



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>

MEMORANDUM

DATE: February 24, 2020

TO: Kari Parsons, DSD-Project Manager

FROM: Jeffrey C. Hodsdon - LSC Transportation Consultants, Inc.

SUBJECT: Brookmoor PUD Amendment
Response to Comments Memorandum
LSC #174650

Following are the LSC Transportation consultants, Inc. responses to EPC comments regarding Brookmoor PUD Amendment.

PCD Project Manager Comments

The applicant states that the gate restriction elimination will provide as a second access to the 59 lot development for the Brookmoor residents if they have a transponder. Two access points are required for developments that are greater than 25 lots.

If this development is allowed to access through the public culdesac known as, South Park Drive, adding 59 units at to the public culdesac, which serves 10 lots at present, would exceed the 25 lots on a dead end road (South Park Drive).

Should the South Park Drive residents then have access through this development via Symphony Heights, a private roadway, to connect to Lake Wood More Drive, a public road way, since the South Park Drive would serve the existing 10 lots on the dead end road plus 59 residents in the gated community? If there was an accident on South Park Drive, how would these residents exit with the added traffic?

The settlement agreement required the gate to be closed to the public with the exception of ER access and construction traffic for one year. It allowed for the HOA to submit a request to amend the PUD restriction to allow for the gate to be opened; there was no presumption of approval in the settlement agreement. There is opposition to the gate being opened; this application may be elevated to a PC and BoCC hearing.

LSC Response: The number of lots on a dead-end roadway would remain only at 10 because the 59 lots would have two access points. The allowable county cul-de-sac (in terms of number of units – max. 25 units) would have a corresponding estimated ADT of about 250 daily trips. The projected ADT for South Park Drive with this PUD Amendment is 125 (Note: the Brookmoor residents have an alternative and could use the Moveen Heights access in the event of an accident). Note: Even if the Brookmoor added traffic were hypothetically based on ITE trip generation rates, the projected total ADT would be 160 vpd. The proposed condition would be a better situation for South Park residents in the event of an emergency/accident because the gate could be opened by emergency service personnel, if deemed necessary, to provide exit and/or entry for South Park residents.

PCD Engineering Manager's Comments:

#1: *The TIS cites striping adjustments are needed at Lake Woodmoor/and Woodmoor Drive. The report did not note if the asphalt is of adequate width or not for the extension of these turn lanes. It also did not address who should make these changes.*

LSC Response: This did not address the comment. The TIS should go into more detail about the needs at this intersection and state if this would alleviate the issues that Brookmoor residents are experiencing, thus alleviating the need to open the back gate to this development.

2: The report states that no improvements are needed with this. First, the estimated traffic was increased. Next, the TIS uses counts for the traffic other traffic, causing an unrealistic comparison. The ITE trip generation values should be used in all cases for calculating the traffic volume from this subdivision. Please revise and use the ITE

LSC Response: LSC put together a very detailed and accurate trip distribution and trip rate calculation for the site. The details of the distribution and trip rate calculation are in the report. The trip rate calculation is based on the ITE trip generation value when performing the calculation. Based on the left turn movement vs the right turn movement when a resident uses the front gate vs the potential back gate, this report should justify the projected split in exiting traffic that is to use the back gate (see next comment).

Again, the report doesn't state the improvements needed for S Park. S Park is not constructed to current County standards and opening this gate to the Brookmoor traffic **would require making the improvements** to the existing width and depth of the pavement. Due to the known traffic issues at the WM/Lake WM intersection the traffic split exiting the Brookmoor site (back gate) in the am PH should be much higher than is shown. It could be assumed that the entire trips exiting at Moveen to the left and wanting to turn left onto LWM Dr would exit the back gate in the AM PH. All tables should use ITE trip generation values.

required, was not between Brookmoor and “other traffic”- rather between Brookmoor “actual recorded” trip generation versus “hypothetical” trip generation for Brookmoor based on ITE rates. Note: The peak-hour volumes for South Park Drive have been based on actual peak hour counts. The estimate of existing **daily** traffic on South Park Drive (based on ITE rates) may actually be conservative as the peak-hour volumes counted are lower than hypothetical trip projections based on average ITE rates. Note: Even if the Brookmoor added traffic were based on ITE trip generation rates, the total ADT would be 160 vpd.

