

Integrated Design Solutions, LLC
Architecture, Engineering, Interiors & Technology

1441 West Long Lake, Suite 200, Troy, MI 48068
tel 248.823.2100 - fax 248.823.2200
www.ids-troy.com

Linden Community Schools

2013 Sinking Fund Projects

- High School Student Lockers
- High School Toilet Room Upgrades and Fixture Replacements
- High School New Barrier Free Toilet Room and Office Renovation
- Central Elementary Student Lockers
- Central Elementary Window and Door Replacement
- Linden Elementary Classroom Storage and Art Room Renovation

Linden, Michigan

Project Title

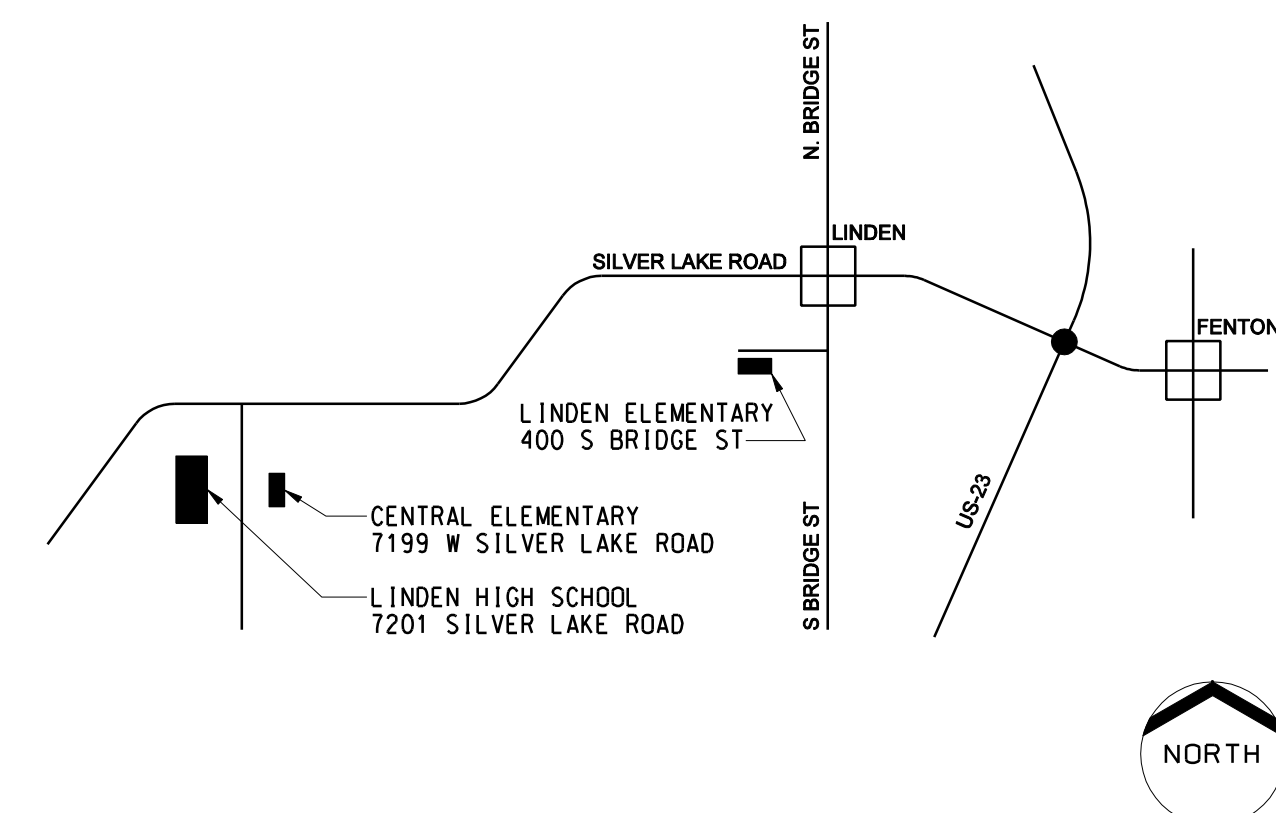


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Site Map



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Issue Date: 03-11-13
Issued for: Quality Management Review
03-15-13 Bids

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A1.2HS HIGH SCHOOL LOCKER DETAILS
A1.3HS HIGH SCHOOL NEW BARRIER FREE TOILET ROOM AND OFFICE RENOVATION
- A2.1CE CENTRAL ELEMENTARY LOCKER PLAN AND DETAILS
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- A3.1LE LINDEN ELEMENTARY CLASSROOM STORAGE ELEVATIONS
A3.2LE LINDEN ELEMENTARY CLASSROOM STORAGE ELEVATIONS AND DETAILS
A3.3LE LINDEN ELEMENTARY CLASSROOM STORAGE DETAILS

ARCHITECTURAL/MECHANICAL

- AM1.1HS HIGH SCHOOL TOILET ROOM UPGRADES AND FIXTURE REPLACEMENTS
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ELECTRICAL

- E0.1 ELECTRICAL REFERENCE INFORMATION
- E1.1HS ELECTRICAL DEMOLITION AND NEW WORK PLANS

Code Information

APPLICABLE CONSTRUCTION CODES AND STANDARDS

- BUILDING:** MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS, BUREAU OF CONSTRUCTION CODES, 2009 MICHIGAN BUILDING CODE, INCORPORATING THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE
- MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS, BUREAU OF FIRE SERVICES, RULES FOR SCHOOLS, COLLEGES AND UNIVERSITIES, 1999, INCORPORATING THE 1997 EDITION OF THE NFPA 101 LIFE SAFETY CODE
- BARRIER FREE:** MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS, 2009 MICHIGAN BUILDING CODE, INCORPORATING THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE
- AMERICANS WITH DISABILITIES ACT (ADA), 2010, STANDARDS FOR ACCESSIBLE DESIGN
- MECHANICAL:** MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS, 2009 MICHIGAN MECHANICAL CODE, INCORPORATING THE 2009 EDITION OF THE INTERNATIONAL MECHANICAL CODE
- PLUMBING:** MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS, 2009 MICHIGAN PLUMBING CODE, INCORPORATING THE 2009 EDITION OF THE INTERNATIONAL PLUMBING CODE
- ELECTRICAL:** MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS, 2008 MICHIGAN ELECTRICAL CODE, INCORPORATING THE 2008 EDITION OF THE NATIONAL ELECTRICAL CODE

Registration Seal

Signature: _____ Date: _____

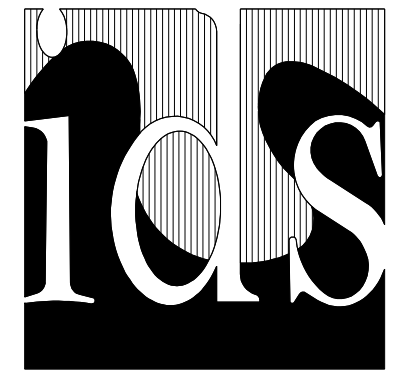
Signature: _____ Date: _____

Signature: _____ Date: _____

Signature: _____ Date: _____

IDS Project Number

13101-1000



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ABBREVIATIONS

Table of abbreviations categorized by letter (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z). Includes terms like ABRSV, ACDS, ACU, ADJ, AFF, ALT, ALUM, AND, ACS PNL, APPROX, ARCH, ARCHITECT, AUTO, B, BD, BEV, BDC, BLKG, BN, BOT, BRG, BRKT, BSMT, BUR, B/B, B/D, C, CAB, CB, CBB, CCT, CD, CHBD, CHKD PL, CLG, CMU, COL, COMP, COMPO, CONC, CONF, CONN, CONSTR, CONT, CONTR, CONV, CORR, COORD, CSWK, CT, CSK, CUH, etc.

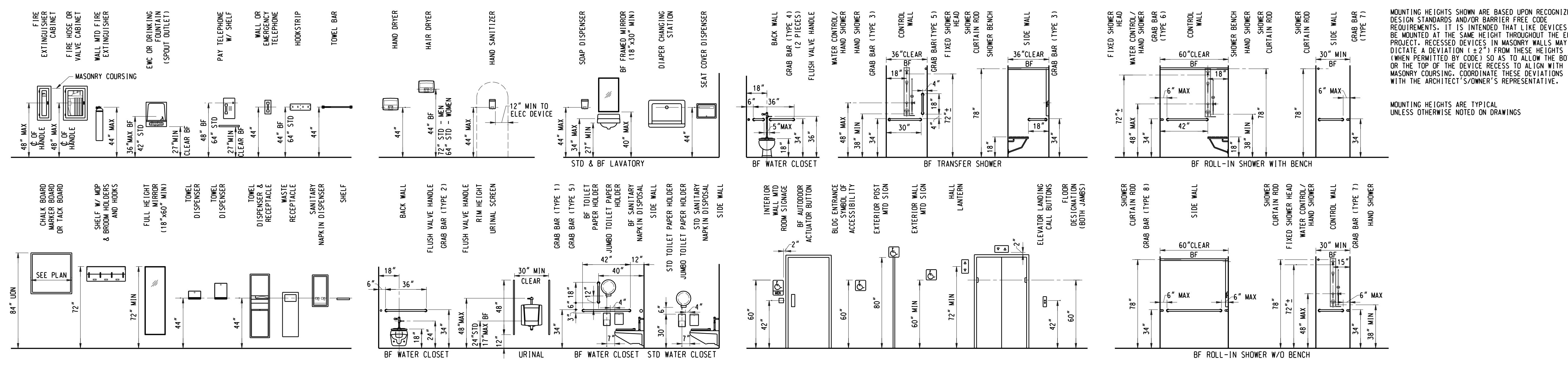
MATERIAL LEGEND

Material Legend table with columns for material name and corresponding hatching pattern. Includes SOIL, ASPHALT CONCRETE, GRANULAR FILL, GRAVEL, CONCRETE, CONCRETE MASONRY UNIT, BRICK, GLAZED CMU, STRUCTURAL GLAZED FACING TILE, STONE, MARBLE, METALS - LARGE SCALE, METALS - SMALL SCALE, FINISH WOOD, PLYWOOD, CERAMIC OR QUARRY TILE, TERRAZZO, INTERRUPTED WOOD BLOCKING OR SHIMS, BATT INSULATION, RIGID INSULATION, PREMOULDED EXPANSION JOINT OR COMPRESSIBLE FILLER STRIP, GLASS OR PLASTIC GLAZING, PLASTER OR GYPSUM BOARD, ACUSTICAL PANEL OR ACUSTICAL TILE, EXISTING MATERIAL (NO DELINEATION).

SYMBOL LEGEND

Symbol Legend table with columns for symbol name and description. Includes DETAIL SYMBOL, DETAIL LOCATOR, ELEVATION SYMBOL, BUILDING SECTION LOCATOR, MATERIAL KEYNOTE, ROOM NAME AND NUMBER, PARTITION TYPE, DOOR NUMBER, and symbols for EXISTING and NEW.

MOUNTING HEIGHTS



Project Title

LINDEN COMMUNITY SCHOOLS
2013 Sinking Fund Projects

Linden, Michigan
Key Plan

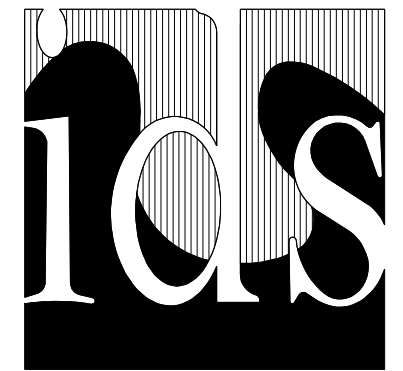
THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION SHOWN ON THIS SHEET.

Project Administrator: Seal: K. Delzer
Project Designer: B. Ingham
Project Architect / Engineer: B. Ingham
Drawn By: B. Ingham
C.M. Review: K. Delzer
Approved: K. Delzer Signature:
Drawing Scale: Date: None

Issue Date: Issued for:
03-11-13 Quality Management Review
03-14-13 Plan Review
03-15-13 Bids

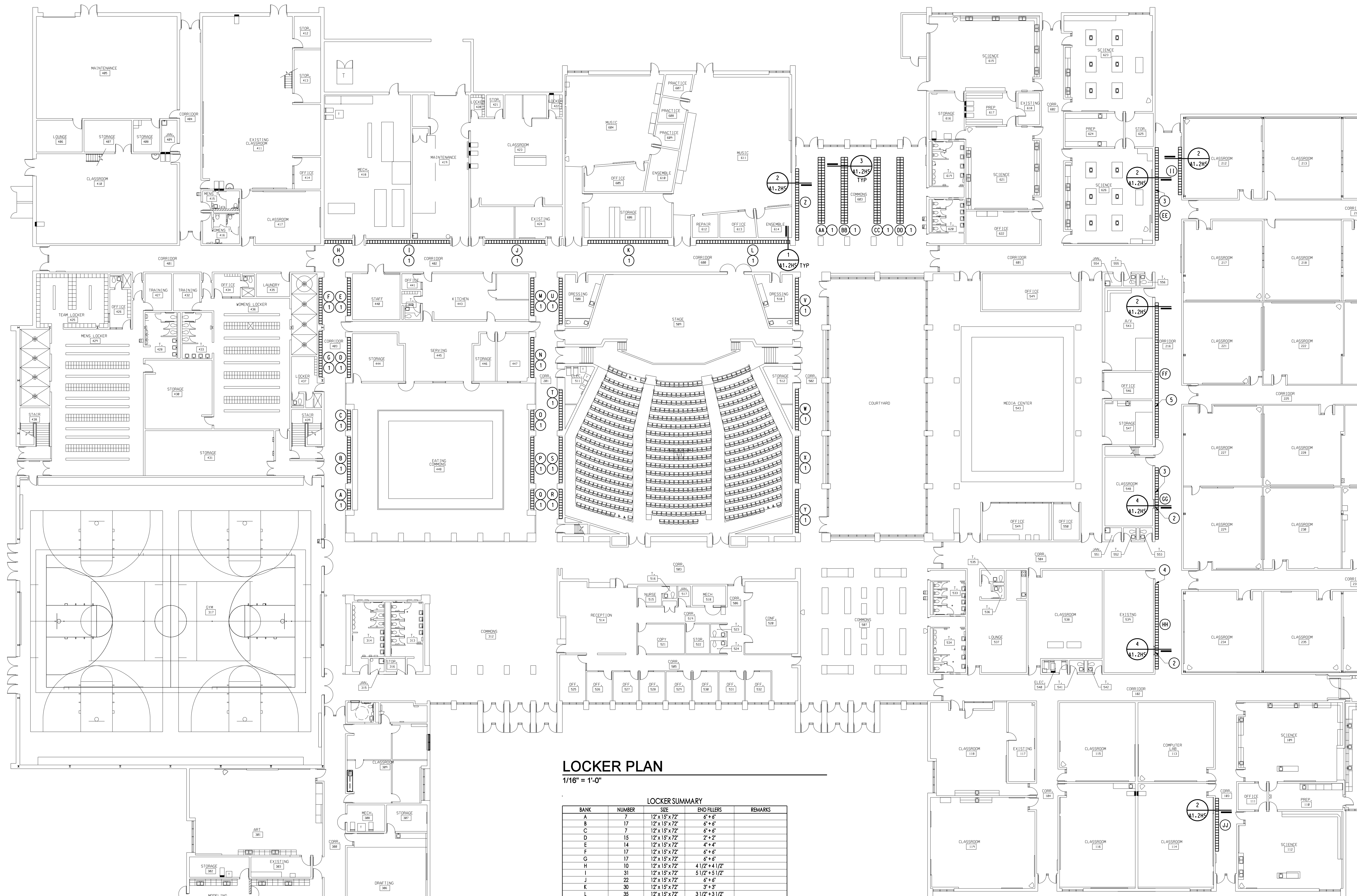
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IDS Drawing Title

Architectural Reference Information



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LOCKER PLAN
1/16" = 1'-0"

BANK	NUMBER	SIZE	END FILLERS	REMARKS
A	7	12' x 15' x 7 1/2"	6" x 6"	
B	17	12' x 15' x 7 1/2"	6" x 6"	
C	7	12' x 15' x 7 1/2"	6" x 6"	
D	15	12' x 15' x 7 1/2"	2" x 2"	
E	14	12' x 15' x 7 1/2"	4" x 4"	
F	17	12' x 15' x 7 1/2"	6" x 6"	
G	17	12' x 15' x 7 1/2"	6" x 6"	
H	10	12' x 15' x 7 1/2"	4 1/2" x 4 1/2"	
I	31	12' x 15' x 7 1/2"	5 1/2" x 5 1/2"	
J	20	12' x 15' x 7 1/2"	6" x 6"	
K	30	12' x 15' x 7 1/2"	8" x 8"	
L	35	12' x 15' x 7 1/2"	3 1/2" x 3 1/2"	
M	14	12' x 15' x 7 1/2"	4" x 4"	
N	15	12' x 15' x 7 1/2"	2" x 2"	
O	7	12' x 15' x 7 1/2"	6" x 6"	
P	17	12' x 15' x 7 1/2"	6" x 6"	
Q	7	12' x 15' x 7 1/2"	6" x 6"	
R	11	12' x 15' x 7 1/2"	2" x 2"	
S	17	12' x 15' x 7 1/2"	6" x 6"	
T	15	12' x 15' x 7 1/2"	4" x 4"	
U	17	12' x 15' x 7 1/2"	6" x 6"	
V	17	12' x 15' x 7 1/2"	6" x 6"	
W	15	12' x 15' x 7 1/2"	6" x 6"	
X	17	12' x 15' x 7 1/2"	6" x 6"	
Y	16	12' x 15' x 7 1/2"	4" x 4"	
Z	27	12' x 15' x 7 1/2"	NONE	
AA	50	12' x 15' x 7 1/2"	NONE	BACK-TO-BACK
BB	50	12' x 15' x 7 1/2"	NONE	BACK-TO-BACK
CC	50	12' x 15' x 7 1/2"	NONE	BACK-TO-BACK
DD	50	12' x 15' x 7 1/2"	NONE	BACK-TO-BACK
EE	35	12' x 15' x 7 1/2"	NONE	
FF	51	12' x 15' x 7 1/2"	NONE	
GG	27	12' x 15' x 7 1/2"	NONE	
HH	32	12' x 15' x 7 1/2"	NONE	
II	18	12' x 15' x 7 1/2"	NONE	
JJ	20	12' x 15' x 7 1/2"	NONE	
SUB-TOTAL (NEW)	817			
EXISTING	271	12' x 15' x 7 1/2"		
TOTAL	1088			NOT SHOWN

NOTES:
1. ALL LOCKERS TO HAVE CONTINUOUS SLOPED TOPS.
2. END FILLERS LESS THAN 1.75" USE ANGLE FILLER DETAIL.
3. END FILLERS GREATER THAN 1.75" USE SLIP JOINT FILLER DETAIL EQUAL FILLERS AT EACH END.
4. REFERENCE DETAIL S/A 1.2HS FOR LOCKER END FILLER PANEL PLAN DETAILS.

GENERAL NOTES

- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.
- CONTRACTOR SHALL PROVIDE ALL WORK NECESSARY TO PROVIDE COMPLETE PROJECT AS DESCRIBED IN THESE DOCUMENTS.
- CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.
- PROTECT ALL EXISTING FINISHES DURING CONSTRUCTION.

LEGEND

(A)(B)(C) ETC. DENOTES NEW LOCKER BANK

KEYNOTES

- NOTE: NOT ALL KEYNOTES MAY BE USED
- REMOVE EXISTING LOCKERS AND FILLER PANELS AND INSTALL NEW LOCKERS. REF DETAILS ON A1.2HS.
 - EXISTING HOLLOW METAL WINDOW TO REMAIN
 - DISCONNECT AND REMOVE DUPLEX RECEPTACLE AND WIRING BACK TO SOURCE AND PROVIDE BLANK COVERPLATE (BY OWNER)
 - EXISTING RECEPTACLE TO REMAIN
 - RELOCATE EXISTING PULL STATION TO OPPOSITE CORRIDOR WALL (BY OWNER)

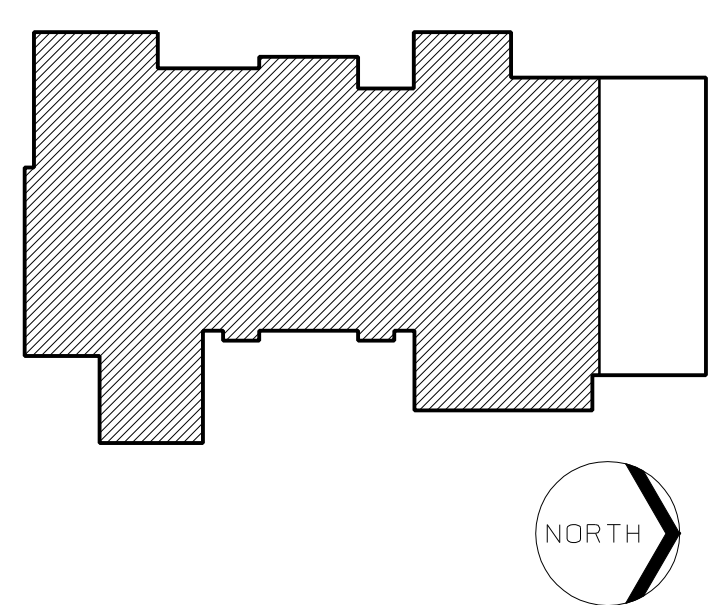
Project Title



LINDEN COMMUNITY SCHOOLS
2013 Sinking Fund Projects

Linden, Michigan

Key Plan



Project Administrator: Seal:
K. Delzer

Project Designer:
B. Ingham

Project Architect / Engineer:
B. Ingham

Drawn By:
B. Ingham

C.M. Review:
K. Delzer

Approved:
K. Delzer

Drawing Scale:
1/16" = 1'-0"

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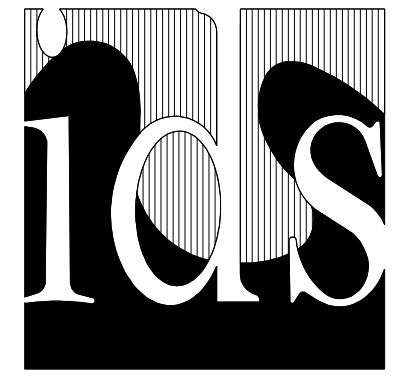
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IDS Drawing Title

High School Locker Demolition and New Work Plan

IDS Project Number Drawing Number

13101-1000 **A1.1HS**



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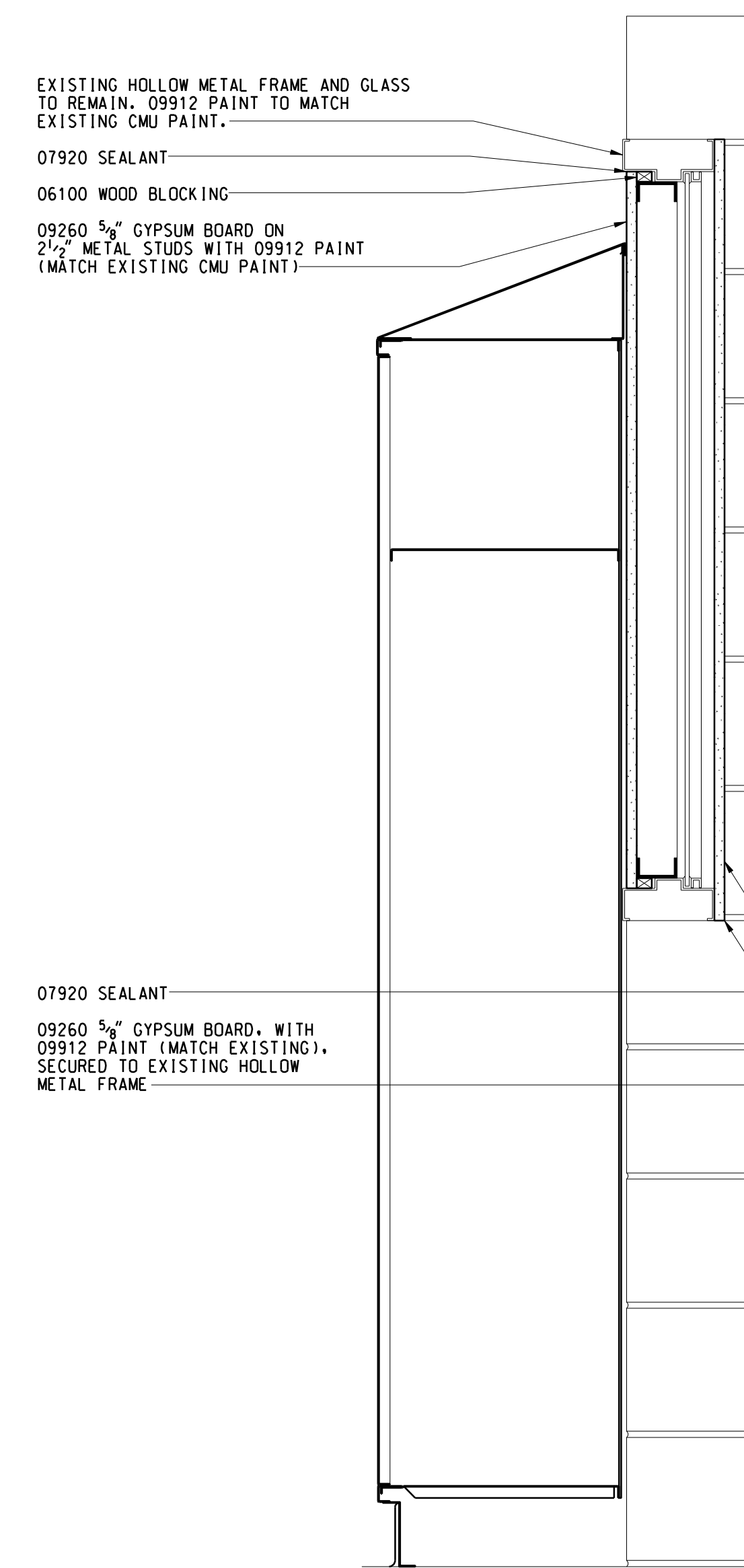


LINDEN COMMUNITY SCHOOLS

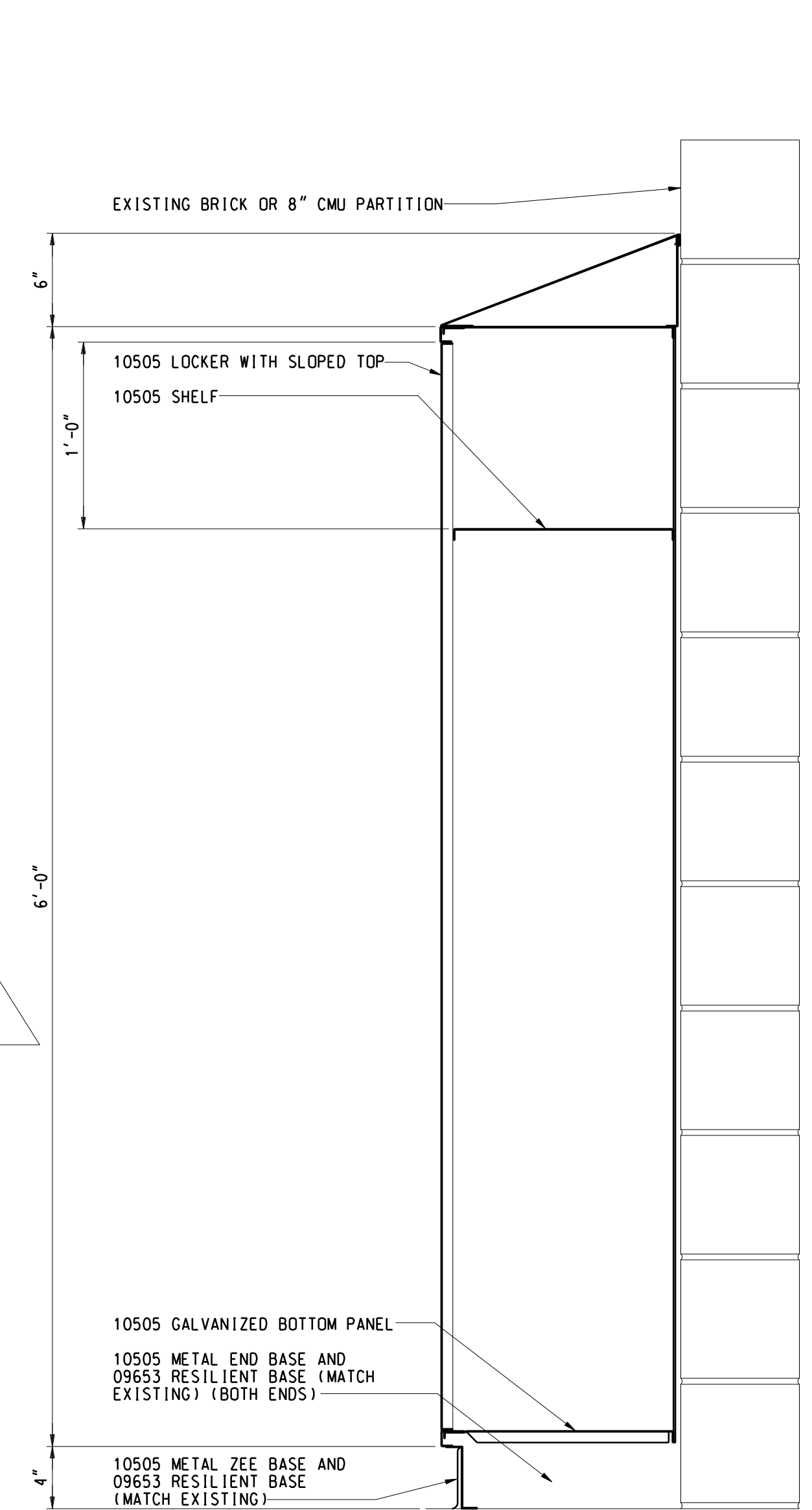
2013 Sinking Fund Projects

Linden, Michigan

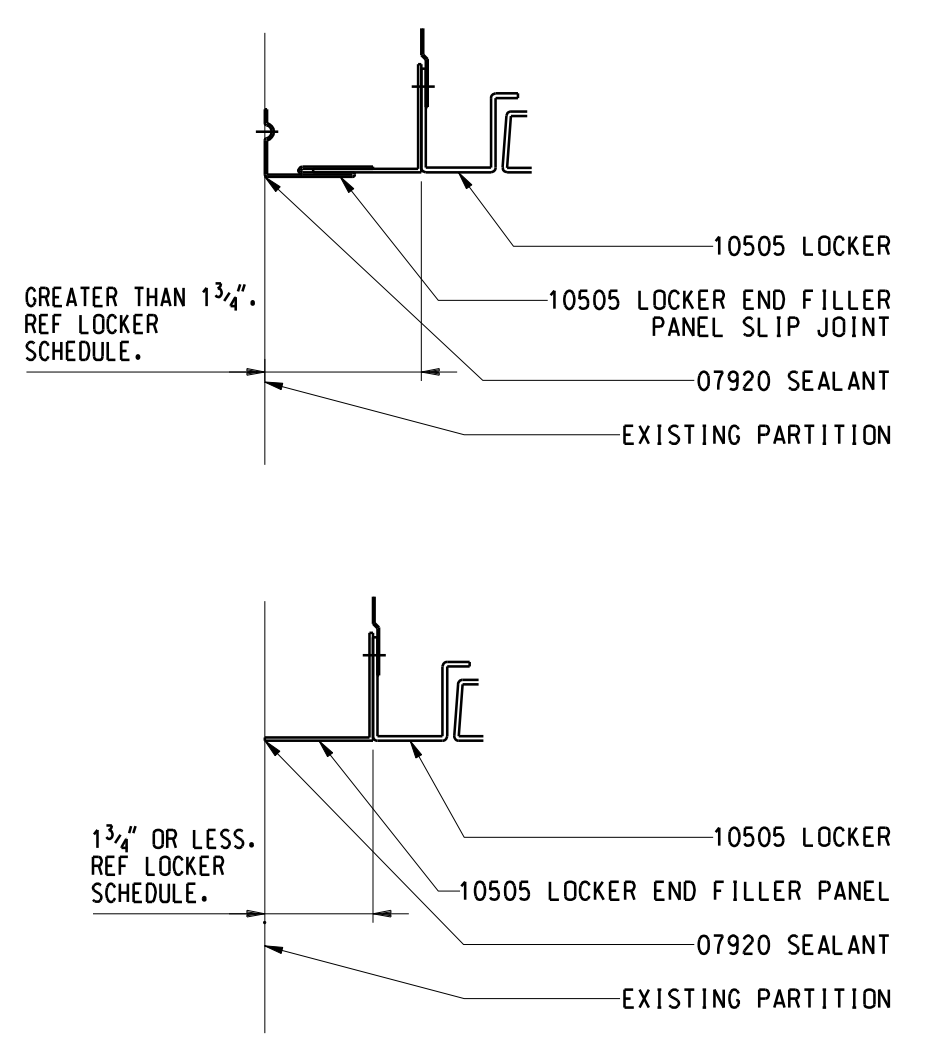
Key Plan



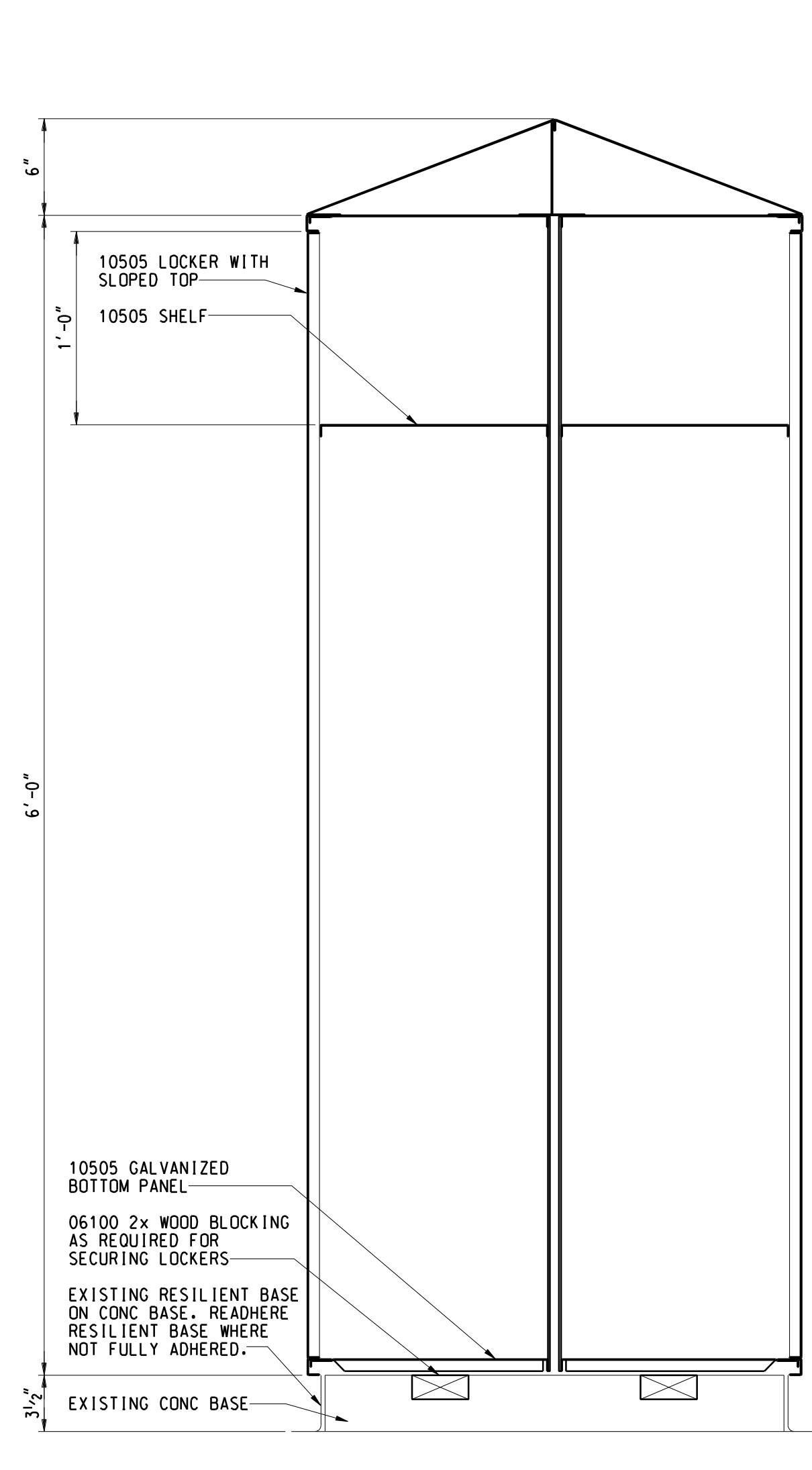
LOCKER SECTION AT EXISTING WINDOW
4
1.1HS 1 1/2" = 1'-0" REF DETAIL 2 THIS DRAWING FOR TYPICAL NOTES



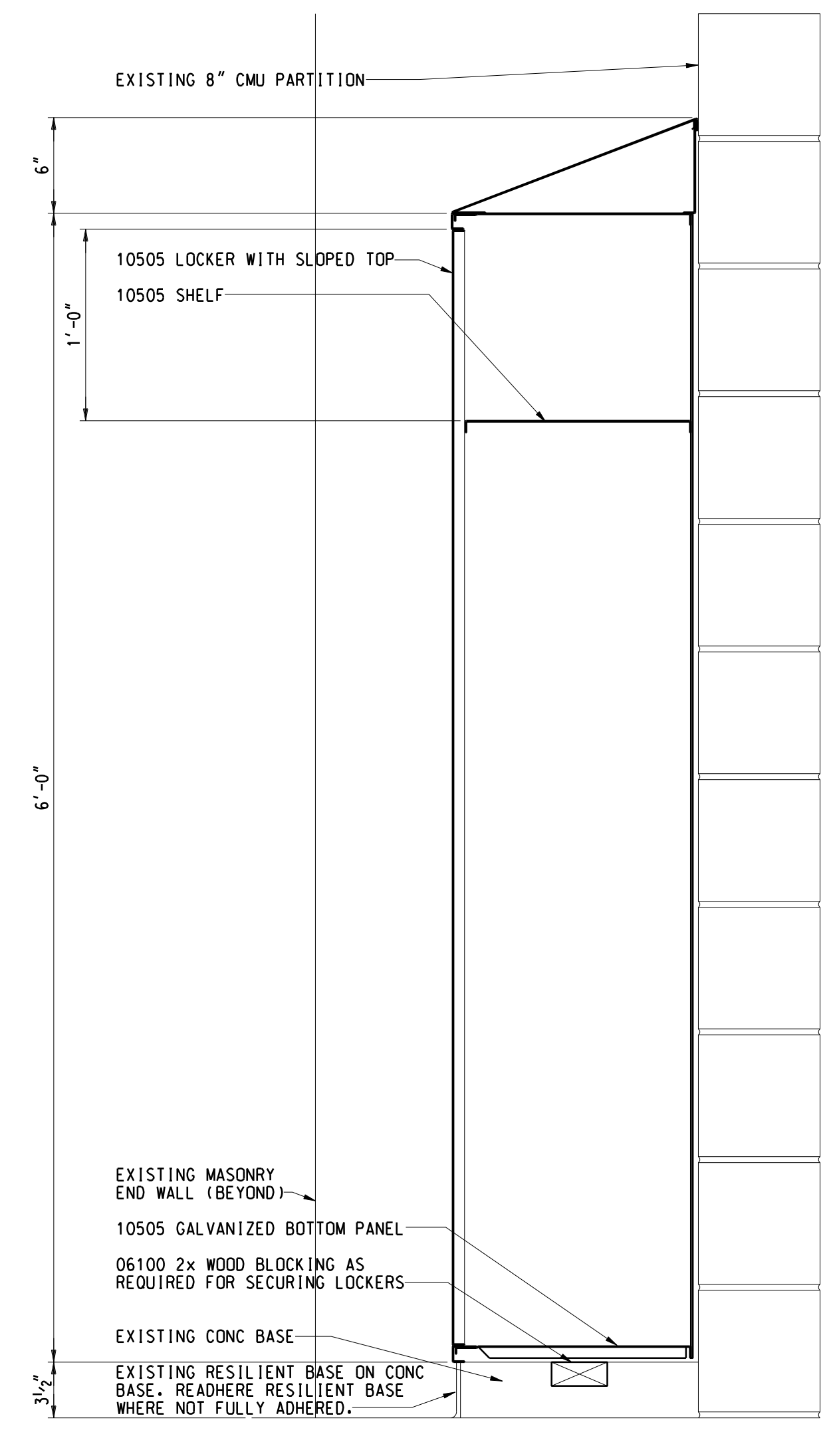
LOCKER SECTION AT EXISTING PARTITION
2
1.1HS 1 1/2" = 1'-0"



LOCKER END FILLER PANEL PLAN DETAILS
5
1.1HS 6" = 1'-0"



LOCKER SECTION AT EXISTING BASE
3
1.1HS 1 1/2" = 1'-0"



LOCKER SECTION AT EXISTING RECESS
1
1.1HS 1 1/2" = 1'-0"

Project Administrator: Seal:
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Project Designer:
B. Ingham
Project Architect / Engineer:
B. Ingham
Drawn By:
B. Ingham
Q.M. Review:
K. Delzer
Approved: Signature:
K. Delzer
Drawing Scale: Date:
As Noted

