

LEGEND

- ROOF TYPE 'A' OR 'A1'- EXHIBIT HALL BARRELS- PVC REFER TO DETAILS E5/A-501 OR D5/A-501
- ROOF TYPE 'B'- EXHIBIT HALL VALLEYS- PVC REFER TO DETAIL C5/A-501
- ROOF TYPE 'C'- EXHIBIT HALL- SBS- METAL REFER TO DETAILS E3/A-501
- ROOF TYPE 'C1'- EXHIBIT HALL- SBS- CONCRETE REFER TO DETAILS D3/A-501
- ROOF TYPE 'D'- EXHIBIT HALL- SBS- IRMA- CONCRETE REFER TO DETAILS E1/A-501
- WALKPAD

A1 NEW WORK ROOF TYPE PLAN
 1/32" = 1'-0"
 0 16' 32' 64'

NO.	DATE	REVISION
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SPEC. NO.	DATE
SCALE	LOCATION NO.
1/32" = 1'-0"	12/15/2014
DRAWN BY	TYPE NO.
MCM/MDJ	
CHECKED BY	FILE NO.
RHS	

BID DOCUMENTS- NOT FOR CONSTRUCTION

1 2

E

D

C

B

A

ROOF TYPE 'E' - TRAIN SHED (R-20)

PVC MEMBRANE FULLY ADHERED
 1/2" 100 PSI POLYISOCYANURATE COVERBOARD FULLY ADHERED (R-2.5)
 1/2" 100 PSI POLYISOCYANURATE COVERBOARD MECHANICALLY ATTACHED (R-2.5)
 EXISTING:
 MEMBRANE ROOFING - TO BE REMOVED
 5/8" GYPSUM BOARD MECHANICALLY ATTACHED (R-0.56)
 3" EXPS INSULATION - MECHANICALLY FASTENED (ESTIMATED R-15)
 2 PLY 30# FELT OR SELF ADHERED UNDERLAYMENT
 2" T&G WOOD DECKING

ROOF NAV NO. 3517-0-0

A1 3"=1'-0" 0 3' 6' 9"

PVC ROOF
TRAIN SHED

1 2

3 4

ROOF TYPE 'C' - LOW-SLOPE ROOFS
 (MINIMUM R-VALUE 20)
 METAL DECK
 -SBS MEMBRANE FULLY ADHERED
 - 0.5" GYPSUM COVER BOARD (R-VALUE 0.6)
 - 25 PSI POLYISOCYANURATE TAPERED 1/4" PER FOOT (MIN. THICKNESS 0.5", MIN. R-VALUE 2.5)
 - 2.0" (TYPICAL) 25 PSI POLYISOCYANURATE MECHANICALLY FASTENED (R-VALUE 12.1)
 - 0.5" GYPSUM THERMAL BARRIER (R-VALUE 0.6)
 - EXISTING STEEL DECK

ROOF NAV NO. 21634-48824-0

E3 3"=1'-0" 0 3' 6' 9"

ROOF TYPE C-1 - LOW-SLOPE ROOFS
 (MINIMUM R-VALUE 20)
 CONCRETE DECK
 - SBS MEMBRANE FULLY ADHERED
 - 0.5" GYPSUM COVER BOARD (R-VALUE 0.6)
 - 25 PSI POLYISOCYANURATE TAPERED 1/4" PER FOOT (MIN. THICKNESS 0.5", MIN. R-VALUE 2.5)
 - 2.0" (TYPICAL) 25 PSI POLYISOCYANURATE FULLY ADHERED (R-VALUE 12.1)
 - EXISTING CONCRETE DECK (ESTIMATED R-VALUE 0.4)

ROOF NAV NO. 21856-49238-0

D3 3"=1'-0" 0 3' 6' 9"

SBS ROOF

ROOF TYPE D -IRMA ROOF
 (MINIMUM R-VALUE 20)
 - CONCRETE PEDESTAL PAVER- 24"X24"X2 1/4"
 - SBS WALKPAD- 8" STRIPS
 - FILTER FABRIC
 - 2" 60 PSI TAPERED (3" PER FOOT)
 - 2" 60 PSI EXPS INSULATION LOOSE LAY (R-10)
 - DRAINAGE MAT
 - SBS CAPSHEET WITH INTEGRAL ROOT BARRIER
 - SBS SMOOTH BASEPLY TG
 - SEPERATOR SHEET TG
 - COMPOSITE DECK

