

GYM HVAC SYSTEM RENOVATION AND LOCKER ROOM ALTERATION AT: LINDENWOLD MIDDLE SCHOOL

40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY 08021
LOT 2, BLOCK 145
NJDOE STATE PROJECT #2670-090-14-1006-G04



ARCHITECT
REGAN YOUNG ENGLAND BUTERA, PC
456 HIGH STREET
MOUNT HOLLY, NJ 08060
609.265.2652 / FAX 609.265.0333

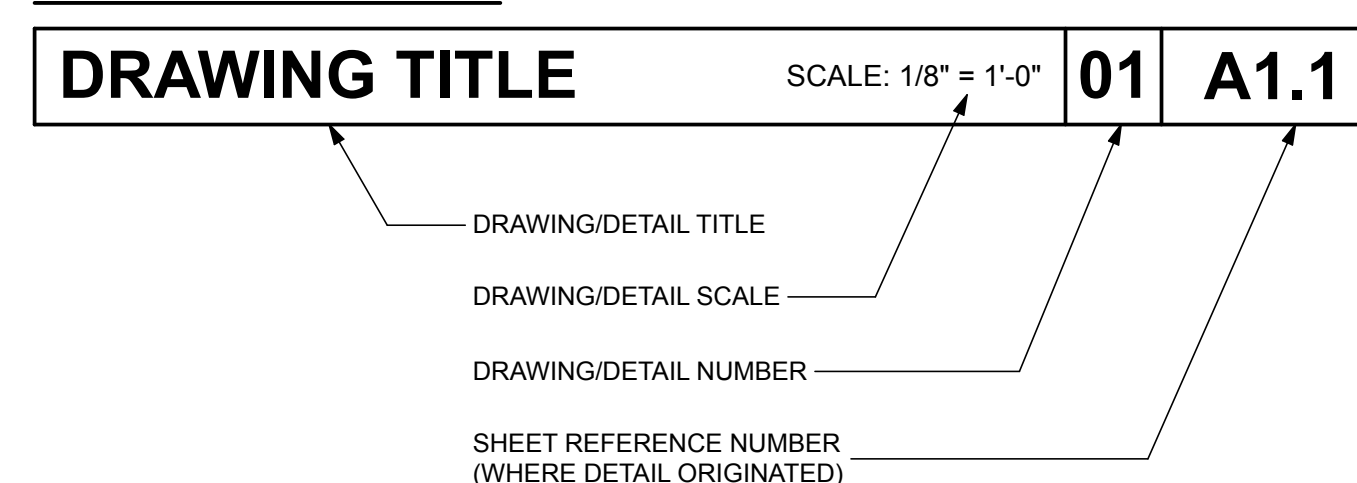
STRUCTURAL
SE2 ENGINEERING, LLC
1705 BUTLER PIKE
CONSHOHOCKEN, PA 19428
610.828.1550 / FAX 610.828,5080

MECHANICAL, PLUMBING & ELECTRIC
KELTER & GILLIGO CONSULTING ENGINEERS
14 WASHINGTON ROAD, SUITE 221
PRINCETON JUNCTION, NJ 08550
609.799.8336 / FAX 609.275.9306

ENVIRONMENTAL
HORIZON ENVIRONMENTAL GROUP
P.O. BOX 316
THOROFARE, NJ 08086
856.848.0800 / FAX 856.848.0838

SUBCODES		
THE FOLLOWING SUBCODES AS ADOPTED BY THE NEW JERSEY UNIFORM CONSTRUCTION CODE (NJAC 5:23 et seq.) SHALL APPLY TO THIS PROJECT.		
SUBCODE	NATIONAL MODEL CODE	UCC REFERENCE
BUILDING	INTERNATIONAL BUILDING CODE NJ ED/2015	NJAC 5:23-3.14
PLUMBING	NATIONAL PLUMBING CODE /2015	NJAC 5:23-3.15
ELECTRICAL	NATIONAL ELECTRICAL CODE /2014	NJAC 5:23-3.16
ENERGY	ASHRAE 90.1 (COMM) 2013	NJAC 5:23-3.18
MECHANICAL	INTERNATIONAL MECHANICAL CODE /2015	NJAC 5:23-3.20
FUEL GAS	INTERNATIONAL FUEL GAS CODE /2015	NJAC 5:23-3.22
REHABILITATION	REHABILITATION SUBCODE RENOVATION 6.5 AND ALTERATION 6.6	NJAC 5:23-6
BARRIER FREE	NJAC 5:23-7 BARRIER-FREE SUBCODE, IBC/NJ 2015 CHAPTER 11 AND ANSI A117.1-2009	NJAC 5:23-7

DRAWING KEY



LIST OF DRAWINGS

All Contractors shall examine all drawings indicated herein for required coordination between different trades and/or for work included in other sections of the Project Manual that may pertain to their respective contract.

CS	COVER SHEET
A1.1	PARTIAL PLAN NOTES AND DETAILS
A1.2	PARTIAL PLANS, ELEVATIONS AND DETAILS
A1.3	MISC. DETAILS
PD1.0	PARTIAL GYM FLOOR PLANS - PLUMBING DEMOLITION
P1.0	GYM FLOOR PLAN AND DETAIL - PLUMBING
HD1.0	PARTIAL CRAWLSPACE PLAN - HVAC DEMOLITION
HD1.1	GYM FLOOR AND ROOF PLAN - HVAC DEMOLITION
H1.0	GYM FLOOR PLAN - HVAC
H1.1	GYM ROOF PLAN AND BOILER ROOM - HVAC
H2.0	SCHEDULES - HVAC
H2.1	DETAILS - HVAC
ED.1	PARTIAL PLANS - ELECTRICAL DEMOLITION
E1.0	PARTIAL FIRST FLOOR PLAN - ELECTRICAL
E1.1	PLANS, SCHEDULES, SYMBOLS AND DIAGRAM - ELECTRICAL
E2.0	PLANS AND SINGLE LINE DIAGRAM - ELECTRICAL

CONSTRUCTION NOTES:

SCOPE OF WORK:

Contractor(s) shall comply with the current NEW JERSEY UNIFORM CONSTRUCTION CODE (UCC) REHABILITATION SUBCODE & all applicable subcodes, ordinances & regulations of federal, state, municipal, & other governing bodies.

Contractor(s) shall be solely responsible for & have control over construction means, methods, techniques, sequences & procedures, shoring & bracing, jobsite safety, & for coordinating all portions of work.

Prior to submitting a bid, the Contractor(s) shall visit the site of the Work & shall thoroughly familiarize themselves w/ the existing conditions affecting the work & shall report any errors to the Architects. By the act of submitting a bid, the Contractor(s) shall be deemed to have made such an examination, to have accepted such conditions, and to have made allowance therefore in preparing their bid. No additional compensation will be granted on the account of extra work made necessary by the Contractor's failure to investigate such existing conditions. Contractor(s) shall perform the Work in accordance with the documents, or assume responsibility for corrections.

Contractor shall keep the premises & surrounding area free from accumulation of waste materials & rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove from & about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery, & surplus materials.

PERMITS:

General Contractor shall be responsible for providing all necessary permits. Complete building permit application and file with authorities having jurisdiction within five days of the Notice to Proceed or the date of execution of the Contract whichever is later.

Fees shall be paid for by the Owner or reimbursed after submission of receipt to Architect for Owner's payment.

DIMENSIONS:

Are to outside surface of finish materials unless shown otherwise. All dimensions are nominal and shall be field verified.

DEMOLITION:

Prior to commencement of the Work, the Contractor shall survey the existing conditions & record them by use of preconstruction photographs &/ or videotapes. Provide Architect with an electronic copy of the survey.

Prior to the commencement of the Work, the Contractor shall verify through the District's fire alarm vendor the status of the entire existing fire alarm system & submit a written report indicating the status of the system & list all devices that are inoperative. Otherwise, the Contractor takes full responsibility for all non-functioning devices.

Prior to the commencement of the Work, the Contractor shall review with the Owner all material & equipment to be removed. Should the Owner opt to keep any items, the Contractor shall salvage & deliver the items to the Owner on the site where so directed & properly dispose of all other demolition & construction materials.

Remove all exterior structures, interior walls, flooring & ceiling finishes, fixtures & other items as noted on drawings.

Support existing structural system before removing & replacing existing structure. Temporarily brace & shore all areas where supporting structures are removed until new construction is securely in place.

Protect existing flooring to remain during the construction period with covering of hardboard panels or other suitable material. Do not use paper or plastic sheeting. Do not move heavy and sharp objects directly over existing or proposed flooring. Protect flooring as indicated above to prevent damage from storing or moving objects over floor surfaces.

Protect or relocate existing plantings in construction area.

Maintain building envelope in a weathertight & secure condition for the duration of the Project.

Refer to MPE documents for additional requirements.

REPAIR, PATCH & PAINT:

All areas disturbed during demolition & construction shall match adjacent materials & finishes at project completion.

All flooring and wall demolition and new work shall be required to be patched and finish painted to match existing surfaces and finishes.

All unused penetrations (floor and wall) shall be filled to match existing. All existing fire alarm devices and speakers shall be removed and reinstalled by contractor in working order.

In ceiling & walls disturbed during construction existing openings shall be patched to match adjacent materials & finishes.

Scrape, clean & patch existing concrete floor to provide an acceptable level floor. Prepare surface to receive specified floor finish.

EXISTING CONCRETE FLOOR:

Contractor is responsible for preparing, finishing and all required testing of the concrete slabs in accordance with the most stringent requirements of the finish floor systems specified and selected by the Owner.

Scrape, shot blast, clean & patch as per ASTM D4259, *Standard Practice for Abrading Concrete* to provide an acceptable level floor. Prepare surface to receive specified floor finish.

Contractor shall ensure that the existing concrete work complies with the requirements of the finish floor manufacturer(s) selected for use on this project. This includes, but is not limited to, tolerances and conditions, rapid relative humidity testing as per ASTM F2170, *Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes*, bond testing, and alkalinity testing. General Contractor shall supply the Architect with copies of all test results, the finish floor manufacturer's concrete subfloor requirements, and letters of acceptance from the finish floor manufacturer(s) prior to proceeding with the concrete subfloor work.

Where cement based interior self-leveling underlayment is required, it shall be the responsibility of the Contractor to provide an underlayment compatible with the specified finish floor.

The use of curing compounds on subfloors where finish floor manufacturers prohibit their use shall not be permitted.

Contractor shall be required to employ whatever means necessary to meet the requirements of the finish floor manufacturers for concrete slabs without additional compensation or time extension.

EXISTING ROOFING:

The existing roofing contains asbestos materials. Contractor is responsible for all roof modifications and shall conform to the requirements of Appendix-01 Section 340002 - Asbestos Roofing Material Abatement for the Project Manual.

FIREBLOCKING/DRAFTSTOPPING:

Through penetrations shall be protected by an approved penetration Fire-block system installed & tested in accordance w/ ASTM E 814 or UL 1479, w/ a minimum positive pressure differential of 0.01 inch (2.49 Pa) of water & shall have an F rating of not less than the required fire-resistance rating of the wall penetrated.

Existing and new penetrations through rated assemblies shall be sealed on both sides with Dow Corning Fire Stop Foam or equal.

PRINT DATE: 3/6/19

REGAN YOUNG, AIA
21A00912100

REGAN YOUNG ENGLAND BUTERA
REFERENDUMS - ENGINEERING - ARCHITECTURE - DESIGN
456 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1(609)265-2652/0333FAX • 21A00912100 • RYEBREAD.COM

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND
LOCKER ROOM ALTERATIONS AT:
LINDENWOLD MIDDLE SCHOOL
LOT 2, BLOCK 145
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY

TITLE
COVER SHEET

DRAWING DATE:

01 MAR 19

REVISION DATE:

PRINT DATE:

DRAWN BY:

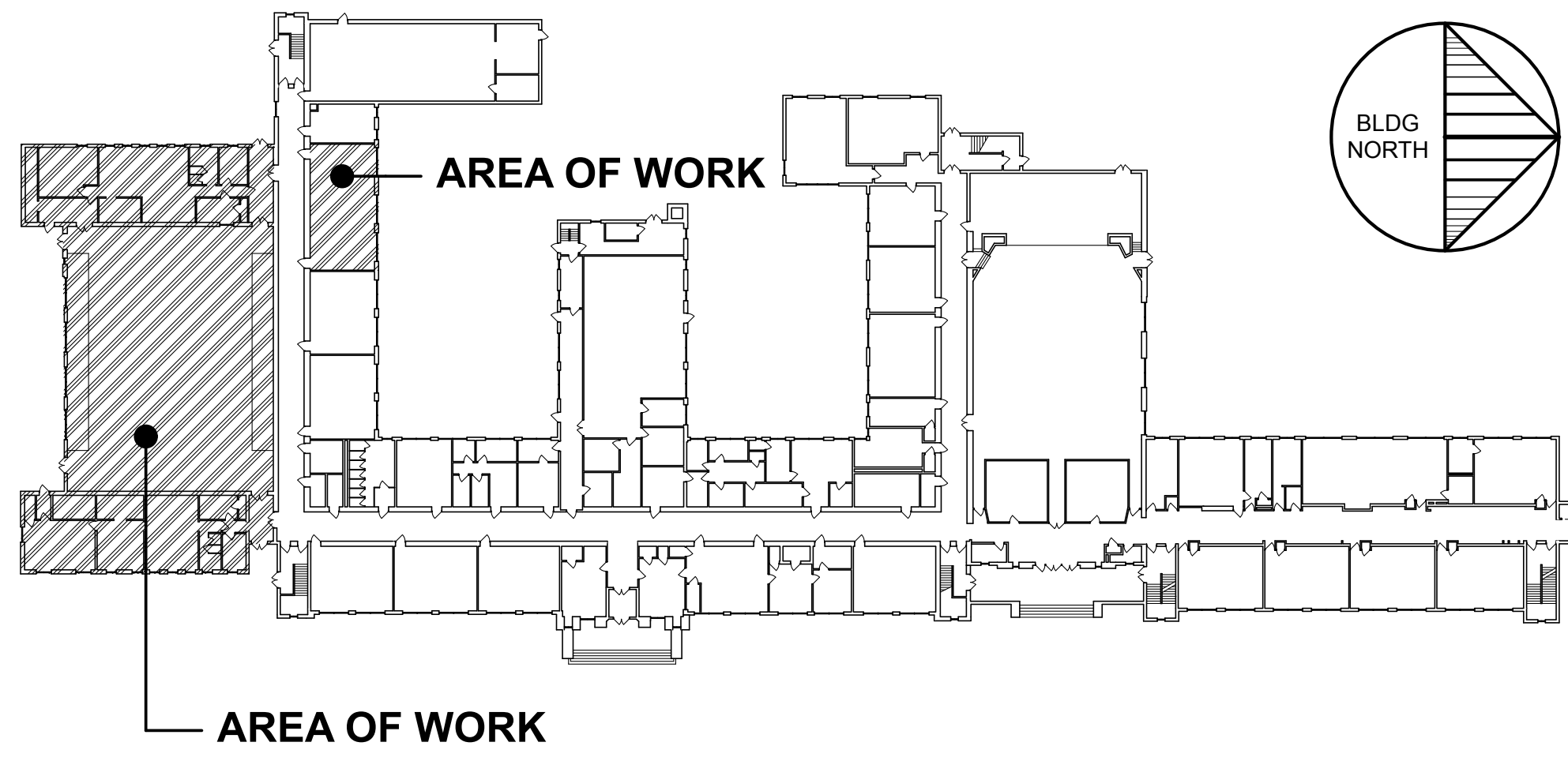
RR

COMMISSION NO.:

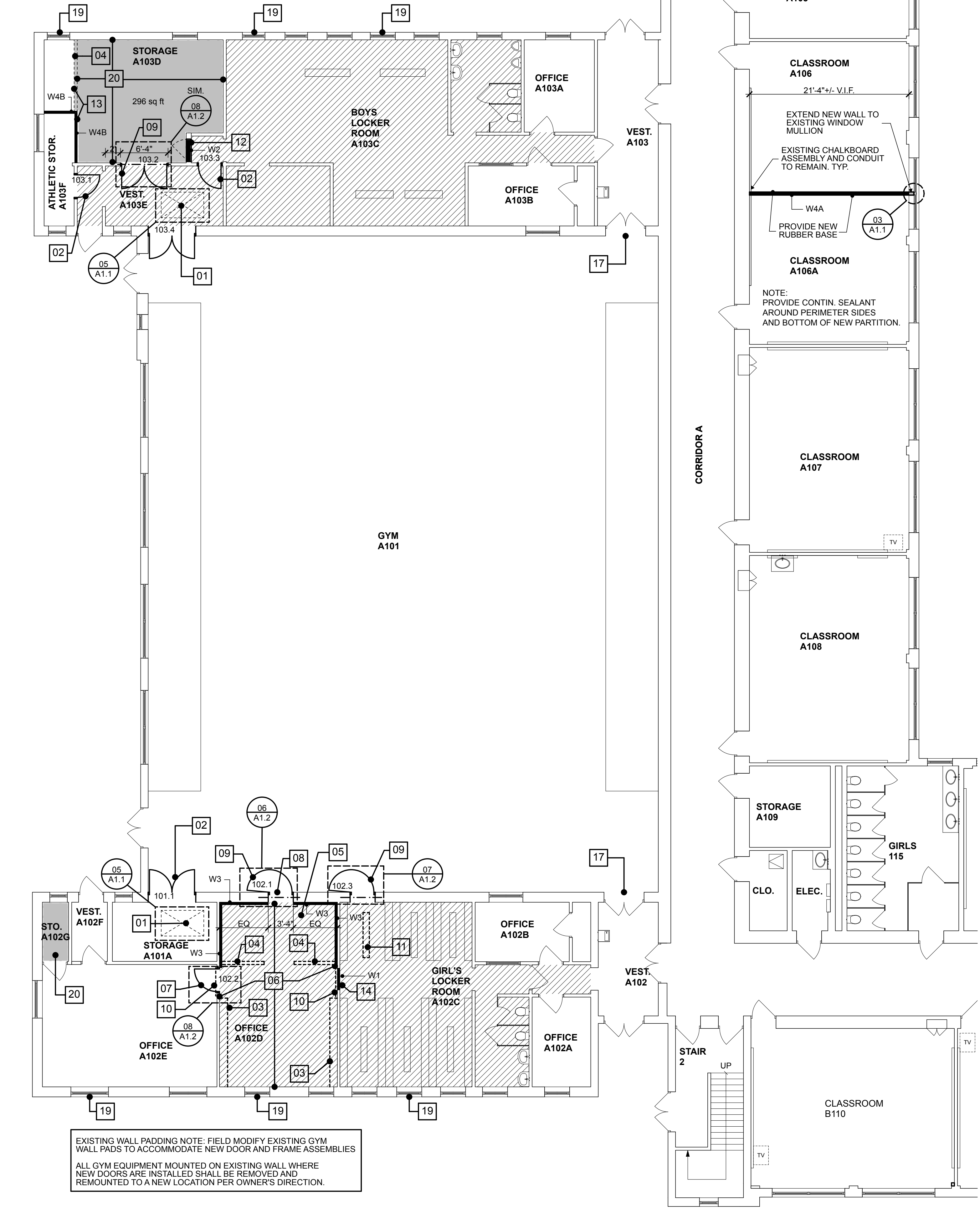
5563C

CS

1 OF 1



FIRST FLOOR KEY PLAN



PROF PARTIAL FIRST FLOOR PLAN SCALE: 1/8" = 1'-0" **01**

TYPICAL GENERAL NOTES:

A ALL FLOORING AND WALL DEMOLITION AND NEW WORK SHALL BE REQUIRED TO BE PATCHED AND FINISH PAINTED TO MATCH EXISTING SURFACES AND FINISHES (TYP.)

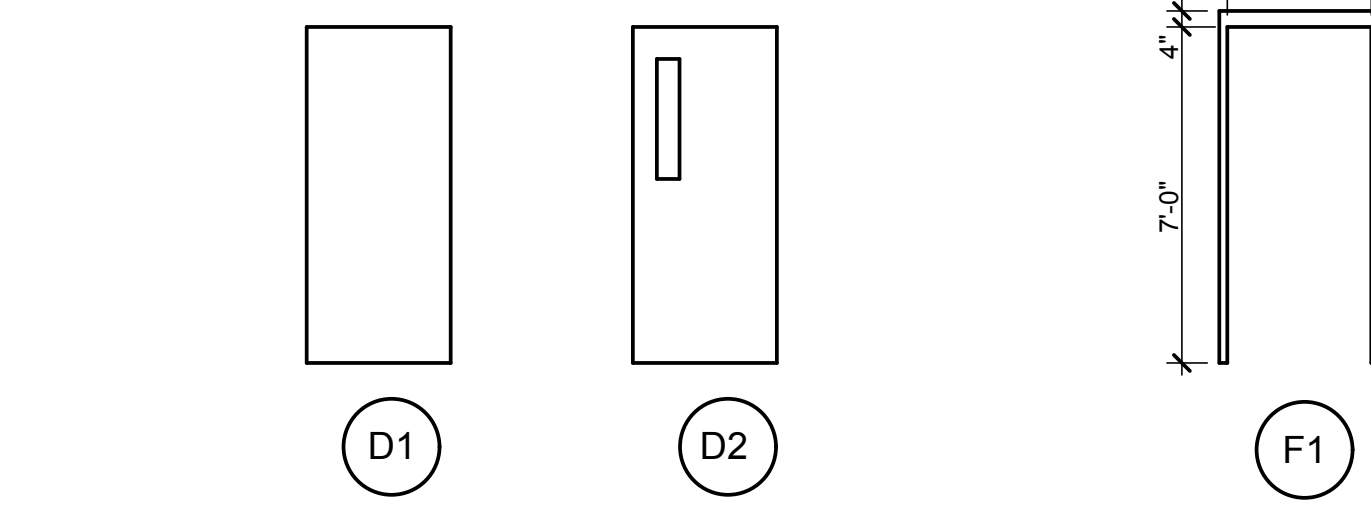
B ALL UNUSED PENETRATIONS (FLOOR AND WALL) SHALL BE INFILLED TO MATCH EXISTING.

C CONTRACTOR SHALL REPAIR AND PATCH ALL EXISTING WALL, CEILING AND FLOOR FINISHES WHERE IMPACTED BY CONSTRUCTION TO MATCH EXISTING.

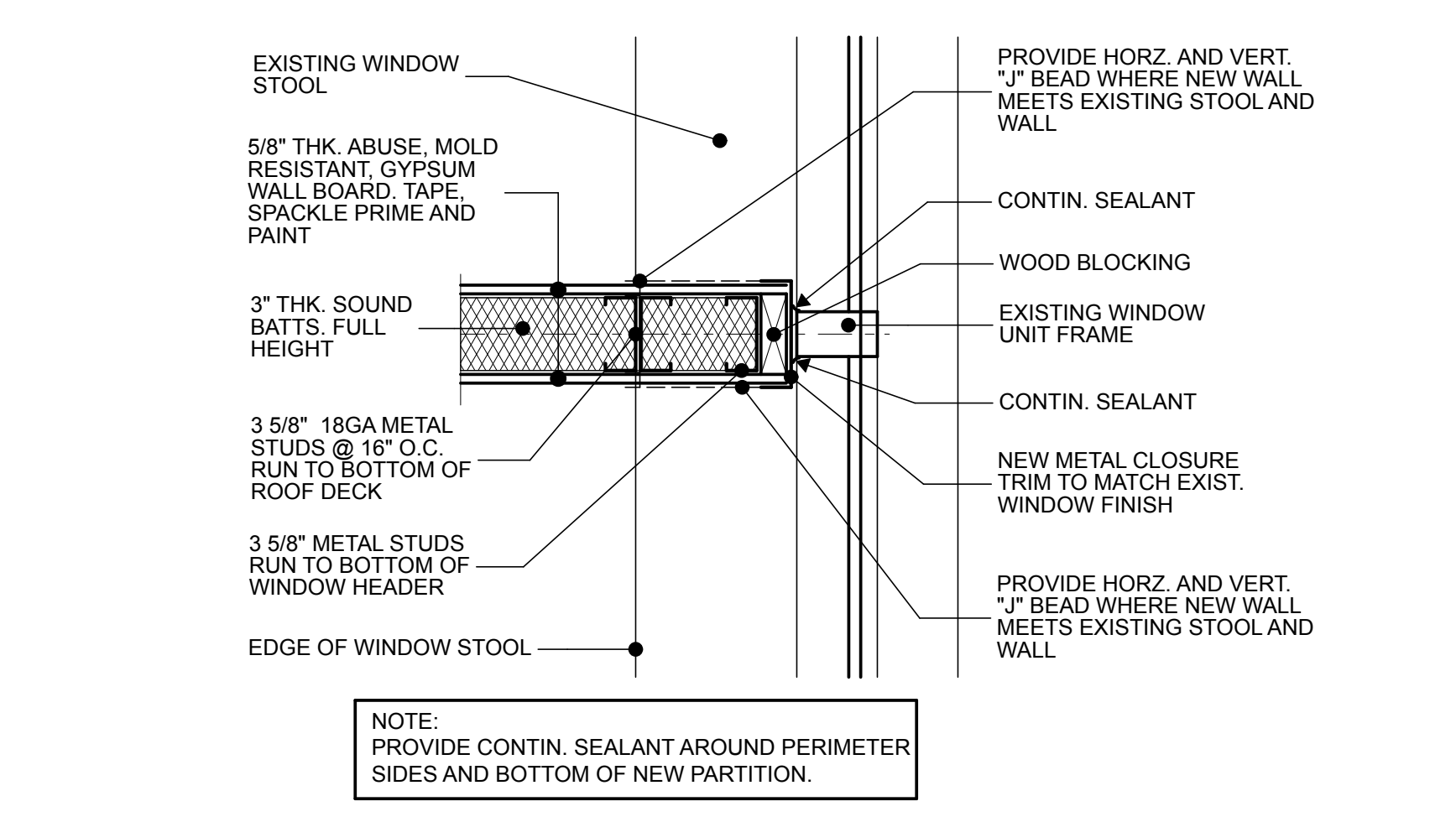
D WHERE CONSTRUCTION IS DEMOLISHED, CONTRACTOR SHALL INFILL WITH MATERIALS TO MATCH ADJACENT CONSTRUCTION

KEY:

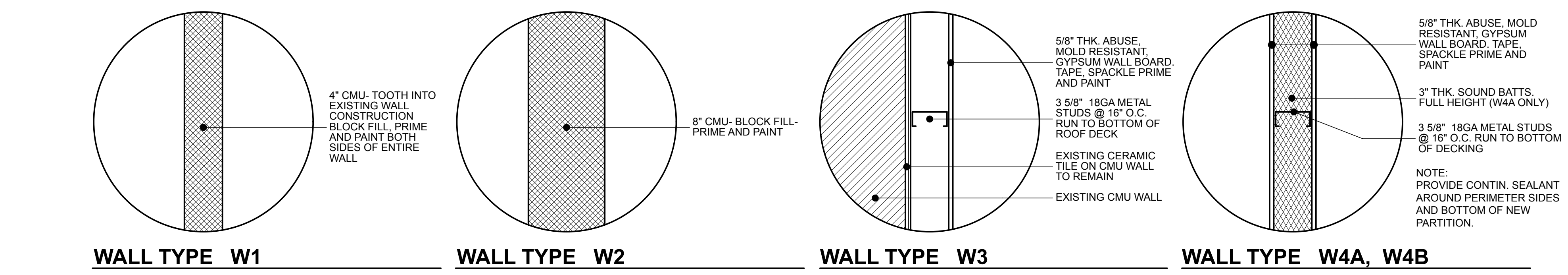
- NEW WALL CONSTRUCTION TO ROOF DECK FOLLOW PLAN FOR WALL TYPES.
- REMOVE EXISTING APC CEILING AND LIGHTING SYSTEMS IN THEIR ENTIRETY.
- AREA OF ASBESTOS ABATEMENT BY OWNER



DOOR AND FRAME TYPES SCALE: 1/8" = 1'-0" **04 A1.1**



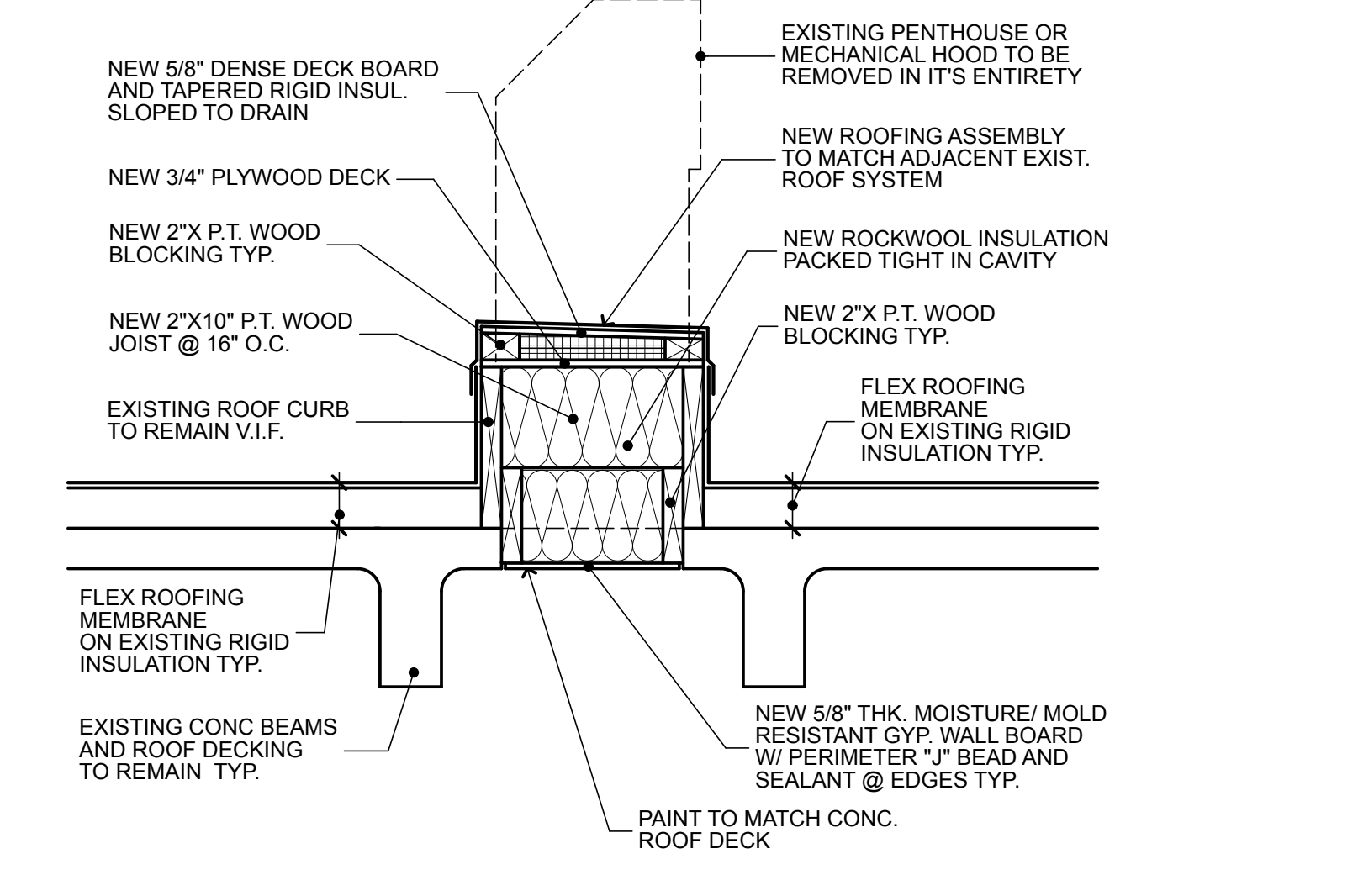
PLAN DETAIL SCALE: 1/8" = 1'-0" **03 A1.1**



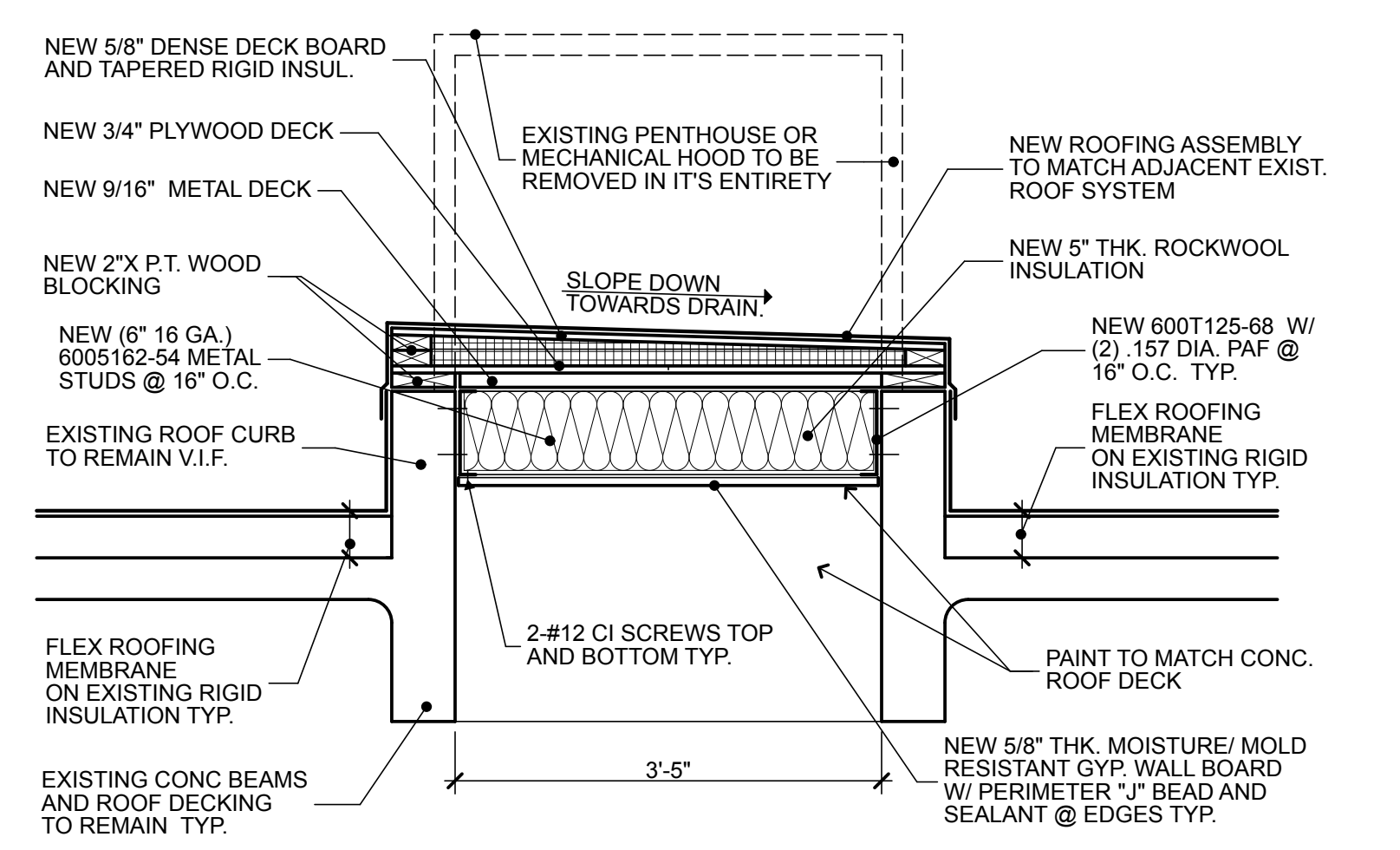
WALL TYPES SCALE: 1/8" = 1'-0" **02 A1.1**

NOTES:

- 01 REMOVE EXISTING ABANDONED ROOF MOUNTED GRAVITY RELIEF PENTHOUSE IN ITS ENTIRETY. EXISTING CONCRETE ROOF CURB PORTION TO REMAIN. PATCH WITH ROOFING TO MATCH EXISTING. FOLLOW DETAIL 05/A1.1.
- 02 REMOVE EXISTING DOOR AND FRAME ASSEMBLY AND REPLACE WITH NEW. VERIFY EXISTING OPENING IN FIELD.
- 03 REMOVE EXISTING LOCKER AND CONCRETE BASE. PATCH AND PREP SUBFLOOR TO ACCEPT NEW FINISH FLOOR.
- 04 REMOVE EXISTING CMU WALL. PATCH AND PREP SUBFLOOR AND WALLS TO ACCEPT PROPOSED FLOOR FINISH.
- 05 FURR OUT WALLS AND REFACE WITH IMPACT RESISTANT DRYWALL. PATCH AND PREP FOR PROPOSED NEW WALL FINISH. FOLLOW WALL TYPE W3.
- 06 REMOVE EXISTING CERAMIC FLOOR TILE, VCT AND WALL BASE. PATCH AND LEVEL PREP EXISTING SUBFLOOR TO ALIGN WITH ADJACENT FLOOR TO REMAIN AS PER EXISTING CONCRETE FLOOR FOUND IN THE CONSTRUCTION NOTES ON COVER SHEET. PROVIDE NEW VCT FLOORING AND WALL BASE IN THIS AREA.
- 07 PROVIDE NEW DOOR AND FRAME ASSEMBLY IN EXISTING OPENING. VERIFY EXISTING OPENING IN FIELD.
- 08 REMOVE EXISTING CHIN-UP EXERCISE BAR AND WOOD MOUNTS. PATCH, PREP AND PAINT EXISTING WALL AS REQUIRED.
- 09 MODIFY EXISTING MASONRY WALL AS REQUIRED AND PROVIDE NEW DOOR AND FRAME ASSEMBLY. PATCH FLOOR TO MATCH EXISTING.
- 10 REMOVE EXISTING SECURITY GATE. PATCH PREP AND PAINT WALL.
- 11 REMOVE EXISTING BENCH AND BASE. PATCH EXISTING VCT FLOOR TO MATCH EXISTING.
- 12 REMOVE EXISTING DOOR AND FRAME ASSEMBLY AND INFILL WALL TO MATCH EXISTING TO RUN TO UNDERSIDE OF EXISTING LINTEL.
- 13 EXISTING CMU WALL TO BE REMOVED PROVIDE NEW WALL PER SCHEDULE. RUN NEW WALL TO UNDERSIDE OF ROOF DECK.
- 14 INFILL EXISTING WALL OPENING WITH NEW CMU WALL TO MATCH EXISTING. PREP, PRIME AND PAINT BOTH SIDES OF INFILL WALL TO MATCH ADJACENT WALL.
- 15 REMOVE ALUMINUM WINDOW ASSEMBLY TO PERMIT NEW DUCTWORK PENETRATION. FOLLOW MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. INFILL REMAINING OPENING WITH CMU AND BRICK TO MATCH EXISTING. PREP, PRIME AND PAINT CMU TO MATCH ADJACENT WALL.
- 16 EXISTING PV PANEL ELECTRICAL CONDUIT FEED TO BE RELOCATED BY OWNER. COORDINATE WITH SCHOOL DISTRICT'S SOLAR VENDOR.
- 17 INFILL EXISTING CMU WALL (APPROX. 64" X 20" X 16") AFTER MECHANICAL LOUVER IS REMOVED. FOLLOW MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. PREP, PRIME AND PAINT BOTH SIDES OF INFILL TO MATCH ADJACENT WALL.
- 18 EXISTING MECHANICAL UNIT AND DUCT WORK TO BE REMOVED IN ITS ENTIRETY. FOLLOW DETAIL 05/A1.2 FOR INFILL DETAIL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 19 INFILL WITH CMU AND BRICK VENEER TO MATCH EXISTING AFTER MECHANICAL DEMOLITION. FOLLOW MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. PRIME AND PAINT INTERIOR CMU INFILL TO MATCH EXISTING.
- 20 PATCH, LEVEL AND PREP EXISTING SUBFLOOR TO ALIGN WITH ADJACENT FLOOR TO REMAIN AS PER EXISTING CONCRETE FLOOR FOUND IN THE CONSTRUCTION NOTES ON COVER SHEET. PROVIDE NEW VCT FLOORING AND WALL BASE IN THIS AREA.
- 21 EXISTING EXHAUST FAN UNIT AND DUCT WORK TO BE REMOVED IN ITS ENTIRETY. FOLLOW DETAIL 08/A1.1 FOR INFILL DETAIL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.