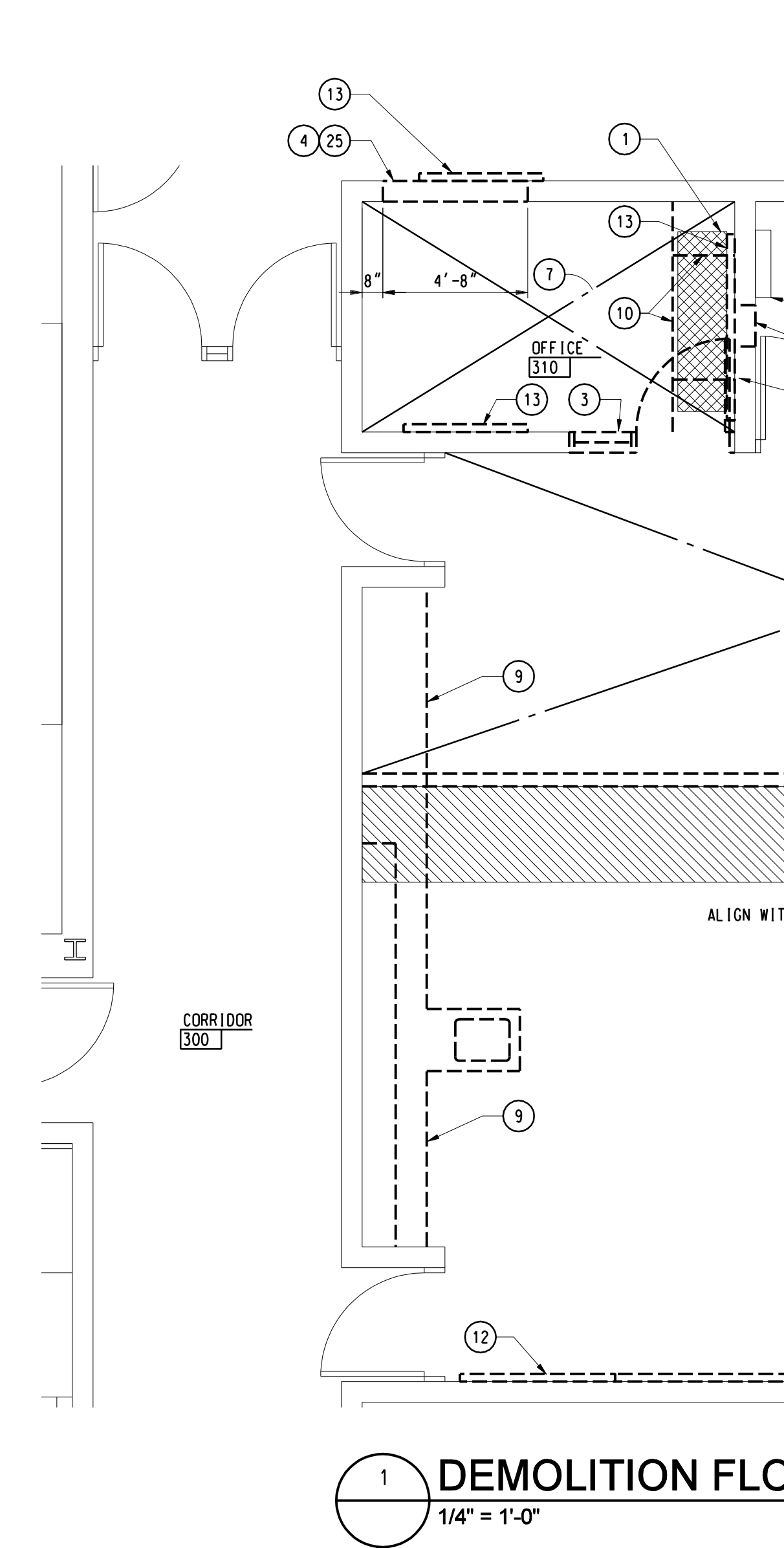
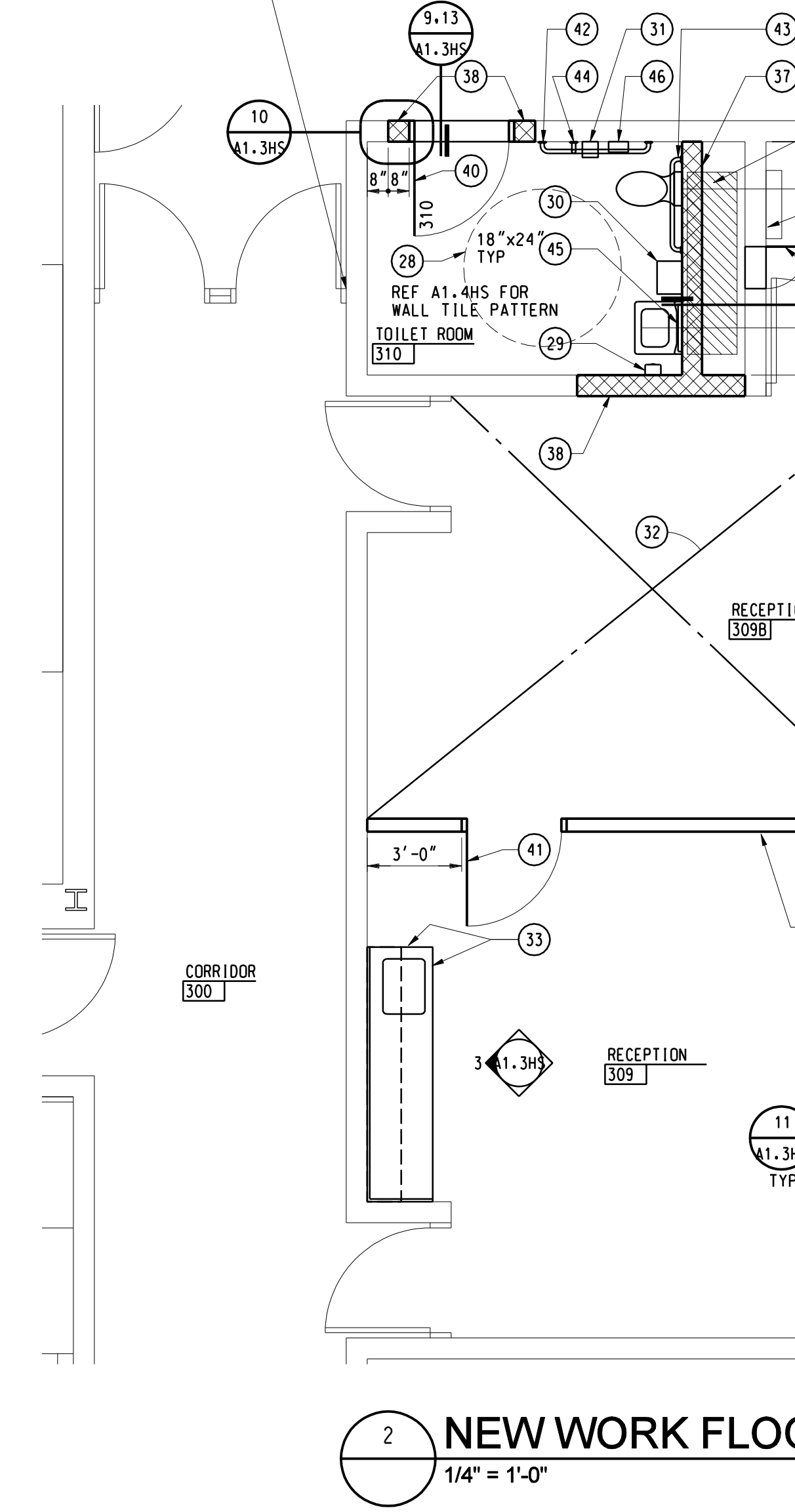
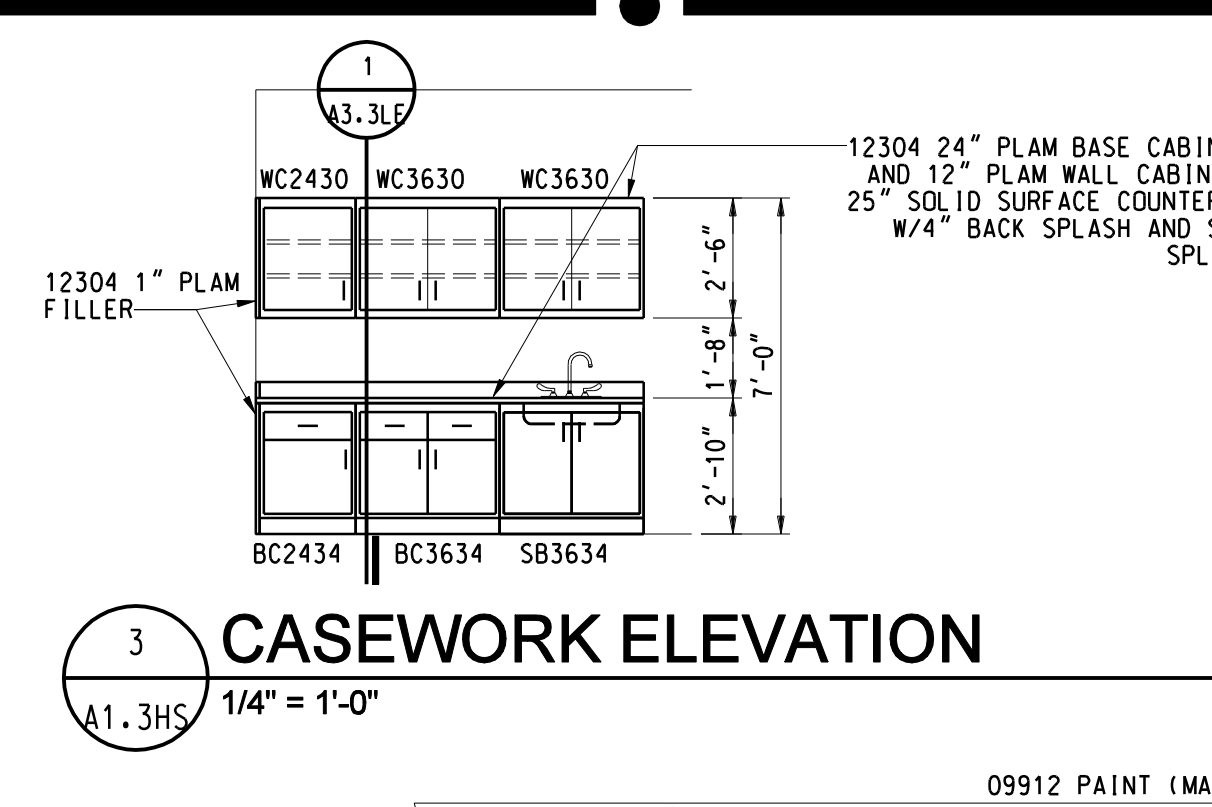
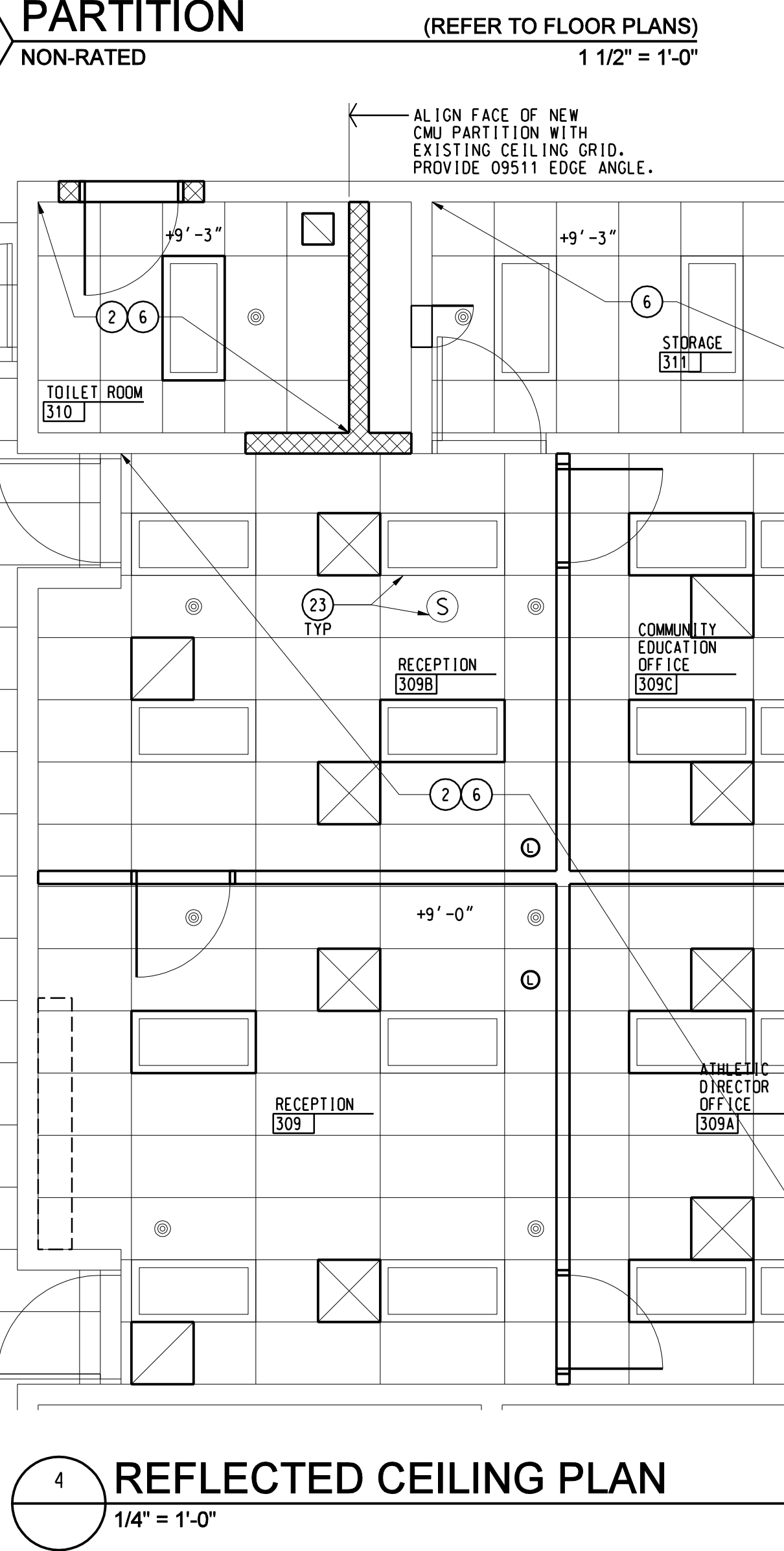
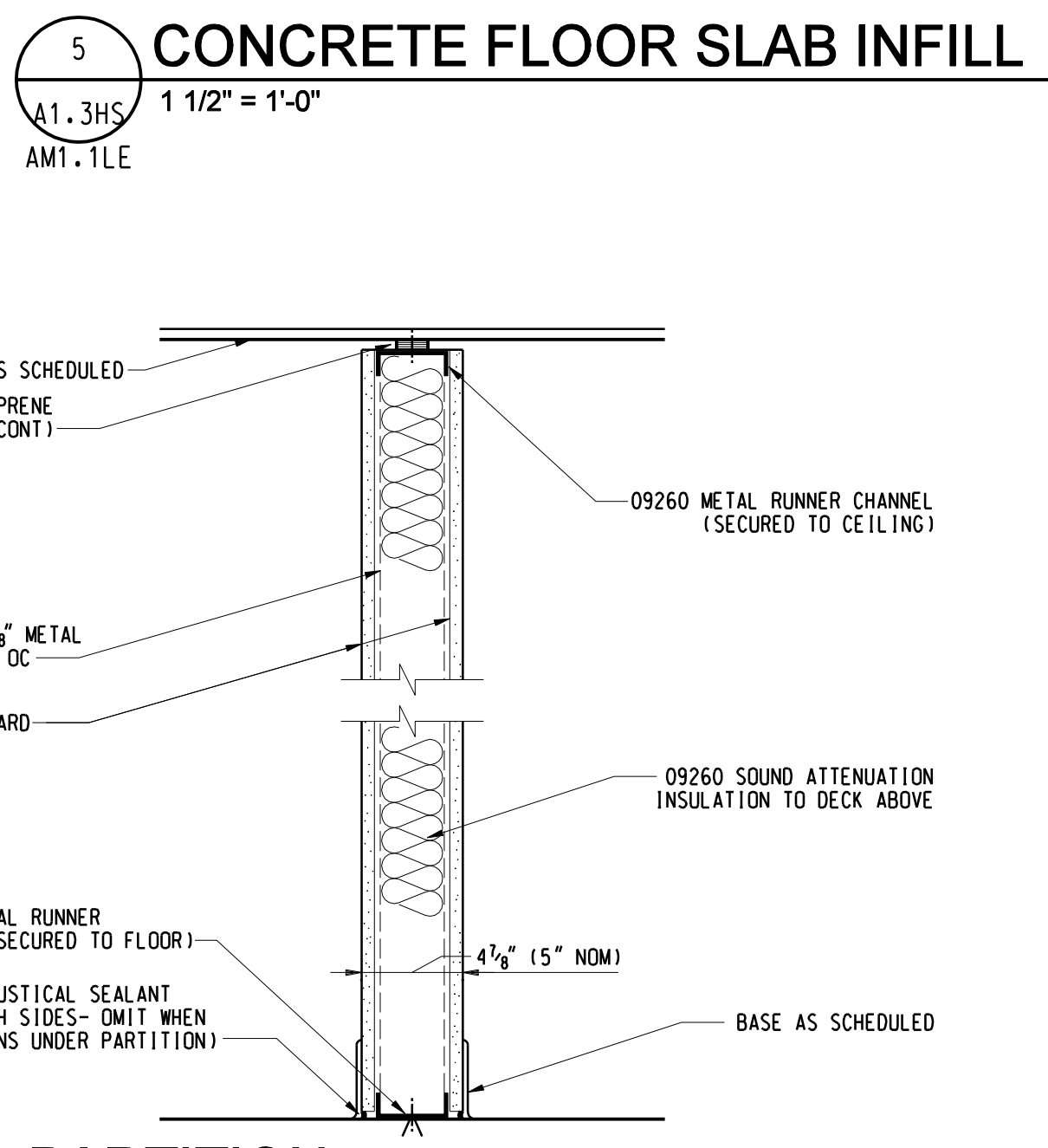
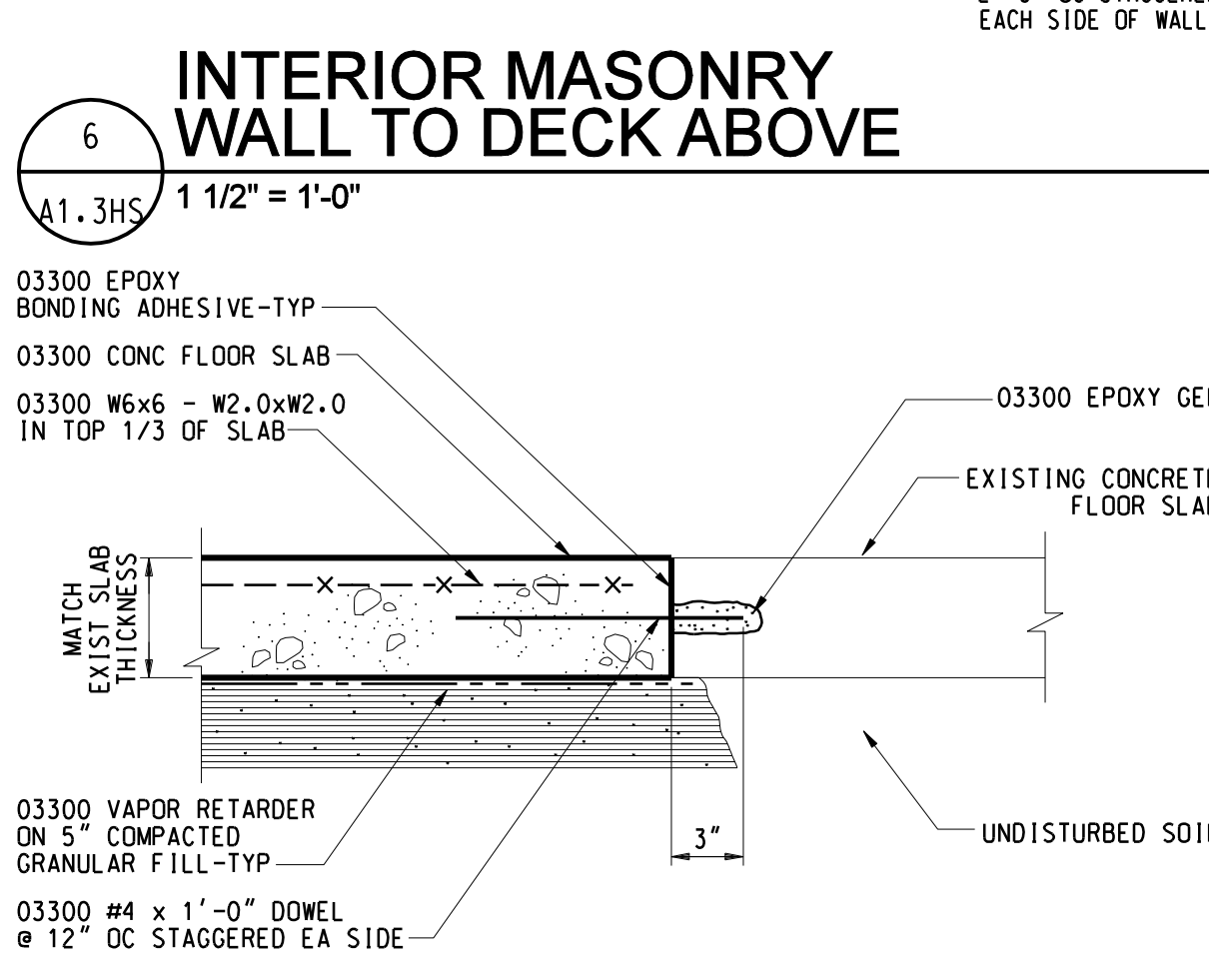
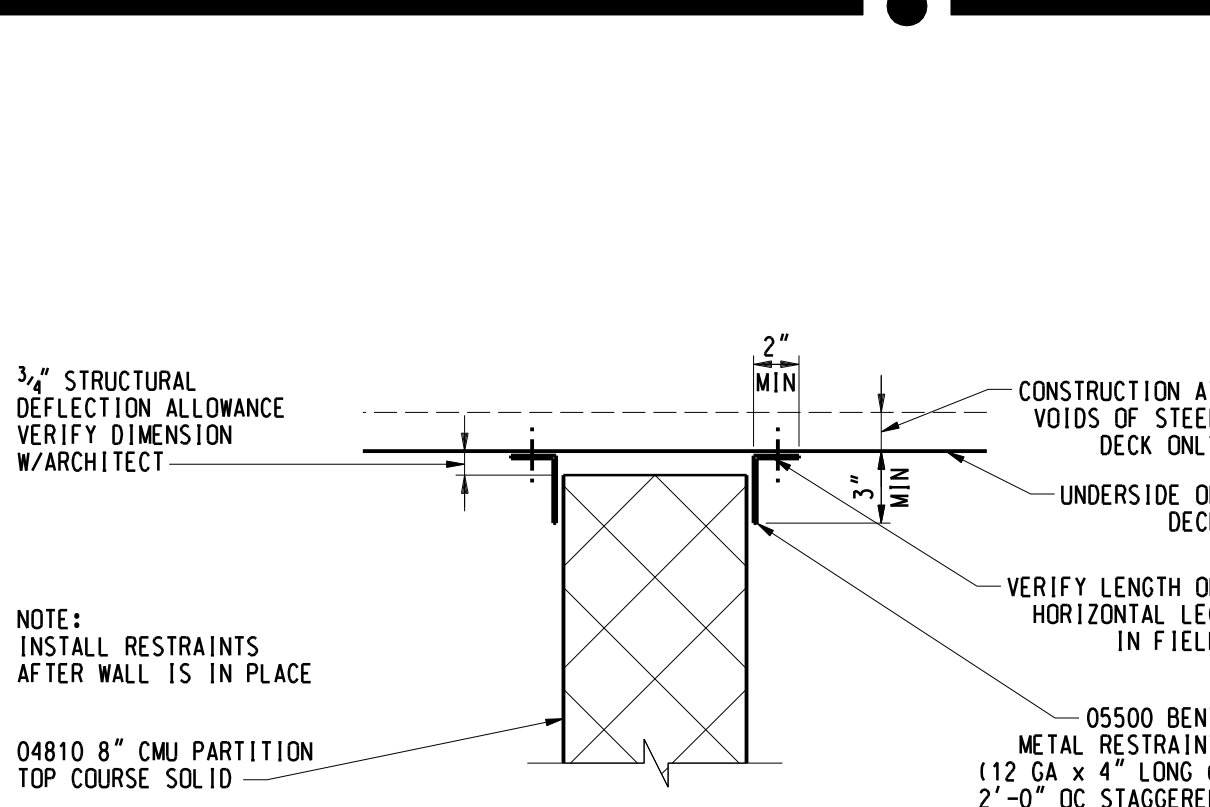
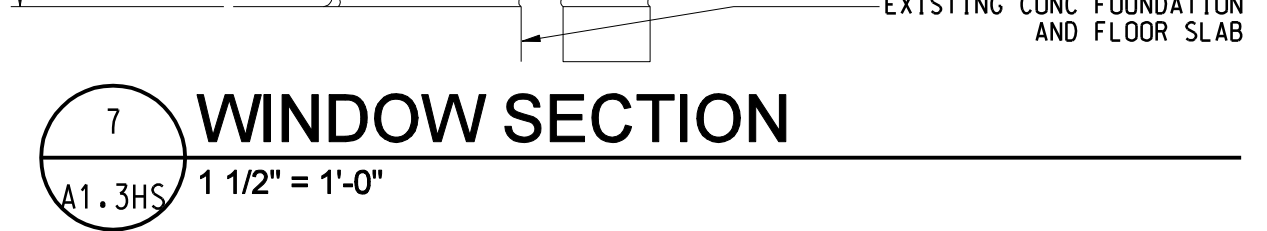
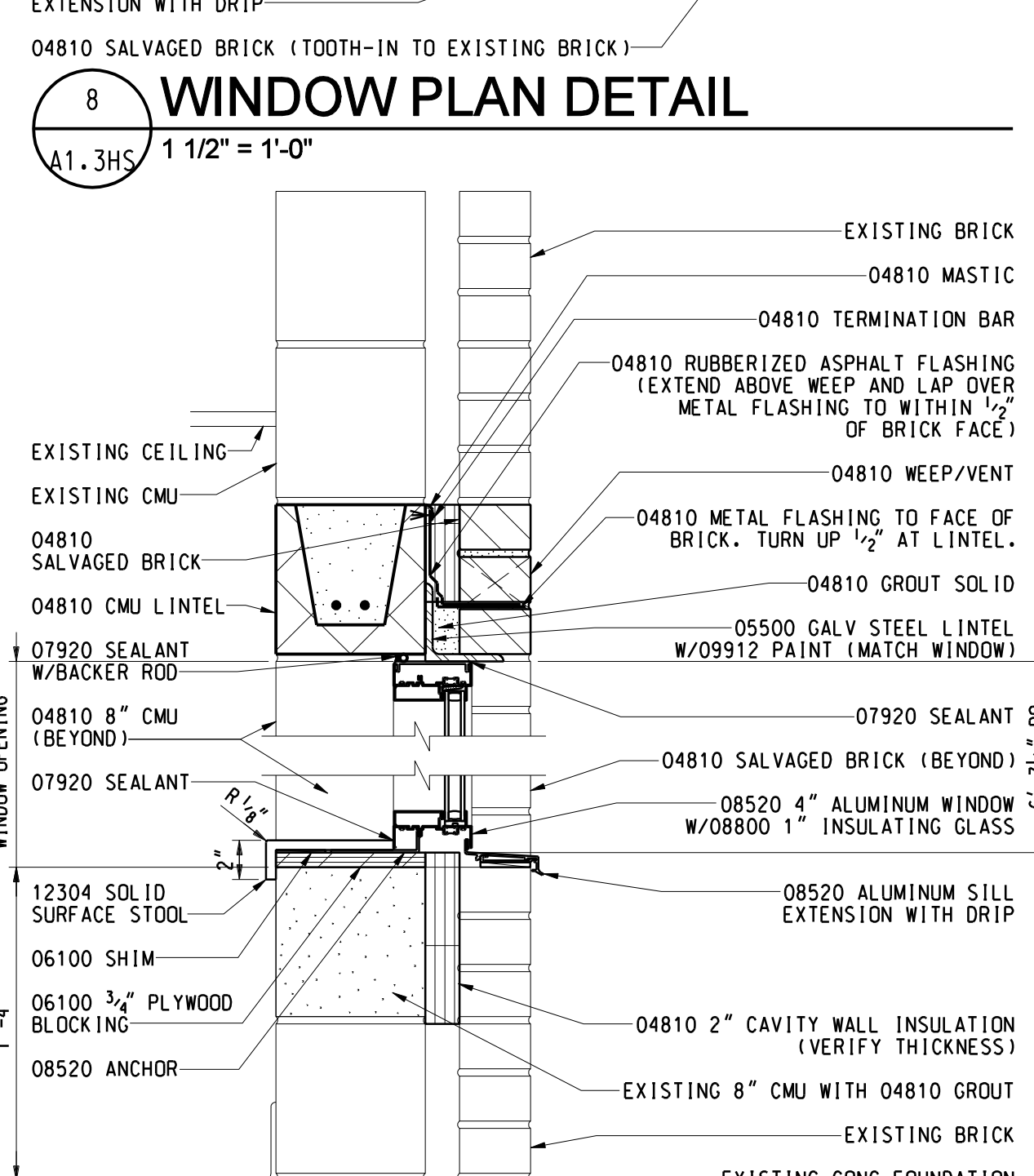
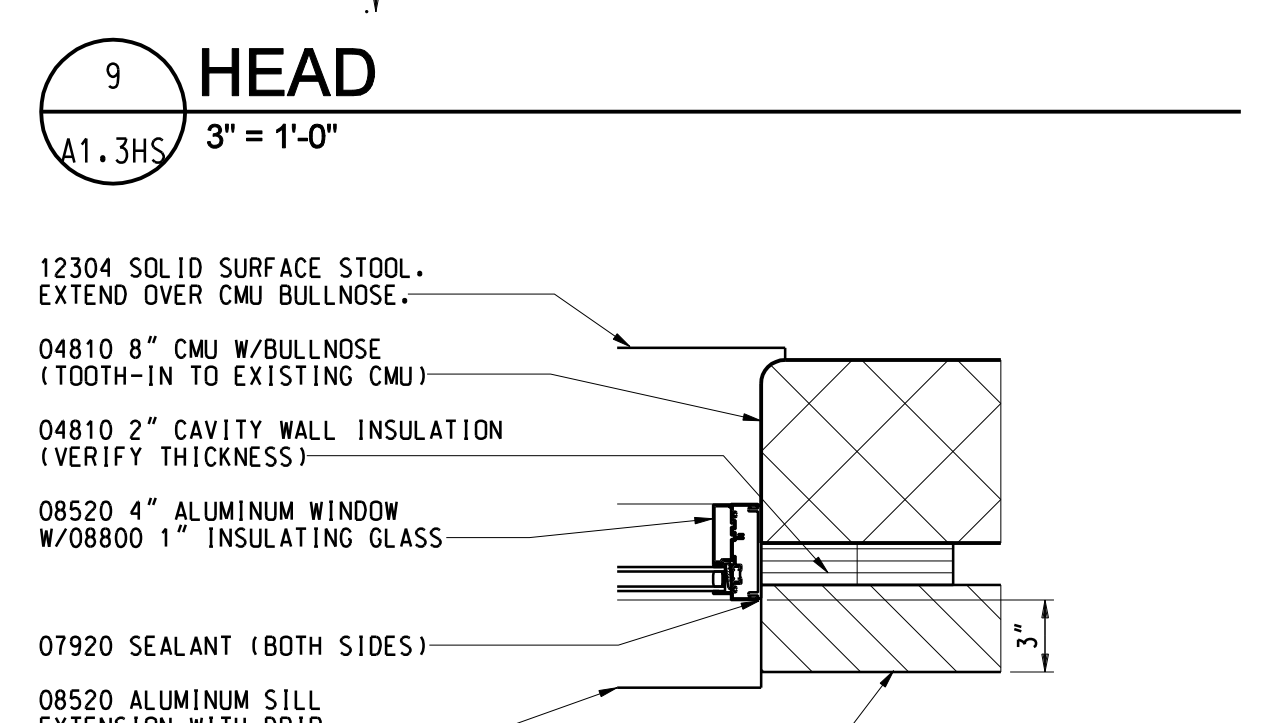
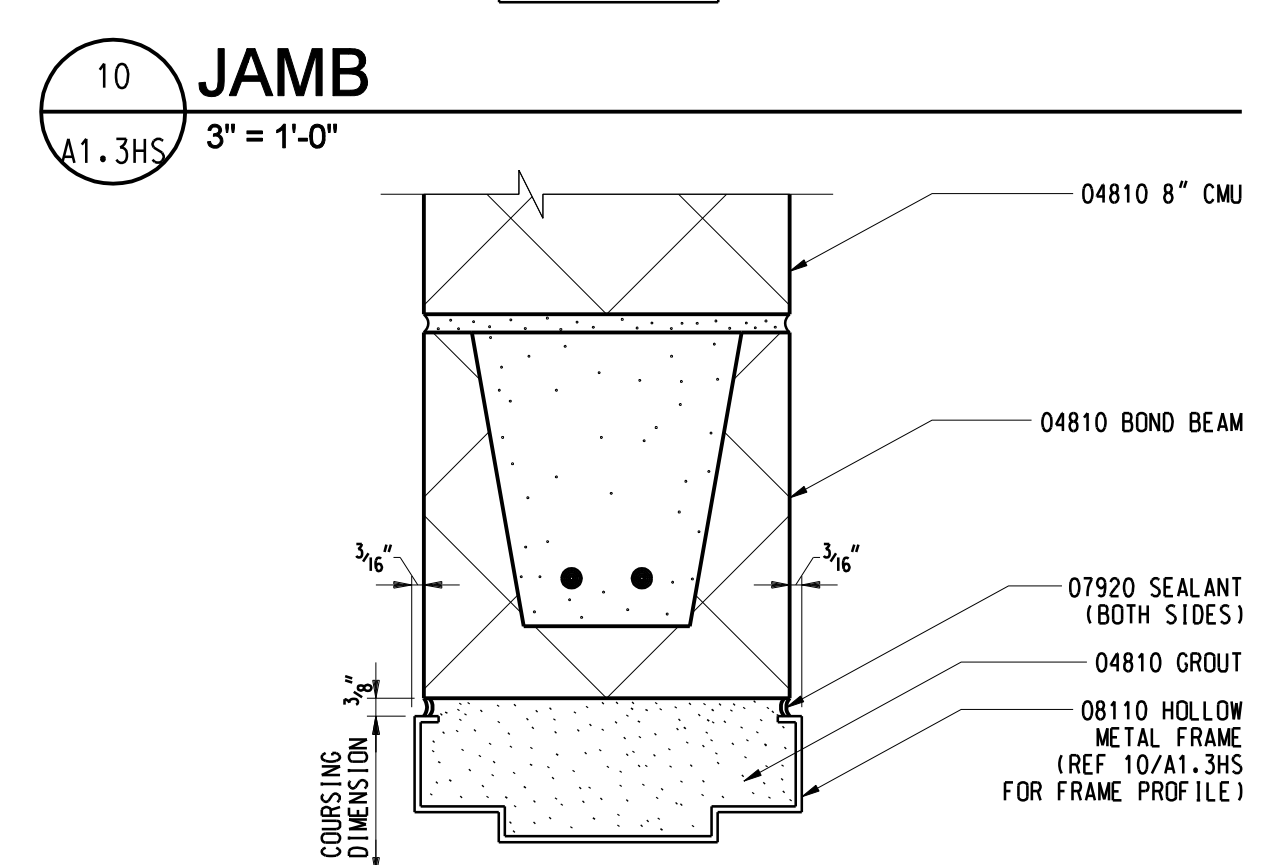
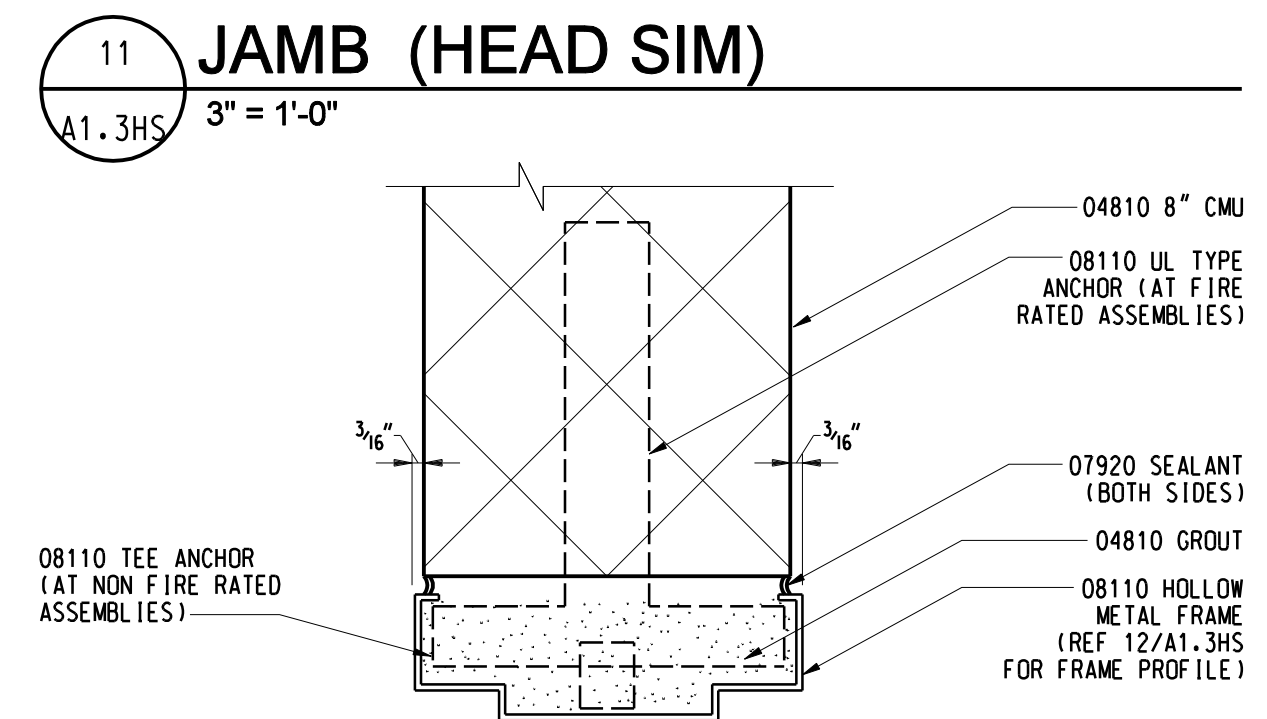
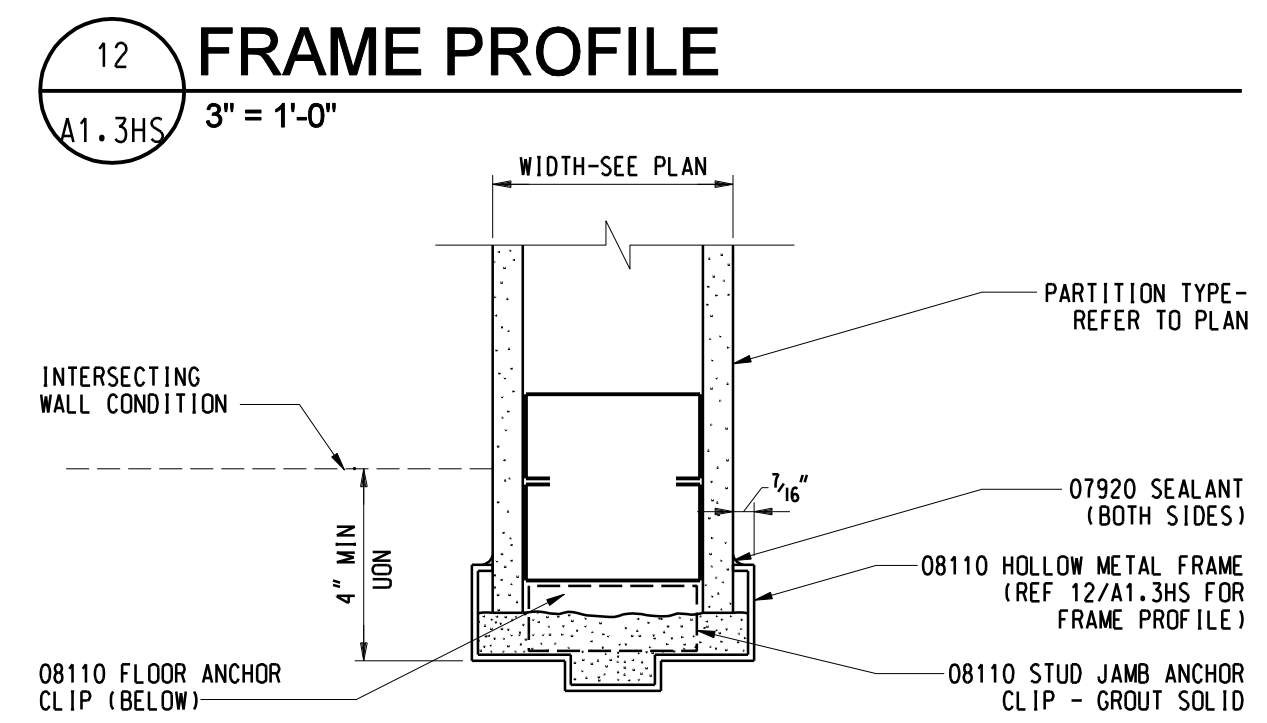
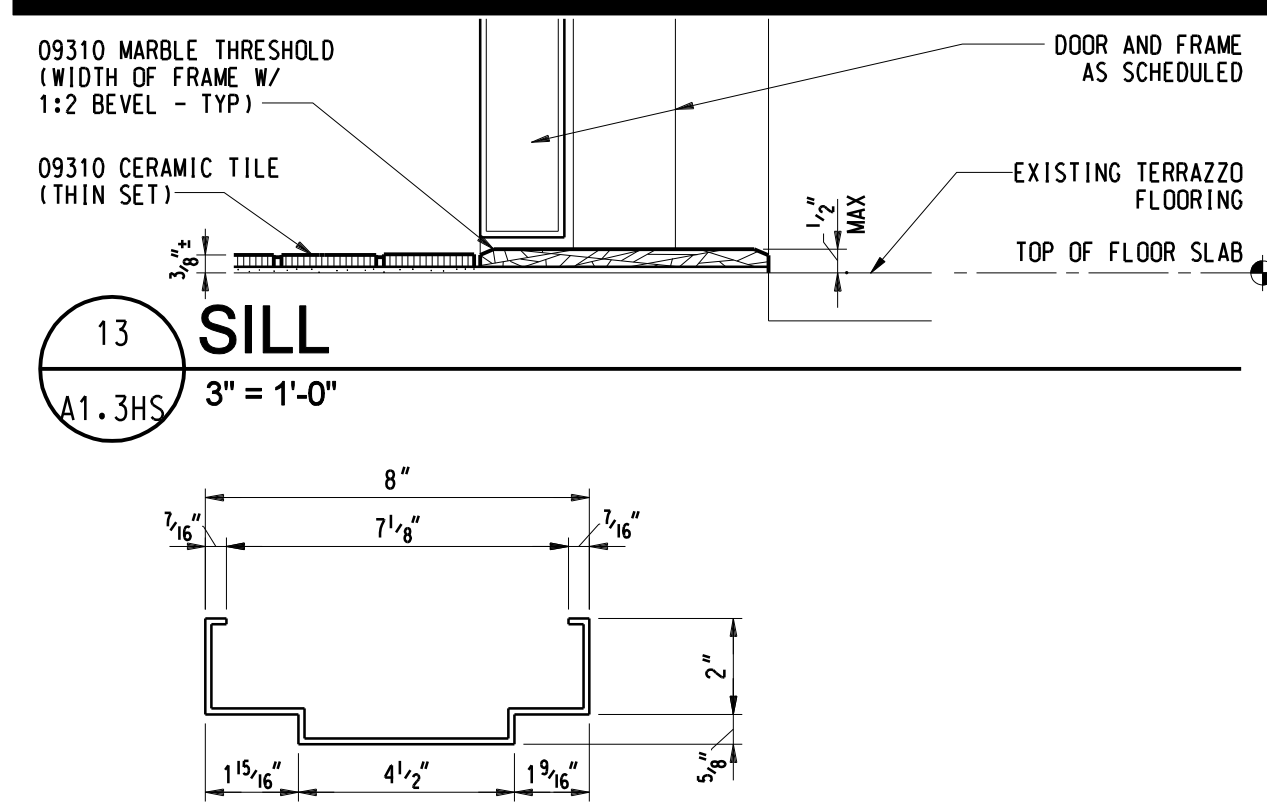
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IDS Drawing Title

High School Locker Details

IDS Project Number Drawing Number

13101-1000 **A1.2HS**



CASEWORK NOTES:

- COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE TRADE PROVIDING SAME. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL COUNTERTOPS INSTALLED AGAINST A WALL ARE TO HAVE A 4" H BACKSPLASH AND SIDE SPLASHES (UON)
- FINISH EXPOSED ENDS AND/OR BACKS OF ALL FREESTANDING CASEWORK
- CASEWORK NUMBERS REFER TO HEIGHT AND WIDTH OF CABINET. BC2436 DENOTES BASE CABINET 24" W X 36" H. DEPTH OF CABINET DESCRIBED IN NOTE.
- CASEWORK NUMBER DESCRIBES TYPE OF CABINET. BC= BASE CABINET, WC= WALL CABINET, SB= SINK BASE

GENERAL NOTES

- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.
- CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION
- PROTECT ALL EXISTING FINISHES DURING CONSTRUCTION
- ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL, AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION
- COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS
- PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND/OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK
- INFILL ALL OPENINGS IN EXISTING WALLS ABOVE CEILING THAT ARE IN MASONRY WALLS SHALL BE FILLED WITH MASONRY OF SIMILAR TYPES AND THICKNESSES AS EXISTING. OPENINGS LESS THAN 16 SO INCHES MAY BE GROUT FILLED FLUSH WITH WALL SURFACES. OPENINGS IN OTHER TYPES OF WALL CONSTRUCTION SHALL MATCH EXISTING MATERIALS, FINISHES AND WALL THICKNESSES. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR SCOPE OF WORK
- COORDINATE ARCHITECTURAL AND MECHANICAL WORK WITH OWNER'S ELECTRICAL CONTRACTOR. REFER TO E1.1HS FOR SCOPE.

LEGEND

NOTE: NOT ALL SYMBOLS MAY BE USED

- EXISTING CONSTRUCTION
- EXISTING TO BE REMOVED
- NEW CONSTRUCTION
- PARTITION TYPE

KEYNOTES

NOTE: NOT ALL KEYNOTES MAY BE USED

- REMOVE CONCRETE FLOOR SLAB
- REMOVE AND INSTALL 09511 ACOUSTICAL LAY-IN CEILING PADS, 09313 ELECTROSTATIC PAINT EXISTING CEILING GRID. PROVIDE 09511 CEILING GRID COMPONENTS WHERE REQUIRED AT RELOCATED AND NEW CEILING DEVICES.
- REMOVE WOOD DOOR, HOLLOW METAL FRAME, SIDELITE AND HARDWARE
- REMOVE 8" CMU
- REMOVE CARPET AND RESILIENT BASE
- REMOVE AND REINSTALL CEILING AS REQUIRED TO ACCOMMODATE MECH WORK
- REMOVE RESILIENT WALL BASE AND VCT FLOORING
- REMOVE GYPSUM BOARD PARTITION (BY OWNER)
- REMOVE BASE CABINETS, COUNTERTOP, UPPER CABINETS AND SINK (BY OWNER)
- REMOVE CEILING PADS AND GRID AT NEW PARTITION LOCATION
- REMOVE 8" CMU, SALVAGE BRICK FOR NEW JAMBS.
- REMOVE CHALKBOARD AND TACKBOARDS
- REMOVE TACKBOARD (BY OWNER)
- REMOVE AND PATCH MASONRY WITH 04810 SALVAGED BRICK AS REQUIRED FOR 10200 8 1/2" W X 7 1/2" H X 4" D BRICK VENT AND 15000 EXHAUST
- NOT USED
- EXISTING SHELVING TO REMAIN
- EXISTING CMU PARTITION ON THICKENED CONC SLAB
- EXISTING SEALED CONCRETE FLOOR
- EXISTING CONVECTOR TO REMAIN (DO NOT PAINT)
- EXISTING ELECTRICAL PANEL TO REMAIN
- EXISTING ELECTRICAL BOX TO REMAIN
- EXISTING SPRINKLER HEAD TO REMAIN. PROVIDE SUPPORT AND PROTECTION DURING CEILING WORK.
- EXISTING LIGHT FIXTURE OR SPEAKER TO REMAIN. PROVIDE SUPPORT AND PROTECTION DURING CEILING WORK (BY OWNER).
- NOT USED
- SALVAGE AND REINSTALL RESILIENT WALL BASE
- NOT USED
- NOT USED
- 5'-0" TURNING RADIUS
- SOAP DISPENSER (OWNER FURNISHED AND INSTALLED)
- TOWEL DISPENSER (OWNER FURNISHED AND INSTALLED)
- TILE PAPER DISPENSER (OWNER FURNISHED AND INSTALLED)
- CARPET AND RESILIENT BASE (BY OWNER)
- RESILIENT BASE (BY OWNER)
- 09912 PAINT (MATCH EXISTING)
- 08311 16"x16" ACCESS DOOR W/09912 PAINT (MATCH EXISTING). BOTTOM 4"-0" AFF
- 03300 CONCRETE FLOOR SLAB. REF DETAIL 5/A1.3HS.
- 04810 8" CMU. ALIGN WITH EXISTING CEILING GRID.
- 04810 8" CMU (TOOTH-IN TO EXISTING CMU)
- 08211 FLUSH WOOD DOOR, 3'-0" X 7'-0" (NOMINAL), 1 3/4" THICK WITH HARDWARE SET #54
- 08211 FLUSH WOOD DOOR, 3'-0" X 7'-2" (NOMINAL), 1 3/4" THICK WITH HARDWARE SET #53
- 10801 GRAB BAR (TYPE 1)
- 10801 GRAB BAR (TYPE 2)
- 10801 GRAB BAR (TYPE 5)
- 10801 FRAMED MIRROR (SIZE AS NOTED ON PLAN - WHI)
- 10801 SANITARY NAPKIN DISPOSAL

IDS

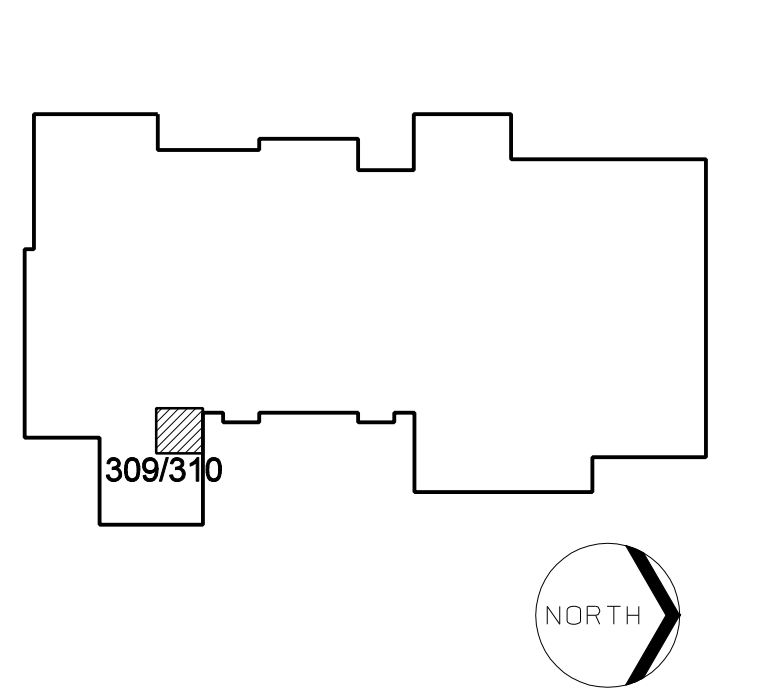
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Project Title
LINDEN COMMUNITY SCHOOLS
2013 Sinking Fund Projects

Linden, Michigan



Key Plan

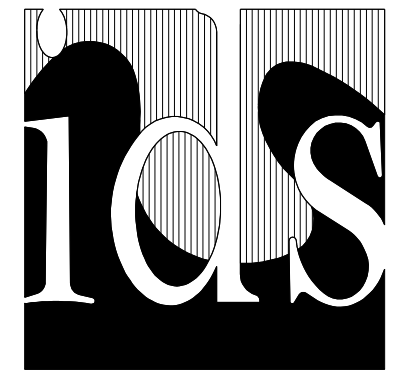
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Project Architect / Engineer: B. Ingham
Drawn By: B. Ingham
Q.M. Review: K. Delzer
Approved: K. Delzer
Drawing Scale: As Noted
Signature: _____
Date: _____

Issue Date: 03-11-13
Quality Management Review: 03-14-13
Plan Review: 03-15-13
Bids: _____

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IDS Drawing Title

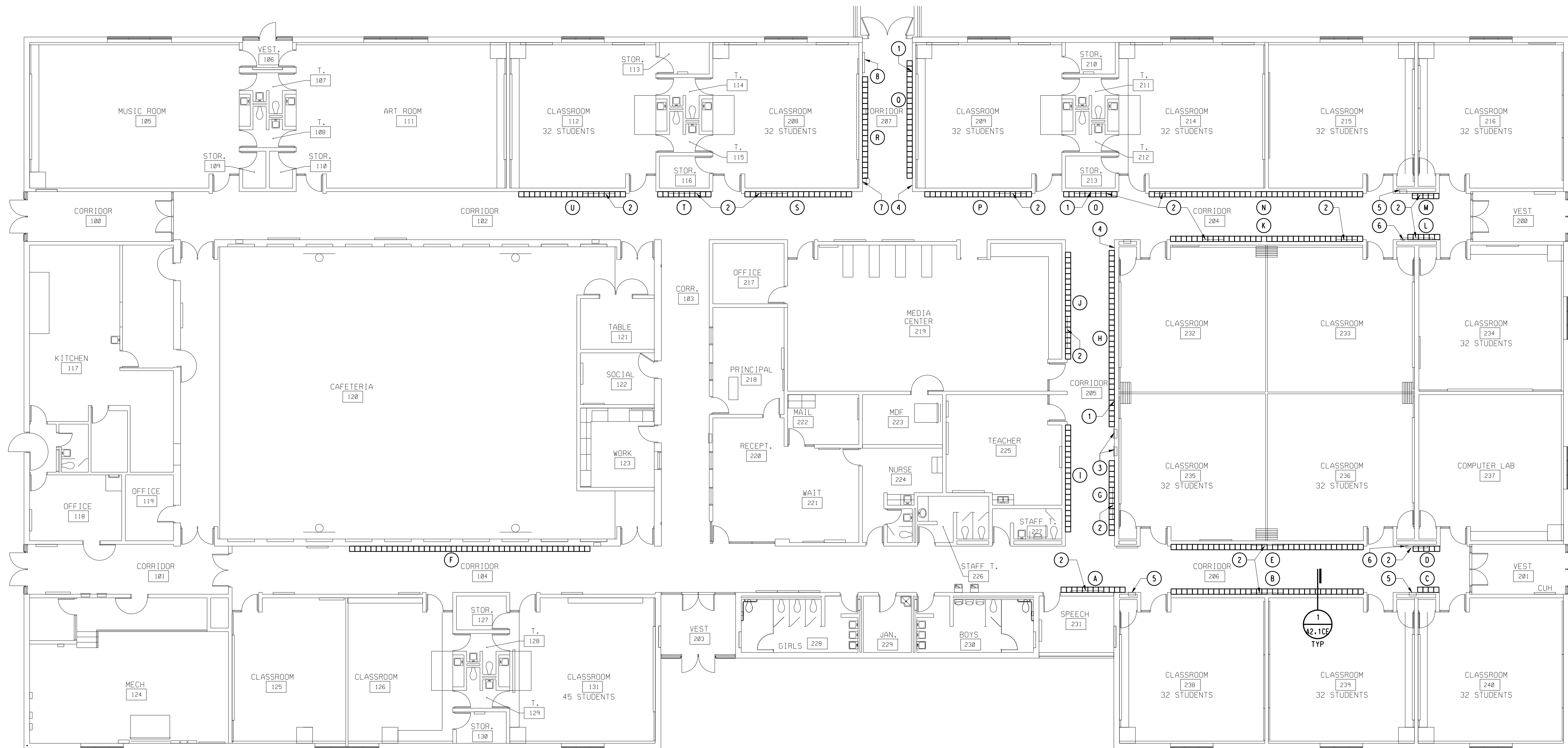
High School New Barrier Free Toilet Room and Office Renovation

IDS Project Number: 13101-1000 Drawing Number: A1.3HS



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1441 West Long Lake, Suite 200, Troy, MI 48098
tel 248.823.2100 - fax 248.823.2200
www.ids-troy.com



GENERAL NOTES

- A. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.
- B. CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION
- C. PROTECT ALL EXISTING FINISHES DURING CONSTRUCTION

LEGEND

(A)(B) ETC. DENOTES NEW LOCKER BANK

KEYNOTES

- NOTE: NOT ALL KEYNOTES MAY BE USED
- 1 DISCONNECT AND REMOVE DUPLEX RECEPTACLE AND WIRING BACK TO SOURCE AND PROVIDE BLANK COVERPLATE (BY OWNER)
 - 2 REMOVE TACKBOARD (BY OWNER)
 - 3 ELECTRICAL PANEL TO REMAIN
 - 4 LIGHT SWITCH TO REMAIN
 - 5 RECESSED FIRE EXTINGUISHER CABINET TO REMAIN
 - 6 CLEAN OUT TO REMAIN
 - 7 THERMOSTAT TO REMAIN
 - 8 CABINET UNIT HEATER TO REMAIN

