING & PROTECTION
2. STRUCTURAL STEEL:
   A. GRADE
   B. PLACEMENT
   C. BOLTED AND WELDED CONNECTIONS
3. STEEL DECKING:
   A. GAUGE
   B. ATTACHMENT TO SUPPORTING MEMBERS
4. CONCRETE MASONRY UNITS:
   A. PRISM TEST
   B. GROUT
   C. MORTAR
   D. REBAR
5. WOOD:
   A. HURRICANE TIES AT ROOF
   B. HANGER CONNECTIONS
   C. JOIST ANCHORAGE TO WALL
6. SOILS:
   A. BACKFILL AND COMPACTION REQUIREMENTS
   B. VERIFICATION OF BEARING STRATA
   C. INSPECTION OF PREPARED FILL

MISC. METALS SECTION (STAIRS AND RAILINGS):

1. ALL STAIRS, STAIR LANDINGS, RAILINGS AND OTHER STAIR COMPONENTS SHALL BE DESIGNED AND DETAILED UNDER THE SUPERVISION OF A STRUCTURAL ENGINEER LICENSED IN THE COMMONWEALTH OF MASSACHUSETTS.
2. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED, SEALED, AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. SHOP DRAWINGS SHALL CLEARLY INDICATE, BUT NOT BE LIMITED TO, THE FOLLOWING:
   a. LOADS IMPOSED ON THE STRUCTURE FROM THE STAIR / RAILINGS
   b. ALL CONNECTIONS FROM THE STAIRS / RAILINGS TO THE STRUCTURE
   c. ALL SIZES AND SHAPES
   d. ALL DIMENSIONS AND CONFIGURATIONS
3. ALL CONCRETE INFILL (WHERE INDICATED ON THE ARCHITECTURAL DRAWINGS) AND LANDINGS SHALL BE CAST WITH NORMAL WEIGHT CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.

METAL STUDS (COLD-FORMED METAL FRAMING FOR EXTERIOR BACK-UP WALLS):

1. CONTRACTOR SHALL SUBMIT THE FOLLOWING:
   a. SHOP DRAWINGS FOR ALL COMPONENTS AND INSTALLATIONS NOT FULLY DIMENSIONED OR DETAILED IN MANUFACTURER'S PRODUCT DATA.
   b. SHOP DRAWINGS AND CALCULATIONS SHALL BE SEALED BY A LICENSED ENGINEER IN THE STATE OF MASSACHUSETTS.
   c. CALCULATIONS AND DRAWINGS WILL BE REVIEWED BY ARCHITECT FOR GENERALCOMPLIANCE WITH DESIGN INTENT.
   d. PRODUCT CATALOG WITH PROPERITES OF ALL C STUDS.
2. GALVANIZED STUDS OF 12, 14, AND 16 GAUGE SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO ASTM A653. CALCULATIONS SHALL BE PREPARED UTILIZING ONE OF THE FOLLOWING GRADES:
   a. GRADE D MINUMUM YIELD 50 KSI
3. ALL GALVANIZED 18 AND 20 GAUGE STUDS, TRACK, BRIDGING, END CLOSURE AND ACCESSORIES SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE REQUIREMENT OF ASTM A653, GRADE A, WITH YIELD OF 33 KSI.
4. ALL STUDS AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A HOT-DIPPED, GALVANIZED COATING.
5. INSTALLATION:
   a. TRACKS: INSTALL CONTINUOUS TRACKS SIZED TO MATCH STUDS. ALIGN TRACKS ACCURATELY TO LAYOUT AT BASE AND TOPS OF STUDS. SECURE TRACKS AS RECOMMENDED BY STUD MANUFACTURER EXCEPT TO NOT EXCEED 16 INCHES ON CENTER. PROVIDE FASTENERS AT CORNERS AND END OF TRACKS.
   b. WALL STUDS: SECURE STUDS TO TOP AND BOTTOM RUNNER TRACKS BY EITHER WELDING OR SCREW FASTENING AT BOTH INSIDE AND OUTSIDE FLANGES. ATTACH STUDS WITH SLIP CONNECTION TO UNDERSIDE OF BEAMS AND/OR DECK ABOVE TO ALLOW 3/4" VERTICAL DEFLECTION OF BEAM.
   c. SUPPLEMENTARY FRAMING: PROVIDE BLOCKING AND BRACING IN METAL FRAMING SYSTEM WHEREVER WALL OR PARTITIONS ARE INDICATED TO SUPPORT FIXTURES, EQUIPMENT, SERVICES CASEWORK, HEAVY TRIM AND FURNISHINGS, AND SIMILAR WORK REQUIRING ATTACHMENT TO THE WALL OR PARTITION. WHERE TYPE OF SUPPLEMENTARY SUPPORT IS NOT OTHERWISE INDICATED, COMPLY WITH STUD MANUFACTURER'S RECOMMENDATIONS AND INDUSTRY IN EACH CASE, CONSIDERING WEIGHT OR LOADING RESULTING FROM ITEM SUPPORTED.
   d. WALL OPENINGS: OPENINGS LARGER THAN 2 FEET SQUARE TO BE FRAMED WITH DOUBLE STUD AT EACH JAMB OR FRAME EXCEPT WHERE MORE THAN TWO ARE REQUIRED.
   e. ALL MEMBERS SHALL BE PLUMBED, ALIGNED AND SECURELY ATTACHED TO SUPPORTING MEMBERS.
6. METAL STUDS SHALL BE DESIGNED PER "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS" FOR ALL APPLICABLE LOADS PER THE MASSACHUSETTS STATE BUILDING CODE AND IMPOSED LOADS FROM MECHANICAL EQUIPMENT.

STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL MATERIALS, WORKMANSHIP, AND DETAILS SHALL CONFORM TO THE REQUIREMENTS OF AISC 303-10 AND AISC 360-10. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
   - STRUCTURAL STEEL W- AND WT-SHAPES: ASTM A992 (GRADE 50)
   - STRUCTURAL STEEL CHANNELS: ASTM A992
   - STRUCTURAL PLATES AND ANGLES: ASTM A36 (36 KSI MIN.)
2. ALL STRUCTURAL STEEL SHALL BE PRIMED, UNLESS OTHERWISE NOTED.
3. SHOP OR FIELD WELDED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF AWS D1.1 "STRUCTURAL WELDING CODE - STEEL" BY THE AMERICAN WELDING SOCIETY AND SHALL USE E70 SERIES ELECTRODES. WHERE NO WELD SIZE IS INDICATED ON PLANS, DETAILS, OR SECTIONS, PROVIDE A MINIMUM OF 1/4" FILLET WELDS (ALL AROUND). ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS. ALL CERTIFICATIONS MUST BE CURRENT (i.e. WITHIN 12 MONTHS OF PERFORMANCE OF WELDING).
4. SHOP OR FIELD BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125, GRADE A325 OR GRADE A490. WHERE NO BOLT SIZE IS INDICATED ON PLANS, DETAILS, OR SECTIONS, PROVIDE A MINIMUM OF 3/4"Ø GRADE A325 BOLTS.
5. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 36 (OR GRADE 55), UNLESS OTHERWISE ANCHOR RODS SHALL BE THREADED RODS WITH A STANDARD HEX-HEAD NUT TACK WELDED TO THE ROD, OR STANDARD HEX-HEAD BOLTS, AND SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE PIER / PILASTER OR FOOTING BELOW. SET ANCHOR RODS WITH TEMPLATE TO ENSURE PROPER POSITIONING.
6. ALL "SIMPLY SUPPORTED" CONNECTIONS SHALL CONFORM TO THE TYPICAL DETAILS GIVEN ON THE PROCEEDING TYPICAL DETAIL SHEETS AND SHALL BE DESIGNED BY THE STEEL FABRICATOR TO SUPPORT THE MINIMUM LOADS GIVEN ON THE "TYPICAL W-BEAM TO BEAM/COLUMN SHEAR CONNECTION" DETAIL.
7. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS SPECIFICATIONS. ALL CERTIFICATIONS MUST BE CURRENT (i.e. WITHIN 12 MONTHS OF PERFORMANCE OF WELDING).
8. SHORT SLOTTED HORIZONTAL HOLES IN WEB OF BEAM FOR BOLTED CONNECTIONS ARE PERMISSIBLE.
9. PROVIDE A MINIMUM OF 1/4" FILLET WELDS (ALL AROUND) AT WELDED CONNECTIONS, U.O.N.

STEEL DECKING:

1. STEEL DECK UNITS SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO THE REQUIREMENTS OF ASTM A653, GRADE 50. BEFORE FORMING, SHEETS SHALL BE COATED WITH A ZINC COATING CONFORMING TO ASTM A653 G-60 AT COMPOSITE FLOOR DECK.
2. STEEL DECK UNITS SHALL SPAN THREE OR MORE SUPPORTS WHERE POSSIBLE.
3. STEEL DECK UNITS SHALL BE FASTENED TO STEEL FRAMING BY A 5/8" DIAMETER PUDDLE WELD SPACED AS FOLLOWS (UNLESS OTHERWISE NOTED ON DRAWINGS):

PANEL TYPE	LOK-FLOORS:
END SUPPORTS	12" O.C.
SIDE SUPPORTS	12" O.C.
INTERIOR SUPPORTS	12" O.C.

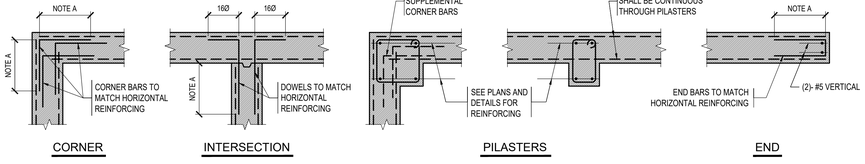
4. STEEL DECKING SIDELAPS SHALL BE CONNECTED WITH #10 TEK SCREWS @ 12" O.C. AT FLOORS, UNLESS OTHERWISE NOTED.
5. PROVIDE END CLOSURES, CAPS, SUMP PANS AND ALL OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
6. MECHANICAL, ELECTRICAL, PLUMBING OR CEILING CONSTRUCTION SHALL NOT BE HUNG OR BEAR (WITH CONCENTRATED LOAD) DIRECTLY FROM THE DECK BUT MUST BE ATTACHED TO STEEL BEAMS/JOISTS.
   EXCEPTION: ANY LOAD THAT IS LESS THAN 100 POUNDS HUNG WITH HANGERS OR DIRECTLY BEARING FROM THE TOPSIDE OF THE DECK IS ALLOWED. THERE MUST NOT BE MORE THAN ONE POINT LOAD PER COMPOSITE FLOOR DECK SPAN PER RIB. THIS APPLIES AS WELL TO POINT LOADS ON ROOF DECK, BUT A 12"x12" BEARING/HUNG PLATE ATTACHED TO 2 RIBS IS REQUIRED AS WELL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE USE OF THESE HANGERS BY ALL TRADES. OTHER CONDITIONS WILL REQUIRE ANGLE, CHANNEL, OR BEAM FRAME TO DISTRIBUTE LOAD TO STEEL BEAMS/JOISTS PER TYPICAL DETAILS.

POST-INSTALLED ANCHORS:

1. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS.
   A. WHERE PLANS, SECTIONS, OR DETAILS REQUIR

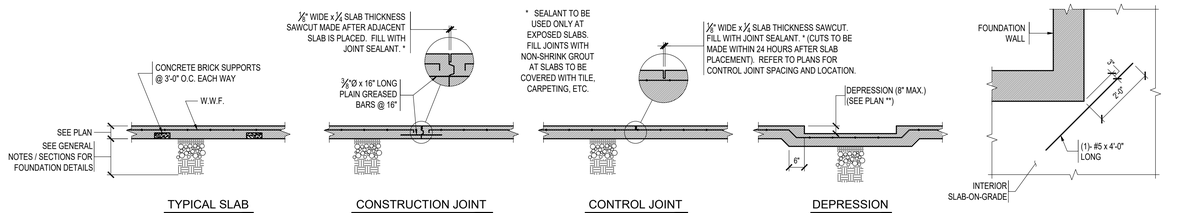
9/16/2024 5:23 PM

S T & P
SOUZA, TRUE AND PARTNERS INC.
STRUCTURAL ENGINEERS
1 CRANBERRY HILL, SUITE 301
LEXINGTON, MA 02421
(617) 926 - 6100 WWW.SOUZATRUE.COM

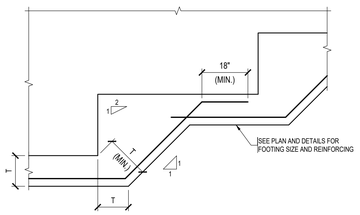


NOTE A: REFER TO TENSION LAP SPLICE LENGTH IN THE "REBAR DEVELOPMENT AND LAP SPLICE LENGTHS" TABLE

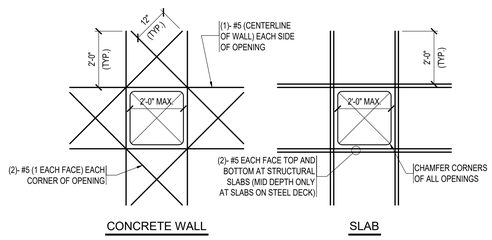
TYPICAL SUPPLEMENTAL REINFORCING DETAILS FOR CONCRETE WALLS (FOR WALLS ≥ 10" WIDE)



TYPICAL SOIL-SUPPORTED SLAB-ON-GRADE DETAILS

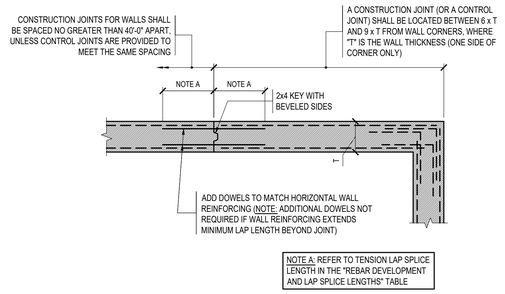


TYPICAL ELEVATION OF CONTINUOUS STEPPED WALL FOOTING



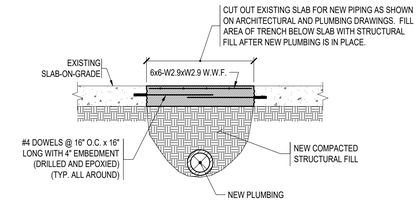
NOTE: DETAIL APPLIES TO OPENINGS IN SLABS OR CONCRETE WALLS THAT ARE 2'-0" (MAX.) IN GREATEST DIMENSION. REFER TO PLANS, SECTIONS, AND DETAILS FOR ADDITIONAL REINFORCING AT LARGER OPENINGS.

TYPICAL DETAIL AT ADDED REINFORCING AT OPENINGS

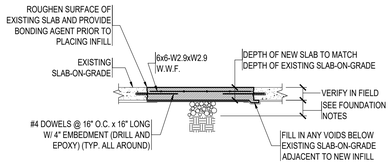


NOTE A: REFER TO TENSION LAP SPLICE LENGTH IN THE "REBAR DEVELOPMENT AND LAP SPLICE LENGTHS" TABLE

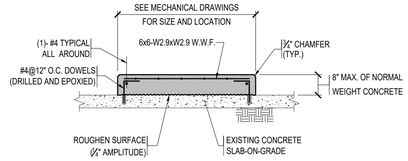
TYPICAL WALL CONSTRUCTION JOINT DETAIL



TYPICAL DETAIL AT NEW PLUMBING UNDER EXISTING SLAB-ON-GRADE

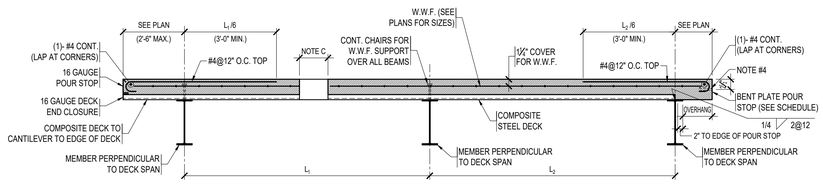


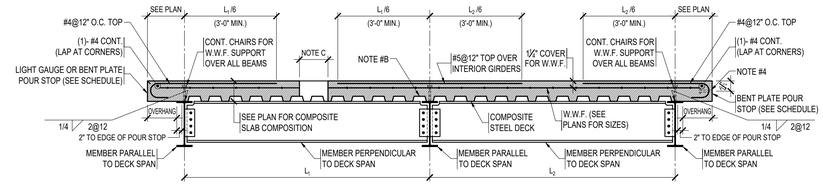
TYPICAL EXISTING SLAB-ON-GRADE INFILL



REFER TO ARCH. AND MEP DRAWINGS FOR SIZE AND LOCATION OF ALL NEW HOUSEKEEPING PADS

TYPICAL HOUSEKEEPING PAD DETAIL FOR EXISTING SOIL-SUPPORTED SLABS-ON-GRADE





TYPICAL REINFORCEMENT AND EDGE CONDITION DETAIL FOR DECK SUPPORTED COMPOSITE SLABS

POUR STOP SCHEDULE		
SLAB OVERHANG BEYOND EDGE OF FLANGE	POUR STOP SIZE	
	INTERIOR EDGES	EXTERIOR EDGES
< 3"	16 GAUGE	3/16" BENT PLATE
3" TO 5"	14 GAUGE	3/16" BENT PLATE
5" TO 8"	12 GAUGE	3/16" BENT PLATE
8" TO 11"	10 GAUGE	3/16" BENT PLATE
11" TO 13"	3/16" BENT PLATE	
13" TO 16"	3/8" BENT PLATE	
16" TO 20"	1/2" BENT PLATE	
> 20"	REFER TO SECTIONS	

NOTES:

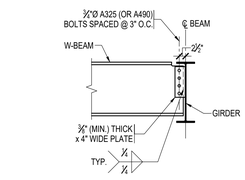
1. TABLE ABOVE INDICATES MINIMUM POUR STOP REQUIREMENTS. REFER TO SECTIONS AND DETAILS FOR FURTHER REQUIREMENTS.
2. IN THE CASE OF CONFLICT BETWEEN THE SCHEDULE AND A DETAIL, THE DETAIL SHALL GOVERN.
3. PROVIDE BENT PLATE POUR STOPS AT ALL EXTERIOR SLAB AND ALL STAIR OPENING EDGES, UNLESS OTHERWISE NOTED. AT OTHER INTERIOR OPENINGS, PROVIDE TYPICAL LIGHT GAUGE POUR STOP, UNLESS OVERHANG DIMENSION REQUIRES A BENT PLATE.
4. PROVIDE ¾"Ø x 6" LONG HEADED STUDS @24" O.C. WELDED TO ALL BENT PLATES, U.O.N. ON PLAN OR SECTIONS (2½" FROM TOP OF CONCRETE TO CENTER OF STUD).

NOTES:

A. TYPICAL FOR ALL SUPPORTED SLABS UNLESS SHOWN OTHERWISE.

B. DECK MUST BE IN CONTACT WITH GIRDER TO INSURE THAT FLANGE DOES NOT FALL UNDER HIGH CELL, RESULTING IN UNBRACED BEAM. WHEN VOIDS OCCUR OVER A BEAM FLANGE, CUT DECK AS REQUIRED AND PROVIDE LIGHT GAUGE DECK CLOSURE.

C. UNFRAMED OPENINGS ARE TO BE BLOCKED OUT WITH FORMWORK. DECK SHALL BE CUT AFTER CONCRETE IS CURED.



NOTES:

1. SIMILAR AT BEAM TO COLUMN CONNECTIONS.
2. THE STEEL FABRICATOR SHALL DESIGN ALL CONNECTIONS FOR SHEAR REACTIONS GIVEN ON PLANS OR IN SECTIONS. IF NO REACTION IS GIVEN, THE MINIMUM SHEAR CAPACITIES IN THE TABLE TO THE RIGHT SHALL BE MAINTAINED.
3. THE STEEL FABRICATOR HAS THE OPTION TO USE ALTERNATE CONNECTION TYPES IN LIEU OF SINGLE PLATE CONNECTIONS, PROVIDED THAT THE MINIMUM SHEAR CAPACITIES AND NUMBERS OF BOLTS AS DEFINED IN THE TABLE ARE MAINTAINED, AND THE STEEL FABRICATOR PROVIDES FULL CALCULATIONS OR REFERENCES TO AISC STANDARD CONNECTION TABLES.
4. WHERE SHORT-SLOTTED HOLES ARE USED, THE HOLE MAY BE HORIZONTALLY SLOTTED IN EITHER THE BEAM WEB OR THE SHEAR PLATE AT THE FABRICATOR'S PREFERENCE.
5. MINIMUM SHEAR CONNECTION REQUIREMENTS ARE FOR ALLOWABLE STRENGTH DESIGN (ASD).

MINIMUM SHEAR CONNECTION REQUIREMENTS (ASD LOADS)			
BEAM DEPTH	MINIMUM SHEAR CAPACITY (KIPS)	MINIMUM NUMBER OF ROWS OF BOLTS	BOLT HOLE TYPE
W10s AND LESS	16.5	2	STANDARD OR SHORT-SLOTTED
W12s AND W14s	28.8	3	STANDARD OR SHORT-SLOTTED
W16s AND W18s	41.5	4	STANDARD OR SHORT-SLOTTED
W21s	54.1	5	STANDARD OR SHORT-SLOTTED
W24s	66.5	6	SHORT-SLOTTED
W27s	78.7	7	SHORT-SLOTTED
W30s	90.8	8	SHORT-SLOTTED
W33s	103	9	SHORT-SLOTTED
W36s	115	10	SHORT-SLOTTED
W40s	126	11	SHORT-SLOTTED

TYPICAL W-BEAM TO BEAM/COLUMN SHEAR CONNECTION

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
TYPICAL DETAILS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

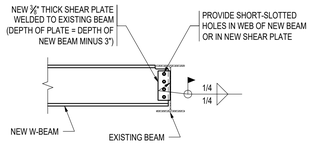
SCALE	AS NOTED
DRAWN BY	GRS
CHECKED	JAY
DATE	09/18/2024

DRAWING NUMBER

S0.02

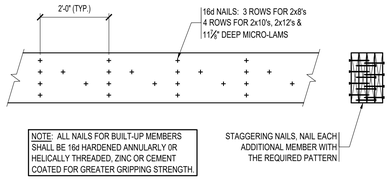
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
H:\2020\24133 - THORNDYKE SCHOOL\24133 S0 SERIES.DWG

9/16/2024 5:24 PM



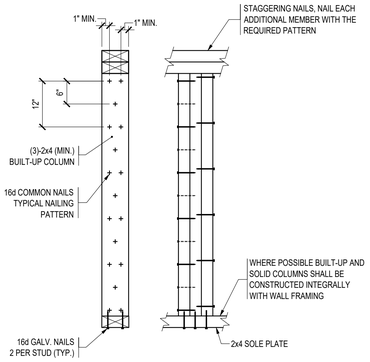
NOTE: SIMILAR AT NEW BEAM TO EXISTING STEEL COLUMN CONNECTIONS

TYPICAL NEW W-BEAM TO EXISTING BEAM CONNECTION



NOTE: ALL NAILS FOR BUILT-UP MEMBERS SHALL BE 16d HARDENED ANNULARLY OR HELICALLY THREADED, ZINC OR CEMENT COATED FOR GREATER GRIPPING STRENGTH.

TYPICAL BUILT-UP BEAM DETAIL



TYPICAL BUILT-UP COLUMN DETAIL

FACE-MOUNT HANGER SCHEDULE (SIMPSON OR APPROVED EQUAL) (U.O.N. ON PLAN)

MEMBER	OVERALL WIDTH x DEPTH	STANDARD	CONCEALED FLANGE	SKEWABLE	SLOPED	SKEWED AND SLOPED
2x6	1½"x5½"	LUS26	LUC26Z	U26	U26	U26
2x8	1½"x7¼"	LUS26	LUC26Z	U26	U26	U26
2x10	1½"x9¼"	LUS28	LUC210Z	U210	U210	U210
2x12	1½"x11¼"	LUS210	LUC210Z	U210	U210	U210
2x14	1½"x13¼"	LUS212	LUC212Z	U212	U212	U212
(2)-2x6s	3"x5½"	LUS26-2	HUC26-2	U26-2	U26-2	U26-2
(2)-2x8s	3"x7¼"	LUS28-2	HUC28-2	U26-2	U26-2	U26-2
(2)-2x10s	3"x9¼"	LUS28-2	HUC210-2	U210-2	U210-2	U210-2
(2)-2x12s	3"x11¼"	LUS210-2	HUC210-2	U210-2	U210-2	U210-2
(2)-2x14s	3"x13¼"	LUS212-2	HUC212-2	U212-2	U212-2	U212-2
(3)-2x10s	4½"x9¼"	LUS28-3	HUC210-3	U210-3	U210-3	U210-3
(3)-2x12s	4½"x11¼"	LUS210-3	HUC212-3	U210-3	U210-3	U210-3
TRUE EX. 2x8	2"x8"	U26R	APLH26R	U26R	U26R	U26R
TRUE EX. (2)-2x8s	4"x8"	U46R	HUC4.12/9	U46R	U46R	U46R
TRUE EX. (2)-2x12s	4"x12"	U410R	HUC4.12/11	U410R	U410R	U410R

MINIMUM CONCRETE WALL REINFORCING SCHEDULE

WALL THICKNESS	REINFORCING LOCATION	HORIZONTAL REINFORCING	VERTICAL REINFORCING
6" - 8"	CENTERED ON WALL	#4 @ 12"	#4 @ 18"
9" - 11"	EACH FACE	#4 @ 18"	#4 @ 18"
12" - 16"	EACH FACE	#4 @ 12"	#4 @ 18"
17" - 20"	EACH FACE	#5 @ 15"	#5 @ 18"

NOTES:

1. WALLS OF FRACTIONAL THICKNESS SHALL BE REINFORCED AS WALLS OF THE NEXT HIGHEST THICKNESS.
2. REFER TO STRUCTURAL DRAWINGS FOR REINFORCING AT WALL THICKNESS NOT INDICATED IN THIS SCHEDULE.

REBAR DEVELOPMENT AND LAP SPLICE LENGTHS

LENGTHS (IN INCHES) BASED ON f'c=4000 PSI NORMAL WEIGHT CONCRETE

		BAR TYPE \ BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
DEVELOPMENT LENGTH	TENSION	TOP BARS	19	25	31	37	54	62	70	79	87
		OTHER BARS	15	19	24	29	42	48	54	61	67
	COMPRESSION	ALL BARS	8	10	12	15	17	19	22	25	27
LAP SPLICE LENGTH	TENSION	TOP BARS	25	33	41	49	71	81	91	102	114
		OTHER BARS	19	25	31	37	54	62	70	79	87
	COMPRESSION	ALL BARS	12	15	19	23	27	30	34	39	43

NOTES:

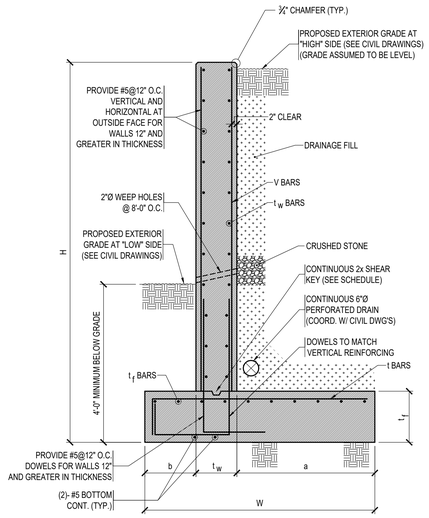
1. LENGTHS ARE BASED ON f_y = 60 KSI, f'c = 4000 PSI, AND NORMAL WEIGHT CONCRETE. WHERE LIGHTWEIGHT AGGREGATE CONCRETE IS SPECIFIED, MULTIPLY THE ABOVE TENSION VALUES BY A FACTOR OF 1.3.
2. TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF FRESH CONCRETE IS PLACED IN THE MEMBER BELOW THE BAR.
3. TENSION LAP SPLICE LENGTHS ARE FOR "CLASS B" SPLICES PER ACI 318. LESSER SPLICE LENGTHS MAY BE SUBMITTED BY THE CONTRACTOR PROVIDED FULL CALCULATIONS AND REFERENCE TO THE APPLICABLE PORTIONS OF THE LATEST EDITION OF ACI 318 ACCOMPANY THE SUBMITTAL.
4. WHERE BARS OF DIFFERENT SIZES ARE SPLICED, LAP SPLICE LENGTH SHALL BE AS REQUIRED FOR THE LARGEST BAR.

LOOSE STEEL LINTEL SCHEDULE (U.O.N. ON PLAN)

MASONRY OPENING	LINTEL SIZE
UP TO 3'-0"	L 3½ x 3½ x 5/16
3'-1" TO 4'-6"	L 4 x 3½ x 5/16 (4" LEG VERT.)
4'-7" TO 6'-0"	L 5 x 3½ x 5/16 (5" LEG VERT.)
6'-1" TO 8'-0"	L 6 x 3½ x 5/16 (6" LEG VERT.)
8'-1" TO 10'-0"	L 7 x 4 x 5/16 (7" LEG VERT.)

NOTES:

1. PROVIDE LINTELS OVER ALL OPENING EXCEPT WHERE LINTEL BLOCKS ARE PROVIDED.
2. PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS. FOR 6" WALLS PROVIDE TEE OR BUILT UP SECTION WITH PROPERTIES (Ix, Zx) EQUAL TO OR GREATER THAN 1.5 TIMES ANGLE PROPERTIES FOR 4" WALL THICKNESS.
3. PROVE 8" OF BEARING AT EACH END OF ALL LINTELS.
4. PROVIDE GALVANIZED STEEL AT ALL EXTERIOR WALLS.



