



# CITY OF NORMAN

## Development Review Form

### Transportation Impacts

**DATE:** July 23, 2012

**CONDUCTED BY:** David R. Riesland, P.E.  
City Traffic Engineer

**PROJECT NAME:** Harvest Church Addition

**PROJECT TYPE:** Church Expansion

Owner: Harvest Church  
Developer's Engineer: Cardinal  
Developer's Traffic Engineer: TEC

#### **SURROUNDING ENVIRONMENT (Streets, Developments)**

Commercial development is located to the south of the project location. Low Density Residential development located to the south and west of the project location. Industrial development is located to the east of the project location. 36th Avenue NW is the main north-south roadway. Indian Hills Road is the main closest east-west roadway.

#### **ALLOWABLE ACCESS:**

Access to 36th Avenue NW is in accordance with the City of Norman Engineering Design Criteria.

#### **EXISTING STREET CHARACTERISTICS (Lanes, Speed Limits, Sight Distance, Medians)**

36th Avenue NW: 2 lanes existing and 4 lanes future. Speed Limit - 50 mph. No sight distance problems.

**ACCESS MANAGEMENT CODE COMPLIANCE:** YES ☒ NO ☐

The expansion of the site, as proposed, will maintain driveway spacing along 36th Avenue NW in accordance with the City of Norman's Engineering Design Criteria.

#### **TRIP GENERATION**

	Total	In	Out
Weekday	610	305	305
A.M. Peak Hour	37	23	14
P.M. Peak Hour	37	18	19

**TRANSPORTATION IMPACT STUDY REQUIRED?** YES ☒ NO ☐

A traffic impact was received from Traffic Engineering Consultants, Inc. of Oklahoma City, Oklahoma.

**RECOMMENDATION:** APPROVAL ☒ DENIAL ☐ N/A ☐ STIPULATIONS ☐

*Recommendations for Approval refer only to the transportation impact and do not constitute an endorsement from City Staff.*

The proposed development, at full build-out, will feature a 1,000 seat sanctuary expansion, a new parking lot, and a second access to 36<sup>th</sup> Avenue NW. At build-out, the site is expected to generate approximately 610 trips per average weekday or 37 PM peak hour trips. On a typical Sunday, when the adjacent street traffic volumes are much lower, the site is expected to generate 1,850 tips per day or 1,129 trips during the peak hour. A traffic impact study for this site was prepared by Traffic Engineering Consultants, Inc. (TEC). Traffic capacities on nearby arterial roadways exceed the demand for existing and proposed trips as a result of this development. No negative traffic impacts are anticipated.

The traffic impact prepared by TEC recommended a traffic impact fee of \$1,450 be contributed toward improvements to the intersection of 36<sup>th</sup> Avenue NW and Indian Hills Road. However, previous traffic impact fees had been calculated at \$66.05 per PM peak hour trip for the installation of three traffic signals on Indian Hills Road including the 36<sup>th</sup> Avenue NW intersection. This \$66.05 fee for 26 PM trips equates to \$1,726.46 of which \$1,450 was identified in the TEC study. Therefore, an additional \$271.46 is required in traffic impact fees for the installation of traffic signals at the Indian Hills Road intersections with both Interstate 35 ramps.

A traffic impact study was recently prepared for J&J Properties which is in close proximity to the site in question. The J&J study analyzed development of much of the existing vacant land. However, the intended use of the site for Harvest Church Addition was not known at the time the J&J study was completed. In addition to the 36<sup>th</sup> Avenue NW intersection with Indian Hills Road, the J&J study also evaluated and determined that improvements were needed at four other intersections including 48<sup>th</sup> Avenue NW with Indian Hills Road, 48<sup>th</sup> Avenue NW with Franklin Road, 36<sup>th</sup> Avenue NW with Franklin Road, and 48<sup>th</sup> Avenue NW with Tecumseh Road. The J&J study showed that the Indian Hills Road and 48<sup>th</sup> Avenue NW, the Franklin Road and 48<sup>th</sup> Avenue NW, and the Franklin Road and 36<sup>th</sup> Avenue NW intersections will need to be widened and signalized in the future. The study also found that the Tecumseh Road and 48<sup>th</sup> Avenue NW intersection will need to be signalized. However, it cannot be shown that Harvest Church site traffic will utilize the 48<sup>th</sup> Avenue NW intersection with Tecumseh Road.

Improvement costs, excluding any costs of half-street widening to be paid by other developments, are expected to be \$500,000 at the intersection of Indian Hills Road with 48<sup>th</sup> Avenue NW, \$210,000 at the intersection of Franklin Road with 48<sup>th</sup> Avenue NW, and \$210,000 at the intersection of Franklin Road with 36<sup>th</sup> Avenue NW. The Harvest Church Addition proportionate share of the intersection improvement costs are summarized in the following table:

<b>Intersection</b>	<b>Total PM Entering Traffic</b>	<b>Improvement Cost</b>	<b>Harvest Church Traffic Volume</b>	<b>Cost Share (%)</b>
Indian Hills at 48 <sup>th</sup> Avenue	3,931	\$500,000	4	0.10
Franklin at 48 <sup>th</sup> Avenue	2,490	\$210,000	2	0.08
Franklin at 36 <sup>th</sup> Avenue	2,692	\$210,000	3	0.11

Total cost to be spent per intersection is as follows: \$508.78 for the intersection of Indian Hills Road with 48<sup>th</sup> Avenue NW, \$168.67 for the intersection of Franklin Road with 48<sup>th</sup> Avenue NW, and \$234.03 for the intersection of Franklin Road with 36<sup>th</sup> Avenue NW. The total to be paid for all three of these intersections by the Harvest Church Addition \$911.48. Total impact fees to be collected with the filing of the final plat is \$2,632.94 (\$1,450 from TEC study + \$271.46 for two other Indian Hills traffic signals at I-35 + \$911.48 in other three J&J intersections).