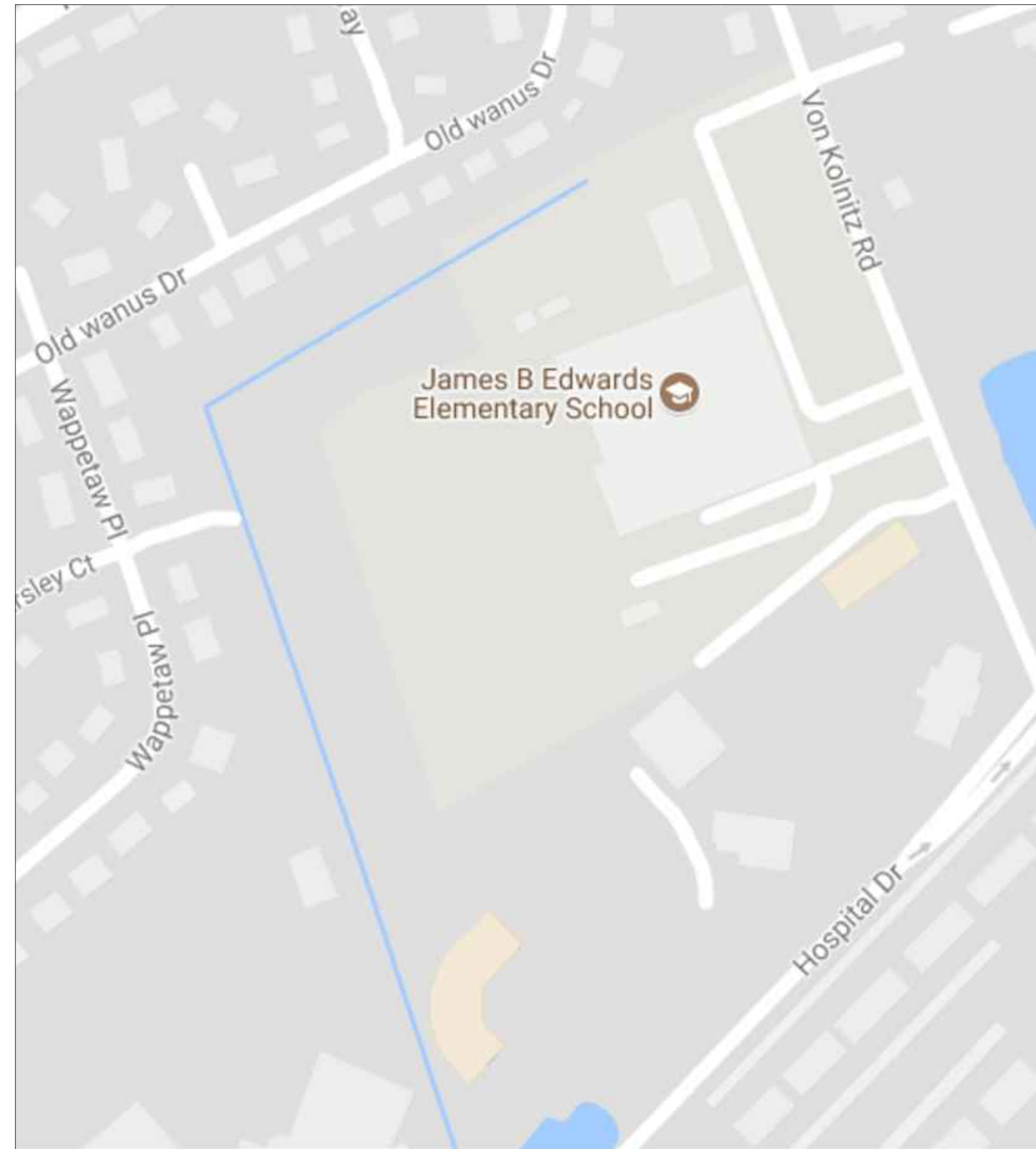




VICINITY MAP



SITE MAP

# JAMES B. EDWARDS ELEMENTARY SCHOOL ROOF REPLACEMENT

CHARLESTON COUNTY SCHOOL DISTRICT

855 VON KOLNITZ ROAD

MT. PLEASANT, SC 29464

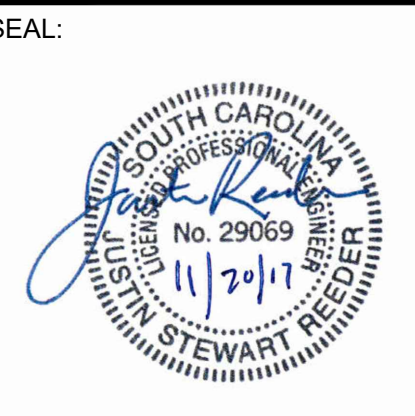
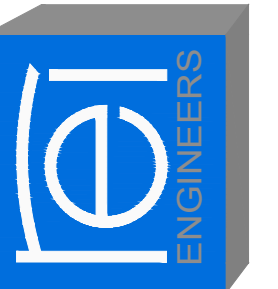
Charleston > excellence is our standard  
County SCHOOL DISTRICT

DRAWING INDEX	
R-001	COVER SHEET
R-100	BASE BID 1 AND 2 SECTOR DESIGNATIONS
R-101	BASE BID 1 ROOF PLAN
R-102	BASE BID 2 ROOF PLAN
R-103	INSULATION/BASE SHEET ATTACHMENT PLAN
R-201	ROOF DETAILS
R-202	ROOF DETAILS
R-203	ROOF DETAILS

ABBREVIATION LIST	
MAX.	MAXIMUM
MIN.	MINIMUM
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
S.S.	STAINLESS STEEL
SIM.	SIMILAR
TERM.	TERMINATION
TYP.	TYPICAL

CODE COMPLIANCE REFERENCE LIST	
2015 INTERNATIONAL BUILDING CODE WITH SC MODIFICATIONS	
2015 INTERNATIONAL FIRE CODE WITH SC MODIFICATIONS	
2015 INTERNATIONAL PLUMBING CODE	
2015 INTERNATIONAL MECHANICAL CODE	
2009 INTERNATIONAL ENERGY CONSERVATION CODE	
2015 INTERNATIONAL FUEL GAS CODE WITH SC MODIFICATIONS	
2014 NATIONAL ELECTRIC CODE	

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**JAMES B. EDWARDS ELEMENTARY SCHOOL**  
**ROOF REPLACEMENT**  
 CHARLESTON COUNTY SCHOOL DISTRICT  
 MT. PLEASANT, SOUTH CAROLINA  
 REI PROJECT #: 17CHS-067

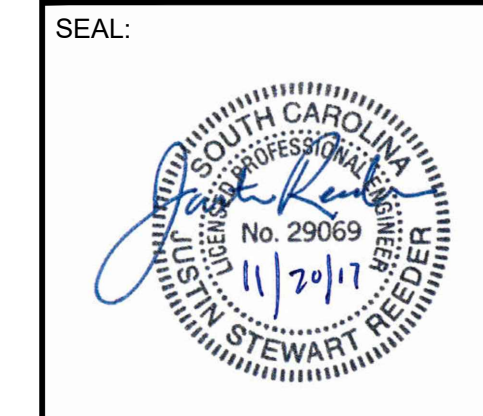
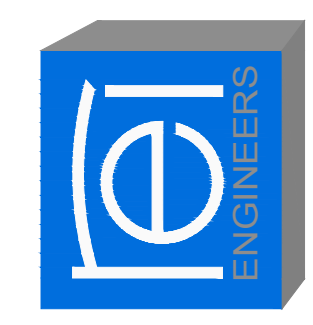
REVISION #	REVISION DATE
1	
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DRAWN BY: RLW  
SCALE: N.T.S.  
DATE: 11/20/2017

DRAWING:  
**R-001**  
SHEET 1 OF 8  
COVER SHEET

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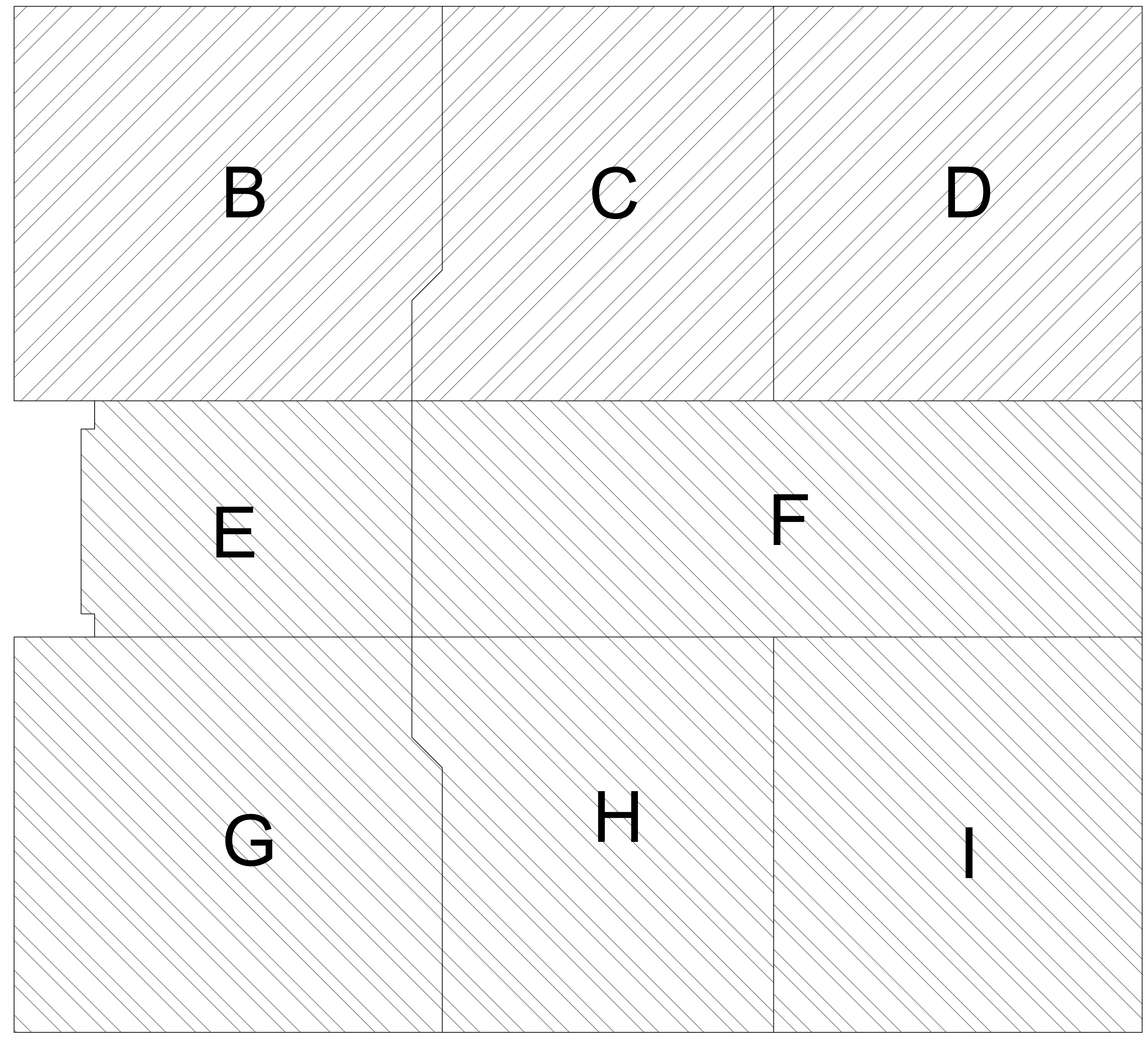
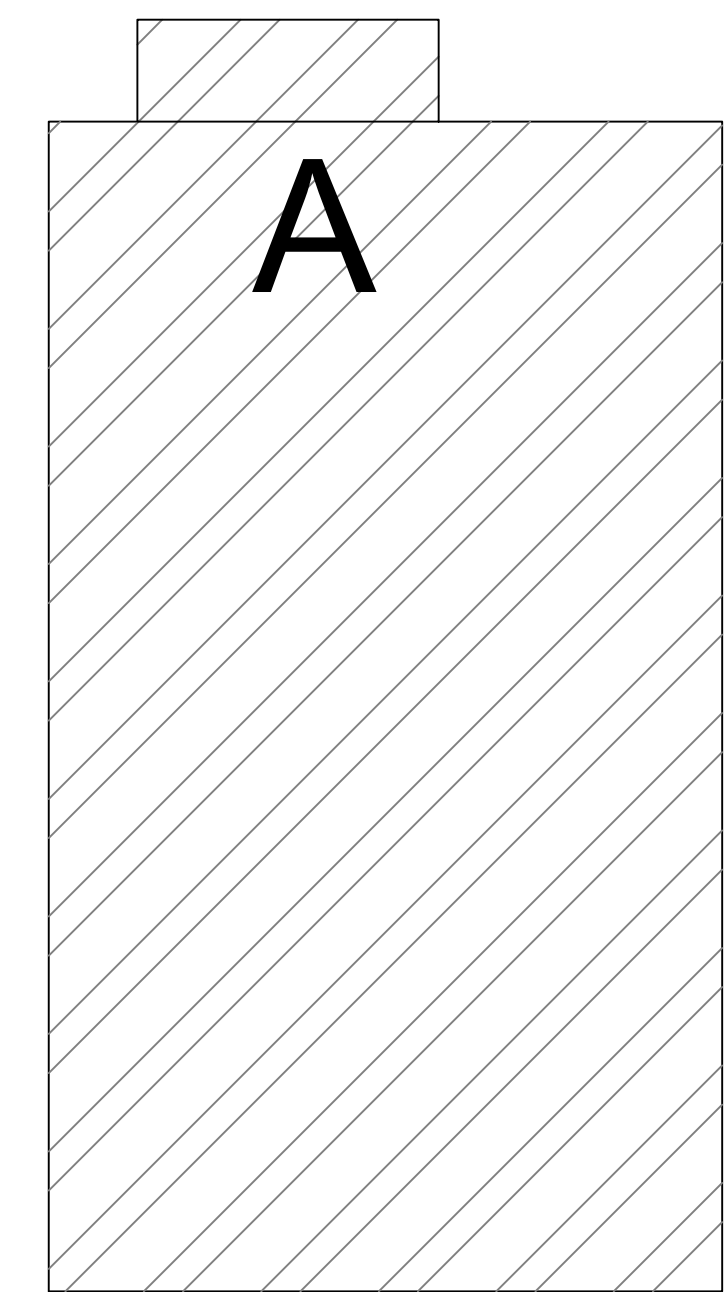
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**JAMES B. EDWARDS ELEMENTARY SCHOOL  
ROOF REPLACEMENT**  
CHARLESTON COUNTY SCHOOL DISTRICT  
MT. PLEASANT, SOUTH CAROLINA  
REI PROJECT #: 17CHS-067