TYPICAL SITE RETAINING WALL

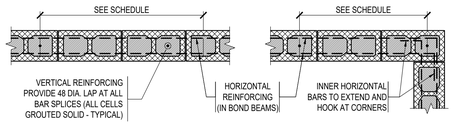
SITE RETAINING WALL SCHEDULE

DIMENSIONS							REINFORCING			
H	W	t_W	a	b	t_f	SHEAR KEY	V BARS	t BARS	t_W BARS	t_f BARS
6'-0"	4'-0"	8"	2'-6"	10"	12"	2x4	#4@12"	#4@12"	#4@12"	(4)- #5
7'-0"	4'-3"	8"	2'-9"	10"	12"	2x4	#4@12"	#4@12"	#4@12"	(4)- #5
8'-0"	4'-9"	12"	2'-9"	12"	12"	2x6	#5@12"	#4@12"	#5@12"	(4)- #5
9'-0"	5'-6"	12"	3'-6"	12"	12"	2x6	#5@12"	#5@12"	#5@12"	(5)- #5
10'-0"	6'-0"	12"	3'-9"	1'-3"	12"	2x6	#5@12"	#5@12"	#5@12"	(5)- #5
11'-0"	6'-6"	14"	4'-3"	1'-1"	14"	2x8	#5@9"	#5@12"	#5@12"	(5)- #6
12'-0"	7'-6"	14"	4'-6"	1'-10"	14"	2x8	#6@10"	#6@12"	#5@12"	(6)- #6
13'-0"	8'-0"	14"	5'-0"	1'-10"	15"	2x8	#7@12"	#6@12"	#5@12"	(6)- #6
14'-0"	8'-6"	14"	5'-6"	1'-10"	15"	2x8	#7@10"	#6@12"	#5@12"	(6)- #6
15'-0"	9'-0"	16"	5'-8"	2'-0"	17"	2x8	#8@12"	#7@12"	#5@12"	(6)- #7
16'-0"	9'-6"	16"	6'-2"	2'-0"	17"	2x8	#8@10"	#7@12"	#5@12"	(6)- #7
17'-0"	10'-6"	18"	6'-9"	2'-3"	18"	2x10	#9@12"	#8@12"	#5@12"	(7)- #7
18'-0"	11'-0"	18"	7'-0"	2'-6"	18"	2x10	#9@10"	#8@10"	#5@12"	(7)- #7

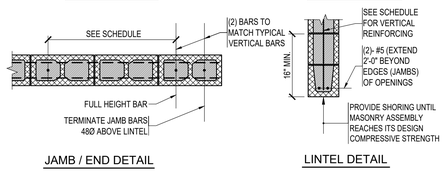
NOTE: LAP ALL VERTICAL BARS AS A TENSION LAP SPLICE.

MINIMUM CONCRETE MASONRY WALL REINFORCING SCHEDULE

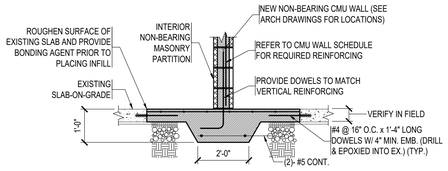
WALL LOCATION	WALL THICKNESS	VERTICAL REINFORCING	HORIZONTAL REINFORCING
ALL EXTERIOR WALLS, STAIR SHAFTS AND ELEVATOR SHAFTS; ALL LOAD BEARING WALLS (UNLESS OTHERWISE NOTED)	6"	#4 @ 32" O.C.	(2)- #4 @ 48" O.C. IN BOND BEAMS
	8"	#6 @ 24" O.C.	(2)- #4 @ 48" O.C. IN BOND BEAMS
	12"	#6 @ 16" O.C.	(2)- #4 @ 48" O.C. IN BOND BEAMS
ALL OTHER INTERIOR CMU WALLS	ALL SIZES	#5 @ 48" O.C.	9 GAUGE JOINT REINFORCING @ 16" O.C.
REFER TO PLANS AND SECTIONS FOR ANY REINFORCING REQUIREMENTS MORE STRINGENT THAN IN THIS SCHEDULE.			



TYPICAL DETAIL | CORNER DETAIL



JAMB / END DETAIL | LINTEL DETAIL



TYPICAL DETAIL UNDER INTERIOR NON-BEARING MASONRY PARTITIONS

SOUZA, TRUE AND PARTNERS INC.
STRUCTURAL ENGINEERS
1 CRANBERRY HILL, SUITE 301
LEXINGTON, MA 02421
(617) 926 - 6100
WWW.SOUZATRUE.COM

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
TYPICAL DETAILS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	AS NOTED
DRAWN BY	GRS
CHECKED	JAY
DATE	09/18/2024

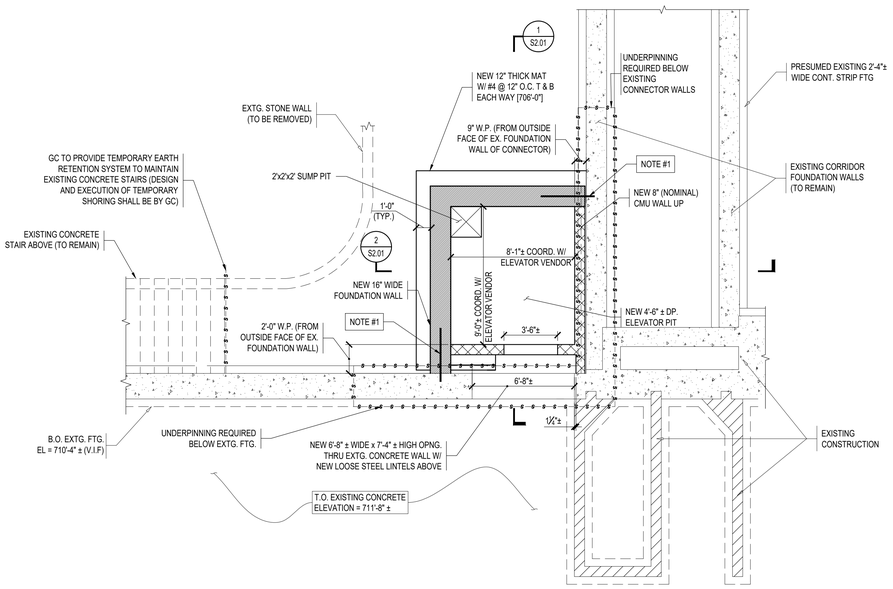
DRAWING NUMBER

S0.03

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
H:\2024\24133 - THORNDYKE SCHOOL\24133 S0 SERIES.DWG

9/16/2024 5:24 PM

SOUZA, TRUE AND PARTNERS INC.
STRUCTURAL ENGINEERS
1 CRANBERRY HILL, SUITE 301
LEXINGTON, MA 02421
(617) 926 - 6100
WWW.SOUZATRUE.COM



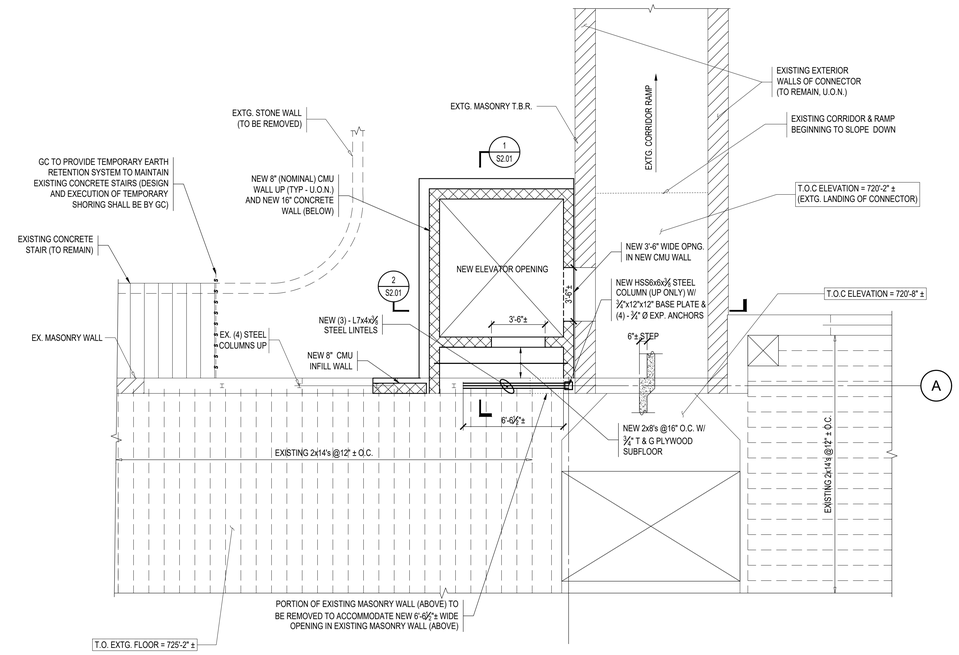
FOUNDATION / LOWER LEVEL PART PLAN

1/4"=1'-0"

NOTES:

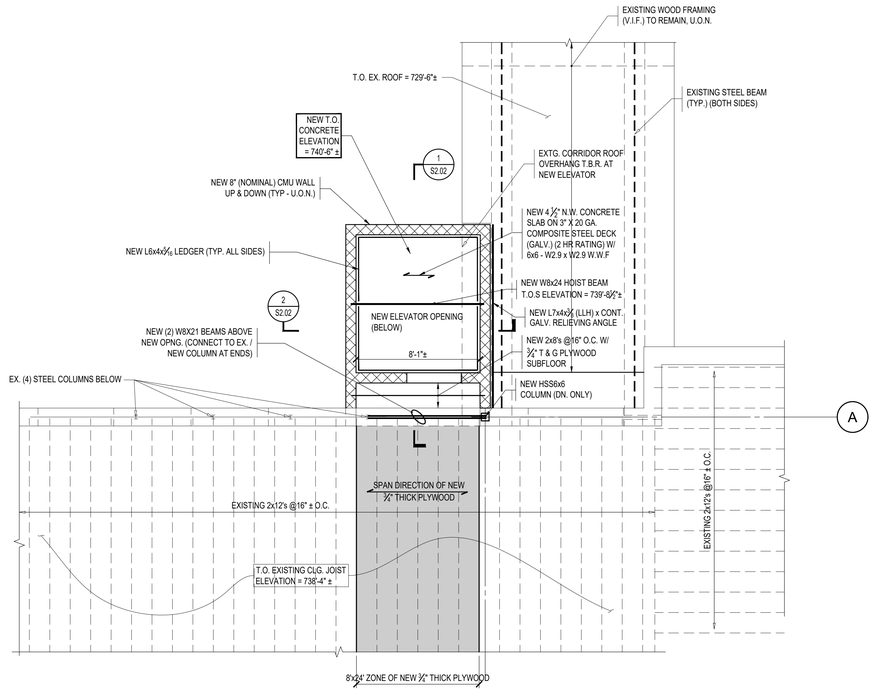
1. PROVIDE #6 @ 12" O.C. x 3'-6" LONG HORIZONTAL DOWELS WITH 6 3/4" MINIMUM EMBEDMENT WHERE NEW FOUNDATION WALL MEETS EXISTING FOUNDATIONS AND / OR NEW UNDERPINNING WALL.

2. REFER TO DRAWINGS S0.01 THRU S0.03 FOR GENERAL NOTES AND TYPICAL DETAILS.



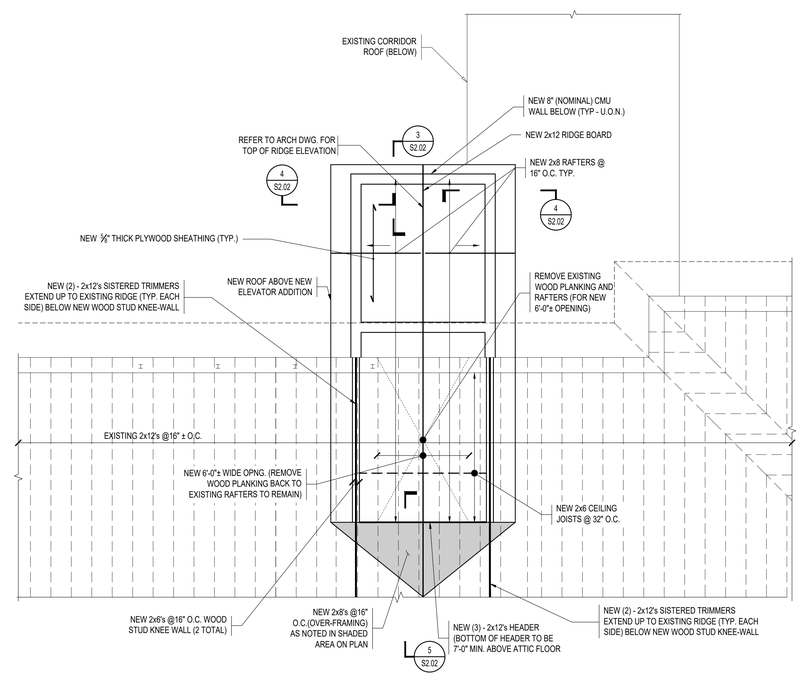
INTERMEDIATE / FIRST FLOOR FRAMING PART PLAN

1/4"=1'-0"



FIRST FLOOR CEILING FRAMING PART PLAN

1/4"=1'-0"



ROOF FRAMING PART PLAN

1/4"=1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

BID SET

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE

PARTIAL FRAMING PLANS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	AS NOTED
DRAWN BY	GRS
CHECKED	JAY
DATE	09/18/2024

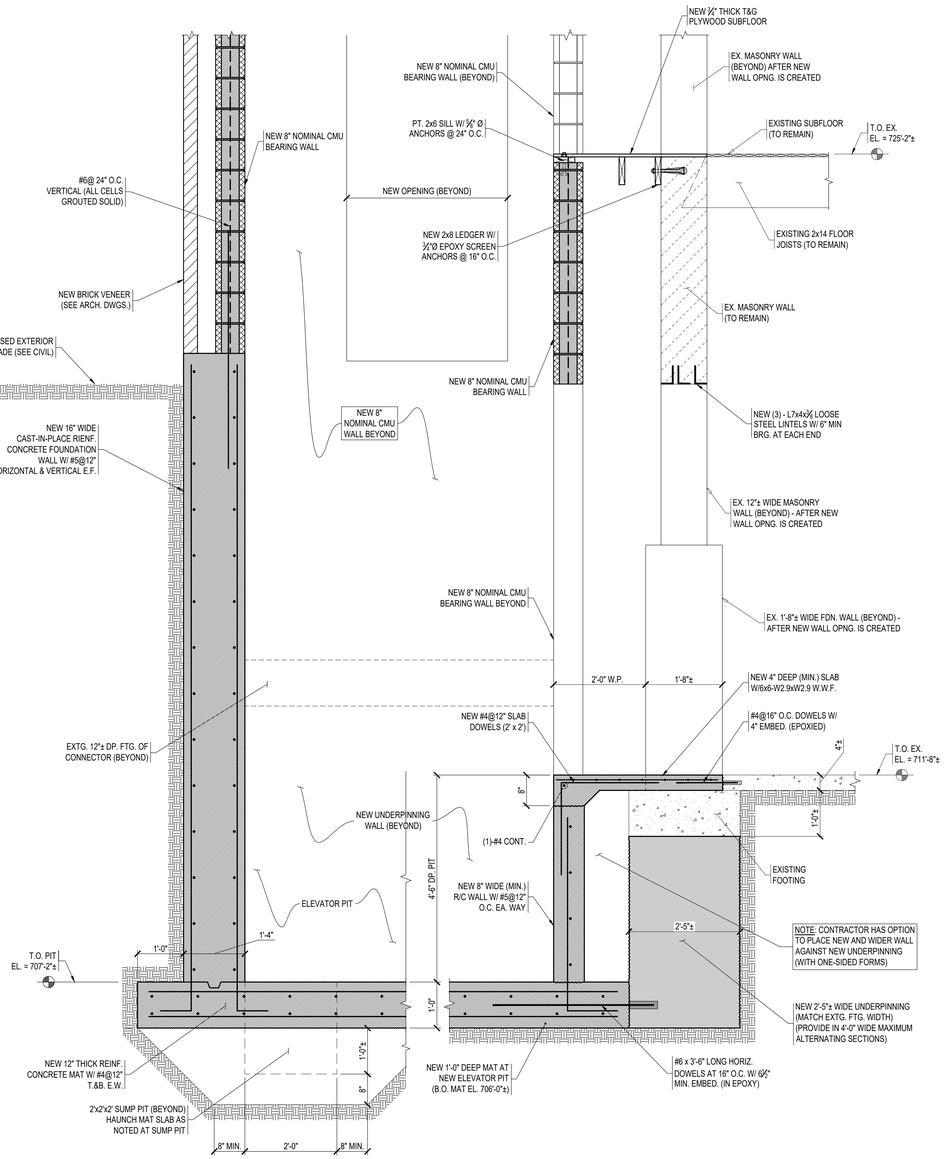
DRAWING NUMBER

S1.01

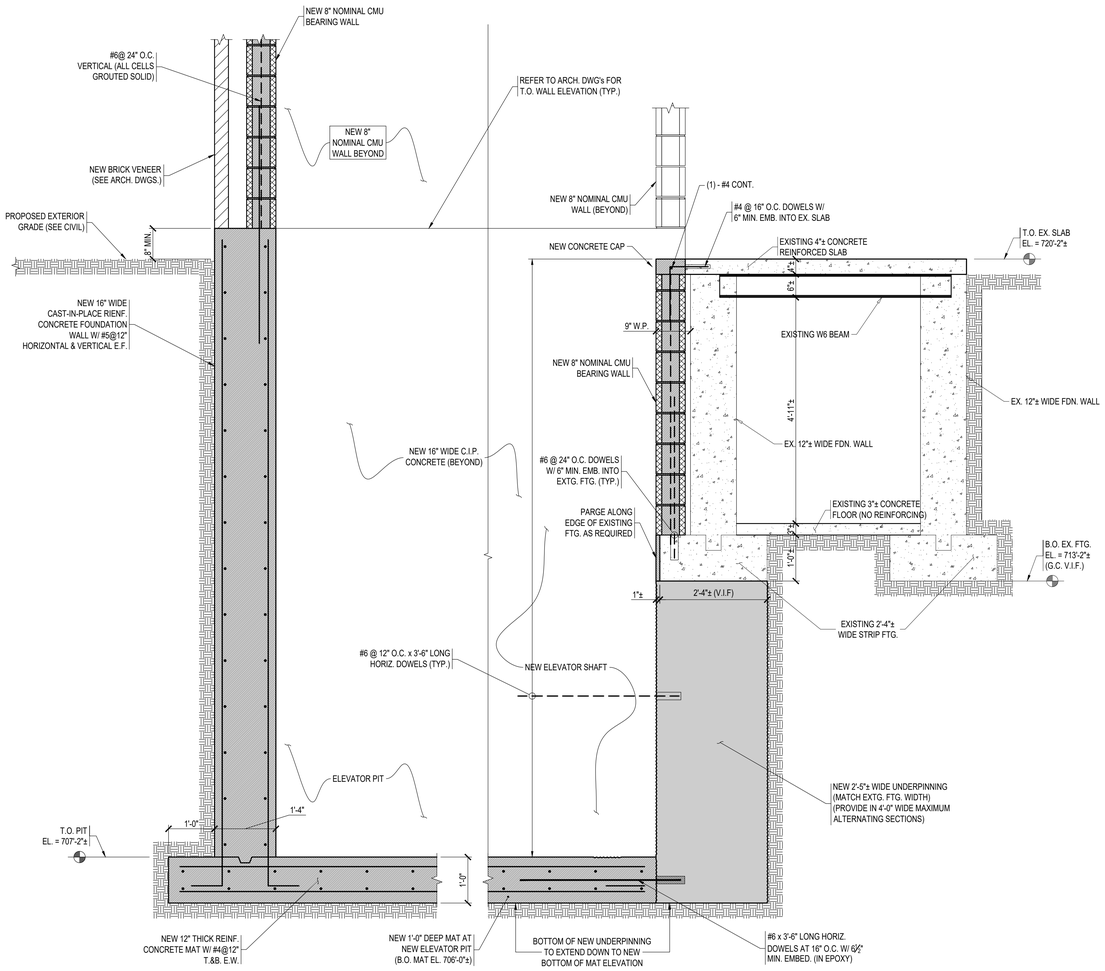
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

H:\2024\24153 - THORNDYKE SCHOOL\24153 S1 SERIES.DWG

9/16/2024 5:24 PM



SECTION 1
3/4"=1'-0"



SECTION 2
3/4"=1'-0"

S T&P
SOUZA, TRUE AND PARTNERS INC.
STRUCTURAL ENGINEERS
1 CRANBERRY HILL, SUITE 301
LEXINGTON, MA 02421
(617) 926 - 6100 WWW.SOUZATRUE.COM

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
SECTIONS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

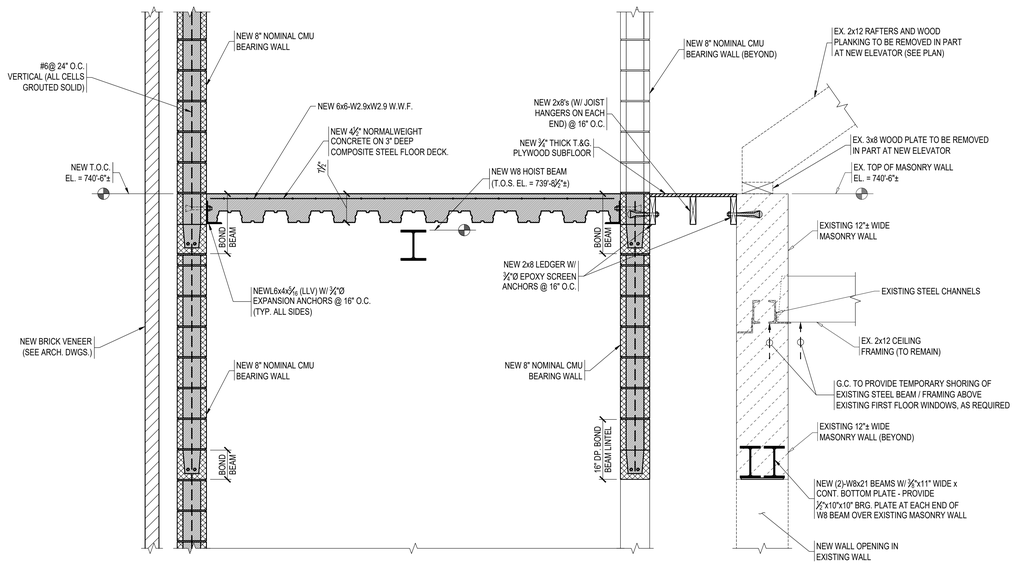
SCALE	AS NOTED
DRAWN BY	GRS
CHECKED	JAY
DATE	09/18/2024

DRAWING NUMBER
S2.01

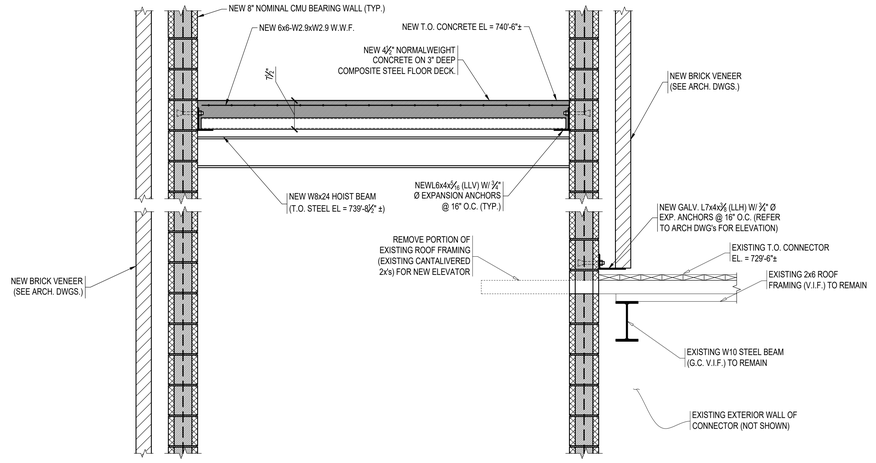
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

H:\2024\24133 - THORNDYKE SCHOOL\24133 S2 SERIES.DWG

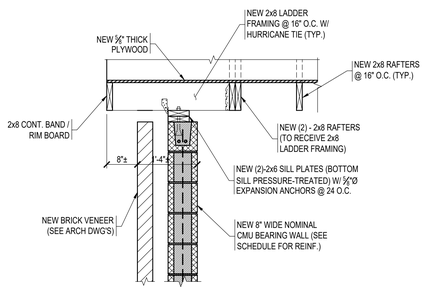
9/16/2024 5:24 PM



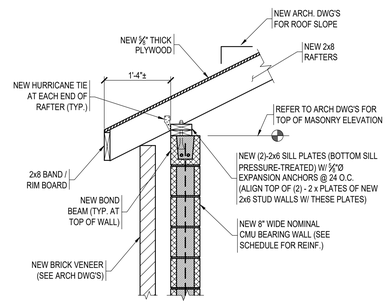
SECTION 1
3/4"=1'-0"



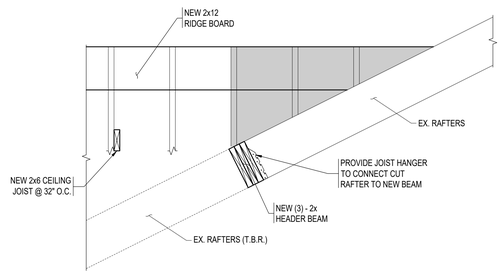
SECTION 2
3/4"=1'-0"



SECTION 3
3/4"=1'-0"



SECTION 4
3/4"=1'-0"



SECTION 5
3/4"=1'-0"

S|T&P
SOUZA, TRUE AND PARTNERS INC.
STRUCTURAL ENGINEERS
1 CRANBERRY HILL, SUITE 301
LEXINGTON, MA 02421
(617) 926 - 6100 WWW.SOUZATRUE.COM

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
BID SET

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
SECTIONS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

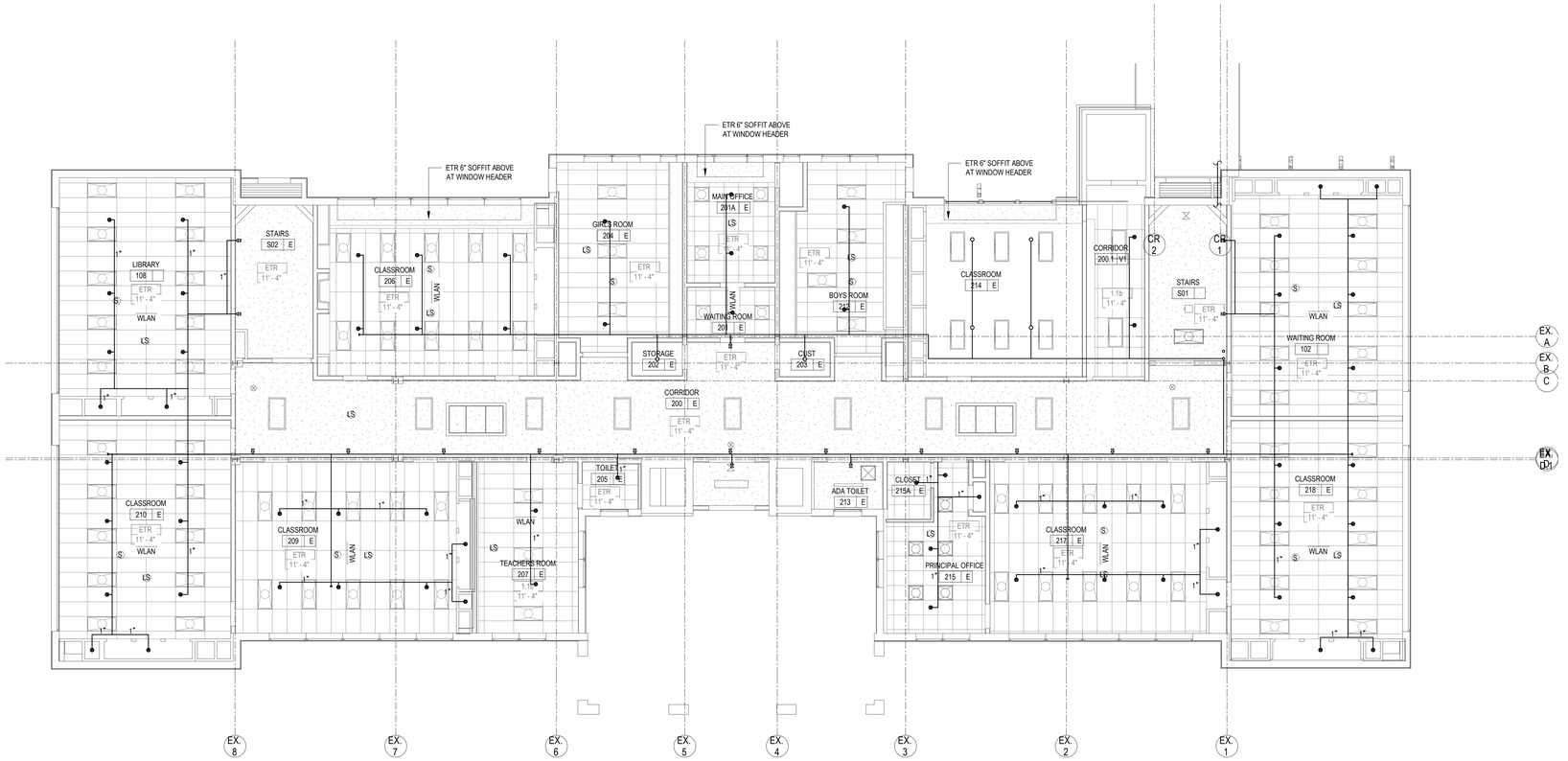
STAMP

DRAWING INFORMATION

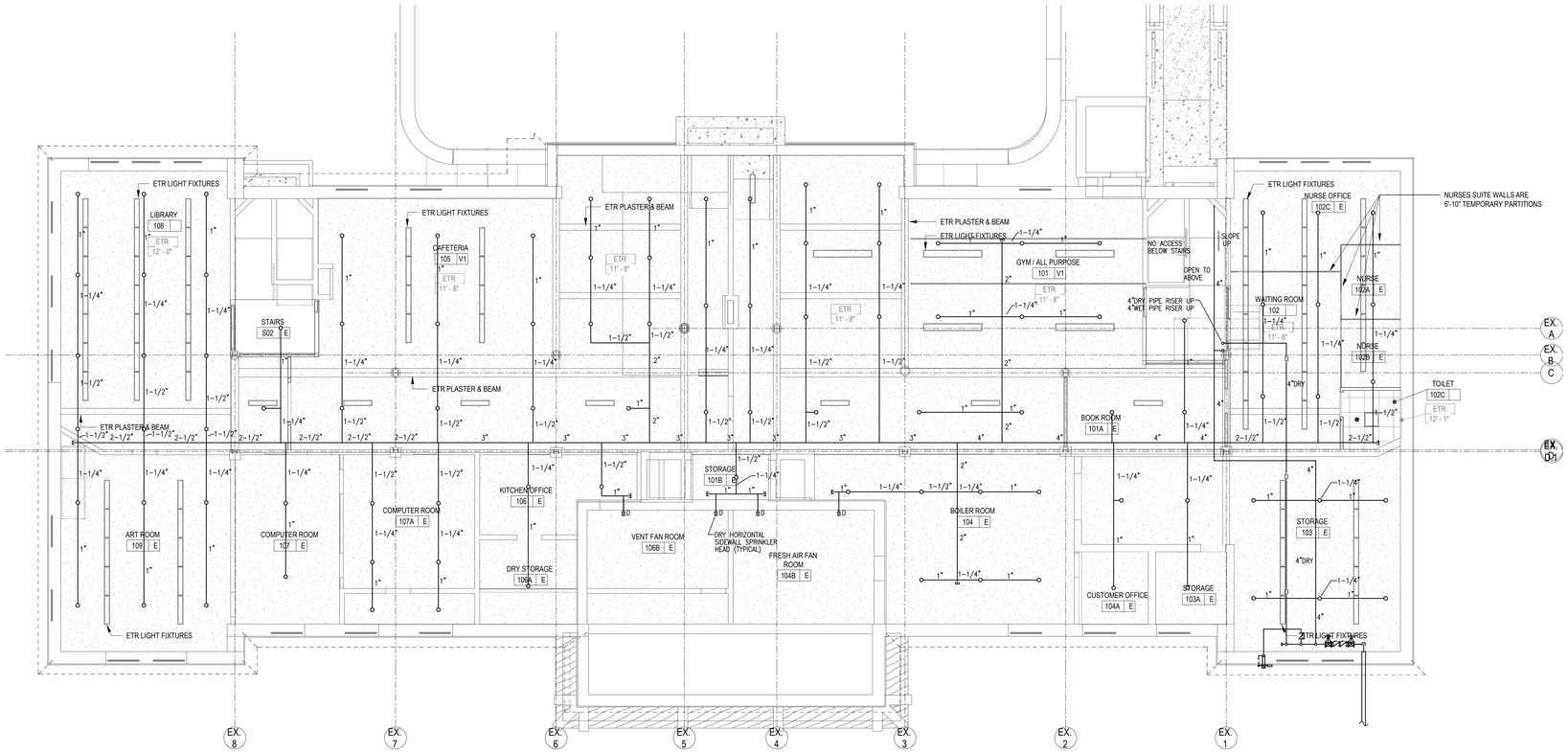
SCALE	AS NOTED
DRAWN BY	GRS
CHECKED	JAY
DATE	09/18/2024

