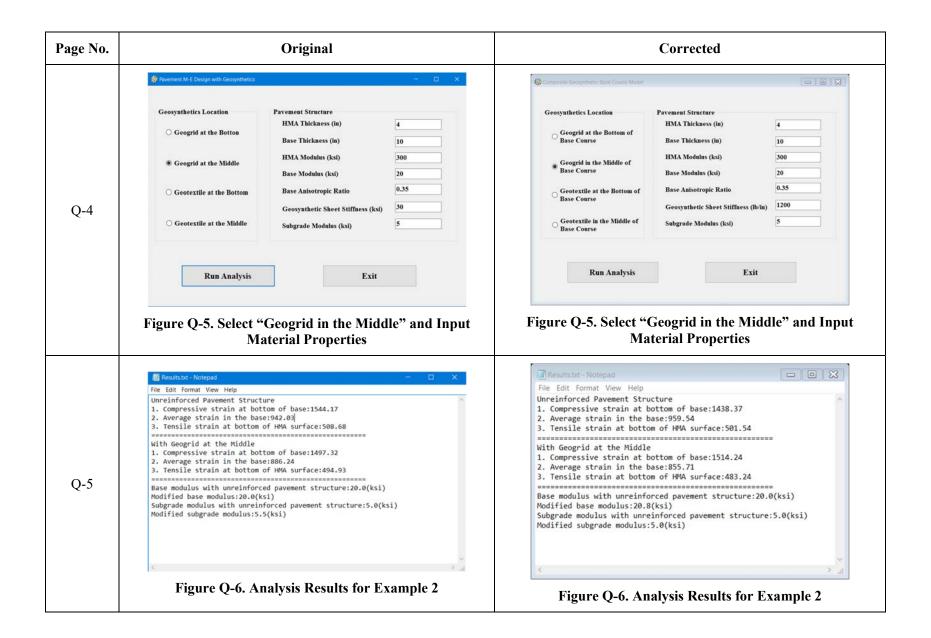
Errata Sheet for NCHRP Web-Only Document 235

Quantifying the Influence of Geosynthetics on Pavement Performance

Page No.	Original	Corrected		
C-3	(Table C-2 footnote) a "Sheet stiffness corresponding to 2 percent tensile strain."	^a "Tensile sheet stiffness values are at 0.5% tensile strain for TX geogrid and at 2% tensile strain for BX geogrid."		
Q-1	It can be observed from Figure Q-3 that the subgrade modulus has been increased from 5.0 ksi to 11.9 ksi with placing the geogrid at the bottom of the base course.	It can be observed from Figure Q-3 that the subgrade modulus has been increased from 5.0 ksi to 13.1 ksi and base modulus has been increased from 20.0 ksi to 22.5 ksi with placing the geogrid at the bottom of the base course.		
Q-2	Geosynthetics Location Geogrid at the Botton Geogrid at the Middle Geotextile at the Bottom Geotextile at the Middle Run Analysis Figure Q-2. Select "Geogrid at the Bottom" and Input Material Properties	Geosynthetics Location Geogrid at the Bottom of Base Course Geotextile at the Bottom of Base Course Geotextile in the Middle of Base Modulus (ksi) Geotextile in the Middle of Base Modulus (ksi) Exit Figure Q-2. Select "Geogrid at the Bottom" and Input Material Properties		