Project Title

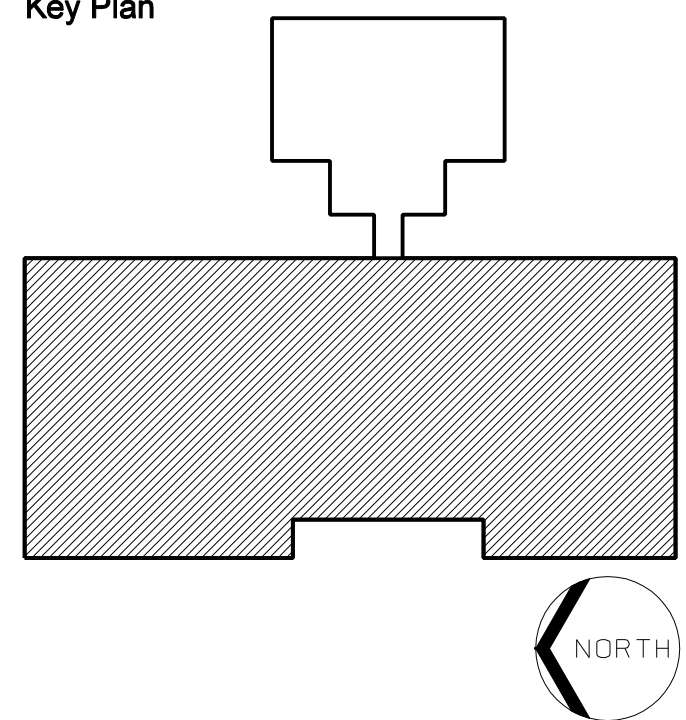


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan



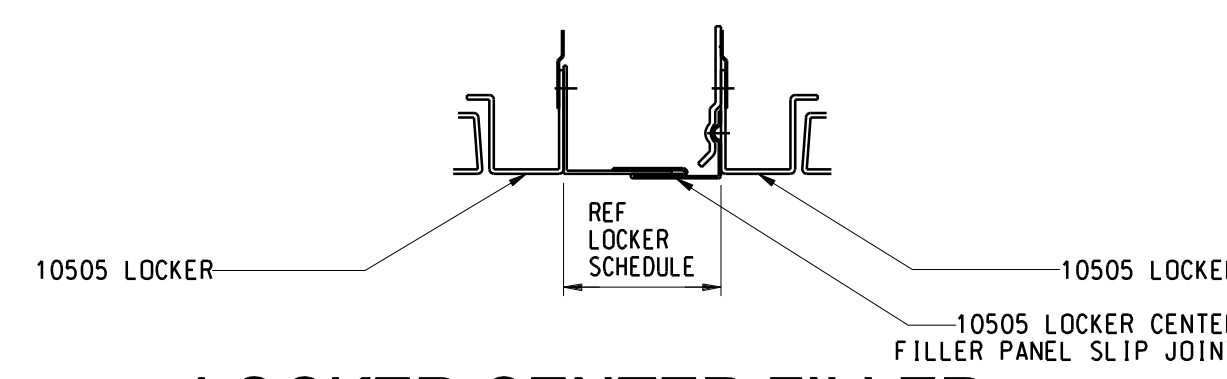
LOCKER PLAN

3/32" = 1'-0"

LOCKER SUMMARY

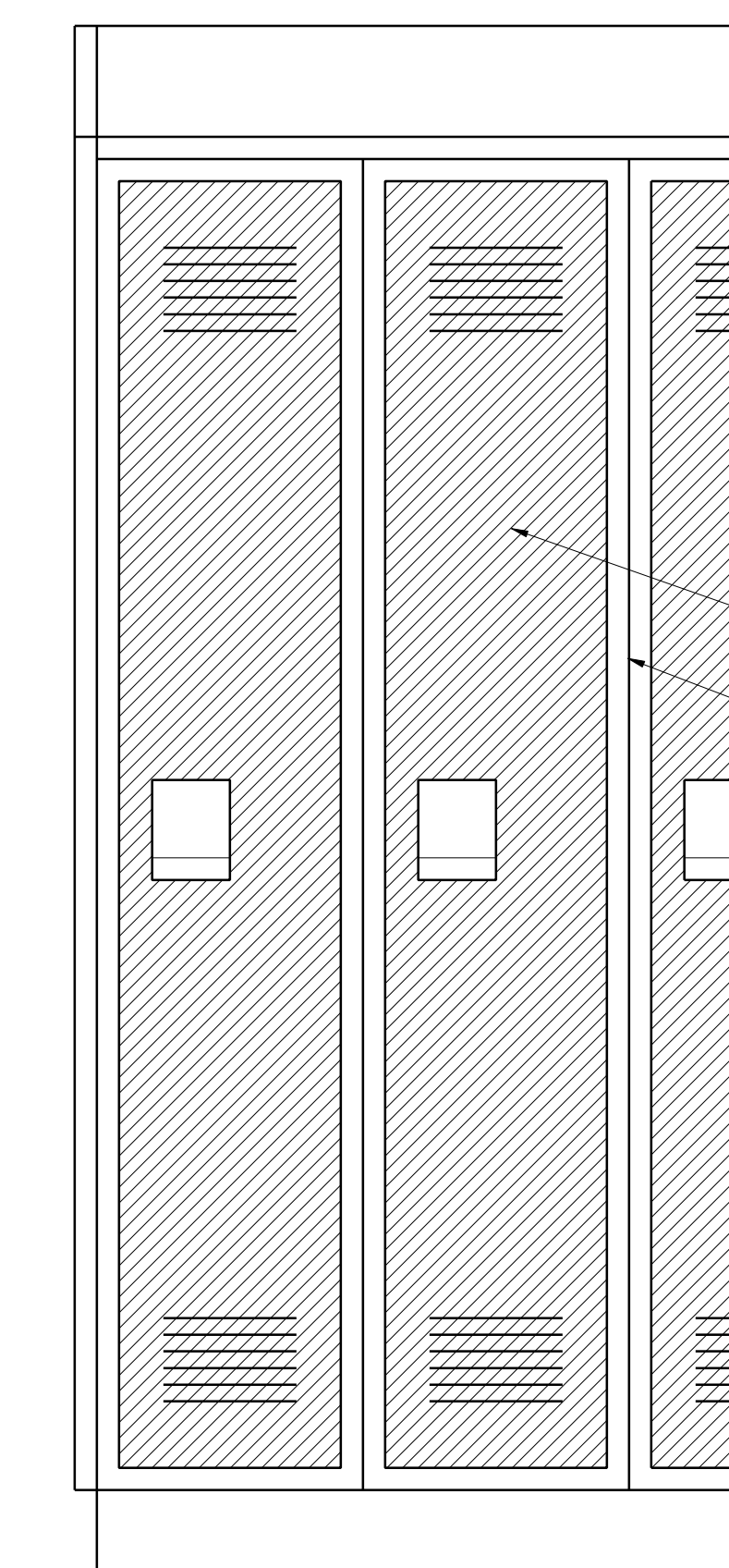
BANK	NUMBER	SIZE	CENTER FILLER	REMARKS
A	12	12' x 12' x 60"	NONE	
B	35	12' x 12' x 60"	11"	
C	4	12' x 12' x 60"	NONE	
D	5	12' x 12' x 60"	NONE	
E	35	12' x 12' x 60"	11"	
F	45	12' x 12' x 60"	NONE	
G	14	12' x 12' x 60"	NONE	
H	33	12' x 12' x 60"	NONE	
I	20	12' x 12' x 60"	NONE	
J	20	12' x 12' x 60"	NONE	
K	35	12' x 12' x 60"	11"	
L	6	12' x 12' x 60"	NONE	
M	5	12' x 12' x 60"	NONE	
N	39	12' x 12' x 60"	11"	
O	10	12' x 12' x 60"	NONE	
P	20	12' x 12' x 60"	NONE	
Q	22	12' x 12' x 60"	NONE	
R	19	12' x 12' x 60"	NONE	
S	20	12' x 12' x 60"	NONE	
T	10	12' x 12' x 60"	NONE	
U	20	12' x 12' x 60"	NONE	
TOTAL	429			

- NOTES:
1. ALL LOCKERS TO HAVE CONTINUOUS SLOPED TOPS.
2. REFERENCE DETAIL 3/2.1CE FOR LOCKER CENTER FILLER PANEL PLAN DETAIL.



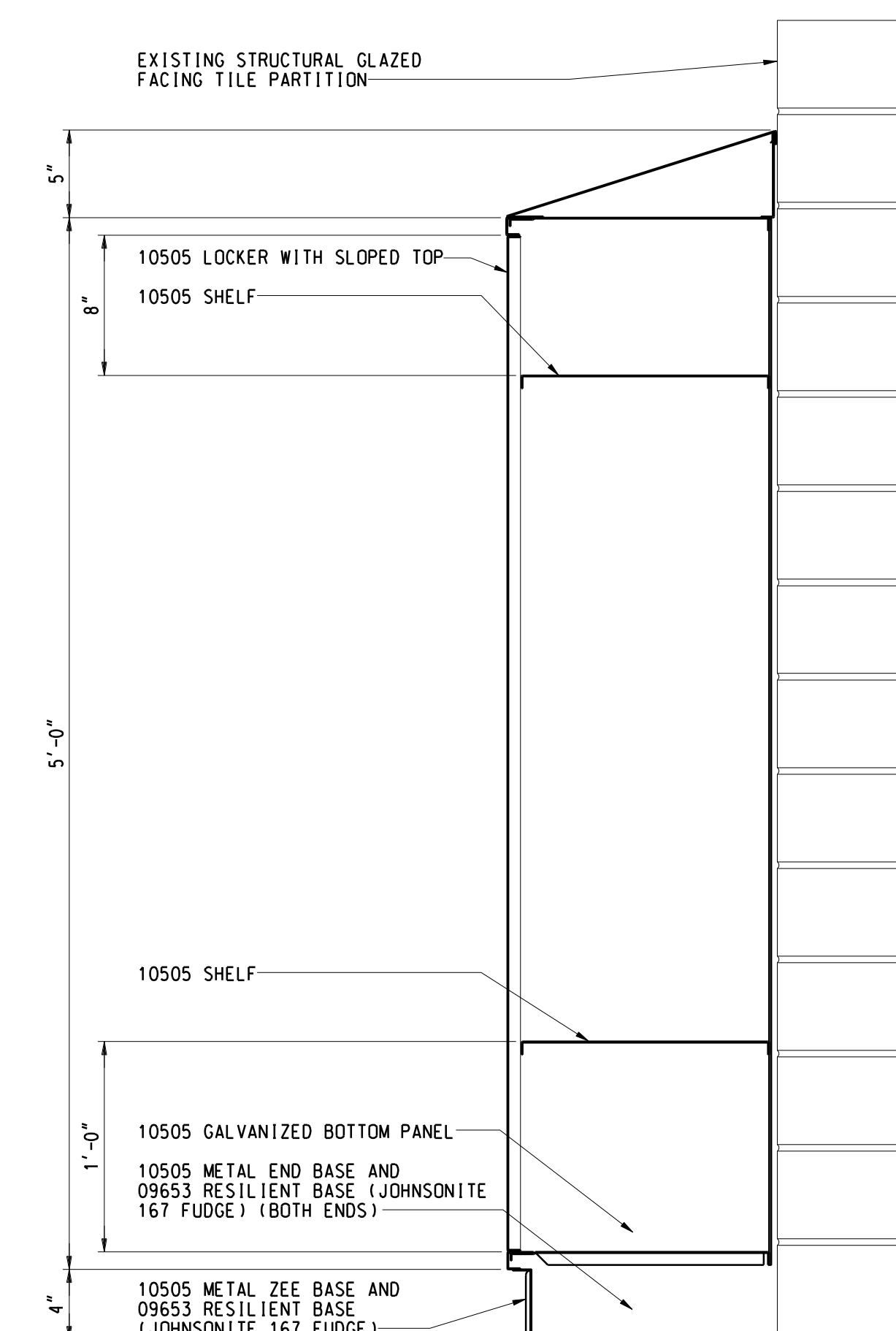
LOCKER CENTER FILLER PANEL PLAN DETAIL

3/32" = 1'-0"



PARTIAL LOCKER ELEVATION

1 1/2" = 1'-0"



LOCKER SECTION AT EXISTING PARTITION

1 1/2" = 1'-0"

Project Administrator: Seal:

K. Delzer

Project Designer: B. Ingham

Project Architect / Engineer: B. Ingham

Drawn By: B. Ingham

Q.M. Review: K. Delzer

Approved: K. Delzer

Drawing Scale: As Noted

Signature: _____

Date: _____

Issue Date: 03-11-13

Issued for: Quality Management Review

03-15-13 Bids

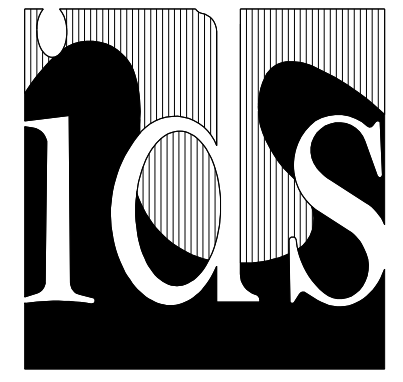
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IDS Drawing Title

Central Elementary Locker Plan and Details

IDS Project Number Drawing Number

13101-1000 **A2.1CE**



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GENERAL NOTES

- A. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.
- B. CONTRACTOR SHALL PROVIDE ALL WORK NECESSARY TO PROVIDE COMPLETE PROJECT AS DESCRIBED IN THESE DOCUMENTS.
- C. CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.
- D. PROTECT ALL EXISTING FINISHES DURING CONSTRUCTION.
- E. COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.
- F. PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND/OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE WORK.

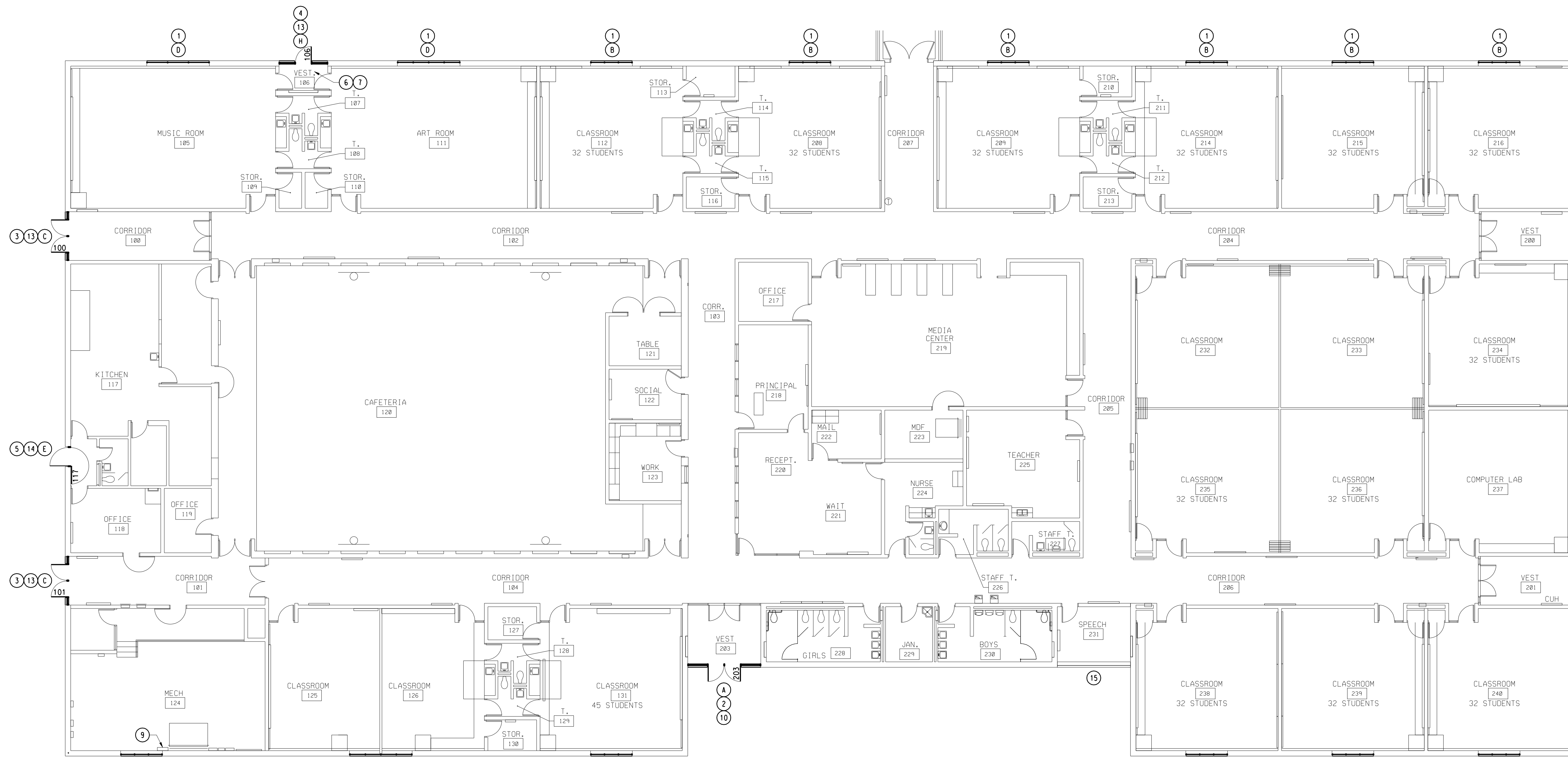
LEGEND

(A)(B)(C) ETC. DENOTES NEW FRAME TYPE

KEYNOTES

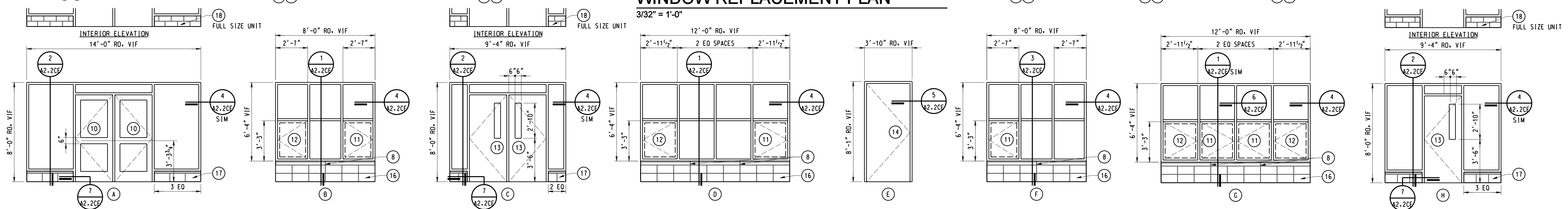
NOTE: NOT ALL KEYNOTES MAY BE USED

- 1 REMOVE WINDOW SYSTEM, SEALANT, METAL FLASHING AT BASE; LOWERS AND BLANK-OFF PANELS (MECH 124 ONLY) AND METAL PANELS (CLASSROOM 126 ONLY)
- 2 REMOVE STOREFRONT FRAMING SYSTEM, DOORS, HARDWARE AND SEALANT. SALVAGE TWO-WAY COMMUNICATION DEVICE AND LOW VOLTAGE WIRING TO 1" AND ELECTRIC STRIKE.
- 3 REMOVE STOREFRONT FRAMING SYSTEM AND SEALANT. SALVAGE DOORS AND HARDWARE.
- 4 REMOVE HOLLOW METAL FRAMING SYSTEM, SEALANT, DOORS AND HARDWARE
- 5 REMOVE HOLLOW METAL DOOR, FRAME, HARDWARE, WOOD BLOCKING AND SEALANT. SALVAGE AND REINSTALL ALUMINUM SCREEN DOOR.
- 6 REMOVE CARPET
- 7 CARPET (BY OWNER)
- 8 ALIGN 04720 CAST STONE JOINT WITH 04810 GROUND FACE CMU
- 9 ELECTRICAL PANEL TO REMAIN
- 10 08410 ALUMINUM DOOR, 3'-0" x 7'-0" (NOMINAL) WITH HARDWARE SET CE3
- 11 08520 ALUMINUM CASEMENT WINDOW
- 12 08520 ALUMINUM EMERGENCY EGRESS WINDOW
- 13 08220 FRP DOOR, 3'-0" x 7'-0" (NOMINAL) WITH HARDWARE SET CE2 AT DOOR OPENING 106 ONLY. REINSTALL SALVAGED FRP DOORS AND HARDWARE 106W SET CE1 AT DOOR OPENINGS 100, 101, 200 AND 201.
- 14 08220 FRP DOOR, 3'-6" x 7'-11" (NOMINAL) WITH HARDWARE SET CE4 AND 2" x 6" ALUMINUM FRAME
- 15 EXISTING WINDOW TO REMAIN
- 16 04810 GROUND FACE CMU, STACK BOND COURSING
- 17 04810 GROUND FACE CMU, EQUAL UNITS AS INDICATED
- 18 04810 STRUCTURAL GLAZED FACING TILE, RUNNING BOND COURSING WITH FULL SIZE UNIT INDICATED



WINDOW REPLACEMENT PLAN

3/32" = 1'-0"



FRAME TYPES

1/4" = 1'-0"

Project Title

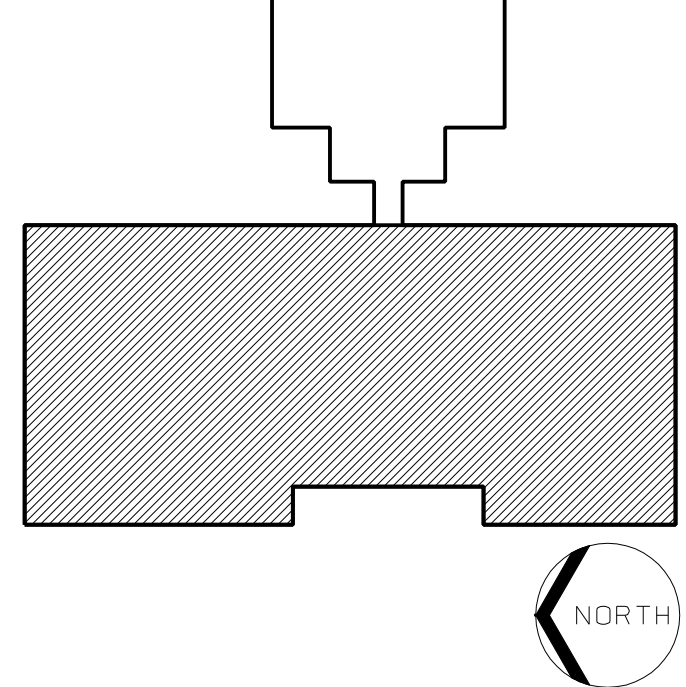


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan



Project Administrator: K. Delzer

Project Designer: B. Ingham

Project Architect / Engineer: B. Ingham

Drawn By: B. Ingham

C.M. Review: K. Delzer

Approved: K. Delzer

Drawing Scale: As Noted

Issue Date: 03-11-13

Quality Management Review

03-14-13 Plan Review

03-15-13 Bids

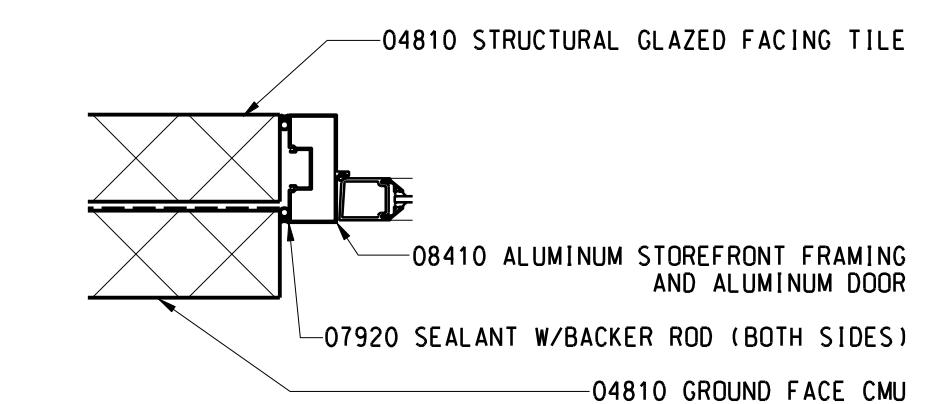
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IDS Drawing Title

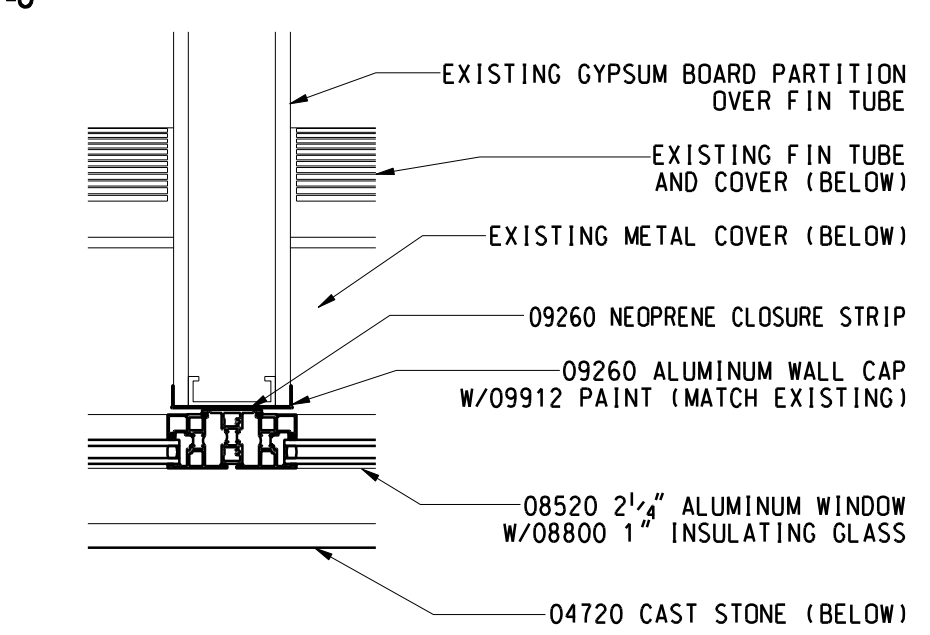
Central Elementary Window Demolition and New Work Plan

IDS Project Number Drawing Number

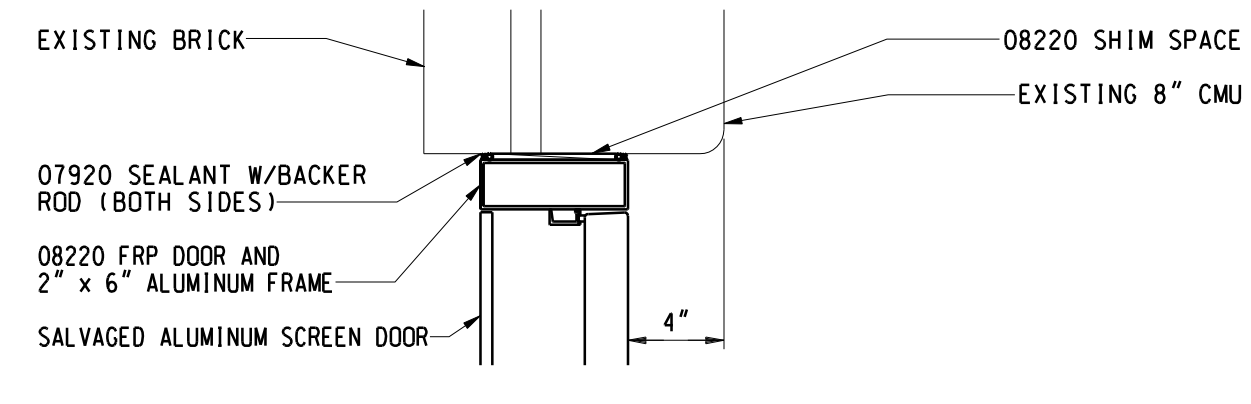
13101-1000 **A2.2CE**



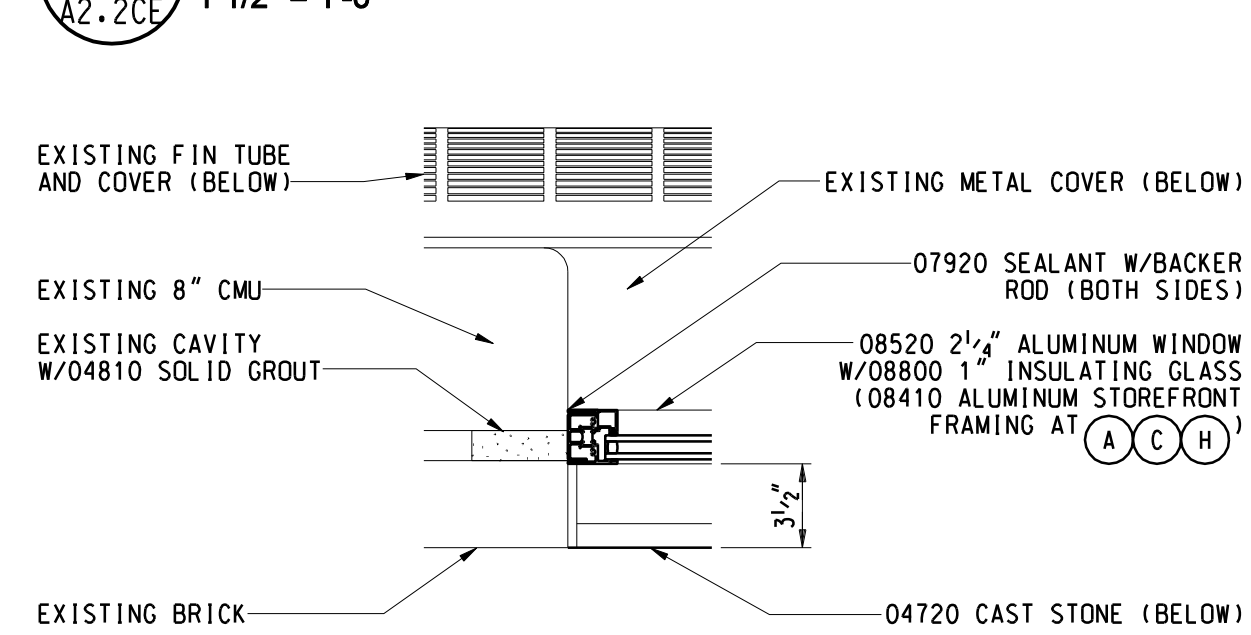
7 STOREFRONT JAMB DETAIL
1/2" = 1'-0"



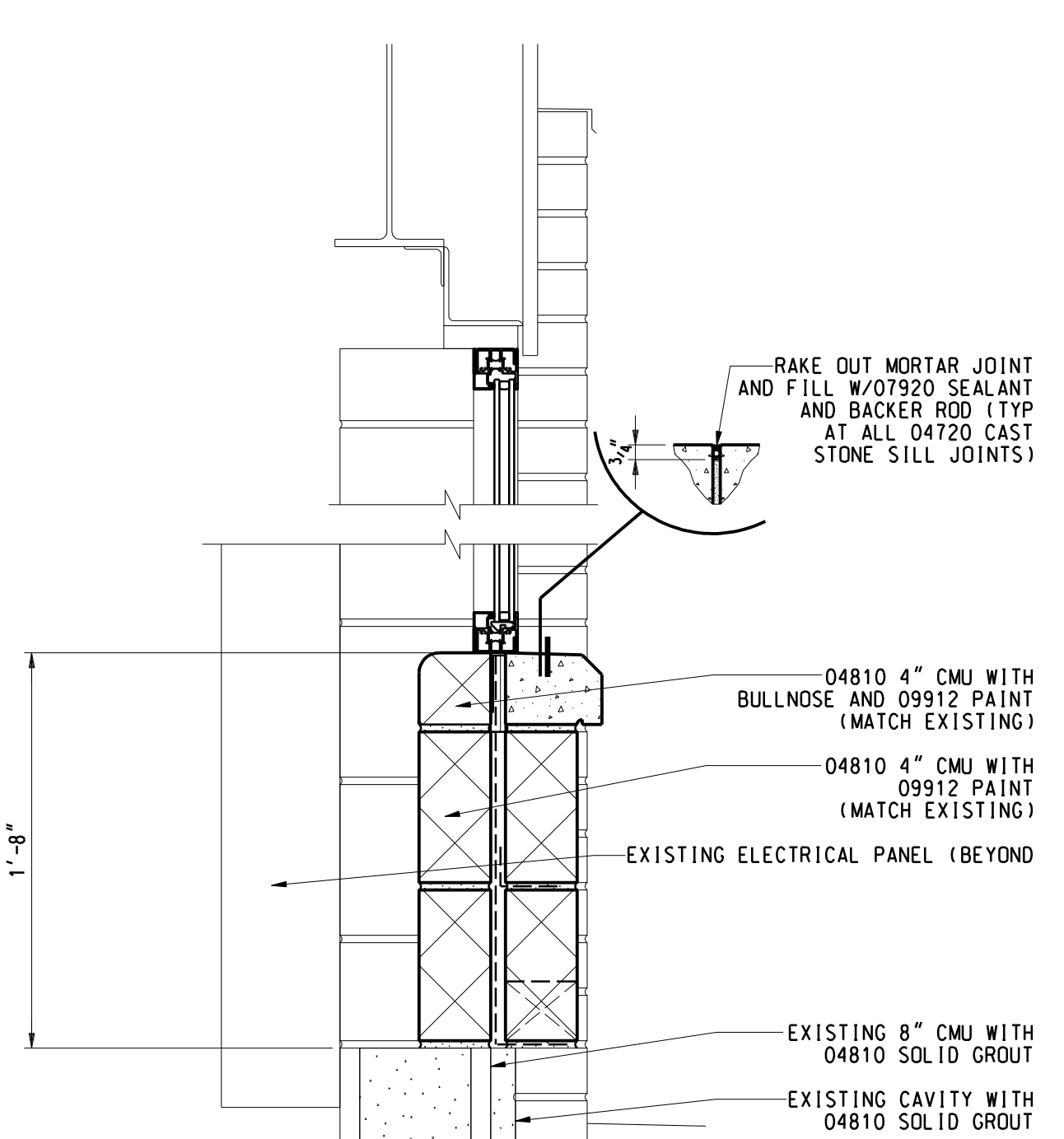
6 WINDOW PLAN DETAIL
1/2" = 1'-0"



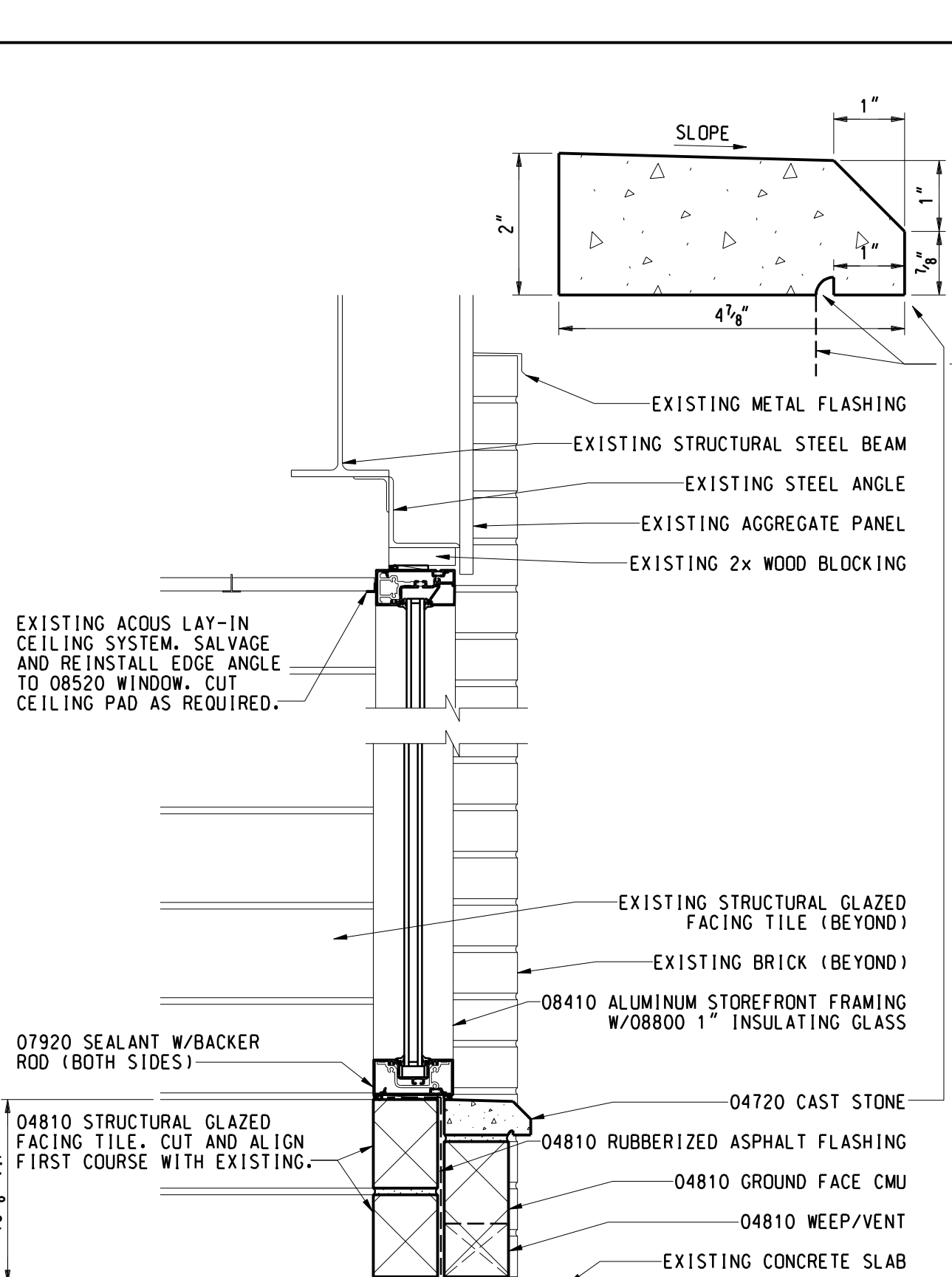
5 FRP DOOR JAMB (HEAD SIM)
1 1/2" = 1'-0"



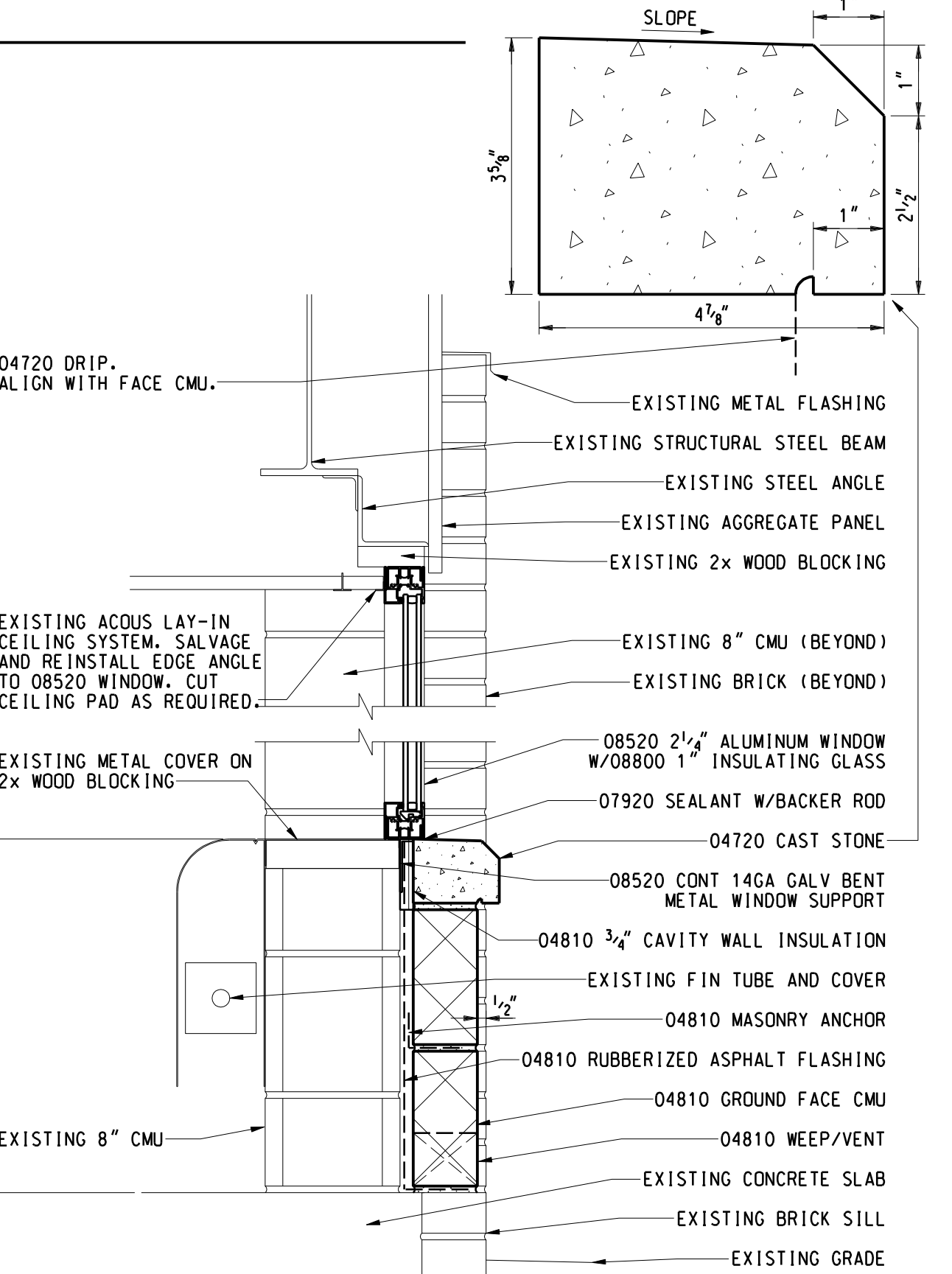
4 WINDOW PLAN DETAIL
1/2" = 1'-0"



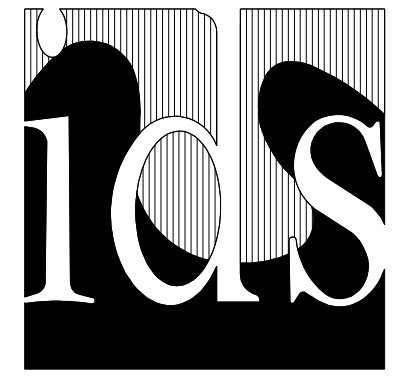
3 WINDOW SECTION
1 1/2" = 1'-0"



2 STOREFRONT FRAMING SECTION
1 1/2" = 1'-0"



1 WINDOW SECTION
1 1/2" = 1'-0"



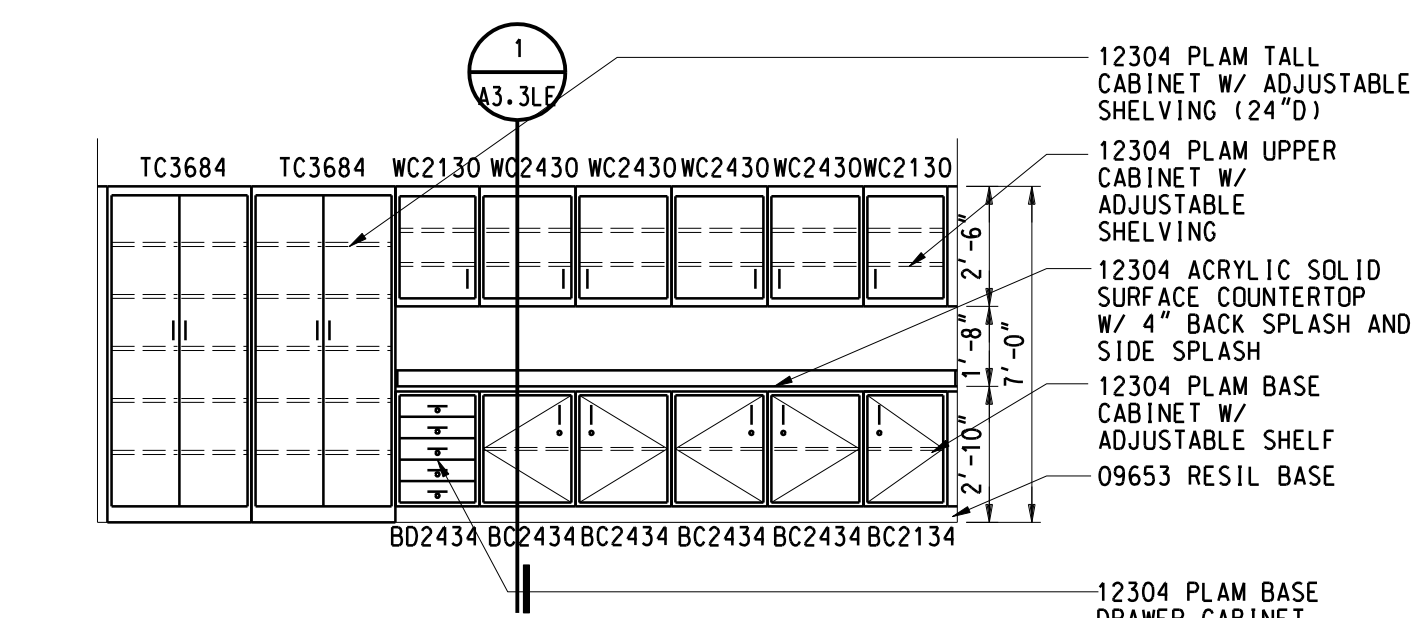
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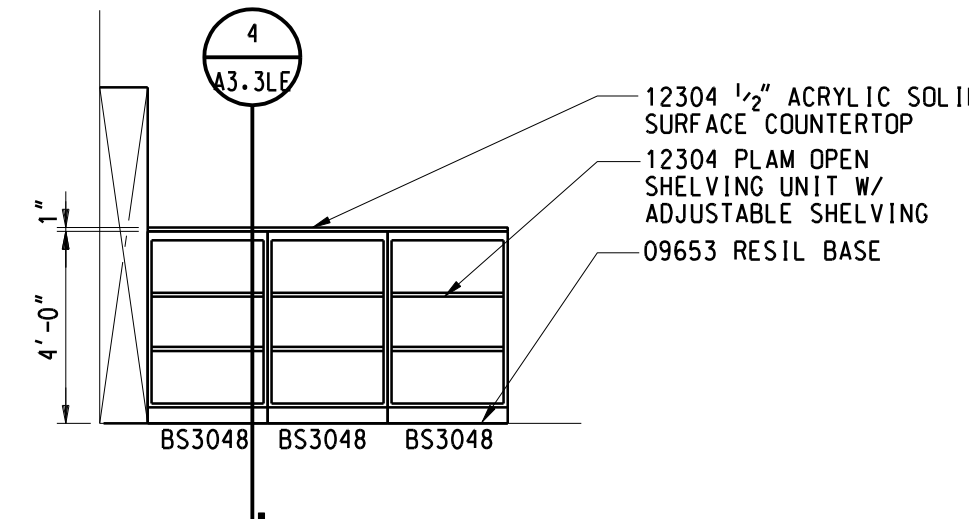
GENERAL NOTES

INTERIOR ELEVATIONS

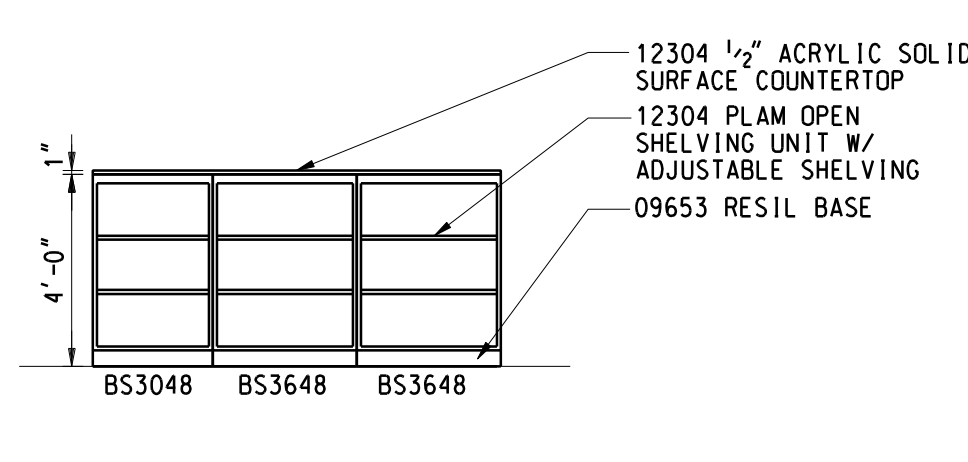
- A ALL WALL MOUNTED CABINETS ARE TO BE MOUNTED 7'-0" AFF TO TOP UDN
- B COORDINATE THE INTERFACING OF ALL TRADES WITH RESPECT TO DELIVERY AND AND INSTALLATION OF ALL FIXTURES AND EQUIPMENT
- C CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BEFORE INSTALLATION. CONSULT WITH ARCHITECT WHEN ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN ON CONTRACT DOCUMENTS
- D COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE TRADE PROVIDING SAME. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
- E ALL TALL CASES ARE TO BE FASTENED TO THE ADJOINING WALL THROUGH THE BACK OR SIDE OF THE UNIT
- F ALL COUNTERTOPS INSTALLED AGAINST A WALL ARE TO HAVE A 4" BACKSPLASH AND SIDE SPLASHES UDN
- G FINISH EXPOSED ENDS AND/OR BACKS OF ALL FREESTANDING CASEWORK
- H PROVIDE FILLERS AS NEEDED
- I PROVIDE LOCKS ON ALL CABINETS AND DRAWERS UNLESS OTHERWISE NOTED. ALL LOCKS SHALL BE KEYS ALIKE BY ROOM. PROVIDE MASTER KEYING
- J REFER TO LEGEND ON INTERIOR ELEVATIONS A3.1LE FOR DESCRIPTION OF ACCESSORIES, EQUIPMENT AND FURNISHINGS. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION
- K CASEWORK SHALL BE PIONITE - WY031 PEARWOOD. COUNTERTOPS SHALL BE CORIAN - GRAY FIELDSTONE. RESILIENT BASE SHALL BE JOHNSONITE - 40 BLACK IF APPLICABLE. PAINT SHALL MATCH EXISTING.



