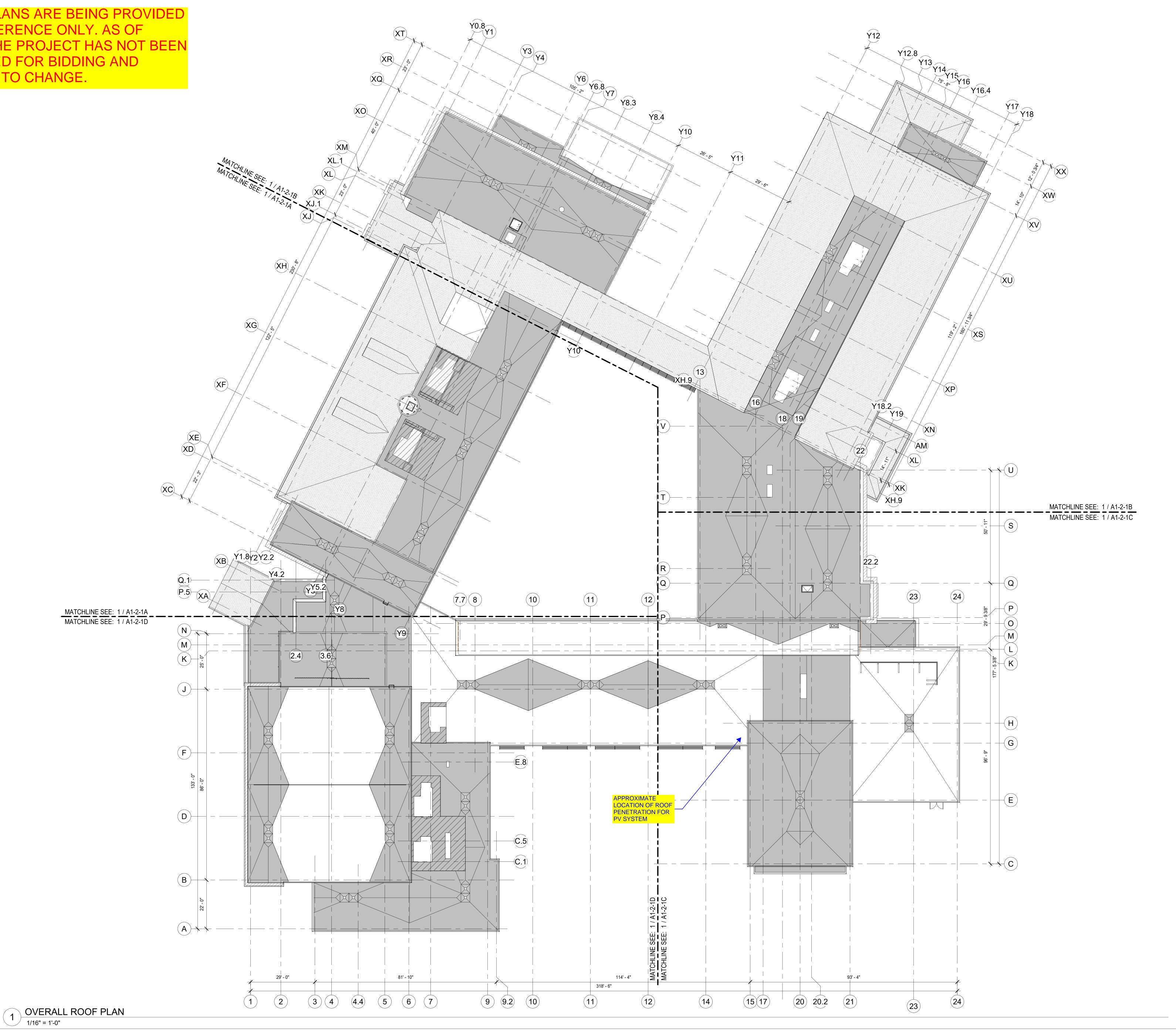
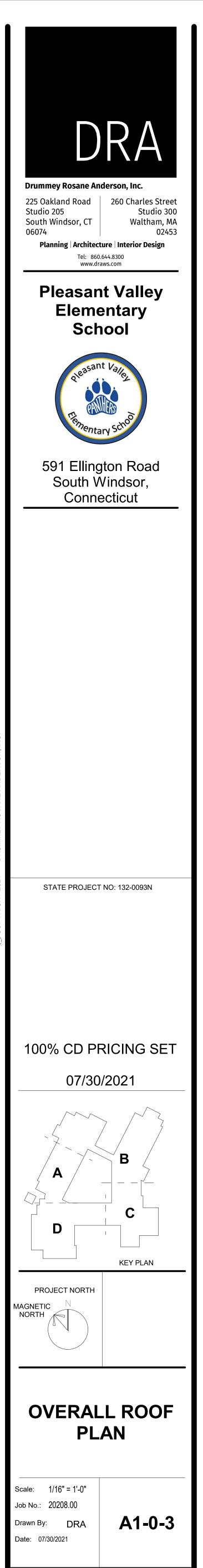
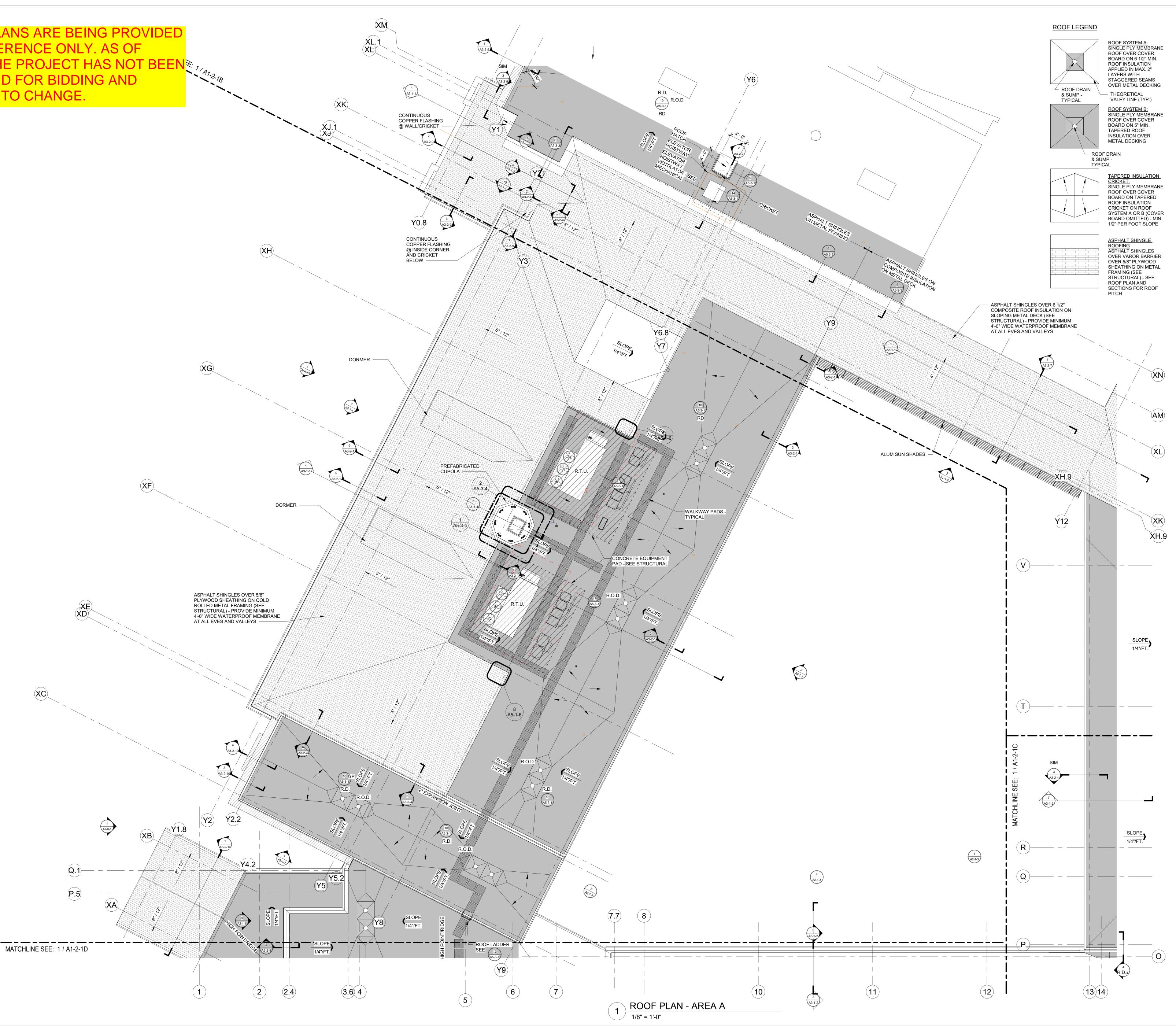
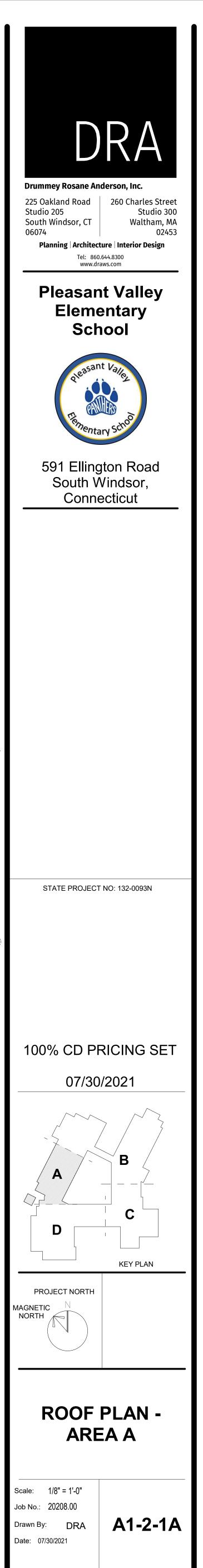
THESE PLANS ARE BEING PROVIDED FOR REFERENCE ONLY. AS OF 9/23/21 THE PROJECT HAS NOT BEEN APPROVED FOR BIDDING AND SUBJECT TO CHANGE.