DRAWING NUMBER
S2.02

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
H:\2024\24133 - THORNDYKE SCHOOL\24133 S2 SERIES.DWG



3 FIRST LEVEL FIRE PROTECTION PLAN AREA A
1/8" = 1'-0"



1 LOWER LEVEL FIRE PROTECTION PLAN AREA A
1/8" = 1'-0"

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

7/3/2024 1:47:25 PM

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
LOWER & FIRST LEVEL REFLECTED CEILING PLANS - AREA A

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

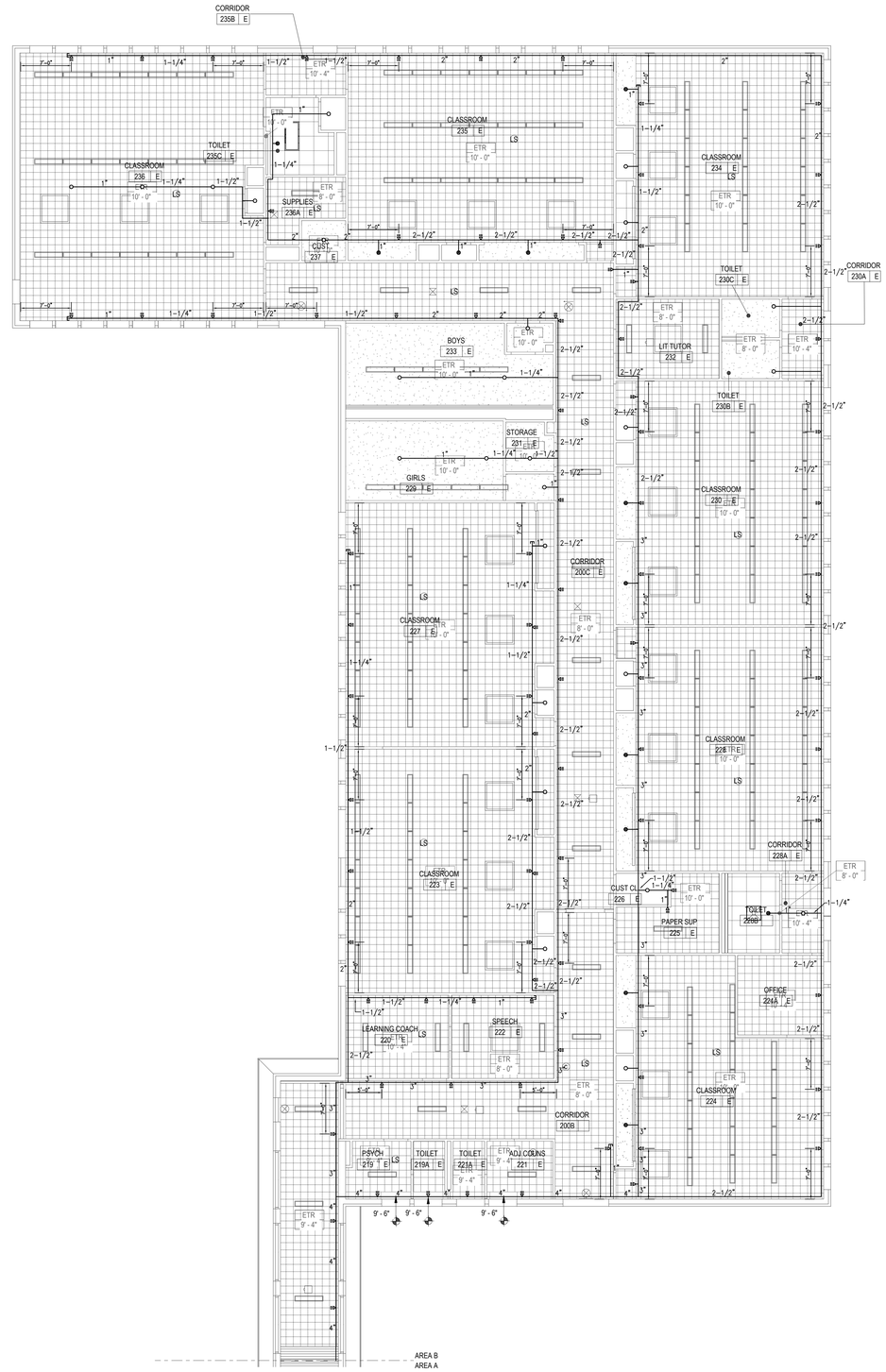
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	JULY 12, 2024

DRAWING NUMBER
FP1.01

PROJECT NORTH
NORTH



GENERAL NOTE:
ETR CEILING SLOPES WITH STEEL FRAMING AT ALL CLASSROOMS TYPICAL.
UNLESS NOTED OTHERWISE

1 FIRST LEVEL FIRE PROTECTION PLAN AREA B
1/8" = 1'-0"



KEY PLAN

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
FIRST LEVEL FIRE PROTECTION PLAN - AREA B

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

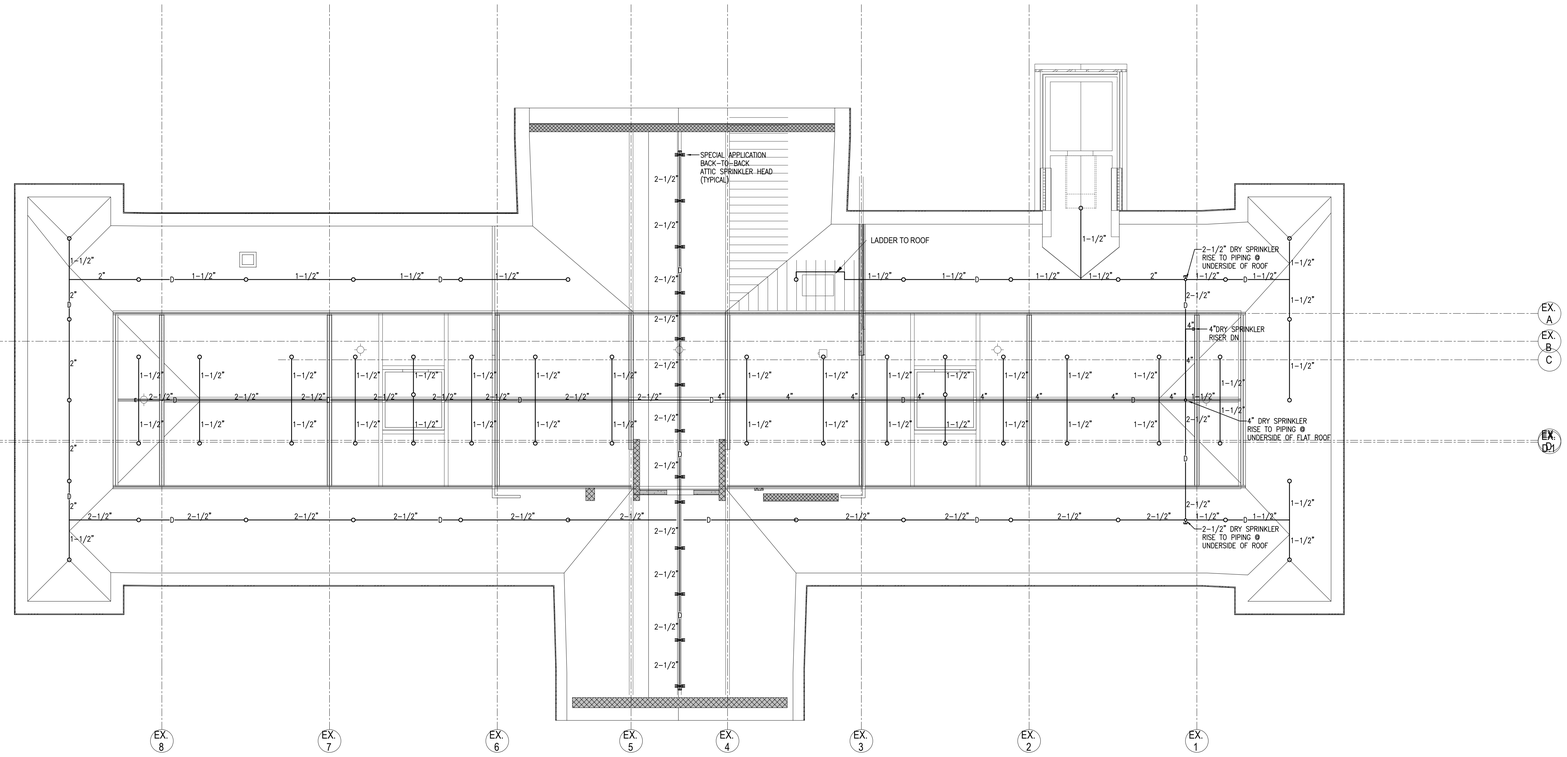
DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	JULY 12, 2024

DRAWING NUMBER
FP1.02

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
7/2/2024 1:48:38 PM



SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN DOCUMENTS

PROJECT NUMBER

02023.11

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE

ATTIC REFLECTED CEILING PLAN - AREA A

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	JULY 12, 2024

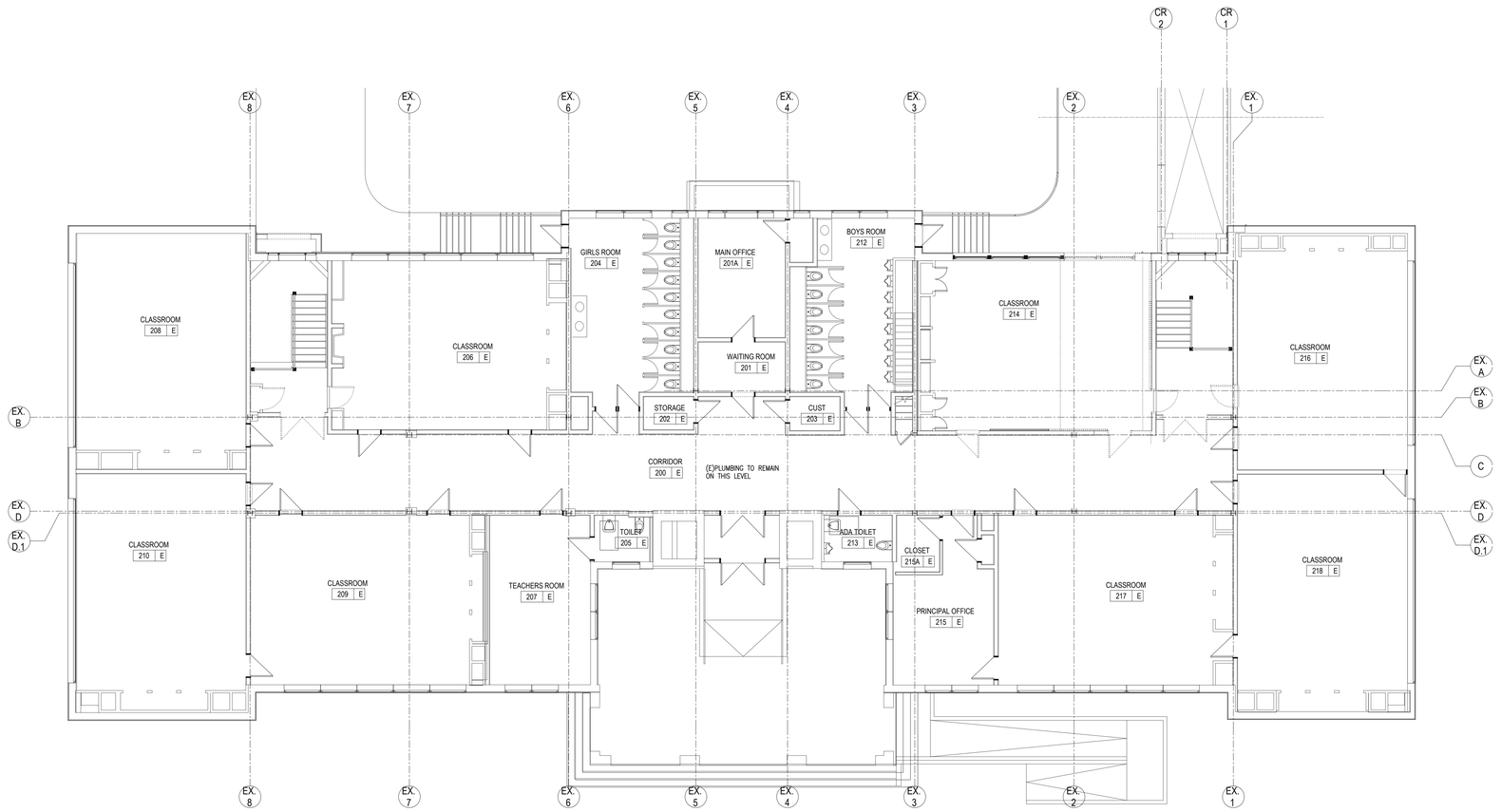
DRAWING NUMBER

FP1.03

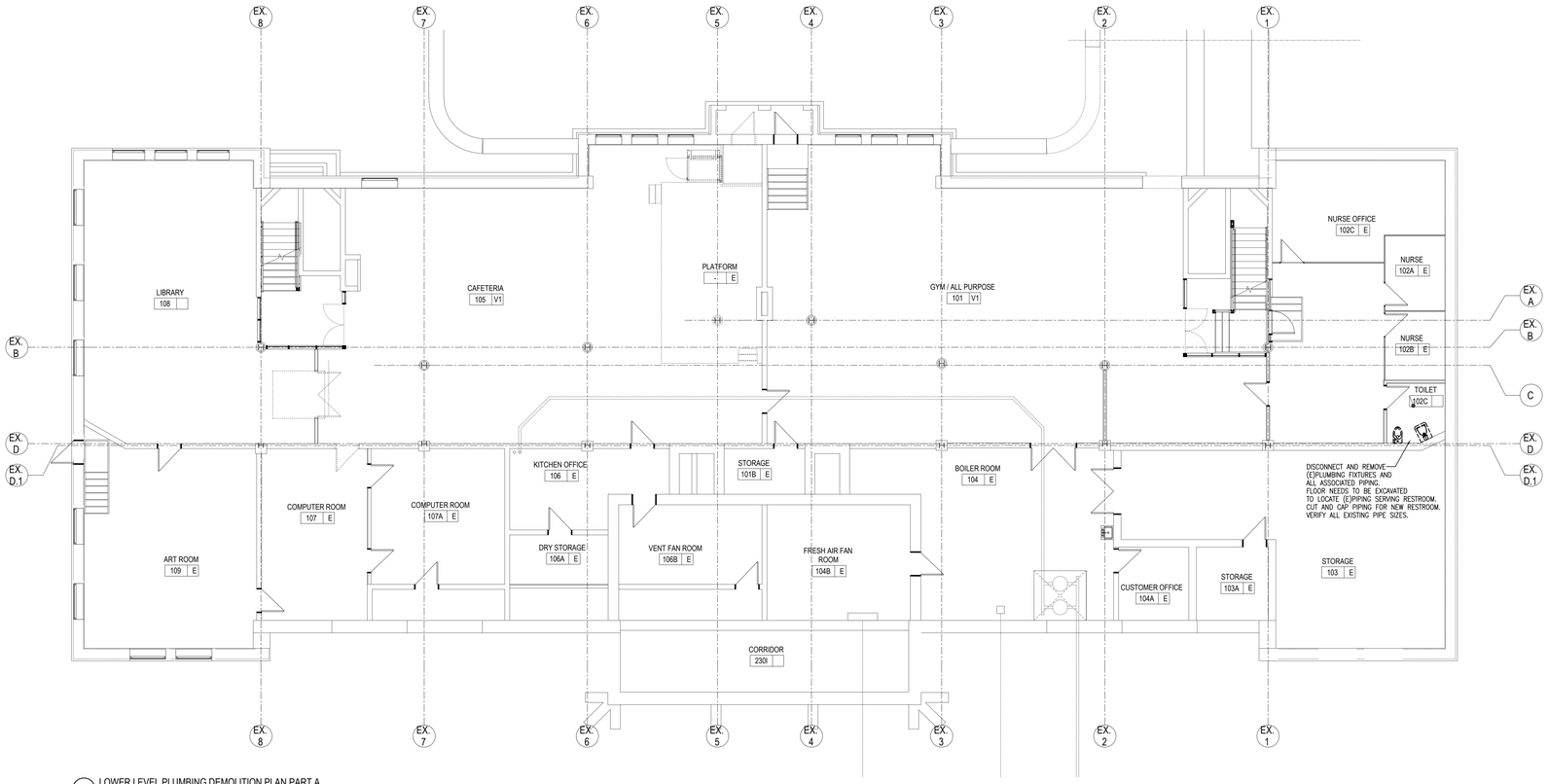
PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

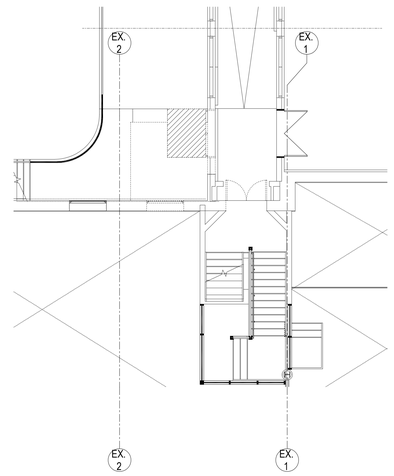
7/3/2024 1:48:08 PM



3 FIRST LEVEL PLUMBING DEMOLITION PLAN PART A
1/8" = 1'-0"



1 LOWER LEVEL PLUMBING DEMOLITION PLAN PART A
1/8" = 1'-0"



2 INTERMEDIATE LANDING DEMOLITION PLAN PART A
1/8" = 1'-0"

PROJECT NORTH
NORTH

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
LOWER LEVEL & FIRST FLOOR PLUMBING DEMOLITION PLANS AREA A

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

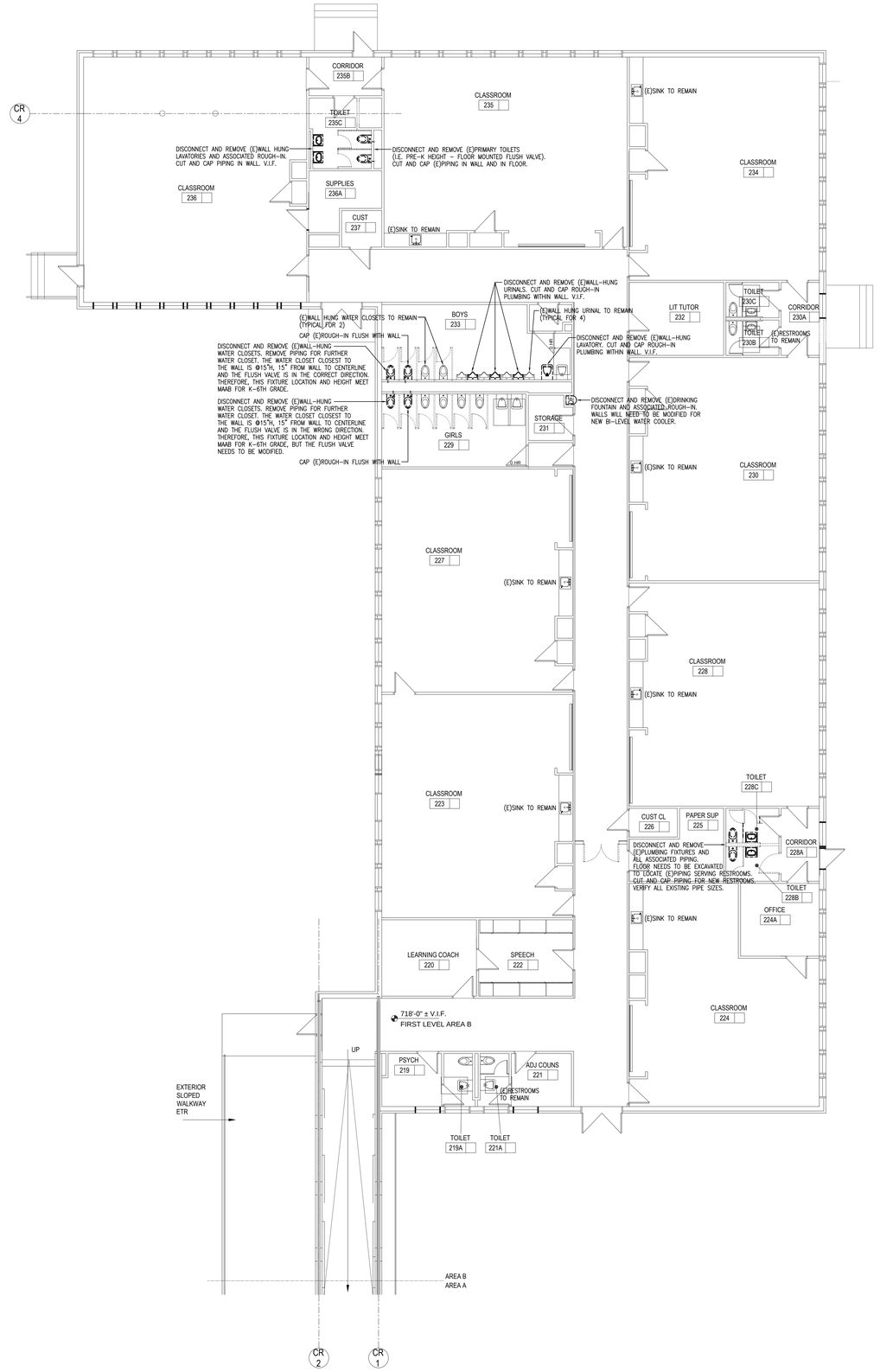
DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	JULY 12, 2024

DRAWING NUMBER
DP1.01

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

7/3/2024 4:47:06 PM



1 DEMOLITION FIRST LEVEL PLUMBING DEMOLITION FLOOR PLAN AREA B
1/8" = 1'-0"

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
FIRST FLOOR PLUMBING DEMOLITION PLAN AREA B

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

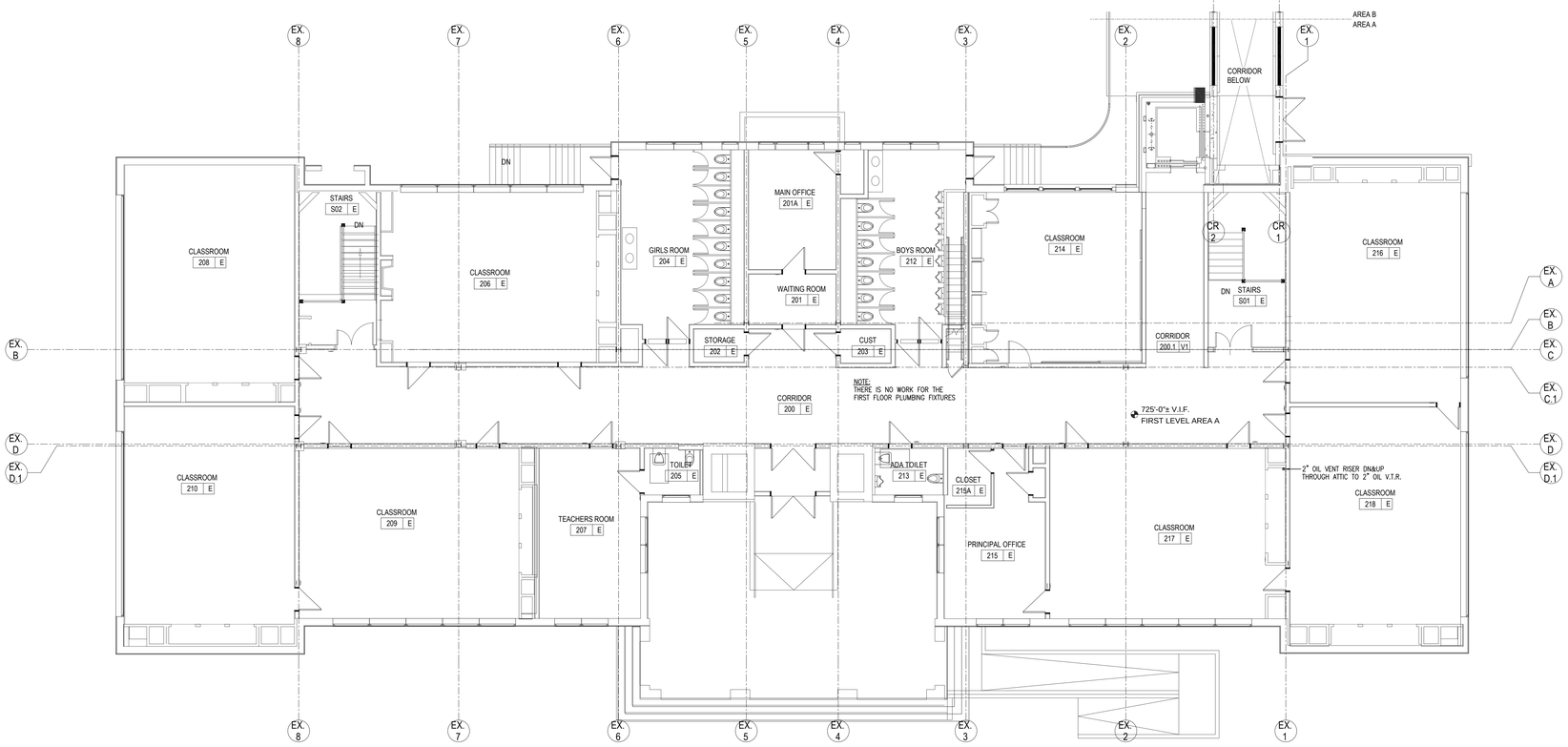
DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	JULY 12, 2024

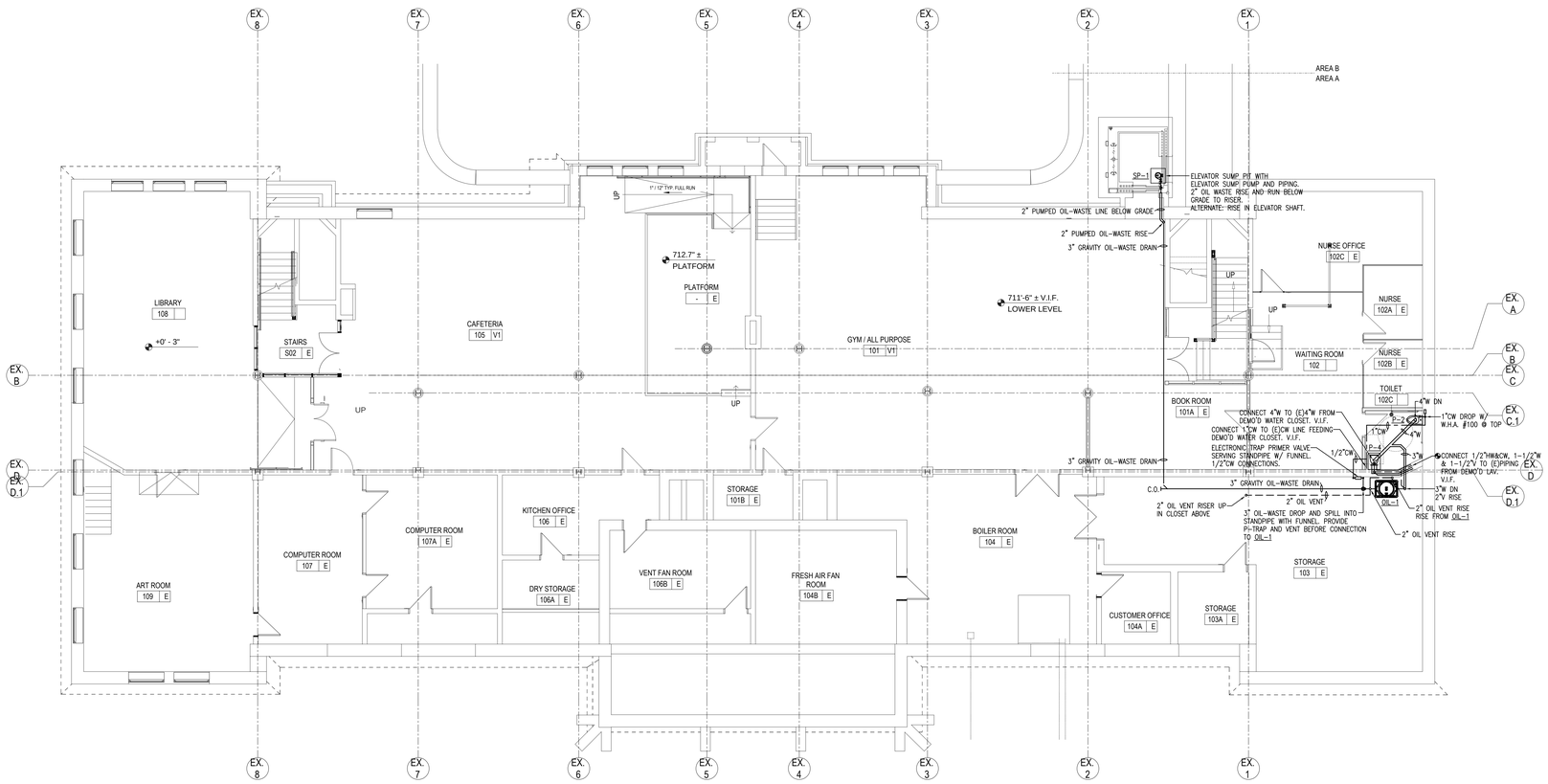
DRAWING NUMBER
DP1.02

PROJECT NORTH
NORTH

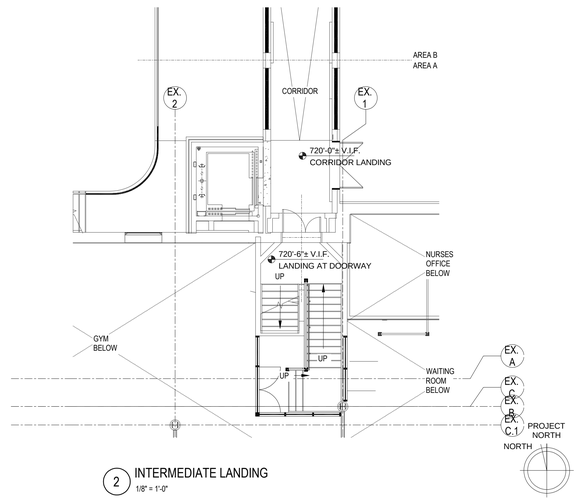
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
7/3/2024 4:48:14 PM



