



July 19, 2017

RE: TRAFFIC IMPACT REVIEW

**MCUBE Technologies, Inc.
Performance Sports
3705 Clinton Parkway**

- 1. Identify the specific development plan under study and any existing development on and/or approved plans for the site (land use types and intensities and the arrangement of buildings, parking and access). Also, identify land uses (including types and the arrangement of buildings, parking and access) on property abutting the proposed development site, including property across public streets.**

An existing two story, 15,315 gsf, building with current occupant/owner being a church. The proposed uses are to repurpose the existing building to professional offices and to construct a one story, 9,995 gsf, indoor active recreation facility on undeveloped ground to the rear to the existing two story building

- 2. Identify the land uses shown in Horizon 2020 for the proposed development site under study, as well as the ultimate arterial and collector street network in the vicinity of the site (at least the first arterial or Collector Street in each direction around the site).**

The Future Land Use Map from Horizon 2020, April 2016 revision, identifies the area containing the development site as Medium to High Density Residential

Per the adopted T2040 Major Thoroughfares Map, the nearest defined principal arterial is Clinton Parkway on which this parcel fronts

The Collector street system in the vicinity:

North: None

South: West 27th Street

East: None

West: Crossgate Drive, Inverness Drive

- 3. Identify the functional classification of the public street(s) bordering the site and those streets on which access for the development is proposed. The functional classification is shown on the Major Thoroughfares Plan, adopted as a part of Transportation 2040 and Figure 14 in Horizon 2020.**

East: Clinton Parkway Frontage Road, East, to the intersection of Hawthorne Drive & Clinton Parkway a Principal Arterial, a controlled intersection

West: Clinton Parkway Frontage Road, West, to the intersection of Crossgate & Drive Clinton Parkway Principal Arterial, a controlled intersection

- 4. Identify allowable access to the development site as defined by criteria included in the adopted Access Management Plans for arterial and collector streets in Lawrence, specifically the W. 6th Street Corridor study.**

This project is not located within the boundaries of these Access Management Plans.

5. Document current public street characteristics adjacent to the site, including the nearest arterial and collector streets [number and type of lanes, speed limits or 85th percentile speeds, and sight distances along the public street(s) from the proposed access(es).

Collector Streets

Street Name	Distance	Direction	Travel Lanes	Center Lane	Parking	Shoulder	Speed Limit	Site Distance
Crossgate Drive	.13 mi	West	2	No	No	None	35 mph	Unobstructed
Inverness Drive	.70 mi	West	2	No	No	None	35 mph	Unobstructed
West 27th Street	.50 mi	South	2	No	No	None	35 mph	Unobstructed

Arterial Streets

Street Name	Distance	Direction	Travel Lanes	Center Lane	Parking	Shoulder	Speed Limit	Site Distance
Clinton Parkway	.00	North	4	Median	No	No	45 mph	Unobstructed
Kasold Drive	.25 mi	East	4	Median	No	No	40 mph	Unobstructed
Wakarusa Drive	1.10 mi	West	4	No	No	No	45 mph	Unobstructed

6. Compare proposed access with AASHTO established design criteria (driveway spacing, alignment with other streets and driveways, city driveway standards, and minimum sight distances.) Assess the feasibility of access connections to abutting properties, including shared access with the public street system.

The proposed site access shall remain as site planned and provides for a single lane in and a single lane out to Clinton Parkway Frontage Road. The site access from Clinton Parkway Frontage Road is approximately 1,400' from the centerline of Hawthorne Drive and the same to Crossgate Drive.

7. Estimate the number of trips generated by existing and proposed development on the site for a typical weekday and weekday peak hours using the latest edition of Trip Generation published by the Institute of Transportation Engineers. Local trip generation characteristics may be used if deemed to be properly collected and consistent with the subject development application. The Public Works Director shall make such determination. Calculate the net difference in trips between existing and proposed uses. If the development site already has an approved plan, also estimate the number of trips that would be generated by the approved land uses. If the development application is proposing a land use DIFFERENT THAN indicated in Horizon 2020 and Transportation 2025, also estimate the number of trips that would be generated by the land use indicated in Horizon 2020 or Transportation 2040.

The estimated traffic generated from the site is based on the closet approximate study,

Church land use code (560) based on seats

General Office land use code (710) based on per 1,000 square feet

Batting Cages land use code (433) base on per batting cage

found in the 9th Edition of ITE Trip Generation Handbook.

Empirical based on owners experience with identical 12,000 sf facility elsewhere

Time of Day/Week	Existing: Church					Proposed: General Office			
	Volume	Total	In	Out		Volume	Total	In	Out
Daily Average Rate Weekday	300 seats	182	91	91		15,300sf	94	46	46
A.M. Peak Hour Rate Weekday	300 seats	N/A	-	-		15,300sf	24	21	3
P.M. Peak Hour Rate Weekday	300 seats	N/A	-	-		15,300sf	22	4	18
Saturday Peak Hour Rate	300 seats	180	90	90		15,300sf	7	5	2
Sunday Peak Hour Rate	300 seats	554	277	277		15,300sf	6	4	2

Time of Day/Week	Proposed: Batting Cages					Proposed: Batting Cages Empirical			
	Volume	Total	In	Out		Volume	Total	In	Out
Daily Average Rate Weekday	10 cages	N/A	-	-		Owner operated an identical 12,000sf facility located at 1811 West 31st for 3 years. During that time they observed no parking demand during weekday hours, 20-22 in & out trips during Weekday Peak P.M. and 20-22 in & out trips during the Saturday Peak A.M. No trips on Sunday. Proposed facility is 20% smaller so trip loads should be factored down proportionally.			
A.M. Peak Hour Rate Weekday	10 cages	N/A	-	-					
P.M. Peak Hour Rate Weekday	10 cages	22	12	10					
Saturday Peak Hour Rate	10 cages	22	12	10					
Sunday Peak Hour Rate	10 cages	N/A	-	-					

8. Conclusion

Since the maximum peak hour trips generated do not exceed 100 trips with the proposed general office/active recreation use (combined or separate), no further traffic analysis is required.