February 12, 2014

Parsons Brinckerhoff
6100 Uptown Boulevard NE, Suite 700
Albuquerque, New Mexico 87110

Attn: Mr. Jim Buckman

Re: Pavement Design Recommendations
Cerrillos Road – Phase II
Camino Carlos Rey to St. Michaels Drive
Santa Fe, New Mexico
Terracon Project No. 66135047

Dear Mr. Buckman:

Terracon has completed the pavement design for the Cerrillos Road – Phase II project to be located between Camino Carlos Rey and St. Michaels Drive in Santa Fe, New Mexico. The scope of the services performed for this project included literature review and engineering analyses. The purpose of these services is to provide geotechnical engineering recommendations for the design and construction of new pavements, and other earth connected phases of the project.

A copy of the original geotechnical engineering report entitled *"Cerrillos Road"* dated March 22, 2006 prepared by Vineyard & Associates, Inc. (V&A Project No. 99-1-299) was provided to us and was reviewed prior to the preparation of this report. In addition, "*City of Santa Fe – Cerrillos Road: Richards Avenue to St. Michaels Drive – Typical Pavement Sections*" dated June 10, 2002 was provided to us and was also reviewed prior to the preparation of this report.

Existing Pavement Conditions

Based upon the provided information, the existing pavement materials thicknesses along the project alignment can be summarized as follows:

Hot Mix Asphalt (HMA) Thickness (inches)	Aggregate Base Course (ABC) Thickness (inches)	Granular Subbase* (inches)
6 to 10	2 to 6	0 to 24

*Encountered in three borings and typically associated with low density soils.

The existing subgrade is typically comprised of clayey soils which would exhibit a tendency for movement (compression and expansion) when elevated in moisture content would also impact the soil modulus, strength, and future performance of pavements. Elevated moisture contents and low density soils were encountered at shallow depths in some borings along the project alignment.

Pavement Design

Input design parameters for this project are based on the 2013 traffic volumes, percent trucks, and growth rate provided to us by Parsons Brinkerhoff. The traffic volumes are as follows:

Traffic Volumes	Cerrillos Road From Camino Carlos Rey to St. Michaels Drive
ADT (2013)	44,100 vpd
ADT (2035)	45,500 vpd
Truck Traffic	6%

The projected traffic volumes were provided to the NMDOT Planning Department and were used to generate 6 sets of equivalent single-axle loads (ESALs) for this section of Cerrillos Road.

Design of the pavement thickness was based on the procedures outlined in the New Mexico Department of Transportation's Design Directive (IDD-2008-05) (NMDOT Design Directive), the New Mexico State Department of Transportation Standard Specifications for Highway and Bridge Construction 2014 Edition (NMDOT Specifications), our local experience and understanding of the project.

The following parameters were used in the design of the hot mix asphalt (HMA) pavement:

- Type of facility: All New Mexico Routes and Frontage Road(per IDD-2008-05)
- Local drainage characteristics were classified as good, resulting in an overall design drainage coefficient (C_d) of 1.15,
- Regional factor of 1.6 (Santa Fe, Santa Fe County),
- A initial serviceability of 4.2 along with terminal serviceability index of 2.0 was utilized with an inherent reliability of 65%,
- Layer structural coefficients of 0.44 and 0.11 for new hot mix asphalt and untreated base course materials,
- A minimum R-value of 16 (from V&A Project No. 99-1-299),
- Pavement criteria are based on a 20 year design life with design equivalent axle loads provided by the NMDOT Planning Department as outlined below:

ESAL	Cumulative ESALs (2035) Cerrillos Road
	From Camino Carlos Rey to St. Michaels Drive
SN1	6,409,804
SN2	6,903,994
SN3	7,489,576
SN4	7,098,060
SN5	7,296,638
SN6	6,260,870

Based on the design criteria outlined above, the @RISK program, and the existing pavement section thickness, the recommended alternative pavement section thicknesses are as follows:

Recommended Pavement Section Thickness (inches)		
Material	**Alternative 1**	**Alternative 2**
Asphalt Concrete Surface	8.5	7
Aggregate Base Course	6	12
Total	14.5	19

The NMDOT pavement structural design computation forms are attached.

