



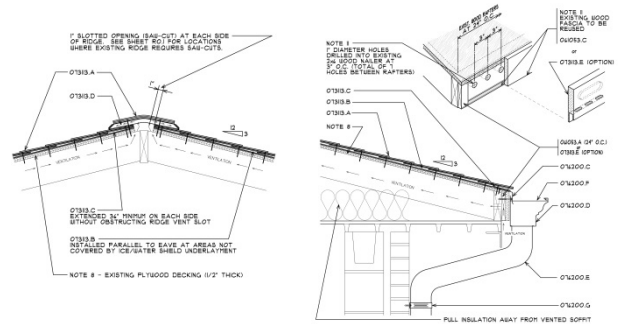
**Loudon County Office Building  
Roof Replacement  
Loudon County Government  
Loudon, Tennessee**

Roof Replacement	25,840 s.f.
Construction Cost	\$112,386
Cost/s.f.	\$4.35
Completion Date	2014



along the eaves, valleys, end walls, and roof penetrations.

A continuous rigid ridge exhaust vent would be installed at all the ridges and an eave ventilating fascia board would be installed along the eaves to increase attic ventilation for the new laminated shingle roofing system.



The existing roof was identified as a 3-tab fiberglass asphalt shingle installed over a 15# felt underlayment on plywood decking. The attic space beneath the existing roof was poorly ventilated which caused premature aging of the existing shingles. The existing attic framing members required strengthening and additional wood bracing to meet current building codes for the new shingle roofing system.

Unique challenges on the project included leveling up the plywood decking in some locations to minimize sagging of the roof deck, installing a “woven shingle pattern” in the valleys because of the irregularities in the existing plywood roof deck sight lines, and resizing the gutters and downspouts for increased drainage of the new roof system.



Additional Wood Bracing Added per Code



New Gutters & Downspouts



Painted Vent Stacks

The new shingle roofing system installed was a laminated architectural shingle which would assist with hiding the irregularities noted in the existing plywood roof deck. The new shingles would be installed over a 30# felt underlayment with an ice/water shield membrane installed



Overall View of the New Shingle Roof