ROOF NAV NO. 21822-48824-0

B3 3"=1'-0" 0 3' 6' 9"

IRMA ROOF
EXHIBIT HALL

3 4

5 6

ROOF TYPE A
 BARREL R-20 (MINIMUM R-VALUE 20)
 - PVC MEMBRANE- FULLY ADHERED
 - 1.5" HIGH DENSITY 100PSI POLYISOCYANURATE COVER BOARD FULLY ADHERED (R-VALUE 8)
 - 0.5" 25PSI POLYISOCYANURATE MECHANICALLY FASTENED (R-VALUE 2.5)

EXISTING ROOF
 - MECHANICALLY FASTENED CSPE SINGLE-PLY MEMBRANE (TO BE REMOVED)
 - 1" POLYISOCYANURATE INSULATION (ESTIMATED R-VALUE 5.6)
 - 2" EXPS INSULATION (ESTIMATED R-VALUE 10.0)
 - 5/8" GYPSUM THERMAL BARRIER (ESTIMATED R-VALUE 0.56)
 - METAL DECK

ROOF NAV NO. 305079-0-0

E5 3"=1'-0" 0 3' 6' 9"

ROOF TYPE 'A'- BARRELS

ROOF TYPE B
 VALLEYS (MINIMUM R-VALUE 20)
 STRIP TO DECK
 - PVC MEMBRANE- FULLY ADHERED
 - 0.5" HIGH DENSITY 100PSI POLYISOCYANURATE COVER BOARD FULLY ADHERED (R-VALUE 2.5)
 - POLYISOCYANURATE TAPERED 1/4" PER FOOT (0.5" MIN. THICKNESS, MIN. R-VALUE 2.5)
 - 3.0" 25 PSI POLYISOCYANURATE MECHANICALLY FASTENED
 - VAPOR BARRIER
 - 5/8" GYPSUM THERMAL BARRIER (ESTIMATED R-VALUE 0.56)
 - EXISTING METAL DECK

ROOF NAV NO. 64498-0-0

C5 3"=1'-0" 0 3' 6' 9"

ROOF TYPE 'B'- VALLEYS

TYPICAL ROOF TYPE 'B' EXTENTS AND LOCATIONS

PVC ROOF
EXHIBIT HALL

5 6

Pennsylvania Convention Center PHILADELPHIA
 AN **CSMD** MANAGED FACILITY

SEAL

Kelly/Macello Inc. Architects & Planners
 1800 MARKET STREET, SUITE 625
 PHILADELPHIA, PA 19102-1915

RAMLA BENAISSA ARCHITECTS
 1800 MARKET STREET, SUITE 625
 PHILADELPHIA, PENNSYLVANIA 19103

PROJECT & LOCATION
 PENNSYLVANIA CONVENTION CENTER
 1101 ARCH STREET

PROJECT TITLE
 PENNSYLVANIA CONVENTION CENTER
 ROOF REPLACEMENT PROJECT

DRAWING TITLE
 ROOF TYPES

APPROVED BY

ROOF REPLACEMENT PROJECT
 PENNSYLVANIA CONVENTION CENTER
 ONE PENNSYLVANIA CONVENTION CENTER PLACE
 1101 ARCH STREET
 PHILADELPHIA, PENNSYLVANIA 19107

CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

NO.	DATE	REVISION
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SPEC NO. **DATE**
 3"=1'-0" 12/15/2014