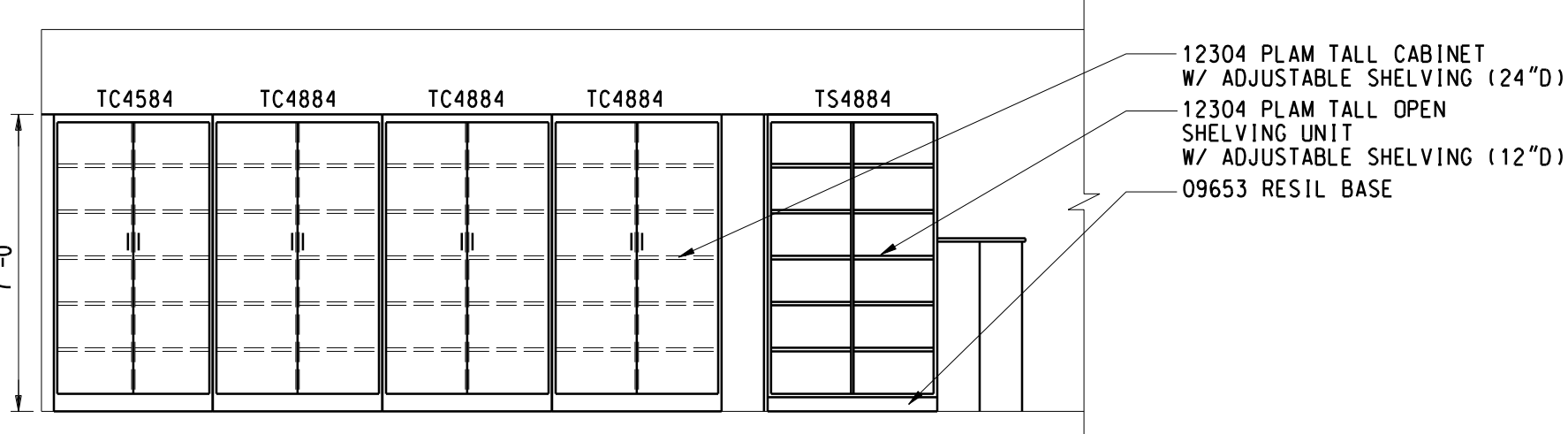
19 CLASSROOMS 9, 10, 12, 13
AM1.1LE 1/4" = 1'-0"



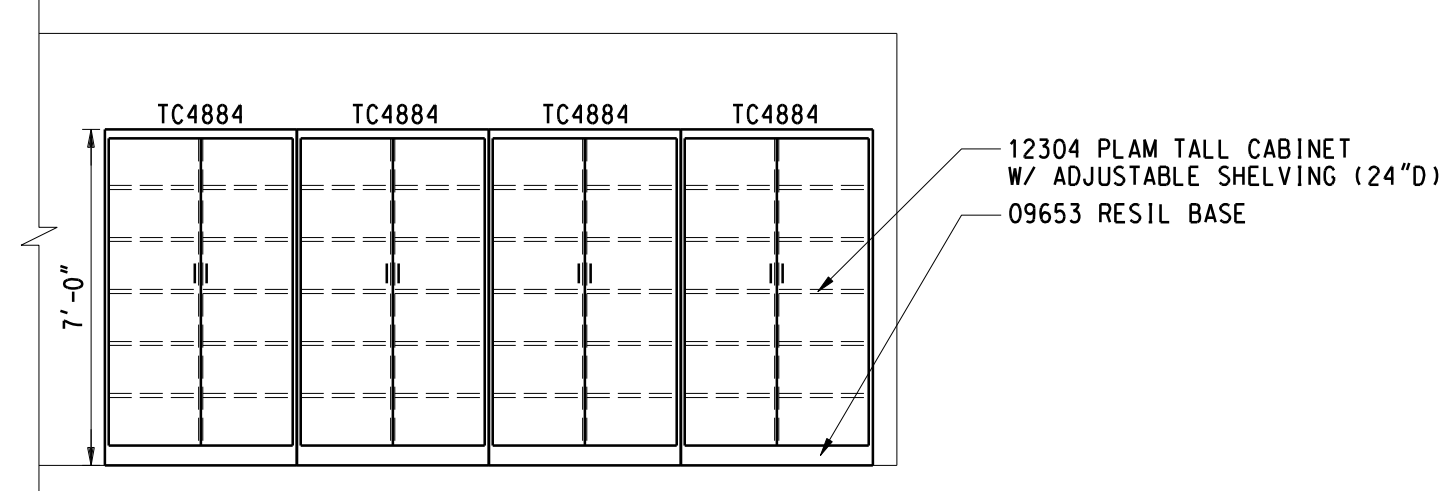
18 CORRIDOR 304
AM1.1LE 1/4" = 1'-0"



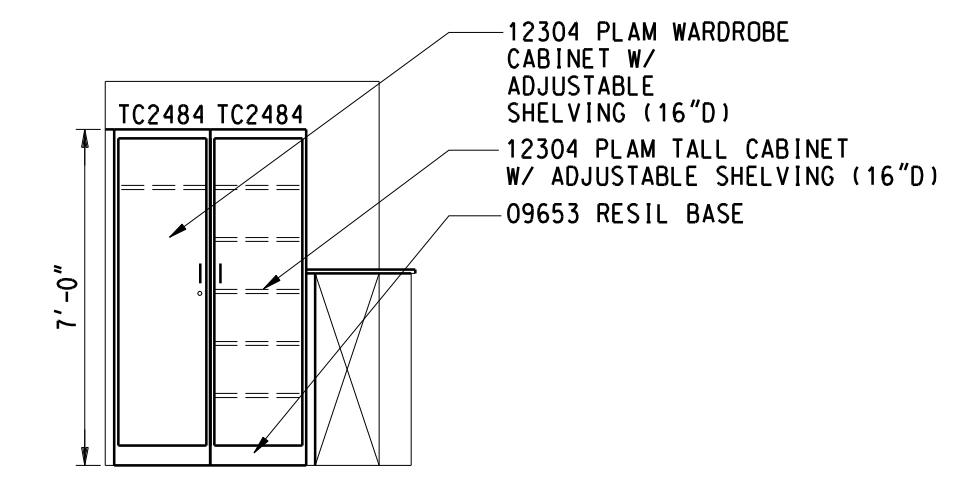
17 CORRIDOR 304
AM1.1LE 1/4" = 1'-0"



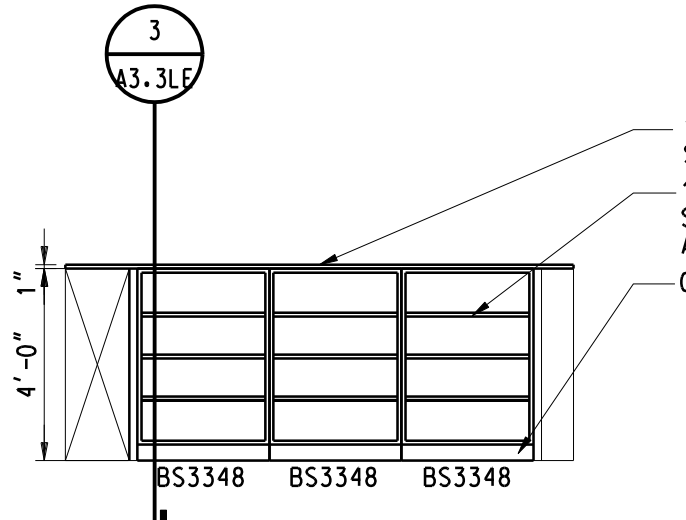
16 CORRIDOR 304
AM1.1LE 1/4" = 1'-0"



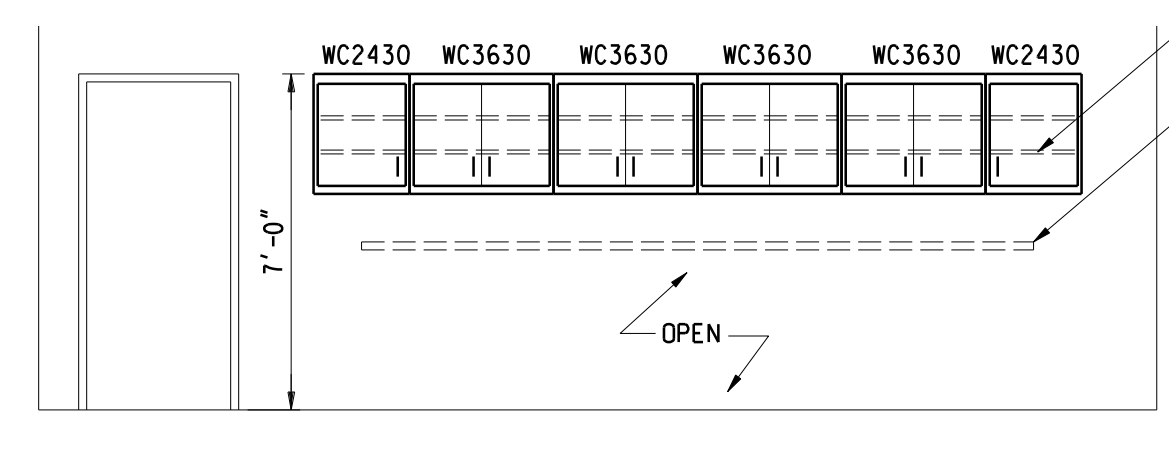
15 CORRIDOR 304
AM1.1LE 1/4" = 1'-0"



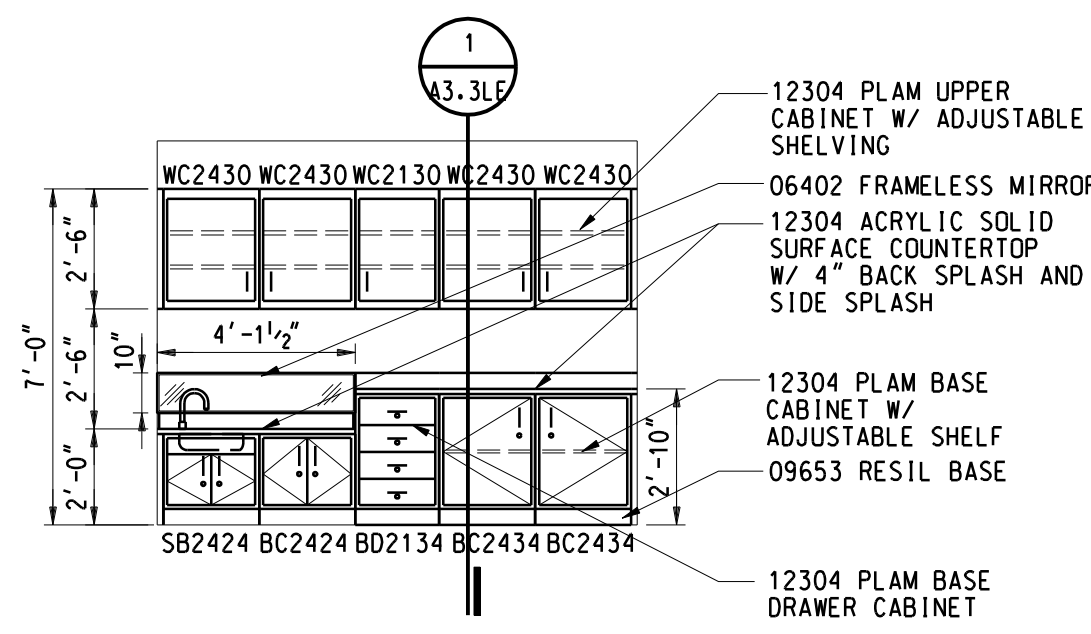
14 CLASSROOM 15, 19
AM1.1LE 1/4" = 1'-0"



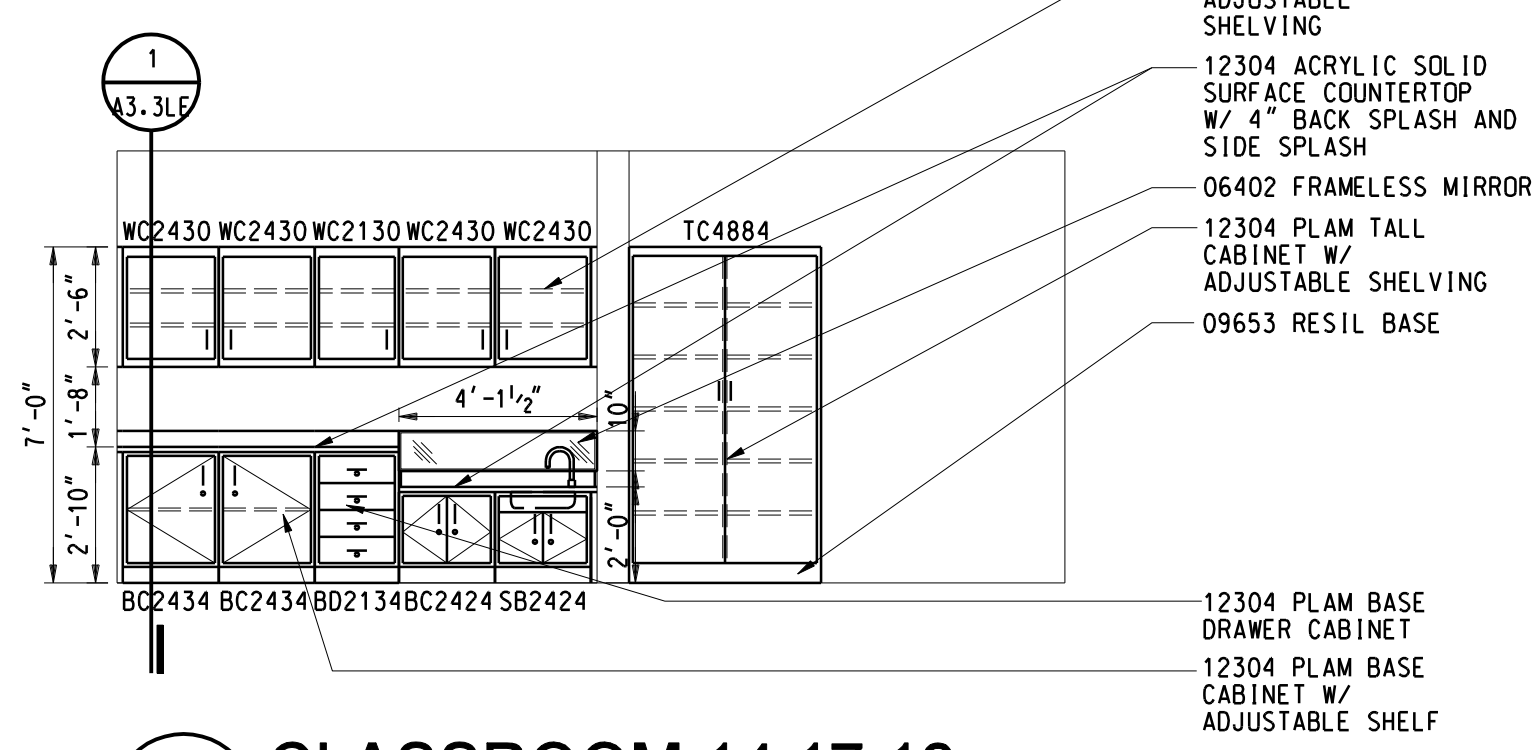
13 CLASSROOM 15, 19
AM1.1LE 1/4" = 1'-0"



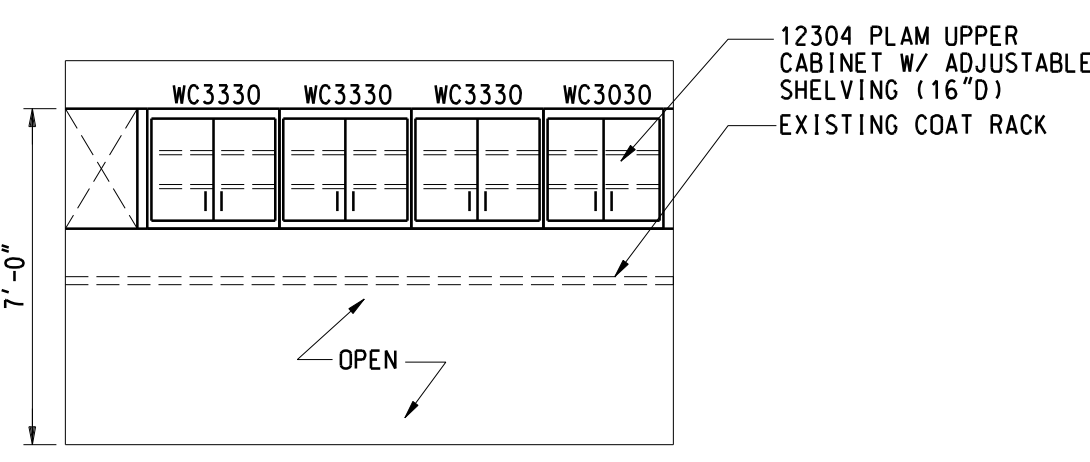
12 CORRIDOR A, B, C, D
AM1.1LE 1/4" = 1'-0"



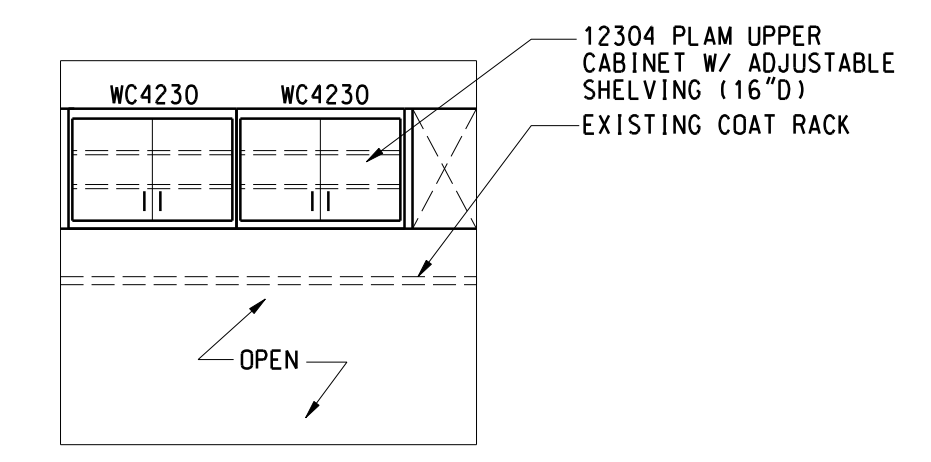
11 CLASSROOM 15, 19, 22
AM1.1LE 1/4" = 1'-0"



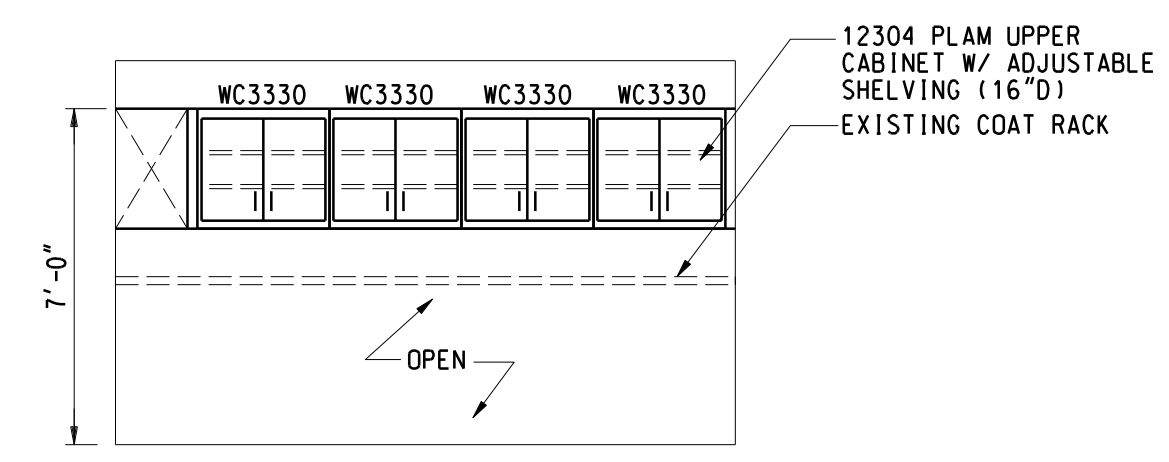
10 CLASSROOM 14, 17, 18
AM1.1LE 1/4" = 1'-0"



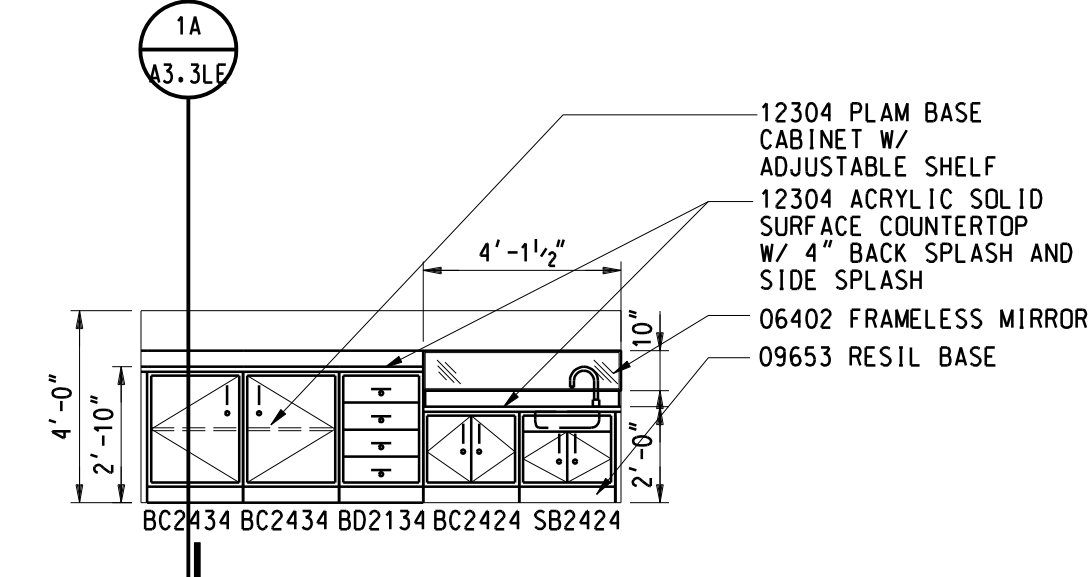
9 CLASSROOM 16, 20
AM1.1LE 1/4" = 1'-0"



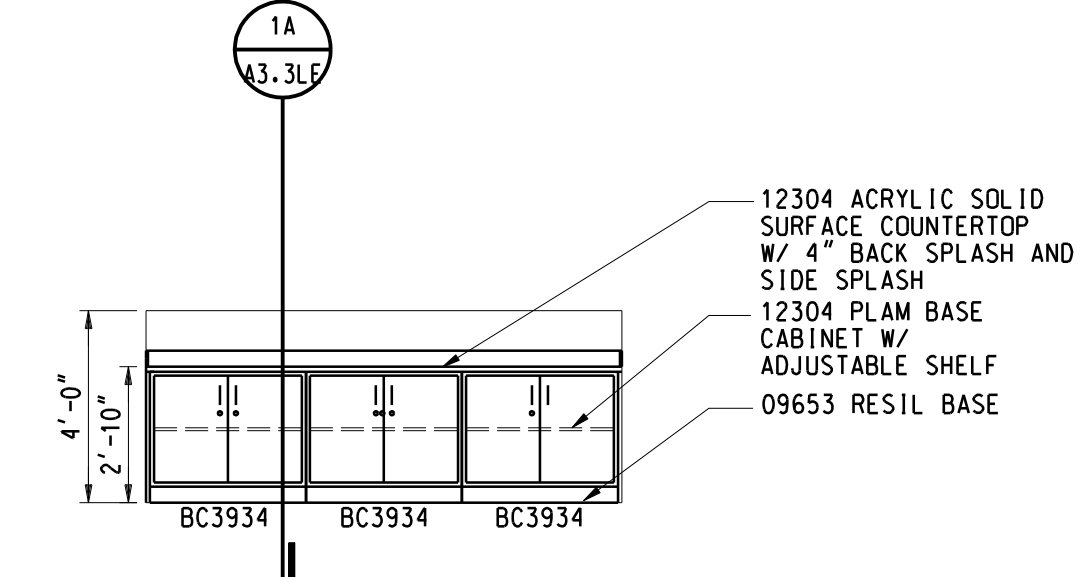
8 CLASSROOM 15, 19
AM1.1LE 1/4" = 1'-0"



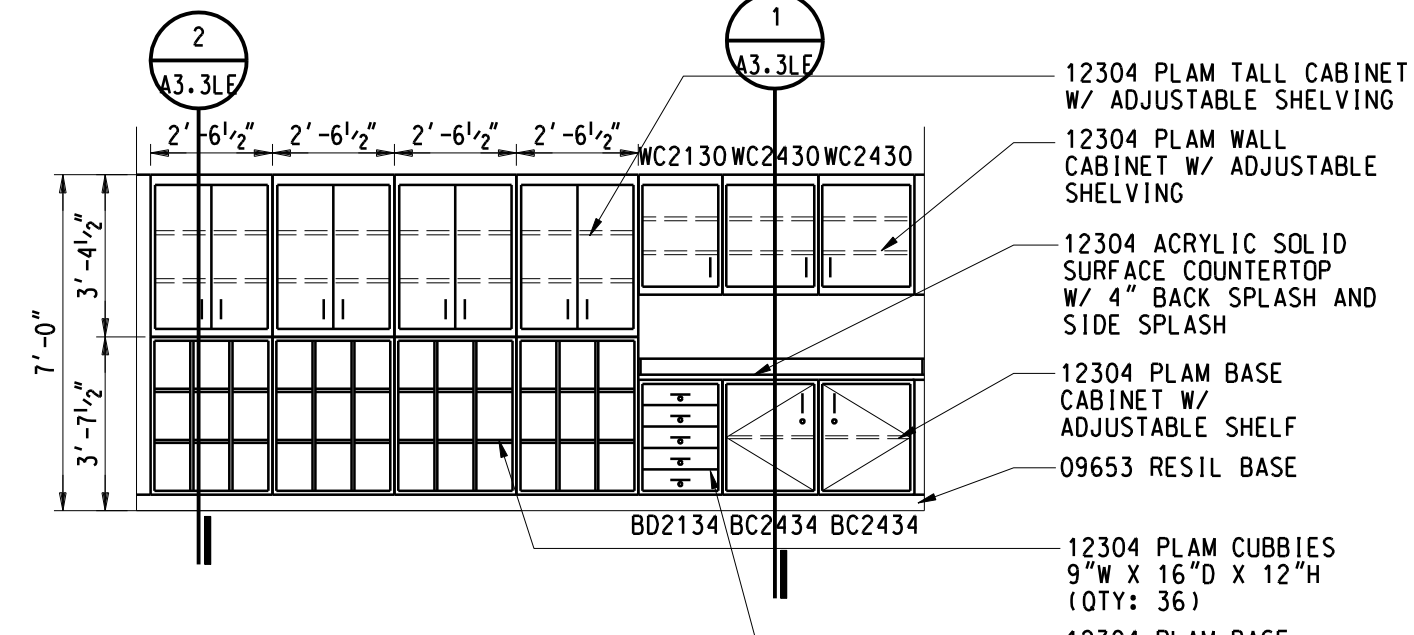
7 CLASSROOM 15, 16, 19, 20
AM1.1LE 1/4" = 1'-0"



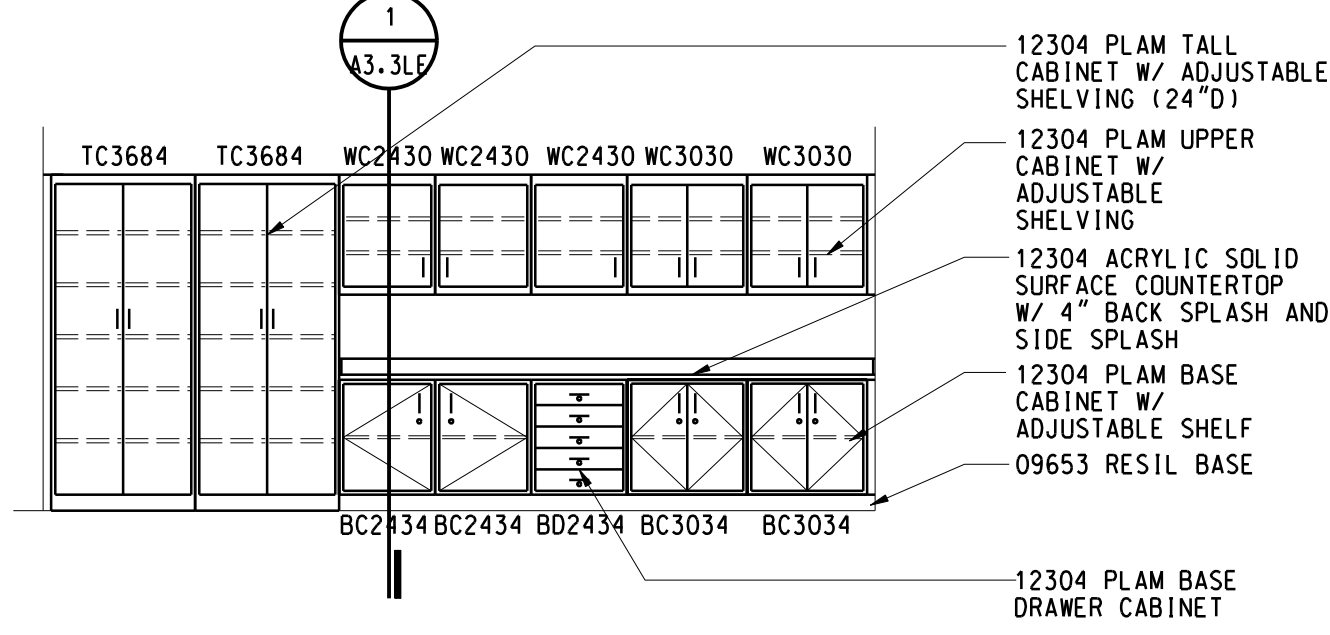
6 CLASSROOM 16, 20
AM1.1LE 1/4" = 1'-0"



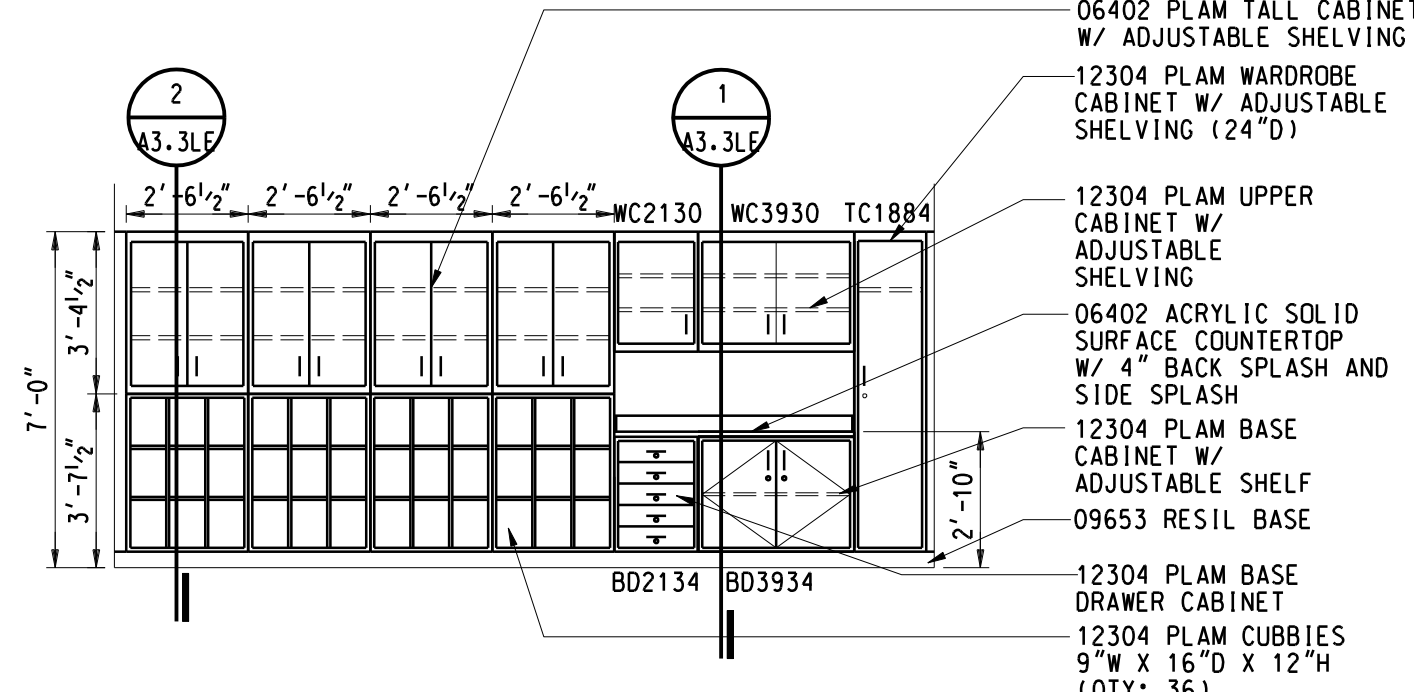
5 CLASSROOM 16, 20
AM1.1LE 1/4" = 1'-0"



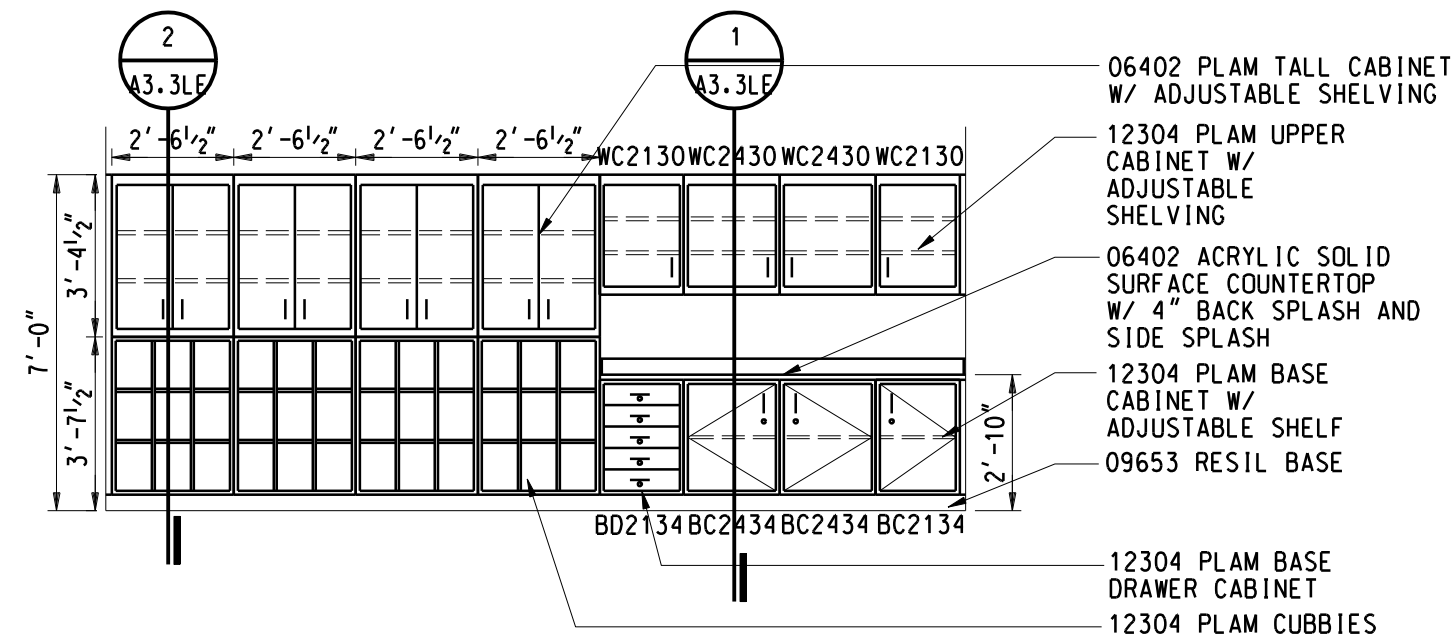
4 CLASSROOM 11
AM1.1LE 1/4" = 1'-0"



3 CLASSROOM 1
AM1.1LE 1/4" = 1'-0"



2 CLASSROOM 6
AM1.1LE 1/4" = 1'-0"



1 CLASSROOMS 2, 3, 7, 8
AM1.1LE 1/4" = 1'-0"

Project Title



LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan

Project Administrator: Seal:

K. Delzer

Project Designer:

B. Ingham

Project Architect / Engineer:

B. Ingham

Drawn By:

B. Ingham

C.M. Review:

K. Delzer

Approved:

K. Delzer

Drawing Scale:

As Noted

Issue Date:

03-11-13

Issued for:

Quality Management Review

03-15-13

Bids

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IDS Drawing Title

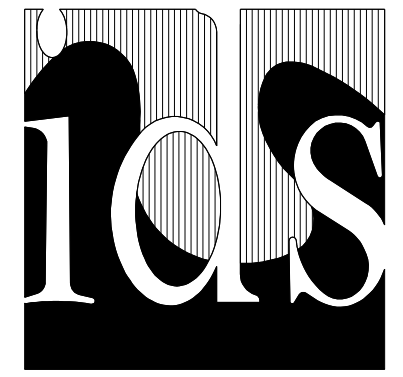
Linden Elementary Classroom Storage Elevations

IDS Project Number

Drawing Number

13101-1000

A3.1LE



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Architecture, Engineering, Interiors & Technology

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tel 248.823.2100 - fax 248.823.2200
www.ids-troy.com

Project Title



LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan

Project Administrator: Seal:
K. Delzer

Project Designer:
B. Ingham

Project Architect / Engineer:
B. Ingham

Drawn By:
B. Ingham

Q.M. Review:
K. Delzer

Approved:
K. Delzer

Drawing Scale:
As Noted

Issue Date: Issued for:
03-11-13 Quality Management Review

03-15-13 Bids

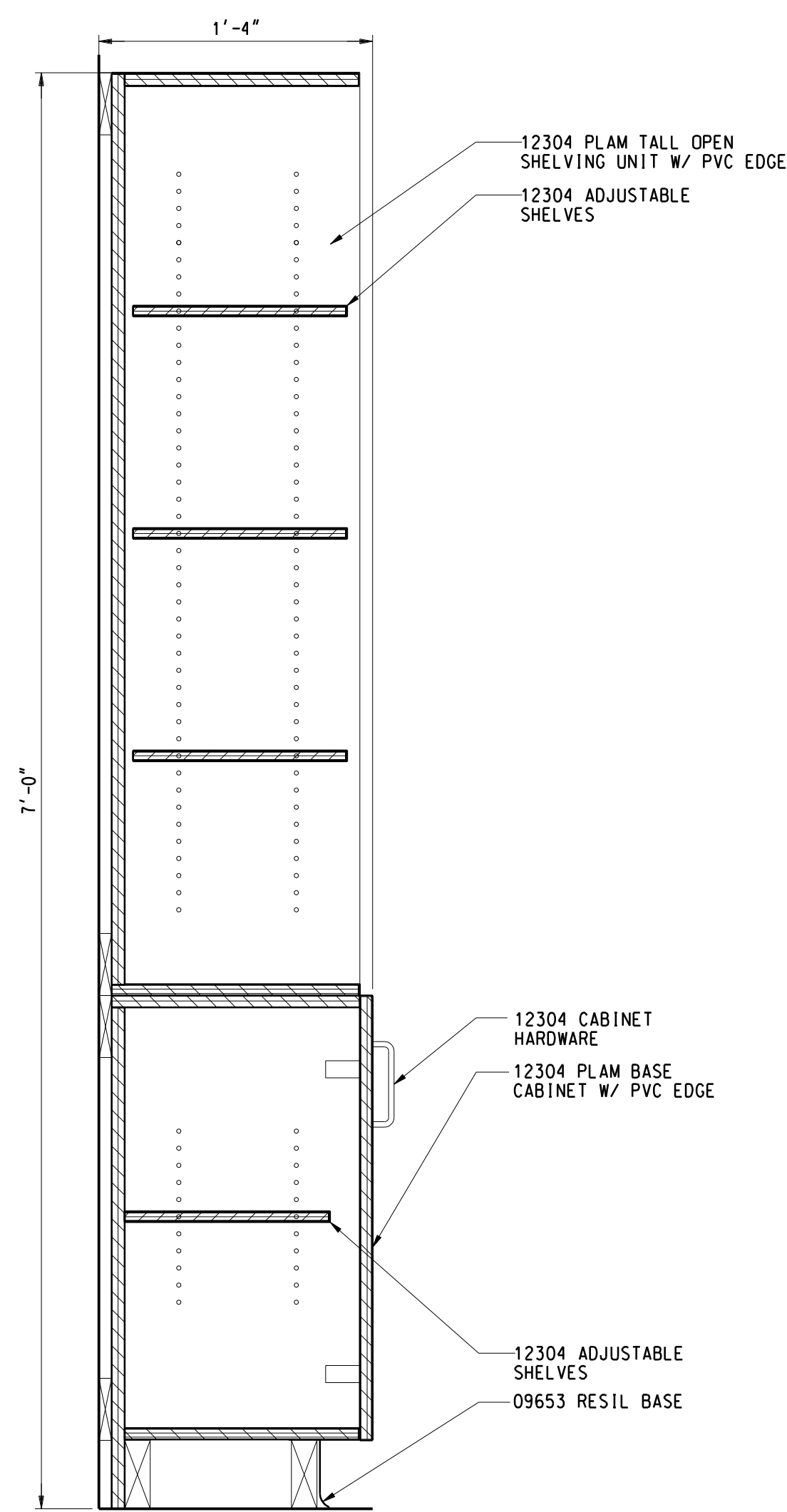
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IDS Drawing Title

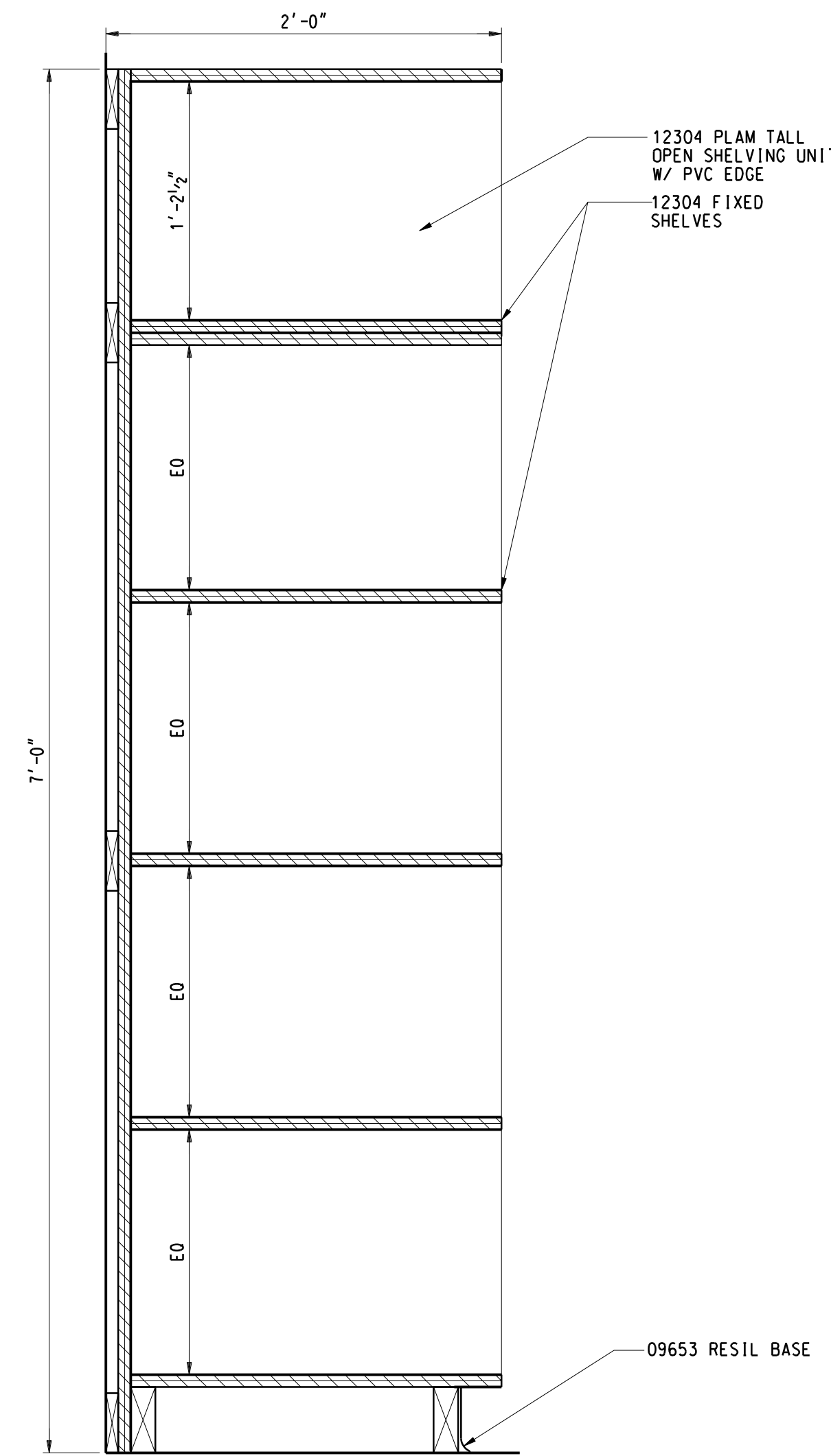
Linden Elementary Classroom Storage Details

