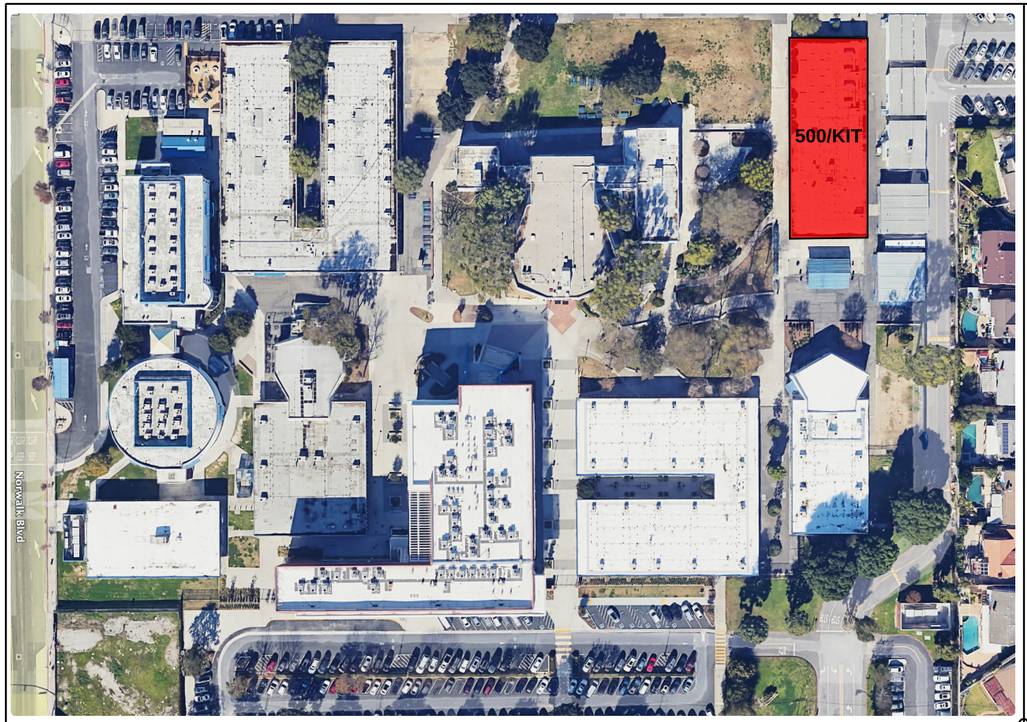

DRAWING INDEX

A-1 – COVER PAGE

B-1 – SITE MAP
B-2 – ROOF COMPOSITION
B-3 – PHOTOS

C-1 – PROPOSED ROOF SYSTEM

D-1 – BUDGET ESTIMATES

Los Alamitos High School

500/Kitchen Roof Replacement

The Garland Company
3800 E. 91st Street
Cleveland, OH 44105

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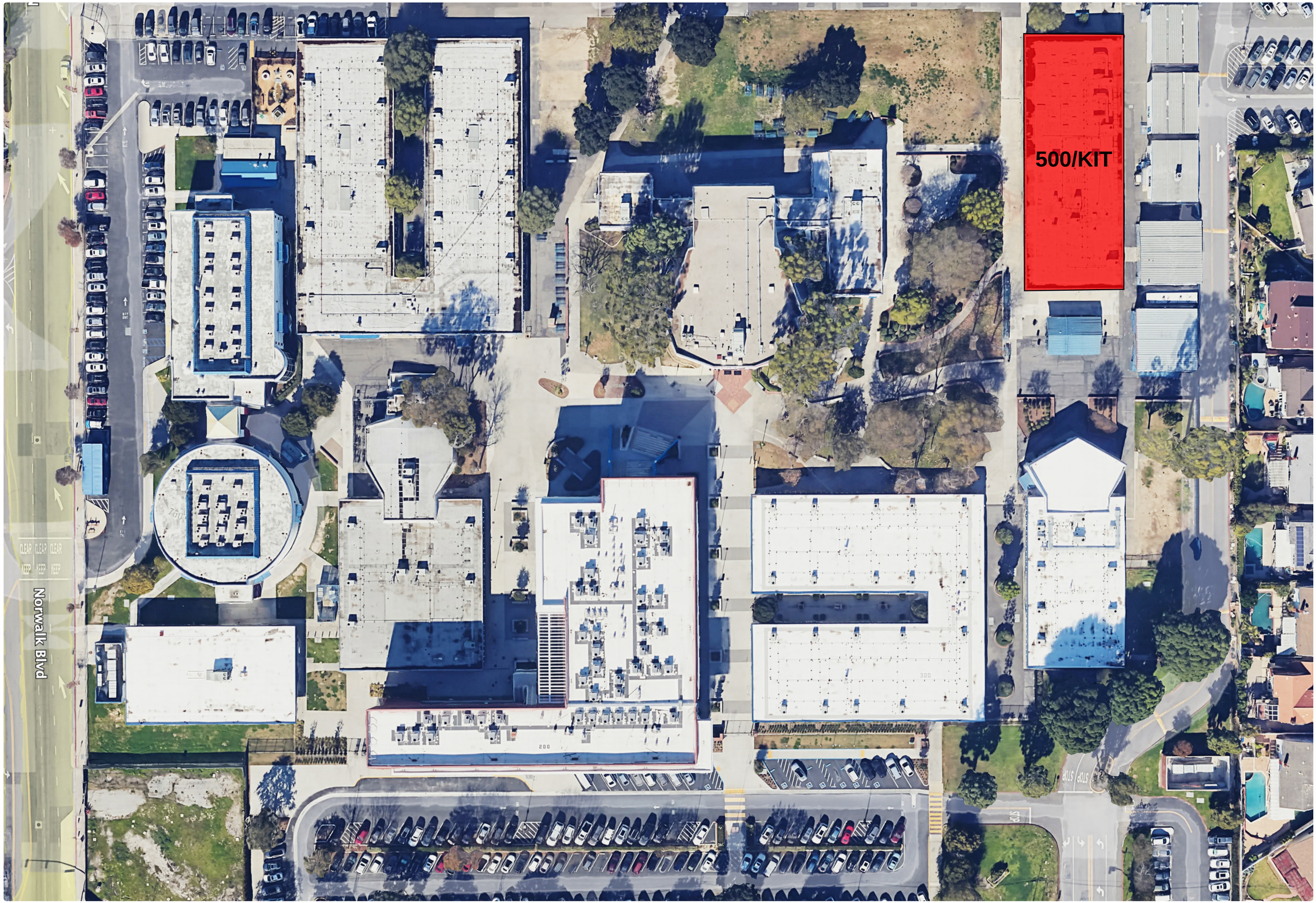
Los Alamitos, CA 90720

COVER PAGE

A-1



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Site Map

B-1

Los Alamitos High School
Scope Overview:

1. Roof sections indicated in red shall be removed and replaced with a KEE Hybrid roof system, installed per specification 07 55 00
2. Roof sections indicated in blue shall be removed and replaced with a 1-ply KEE roof system, installed per specification 07 55 00

Unit 500C:
Remove and demolish rooftop unit. Frame down the existing curb opening as needed to accommodate a new roof hatch. Install an OSHA-compliant fixed roof access ladder, final selection to be determined by the owner.

Unit 500B:
Remove and demolish rooftop unit. Patch concrete hole after removal

504

502

Activities

500/KIT

ASB

Engineering

Contractor to install and flash in two (2) new Solatube penetrations per manufacturer-supplied details.