SCALE **LOCATION NO.**

DRAWN BY **TYPE NO.**
 MCM/MDJ

CHECKED BY **FILE NO.**
 RHS

DRAWING NO.
 A-501

ARCHITECTURE
 SHEET 33 OF 43

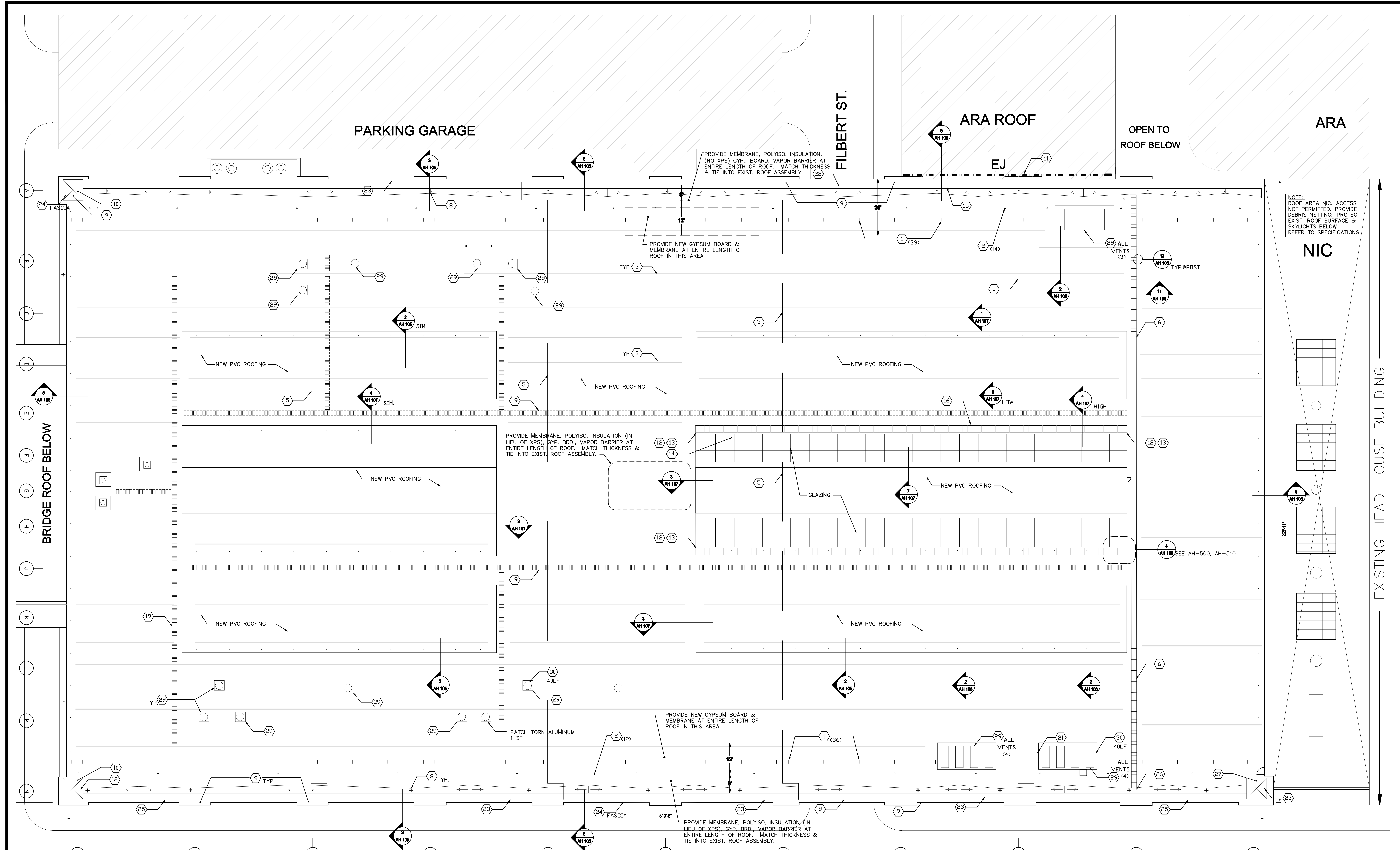
BID DOCUMENTS- NOT FOR CONSTRUCTION

NO.	DATE	REVISION
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SPEC. NO.	DATE
XXX	12.15.14
SCALE	LOCATION NO.
AS NOTED	XXX
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DRAWING NO.
AH 102