IDS Project Number Drawing Number

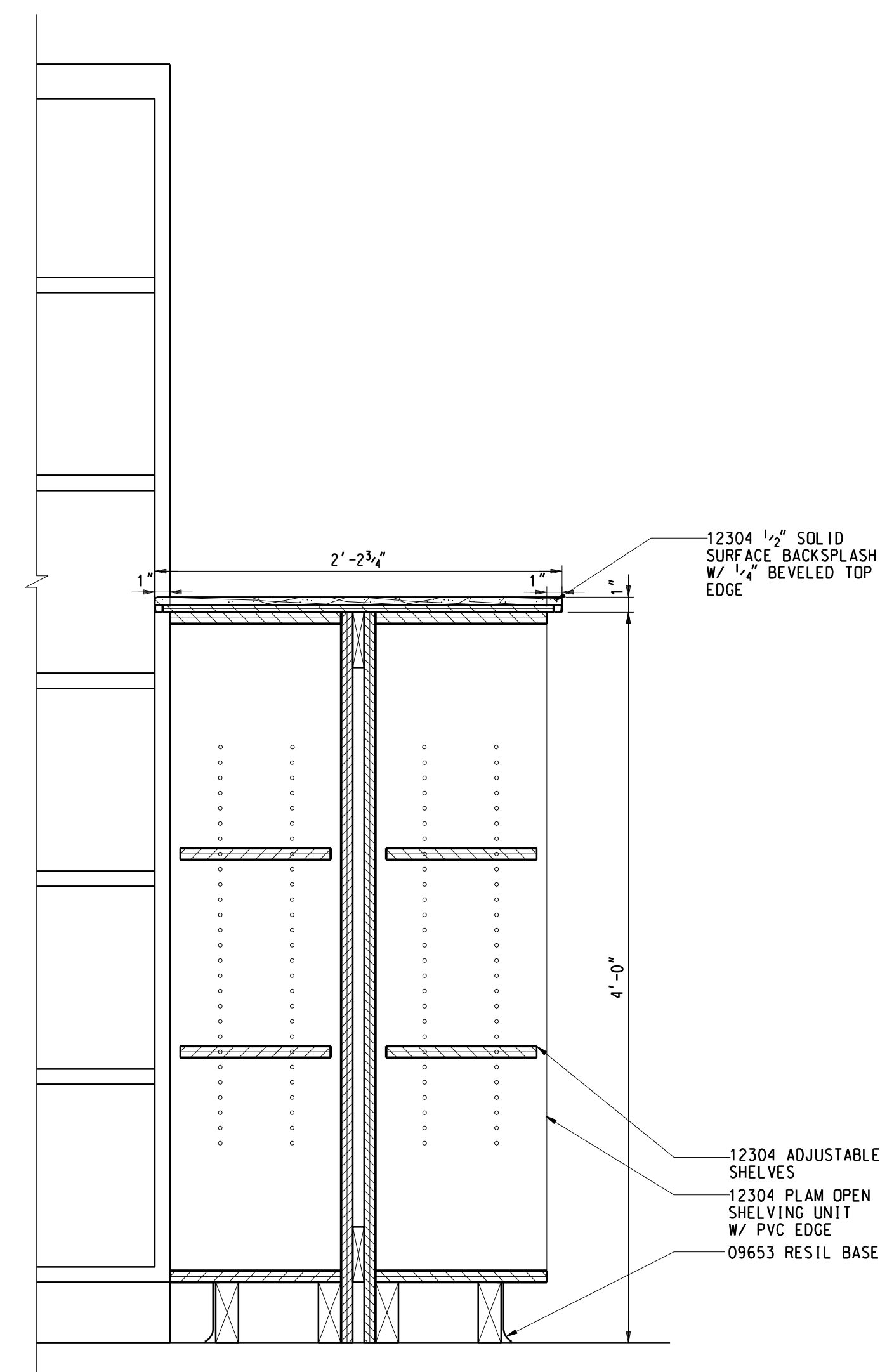
13101-1000 **A3.3LE**



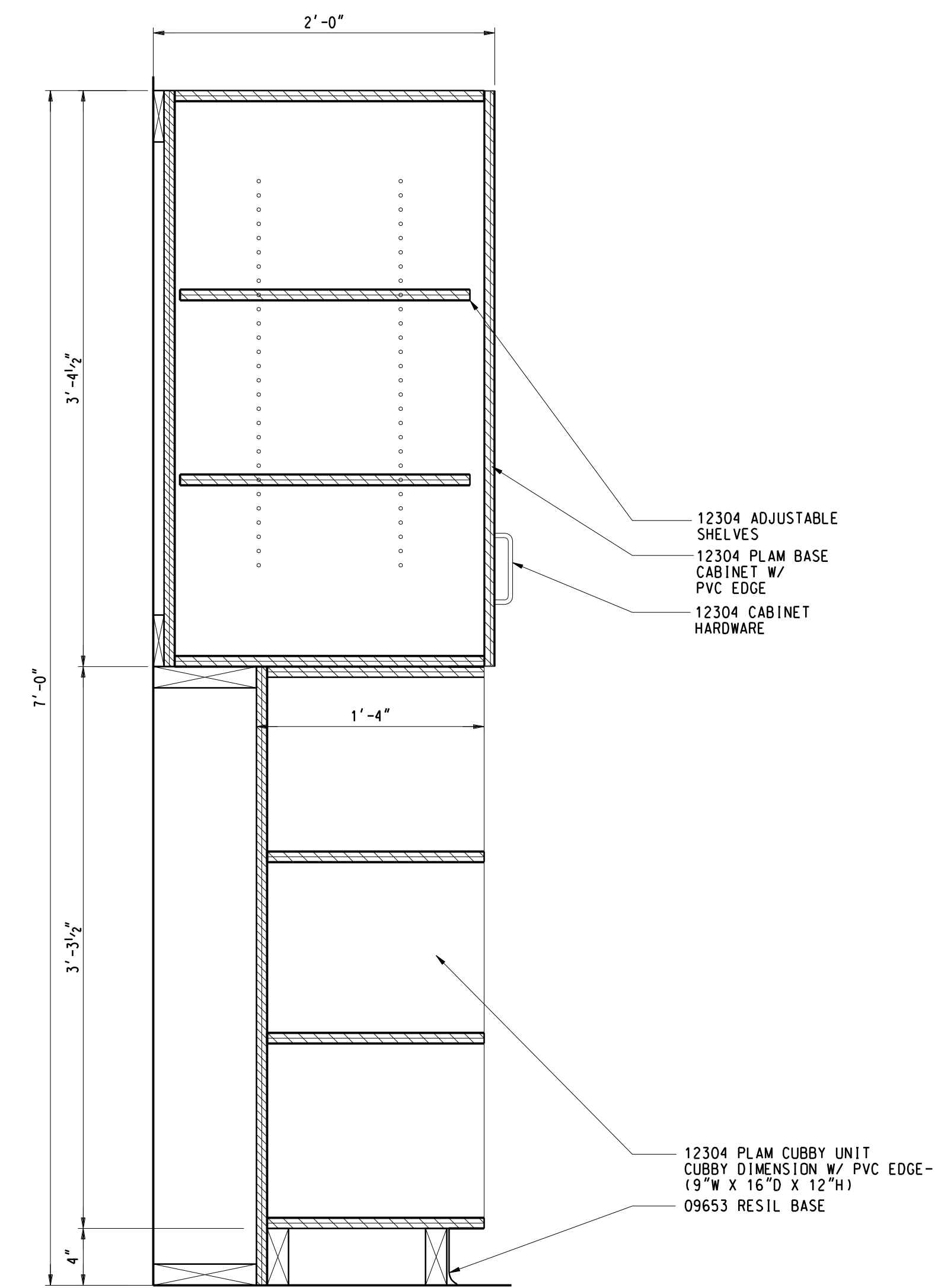
8 CASEWORK DETAIL
A3.2LE 1-1/2" = 1'-0"



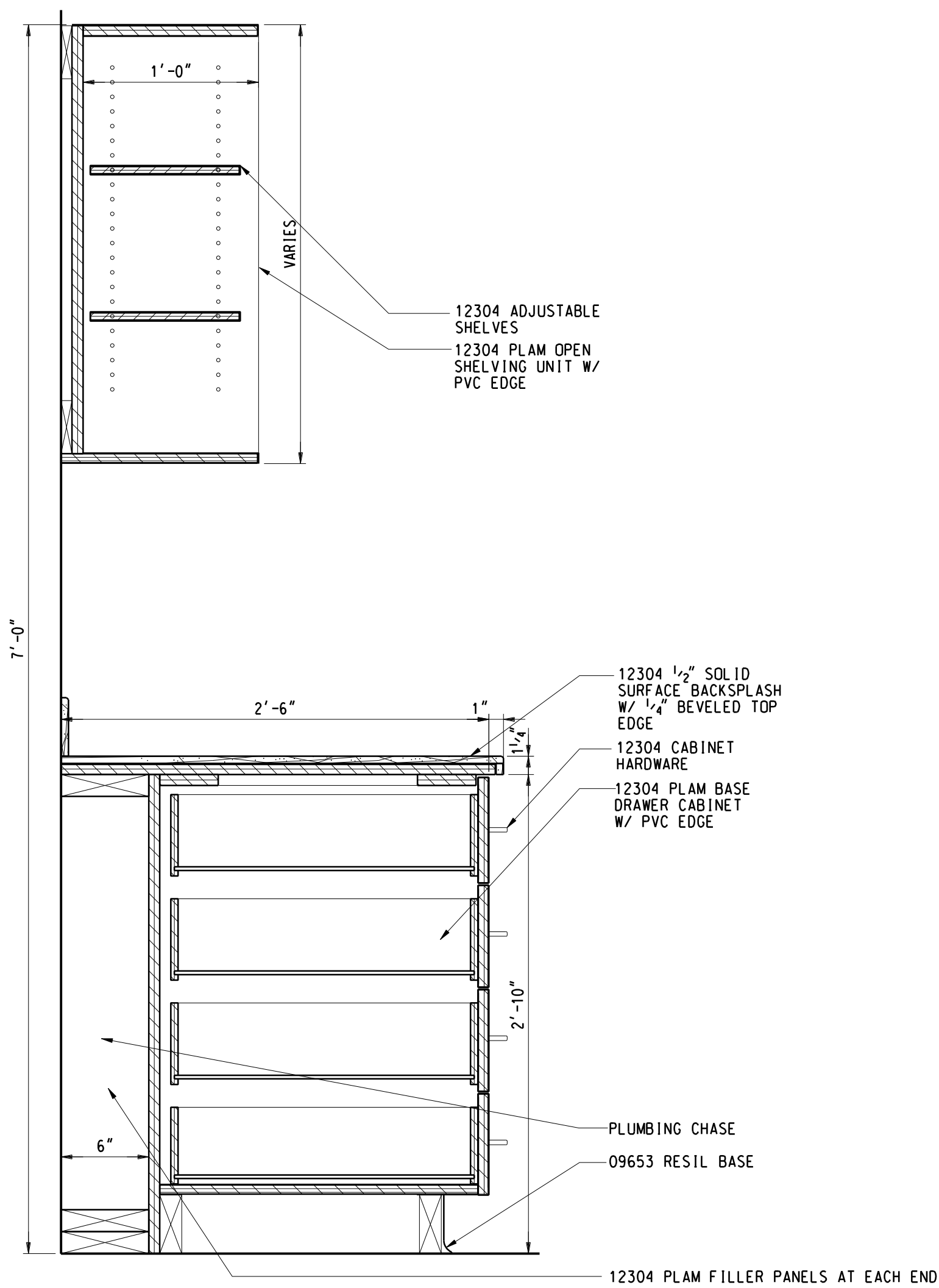
6 CASEWORK DETAIL
A3.2LE 1-1/2" = 1'-0"



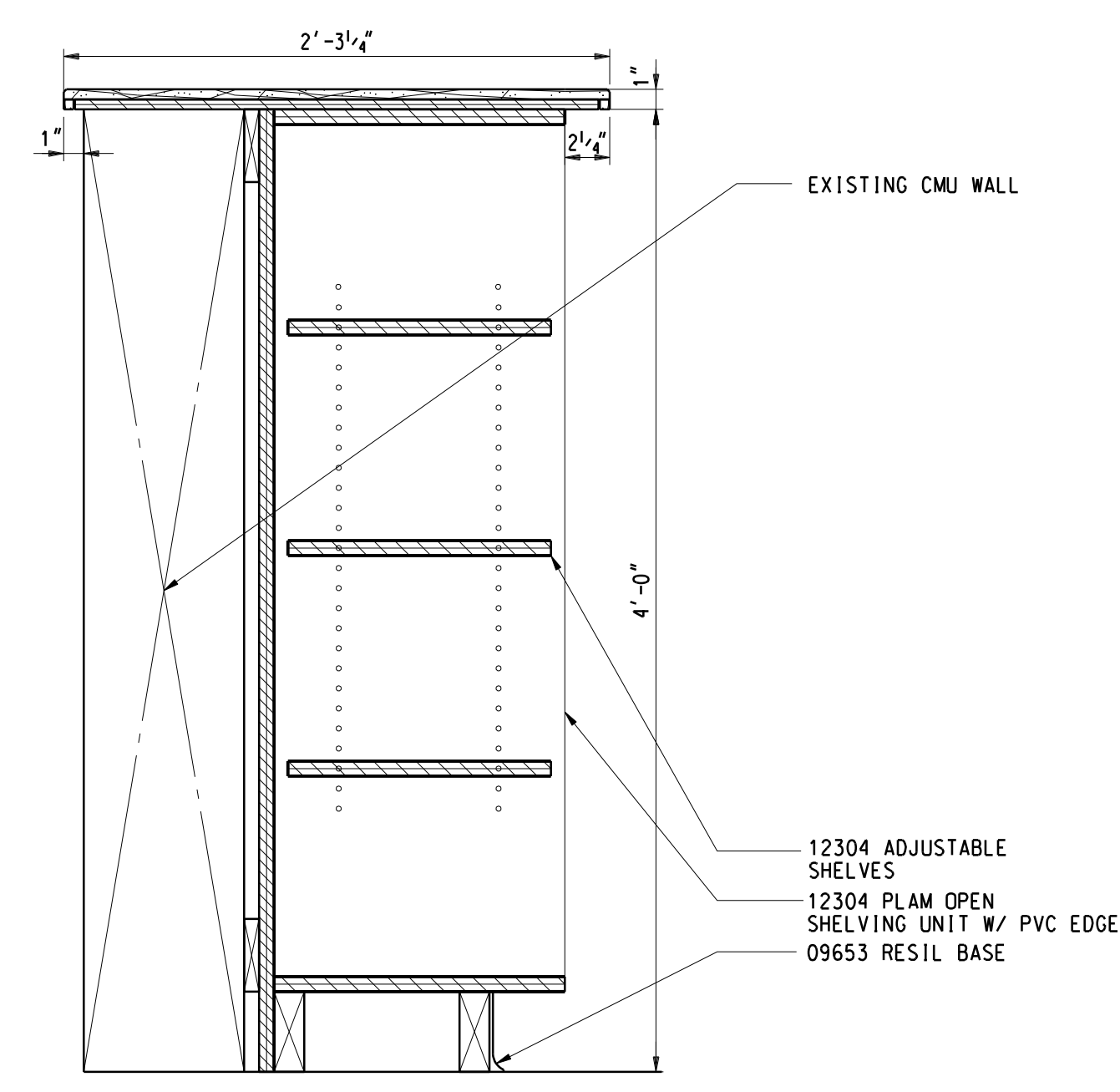
4 CASEWORK DETAIL
A3.1LE 1-1/2" = 1'-0"



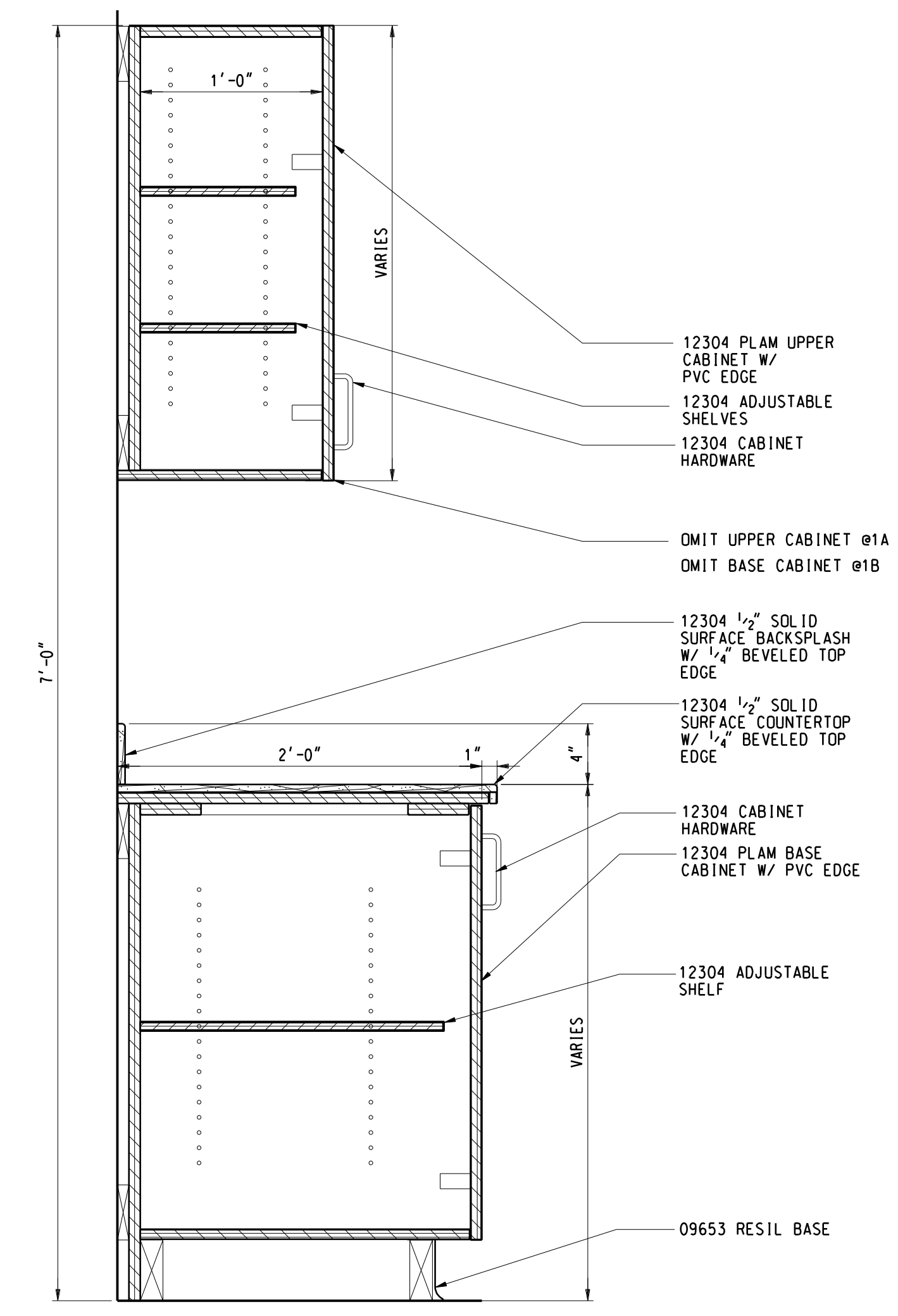
2 CASEWORK DETAIL
A3.1LE 1-1/2" = 1'-0"



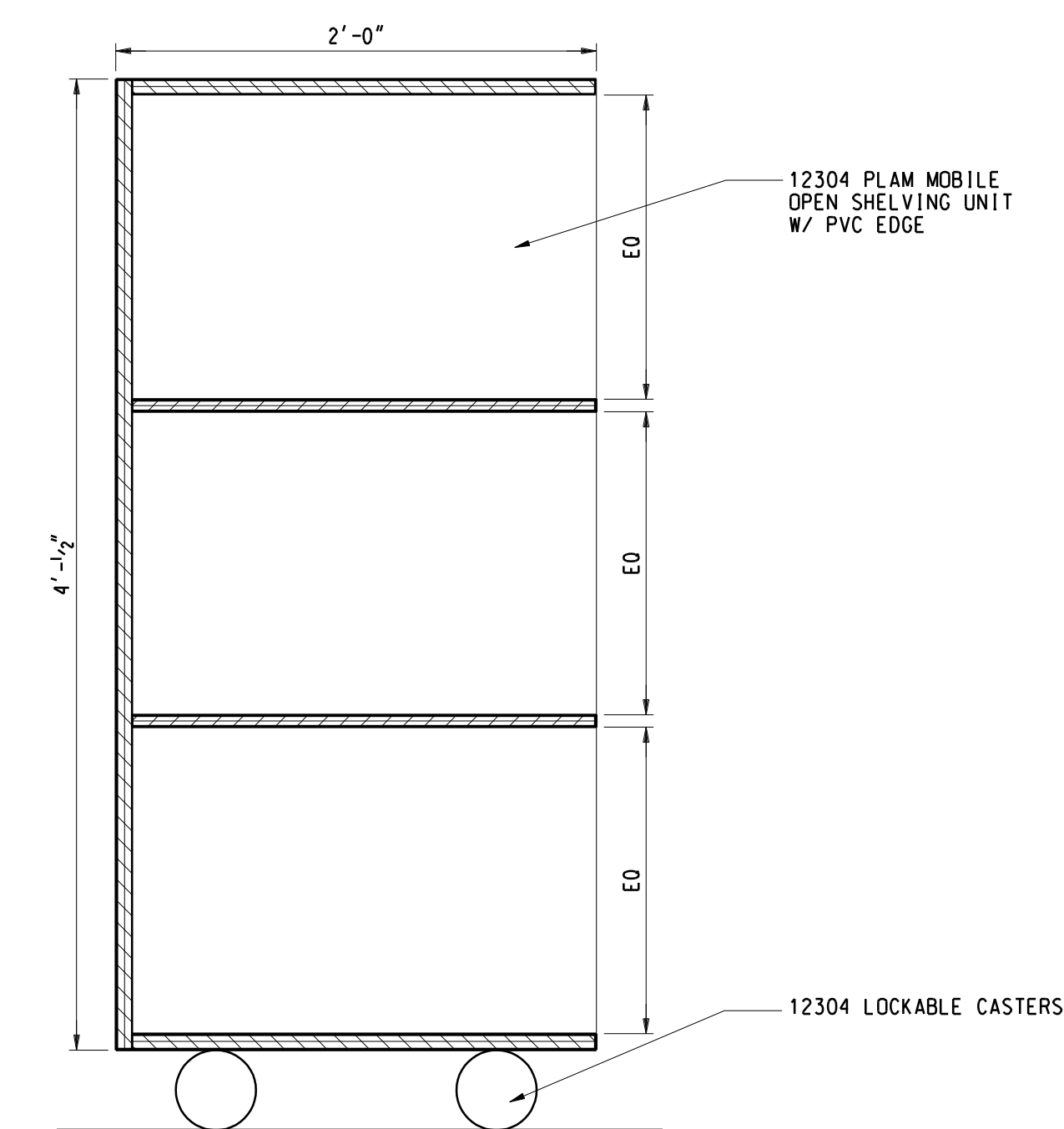
5 CASEWORK DETAIL
A3.2LE 1-1/2" = 1'-0"



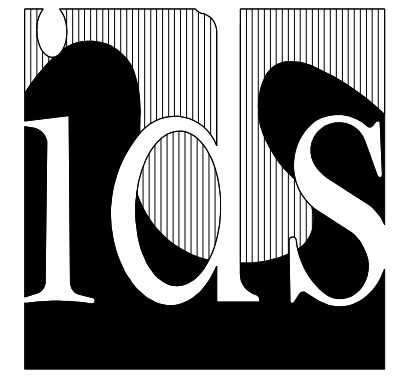
3 CASEWORK DETAIL
A3.1LE 1-1/2" = 1'-0"



1A CASEWORK DETAIL
A3.1LE A1.3HC 1-1/2" = 1'-0"



7 MOBILE CUBBY UNIT DETAIL
A3.2LE 1-1/2" = 1'-0"



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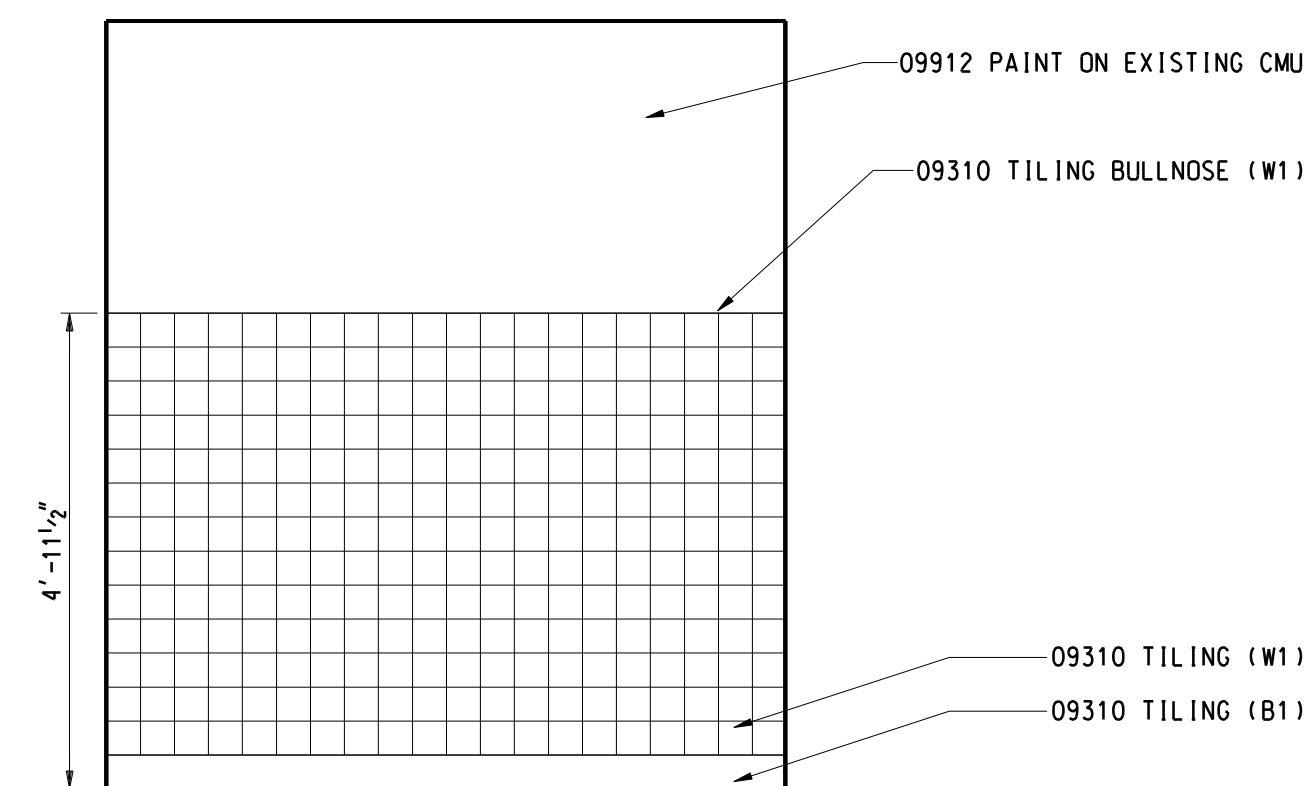
GENERAL NOTES

- A. THE GENERAL INTENT OF THIS WORK IS TO 1) REPLACE ALL EXISTING TOILET ROOM FIXTURES AND TOILET COMPARTMENTS WITH NEW FIXTURES AND TOILET COMPARTMENTS IN EXISTING LOCATIONS WITH FIXTURES SECURED TO EXISTING CARRIERS AND CONNECTED TO EXISTING UTILITIES 2) REPLACE MOST EXISTING ACCESSORIES WITH NEW ACCESSORIES 3) INSTALL NEW FINISHES INCLUDING DEMOLITION OF SOME EXISTING FINISHES
- B. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.
- C. CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION
- D. PROTECT ALL EXISTING FINISHES DURING CONSTRUCTION
- E. ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL, AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION
- F. COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS
- G. PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND/OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK

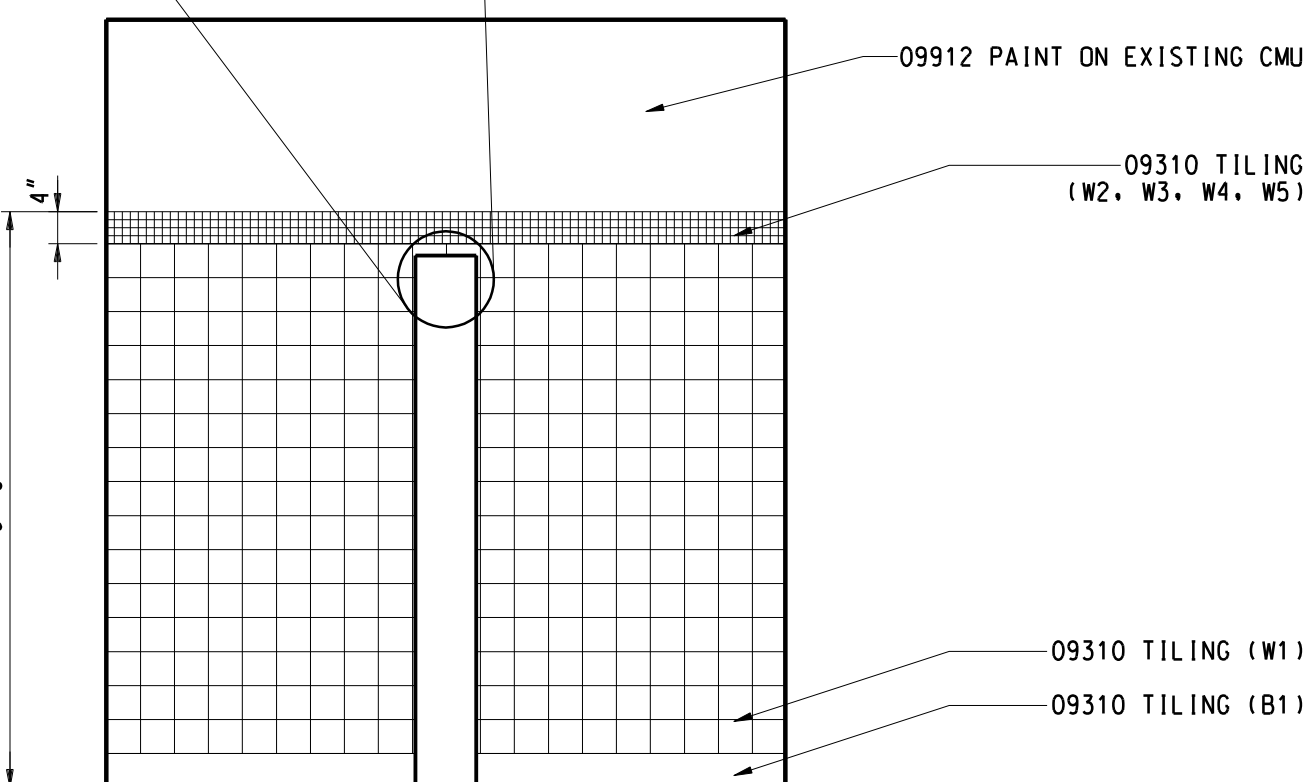
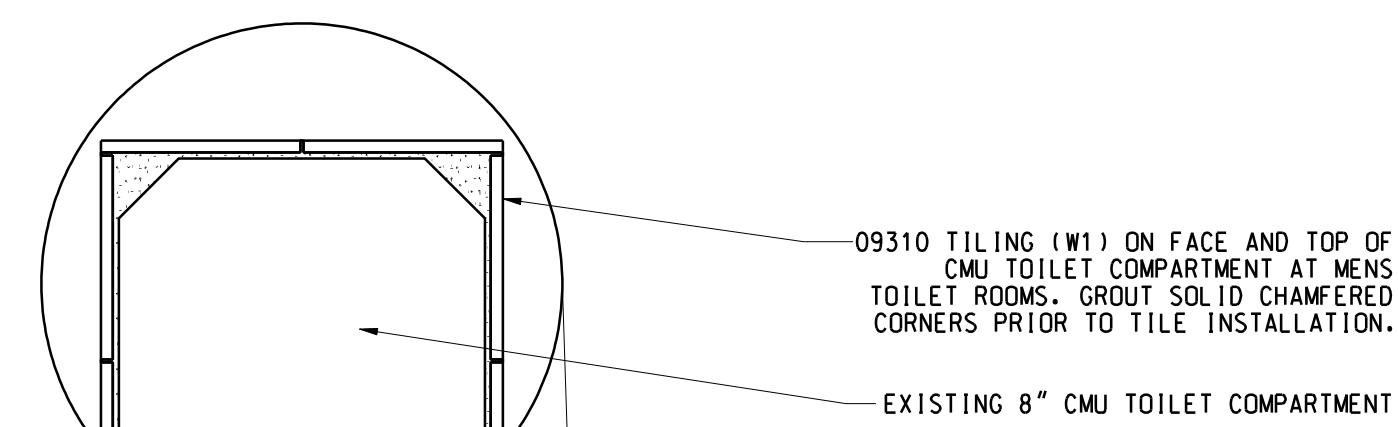
KEYNOTES

NOTE: NOT ALL KEYNOTES MAY BE USED

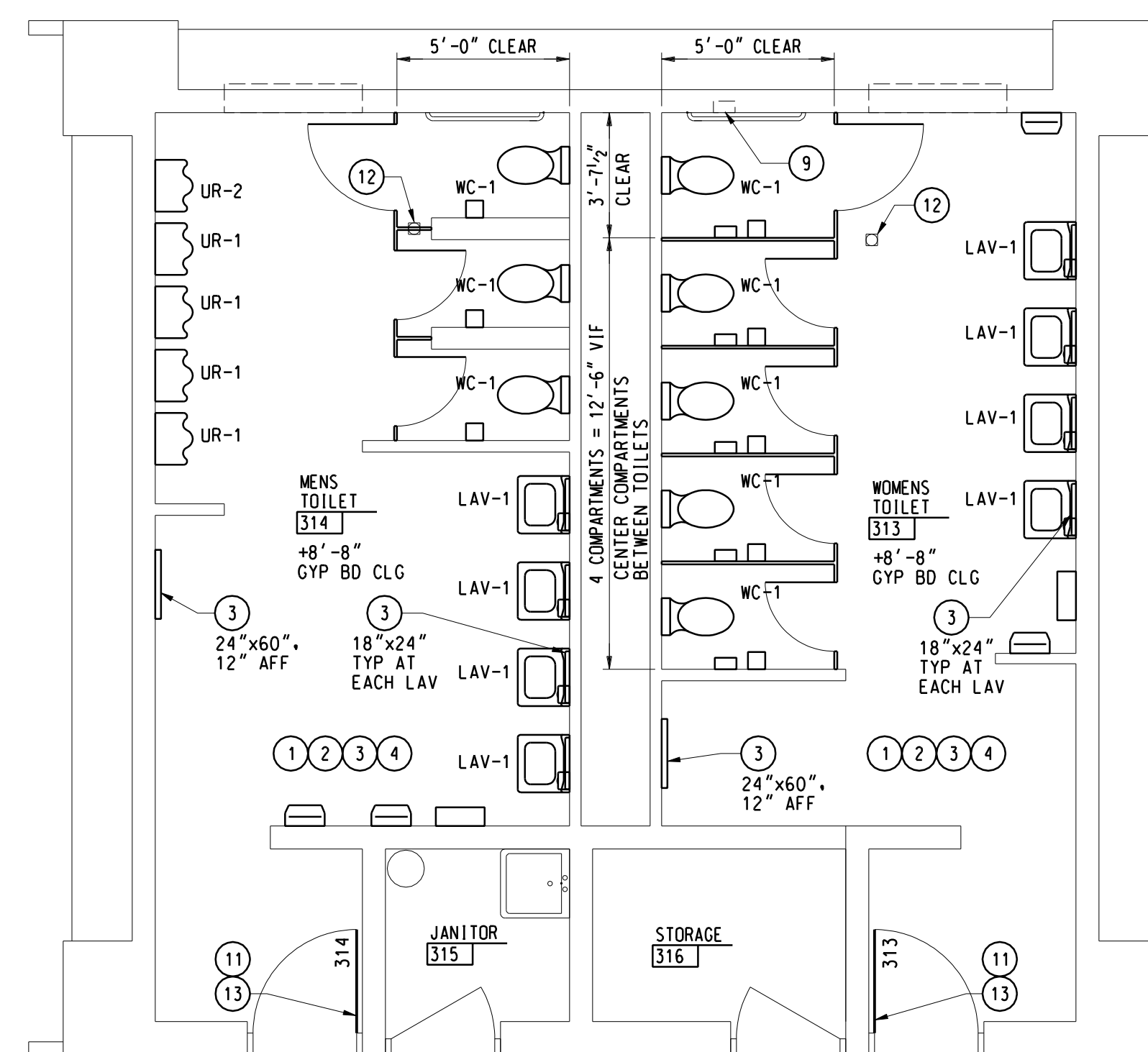
- 1 OWNER WILL PROVIDE ALL ELECTRICAL WORK, DEMOLITION AND NEW, INCLUDING BUT NOT LIMITED TO:
ELECTRIC HAND DRYERS
LIGHT FIXTURES
SWITCHES
ELECTRICAL DEVICE COVER PLATES
CLEANING AND RELAMPING OF LIGHT FIXTURES
- 2 DEMOLITION WORK SHALL INCLUDE REMOVAL OF ALL:
FLOOR AND WALL BASE TILE
MIRRORS
LAVATORIES, FAUCETS AND TRAPS
WATER CLOSETS AND FLUSH VALVES
URINALS AND FLUSH VALVES
FLOOR AND WALL CLEANOUT COVERS
TOILET COMPARTMENTS
WALL MOUNTED DOOR BUMPERS
SOAP DISPENSERS
TOILET PAPER DISPENSERS
TOWEL DISPENSERS
- 3 NEW WORK SHALL INCLUDE:
09310 CERAMIC TILE
09912 PAINT
10155 TOILET COMPARTMENT
10801 FRAMED MIRROR (SIZE AS NOTED ON PLAN - WxH)
10801 SANITARY NAPKIN DISPOSAL (TYP AT EACH FEMALE WC COMPARTMENT)
15000 LAVATORY (LAV-1) AND FAUCET (LAV-1)
15000 WATER CLOSET (WC-1) AND FLUSH VALVE (FV-1)
15000 URINAL (UR-1) AND FLUSH VALVE (FV-2)
15000 WALL CLEANOUT COVER (WC-1)
- 4 OWNER SHALL PROVIDE AND INSTALL:
SOAP DISPENSER
TOWEL DISPENSER
TOILET PAPER DISPENSER
ELECTRIC HAND DRYER
- 5 NO EXISTING LAVATORIES AT THIS LOCATION. REMOVE AND PATCH EXISTING CMU FOR CONNECTION TO EXISTING PLUMBING AND ANCHORS IN PARTITION.
- 6 EXISTING COVER BOARD TO REMAIN
- 7 EXISTING GRAB BAR TO REMAIN. INSTALL 09310 CERAMIC TILE OVER MOUNTING PLATE AND COVER WITH EXISTING ESCUTCHEON PLATE.
- 8 EXISTING CONVECTOR TO REMAIN WITH 09912 PAINT
- 9 EXISTING SANITARY NAPKIN DISPOSAL TO REMAIN
- 10 EXISTING AIR FRESHENER TO REMAIN
- 11 EXISTING HOLLOW METAL DOOR FRAME TO REMAIN WITH 09912 PAINT (MATCH EXISTING)
- 12 EXISTING FLOOR DRAIN COVER TO REMAIN. CLEAN OUT EXISTING FLOOR DRAIN AND ROUT OUT DRAINAGE PIPING AS REQUIRED FOR A MINIMUM OF FIFTY (50) LINEAL FEET TO REMOVE ANY AND ALL BLOCKAGES AND RE-ESTABLISH PROPER DRAINAGE. AFTER CLEANING, TEST FLOOR DRAIN IN PRESENCE OF OWNER'S REPRESENTATIVE BY FLOODING WITH GARDEN HOSE FOR APPROXIMATELY 15 MINUTES OR UNTIL PROPER DRAINAGE CONFIRMED.
- 13 REMOVE WOOD DOOR AND HARDWARE AND PROVIDE 08211 FLUSH WOOD DOOR, 3'-0" x 7'-2" (NOMINAL), 1 1/4" THICK WITH HARDWARE SET HST



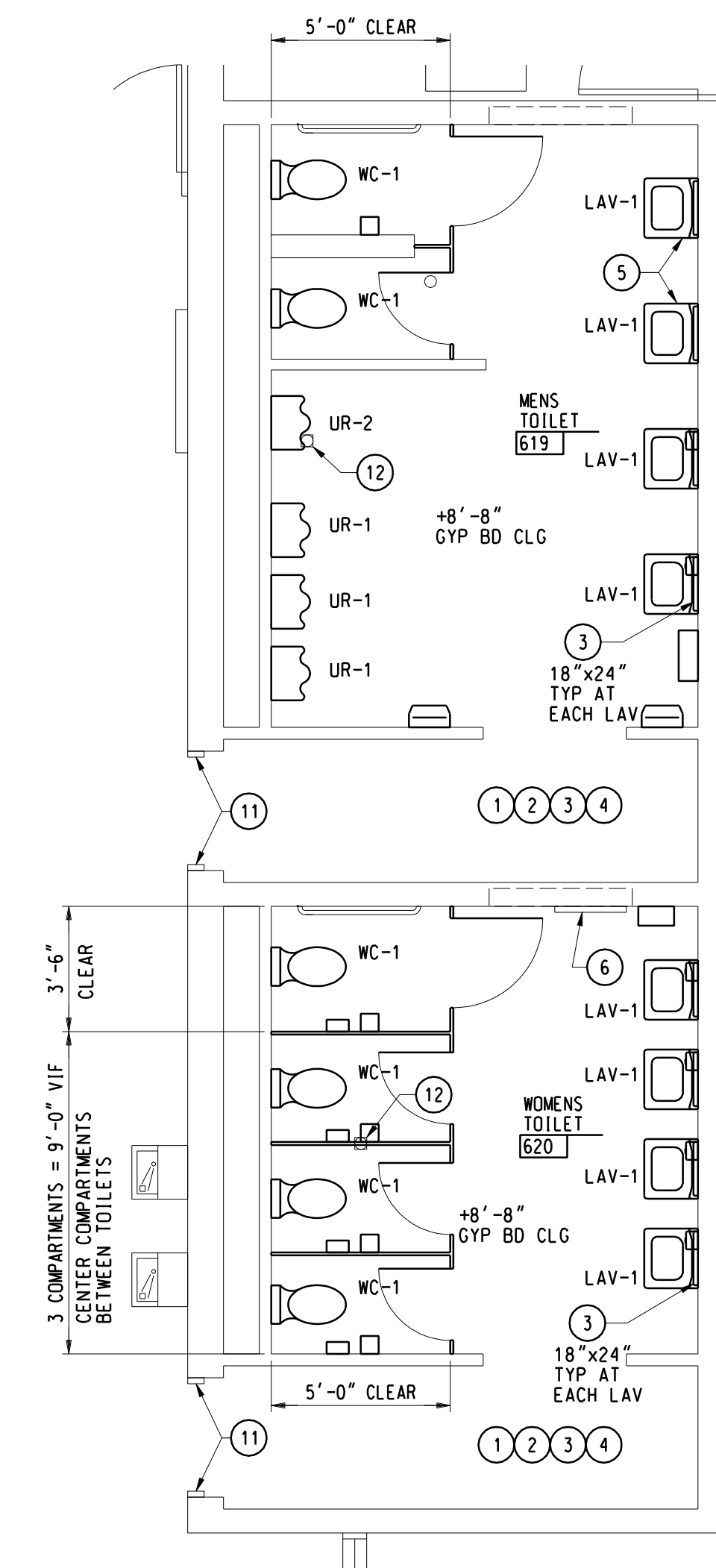
**TYP WALL TILE PATTERN
TOILET ROOM 310**
1/2" = 1'-0"



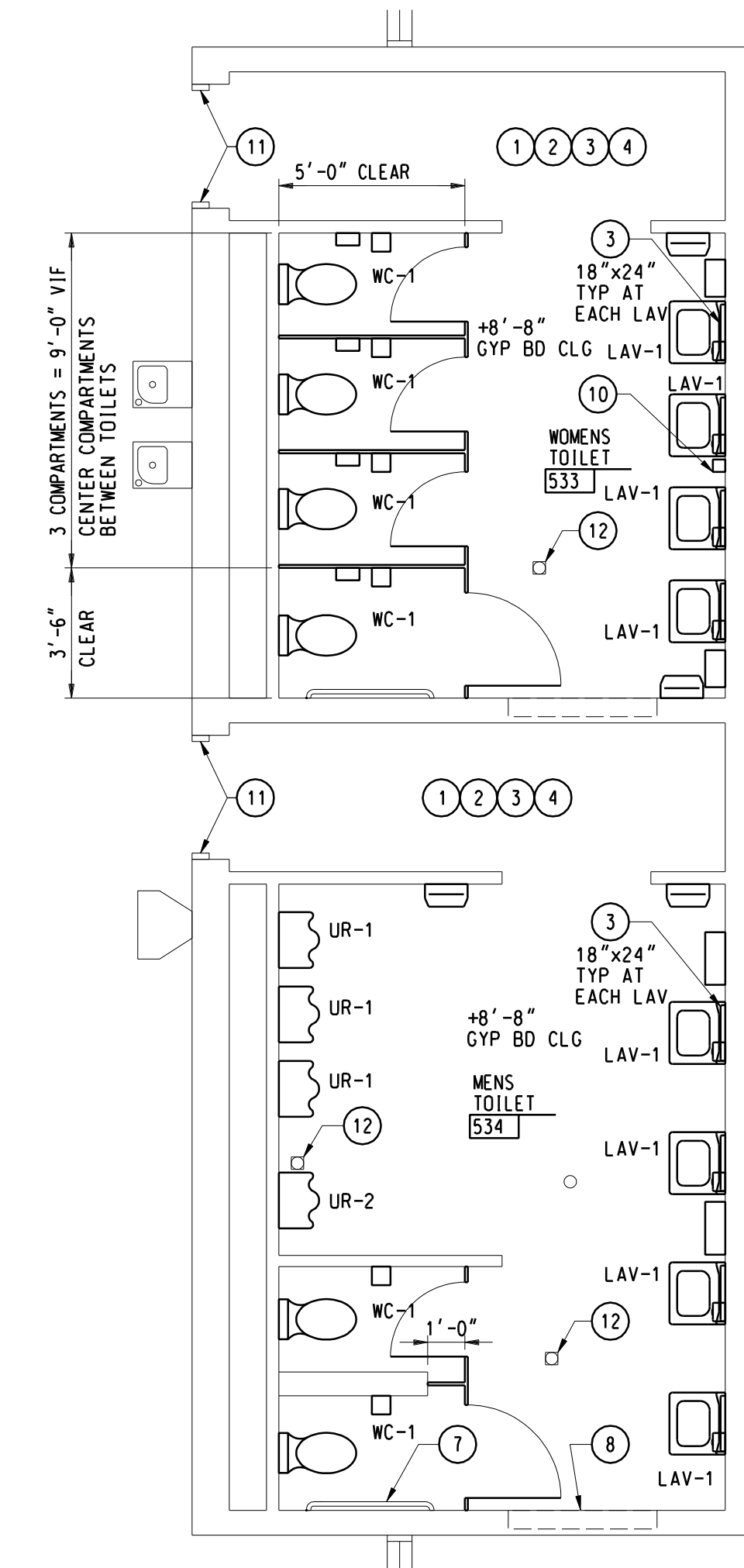
**TYP WALL TILE PATTERN
TOILET ROOMS 313, 314, 533, 534, 619, 620**
1/2" = 1'-0"



**TOILET ROOMS 313 AND 314
DEMO/NEW WORK FLOOR PLAN**
1/4" = 1'-0" REF DETAIL 1 THIS DWG FOR TYP NOTES



**TOILET ROOMS 619 AND 620
DEMO/NEW WORK FLOOR PLAN**
1/4" = 1'-0" REF DETAIL 1 THIS DWG FOR TYP NOTES



**TOILET ROOMS 533 AND 534
DEMO/NEW WORK FLOOR PLAN**
1/4" = 1'-0"

Project Title

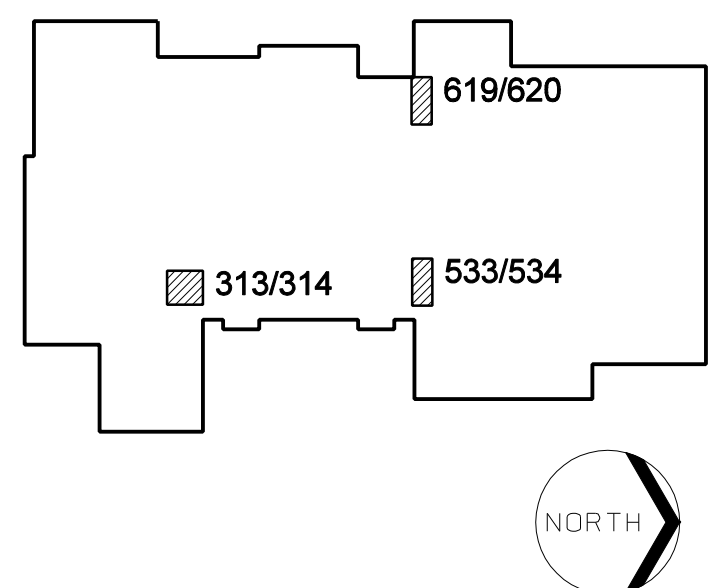


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan



Project Administrator: Seal: K. Delzer

Project Designer: B. Ingham

Project Architect / Engineer: B. Ingham

Drawn By: B. Ingham

C.M. Review: K. Delzer

Approved: K. Delzer

Drawing Scale: As Noted

Issue Date: 03-11-13

Issued for: Quality Management Review

03-15-13 Bids

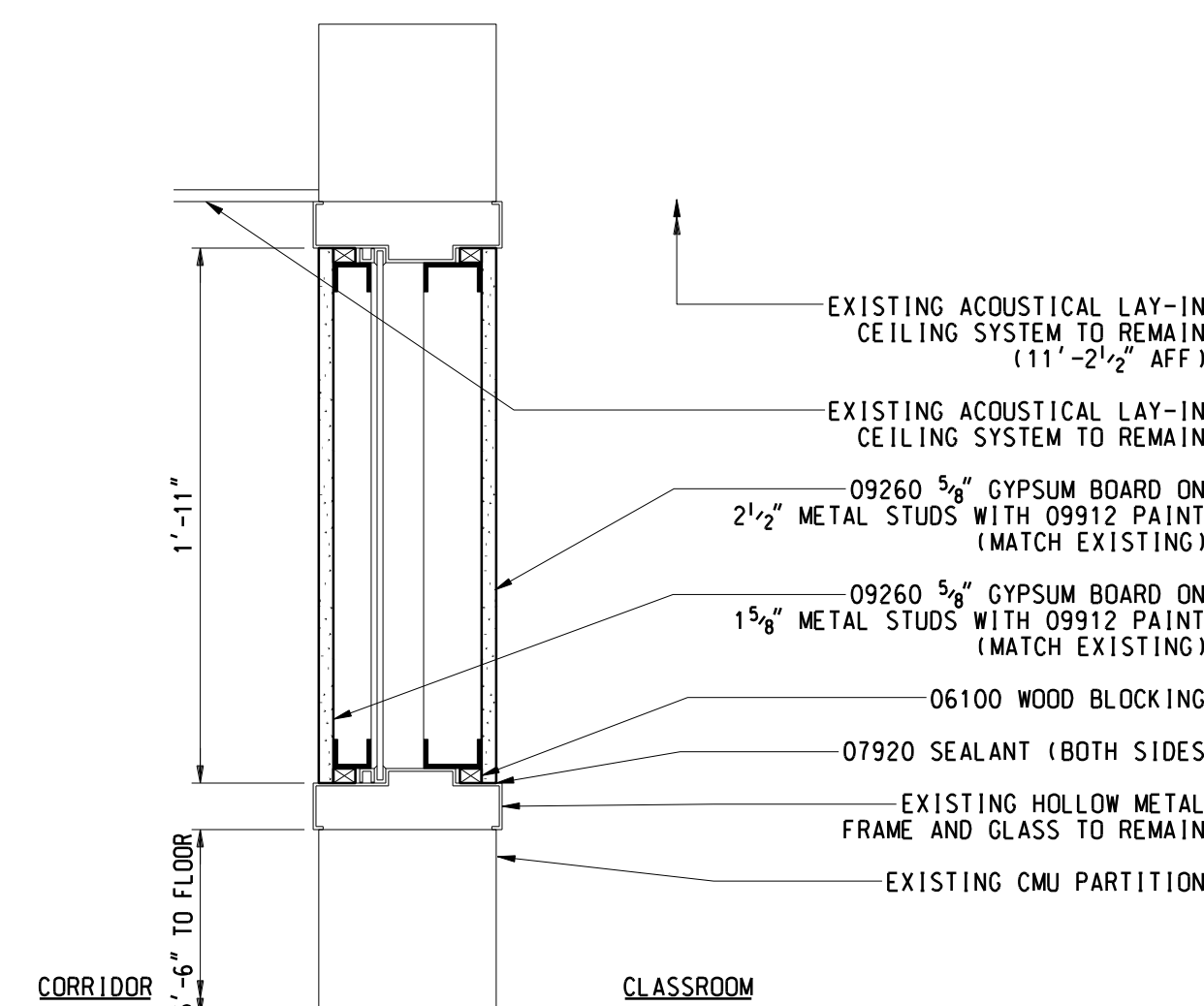
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IDS Drawing Title