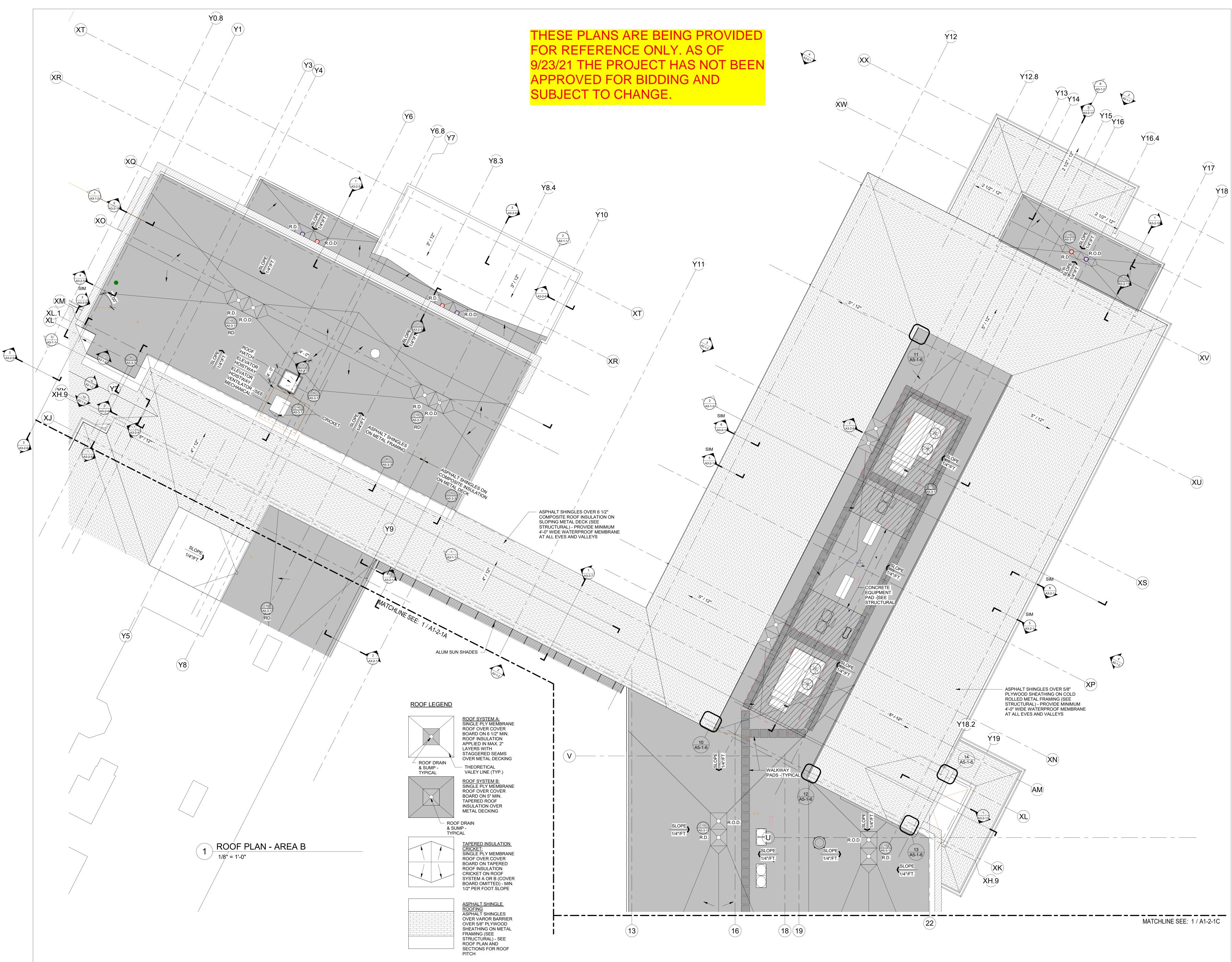


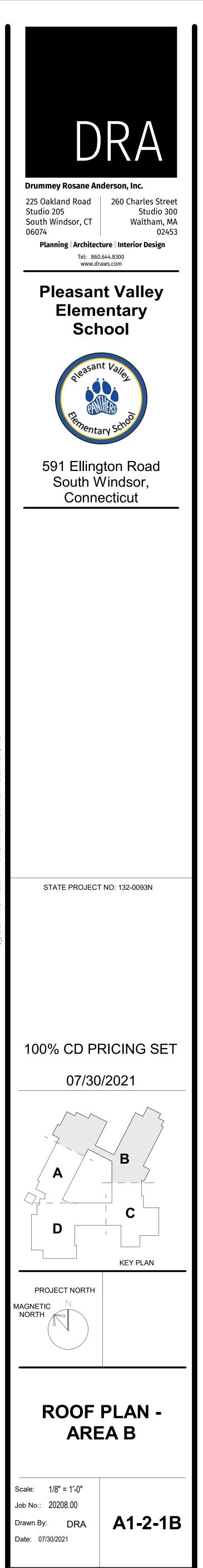










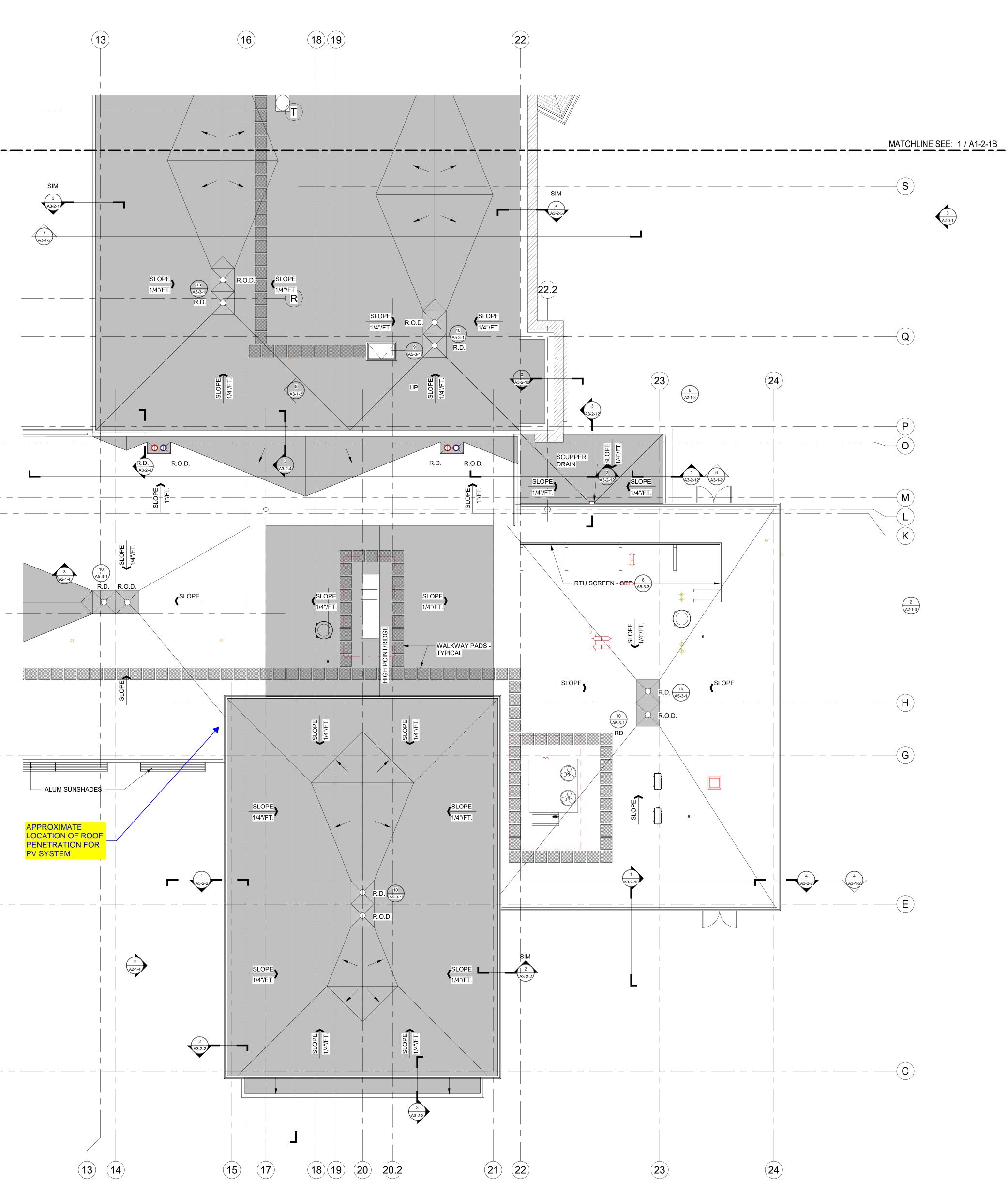


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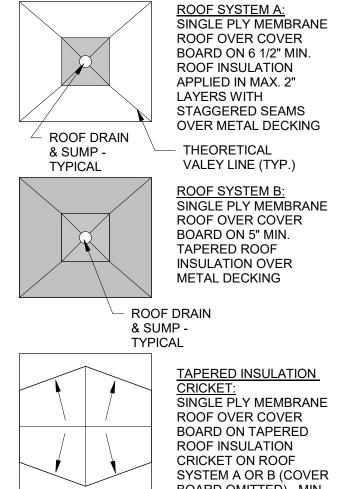
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J