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DRAWN BY: RLW  
SCALE: N.T.S.  
DATE: 11/20/2017  
DRAWING:  
**R-100**  
SHEET 2 OF 8  
BASE BID 1 AND 2 SECTOR DESIGNATIONS



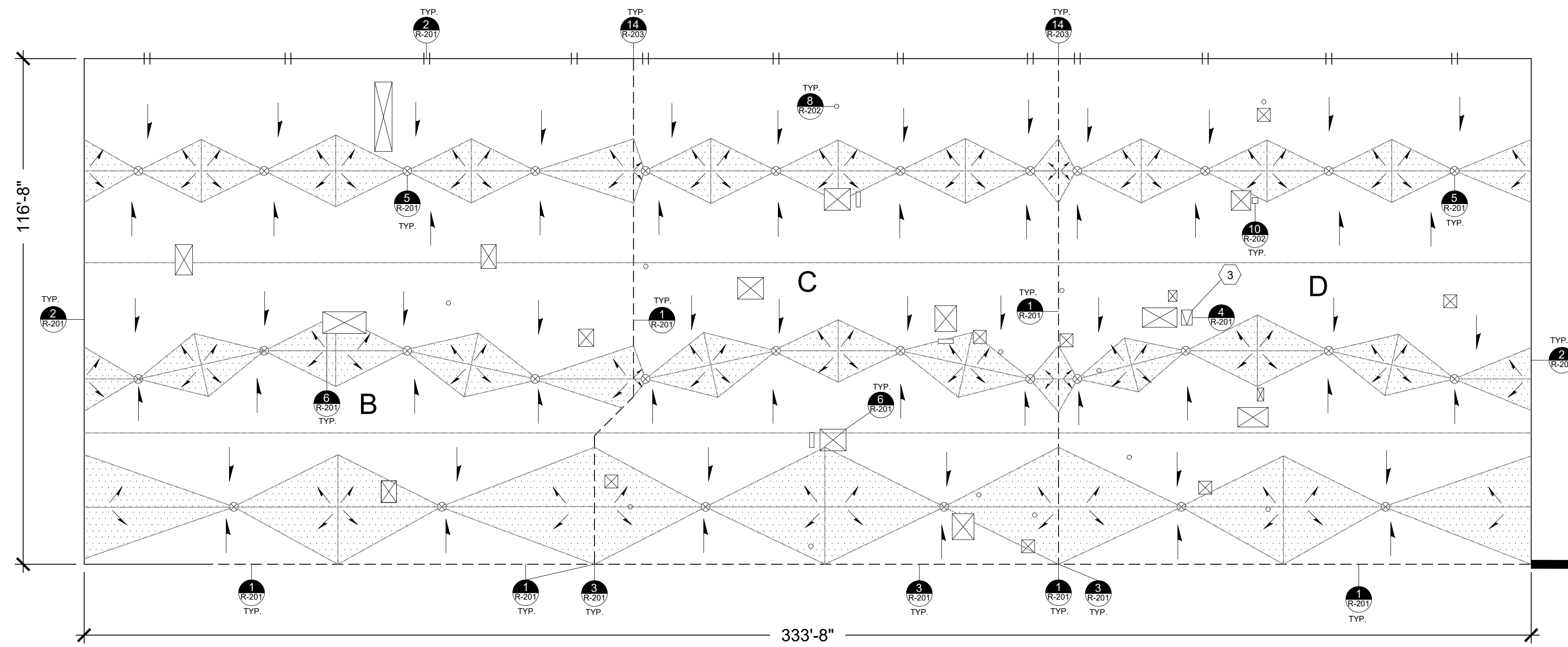
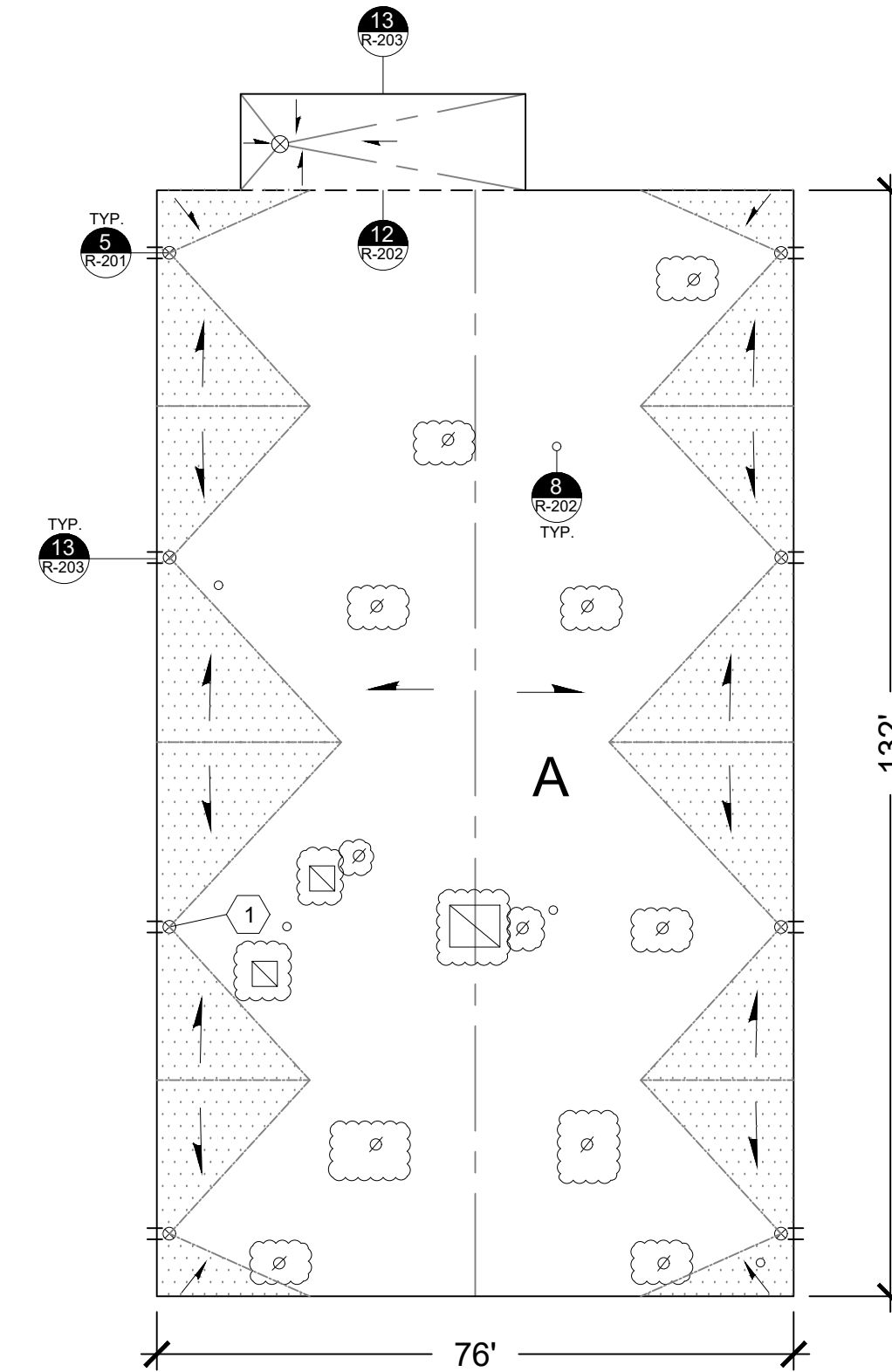
KEY

BASE BID 1

BASE BID 2

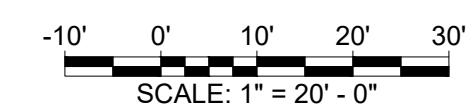
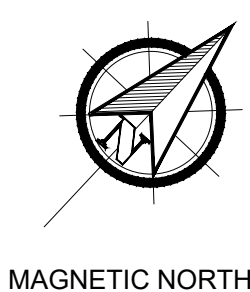
SECTOR	AREA (SQUARE FEET)
A	± 10,423
B	± 14,470
C	± 11,741
D	± 12,717
TOTAL	± 49,351

\*\*CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO BIDDING\*\*

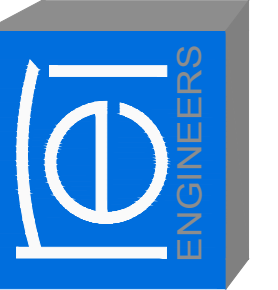


KEY	
	RAISED ROOF EDGE SCUPPER
	RAISED ROOF EDGE
	RIDGE-HIP-VALLEY
	EXPANSION JOINT
	TAPERED SLOPE
	FLEXIBLE CONDUIT FLASHING
	ROOF DRAIN
	EQUIPMENT CURB
	VACANT CURB
	ROOF HATCH
	EXISTING EQUIPMENT SUPPORT CURB
	TAPERED SADDLE / BACKSLOPE
	PIPE PENETRATION
	ONE WAY MOISTURE RELIEF VENT
	DEMO/REMOVE

- NOTES: #
- CLEAR OBSTRUCTED ROOF DRAIN PRIOR TO PERFORMANCE OF WORK.
  - REFER TO MECHANICAL DRAWINGS FOR ROOFTOP UNIT REMOVAL AND REPLACEMENT.
  - PROVIDE NEW ROOF HATCH.
  - RESECURE EXISTING NAILERS IN ACCORDANCE WITH FM DATA SHEET 1-49.
  - SECURE NEW NAILERS IN ACCORDANCE WITH FM DATA SHEET 1-49.
  - ADJUST NAILERS AS REQUIRED FOR SMOOTH TRANSITIONS. MAINTAIN LEVEL HEIGHT ALONG PERIMETER EDGE. ADJUST AS REQUIRED TO PREVENT PONDING WATER.
  - PROVIDE CRICKETS BEHIND CURBS 12" WIDE OR GREATER.
  - CONTRACTOR SHALL BECOME FAMILIAR WITH AND VERIFY CONDITION, DIMENSION, AND LOCATION OF ALL ROOF AREAS INCLUDING ROOFTOP EQUIPMENT, FLASHINGS, PIPE LINES, CONDUIT, PIPE SUPPORTS, ETC., BEFORE SUBMITTING BID. NOT ALL EXISTING PIPES, CONDUIT, ELECTRICAL LINES, CABLES, GUY WIRES, AND DUCTWORK ABOVE THE ROOF SURFACE HAVE BEEN SHOWN ON THE ROOF PLAN.
  - RAISE ALL ROOFTOP MOUNTED EQUIPMENT, SUPPORT STANDS AND OTHER APPURTENANCES AS NECESSARY TO PROVIDE AN EIGHT INCH FLASHING HEIGHT ABOVE THE FINISHED ROOF SURFACE. RAISE OR EXTEND ASSOCIATED DUCTWORK, GAS LINES, AIR CONDITIONING LINES, ETC. TO ACCOMMODATE PROPER REINSTALLATION OF THE LINES TO THE ASSOCIATED EQUIPMENT AFTER THE EQUIPMENT HAD BEEN RAISED. PROVIDE NECESSARY EQUIPMENT TO BLEED FREON FROM AIR CONDITIONING AND HVAC LINES.
  - ONLY ONE DETAIL SYMBOL IS SHOWN FOR EACH TYPE OF ROOF PENETRATION. ALL OTHER SIMILAR PENETRATIONS ARE TO BE FLASHED AS REQUIRED BY THE DETAIL UNLESS OTHERWISE NOTED.
  - THE TAPERED INSULATION LAYOUT PATTERN DEPICTED ON DRAWING R-101 AND R-102 ARE PROVIDED FOR GENERAL ILLUSTRATION ONLY. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, DEPICTED AT MINIMUM 3/16" INCH SCALE, SHOWING THE FOLLOWING: A) ACTUAL TAPERED INSULATION LAYOUT PROPOSED FOR THE PROJECT; B) LOCATION OF ALL DRAINS; C) MINIMUM R-VALUES FOR EACH ROOF AREA; AND, D) LOCATION OF OVERFLOW SCUPPERS.



