**SCOPE OF TRAFFIC IMPACT STUDY (TIS)**

**TO:** Ronald R. Bohannan, P.E.

 Tierra West, LLC

 5571 Midway Park Pl. NE

 Albuquerque, NM 87108

**MEETING DATE:** Tuesday January 14, 2025 at 10:00 am.

**ATTENDEES:** Curtis Cherne, P.E. (City of Albuquerque), David Serrano, Jesse Guillam, & Travis Johnson (City of Rio Rancho), Ronald R. Bohannan, P.E., Jimeia Roberts, Jacob Liberman, and Terry Brown (Tierra West, LLC)

**PROJECT:** Verdot Development – Rio Rancho (Black Arroyo Blvd. / Unser Blvd.)

**REQUESTED CITY ACTION:**  Zone Change X Site Development Plan

 X Subdivision Building Permit Sector Plan Sector Plan Amendment

 Curb Cut Permit Conditional Use Annexation Site Plan Amendment

**ASSOCIATED APPLICATION:** Residential Subdivision (approx.. 128 lots) – a mix of single-family detached homes and common-wall townhomes.

**SCOPE OF REPORT:** COA Changes in Blue

The Traffic Impact Study should follow the standard report format, which is outlined in the DPM. The following supplemental information is provided for the preparation of this specific study.

1. Trip Generation - Use Trip Generation Manual, 11th Edition.

 Consultant to provide.

1. Appropriate study area:

Signalized Intersections;

* 1. Wellspring Ave. / Unser Blvd.
	2. McMahon Blvd. / Unser Blvd.

 Unsignalized Intersections;

1. Black Arroyo Blvd. / Unser Blvd.
2. Night Whisper Rd. (Summer Ridge Rd.) / Unser Blvd.
3. McMahon Blvd. / Pinon Verde Rd.
4. McMahon Blvd. / Bandelier Dr.
5. McMahon Blvd. / Sweet Dreams Dr.
6. McMahon Blvd. / Milky Way St.
7. Black Arroyo Blvd. / Milky Way St.
8. Black Arroyo Blvd. / Sweet Dreams
9. Black Arroyo Blvd. / Dreamy Way
10. Black Arroyo Blvd. / Pinon Azul
11. Black Arroyo Blvd/19th St
12. 22nd Ave. / 15th St.
13. Westside Blvd. / 15th St.
14. 22nd Ave. / 19th St.
15. Wellspring Ave. / Eye Associated Optical Driveway
16. 20th Ave. / Wellspring Ave.
17. Westside Blvd. / Wellspring Ave.
18. ~~22~~~~nd~~ ~~Ave. / 15~~~~th~~ ~~St.~~

 Driveway Intersections: Driveway “A” / 19th St.

1. Intersection turning movement counts

Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour

Consultant to provide for all intersections listed above.

1. Type of intersection progression and factors to be used.

Type III arrival type (see “Highway Capacity Manual, current edition” or equivalent as approved by staff). Unless otherwise justified, peak hour factors and % heavy commercial should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant.

1. Boundaries of area to be used for trip distribution.

 City Wide - residential, office or industrial;

 x mile radius – commercial;

 Interstate or to be determined by consultant - motel/hotel

 APS district boundary mapping for each school and bus routes

1. Basis for trip distribution.

Residential – Use inverse relationship based upon distance and employment. Use employment data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Office/Industrial - Use inverse relationship based upon distance and population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Residential - Ts = (Tt ) (Se / D) / (Se / D)

Ts = Development to Individual Subarea Trips

Tt = Total Trips

Se = Subarea Employment

D = Distance from Development to Subarea

Office/Industrial - Ts = (Tt ) (Sp / D) / (Sp / D)

Ts = Development to Individual Subarea Trips

Tt = Total Trips

Sp = Subarea Population

D = Distance from Development to Subarea

Commercial -

Ts = (Tt ) (Sp) / (Sp)

Ts = Development to Individual Subarea Trips

Tt = Total Trips

Sp = Subarea Population

1. Traffic Assignment. Logical routing on the major street system.
2. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
3. The Village Development
4. Los Diamontes Development
5. Method of intersection capacity analysis - planning or operational (see “Highway Capacity Manual – 7th Edition” or equivalent [i.e. HCS, Synchro, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.

 Implementation Year: 2028

 Horizon Year: 2038

1. Traffic conditions for analysis:
	1. Existing analysis X yes no - year (2025);
	2. Phase implementation year(s) without proposed development – 2028
	3. Phase implementation year(s) with proposed development – 2028
	4. Project completion year without proposed development – 2038
	5. Project completion year with proposed development – 2038
	6. Other –
2. Background traffic growth.

Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

1. Planned (programmed) traffic improvements.

List planned CIP improvements in study area and projected project implementation year:

1. Project – Location (Implementation Year) – N/A
2. Items to be included in the study:
3. Intersection analysis. Yes
4. Signal progression - An analysis is required if the driveway analysis indicates a traffic signal is possibly warranted. Analysis Method: N/A
5. Arterial LOS analysis; No
6. Recommended street, intersection and signal improvements. Yes
7. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility. Yes
8. Transportation system impacts. Yes
9. Other mitigating measures.
10. Accident analyses X yes no; Location(s): 5-year crash analysis (2018 – 2023) – categorize crash types – ~~no predictive analysis. City of Albuquerque to assist with getting individual crash reports.~~
11. Weaving analyses yes X no; Location(s):
12. Other: Access Evaluation Study will accompany this Traffic Impact Study using the amount of traffic as a result of the Traffic Study. The Access Evaluation Study will evaluate the following access scenarios:
13. Black Arroyo / Unser Blvd. will remain a right-in, right-out only unsignalized intersection.
14. ~~Black Arroyo / Unser Blvd. will be permitted as a right-in, right-out, left-in only unsignalized driveway.~~
15. Black Arroyo / Unser Blvd. will be permitted as full access with protected left-turn signalized intersection. An eight-hour signal warrant will be included.
16. Black Arroyo / Unser Blvd. will be permitted as a right-in, right-out, protected left-in only signalized intersection (i.e., signalization of the NB LT, the SB Thru, and the EB RT movements only. NB Thru movement will not be signalized. An eight-hour signal warrant will be included.
17. A Michigan left will be created to the north of the intersection of Black Arroyo Blvd. / Unser Blvd.

All four cases above will be evaluated with and without the Pavilion Ave. connection from 22nd Ave. connecting to Wellspring Ave.

A traffic signal, if approved, to be maintained by the City of Rio Rancho (CoRR).

CoRR to be responsible to sponsor the access modification, if necessary, to the Roadway Access Control (RAC) Policy Inventory of Roadway Access Limitations.

Cut-through study, per COA Neighborhood Traffic Management Program, to be performed for Milky Way St., Sweet Dreams Dr., Bandelier Dr., and Pinon Verde between McMahon Blvd. and Black Arroyo Rd.

**SUBMITTAL REQUIREMENTS:**

1. Number of copies of report required
	1. No paper copy
	2. 1 digital copy
2. Submittal Fee – $1300 for up to 3 reviews (plus technology fee)

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_

Curtis Cherne, P.E., ~~PTOE~~ Date

Senior Engineer

City of Albuquerque, Planning

Transportation Development Section

via: email

C: ~~TIS Task Force Attendees, file~~