1 ROOF PLAN - AREA C 1/8" = 1'-0"



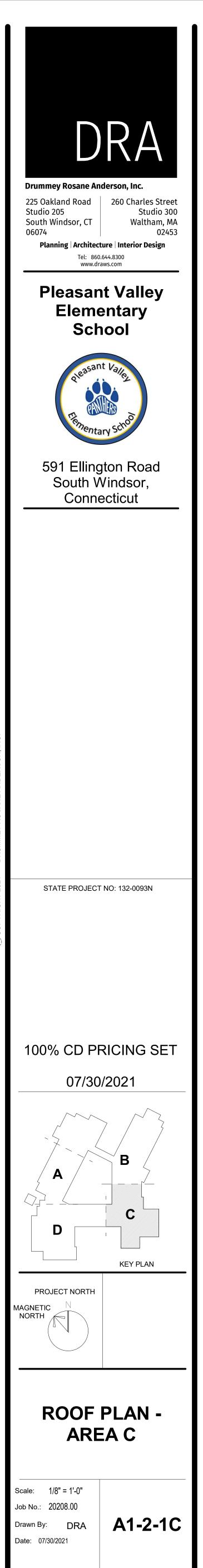
### ROOF LEGEND

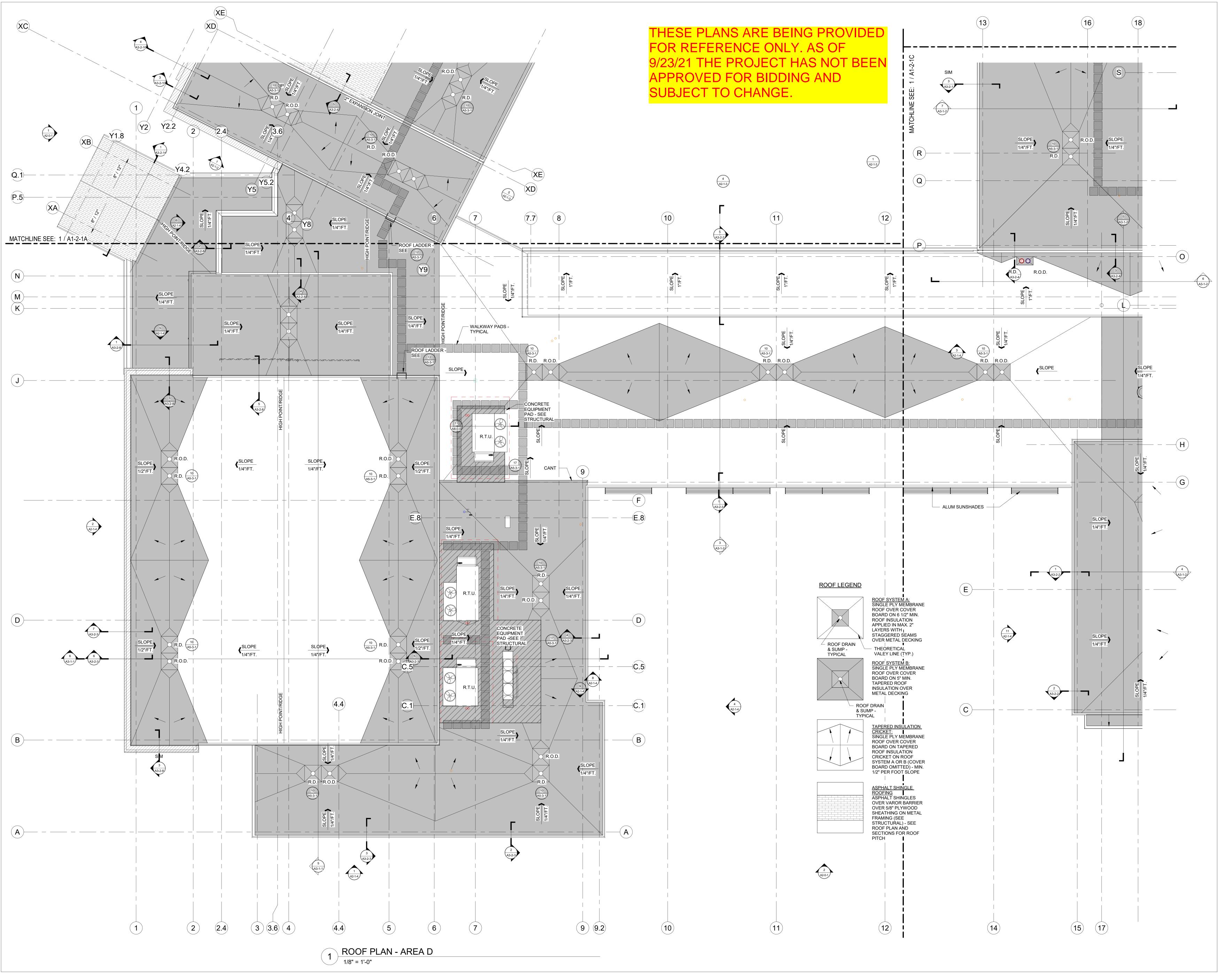


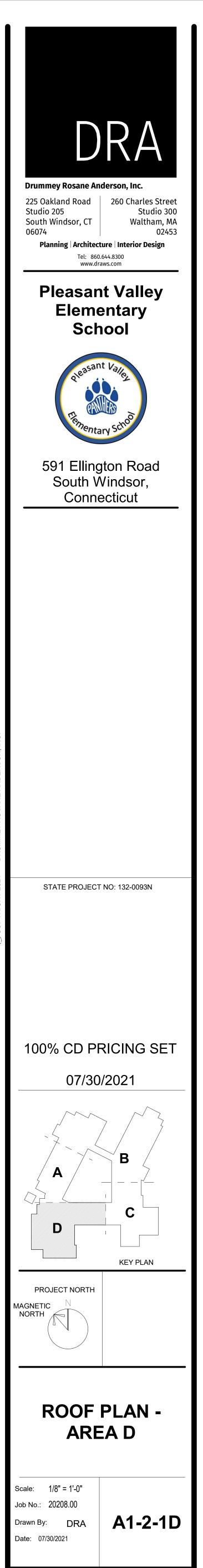
TAPERED INSULATION CRICKET: SINGLE PLY MEMBRANE ROOF OVER COVER BOARD ON TAPERED ROOF INSULATION CRICKET ON ROOF SYSTEM A OR B (COVER BOARD OMITTED) - MIN. 1/2" PER FOOT SLOPE