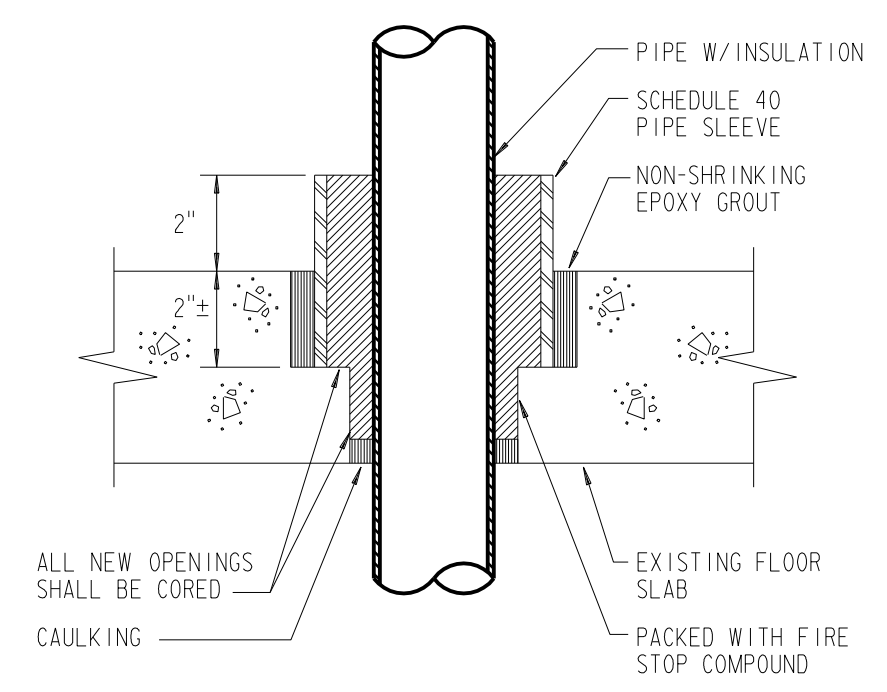
**High School
Toilet Room Upgrades
and Fixture Replacements**

IDS Project Number Drawing Number

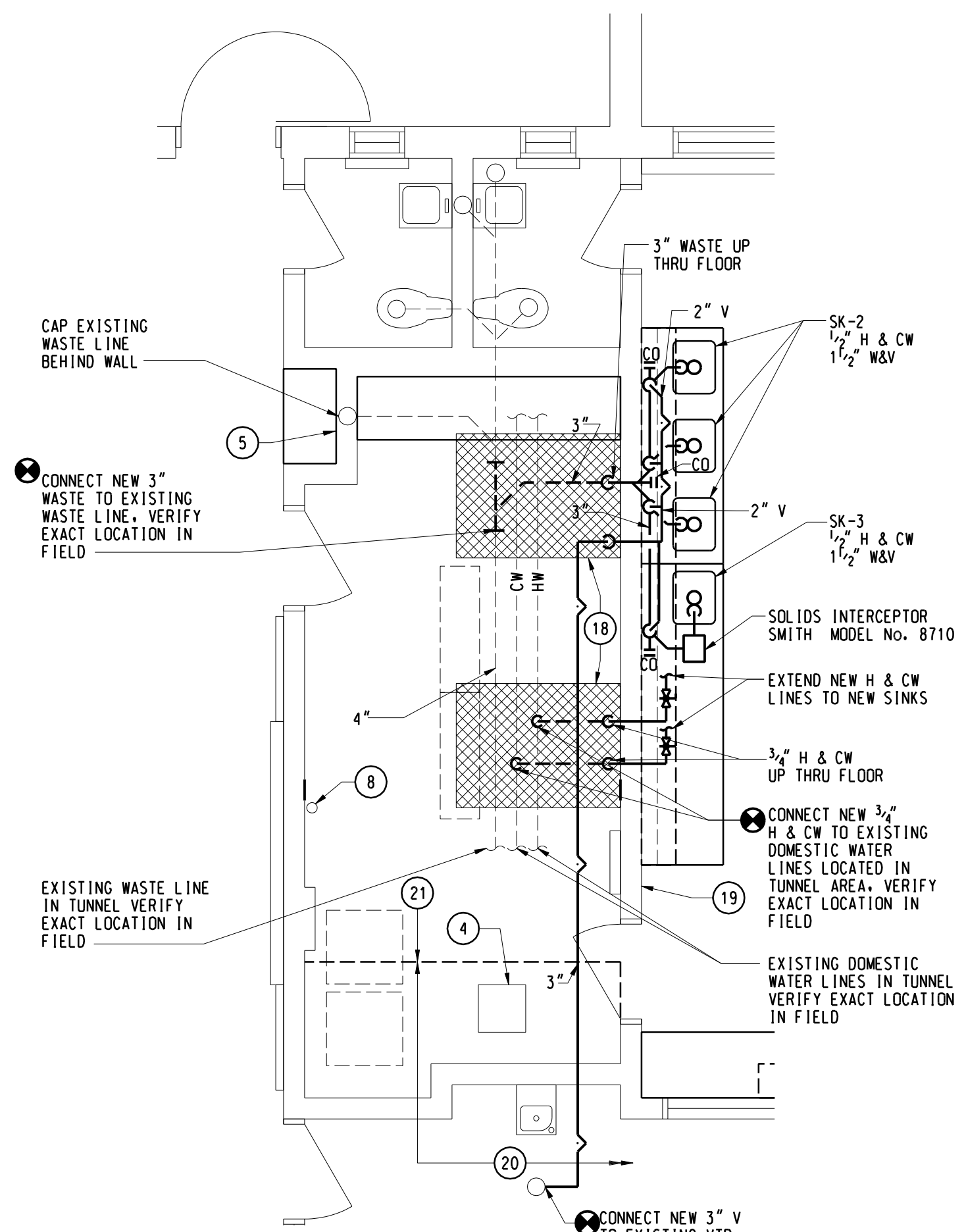
13101-1000 **AM1.1HS**



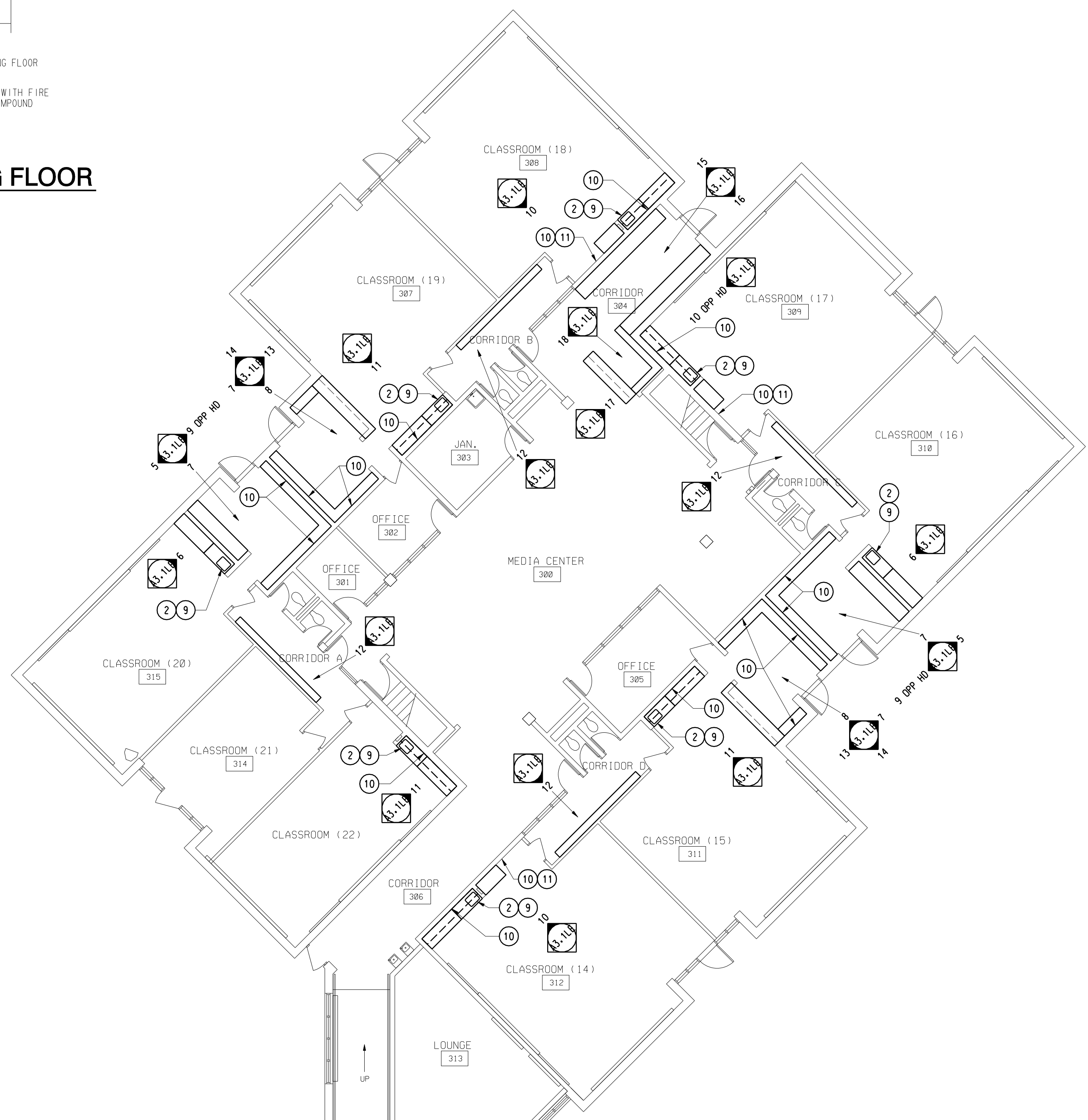
2 SECTION AT EXISTING WINDOW
 AM1.1LE 1 1/2" = 1'-0"



PIPE SLEEVE THRU EXISTING FLOOR
 NO SCALE



1 PLUMBING PLAN
 AM1.1LE 1/4" = 1'-0"



GENERAL MECHANICAL NOTES:

- OBTAIN PLUMBING FAUCETS AND OTHER COMPONENTS THROUGH ONE SOURCE FROM A SINGLE MANUFACTURER.
- COMPLY WITH ADA REQUIREMENTS FOR PLUMBING INSTALLATIONS.
- PROVIDE WATER SUPPLIES THAT ARE CHROME-PLATED COPPER.
- PROVIDE CHROME-PLATED CAST-BRASS TRAP WITH NPS 1 1/2", 0.032 INCH THICK TUBULAR BRASS WASTE TO WALL; AND WALL ESCUTCHEON.
- CONNECT SINK TO EXISTING WATER SUPPLY AND DRAIN LINES. PROVIDE ASSOCIATED HARDWARE AND ACCESSORIES INCLUDING STOPS AND TRAP AS REQUIRED. NOTE: MOUNT SINKS SO THAT FAUCETS AND BUBBLER ARE MOUNTED TO THE SIDE OF THE SINK AS INDICATED.

GENERAL NOTES

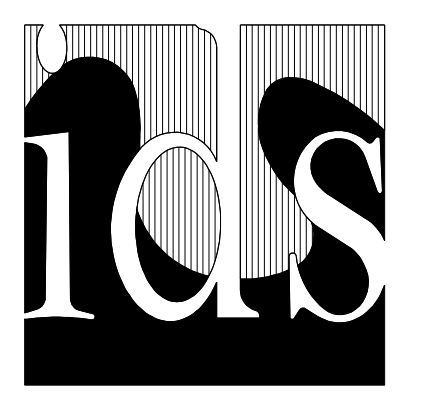
- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.
- CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.
- PROTECT ALL EXISTING FINISHES DURING CONSTRUCTION.
- ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL, AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.
- COORDINATE SCOPE AND EXTENT OF DEMOLITION WORK WITH NEW WORK PLANS AND DETAILS.
- PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND/OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK.
- FILL ALL OPENINGS IN EXISTING WALLS ABOVE CEILINGS THAT ARE THE RESULT OF MECHANICAL OR ELECTRICAL DEMOLITION. OPENINGS IN MASONRY WALLS SHALL BE FILLED WITH MASONRY OF SIMILAR TYPES AND THICKNESSES AS EXISTING. OPENINGS LESS THAN 16 SO INCHES MAY BE GROUT FILLED FLUSH WITH WALL SURFACES. OPENINGS IN OTHER TYPES OF WALL CONSTRUCTION SHALL MATCH EXISTING MATERIALS, FINISHES AND WALL THICKNESSES. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR SCOPE OF WORK.

LEGEND

- NOTE: NOT ALL SYMBOLS MAY BE USED
- EXISTING CONSTRUCTION
 - EXISTING TO BE REMOVED
 - NEW CONSTRUCTION
 - PARTITION TYPE

KEYNOTES

- NOTE: NOT ALL KEYNOTES MAY BE USED
- EXISTING UTILITY BOX TO REMAIN
 - REMOVE SINK WITH BUBBLER AND TRAP AND INSTALL 15000 SK-2 AND SF-2 TO EXISTING UTILITIES
 - REMOVE CMU PARTITION (10'-6" T. VIF)
 - EXISTING FLOOR ACCESS DOOR TO REMAIN
 - REMOVE SINK WITH BUBBLER AND TRAP. CAP HW. CW. WASTE AND VENT INSIDE CMU PARTITION AND PATCH.
 - 15000 SK-3 AND SF-3. CONNECT TO EXISTING HW. CW. WASTE AND VENT IN AREA.
 - 15000 SK-2 AND SF-2. CONNECT TO EXISTING HW. CW. WASTE AND VENT IN AREA.
 - EXISTING RAIN CONDUCTOR TO REMAIN
 - REMOVE BASE CABINETS, COUNTERTOP, SOAP AND PAPER TOWEL DISPENSER
 - REMOVE SHELVES, STANDARDS AND BRACKETS (BY OWNER)
 - PATCH FORMER ANCHOR LOCATIONS AND 0912 PAINT (MATCH EXISTING) TO NEAREST INSIDE CORNER
 - 0912 PAINT (MATCH EXISTING) EXISTING CMU PARTITIONS
 - DISCONNECT AND REMOVE SURFACE MOUNTED DUPLEX RECEPTACLE. CONDUIT AND WIRING BACK TO SOURCE (BY OWNER)
 - EXISTING FINNED TUBE RADIATION TO REMAIN
 - RELOCATE SPEAKER VOLUME CONTROL AND CONDUIT TO FACE OF WALL ABOVE LIGHT SWITCH. EXTEND CONDUIT AND WIRING TO NEW LOCATION (BY OWNER)
 - DISCONNECT AND REMOVE SURFACE MOUNTED OJAD RECEPTACLE. CONDUIT AND WIRING BACK TO SOURCE (BY OWNER)
 - RELOCATE VERTICAL SECTION OF SURFACE MOUNTED RACEWAY TO AVOID INTERFERENCE WITH NEW CASEWORK DOOR SWING (BY OWNER)
 - REMOVE CONCRETE FLOOR SLAB FOR CONNECTION TO EXISTING UNDERGROUND MECHANICAL UTILITIES. REPLACE WITH 03300 CONCRETE FLOOR SLAB. REF DETAIL S/A1.3HS.
 - EXISTING CMU PARTITION ON THICKENED CONC SLAB
 - EXTENT OF EXISTING UTILITY TUNNEL WITH SUPPORTED CONCRETE FLOOR SLAB
 - EXISTING CONCRETE FLOOR SLAB ON GRADE



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Project Title

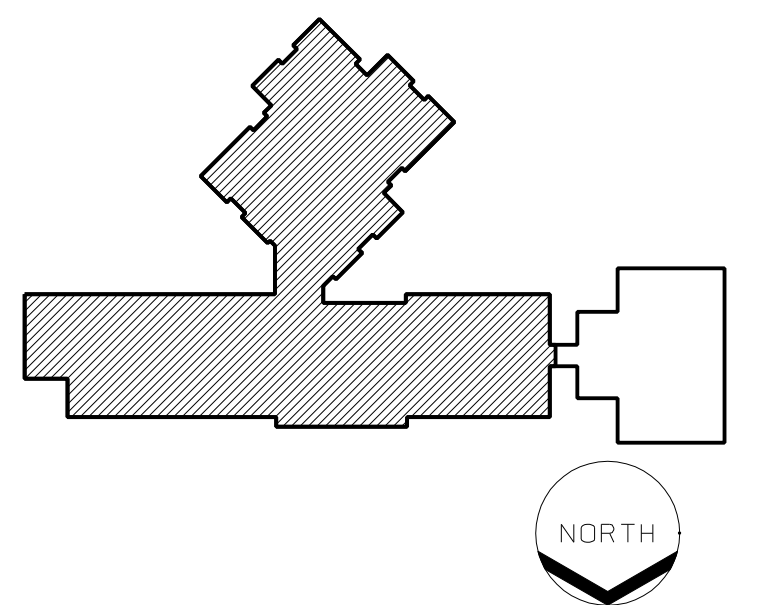


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan



Project Administrator: Seal: K. Delzer

Project Designer: B. Ingham

Project Architect / Engineer: B. Ingham

Drawn By: B. Ingham

Q.M. Review: K. Delzer

Approved: K. Delzer

Drawing Scale: As Noted

Issue Date: Issued for: 03-11-13 Quality Management Review

03-15-13 Bids

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IDS Drawing Title

Linden Elementary Classroom Storage Demolition and New Work Plan

IDS Project Number Drawing Number

13101-1000 **AM1.1LE**

STORAGE DEMOLITION AND NEW WORK PLAN
 3/32" = 1'-0"

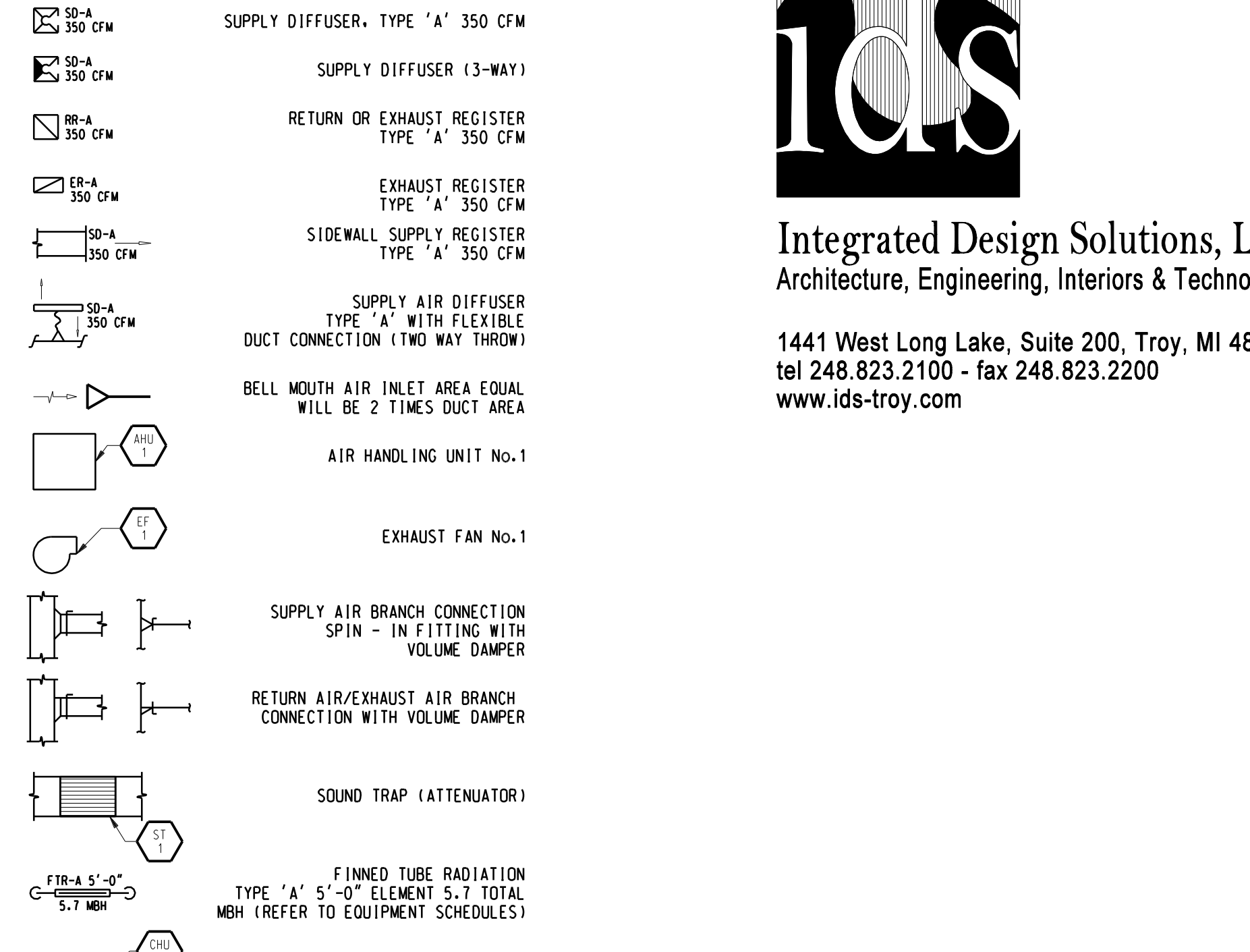
ABBREVIATIONS

A	AAV AIR ADMITTANCE VALVE	AC AIR COMPRESSOR	ACU AIR CONDITIONING UNIT	AD ACCESS DOOR	AE AIR EXTRACTOR	AFF ABOVE FINISHED FLOOR	AFT AIR FLOW TRANSMITTER	AHU AIR HANDLING UNIT	APD AIR PRESSURE DROP	APPROX APPROXIMATELY	ARCH ARCHITECTURAL	ASR AUTOMATIC SPRINKLER RISER
B	BAS BUILDING AUTOMATION SYSTEM	BBD BOILER BLOWDOWN	BF BARRIER FREE	BPFP BOILER FEEDWATER PUMP	BHP BRAKE HORSEPOWER	BP BACKFLOW PREVENTER	BWV BACKWATER VALVE					
C	CAP CAPACITY	CC COOLING COIL	CD COLD DECK	CFH CUBIC FEET PER HOUR	CFM CUBIC FEET PER MINUTE	CI CAST IRON	CLG CEILING	CO CLEANOUT	COND CONDENSATE	CONN CONNECTION	CONT CONTINUATION	CONTR CONTRACTOR
D	DB DRY BULB	DDC DIRECT DIGITAL CONTROL	DEG DEGREES	DN DOWN	D/N DAY/NIGHT	DPR DAMPER	DRT DRIP & TRAP	DTG DRAIN TILE CONNECTION				
E	EA ENTERING AIR TEMPERATURE	EDB EXHAUST DUCT	EF EXHAUST FAN	EHC ELECTRIC HEATING COIL	EIH ELECTRIC INFRARED HEATER	EJ EXPANSION JOINT	EV ELEVATION	ELEC ELECTRICAL	EMCS ENERGY MONITORING AND CONTROL SYSTEM	ENT ENTERING	ER EXHAUST REGISTER	ERC ENERGY RECOVERY COIL
F	ES EMERGENCY SHOWER	ESP EXTERNAL STATIC PRESSURE	ET EXPANSION TANK	EWB ENTERING WET BULB	EWG ELECTRIC WATER COOLER	EWT ENTERING WATER TEMPERATURE	EXH EXHAUST	EX(1) EXISTING	EX(2) EXISTING	EXP EXPANSION	F FAHRENHEIT	FA FACE AREA
G	GA GAGE/GAUGE	GALV GALVANIZED	GPM GALLONS PER MINUTE	GPH GALLONS PER HOUR	GR GRILLE	GV GATE VALVE						
H	HUMD HUMIDIFIER	HB HOSE BIBB	HD HOT DECK	HO HUB OUTLET	HDA HAND-OFF-AUTO	HHP HORSEPOWER	HP STM HIGH PRESSURE STEAM	HV HEATING AND VENTILATION UNIT	HVAC HEATING, VENTILATION & AIR CONDITIONING	HYD HYDRANT	ID INSIDE DIAMETER	IE INVERT ELEVATION
I	INDIRECT WASTE											

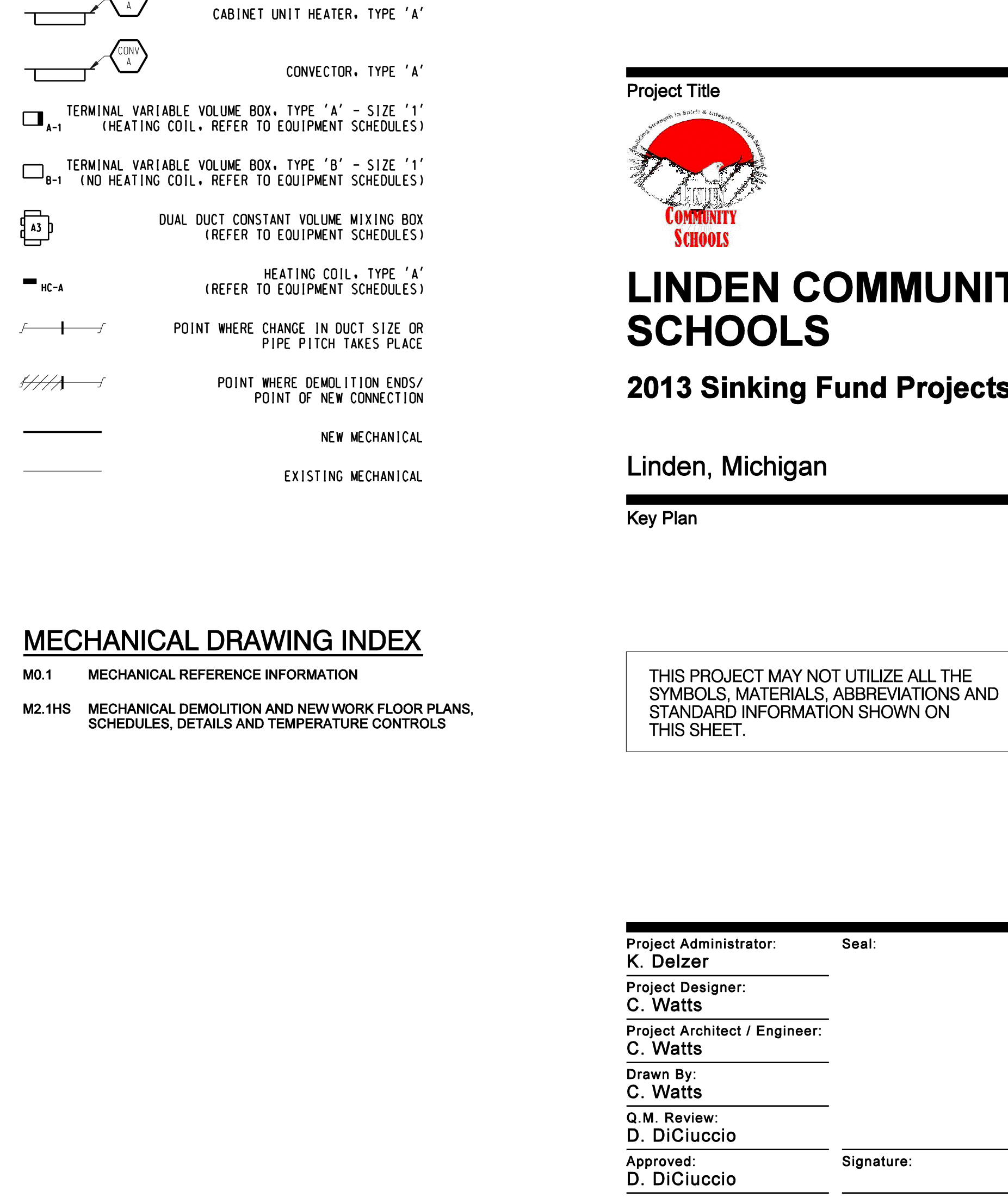
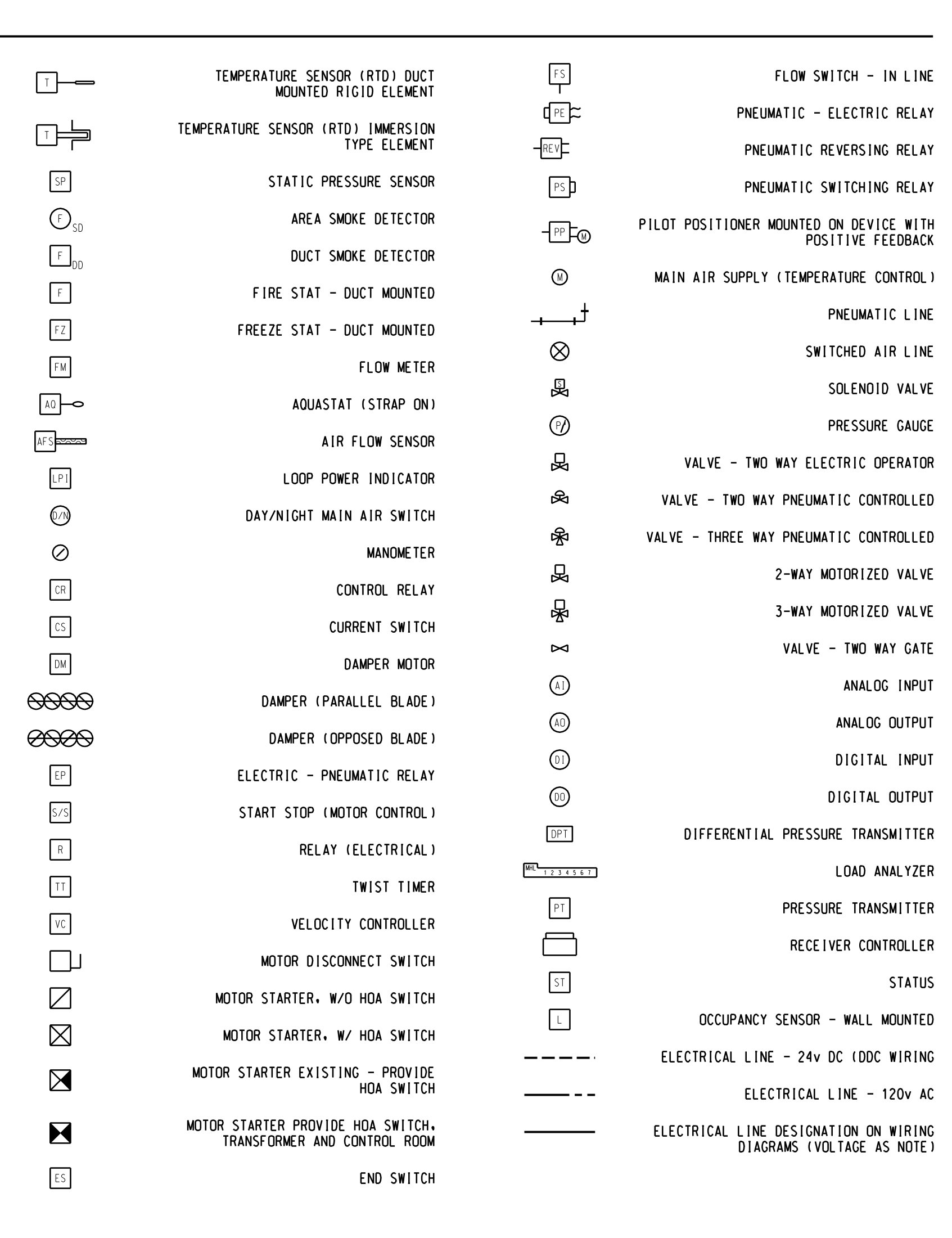
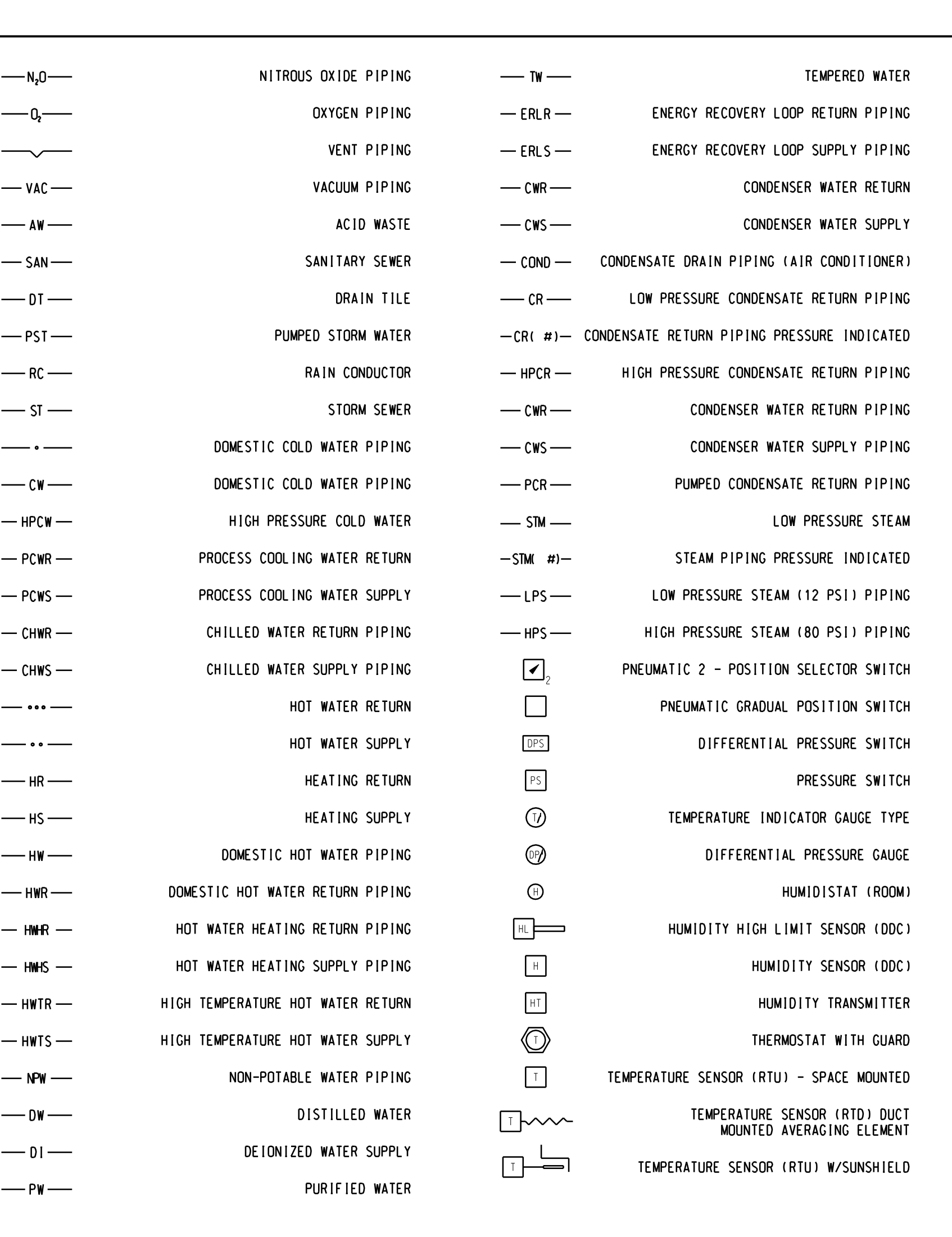
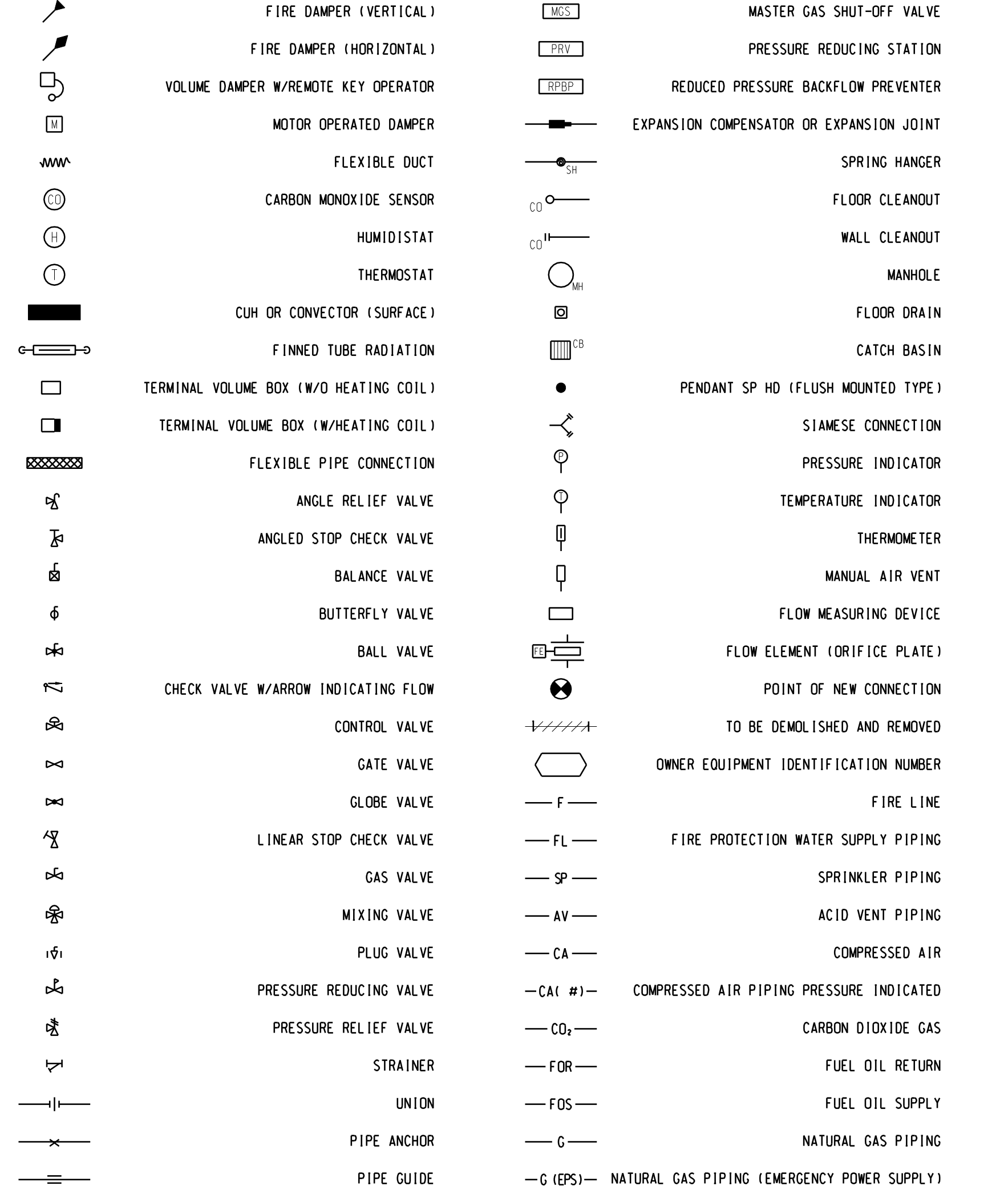
L	LAV LBS/HR	LL LOW LIMIT	LP LIGHTING PANEL	LP STM LOW PRESSURE STEAM	LRA LOCKED ROTOR AMPS	LWT LEAVING WATER TEMPERATURE
M	MA MIXED AIR	MANV MANUAL AIR VENT	MAX MAXIMUM	MBH THOUSAND BRITISH THERMAL UNITS PER HOUR	MFC MOTOR CONTROL CENTER	MH MAN HOLE
N	NCR NORMALLY CLOSED	NCR NORMALLY OPEN	NCR NOT IN CONTRACT	NCR NORMALLY OPEN	NCR NUMBER	NCR NOT TO SCALE
O	OA OUTSIDE AIR	OD OUTSIDE DIAMETER	OE OPEN ENDED DUCT	OS OUTSIDE SCREW AND YOKER	OV OUTLET VELOCITY	
P	P PUMP	PAC PIPE ANCHOR	PAC PACKAGE AIR CONDITIONING UNIT	PCR PUMPED CONDENSATE RETURN	PCD PRESSURE DROP	PE PIPE GUIDE
R	RA RETURN AIR	RAD RADIATOR	RAD RADIANT CEILING PANEL	RG RETURN GRILLE	RH RELATIVE HUMIDITY	RF RETURN FAN
S	SA SUPPLY AIR	SAN SANITARY	SAT SATURATED	SC STEAM COIL	SD SUPPLY DIFFUSER	SF SUPPLY FAN
T	TD TRENCH DRAIN	TV TURNING VANES	TW TEMPERED WATER			
U	UH UNIT HEATER	UL UNDERWRITERS LABORATORY	UR URINAL	UV UNIT VENTILATOR		
V	V VENT	VAV VARIABLE AIR VOLUME	VD VOLUME DAMPER	VI VIBRATION ISOLATOR	VV VENT STACK	VTR VENT THRU ROOF
W	W WASTE	WV WASTE AND VENT	WB WET BUILD	WC WATER CLOSET	WCD WALL CLEANOUT	WG WATER GAUGE
X	XH WALL HYDRANT (FREEZE PROTECTED)	WS WASTE STACK				

F	FCD FLOOR CLEANOUT	FDD FLOOR DRAIN	FDC FIRE DEPARTMENT CONNECTION	FDM FIRE DAMPER	FHY FIRE HYDRANT	FHC FIRE HOSE CABINET	FHV FIRE HOSE VALVE	FL FIRE LINE	FLL FULL LOAD AMPS	FMS FLOW MEASUREMENT STATION	FPM FEET PER MINUTE	FT FOOT/FEET	FAT FLOT AND THERMOSTATIC STEAM TRAP	FTR FINED TUBE RADIATION	FVC FIRE VALVE CABINET
G	GA GAGE/GAUGE	GALV GALVANIZED	GPM GALLONS PER MINUTE	GPH GALLONS PER HOUR	GR GRILLE	GV GATE VALVE									
H	HUMD HUMIDIFIER	HB HOSE BIBB	HD HOT DECK	HO HUB OUTLET	HDA HAND-OFF-AUTO	HHP HORSEPOWER	HP STM HIGH PRESSURE STEAM	HV HEATING AND VENTILATION UNIT	HVAC HEATING, VENTILATION & AIR CONDITIONING	HYD HYDRANT	ID INSIDE DIAMETER	IE INVERT ELEVATION	INDIRECT WASTE		
L	LAV LBS/HR	LL LOW LIMIT	LP LIGHTING PANEL	LP STM LOW PRESSURE STEAM	LRA LOCKED ROTOR AMPS	LWT LEAVING WATER TEMPERATURE									
M	MA MIXED AIR	MANV MANUAL AIR VENT	MAX MAXIMUM	MBH THOUSAND BRITISH THERMAL UNITS PER HOUR	MFC MOTOR CONTROL CENTER	MH MAN HOLE									
N	NCR NORMALLY CLOSED	NCR NORMALLY OPEN	NCR NOT IN CONTRACT	NCR NORMALLY OPEN	NCR NUMBER	NCR NOT TO SCALE									
O	OA OUTSIDE AIR	OD OUTSIDE DIAMETER	OE OPEN ENDED DUCT	OS OUTSIDE SCREW AND YOKER	OV OUTLET VELOCITY										
P	P PUMP	PAC PIPE ANCHOR	PAC PACKAGE AIR CONDITIONING UNIT	PCR PUMPED CONDENSATE RETURN	PCD PRESSURE DROP	PE PIPE GUIDE									
R	RA RETURN AIR	RAD RADIATOR	RAD RADIANT CEILING PANEL	RG RETURN GRILLE	RH RELATIVE HUMIDITY	RF RETURN FAN									
S	SA SUPPLY AIR	SAN SANITARY	SAT SATURATED	SC STEAM COIL	SD SUPPLY DIFFUSER	SF SUPPLY FAN									
T	TD TRENCH DRAIN	TV TURNING VANES	TW TEMPERED WATER												
U	UH UNIT HEATER	UL UNDERWRITERS LABORATORY	UR URINAL	UV UNIT VENTILATOR											
V	V VENT	VAV VARIABLE AIR VOLUME	VD VOLUME DAMPER	VI VIBRATION ISOLATOR	VV VENT STACK	VTR VENT THRU ROOF									
W	W WASTE	WV WASTE AND VENT	WB WET BUILD	WC WATER CLOSET	WCD WALL CLEANOUT	WG WATER GAUGE									
X	XH WALL HYDRANT (FREEZE PROTECTED)	WS WASTE STACK													

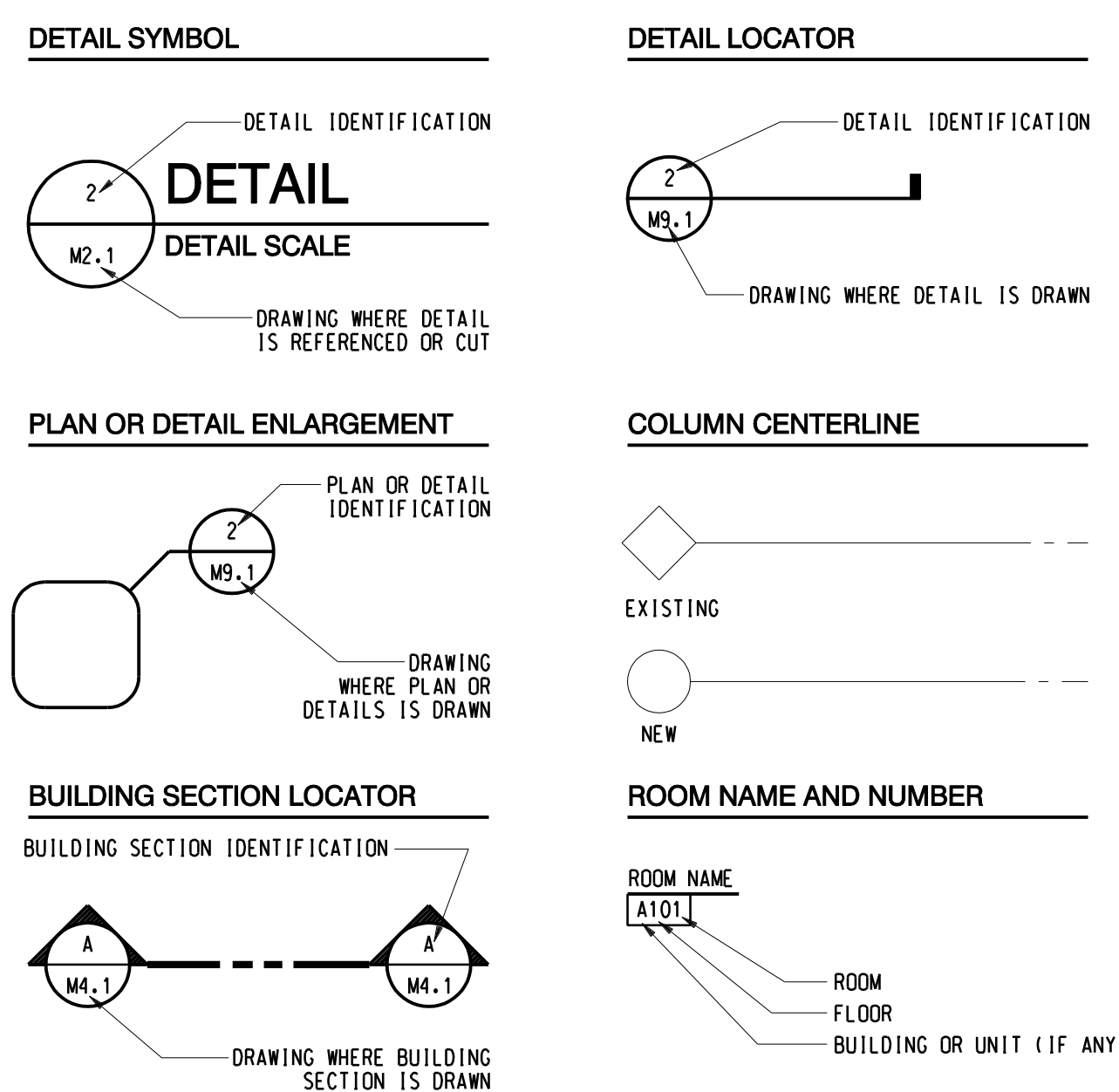
NOTATION METHODS



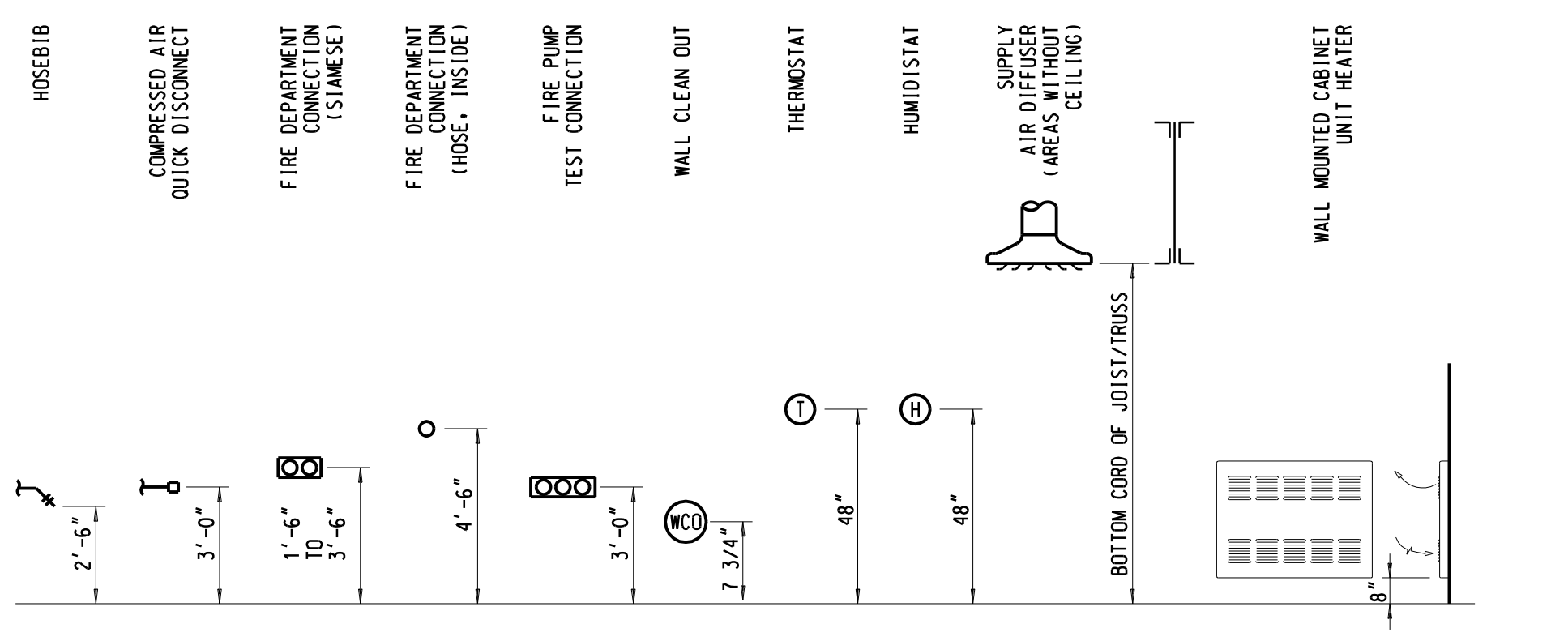
SYMBOLS



SYMBOL LEGEND



MOUNTING HEIGHTS

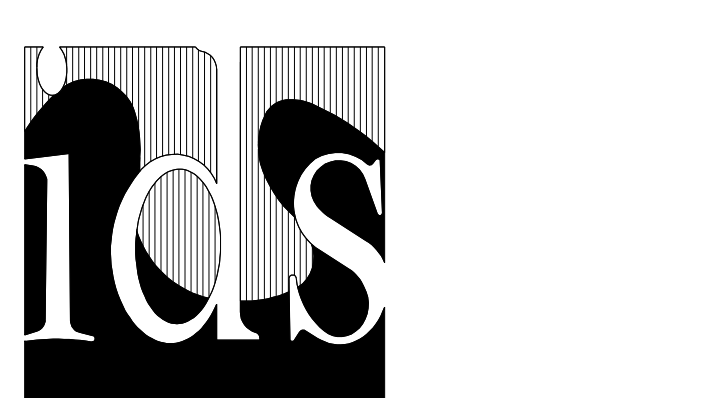


GENERAL NOTES

- VERIFY ALL CONDITIONS IN FIELD BEFORE START OF CONSTRUCTION. NOTIFY ARCHITECT/ENGINEER OF DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS.
- COORDINATE ANY REQUIRED SHUTDOWN OF SERVICES OR EQUIPMENT WITH OWNER'S REPRESENTATIVE.
- PROVIDE ALL MISC STEEL AND ITEMS REQUIRED FOR THE PROPER INSTALLATION OF ALL PIPE, SHEET METAL AND EQUIPMENT.
- COORDINATE FLOOR, WALL & ROOF PENETRATIONS ETC. WITH ARCH TRADES.
- INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE IN AREAS WITHOUT A CEILING UNLESS INDICATED OTHERWISE.
- DUCT CONNECTED TO EQUIPMENT SHALL EQUAL EQUIPMENT CONNECTION SIZE UNLESS NOTED OTHERWISE.
- MAXIMUM LENGTH ON FLEXIBLE DUCT SHALL BE 5'-0".
- REFER TO ARCH REFLECTED CEILING PLANS FOR EXACT DIFFUSER LOCATIONS IN AREAS WITH A CEILING.
- ALL HOT WATER FIN TUBE RADIATION COVERS SHALL RUN WALL TO WALL (OR COLUMN).
- DO NOT RUN ANY PIPING OR DUCTWORK INTO THE ELECTRICAL ROOM THAT IS NOT DEDICATED TO SERVE THAT ROOM.