The NMDOT Infrastructure Design Directive indicates that the "designer shall also consider the use of a reinforcing geotextile and/or geogrid materials at the subgrade/untreated aggregate base course interface whenever the subgrade design R-value is less than 20 or when the subgrade material is saturated or unstable". The actual thickness of aggregate base course would be dependent upon the magnitude and depth of instability. The design R-value used was 16 for this project. In reviewing the geotechnical data (V&A Project No. 99-1-299), the shallow subgrade soils are clayey and exhibit in-situ moisture contents ranging from about 1.5 to 20 percent. In addition, low density soils were encountered in some borings along the project alignment. The elevated moisture and low density soil conditions may result in unstable subgrade conditions during construction. Therefore, consideration could be given to the use of a geogrid or other measures in these areas to promote stability and enhance log-term performance.

In lieu of a geogrid and provided that grades can be maintained, the City could consider milling of the existing HMA and/or in-situ pulverization of the existing HMA and ABC and incorporating these materials into the underlying subgrade to improve strength and stability conditions. This would minimize the export of HMA and/or ABC and could be considered an alternative to other stabilization methods. We are available to discuss these options with you.

Materials Specifications

Based upon the design directive, the recommended pavement sections should consist of Hot Mix Asphalt (HMA), meeting the gradation and properties of SP-III and SP-IV. Maximum and minimum lift thicknesses are as follows:

Type	Lift Thickness (inches)	
	Minimum	Maximum
SP-III	2-½	3-½
SP-IV	1-½	3

Performance graded (PG) asphalt binder of 64-28 should be used along the mainline and a PG asphalt binder of 70-28 should be considered in intersections where standing traffic is anticipated, based on criteria in the design directive. NMDOT would provide final input regarding the performance binder to be used for the project. Additionally, based on the design directive and an open-graded friction course (OGFC) should be used on all flexible pavement surfaces, whose design lane traffic levels are greater than 2,000 ADT and/or where design speeds are 40 mph or higher. Pavement materials should conform to NMDOT Specifications Sections 402 (*Asphalt Materials, Hydrated Lime, and Anhydrite Based Material*) and 423 (*Hot-Mix Asphalt – Superpave QLA & non-QLA*).

The hot mix asphalt should be compacted to a density of at least 93% and not greater than 97% of the theoretical maximum density as determined by ASTM D2041. The pavement sections should be constructed according to NMDOT Specifications Section 423.

The hot mix asphalt mix design should be submitted prior to construction to verify its adequacy and should be placed and compacted in accordance with procedures outlined in the NMDOT Specifications.

The aggregate base course should consist of a blend of sand and gravel, which meets strict specifications for quality and gradation. Use of materials meeting Sections 303 (*Base Course - QLA*) and 304 (*Base Course*) of NMDOT Specifications is required. Aggregate base course material should be tested to determine compliance with these specifications prior to importation to the site.

Aggregate base course should be compacted to a minimum 95% of maximum dry density and within 2 percent of optimum moisture content as determined by AASHTO T180/ASTM D1557. Aggregate base course should be placed and compacted in accordance with Sections 303 and 304 of NMDOT Specifications.

Pavement Maintenance

Service life of the pavement is based on periodic pavement maintenance, adequate drainage, and traffic consistent with the stated assumptions in this report. Preventive maintenance should be planned and provided for through an on-going pavement management program. Preventive maintenance activities are intended to slow the rate of pavement deterioration, and to preserve the pavement investment. Preventive maintenance consists of both localized maintenance (e.g. crack and joint sealing and patching) and global maintenance (e.g. surface sealing). Preventive maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements. Prior to implementing any maintenance, additional engineering observation is recommended to determine the type and extent of preventive maintenance.