3 FIRST FLOOR PLAN - AREA A
1/8" = 1'-0"



1 LOWER LEVEL FLOOR PLAN - AREA A
1/8" = 1'-0"



2 INTERMEDIATE LANDING
1/8" = 1'-0"

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/28/2024 5:32:41 PM

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
PLUMBING FLOOR PLANS AREA A

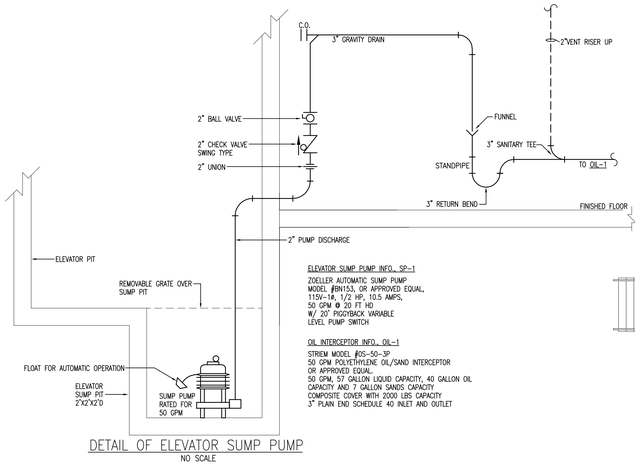
MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	JULY 12, 2024

DRAWING NUMBER
P1.01



DETAIL OF ELEVATOR SUMP PUMP
NO SCALE

ELEVATOR SUMP PUMP INFO.. SP-1

ZOELLER AUTOMATIC SUMP PUMP
MODEL #SN153, OR APPROVED EQUAL.
115V-1ø, 1/2 HP, 10.5 AMPS,
50 GPM @ 20 FT HD
W/ 20' PIGGYBACK VARIABLE
LEVEL PUMP SWITCH

OIL INTERCEPTOR INFO.. OIL-1

STRIEM MODEL #OS-50-3P
50 GPM POLYETHYLENE OIL/SAND INTERCEPTOR
OR APPROVED EQUAL.
50 GPM, 57 GALLON LIQUID CAPACITY, 40 GALLON OIL
CAPACITY AND 7 GALLON SANDS CAPACITY
COMPOSITE COVER WITH 2000 LBS CAPACITY
3" PLAIN END SCHEDULE 40 INLET AND OUTLET

PLUMBING FIXTURE SCHEDULE

		P-1	P-2	P-2A	P-3	P-4	P-5
KEY							
FIXTURE		WALL HUNG WATER CLOSET (CHILD) (HANDICAP)	FLOOR MOUNTED WATER CLOSET (CHILD) (HANDICAP)	FLOOR MOUNTED WATER CLOSET (PRE-K) (HANDICAP)	WALL HUNG URINAL (CHILD) (HANDICAP)	WALL HUNG LAVATORY (CHILD) (HANDICAP)	BI-LEVEL WATER COOLER W/ BOTTLE FILLER (HANDICAP)
PIPING CONNECTIONS	TRAP	——	——	——	——	1-1/2"	1-1/2"
	WASTE	4"	4"	4"	2"	1-1/2"	1-1/2"
	VENT	2"	2"	2"	1-1/2"	1-1/4"	1-1/4"
	CWS	1"	1"	1"	3/4"	3/8"	1/2"
	HWS	——	——	——	——	3/8"	——
MOUNTING HEIGHT FL. TO RIM		15"	15"	15"	15"	30" OR PER ARCH./MAAB	36" TO HC SPOUT PER ADA
MATERIAL		VITREOUS CHINA	VITREOUS CHINA	VITREOUS CHINA	VITREOUS CHINA	VITREOUS CHINA	——
FITTINGS		SLOAN ROYAL MANUAL FLUSHOMETER MODEL #111-1.6 EXPOSED, CHROME @ 1.6 GPF CODE #3010000 OPEN FRONT ELONGATED SEAT	SLOAN ROYAL MANUAL FLUSHOMETER MODEL #111-1.6 EXPOSED, CHROME @ 1.6 GPF CODE #3010000 OPEN FRONT ELONGATED SEAT	SLOAN ROYAL MANUAL FLUSHOMETER MODEL #111-1.6 EXPOSED, CHROME @ 1.6 GPF CODE #3010000 OPEN FRONT ELONGATED SEAT	SLOAN ROYAL MANUAL FLUSHOMETER MODEL #186-0.5 EXPOSED, CHROME @ 0.5 GPF CODE #391222	SYMMONS SCOT METERING LAVATORY FAUCET #SLC-6000 OFFSET GRID DRAIN	P-TRAP AND FIXTURE STOP
	MANUF.	AMERICAN STANDARD	AMERICAN STANDARD	AMERICAN STANDARD	AMERICAN STANDARD	AMERICAN STANDARD	ELKAY
	MODEL	AFWALL MILLENNIUM FLOWISE 2257.101	MADERA FLOWISE 15"H 2234.001	BABY DEVORO FLOWISE 2282.001	WASHBROOK FLOWISE 6590.001	MURRO UNIVERSAL 0954.004	LZSTL8WSLK

NOTES:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. ALL DIMENSIONS ARE AS IS UNLESS NOTED OTHERWISE ON DRAWINGS.
3. VERIFY ALL MOUNTING HEIGHTS WITH ARCHITECTURAL PLANS AND ALL APPLICABLE CODES BEFORE INSTALLATION.
4. PROVIDE WHEELCHAIR LAVATORY STRAINER ON HANDICAP LAVATORY. INSTALL PVC COATED INSULATION ON ALL PIPING BELOW HANDICAP LAVATORIES UNLESS PIPING IS ENCLOSED.
5. PIPE INSULATION UNDER FIXTURE P-2 SHALL BE TRUEBRO LAV GUARD MODEL #103,

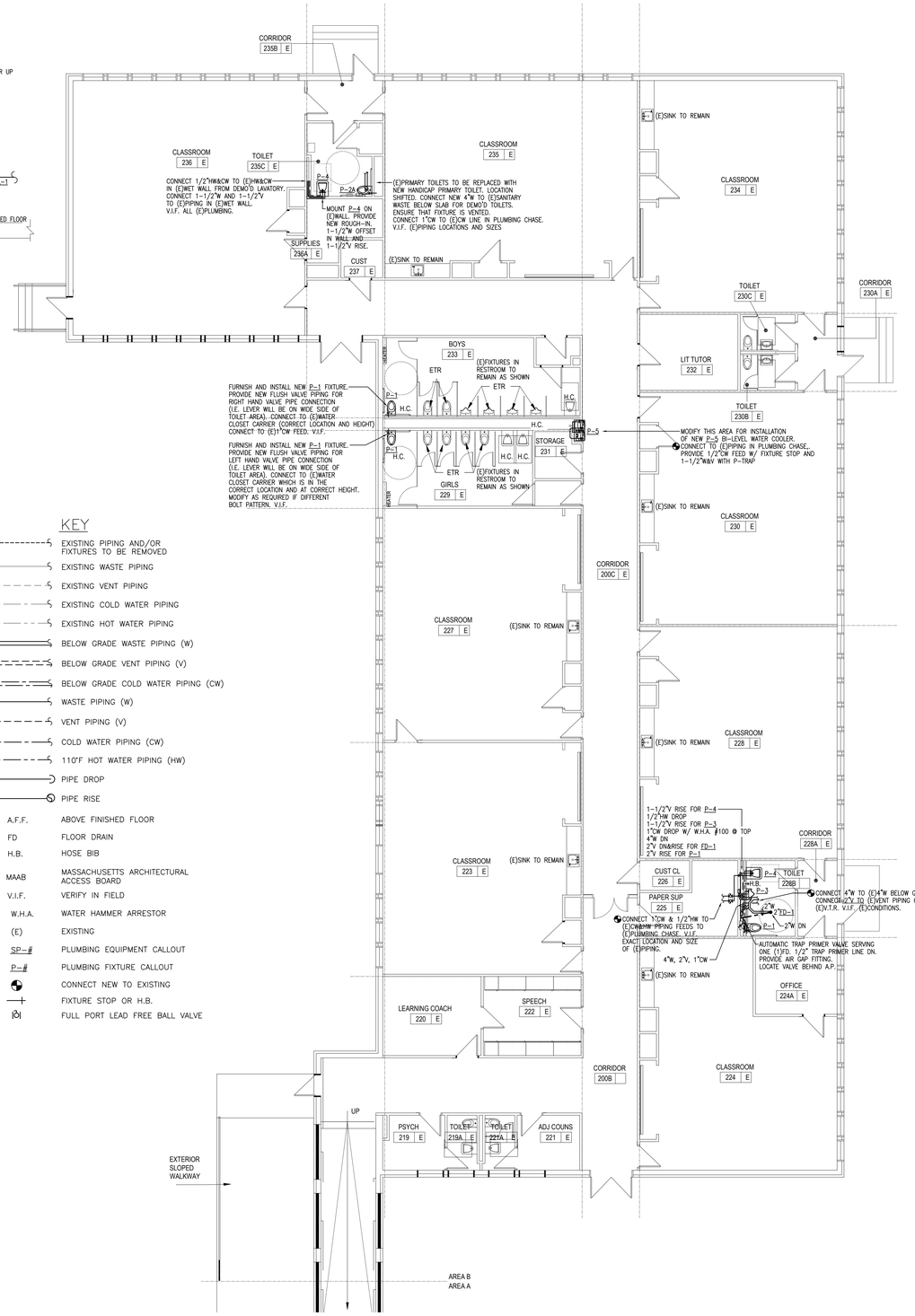
PLUMBING NOTES:

1. CONTRACTOR RESPONSIBLE FOR PROVIDING ALL MATERIAL, LABOR, SUPERVISION AND TRANSPORTATION REQUIRED TO COMPLETE THE WORK DESCRIBED ON THESE DRAWINGS AND IN THE SPECIFICATIONS UNLESS NOTED OTHERWISE.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND LOCATION IN THE FIELD.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
4. ALL PIPING TO BE INSTALLED PER LOCAL, STATE, AND FEDERAL CODES.
5. CONTRACTOR IS RESPONSIBLE FOR ALL OFFSETS AND MODIFICATIONS AS REQUIRED TO CLEAR BUILDING STRUCTURES.
6. ALL PIPING TO BE PRESSURE TESTED BEFORE INSULATION. LEAVE VALVES OPEN, READY FOR OPERATION.
7. INSULATE ALL NEW COLD & HOT LINES INSTALLED WITH 1/2" FIBERGLASS OR CLOSED CELL INSULATION..
8. REPAIR OF ANY DAMAGE TO THE NEW CONSTRUCTION DURING THE EXECUTION OF THIS WORK SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
9. ALL EXPOSED PIPING/FITTINGS TO BE CHROME PLATED COPPER/BRASS.
10. ALL WATER SUPPLY PIPING TO BE RIGID TYPE L COPPER UNLESS STATED OTHERWISE.
11. ALL WASTE AND VENT PIPING TO BE CAST IRON OR DWV COPPER AS ALLOWED BY THE MA PLUMBING CODE.
12. PIPING RUNS ARE SHOWN AS REPRESENTATIVE OF REQUIRED SIZES. ROUTING MAY BE CHANGED BY CONTRACTOR AS NECESSITATED BY STRUCTURAL CONSIDERATIONS.
13. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATION OF PLUMBING FIXTURES.
14. ALL DOMESTIC AND WASTE PIPING IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE TO PROVIDE COMPLETE AND WORKING FIXTURES.

KEY

- EXISTING PIPING AND/OR FIXTURES TO BE REMOVED
- EXISTING WASTE PIPING
- EXISTING VENT PIPING
- EXISTING COLD WATER PIPING
- EXISTING HOT WATER PIPING
- BELOW GRADE WASTE PIPING (W)
- BELOW GRADE VENT PIPING (V)
- BELOW GRADE COLD WATER PIPING (CW)
- WASTE PIPING (W)
- VENT PIPING (V)
- COLD WATER PIPING (CW)
- 110°F HOT WATER PIPING (HW)
- PIPE DROP
- PIPE RISE

A.F.F.	ABOVE FINISHED FLOOR
FD	FLOOR DRAIN
H.B.	HOSE BIB
MAAB	MASSACHUSETTS ARCHITECTURAL ACCESS BOARD
V.I.F.	VERIFY IN FIELD
W.H.A.	WATER HAMMER ARRESTOR
(E)	EXISTING
SP-#	PLUMBING EQUIPMENT CALLOUT
P-#	PLUMBING FIXTURE CALLOUT
	CONNECT NEW TO EXISTING
	FIXTURE STOP OR H.B.
	FULL PORT LEAD FREE BALL VALVE



1 FIRST LEVEL PROPOSED PLUMBING FLOOR PLAN AREA B
1/8" = 1'-0"

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
PROPOSED PLUMBING FLOOR PLAN - AREA B

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	JULY 12, 2024

DRAWING NUMBER
P1.02

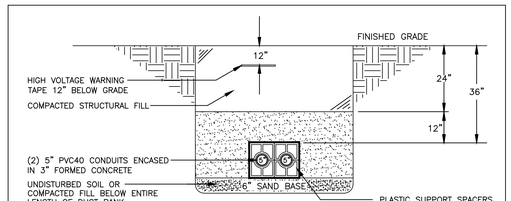
PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

6/28/2024 5:59:37 PM

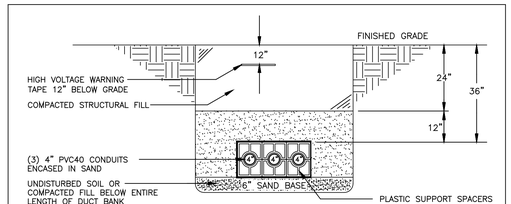


1 ES.1 SITE PLAN- ELECTRICAL
SCALE: 1"=20'-0"



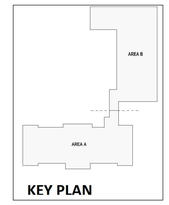
2 ES.1 TRENCH DETAIL "A"- PRIMARY ELECTRIC
NOT TO SCALE

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCHING, BACK FILL, PAVING, CONCRETE ENCASEMENT. ELECTRICAL CONTRACTOR TO INSTALL CONDUITS, SPACERS, ETC.



3 ES.1 TRENCH DETAIL "B"- SECONDARY ELECTRIC
NOT TO SCALE

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCHING, BACK FILL, PAVING, CONCRETE ENCASEMENT. ELECTRICAL CONTRACTOR TO INSTALL CONDUITS, SPACERS, ETC.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
SITE PLAN ELECTRICAL

MVG MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1"=20'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

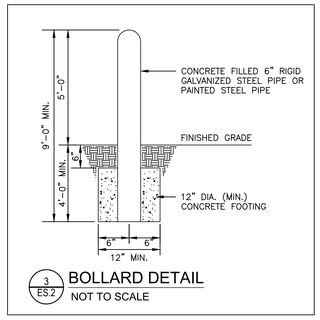
DRAWING NUMBER
ES.1

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRATTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

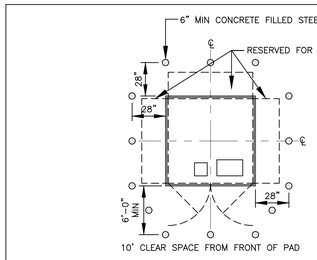
PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

6/28/2024 6:30:39 PM

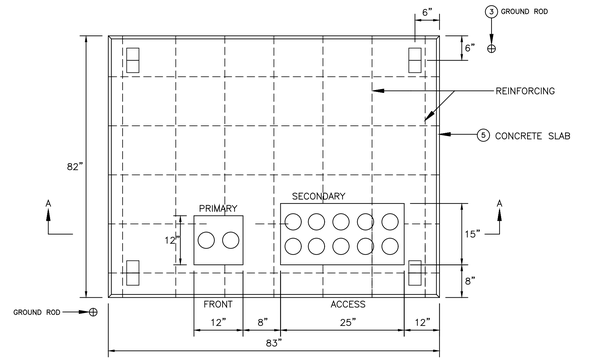


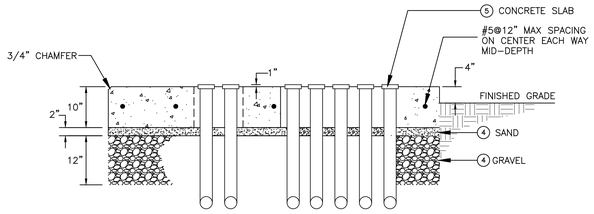
3/ES.2 BOLLARD DETAIL
NOT TO SCALE



4/ES.2 TRANSFORMER PAD BOLLARDS DETAIL
NOT TO SCALE

PRIOR TO INSTALLING BOLLARDS OR TRANSFORMER PAD, COORDINATE WITH THE UTILITY CO TO DETERMINE THE TRANSFORMER ORIENTATION





SECTION A–A

2/ES.2 TRANSFORMER PAD 750-2500KVA DETAIL
NOT TO SCALE

1 SCOPE:

THIS STANDARD COVERS SPECIFICATIONS FOR THE CONSTRUCTION OF THE PADMOUNT TRANSFORMER FOUNDATION AND GROUNDING.

NOTE: GROUNDING BY ELECTRICAL CONTRACTOR.

2 CONDUIT:

INSTALL AS SHOWN BEFORE SLAB IS POURED. USE 36" BENDS, WITH COUPLINGS, NIPPLES AND BUSHINGS AS REQUIRED (MATERIAL MAY BE GALVANIZED STEEL, BLACK IRON, TYPE II FIBER, OR TYPE DB PVC AS SHOWN IN FIGURE 1, SOLID OR DOTTED, DEPENDING UPON NUMBER OF DUCTS. THE NIPPLE AND BUSHING SHOULD BE INSTALLED AFTER THE TRANSFORMER IS PLACED AND BEFORE THE CABLES ARE PULLED.

3 GROUND GRID:

INSTALL #2/0 19 STRAND BARE COPPER (CODE 943108) WIRE LOOP 1'-0" BELOW GRADE. BOND TO ALL EXPOSED METALLIC CONDUIT AND LEAVE 3'-0" OR WIRE ABOVE PAD FOR GROUNDING TRANSFORMER AT TWO OPPOSITE POINTS IN THE CABLE CONDUITS OPENINGS. INSTALL TWO 8' GALVANIZED STEEL (3/ 4") GROUND RODS AND TWO APPROVED GALVANIZED CONNECTORS BELOW GROUND . LEAVE GRID EXPOSED UNTIL INSPECTED BY THE UTILITY COMPANY.

NOTE:

THE SHORT TIMING FUSING CURRENT OF #1/ 0 7 STRAND BARE COPPER WIRE IS 15,000 AMPERES FOR ONE SECOND. IF THE MAXIMUM FAULT AT THE PARTICULAR LOCATION EXCEEDS THIS VALUE CONSULT DISTRIBUTION ENGINEERING.

4 GRAVEL AND SAND:

GRAVEL AND SAND SHALL BE PLACED AS SHOWN IN FIGURES 1 AND 2; THE GRAVEL BEING COMPACTED AND THE SAND THOROUGHLY WETTED JUST BEFORE PLACING THE CONCRETE.

5 CONCRETE SLAB:

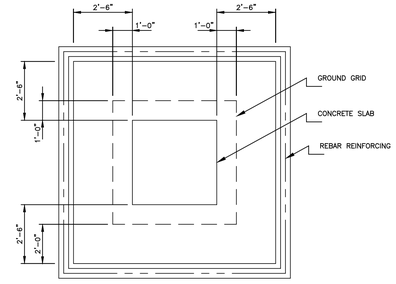
INSTALL CONCRETE IN ACCORDANCE WITH MIX #4–STD 0211 UNLESS OTHERWISE SPECIFIED. ALL EXPOSED EDGES TO HAVE 3/ 4" CHAMFER.

6 REINFORCING:

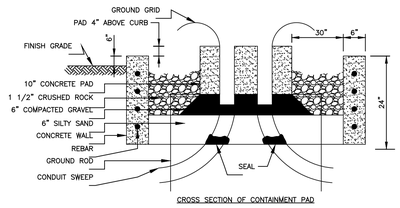
REINFORCING TO BE #4–GRADE 60 BARS AND SHALL CONFORM TO THE ASTM STD. A–615 OF LATEST DATE. REINFORCING RODS TO BE LOCATED IN CENTER OF THE SLAB, WITH A MINIMUM OF 2" CLEARANCE FROM FACE OF CONCRETE.

NOTE 1A:

CONFIRM DIMENSIONS OF CONCRETE PAD WITH THE UTILITY COMPANY.



CONTAINMENT AREA PLAN



CROSS SECTION OF CONTAINMENT PAD

1/ES.2 OIL CONTAINMENT PAD
NOT TO SCALE

THIS IS TO BE USED WHERE OIL CONTAINMENT IS REQUIRED BY LOCAL AUTHORITIES OR WHERE OTHERWISE JUSTIFIED. THIS LINER SYSTEM WILL SIGNIFICANTLY SLOW THE MIGRATION OF OIL INTO THE UNDER LAYING SUB GRADE, ALLOWING ADDITIONAL TIME TO INITIATE A CLEANUP RESPONSE. THE POLYPROPYLENE GEOTEXTILE ALLOWS THE PASSAGE OF WATER BUT ABSORBS SMALL QUANTITIES OF OIL. THIS DESIGN IS INTENDED TO CONFINE 100% OF TOTAL TRANSFORMER OIL PRESENT, WITH A 20% RESERVE MARGIN, FOR UP TO 36 HOURS. FOLLOW THE FOLLOWING INSTALLATION STEPS. A PRECAST CONTAINMENT BARRIER MAY BE USED AS AN ALTERNATE TO CASTING ONE IN PLACE. PRECAST CURB CAN BE ONE PIECE OR MADE UP OF SEPARATE PIECES ASSEMBLED IN THE FIELD.

NOTE:
ON FIELD ASSEMBLED PIECES. ALL PIECES MUST BE SEALED TOGETHER WITH ROPE TAR, RUBBER SEALANT OR EQUIVALENT.

1. BUILD OIL CURB, THIS SHOULD BE INSTALLED WITH CONCRETE IN ACCORDANCE WITH MIX #4 PER CONCRETE SPECIFICATIONS ON PAGES 45 THRU 48. REINFORCEMENT TO BE #4, GRADE 60 RODS MINIMUM, 6" ON CENTER, BEND RODS AROUND CORNERS. CURB TO BE 24" DEEP WITH A MINIMUM THICKNESS OF 6".
2. INSTALL GEOTEXTILE LINER FROM TOP OF WALLS AND AROUND BOTTOM OF CONTAINMENT AREA. AREAS WHERE CONDUIT CROSSES OVERLAP LINER AROUND CONDUIT AND SEAL WITH EXPANDING FOAM.
3. INSTALL 6" OF SILTY SAND ON TOP OF LINER.
4. INSTALL SECOND LAYER OF GEOTEXTILE LINER AS NOTED IN STEP 2.
5. BUILD UP AREA FOR TRANSFORMER PAD WITH 6" OF COMPACTED GRAVEL AND LEVEL.
6. INSTALL GROUND GRID.
7. SET/BUILD TRANSFORMER PAD.
8. FILL IN CONDUIT OPENINGS WITH SILTY SAND OR EXPANDING FOAM UP TO THE LAST TWO INCHES OF THE PAD.
9. FILL REST OF CONDUIT OPENING WITH CONCRETE GROUT OR EXPANDING FOAM.
10. FILL AREA BETWEEN SLAB AND CURB WITH 1 1/2" UNIFORMLY GRADED CRUSHED ROCK.

GEO–TEXTILE LINER:
GENERIC NAME IS: 16OZ POLYPROPYLENE GEOTEXTILE ALSO CALLED FILTER FABRIC WEIGHING 16OZ/SQUARE YARD.

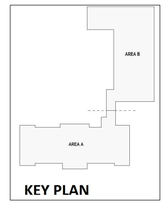
BRAND NAMES/SUPPLIERS ARE:

AME1680 AVAILABLE FROM AMERICAN ENGINEERING FABRICS (AEF), INC.
NEW BEDFORD, MA
1–617–965–0007/1–800–770–2666

VELLANO BROS.
LANCASTER, NY
1–716–684–7222/WWW.VELLANO.COM

SYNTHETIC INDUSTRIES ST 160 AVAILABLE FROM SPARTAN MILLS INC'S
SPARTANBURG, NC
1–803–576–2353

CARTHAGE MILLS FX–160HS/US CONSTRUCTION FABRICS LLC
90 RANGE ROAD
WINDHAM, NH 03087
1–603–898–0532



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
SITE PLAN
ELECTRICAL DETAILS

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1"=20'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

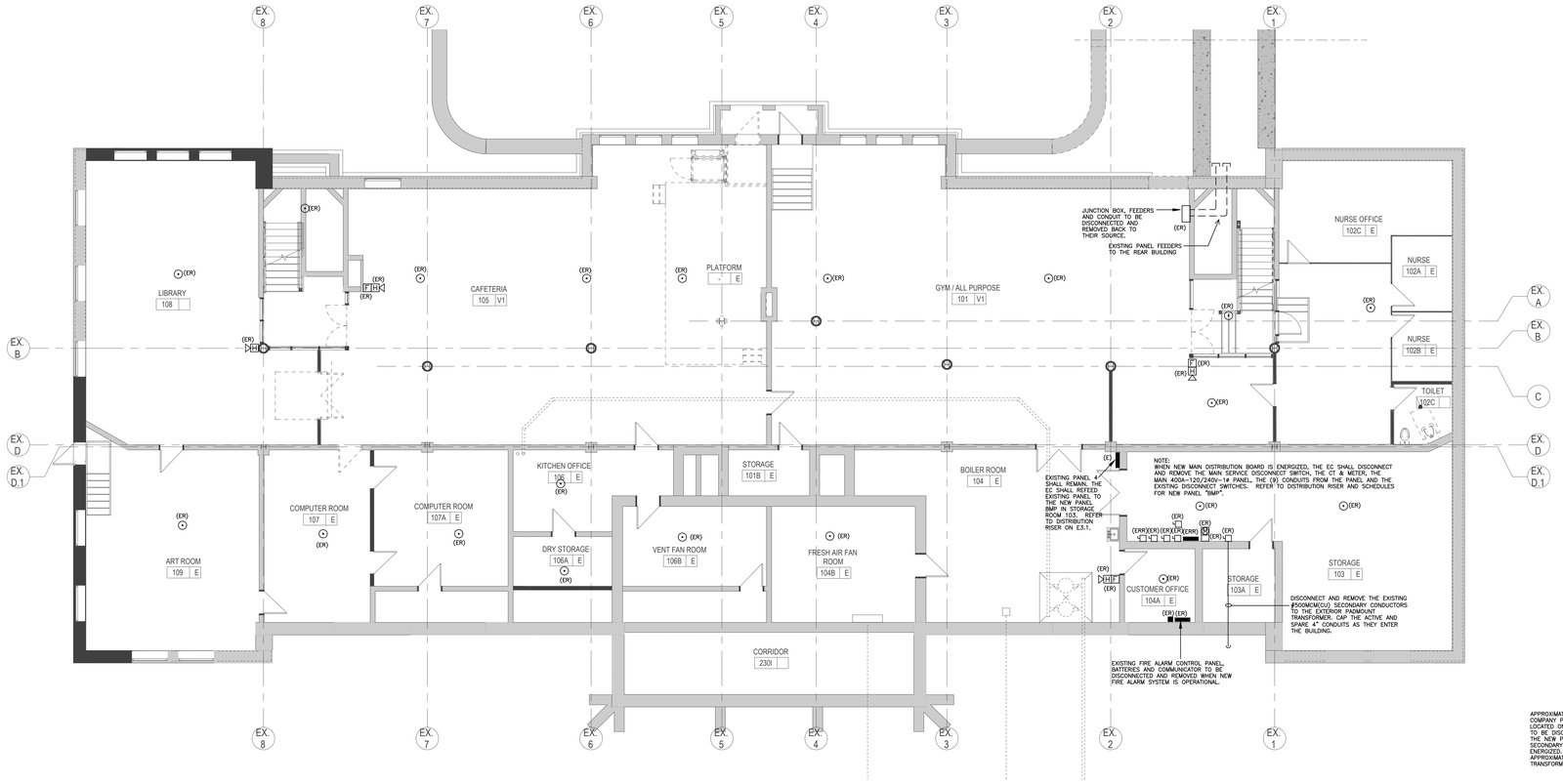
DRAWING NUMBER

ES.2

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757–7793 * FAX: (508) 753–2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/29/2018 6:32:39 PM



APPROXIMATE LOCATION OF EXISTING UTILITY COMPANY PAD-MOUNT TRANSFORMER LOCATED ON PROPERTY. SECONDARY FEED TO BE DISCONNECTED AND REMOVED ONCE THE NEW PAD-MOUNT TRANSFORMER AND SECONDARY FEEDERS ARE INSTALLED AND ENERGIZED. REFER TO DRAWING E.0.1 FOR APPROXIMATE LOCATION ON NEW PAD-MOUNT TRANSFORMER AND SERVICE IS ENERGIZED.

(ER) T

BASEMENT FLOOR PLAN - (AREA "A") - ELECTRICAL DEMOLITION

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

DEMOLITION NOTES:

NOTE 1:

THE EQUIPMENT SHOWN IS TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO REVIEW THE SITE AND TO COORDINATE WITH THE GENERAL CONTRACTOR TO DETERMINE THE AMOUNT AND PHASING OF DEMOLITION WORK REQUIRED.

NOTE 2:

THIS CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ELECTRICAL EQUIPMENT BEING REMOVED BY THE GENERAL/DEMOLITION CONTRACTOR IS TAGGED AND MADE ELECTRICALLY SAFE. CUT ALL CABLES FROM THE PANEL AND AT THE EQUIPMENT TO ENSURE SAFE REMOVAL.