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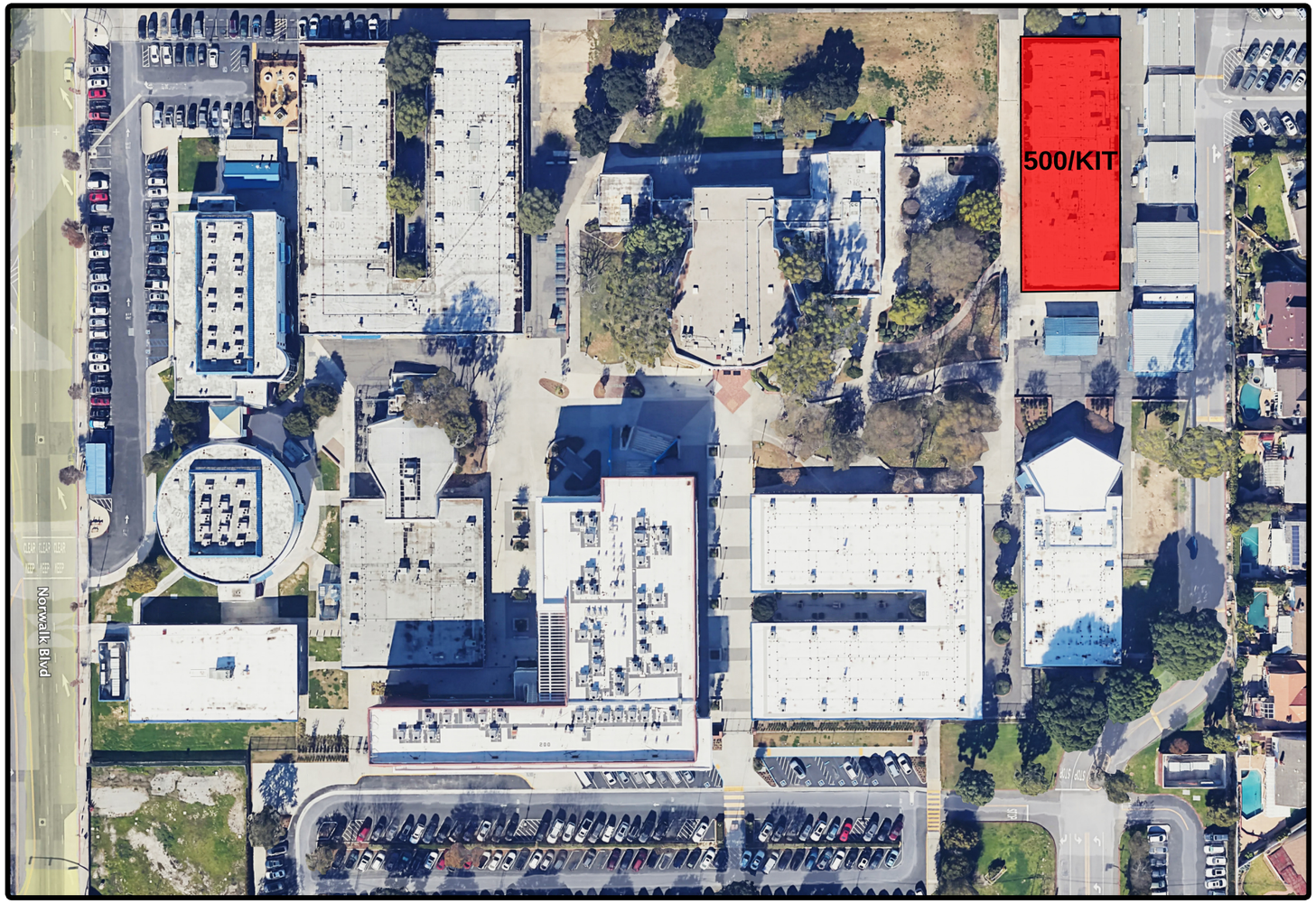
Site Map

B-1

Existing Roof Composition



Roof Section	Existing Roof System
500 / Kitchen	Coated BUR with 1.5" Perlite over a Concrete Deck

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Existing Roof Composition

B-2

Overview of BLDG 500/Kitchen. Weathered silver emulsion BUR.

Walkway pads are severely blistered and deteriorated.

Wood pipe support blocks have damaged the silver emulsion coating and BUR membrane.

Membrane around condensate drain is cracked and deteriorated.

Conduit penetration flashings are brittle and cracking. Mastic is separating from the membrane