Long term pavement performance depends on several factors, including maintaining subgrade moisture levels and providing for preventive maintenance. The following recommendations should be considered the minimum:

- Site grading at a minimum 2% grade away from the pavements;
- The subgrade and the pavement surface have a minimum ¾ inch per foot slope to promote proper surface drainage.
- Consider appropriate edge drainage and pavement under drain systems,
- Install joint sealant and seal cracks immediately

Earthwork

The following presents recommendations for site preparation, excavation, subgrade preparation and placement of engineered fills on the project. The recommendations presented for design and construction of earth supported elements including pavements are contingent upon following the recommendations outlined in this section.

Earthwork, site preparation, and excavations (where applicable) should be performed in accordance with Section 200, *Earthwork* of the NMDOT Specifications.

Site Preparation

Site preparation should be performed in accordance with Section 201, *Clearing and Grubbing,* of the NMDOT Specifications. The existing asphalt pavement should be obliterated according to Section 213, *Obliterating Old Road.*

The reuse of pavement materials for subgrade support may be considered if the pavement materials are adequately processed and blended with suitable soils or aggregate base course. In-situ pulverization of the pavement could be considered to increase subgrade support; however, due to the significant variability of the existing pavement section thickness, the result would likely be a non-uniform subgrade. Reuse of pavement materials should conform to Section 302, *Processing, Placing, and Compacting Existing Pavement,* of NMDOT Specifications.

Excavation

Excavations should be performed in accordance with Sections 203, *Excavation, Borrow, and Embankment*, and 206, *Excavation and Backfill for Culverts and Minor Structures* of the NMDOT Specifications.

Subgrade Preparation

Subgrade preparation should be conducted in accordance with Section 207, *Subgrade Preparation,* of NMDOT Specifications.

Based upon the subsurface conditions determined from the geotechnical exploration, excavations into the on-site clayey soils are likely to be encountered. Elevated moisture contents and low density were encountered in some borings. The stability of the subgrade may be affected by precipitation, repetitive construction traffic or other factors. If unstable conditions develop, workability may be improved by scarifying and drying. Overexcavation of wet zones and replacement with granular materials may be necessary. Lightweight excavation equipment may be required to reduce subgrade pumping. Subgrade stabilization should be performed per Section 306-B, *Unstable Subgrade Stabilization,* of the NMDOT Special Provisions.

GENERAL COMMENTS

Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide testing and observation during excavation, grading, and construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the boring performed at the indicated location and from other information discussed in this report. This report does not reflect variations that may occur outside the boring location, across the site, or due to the modifying effects of weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be

immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either expressed or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding this report, or if we may be of further service to you in other ways, please let us know.

Sincerely,
Terracon Consultants, Inc.

Meagan J. Duneman, P.E.
Project Engineer

Michael E. Anderson, P.E.
Principal

Enclosures: NMDOT Pavement Design Calculations and Attachments

New Mexico Department of Transportation
Context Sensitive Solutions Bureau - Pavement Design & Investigation Section
Probablistic Flexible Pavement Design (English) - Release 2.0

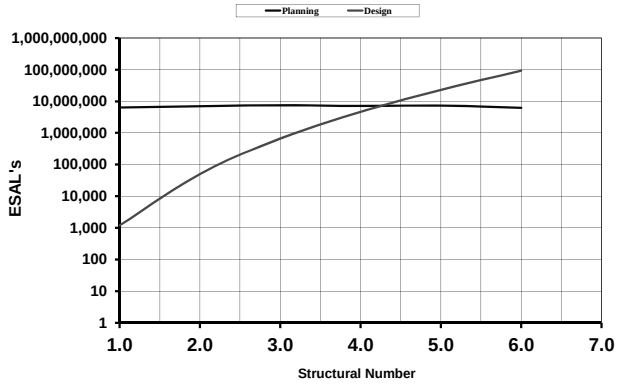
Project Information

Date: 20-Dec-13

Project Number:
Control Number:

Location: Cerrillos Road, Camino Carlos Rey to St. Michaels

District Number: Five
County: Santa Fe County
Design Specialist: MJD
PDE:
Type of Construction: New Construction



Flexible Pavement Structural Number Computation Worksheet

Design Factor Summary

Design R-Value: 16.0
Regional Factor (R): 1.6
Initial Serviceability (Pi): 4.2
Terminal Serviceability (P_t): 2.0
Design ESAL (years): 20.0

Design ESAL Summary

Assumed Structural Number	Calculated Flexible ESALs	
	Planning	Design
1.0	6,409,804	1,180
2.0	6,903,994	50,253
3.0	7,489,576	660,214
4.0	7,098,060	4,617,502
5.0	7,296,638	23,061,914
6.0	6,260,870	92,786,811
	Planning Uncertainty Percentage =	25%

DESIGN STRUCTUAL NUMBER : 4.25
DESIGN ESAL : 7,075,302

English Units Version

Pavement Type	Design Depth (Inches)	Design Structural Coefficient	Thickness Uncertainty	Layer Structural Number
New Rubberized Open Graded Friction Course	0.00	0.00	--------	--------
New Open Graded Friction Course	0.625	0.00	--------	--------
Stone Matrix Asphalt	0.00	0.40	10%	0.00
New Plant Mix Bituminous Pavement	8.16	0.44	10%	3.59
New Aggregate Base Course	6.00	0.11	10%	0.66
New Cement Treated Base Course	0.00	0.27	0%	0.00
New Asphalt Treated Base Course	0.00	0.27	0%	0.00
New Cement Treated Subgrade	0.00	0.20	0%	0.00
New Lime Treated Subgrade	0.00	0.10	0%	0.00
	0.00	0.00	0%	0.00
Hot Recycle	0.00	0.30	0%	0.00
In-Situ Cold Recyle of Existing PMBP	0.00	0.30	10%	0.00
Cold Milling of Existing PMBP	0.00	-0.27	0%	0.00
Existing Plant Mix Bituminous Pavement	0.00	0.27		0.00
Existing Aggregate Base Course	0.00	0.08		0.00
Existing Cement Treated Base Course	0.00	0.05		0.00
Existing Asphalt Treated Base Course	0.00	0.05		0.00
Existing Cement Treated Subgrade	0.00	0.08		0.00
Existing Lime Treated Subgrade	0.00	0.08		0.00

Proposed Structural Number: 4.25
Design Structural Number: 4.25

Design Reliability: 65%
Reliability For Constructability: 65%

Proposed Structural Number MEETS Minimum Design Requirements

New Mexico Department of Transportation
Context Sensitive Solutions Bureau - Pavement Design & Investigation Section
Probablistic Flexible Pavement Design (English) - Release 2.0

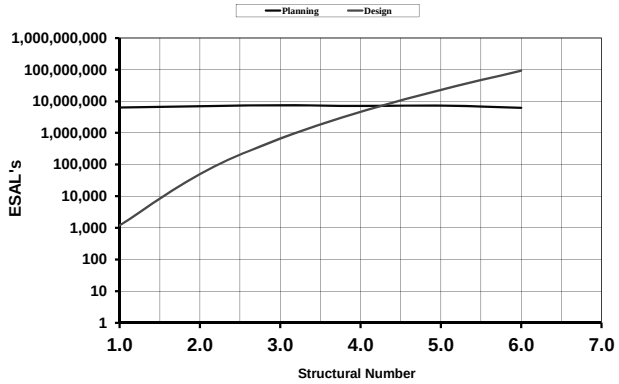
Project Information

Date: 08-Jan-14

Project Number:
Control Number:

Location: Cerrillos Road, Camino Carlos Rey to St. Michaels

District Number: Five
County: Santa Fe County
Design Specialist: MJD
PDE:
Type of Construction: New Construction



Flexible Pavement Structural Number Computation Worksheet

Design Factor Summary

Design R-Value: 16.0
Regional Factor (R): 1.6
Initial Serviceability (Pi): 4.2
Terminal Serviceability (P_t): 2.0
Design ESAL (years): 20.0

Design ESAL Summary

Assumed Structural Number	Calculated Flexible ESALs	
	Planning	Design
1.0	6,409,804	1,180
2.0	6,903,994	50,253
3.0	7,489,576	660,214
4.0	7,098,060	4,617,502
5.0	7,296,638	23,061,914
6.0	6,260,870	92,786,811
	Planning Uncertainty Percentage =	25%

DESIGN STRUCTUAL NUMBER : 4.25
DESIGN ESAL : 7,075,302

English Units Version

Pavement Type	Design Depth (Inches)	Design Structural Coefficient	Thickness Uncertainty	Layer Structural Number
New Rubberized Open Graded Friction Course	0.00	0.00	--------	--------
New Open Graded Friction Course	0.625	0.00	--------	--------
Stone Matrix Asphalt	0.00	0.40	10%	0.00
New Plant Mix Bituminous Pavement	6.66	0.44	10%	2.93
New Aggregate Base Course	12.00	0.11	10%	1.32
New Cement Treated Base Course	0.00	0.27	0%	0.00
New Asphalt Treated Base Course	0.00	0.27	0%	0.00
New Cement Treated Subgrade	0.00	0.20	0%	0.00
New Lime Treated Subgrade	0.00	0.10	0%	0.00
	0.00	0.00	0%	0.00
Hot Recycle	0.00	0.30	0%	0.00
In-Situ Cold Recyle of Existing PMBP	0.00	0.30	10%	0.00
Cold Milling of Existing PMBP	0.00	-0.27	0%	0.00
Existing Plant Mix Bituminous Pavement	0.00	0.27		0.00
Existing Aggregate Base Course	0.00	0.08		0.00
Existing Cement Treated Base Course	0.00	0.05		0.00
Existing Asphalt Treated Base Course	0.00	0.05		0.00
Existing Cement Treated Subgrade	0.00	0.08		0.00
Existing Lime Treated Subgrade	0.00	0.08		0.00

Proposed Structural Number: 4.25
Design Structural Number: 4.25

Design Reliability: 65%
Reliability For Constructability: 65%

Proposed Structural Number MEETS Minimum Design Requirements

NEW MEXICO DEPARTMENT OF TRANSPORTATION
TRAFFIC VOLUME ESTIMATES

PROJECT _____ ROAD NO. _____ CN _____

TERMINI NM 14 Cerrillos Rd between Camino Carlos Rey and St Michaels Dr

BMP _____ LENGTH (MILES) _____

AADT (2013) ACTUAL 44,100

AADT (2013) 44,100 DHV (2013) _____

AADT ( ) _____ DHV ( ) _____

AADT (2025) _____ DHV (2025) _____

AADT ( ) _____ DHV ( ) _____

AADT (2035) DESIGN 45,500 DHV (2035) _____

% HEAVY COMMERCIAL (2013) ACTUAL 6.00%

% HEAVY COMMERCIAL (2035) DESIGN 6.00%

% HEAVY COMMERCIAL DURING DHV 5.00%

NOISE MODEL DATA (% MEDIUM TRUCKS DURING DHV) _____

(% HEAVY TRUCKS DURING DHV) _____

Note: All AADT and %HC were provided by Terracon Consultants, Inc.