NOTE 3:

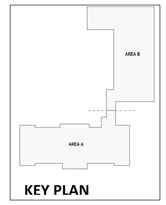
IN THE EVENT THAT A DEVICE BEING REMOVED CAUSES ANOTHER DEVICE REMAINING NOT TO OPERATE, IT SHALL BE THIS CONTRACTORS RESPONSIBILITY TO RECONNECT THE EQUIPMENT REMAINING BACK TO ITS SOURCE.

NOTE 4:

THE EXISTING FIRE ALARM DEVICES ARE TO REMAIN OPERATIONAL UNTIL THE NEW IS INSTALLED AND FULLY TESTED. AFTER TESTING, THE ENTIRE FIRE ALARM SYSTEM INSTALLED THROUGHOUT THE BUILDING IS TO BE DISCONNECTED AND REMOVED IN ITS ENTIRETY INCLUSIVE OF THE BRANCH CIRCUIT WIRING. INSTALL WHITE COVER PLATES OVER ALL EXPOSED JUNCTION BOXES

DEMOLITION LEGEND:

(E)	EXISTING TO REMAIN
(ER)	EXISTING TO BE REMOVED BACK TO ITS SOURCE
(ERR)	EXISTING TO BE REMOVED AND REPLACED WITH NEW



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

CONSTRUCTION DOCUMENTS

PROJECT NUMBER

02018.04

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE

BASEMENT FLOOR PLAN AREA "A" ELECTRICAL DEMOLITION

MVG MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8"=1'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER

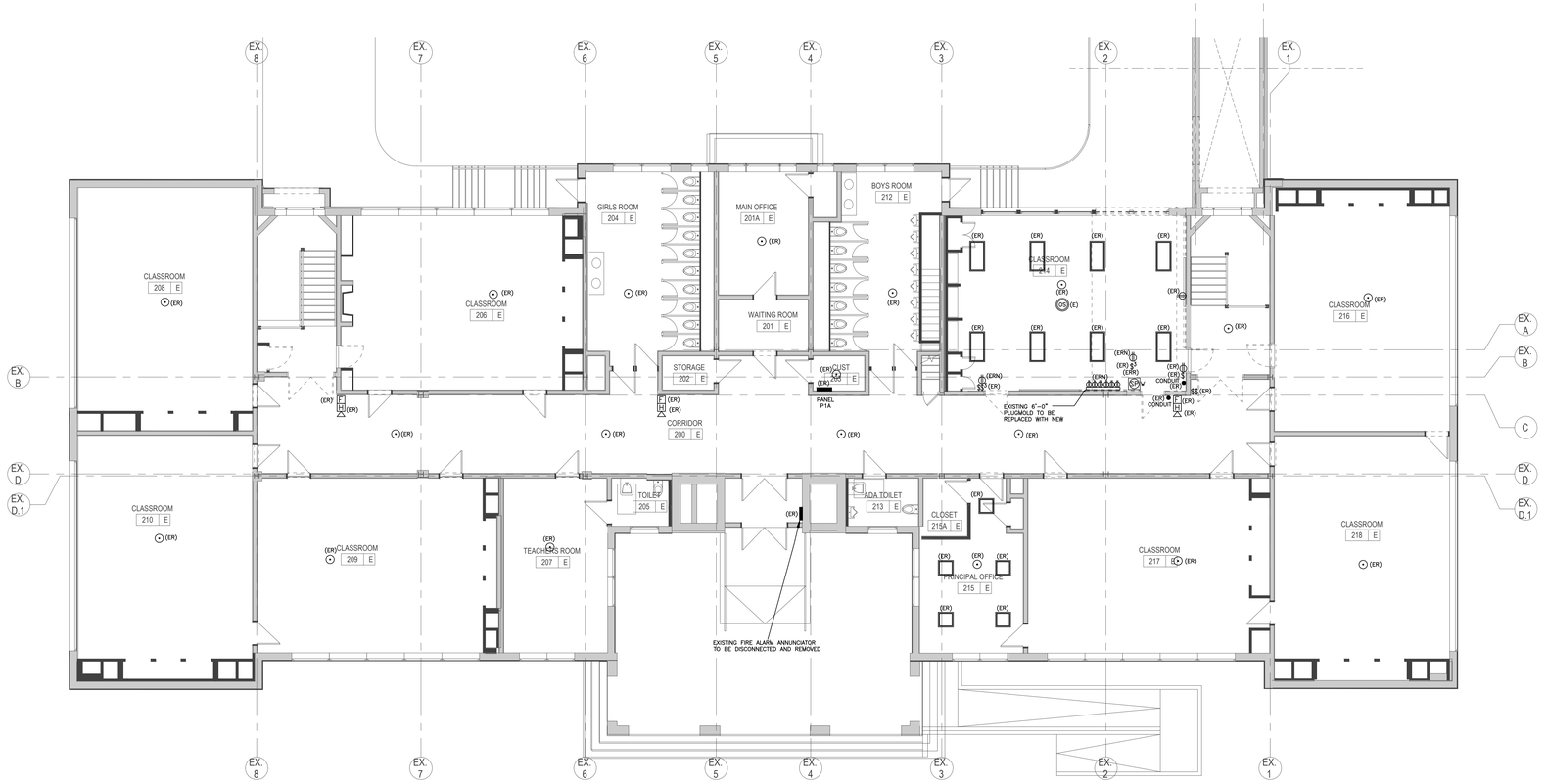
ED.0

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

6/28/2024 6:32:39 PM

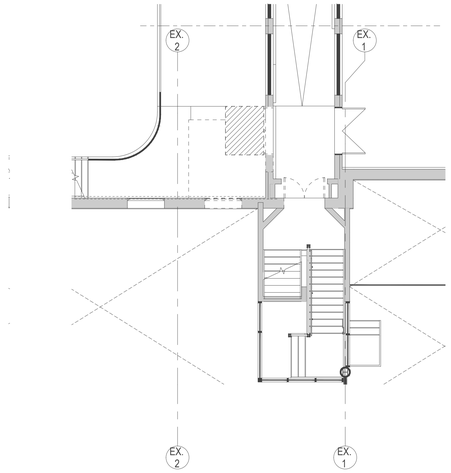


FIRST FLOOR PLAN - (AREA "A") - ELECTRICAL DEMOLITION

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

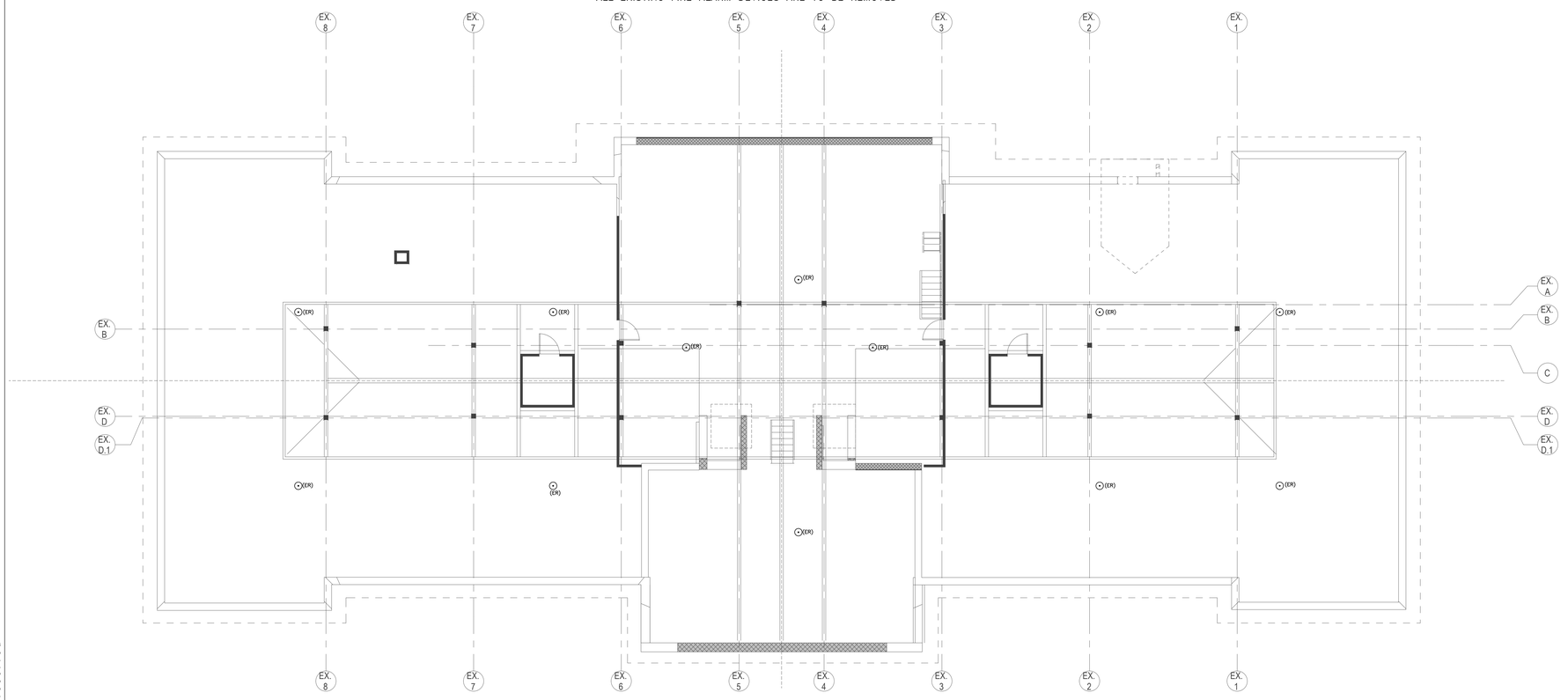
NOTE :

ALL EXISTING FIRE ALARM DEVICES ARE TO BE REMOVED



INTERMEDIATE LANDING FLOOR PLAN - (AREA "A") - ELECTRICAL DEMOLITION

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



ATTIC FLOOR PLAN - (AREA "A") - ELECTRICAL DEMOLITION

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

DEMOLITION NOTES:

NOTE 1:

THE EQUIPMENT SHOWN IS TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO REVIEW THE SITE AND TO COORDINATE WITH THE GENERAL CONTRACTOR TO DETERMINE THE AMOUNT AND PHASING OF DEMOLITION WORK REQUIRED.

NOTE 2:

THIS CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ELECTRICAL EQUIPMENT BEING REMOVED BY THE GENERAL/DEMOLITION CONTRACTOR IS TAGGED AND MADE ELECTRICALLY SAFE. CUT ALL CABLES FROM THE PANEL AND AT THE EQUIPMENT TO ENSURE SAFE REMOVAL.

NOTE 3:

IN THE EVENT THAT A DEVICE BEING REMOVED CAUSES ANOTHER DEVICE REMAINING NOT TO OPERATE, IT SHALL BE THIS CONTRACTORS RESPONSIBILITY TO RECONNECT THE EQUIPMENT REMAINING BACK TO ITS SOURCE.

NOTE 4:

THE EXISTING FIRE ALARM DEVICES ARE TO REMAIN OPERATIONAL UNTIL THE NEW IS INSTALLED AND FULLY TESTED. AFTER TESTING, THE ENTIRE FIRE ALARM SYSTEM INSTALLED THROUGHOUT THE BUILDING IS TO BE DISCONNECTED AND REMOVED IN ITS ENTIRETY INCLUSIVE OF THE WIRING. INSTALL WHITE COVER PLATES OVER ALL EXPOSED JUNCTION BOXES

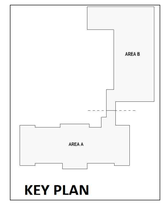
DEMOLITION LEGEND:

(E)	EXISTING TO REMAIN
(ER)	EXISTING TO BE REMOVED BACK TO ITS SOURCE
(ERR)	EXISTING TO BE REMOVED AND REINSTALLED IN PLACE
(ERN)	EXISTING TO BE REMOVED AND REPLACED WITH NEW

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH

NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

CONSTRUCTION DOCUMENTS

PROJECT NUMBER

02018.04

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE

FIRST & ATTIC FLOOR PLAN AREA "A" ELECTRICAL DEMOLITION

MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

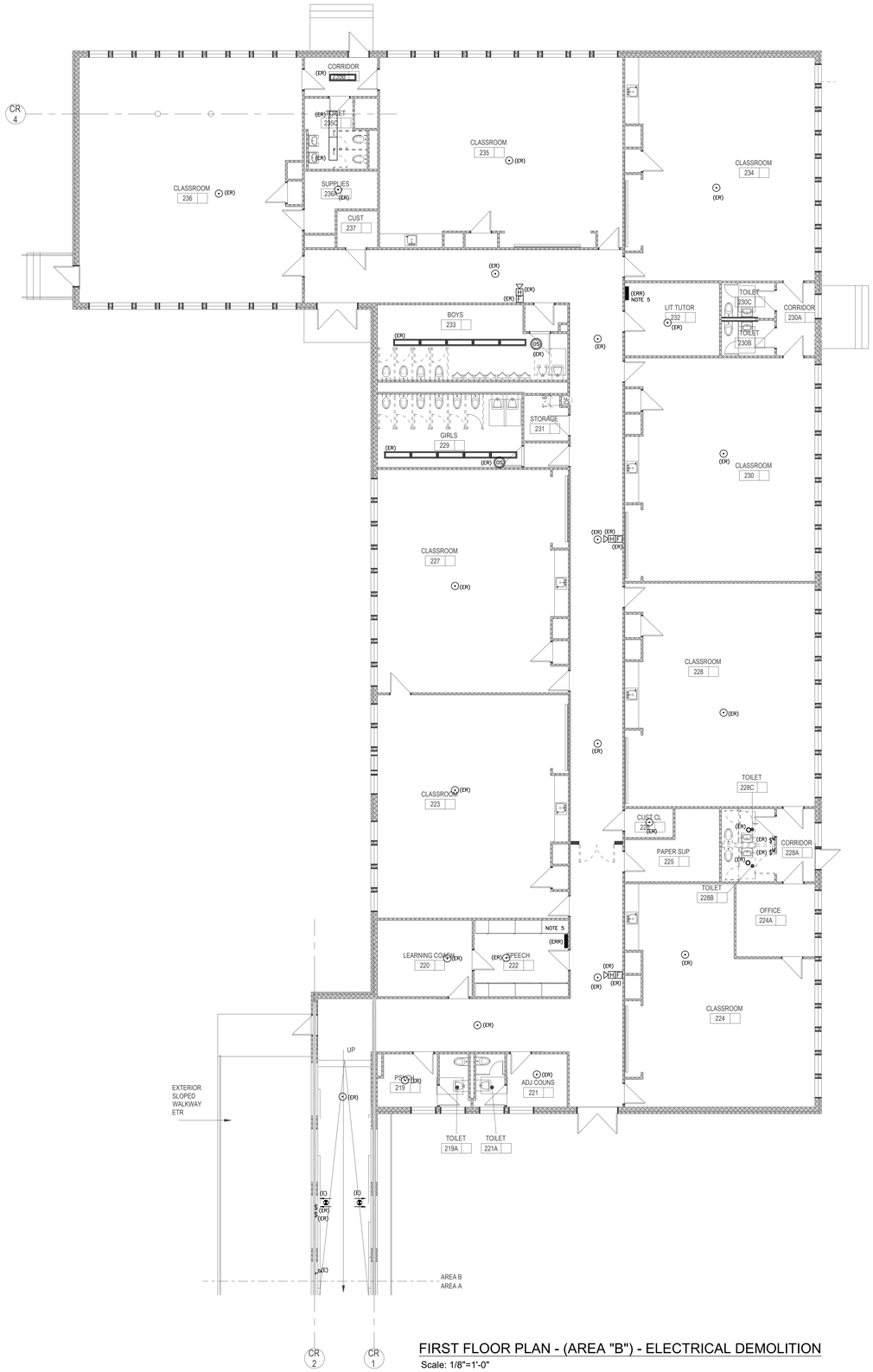
SCALE	1/8"=1'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER

ED.1

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

6/28/2024 8:02:35 PM



FIRST FLOOR PLAN - (AREA "B") - ELECTRICAL DEMOLITION

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

DEMOLITION NOTES:

NOTE 1:

THE EQUIPMENT SHOWN IS TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO REVIEW THE SITE AND TO COORDINATE WITH THE GENERAL CONTRACTOR TO DETERMINE THE AMOUNT AND PHASING OF DEMOLITION WORK REQUIRED.

NOTE 2:

THIS CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ELECTRICAL EQUIPMENT BEING REMOVED BY THE GENERAL/DEMOLITION CONTRACTOR IS TAGGED AND MADE ELECTRICALLY SAFE. CUT ALL CABLES FROM THE PANEL AND AT THE EQUIPMENT TO ENSURE SAFE REMOVAL.

NOTE 3:

IN THE EVENT THAT A DEVICE BEING REMOVED CAUSES ANOTHER DEVICE REMAINING NOT TO OPERATE, IT SHALL BE THIS CONTRACTORS RESPONSIBILITY TO RECONNECT THE EQUIPMENT REMAINING BACK TO ITS SOURCE.

NOTE 4:

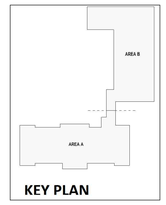
THE EXISTING FIRE ALARM DEVICES ARE TO REMAIN OPERATIONAL UNTIL THE NEW IS INSTALLED AND FULLY TESTED. AFTER TESTING, THE ENTIRE FIRE ALARM SYSTEM INSTALLED THROUGHOUT THE BUILDING IS TO BE DISCONNECTED AND REMOVED IN ITS ENTIRETY INCLUSIVE OF THE BRANCH CIRCUIT WIRING. INSTALL WHITE COVER PLATES OVER ALL EXPOSED JUNCTION BOXES

NOTE 5:

DISCONNECT AND REMOVE THE EXISTING BRANCH PANEL AND BRANCH PANEL FEED BACK TO THE MAIN ELECTRIC ROOM. RECONNECT THE EXISTING BRANCH FEEDERS TO THE NEW PANEL.

DEMOLITION LEGEND:

(E)	EXISTING TO REMAIN
(ER)	EXISTING TO BE REMOVED BACK TO ITS SOURCE
(ERR)	EXISTING TO BE REMOVED AND REPLACED WITH NEW



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

CONSTRUCTION DOCUMENTS

PROJECT NUMBER

02018.04

OWNER / PROJECT NAME / LOCATION

CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE

FIRST FLOOR PLAN
AREA "B"
ELECTRICAL DEMOLITION

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8"=1'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER

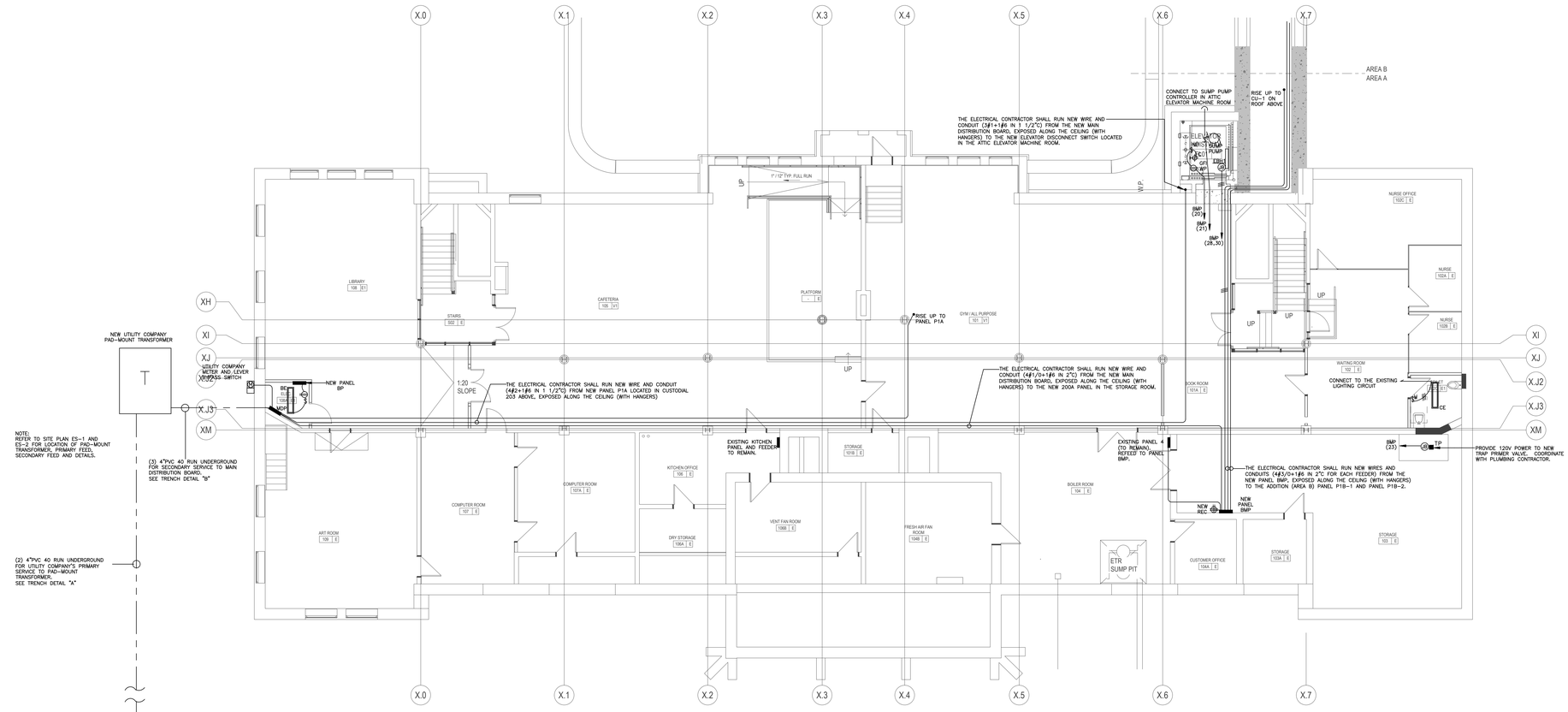
ED.2

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

6/29/2018 6:32:39 PM



NOTE:
REFER TO SITE PLAN ES-1 AND ES-2 FOR LOCATION OF PAD-MOUNT TRANSFORMER, PRIMARY FEED, SECONDARY FEED AND DETAILS.

(3) 4"PVC 4D RUN UNDERGROUND FOR SECONDARY SERVICE TO MAIN DISTRIBUTION BOARD. SEE TRENCH DETAIL "B"

(2) 4"PVC 4D RUN UNDERGROUND FOR UTILITY COMPANY'S PRIMARY SERVICE TO PAD-MOUNT TRANSFORMER. SEE TRENCH DETAIL "A"

1 NATIONAL GRID (NG) APPROVED HANDHOLE TO BE INSTALLED WITHIN 2'-0" OF THE PROPERTY LINE. COORDINATE WITH (NG) FOR THE EXACT LOCATION

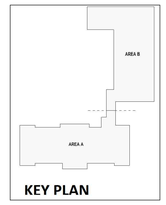
~THORNDYKE STREET~

BASEMENT FLOOR PLAN – (AREA "A") – ELECTRICAL

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

NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
BASEMENT FLOOR PLAN
AREA "A"
LIGHTING & POWER

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

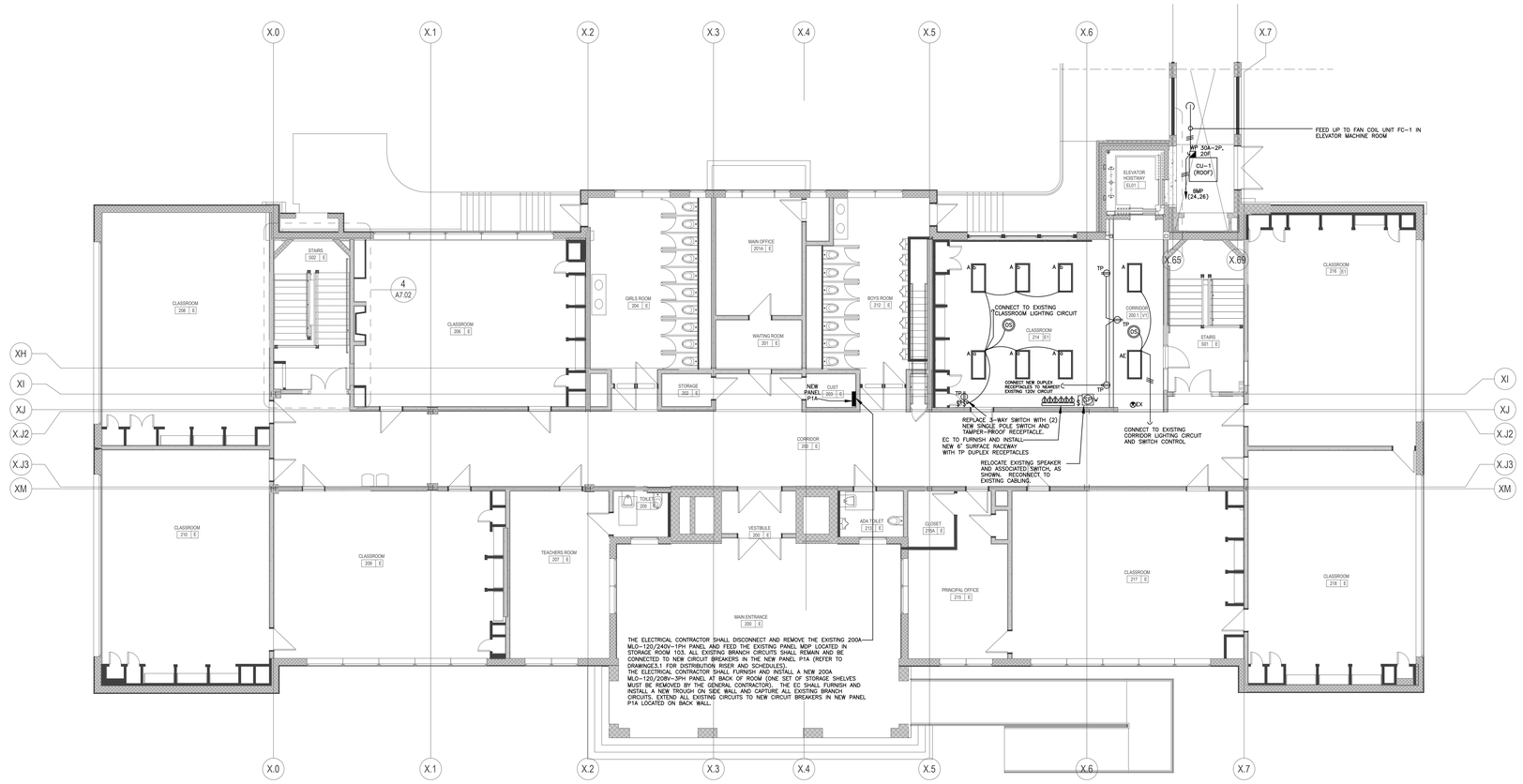
SCALE	1/8"=1'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER
E0.1

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/28/2024 6:32:35 PM



FIRST FLOOR PLAN - (AREA "A") - ELECTRICAL

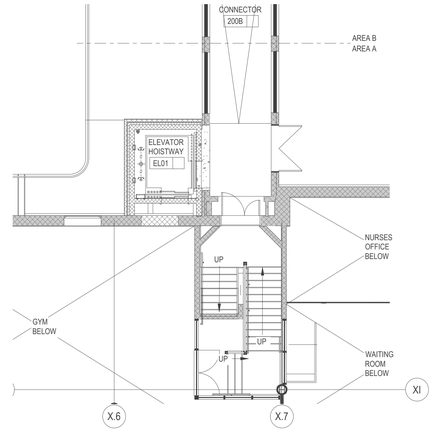
Scale: 1/8"=1'-0"

NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.

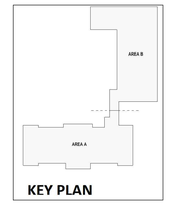
NOTE:
EXIT SIGNS AND EMERGENCY BATTERY UNITS ARE TO BE CONNECTED TO THE LINE SIDE OF THE LOCAL LIGHTING CIRCUIT.