EXISTING ROOF INFILL DETAIL SCALE: 1/8" = 1'-0" **06 A1.2**



EXISTING ROOF INFILL DETAIL SCALE: 1/8" = 1'-0" **05 A1.1**

PRINT DATE: 3/6/19

REGAN YOUNG, AIA
21A00912100

REGAN YOUNG ENGLAND BUTERA
REFERENDUMS - ENGINEERING - ARCHITECTURE - DESIGN
466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1(609)265-2652/0333FAX • 21A00912100 • RYE@RYEAD.COM

NJDOE SP #2670-090-14-1006-G04

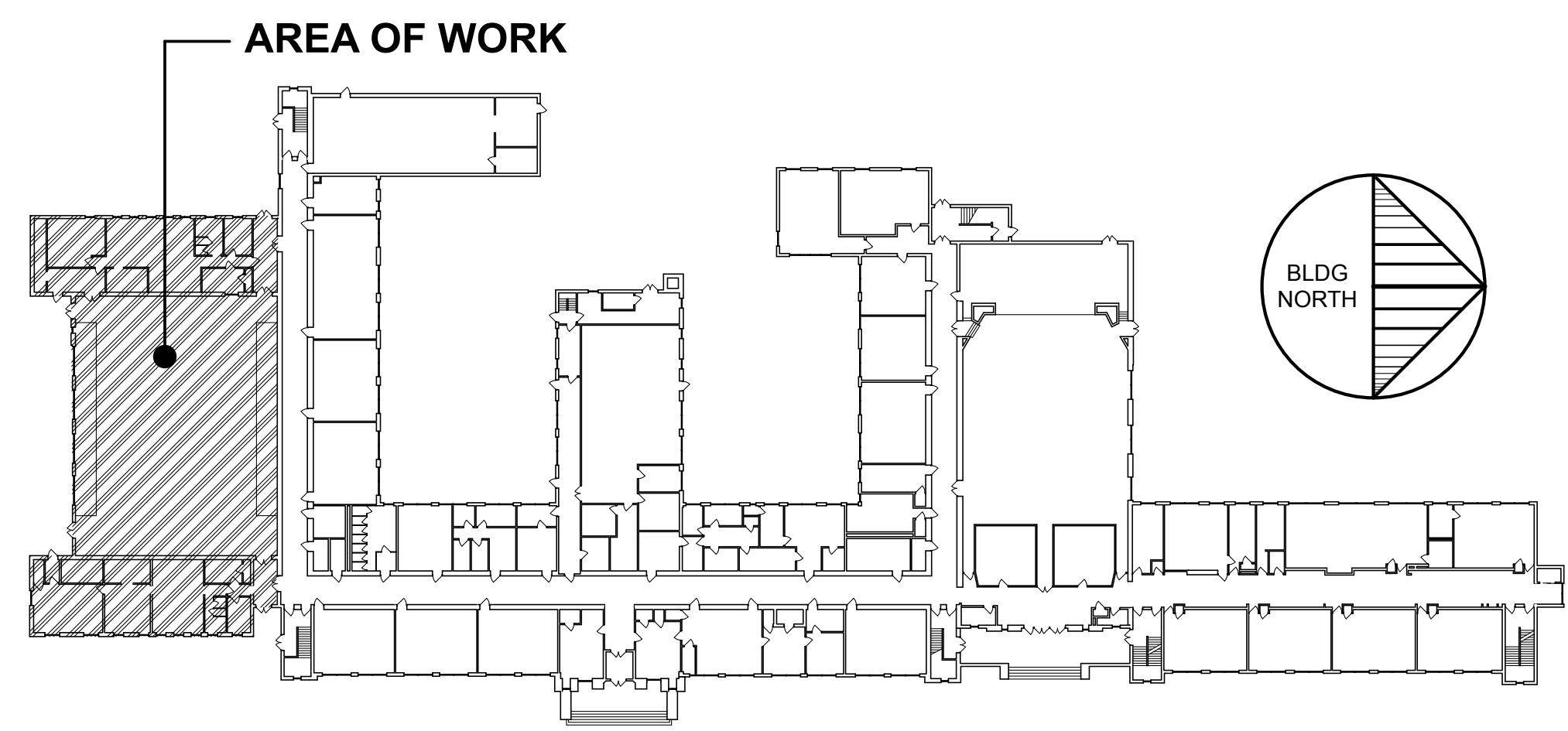
GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOLD MIDDLE SCHOOL, LOT 2, BLOCK 448, 40 WHITE HORSE AVENUE, LINDENWOLD, NEW JERSEY

TITLE: **PARTIAL PLAN, NOTES, AND DETAILS**

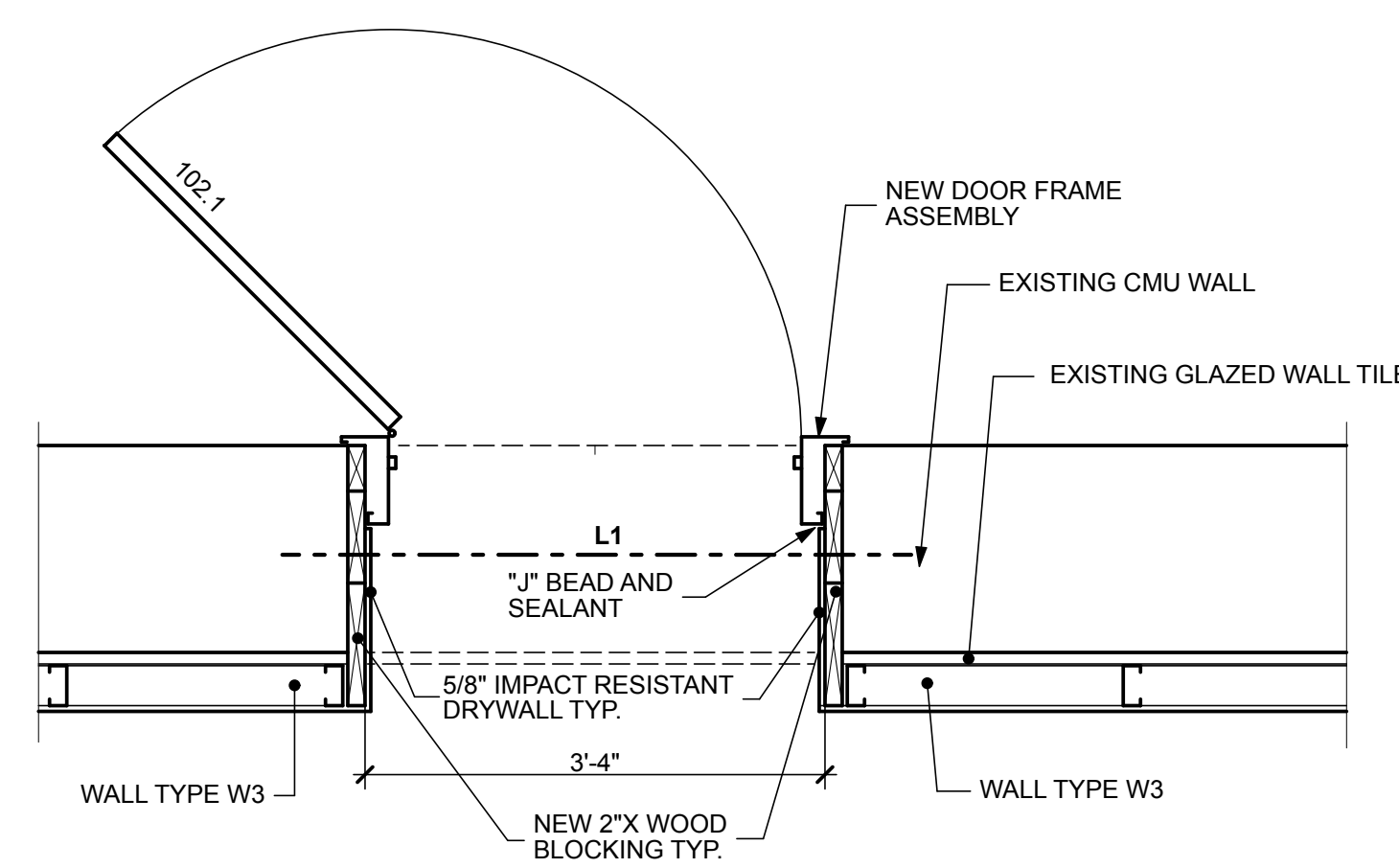
DRAWING DATE: **01 MAR 19**
REVISION DATE:
PRINT DATE:
DRAWN BY: **RR**
COMMISSION NO.: **5563C**

A1.1

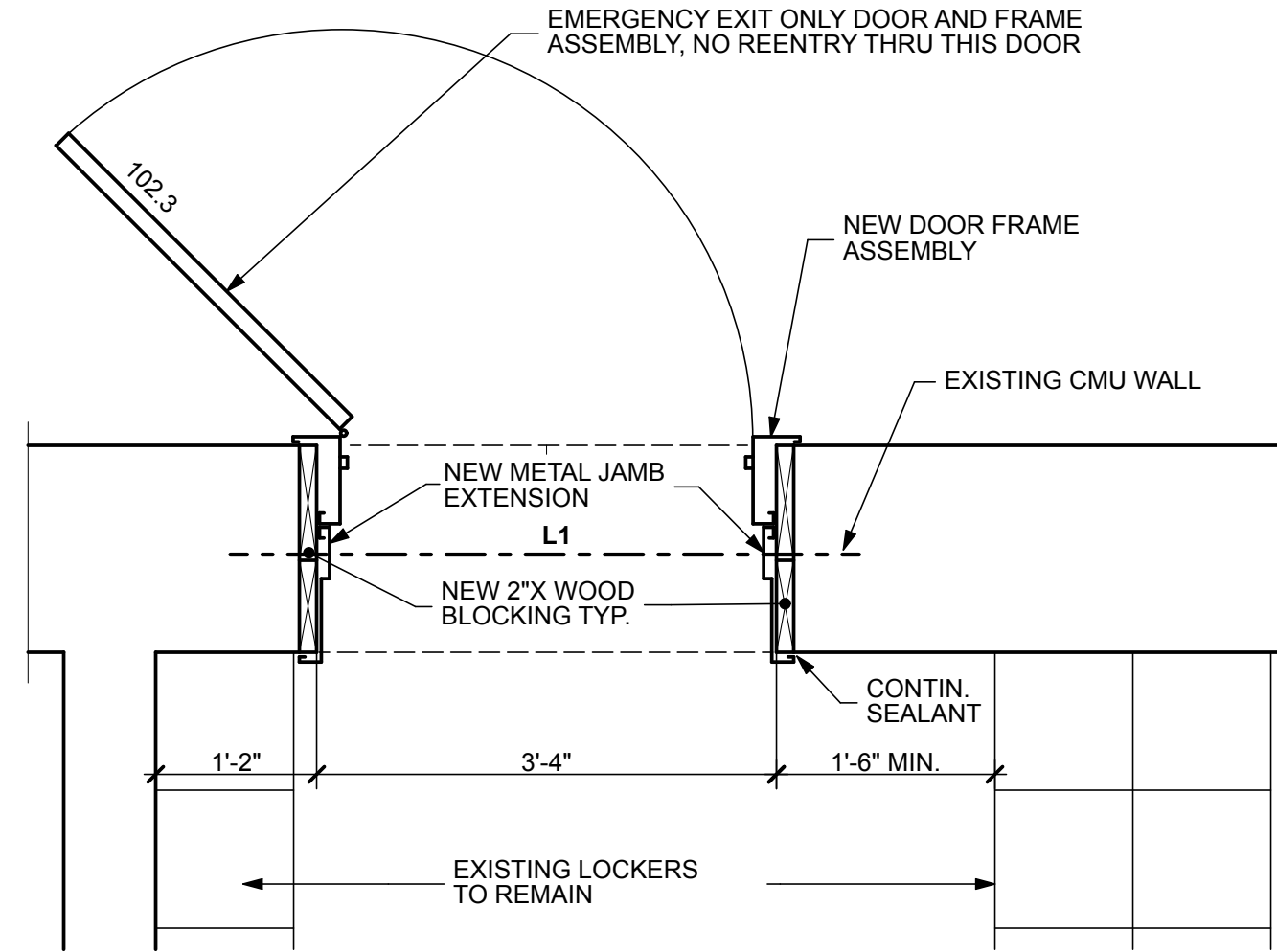
1 OF 3



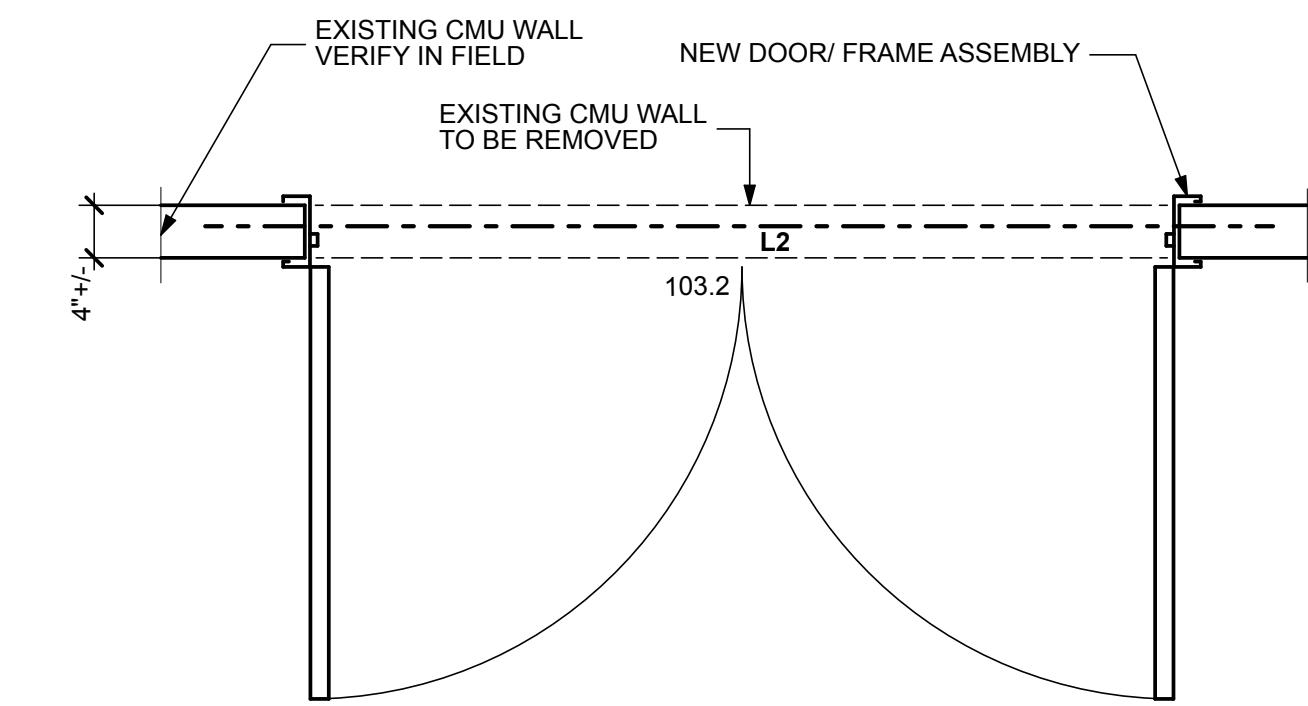
SECOND FLOOR KEY PLAN



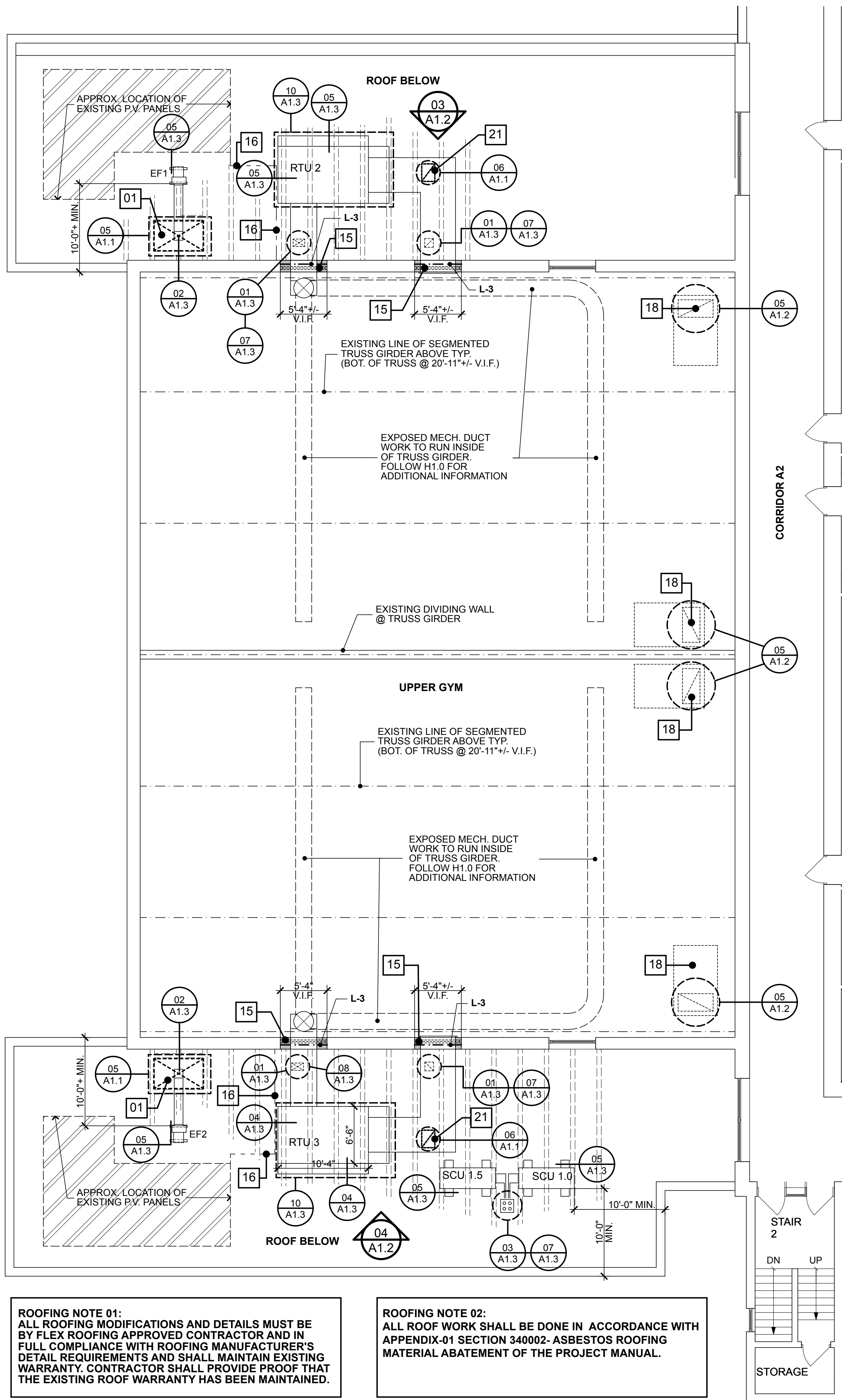
JAMB DETAIL SCALE: 3/4" = 1'-0" **06 A1.1**



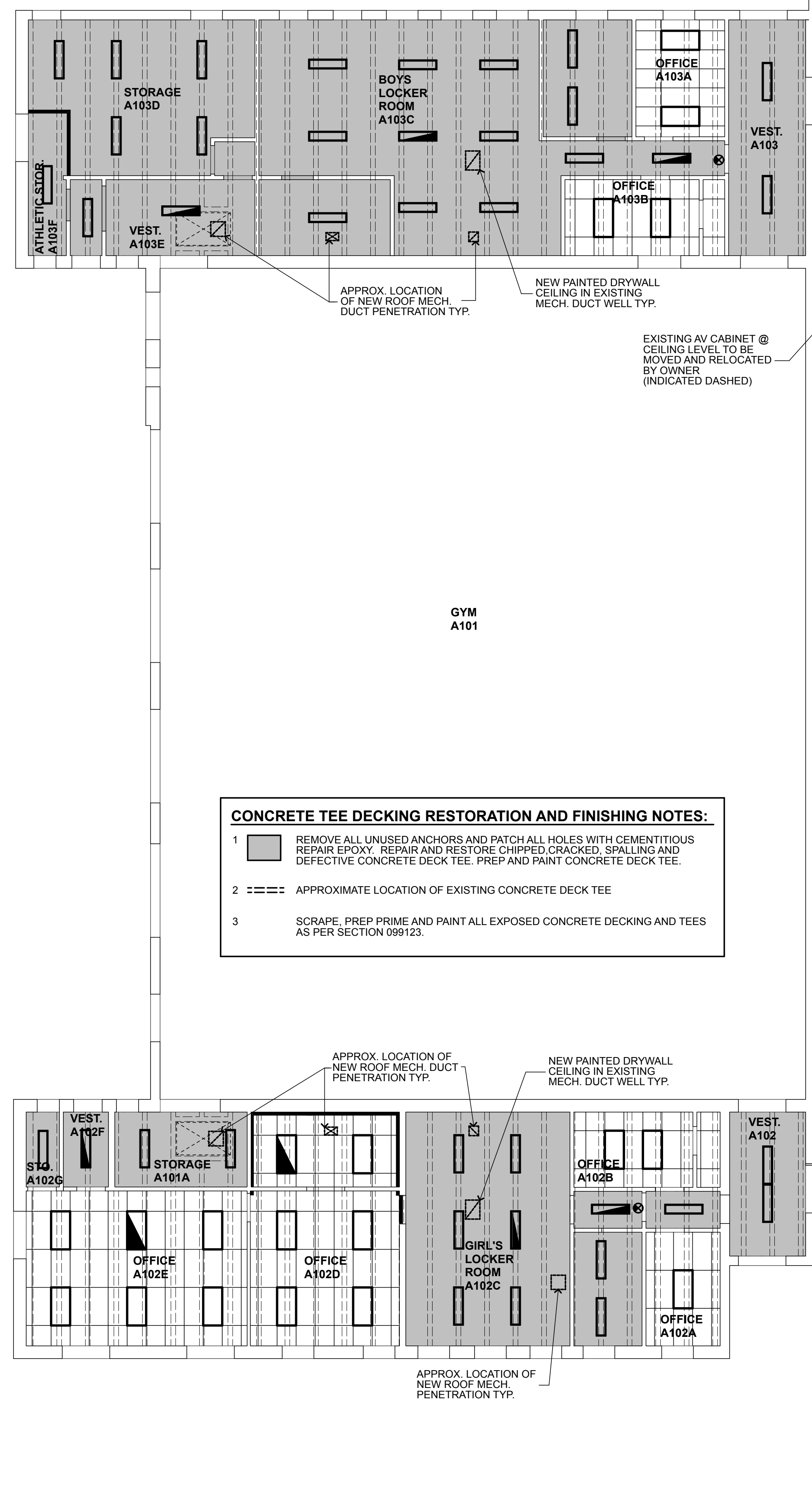
JAMB DETAIL SCALE: 3/4" = 1'-0" **07 A1.1**



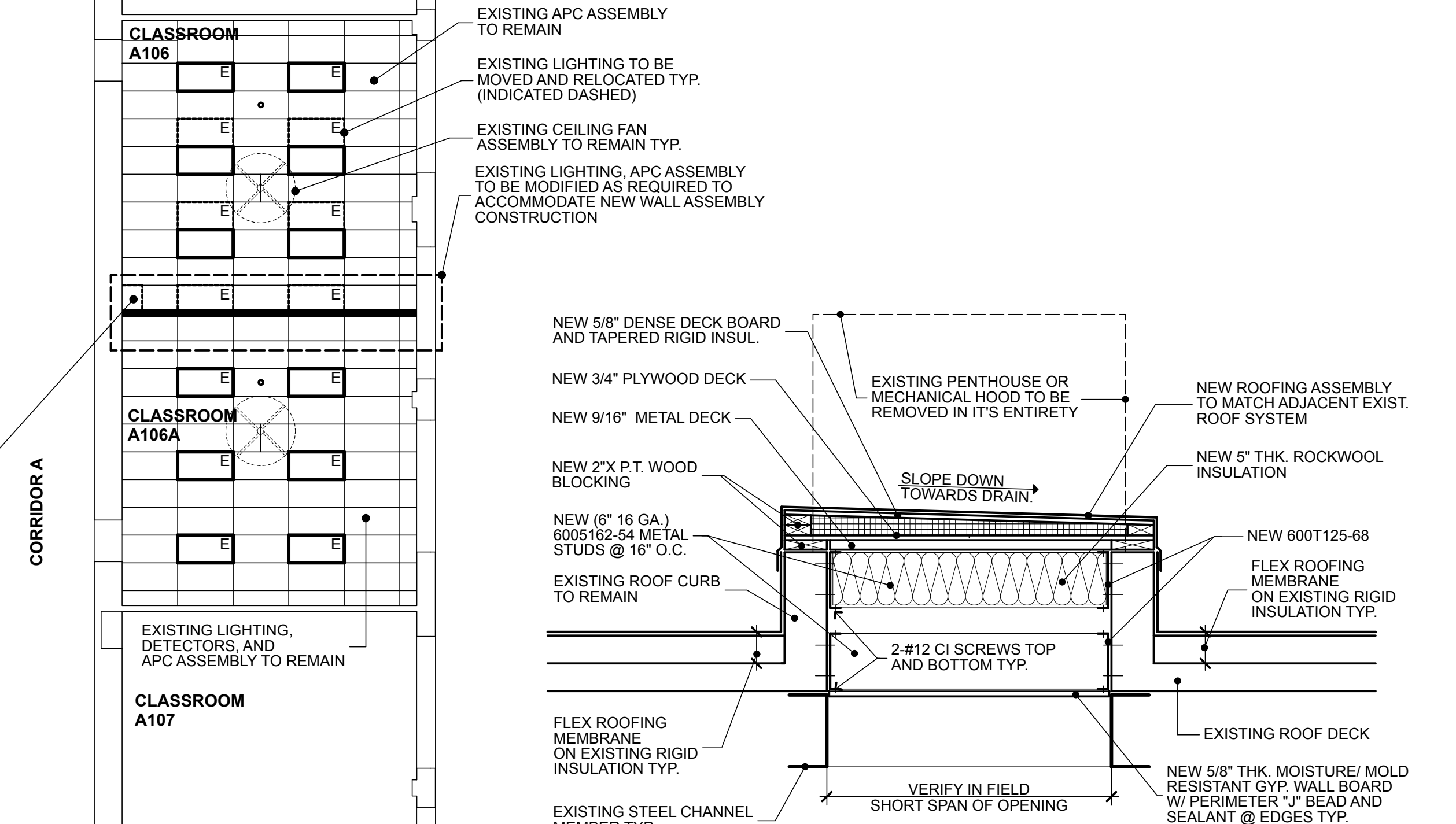
JAMB DETAIL SCALE: 3/4" = 1'-0" **08 A1.1**



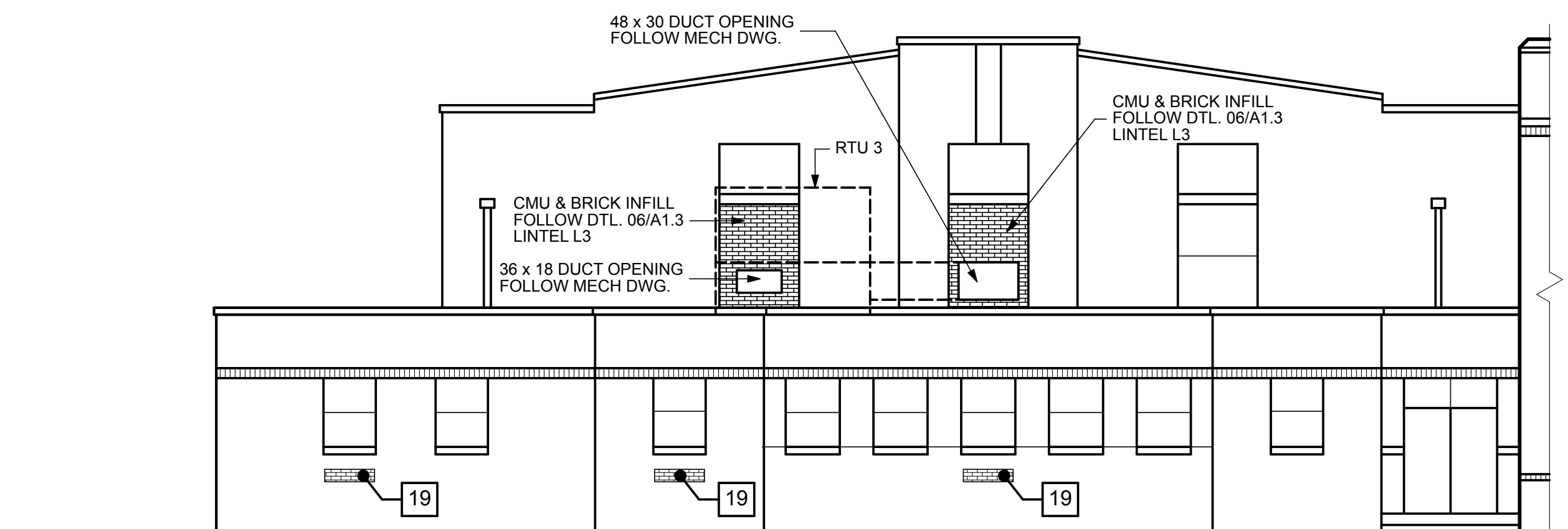
PARTIAL SECOND FLOOR WORK PLAN SCALE: 1/8" = 1'-0" **01 A1.2**



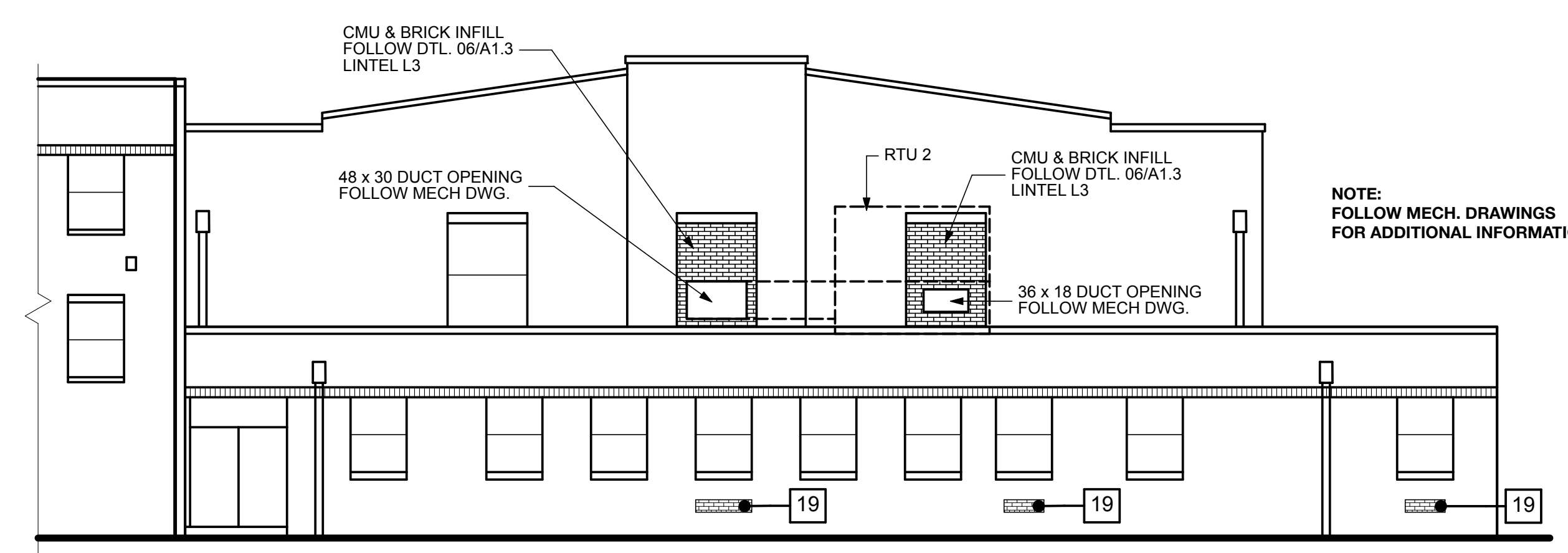
PARTIAL FIRST FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" **02 A1.2**



EXISTING ROOF INFILL DETAIL SCALE: 1/8" = 1'-0" **05 A1.2**



PARTIAL EAST ELEVATION SCALE: 1/8" = 1'-0" **04 A1.1**



PARTIAL WEST ELEVATION SCALE: 1/8" = 1'-0" **03 A1.1**

PRINT DATE: 3/6/19

REGAN YOUNG, AIA
21A00912100

REGAN YOUNG ENGLAND BUTERA
REFERENDUMS - ENGINEERING - ARCHITECTURE - DESIGN
466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1(609)265-2652-0333FAX • 21A00912100 • RYEBREAD.COM

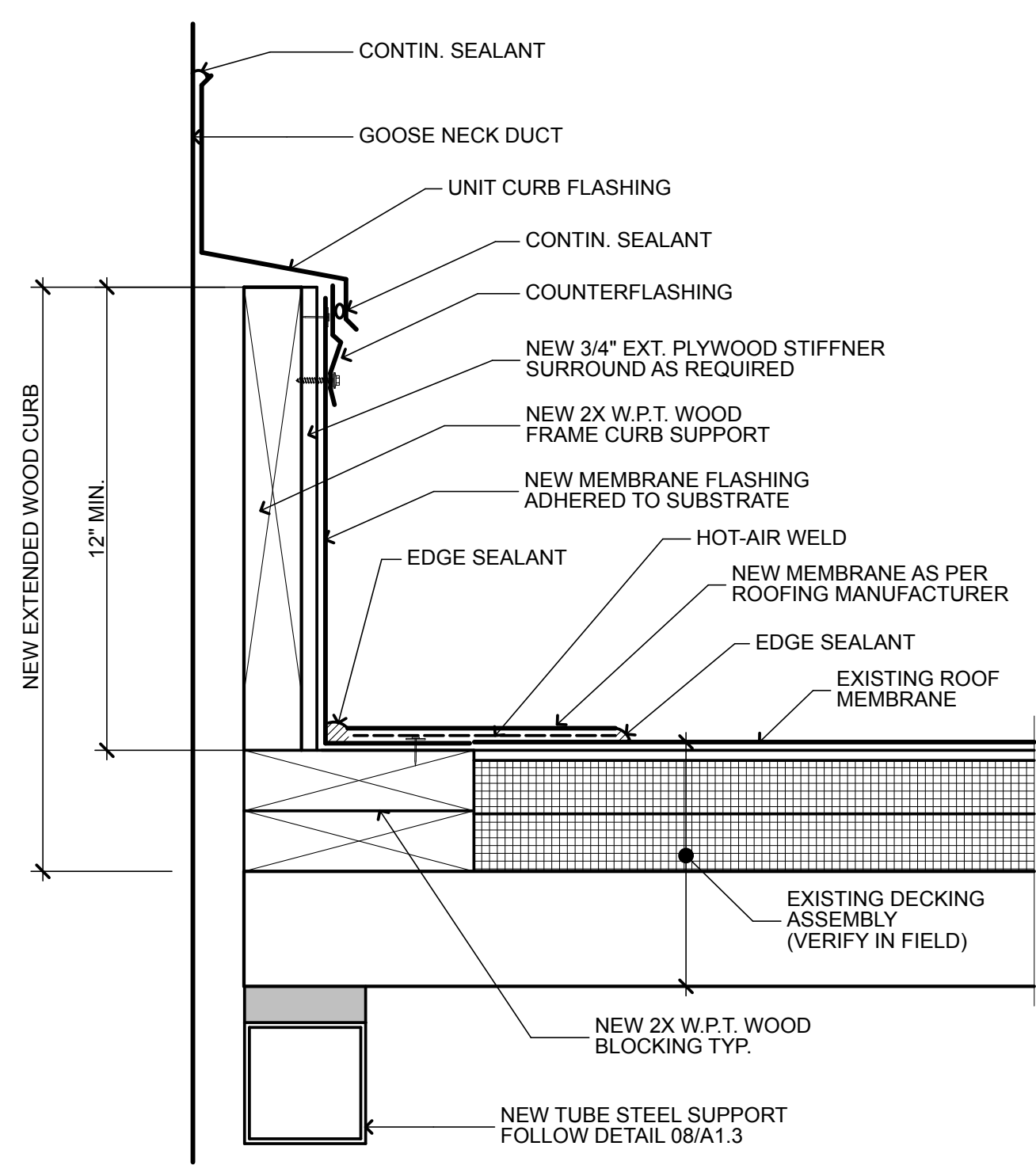
NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOLD MIDDLE SCHOOL
LOT 2, BLOCK 44S
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY

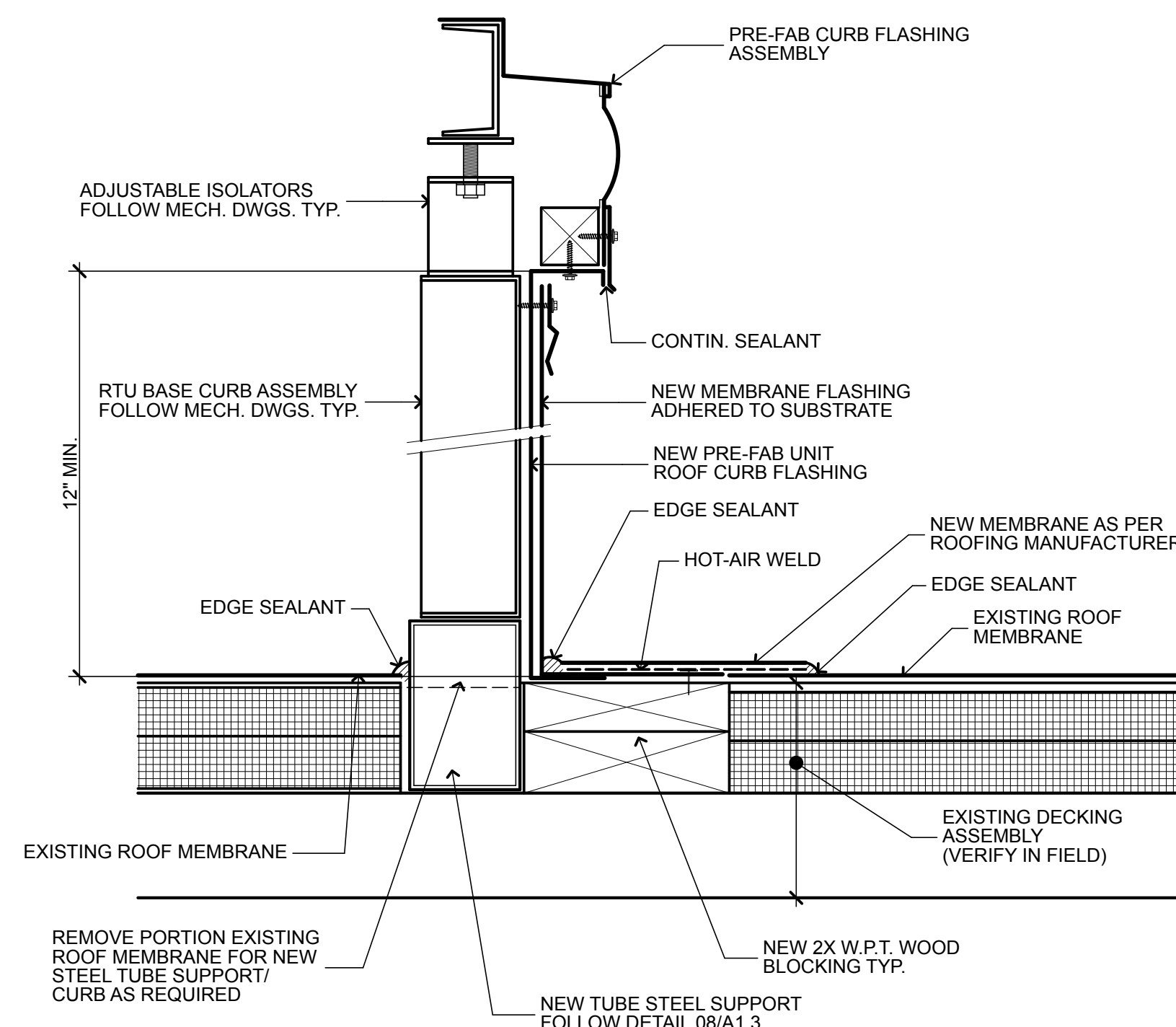
PARTIAL PLANS, ELEVATIONS AND DETAILS

DRAWING DATE: **01 MAR 19**
REVISION DATE:
PRINT DATE:
DRAWN BY: **RR**
COMMISSION NO.: **5563C**

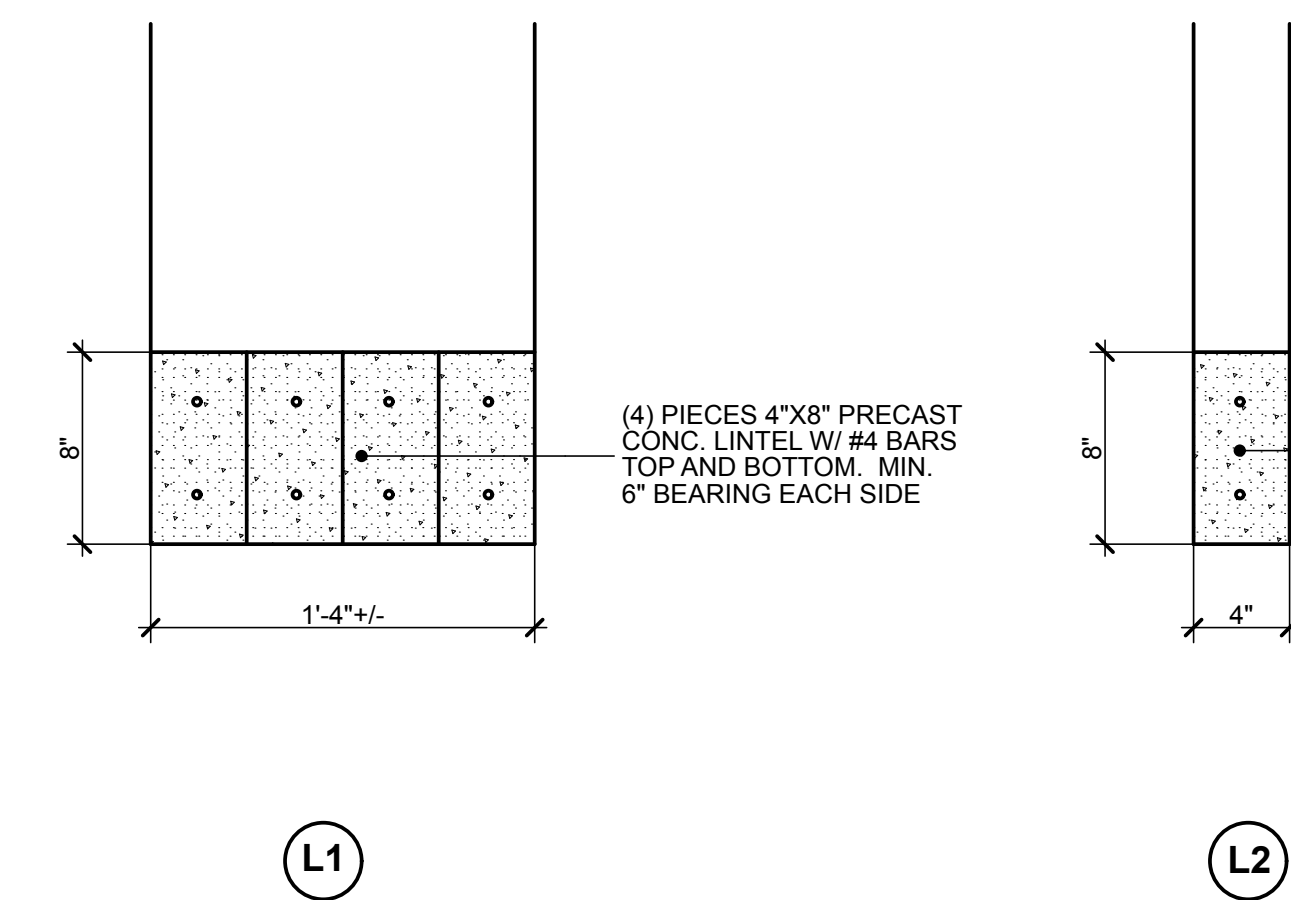
A1.2
2 OF 3



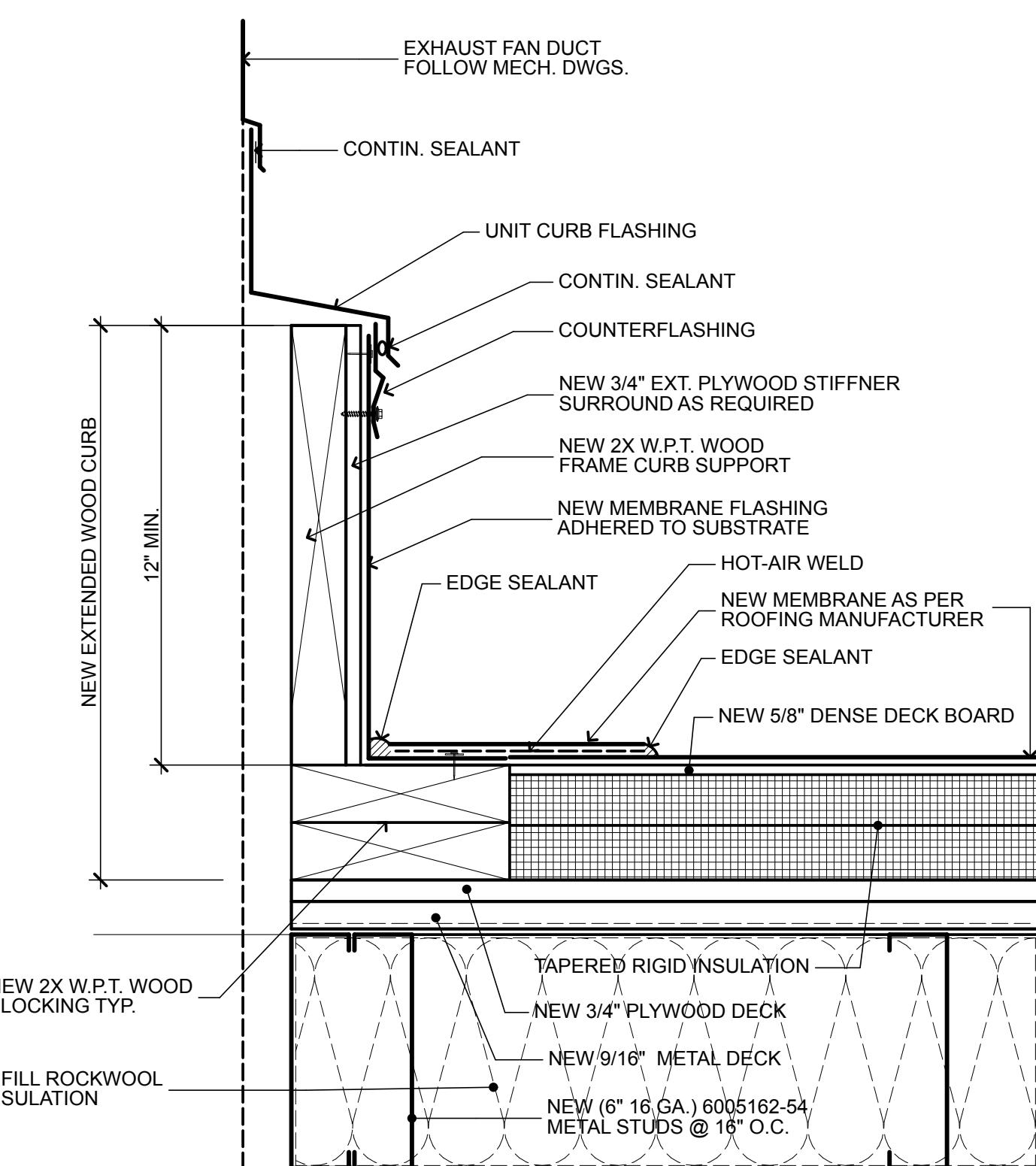
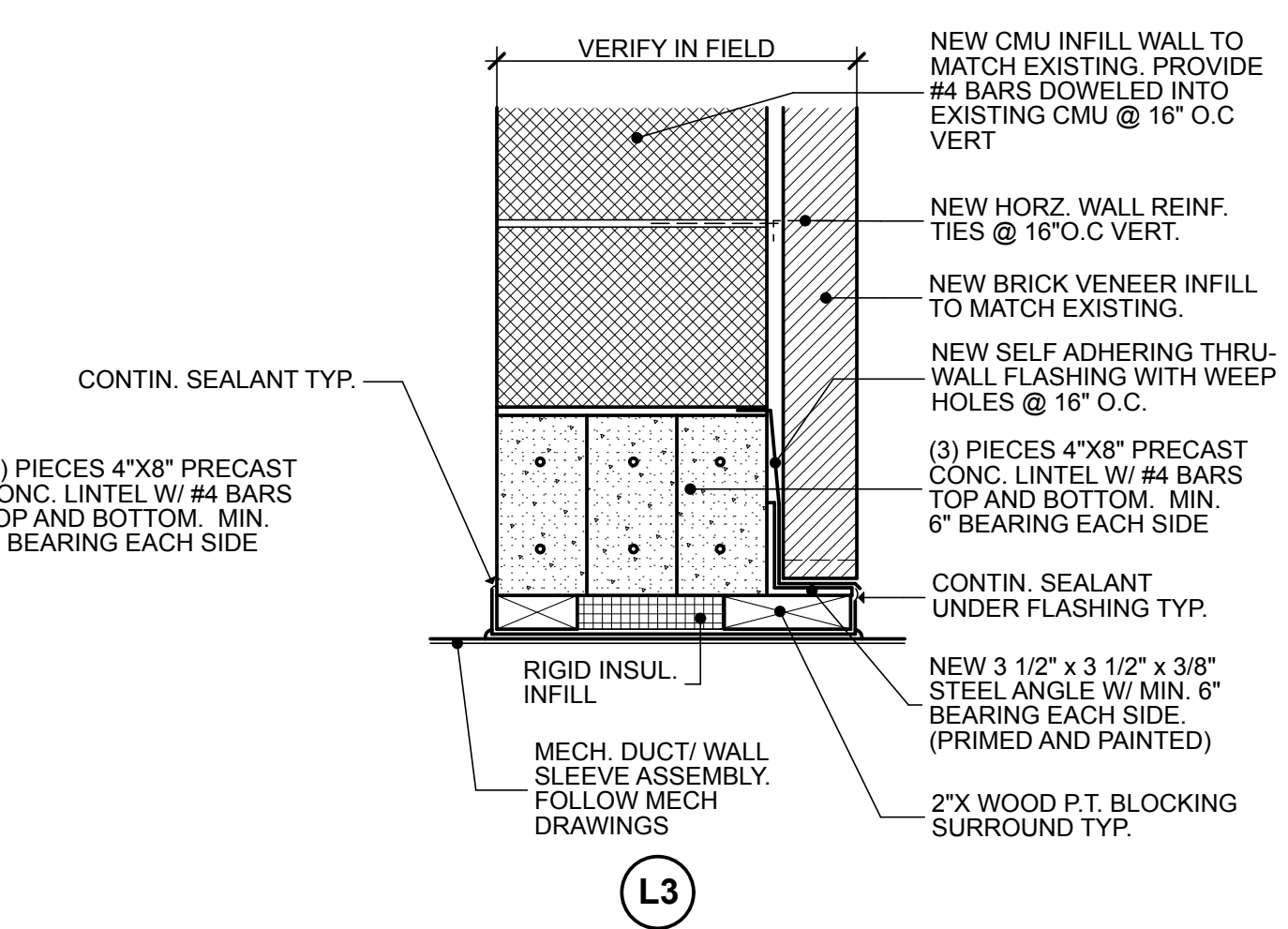
TYP. ROOF CURB DETAIL NTS **01** **A1.2**



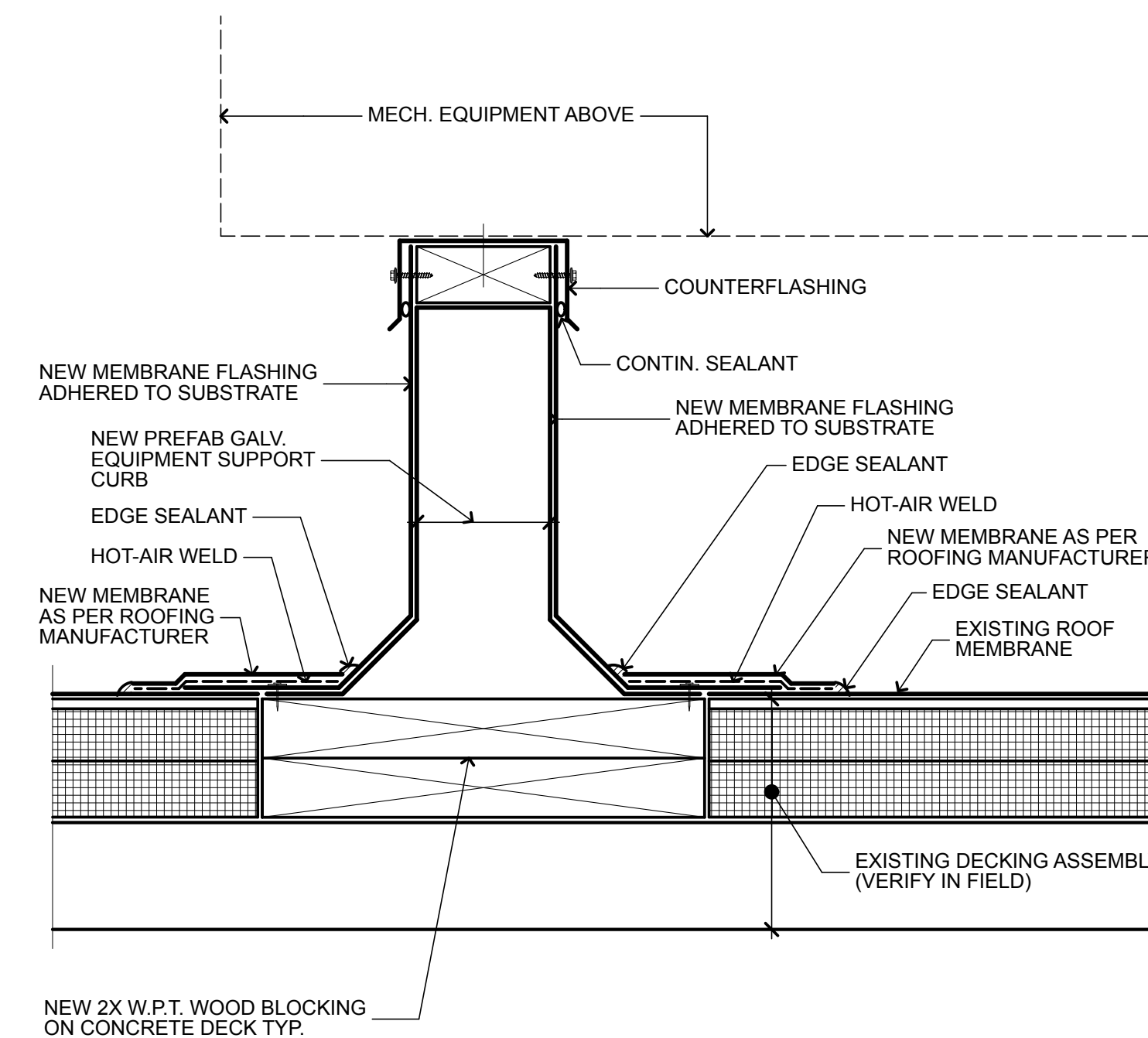
TYP. RTU CURB DETAIL NTS **04** **A1.2**



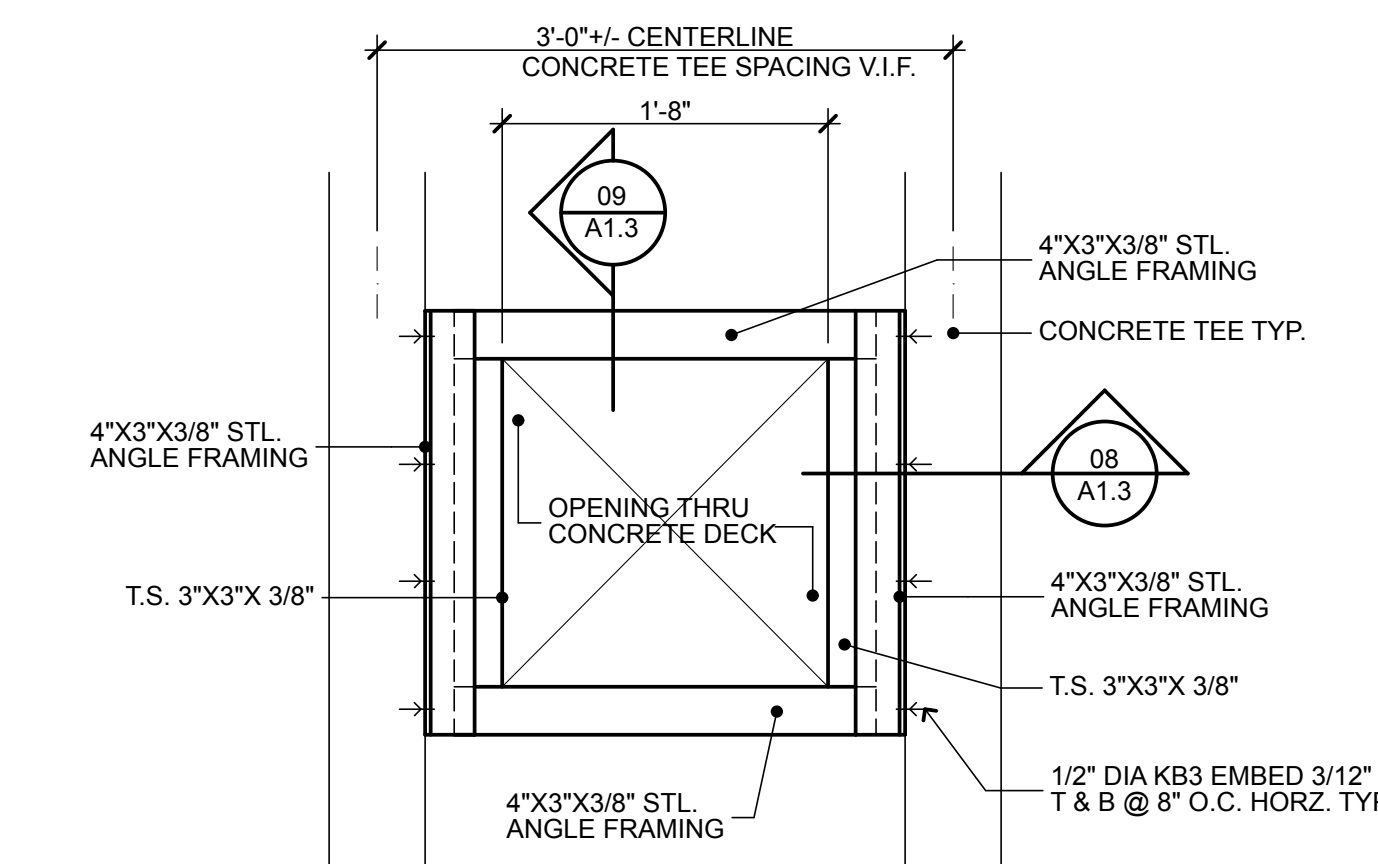
LINTEL DETAILS SCALE: 1 1/2" = 1'-0" **06** **A1.1**



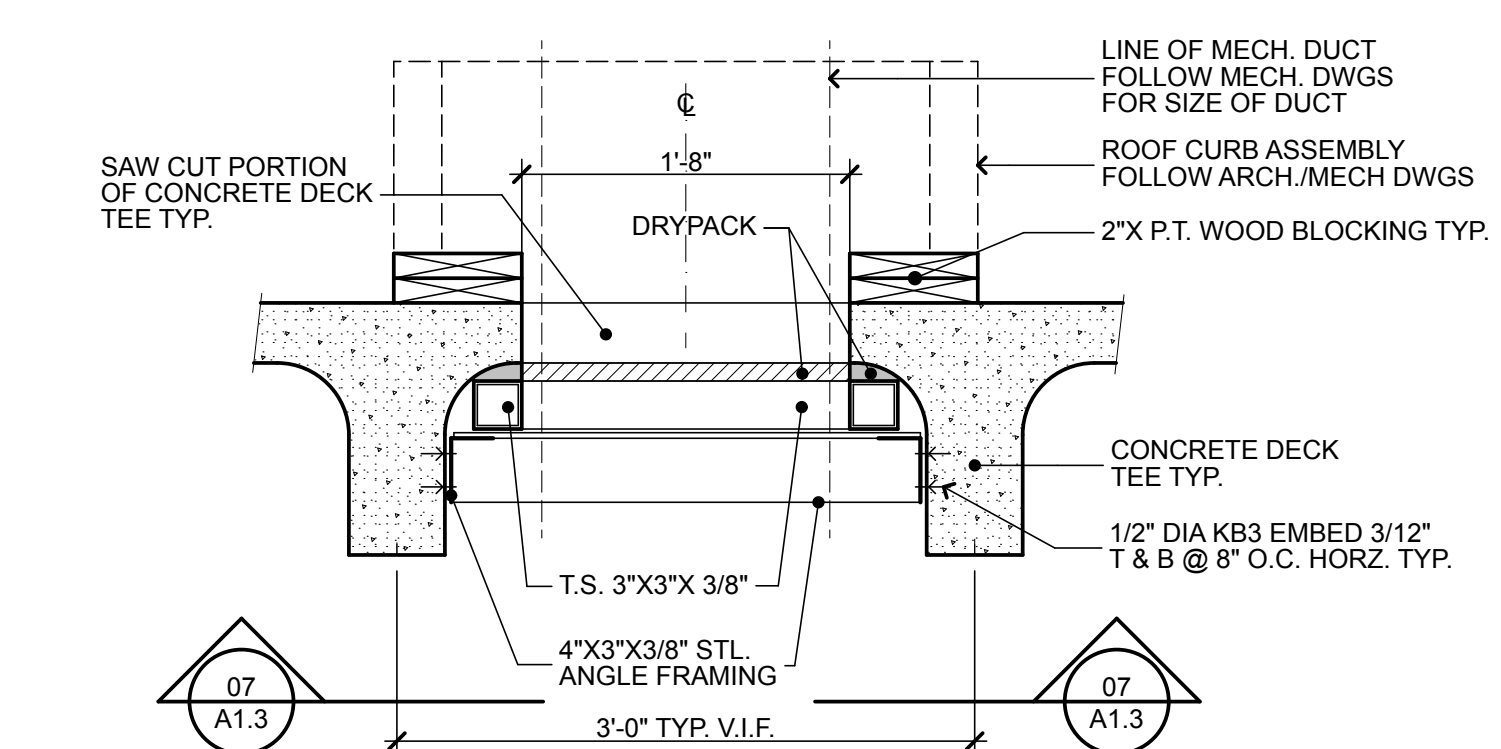
TYP. ROOF CURB DETAIL NTS **02** **A1.2**



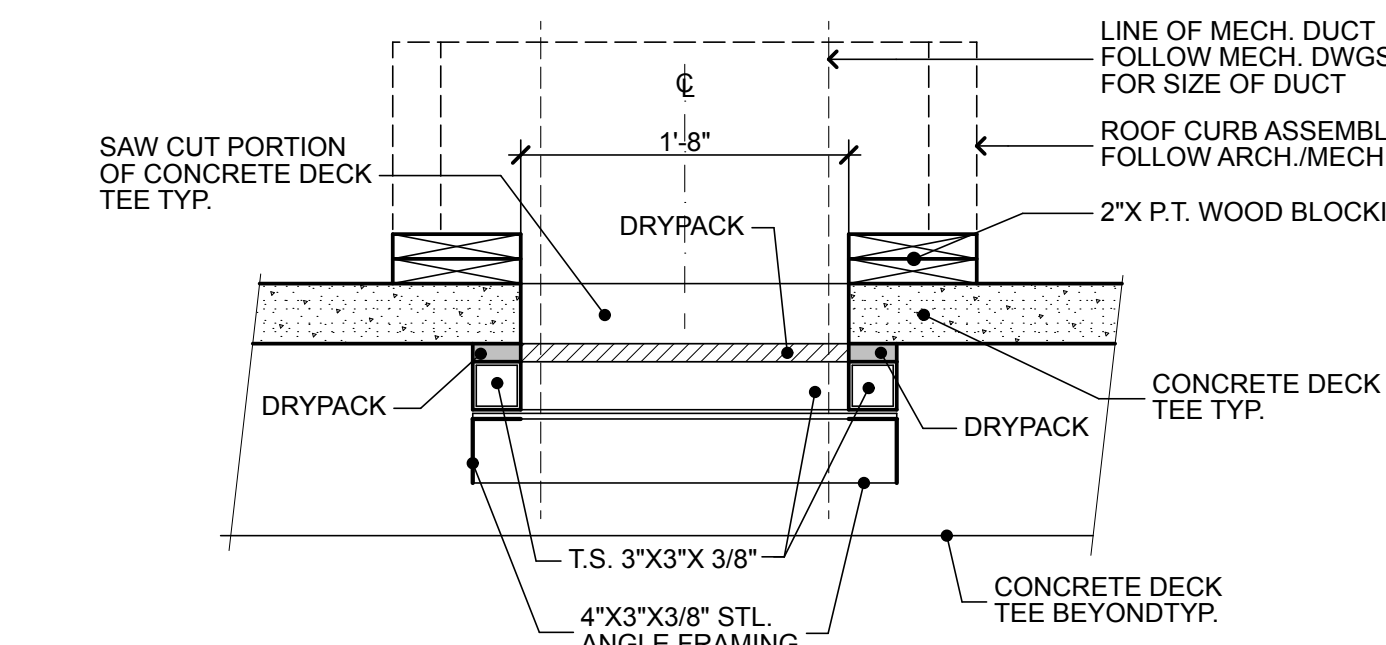
TYP. EQUIPMENT CURB DTL. NTS **05** **A1.2**



TYP. ROOF OPENING PLAN SCALE: 1" = 1'-0" **07** **A1.2**

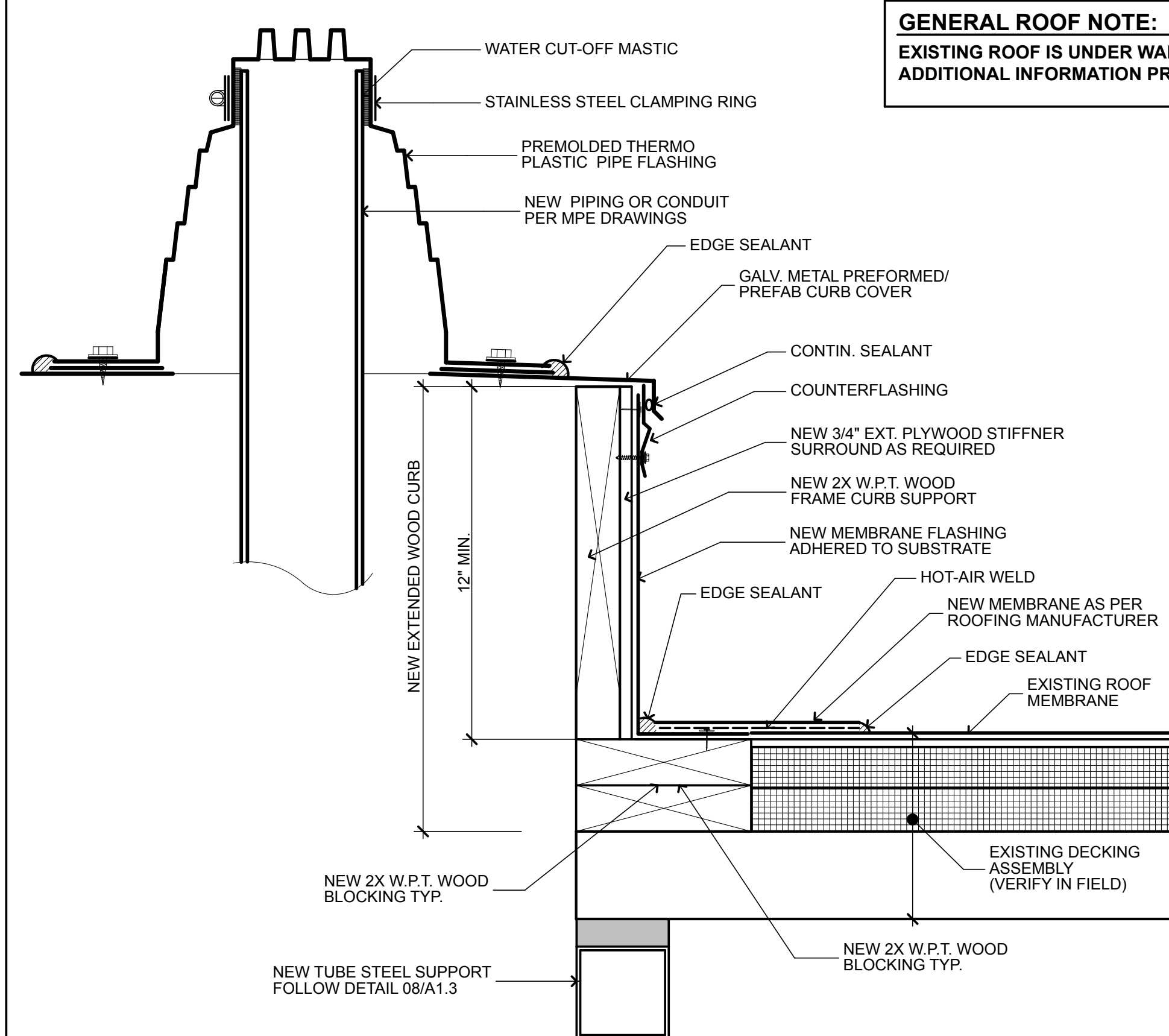


PROPOSED ROOF OPENING DTL. 1" = 1'-0" **08** **A1.2**



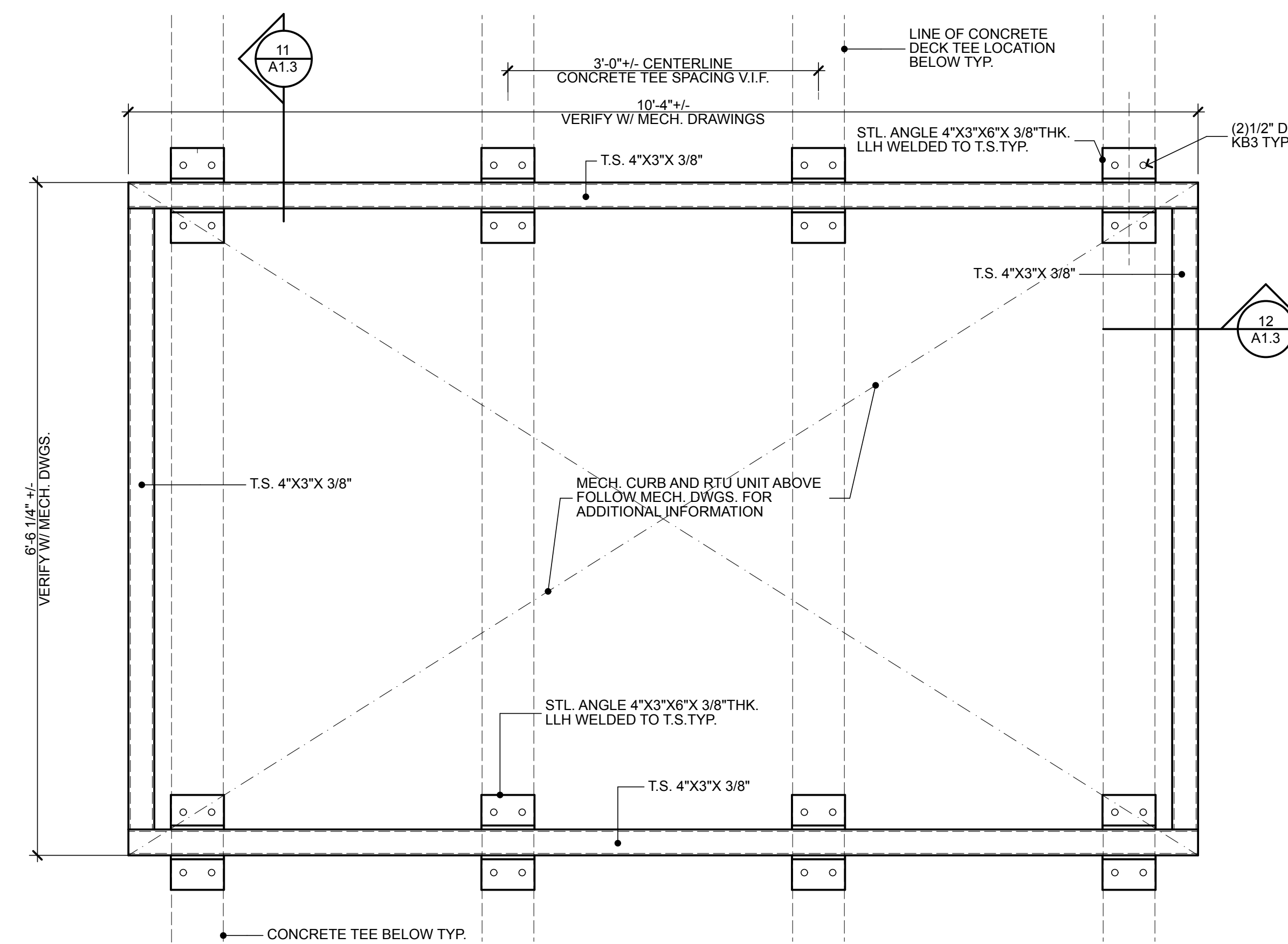
PROPOSED ROOF OPENING DTL. 1" = 1'-0" **09** **A1.2**

NOTE: ALL STEEL TUBE MEMBERS AND ANGLES SHALL BE PRIMED PAINTED

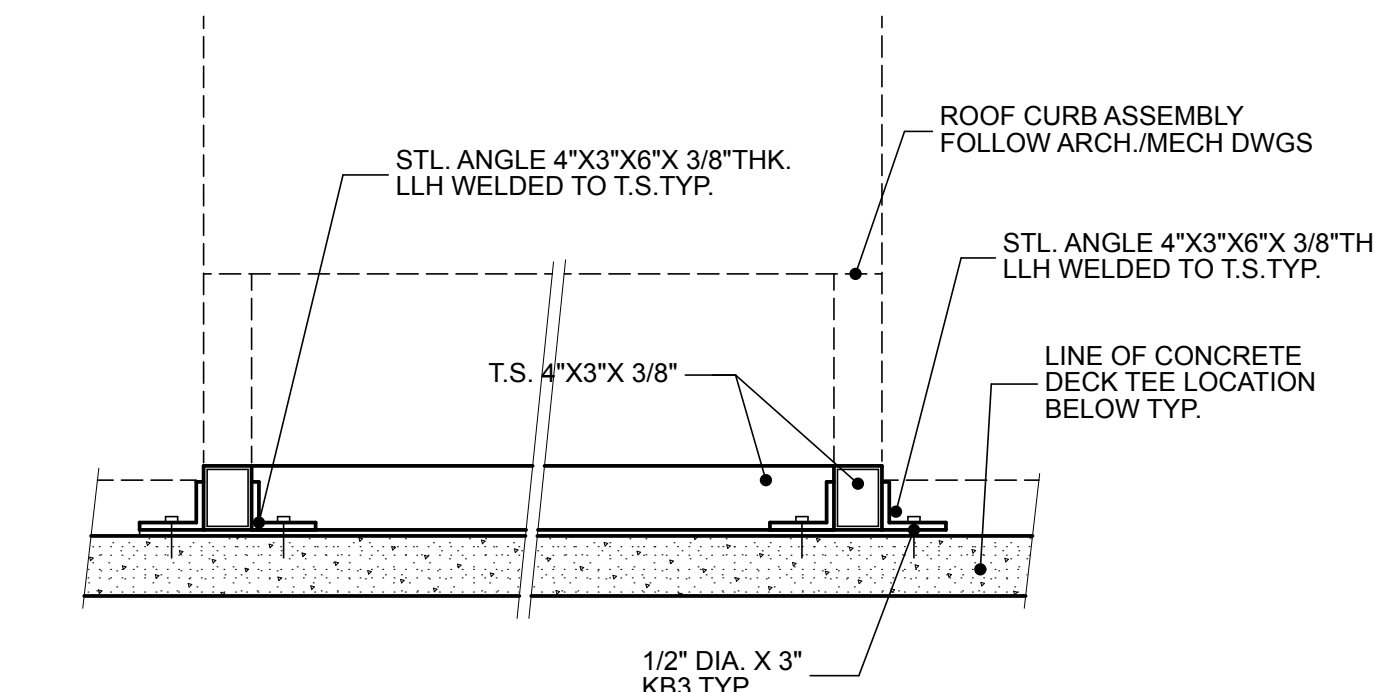


TYP. PITCH POCKET DETAIL NTS **03** **A1.2**

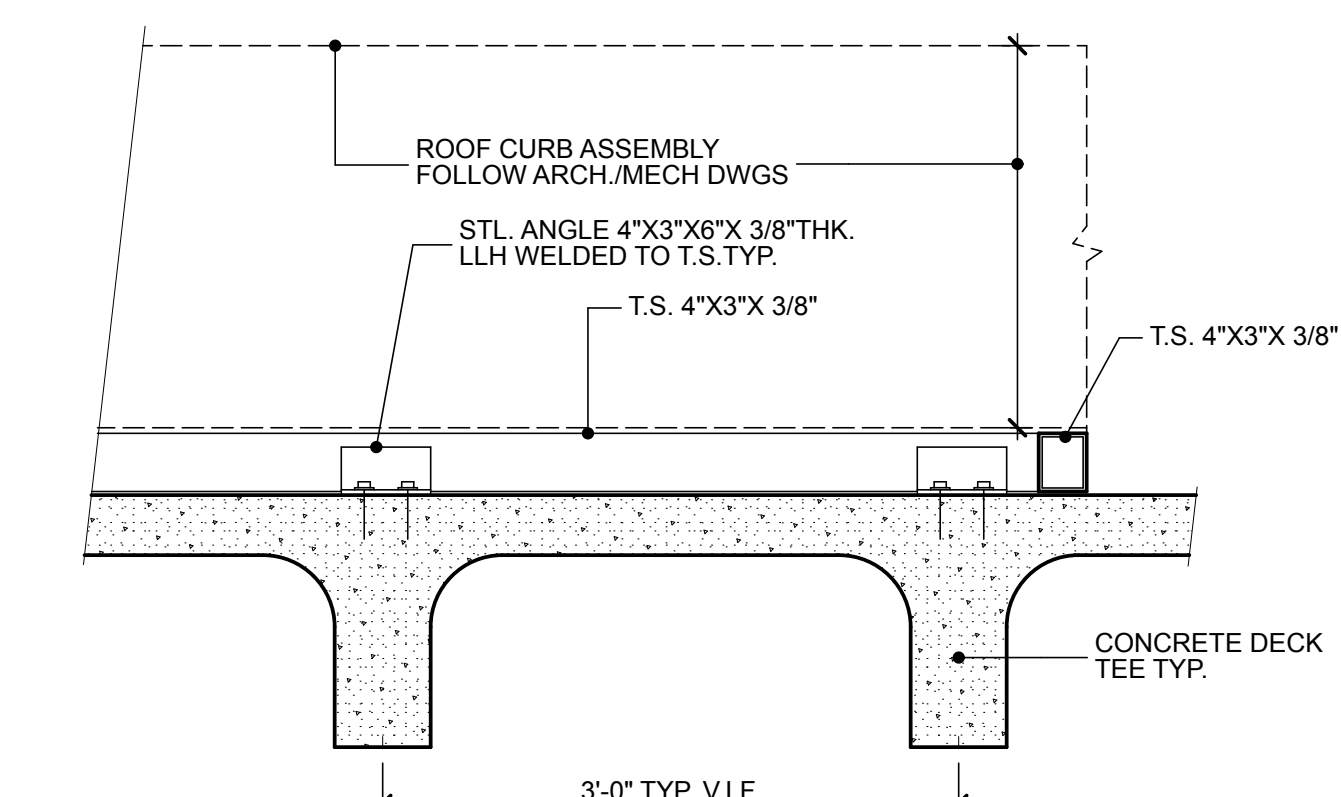
GENERAL ROOF NOTE:
EXISTING ROOF IS UNDER WARRANTY. REFER TO SECTION 024119 FOR ADDITIONAL INFORMATION PRIOR TO BEGINNING ANY ROOF WORK.



TYP. RTU SUPPORT PLAN SCALE: 1 1/2" = 1'-0" **10** **A1.2**



PROPOSED RTU SUPPORT DTL. 1" = 1'-0" **11** **A1.3**



PROPOSED RTU SUPPORT DTL. 1" = 1'-0" **12** **A1.3**

© 2019 REGAN YOUNG ENGLAND BUTERA, PC

PRINT DATE: 3/6/19

REGAN YOUNG, AIA
21A00912100

REGAN YOUNG ENGLAND BUTERA
REFERENDUMS - ENGINEERING - ARCHITECTURE - DESIGN
466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1 (609) 265-2652 • 0333FAX • 21A00912100 • RYEBREAD.COM

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND
LOCKER ROOM ALTERATIONS AT:
LINDENWOLD MIDDLE SCHOOL
LOT 2, BLOCK 448
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY

TITLE **MISC. DETAILS**

DRAWING DATE:

01 MAR 19

REVISION DATE:

PRINT DATE:

DRAWN BY:

RR

COMMISSION NO.:

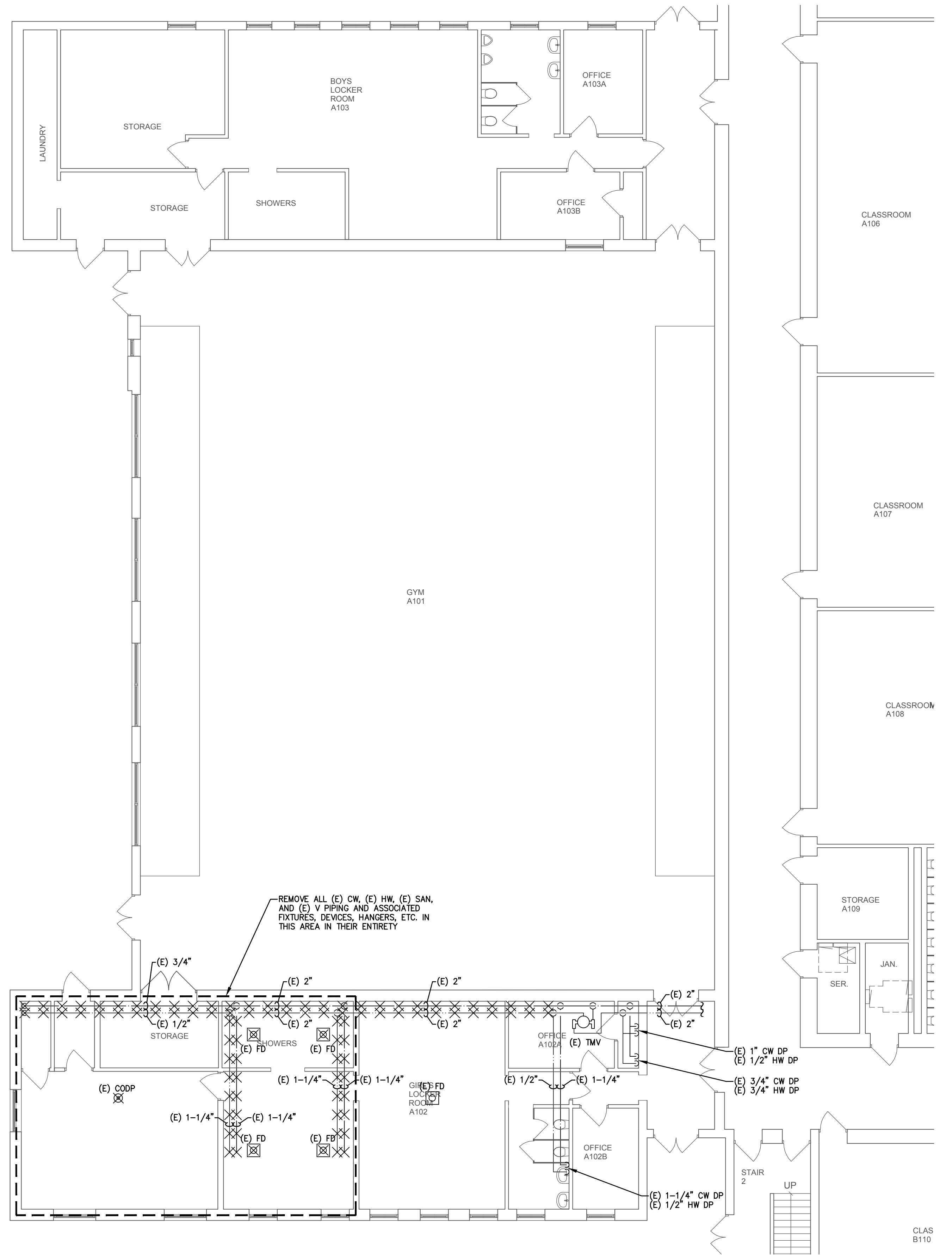
5563C

A1.3

3 OF 3



1 GYM FLOOR PLAN - PLUMBING DEMOLITION
 SCALE 1/8" = 1'-0"
 NOTES:
 1. EXISTING SANITARY PIPING SHALL BE CUT BELOW FLOOR SLAB WHERE AND AS INDICATED.