ARCHITECTURE
SHEET OF 00



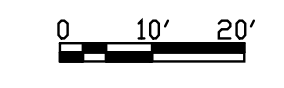
GENERAL NOTES

- PRIOR TO COMMENCING ANY WORK ON THE ROOF OF THIS PROJECT, MEET WITH ARCHITECT/CONSULTANT AND ROOFING SUBCONTRACTOR TO INSPECT THE EXISTING ROOFING SYSTEM.
- INSTALL ROOF PROTECTION AND ACCESS RESTRICTING RAILING SYSTEM IN SUMP & GUTTER AREA AFTER COMPLETION OF INSPECTION REPORT. DO NOT RESTRICT FLOW OF WATER TOWARD AND/OR INTO THE DRAIN SUMP REGION. MAINTAIN CLEAR DRAIN STRAINERS THROUGHOUT PROJECT.
- EXISTING SNOW GUARD SYSTEM AND BRACKETS, EXISTING ROOF MEMBRANE, INSULATION, COVER BOARD TO BE REMOVED TO EXAMINE EXISTING WOOD DECK SUBSTRATE BY ARCHITECT PRIOR TO RE-ROOFING.
- REMOVE EXISTING ROOFING MATERIALS INCLUDING CAP SHEET, PROTECTION BOARD & INSULATION, FLASHINGS, BASE FLASHINGS AND REPLACE WITH FULLY ADHERED PVC MEMBRANE OVER INSULATION & COVERBOARD. REFER TO SPECIFICATIONS FOR FULL SCOPE OF WORK.
- REPLACE DAMAGED WOOD DECKING & PURLINS & BLOCKING AS REQUIRED. REFER TO AH-102 & AH-201.
- REMOVE AND REPLACE, SHEET METAL CORNICE - EAST AND WEST SIDE (BELOW DRAIN/SUMP AREA)
- RELIEF CUT EXIST. EXPANSION JOINT ALONG ARA TOWER ROOF PERIMETER. PROVIDE NEW FLASHING.
- FLUSH ALL ROOF DRAINS AT START OF PROJECT & SUBMIT WRITTEN REPORT ON CONDITIONS. REFER TO SPECIFICATIONS.
- ALL GUTTER DRAINS SHALL BE FITTED WITH A CAST IRON DRAIN STRAINER
- DIMENSIONS NOTED ARE FLATTENED AND APPROXIMATE AND DO NOT REFLECT THE ACTUAL, ARCHED ROOF SURFACE AREA. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD
- GO TO PAINT RUSTED MECHANICAL DUCTWORK, CURBS & SUPPORTS.
- RE-COAT RUSTED AREAS OF GALVANIZED SNOW GUARDS & BRACKETS.
- THE STORAGE OF MATERIALS AND DEBRIS ON THE ROOF IS PROHIBITED. THE STORAGE OF MATERIALS & DEBRIS SHALL BE RESTRICTED TO QUANTITY OF MATERIALS NECESSARY TO COMPLETE ONE DAYS ROOFING, CARPENTRY &/OR SHEET METAL WORK AS TO NOT EXCEED THE ALLOWABLE ROOF LOAD ON ANY STRUCTURE OF 20 PSF MAXIMUM UNLESS OTHERWISE NOTED.
- LIGHTNING PROTECTION TO REMAIN IN PLACE. EXIST. ROOF PENETRATIONS ARE TO BE LEFT INTACT, FUNCTIONAL & ACCESSIBLE TO OTHERS. ROOF CONTRACTOR TO MAKE PENETRATIONS WEATHERTIGHT UNTIL NEW THROUGH ROOF ASSEMBLIES AT THESE LOCATIONS CAN BE INSTALLED. WEATHERPROOFING OF ALL PENETRATIONS & TIE INS BY ROOF CONTRACTOR. REFER TO SPECIFICATIONS.
- REFER TO SHEETS A-508, A-509, A-510 FOR ADDITIONAL PVC ROOF DETAILS
- REFER TO SE-1, SE-2, P-1, S-1, S-2 FOR ELECTRICAL, PLUMBING AND STRUCTURAL WORK.