SUBMITTED TO Meagan Duneman

DATE 20-Dec-2013

Flexible Roads - Single ESAL
SN1 Heavy Commercial Truck Forecast

Report Date *12/20/13*

Project: *NM 14 from Camino Carlos Rey and St.*

Year	Volume	ESALS/YEAR	CUM ESALS
2013	2,646.0	274,333	274,333
2014	2,649.8	274,729	549,061
2015	2,653.6	275,124	824,186
2016	2,657.5	275,520	1,099,706
2017	2,661.3	275,916	1,375,622
2018	2,665.1	276,312	1,651,934
2019	2,668.9	276,708	1,928,642
2020	2,672.7	277,104	2,205,745
2021	2,676.5	277,500	2,483,245
2022	2,680.4	277,895	2,761,140
2023	2,684.2	278,291	3,039,432
2024	2,688.0	278,687	3,318,119
2025	2,691.8	279,083	3,597,202
2026	2,695.6	279,479	3,876,681
2027	2,699.5	279,875	4,156,555
2028	2,703.3	280,271	4,436,826
2029	2,707.1	280,666	4,717,492
2030	2,710.9	281,062	4,998,555
2031	2,714.7	281,458	5,280,013
2032	2,718.5	281,854	5,561,867
2033	2,722.4	282,250	5,844,117
2034	2,726.2	282,646	6,126,763
2035	2,730.0	283,042	6,409,804

Flexible Roads - Single ESAL
SN2 Heavy Commercial Truck Forecast

Report Date *12/20/13*

Project: *NM 14 from Camino Carlos Rey and St.*

Year	Volume	ESALS/YEAR	CUM ESALS
2013	2,646.0	295,483	295,483
2014	2,649.8	295,910	591,393
2015	2,653.6	296,336	887,730
2016	2,657.5	296,763	1,184,492
2017	2,661.3	297,189	1,481,681
2018	2,665.1	297,615	1,779,296
2019	2,668.9	298,042	2,077,338
2020	2,672.7	298,468	2,375,806
2021	2,676.5	298,895	2,674,701
2022	2,680.4	299,321	2,974,022
2023	2,684.2	299,747	3,273,769
2024	2,688.0	300,174	3,573,943
2025	2,691.8	300,600	3,874,543
2026	2,695.6	301,026	4,175,569
2027	2,699.5	301,453	4,477,022
2028	2,703.3	301,879	4,778,901
2029	2,707.1	302,306	5,081,207
2030	2,710.9	302,732	5,383,939
2031	2,714.7	303,158	5,687,097
2032	2,718.5	303,585	5,990,682
2033	2,722.4	304,011	6,294,693
2034	2,726.2	304,437	6,599,130
2035	2,730.0	304,864	6,903,994

Flexible Roads - Single ESAL
SN3 Heavy Commercial Truck Forecast

Report Date
12/20/13

Project: *NM 14 from Camino Carlos Rey and St.*

Year	Volume	ESALS/YEAR	CUM ESALS
2013	2,646.0	320,546	320,546
2014	2,649.8	321,008	641,554
2015	2,653.6	321,471	963,025
2016	2,657.5	321,933	1,284,958
2017	2,661.3	322,396	1,607,354
2018	2,665.1	322,858	1,930,212
2019	2,668.9	323,321	2,253,533
2020	2,672.7	323,784	2,577,317
2021	2,676.5	324,246	2,901,563
2022	2,680.4	324,709	3,226,272
2023	2,684.2	325,171	3,551,443
2024	2,688.0	325,634	3,877,077
2025	2,691.8	326,096	4,203,173
2026	2,695.6	326,559	4,529,732
2027	2,699.5	327,021	4,856,753
2028	2,703.3	327,484	5,184,237
2029	2,707.1	327,946	5,512,183
2030	2,710.9	328,409	5,840,592
2031	2,714.7	328,872	6,169,464
2032	2,718.5	329,334	6,498,798
2033	2,722.4	329,797	6,828,595
2034	2,726.2	330,259	7,158,854
2035	2,730.0	330,722	7,489,576