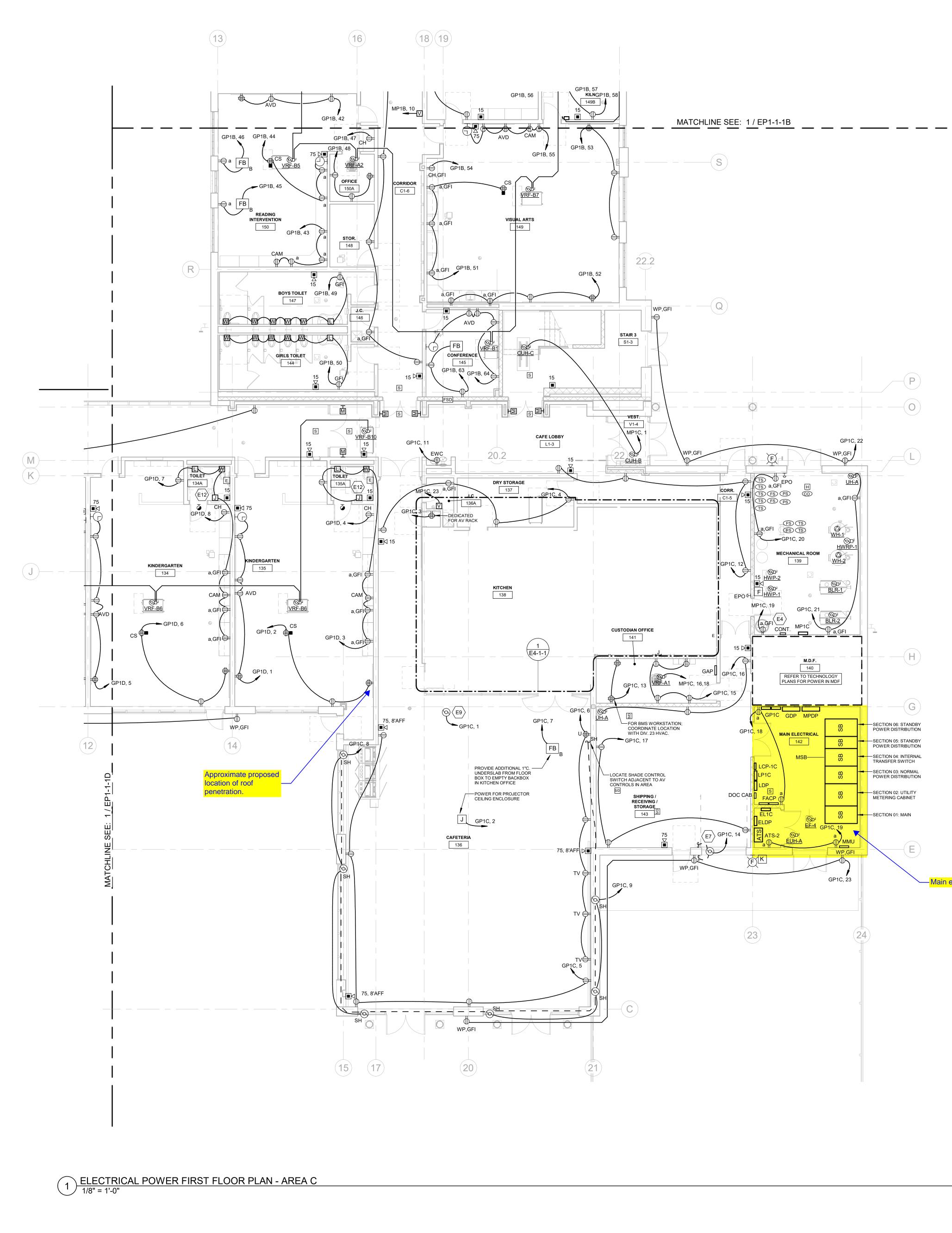
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<u>ASPHALT SHINGLE</u> <u>ROOFING</u> ASPHALT SHINGLES OVER VAROR BARRIER OVER VAROR BARRIER OVER 5/8" PLYWOOD SHEATHING ON METAL FRAMING (SEE STRUCTURAL) - SEE ROOF PLAN AND SECTIONS FOR ROOF PITCH









