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Oxbow Development / Coors Pavilion
(St. Josephs Dr. / Coors Blvd.)

DRAFT
Traffic Impact Study

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Presented to:

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**Oxbow Centre
(St. Joseph's Dr. / Coors Blvd.)
Traffic Impact Study**

Executive Summary

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Oxbow Center Retail Commercial Development to determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary.

The proposed development is located at the southwest corner of the intersection of St. Joseph's Dr. / Coors Blvd. in Albuquerque, New Mexico. The study area includes analysis and evaluation of the following intersections:

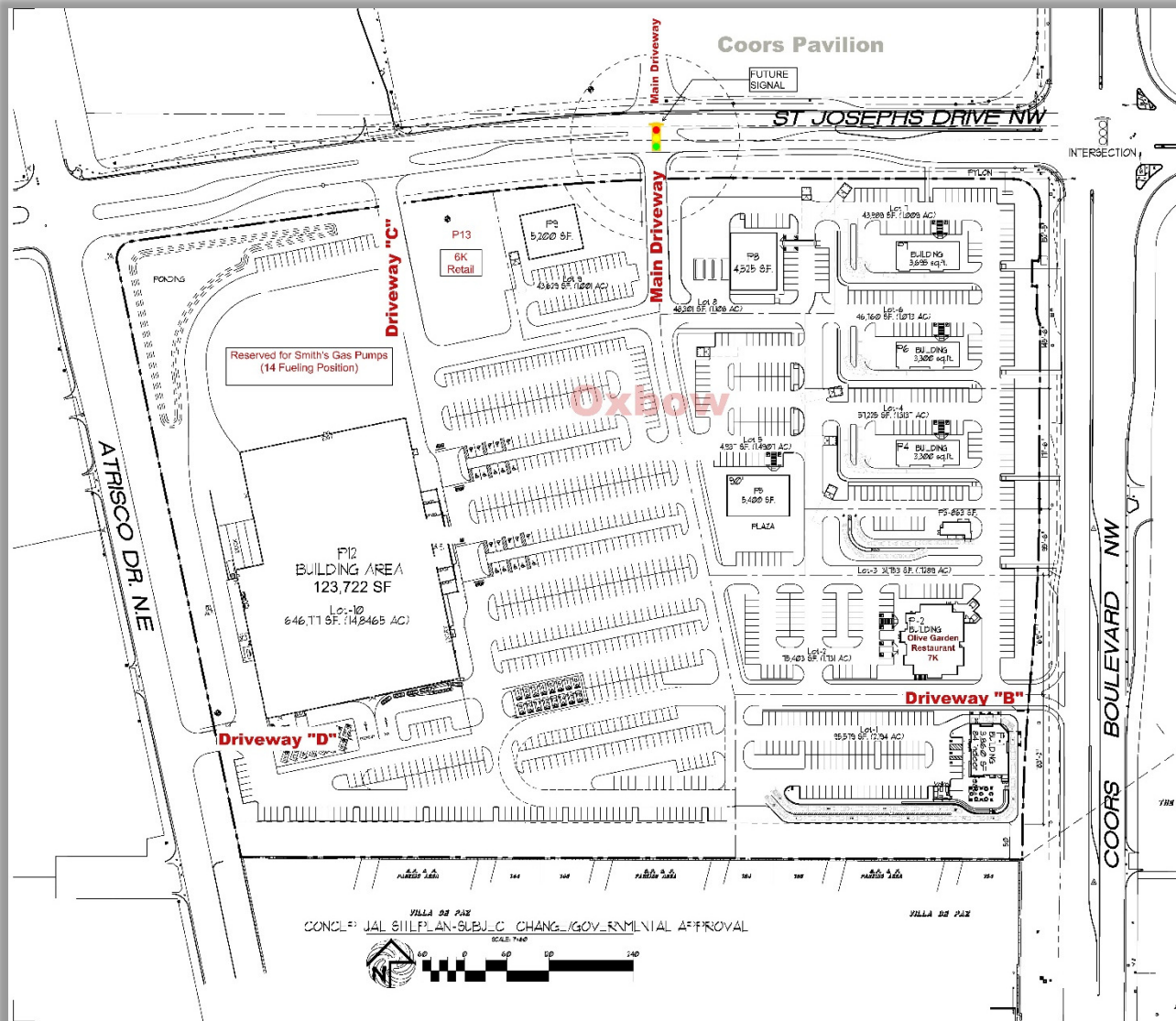
- 1) Sequoia Rd. / Coors Blvd. – Signalized (NM DOT)
- 2) St. Joseph's Dr. / Coors Blvd. – Signalized (NM DOT)
- 3) Western Trail / Coors Blvd. – Signalized (NM DOT)
- 4) Milne Rd. / Coors Blvd. – Unsignalized (NM DOT)
- 5) St. Joseph's Dr. / Atrisco Dr. – Signalized (City of Albuquerque)
- 6) Western Trail / Atrisco Dr. – Signalized (City of Albuquerque)
- 7) Milne Rd. / Atrisco Dr. – Unsignalized (City of Albuquerque)
- 8) Access Driveways (Main Access / St. Joseph's Dr., Driveway "A" / Coors Blvd., Driveway "B" / Coors Blvd., Driveway "C" / St. Joseph's Dr., and Driveway "D" / Atrisco Dr.)