Flexible Roads - Single ESAL
SN4 Heavy Commercial Truck Forecast

Report Date *12/20/13*

Project: *NM 14 from Camino Carlos Rey and St.*

Year	Volume	ESALS/YEAR	CUM ESALS
2013	2,646.0	303,789	303,789
2014	2,649.8	304,228	608,017
2015	2,653.6	304,666	912,683
2016	2,657.5	305,104	1,217,787
2017	2,661.3	305,543	1,523,330
2018	2,665.1	305,981	1,829,311
2019	2,668.9	306,419	2,135,730
2020	2,672.7	306,858	2,442,588
2021	2,676.5	307,296	2,749,884
2022	2,680.4	307,735	3,057,619
2023	2,684.2	308,173	3,365,792
2024	2,688.0	308,611	3,674,403
2025	2,691.8	309,050	3,983,453
2026	2,695.6	309,488	4,292,941
2027	2,699.5	309,926	4,602,867
2028	2,703.3	310,365	4,913,232
2029	2,707.1	310,803	5,224,035
2030	2,710.9	311,242	5,535,277
2031	2,714.7	311,680	5,846,957
2032	2,718.5	312,118	6,159,075
2033	2,722.4	312,557	6,471,631
2034	2,726.2	312,995	6,784,626
2035	2,730.0	313,433	7,098,060

Flexible Roads - Single ESAL
SN5 Heavy Commercial Truck Forecast

Report Date
12/20/13

Project: *NM 14 from Camino Carlos Rey and St.*

Year	Volume	ESALS/YEAR	CUM ESALS
2013	2,646.0	312,288	312,288
2014	2,649.8	312,739	625,027
2015	2,653.6	313,189	938,216
2016	2,657.5	313,640	1,251,857
2017	2,661.3	314,091	1,565,947
2018	2,665.1	314,541	1,880,489
2019	2,668.9	314,992	2,195,481
2020	2,672.7	315,443	2,510,923
2021	2,676.5	315,893	2,826,817
2022	2,680.4	316,344	3,143,160
2023	2,684.2	316,795	3,459,955
2024	2,688.0	317,245	3,777,200
2025	2,691.8	317,696	4,094,896
2026	2,695.6	318,146	4,413,042
2027	2,699.5	318,597	4,731,639
2028	2,703.3	319,048	5,050,687
2029	2,707.1	319,498	5,370,185
2030	2,710.9	319,949	5,690,134
2031	2,714.7	320,400	6,010,534
2032	2,718.5	320,850	6,331,384
2033	2,722.4	321,301	6,652,685
2034	2,726.2	321,751	6,974,436
2035	2,730.0	322,202	7,296,638

Flexible Roads - Single ESAL
SN6 Heavy Commercial Truck Forecast

Report Date *12/20/13*

Project: *NM 14 from Camino Carlos Rey and St.*

Year	Volume	ESALS/YEAR	CUM ESALS
2013	2,646.0	267,958	267,958
2014	2,649.8	268,345	536,304
2015	2,653.6	268,732	805,035
2016	2,657.5	269,118	1,074,154
2017	2,661.3	269,505	1,343,659
2018	2,665.1	269,892	1,613,551
2019	2,668.9	270,278	1,883,829
2020	2,672.7	270,665	2,154,494
2021	2,676.5	271,052	2,425,546
2022	2,680.4	271,438	2,696,984
2023	2,684.2	271,825	2,968,809
2024	2,688.0	272,212	3,241,021
2025	2,691.8	272,598	3,513,619
2026	2,695.6	272,985	3,786,605
2027	2,699.5	273,372	4,059,976
2028	2,703.3	273,758	4,333,735
2029	2,707.1	274,145	4,607,880
2030	2,710.9	274,532	4,882,411
2031	2,714.7	274,918	5,157,330
2032	2,718.5	275,305	5,432,635
2033	2,722.4	275,692	5,708,327
2034	2,726.2	276,078	5,984,405
2035	2,730.0	276,465	6,260,870