### ELECTRICAL REFERENCE NOTE

1. REFER TO DRAWING E0-1-1 FOR ELECTRICAL GENERAL NOTES, ABBREVIATIONS, LEGENDS AND SYMBOLS LIST.

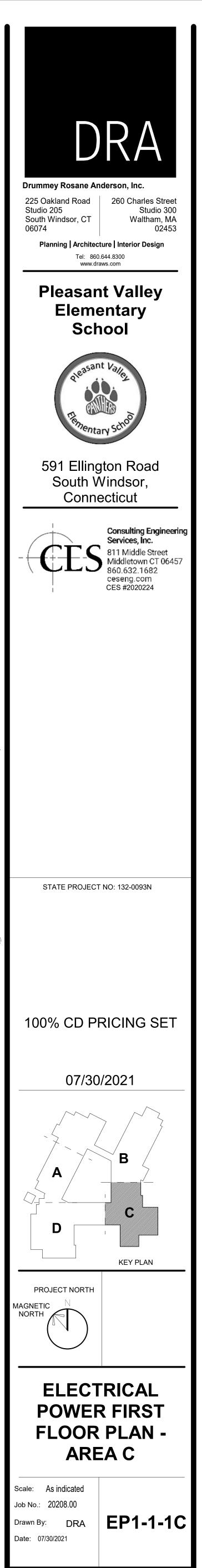
## ELECTRICAL KEY NOTES

- E1 PROVIDE 20A-1P POWER FEED TO AUTOMATIC DOOR OPENER. REFER TO T-SERIES ACCESS CONTROL DOOR DETAILS FOR ADDITIONAL LOW VOLTAGE INTERCONNECTIONS REQUIRED. E2 PROVIDE ELEVATOR DISCONNECT SWITCH AND ASSOCIATED FIRE ALARM CONTROL & MONITOR MODULES, PER ELEVATOR DISCONNECT SWITCH DETAIL. POWERED GYMNASIUM EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER **E**3 AND CONTROL WIRING TO EQUIPMENT AS INDICATED ON GYMNASIUM EQUIPMENT WIRING DETAIL. REFER TO FIRST FLOOR PLAN FOR LOCATION OF ASSOCIATED KEY SWITCHES. CONTACTOR FOR BOILER ROOM EPO/SHUTOFF SYSTEM OF GAS-FIRED APPLIANCES. REFER TO EPO DETAIL FOR ADDITIONAL INFORMATION. REFER TO MOTOR/ EQUIPMENT CIRCUIT SCHEDULE FOR EQUIPMENT TO BE SHUT OFF. PROVIDE (2)-1"C. FROM ABOVE CEILING IN THIS LOCATION TO ROOF LEVEL FOR OWNER<br/>PROVIDED WALKIE-TALKIE SYSTEM ANTENNA. REFER TO ROOF PLAN FOR FUTURE ANTENNA LOCATION. E6PROVIDE NEMA 15-50R RECEPTACLE FOR KILN. WIRE TO 60A-3P DISC. SWITCH AT<br/>ENTRANCE TO ROOM FOR SAFETY SHUTOFF. POWER VIA 3#6+1#10G, 3/4"C. TO 50A-3P BREAKER IN PANELBOARD. 
   PROVIDE 20A-1P POWER FEED TO OVERHEAD COILING DOOR. PROVIDE 1"C. WITH WIRING
  PER MFR. REQUIREMENTS FROM MOTOR TO CONTROL SWITCHES AS SHOWN ON PLANS. SWITCHES SHALL BE FURNISHED BY HARDWARE CONTRACTOR, INSTALLED BY EC. 
   ROVIDE 208V-20A-3PH POWER FEED TO TELESCOPING STAND MOTOR WITH PENDANT

   CONTROL 50 PD02/055 20A 3PH POWER FEED TO TELESCOPING STAND MOTOR WITH PENDANT
  CONTROLLER. PROVIDE 30A-3P DISCONNECT SWITCH ON SIDE OF STAND AND MAKE FINAL CONNECTIONS TO STAND. COORDINATE EXACT POINT OF CONNECTION WITH STAND INSTALLER PRIOR TO ROUGH-IN. (E9) PROVIDE 20A-1P POWER FEED TO DROP-DOWN PROJECTION SCREEN. PROVIDE CONTROL WIRING FROM SCREEN TO AV/SOUND SYSTEM IN ROOM PER TECHNOLOGY DETAILS. WIRING FROM SCREEN TO AV/SOUND SYSTEM IN ROOM PER TECHNOLOGY DETAILS. E10 PROVIDE 20A-1P POWER FEED TO PROSCENIUM VERTICAL FOLDING PARTITION. PROVIDE 1"C. WITH WIRING PER MFR. REQUIREMENTS FROM MOTOR TO CONTROL SWITCHES AS SHOWN ON PLANS. SWITCHES SHALL BE FURNISHED BY HARDWARE CONTRACTOR,
- INSTALLED BY EC. POWERED CEILING FAN. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER AND CONTROL WIRING TO FAN CONTROL PANEL, REFER TO FIRST FLOOR PLAN FOR LOCATION
- OF CONTROL PANEL. POWER FOR RADIANT FLOOR MANIFOLDS, COORDINATE EXACT LOCATION WITH SUPPLIED EQUIPMENT.