In addition to the evaluation of the Oxbow Center, this Study will also include and evaluate the impact of the changed land uses in the previously approved Coors Pavilion Development (approved in November, 2017).

This Study, therefore, will first evaluate changes proposed to the previously approved Coors Pavilion Development (NW Corner of St. Joseph's Dr. / Coors Blvd.) followed by evaluation of the proposed new Oxbow Center (SW Corner of St. Joseph's Dr. / Coors Blvd.). The Coors Pavilion project is partially developed, primarily along the frontage of Coors Blvd. The approved plan for Coors Pavilion proposed office use for the west portion of the project. The new plan changes the office use to a new Target Discount Store (not a superstore) among other changes to the tracts still vacant.

The following pages show the two development projects (Coors Pavilion north of St. Joseph's Dr. and Oxbow Development south of St. Joseph's Dr.) The two projects will share one Main Driveway on St. Joseph's Dr. approximately 630 feet west of Coors Blvd. (centerline to centerline).





Following is the trip generation rate table for the Coors Pavilion (revised uses) based on the ITE Trip Generation Manual, 11th Edition:

Coors Pavilion (NW Corner of St. Joseph's Dr. / Coors Blvd.)

Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.			P. M. PEAK HR.	
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet		Units					
Lot 1 - Blake's, Lot 4, & Lots 6	Fast Food Restaurant w/ Drive-Thru Window (934)	11.23	5,250	255	245	193	178
Lots 2, 3, 8-B, & 9-C	Strip Retail Plaza (822)	37.19	1,799	41	27	99	99
Lot 3	Coffee/Donut Shop w/ Drive Thru Window (937)	1.80	960	79	76	35	35
Lot 7 - Kirland FCU	Drive-In Bank (912)	5	625	26	17	66	69
Lots 8-A, 8-C, & 9-A - Target	Free-Standing Discount Superstore (813)	140.00	7,073	146	115	297	309
Lot 9-B - TLE	Day Care Center (565)	10.00	476	58	52	52	59
Unadjusted Volumes - Full Development (Coors Pavilion)			16,183	605	532	742	749
Internal Capture Trips				(30)	(30)	(192)	(192)
Total Trips Adjusted for Internal Capture			16,183	575	502	550	557
Pass-by Trip Adjustment		30%		(173)	(151)	(165)	(167)
Net New Trips (Adjusted for Internal Capture & Pass-by)			16,183	402	351	385	390
Trips that were being generated at the time of the Traffic Counts (January, 2020) and are included in the counts:							
Lots 2 & 3	Strip Retail Plaza (822)	6.70	512	13	9	29	29
Lot 3	Coffee/Donut Shop w/ Drive Thru Window (937)	1.80	960	79	76	35	35
Lot 4 - Panera Bread	Fast Food Restaurant w/ Drive-Thru Window (934)	3.50	1,636	80	77	60	55
Unadjusted Volumes - Partial Development (Coors Pavilion)			3,108	172	162	124	119
Allot 20% of Internal Capture Trips at time of traffic counts				(6)	(6)	(38)	(38)
Total Trips Adjusted for Internal Capture			3,108	166	156	86	81
Pass-by Trip Adjustment		30%		(50)	(47)	(26)	(24)
Net New Trips (Adjusted for Internal Capture & Pass-by)			3,108	116	109	60	57
Net New Trips to be added to the system subsequent to Traffic Counts			286	242	325	333	
New Pass-by Trips to be added to the Driveways subsequent to Traffic Counts			(123)	(104)	(139)	(143)	

Note that the field traffic count data for this project was collected on January 21, 2021. Lots 2, a portion of 3, and 4 were developed at that time, so the trips generated by those uses are included in the field traffic counts collected.