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SEAL:



# JAMES B. EDWARDS ELEMENTARY SCHOOL ROOF REPLACEMENT

CHARLESTON COUNTY SCHOOL DISTRICT  
MT. PLEASANT, SOUTH CAROLINA

REI PROJECT #: 17CHS-067

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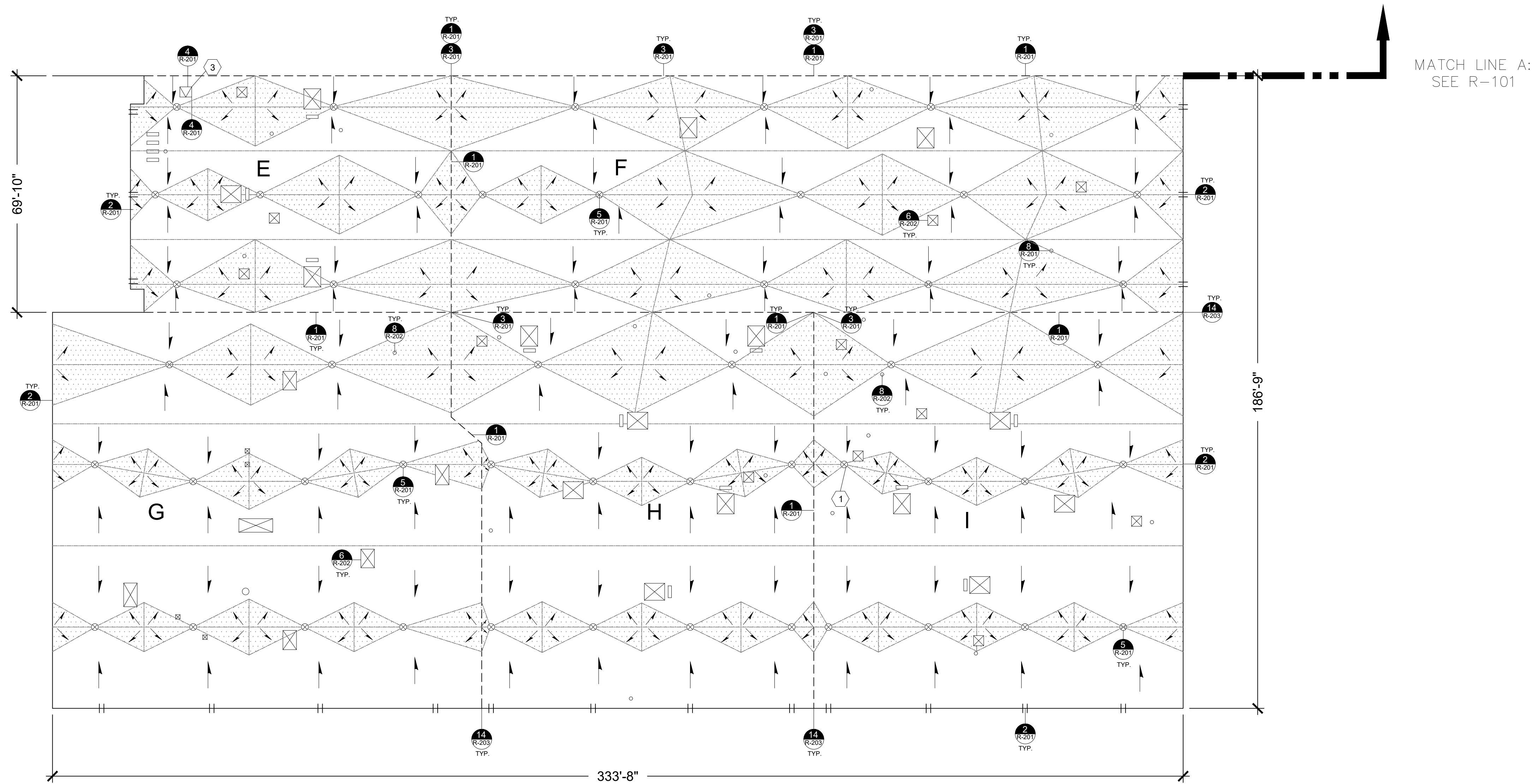
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SCALE: 1"=20'-0"

DATE: 11/20/2017  
DRAWING: R-101

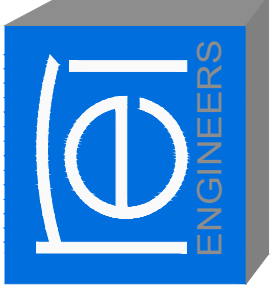
SHEET 3 OF 8  
BASE BID 1 ROOF PLAN

SECTOR	AREA (SQUARE FEET)
E	± 6,550
F	± 15,084
G	± 14,496
H	± 11,771
I	± 12,744
TOTAL	± 60,645

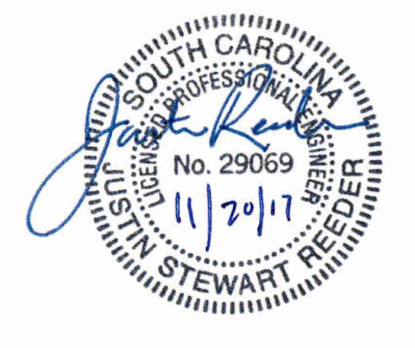
\*\*CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO BIDDING\*\*



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SEAL:



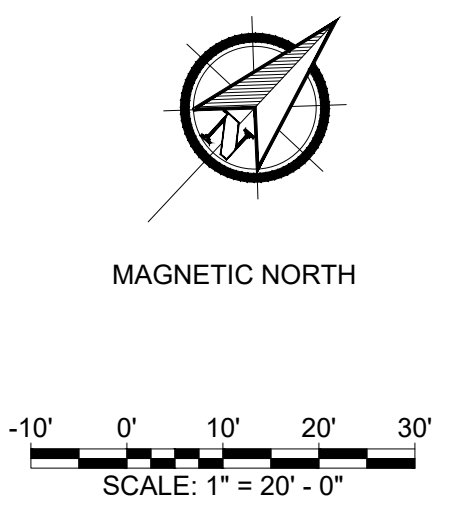
**JAMES B. EDWARDS ELEMENTARY SCHOOL**  
**ROOF REPLACEMENT**  
CHARLESTON COUNTY SCHOOL DISTRICT  
MT. PLEASANT, SOUTH CAROLINA  
REI PROJECT #: 17CHS-067