KEY NOTES

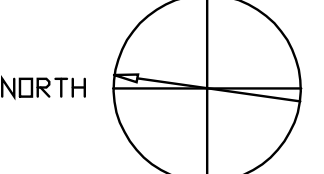
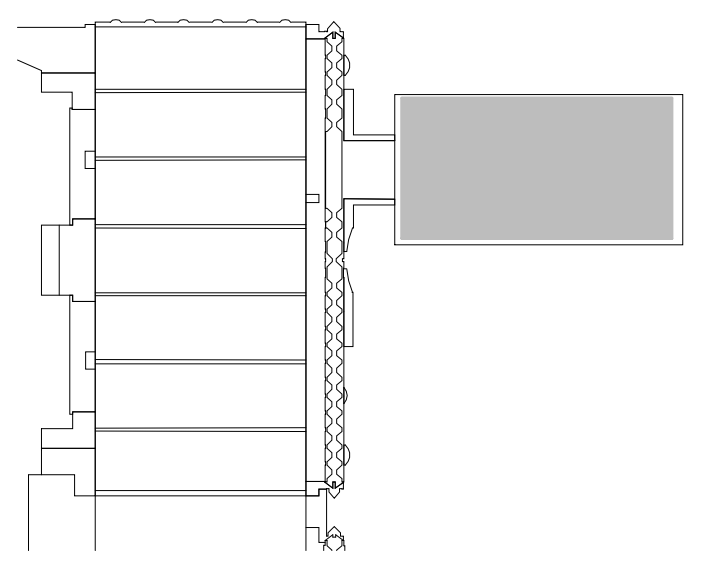
- REMOVE OBSOLETE SNOW GUARD BRACKETS-REPAIR WOOD DECK AS REQUIRED.
- REMOVE OBSOLETE EYEBOLTS - REPAIR WOOD DECK AS REQUIRED.
- REMOVE & REINSTALL EXIST. SNOW GUARDS & BRACKETS FOR RE-ROOFING & EXAM. OF EXIST. WOOD DECK; SEE S-1 & S-2. RECOAT GALVANIZING AT SELECTED LOCATIONS.
- REPLACE OR MODIFY EXISTING ROOF CURBS PRIOR TO NEW ROOFING
- REPLACE ROOF EXPANSION JOINT
- PAINT EXISTING ACCESS STAIR & SUPPORTS
- PROVIDE FLASHING AT ACCESS STAIR POST PENETRATIONS
- EXISTING ROOF DRAINS TO REMAIN - PROVIDE NEW BRASS ROOF DRAIN STRAINERS - TYPICAL
- REPAIR & SOLDER EXISTING TCS
- SOLDER REPAIR JOINTS IN EXISTING COPPER COPING
- REPLACE EXPANSION JOINT BETWEEN TRAIN SHED AND ARA ROOF
- PROVIDE NEW GUTTER & DOWNSPOUTS
- PROVIDE NEW HEAT TRACE AT GUTTERS-REFER TO SE-1, 2
- PROVIDE NEW INSULATED GLAZING UNITS AT SKYLIGHT. REFER TO SHEET AH-510.
- JOINTS IN THE INSULATION BOARD TO BE STAGGERED DURING INSTALLATION. INSTALL FASTENERS PER FASTENER PLACEMENT DRAWINGS.
- ANY WET INSULATION & COVERBOARD TO BE REMOVED & REPLACED.
- RE-COAT RUSTED AREAS OF GALVANIZED SNOW GUARDS, BRACKETS, EXHAUST HOODS & VENTS.
- PRODUCTS USED IN THE ROOF COVER & ASSEMBLY INSTALLATION SHALL BE FM APPROVED.
- DEMOLITION ONLY AS MUCH INSULATION BOARD AS CAN BE COVERED SHOULD BE INSTALLED EACH WORKING DAY. LOOSE ROOF COVER EDGES SHOULD BE SEALED AT THE END OF DAY TO MINIMIZE MOISTURE DAMAGE.
- PROVIDE A MINIMUM OF TWO (2) 10 LB. ABC FIRE EXTINGUISHERS AVAILABLE ON THE ROOF DURING CONSTRUCTION
- REPLACE COPPER PARAPET CLADDING & FLASHING
- CUT BACK EXISTING END METAL PANELS TO INSTALL BASE FLASHING SHEETS; REPLACE METAL PANELS AS REQUIRED.
- REPLACE 100 SF OF METAL SIDING TO MATCH EXIST.
- REFER TO SHEET AH-110 FOR MISCELLANEOUS REPAIRS AT METAL CLADDING AND ROOFS.
- LIGHTENING PROTECTION TO REMAIN IN PLACE; REFER TO A-101 & SPECIFICATIONS.
- COORDINATE LOCATION OF WALKPADS WITH FALL PROTECTION DRAWINGS.
- RESECURE LOOSE UNISTRUT SUPPORTS.
- REPAIR/RESECURE LOOSE AND BULGING METAL PANELS.
- REPAIR FAILED SOLDER JOINTS AT ALL LOCATIONS- TYP.
- PROVIDE SEALANT AT OPEN JOINTS - TYP.
- FILL OPEN HOLES
- PROVIDE NEW GUARD RAIL AT TERMINATION OF ACCESS STAIR. REFER TO S-1 & S-2
- REPAIR DENTED COPPER
- REPAIR ENDS OF EXIST. STANDING SEAM ROOF
- SCRAPE AND PAINT EXHAUST HOODS, VENTS & CURBS
- SOLDER REPAIR CURB FLASHING - 50 LF.

NEW WORK PLAN
1/16" = 1'-0"



SYMBOL KEY

- RD ROOF DRAIN
- ← DIRECTION OF GUTTER FLOW AND SLOPE OF ROOF
- LL=XXPSF ROOF LOADING DESIGNATION
- VENT
- ⊖ EXHAUST FAN CURB
- PITCH POCKET
- SNOW GUARDS
- LIGHTNING PROTECTION



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