Internal capture trip reduction was calculated based on NCHRP 684 and applied to this project. The pass-by trip rate utilized was 30%.

The Oxbow Center located at the southwest corner of St. Joseph's Dr. / Coors Blvd. is a new project separate from Coors Pavilion in one sense, but located so close to Coors Pavilion that the two projects should be considered collectively due to the changed land uses for Coors Pavilion and the new land uses for Oxbow Center. Following is the trip generation table for the Oxbow Center based on ITE Trip Generation Manual, 11th Edition:

Oxbow (SW Corner of St. Joseph's Dr. / Coors Blvd.)

Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet		Units				
P1, P4, P6, & P7	Fast Food Restaurant w/ Drive-Thru Window (934)	14.16	6,620	322	310	243
P2	High Turnover (Sit-Down) Restaurant (932)	7.00	750	37	30	39
P3	Coffee/Donut Shop w/ Drive Thru Window (937)	0.86	459	38	36	17
P5, P8, P13	Strip Retail Plaza (822)	17	930	24	16	56
P12	Supermarket (850)	123.72	10,857	209	145	459
Fueling Center	Gasoline / Service Station w/ Convenience Market (945)	14	3,066	112	112	129
P8	Drive-In Bank (912)	4	500	21	13	53
	Unadjusted Volumes - Full Development (Oxbox Center)		23,182	763	662	996
	Internal Capture Trips			-54	-54	-196
	Total Trips Adjusted for Internal Capture		23,182	709	608	800
	Pass-by Trip Adjustment 30%			(213)	(182)	(240)
	Net New Trips (Adjusted for Internal Capture and Pass-by)		23,182	496	426	560
Net New Trips to be added to the system			496	426	560	538
	Pass-by Trips		(213)	(182)	(240)	(231)

Internal capture rates for Oxbow Center was calculated based on NCHRP 684 and applied to the project. The pass-by trip rate utilized was 30%.

Analyses in this Study are reported for three cases (NO BUILD, BUILD Condition assuming Coors Pavilion Development only, and BUILD Condition assuming Coors Pavilion Development and Oxbox Development together) for the implementation year (2026) and again for the horizon year (2036).

- 2026 AM Peak Hour NO BUILD Conditions
- 2026 AM Peak Hour BUILD Conditions (Coors Pavilion trips)
- 2026 PM Peak Hour NO BUILD Conditions
- 2026 PM Peak Hour BUILD Conditions (Coors Pavilion trips)
- 2036 AM Peak Hour NO BUILD Conditions
- 2036 AM Peak Hour BUILD Conditions (Coors Pavilion trips)
- 2036 PM Peak Hour NO BUILD Conditions
- 2036 PM Peak Hour BUILD Conditions (Coors Pavilion trips)
- 2026 AM Peak Hour BUILD Conditions (Coors Pavilion AND Oxbow Center trips)
- 2026 PM Peak Hour BUILD Conditions (Coors Pavilion AND Oxbow Center trips)
- 2036 AM Peak Hour BUILD Conditions (Coors Pavilion AND Oxbow Center trips)
- 2036 PM Peak Hour BUILD Conditions (Coors Pavilion AND Oxbow Center trips)

Analysis results (Coors Pavilion ONLY) by analysis year are included in the following tables:

Executive Summary Results Table

Coors Pavilion			2026 Conditions		2036 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak	AM Peak	PM Peak
1 - Sequoia Rd. / Coors Blvd.	Signalized	NO BUILD	A - 5.0	B 10.7	A - 5.1	B - 15.1
		BUILD	A - 4.8	B - 11.5	A - 4.9	B - 19.4
2 - St. Joeeph's Dr. / Coors Blvd.	Signalized	NO BUILD	C - 28.2	A - 8.1	D - 35.0	A - 9.4
		BUILD	D - 38.3	C - 25.5	D - 51.1	C - 28.0
3 - Western Trail / Coors Blvd.	Signalized	NO BUILD	E - 71.3	B - 17.0	F - 98.7	B - 19.6
		BUILD	F - 83.9	B - 18.3	F - 110.1	B - 19.1
		MIT	D - 50.1	N/A	E - 57.3	N/A
4 - Milne Rd. / Coors Blvd.	Unsignalized	NO BUILD	D - 33.3	B - 14.2	F - 55.4	C - 15.1
		BUILD	E - 38.4	B - 14.7	F - 99.6	C - 15.8
5 - St. Joseph's Dr. / Atrisco Dr.	Signalized	NO BUILD	C - 21.2	B - 14.2	D - 38.9	B - 15.9
		BUILD	C - 24.5	B - 15.9	D - 45.4	B - 18.0
6 - Western Trail / Atrisco Dr.	Signalized	NO BUILD	B - 15.8	B - 13.3	C - 22.8	B - 14.5
		BUILD	B - 16.9	B - 13.8	C - 28.4	B - 15.3
7 - Milne Rd. / Atrisco Rd.	Unsignalized	NO BUILD	F - 255	C - 18.5	F - 999	C - 23.1
		BUILD	F - 334	C - 20.1	F - 999	D - 25.3
8 - St. Joseph's Dr. / Main Driveway	Unsignalized	NO BUILD	B - 14.6	B - 14.5	C - 15.8	C - 15.4
		BUILD	F - 56.4	D - 31.7	F - 76.6	F - 163.0
9 - Driveway "A" / Coors Blvd.	Unsignalized	NO BUILD	D - 32.7	D - 34.7	F - 53.1	E - 41.1
		BUILD	F - 79.6	C - 24.4*	F - 202	F - 191.0

* - Accounts for upstream signal.

The preceding table reports the delays / levels-of-service for the 2026 and 2036 NO BUILD Conditions, Build Conditions, and BUILD (Mitigated) Conditions based on the Synchro 11 analysis. The BUILD Conditions results reported above only assume development of the Coors Pavilion project at the northwest corner of St. Joseph's Dr. / Coors Blvd. The Coors Pavilion project was approved a couple years ago assuming different land uses that generated less traffic. This analysis updates the Coors Pavilion Traffic Impact Study to evaluate the currently proposed land uses including a new Target Discount Store on the west side of the project.

The New Mexico Department of Transportation requires the signalized analysis on Coors Blvd. to be performed using HCS7 software. Following are the results of the HCS7 analyses:

Coors Pavilion (HCS 7 Analysis Results)			2026 Conditions		2036 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak	AM Peak	PM Peak
1 - Sequoia Rd. / Coors Blvd.	Signalized	NO BUILD	B - 16.4	C - 20.6	B - 12.0	C - 26.2
		BUILD	B - 15.3	C - 23.3	B - 12.0	C - 32.4
2 - St. Joeeph's Dr. / Coors Blvd.	Signalized	NO BUILD	D - 41.7	B - 19.1	D - 36.7	C - 21.6
		BUILD	C - 50.3	D - 38.0	D - 45.7	D - 44.1
3 - Western Trail / Coors Blvd.	Signalized	NO BUILD	E - 77.6	C - 22.0	F - 123.7	C - 24.1
		BUILD	F - 91.6	C - 22.8	F - 133.5	C - 24.1
		MIT	E - 57.5	N/A	F - 80.1	N/A

The following table evaluates the totality of the two developments (Coors Pavilion and Oxbow) based on the Synchro 11 analyses:

Executive Summary Results Table

OXBOW DEVELOPMENT			2026 Conditions		2036 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak	AM Peak	PM Peak
1 - Sequoia Rd. / Coors Blvd.	Signalized	BUILD	A - 5.6	B - 14.4	A - 6.8	C - 30.5
2 - St. Joseph's Dr. / Coors Blvd.	Signalized	BUILD	F - 108.0	F - 90.0	F - 127.1	F - 98.8
		MIT*	D - 47.1	C - 30.1	E - 61.9	D - 36.4
3 - Western Trail / Coors Blvd.	Signalized	BUILD	F - 102.7	C - 21.2	F - 131.4	C - 27.0
		MIT**	C - 23.7	B - 17.2	C - 23.7	B - 19.3
4 - Milne Rd. / Coors Blvd.	Unsignalized	BUILD	F - 57.3	C - 16.2	F - 268	C - 18.2
5 - St. Joseph's Dr. / Atrisco Dr.	Signalized	BUILD	C - 33.2	C - 33.2	E - 57.5	C - 23.8
		MIT***	C - 20.6	B - 18.7	C - 34.3	C - 23.4
6 - Western Trail / Atrisco Dr.	Signalized	BUILD	B - 19.3	B - 14.9	C - 35.0	B - 17.1
7 - Milne Rd. / Atrisco Rd.	Unsignalized	BUILD	F - 512	C - 22.8	F - 999	D - 29.4
8 - St. Joseph's Dr. / Main Driveway	Signalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	F - 999	F - 999	F - 999	F - 999
		MIT****	B - 15.1	B - 16.1	B - 15.7	B - 16.4
9 - Driveway "A" / Coors Blvd.	Unsignalized	BUILD	F - 192	D - 31.8	F - 808	E - 48.2
10 - Driveway "B" / Coors Blvd.	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	F - 133	E - 42.1	F - 200	F - 52.2
11 - St. Joseph's Dr. / Driveway "C"	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	D - 32.7	C - 24.8	E - 38.3	D - 29.5
12 - Driveway "D" / Atrisco Dr.	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	C - 21.7	B - 19.5	D - 34.3	C - 22.5

