

MEMORANDUM

To: Ziggy Files, Terracina Design

From: Cassie Slade, PE, PTOE

Date: June 12, 2023
Updated August 17, 2023

Project: Prairie Point (aka Kings Point) Filing No. 3 in Aurora, Colorado

Subject: Traffic Conformance Memo

The Fox Tuttle Transportation Group has completed a traffic analysis for the proposed development of Filing No. 3 of the Prairie Point (aka Kings Point) Development project in Aurora, Colorado. The project is located between Parker Road and Ireland Way and between future Aurora Parkway and Long Avenue as shown in **Figure 1**.

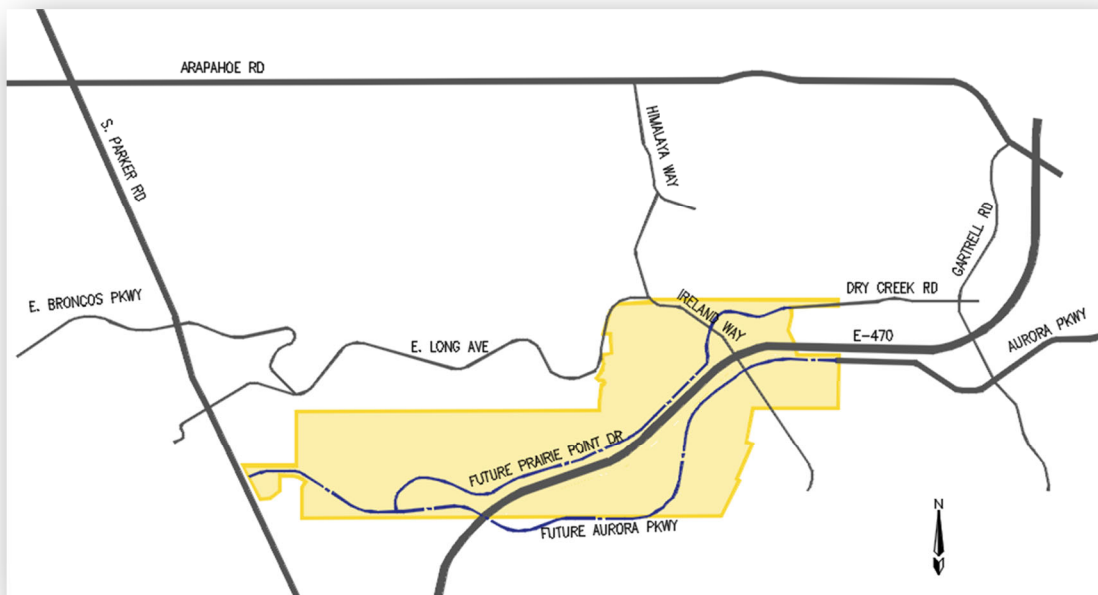


Figure 1. Vicinity Map

Filing No. 3 is proposing to construct 235 dwelling units within five (5) Planning Areas (PA) including PA 14, PA 16, PA 17, PA 18, and PA 19. The existing and future roadways and intersections have been planned or built to support Prairie Point (aka Kings Point) traffic including the parcels in Filing No. 3. The master development includes extending Aurora Parkway from the current end point that is east of Ireland Way to Parker Road, midway between Longs Avenue and Cottonwood Drive. In addition, a new collector roadway (Prairie Point Drive) will be constructed north of E-470 as a parallel east-west connection that will connect to Dry Creek Road. The purpose of this “traffic conformance memo” is to determine if the proposed Filing No. 3 project compares to the trip generation assumptions for Planning Areas 14, 15, 16, 17, 18 and 19 as analyzed in the master traffic study and to determine if additional traffic analyses are necessary.

Comparison to the Master Traffic Study

A “Master” traffic impact study¹ (TIS) was previously prepared for the entire Prairie Point (aka Kings Point) development including the subject planning areas within Filing No. 3, as shown in **Figure 2**. The proposed roadways and intersections have been planned and will be built to support this full buildout traffic of Kings Point. A review of the Master TIS shows that PA 14, PA 15, PA 16, PA 17, PA 18, and PA 19 included up to 271 single-family dwelling units and a water tank. Filing No. 3 proposed to construct 235 single-family dwelling units and a water tank, which is a decrease of 36 dwelling units (13% decrease). In the MTS and this study, the water tank is not anticipated to generate traffic beyond regular maintenance that will likely not occur during peak hours. Access will remain the same along Aurora Parkway and Prairie Point Drive as shown in **Figure 2** and as previously evaluated.