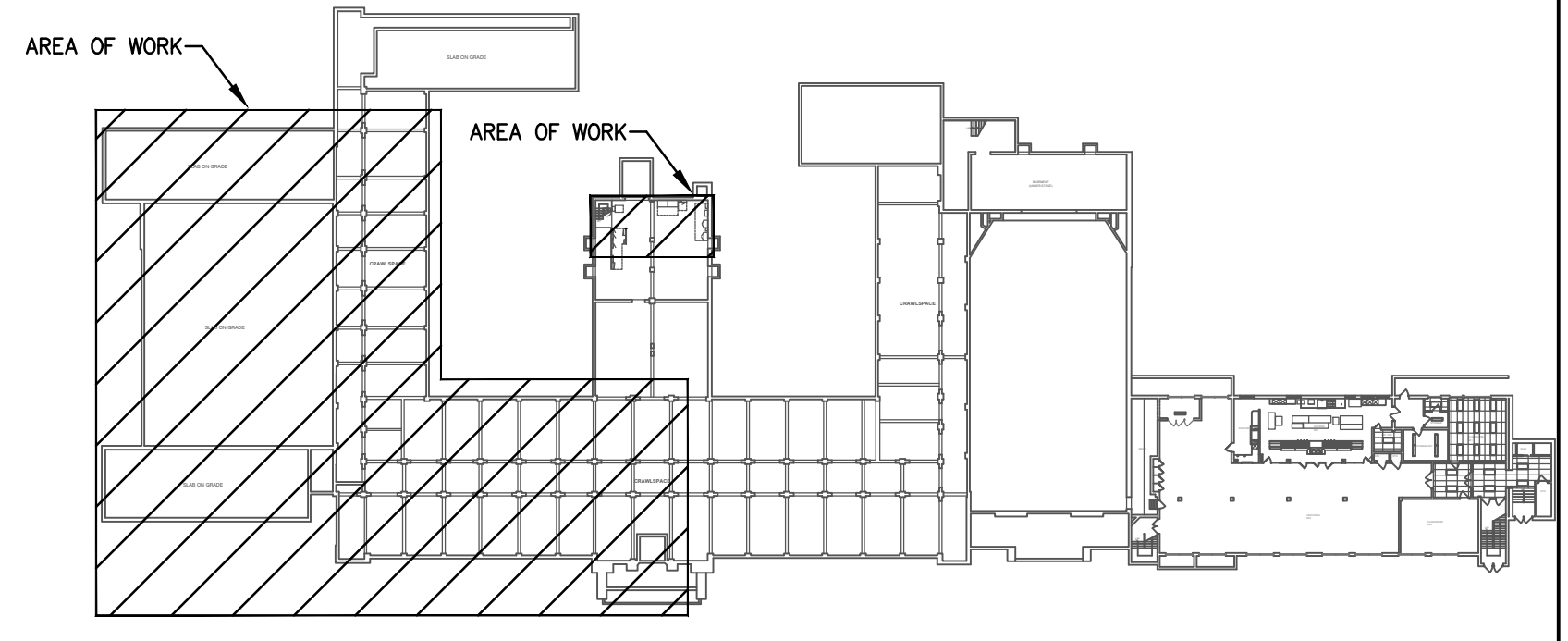


2 GYM FLOOR PLAN - PLUMBING DEMOLITION
 SCALE 1/8" = 1'-0"
 NOTES:
 1. REMOVE EXISTING SHOWER DRAIN BODIES TO BELOW FLOOR SLAB AS INDICATED.
 2. REMOVE EXISTING COOP ASSEMBLY TO BELOW FLOOR SLAB AS INDICATED.
 3. CUT BACK EXISTING COLD WATER AND EXISTING HOT WATER PIPING AS INDICATED, INCLUDING ALL ASSOCIATED FIXTURES, DEVICES, PIPE HANGERS, SUPPORTS, ETC.

PLUMBING SYMBOL LIST					
ABBREVIATION	SYMBOL	DESCRIPTION	ABBREVIATION	SYMBOL	DESCRIPTION
CW	—	COLD WATER PIPING		●	BALL VALVE
HW	—	HOT WATER PIPING		—	FLOOR DRAIN
(E) CW	—	(E) COLD WATER PIPING	FD	□	FLOOR DRAIN
(E) HW	—	(E) HOT WATER PIPING	CCDP	⊙	CLEAN OUT DECK PLATE
	XXXXXX	EXISTING PIPING TO BE REMOVED		—	BRANCH - TOP CONNECTION
	///////	EXISTING PIPING TO BE ABANDONED		—	BRANCH - BOTTOM CONNECTION
SAN	—	SOIL, WASTE, OR SANITARY SEWER		—	NEW CONNECTION TO EXISTING
(E) SAN	—	(E) SOIL, WASTE OR SANITARY SEWER		—	THERMOSTATIC MIXING VALVE
	—	CAPPED OUTLET	TMV	—	TRAP
	—	VALVED & CAPPED OUTLET			
	—	PIPING DROP			
	—	PIPING RISE			

PLUMBING ABBREVIATIONS			
CO	CLEANOUT	HW	HOT WATER SUPPLY
CCDP	CLEANOUT DECK PLATE	HW R	HOT WATER RETURN
CW	COLD WATER	LAV	LAVATORY
DF	DRINKING FOUNTAIN/WATER COOLER	S	SANITARY
DN	DOWN	SAN	SANITARY
DP	DROP	SD	SHOWER DRAIN
DWG	DRAWING	TMV	THERMOSTATIC MIXING VALVE
(E)	EXISTING	V	VENT
FD	FLOOR DRAIN	WC	WATER CLOSET

ALTERNATE BID-02 - BOILER ROOM GAS PIPING
 REMOVE EXISTING 2" BOILER GAS PIPING, DRIP LEG, VALVES, SUPPORTS, APPURTENANCES, ETC. AS REQUIRED TO FACILITATE THE INSTALLATION & CLEARANCE REQUIREMENTS OF THE NEW SWITCH GEAR. CUT BACK EXISTING 4" GAS MAIN AS REQUIRED TO FACILITATE THE INSTALLATION & CLEARANCE REQUIREMENTS OF THE NEW SWITCH GEAR. PROVIDE & INSTALL NEW GAS PIPING AS REQUIRED TO RECONNECT EXISTING EQUIPMENT. INSTALLATION OF ALL NEW VALVING AND APPURTENANCES SHALL MATCH EXISTING. CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR & MATERIAL FOR SATISFACTORY INSTALLATION.



REGAN YOUNG ENGLAND BUTERA
 REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN
 466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
 +1 (609) 265-2852 • 0333 FAX • 21 A00912100 • RYE@REGAN.COM

KELTER & GILLICO
 consulting engineers
 P.O. BOX 777 14 WASHINGTON RD.
 FARGO, NORTH DAKOTA 58103
 Frank, Taylor, P.E.
 Professional Engineer
 NJ 36606

NJDOE SP #2670-090-14-1006-C04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOLD MIDDLE SCHOOL, LOT 2, BLOCK 44S, 40 WHITE HORSE AVENUE, LINDENWOLD, NEW JERSEY

PARTIAL GYM FLOOR PLANS - PLUMBING DEMOLITION

DRAWING DATE: **01 MAR 19**

REVISION DATE:

DRAWN BY: **ACL**

COMMISSION NO.: **5563C**

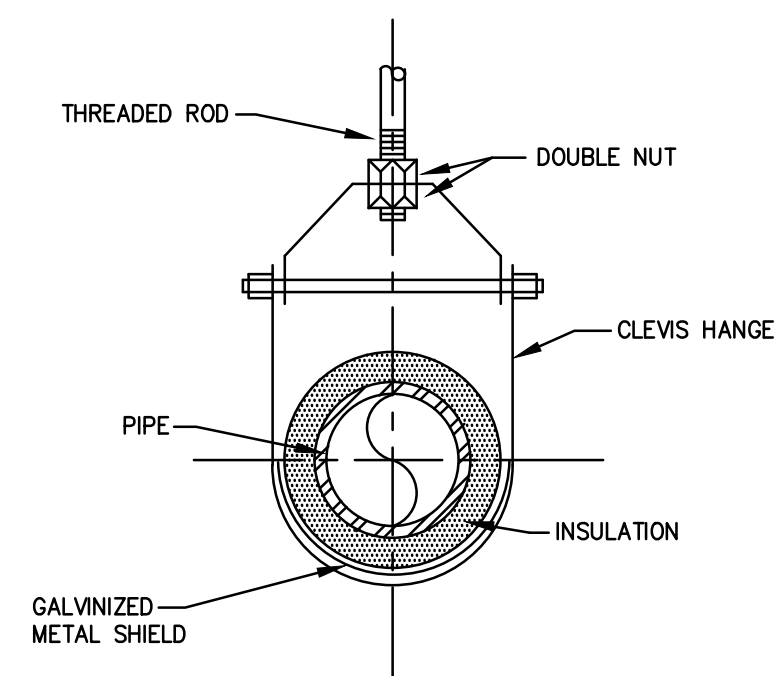
PD1.0

1 OF 2



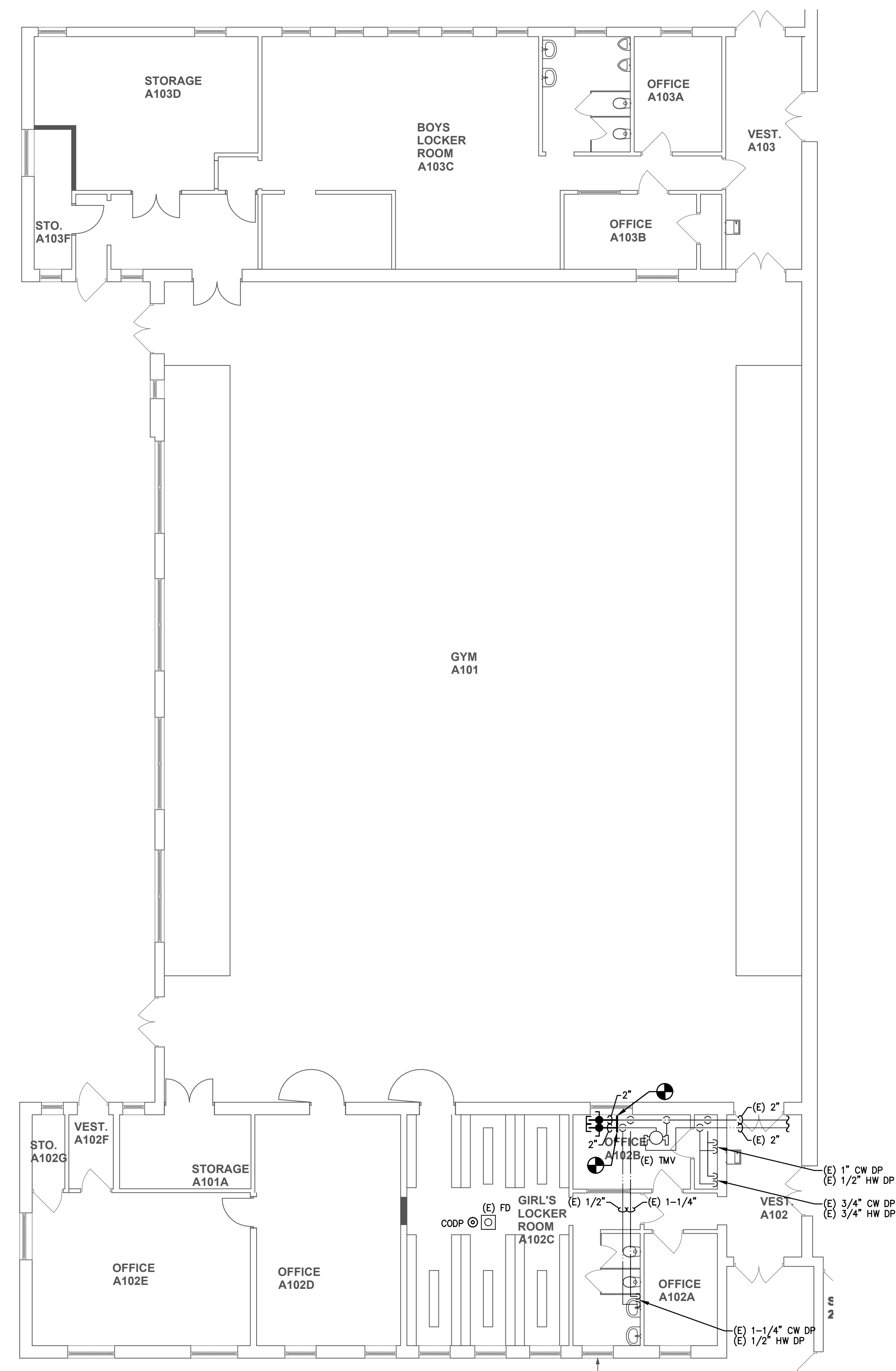
1 GYM CRAWL SPACE PLAN - PLUMBING
P1.0 SCALE 1/8" = 1'-0"

- NOTES:
- INFILL ABANDONED SANITARY PIPING WITH CONCRETE AND CAP ALL OPEN ENDS LIQUID AND GAS TIGHT.
 - PATCH FLOOR OPENINGS TO MATCH EXISTING CONSTRUCTION; REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - ALL NEW PIPING MATERIAL SHALL MATCH EXISTING.



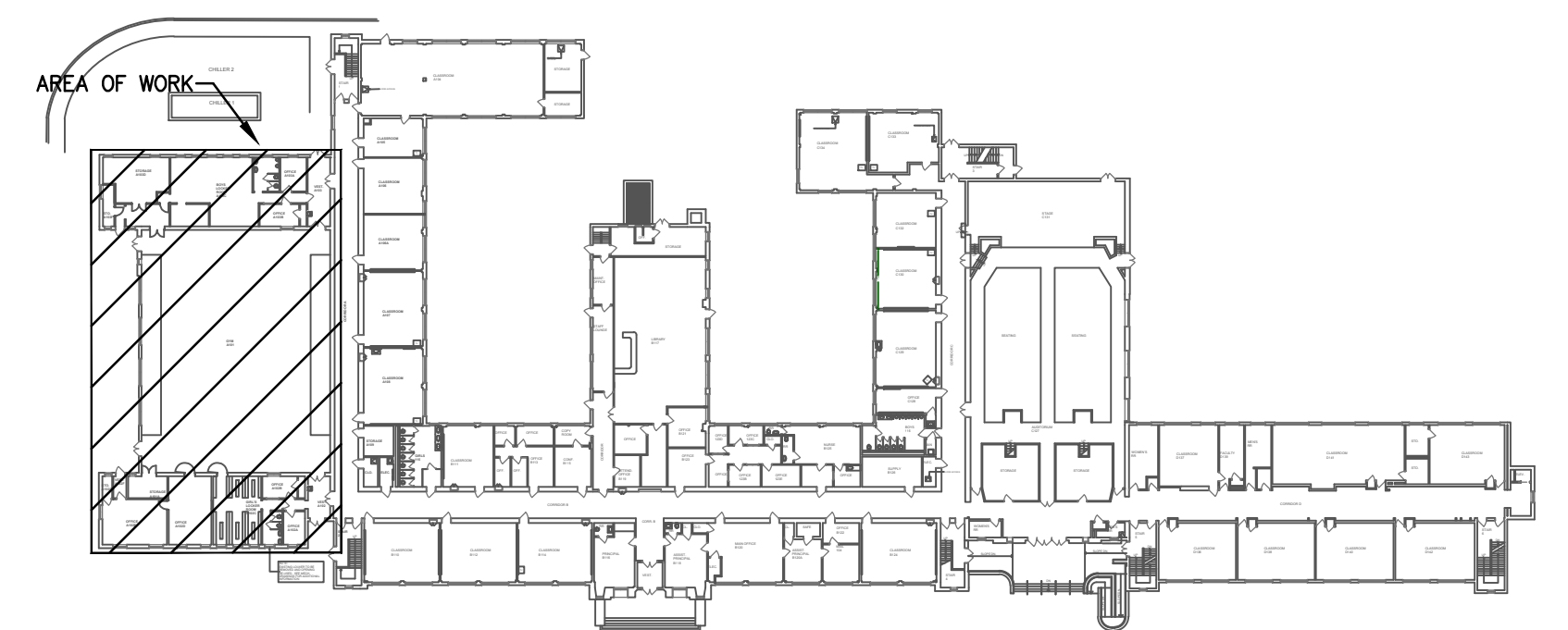
PIPE HANGER SCHEDULE						
PIPE DIA.	SHIELD		ROD DIA.	MAX. PIPE SUPPORT SPAN		
	LENGTH	THICKNESS		STEEL	COPPER	CAST IRON
1/2"	12"	.048"	3/8"	8'-0"	6'-0"	-
3/4"	12"	.048"	3/8"	8'-0"	6'-0"	-
1"	12"	.048"	3/8"	8'-0"	6'-0"	-
1-1/4"	12"	.048"	3/8"	8'-0"	6'-0"	-
1-1/2"	12"	.048"	1/2"	10'-0"	8'-0"	5'-0"
2"	12"	.048"	1/2"	10'-0"	8'-0"	5'-0"

3 CLEVIS HANGER DETAIL
P1.0 NOT TO SCALE



2 GYM FLOOR PLAN - PLUMBING
P1.0 SCALE 1/8" = 1'-0"

- NOTES:
- PROVIDE NEW 2" VALVED AND CAPPED OUTLETS ON 2" CW AND 2" HW PIPES.
 - ALL NEW PIPING MATERIAL SHALL MATCH EXISTING.
 - NEW BALL VALVES SHALL BE APOLLO, 77-200 SERIES, FULL PORT, SOLDER END, WITH TFE TEFLO SEATS AND SEALS WITH STEEL LEVER HANDLES WITH STOPS. CONTRACTOR SHALL PROVIDE NEW VALVE TAGS REUTILIZING THE VALVE NUMBERS OF THE NEAREST VALVES DEMOLISHED UNDER THIS CONTRACT. CONTRACTOR SHALL UPDATE OWNERS VALVE BOOKS AND CHARTS TO REFLECT NEW PIPING CONFIGURATION AS INSTALLED UNDER THIS CONTRACT.
 - (E) CW AND (E) HW PIPING REMAINING IN VESTIBULE A102, OFFICE A102A, OFFICE A102B, AND GIRL'S LOCKER ROOM A102C SHALL BE INSULATED WITH 0.4 LB DENSITY FIBROUS GLASS, ONE-PIECE MOLDED SECTIONAL PIPE COVERING MAXIMUM K FACTOR 0.26 AT 75°F MEAN TEMPERATURE. PROVIDE FIRE RETARDANT ALL SERVICE OR PURPOSE JACKET OF LAMINATE OR VINYL COATED WHITE KRAFT FACING, GLASS REINFORCING AND ALUMINUM FOIL WITH SELF-SEALING LAP. INSULATION SHALL BE 1" THICK WITH VAPOR BARRIER JACKET, FLAME SPREAD INDEX OF 20 OR LESS, AND SMOKE DEVELOPED INDEX OF 50 OR LESS.
 - (E) CW AND (E) HW PIPING REMAINING IN VESTIBULE A102, OFFICE A102A, OFFICE A102B, AND GIRL'S LOCKER ROOM A102C SHALL BE PROVIDED WITH NEW HANGERS CONFORMING TO NATIONAL STANDARD PLUMBING CODE 2015, WITH SEISMIC RESTRAINTS AS REQUIRED FOR NEW CONSTRUCTION UNDER NEW JERSEY EDITION OF 2015 INTERNATIONAL BUILDING CODE. PIPE HANGERS SHALL BE SPACED NOT GREATER THAN 10'-0" O.C. WITH 1/2" MINIMUM ROD SIZE. FOR ALL INSULATED PIPE PROVIDE CLEVIS HANGERS WITH WELDED SHIELDS AND EQUAL TO C&P, INC., FIG. 100 SH.
 - (E) CW AND (E) HW PIPING REMAINING IN VESTIBULE A102, OFFICE A102A, OFFICE A102B, AND GIRL'S LOCKER ROOM A102C SHALL BE IDENTIFIED IN ACCORDANCE WITH OSHA SAFETY COLOR REGULATION AND ANSI 13.1 "SCHEME FOR IDENTIFICATION OF PIPING SYSTEM". PIPE LABELS SHALL BE SHARP ON TYPE AS MANUFACTURED BY SETON HANDEPLATE CORP., NEW HAVEN, CT (SETMARK SYSTEM), BUNTING STAMP CO. INC., PITTSBURGH, PA OR APPROVED EQUAL. MARKERS SHALL COMPLETELY ENCLOSE THE PIPE WITH A SUBSTANTIAL OVERLAP. NO ADHESIVE SHALL BE USED. THEY SHALL BE MANUFACTURED OF U.L. APPROVED, SELF EXTINGUISHING PLASTIC. WHEN THE PIPE INCLUDING INSULATION (IF ANY) IS LARGER THAN 6" DIAMETER AND LARGER, MARKERS SHALL BE STRAP ON TYPE.



KEY PLAN

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOLD MIDDLE SCHOOL, LOT 2, BLOCK 448, 40 WHITE HORSE AVENUE, LINDENWOLD, NEW JERSEY

TITLE: GYM FLOOR PLAN AND DETAIL - PLUMBING

DRAWING DATE: 01 MAR 19

REVISION DATE:

DRAWN BY: ACL

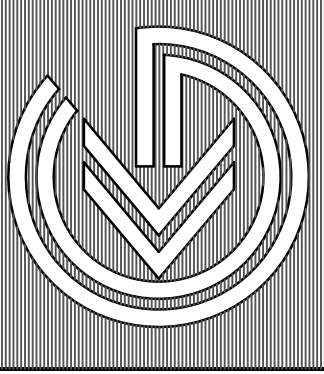
COMMISSION NO.: 5563C

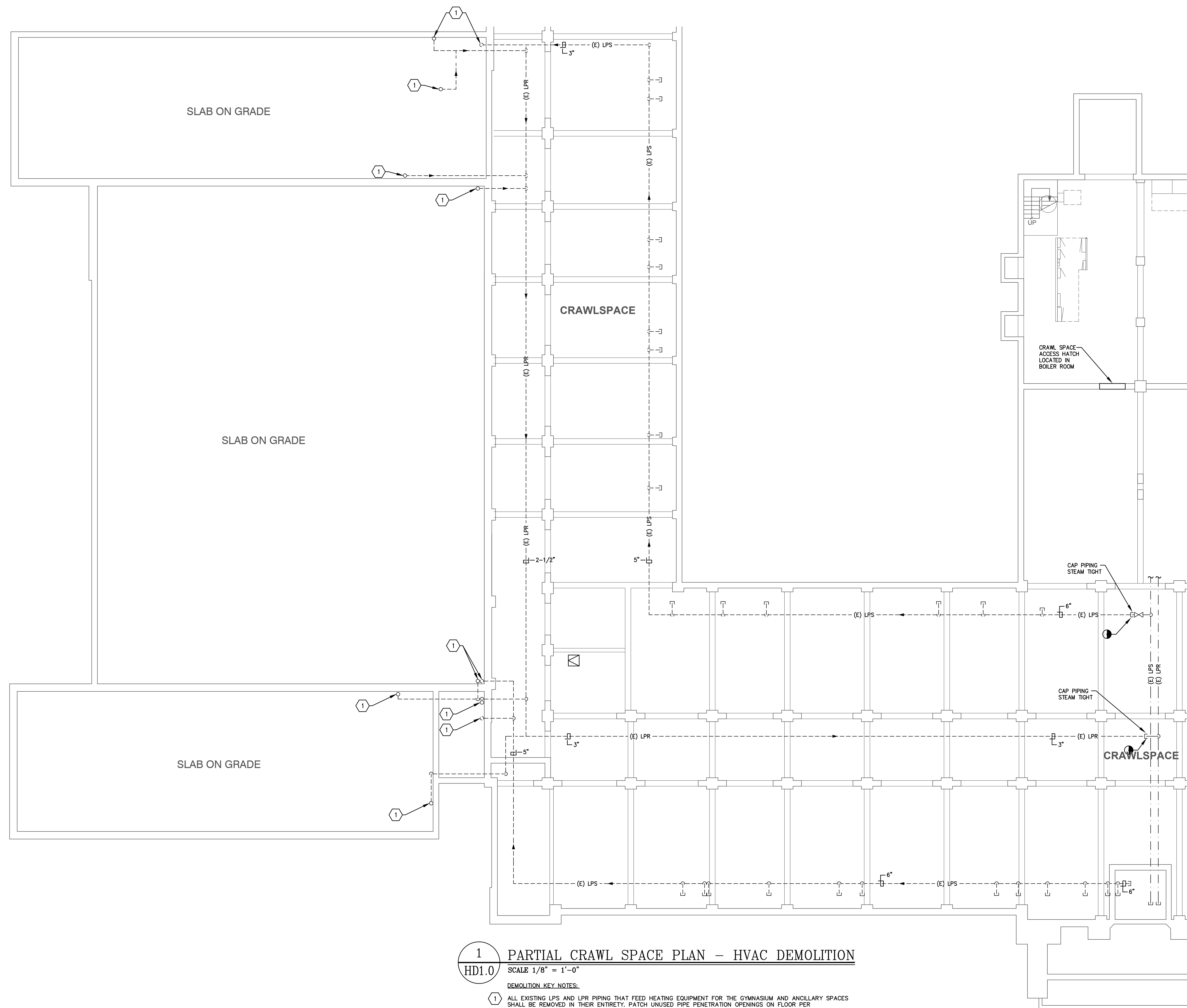
P1.0

2 OF 2

REGAN YOUNG ENGLAND BUTERA
 REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN
 466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
 +1 (609) 265-2652 • 0333FAX • 21A00912100 • RYE@REYED.COM

KELTER & GILLICO
 consulting engineers
 P.O. BOX 777, 14 WASHINGTON RD., FRANKFORD, NJ 08037-0777
 Frank Kelter, P.E.
 Professional Engineer
 NJ 36596



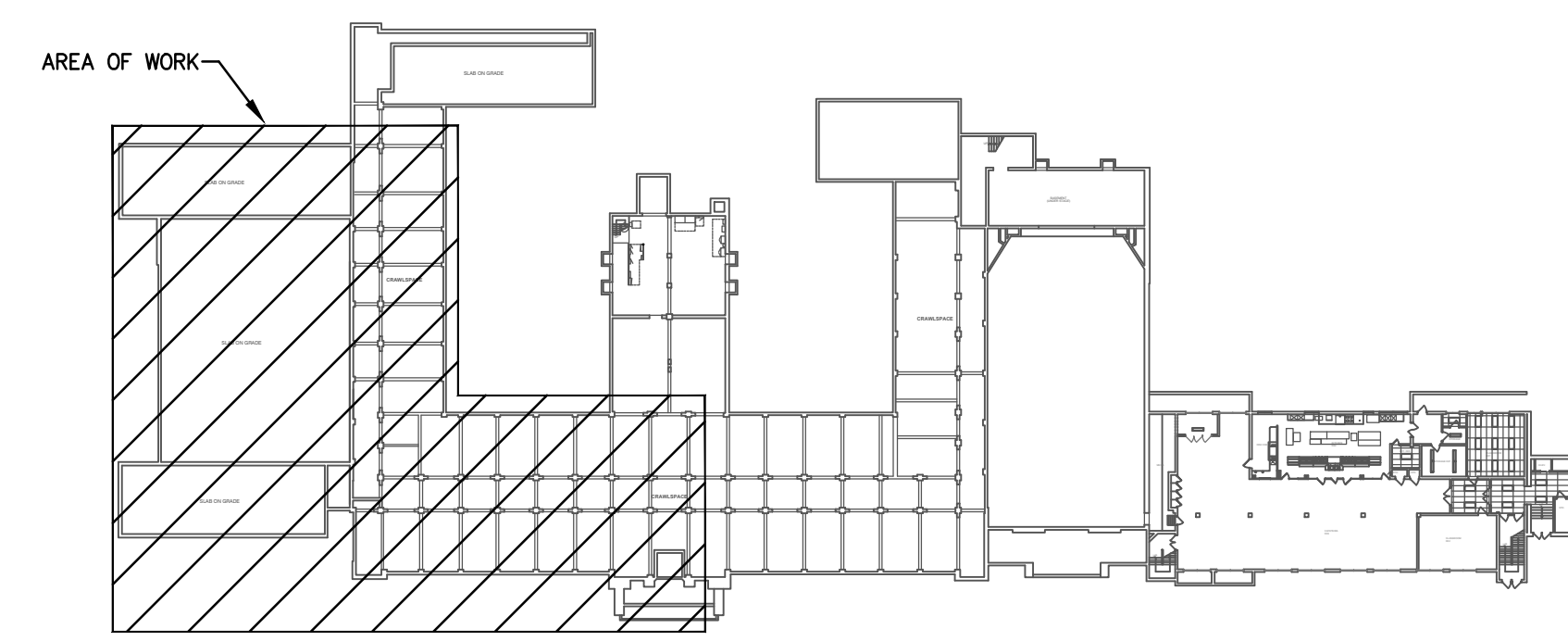


1 PARTIAL CRAWL SPACE PLAN - HVAC DEMOLITION
 HD1.0

SCALE 1/8" = 1'-0"

DEMOLITION KEY NOTES:

- 1 ALL EXISTING LPS AND LPR PIPING THAT FEED HEATING EQUIPMENT FOR THE GYMNASIUM AND ANCILLARY SPACES SHALL BE REMOVED IN THEIR ENTIRETY. PATCH UNUSED PIPE PENETRATION OPENINGS ON FLOOR PER ARCHITECTURAL DETAIL.



KEY PLAN

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND
 LOCKER ROOM ALTERATIONS AT:
 LINDENWOLD MIDDLE SCHOOL
 LOT 2, BLOCK 44S
 40 WHITE HORSE AVENUE
 LINDENWOLD, NEW JERSEY

TITLE: PARTIAL CRAWL SPACE PLAN - HVAC DEMOLITION

DRAWING DATE:
01 MAR 19

REVISION DATE:

DRAWN BY:
MML

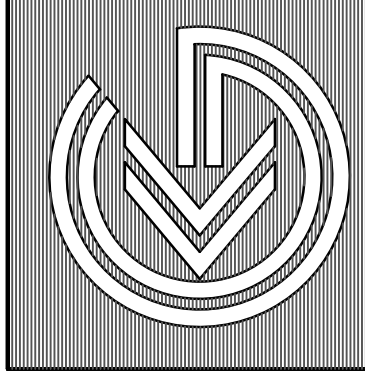
COMMISSION NO.:
5563C

March 4, 2019 3:57:04 p.m.
 Drawing: 2670-090-14-1006-G04

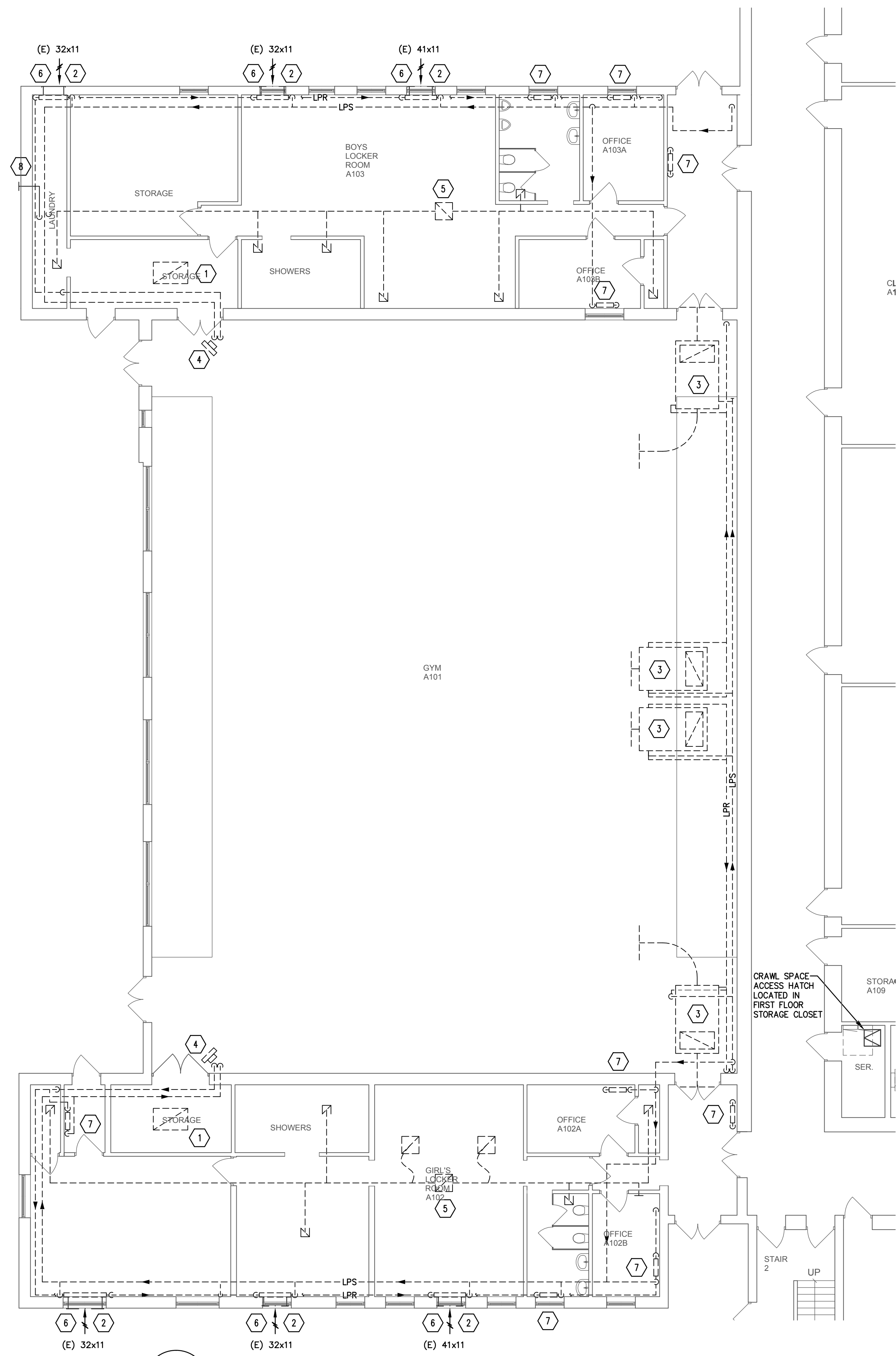
HD1.0

1 OF 6

KELTER & GILLICO
 consulting engineers
 P.O. BOX 777 14 WASHINGTON RD.
 PRINCETON JERSEY 08542-0777
 P: 609.781.8800 F: 609.781.8809
 www.kgeng.com
 Kevin T. Kelter, P.E.
 Professional Engineer
 NJ 36856



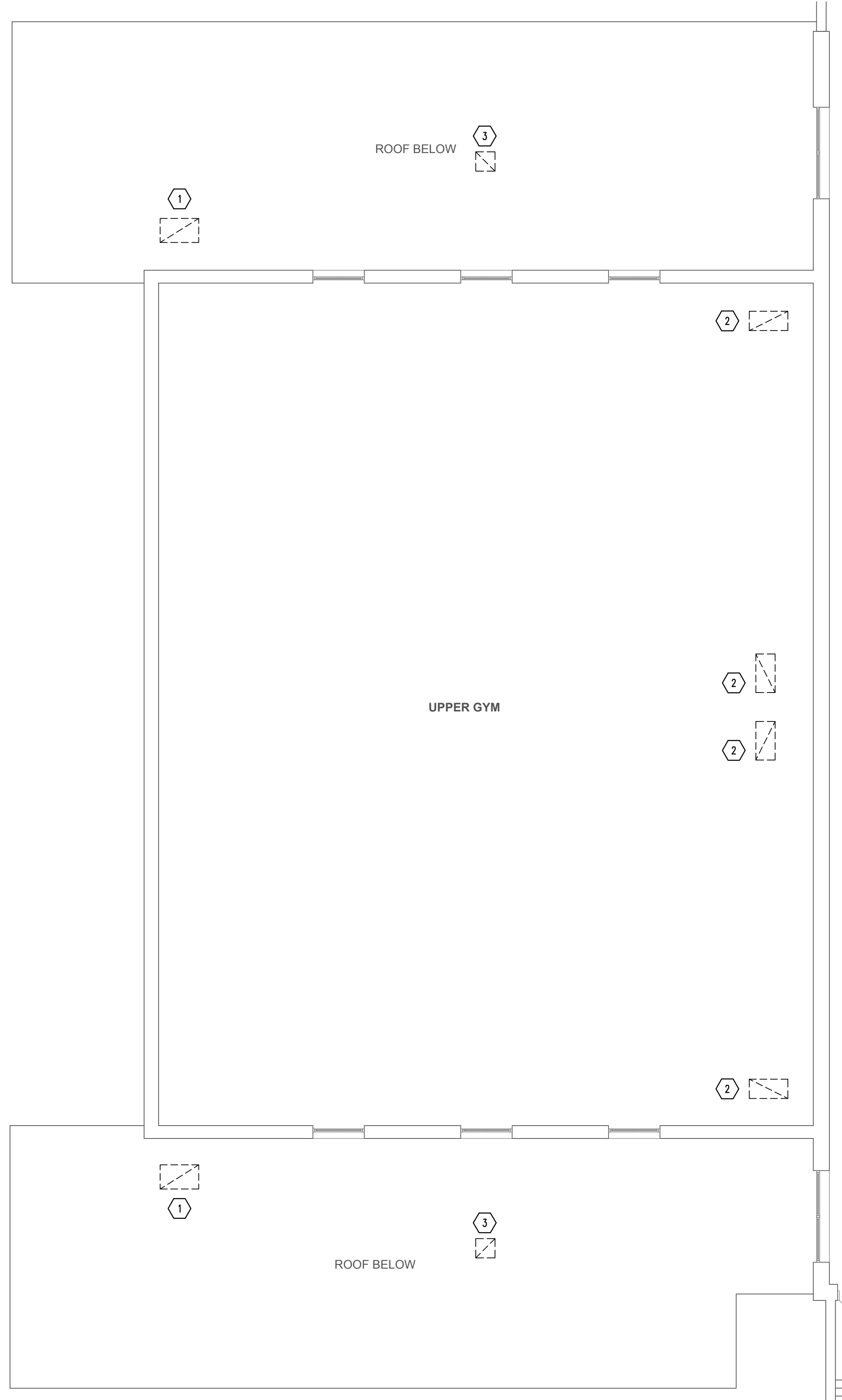
REGAN YOUNG ENGLAND BUTERA
 REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN
 466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
 +1 (609) 265-2652 • 0333FAX • 21A00912100 • RYEBREAD.COM



1 GYM FLOOR PLAN - HVAC DEMOLITION

HD1.1 SCALE 1/8" = 1'-0"

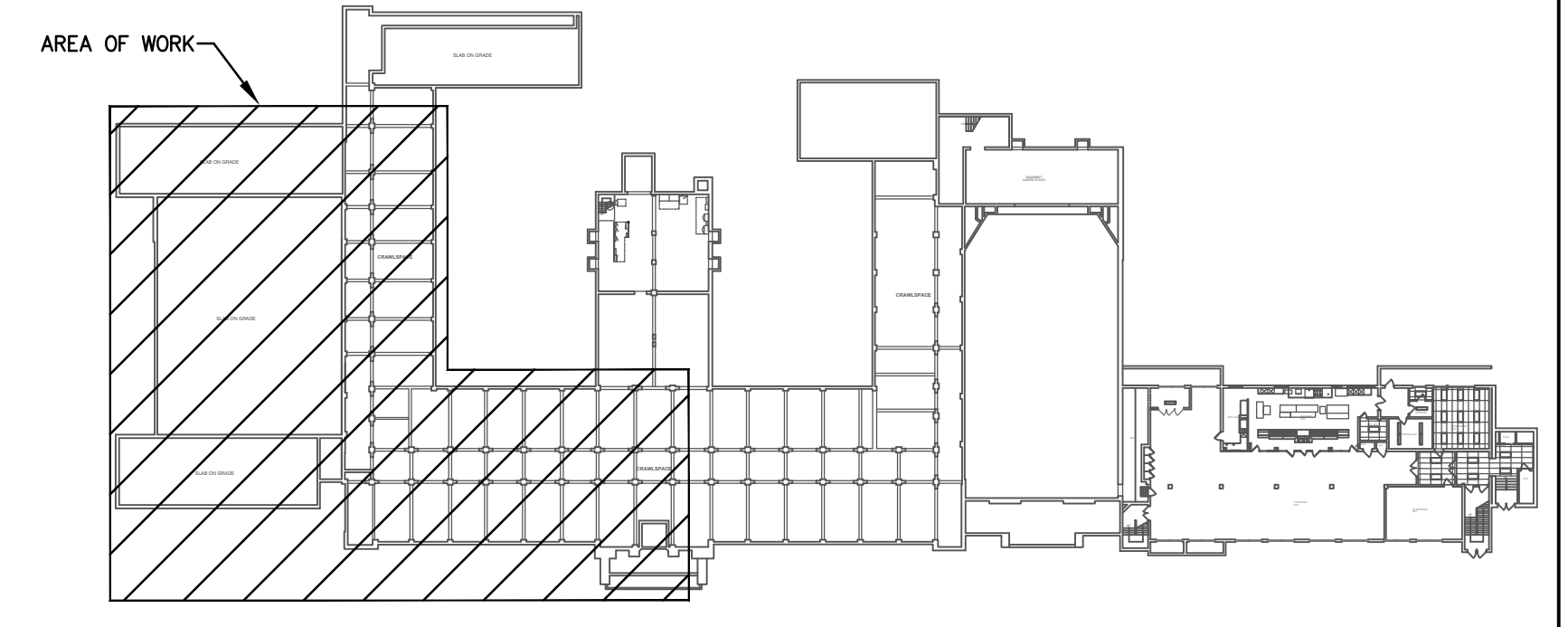
- DEMOLITION KEY NOTES:**
- 1 EXISTING CEILING GRILLE AND DUCT UP TO GRAVITY VENT ON ROOF SHALL BE REMOVED. CEILING SHALL BE PATCHED WITH IDENTICAL MATERIALS AND FINISHED PER ARCHITECTURAL DETAIL.
 - 2 EXISTING UNIT VENTILATOR (UV) AND ASSOCIATED LOUVER, CONTROLS, LPS/LPR PIPING, VALVES, APPURTENANCES, PIPING ENCLOSURE, SUPPORTS, ETC. SHALL BE REMOVED IN THEIR ENTIRETY.
 - 3 EXISTING HEATING AND VENTILATING UNIT (H&V) AND ASSOCIATED CONTROLS, LPS AND LPR PIPING, DUCTWORK, AIR OUTLETS, AND SUPPORTS SHALL BE REMOVED IN THEIR ENTIRETY.
 - 4 EXISTING UNIT HEATER (UH) AND ASSOCIATED CONTROLS, VALVES, APPURTENANCES, LPS/LPR PIPING AND SUPPORTS SHALL BE REMOVED IN THEIR ENTIRETY.
 - 5 EXISTING EXHAUST FAN ON ROOF AND ASSOCIATED CONTROLS, DUCTWORK, GRILLES, DAMPERS AND SUPPORTS SHALL BE REMOVED IN THEIR ENTIRETY.
 - 6 REMOVE (E) LOUVER IN ITS ENTIRETY. INFILL WITH CMU AND BRICK TO MATCH EXISTING EXTERIOR CONDITIONS. REFER TO ARCHITECTURAL DETAILS.
 - 7 EXISTING RADIATOR AND ASSOCIATED CONTROLS, VALVES, APPURTENANCES, PIPING ENCLOSURES AND SUPPORTS SHALL BE REMOVED IN THEIR ENTIRETY.
 - 8 EXISTING DRYER VENT TO REMAIN IN SERVICE.