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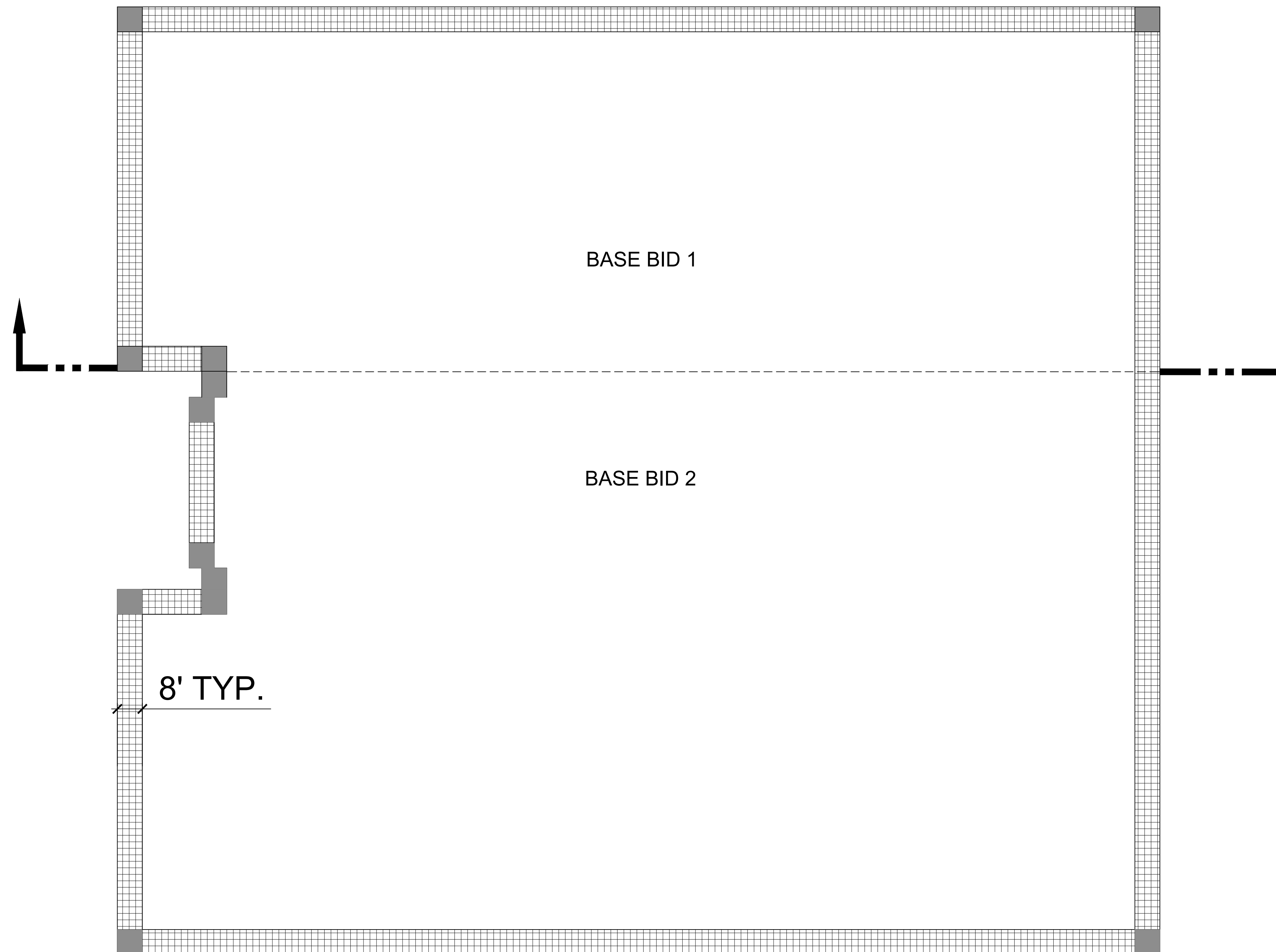
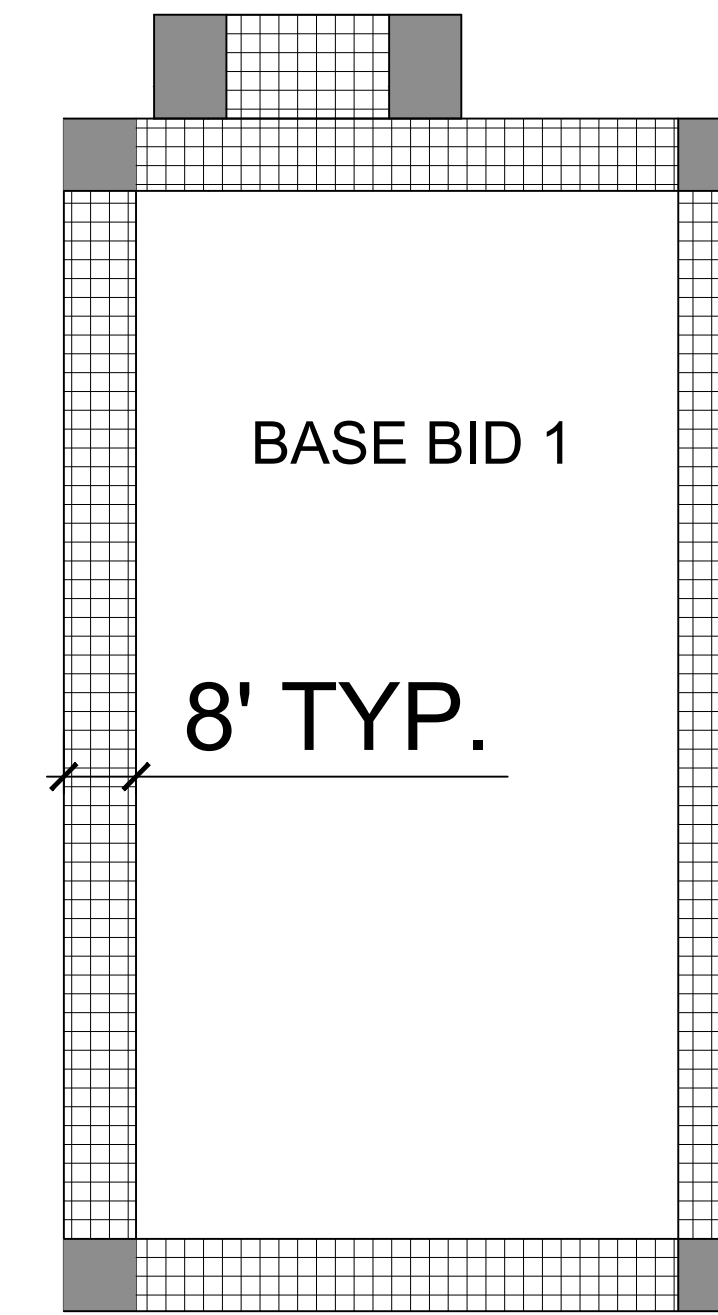
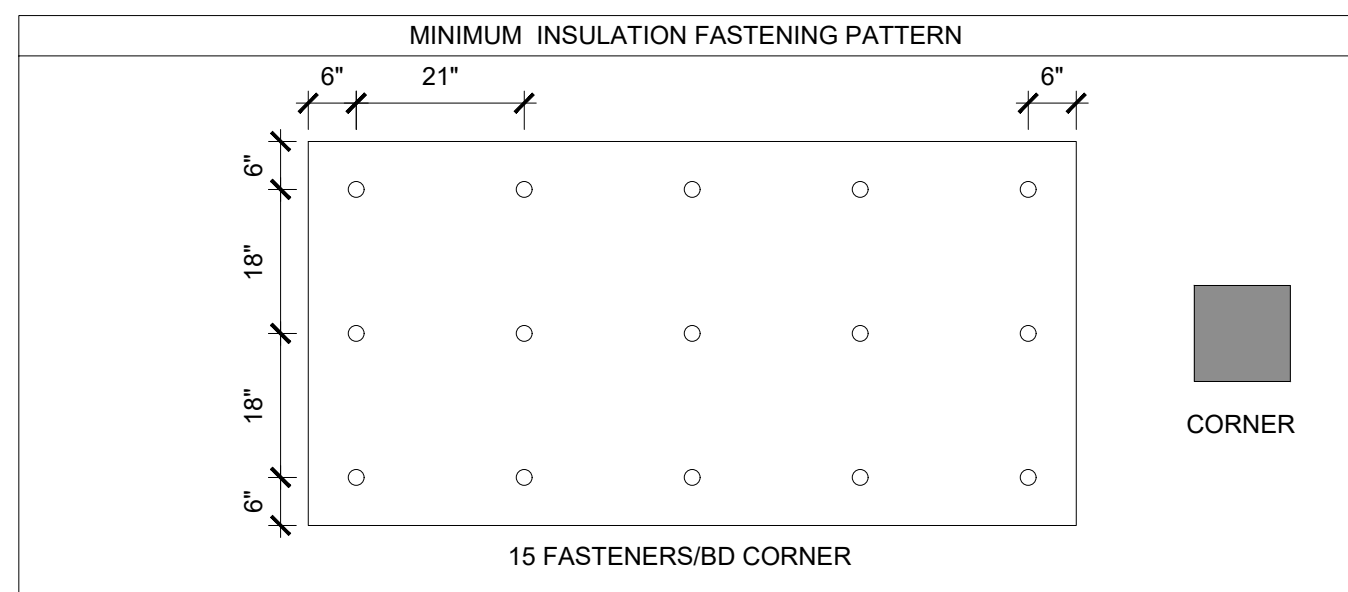
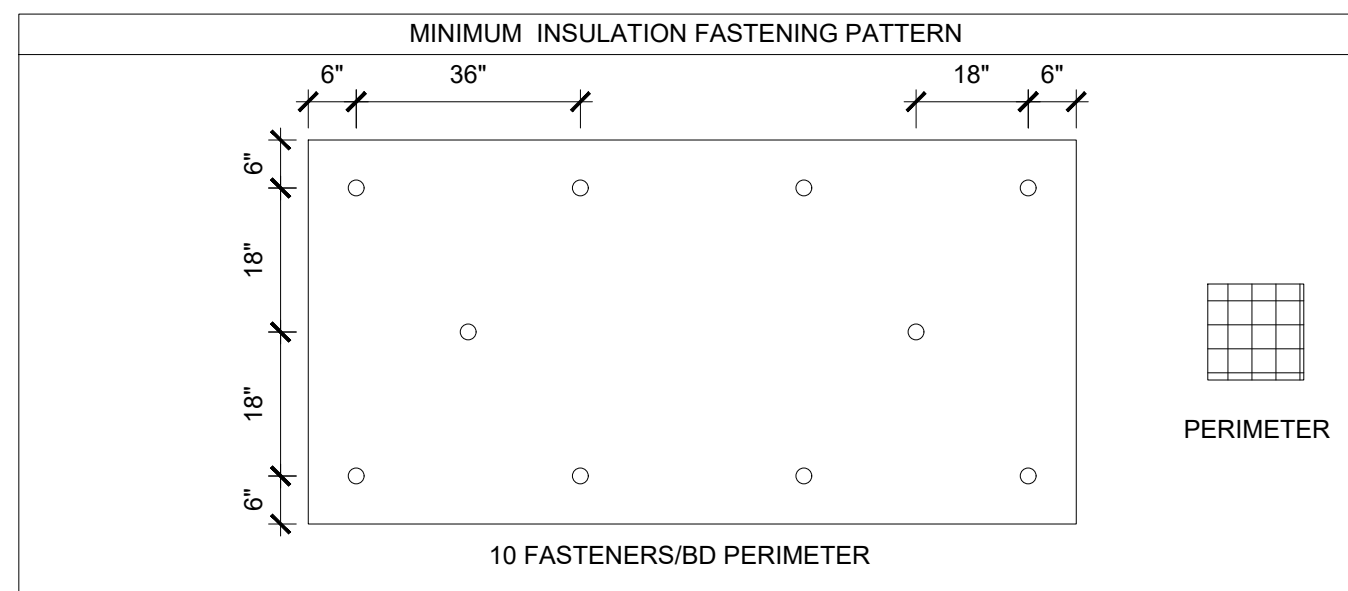
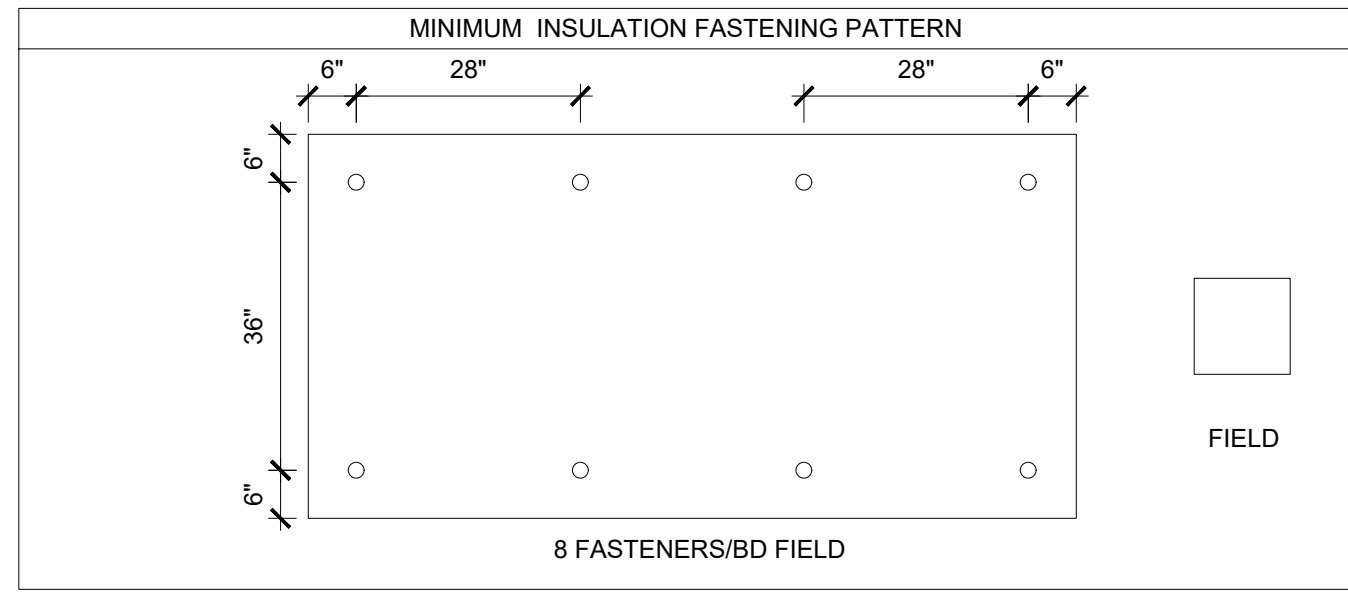
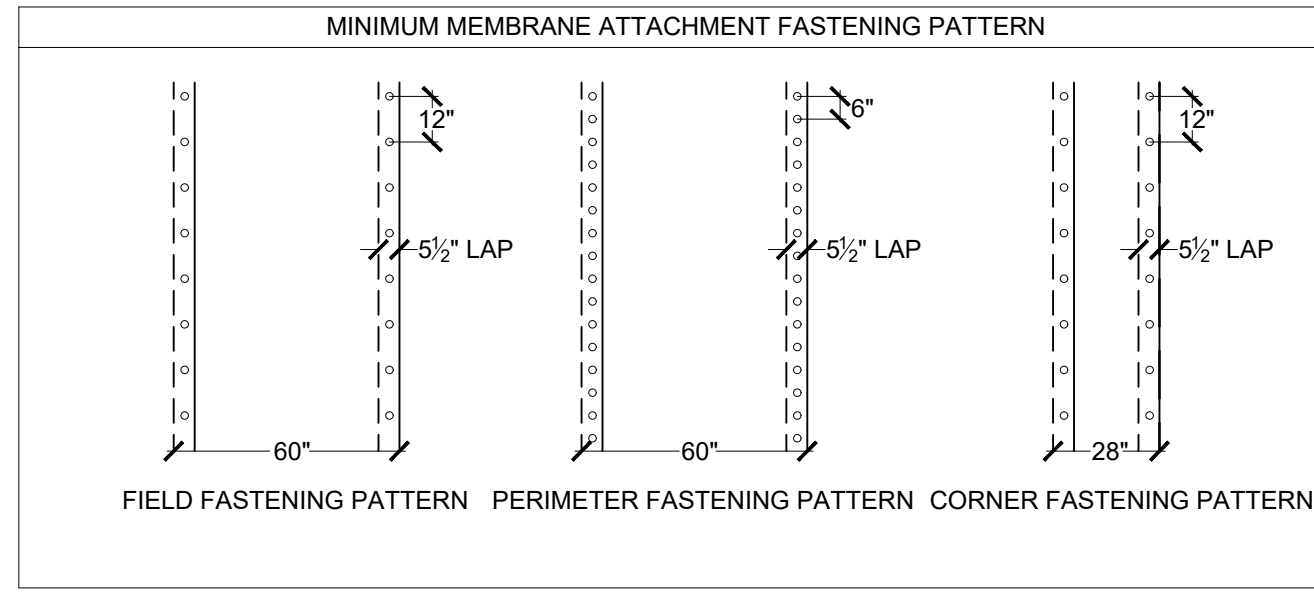
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SCALE: 1"=20'-0"  
DATE: 11/20/2017  
DRAWING:  
**R-102**  
SHEET 4 OF 8  
BASE BID 2 ROOF PLAN

KEY	
	RAISED ROOF EDGE SCUPPER
	RAISED ROOF EDGE
	RIDGE-HIP-VALLEY
	EXPANSION JOINT
	TAPERED SLOPE
	FLEXIBLE CONDUIT FLASHING
	ROOF DRAIN
	EQUIPMENT CURB
	VACANT CURB
	ROOF HATCH
	EXISTING EQUIPMENT SUPPORT CURB
	TAPERED SADDLE/BACKSLOPE
	PIPE PENETRATION

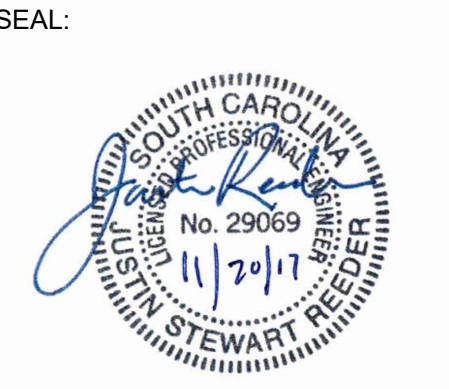
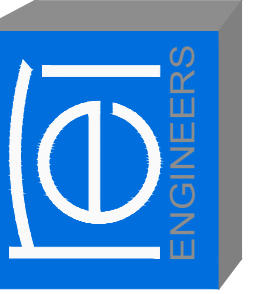
- NOTES: (#)
- CLEAR OBSTRUCTED ROOF DRAIN PRIOR TO PERFORMANCE OF WORK.
  - REFER TO MECHANICAL DRAWINGS FOR ROOFTOP UNIT REMOVAL AND REPLACEMENT.
  - PROVIDE NEW ROOF HATCH.
  - RESECURE EXISTING NAILERS IN ACCORDANCE WITH FM DATA SHEET 1-49.
  - SECURE NEW NAILERS IN ACCORDANCE WITH FM DATA SHEET 1-49.
  - ADJUST NAILERS AS REQUIRED FOR SMOOTH TRANSITIONS. MAINTAIN LEVEL HEIGHT ALONG PERIMETER EDGE. ADJUST AS REQUIRED TO PREVENT PONDING WATER.
  - PROVIDE CRICKETS BEHIND CURBS 12" WIDE OR GREATER.
  - CONTRACTOR SHALL BECOME FAMILIAR WITH AND VERIFY CONDITION, DIMENSION, AND LOCATION OF ALL ROOF AREAS INCLUDING ROOFTOP EQUIPMENT, FLASHINGS, PIPE LINES, CONDUIT, PIPE SUPPORTS, ETC., BEFORE SUBMITTING BID. NOT ALL EXISTING PIPES, CONDUIT, ELECTRICAL LINES, CABLES, GUY WIRES, AND DUCTWORK ABOVE THE ROOF SURFACE HAVE BEEN SHOWN ON THE ROOF PLAN.
  - RAISE ALL ROOFTOP MOUNTED EQUIPMENT, SUPPORT STANDS AND OTHER APPURTENANCES AS NECESSARY TO PROVIDE AN EIGHT INCH FLASHING HEIGHT ABOVE THE FINISHED ROOF SURFACE. RAISE OR EXTEND ASSOCIATED DUCTWORK, GAS LINES, AIR CONDITIONING LINES, ETC. TO ACCOMMODATE PROPER REINSTALLATION OF THE LINES TO THE ASSOCIATED EQUIPMENT AFTER THE EQUIPMENT HAD BEEN RAISED. PROVIDE NECESSARY EQUIPMENT TO BLEED FREON FROM AIR CONDITIONING AND HVAC LINES.
  - ONLY ONE DETAIL SYMBOL IS SHOWN FOR EACH TYPE OF ROOF PENETRATION. ALL OTHER SIMILAR PENETRATIONS ARE TO BE FLASHED AS REQUIRED BY THE DETAIL UNLESS OTHERWISE NOTED.
  - THE TAPERED INSULATION LAYOUT PATTERN DEPICTED ON DRAWING R-101 AND R-102 ARE PROVIDED FOR GENERAL ILLUSTRATION ONLY. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, DEPICTED AT MINIMUM 3/8" INCH SCALE, SHOWING THE FOLLOWING: A) ACTUAL TAPERED INSULATION LAYOUT PROPOSED FOR THE PROJECT; B) LOCATION OF ALL DRAINS; C) MINIMUM R-VALUES FOR EACH ROOF AREA; AND, D) LOCATION OF OVERFLOW SCUPPERS.