TC GENERAL NOTES

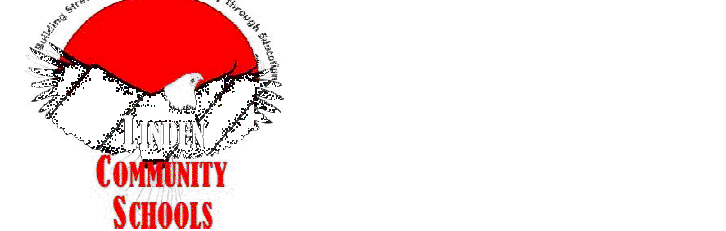
- GENERAL NOTES SHALL BE APPLICABLE FOR ALL CONTROL DRAWINGS.
- WIRING AND SYSTEM CONTROL VOLTAGES SHALL BE IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
- DDC WIRING SHALL BE TERMINATED AT DDC SENSORS, RELAYS, TRANSDUCERS, SWITCHES, AND CONTROL PANELS. NO INTERMEDIATE STOPS OR TERMINATIONS AT ANY OTHER TERMINAL STRIP ARE ACCEPTABLE.
- SPLICING OF WIRES FOR OPS AND ELECTRICAL MOTOR STARTER STATUS SHALL TAKE PLACE AT THE OPS, MOTOR STARTER, OR DDC PANEL.
- IT IS THE TEMPERATURE CONTROL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH EQUIPMENT SUPPLIERS SUCH AS CHILLERS, EVAPORATIVE CONDENSERS AND PACKAGED A/C UNITS FOR SPECIFIC WIRING REQUIREMENTS. ALL WIRING SHALL BE PER EQUIPMENT MANUFACTURER'S RECOMMENDATION.
- ELECTRICAL POWER REQUIRED FOR CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE FROM DESIGNATED CIRCUITS WITHIN NEAREST ELECTRICAL POWER DISTRIBUTION PANEL.
- WIRING SHALL BE INSTALLED IN RACEWAY.
- ELECTRICAL WORK SHALL CONFORM WITH THE MOST RECENT VERSION OF THE NATIONAL ELECTRICAL CODE AND SECTION 16000 OF THIS PROJECT.



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Project Title



LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan

MECHANICAL DRAWING INDEX

M0.1	MECHANICAL REFERENCE INFORMATION
M2.1HS	MECHANICAL DEMOLITION AND NEW WORK FLOOR PLANS, SCHEDULES, DETAILS AND TEMPERATURE CONTROLS

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION SHOWN ON THIS SHEET.

Project Administrator:	Seal:
K. Delzer	
Project Designer:	
C. Watts	
Project Architect / Engineer:	
C. Watts	
Drawn By:	
C. Watts	
Q.M. Review:	
D. DiCiccio	
Approved:	Signature:
D. DiCiccio	
Drawing Scale:	Date:
None	

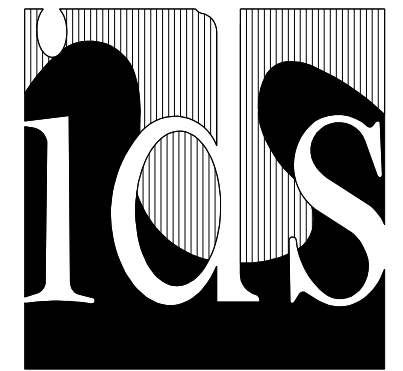
Issue Date:	Issued for:
03-11-13	Quality Management Review
03-14-13	Plan Review
03-15-13	Bids

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IDS Drawing Title

Mechanical Reference Information

IDS Project Number Drawing Number

13101-1000 M0.1



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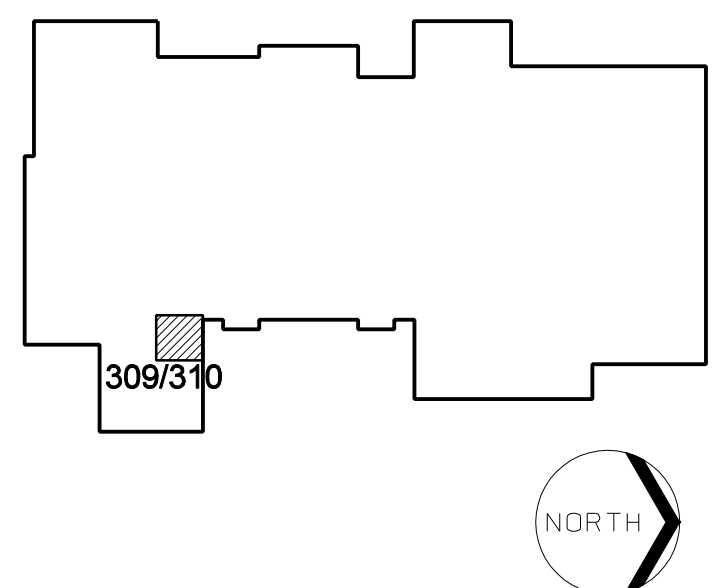


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan



Project Administrator: K. Delzer
Project Designer: C. Watts
Project Architect / Engineer: C. Watts
Drawn By: C. Watts
G.M. Review: D. DiCiccio
Approved: D. DiCiccio
Drawing Scale: As Noted

Issue Date: 03-11-13
Quality Management Review: 03-14-13
Plan Review: 03-15-13
Bids:

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IDS Drawing Title

Mechanical Demolition and New Work Floor Plans, Schedules, Details and Temperature Controls

IDS Project Number Drawing Number

13101-1000 **M2.1HS**

EXHAUST FAN SCHEDULE															
MARK	AREA SERVED	TYPE	C.F.M.	S.P. IN. W.G.	FAN R.P.M.	T.I.P. SPD. F.P.M.	MAX. SONES	MOTOR				TYPE DRIVE	CONTROLLED BY	"GREENHECK" MODEL No.	REMARKS
								BHP	HP	VOLTS	PH.				
EF-1	BATH 371	IN LINE	150	.5	905	1599	2.2	---	83 WATTS	115	1	DIRECT	SWITCH/WITH DELAY	"GREENHECK" SP-A190	STAINLESS STEEL GRILLE, CEILING RADIATION DAMPER ISOLATION KIT AND NEMA 1 DISCONNECT SWITCH

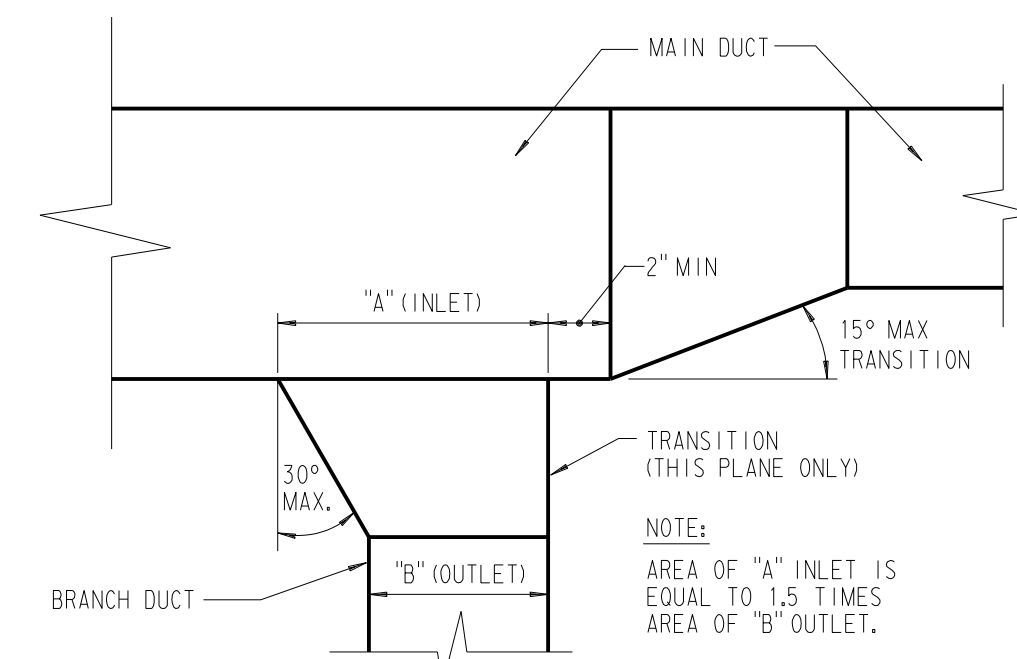
NOTES:
1. PROVIDE EF-2 WITH SOLID STATE SPEED CONTROL - SWSSC.

HOT WATER FINNED RADIATION SCHEDULE										
MARK	BTU PER LIN. FT.	ENCLOSURE DIM (IN)		ENCLOSURE TYPE	ELEMENT DIM (IN)			No. OF TIERS	"STERLING" MODEL No.	REMARKS
		HEIGHT	DEPTH		TUBE	FIN W	FIN H			
FTR-A	815	8	3 1/8	JVK-SB	3/4	2 1/4	2 1/2	1	R02	PROVIDE WITH END CAPS

NOTES:
1. 200°F AVERAGE WATER TEMPERATURE.
2. 65°F ENTERING AIR TEMPERATURE UNLESS NOTED.
3. FTR IS WALL TO WALL PROVIDE ALL ACCESSORIES NEEDED FOR A FINISHED LOOK.

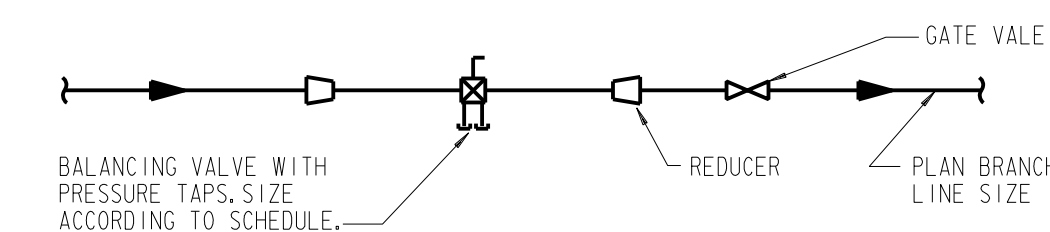
SUPPLY DUFFUSER SCHEDULE		
CFM RANGE FOR DOWN TYPE DUFFUSERS	NECK SIZE FOR SD-A AND SD-B	
	ROUND	SQUARE
0-200	6"	-
201-350	8"	-
351-500	10"	-
501-700	12"	-
701-900	14"	-

GRILLE, REGISTER AND DIFFUSER SCHEDULE								
MARK	CORE STYLE	BORDER FRAME TYPE	MODULE SIZE	FINISH	ACCESSORY	CONSTRUCTION	"PRICE" MODEL No.	REMARKS
SD-A	SQUARE PLAQUE	LAY-IN	24"x24"	WHITE	-	STEEL	SPD	SURFACE MOUNT SQUARE PLAQUE DIFFUSERS IN AREAS WITH HARD CEILING
SD-B	SQUARE PLAQUE	LAY-IN	24"x24"	WHITE	-	STEEL	VARIABLE VPD-HC	PROVIDE DIFFUSER WITH PRESSURE RELIEF COLLAR
RG-A	EGGCRATE	LAY-IN	24"x24" / 24"x12"	WHITE	-	ALUMINUM	80	-
RG-A	EGGCRATE	LAY-IN	12"x12"	WHITE	-	ALUMINUM	80	-



TYPICAL DUCT CONNECTION DETAIL
(LOW PRESSURE DUCTWORK)

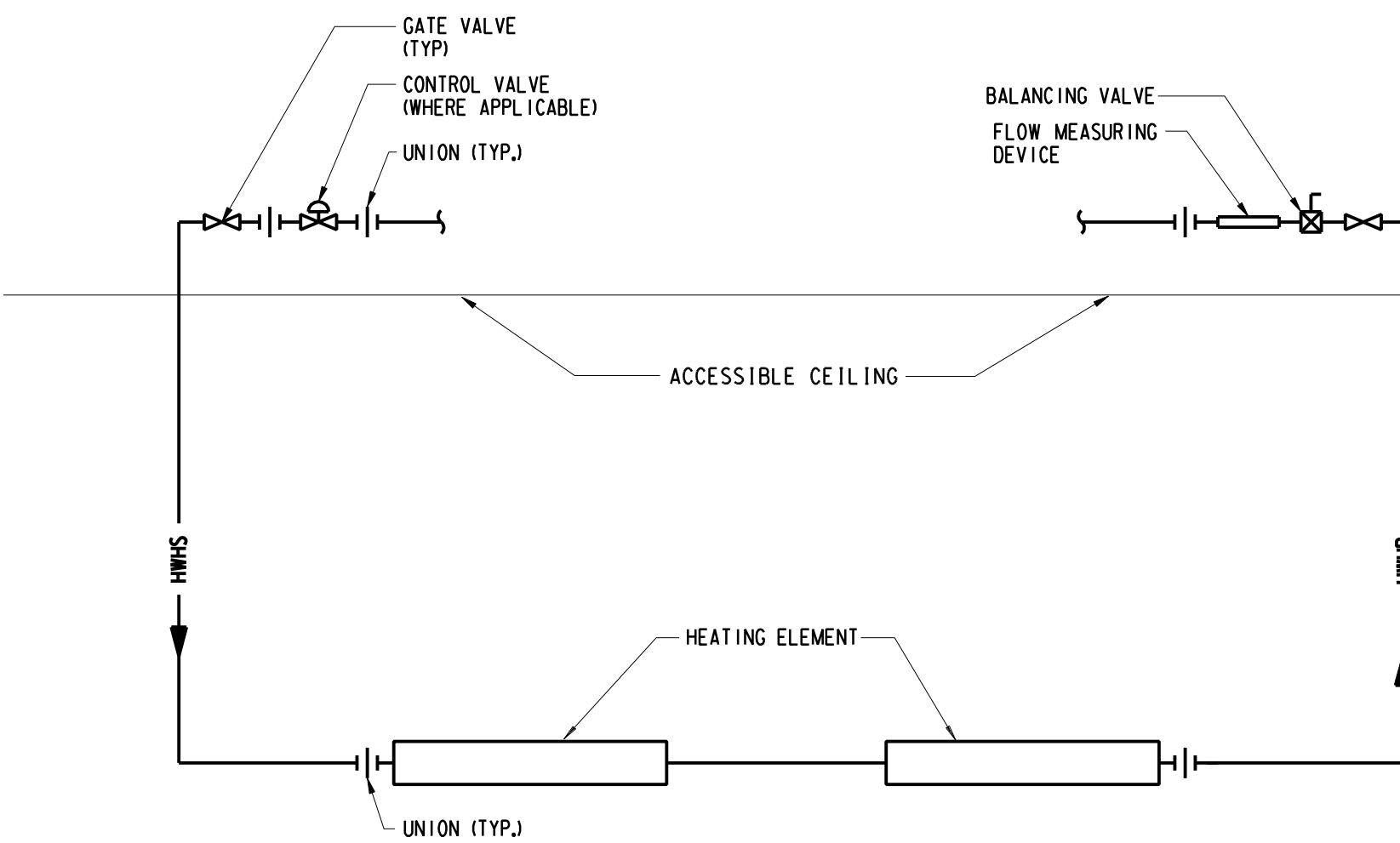
VALVE SIZING SCHEDULE	
GPM	VALVE SIZE
0.5 - 6.0	1/2"
6.1 - 11.0	3/4"
11.1 - 17.0	1"
17.1 - 30.0	1 1/2"
30.1 - 40.0	1 1/2"
40.1 - 75.0	2"
75.1 - 110	2 1/2"
110.1 - 150	3"



WATER FLOW MEASURING DEVICE FOR VALVE SIZE UP TO 3 INCH

TYPICAL FINNED TUBE RADIATION CONTROL DIAGRAM

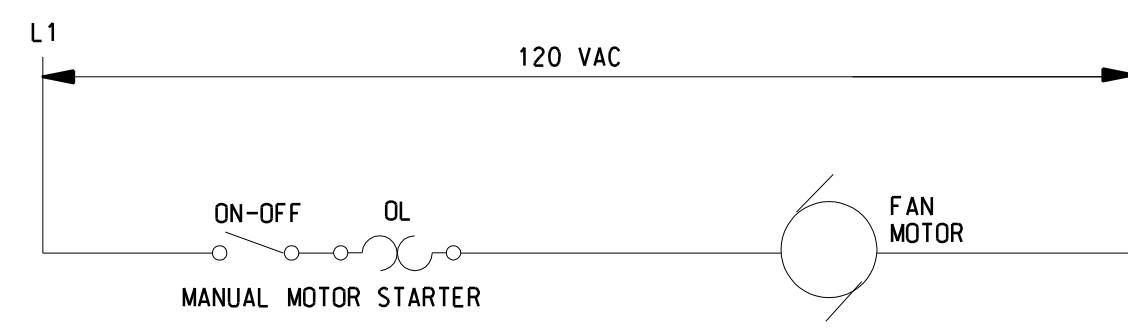
SEQUENCE OF OPERATION:
1. ELECTRIC SPACE THERMOSTAT SHALL MODULATE HHWS CONTROL VALVE TO MAINTAIN SPACE TEMPERATURE SETTING.



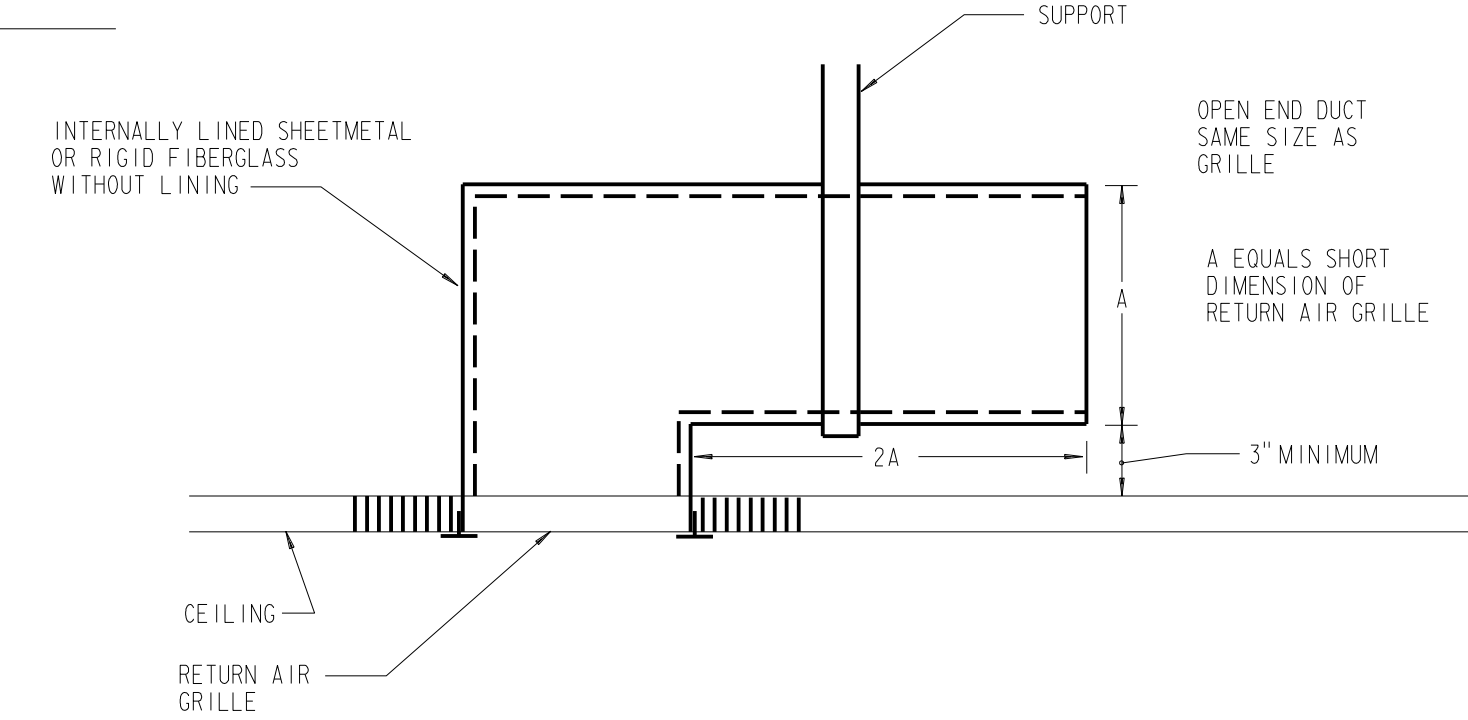
DOWNFIED FINNED TUBE RADIATION PIPING DIAGRAM

EXHAUST FAN EF-1 CONTROL DIAGRAM

SEQUENCE OF OPERATION:
1. THE EXHAUST FAN IS MANUALLY STARTED AND STOPPED AT THE SPACE MOUNTED MOTOR STARTER.

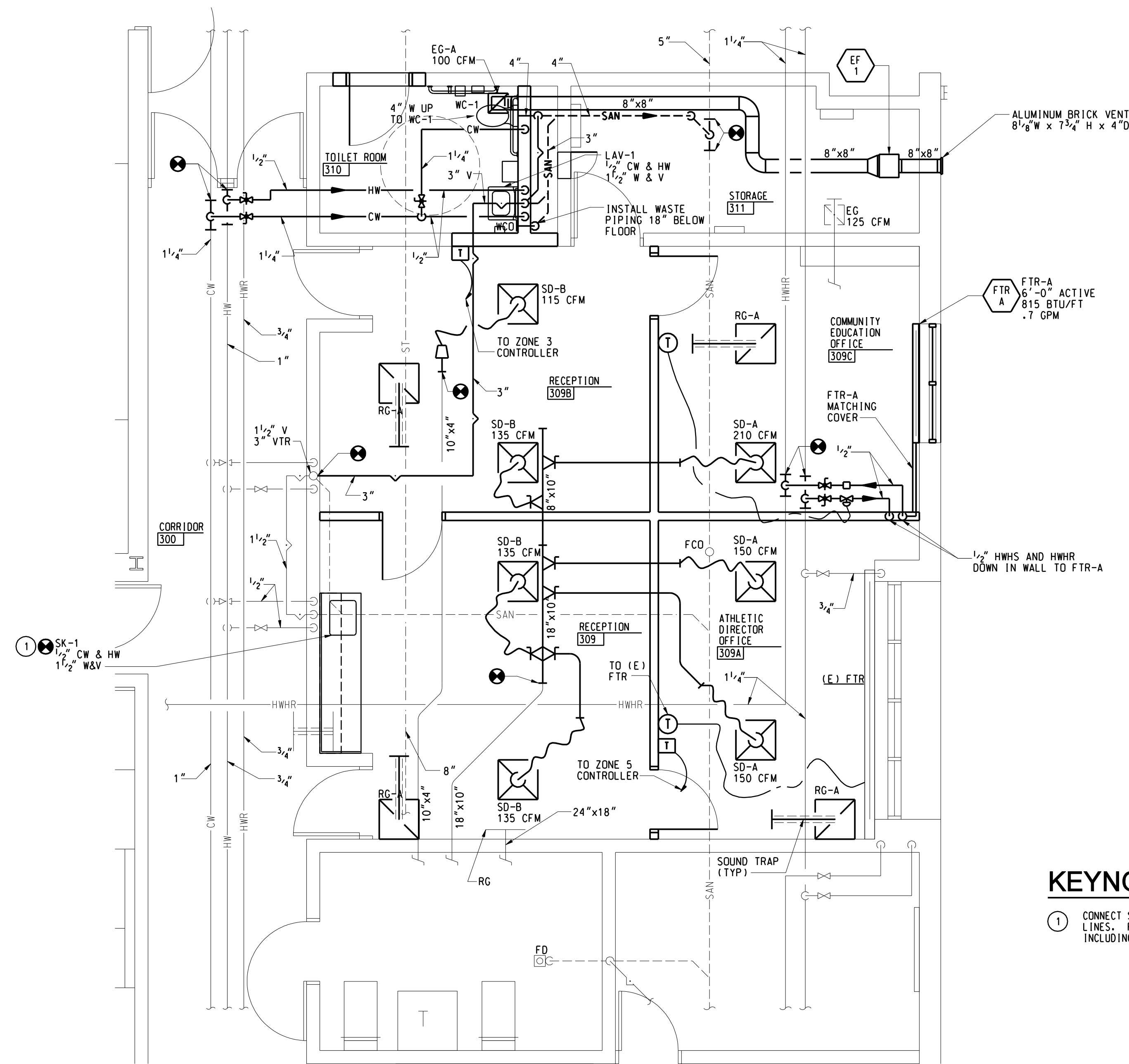


EXHAUST FAN EF-1 MOTOR STARTER WIRING DETAIL



TYPICAL CEILING RETURN AIR GRILLE SOUND TRAP

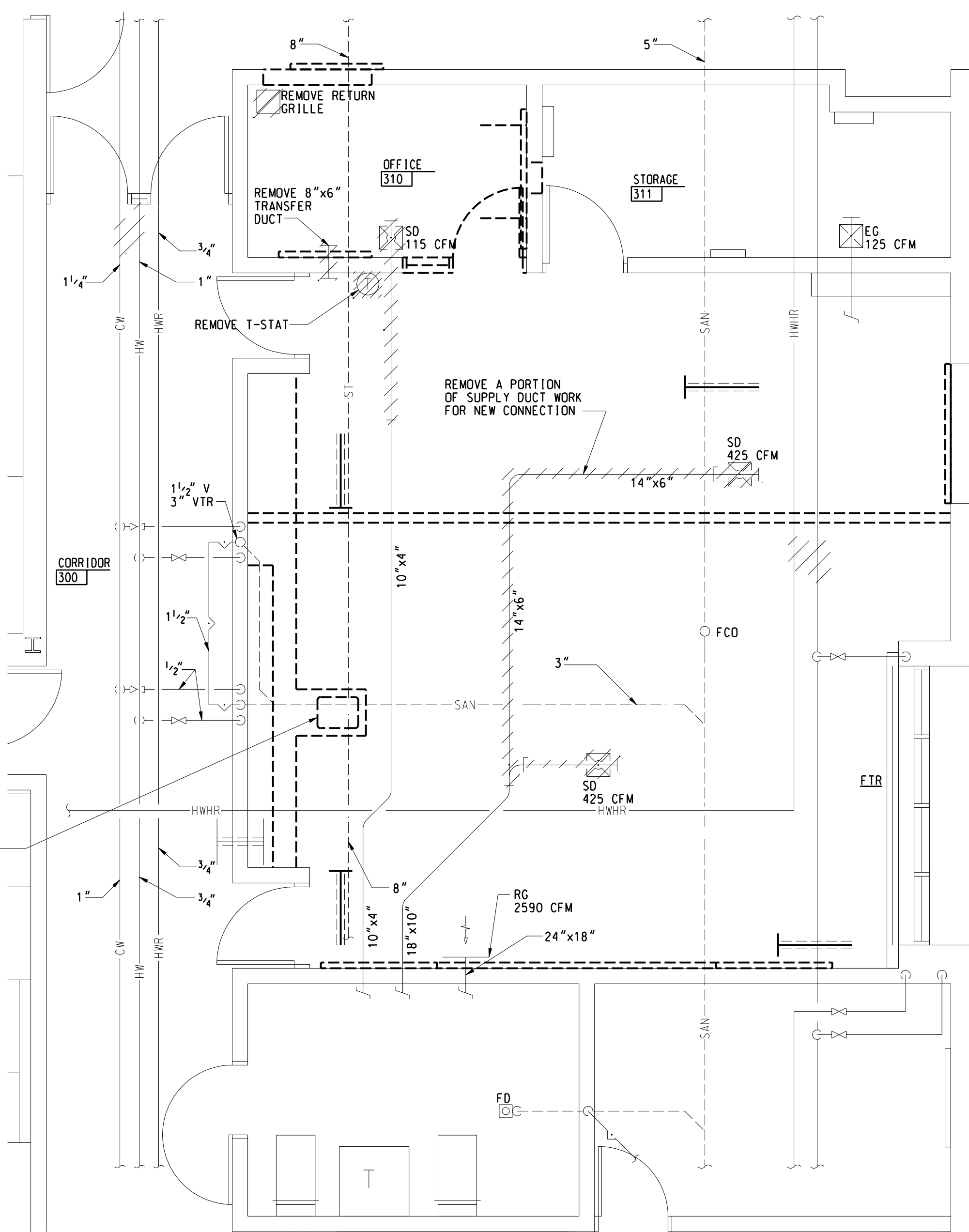
NO SCALE
NOTE:
REFER TO PLANS FOR LOCATION.



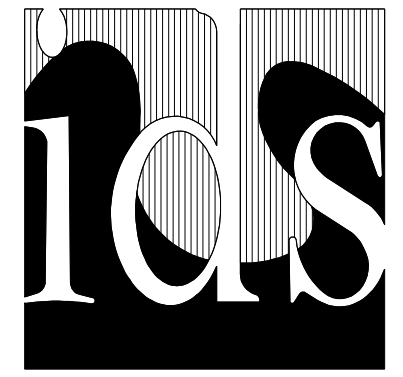
NEW WORK FLOOR PLAN
1/4" = 1'-0"

KEYNOTES

1. CONNECT SINK TO EXISTING WATER SUPPLY AND DRAIN LINES. PROVIDE ASSOCIATED HARDWARE AND ACCESSORIES INCLUDING STOPS AND TRAP AS REQUIRED.



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



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EXHAUST FAN SCHEDULE															
MARK	AREA SERVED	TYPE	C.F.M.	S.P. IN W.G.	FAN R.P.M.	TIP SPD. F.P.M.	MAX. SONES	MOTOR				TYPE DRIVE	CONTROLLED BY	"GREENHECK" MODEL No.	REMARKS
								BHP	HP	VOLTS	PH.				
EF-1	BATH 371	INLINE	150	.5	905	1599	2.2	---	83 WATTS	115	1	DIRECT	SWITCH/WITH DELAY	"GREENHECK" SP-A190	STAINLESS STEEL GRILLE, CEILING RADIATION DAMPER ISOLATION KIT AND NEMA 1 DISCONNECT SWITCH

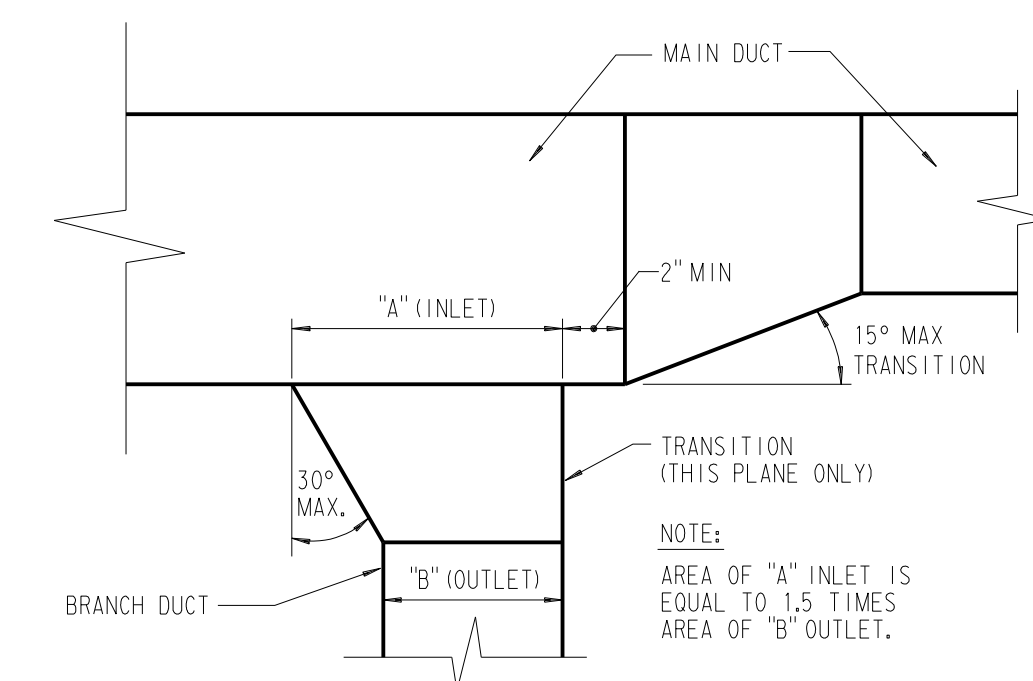
NOTES:
1. PROVIDE EF-2 WITH SOLID STATE SPEED CONTROL - 5WSSC.

HOT WATER FINNED RADIATION SCHEDULE										
MARK	BTU PER LIN FT	ENCLOSURE DIM (IN)		ENCLOSURE TYPE	ELEMENT DIM (IN)			No. OF TIERS	"STERLING" MODEL No.	REMARKS
		HEIGHT	DEPTH		TUBE	FIN W	FIN H			
FTR-A	815	8	3 3/4	JVK-58	3/4	2 1/4	2 1/2	1	R02	PROVIDE WITH END CAPS

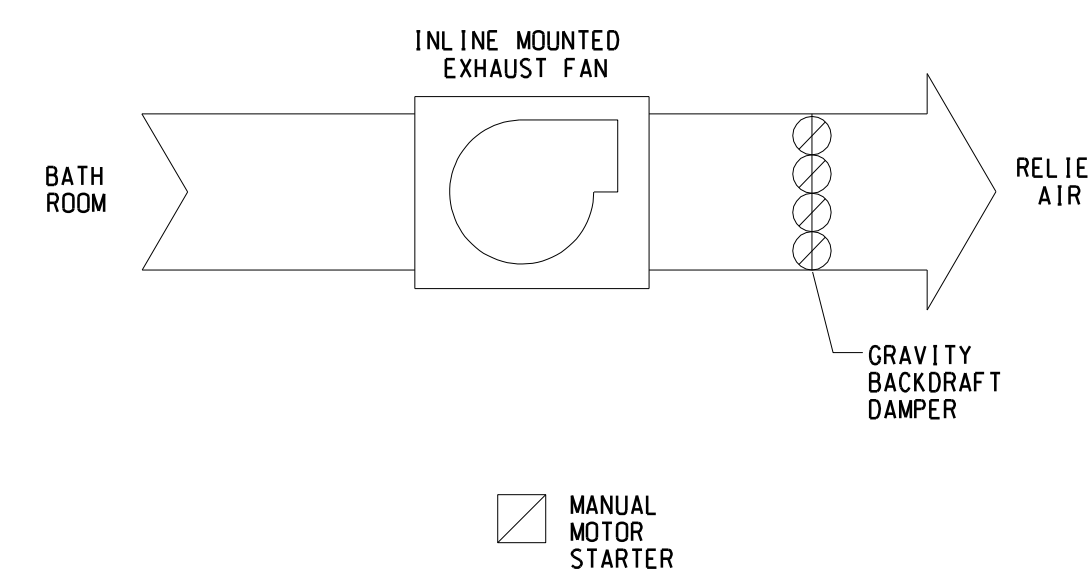
NOTES:
1. 200°F AVERAGE WATER TEMPERATURE.
2. 65°F ENTERING AIR TEMPERATURE UNLESS NOTED.
3. FTR IS WALL TO WALL PROVIDE ALL ACCESSORIES NEEDED FOR A FINISHED LOOK.

SUPPLY DUFFUSER SCHEDULE		
CFM RANGE FOR DMN1 TYPE DUFFUSERS	NECK SIZE FOR SD-A AND SD-B	
	ROUND	SQUARE
0-200	6"	-
201-350	8"	-
351-500	10"	-
501-700	12"	-
701-900	14"	-

GRILLE, REGISTER AND DIFFUSER SCHEDULE								
MARK	CORE STYLE	BORDER FRAME TYPE	MODULE SIZE	FINISH	ACCESSORY	CONSTRUCTION	"PRICE" MODEL No.	REMARKS
SD-A	SQUARE PLAQUE	LAY-IN	24"x24"	WHITE	-	STEEL	SPD	SURFACE MOUNT SQUARE PLAQUE DIFFUSERS IN AREAS WITH HARD CEILING
SD-B	SQUARE PLAQUE	LAY-IN	24"x24"	WHITE	-	STEEL	VARIABLE VPD-HC	PROVIDE DIFFUSER WITH PRESSURE RELIEF COLLAR
RG-A	EGGCRATE	LAY-IN	24"x24" 24"x12"	WHITE	-	ALUMINUM	80	-
RG-A	EGGCRATE	LAY-IN	12"x12"	WHITE	-	ALUMINUM	80	-

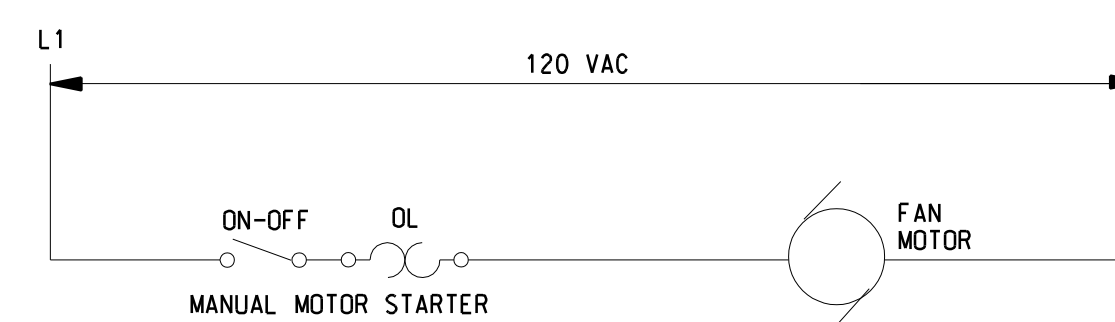


TYPICAL DUCT CONNECTION DETAIL
(LOW PRESSURE DUCTWORK)

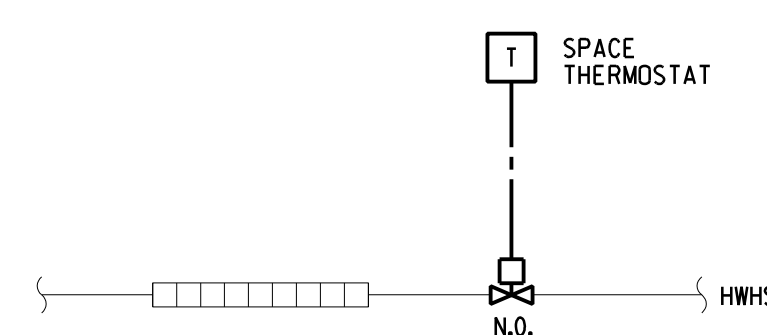


EXHAUST FAN EF-2 CONTROL DIAGRAM

SEQUENCE OF OPERATION:
1. THE EXHAUST FAN IS MANUALLY STARTED AND STOPPED AT THE SPACE MOUNTED MOTOR STARTER.

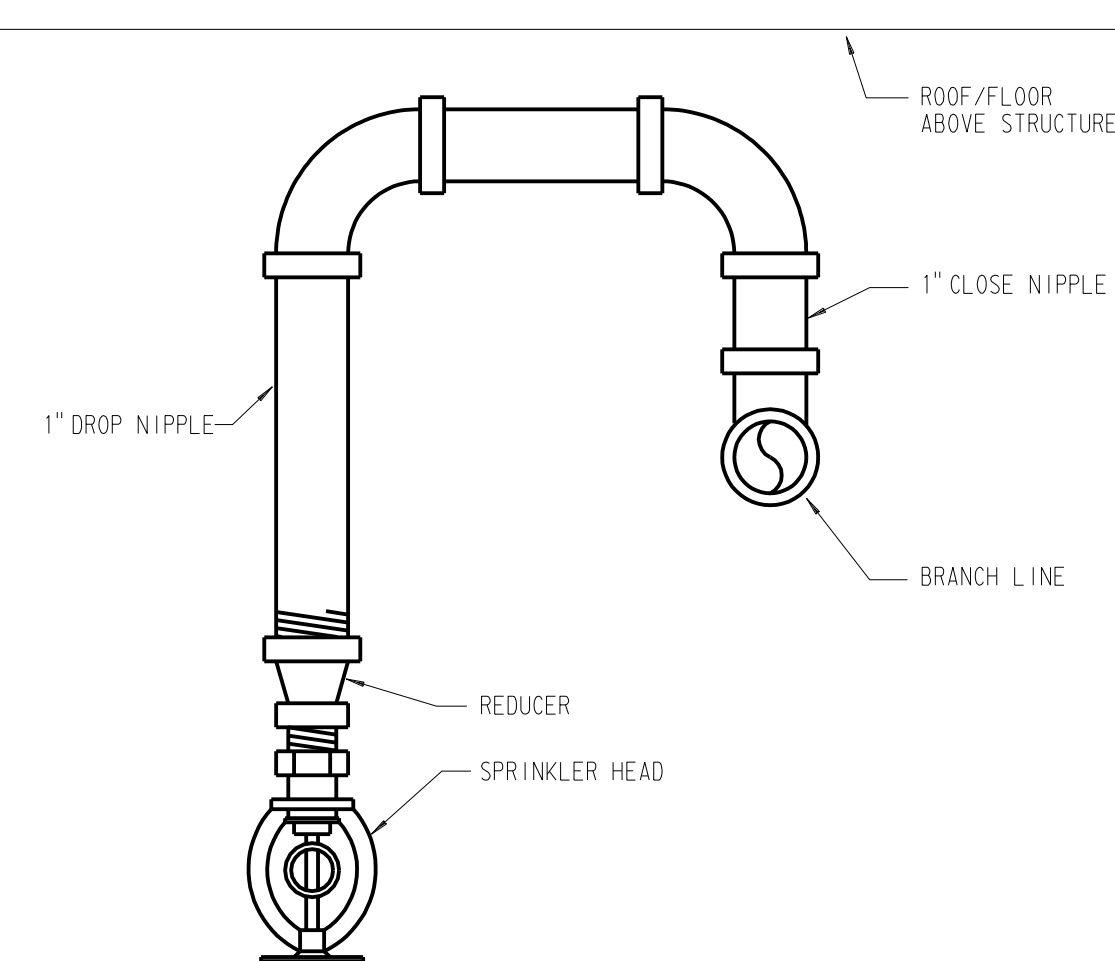


EXHAUST FAN EF-1 MOTOR STARTER WIRING DETAIL



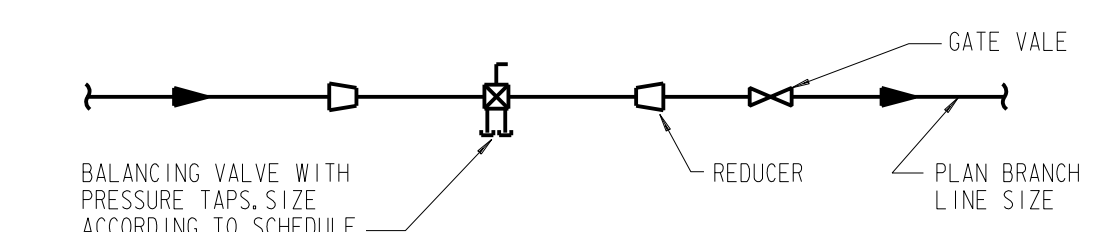
TYPICAL FINNED TUBE RADIATION CONTROL DIAGRAM

SEQUENCE OF OPERATION:
1. ELECTRIC SPACE THERMOSTAT SHALL MODULATE HWS CONTROL VALVE TO MAINTAIN SPACE TEMPERATURE SETTING.



