

Cook, Flatt & Strobel Engineers  
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 Kansas City, Kansas 66103  
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October 15, 2020

Kyle Gorrell  
 Lee's Summit R-7 School District  
 301 NE Tudor Road  
 Lee's Summit, MO 64086

Re: Lee's Summit Middle School #4  
 Lee's Summit, Missouri  
 CFS # 20-1074

Cook, Flatt & Strobel (CFS) Engineers, P.A. has reviewed the pavement section for the reference project. The contractor proposes to provide a laydown area covering 80% of the proposed pavement area. The laydown area will be constructed using geogrid and 6 inches of 3 to 5 inch crushed stone. The 3 to 5 inch stone will be covered with 4 inches of compacted MODOT Type 5 crushed stone when pavement construction commences. The proposed pavement sections versus Lee's Summit's pavements sections are summarized in the tables below.

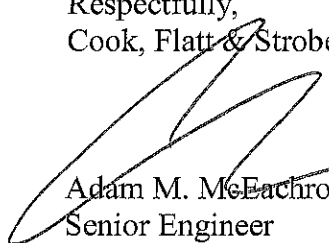
Material	Lee's Summit Light Duty Pavement (in)	Proposed Light Duty Pavement - Laydown Area (in)	Proposed Light Duty Pavement (in)
Surface Asphalt APWA Type III	1.5	2	2
Base Asphalt APWA Type I	4	3	3
MoDOT Type 5 Base Rock	6	4	8
3" Minus Rock	--	6	--
Geogrid	Yes	Yes	Yes
ESAL's (millions)	1.362	2.797	1.669
Structrual #	4.30	4.75	4.42

Material	Lee's Summit Heavy Duty Pavement (in)	Proposed Heavy Duty Pavement - Laydown Area (in)	Proposed Heavy Duty Pavement (in)
Surface Asphalt APWA Type III	1.5	2	2
Base Asphalt APWA Type I	5	6	6
MoDOT Type 5 Base Rock	6	4	6
3" Minus Rock	--	6	--
Geogrid	Yes	Yes	Yes
ESAL's (millions)	2.588	15.399	6.419
Structrual #	4.70	5.95	5.31

A CBR value of 3 for the clay sub-grade was assumed. The proposed pavement sections provide higher Equivalent Single Axle Loads (ESAL's), and greater structural numbers.

Please contact CFS with further questions. 913-627-4090

Respectfully,  
Cook, Flatt & Strobel Engineers



Adam M. McEachron, P.E.  
Senior Engineer