2 GYM ROOF PLAN - HVAC DEMOLITION

HD1.1 SCALE 1/8" = 1'-0"

- DEMOLITION KEY NOTES:**
- 1 EXISTING OAI/EXHAUST GOOSENECK/HOUSING ON ROOF AND ASSOCIATED ROOF CURB, CONTROLS, DUCTWORK, GRILLES, DAMPERS AND SUPPORTS SHALL BE REMOVED IN THEIR ENTIRETY. ROOF OPENING SHALL BE RE-UTILIZED.
 - 2 EXISTING OAI GOOSENECK ON ROOF AND ASSOCIATED CONTROLS, DUCTWORK, DAMPERS AND SUPPORTS SHALL BE REMOVED IN THEIR ENTIRETY. UNUSED ROOF OPENING SHALL BE PATCHED TO MATCH EXISTING ROOF CONDITIONS PER ARCHITECTURAL DETAILS.
 - 3 EXISTING EXHAUST FAN AND ASSOCIATED CONTROLS, ROOF CURB, DUCTWORK, GRILLES, DAMPERS AND SUPPORTS SHALL BE REMOVED IN THEIR ENTIRETY. UNUSED ROOF OPENING SHALL BE PATCHED WEATHER TIGHT TO MATCH EXISTING ROOF CONDITIONS PER ARCHITECTURAL DETAILS.
- ROOF WARRANTY NOTES:**
1. EXISTING ROOFING SYSTEM IS UNDER ROOF WARRANTY AND IS A SINGLE-PLY ROOF SYSTEM MANUFACTURED BY FLEX ROOFING.
 2. ALL NEW ROOF WORK MUST BE CONDUCTED IN STRICT ACCORDANCE WITH ROOF MANUFACTURER'S REQUIRED DETAILS TO MAINTAIN ROOF WARRANTY IN FULL EFFECT.
 3. NEW ROOFING ALTERATIONS MUST BE CONDUCTED BY A ROOFING SUBCONTRACTOR WHO IS A FLEX ROOFING CERTIFIED INSTALLER.
 4. ROOF MANUFACTURER SHALL CONDUCT INSPECTION AND ISSUE A REPORT AND ISSUE LETTER REGARDING CONTINUANCE OF WARRANTY WITHOUT EXCEPTION.
- SOLAR PHOTOVOLTAIC PANEL NOTES:**
1. EXISTING ROOF-MOUNTED PHOTOVOLTAIC PANELS EXIST AND SHALL NOT BE DISTURBED. PANELS ARE NOT SHOWN FOR CLARITY.



KEY PLAN

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT:
LINDENWOLD MIDDLE SCHOOL
LOT 2, BLOCK 44S
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY

TITLE: GYM FLOOR & ROOF PLAN - HVAC DEMOLITION

DRAWING DATE:
01 MAR 19

REVISION DATE:

DRAWN BY:
MML

COMMISSION NO.:
5563C

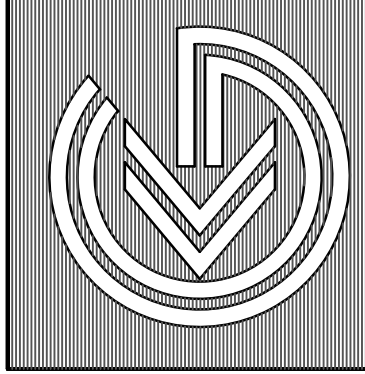
March 4, 2019 1:57:04 p.m.
Drawing: 2848-110101.DWG

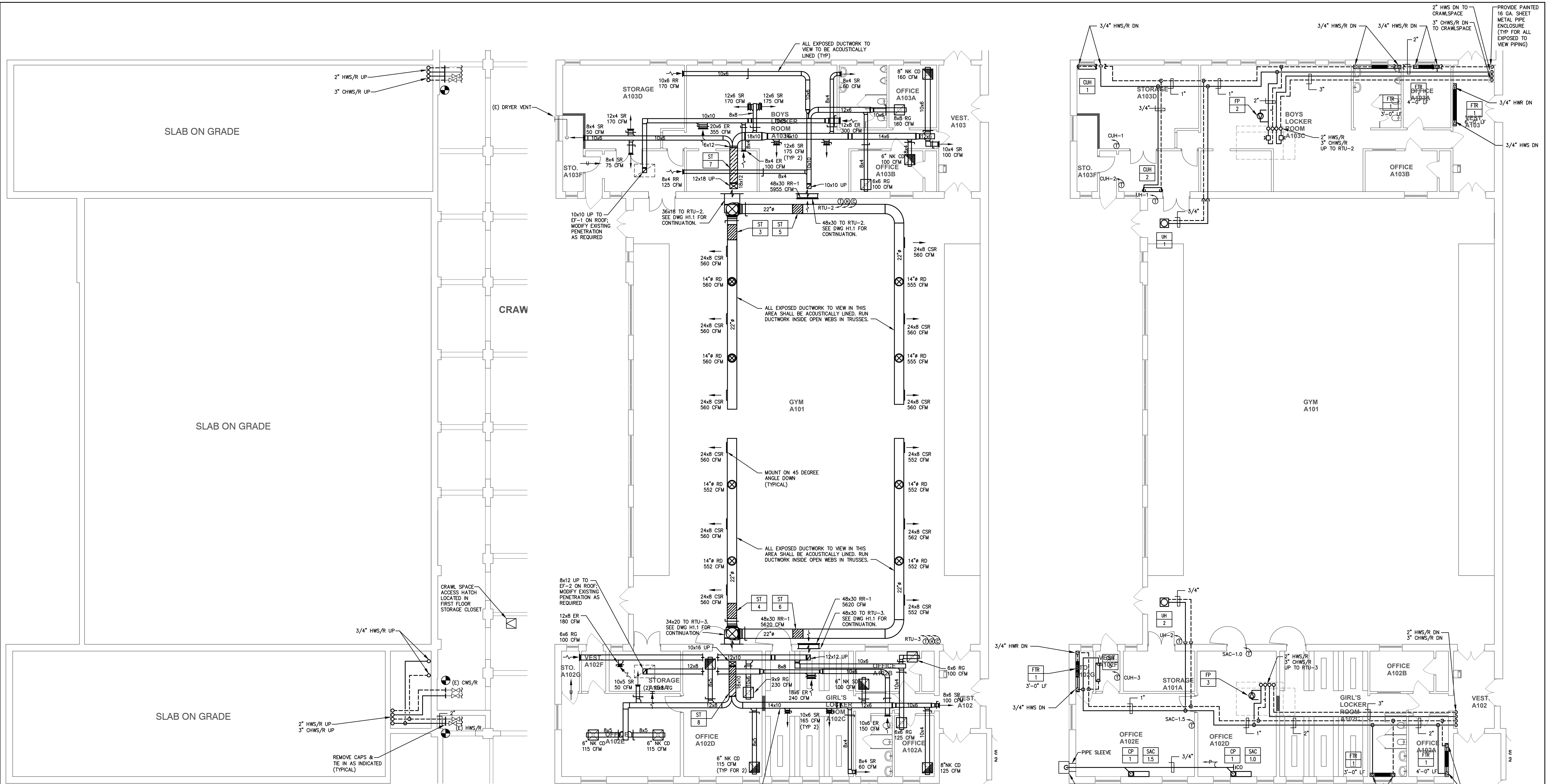
HD1.1

2 OF 6

REGAN YOUNG ENGLAND BUTERA
REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN
466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1 (609) 265-2652 • 0333FAX • 21A00912100 • RYEBREAD.COM

KELTER & GILLICO
consulting engineers
P.O. BOX 777 14 WASHINGTON RD.
FARGO, NORTH DAKOTA 58103
P. 701.784.8888
Professional Engineer

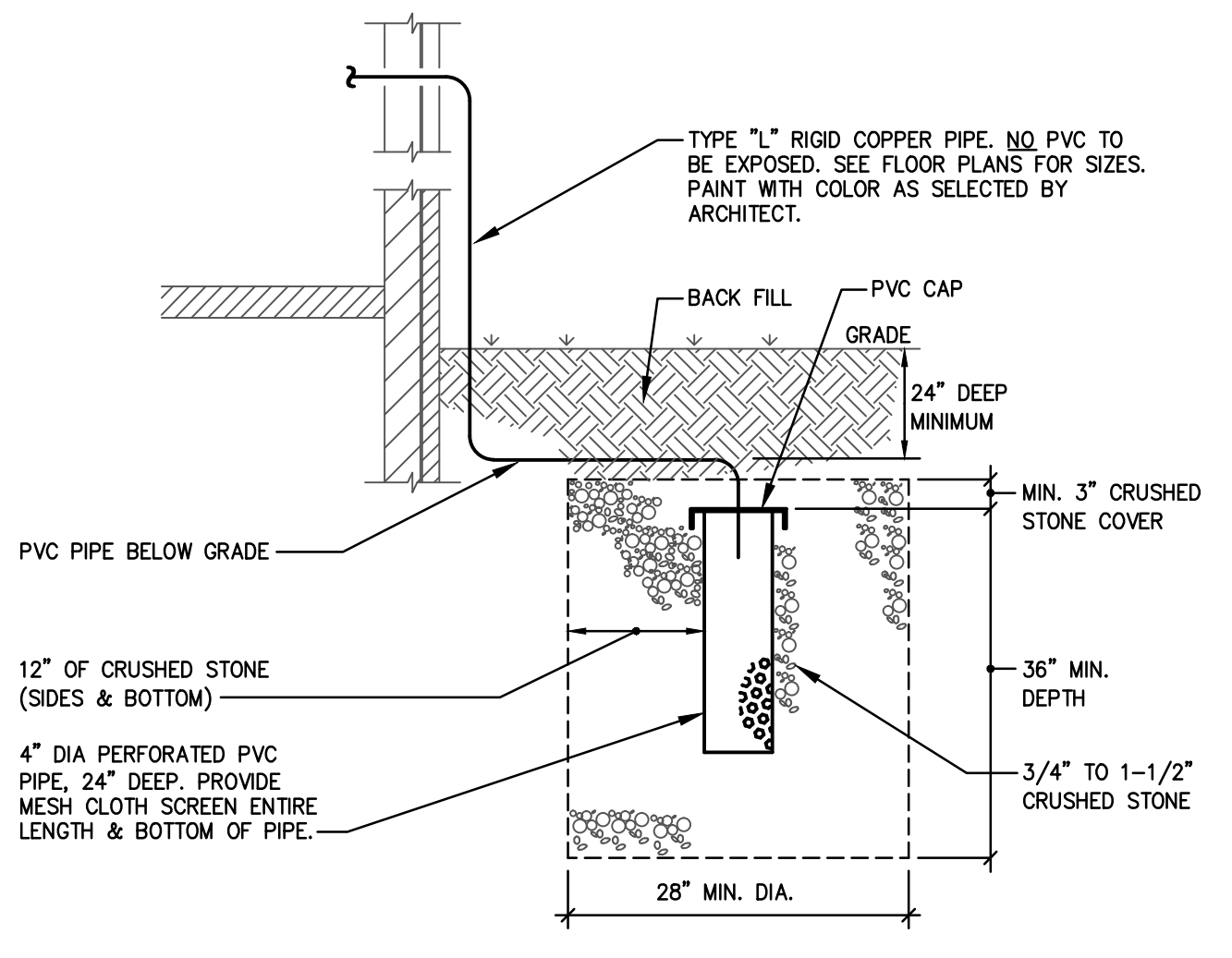




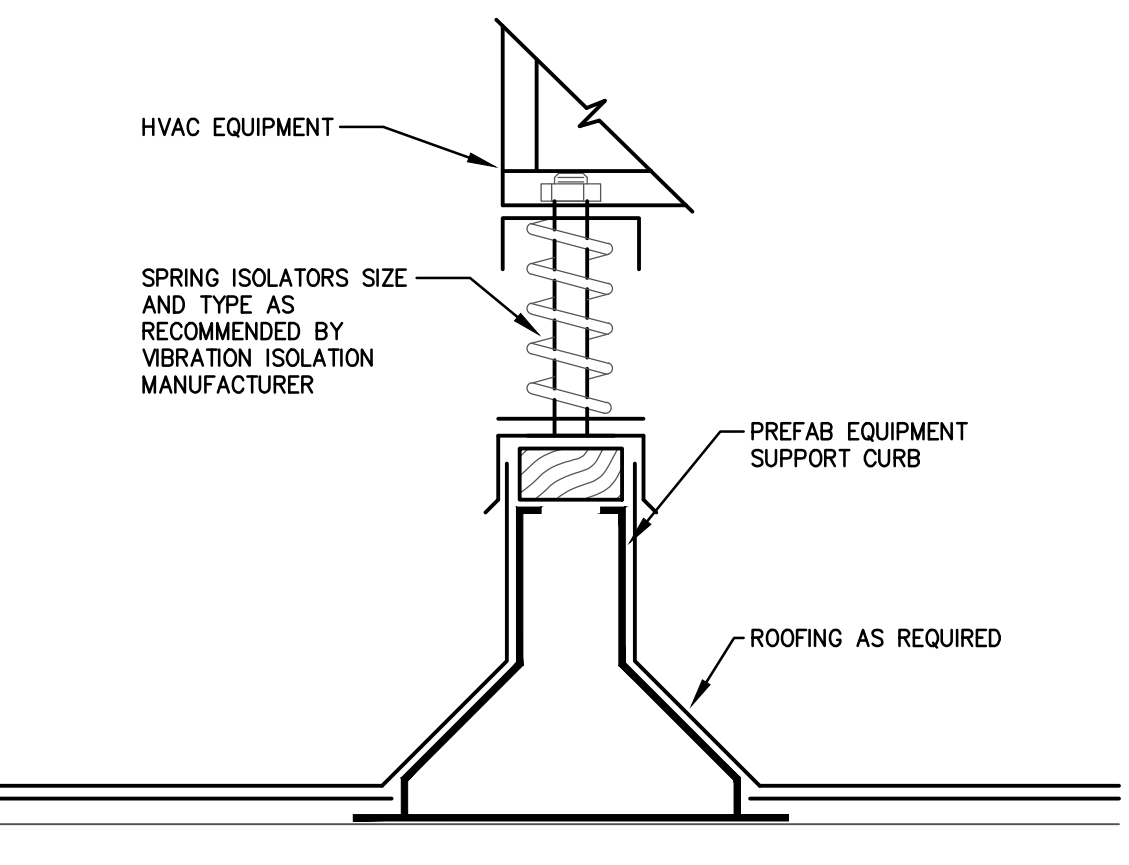
1 GYM CRAWL SPACE PLAN - HVAC
 H1.0 SCALE 1/8" = 1'-0"
 GENERAL NOTE:
 1. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL HW & CW CAPS & PRESENCE OF ISOLATION VALVES.

2 GYM FLOOR DUCTWORK PLAN - HVAC
 H1.0 SCALE 1/8" = 1'-0"
 GENERAL NOTE:
 1. COORDINATE NEW CEILING DIFFUSERS WITH NEW CEILING GRID, LIGHTING, ETC.
 2. ALL UNUSED ROOF, WALL, & FLOOR OPENINGS SHALL BE IN-FILLED AND/OR PATCHED WITH SAME MATERIALS AS EXISTING. REFER TO ARCHITECTURAL DETAILS, NOTES, & SPECIFICATIONS.

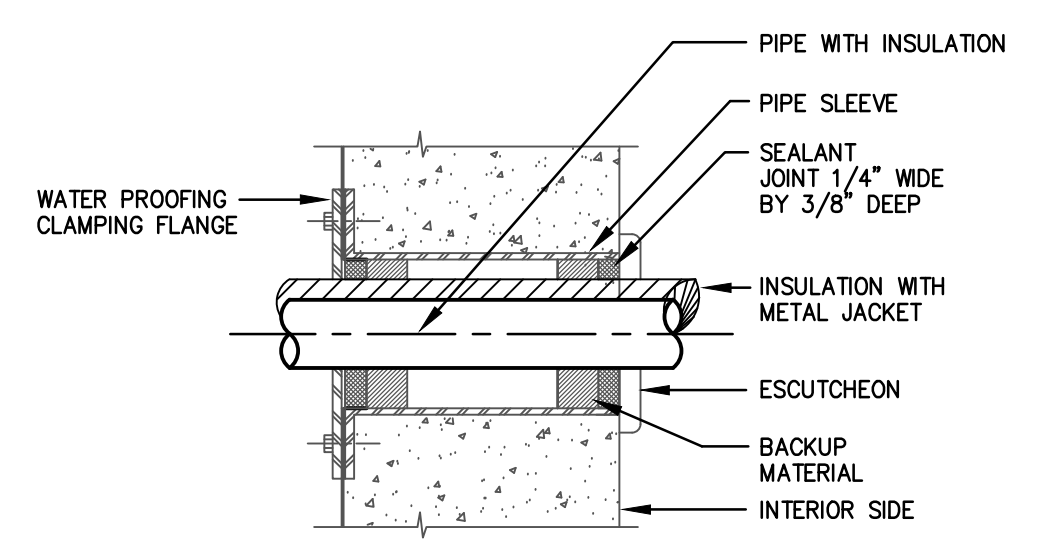
3 GYM FLOOR PIPING PLAN - HVAC
 H1.0 SCALE 1/8" = 1'-0"
 GENERAL NOTE:
 1. ALL EXPOSED TO VIEW VERTICAL PIPING SHALL BE PROVIDED WITH PAINTED 16 GA. METAL ENCLOSURE AS MANUFACTURED BY ARSCO OR APPROVED EQUAL.



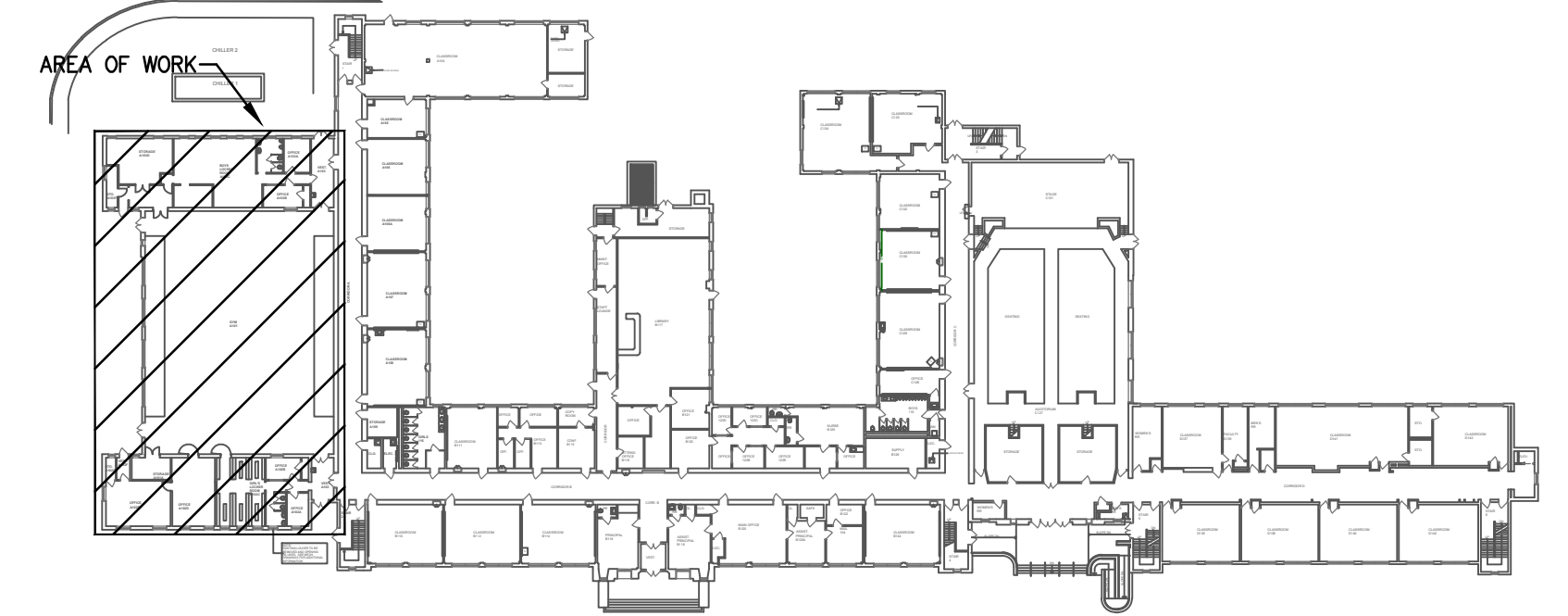
4 CONDENSATE DRAIN & DRYWELL DETAIL
 H1.0 NOT TO SCALE



5 EQUIPMENT SUPPORT CURB W/ SPRING ISOLATORS DETAIL
 H1.0 NOT TO SCALE



6 PIPE THROUGH EXTERIOR WALL DETAIL
 H1.0 NOT TO SCALE



KEY PLAN

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOOD MIDDLE SCHOOL, LOT 2, BLOCK 4/3, 40 WHITE HORSE AVENUE, LINDENWOOD, NEW JERSEY

GYM FLOOR PLAN - HVAC

DRAWING DATE: 01 MAR 19

REVISION DATE:

DRAWN BY: MML

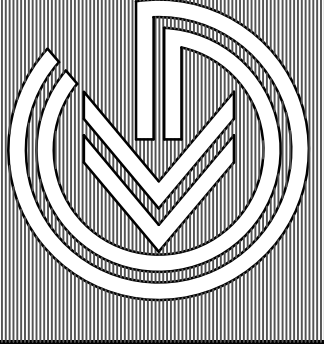
COMMISSION NO.: 5563C

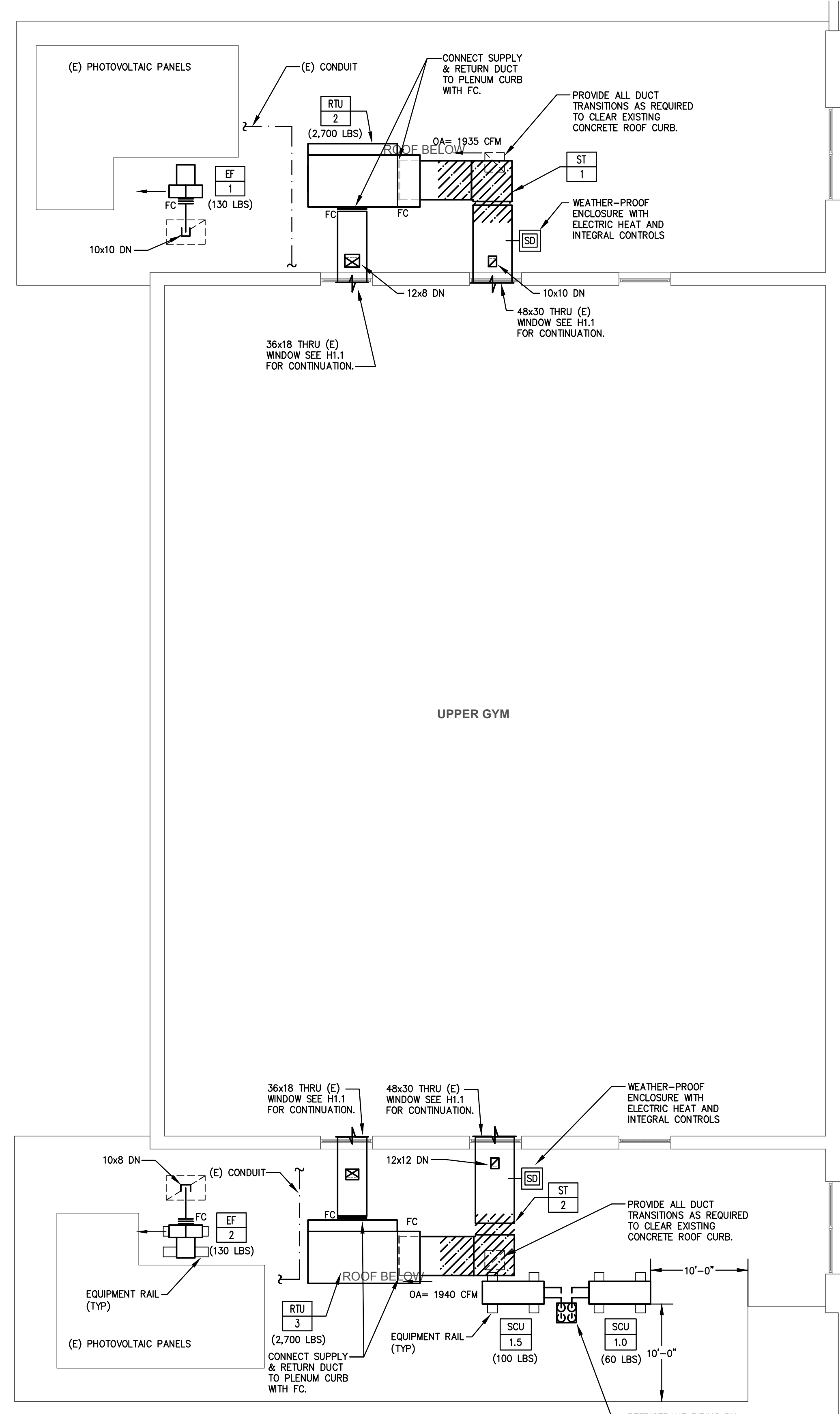
H1.0

3 OF 6

REGAN YOUNG ENGLAND BUTERA
 REGISTERED PROFESSIONAL ENGINEER - ARCHITECTURE - DESIGN
 456 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
 +1(609)265-2652 • 0333FAX • 21A000912100 • RYEBREAD.COM

KELTER & GILLICO
 consulting engineers
 P.O. BOX 777 14 WASHINGTON RD.
 FORT LINDENBOROUGH NEW JERSEY 08060
 Phone: 762-9100
 Professional Engineer





1 GYM ROOF PLAN - HVAC
H1.1 SCALE 1/8" = 1'-0"

- GENERAL NOTE:**
1. ALL EXTERIOR LOUVERS SHALL BE CLEAR ANODIZED ALUMINUM.
- ROOF WARRANTY NOTES:**
1. EXISTING ROOFING SYSTEM IS UNDER ROOF WARRANTY AND IS A SINGLE-PLY ROOF SYSTEM MANUFACTURED BY FLEX ROOFING.
2. ALL NEW ROOF WORK MUST BE CONDUCTED IN STRICT ACCORDANCE WITH ROOF MANUFACTURER'S REQUIRED DETAILS TO MAINTAIN ROOF WARRANTY IN FULL EFFECT.
3. NEW ROOFING ALTERATIONS MUST BE CONDUCTED BY A ROOFING SUBCONTRACTOR WHO IS A FLEX ROOFING CERTIFIED INSTALLER.
4. ROOF MANUFACTURER SHALL CONDUCT INSPECTION AND ISSUE A REPORT AND ISSUE LETTER REGARDING CONTINUANCE OF WARRANTY WITHOUT EXCEPTION.
- SOLAR PHOTOVOLTAIC PANEL NOTES:**
1. EXISTING ROOF-MOUNTED PHOTOVOLTAIC PANELS EXIST AND SHALL NOT BE DISTURBED.

CRAWL SPACE EXHAUST FAN SCHEDULE

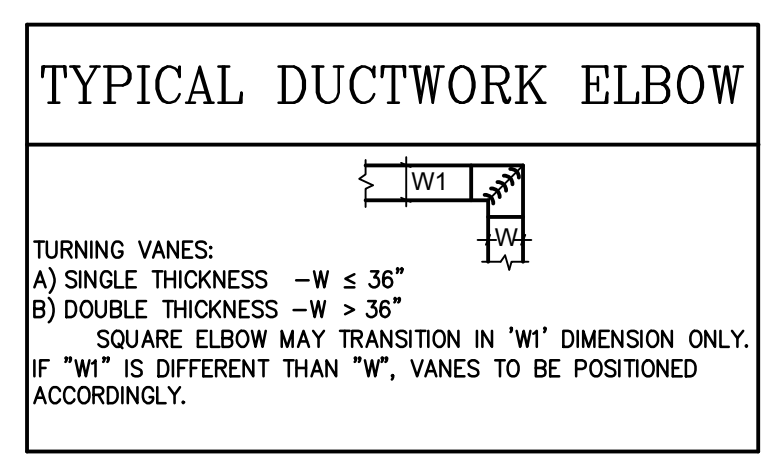
NO.	MFR	MODEL	TYPE	DRIVE	CFM	ESP IWC	HP	RPM	V/PH/Hz	SONES	SERVICE	LOCATION	L/W/D (N)	WEIGHT (LBS)	REMARKS
CEF-1	PENNBARRY	SX120B	INLINE	BELT	2750	0.75"	1.5	1875	208/3/60	16.2	CRAWL SPACE	BOILER ROOM	22x22x27	74	1,2

NOTES:
1. PROVIDE MOTOR W/ THERMAL OVERLOAD PROTECTION, DISCONNECT, & BACK DRAFT DAMPER.
2. PROVIDE GALVANIZED STEEL HANGERS WITH SPRING VIBRATION ISOLATORS.

EXHAUST GRILLE SCHEDULE

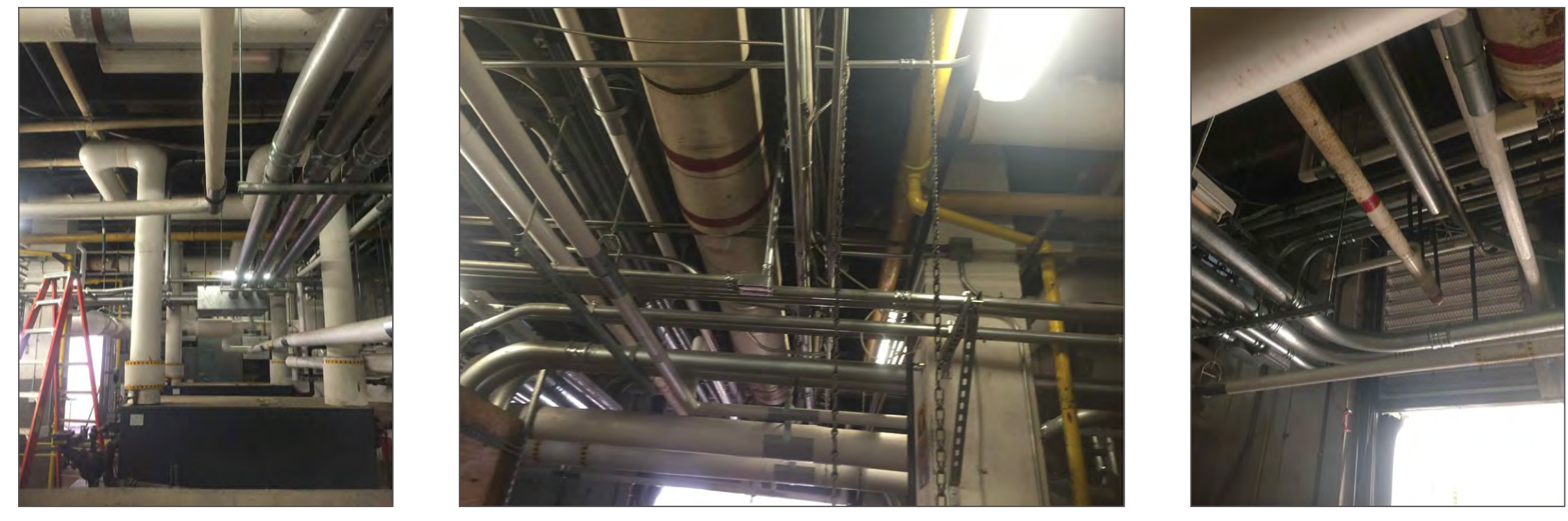
NO.	MARK	REMARKS
1.	EXHAUST GRILLE SHALL BE TITUS MODEL 350ZFL OR APPROVED "EQUAL".	①②③

REMARKS:
① ALUMINUM EXHAUST GRILLE WITH BLADES AT 3/4" SPACING AND 0° FIXED DEFLECTION. REFER TO DRAWINGS FOR CORRECT MOUNTING STYLE.
② PROVIDE PLENUM TO MATCH SIZE OF EXHAUST GRILLE.
③ PROVIDE CLEAR ANODIZED ALUMINUM.

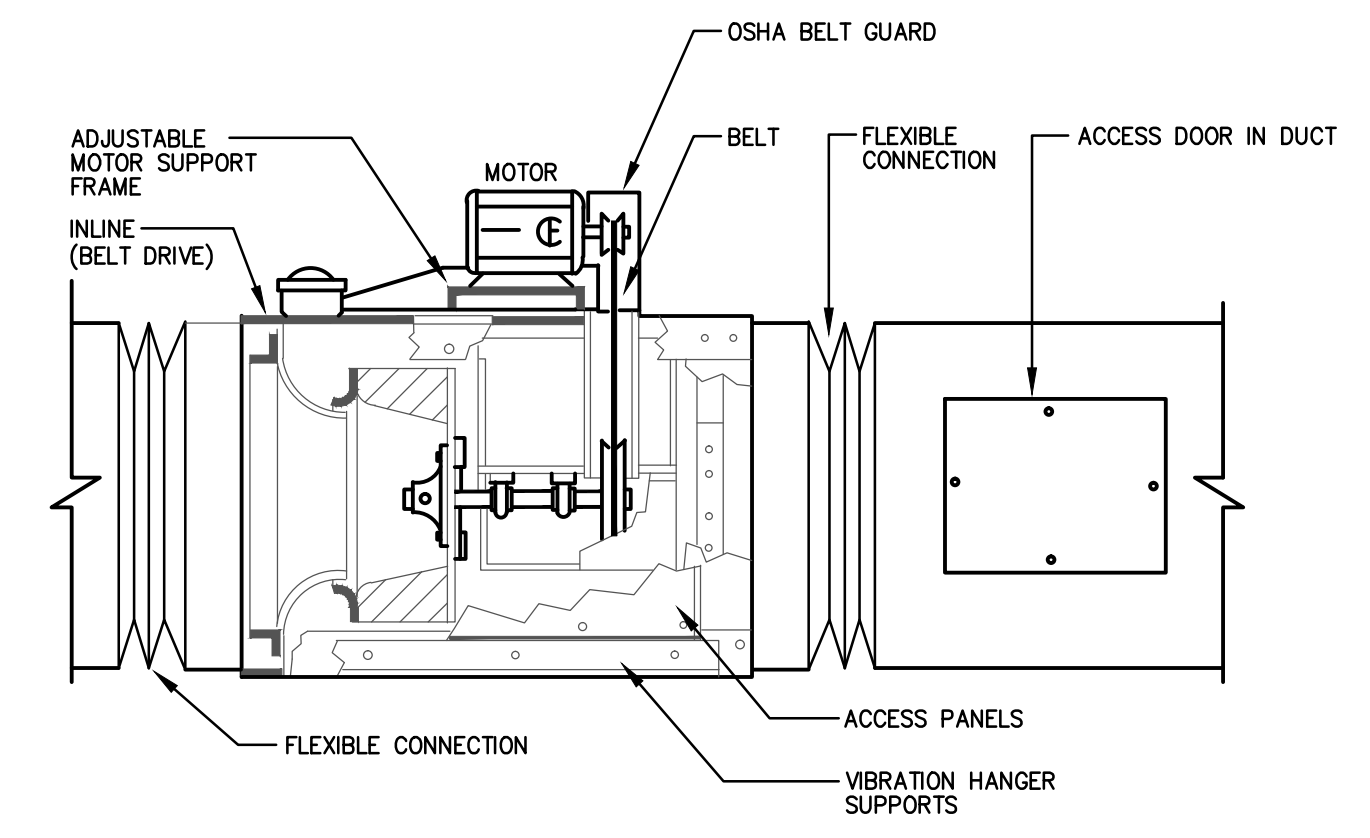


2 BOILER ROOM PLAN - HVAC & ELECTRICAL
H1.1 SCALE 1/4" = 1'-0"

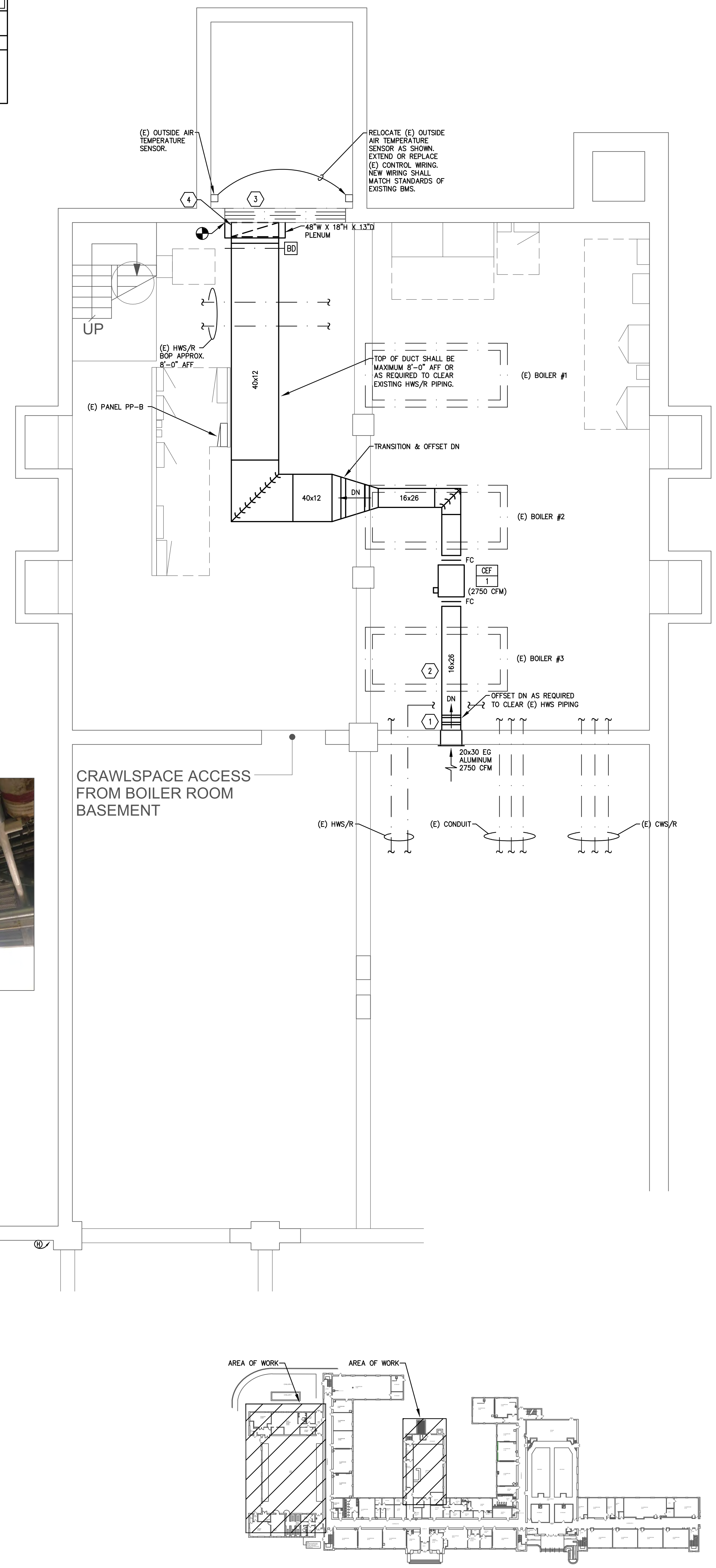
- NOTES:**
1. DUE TO THE SEVERITY OF CEILING CONGESTION, CONTRACTOR SHALL PROVIDE CUSTOM FABRICATED SUPPORTS WHERE REQUIRED TO SUPPORT EXISTING PIPING, CONDUIT, DUCT, BREECING, ETC. AND NEW DUCTWORK IN COMPLIANCE WITH ANSI/MSS SP-58.
2. ALL DUCTWORK & SUPPORTS INSTALLED BELOW 8'-0" AFF SHALL BE WRAPPED WITH 1" THICK AP ARMAFLEX DUCT WRAP SUCH THAT NO WALKING HAZARDS EXIST. THE FLAME SPREAD & SMOKE DEVELOPMENT RATING OF THE INSULATION PRODUCT SHALL NOT EXCEED 25/50.
3. ALL DUCTWORK & SUPPORTS INSTALLED BELOW 8'-0" AFF SHALL BE MARKED WITH OSHA APPROVED BLACK & YELLOW HAZARD SAFETY TAPE. TAPE SHALL BE WOVEN WITH PRESSURE SENSITIVE ADHESIVE AND HAVE A MINIMUM WIDTH OF 2". TAPE SHALL BE TRANSVERSELY WRAPPED AROUND THE DUCT EVERY 12" OC.
4. RUN DUCT TO CLEAR EXISTING PIPING, CONDUITS, ETC. AND TO MAXIMIZE AVAILABLE HEAD ROOM.
- KEY NOTES:**
① EXISTING WALL MOUNTED 3/4" CONDUIT SHALL BE RELOCATED AS REQUIRED TO FACILITATE THE INSTALLATION OF THE NEW DUCTWORK.
② THREE (3) EXISTING CLEVIS HANGERS & SHIELDS SHALL BE RELOCATED AS REQUIRED TO FACILITATE THE INSTALLATION OF THE NEW DUCTWORK. THIS WORK INCLUDES BUT MAY NOT BE LIMITED TO: RELOCATION OF SUPPORTS, RECONFIGURATION OF SUPPORTS, OR THE ADDITION OF SUPPORTS TO COMPLY WITH ANSI/MSS SP-58.
③ EXISTING OPEN ENDED PIPE SHALL BE CUT BACK AS REQUIRED TO FACILITATE THE INSTALLATION OF THE NEW PLENUM.
④ 40x12 UP & CONNECT TO UNDERSIDE OF PLENUM. SEAL PLENUM CONNECTION TO (E) LOUVER AIR & WATER TIGHT.
- CONTROL NOTES:**
1. EF-1 SHALL BE CONTROLLED FROM THE EXISTING TRANE TRACER BUILDING MANAGEMENT SYSTEM. PROVIDE ALL NECESSARY I/O, SOFTWARE, HARDWARE, PROGRAMMING, & GRAPHICS TO ACHIEVE THE INTERFACE.
- VENTILATION SYSTEM SEQUENCE OF OPERATIONS:**
OCCUPIED MODE:
WHEN THE EXHAUST FAN IS IN OCCUPIED MODE, IT SHALL BE ENERGIZED & RUN CONTINUOUSLY.
UNOCCUPIED MODE:
WHEN THE EXHAUST FAN IS IN UNOCCUPIED MODE, IT SHALL BE DE-ENERGIZED WHEN THE HUMIDITY LEVEL IN THE CRAWL SPACE IS LESS THAN 55%. WHEN THE HUMIDITY LEVEL OF THE CRAWL SPACE IS GREATER THAN OR EQUAL TO 55%, THE EXHAUST FAN SHALL OPERATE IN OCCUPIED MODE.
- OPERATING STATUS:**
THE BUILDING MANAGEMENT SYSTEM SHALL CONTINUOUSLY MONITOR THE OPERATING STATUS OF THE FAN.