- NOTES:
1. PLACEMENT OF INSULATION FASTENERS SHALL COMPLY WITH BOARD MANUFACTURER'S PUBLISHED LITERATURE AND THE MEMBRANE MANUFACTURER'S REQUIREMENTS.
  2. CUT OR SCORE BOARDS TO CONFORM TO ANY IRREGULAR SUBSTRATE CONDITIONS.
  3. INSTALL NUMBER OF FASTENERS REQUIRED BY MEMBRANE MANUFACTURER'S TESTED ASSEMBLY TO MEET WIND DESIGN UPLIFT PRESSURES SPECIFIED IN SECTION 07 52 16.



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**JAMES B. EDWARDS ELEMENTARY SCHOOL**  
**ROOF REPLACEMENT**  
CHARLESTON COUNTY SCHOOL DISTRICT  
MT. PLEASANT, SOUTH CAROLINA  
REI PROJECT #: 17CHS-067

REVISION #	REVISION DATE
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DRAWN BY: RLW

SCALE: N.T.S.

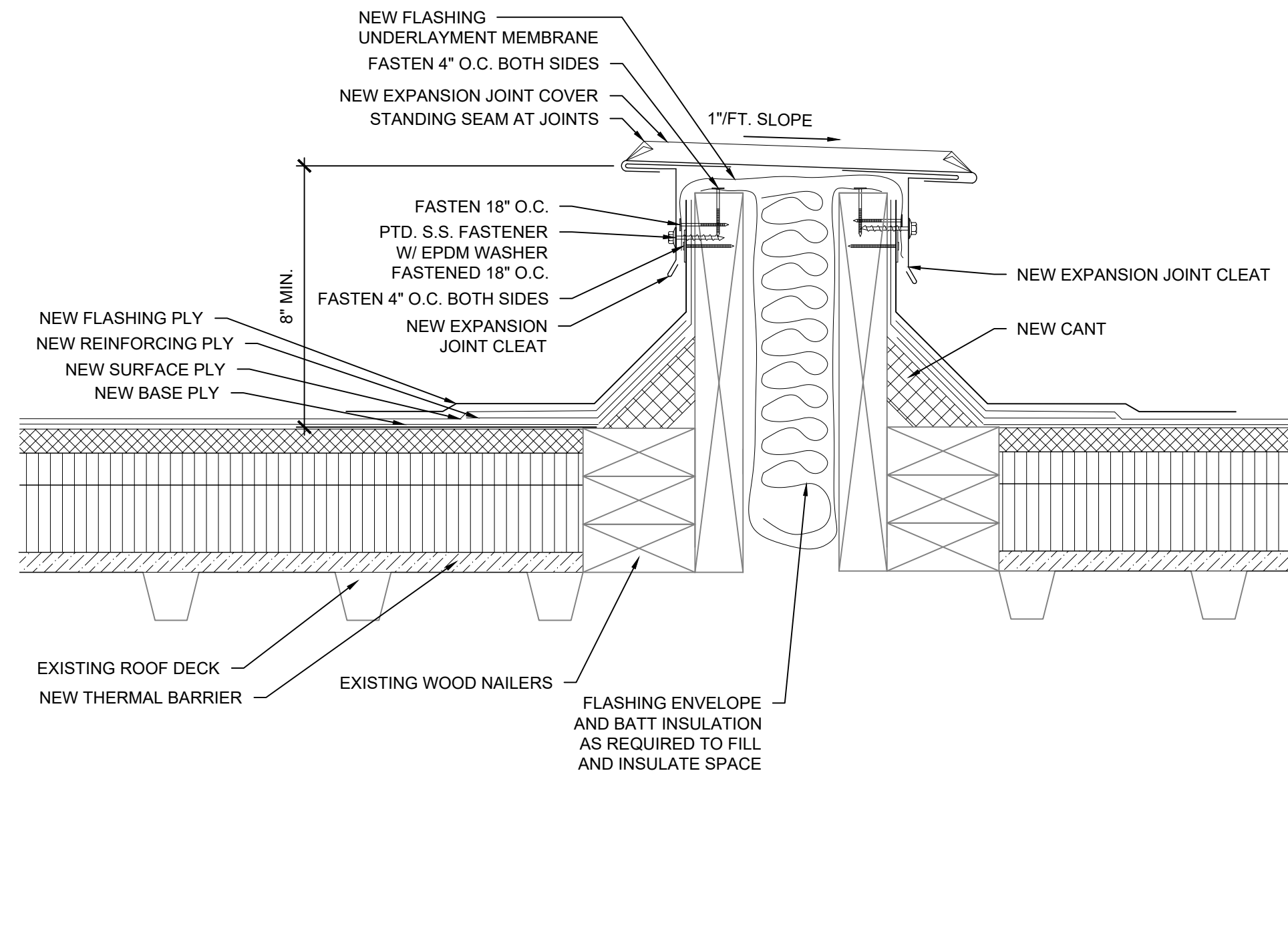
DATE: 11/20/2017

DRAWING:

**R-103**

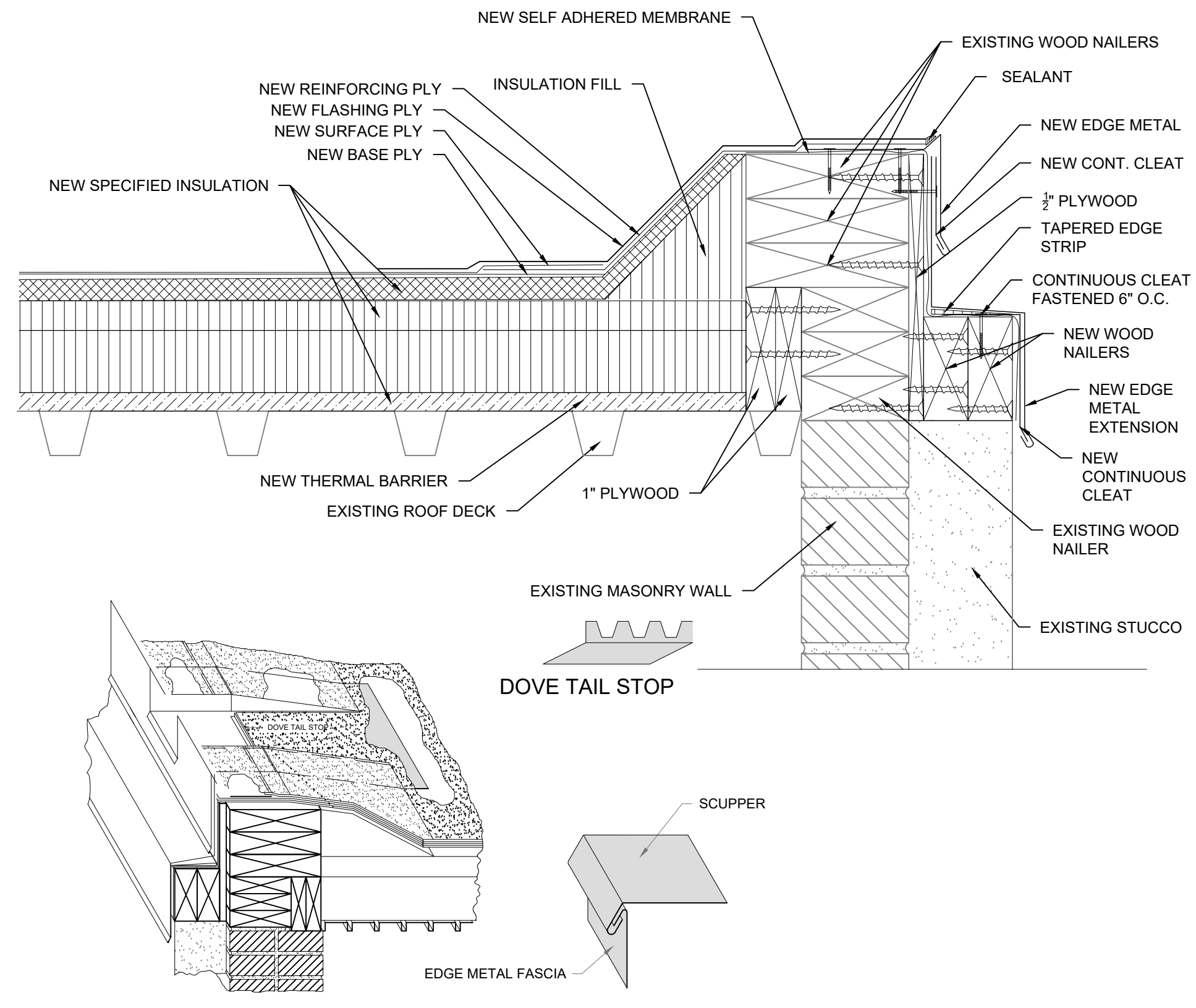
SHEET 5 OF 8

INSULATION/BASE SHEET ATTACHMENT PLAN



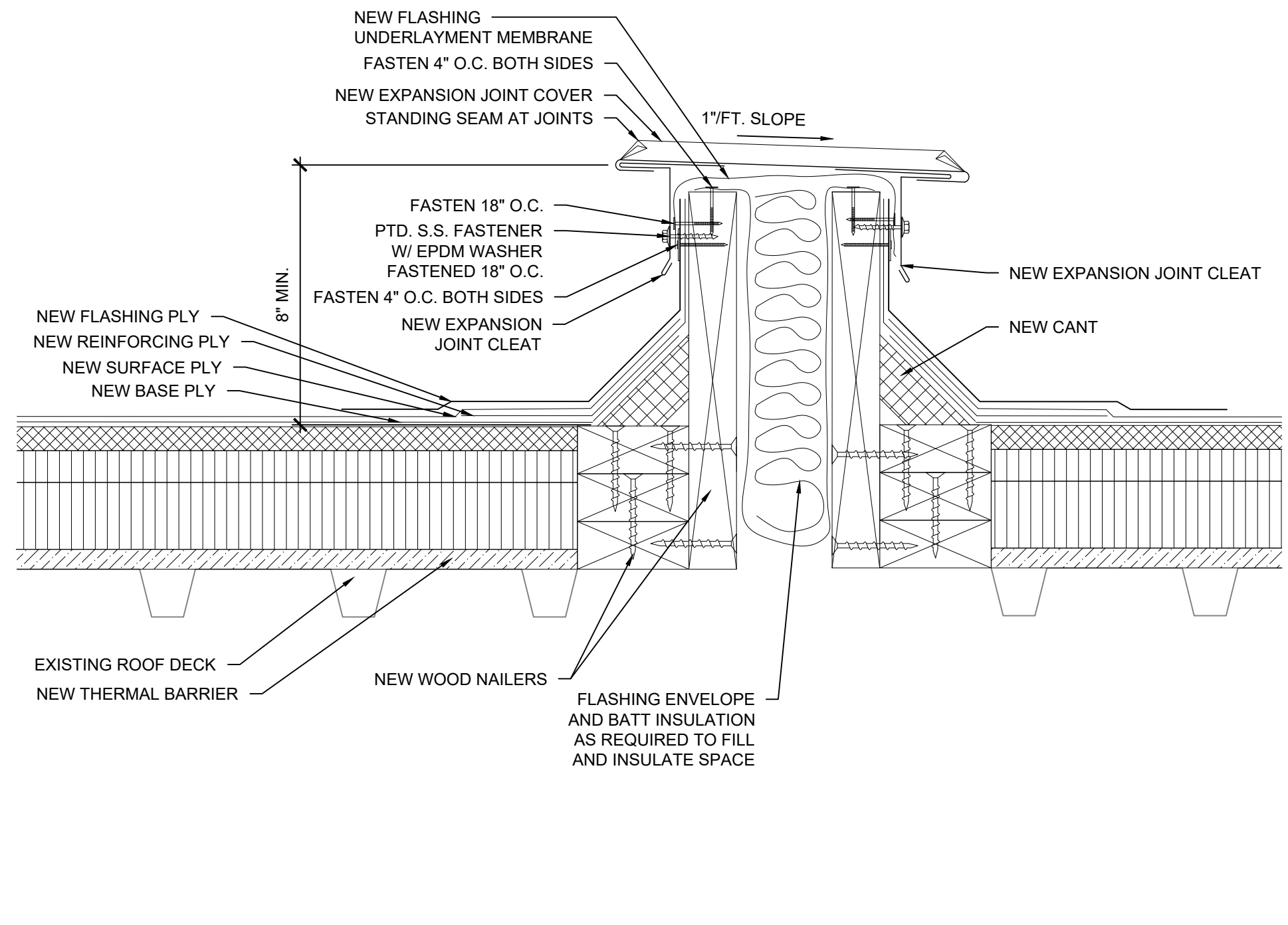
- NOTES:
1. ADD NAILERS WHERE NEEDED TO PROVIDE SMOOTH TRANSITION.
  2. FLASHING UNDERLAYMENT, CLEAT AND COVER SHALL BE PROVIDED BY BASE BID ONE CONTRACTOR.
  3. TAPERED INSULATION NOT SHOWN.