Page No.	Original	Corrected		
Q-3	File Edit Format View Help Unreinforced Pavement Structure 1. Compressive strain at bottom of base:1711.82 2. Average strain in the base:1192.74 3. Tensile strain at bottom of HMA surface:553.56 With Geogrid at the Bottom 1. Compressive strain at bottom of base:1029.23 2. Average strain in the base:1210.01 3. Tensile strain at bottom of HMA surface:566.82 Subgrade modulus with unreinforced pavement structure:5.0(ksi) Modified subgrade modulus:11.9(ksi) Base modulus with unreinforced pavement structure:20.0(ksi) Modified base modulus:20.0(ksi)	File Edit Format View Help Unreinforced Pavement Structure 1. Compressive strain at bottom of base:1438.37 2. Average strain in the base:959.54 3. Tensile strain at bottom of HMA surface:501.54 With Geogrid at the Bottom 1. Compressive strain in the base:927.10 3. Tensile strain at bottom of HMA surface:491.24 Subgrade modulus with unreinforced pavement structure:5.0(ksi) Modified subgrade modulus:13.1(ksi) Base modulus with unreinforced pavement structure:20.0(ksi) Modified base modulus:22.5(ksi)		
	Figure Q-3. Analysis Results for Example 1	Figure Q-3. Analysis Results for Example 1		
Q-3	The "Results" file will then open up, as shown in Figure Q-6, which indicates that the subgrade modulus has been increased from 5.0 ksi to 5.5 ksi with a geogrid layer in the middle of the base course.	The "Results" file will then open up, as shown in Figure Q-6, which indicates that the base modulus has been increased from 20.0 ksi to 20.8 ksi with a geogrid layer in the middle of the base course.		



Page No.	Original			Corrected		
Q-5	As can been seen from subgrade modulus has been placing the geotest course.	een increased from 5.	0 ksi to 14.6 ksi	As can been seen from the subgrade modulus has been when placing the geotextic course.	en increased from 5.0	ksi to 7.7 ksi
	## Pavement M-E Design with Geosynthetics		- o x	Composite Georynthetic-Base Course Model		
	Geosynthetics Location	Pavement Structure		Geosynthetics Location	Pavement Structure	
	Geogrid at the Botton	HMA Thickness (in)	5	Geogrid at the Bottom of	HMA Thickness (in)	5
		Base Thickness (in)	11	Base Course Base Thickness (in)	Base Thickness (in)	11
	○ Geogrid at the Middle	HMA Modulus (ksi)	300	Geogrid in the Middle of Base Course	HMA Modulus (ksi)	300
		Base Modulus (ksi)	20		Base Modulus (ksi)	20
	Geotextile at the Bottom	Base Anisotropic Ratio	0.35	Geotextile at the Bottom of Base Course	Base Anisotropic Ratio	0.35
Q-6		Geosynthetic Sheet Stiffness (ksi)	30		Geosynthetic Sheet Stiffness (lb/in)	1200
	O Geotextile at the Middle	Subgrade Modulus (ksi)	5	Geotextile in the Middle of Base Course	Subgrade Modulus (ksi)	5
	Run Analysis Figure Q-8. Select "(Geotextile at the Bott aterial Properties	om" and Input	Run Analysis Figure Q-8. Select "C	Exit Geotextile at the Bott aterial Properties	om" and Input

Page No.	Original	Corrected		
Q-7	File Edit Format View Help Unreinforced Pavement Structure 1. Compressive strain at bottom of base:1083.07 2. Average strain in the base:685.97 3. Tensile strain at bottom of HMA surface:410.45 With Geotextile at the Bottom 1. Compressive strain at bottom of base:390.09 2. Average strain in the base:758.71 3. Tensile strain at bottom of HMA surface:439.61 Subgrade modulus with unreinforced pavement structure:5.0(ksi) Modified subgrade modulus:14.6(ksi) Base modulus with unreinforced pavement structure:20.0(ksi) Modified base modulus:20.0(ksi) Figure Q-9. Analysis Results for Example 3	File Edit Format View Help Unreinforced Pavement Structure 1. Compressive strain at bottom of base:991.82 2. Average strain in the base:662.63 3. Tensile strain at bottom of HMA surface:416.53 With Geotextile at the Bottom 1. Compressive strain in the base:776.47 3. Tensile strain at bottom of HMA surface:430.38 Subgrade modulus with unreinforced pavement structure:5.0(ksi) Modified subgrade modulus:7.7(ksi) Base modulus with unreinforced pavement structure:20.0(ksi) Modified base modulus:20.0(ksi)		
Q-7	As shown in Figure Q-12, the "Results" file indicates that placing a geotextile layer in the middle of the base course in fact decreases the modulus of the base course from 30.0 ksi to 27.0 ksi.	As shown in Figure Q-12, the "Results" file indicates that placing a geotextile layer in the middle of the base course in fact decreases the modulus of the base course from 40.0 ksi to 26.2 ksi.		