* - Mitigation for St. Joseph's Dr. / Coors Blvd.. - Construct triple EB LT Lanes, Dual NB / SB Left Turn Lanes, and incorporate right turn overlay phasing for EB / SB Right Turn movements.

** - Mitigation for Western Trail / Coors Blvd. - Convert EB Thru lane to Thru / RT Lane, add EB RT overlap phase.

*** - Mitigation for St. Joseph's Dr. / Atrisco Dr. - Convert EB RT Lane to EB Thru / RT Lane.

**** - Mitigation for St. Joseph's Dr. / Main Driveway - Construct Traffic Signal

Also, construct two EB travel lanes on St. Joseph's Dr. from Atrisco Dr. to Coors Blvd.

In summary, the proposed developments (Coors Pavilion and Oxbow) do have a significant adverse impact to the adjacent transportation system especially during the AM Peak Hour at the intersections of St. Joseph's Dr. / Coors Blvd., Western Trail / Coors Blvd., and St. Joseph's Dr. / Main Driveway. The subject projects are large projects that will generate significant volumes of traffic which will be concentrated at St. Joseph's Dr. / Coors Blvd. The increase in traffic near the

project is such that the current signal timing plan for the Coors Blvd. corridor (especially at St. Joseph's Dr. and at Western Trail) will no longer be optimal.

The New Mexico Department of Transportation requires the signalized analysis on Coors Blvd. to be performed using HCS7 software. Following are the results of the HCS7 analyses:

Executive Summary Results Table

OXBOW DEVELOPMENT (HCS 7 Analyses)			2026 Conditions		2036 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak	AM Peak	PM Peak
1 - Sequoia Rd. / Coors Blvd.	Signalized	BUILD	A - 5.6	B - 14.4	A - 6.8	C - 30.5
2 - St. Joeeph's Dr. / Coors Blvd.	Signalized	BUILD	F - 108.0	F - 90.0	F - 127.1	F - 98.8
		MIT*	D - 47.1	C - 30.1	E - 61.9	D - 36.4
3 - Western Trail / Coors Blvd.	Signalized	BUILD	F - 102.7	C - 21.2	F - 131.4	C - 27.0
		MIT**	C - 23.7	B - 17.2	C - 23.7	B - 19.3

* - Mitigation for St. Joseph's Dr. / Coors Blvd.. - Construct triple EB LT Lanes, Dual NB / SB Left Turn Lanes, and incorporate right turn overlay phasing for EB / WB / SB Right Turn movements.

** - Mitigation for Western Trail / Coors Blvd. - Convert EB Thru lane to Thru / RT Lane, add EB RT overlap phase.

It should be remembered that the calculated overall intersection delays in the preceding tables are weighted average delays. Therefore, if the project contributes significant volumes of traffic to turning movements with lower calculated delays, the weighted average intersection delay could decrease.

The recommendations of this study are:

Implementation Year Analysis (2026):

- **Coors Blvd. Corridor (Sequoia Rd., St. Joseph's Dr., and Western Trail):**
 - As the development progresses, monitor the increasing traffic volumes along the Coors Blvd. corridor (from Sequoia Rd. to Western Trail) and update the signal timing plan for Coors Blvd. as needed.
- **St. Joseph's Dr. / Coors Blvd.:**
 - Reconstruct the signalized intersection to incorporate:
 - Dual northbound left turn lanes (protected)
 - Dual southbound left turn lanes (protected)
 - Triple eastbound left turn lanes (protected) – 448 feet long plus transition
 - Right turn overlap phasing for eastbound, westbound, and southbound right turn movements.
 - Lengthen eastbound right turn lane as far as possible.