**1** EXPANSION JOINT  
SCALE: 3"=1'-0"



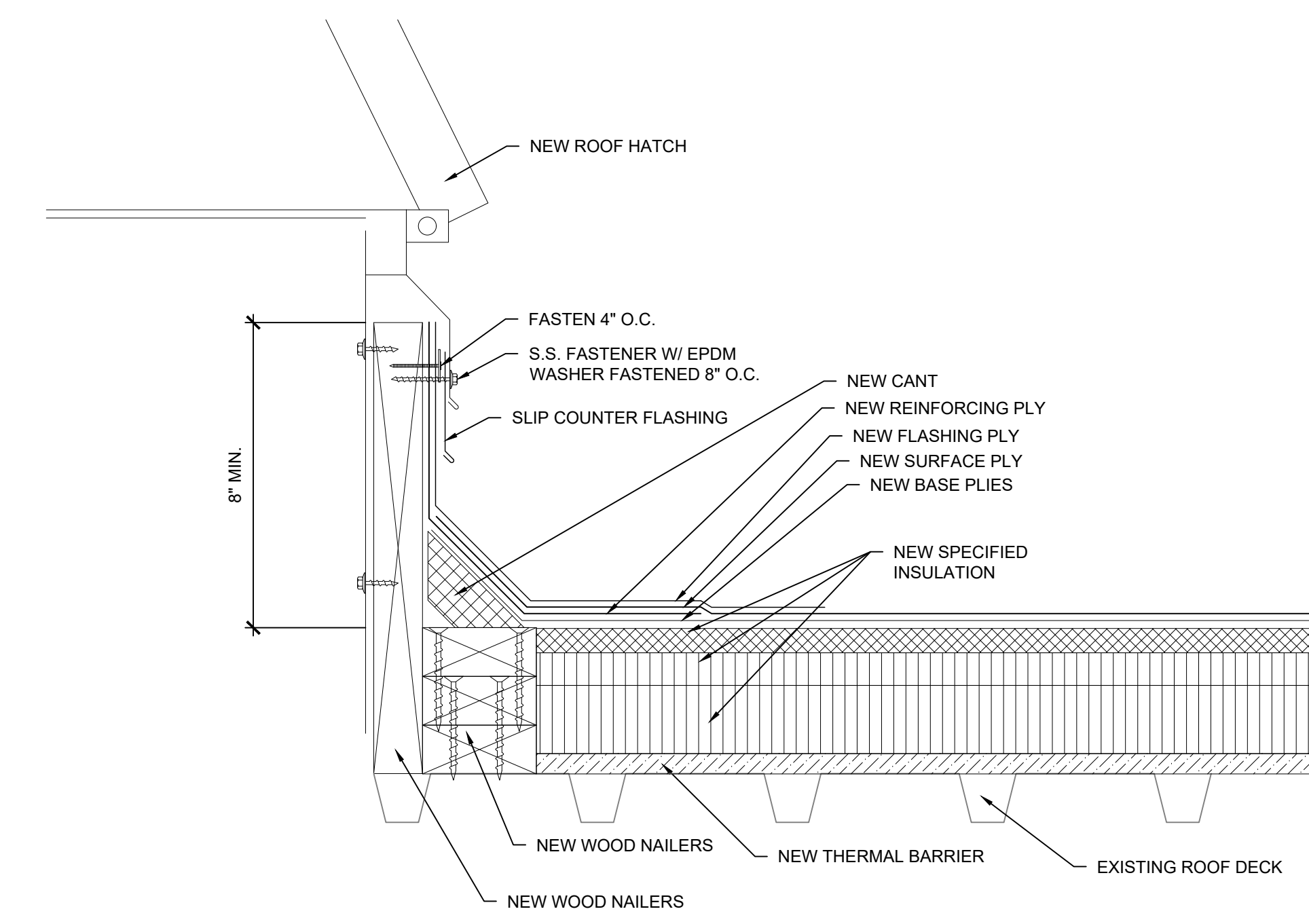
- NOTES:
1. INSULATION FILL TO MATCH AS NEEDED TO PROVIDE SMOOTH TRANSITION.
  2. FINISHED SCUPPER OPENING SHALL BE 8" IN WIDTH.

**2** ROOF EDGE AND THRU EDGE SCUPPER  
SCALE: 3"=1'-0"



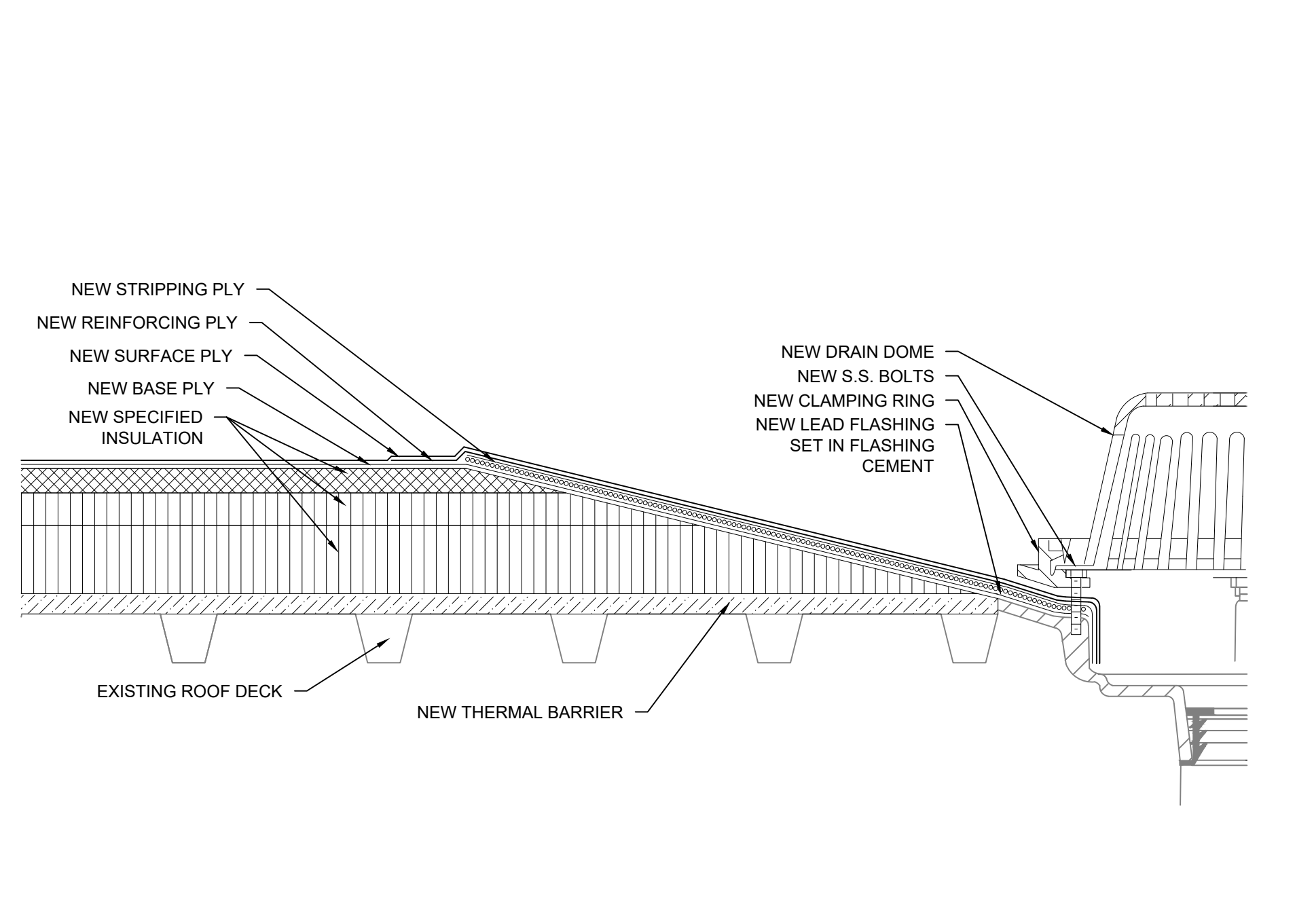
- NOTES:
1. ADD NAILERS WHERE NEEDED TO PROVIDE SMOOTH TRANSITION.
  2. FLASHING UNDERLAYMENT, CLEAT AND COVER SHALL BE PROVIDED BY BASE BID ONE CONTRACTOR.
  3. TAPERED INSULATION NOT SHOWN.

**3** EXPANSION JOINT  
SCALE: 3"=1'-0"



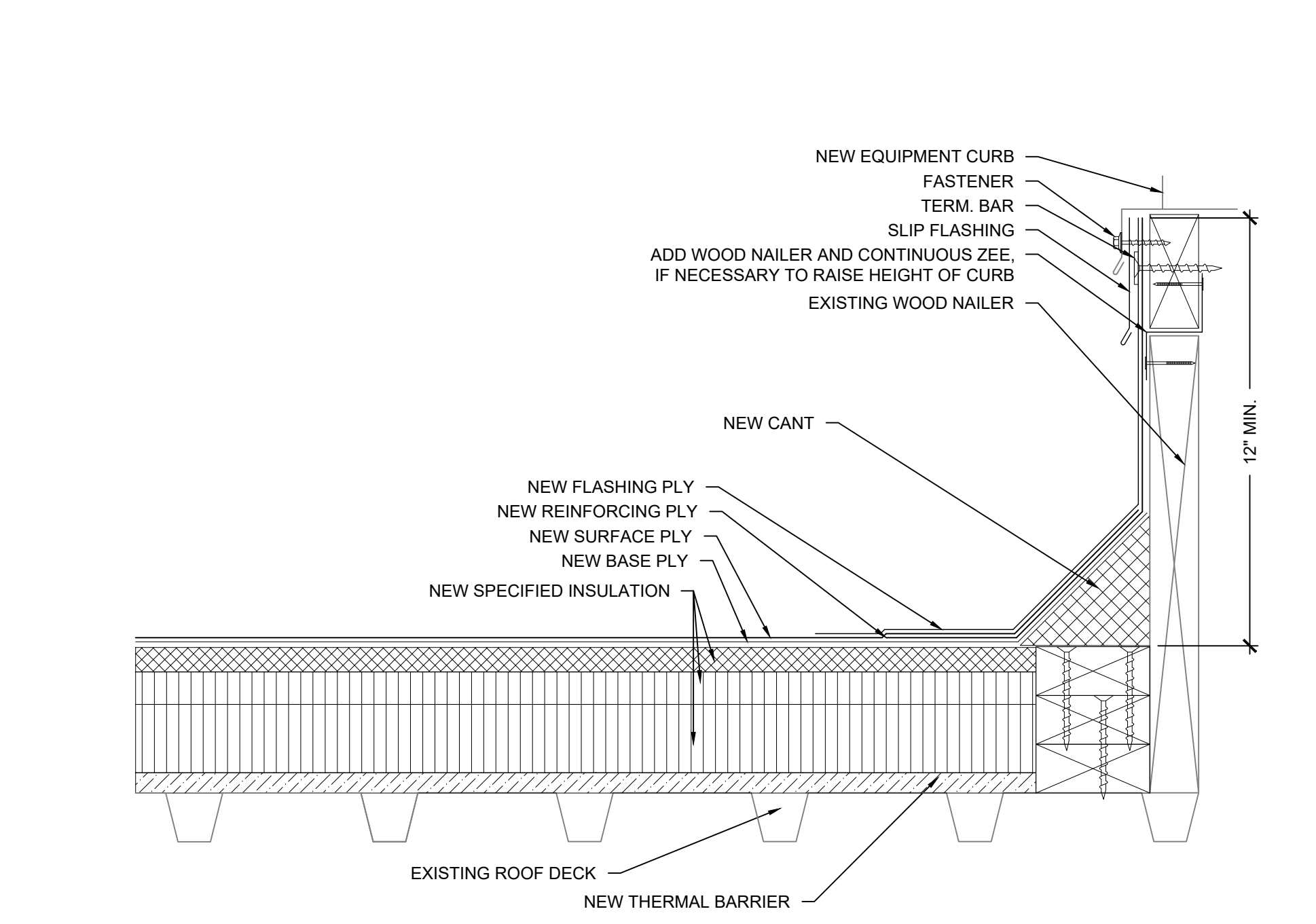
- NOTES:
1. REFER TO SECTION 07 72 00 FOR NEW ROOF HATCH REQUIREMENTS.
  2. NEW THERMAL BARRIER NOT REQUIRED AT SECTOR "A".
  3. BASE SHEET REQUIRED AT SECTOR "A" NOT SHOWN FOR CLARITY.