TYPICAL SPRINKLER PIPING DETAIL

VALVE SIZING SCHEDULE	
GPM	VALVE SIZE
0.5 - 6.0	3/8"
6.1 - 11.0	3/4"
11.1 - 17.0	1"
17.1 - 30.0	1 1/4"
30.1 - 40.0	1 1/2"
40.1 - 75.0	2"
75.1 - 110.0	2 1/2"
110.1 - 150.0	3"



WATER FLOW MEASURING DEVICE FOR VALVE SIZE UP TO 3 INCH

Project Title

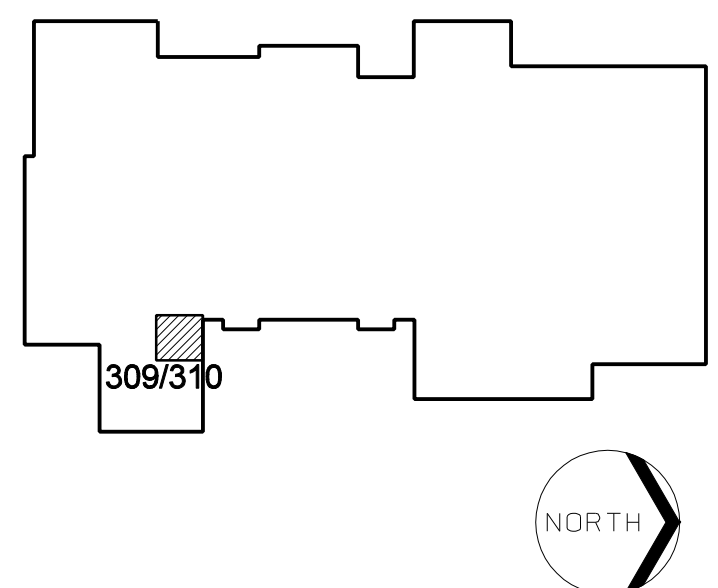


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan



Project Administrator: Seal: K. Delzer
Project Designer: C. Watts
Project Architect / Engineer: C. Watts
Drawn By: C. Watts
G.M. Review: D. DiCiccio
Approved: D. DiCiccio Signature:
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IDS Drawing Title

Schedules, Details and Temperature Controls

IDS Project Number Drawing Number

13101-1000 M6.1HS

ABBREVIATIONS

A	AMPERE / AMP
AC	ALTERNATING CIRCUIT
ACU	AIR CONDITIONING UNIT
AF	AMPERE FRAME
AFB	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
AMP	AMPERES INTERRUPTING CAPACITY
ARCH	ARCHITECT / ARCHITECTURAL
AS	AMPERE SENSITIVE
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO / VIDEO
AWG	AMERICAN WIRE GAUGE
B	BUILDING
BLDG	BUILDING
BOT	BOTTOM
BSMT	BASEMENT
C	CABINET
CB	CIRCUIT BREAKER
CC	CARD CATALOG
CCP	CLASSROOM CONTROL PANEL
CCV	CLOSED CIRCUIT TELEVISION
CDI	CANDELA
CDI	COMPACT DISC INTERACTIVE
CHBD	CHALKBOARD
CKT	CIRCUIT
CLG	CEILING
COMP	COMPUTER
CPU	CENTRAL PROCESSING UNIT
CP	CONTROL PANEL
CT	CABLE TRAY
CUH	CABINET UNIT HEATER

D	DA	DIGITALLY ADDRESSABLE
DC	DC	DIRECT CURRENT
DEMO	DEMOLITION	
DEFT	DEPARTMENT	
DIA	DIAMETER	
DISC	DISCONNECT	
DN	DOWN	
DND	DISTRIBUTION PANELBOARD	
DVP	DIGITAL VERSATILE DISC	
DWG	DRAWING	
E	EA	EACH
EC	ELECTRICAL CONTRACTOR	
EDH	ELECTRIC DUCT HEATER	
EF	EXHAUST FAN	
ELEC	ELECTRICAL	
ELEV	ELEVATOR	
EM	EMERGENCY	
EMCS	ENERGY MONITORING AND CONTROL SYSTEM	
EMT	ELECTRIC METALLIC TUBING	
EP	ELECTRIC PNEUMATIC SWITCH	
EQUIP	EQUIPMENT	
ET	ETHERNET	
EUN	ELECTRIC UNIT HEATER	
EWC	ELECTRIC WATER COOLER	
EWH	ELECTRIC WATER HEATER	
EXIST	EXISTING	
F	FA	FIRE ALARM
FAFP	FIRE ALARM ANNUNCIATOR PANEL	
FACP	FIRE ALARM CONTROL PANEL	
FCU	FAN COIL UNIT	
FLA	FULL LOAD AMPERES	
FLR	FLOOR	
FT	FOOT / FEET	
FU	FUSE	
FVNR	FULL VOLTAGE NON REVERSING	

G	GA	GAUGE / GAUGE
GF1	GROUND FAULT INTERRUPTER	
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	
GND	GROUND	
GYP	GYPSPUM BOARD	
H	HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE	
HDA	HAND-OFF-AUTO	
HP	HORSEPOWER	
HTR	HEATER	
HV	HEATING AND VENTILATION UNIT	
HVAC	HEATING, VENTILATION & AIR CONDITIONING	
I	IAC	INTERLOCKED ARMORED CABLE
INS	INCH / INCHES	
ITS	INTEGRATED TECHNOLOGY SYSTEMS	
J	JB	JUNCTION BOX
JC	JANITOR CLOSET	
K	KVA	KILOVOLT AMPERE
KWH	KILOWATT HOUR	
L	LAN	LOCAL AREA NETWORK
LCP	LIGHTING CONTROL PANEL	
LPA	LOCKED ROTOR AMPERES	
LTC	LIGHTING	

M	MAX	MAXIMUM
MCB	MOTOR CONTROL CENTER	
MCC	MECHANICAL	
MDF	MECHANICAL	
MECH	MECHANICAL	
MH	MANHOLE	
MIN	MINIMUM	
MISC	MISCELLANEOUS	
ML0	MAIN LUGS ONLY	
MTO	MODULATED	
MTG	MOUNTING	
N	NC	NORMALLY CLOSED
NF	NON FUSIBLE	
NIC	NOT IN CONTRACT	
NL	NIGHT LIGHT	
NO	NORMALLY OPEN	
NTS	NOT TO SCALE	
O	OC	ON CENTER
OFE	OWNER FURNISHED EQUIPMENT	
OS	OCCUPANCY SENSOR	
P	PA	PUBLIC ADDRESS
PB	PULL BOX	
PC	PHOTOCELL	
PE	PNEUMATIC SWITCH	
PH	PILOT LIGHT	
PL	POINT OF SALES	
PDS	POWER PANELBOARD	
PP	POKE THROUGH	
PT	EMERGENCY POWER TRANSFER DEVICE	
PTD	POLYVINYL CHLORIDE	
PVC	POLYVINYL CHLORIDE	

R	R	RELOCATE
R-NET	RESIDENTIAL CABLE NETWORK	
RAF	RETURN AIR FAN	
RFP	RECEPTACLE CONTROL PANEL	
REOD	RECEPTACLE CONTROL PANEL	
RF	RADIO FREQUENCY	
RGS	RIGID GALVANIZED STEEL	
RMS	ROOT MEAN SQUARE	
RP	RECEPTACLE PANEL	
RPPS	RECEPTACLE PANEL WITH INTEGRAL SURGE SUPPRESSION	
S	SAF	SUPPLY AIR FAN
SD	SMOKE DETECTOR	
SE	SQUARE FEET	
SEPC	SPECIFICATIONS	
SPKR	SPEAKER	
SS	STANDARD	
STD	STANDARD	
SUB	SUBSTATION	
SW	SWITCH	
SWGR	SWITCHGEAR	
T	TC	TIME CLOCK
TEL	TELEPHONE	
TELCOM	TELECOMMUNICATION	
TERM	TERMINAL	
TSD	TACKBOARD	
TTB	TELEPHONE TERMINAL BACKBOARD	
TV	TELEVISION	
TVS	TRANSIENT VOLTAGE SURGE SUPPRESSION	
TYP	TYPICAL	

U	UH	UNIT HEATER
ULN	UNDERWRITERS LABORATORIES INC.	
UPS	UNLESS OTHERWISE NOTED	
UV	UNINTERRUPTIBLE POWER SUPPLY	
V	VCR	VIDEO CASSETTE RECORDER
VFC	VARIABLE FREQUENCY CONTROLLER	
VIF	VERIFY IN FIELD	
VTS	VIDEO TAPE STORAGE	
W	WAN	WIDE AREA NETWORK
WAP	WIRELESS ACCESS POINT	
WG	WIRE GUARD	
WP	WEATHERPROOF	
X	XP	EXPLOSION PROOF
Misc		
AK	NEMA 3R ENCLOSURE	
AK	NEMA 4X ENCLOSURE	
CL	ANGLE	
CL	CENTERLINE	
CL	CHANNEL	
CL	DEGREE / DEGREES	
CL	FOOT / FEET	
CL	INCH / INCHES	
CL	NUMBER	
CL	CONDUIT	
CL	PHASE	
CL	WIRE	

SYMBOLS

	LIGHTING FIXTURE - RECESSED OR SURFACE MOUNTED (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - RECESSED OR SURFACE MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - SUSPENDED MOUNTED (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - SUSPENDED MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT (LETTERS INDICATE TYPE (TYP))
	STRIP LIGHTING FIXTURE (LETTERS INDICATE TYPE (TYP))
	STRIP LIGHTING FIXTURE ON NIGHT LIGHT OR EMERGENCY CIRCUIT (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - RECESSED OR PENDANT MTD (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - RECESSED OR PENDANT MTD ON NIGHT LIGHT OR EMERGENCY CIRCUIT (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - SURFACE MOUNTED (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - SURFACE MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT (LETTERS INDICATE TYPE (TYP))
	TRACK LIGHTING WITH INDICATED NUMBER OF FIXTURES - CEILING MOUNTED (LETTERS INDICATE TYPE (TYP))
	TRACK LIGHTING WITH INDICATED NUMBER OF FIXTURES - CEILING MOUNTED (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - WALL MOUNTED (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - WALL MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - UNDERCABINET MOUNTED (LETTERS INDICATE TYPE (TYP))
	LIGHTING FIXTURE - UNDERCABINET MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT (LETTERS INDICATE TYPE (TYP))
	EXIT LIGHTING FIXTURE SINGLE OR DOUBLE FACE WITH DIRECTIONAL ARROWS - CEILING OR PENDANT MOUNTED (LETTERS INDICATE TYPE (TYP))
	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS - WALL MOUNTED (LETTERS INDICATE TYPE (TYP))
	SELF-CONTAINED EMERGENCY LIGHTING UNIT - CEILING MOUNTED (LETTERS INDICATE TYPE (TYP))
	SELF-CONTAINED EMERGENCY LIGHTING UNIT - WALL MOUNTED (LETTERS INDICATE TYPE (TYP))
	POLE MOUNTED LIGHTING FIXTURE QUANTITY OF LUMINAIRES AS INDICATED (LETTERS INDICATE TYPE (TYP))
	SITE LIGHTING FIXTURES ADJUSTABLE FLOODS (LETTERS INDICATE TYPE (TYP))
	SINGLE POLE SWITCH
	DOUBLE POLE SWITCH
	THREE WAY SWITCH
	FOUR WAY SWITCH
	KEY OPERATED SWITCH

	DIMMER SWITCH
	LIGHTING OCCUPANCY SENSOR WITH INTEGRAL ON/OFF SWITCH - WALL MOUNTED
	LIGHTING OCCUPANCY SENSOR WITH INTEGRAL DUAL LEVEL ON/OFF SWITCH - WALL MOUNTED
	SWITCH WITH PILOT LIGHT
	SWITCH WITH TIMER
	SINGLE POLE SWITCHES FOR DUAL LEVEL LIGHTING CONTROL
	THREE WAY SWITCHES FOR DUAL LEVEL LIGHTING CONTROL
	LIGHTING OCCUPANCY SENSOR - CEILING MOUNTED
	LIGHTING OCCUPANCY SENSOR - WALL MOUNTED
	LIGHTING CONTACTOR
	TIME SWITCH
	LIGHTING CONTROL PANEL
	PHOTOELECTRIC SWITCH - CEILING MOUNTED
	PHOTOELECTRIC SWITCH - WALL MOUNTED
	EMERGENCY POWER TRANSFER DEVICE
	SINGLE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED IN CEILING
	DUPLEX RECEPTACLE OUTLET FLOOR MOUNTED (LETTER INDICATES TYPE (TYP))
	DUPLEX RECEPTACLE OUTLET WITH INTEGRAL GROUND FAULT PROTECTION
	DUPLEX RECEPTACLE OUTLET WITH UPSTREAM GROUND FAULT PROTECTION DEVICE
	DUPLEX RECEPTACLE OUTLET WITH INTEGRAL SURGE SUPPRESSION
	DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM SURGE SUPPRESSION DEVICE
	DUPLEX RECEPTACLE OUTLET SPLIT WIRING
	DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND
	QUAD RECEPTACLE OUTLET
	QUAD RECEPTACLE OUTLET WITH ONE (1) INTEGRAL SURGE SUPPRESSION TYPE RECEPTACLE AND ONE (1) SURGE SUPPRESSION PROTECTED RECEPTACLE
	SPECIAL OUTLET - SIZES AND TYPES DENOTED ON DRAWINGS
	DC POWER SYSTEM - SERVICE OUTLET
	DC POWER SYSTEM - POWER SUPPLY
	POWER/COMMUNICATIONS POLE
	SPECIAL POWER CONNECTION
	CORD DROP
	POKE THROUGH ASSEMBLY (LETTER INDICATES TYPE (TYP))

	JUNCTION BOX - CEILING MOUNTED
	JUNCTION BOX - WALL MOUNTED
	PUSHBUTTON STATION
	PUSHBUTTON STATION - EMERGENCY POWER SHUTDOWN
	INTERCOM CALL BUTTON
	INTERCOM CALL BUTTON WITH PRIVACY
	HORIZONTALLY MOUNTED MULTI-OUTLET RACEWAY WITH VERTICAL FEED
	VERTICALLY MOUNTED MULTI-OUTLET RACEWAY
	BUS DUCT
	EQUIPMENT MOUNTING BACKBOARD
	208/120V PANELBOARD
	480/277V PANELBOARD
	DISTRIBUTION OR POWER PANELBOARD
	SINGLE PHASE MOTOR
	THREE PHASE MOTOR
	MAGNETIC MOTOR STARTER
	COMBINATION MAGNETIC MOTOR STARTER SWITCH SIZE / FUSE SIZE
	DISCONNECT SWITCH - NONFUSIBLE
	DISCONNECT SWITCH - FUSIBLE
	DISCONNECT SWITCH - CIRCUIT BREAKER BREAKER SIZE
	DISCONNECT SWITCH - VARIABLE FREQUENCY CONTROLLER
	MAGNETIC CONTACTOR
	MANUAL MOTOR STARTER
	PACKAGED EQUIPMENT WITH INTEGRALLY MOUNTED PREWIRED CONTROL PANEL
	FURNISHED AS INTEGRAL PART OF EQUIPMENT
	TRANSFORMER
	GROUND ROD
	LIGHTNING PROTECTION AIR TERMINAL
	CEILING MOUNTED FAN

	CEILING MOUNTED SPEAKER CLUSTER
	WALL MOUNTED SPEAKER
	MICROPHONE OUTLET - CEILING MOUNTED
	MICROPHONE OUTLET - WALL MOUNTED
	AUXILIARY OUTLET - WALL MOUNTED
	VOLUME CONTROL - WALL MOUNTED
	BELL - WALL MOUNTED
	CHIME - WALL MOUNTED
	HORN SPEAKER - WALL MOUNTED
	HORN SPEAKER - CEILING MOUNTED
	CARD READER - SECURITY SYSTEM
	DOOR CONTACT - SECURITY SYSTEM
	KEY SWITCH - SECURITY SYSTEM
	MOTION DETECTOR - SECURITY SYSTEM
	CLOSED CIRCUIT VIDEO CAMERA - SECURITY SYSTEM
	FIRE ALARM PULL STATION
	AUDIO/VISUAL FIRE ALARM INDICATING DEVICE - WALL MOUNTED
	AUDIO VISUAL FIRE ALARM INDICATING DEVICE - CEILING MOUNTED
	VISUAL FIRE ALARM INDICATING DEVICE - WALL MOUNTED
	VISUAL FIRE ALARM INDICATING DEVICE - CEILING MOUNTED
	AUDIO FIRE ALARM INDICATING DEVICE - WALL MOUNTED
	AUDIO FIRE ALARM INDICATING DEVICE - CEILING MOUNTED
	AREA SMOKE DETECTOR - WALL MOUNTED
	AREA SMOKE DETECTOR - CEILING MOUNTED
	TEMPERATURE DETECTOR
	DUCT SMOKE DETECTOR
	MAGNETIC DOOR HOLDER/RELEASE
	WATER FLOW SWITCH
	TAMPER SWITCH
	FIRE FIGHTER TELEPHONE JACK
	FIRE ALARM CONTROL PANEL
	FIRE SUPPRESSION SYSTEM CONTROL PANEL
	FIRE ALARM REMOTE ANNUNCIATOR PANEL
	SINGLE BED STATION - NURSE CALL
	DOUBLE BED STATION - NURSE CALL
	BATHROOM STATION - NURSE CALL
	BATHROOM STATION PULL CORD - NURSE CALL
	CODE BLUE PUSHBUTTON - NURSE CALL

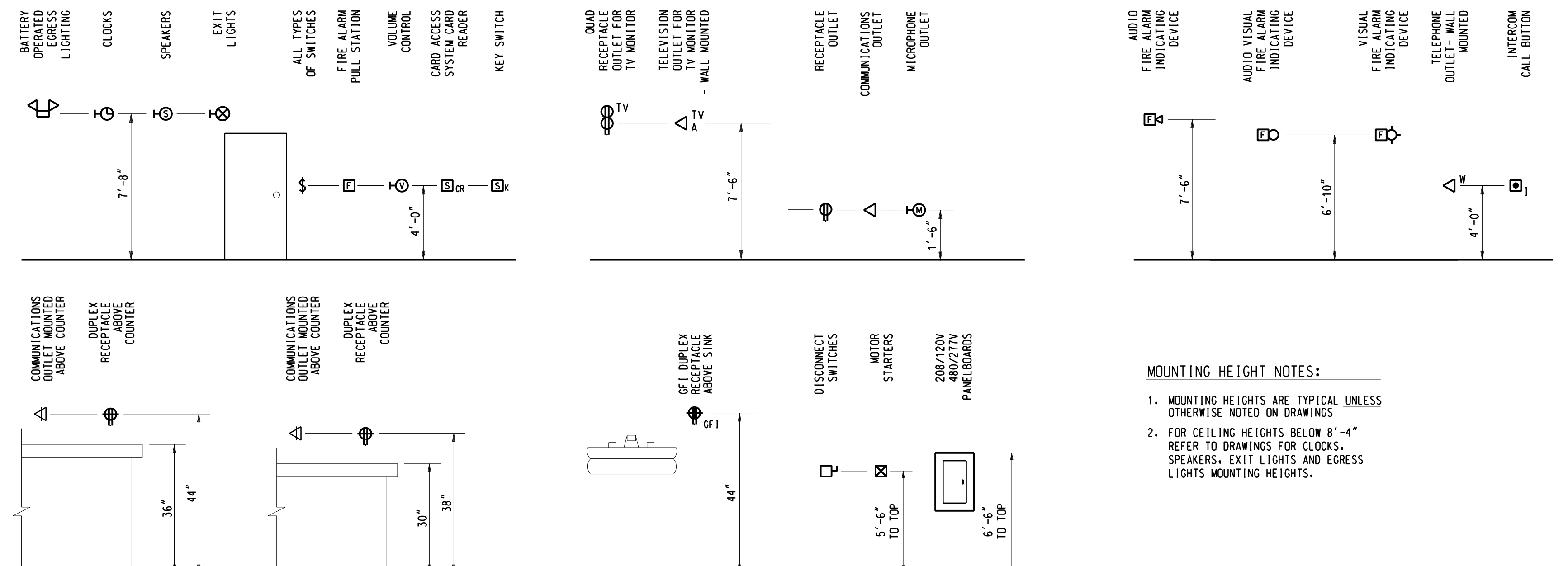
	DUTY STATION - NURSE CALL
	EMERGENCY STATION - NURSE CALL
	MASTER STATION - NURSE CALL
	POWER SUPPLY - NURSE CALL
	STAFF STATION - NURSE CALL
	DOME LIGHT WALL MOUNTED - NURSE CALL
	DOME LIGHT CEILING MOUNTED - NURSE CALL
	DOME LIGHT WITH CODE BLUE WALL MOUNTED - NURSE CALL
	DOME LIGHT WITH CODE BLUE CEILING MOUNTED - NURSE CALL
	COMMUNICATIONS OUTLET - WALL MOUNTED (LETTER INDICATES FACEPLATE TYPE)
	TELEVISION OUTLET - WALL MOUNTED (LETTER INDICATES FACEPLATE TYPE)
	TELEPHONE OUTLET - WALL MOUNTED
	COMMUNICATIONS OUTLET - WALL MOUNTED ABOVE COUNTER (LETTER INDICATES FACEPLATE TYPE)
	COMMUNICATIONS OUTLET - CEILING MOUNTED (LETTER INDICATES FACEPLATE TYPE)
	COMMUNICATIONS OUTLET - FLOOR MOUNTED (LETTER INDICATES FACEPLATE TYPE)
	COMBINATION POWER/COMMUNICATIONS OUTLET - FLOOR MOUNTED (LETTER INDICATES FACEPLATE TYPE (TYP))
	CLASSROOM CONTROL PANEL
	CCP-XXX (XXX-CLASSROOM NUMBER) 552-222 (PANEL AND CKT NUMBER)
	CEILING MOUNTED MONITOR
	WALL MOUNTED MONITOR OR SINGLE ARM MOUNTING
	PROJECTOR - SUSPENDED MOUNTED
	PROJECTOR - RECESSED MOUNTED (MOTOR LIFT)
	AMPERE METER
	VOLT METER
	WATT METER
	METER
	KILOWATT HOUR METER
	KILOWATT METER
	AMPERE SWITCH
	VOLT SWITCH

	KIRK KEY INTERLOCK
	CIRCUIT BREAKER
	DISCONNECT SWITCH
	FUSE
	TRANSFORMER
	TRANSFER SWITCH
	THERMAL OVERLOAD
	CONTACTS
	INDICATES WIRE SIZE AND CONDUIT SIZE
	GROUND FAULT PROTECTION
	DRAWOUT CIRCUIT BREAKER
	AIR-MAG / VACUUM CIRCUIT BREAKER
	ENGINE GENERATOR
	SYSTEM OR EQUIPMENT GROUND
	EXOTHERMIC WELD OR BRAZED CONNECTION
	GROUND CABLE
	CONDUIT CONCEALED IN WALLS OR IN CEILING SPACE OR EXPOSED IN UNFINISHED AREAS
	CONDUIT IN OR BELOW FLOOR SLAB OR BELOW GRADE
	RACEWAY TURNED UP
	RACEWAY TURNED DOWN
	SEAL-OFF - CONDUIT SEAL
	CABLE TRAY
	UNDERFLOOR DUCT - POWER
	UNDERFLOOR HEADER DUCT - POWER
	UNDERFLOOR DUCT - COMMUNICATIONS
	UNDERFLOOR HEADER DUCT - COMMUNICATIONS

SYMBOL LEGEND

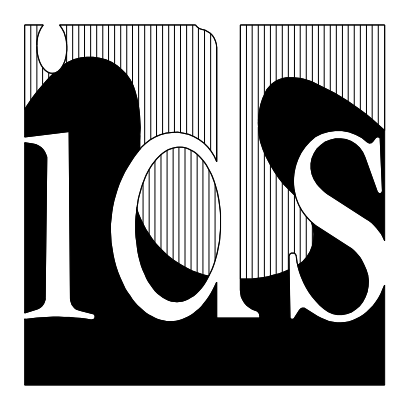
DETAIL SYMBOL	ELEVATION SYMBOL
PLAN OR DETAIL ENLARGEMENT	COLUMN CENTERLINE
SECTION LOCATOR	ROOM NAME AND NUMBER

MOUNTING HEIGHTS



ALL DEMOLITION AND NEW ELECTRICAL WORK SHALL BE BY OWNER.

GENERAL NOTES:
 1. ALL WORK AND EQUIPMENT SHALL CONFORM TO NEC. THE MEANS AND METHODS USED BY THIS CONTRACTOR SHALL CONFORM TO NEC SECTION 110-3 (G AND D).
 2. FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED TO THE FIRE MARSHALL FOR APPROVAL PRIOR TO SUBMITTING FOR ENGINEER APPROVAL.



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Project Title

LINDEN COMMUNITY SCHOOLS

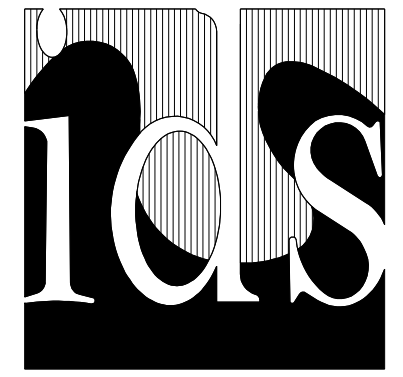
2013 Sinking Fund Projects

Linden, Michigan

Key Plan

ELECTRICAL DRAWING INDEX

E0.1HS ELECTRICAL REFERENCE INFORMATION
 E1.1HS ELECTRICAL DEMOLITION AND NEW WORK PLANS



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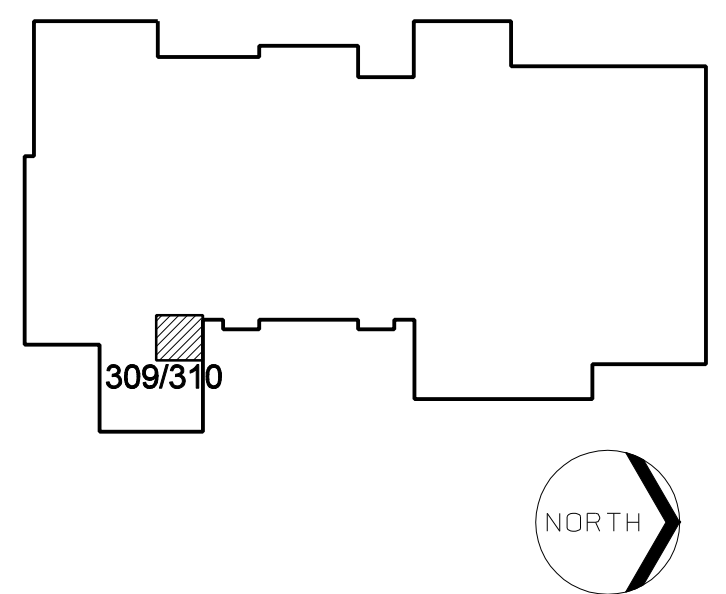


LINDEN COMMUNITY SCHOOLS

2013 Sinking Fund Projects

Linden, Michigan

Key Plan



LIGHTING FIXTURE SCHEDULE

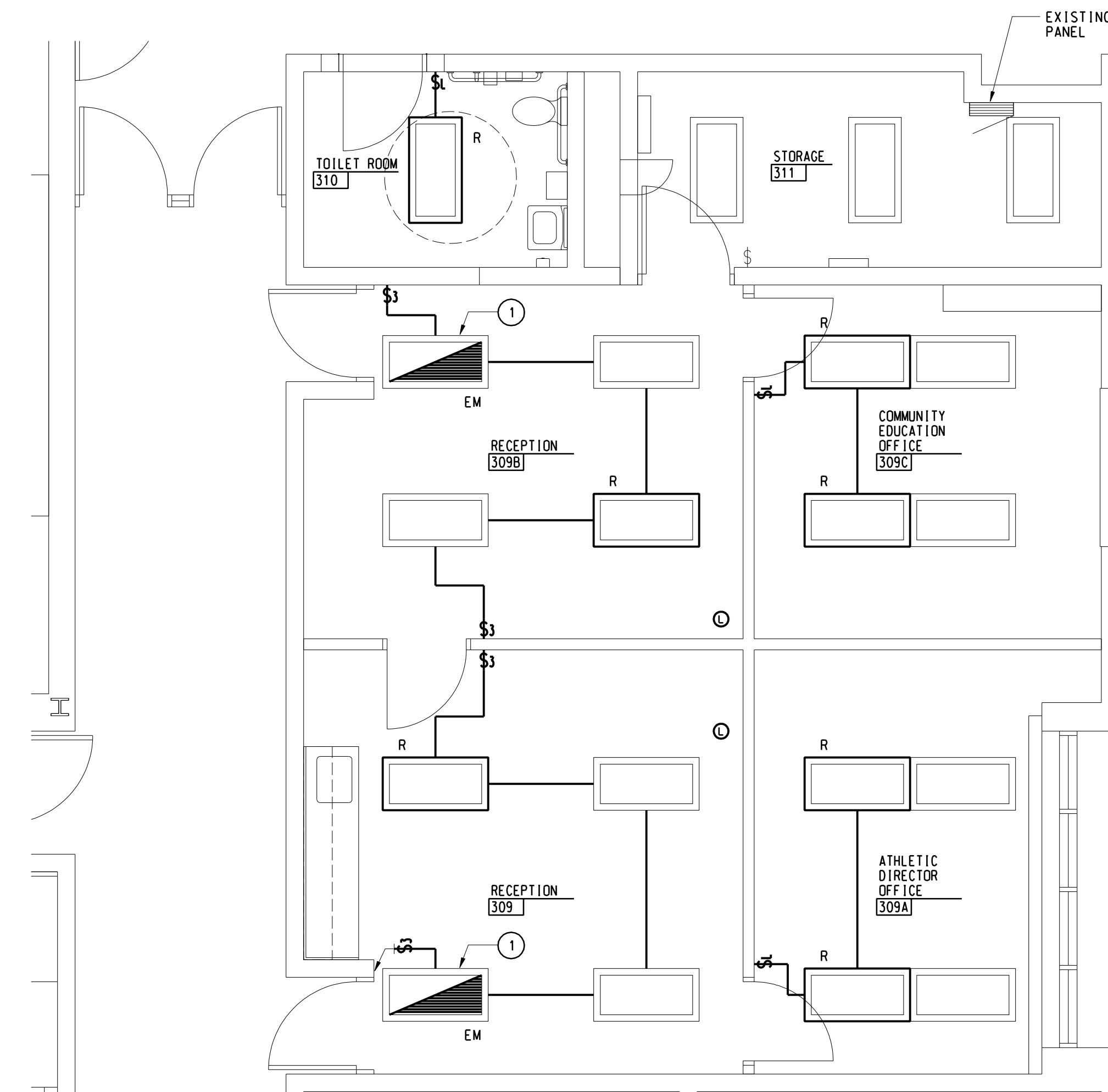
TYPE	DESCRIPTION
EM	SELF-CONTAINED, UNIT INVERTER (BATTERY PACK) CONCEALED INSIDE FIXTURE CHANNEL. TO PROVIDE BATTERY BACK-UP TO (2) T-8 LAMP AT 1350 INITIAL LUMENS (MINIMUM) FOR 90 MINUTE BATTERY LIFE (MINIMUM) PROVIDE WITH SEALED, RECHARGEABLE, MAINTENANCE-FREE NICKEL CADMIUM BATTERIES; SOLID STATE CHARGER; LOW VOLTAGE DISCONNECT; INDICATING LAMP; TEST SWITCH; FULL SELF DIAGNOSTICS; 277 VOLT OPERATION. MANUFACTURER: BODINE 8505T

GENERAL NOTES

- LIGHTING AND POWER PLANS**
- LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN. HEAVY LINE WEIGHT INDICATES NEW ELECTRICAL EQUIPMENT. THE LETTER (R) INDICATES NEW LOCATION OF EQUIPMENT RELOCATED.
 - ALL BRANCH CIRCUITS SHALL CONSIST OF A MINIMUM OF 2#12AWG AND 1#12AWG GROUND IN 1/2" CONDUIT TO A 20A-1P CIRCUIT BREAKER UNLESS NOTED OTHERWISE.
 - ALL NEW ELECTRICAL DEVICES SHALL BE FLUSH MOUNTED. ALL CONDUIT AND WIRING SHALL BE CONCEALED IN WALLS.
 - ELECTRICAL CONTRACTOR SHALL RING OUT ALL CIRCUITS IN ALL EXISTING PANELBOARDS AFFECTED BY THE SCOPE OF THIS PROJECT AND PROVIDE UPDATED TYPED PANELBOARD DIRECTORIES. REPLACE ALL INOPERATIVE OR DEFECTIVE CIRCUIT BREAKERS AND PROVIDE BLANK COVERS WHERE BREAKERS HAVE BEEN REMOVED.
 - CONNECT LIGHTING FIXTURES TO EXISTING LIGHTING BRANCH CIRCUITS. PROVIDE SWITCHING AS INDICATED. 277 VOLT, 20A-1P BRANCH CIRCUITS SHALL NOT BE LOADED IN EXCESS OF 4000VA. CLEAN AND RELAMP ALL EXISTING FIXTURES.
 - CIRCUIT NEW RECEPTACLES TO EXISTING BRANCH CIRCUIT PANELS. VERIFY EXACT CIRCUIT NUMBERS IN THE FIELD AND CONNECT TO EXISTING SPARE CIRCUIT BREAKERS. 120 VOLT, 20A-1P BRANCH CIRCUITS SHALL NOT BE LOADED IN EXCESS OF 1500VA.
 - PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAY, ALONG WITH THE PHASE CONDUCTORS, FOR ALL BRANCH CIRCUITS. PROVIDE A SEPARATE DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT PHASE CONDUCTOR.
 - PROVIDE CONDUIT BUSHINGS AND PULL STRINGS IN ALL EMPTY TELECOMMUNICATIONS CONDUITS.
 - WHERE CONDUITS PENETRATE FIRE WALLS, THE WALL SHALL BE SEALED TO BE EQUAL OR GREATER THAN THE ORIGINAL FIRE RATING OF THAT WALL.
 - REMOVE AND REPLACE ALL EXISTING CEILING TILES AS REQUIRED FOR THE INSTALLATION OF ELECTRICAL EQUIPMENT.
 - OBTAIN APPROVAL FROM THE OWNER PRIOR TO INTERRUPTING EXISTING ELECTRICAL SERVICES. ALL ELECTRICAL SERVICE INTERRUPTIONS AND CONNECTIONS TO EXISTING SYSTEMS SHALL BE PERFORMED DURING AT A TIME SUITABLE TO THE OWNER.
 - PROVIDE BOX EXTENSIONS ON ALL EXISTING OUTLETS AS REQUIRED TO ACCOMMODATE FURRED OUT WALLS.
 - PROVIDE NEW FIRE ALARM DEVICES COMPATIBLE IN MAKE, MODEL AND MANUFACTURER, WITH THE EXISTING FIRE ALARM SYSTEM.

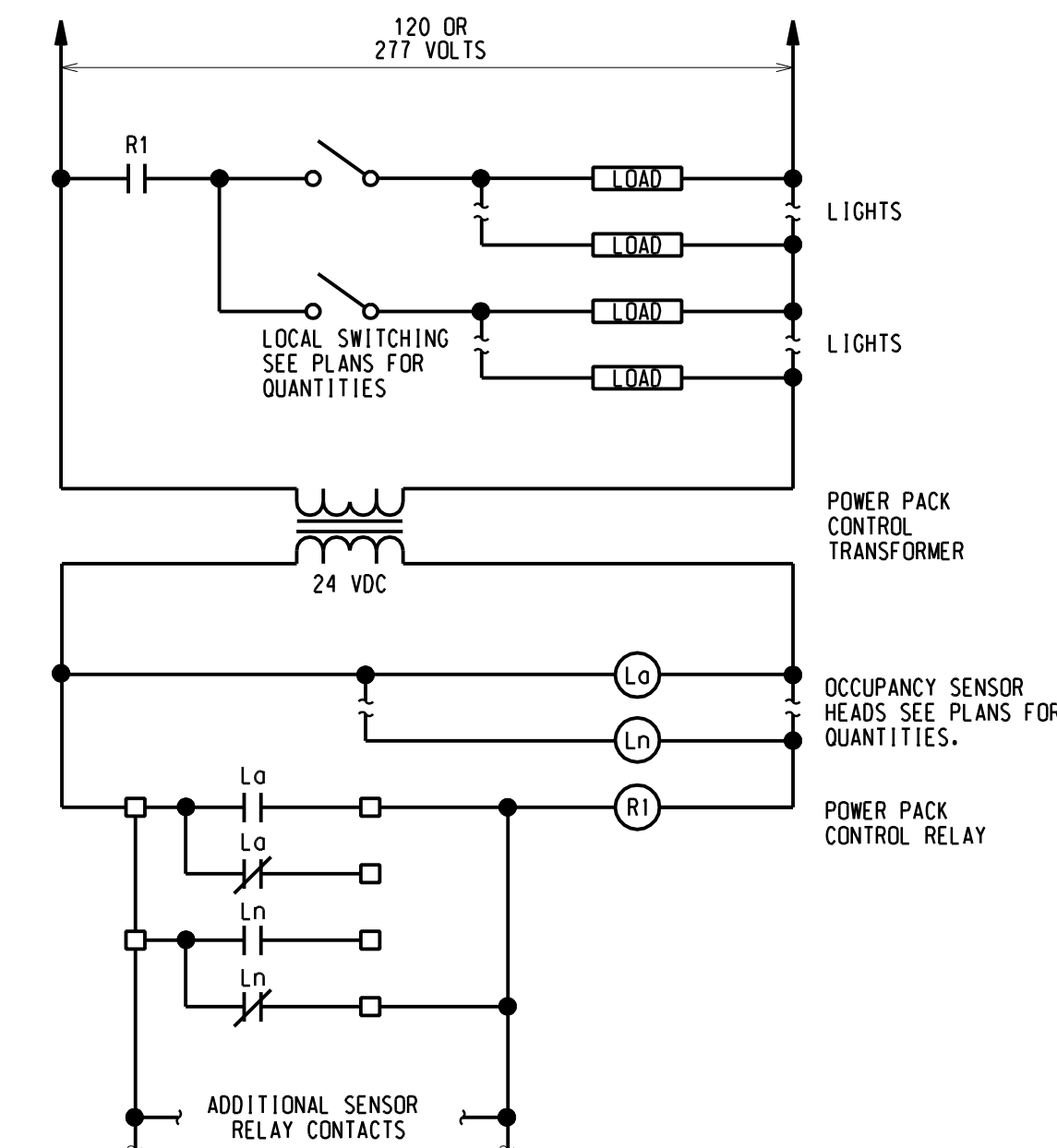
KEYNOTES

- LIGHTING PLAN**
- FURNISH AND INSTALL NEW EMERGENCY LIGHTING BATTERY PACK TYPE "EM" IN EXISTING LIGHTING FIXTURE.



LIGHTING PLAN

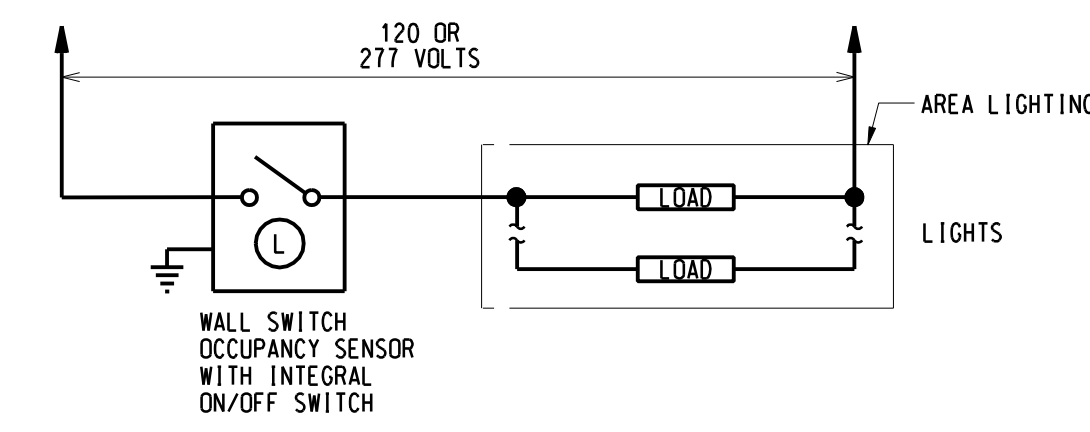
1/4" = 1'-0"



CEILING OCCUPANCY SENSOR(S) AND LOCAL SWITCHING FOR LIGHTING CONTROL

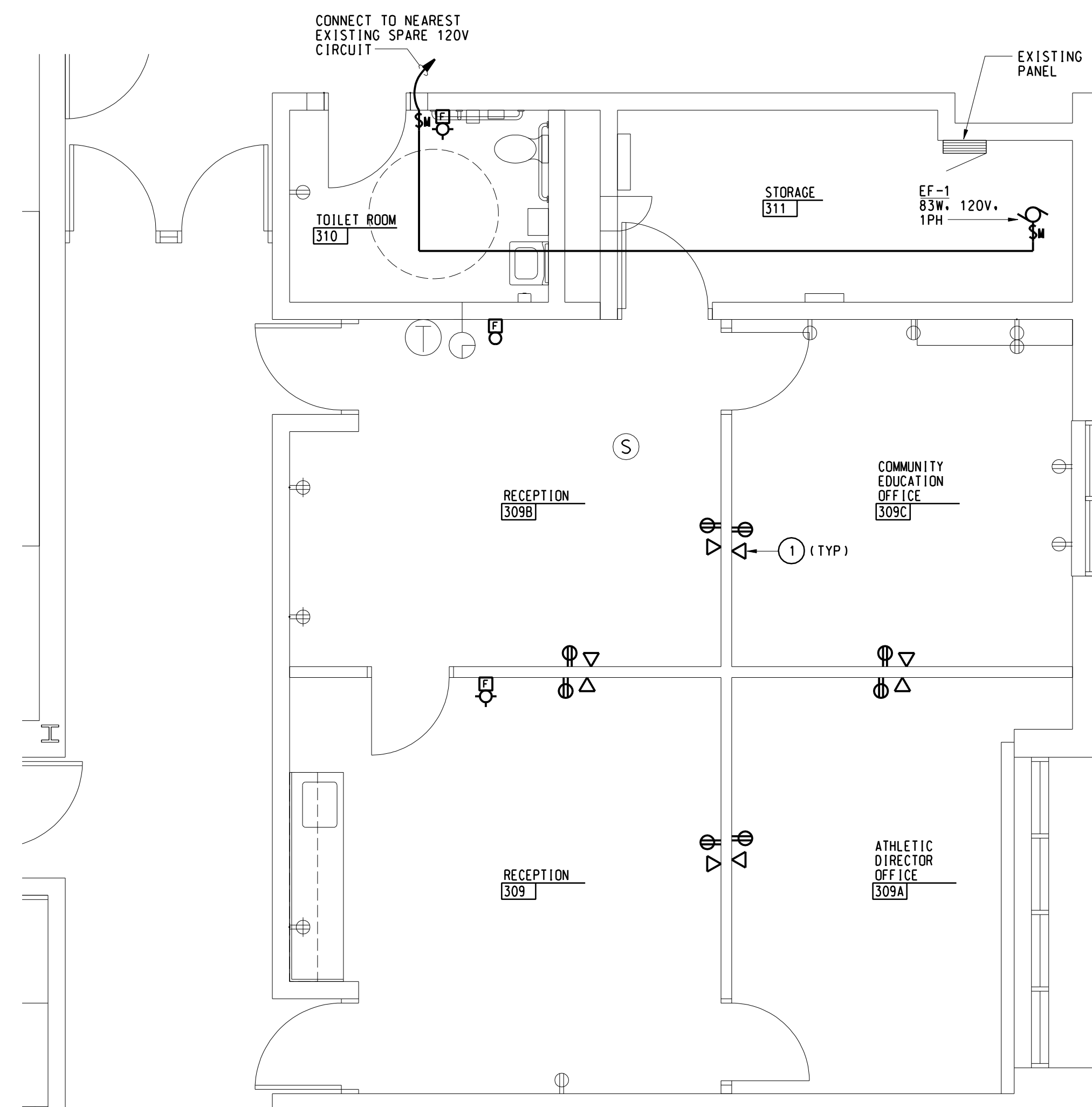
NO SCALE

- NOTES:**
- ALL LOW VOLTAGE WIRING SHALL BE #18 AWG MINIMUM.



WALL OCCUPANCY SENSOR FOR SINGLE LEVEL LIGHTING CONTROL

NO SCALE



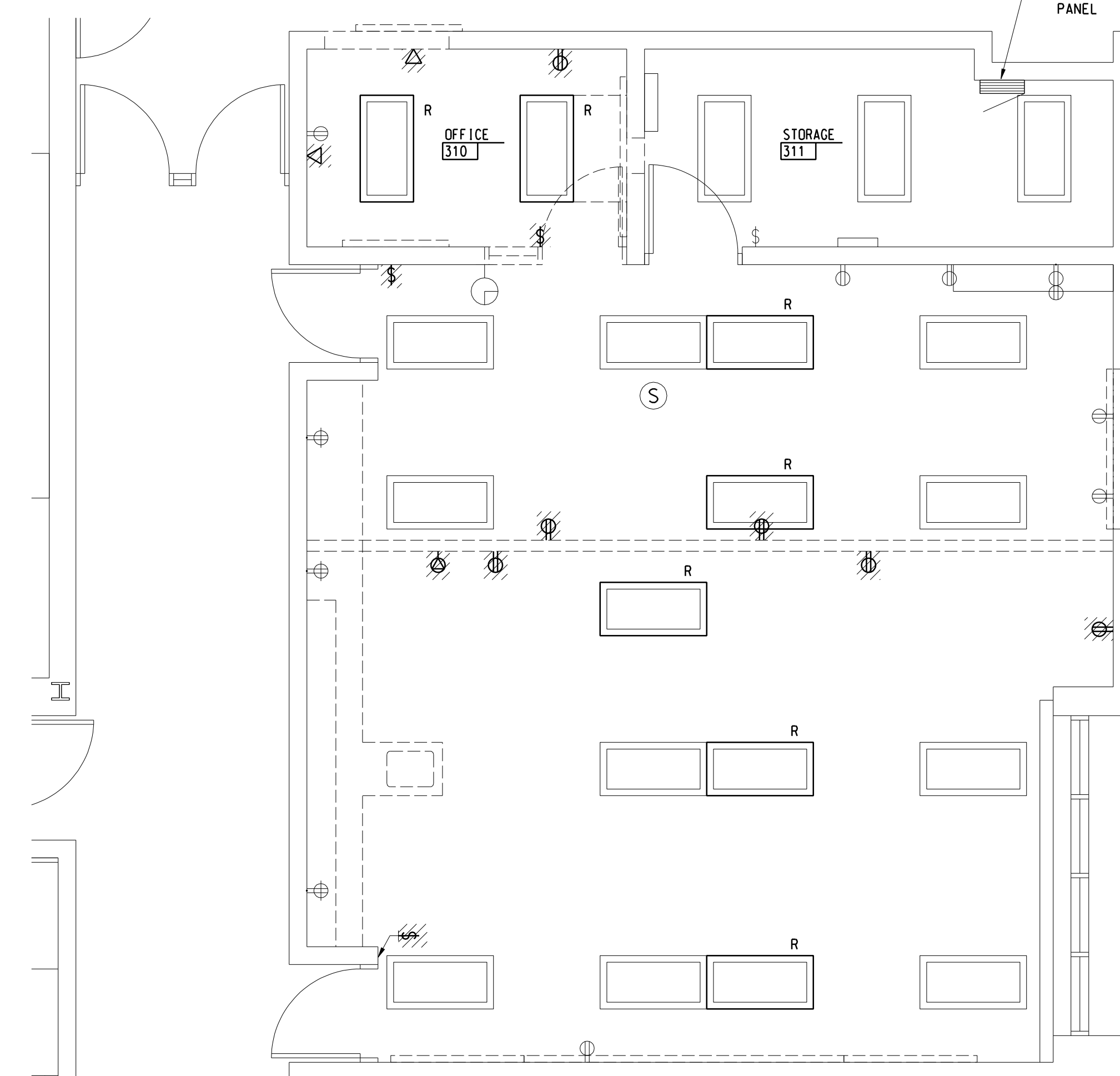
POWER AND AUXILIARY SYSTEM PLAN

1/4" = 1'-0"



KEYNOTES

- POWER PLAN**
- FURNISH AND INSTALL 4 1/8" SQUARE BY 2 1/8" DEEP BOX WITH SINGLE GANG REDUCING RING AND EMPTY 3/4" CONDUIT STUBBED INTO CEILING SPACE AND TERMINATED WITH FIBER BUSHING. DATA CABLING AND TERMINATIONS PROVIDED BY OWNER.



DEMOLITION PLAN

1/4" = 1'-0"



GENERAL NOTES

- DEMOLITION**
- LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN. PLAN SLASH MARKS INDICATE EQUIPMENT TO BE DISCONNECTED AND REMOVED. THE LETTER (R) INDICATES EXISTING EQUIPMENT TO BE RELOCATED.
 - UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AS INDICATED OR REQUIRED TO FACILITATE NEW CONSTRUCTION INCLUDING HANGERS, MOUNTING HARDWARE, PULL BOXES, JUNCTION BOXES, CONDUIT, WIRING, ETC. FROM THE POWER SOURCE TO THE UTILIZATION EQUIPMENT.
 - WHERE REMOVAL OF CONDUIT AND WIRING AFFECTS THE OPERATION OF "UPSTREAM" AND/OR "DOWNSTREAM" UTILIZATION EQUIPMENT WHICH WAS NOT INDICATED TO BE REMOVED, PROVIDE ADDITIONAL CONDUIT AND WIRING TO RESTORE THE "UPSTREAM" AND "DOWNSTREAM" UTILIZATION EQUIPMENT TO ITS NORMAL OPERATION.
 - FOR LIGHTING REMOVE SWITCH, COVERPLATE, AND WIRING TO NEAREST JUNCTION BOX IN THE CEILING SPACE. DEVICE BOX AND CONDUIT TO CEILING SPACE SHALL REMAIN. LIGHTING BRANCH CIRCUITS SERVING THE AREA SHALL REMAIN FOR REUSE.
 - CEILING GRIDS AND PADS ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED ON ARCH. DRAWINGS. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND RE-INSTALLATION OF EXISTING ACOUSTICAL CEILING PANELS AND GRIDS REQUIRED FOR THE INSTALLATION OF ALL ELECTRICAL WORK. IN AREAS NOT SHOWN AS REPLACED BY ARCH. TRADES, ANY BROKEN/SCRATCHED/OR DAMAGED PANELS SHALL BE REPLACED WITH NEW MATCHING EXISTING. EXISTING ACOUSTICAL CEILING PANELS ALREADY SCRATCHED/DAMAGED OR BROKEN SHALL BE DOCUMENTED WITH OWNER/OWNER'S REPRESENTATIVE PRIOR TO BEGINNING ANY WORK.
 - AFTER REMOVAL OF SURFACE MOUNTED ELECTRICAL EQUIPMENT PATCH HOLE IN MASONRY OR GYP. BOARD WALLS AND PAINT TO MATCH EXISTING WALL FROM NEAREST VERTICAL AND HORIZONTAL MORTAR JOINT OR CORNER.

ALL DEMOLITION AND NEW ELECTRICAL WORK SHALL BE BY OWNER.

Project Administrator: Seal:

K. Delzer

Project Designer: M. Nowicki

Project Architect / Engineer: M. Nowicki

Drawn By: T. Manardo

C.M. Review: R. Bracci

Approved: R. Bracci

Signature: _____

Drawing Scale: 1/4"=1'-0"

Date: _____

Issue Date: 03-11-13

Quality Management Review

03-14-13 Plan Review

03-15-13 Bids

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IDS Drawing Title

Electrical Demolition and New Work Plans

IDS Project Number Drawing Number

13101-1000 **E1.1HS**