NOTE:
THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A CONSTANT VOLTAGE CIRCUIT TO FIXTURES WITH INTEGRAL EMERGENCY DRIVERS



INTERMEDIATE LANDING FLOOR PLAN - (AREA "A") - ELECTRICAL

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



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
FIRST FLOOR PLAN
AREA "A"
LIGHTING & POWER

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8"=1'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

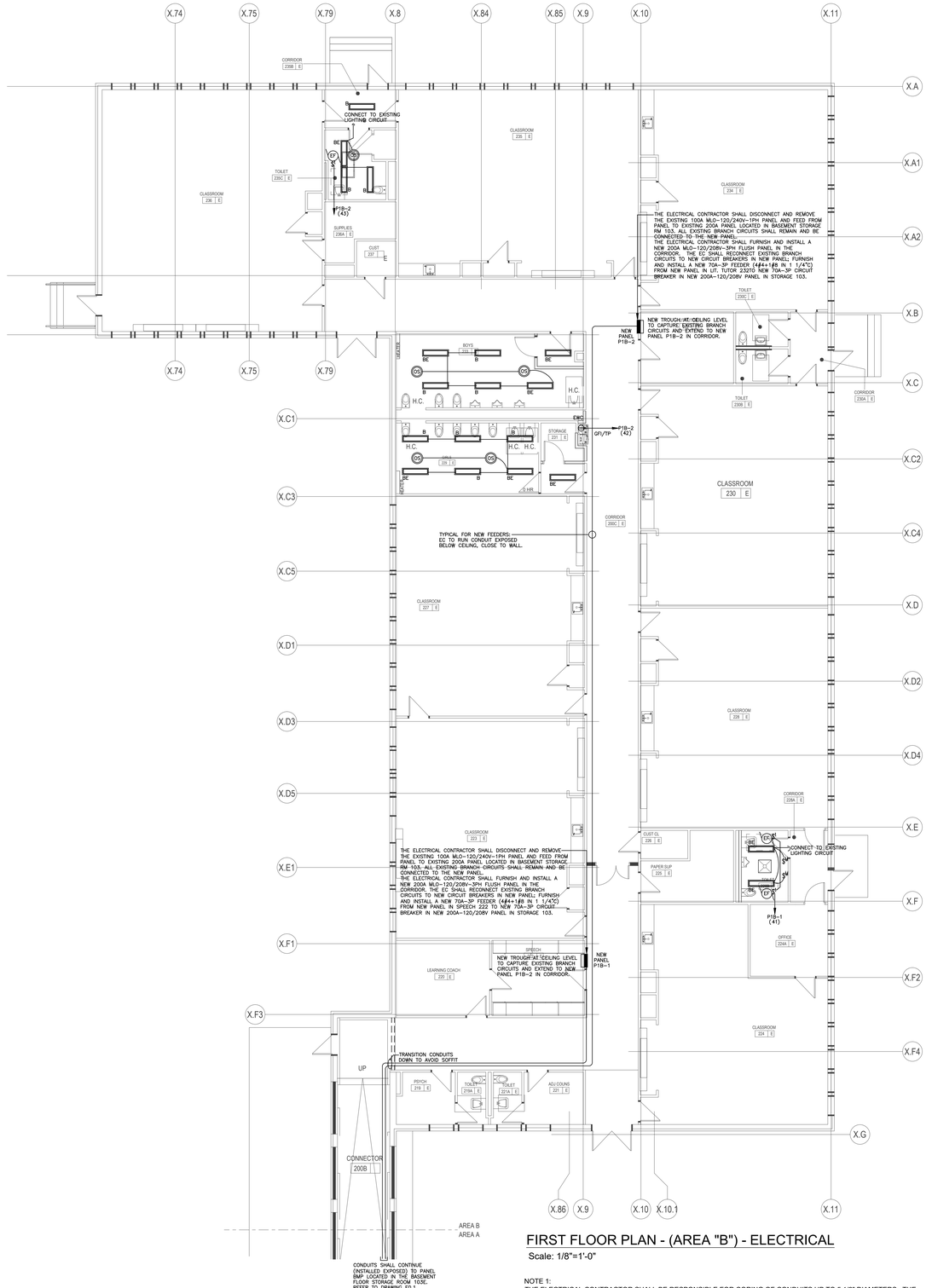
DRAWING NUMBER

E1.1

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 * FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/28/2024 6:32:35 PM

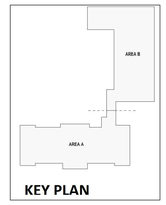


FIRST FLOOR PLAN - (AREA "B") - ELECTRICAL

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

NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
FIRST FLOOR PLAN
AREA "B"
LIGHTING & POWER

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8"=1'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER

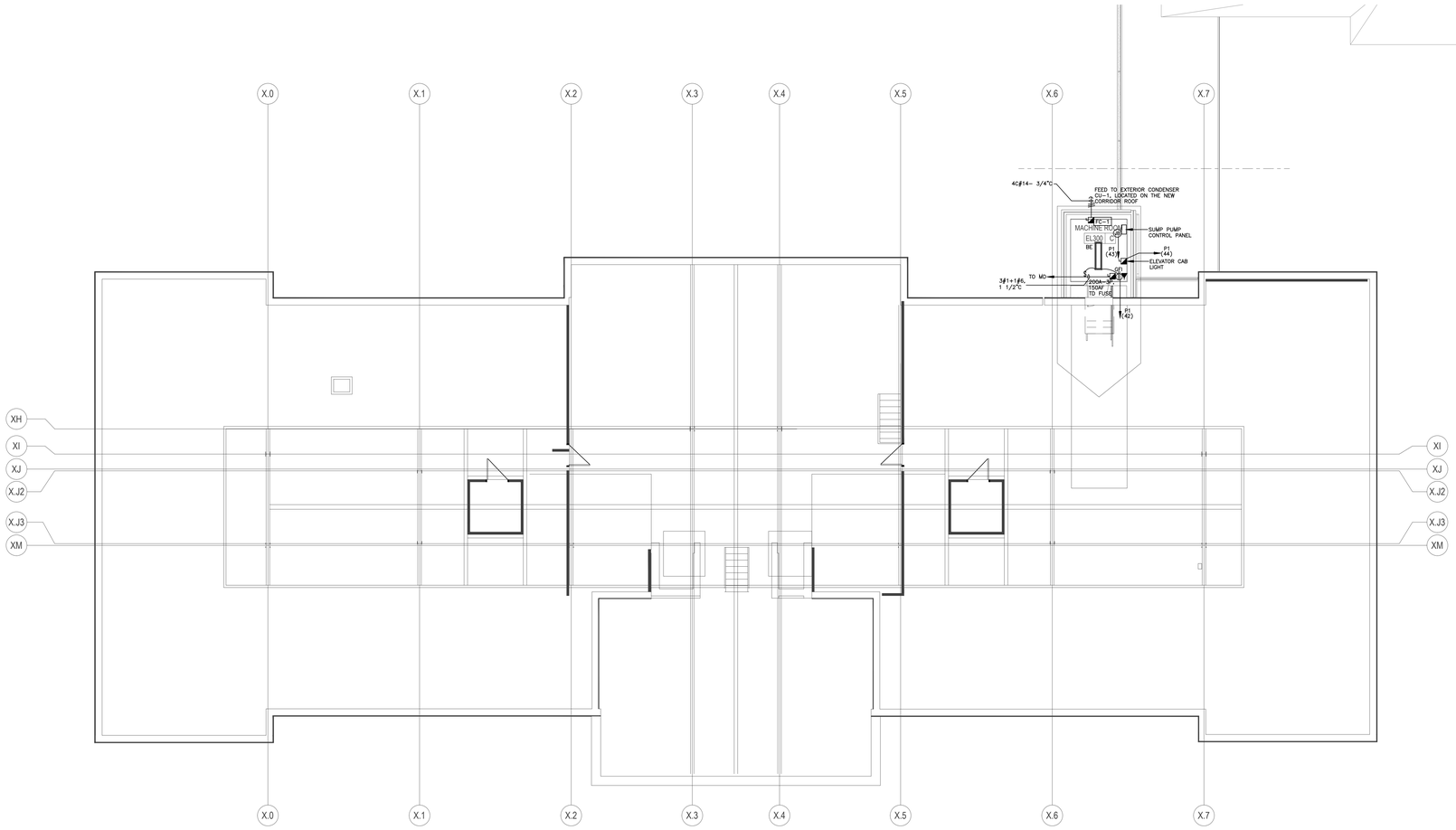
E1.2

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

6/26/2024 4:33:35 PM



ATTIC FLOOR PLAN- (AREA "A") - POWER

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

NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.

TYPICAL FOR ELEV. MACHINE ROOM:
FURNISH AND INSTALL A HEAVY DUTY FUSED DISCONNECT SW (SIZE AS INDICATED) AT NO MORE THAN 18" TO THE ENTRANCE OF THE ROOM.

FURNISH AND INSTALL AN ELEVATOR RECALL SMOKE DETECTOR IN ROOM; CONNECT TO FIRE ALARM SYSTEM LOOP.

FURNISH AND INSTALL A 20A–1P CIRCUIT BREAKER DISCONNECT SWITCH FOR THE ELEVATOR CAR LIGHT.

EC SHALL FURNISH AND INSTALL FOUR RELAYS FOR ELEVATOR RECALL SMOKE DETECTORS. CONNECT TO FACP.

EC SHALL FURNISH AND INSTALL A GFI RECEPTACLE IN ROOM.

THE EC SHALL MAKE PROVISIONS FOR A TELEPHONE OUTLET IN ROOM.

THE EC SHALL PROVIDE THE INTERCONNECTION BETWEEN THE ELEVATOR MICROPROCESSOR MOTOR CONTROLLER AND THE FIRE ALARM SYSTEM.

IT SHALL BE THE RESPONSIBILITY OF THE EC TO COORDINATE ALL ELEVATOR WORK WITH THE GENERAL CONTRACTOR AND ELEVATOR INSPECTOR.

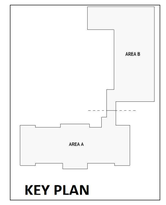
ELEVATOR SHAFT REQUIREMENTS:
ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL THE FOLLOWING IN THE ELEVATOR SHAFT:

THE EC SHALL FURNISH AND INSTALL A WEATHERPROOF SWITCH CONTROL AND LIGHT FIXTURE WITH PROTECTIVE COVER OR WIREGUARD IN BOTTOM OF SHAFT.

THE EC SHALL FURNISH AND INSTALL A GFI/WP RECEPTACLE IN THE BOTTOM OF THE SHAFT.

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
ATTIC FLOOR PLAN AREA "A" LIGHTING & POWER

MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

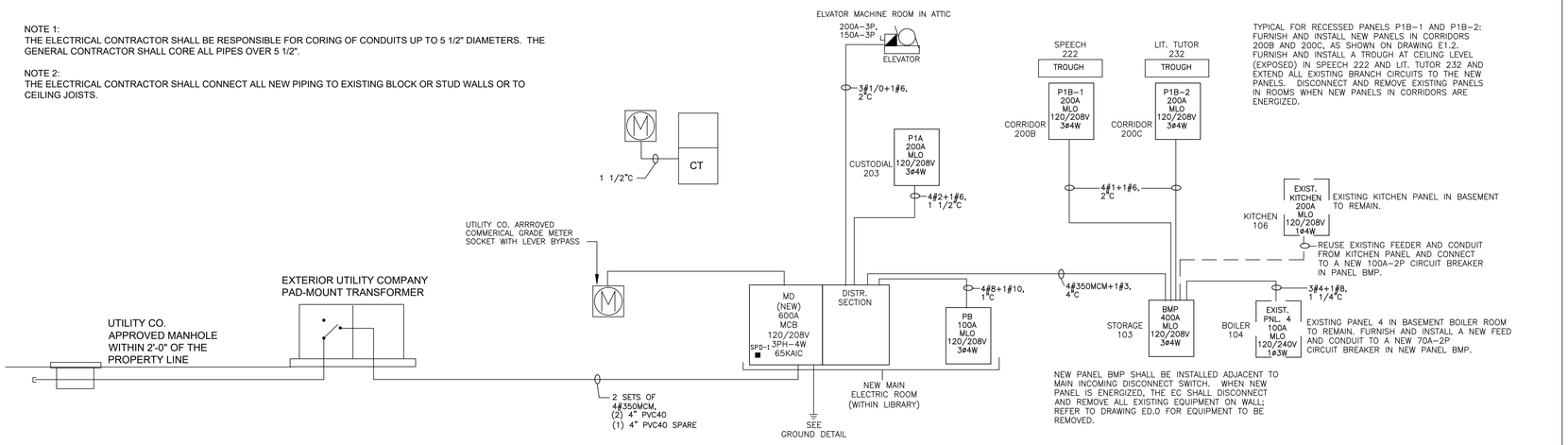
SCALE	1/8"=1'-0"
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER
E2.1

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/29/2024 6:32:38 PM

NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.



DISTRIBUTION RISER

NOT TO SCALE

LEGEND

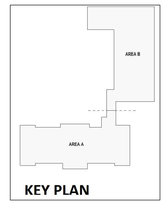
- 2'X2' LED RECESSED LIGHT FIXTURE
- 2'X4' LED SURFACE LIGHT FIXTURE
- 4' LED SURFACE UTILITY LIGHT FIXTURE
- OS — CEILING–MOUNT OCCUPANCY SENSOR
- EXIT SIGN
- $ — WALL–MOUNT SWITCH

POWER LEGEND

- TP — TAMPER–PROOF DUPLEX RECEPTACLE
- GFI/TP — GFI/TAMPER–PROOF DUPLEX RECEPTACLE
- JB — JUNCTION BOX
- CONNECT TO EXISTING CIRCUIT
- HOMERUN TO PANEL
- HEAVY–DUTY FUSED DISCONNECT SWITCH
- NON–FUSED DISCONNECT SWITCH
- PANEL
- MOTOR
- EF — EXHAUST FAN
- ST — THERMAL SWITCH
- M — METER
- DATA JACK

LEGEND

- F — PULL STATION
- S — PHOTO–ELECTRIC SMOKE DETECTOR
- S ER — PHOTO–ELECTRIC SMOKE DETECTOR ELEVATOR RECALL
- CO — CARBON MONOXIDE DETECTOR
- HEAT DETECTOR
- STROBE
- S — SPEAKER/VISUAL
- S CLG — SPEAKER/VISUAL CEILING
- IAM — INDEPENDENT ADDRESSABLE MODULE
- FACP — FIRE ALARM CONTROL PANEL
- FIRE ALARM BEACON
- K — FIREFIGHTERS KEY BOX
- MDD — MODULAR/DAMPER



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PANEL: MD — SWITCHBOARD
MAIN: 600A MCB — TYPE: EATON CO. OR EQUAL
VOLTAGE: 120/208V PHASE: 3 WIRE: 4 — 65 KAIC SPD–1

1	NEW PANEL BMP 300A–3P	2	NEW PANEL P1A 100A–3P
3	NEW PANEL PB 50A–3P	4	ELEVATOR 150A–3P
5	SPARE 100A–3P	6	SPARE 70A–3P
7	PROVISION FOR FUTURE	8	PROVISION FOR FUTURE
9	PROVISION FOR FUTURE	10	PROVISION FOR FUTURE

PANEL: BP
MAIN: 100A MLO — TYPE: EATON CO. OR EQUAL
VOLTAGE: 120/208V PHASE: 3 WIRE: 4 — SURFACE

CIR	DESCRIPTION	TRIP	POLE	CIR	DESCRIPTION	TRIP	POLE
1	SPARE	20	2	2	SPARE	20	2
3				4			
5	SPARE	20	1	6	ELECTRIC ROOM LT AND REC	20	1
7	SPARE	20	1	8	SPARE	20	1
9	SPARE	20	1	10	SPARE	20	1
11	SPARE	20	1	12	SPARE	20	1
13	SPARE	20	1	14	SPARE	20	1
15	SPARE	20	1	16	SPARE	20	1
17				18			
19				20			
21				22			
23				24			

PANEL: BMP (NEW) — SURFACE
MAIN: 400A MLO — TYPE: EATON CO. OR EQUAL
VOLTAGE: 120/208V PHASE: 3 WIRE: 4 — 42 KAIC

CIR	DESCRIPTION	TRIP	POLE	CIR	DESCRIPTION	TRIP	POLE
1	PANEL "KITCHEN"	100	2	2	EXISTING PANEL 4 (BOILER RM)	70	2
3				4			
5	SPARE	30	2	6	SPARE	30	2
7				8			
9	EXISTING	20	1	10	EXISTING	20	1
11	EXISTING	20	1	12	EXISTING	20	1
13				14			
15	PANEL P1B–1	100	3	16	PANEL P1B–2	100	3
17				18			
19	SPARE	20	1	20	ELEVATOR PIT LT & GFI REC.	20	1
21	ELEVATOR PIT SUMP PUMP	20	1	22	QUAD RECEPTACLE IN STOR. 103E	20	1
23	TRAP PRIMER VALVE	20	1	24	ELEVATOR FC–1/CU–1	20	2
25	SPARE	20	1	26			
27	SPARE	20	1	28	ELEV. PIT ELEC. BASEBOARD EBH–1	20	2
29	SPARE	20	1	30			
31	SPARE	60	2	32	SPARE	20	1
33				34	SPARE	20	1
35	SPARE	30	2	36	SPARE	30	2
37				38			
39				40			
41				42			

PANEL: P1A (NEW) — SURFACE — 22 KAIC
MAIN: 200A MLO — TYPE: EATON CO. OR EQUAL
VOLTAGE: 120/208V PHASE: 3 WIRE: 4 — 60–CIRCUIT

CIR	DESCRIPTION	TRIP	POLE	CIR	DESCRIPTION	TRIP	POLE
1	EXISTING	20	1	2	EXISTING	20	1
3	EXISTING	20	1	4	EXISTING	20	1
5	EXISTING	20	1	6	EXISTING	20	1
7	EXISTING	20	1	8	EXISTING	20	1
9	EXISTING	20	1	10	EXISTING	20	1
11	EXISTING	20	1	12	EXISTING	20	1
13	EXISTING	20	1	14	EXISTING	20	1
15	EXISTING	20	1	16	EXISTING	20	1
17	EXISTING	20	1	18	EXISTING	20	1
19	EXISTING	20	1	20	EXISTING	20	1
21	EXISTING	20	1	22	EXISTING	20	1
23	EXISTING	20	1	24	EXISTING	20	1
25	EXISTING	20	1	26	EXISTING	20	1
27	EXISTING	20	1	28	EXISTING	20	1
29	EXISTING	20	1	30	EXISTING	20	1
31	EXISTING	20	1	32	EXISTING	20	1
33	EXISTING	20	1	34	EXISTING	20	1
35	EXISTING	20	1	36	EXISTING	20	1
37	EXISTING	20	1	38	EXISTING	20	1
39	EXISTING	20	1	40	EXISTING	20	1
41	FACP	20	1	42	ELEV. MACHINE RM. REC	20	1
43	ELEV. MACHINE SUMP PUMP CNTLR.	20	1	44	ELEV. MACHINE RM. LT	20	1
45	SPARE	20	1	46	SPARE	20	1
47	SPARE	20	1	48	SPARE	20	1
49	SPARE	20	1	50	SPARE	20	1
51	SPARE	20	1	52	SPARE	20	1
53	SPARE	20	1	54	SPARE	20	1
55	SPARE	20	1	56	SPARE	20	1
57	SPARE	20	1	58	SPARE	20	1
59	SPARE	20	1	60	SPARE	20	1

PANEL: P1B–1A (NEW) — RECESSED
MAIN: 200A MLO — TYPE: EATON CO. OR EQUAL
VOLTAGE: 120/208V PHASE: 3 WIRE: 4 — 22 KAIC

CIR	DESCRIPTION	TRIP	POLE	CIR	DESCRIPTION	TRIP	POLE
1	EXISTING	20	1	2	EXISTING	20	1
3	EXISTING	20	1	4	EXISTING	20	1
5	EXISTING	20	1	6	EXISTING	20	1
7	EXISTING	20	1	8	EXISTING	20	1
9	EXISTING	20	1	10	EXISTING	20	1
11	EXISTING	20	1	12	EXISTING	20	1
13	EXISTING	20	1	14	EXISTING	20	1
15	EXISTING	20	1	16	EXISTING	20	1
17	EXISTING	20	1	18	EXISTING	20	1
19	EXISTING	20	1	20	EXISTING	20	1
21	EXISTING	20	1	22	EXISTING	20	1
23	EXISTING	20	1	24	EXISTING	20	1
25	EXISTING	20	1	26	EXISTING	20	1
27	EXISTING	20	1	28	EXISTING	20	1
29	EXISTING	20	1	30	EXISTING	20	1
31	EXISTING	20	1	32	EXISTING	20	1
33	EXISTING	20	1	34	EXISTING	20	1
35	EXISTING	20	1	36	EXISTING	20	1
37	EXISTING	20	1	38	EXISTING	20	1
39	EXISTING	20	1	40	EXISTING	20	1
41	TOILET ROOM EXHAUST FAN	20	1	42	SPARE	20	1
43	SPARE	20	1	44	SPARE	20	1
45	SPARE	20	1	46	SPARE	20	1
47	SPARE	20	1	48	SPARE	20	1
49	SPARE	20	1	50	SPARE	20	1
51	SPARE	20	1	52	SPARE	20	1
53	SPARE	20	1	54	SPARE	20	1
55	SPARE	20	1	56	SPARE	20	1
57	SPARE	20	1	58	SPARE	20	1
59	SPARE	20	1	60	SPARE	20	1

PANEL: P1B–2 — RECESSED
MAIN: 200A MLO — TYPE: EATON CO. OR EQUAL
VOLTAGE: 120/208V PHASE: 3 WIRE: 4 — 60–CIRCUIT

CIR	DESCRIPTION	TRIP	POLE	CIR	DESCRIPTION	TRIP	POLE
1	EXISTING	20	1	2	EXISTING	20	1
3	EXISTING	20	1	4	EXISTING	20	1
5	EXISTING	20	1	6	EXISTING	20	1
7	EXISTING	20	1	8	EXISTING	20	1
9	EXISTING	20	1	10	EXISTING	20	1
11	EXISTING	20	1	12	EXISTING	20	1
13	EXISTING	20	1	14	EXISTING	20	1
15	EXISTING	20	1	16	EXISTING	20	1
17	EXISTING	20	1	18	EXISTING	20	1
19	EXISTING	20	1	20	EXISTING	20	1
21	EXISTING	20	1	22	EXISTING	20	1
23	EXISTING	20	1	24	EXISTING	20	1
25	EXISTING	20	1	26	EXISTING	20	1
27	EXISTING	20	1	28	EXISTING	20	1
29	EXISTING	20	1	30	EXISTING	20	1
31	EXISTING	20	1	32	EXISTING	20	1
33	EXISTING	20	1	34	EXISTING	20	1
35	EXISTING	20	1	36	EXISTING	20	1
37	EXISTING	20	1	38	EXISTING	20	1
39	EXISTING	20	1	40	EXISTING	20	1
41	TOILET ROOM EXHAUST FAN	20	1	42	ELECTRIC WATER COOLER	20	1
43	TOILET ROOM EXHAUST FAN	20	1	44	SPARE	20	1
45	SPARE	20	1	46	SPARE	20	1
47	SPARE	20	1	48	SPARE	20	1
49	SPARE	20	1	50	SPARE	20	1
51	SPARE	20	1	52	SPARE	20	1
53	SPARE	20	1	54	SPARE	20	1
55	SPARE	20	1	56	SPARE	20	1
57	SPARE	20	1	58	SPARE	20	1
59	SPARE	20	1	60	SPARE	20	1

LIGHTING FIXTURE SCHEDULE

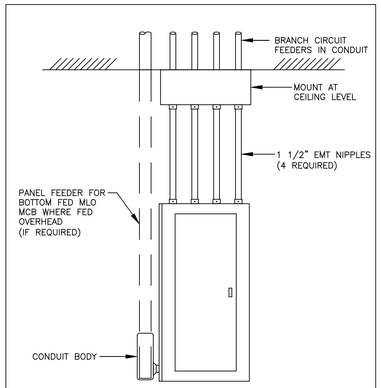
TYPE	MANUFACTURER	CATALOGUE #	LAMPING: TYPE	WATTAGE	QUANTITY	MOUNTING	REMARKS
A	METALUX	24GSB40L835FA–SK24WS	LED	22	1	SURFACE	2'X4' LED SURFACE LIGHT FIXTURE
AE	METALUX	24GSB40EL14WL835FA–SK24WS	LED	22	1	SURFACE	2'X4' LED SURFACE LIGHT FIXTURE W/EMERG.
B	METALUX	22GSB35L835FA	LED	14	1	RECESSED	2'X2' LED RECESSED LIGHT FIXTURE
BE	METALUX	22GSB35–EL14W–L835FA	LED	14	1	RECESSED	2'X2' LED RECESSED LIGHT FIXTURE W/EMERG.
C	METALUX	4SLSTPS2040––DD–UNV	LED	22	1	SURFACE	4' LED SURFACE LIGHT FIXTURE
CE	METALUX	4SLSTPS2040–EL14W–DD–UNV	LED	22	1	SURFACE	4' LED SURFACE LIGHT FIXTURE W/EMERG.
D	HALO	VT0840L	LED	9.4	1	WALL–MT	ELEV. PIT LT
OS	GREENGATE	OAC––DT–2000–MV	---	---	---	RECESSED	CEILING–MOUNT OCCUPANCY SWITCH
EX	MULE	RMXURWSD	LED	7	---	UNIVERSAL	EXIT SIGN
EB	MULE	MRDR612LEDW	LED	3	---	WALL–MT	EMERGENCY BATTERY UNIT

NOTE:
THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW LIGHT FIXTURES AND ASSOCIATED BRANCH CIRCUITRY, AS SHOWN.

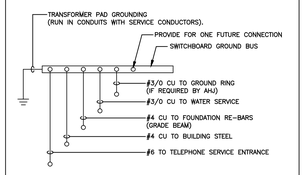
CONNECT ALL NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUIT FEEDERS IN AREA.

THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE NEW LIGHTING CONTROLS.

THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A CONSTANT VOLTAGE CIRCUIT FOR ALL LIGHT FIXTURES WITH INTEGRAL EMERGENCY DRIVERS.



PANELBOARD ENCLOSURE DETAIL
SCALE: N.T.S.



GROUNDING SYSTEM DETAIL
NOT TO SCALE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
LEGEND, SCHEDULES & DETAILS

MVG MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	AS NOTED
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

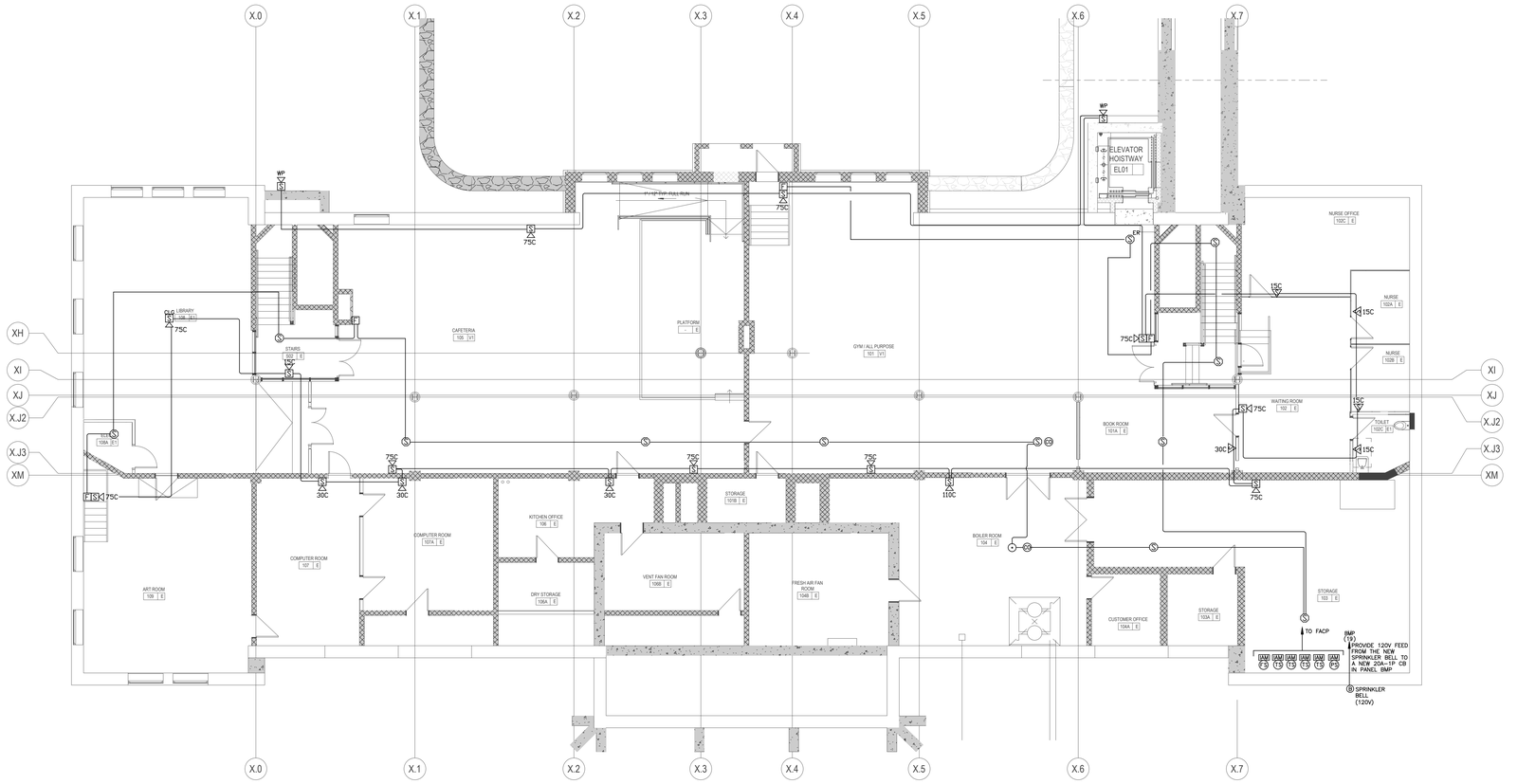
DRAWING NUMBER

E3.1

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1 EDE GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757–7793 * FAX: (508) 753–2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/8/2024 8:32:35 PM



NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.

BASEMENT FLOOR PLAN - (AREA "A") - FIRE ALARM

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

NOTE :
FIRE ALARM CONDUITS SHALL BE SURFACE MOUNTED IN HALLWAYS. FIRE ALARM CONDUITS SHALL BE RUN ABOVE ATC CEILINGS IN CLASSROOMS.

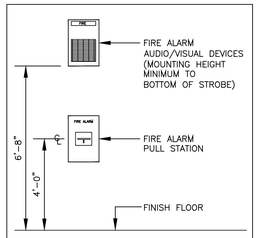
NOTE :
ALL MANUAL PULL STATIONS SHALL HAVE STOPPER II STYLE PROTECTIVE COVERS.

NOTE:
IT SHALL BE THE RESPONSIBILITY OF THE EC AND FA MANUFACTURER THE QUANTITY AND LOCATION OF NOTIFICATION APPLIANCE CIRCUIT (NAC) PANELS, AS REQUIRED.

NOTE:
ROUTING SHOWN ON PLANS ARE FOR DIAGRAMMATIC PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE THE BEST ROUTE FOR CONDUIT RUNS THROUGHOUT THE BUILDINGS.

LEGEND

F	PULL STATION
S	PHOTO-ELECTRIC SMOKE DETECTOR
S CO	PHOTO-ELECTRIC SMOKE & CO DETECTOR SOUNDER BASE
S ER	PHOTO-ELECTRIC SMOKE DETECTOR ELEVATOR RECALL
CO	CARBON MONOXIDE DETECTOR
	HEAT DETECTOR
	STROBE
K	SPEAKER/VISUAL
K CLG	SPEAKER/VISUAL CEILING
IAM	INDEPENDENT ADDRESSABLE MODULE
FACP	FIRE ALARM CONTROL PANEL
	FIRE ALARM BEACON
K	FIREFIGHTERS KEY BOX
TS	TAMPER SWITCH
FS	FLOW SWITCH
PS	LOW PRESSURE SWITCH



DEVICE LOCATION HEIGHTS

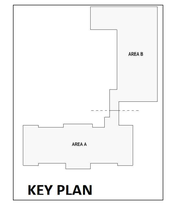
NOT TO SCALE

NOTES:
ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM THE FINISH FLOOR TO THE CENTERLINE OF THE DEVICE EXCEPT FIRE ALARM A/V DEVICES.

DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.

ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DEVICE UNLESS OTHERWISE NOTED.