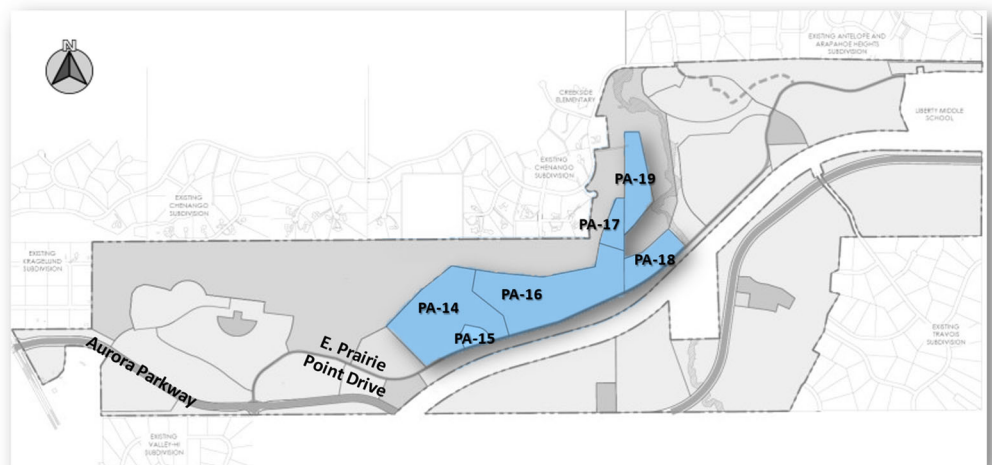


Figure 2. Proposed Filing No. 3 of Prairie Point (aka Kings Point) Map

¹ Kings Point Development Traffic Impact Study. Fox Tuttle Transportation Group, LLC. February 2022.

Trip Generation

To establish the volume of trips associated with the proposed Prairie Point (aka Kings Point) Filing No. 3, the data contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Handbook and Manual* (11th Edition, Year 2021) was applied to the most applicable land use category. The proposed land use is estimated to mostly be new trips, known as 'primary trips', which is discussed below:

Primary Trips. These trips are made specifically to visit the site and are considered "new" trips. Primary trips would not have been made if the proposed project did not exist. Therefore, this is the only trip type that increases the number of trips made on a regional basis.

In the Master TIS, it was assumed that there will 10% internal capture/non-auto reduction with the mix of land uses and connectivity to multi-modal facilities. For comparison purposes, the same percentage was applied to Filing No. 3. The estimated trip generation is summarized in **Table 1** for weekday daily, weekday AM, and weekday PM periods.

Table 1. Trip Generation Estimate and Comparison

Land Use	Size	Unit	Internal Capture & Non-Auto	Average Daily New Trips				AM Peak Hour New Trips				PM Peak Hour New Trips			
				Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
Master Traffic Study															
ITE 210 - Single-Family Detached Housing	271	DU	10%	9.44	2302	1151	1151	0.74	180	45	135	0.99	241	152	89
Proposed Filing No. 3															
ITE 210 - Single-Family Detached Housing	235	DU	10%	9.44	1997	999	998	0.74	157	39	118	0.99	209	132	77
Change from Previous Land Use Assumptions					-305	-152	-153	AM >	-23	-6	-17	PM >	-32	-20	-12
Percent Difference					-13%			-13%				-13%			

Source : ITE Trip Generation 11th Edition, 2021.

Based on the comparison to the Master TIS, **it was estimated that the trips associated with Filing No. 3 will have 13% fewer vehicles daily and during the peak hours.** The daily traffic volume was estimated to be decreased by 305 vehicles per day (vpd). The AM peak hour was estimated to have 23 fewer vehicles and the PM peak hour was estimated to have 32 fewer vehicles. The change in dwelling units does not impact the recommendations or require additional improvements.

Conclusions

It is anticipated that the existing and proposed roadway network, intersections, and accesses can accommodate the Prairie Point (aka Kings Point) Filing No. 3 trips since these trips were estimated to be 13% less than the Master TIS trip forecasts for this area. Filing No. 3 proposes to construct 36 fewer single-family units than the Master TIS anticipated. Please note, Filing No. 1 contained 65 fewer units than anticipated and Filing No. 2 had an increase in two (2) units. As noted above, the **proposed land use is consistent with the trip generation assumptions of the Master TIS, and thus the findings and recommendations of that study are still valid.** No additional traffic analysis is necessary to support this project.

I hope that the contents of this memorandum are helpful to you. If you have any questions, please feel free to give me a call.

Sincerely,

FOX TUTTLE TRANSPORTATION GROUP, LLC



Cassie Slade, P.E., PTOE
Principal

