



LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

Fuel Church Transportation Memorandum (LSC #204460) September 16, 2020

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Date



LSC TRANSPORTATION CONSULTANTS, INC.
 2504 East Pikes Peak Avenue, Suite 304
 Colorado Springs, CO 80909
 (719) 633-2868
 FAX (719) 633-5430
 E-mail: lsc@lsctrans.com
 Website: <http://www.lsctrans.com>

September 16, 2020

Mr. Daniel O. Crosby
 P.O. Box 939
 Monument, CO 80132

RE: Fuel Church
 El Paso County, CO
 Transportation Memorandum
 LSC #204460

Dear Mr. Nelson,

LSC Transportation Consultants, Inc. has prepared this transportation memorandum for the proposed Fuel Church development in El Paso County, Colorado west of the Town of Monument. Located at 16965 Lindbergh Road and referenced by El Paso County parcel ID (7121001009), the site is southeast of the intersection of Schilling Avenue/Lindbergh Road. This report presents the estimated vehicle-trip generation and sight-distance analysis for the proposed access for this currently-planned development.

PROPOSED LAND USE

The 7.33-acre property (zoned A-5) is located at 16965 Lindbergh Road in Monument, Colorado. Seating capacity of the 5,896-square-foot church sanctuary would be 200 people, with services to be held on Sunday mornings only. It is our understanding that this church will not include a parochial school, a commercial daycare facility/preschool, or other high-traffic-generating weekday use.

SITE ACCESS

There is an existing access below the proposed parking area. Please provide a discussion on access spacing and location.

Site access is proposed to Lindbergh Road, located approximately 428 feet south of Schilling Road (centerline distance). A copy of the site plan is attached for reference.

Refer to ECM 2.4. A deviation request for consideration by the ECM administrator may be required if the intent is to keep both access points

use 2019 report (see attached)



EXISTING ACCESS POINTS at the site are identified below, followed by a brief description of each:

Schilling Road (east of Lindbergh Road) and Nursery Road provide a connection north to Mt. Herman Road. Schilling Road is identified in the *El Paso County Road System – 2014* report as

revise to the 2019
report

a two-lane Rural Local road. The posted speed limit along this gravel road connection is 25 miles per hour (mph).

Lindbergh Road extends 1.3 miles between Schilling Road and Mesa Top Road, Lindbergh Road is identified in the *El Paso County Road System – 2014* report as a two-lane Rural Local road. The posted speed limit along this gravel road is 25 mph.

TRIP GENERATION ESTIMATE

Estimates of the vehicle trips projected to be generated by the proposed site expansion have been made using the nationally published average trip generation rates for land use code “560 – Church” in *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE).

Table 1 below presents a summary of the estimated site trip generation. A detailed trip-generation estimate for the site, including ITE rates for the proposed land uses, is presented in Table 2 (attached).

Table 1: Estimated Site Vehicle-Trip Generation

Analysis Period	Weekday		
	In	Out	Total
Weekday morning peak hour (vehicle trips/hour)	1	1	2
Weekday afternoon peak hour (vehicle trips/hour)	3	3	6
Weekday – 24-hour total (vehicle trips/day)	27	27	53
Sunday peak hour (vehicle trips/hour)	54	58	112
Sunday – 24-hour total (vehicle trips/day)	82	82	163

Sunday

Fuel Church would generate about 163 vehicle trips on the average Sunday, with half entering and half exiting the site. During the Sunday morning peak hour, 54 trips are projected to enter and 58 trips are projected to exit, during the Sunday church peak.

Weekday

Based on the ITE estimate for the proposed land use, Fuel Church would generate about 53 vehicle trips on the average weekday, with half entering and half exiting the site. One trip is projected to enter and exit during the weekday morning peak hour. Approximately 3 entering vehicles and 3 exiting vehicles are projected for the weekday evening peak hour.

SIGHT DISTANCE ANALYSIS

Sight Distance Field Measurements

Sight distance field measurements utilized a driver's eye height of 3.5 feet and a height of 3.5 feet for a vehicle traveling along Lindbergh Road. The following analysis corresponds to field-measured sight distances for the proposed site-access intersection with Lindbergh Road. Field-measured sight distances for passenger vehicles are as follows:

- To the north: 428 feet (unobstructed to the corner of Lindbergh/Schilling)
- To the east: greater than ¼ mile (unobstructed)

Sight Distance Along Roadway

The proposed site access point to Lindbergh Road must meet *ECM* standards for sight distance along the roadway contained in Section 2.4.1.D.1 of the *ECM*. Based on the posted speed limit of 25 mph and spot-grades along Lindbergh Road (downgrade of less than 3 percent), the prescribed stopping sight distance along Lindbergh Road is 150 feet.

Based on the site plan drawings and field measurements, the sight distance at the proposed site-access intersection would exceed 150 feet approaching the access from the north and south along Lindbergh Road. The intersection and stopping sight distance would exceed county standards for stopping sight distance at a posted speed of 25 mph.

Entering Sight Distance

With a 25-mph posted speed limit on Lindbergh Road, the field-measured sight distances for the proposed site-access intersection with Lindbergh Road would exceed the required 250-foot requirement for entering sight distance for passenger vehicles, as shown in *ECM* Table 2-35.

The requirement of 325 feet for single-unit trucks would be met as well. Therefore, access entering sight distance **would** be acceptable at the proposed site-access location shown on the site plan. As the site is developed, the lines of sight to the north and south from the access point need to be kept clear of any sight distance obstructions.

Please state whether or not any improvements to the existing roadways are needed.

* * * * *

Please indicate whether any traffic control will be needed or implemented during service times.

Please provide a discussion and breakdown of Road Impact Fees for this project. Please visit <https://publicworks.elpasoco.com/road-impact-fees/> for further information on the Road Impact Fee.

Please refer to *ECM* Appendix B2.3.D and B.2.4.D for study area and evaluation elements for a traffic memo and update the report accordingly.

Please contact me if you have any questions.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By _____
Jeffrey C. Hodsdon, P.E.
Principal

JAB:jas

Enclosures: Table 2

Table 2

The table area is currently blank.



Table 2: Trip Generation Table

ITE		Value	Units ¹	Trip Generation Rates ²					Total Trips Generated				
Code	Description			Average Weekday	A.M.		P.M.		Average Weekday	A.M.		P.M.	
				In	Out	In	Out		In	Out	In	Out	
560	Church (Weekday)	5.896	KSF	9.04	0.14	0.09	0.46	0.57	53	1	1	3	3
560	Church (Sunday)	5.896	KSF	27.63	9.12	9.88	-	-	163	54	58	-	-

¹ KSF = 1,000 square feet

² Source: Trip Generation, 10th Edition, 2017, by the Institute of Transportation Engineers (ITE)