STROBE HEIGHT ILLUSTRATED AT MAXIMUM HEIGHT. STROBE SHALL BE 80" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
BASEMENT FLOOR PLAN AREA "A" FIRE ALARM

MVG MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

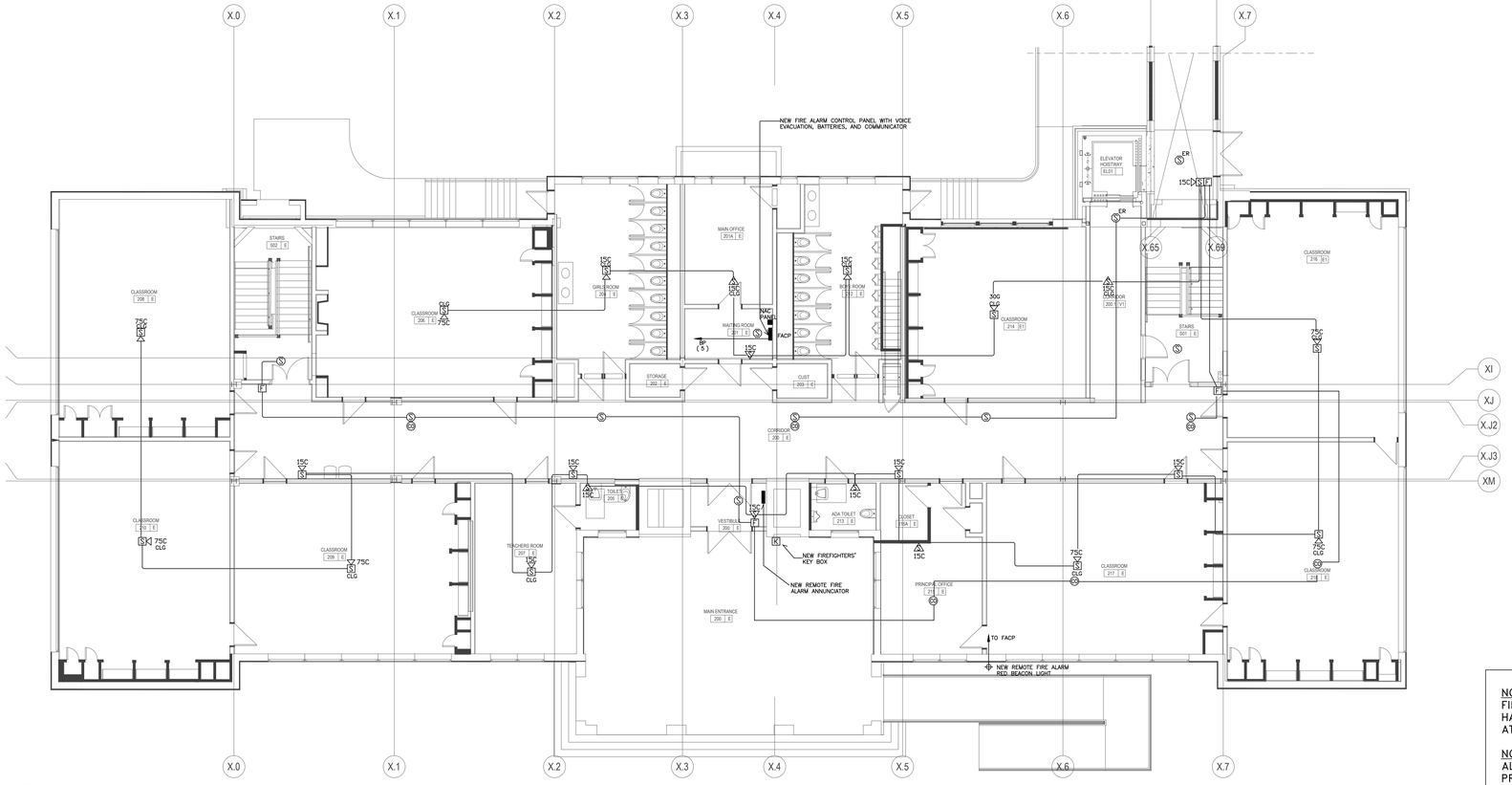
SCALE	AS SHOWN
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER
FA.0

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

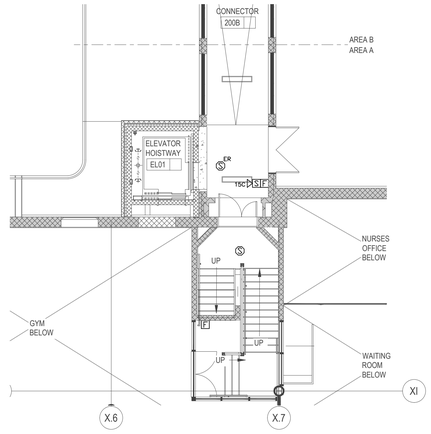
PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/26/2024 6:32:35 PM



FIRST FLOOR PLAN - (AREA "A") - FIRE ALARM

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

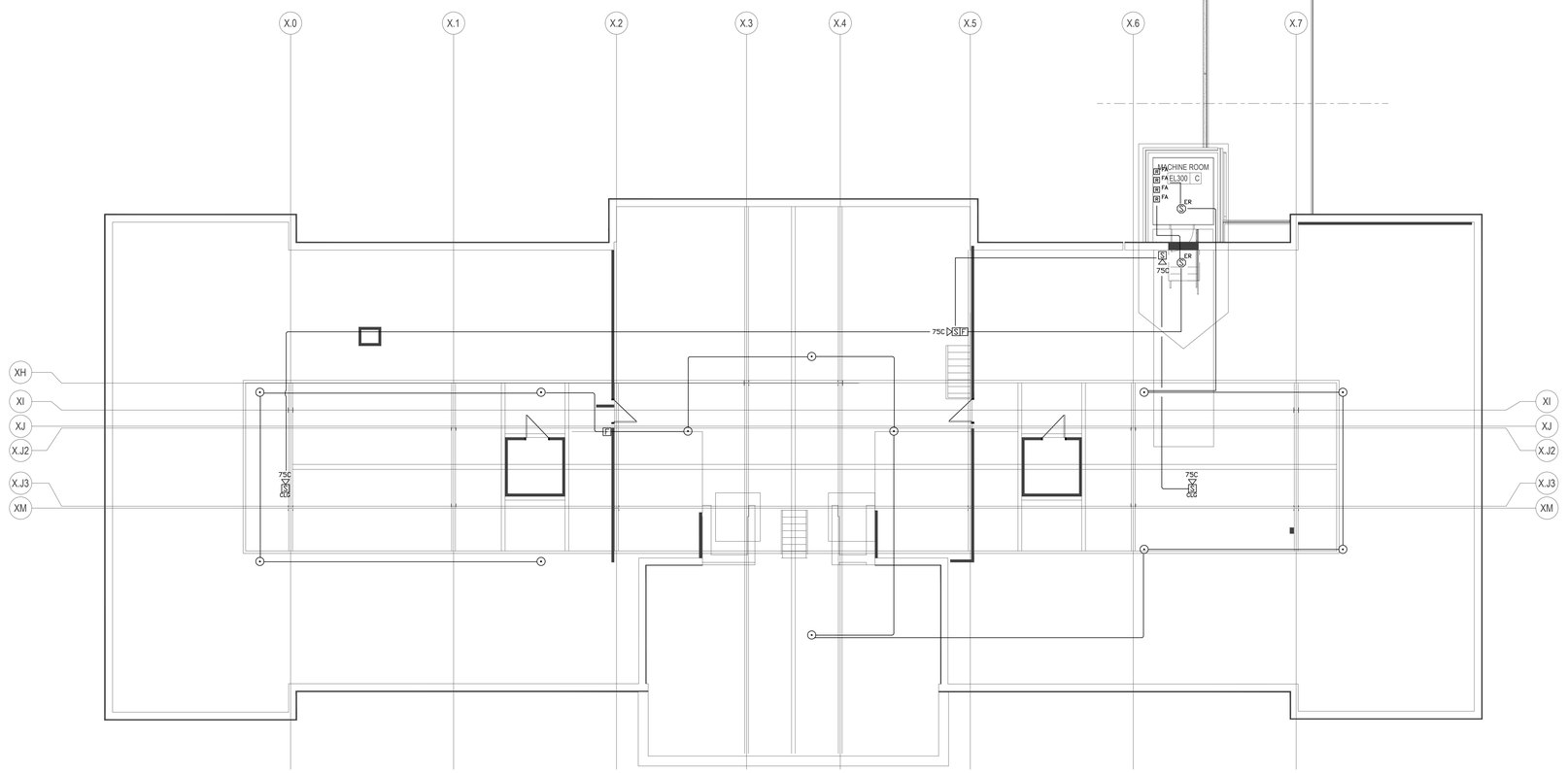


INTERMEDIATE LANDING FLOOR PLAN - (AREA "A") - FIRE ALARM

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

NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.



ATTIC FLOOR PLAN - (AREA "A") - FIRE ALARM

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

NOTE :
FIRE ALARM CONDUITS SHALL BE SURFACE MOUNTED IN HALLWAYS. FIRE ALARM CONDUITS SHALL BE RUN ABOVE ATC CEILINGS IN CLASSROOMS.

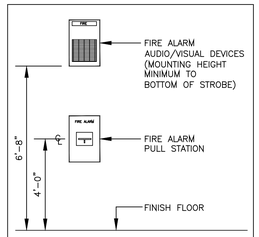
NOTE :
ALL MANUAL PULL STATIONS SHALL HAVE STOPPER II STYLE PROTECTIVE COVERS.

NOTE:
IT SHALL BE THE RESPONSIBILITY OF THE EC AND FA MANUFACTURER THE QUANTITY AND LOCATION OF NOTIFICATION APPLIANCE CIRCUIT (NAC) PANELS, AS REQUIRED.

NOTE:
ROUTING SHOWN ON PLANS ARE FOR DIAGRAMMATIC PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE THE BEST ROUTE FOR CONDUIT RUNS THROUGHOUT THE BUILDINGS.

LEGEND

F	PULL STATION
S	PHOTO-ELECTRIC SMOKE DETECTOR
S CO	PHOTO-ELECTRIC SMOKE & CO DETECTOR SOUNDER BASE
S ER	PHOTO-ELECTRIC SMOKE DETECTOR ELEVATOR RECALL
CO	CARBON MONOXIDE DETECTOR
	HEAT DETECTOR
	STROBE
S	SPEAKER/VISUAL
S CLG	SPEAKER/VISUAL CEILING
IAM	INDEPENDENT ADDRESSABLE MODULE
FACP	FIRE ALARM CONTROL PANEL
	FIRE ALARM BEACON
K	FIREFIGHTERS KEY BOX
TS	TAMPER SWITCH
FS	FLOW SWITCH
PS	LOW PRESSURE SWITCH



DEVICE LOCATION HEIGHTS

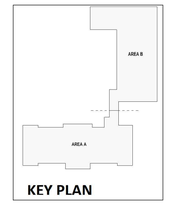
NOT TO SCALE

NOTES:
ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM THE FINISH FLOOR TO THE CENTERLINE OF THE DEVICE EXCEPT FIRE ALARM A/V DEVICES.

DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.

ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DEVICE UNLESS OTHERWISE NOTED.

STROBE HEIGHT ILLUSTRATED AT MAXIMUM HEIGHT. STROBE SHALL BE 80" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
FIRST & ATTIC FLOOR PLAN AREA "A" FIRE ALARM

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	AS SHOWN
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER

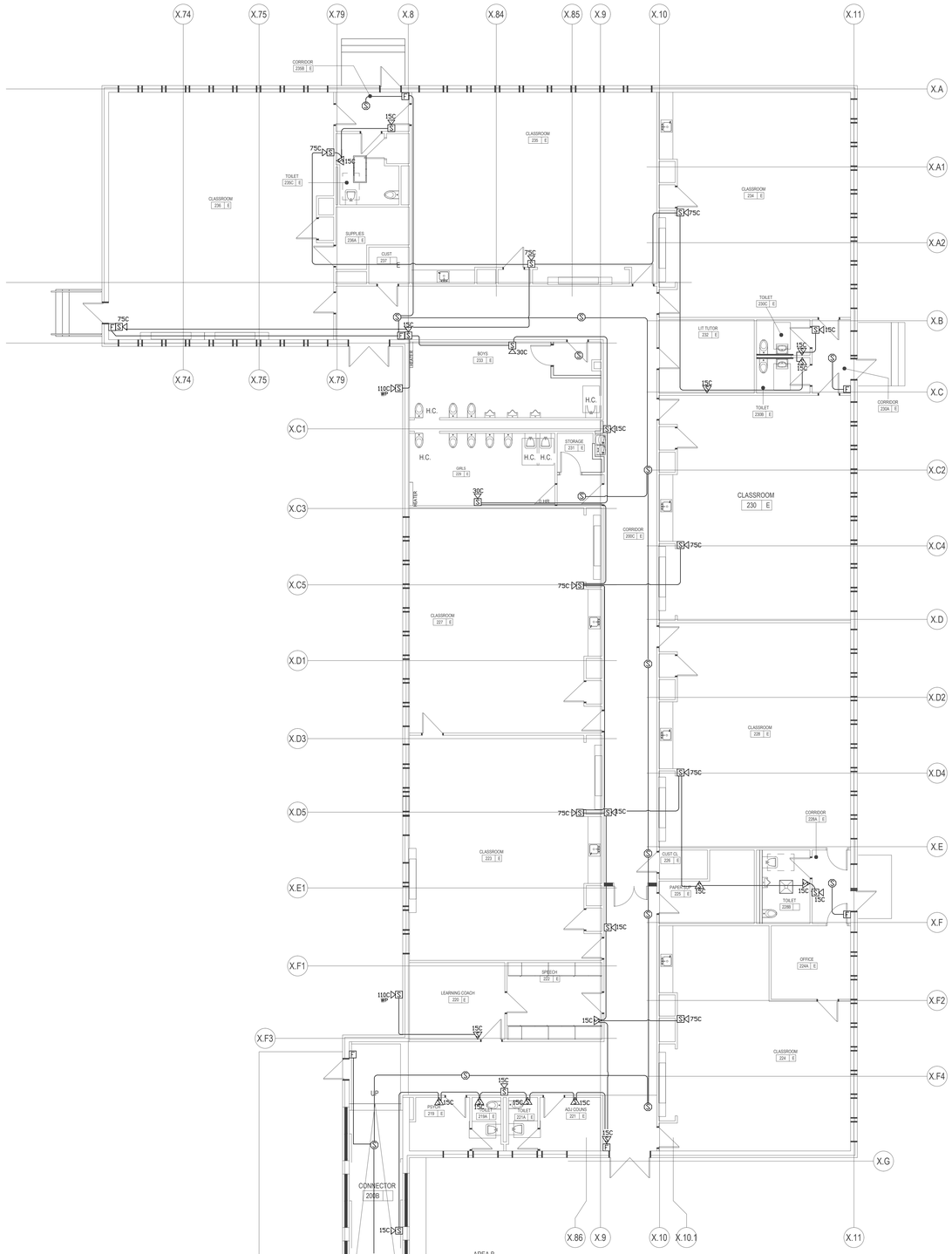
FA.1

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

6/28/2024 6:32:35 PM



SECOND FLOOR PLAN - (AREA "B") - FIRE ALARM

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

NOTE 1:
THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" DIAMETERS. THE GENERAL CONTRACTOR SHALL CORE ALL PIPES OVER 5 1/2".

NOTE 2:
THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK OR STUD WALLS OR TO CEILING JOISTS.

NOTE :
FIRE ALARM CONDUITS SHALL BE SURFACE MOUNTED IN HALLWAYS. FIRE ALARM CONDUITS SHALL BE RUN ABOVE ATC CEILINGS IN CLASSROOMS.

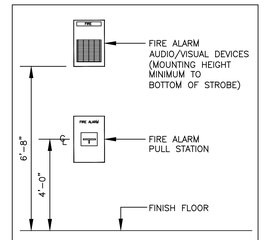
NOTE :
ALL MANUAL PULL STATIONS SHALL HAVE STOPPER II STYLE PROTECTIVE COVERS.

NOTE:
IT SHALL BE THE RESPONSIBILITY OF THE EC AND FA MANUFACTURER THE QUANTITY AND LOCATION OF NOTIFICATION APPLIANCE CIRCUIT (NAC) PANELS, AS REQUIRED.

NOTE:
ROUTING SHOWN ON PLANS ARE FOR DIAGRAMMATIC PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE THE BEST ROUTE FOR CONDUIT RUNS THROUGHOUT THE BUILDINGS.

LEGEND

F	PULL STATION
S	PHOTO-ELECTRIC SMOKE DETECTOR
S/S	PHOTO-ELECTRIC SMOKE & CO DETECTOR SOUNDER BASE
S ER	PHOTO-ELECTRIC SMOKE DETECTOR ELEVATOR RECALL
CO	CARBON MONOXIDE DETECTOR
H	HEAT DETECTOR
	STROBE
S	SPEAKER/VISUAL
S CLG	SPEAKER/VISUAL CEILING
IAM	INDEPENDENT ADDRESSABLE MODULE
FACP	FIRE ALARM CONTROL PANEL
	FIRE ALARM BEACON
K	FIREFIGHTERS KEY BOX
TS	TAMPER SWITCH
FS	FLOW SWITCH
PS	LOW PRESSURE SWITCH



DEVICE LOCATION HEIGHTS

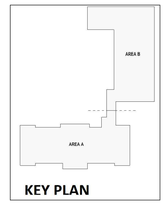
NOT TO SCALE

NOTES:
ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM THE FINISH FLOOR TO THE CENTERLINE OF THE DEVICE EXCEPT FIRE ALARM A/V DEVICES.

DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.

ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DEVICE UNLESS OTHERWISE NOTED.

STROBE HEIGHT ILLUSTRATED AT MAXIMUM HEIGHT. STROBE SHALL BE 80" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
FIRST FLOOR PLAN
AREA "B"
FIRE ALARM

MVG
MOUNT VERNON GROUP ARCHITECTS

178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880

781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	AS SHOWN
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER
FA.2

SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1 EDE GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

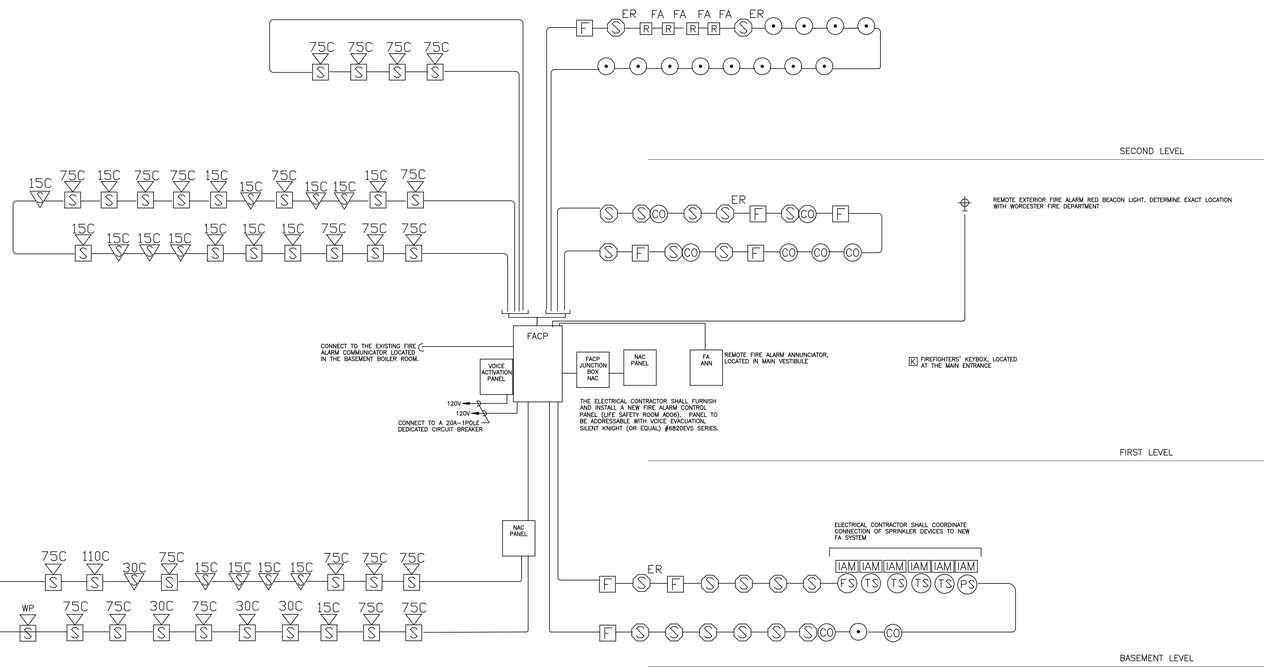
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/8/2024 8:32:35 PM

FIRE ALARM MATRIX NOTE:
THE ELECTRICAL CONTRACTOR, THROUGH THE MANUFACTURER, SHALL PROVIDE A FIRE ALARM MATRIX INTENDED TO ILLUSTRATE EACH INPUT AND OUTPUT REQUIRED FOR THIS SYSTEM. THE EQUIPMENT SUPPLIER SHALL CREATE A MATRIX INCLUDING EACH INPUT WITH ASSOCIATED ADDRESS AND DEFINE THE REQUIRED SEQUENCE. TEXT DESCRIPTORS SHALL MATCH THE EXACT ALPHANUMERIC DESCRIPTOR TO BE USED FOR PROGRAMMING ALL DEVICES.

SUPERVISORY SIGNAL TRANSMISSIONS SHALL BE PER NFPA-2013 SECTION 10.

FIRE ALARM GENERAL NOTES:

1. LOCATION OF DEVICES AND EQUIPMENT ARE APPOXIMATE. FINAL LOCATIONS MUST BE DETERMINED IN THE FIELD ACCORDING TO SITE CONDITIONS.
2. VISUAL ANNUNCIATORS (STROBES) SHALL HAVE A MINIMUM 5'-0" CLEARANCE FROM ANY OBSTRUCTION AND SHALL BE RATED AS MARKED. ALL STROBES WITHIN VIEW SHALL BE SYNCHRONIZED
3. AUDIBLE NOTIFICATION APPLIANCES (SPEAKERS) SHALL PROVIDE AUDIBILITY OF 15dBA ABOVE THE AMBIENT LEVELS AS DETERMINED BY THE CURRENT NFPA CODE.
4. WALL MOUNTED SPEAKERS AND VISUAL FIRE ALARMS (STROBES) SHALL BE MOUNTED WITH THEIR TOPS NO LESS THAN 90" A.F.F. WHERE LOCAL CONDITIONS DIFFER, INSTALL THE STROBES AT 6" BELOW THE CEILING.
5. MANUAL PULL STATIONS SHALL BE MOUNTED BETWEEN 43" AND 48" FROM FINISHED FLOOR TO ACTIVATION HANDLE.
6. ALL MANUAL PULL STATIONS SHALL BE PROVIDED WITH A FALSE ALARM STOPPER COVER.
7. RISER DIAGRAM IS FOR DESIGN PURPOSES ONLY. ELECTRICAL CONTRACTOR SHALL PROVIDE A COMPLETE RISER DIAGRAM WITH ACTUAL FIELD WIRING SHOWN.
8. EACH FIRE ALARM INITIATING AND INDICATING CIRCUIT SHALL BE ELECTRICALLY SUPERVISED.
9. EACH VISUAL FIRE ALARM CIRCUIT SHALL CONTAIN AT LEAST 20% SPARE CAPACITY.
10. ALL FIRE ALARM DEVICES AND JUNCTION BOXES SHALL BE PROPERLY LABELED WITH MINIMUM 1/4" HIGH LETTERS USING LABELS THAT WILL ADHERE PERMANENTLY TO THE DEVICE.
11. ALL LOW VOLTAGE WIRING TO DEVICES MUST BE A MINIMUM OF #14 AWG AND HAVE A RED COLORED JACKET WITH A MINIMUM THICKNESS OF 25 MILS.
12. ALL WIRING SHALL BE IN MINIMUM 3/4" EMT CONDUIT, UNLESS OTHERWISE NOTED.
13. A FIRE ALARM SYSTEM TEST WILL BE PERFORMED BY THE CONTRACTOR AS PER MASSACHUSETTS BUILDING CODE.
14. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORING OF CONDUITS UP TO 5 1/2" IN DIAMETER. THE GENERAL CONTRACTOR SHALL CORE FOR ALL PIPES OVER 5 1/2".
15. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW PIPING TO EXISTING BLOCK/STUD WALLS OR TO CEILING JOISTS.



FIRE ALARM CABLE DESCRIPTIONS	
A	SIGNALING LINE CIRCUIT (SLC LOOP) – 2#14 TWISTED/UNSHIELDED
B	SOUNDER BASE NOTIFICATION CIRCUIT – 2#14 AWG/SHIELDED
C	SPEAKER NOTIFICATION CIRCUIT – 2#14 TWISTED/SHIELDED
D	STROBE NOTIFICATION CIRCUIT – 2#14 AWG/SHIELDED

NOTE:
1. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE FIRE ALARM DRAWINGS FOR QUANTITIES, TYPES AND LOCATIONS OF ALL FIRE ALARM DEVICES.
2. REFER TO THE ELECTRICAL SPECIFICATION FOR SPECIFIC PART NUMBERS AND SYSTEM OPERATION.
3. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO SUBMIT COMPLETE DEVICE AND WIRING DIAGRAMS FROM THE MANUFACTURER PRIOR TO INSTALLATION OF THE EQUIPMENT.

FIRE ALARM RISER

Scale:NTS

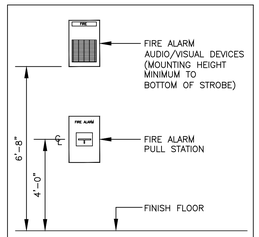
NOTE 1:
INSTALL A PHOTO-ELECTRIC SMOKE DETECTOR ABOVE EACH NAC PANEL, IF THERE IS NOT ALREADY ONE WITHIN A FIVE FOOT RADIUS, AND INTEGRATE INTO THE NEAREST INITIATING LOOP.

NOTE 2:
IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR (WITH THE MANUFACTURER) TO DETERMINE THE QUANTITY OF NAC PANELS REQUIRED FOR THE SYSTEM.; AND TO COORDINATE WITH THE GENERAL CONTRACTOR TO DETERMINE THE BEST LOCATION FOR THE NAC PANELS ON SITE.

NOTE 3:
THE EXISTING FIRE ALARM CONTROL PANEL LOCATED IN THE EXISTING BASEMENT BOILER ROOM SHALL REMAIN OPERATIONAL UNTIL THE NEW SYSTEM IS INSTALLED, TESTED AND OPERATIONAL. THE EXISTING FIRE ALARM SYSTEM, INCLUDING PANELS, DEVICES, WIRING, ETC., SHALL BE COMPLETELY REMOVED ONCE THE NEW SYSTEM IS OPERATIONAL

LEGEND

F	PULL STATION
S	PHOTO-ELECTRIC SMOKE DETECTOR
S CO	PHOTO-ELECTRIC SMOKE & CO DETECTOR SOUNDER BASE
S ER	PHOTO-ELECTRIC SMOKE DETECTOR ELEVATOR RECALL
CO	CARBON MONOXIDE DETECTOR
	HEAT DETECTOR
	STROBE
S	SPEAKER/VISUAL
S CLG	SPEAKER/VISUAL CEILING
IAM	INDEPENDENT ADDRESSABLE MODULE
FACP	FIRE ALARM CONTROL PANEL
	FIRE ALARM BEACON
K	FIREFIGHTERS KEY BOX
TS	TAMPER SWITCH
FS	FLOW SWITCH
PS	LOW PRESSURE SWITCH



DEVICE LOCATION HEIGHTS

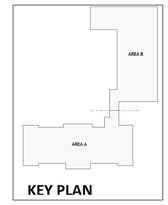
NOT TO SCALE

NOTES:
ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM THE FINISH FLOOR TO THE CENTERLINE OF THE DEVICE EXCEPT FIRE ALARM A/V DEVICES.

DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.

ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DEVICE UNLESS OTHERWISE NOTED.

STROBE HEIGHT ILLUSTRATED AT MAXIMUM HEIGHT. STROBE SHALL BE 80" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER.