**4** NEW ROOF HATCH  
SCALE: 3"=1'-0"



- NOTES:
1. REFER TO SECTION 07 22 16 FOR SUMP DIMENSIONS.

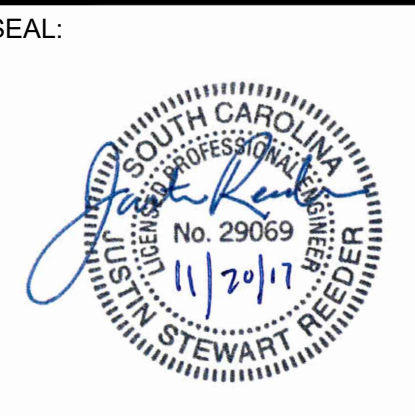
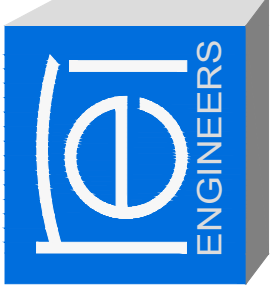
**5** ROOF DRAIN  
SCALE: 3"=1'-0"



- NOTES:
1. NEW THERMAL BARRIER NOT REQUIRED AT SECTOR "A".
  2. BASE SHEET REQUIRED AT SECTOR "A" NOT SHOWN FOR CLARITY.

**6** EQUIPMENT CURB  
SCALE: 3"=1'-0"

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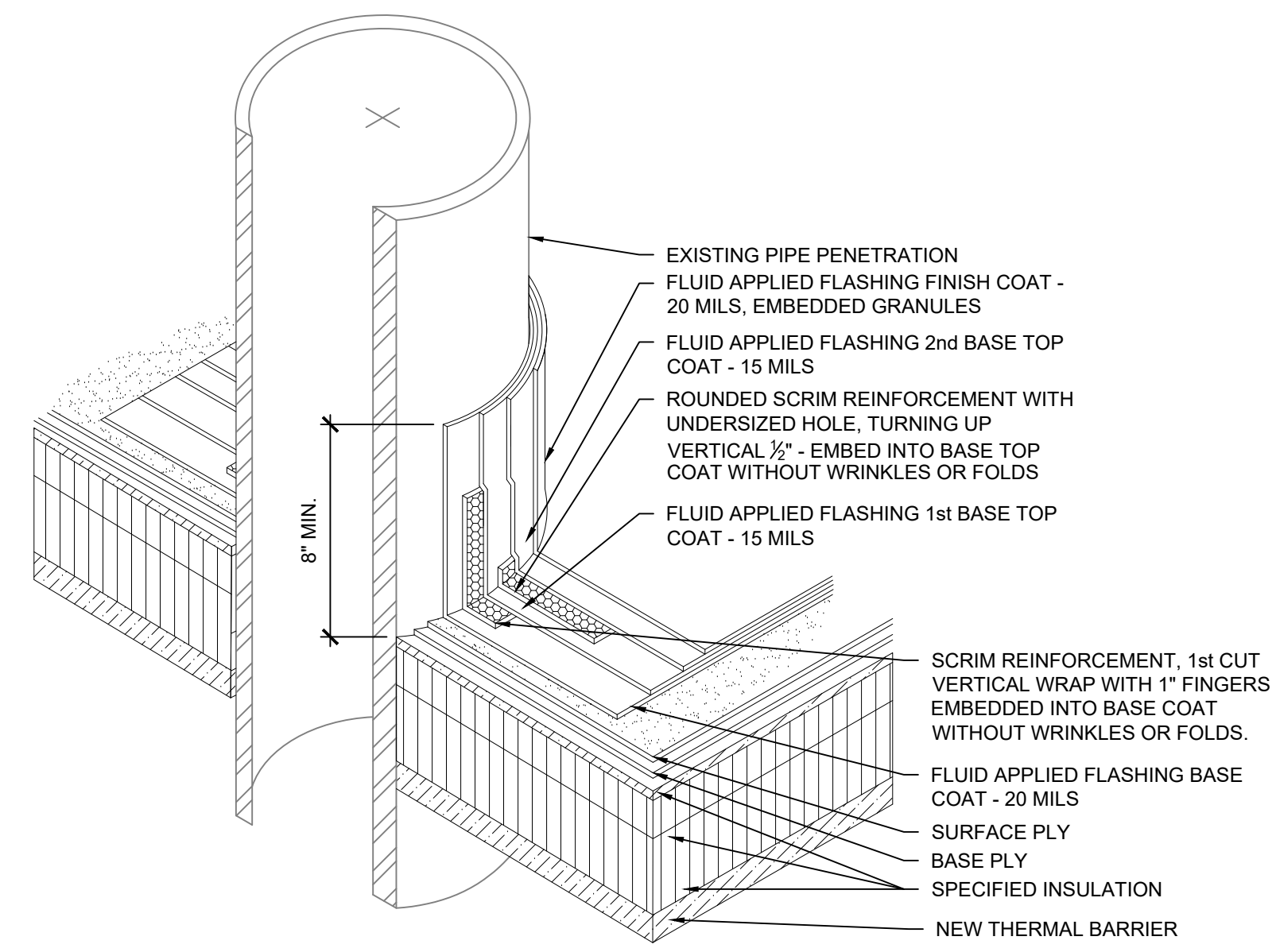
**JAMES B. EDWARDS ELEMENTARY SCHOOL**  
**ROOF REPLACEMENT**  
CHARLESTON COUNTY SCHOOL DISTRICT  
MT. PLEASANT, SOUTH CAROLINA  
REI PROJECT #: 17CHS-067

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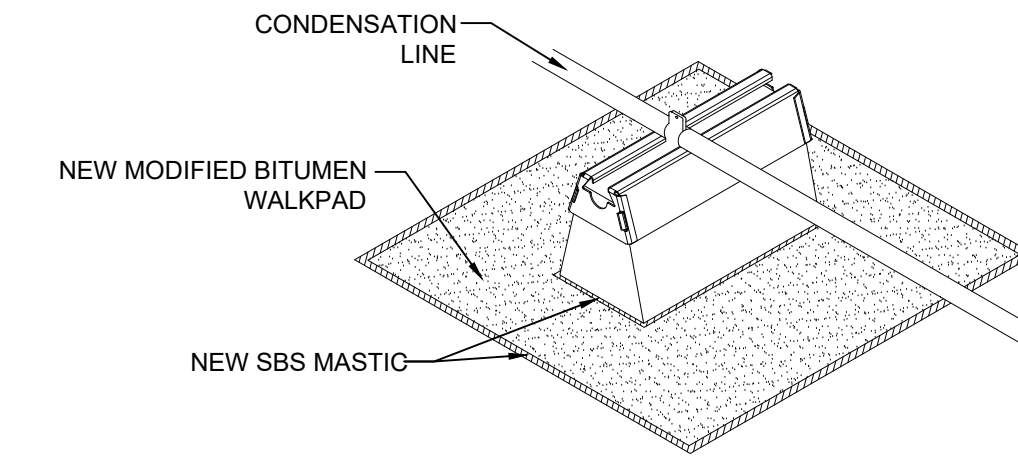
DRAWN BY: RLW  
SCALE: N.T.S.  
DATE: 11/20/2017

DRAWING:  
**R-201**  
SHEET 6 OF 8  
ROOF DETAILS

NOT USED



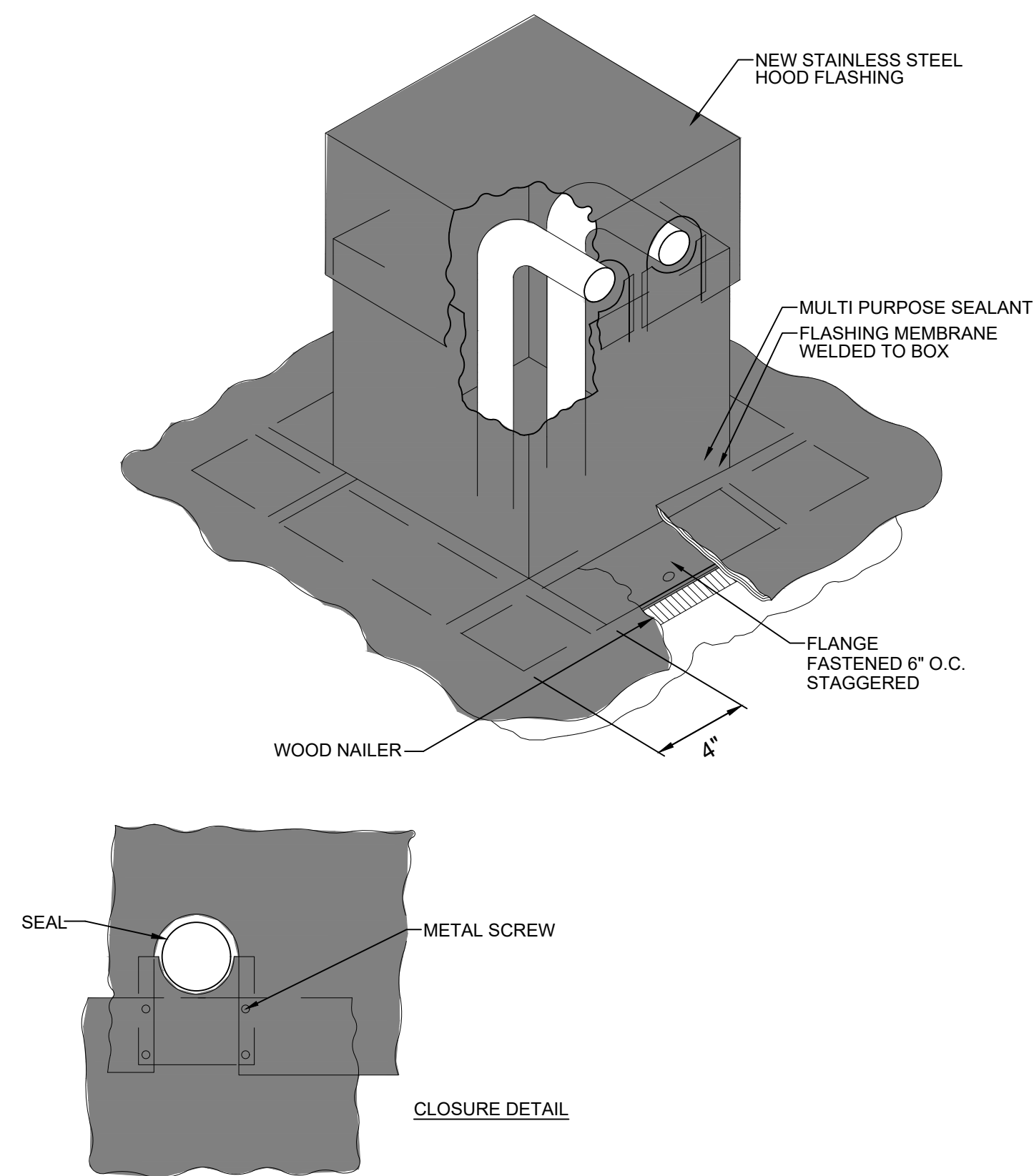
- NOTES:  
 1. NEW THERMAL BARRIER NOT REQUIRED AT SECTOR "A".  
 2. BASE SHEET REQUIRED AT SECTOR "A" NOT SHOWN FOR CLARITY.



- NOTES:  
 1. REFER TO SECTION 07 01 50 FOR SUPPORT SPACING.

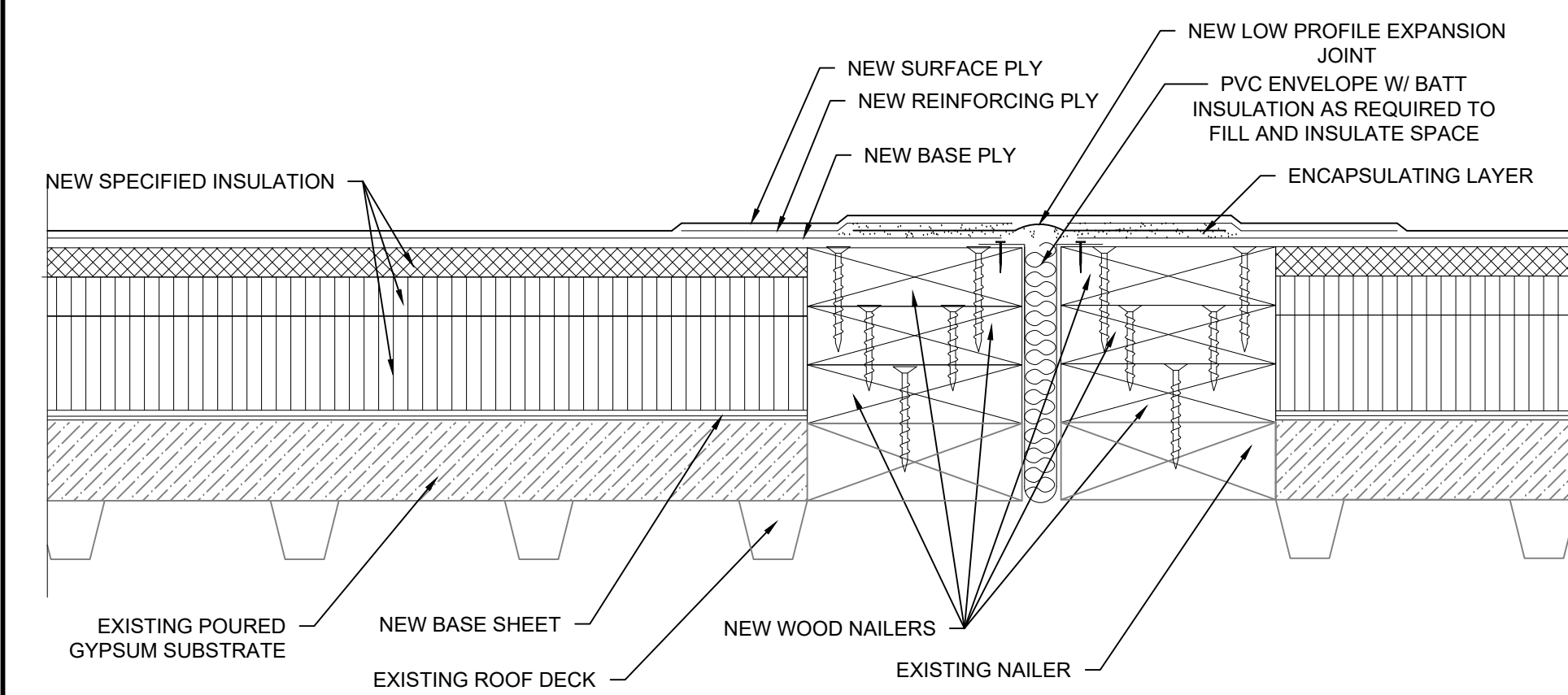
**8** PIPE PENETRATION  
 SCALE: 3"=1'-0"

**9** CONDUIT SUPPORT  
 SCALE: N.T.S.



- NOTES:  
 1. ROUTE CONDUIT AS REQUIRED TO PROVIDE SLOPE AWAY FROM HOOD FLASHING.