#3 and #4: *The intersection of Lake Woodmoor Drive and Woodmoor drive should be assessed to see if it meets warrants for a signal. A signal at this location may alleviate the issues that Brookmoor is having with the traffic. At this time Engineering cannot support the opening of this gate for the local traffic as requested without proposed improvements to South Park Drive. If the gate is to be opened to local Brookmoor traffic roadway improvements would be required for South Park drive from the gate to Knollwood. This would include both width and depth of asphalt*

LSC Response to Comment #3: This proposed change would reduce traffic (by a relatively minor amount) at this intersection. Additionally, the allowable use of the east gate to Brookmoor residents would provide access to the intersection. **This did not address the comment. The TIS should go into more detail about the needs at this intersection and state if a signal would alleviate the issues that Brookmoor residents are experiencing, thus alleviating the need to open the back gate to this development. A signal warrant should be performed.**

LSC Response to Comment #4: The width is addressed in the traffic study along with documentation and discussion of the limited use of on-street parking. Regarding the pavement depth, trucks have significantly more impact to pavement than passenger vehicles - only passenger vehicles will be allowed to use the connection and not trucks.

JCH:jas

The added traffic to S Park warrants the need to upgrade the width (and possibly the depth) of S Park. Because there were no cars parked on the street during your survey is moot. Cars are allowed to park on S Park. S Park should be upgraded to today's standards to account for these additional trips. Knollwood should also be evaluated in this report. Engineering could support the opening of this gate to internal residents if S Park is upgraded to current EPC standards and if Knollwood is analyzed and any needed improvements to it were proposed to be constructed with this gate opening.

dsdnijkamp (5)

This did not address the comment. The TIS should go into more detail about the needs at this intersection and state if this would alleviate the issues that Brookmoor residents are experiencing, thus alleviating the need to open the back gate to this development.

Again, the report doesn't state the improvements needed for S Park. S Park is not constructed to current County standards and opening this gate to the Brookmoor traffic would require making the improvements to the existing width and depth of the pavement. Due to the known traffic issues at the WM/Lake WM intersection the traffic split exiting the Brookmoor site (back gate) in the am PH should be much higher than is shown. It could be assumed that the entire trips exiting at Moveen to the left and wanting to turn left onto LWM Dr would exit the back gate in the AM PH. All tables should use ITE trip generation values.

Appendix table 1 and appendix table 2 as well as the findings and conclusion use the actual counts and not the ITE estimated trip generation for the Brookmoor subdivision. The ITE trip generation values should be used in all cases for calculating the traffic volume from this subdivision. Please revise and use the ITE values for all calculation. Please show the peak hour calculation in this report (for cars exiting the site), and use the ITE trip generation value when performing the calculation. Based on the left turn movement vs the right turn movement when a resident uses the front gate vs the potential back gate, this report should justify the projected split in exiting traffic that is to use the back gate (see next comment).

This did not address the comment. The TIS should go into more detail about the needs at this intersection and state if a signal would alleviate the issues that Brookmoor residents are experiencing, thus alleviating the need to open the back gate to this development. A signal warrant should be performed.

The added traffic to S Park warrants the need to upgrade the width (and possibly the depth) of S Park. Because there were no cars parked on the street during your survey is moot. Cars are allowed to park on S Park. S Park should be upgraded to today's standards to account for these additional trips. Knollwood should also be evaluated in this report. Engineering could support the opening of the gate to internal residents if S Park is upgraded to current EPC standards and if Knollwood is analyzed and any needed improvements to it were proposed to be constructed with this gate opening.

Subject: Engineer
Page Label: 3
Author: dsdnijkamp
Date: 4/1/2020 8:54:18 AM
Status:
Color: ■
Layer:
Space:

The added traffic to S Park warrants the need to upgrade the width (and possibly the depth) of S Park. Because there were no cars parked on the street during your survey is moot. Cars are allowed to park on S Park. S Park should be upgraded to today's standards to account for these additional trips. Knollwood should also be evaluated in this report. Engineering could support the opening of this gate to internal residents if S Park is upgraded to current EPC standards and if Knollwood is analyzed and any needed improvements to it were proposed to be constructed with this gate opening.