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02018.04

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ELEMENTARY SCHOOL

WORCESTER, MA

DRAWING TITLE
FIRE ALARM RISER

MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

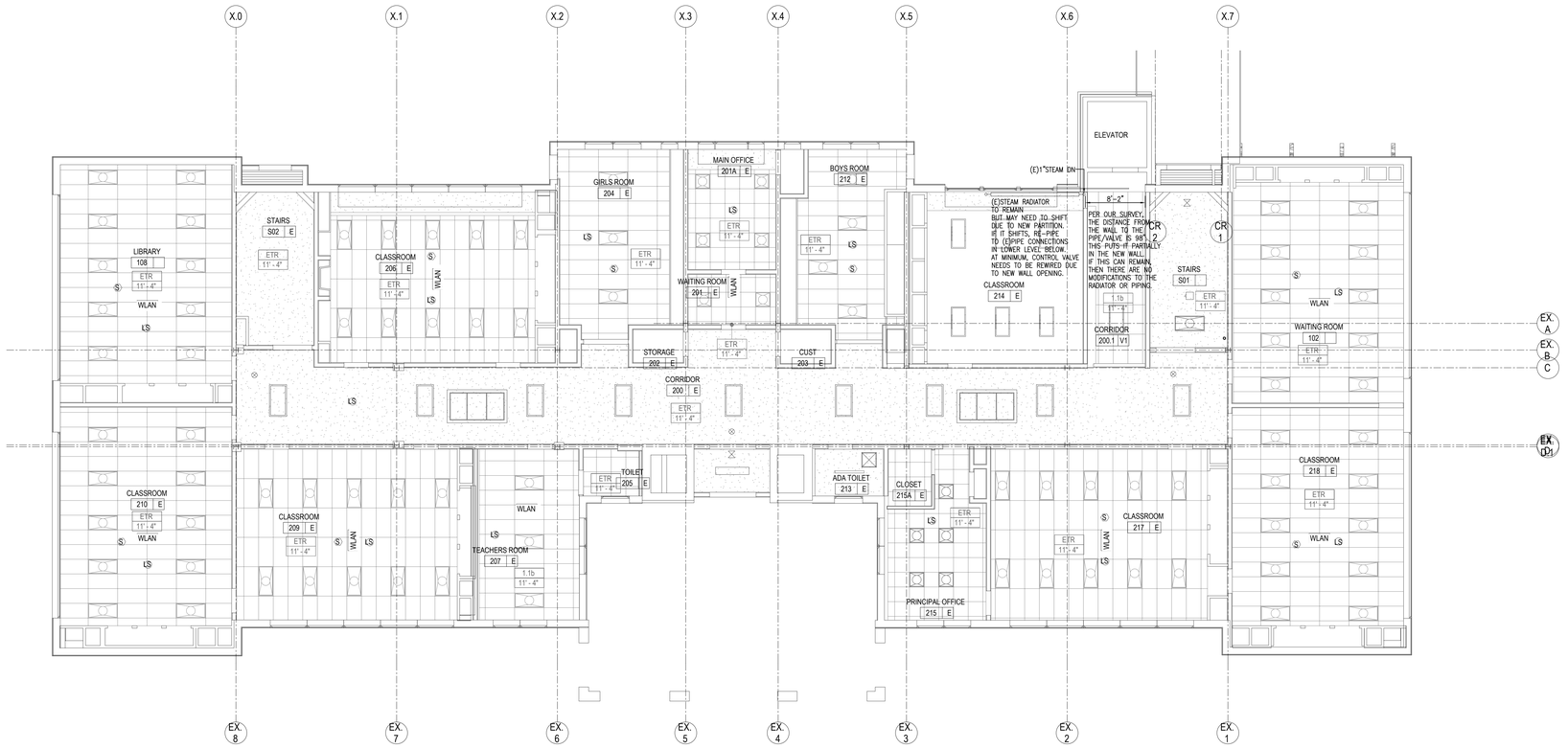
SCALE	AS SHOWN
DRAWN BY	AJV
CHECKED	JDS
DATE	AUGUST 09, 2023

DRAWING NUMBER
FA.3

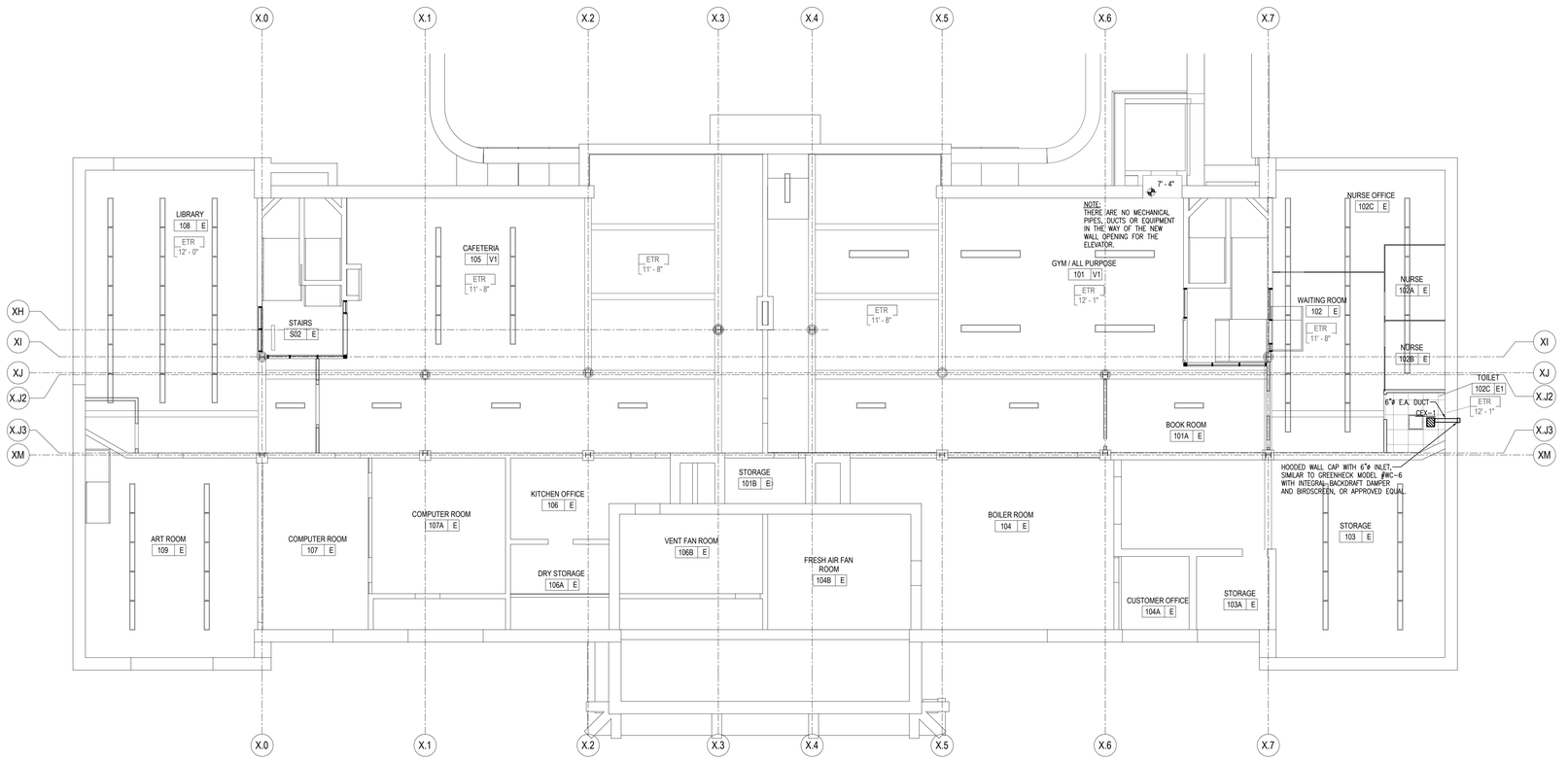
SHEPHERD ENGINEERING, INC.
ELECTRICAL CONSULTANTS
1308 GRAFTON STREET
WORCESTER, MASSACHUSETTS 01604
PHONE: (508) 757-7793 • FAX: (508) 753-2309
REFERENCE NO.: 24076B

PROJECT NORTH
NORTH

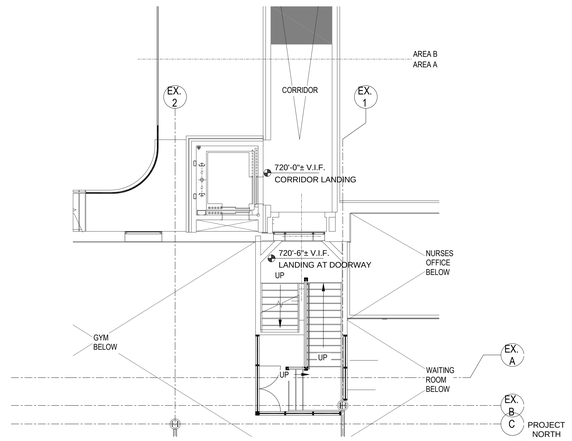
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
6/26/2024 4:32:35 PM



2 FIRST FLOOR HVAC PLAN - AREA A
1/8" = 1'-0"



1 LOWER LEVEL HVAC FLOOR PLAN - AREA A
1/8" = 1'-0"

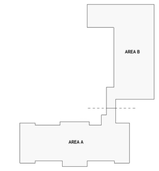


2 INTERMEDIATE LANDING PLAN
1/8" = 1'-0"

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

7/3/2024 1:47:42 PM

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
LOWER LEVEL AND FIRST FLOOR HVAC PLANS - AREA A

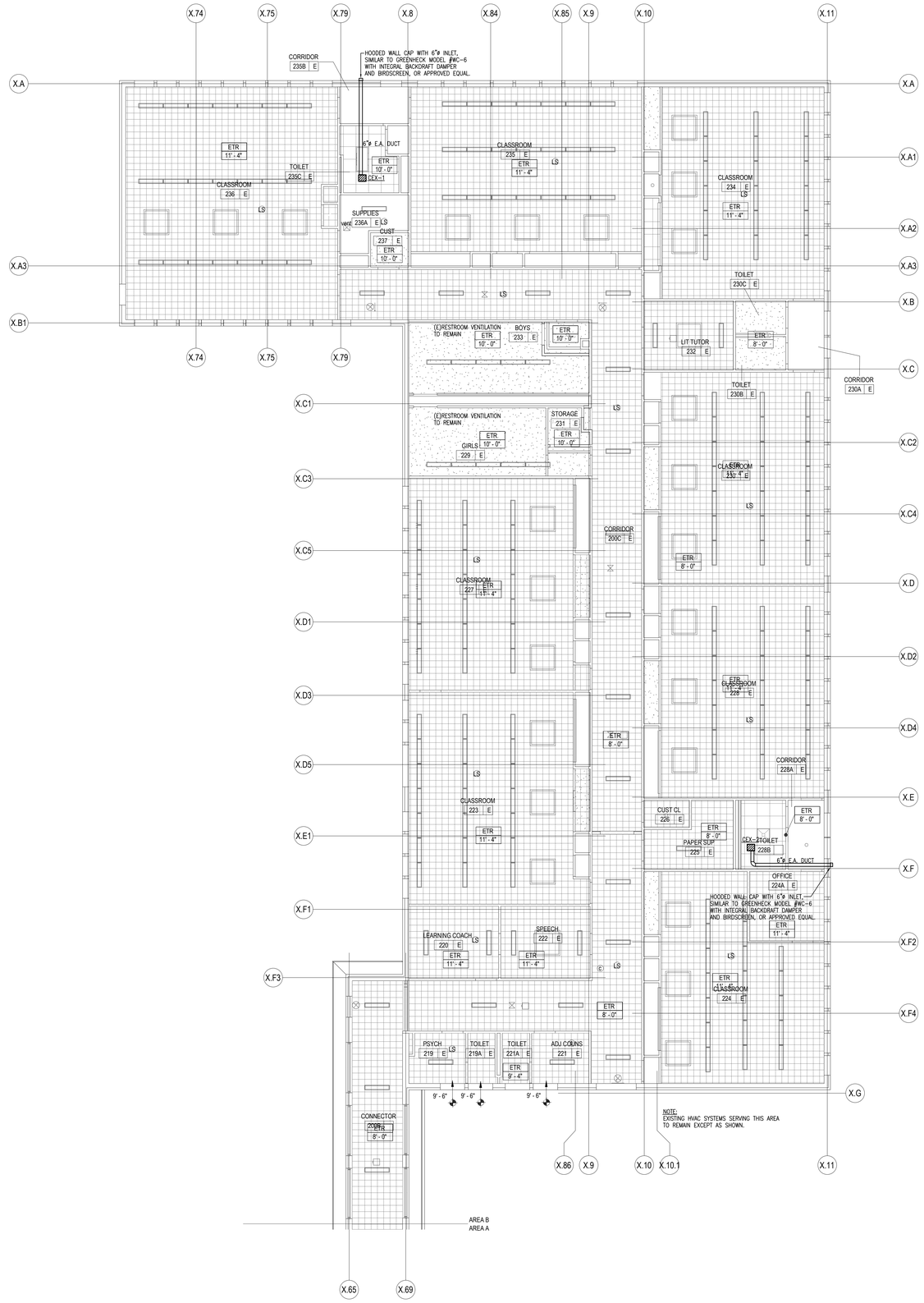
MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street,
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	KRS
CHECKED	CDR
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER
H1.01



1 FIRST FLOOR HVAC PLAN - AREA B
1/8" = 1'-0"

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
FIRST FLOOR HVAC PLAN - AREA B

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER
H1.02

PROJECT NORTH
NORTH

ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved

7/3/2024 1:48:06 PM

EQUIPMENT NOTES:

FC-1/CU-1 1-TON DUCTLESS SPLIT HEAT PUMP SYSTEM, R-32 REFRIGERANT
OUTDOOR UNIT POWER: 208 VOLT-1ø-60HZ, MCA=9.36A, MOCP=15A.
COOLING INPUT POWER = 3.52 KW; HEATING INPUT POWER = 3.96 KW
SEER2 = 21, EER2 = 12.5, HSPF2 = 10.2; COP = 3.8; MAX. PIPING LENGTH = 66 FT
INDOOR WALL MOUNTED FAN COIL/EVAPORATOR
DAIKIN MODEL #FTKF12AXVJU, 20.9 LBS
473/436/316/247/132 CFM @ HH, H, M, L, SL SPEEDS
12,000 BTUH TOTAL; 9,540 BTUH SENSIBLE COOLING CAPACITY
14,600 BTUH MAXIMUM & 4,400 BTUH MINIMUM COOLING CAPACITY
13,500 BTUH TOTAL HEATING CAPACITY
18,000 BTUH MAXIMUM & 4,400 BTUH MINIMUM HEATING CAPACITY
POWERED BY OUTDOOR UNIT
PROVIDE REMOTE PROGRAMABLE SMART THERMOSTAT ACCESSORY.
3/8" GAS, 1/4" LIQUID REFRIGERANT CONNECTIONS.
5/8" CONDENSATE DRAIN CONNECTION.
OUTDOOR CONDENSING UNIT: DAIKIN MODEL #RXF14AXVJU
AIRFLOW = 1051 CFM, WEIGHT = 60 LBS
INVERTER COMPRESSOR; COOLING OPERATION RANGE: 50 – 118°F
HEATING OPERATION RANGE: 5 – 65°F
MOUNT UNIT 18" ABOVE ROOF ON MINI-SPLIT SNOW STAND WITH OPEN BASE
PROVIDE PART #DACA-CF4-1 MINI WHITE PUMP KIT 100-250V

CEILING EXHAUST FAN SCHEDULE

			CEX-1	CEX-2
	UNIT NUMBER		CEX-1	CEX-2
	SERVICE		SINGLE FIXTURE BATHROOMS	TWO FIXTURE BATHROOMS
FANS	MANUFACTURER		PANASONIC	PANASONIC
	MODEL #		#FV-05-11VK2	#FV-05-11VK2
	C.F.M.		51	101
	STATIC PRESS. (IN WG)		0.25"	0.25"
	FAN RPM		1054	1164
	ENERGY EFFICIENCY (CFM/W)		8.3	7.7
	SONES		0.4	0.7
MOTOR & STARTER	MOTOR	TYPE	DIRECT	DIRECT
		WATTS	6.2	13.1
		CURRENT AMPS	0.07	0.14
		VOLTAGE/PHASE	120V – 1ø	120V – 1ø
		CURRENT (AMPS)	0.20	0.20
	STARTER	TYPE	–	–
		NEMA SIZE	–	–
		FAN CONTROL	MOTION SENSOR	MOTION SENSOR
		AUX. CONTACTS	–	–
			① ② ③	① ② ③

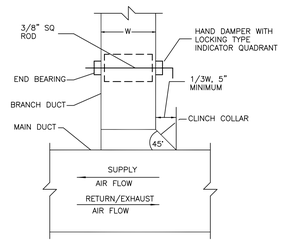
① PROVIDE HANGING VIBRATION ISOLATORS & BACKDRAFT DAMPER. PROVIDE MULTI-SPEED PLUG-N-PLAY MODULE #FV-VS15VK1 AND MOTION SENSOR PLUG-N-PLAY MODULE #FV-MSVK1

② NUTONE, BROAN, PANASONIC OR APPROVED EQUAL.

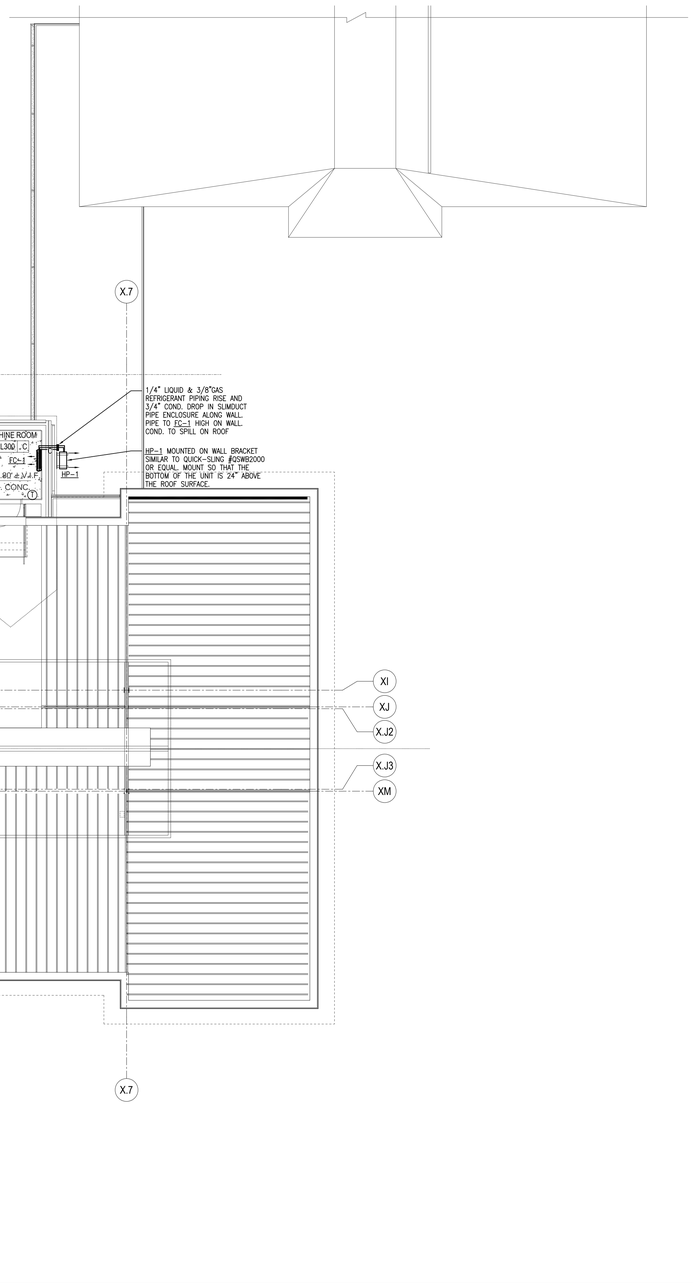
③ THE BATHROOM FAN OPERATES CONTINUOUSLY AT LOW SPEED. WHEN A PERSON ENTER THE BATHROOM THE FAN OPERATES ON HIGH SPEED AND WILL CONTINUE TO RUN ON HIGH SPEED TO A PRESET TIME NOT TO EXCEED 30 MINUTES AFTER THE PERSON EXITS THE BATHROOM

SYMBOLS LEGEND

DIRECTION OF AIRFLOW
CEILING EXHAUST FAN
HIGH WALL FAN COIL UNIT
HEAT PUMP UNIT
PROPOSED DUCTWORK
CEX-1 EQUIPMENT CALLOUT
(E) EXISTING
T THERMOSTAT
(E)STEAM RADIATOR TO REMAIN
REFRIGERANT PIPING
C CONDENSATE DRAIN PIPING

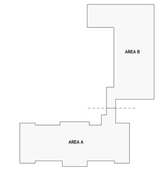


RECTANGULAR DUCT TAP WITH VOLUME DAMPER
NO SCALE



1 ATTIC FLOOR AND LOW ROOF HVAC PLAN - AREA A
1/8" = 1'-0"

SEAMAN ENGINEERING CORPORATION
22 West Street, Unit C ph:508-865-1400
Millbury, MA 01527 fx:508-865-1401



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
CONSTRUCTION DOCUMENTS

PROJECT NUMBER
02023.11

OWNER / PROJECT NAME / LOCATION
CITY OF WORCESTER

THORNDYKE ES - ADA UPGRADES PROJECT

WORCESTER, MA

DRAWING TITLE
ATTIC FLOOR AND LOW ROOF HVAC PLAN - AREA A

MVG MOUNT VERNON GROUP ARCHITECTS
178 Albion Street, Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

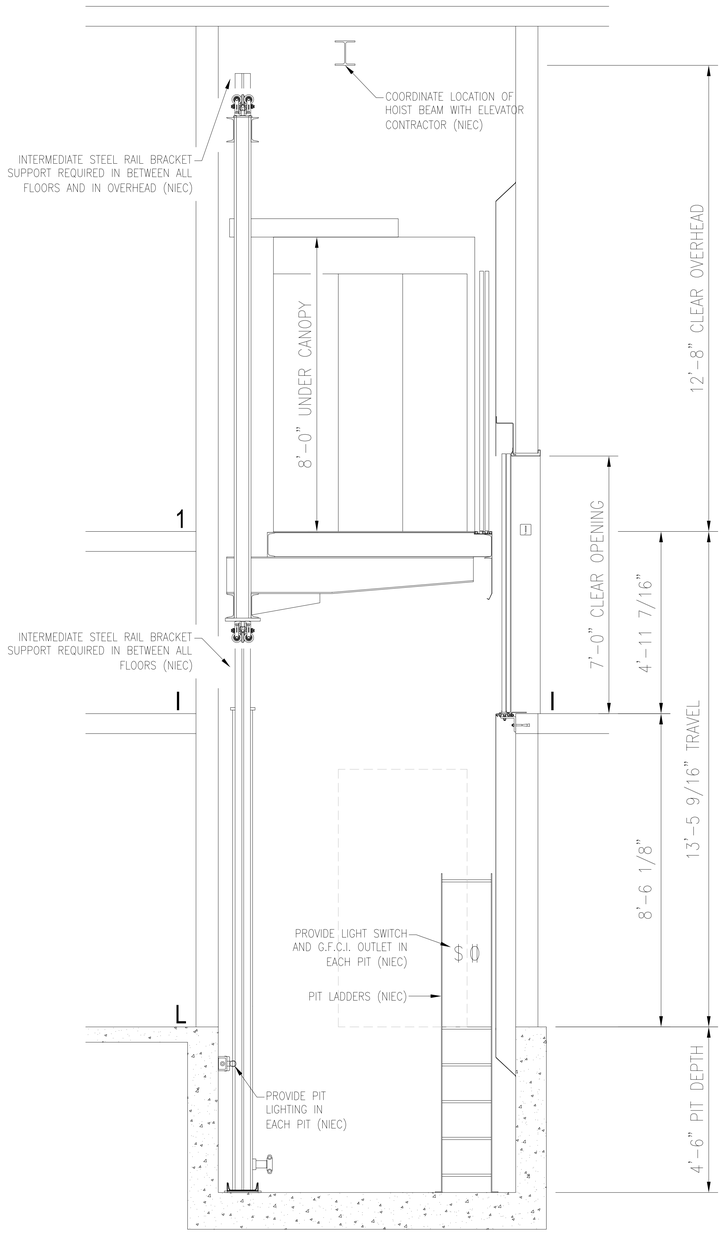
DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	CDR
CHECKED	KRS
DATE	SEPTEMBER 18, 2024

DRAWING NUMBER
H1.03

PROJECT NORTH
NORTH

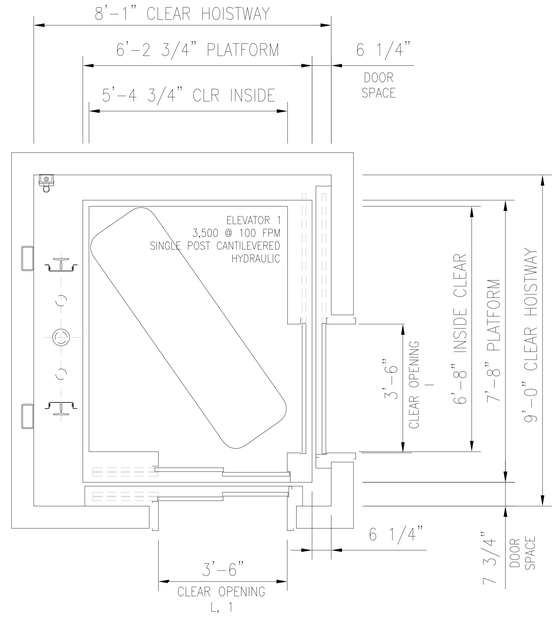
ORIGINAL SHEET IS 30" x 42"
copyright 2018
all rights reserved
7/3/2024 1:41:57 PM



SECTION VIEW ELEVATOR 1

1 / VT.02

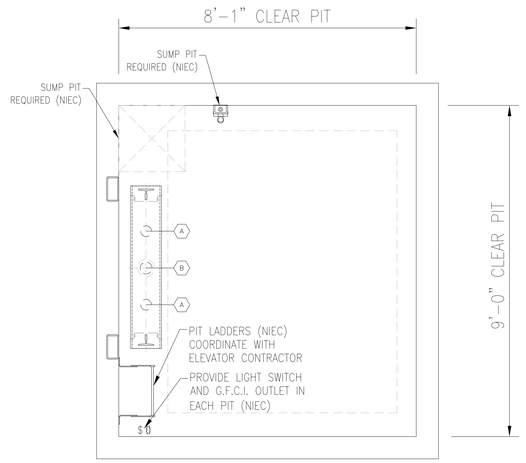
SCALE: NONE
ELEVATOR 1: 3,500 LBS @ 125 FPM
TWIN POST HOLELESS HYDRAULIC



HOISTWAY PLAN ELEVATOR 1

2 / VT.02

SCALE: NONE
ELEVATOR 1: 3,500 LBS @ 125 FPM
TWIN POST HOLELESS HYDRAULIC

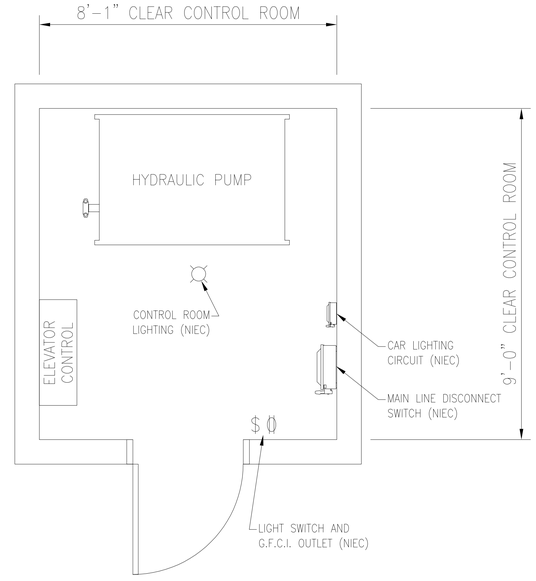


PIT PLAN ELEVATOR 1

3 / VT.02

SCALE: NONE
ELEVATOR 1: 3,500 LBS @ 125 FPM
TWIN POST HOLELESS HYDRAULIC

PIT REACTION TABLE		
KEY	REACTION	DUTY
A	20,112 LBS	3,500 LBS. AT 125 FPM
B	18,620 LBS	
REACTIONS HAVE BEEN DOUBLED FOR IMPACT		



CONTROL ROOM PLAN ELEVATOR 1

4 / VT.02

SCALE: NONE
CONTROL ROOM LOCATED AT ATTIC LEVEL

RAIL FORCES MAXIMUM ON EACH GUIDE RAIL							
UNIT			1				OCCURING ON
NORMAL	R1		1,475 LBS				FACE OF MAIN GUIDE
	R2		2,971 LBS				SIDE OF MAIN GUIDE
	CAR	SAFETY	N/A				FORCE TRANSMITTED TO PIT CAR SAFETY APPLICATION: *
	CWT	SAFETY	N/A				FORCE TRANSMITTED TO PIT CWT SAFETY APPLICATION: *
SEISMIC	CAR	R1	N/A				FACE OF MAIN GUIDE **
		R2	N/A				SIDE OF MAIN GUIDE – LOADING OR RUNNING **
	CWT	R1	N/A				FACE OF COUNTERWEIGHT GUIDE **
		R2	N/A				SIDE OF COUNTERWEIGHT GUIDE **

BUILDING SUPPORTS TO RESIST HORIZONTAL FORCES WITH A TOTAL DEFLECTION AT POINT OF SUPPORT NOT IN EXCESS OF 1/8" DURING NORMAL CONDITIONS

* THESE REACTIONS DO NOT OCCUR SIMULTANEOUSLY WITH PIT BUFFER REACTIONS

BUILDING SUPPORTS FOR GUIDE RAIL ATTACHMENT SHALL RESIST HORIZONTAL FORCES
** WITH A TOTAL DEFLECTION NOT IN EXCESS OF 1/4" BASED UPON 0.5G ACCELERATION DURING SEISMIC CONDITIONS



ELECTRICAL / MECHANICAL REQUIREMENTS								
POWER FEEDER REQUIREMENTS					MAIN SUPPLY: 208V / 3 PH / 60hZ			
UNIT NUMBERS	CAPACITY	SPEED FPM	MOTOR HP	DRIVE HP	FULL LOAD AMPERAGE		HEAT LOAD (BTU'S / HR)	
					STARTING	RUNNING	MACHINE RM	HOISTWAY
ELEVATOR 1	3,500	125	40 HP	N/A	147 AMPS	71 AMPS	23,900	N/A

NOTES:
1. ELECTRIC POWER AND CURRENT ARE BASED ON THREE (3) PHASE A.C. POWER SUPPLY
2. MAIN POWER TO BE PROVIDED AT EACH CONTROLLER THROUGH FUSED DISCONNECTING MEANS OR CIRCUIT BREAKERS
3. MAIN POWER SUPPLY DISCONNECTING MEANS TO BE SIZED TO LIMIT VOLTAGE DROP TO LESS THAN 5-PERCENT
4. A FOURTH WIRE IS REQUIRED FOR GROUNDING PURPOSES. THE CONDUIT CONTAINING THE POWER CABLE CANNOT BE USED AS A GROUND FOR THE SYSTEM
5. PROVIDE ALL COPPER CONDUCTORS THROUGHOUT
6. MACHINE ROOM TEMPERATURE TO BE MINIMUM 50 DEGREES F, MAX 90 DEGREES F, TO BE MEASURED 4'-0" ABOVE FINISH FLOOR AT APPROXIMATE CENTER OF ROOM – RELATIVE HUMIDITY MAXIMUM 85-PERCENT NON CONDENSING
7. THE SELECTION OF MAIN POWER SUPPLY DISCONNECTING MEANS TO BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, SECTION 620-51, ARTICLE 430-52 (EXCEPTIONS A, B, C)
8. PROVIDE LOCAL TELEPHONE SERVICE LINE TO EACH CAR CONTROLLER (IF APPLICABLE)
9. PROVIDE G.F.C.I.-PROTECTED PIT, CONTROL ROOM, AND OVERHEAD OUTLETS

ADDITIONAL POWER AND DISCONNECT REQUIREMENTS IN MACHINE ROOMS			
AUXILIARY SYSTEM	SUPPLY TERMINAL	SUPPLY VOLTAGE	CIRCUIT CAPACITY
CAR LIGHT AND FAN (LOCKABLE DISCONNECT)	EACH ELEVATOR CONTROLLER	120V / 1PH / 60hZ	20 AMPS PER CAR

MACHINERY AND DEVICES SHOWN ON THE FOLLOWING DRAWINGS ARE FOR DIAGRAMMATIC PURPOSES ONLY. ACTUAL MACHINERY WILL VARY BY MANUFACTURER. WORK INDICATED AS "NOT INCLUDED IN ELEVATOR CONTRACT" (NIEC) IS SHOWN FOR SCOPE CLARITY ONLY. REFER TO TRADE DISCIPLINE SHEETS FOR ACTUAL QUANTITIES AND LOCATIONS TO BE COORDINATED WITH THE ELEVATOR SHOP DRAWINGS.

NORTH ARROW

CONSULTANTS

SYSKA HENNESSY GROUP
A member company of SH Group, Inc.
Syska Hennessy Group, Inc.
Vertical Transportation
4925 Greenville Avenue, Suite 415
Dallas, TX 76205
Tel: 972.470.0704
www.syska.com

REVISIONS

PROJECT PHASE

100% BID SET CD

PROJECT NUMBER

02023.11

PROJECT NAME/LOCATION

CITY OF WORCESTER
THORNDYKE ELEMENTARY SCHOOL

30 Thorndyke Rd,
Worcester, MA 01606

DRAWING TITLE

MVG
MOUNT VERNON GROUP ARCHITECTS
178 Albion Street
Suite 240
Wakefield, Massachusetts 01880
781 213 5030 T
781 213 5040 F
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE –

DRAWN BY PBU

CHECKED JM

DATE SEPTEMBER 18, 2024

DRAWING NUMBER

VT.02