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-Main electrical room



# ELECTRICAL REFERENCE NOTE

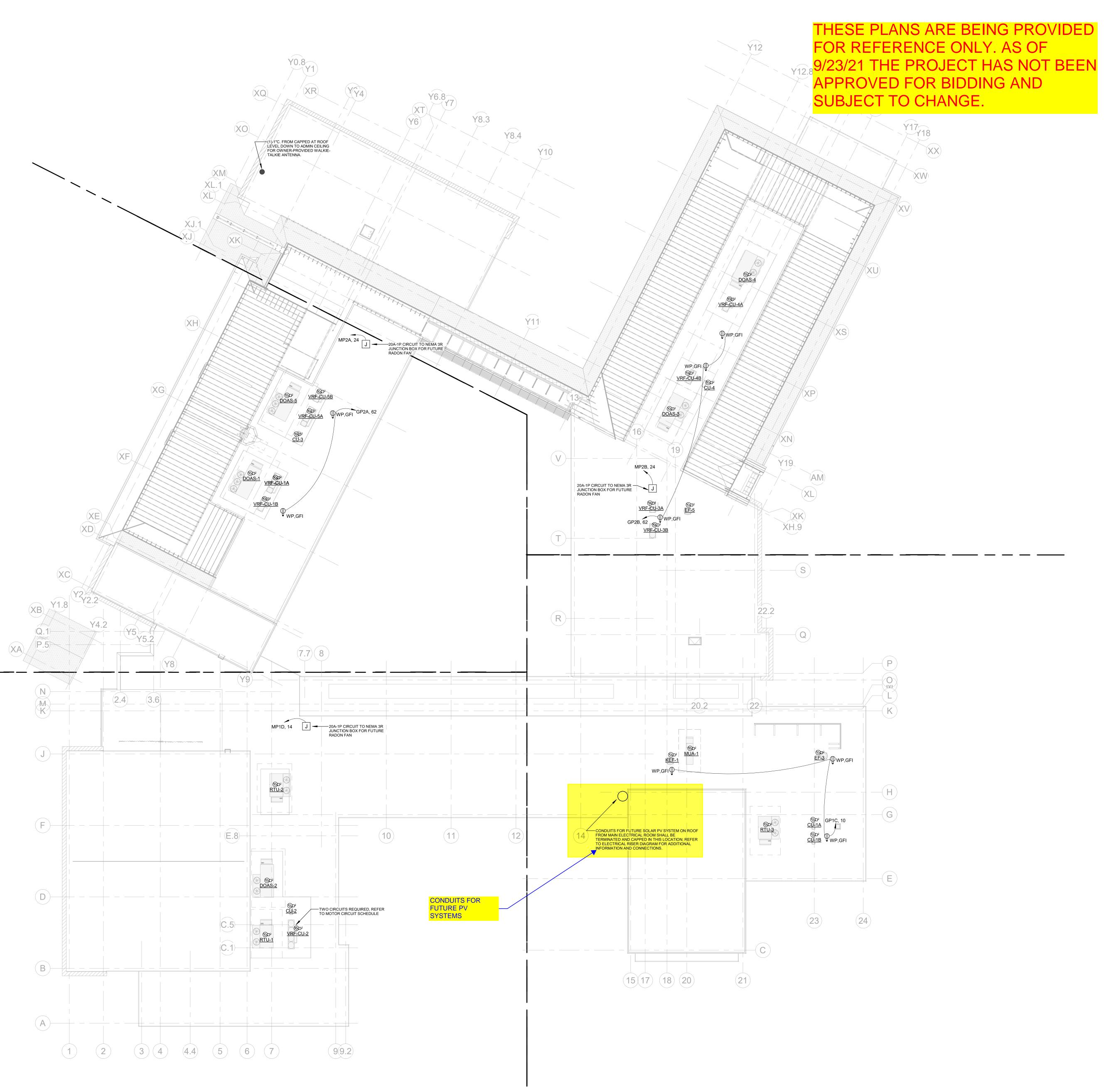
. REFER TO DRAWING E0-1-1 FOR ELECTRICAL GENERAL NOTES, ABBREVIATIONS, LEGENDS AND SYMBOLS LIST.

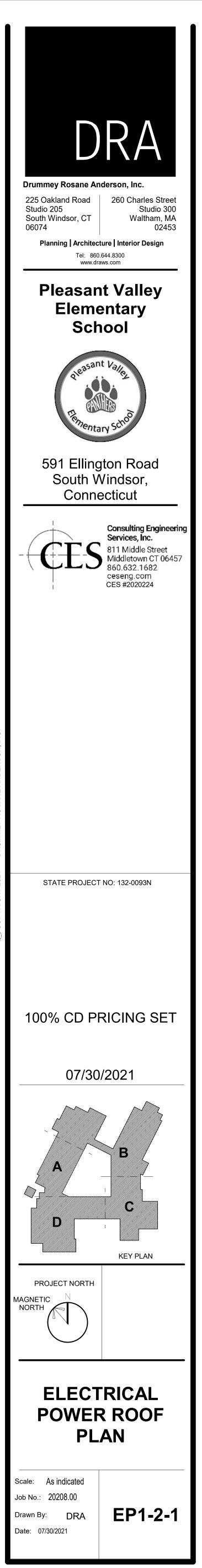
## ELECTRICAL KEY NOTES

E1	PROVIDE 20A-1P POWER FEED TO AUTOMATIC DOOR OPENER. REFER TO T-SERIES ACCESS CONTROL DOOR DETAILS FOR ADDITIONAL LOW VOLTAGE INTERCONNECTIONS REQUIRED.
E2	PROVIDE ELEVATOR DISCONNECT SWITCH AND ASSOCIATED FIRE ALARM CONTROL & MONITOR MODULES, PER ELEVATOR DISCONNECT SWITCH DETAIL.
E3	POWERED GYMNASIUM EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER AND CONTROL WIRING TO EQUIPMENT AS INDICATED ON GYMNASIUM EQUIPMENT WIRING DETAIL. REFER TO FIRST FLOOR PLAN FOR LOCATION OF ASSOCIATED KEY SWITCHES.
E4	CONTACTOR FOR BOILER ROOM EPO/SHUTOFF SYSTEM OF GAS-FIRED APPLIANCES. REFER TO EPO DETAIL FOR ADDITIONAL INFORMATION. REFER TO MOTOR/ EQUIPMENT CIRCUIT SCHEDULE FOR EQUIPMENT TO BE SHUT OFF.
E5	PROVIDE (2)-1"C. FROM ABOVE CEILING IN THIS LOCATION TO ROOF LEVEL FOR OWNER PROVIDED WALKIE-TALKIE SYSTEM ANTENNA. REFER TO ROOF PLAN FOR FUTURE ANTENNA LOCATION.
E6	PROVIDE NEMA 15-50R RECEPTACLE FOR KILN. WIRE TO 60A-3P DISC. SWITCH AT ENTRANCE TO ROOM FOR SAFETY SHUTOFF. POWER VIA 3#6+1#10G, 3/4"C. TO 50A-3P BREAKER IN PANELBOARD.
E7	PROVIDE 20A-1P POWER FEED TO OVERHEAD COILING DOOR. PROVIDE 1"C. WITH WIRING PER MFR. REQUIREMENTS FROM MOTOR TO CONTROL SWITCHES AS SHOWN ON PLANS. SWITCHES SHALL BE FURNISHED BY HARDWARE CONTRACTOR, INSTALLED BY EC.
E8	PROVIDE 208V-20A-3PH POWER FEED TO TELESCOPING STAND MOTOR WITH PENDANT CONTROLLER. PROVIDE 30A-3P DISCONNECT SWITCH ON SIDE OF STAND AND MAKE FINAL CONNECTIONS TO STAND. COORDINATE EXACT POINT OF CONNECTION WITH STAND INSTALLER PRIOR TO ROUGH-IN.
E9	PROVIDE 20A-1P POWER FEED TO DROP-DOWN PROJECTION SCREEN. PROVIDE CONTROL WIRING FROM SCREEN TO AV/SOUND SYSTEM IN ROOM PER TECHNOLOGY DETAILS.
E10	PROVIDE 20A-1P POWER FEED TO PROSCENIUM VERTICAL FOLDING PARTITION. PROVIDE 1"C. WITH WIRING PER MFR. REQUIREMENTS FROM MOTOR TO CONTROL SWITCHES AS SHOWN ON PLANS. SWITCHES SHALL BE FURNISHED BY HARDWARE CONTRACTOR, INSTALLED BY EC.
(E11)	POWERED CEILING FAN. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER AND CONTROL WIRING TO FAN CONTROL PANEL, REFER TO FIRST FLOOR PLAN FOR LOCATION OF CONTROL PANEL.
E12	POWER FOR RADIANT FLOOR MANIFOLDS, COORDINATE EXACT LOCATION WITH SUPPLIED EQUIPMENT.