3 BOILER ROOM - EXISTING CONDITIONS
H1.1 NOT TO SCALE



4 IN-LINE CENTRIFUGAL FAN DETAIL
H1.1 NOT TO SCALE



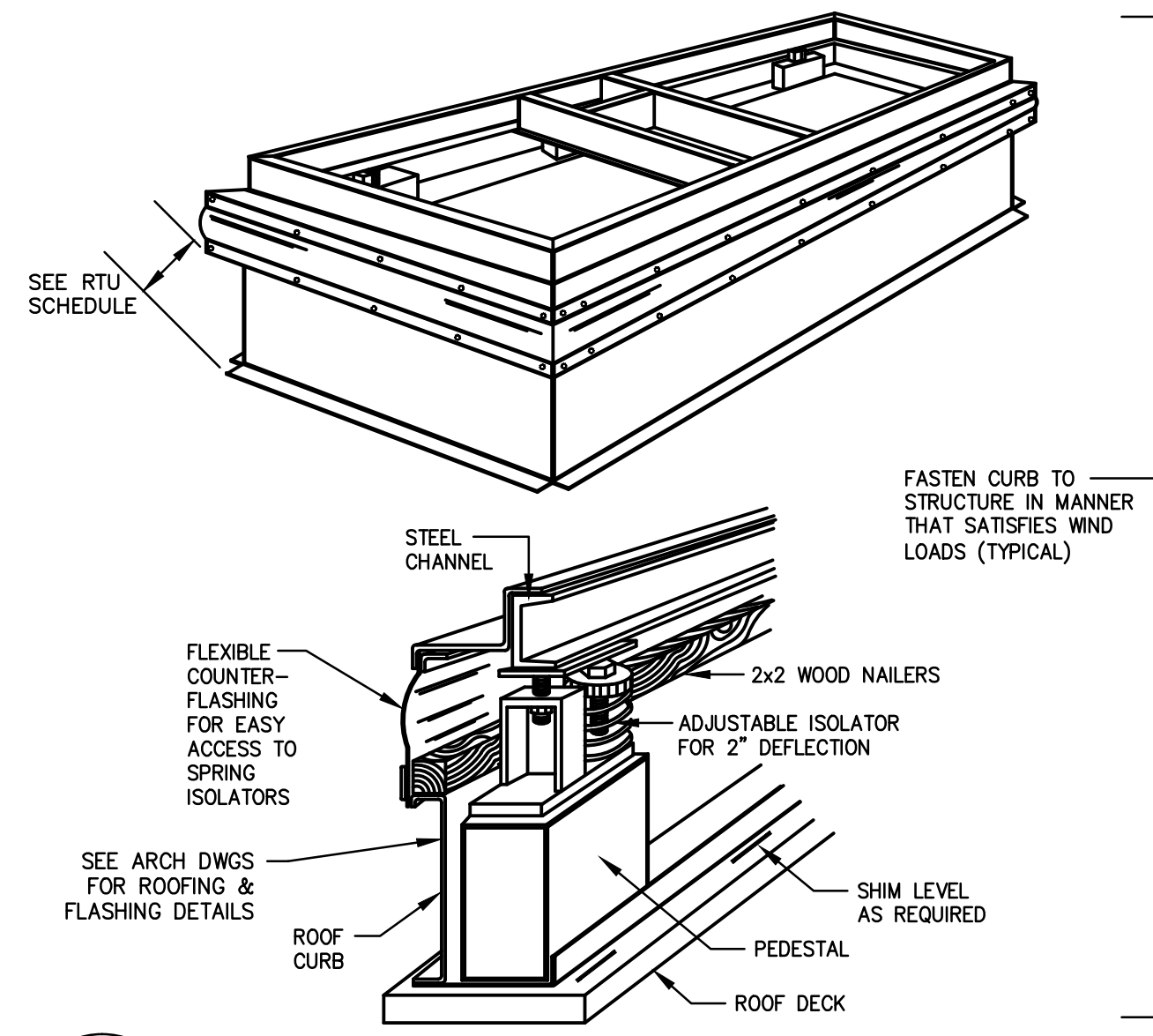
REGAN YOUNG ENGLAND BUTERA
REGISTERED ENGINEER - ARCHITECTURE - DESIGN
456 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1 (609) 265-2852 • 0333 FAX • 21.A000912100 • RYEBREAD.COM

KELTER & GILLICO
consulting engineers
P.O. BOX 777 14 WASHINGTON RD.
FRANCONIA TOWNSHIP NEW JERSEY 07003
Phone: 201.981.9100
Professional Engineer
NJ 36606

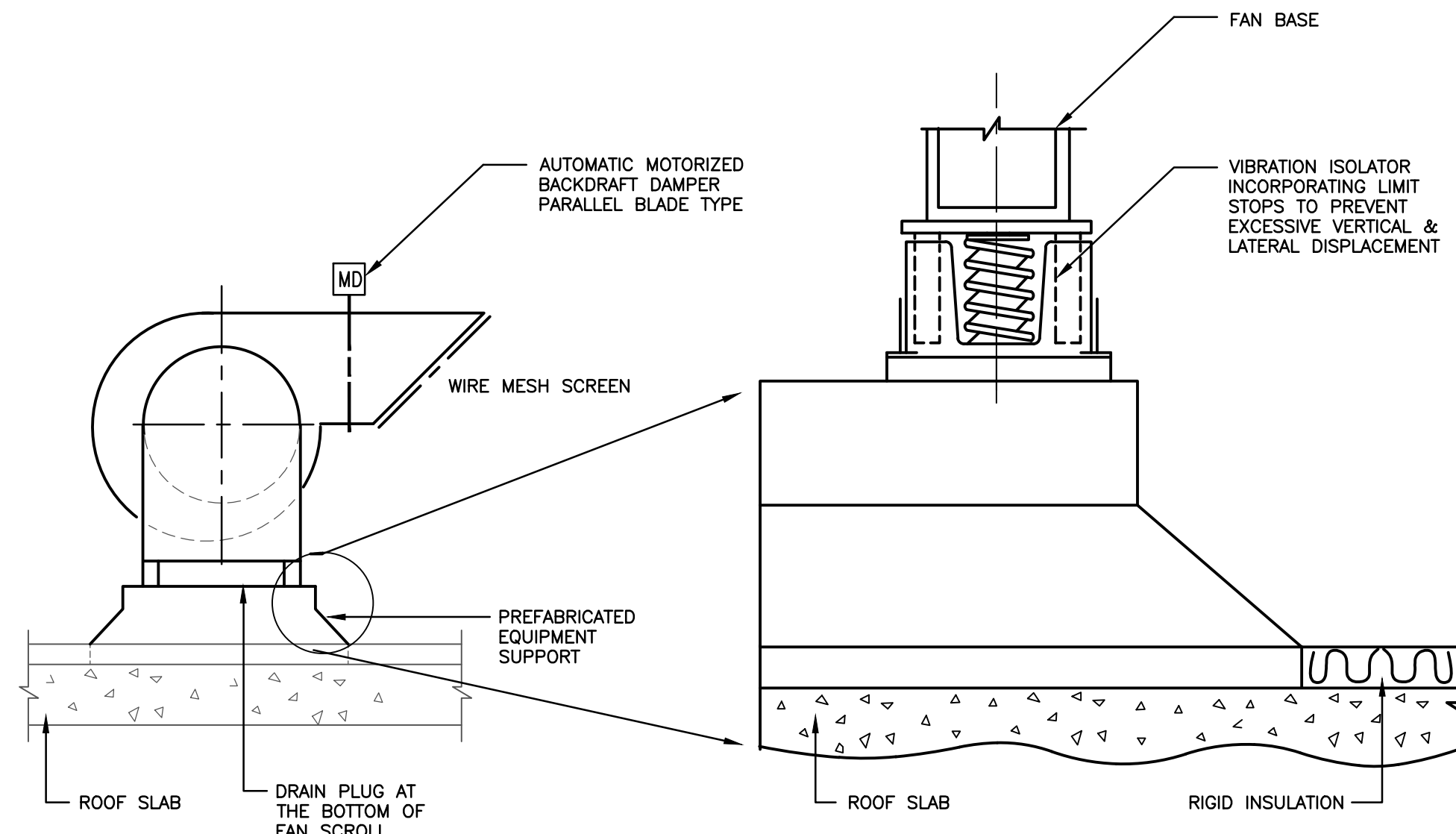
NJDOE SP #2670-090-14-1006-G04
GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT:
LINDENWOLD MIDDLE SCHOOL
LOT 2, BLOCK 448
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY
TITLE: GYM ROOF PLAN & BOILER ROOM - HVAC

DRAWING DATE:
01 MAR 19
REVISION DATE:

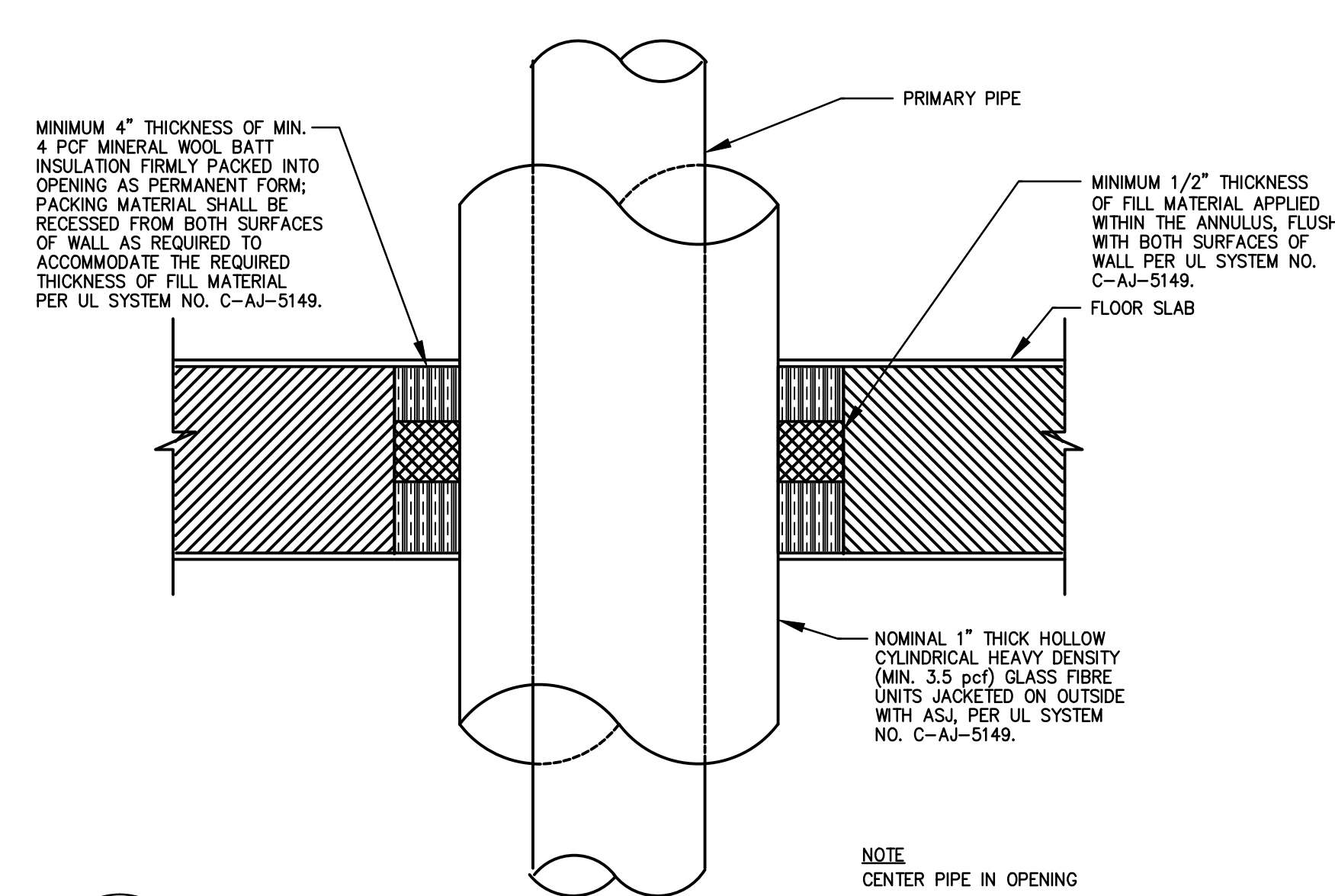
DRAWN BY:
MM
COMMISSION NO.:
5563C



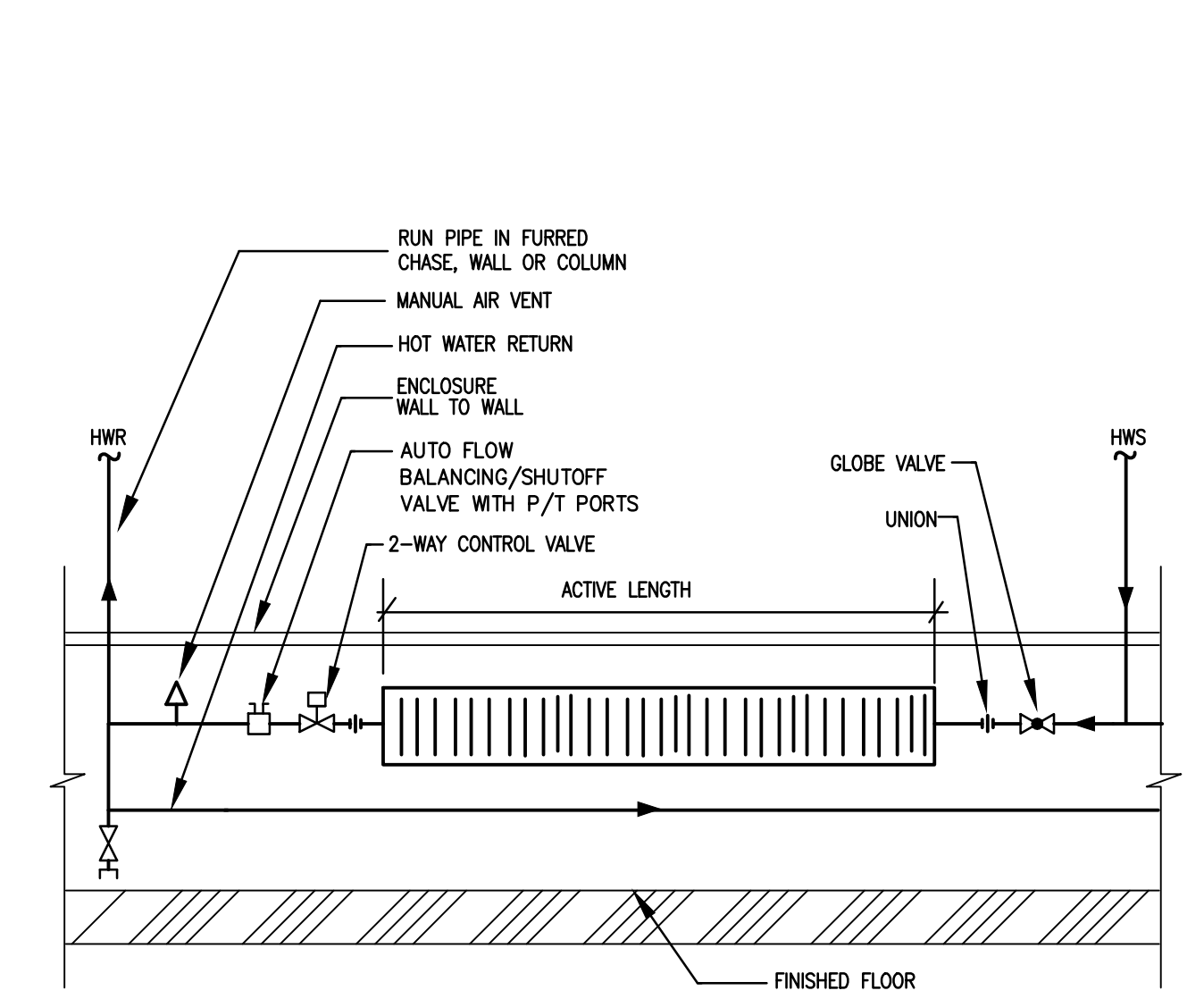
1 TYPICAL ROOF CURB DETAIL FOR ROOFTOP AIR CONDITIONING UNITS
H2.1 NOT TO SCALE



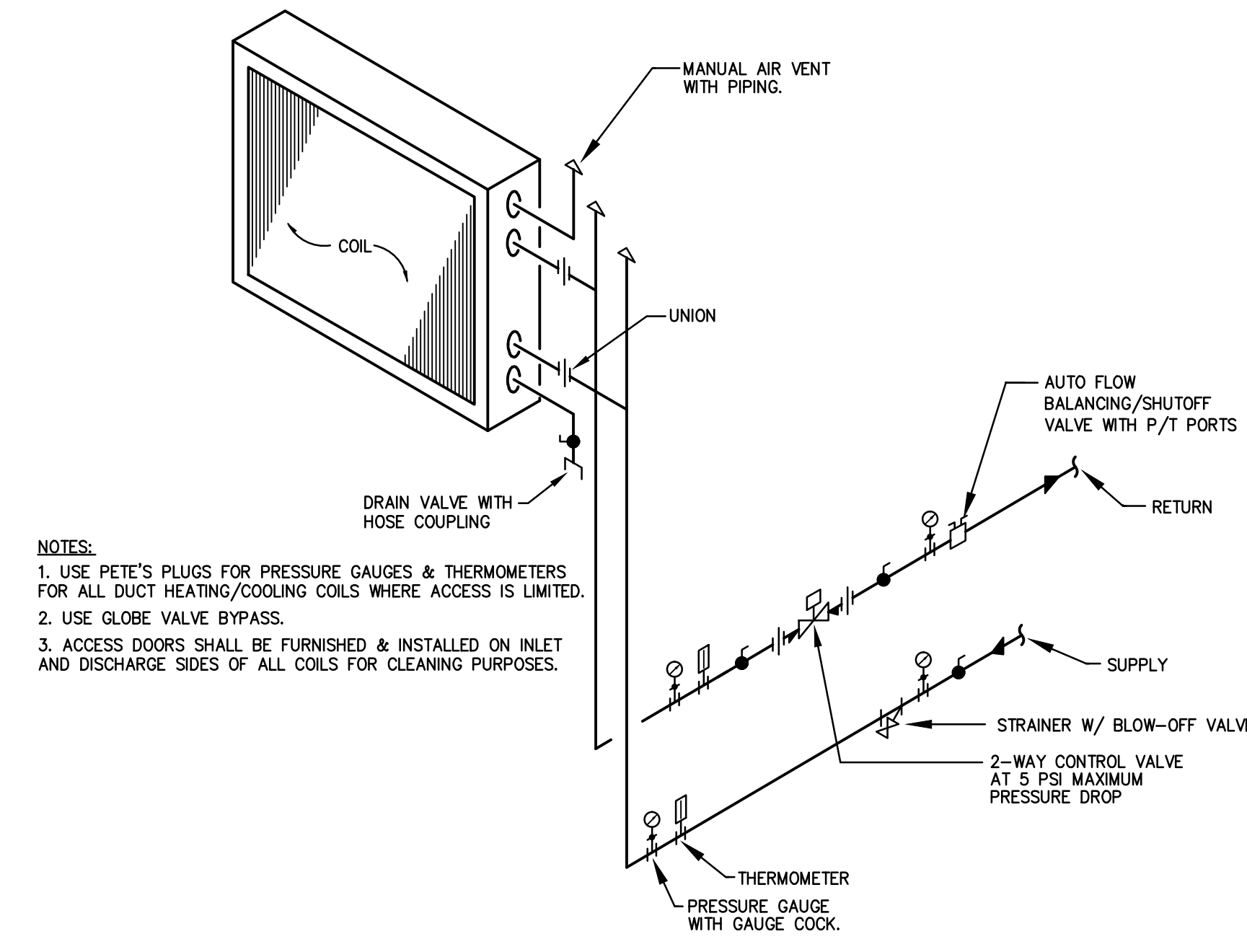
2 ROOF TOP EXHAUST FAN MOUNTING
H2.1 NOT TO SCALE



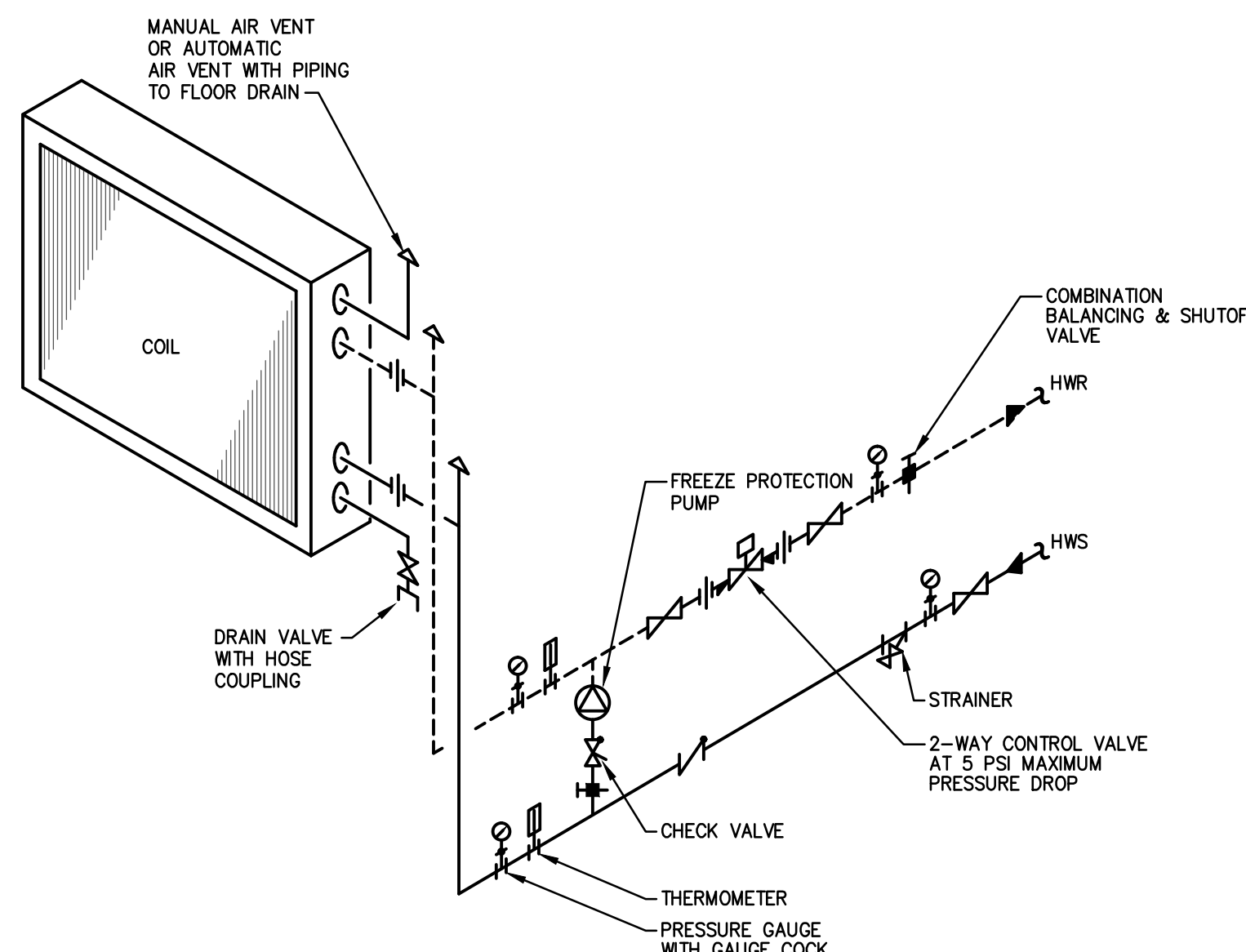
3 PIPE PENETRATION THROUGH FLOOR SLAB
H2.1 NOT TO SCALE



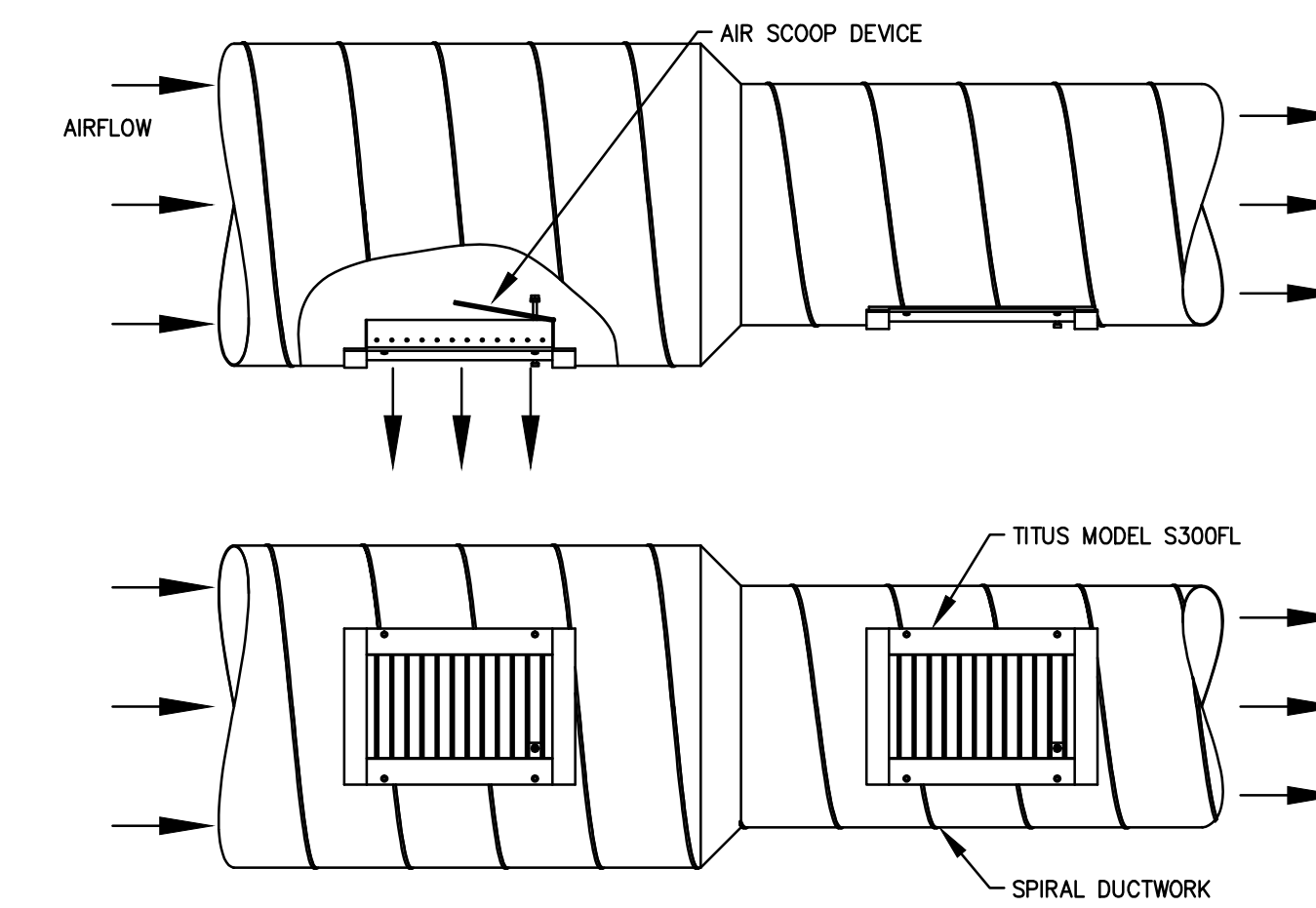
4 FINNED TUBE RADIATION DETAIL
H2.1 NOT TO SCALE



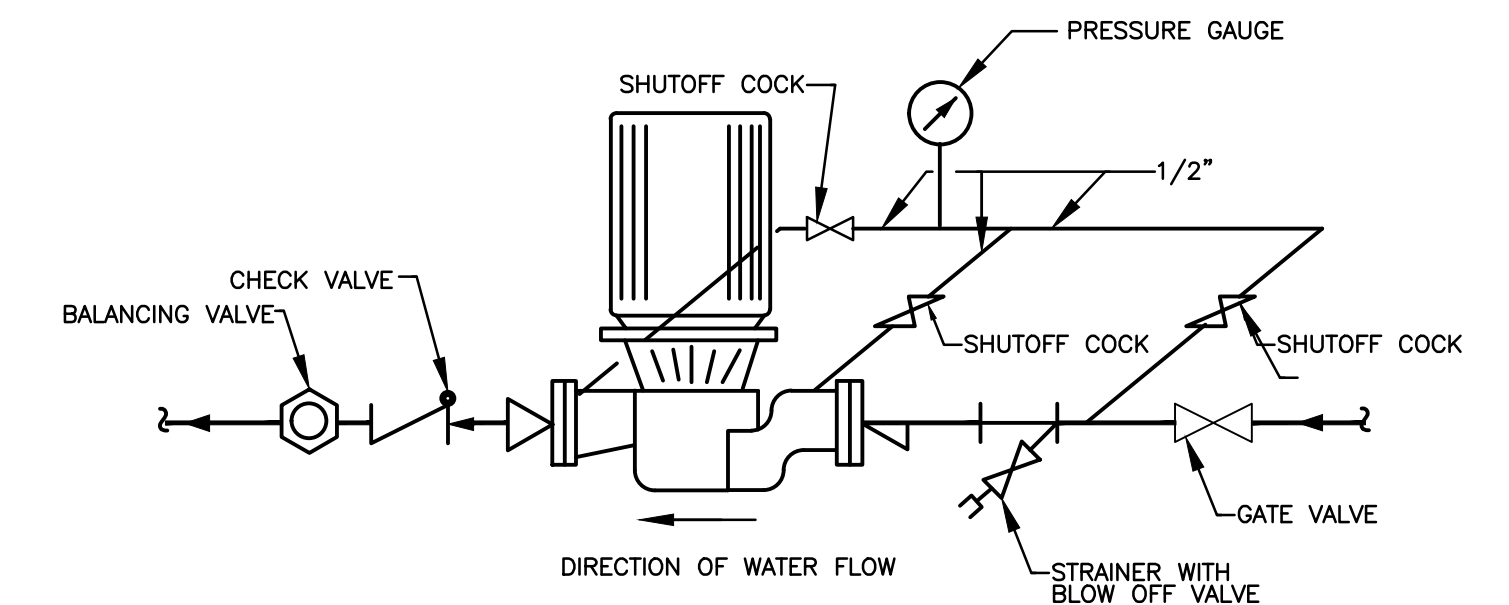
5 HEATING/COOLING COIL PIPING DETAIL
H2.1 NOT TO SCALE



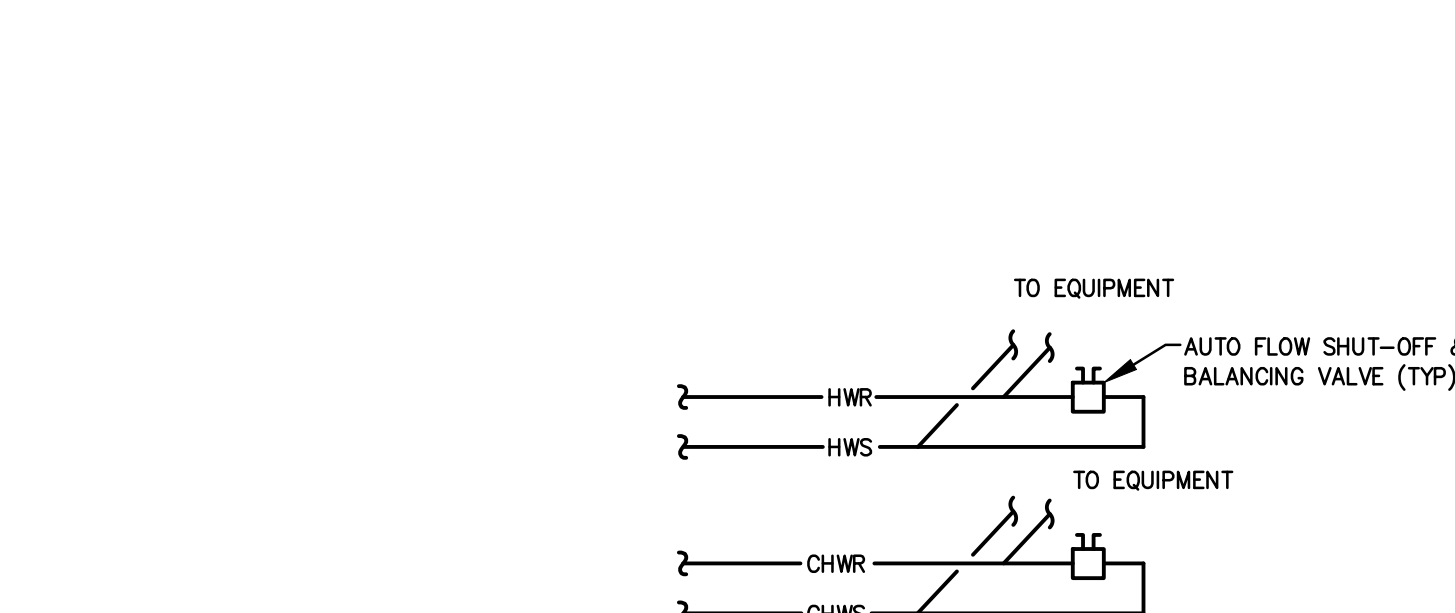
6 HOT WATER HEATING COIL (WITH FREEZE PROTECTION PUMP) PIPING DETAIL
H2.1 NOT TO SCALE



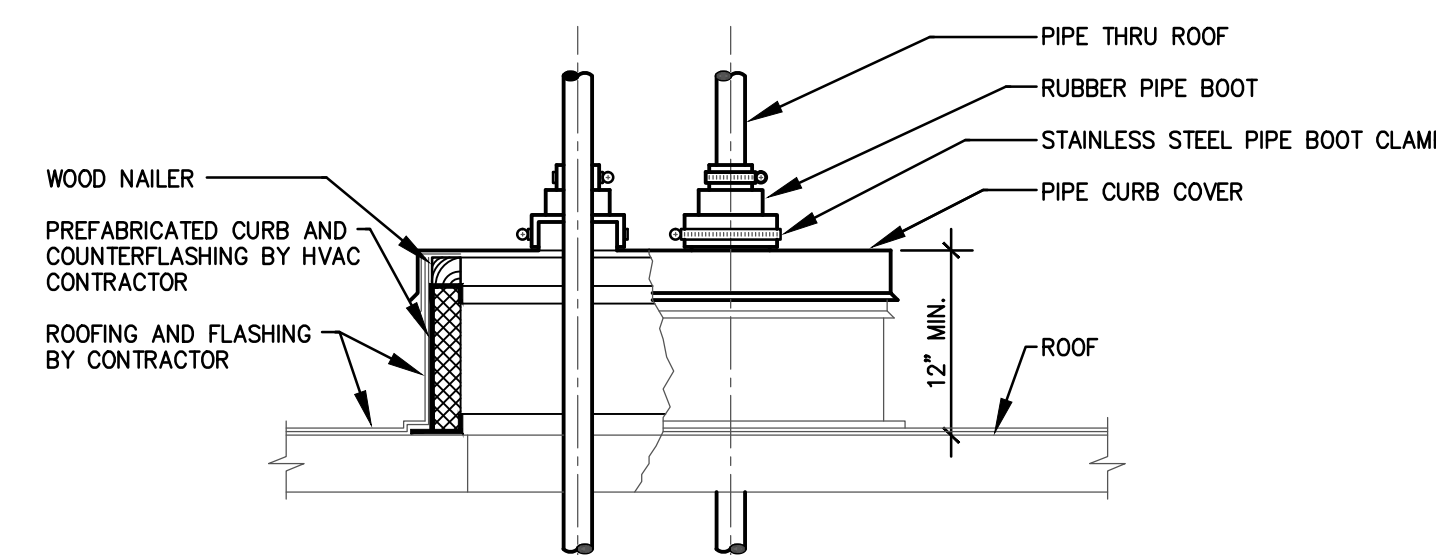
13 SPIRAL DUCT DIFFUSER
H2.1 NOT TO SCALE



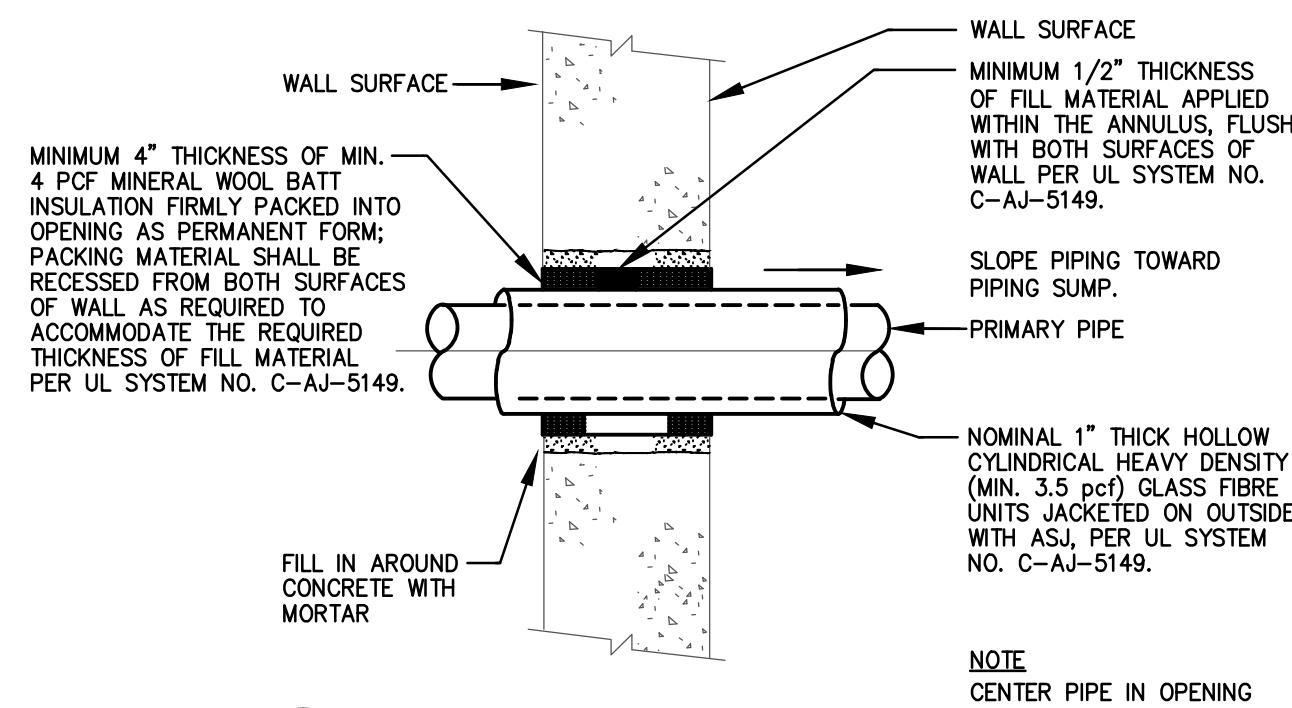
8 TYPICAL CONNECTIONS TO IN-LINE WATER PUMP
H2.1 NOT TO SCALE