- **St. Joseph's Dr. from Atrisco Dr. to Coors Blvd.** – Construct a second eastbound thru lane.
- **St. Joseph's Dr. / Atrisco Dr.** – Convert the existing eastbound right turn lane to a thru / right turn lane.
- **St. Joseph's Dr. / Main Driveway** – Construct the new Main Driveway on St. Joseph's Dr. approximately 630 feet west of Coors Blvd. (centerline to centerline) as a signalized driveway (when warranted) with the following minimum geometry:
 - **Eastbound** – 1 LT Lane, 2 Thru Lanes, and 1 RT Lane
 - **Westbound** - 1 LT Lane, 2 Thru Lanes, and 1 RT Lane
 - **Northbound** – 1 LT Lane and 1 Thru / Right Turn Lane
 - **Southbound** – 1 LT Lane and 1 Thru / Right Turn Lane
 - **NOTE:** Eastbound and westbound Left Turn and Right Turn Lanes on St. Joseph's Dr. at the Main Driveway should be designed and constructed to a length of 240 feet plus transition. Northbound and southbound left turn lanes in driveway should be designed and constructed to a length of 150 feet plus transition (minimum).
- **Access:**
 - **Coors Pavilion** should be accessed in the same manner as it is currently accessed. That is, via one Main Access (full access) driveway on St. Joseph's Dr. approximately 630 feet west of Coors Blvd. (centerline to centerline) and one existing right-in, right-out driveway on the west side of Coors Blvd. approximately 530 feet north of St. Joseph's Dr. (centerline to centerline).
 - **Oxbow** should be accessed via four new driveways as shown on the site plan for the project (Appendix Page A-4). The Main Access should align with the Main Access for Coors Pavilion and should eventually be signalized (when warranted). Driveway "A" should be a new right-in, right-out only driveway located along the west side of Coors Blvd. approximately 800 feet (centerline to centerline) south of St. Joseph's Dr. Driveway "C" is a new full access driveway along the south side of St. Josephs Dr. located approximately 465 feet east of Atrisco Dr. (centerline to centerline) and aligned with the existing driveway to St. Josephs on the Rio Grande Catholic Church. Driveway "D" is a new full access driveway on the east side of Atrisco Dr. located approximately 770 feet south of St. Josephs Dr. (centerline to centerline).
 - **Driveway "A" / Coors Blvd.** – a southbound right turn deceleration lane is warranted (currently already exists).
 - **Driveway "B" / Coors Blvd.** – a southbound right turn deceleration lane is warrants on Coors Blvd. at Driveway "B". The new southbound right turn deceleration lane should be designed and constructed to a length of 370 feet long (including a 125 feet long transition. Driveway "B" should be designed and constructed with one entering lane and one exiting lane and should be restricted to a right-in, right-out driveway.
 - **St. Josephs Dr. / Driveway "C"** – a new left turn lane on St. Josephs Dr. at Driveway "C" is warranted. The new westbound left turn lane should be designed

and constructed to a length of 125 feet plus transition (150'-150' reverse curve). Driveway "C" should be designed and constructed with one entering lane and two exiting lanes (one left turn lane and one thru / right turn lane). Driveway "C" should be aligned with the existing St. Josephs of the Rio Grande Catholic Church driveway.

- **Driveway "D" / Atrisco Dr.** – a new left turn lane on St. Josephs Dr. at Driveway "C" is warranted. The new westbound left turn lane should be designed and constructed to a length of 125 feet plus transition (150'-150' reverse curve).
- All design and construction of roadway infrastructure and site plan elements shall maintain adequate sight distances at the access points for the project.
- Sight design shall incorporate truck turning movement templates to demonstrate reasonable access of delivery vehicles (and other design vehicles) into and out of the project.

Horizon Year Analysis (2036):

- Same as recommendations for the Implementation Year.
- Western Trail / Coors Blvd. – Re-stripe the west leg of Western Trail to create an exclusive eastbound right turn lane plus an eastbound thru / right turn lane. Install a right turn overlap phase on the existing traffic signal for the eastbound to southbound right turn movement.