LIGHTNING PROTECTION SYSTEM PRICE AS ADD-ALTERNATE

- ELECTRICAL CONTRACTOR IS RESPONSIBLE RESPONSIBLE FOR PROVIDE A COMPLETE LIGHTNING PROTECTION SYSTEM FOR THE BUILDING. PROVIDE A COMPLETE UL MASTER LABEL LIGHTNING PROTECTION SYSTEM INCLUDING BUT NOT LIMITED TO ALL AREAS OF THE ROOF, THE ROOF PERIMETER, HVAC EQUIPMENT AND OTHER EQUIPMENT. INCLUDE GROUND RING AROUND THE BASE OF THE BUILDING PER SECTION 26 0526 (GROUNDING AND BONDING). COORDINATE LOCATION OF ALL LIGHTNING PROTECTION EQUIPMENT AND MEANS OF INSTALLATION WITH ROOFING CONTRACTOR PRIOR TO ROUGH-IN. SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 26 4113 (LIGHTNING PROTECTION FOR STRUCTURES). DOWNLEADS FROM ROOF TO GRADE SHALL BE ROUTED WITHIN THE BUILDING ENVELOPE. EXPOSED DOWNLEADS ROUTED ON THE SIDE OF THE BUILDING EXTERIOR ARE NOT
- ACCEPTABLE. DOWNLEADS SHALL BE ROUTED IN CONDUIT WITHIN BUILDING, AND SHALL BE CONCEALED IN WALLS OR EMBEDDED IN CONCRETE DEPENDING ON WALL TYPE. EXPOSED CONDUIT IN BUILDING IS NOT ACCEPTABLE.





			ELECTRICAL FE		CHEDULE			
ALUMINUM CONDUCTORS								
CIRCUIT SYMBOL	CONDUCTORS (1 PH, 2W) WITH GROUND	CONDUIT SIZE	CONDUCTORS (1 OR 3 PH, 3 WIRE) WITH GROUND	CONDUIT SIZE	CONDUCTORS (3 PH, 4 WIRE) WITH GROUND	CONDUIT SIZE	OVERCURRENT RATING	
1	2#12 & 1#12G	3/4"	3#12 & 1#12G	3/4"	4#12 & 1#12G	3/4"	15A	
2	2#12 & 1#12G	3/4"	3#12 & 1#12G	3/4"	4#12 & 1#12G	3/4"	20A	
2.5	2#10 & 1#10G	3/4"	3#10 & 1#10G	3/4"	4#10 & 1#10G	3/4"	25A	
3	2#10 & 1#10G	3/4"	3#10 & 1#10G	3/4"	4#10 & 1#10G	3/4"	30A	
3.5	2#8 & 1#8G	3/4"	3#8 & 1#8G	3/4"	4#8 & 1#8G	3/4"	35A	
4	2#8 & 1#8G	3/4"	3#8 & 1#8G	3/4"	4#8 & 1#8G	1"	40A	
(4M)					PENTAIR #4/8-590 M.I. CABLE		40A	
4.5	2#6 & 1#8G	1"	3#6 & 1#8G	1"	4#6 & 1#8G	1"	45A	
5	2#6 & 1#8G	1"	3#6 & 1#8G	1"	4#6 & 1#8G	1"	50A	
6	2#4 & 1#8G	1 1/4"	3#4 & 1#8G	1 1/4"	4#4 & 1#8G	1 1/4"	60A	
7	2#3 & 1#6G	1 1/4"	3#3 & 1#6G	1 1/4"	4#3 & 1#6G	1 1/4"	70A	
8	2#2 & 1#6G	1 1/4"	3#2 & 1#6G	1 1/4"	4#2 & 1#6G	1 1/2"	80A	
9	2#2 & 1#6G	1 1/4"	3#2 & 1#6G	1 1/4"	4#2 & 1#6G	1 1/2"	90A	
10	2#1 & 1#6G	1 1/2"	3#1 & 1#6G	1 1/2"	4#1 & 1#6G	2"	100A	
(10M)					QTY.4 PENTAIR #1/4-402 M.I. CABLE		100A	
(11)			3#1/0 & 1#4G	2"	4#1/0 & 1#4G	2"	110A	
(12)			3#2/0 & 1#4G	2"	4#2/0 & 1#4G	2"	125A	
(15)			3#3/0 & 1#4G	2 1/2"	4#3/0 & 1#4G	2 1/2"	150A	
(17)			3#4/0 & 1#4G	2 1/2"	4#4/0 & 1#4G	2 1/2"	175A	
20			3#250KCMIL & 1#4G	3"	4#250KCMIL & 1#4G	3"	200A	
22			3#350KCMIL & 1#2G	3"	4#350KCMIL & 1#2G	4"	225A	
25			3#350KCMIL & 1#2G	3"	4#350KCMIL & 1#2G	4"	250A	
30			3#500KCMIL & 1#2G	4"	4#500KCMIL & 1#2G	4"	300A	
35			(2)3#4/0 & 1#1G	(2) 2 1/2"	2 SETS OF 4#4/0 & 1#1G	(2) 2 1/2"	350A	
40			(2)3#250KCMIL & 1#1G	(2) 3"	2 SETS OF 4#250KCMIL & 1#1G	(2) 3"	400A	
45			(2)3#350KCMIL & 1#1/0G	(2) 3"	2 SETS OF 4#350KCMIL & 1#1/0G	(2) 4"	450A	
50			(2)3#350KCMIL & 1#1/0G	(2) 3"	2 SETS OF 4#350KCMIL & 1#1/0G	(2) 4"	500A	
60			(2)3#500KCMIL & 1#2/0G	(2) 4"	2 SETS OF 4#500KCMIL & 1#2/0G	(2) 4"	600A	
70			(3)3#350KCMIL & 1#3/0G	(3) 3"	3 SETS OF 4#350KCMIL & 1#3/0G	(3) 4"	700A	
80			(3)3#500KCMIL & 1#3/0G	(3) 4"	3 SETS OF 4#500KCMIL & 1#3/0G	(3) 4"	800A	
90			(3)3#500KCMIL & 1#4/0G	(3) 4"	3 SETS OF 4#500KCMIL & 1#4/0G	(3) 4"	900A	
100			(4)3#350KCMIL & 1#4/0G	(4) 3"	4 SETS OF 4#350KCMIL & 1#4/0G	(4) 4"	1000A	
(120)			(4)3#500KCMIL & 1#250G	(4) 4"	4 SETS OF 4#500KCMIL & 1#250G	(4) 4"	1200A	
160			(5)3#600KCMIL & 1#350G	(5) 4"	5 SETS OF 4#600KCMIL & 1#350G	(5) 4"	1600A	
200			(6)3#600KCMIL & 1#400G	(6) 4"	6 SETS OF 4#600KCMIL & 1#400G	(6) 4"	2000A	
(250)			(8)3#600KCMIL & 1#600G	(8) 4"	8 SETS OF 4#600KCMIL & 1#600G	(8) 4"	2500A	

NOTES:

CONDUIT SIZES ARE BASED ON THE NEC ANNEX C TABLES FOR EMT/SCH.40 WITH THHN/THWN CONDUCTORS. CONDUCTOR SIZES USED IN CONDUIT CALCULATION ARE BASED ON THE SIZE OF THE HOT CONDUCTORS OF CIRCUIT. EXAMPLE: 40A 3PH, 4W CONDUIT SIZE IS BASED ON 4#8 + 1#8G + 1#8 'SPACE'. FOR ACTUAL WIRE INSTALL USE QUANTITY AND SIZES WITHIN SCHEDULE.

UNLESS OTHERWISE INDICATED, CONDUCTOR SIZING SHALL MATCH THE SIZE INDICATED ABOVE FOR THE APPLICABLE OVERCURRENT DEVICE. PROVIDE LARGER CIRCUIT WHERE INDICATED.

PROVIDE MINIMUM SIZE CONDUIT INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS.