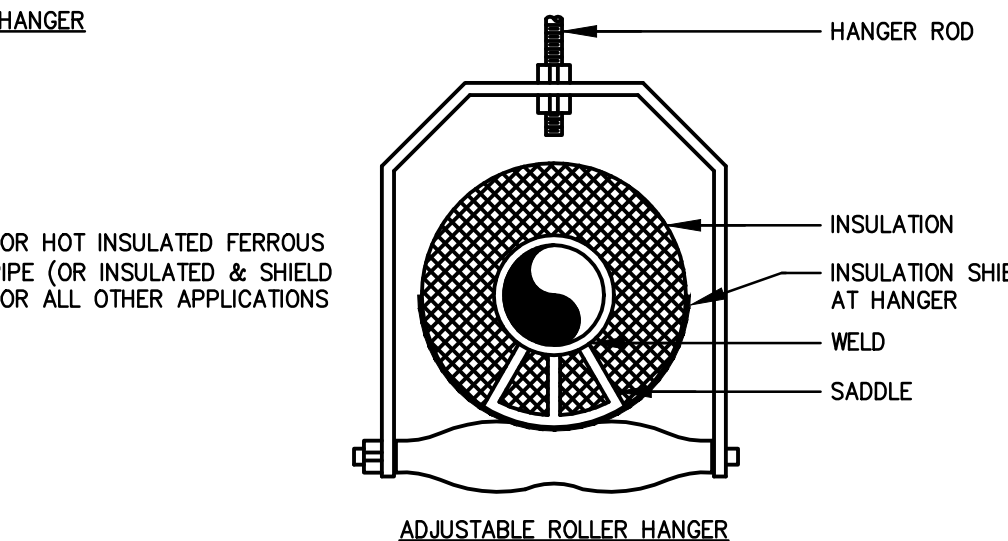
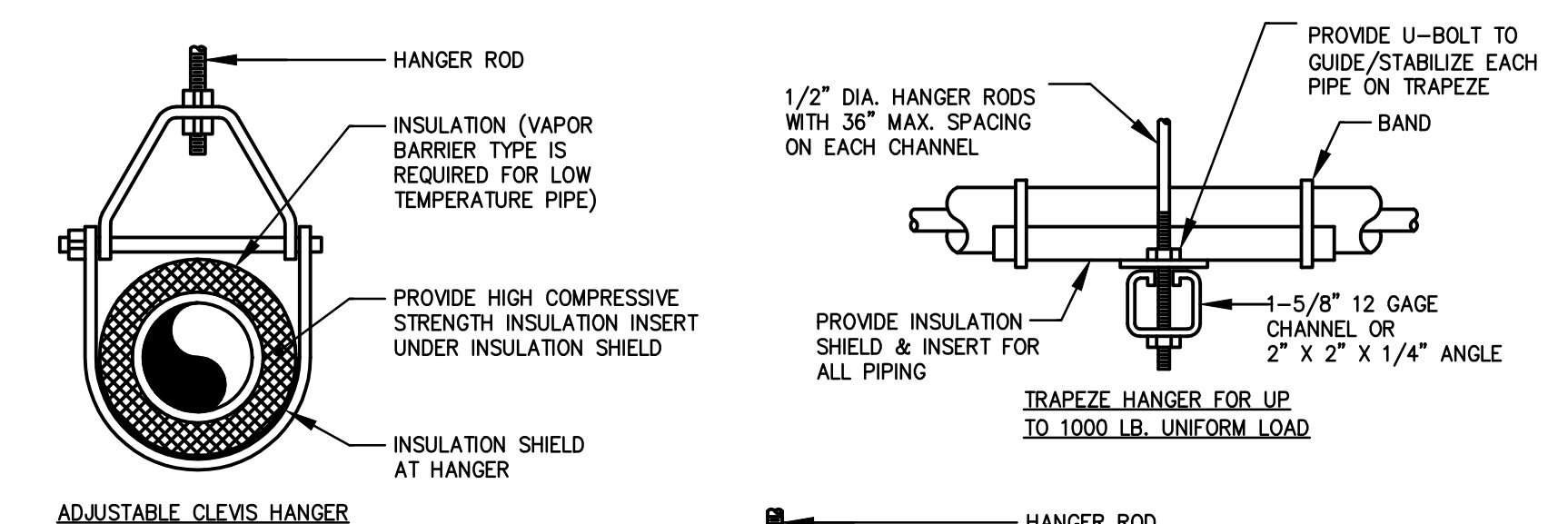
9 END OF PIPING LOOP DETAIL
H2.1 NOT TO SCALE



10 PIPE CURB DETAIL
H2.1 NOT TO SCALE



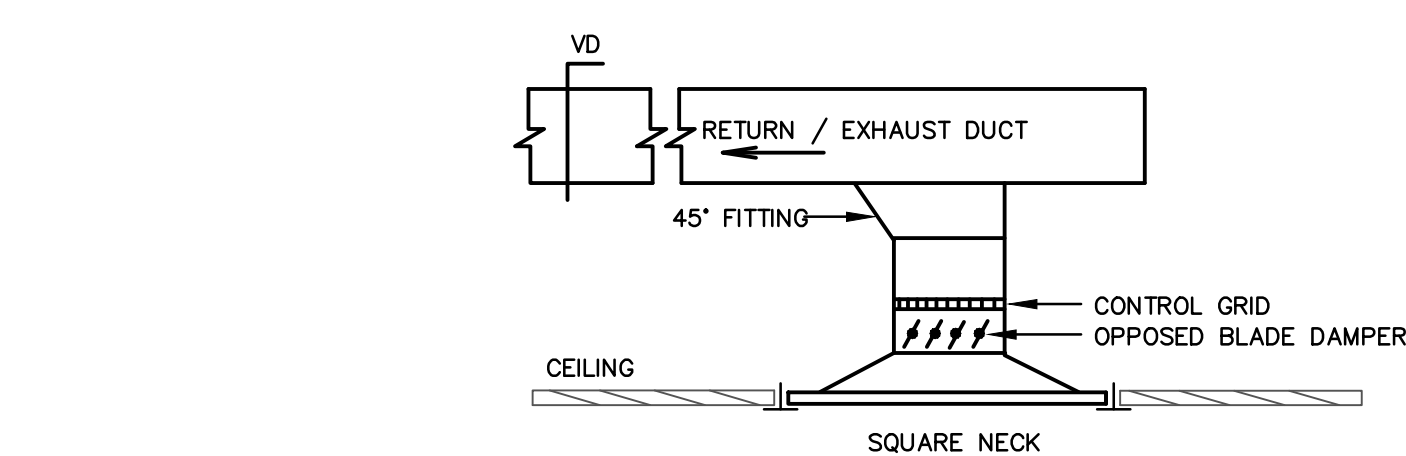
11 PIPE PENETRATION THROUGH RATED WALL DETAIL
H2.1 NOT TO SCALE



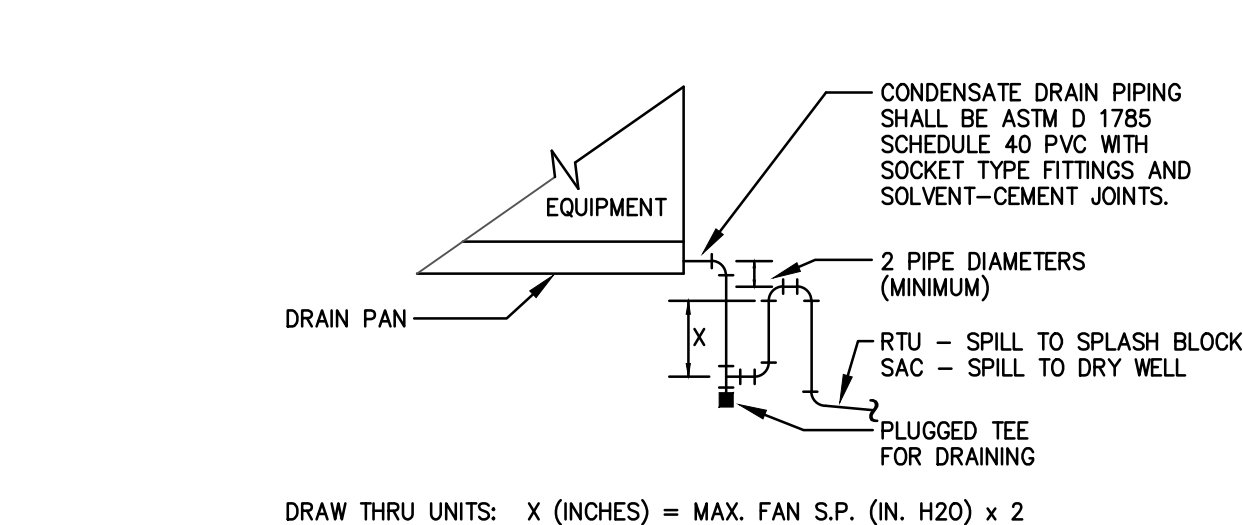
MAXIMUM PIPE/TUBING SUPPORT SPACING, FEET													
NOM. SIZE	THRU 3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"	
PIPE	7	7	7	9	10	11	12	14	16	17	19	22	23
TUBING	5	6	7	8	8	9	10	12	13	14	16	-	-

NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE

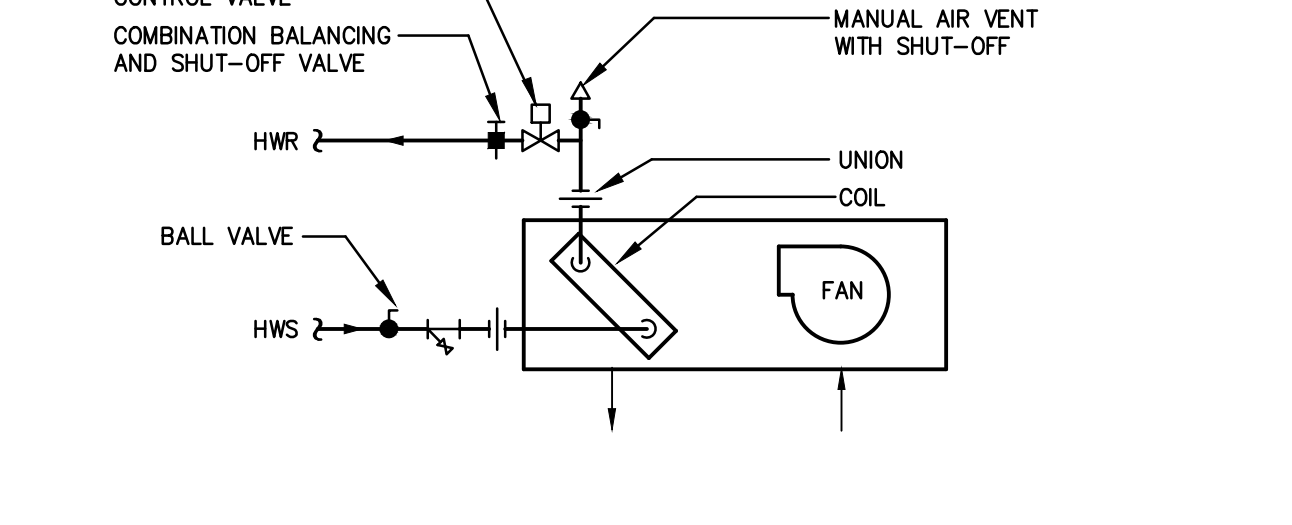
16 TYPICAL PIPE HANGERS
H2.1 NOT TO SCALE



12 CEILING REGISTER TAKE-OFF
H2.1 NOT TO SCALE



14 CONDENSATE DRAIN PIPING DETAIL
H2.1 NOT TO SCALE

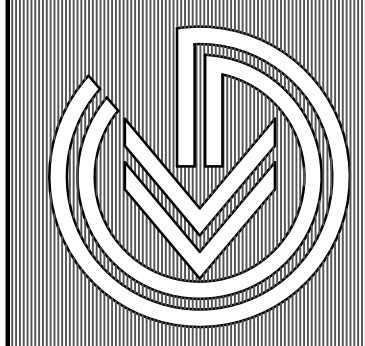


15 CABINET UNIT HEATER PIPING DETAIL
H2.1 NOT TO SCALE

NOTE:
1. SIMILAR FOR UNIT HEATERS

REGAN YOUNG ENGLAND BUTERA
REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN
466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1 (609) 265-2852 • 0333 FAX • 21A000912100 • RYEBREAD.COM

KELTER & GILLICO
consulting engineers
P.O. BOX 777 14 WASHINGTON RD.
FRANCONIA TOWNSHIP NEW JERSEY 08869
Phone: 732.916.9100
Professional Engineer
NJ 35856



NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOLD MIDDLE SCHOOL
LOT 2 BLOCK 4/8
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY

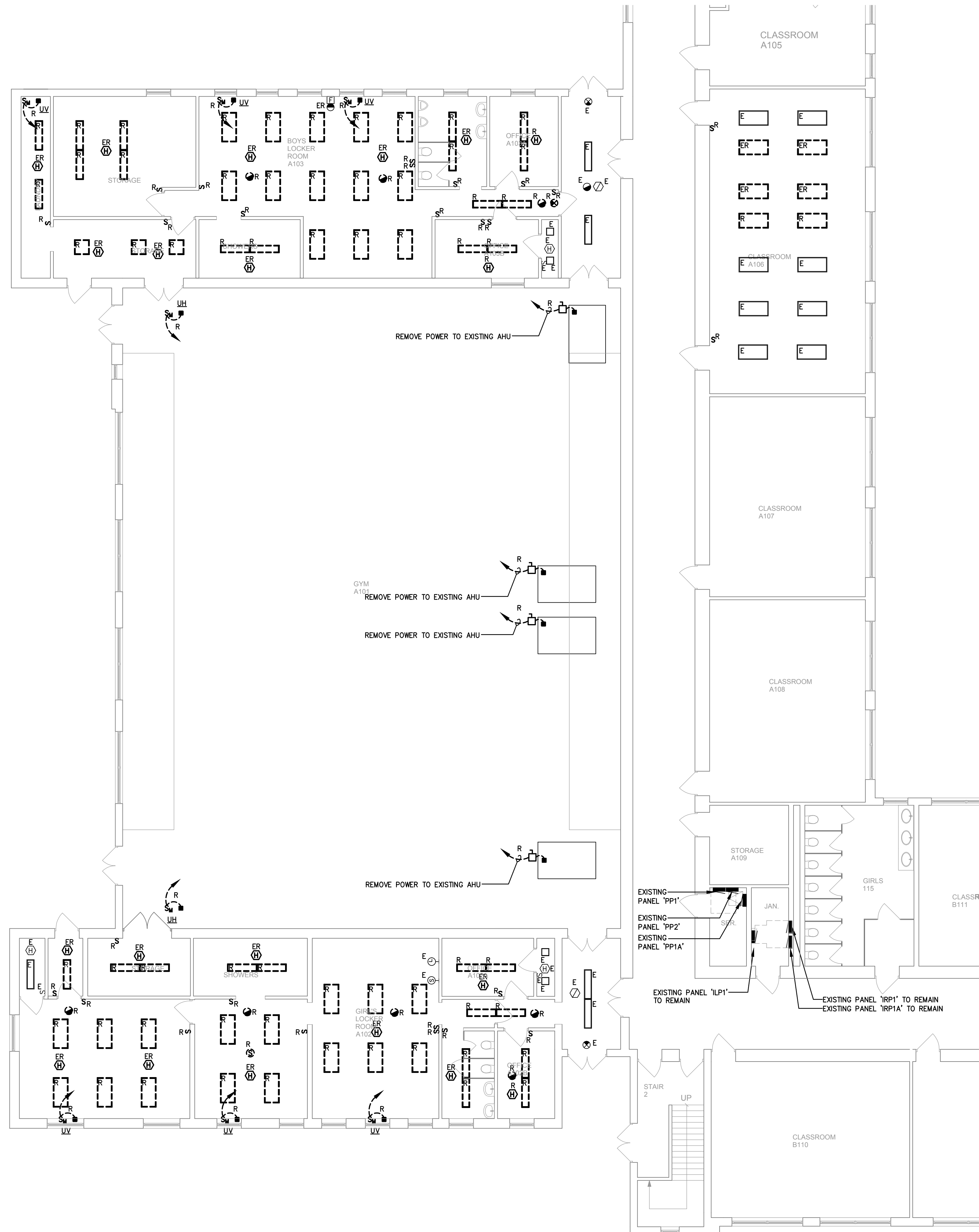
DETAILS - HVAC

DRAWING DATE:
01 MAR 19

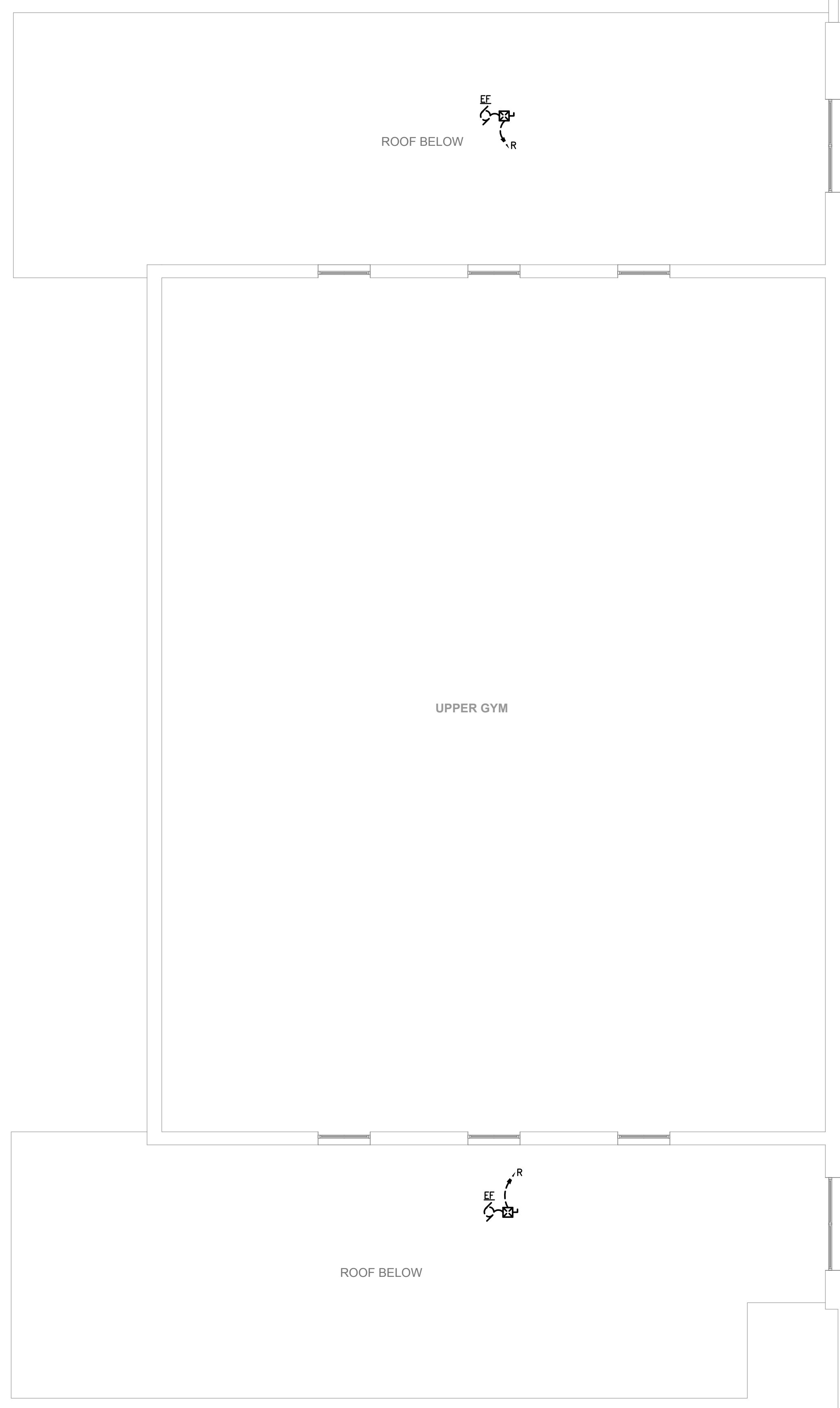
REVISION DATE:

DRAWN BY:
MLL
COMMISSION NO.:
5563C

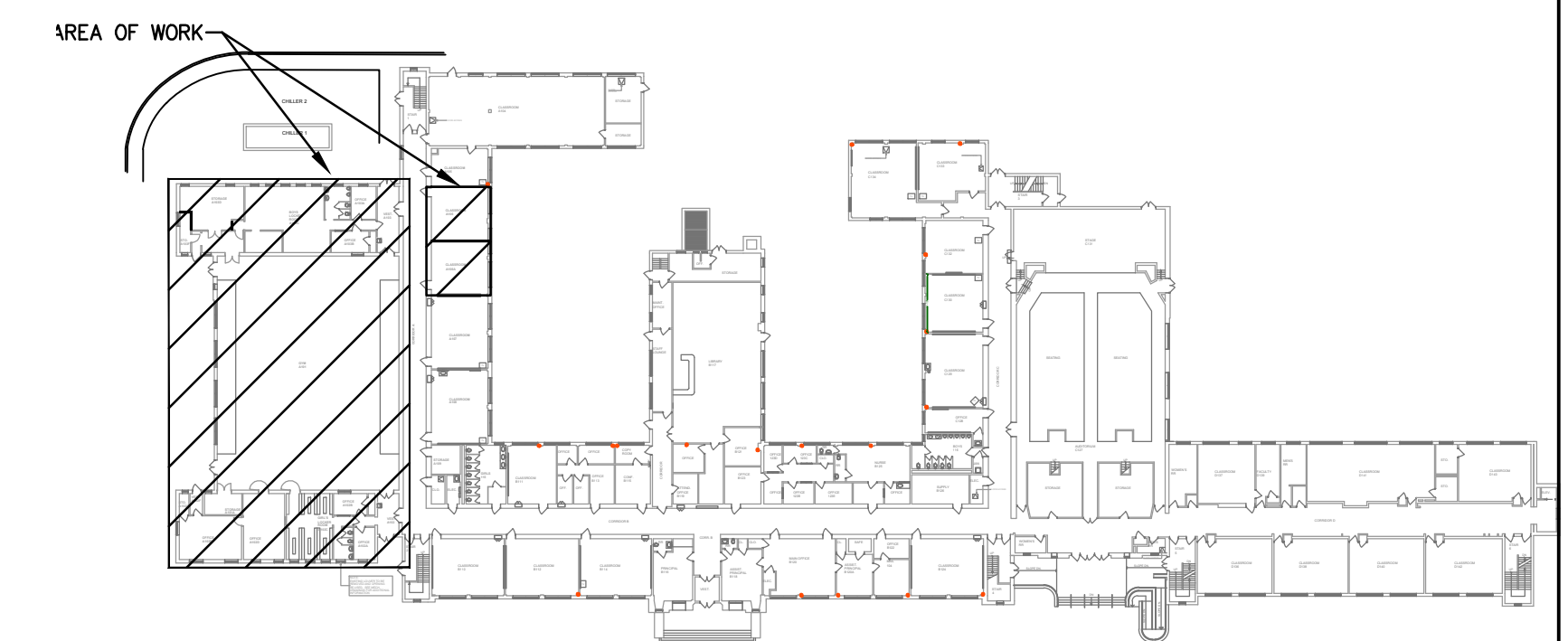
H2.1



1 PARTIAL FIRST FLOOR PLAN - ELECTRICAL DEMOLITION
ED.1 SCALE 1/8" = 1'-0"



2 ROOF PLAN - ELECTRICAL DEMOLITION
ED.1 SCALE 1/8" = 1'-0"



KEY PLAN

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL VERIFY ACTUAL SITE CONDITIONS PRIOR TO SUBMITTING HIS BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEMS. THE CONTRACTOR SHALL ALSO INCLUDE TEMPORARY REMOVAL AND REINSTALLATION OF EXISTING WORK WHEREVER NECESSARY. THE OWNER SHALL NOT ACCEPT EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.
2. THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL DEVICES LOCATED WITHIN THE PROJECT AREA THAT ARE NO LONGER NEEDED BY THE OWNER/TEENENT. ALL EXISTING WIRING WHERE NO LONGER REQUIRED SHALL BE REMOVED AND CONDUIT ABANDONED. RECONNECT DISTURBED FACILITIES WHICH ARE TO REMAIN AND PLACE IN OPERATING CONDITION.
3. REMOVE ALL WIRING DEVICES FROM WALLS TO BE DEMOLISHED. REMOVE EXISTING LIGHT SWITCHES WHERE NO LONGER REQUIRED. ABANDON BOXES IF THEY ARE IN EXISTING WALLS TO REMAIN. PATCH WALLS OVER ABANDONED BOXES.
4. REMOVE ABANDONED OUTLET BOXES, SURFACE METAL RACEWAY AND CONDUIT THAT WOULD BE EXPOSED AND REPAIR DISTURBED SURFACES TO MATCH ADJACENT AREAS.
5. ALL DEMOLISHED EQUIPMENT IS TO BE REMOVED FROM THE JOB SITE.
6. PATCH ALL WALL, ROOF AND SLAB OPENINGS AT REMOVALS TO MATCH EXISTING CONDITIONS PER ARCHITECTURAL DETAILS.
7. THE EXISTING FIRE ALARM SYSTEM SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. SEE 2/21.1 FOR ADDITIONAL INFO.
8. DISCONNECT AND CLEAR ALL CONDUIT, WIRE AND APPURTENANCES FROM HVAC EQUIPMENT TO BE REMOVED. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFO.
9. IN AREAS THAT WILL HAVE CEILING REMOVED:
 - A. PROVIDE TEMPORARY SUPPORT OF EXISTING CEILING MOUNTED DEVICES SO THEY CAN REMAIN IN SERVICE UNTIL INSTALLATION OF NEW WORK REQUIRES REINSTALLATION OR NEW DEVICES ARE READY TO BE PUT INTO OPERATION.
 - B. PROVIDE PERMANENT SUPPORT SYSTEM FOR ALL EXISTING CABLE AND CONDUIT, AS REQUIRED TO FACILITATE THE CEILING REMOVALS.

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND
LOCKER ROOM ALTERATIONS AT:
LINDENWOLD MIDDLE SCHOOL
LOT 2, BLOCK 44S
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY

TITLE: PARTIAL PLANS - ELECTRICAL DEMOLITION

DRAWING DATE:
01 MAR 19

REVISION DATE:

DRAWN BY:
LA
COMMISSION NO.
5563C

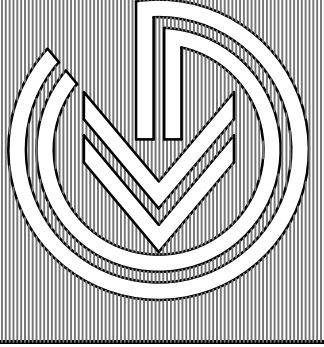
February 07, 2018 1:24:17 p.m.
Drawing: 2848 E100.DWG

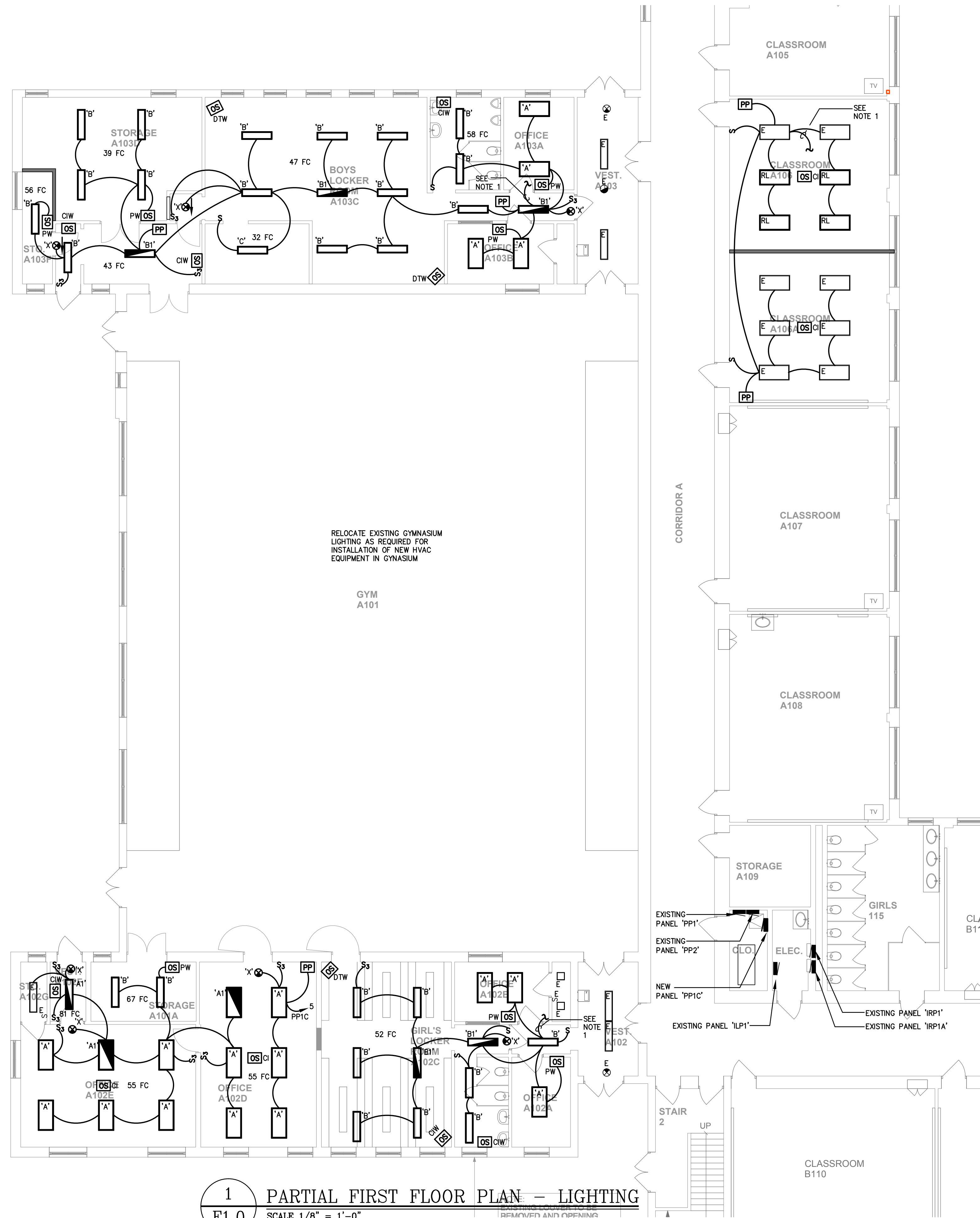
ED.1

1 OF 4

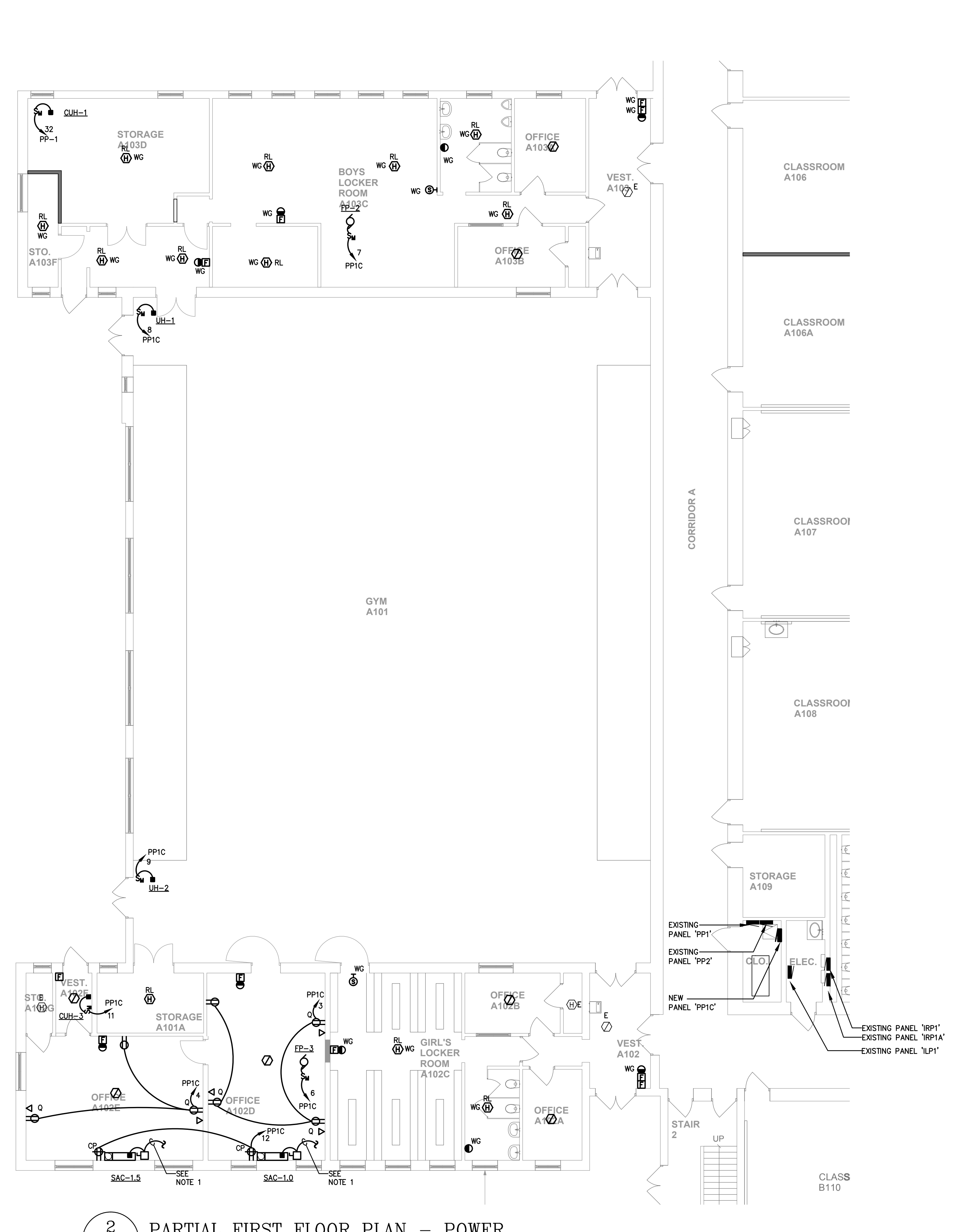
REGAN YOUNG ENGLAND BUTERA
REFERENDUMS - ENGINEERING - ARCHITECTURE - DESIGN
465 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1 (609) 265-2652 • 0333FAX • 21A00912100 • RYEBREAD.COM

KELTER & GILLICO
consulting engineers
P.O. BOX 777, 14 WASHINGTON RD.
FARGO, MINN. 56503
Phone: 763.835.8888
Professional Engineer





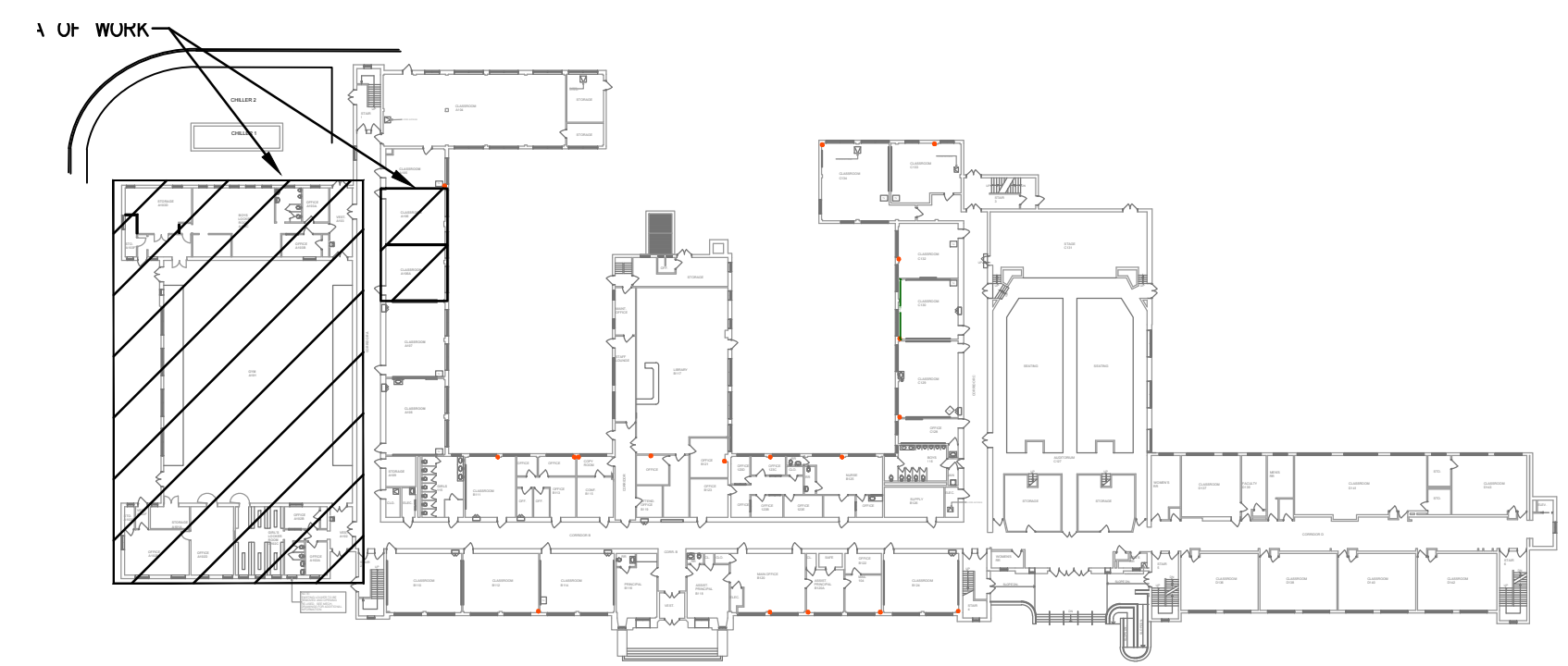
1 PARTIAL FIRST FLOOR PLAN - LIGHTING
 SCALE 1/8" = 1'-0"
 NOTE:
 1. CONNECT BACK TO EXISTING LIGHTING CIRCUIT IN AREA, CIRCUIT VIA 2 #12 & 1 #12 GRD - 3/4".



2 PARTIAL FIRST FLOOR PLAN - POWER
 SCALE 1/8" = 1'-0"
 NOTE:
 1. PROVIDE POWER AND CONTROL WIRING TO OUTDOOR UNIT PER MANUFACTURER'S WRITTEN DIRECTIONS.

GENERAL NOTES (APPLIES TO ALL AREAS)

- ALL EXPOSED RACEWAYS IN FINISHED AREAS SHALL BE IN FINISHED STEEL RACEWAY. PROVIDE WRETHOLD 700 SERIES OR APPROVED EQUAL, WHERE 3/4" IS SPECIFIED, UNLESS OTHERWISE NOTED. PROVIDE ALL FITTINGS, TRIM PIECES, HARDWARE, ETC. AS REQUIRED. PROVIDE ALL OFFSETS, BENDS, BRIDGING, ETC. AS REQUIRED TO AVOID EXISTING AND NEW OBSTRUCTIONS. ALL EDGES SHALL BE REAMED SMOOTH, DO NOT LEAVE ANY SHARP EDGES.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORT OF ALL EXISTING SPEAKERS, WIFI ACCESS POINTS AND SECURITY CAMERAS, WHICH NEED TO BE RELOCATED DUE TO CEILING WORK. EXTENSION OF CABLES/NEW CABLES TO THESE DEVICES AND FINAL INSTALLATION TO BE BY OWNER.



KEY PLAN

NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOLD MIDDLE SCHOOL LOT 2 BLOCK 4/3 40 WHITE HORSE AVENUE LINDENWOLD, NEW JERSEY

PARTIAL FIRST FLOOR PLAN - ELECTRICAL

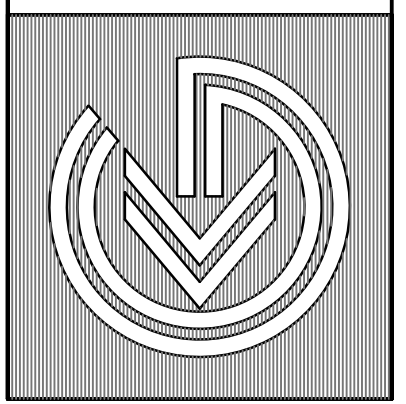
Printed: Mar 04, 2019 15:50:59
 Drawing: 2648 E100.DWG
 Commission No.: 5563C

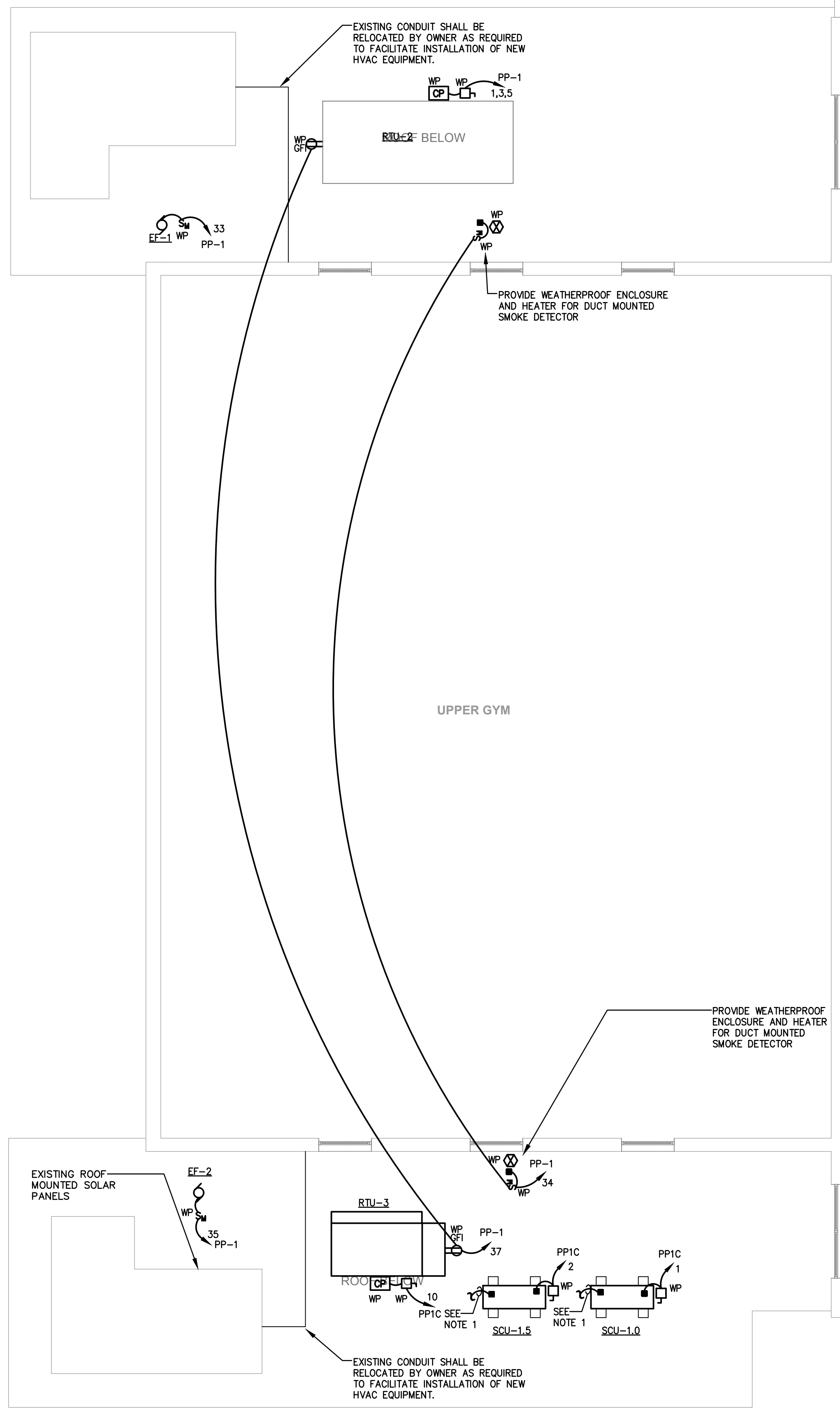
DRAWING DATE:	01 MAR 19
REVISION DATE:	
DRAWN BY:	LA
COMMISSION NO.:	5563C

E1.0
 2 OF 4

REGAN YOUNG ENGLAND BUTERA
 REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN
 466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
 +1(609)265-2652 • 0633FAX • 21A00912100 • RYE@REGAN.COM

KELTER & GILLICO
 consulting engineers
 P.O. BOX 777 14 WASHINGTON RD.
 FRANKFORD TOWNSHIP NEW JERSEY 08059
 Frank T. Kelter, P.E.
 Professional Engineer
 NJ 36856





1 ROOF PLAN - ELECTRICAL

E1.1 SCALE 1/8" = 1'-0"
NOTE:
1. PROVIDE POWER AND CONTROL WIRING TO INDOOR UNIT PER MANUFACTURER'S WRITTEN DIRECTIONS.

