

CITY OF NORMAN

Development Review Form Transportation Impacts

DATE: November 1, 2022 **CONDUCTED BY:** Jami L. Short, P.E. City Traffic Engineer

PROJECT NAME: Redlands Preliminary Plat PROJECT TYPE: Residential/Commercial

SURROUNDING ENVIRONMENT (Streets, Developments)

Residential developments surround the project location with some floodplain land to the west. Indian Hills Road is the main east/west roadway, and 48th and 36th Avenues NW are the main north/south roadways.

ALLOWABLE ACCESS:

Proposed access is in accordance with Section 4018 of the City's Engineering Design Criteria.

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

<u>Indian Hills Road</u>: 2 lanes (existing) / 4 lanes (future). Speed Limit - 50 mph. No sight distance problems. No medians. 48th Avenue NW: 2 lanes (existing and future). Speed Limit - 45 mph. No sight distance problems. No medians. 36th Avenue NW: 2 lanes (existing) / 4 lanes (future). Speed Limit - 50 mph. No sight distance problems. No medians.

ACCESS MANAGEMENT CODE COMPLIANCE: YES ■ NO □

Proposed number of access points along for the development is in compliance with what is allowed in the subdivision regulations.

TRIP GENERATION

	Total	In	Out
Weekday	13,100	6,550	6,550
A.M. Peak Hour	473	206	267
P.M. Peak Hour	1,018	540	478

TRANSPORTATION IMPACT STUDY REQUIRED? YES ■ NO □

Of primary importance with this application is the level of responsibility for improvements identified in a previous traffic study (J&J Properties) to be assessed as responsibility for the improvements identified in the previous study. Specifically, the intersections of 48th Avenue NW with Indian Hills Road, 36th Avenue NW with Indian Hills Road, 48th Avenue NW with Franklin Road, and 36th Avenue NW with Franklin Road were identified as needing improvements in the J&J traffic study. The study submitted with this application recommended construction of a westbound right-turn lane on Indian Hills Road at Street 2. The plans for this right-turn lane should be submitted with the construction plans for the development. 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.

RECOMMENDATION:	APPROVAL	DENIAL	□ N/A	STIPULATIONS	
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Recommendations for Approval refer only to the transportation impact and do not constitute an endorsement from City Staff.

The J&J traffic study showed that the Indian Hills Road and 48th Avenue NW, the Franklin Road and 48th Avenue NW, and the Franklin Road and 36th Avenue NW intersections will need to be widened and signalized in the future. The study also found that the Indian Hills Road and 36th Avenue NW intersection will need to be signalized.

Improvement costs, excluding any costs of half-street widening to be paid by other developments, are expected to be \$2,000,000 at the intersection of Indian Hills Road with 48th Avenue NW, \$2,000,000 at the intersection of Indian Hills Road with 36th Avenue NW, \$1,200,000 at the intersection of Franklin Road with 48th Avenue NW, and \$1,500,000 at the intersection of Franklin Road with 36th Avenue NW. The Redlands share of the intersection improvement costs are summarized in the following table:

Intersection	J&J Properties Addition Share	City Share	Other Development Share	Redlands Share of Total Costs
Indian Hills/48 th	17%	19%	56%	8%
Indian Hills/36 th	15%	25%	49%	11%
Franklin/48 th	16%	20%	62%	2%
Franklin/36 th	13%	27%	59%	1%

Total cost to be spent per intersection is as follows: \$160,000 for the intersection of Indian Hills Road with 48th Avenue NW, \$220,000 for the intersection of Indian Hills Road with 36th Avenue NW, \$24,000 for the intersection of Franklin Road with 48th Avenue NW, and \$15,000 for the intersection of Franklin Road with 36th Avenue NW. The total to be paid for all four intersections by the Redlands development is \$419,000. This equates to \$4,410 per single-family lot or \$411.59 per peak hour trip.