FOR SINGLE PHASE FEEDERS, PROVIDE A 3-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL. FOR THREE PHASE FEEDERS, PROVIDE A 4-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL.

PROVIDE TYPE OF RACEWAY OR CABLE AS INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS.

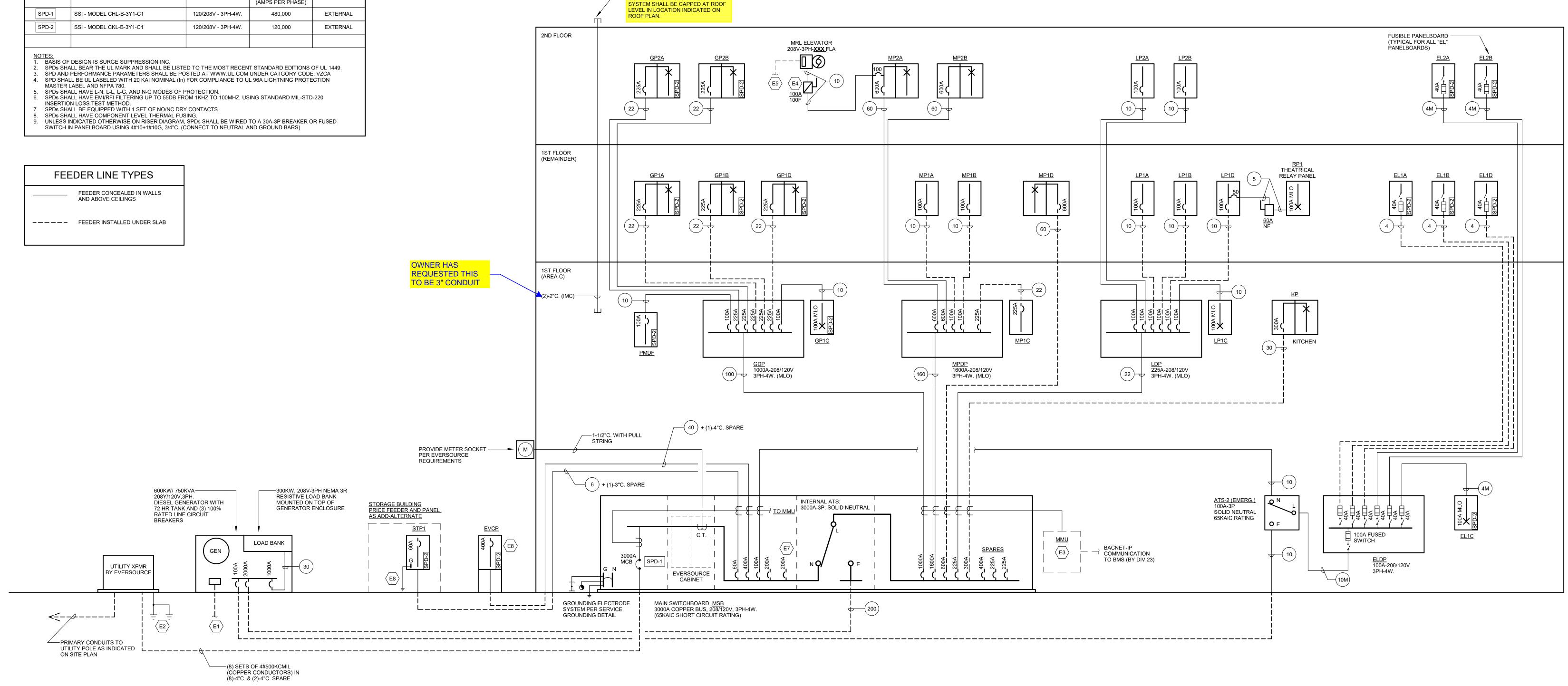
REFER TO PANELBOARD SCHEDULES AND ONE-LINE RISER DIAGRAM DRAWINGS FOR CONDUCTOR AND CONDUIT SIZE REQUIREMENTS.

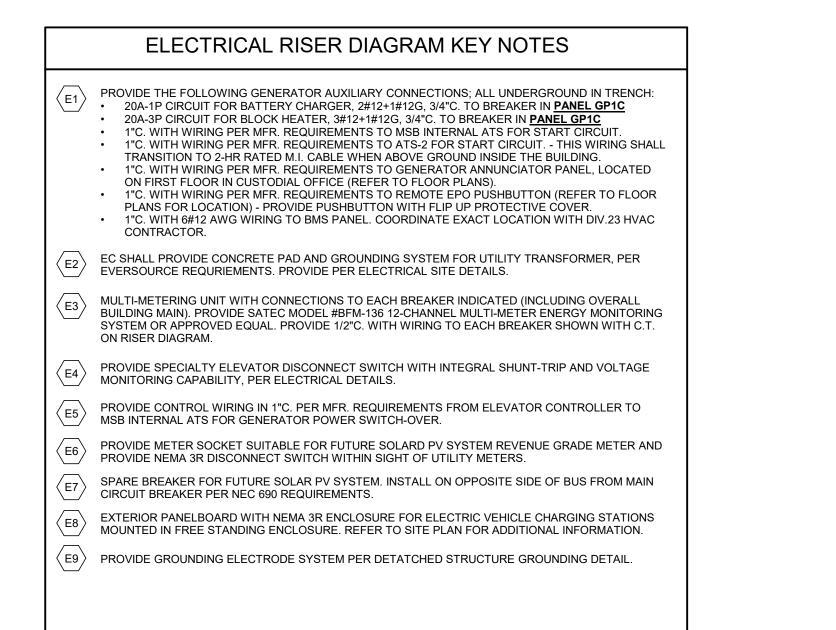
ALL CONDUCTOR SIZES ARE BASED ON 75°C (167°F), ALL EQUIPMENT CONNECTED TO WIRES SHALL BE RATED OR 75°C (167°F)

SURGE PROTECTIVE DEVICE (SPD) SCHEDULE									
DESIGNATION	BASIS OF DESIGN	VOLTAGE	SURGE CURRENT (AMPS PER PHASE)	MOUNTING					
SPD-1	SSI - MODEL CHL-B-3Y1-C1	120/208V - 3PH-4W.	480,000	EXTERNAL					
SPD-2	SSI - MODEL CKL-B-3Y1-C1	120/208V - 3PH-4W.	120,000	EXTERNAL					
NOTES:    1.  BASIS OF DESIGN IS SURGE SUPPRESSION INC.    2.  SPDs SHALL BEAR THE UL MARK AND SHALL BE LISTED TO THE MOST RECENT STANDARD EDITIONS OF UL 1449.    3.  SPD AND PERFORMANCE PARAMETERS SHALL BE POSTED AT WWW.UL.COM UNDER CATGORY CODE: VZCA    4.  SPD SHALL BE UL LABELED WITH 20 KAI NOMINAL (In) FOR COMPLIANCE TO UL 96A LIGHTNING PROTECTION MASTER LABEL AND NFPA 780.    5.  SPDs SHALL HAVE L-N, L-L, L-G, AND N-G MODES OF PROTECTION.    6.  SPDs SHALL HAVE EMI/RFI FILTERING UP TO 55DB FROM 1KHZ TO 100MHZ, USING STANDARD MIL-STD-220 INSERTION I OSS TEST METHOD.									

ISERTION LOSS TEST METHOD.

UNLESS INDICATED OTHERWISE ON RISER DIAGRAM, SPDs SHALL BE WIRED TO A 30A-3P BREAKER OR FUSED





ONDUITS FOR FUTURE SOLAR PV

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