- ROOF WARRANTY NOTES:**
- EXISTING ROOFING SYSTEM IS UNDER ROOF WARRANTY AND IS A SINGLE-PLY ROOF SYSTEM MANUFACTURED BY FLEX ROOFING.
 - ALL NEW ROOF WORK MUST BE CONDUCTED IN STRICT ACCORDANCE WITH ROOF MANUFACTURER'S REQUIRED DETAILS TO MAINTAIN ROOF WARRANTY IN FULL EFFECT.
 - NEW ROOFING ALTERATIONS MUST BE CONDUCTED BY A ROOFING SUBCONTRACTOR WHO IS A FLEX ROOFING CERTIFIED INSTALLER.
 - ROOF MANUFACTURER SHALL CONDUCT INSPECTION AND ISSUE A REPORT AND ISSUE LETTER REGARDING CONTINUANCE OF WARRANTY WITHOUT EXCEPTION.

EXISTING PANELBOARD 'PP-1'												
208/120V, 3ø, 4W, S/N, SURFACE, 400A MAIN LUGS ONLY, 42 KAIC												
OKT#	DESCRIPTION	LOAD KVA	OR BREAKER POLES	AMP	WIRE & CONDUIT	#A #B #C	WIRE & CONDUIT	OR BREAKER AMP	POLES	LOAD KVA	DESCRIPTION	OKT#
1	RTU-2	-	3	60	3 #6 & 1 #10 GRD - 1" C		EXISTING	20	2	-	SPARE	2
3							EXISTING	20	2	-	OFFICE 113,115	6
5	AC-FB	-	2	20	EXISTING		EXISTING	20	1	-	AC-A1-A7	8
9	STAFF LOUNGE						EXISTING	20	1	-	SPARE	10
11	STRIP MOLDING OUTLET	-	1	20	EXISTING		EXISTING	20	1	-	SPARE	12
13	ROOM 105 OUTLET	-	1	20	EXISTING		EXISTING	20	1	-	ROOM 104 OP/P/T REC	14
15	ROOM 104 KITCHEN GF	-	1	20	EXISTING		EXISTING	20	1	-	ROOM 106	16
17	RM 107 EF-14 BATHRM	-	1	20	EXISTING		EXISTING	20	1	-	ROOM 107	18
19	CHILLER 1 LIGHT RECEPT.	-	1	20	EXISTING		EXISTING	20	1	-	ROOM 108	20
21	RM 104 BCC-C	-	1	20	EXISTING		EXISTING	20	1	-	ROOM 104 STRIP	22
23	RM 106 UV	-	1	20	EXISTING		EXISTING	20	1	-	ROOM 104 JB	24
25	RM 104 OUTLET	-	1	20	EXISTING		EXISTING	20	1	-	ROOM 107	26
27	RM B110 UV	-	1	20	EXISTING		EXISTING	20	1	-	B-111	28
29	RM B112 UV	-	1	20	EXISTING		EXISTING	20	1	-	CUH-2	30
31	RM B114 UV	-	1	20	EXISTING		EXISTING	20	1	-	CUH-1	32
33	EF-1	-	1	20	2 #12 & 1 #12 GRD - 3/4" C		2 #12 & 1 #12 GRD - 3/4" C	20	1	-	FIRE FOR DUCT DETECTORS	34
35	EF-2	-	1	20	2 #12 & 1 #12 GRD - 3/4" C		2 #12 & 1 #12 GRD - 3/4" C	20	1	-	SPARE	36
37	ROOF TOP RECEPTS.	-	1	20	2 #12 & 1 #12 GRD - 3/4" C		20	1	-	SPARE	38	
39	SPACE	-	1	-	-		-	-	-	-	SPACE	40
41	SPACE	-	1	-	-		-	-	-	-	SPACE	42
SUB TOTAL KVA											-	SUB TOTAL KVA
TOTAL CONNECTED LOAD											-	

* CONNECT NEW CIRCUIT TO EXISTING SPARE BREAKERS IN PANELBOARD
** REMOVE EXISTING 40A/3P CIRCUIT AND PROVIDE NEW TYPE AND AIC RATING TO MATCH EXISTING

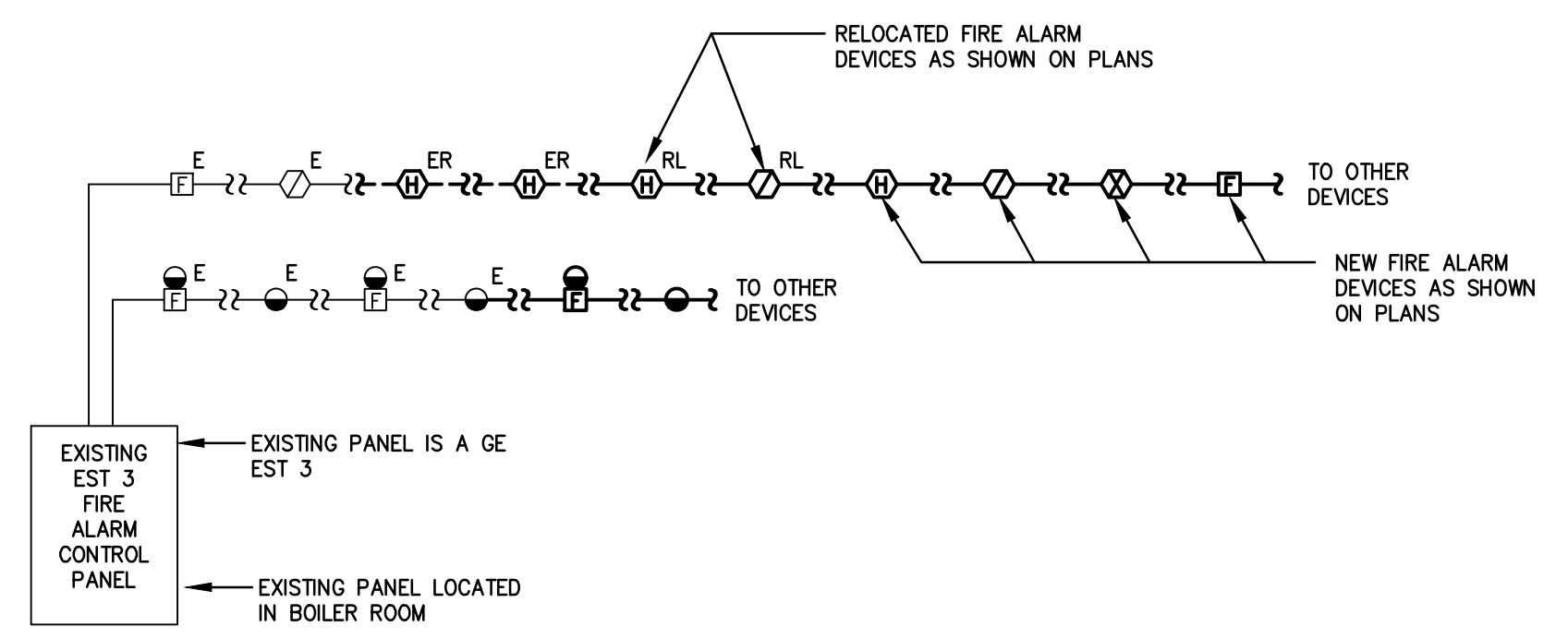
PANELBOARD 'PP-1C'									
208/120V, 3ø, 4W, S/N, SURFACE, 100A MAIN LUGS ONLY, 22 KAIC									
OKT. NO.	CIRCUIT BREAKER	LOAD		CIRCUIT DESCRIPTION	WIRE & CONDUIT				
		AMPS	POLES			KVA	HP		
1	15	2	-	SCU/SAC-1	2 #12 & 1 #12 GRD - 3/4" C				
2	15	2	-	SCU/SAC-2	2 #12 & 1 #12 GRD - 3/4" C				
3	20	1	-	OFFICE A102Z RECEPTACLES	2 #12 & 1 #12 GRD - 3/4" C				
4	20	1	-	OFFICE A102Z RECEPTACLES	2 #12 & 1 #12 GRD - 3/4" C				
5	20	1	-	OFFICE/VEST/STOR. LTG.	2 #12 & 1 #12 GRD - 3/4" C				
6	20	1	-	FP-3	2 #12 & 1 #12 GRD - 3/4" C				
7	20	1	-	FP-2	2 #12 & 1 #12 GRD - 3/4" C				
8	20	1	-	UH-1	2 #12 & 1 #12 GRD - 3/4" C				
9	20	1	-	UH-2	2 #12 & 1 #12 GRD - 3/4" C				
10	60	3	-	RTU-3	3 #6 & 1 #10 GRD - 1" C				
11	20	1	-	CUH-3	2 #12 & 1 #12 GRD - 3/4" C				
12	20	1	-	CONDENSATE PUMP, SAC-1.5/1.0	2 #12 & 1 #12 GRD - 3/4" C				
13	20	1	-	SPARE	-				
14	20	1	-	SPARE	-				
15	20	1	-	SPARE	-				
16	20	1	-	SPARE	-				
17	20	1	-	SPARE	-				
18	20	1	-	SPARE	-				
19	20	1	-	SPARE	-				
20	-	1	-	SPARE	-				
21	-	1	-	SPARE	-				
22	-	1	-	SPARE	-				
23	-	1	-	SPARE	-				
24	-	1	-	SPARE	-				
25	-	1	-	SPARE	-				
26	-	1	-	SPARE	-				
27	-	1	-	SPARE	-				
28	-	1	-	SPARE	-				
29	-	1	-	SPARE	-				
30	-	1	-	SPARE	-				
31	-	1	-	SPARE	-				
32	-	1	-	SPARE	-				
33	-	1	-	SPARE	-				
34	-	1	-	SPARE	-				
35	-	1	-	SPARE	-				
36	-	1	-	SPARE	-				
37	-	1	-	SPARE	-				
38	-	1	-	SPARE	-				
TOTAL CONNECTED LOAD					-				

SYMBOL LIST & ABBREVIATIONS

<p>○ LIGHT FIXTURE - SEE SCHEDULE</p> <p>☐ LIGHT FIXTURE WITH EMERGENCY BACKUP</p> <p>EXIT SIGN - SEE SCHEDULE</p> <p>☒ OCCUPANCY SENSOR - LETTER DENOTES TYPE OF SENSOR TO BE INSTALLED. WAITSTOPPER OR APPROVED EQUAL.</p> <p>DTW = DT-200 CI = CI-300 CW = CX-100 FW = FW-100 UT1 = UT-355</p> <p>WALL MOUNTED DUAL TECHNOLOGY SENSOR LOW VOLTAGE PASSIVE INFRARED SENSOR LOW VOLTAGE WALL MOUNTED PASSIVE INFRARED SENSOR PASSIVE INFRARED WALL SWITCH SENSOR ULTRASONIC SENSOR</p> <p>PP POWER PACK TRANSFORMER AND RELAY, OUTPUT RELAYS RATED 20A BALLAST OR INCANDESCENT, PROVIDE QUANTITY OF RELAYS AS REQUIRED, REFER TO AUTOMATIC LIGHTING CONTROL NOTES</p> <p>GF1 DUPLEX RECEPTACLE, 20A, 125V, 2 POLE, U-GROUND SLOT, GF1 INDICATES GROUND FAULT INTERRUPTION</p> <p>Q DOUBLE DUPLEX QUAD RECEPTACLE</p> <p>▽ VOICE/DATA OUTLET - 4" X 4" OUTLET BOX WITH 1-1/4" C STUBBED UP ABOVE NEAREST ACCESSIBLE CEILING VERIFY LOCATION IN FIELD</p> <p>S SINGLE POLE SWITCH</p> <p>S3 THREE WAY SWITCH</p> <p>S4 MANUAL MOTOR STARTER</p> <p>☒ COMBINATION STARTER CIRCUIT BREAKER</p> <p>☒ FUSED DISCONNECT SWITCH</p> <p>☐ UNFUSED DISCONNECT SWITCH</p> <p>208/120V PANELBOARD</p> <p>☒ MOTOR</p> <p>☒ FACP FIRE ALARM CONTROL PANEL</p> <p>☒ FIRE ALARM MANUAL PULL STATION</p> <p>☒ HEAT DETECTOR - COMBO FIXED TEMP AND RATE OF RISE</p> <p>☒ SMOKE DETECTOR - PHOTOELECTRIC</p>	<p>☒ DUCT MOUNTED SMOKE DETECTOR WITH REMOTE INDICATING LIGHT & KEY TEST</p> <p>☒ FIRE ALARM AUDIO/VISUAL DEVICE</p> <p>☒ FIRE ALARM VISUAL DEVICE (STROBE)</p> <p>☒ CLOCK</p> <p>☒ SPEAKER (CEILING/WALL MOUNTED)</p> <p>☒ CONTROL PANEL</p> <p>☒ WIRE & CONDUIT, CONCEALED IN CEILING OR WALL</p> <p>☒ WIRE & CONDUIT HOMERUN TO PANEL, NUMERAL INDICATES CIRCUIT NUMBER</p> <p>☒ CONNECTION TO EQUIPMENT</p> <p>AHU AIR HANDLING UNIT</p> <p>CP CONDENSATE PUMP</p> <p>CUH CABINET UNIT HEATER</p> <p>E EXISTING TO REMAIN</p> <p>EF EXHAUST FAN</p> <p>ER EXISTING TO BE RELOCATED, VERIFY EXISTING LOCATION IN FIELD, CAREFULLY REMOVE AND STORE ON SITE PRIOR TO DEMOLITION WORK, COORDINATE NEW LOCATION IN FIELD, EXTEND ALL EXISTING WIRING AS REQUIRED, WHERE EXISTING WIRING CANNOT BE EXTENDED, PROVIDE NEW</p> <p>FP FREEZE PROTECTION PUMP</p> <p>R EXISTING TO BE REMOVED</p> <p>RL EXISTING RELOCATED, VERIFY EXISTING LOCATION IN FIELD, CAREFULLY REMOVE AND STORE ON SITE PRIOR TO DEMOLITION WORK, COORDINATE NEW LOCATION IN FIELD, EXTEND ALL EXISTING WIRING AS REQUIRED</p> <p>SAC SPLIT AIR CONDENSING UNIT</p> <p>SCU SPLIT CONDENSING UNIT</p> <p>UH UNIT HEATER</p> <p>UV UNIT VENTILATOR</p> <p>WG WREGLIARD</p> <p>WP WEATHERPROOF</p>
---	--

LIGHTING FIXTURE SCHEDULE

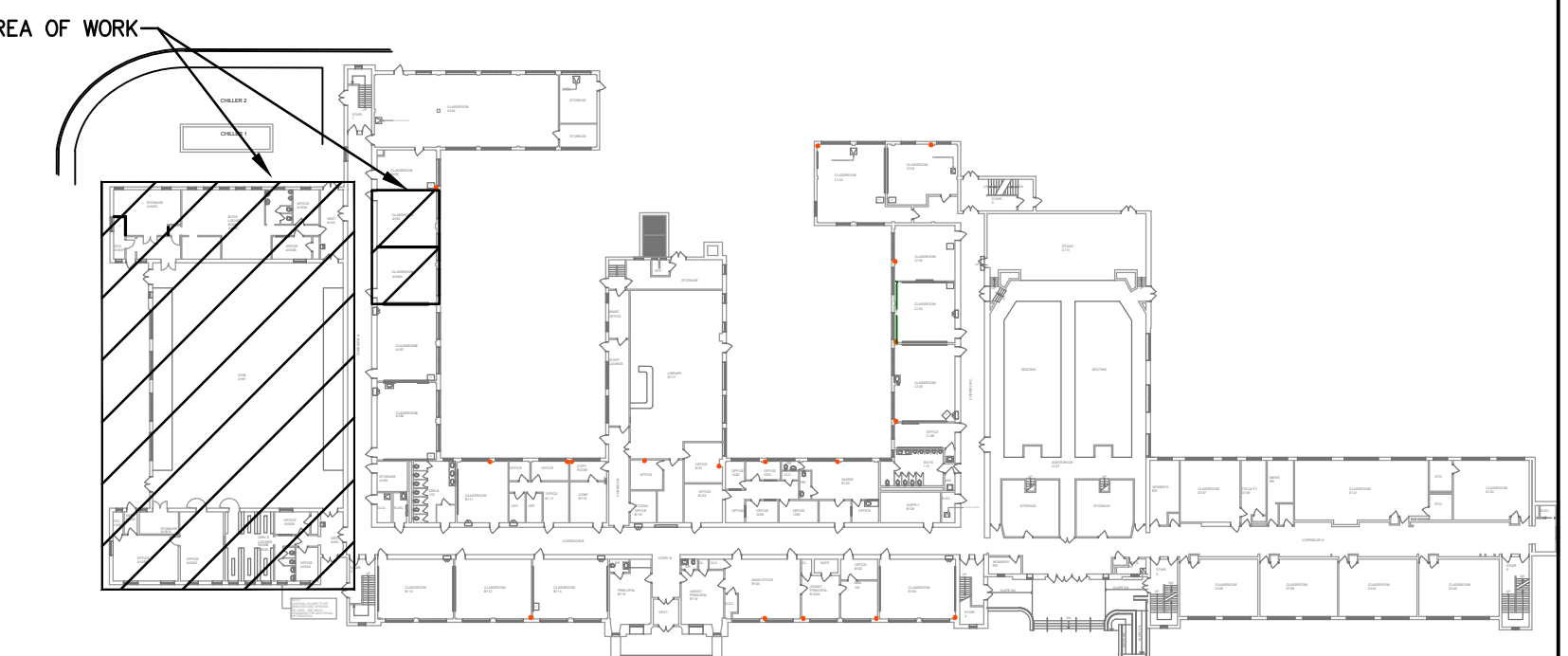
ID	LAMPS	MANUF.	CAT. NO.	MOUNTING	DESCRIPTION
A	(1)-55W LED	METALUX	24AC-LD3-55-UNV-CD-1-U	RECESSED	2'x4' BASKETED FIXTURE, ACRYLIC PRISMATIC LENS, DIE FORMED HOUSING, WHITE ENAMEL FINISH, 120V INPUT
A1	(1)-55W LED	METALUX	24AC-LD3-55-UNV-EL-CD-1-U	RECESSED	2'x4' BASKETED FIXTURE, ACRYLIC PRISMATIC LENS, DIE FORMED HOUSING, WHITE ENAMEL FINISH, 90 MINUTE EMERGENCY BATTERY BACKUP, 120V INPUT
B	47W LED SPX 35	FAILSAFE	HVSL12-4-LDS-2-STD-35-UNV-0 EDC-1	PENDANT	12" W X 4" L VANDAL RESISTANT LENSED FIXTURE, UL WET LOCATION LISTED, 18 GAUGE STEEL HOUSING, MATTE WHITE HOUSING, 120V INPUT
B1	47W LED SPX 35	FAILSAFE	HVSL12-4-LDS-2-STD-35-UNV-0 EDC-1-EL14W	PENDANT	12" W X 4" L VANDAL RESISTANT LENSED FIXTURE, UL WET LOCATION LISTED, 18 GAUGE STEEL HOUSING, MATTE WHITE HOUSING, 90 MINUTE EMERGENCY BATTERY BACKUP, 120V INPUT
C	67.6W LED SPX 35	FAILSAFE	HVSL4-4-LD4-2STD-35-UNV-0-EDC1-WL	SURFACE	1' W X 4' L WET LOCATION LISTED FIXTURE, VANDAL PROOF FIXTURE, 120V INPUT
X	LED	SURE-LITE	CAX7-X-70-00-R-W-05	WALL/CEILING	DIE-CAST ALUMINUM EXIT SIGN, WHITE BODY AND FACE WITH 9" x 3/4" RED LETTERS, SINGLE OR DOUBLE FACE AS REQD, ARROWS AS SHOWN, 120V INPUT



2 EXISTING FIRE ALARM SYSTEM RISER DIAGRAM SCHEMATIC

FIRE ALARM SYSTEM NOTES:

- PROVIDE ALL WIRING AS RECOMMENDED BY MANUFACTURER. ALL WIRING SHALL BE IN CONDUIT. FIRE ALARM LABELED MC CABLE MAY BE USED IN CONCEALED LOCATIONS WHERE PERMITTED BY CODE.
- ALL EQUIPMENT AND WIRING SHALL BE MATCH EXISTING.
- CONTRACTOR IS RESPONSIBLE FOR INSURING THAT COMPLETE SYSTEM MEETS ALL APPLICABLE CODES AND FOR OBTAINING FINAL APPROVAL FROM LOCAL FIRE INSPECTOR(S). SUBMIT SHOP DRAWING TO INSPECTOR(S) AND ENGINEER FOR REVIEW AND APPROVAL.
- EXPAND EXISTING FIRE ALARM SYSTEM AS REQUIRED TO CONNECT NEW DEVICES. PROVIDE ALL NEW HARDWARE, RELAYS, MODULES, WIRING, BATTERIES, ECT., AS NECESSARY FOR COMPLETE INSTALLATION.
- PROVIDE INTERCONNECTION WIRING BETWEEN HVAC EQUIPMENT AND FIRE ALARM CONTROL PANEL AS REQUIRED FOR FAN SHUT-DOWN. ALL ROOFTOP UNITS SHALL HAVE SEPARATE UNIT SHUT-DOWN.
- PROVIDE ALL PROGRAMMING BY A FACTORY CERTIFIED VENDOR AS REQUIRED TO MAKE THE NECESSARY MODIFICATION TO THE SYSTEM. INCLUDE ANY HARDWARE, WIRING, AND COMPONENTS NECESSARY FOR CONTINUED REUSE.
- PROVIDE AT EACH LOCATION SHOWN, AUDIO/VISUAL DEVICES WITH OUTPUT LEVELS AS RECOMMENDED BY MANUFACTURER FOR THE SPACE TO COMPLY WITH ADA & CODE REQUIREMENTS. PROVIDE ADDITIONAL DEVICES TO THOSE SHOWN IF/AS REQUIRED TO MEET LEVELS AT NO ADDITIONAL COST.
- UPON COMPLETION OF FIRE ALARM WORK, PROVIDE A RE-ACCEPTANCE TEST PER NFPA 72.



NJDOE SP #2670-090-14-1006-G04

GYM HVAC RENOVATION AND LOCKER ROOM ALTERATIONS AT: LINDENWOLD MIDDLE SCHOOL LOT 2 BLOCK 4A LINENWOLD AVENUE LINDENWOLD, NEW JERSEY

PLANS, SCHEDULES, SYMBOLS & DIAGRAM - ELECTRICAL

DRAWING DATE:
01 MAR 19

REVISION DATE:

DRAWN BY:
LA

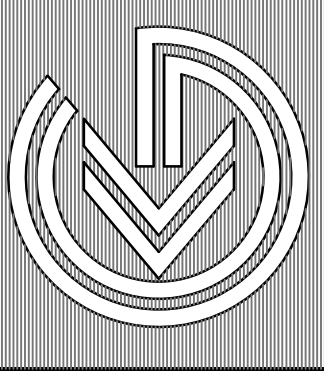
COMMISSION NO.:
5563C

E1.1

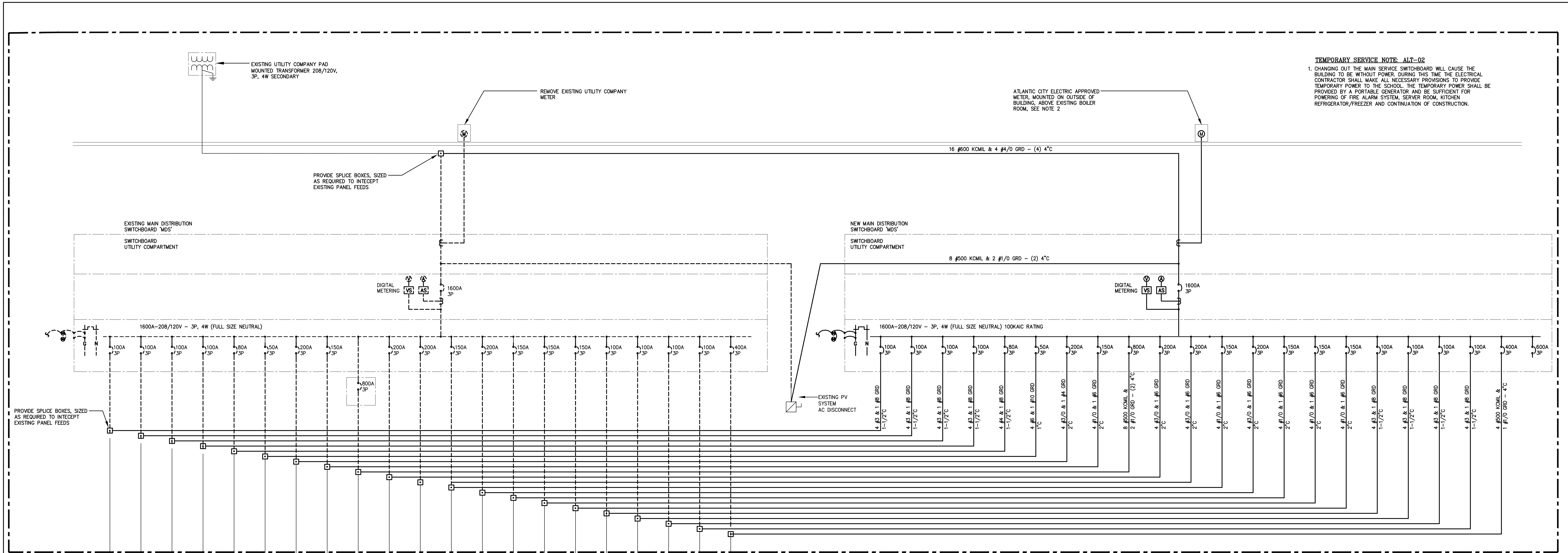
3 OF 4

REGAN YOUNG ENGLAND BUTERA
REGISTERED PROFESSIONAL ENGINEER - ARCHITECTURE - DESIGN
460 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1 (609) 265-2652 • 0333 FAX • 21A00912100 • RYEBREAD.COM

KELTER & GILLICO
consulting engineers
P.O. BOX 777 14 WASHINGTON RD.
FRANCONIA TOWNSHIP NEW JERSEY 08850
Phone: 762-8100
Professional Engineer
NJ 36856



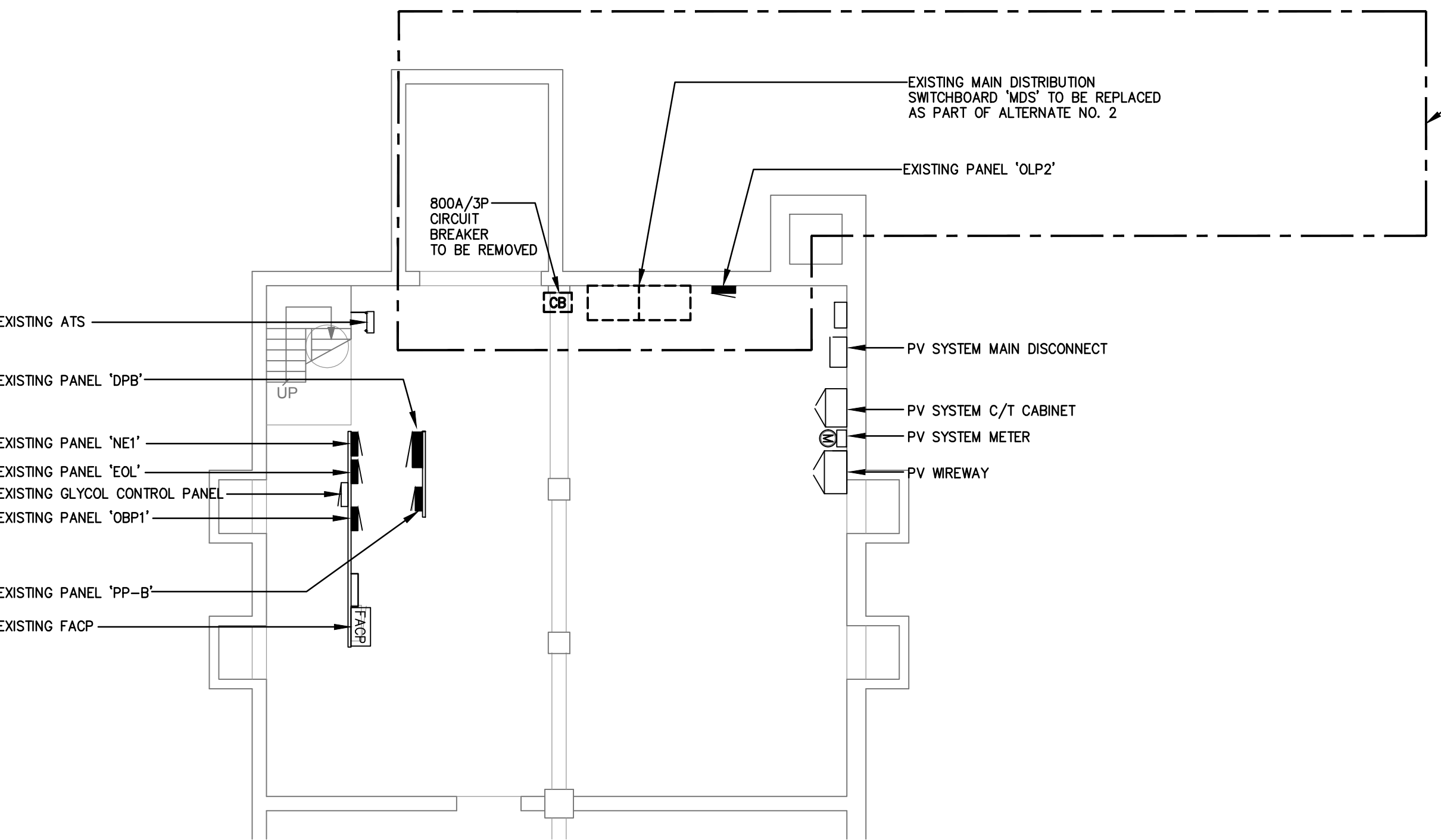
February 07, 2019 1:24:17 pm
Drawing: 284a E100.DWG



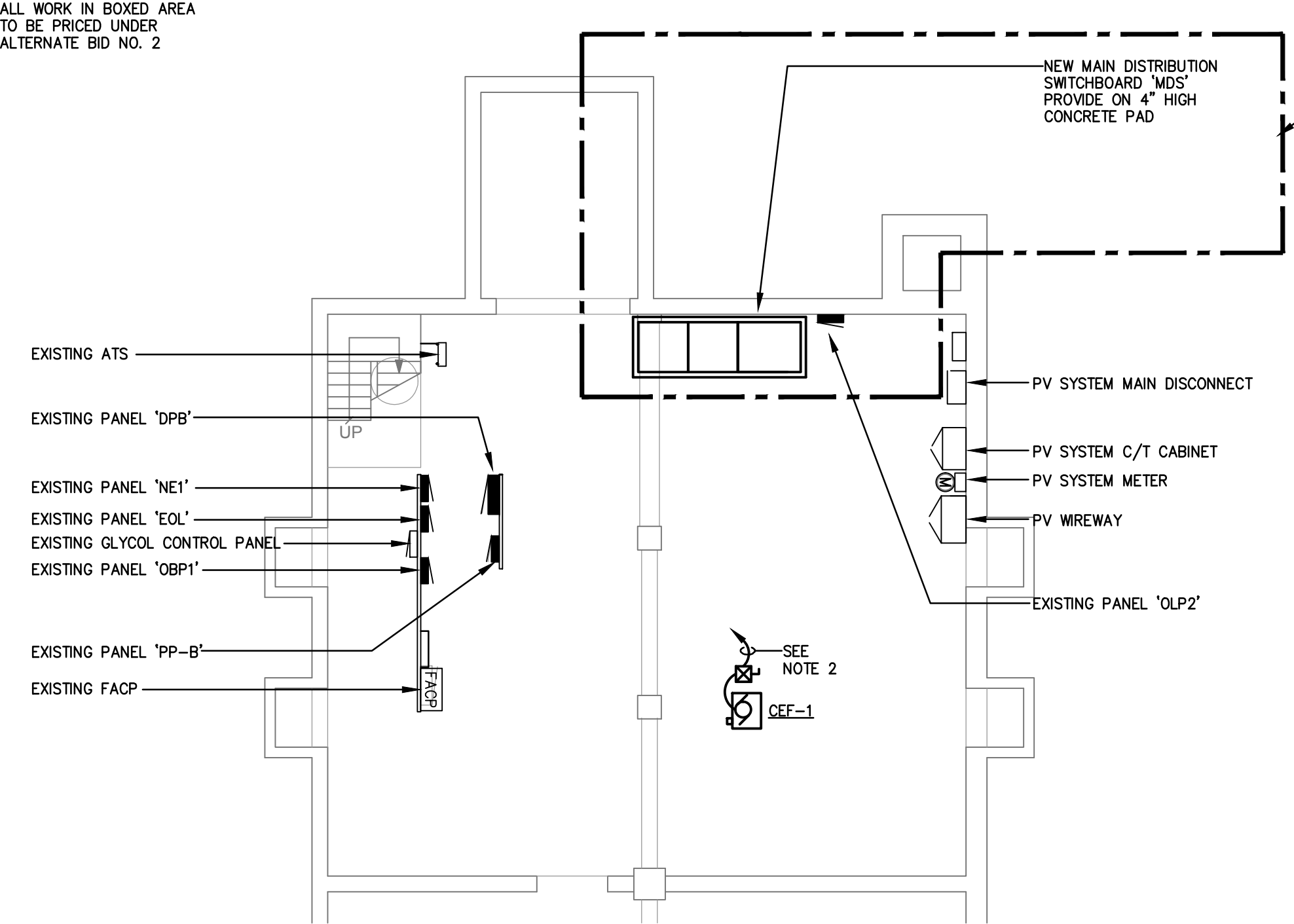
1 SINGLE LINE DIAGRAM
E2.0 SCHEMATIC

- NOTES:
- WHERE THERE IS 20' OR MORE OF 1/2" OR LARGER REBAR ENCASED IN A MINIMUM OF 2" OF CONCRETE IT SHALL BE BONDED TOGETHER WITH STEEL WIRE TIES AND TO THE GROUNDING ELECTRODE SYSTEM WITH #4 AWG SOLID COPPER CONDUCTOR AND AN APPROVED GROUNDING CLAMP BURNEDY TYPE "GAR" SERIES OR EQUAL PER NEC 250-50(C), 250-52(A-3), 250-66(B), AND 250-70.
 - METER CONDUITS SHALL BE 2" RIGID CONDUIT.
 - PROVIDE ARC FLASH LABELING IN ACCORDANCE WITH NEC 110.16 AND LOCAL SUBCODE OFFICIAL AT ALL MODIFIED AND NEW POINTS IN THE DISTRIBUTION SYSTEM.
 - COORDINATE ELECTRICAL SERVICE SHUTDOWN WITH SCHOOL.

ALL WORK IN BOXED AREA TO BE PRICED UNDER ALTERNATE BID NO. 2

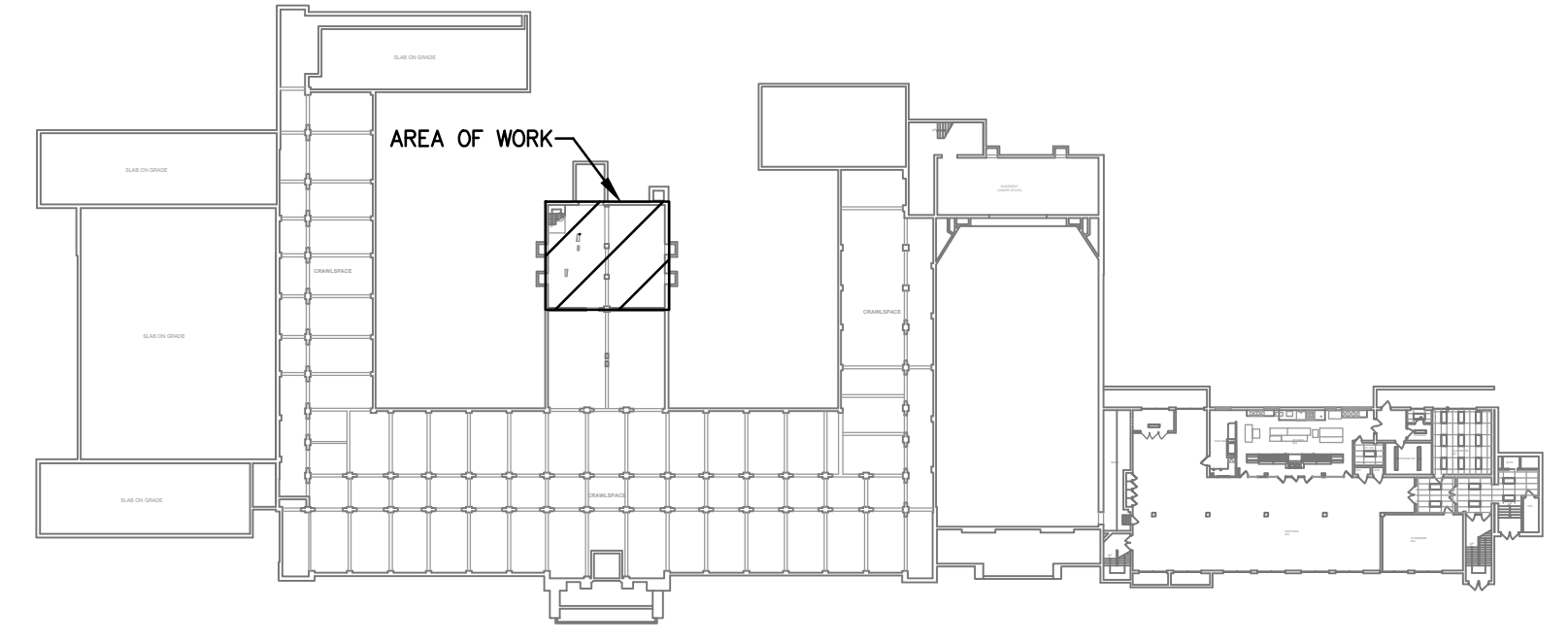


2 BOILER ROOM PLAN - ELECTRICAL DEMOLITION
E2.0 SCALE 1/8" = 1'-0"



3 BOILER ROOM PLAN - ELECTRICAL
E2.0 SCALE 1/8" = 1'-0"

- NOTES:
- PROPOSED MAIN DISTRIBUTION SWITCHBOARD HAS A BIGGER FOOTPRINT THAN THE EXISTING SWITCHBOARD. NOTE THAT THERE IS EXISTING GAS PIPING RUN 3/4" IN FRONT OF THE EXISTING SWITCHBOARD. GAS PIPING WILL NEED TO BE RE-ROUTED AS REQUIRED IN ORDER TO ACCOMMODATE THE NEW SWITCHBOARD. PRICE THIS RE-ROUTING AS PART OF ALTERNATE BID NO. 2. REFER TO PLUMBING DRAWINGS FOR DETAILS.
 - PROVIDE AND CONNECT TO NEW 20A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VA 3 #12 & 1 #12 GRD - 3/4°C.



KEY PLAN

REGAN YOUNG ENGLAND BUTERA
REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN
466 HIGH STREET • MT. HOLLY, NEW JERSEY 08060 USA
+1 (609) 265-2652 • 0333 FAX • 21.A00912100 • RYE@REYAD.COM

KELTER & GILLICO
consulting engineers
P.O. BOX 777 14 WASHINGTON RD.
FRANCONIA TOWNSHIP NEW JERSEY 08869
Frank, Taylor, & C.
Professional Engineer
NJ 36506

NJDOE SP #2670-090-14-1006-G04
GYM HVAC RENOVATION AND
LOCKER ROOM ALTERATIONS AT:
LINDENWOLD MIDDLE SCHOOL
LOT 2 BLOCK 44S
40 WHITE HORSE AVENUE
LINDENWOLD, NEW JERSEY
TITLE: PLANS AND SINGLE LINE DIAGRAM - ELECTRICAL

DRAWING DATE:
01 MAR 19
REVISION DATE:

DRAWN BY:
LA
COMMISSION NO.:
5563C

February 07, 2019 1:24:17 p.m.
Drawing: 2648 E100.DWG
E2.0
4 OF 4