**PIKES PEAK LIBRARY DISTRICT**  
**REPLACE ROOFING PENROSE/CARNEGIE LIBRARY**

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**Applicable Codes:**  
- 2018 International Mechanical Code (IMC)  
- 2018 International Building Code (IBC)  
- 2018 International Fuel Gas Code (IFGC)  
- 2018 International Plumbing Code (IPC)  
- 2018 International Energy Conservation Code (IECC)

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**Design Parameters**  
- **Roof Insulation Value**  
  - Deck 1: R-19.9  
  - Decks 2-8: R-31.3 Minimum  
- **New Roof Weight:** 3-4 psf  
- **Design Wind Speed:** 130 mph (Ultimate)  
- **Special Wind Zone:** Yes  
- **Existing Roof Weight:** 3-8 psf  
- **Fire Resistance Rating:** UL Class A  
- **Roof Slope**  
  - Decks 1-3, 4A: 0.25”/ft or Better  
  - Decks 4, 5-8: Built Into Roof Insulation  
- **Roof Recover Project:** Yes at Deck 1

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**VICINITY MAP**

20 N Cascade Ave.  
Colorado Springs, CO 80903

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**SATELLITE PHOTO**

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**20 N Cascade Ave.**  
**Colorado Springs, CO 80903**
CONSTRUCTION NOTES:

1. Lift & reset conduit as necessary to install new roofing. Conduit shall fall 10° below finished roof surface. Insulated support supports 10° c. To support conduit if old supports are missing or cannot be reused.

2. Lift & reset conduit & security cameras on parapet walls as necessary to install new roofing/ocpap. Coordinate. 

3. Contractor will need to verify and map out any conduit, or other instructions that may exist that are trace to the bottom side of the structural metal deck throughout the buildings.

4. Prepare field至structural access ramps shown on the plan panel. If so desired, with a 30-degree setting, back toward field of roof.

5. Ladder to be reset to back edge of the field. Field to be lifted and reset to install new roofing. These ladders may also need to be trimmed to accommodate new rigid, hit. 

6. Remove all moisture relief vents on deck 4.

EXISTING ROOF SYSTEM DECK 1
Wood deck
3.0" ISO. Foam Insul. BD. 
Adhered 60 Mil EPDM Roof Membrane
Conc. DECK
Tapered Insulation Used at Drain Sumps to Have 1" per foot of slope (1/12).
Tapered Insulation Used at Crickets to Have 0.5/12 Slope Where the Field of the Tapered Insulation Used in Field of Roof to Have 1/8" per foot of slope (0.125/12) at all indicated tapered insulation locations.

EXISTING ROOF SYSTEM DECK 2
Metal deck
2.5" ISO. Foam Insul. BD. 
2.0" Perlite Insul. BD. 
7.5" Asphalt Bur (Smooth Surface)
Adhered 45 Mil Fleeceback EPDM Roof Membrane

EXISTING ROOF SYSTEM DECKS 3 & 4
Concrete deck
Tapered EPS Insul. BD. 
5.0" Wood Fiber Cover BD
Adhered 45 Mil Fleeceback EPDM Roof Membrane

EXISTING ROOF SYSTEM DECK 5
Metal deck
2.5" ISO. Foam Insul. BD. 
2.0" Perlite Insul. BD. 
Adhered 45 Mil Fleeceback EPDM Roof Membrane

EXISTING ROOF SYSTEM DECK 6
Metal deck
2.5" ISO. Foam Insul. BD. 
3.0" Wood Fiber Cover BD
Adhered 45 Mil Fleeceback EPDM Roof Membrane

NEW ROOF SYSTEM DECK 1
Metal deck
3.0" ISO. Foam Insul. BD. (C) (R-17.4)
2.5" ISO. Foam Deck Cover BD. (R-17.4)
Adhered 60 Mil EPDM Roof Membrane
Adhered 45 Mil Fleeceback EPDM Roof Membrane

NEW ROOF SYSTEM DECKS 3 & 4
Metal deck
2.0" ISO. Foam Insul. BD. (R-11)
1.5" ISO. Foam Insul. BD. (R-9.5)
Adhered 60 Mil EPDM Roof Membrane
Adhered 45 Mil Fleeceback EPDM Roof Membrane

NEW ROOF SYSTEM DECK 5
Concrete deck
1.0" ISO. Foam Insul. BD. (R-17.4)
3.0" Wood Fiber Cover BD. (R-17.4)
Adhered 60 Mil EPDM Roof Membrane
Adhered 45 Mil Fleeceback EPDM Roof Membrane

TOTAL THERMAL R-VALUE: R-31.3

NEW ROOF SYSTEM DECKS 6 & 7
Metal deck
2.0" ISO. Foam Insul. BD. (R-11.4)
3.0" ISO. Foam Insul. BD. (R-14.0)
3.0" Wood Fiber Cover BD. (R-17.4)
6.0" HD. ISO. Foam Cover BD. (R-14.5)
Adhered 60 Mil EPDM Roof Membrane
Adhered 45 Mil Fleeceback EPDM Roof Membrane

TOTAL THERMAL R-VALUE: R-37.3

TAPERED INSULATION NOTES:
1. Tapered Insulation Used in Field of Roof to Have 16° per foot of slope (0.162)
at all indicated tapered insulation locations
2. Tapered Insulation Used at Crickets to Have 3.0/12 slope where the field of the tapered insulation used in field of roof to have 3.0/12 slope.
3. Tapered Insulation Used on Downspouts to Have 1.5/12 per foot of slope (0.125)
4. Use Tapered Edge Strip (0.75/12) to Create Smooth Transition between roof and top of perimeter curbs where shown.
1. DETAILS ARE ENLARGED FOR CLARITY. MAKE ALL CONNECTIONS WATERTIGHT.
2. LAP SEALANT NOT SHOWN. REFER TO MFR FOR LOCATIONS.
3. (E) DENOTES EXISTING ITEM TO REMAIN.
4. existing items are shaded gray.

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**Details:**

- **Details are enlarged for clarity.**
- **Make all connections watertight.**
- **Lap sealant not shown. Refer to Mfr for locations.**
- **(E) denotes existing item to remain.**