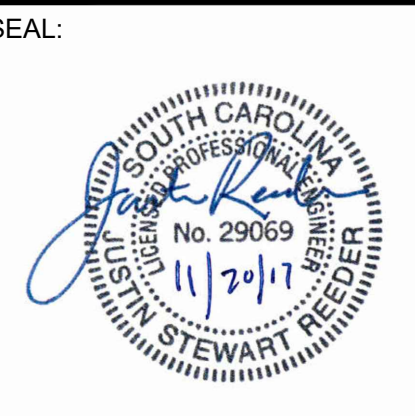
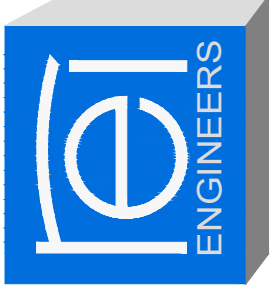
NOT USED



- NOTES:  
 1. TAPERED INSULATION NOT SHOWN.  
 2. ADD WOOD NAILERS TO CREATE SMOOTH TRANSITION.  
 3. INSULATION FILL TO MATCH AS NEEDED TO PROVIDE SMOOTH TRANSITION.

**10** MULTI PIPE PENETRATION  
 SCALE: N.T.S.

**12** LOW PROFILE EXPANSION JOINT  
 SCALE: 3"=1'-0"

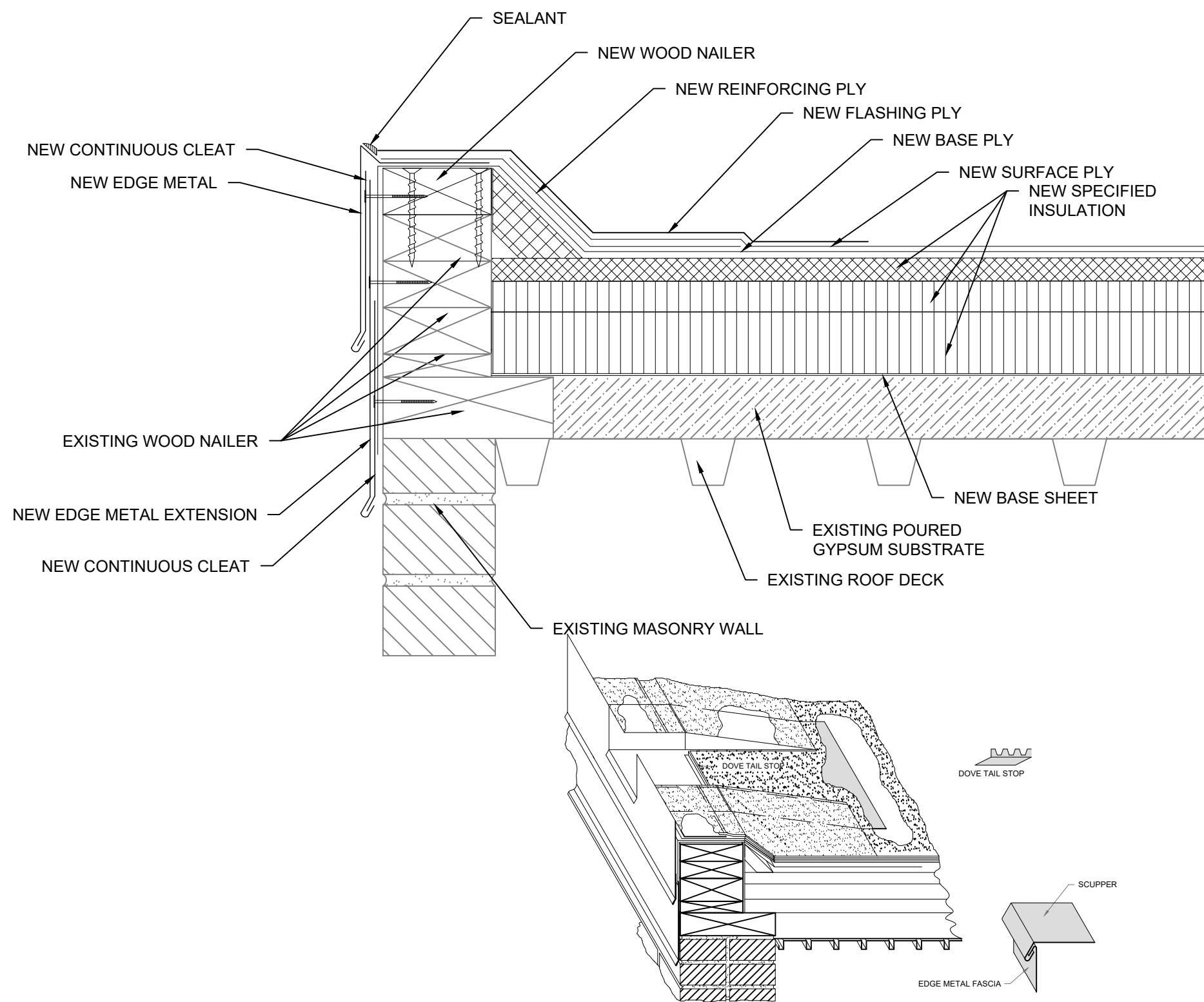


**JAMES B. EDWARDS ELEMENTARY SCHOOL  
 ROOF REPLACEMENT**  
 CHARLESTON COUNTY SCHOOL DISTRICT  
 MT. PLEASANT, SOUTH CAROLINA  
 REI PROJECT #: 17CHS-067

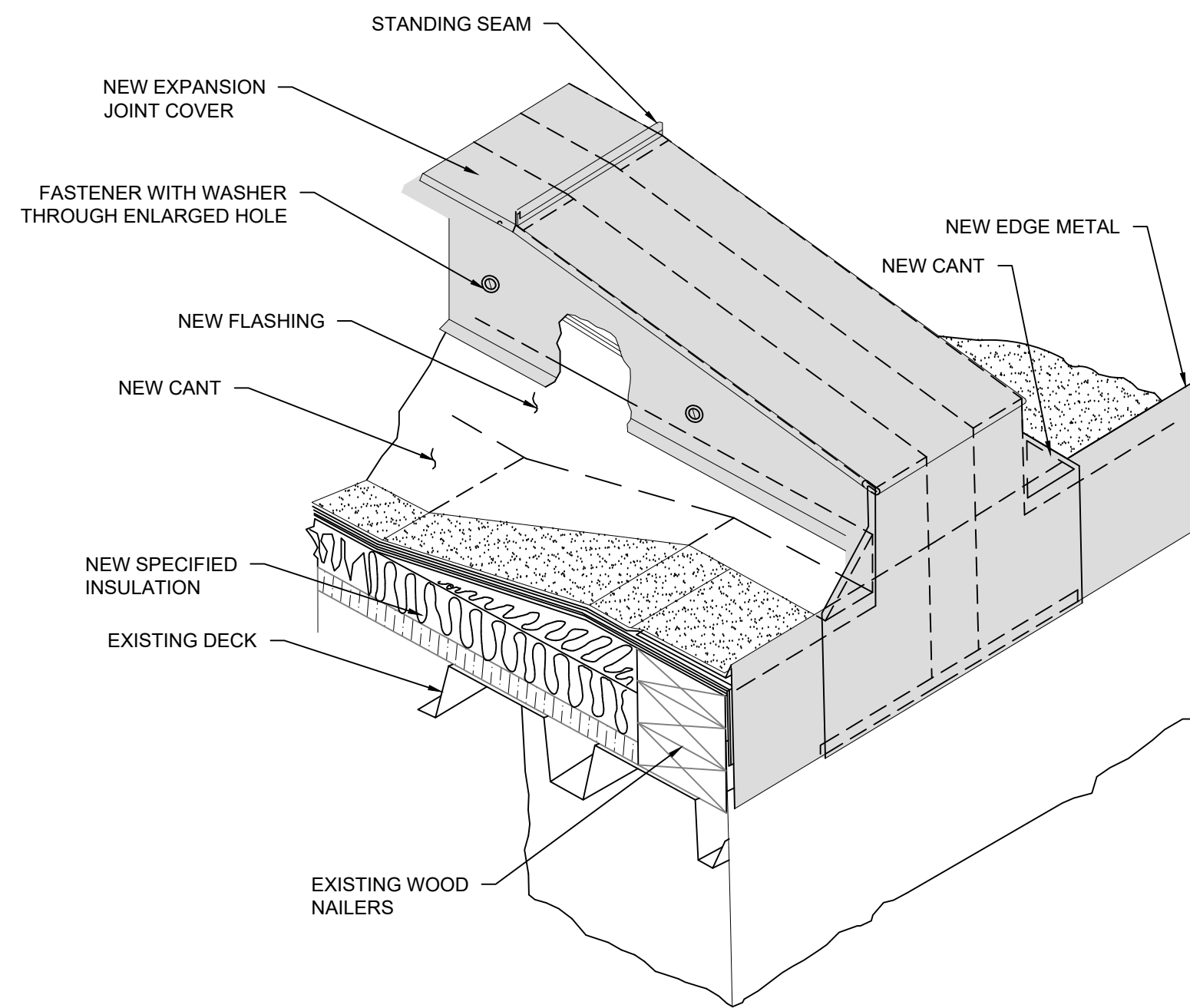
REVISION #	REVISION DATE
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DRAWN BY: RLW  
 SCALE: N.T.S.  
 DATE: 11/20/2017

DRAWING:  
**R-202**  
 SHEET 7 OF 8  
 ROOF DETAILS



- NOTES:  
 1. ADD WOOD NAILERS TO CREATE SMOOTH TRANSITION.  
 2. INSULATION FILL TO MATCH AS NEEDED TO PROVIDE SMOOTH TRANSITION.  
 3. FINISHED SCUPPER OPENING SHALL BE 8" IN WIDTH. REFER TO SECTION 07 62 00 FOR SCUPPER DIMENSIONS.  
 4. EXPOSED FACE HEIGHT OF EDGE METAL EXTENSION SHALL MATCH FACE HEIGHT OF EDGE METAL.



- NOTES:  
 1. NEW EDGE METAL EXTENSION NOT SHOWN FOR CLARITY.

NOT USED

**13** ROOF EDGE AND THRU EDGE SCUPPER SECTOR "A"  
 SCALE: 3"=1'-0"

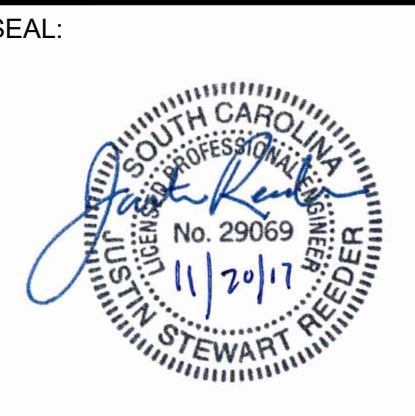
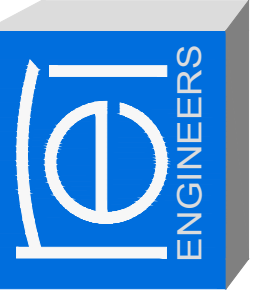
NOT USED

**14** EXPANSION JOINT TO ROOF EDGE  
 SCALE: 3"=1'-0"

NOT USED

NOT USED

ROOFING, WATERPROOFING & BUILDING  
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 www.reiengineers.com



**JAMES B. EDWARDS ELEMENTARY SCHOOL  
 ROOF REPLACEMENT**  
 CHARLESTON COUNTY SCHOOL DISTRICT  
 MT. PLEASANT, SOUTH CAROLINA  
 REI PROJECT #: 17CHS-067

REVISION #	REVISION DATE
1	
2	
3	
4	

DRAWN BY: RLW  
 SCALE: N.T.S.  
 DATE: 11/20/2017  
 DRAWING:  
**R-203**  
 SHEET 8 OF 8  
 ROOF DETAILS