Several abandoned conduits and curbs, to be removed during reroof project

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Photos

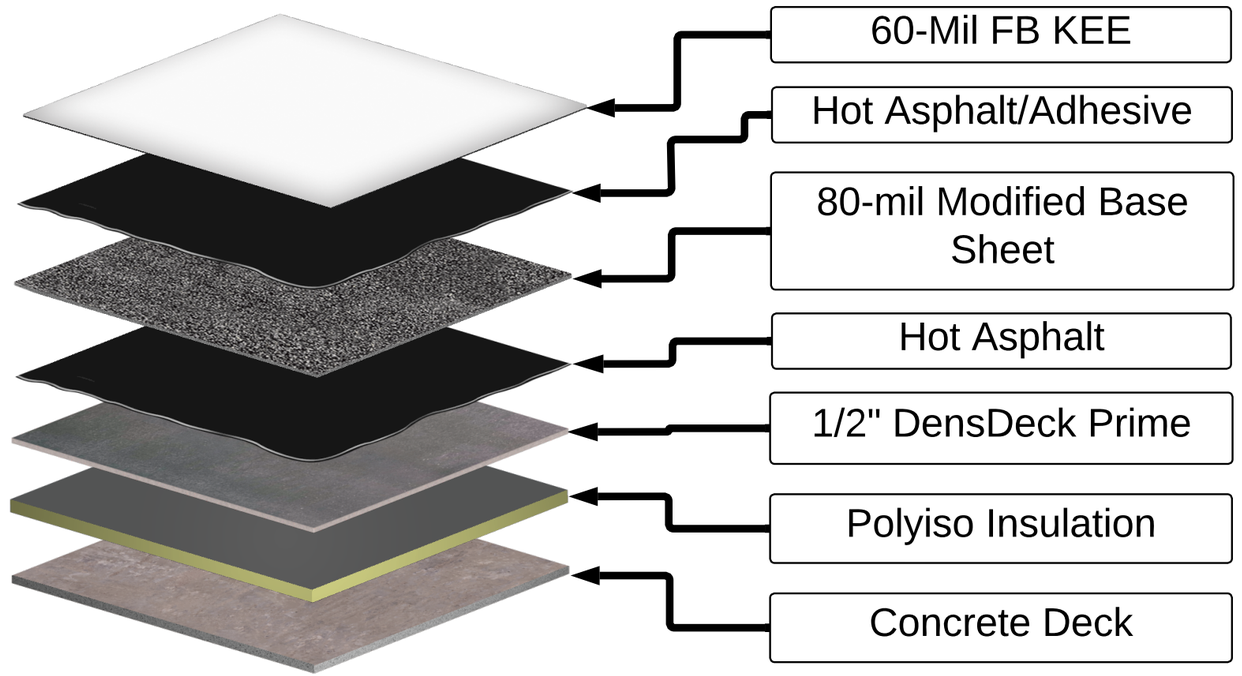
B-3

Roof System Recommendation: 2-Ply KEE Hybrid Roof Replacement

Scope of Work

1. Remove existing roofing, waterproofing, insulation, flashings, edge metal, and copings to the deck.
2. Abate roofing materials as indicated per supplied testing report.
3. Contractor shall completely remove all indicated abondoned curbs, units, sleepers, and specified conduit lines.
4. Install a combination of Polyiso insulation and 1/2" DensDeck prime to match the existing thickness of insulation. Insulation and coverboard plies shall be adhered with manufacturer approved adhsive or hot asphalt per engineer approved wind uplift calculations.
5. 1/4" DensDeck prime shall be installed on all vertical substrates to recieved KEE flashing membrane.
6. Contractor shall install 1-ply hot-applied modified base sheet and 1 ply 60-mil fleece-back KEE thermoplastic membrane with manufacturer approved spray adhesive or hot asphalt.
7. All pipes shall recieve new pipe supports, clamps, and pads installed per code and manufacturer requirements.
8. All drains shall be removed, inspected, and hardware replaced as approved. Drain areas shall be sumped a minimum of 4’ x 4’. Contractor may choose to extend drain sumps to ensure proper slope for adequate drainage. Contractor shall lay plies and flashing at drain areas to ensure there are no bucking conditions.
9. All pipe flashings shall be replaced with KEE pipe flashings.
10. All existing scuppers shall be removed and replaced with new 22 ga clad metal scuppers.
11. New coping shall be installed on all parapet walls, broken from manufacturer supplied, contractor purchased kynar sheet metal. 24ga, 2-piece coping as shown on manufacturer details. All sheet metal shall be purchased from the roof membrane manufacturer for warranty. Color as approved by the owner. Contractor responsible to provide wood nailers on all walls per manufacturer details.
12. Install new building call out stencils per manufacturer details.

2-Ply KEE Hybrid: 30-Year Proposed System



Roof Considerations

- Hot asphalt speeds up installation on open roof sections, therefore reducing labor costs.
- Base sheet acts as a working surface for the various trades (HVAC, plumbing, electrical) prior to the installation of the KEE cap sheet.
- Roof sections have a minimal amount of slope and overall poor drainage. 2 Ply KEE system is recommended.
- Removing abandoned curbs decreases the number of roof penetrations, minimizing potential points of water intrusion and enhancing long-term waterproofing.
- The reflective properties of the KEE cap sheet reduce heat absorption, contributing to energy savings and compliance with cool roof standards.
- 2 Ply KEE hybrid system is a 30 year warranted system, 200+ mils thick, which protects against accidental damage, trades, and vandalism.

Roof Sections

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Proposed Roof System

C-1

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Scope Overview

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