#### PLANNING COMMISSION REPORT Regular Agenda – Public Hearing Item

PC Staff Report 08/22/16

ITEM NO. 2B SPECIAL USE PERMIT; MICROBREWERY; 706 E 23<sup>RD</sup> STREET

**SUP-16-00262**: Consider a Special Use Permit for a *Manufacturing and Production, Limited* use, to accommodate a microbrewery, located at 706 E 23<sup>rd</sup> Street. Submitted by Johnston Investments Company, LLC for Lawrence Brothers, LLC, property owner of record.

**STAFF RECOMMENDATION:** Planning Staff recommends approval of a Special Use Permit for a *Manufacturing and Production, Limited* use to be located at 706 E 23<sup>rd</sup> Street and forwarding the item to the City Commission with a recommendation of approval subject to the following conditions:

- 1. The following items shall be provided prior to the release of the site plan for processing of a building permit:
  - a. Executed site plan performance agreement.
  - b. Erosion control plan for the City Stormwater Engineer's approval.
  - c. Lighting spec sheets to insure building mounted fixtures are the lumen equivalent of lights less than 150 watt incandescent or that full cut-off fixtures are used.
- 2. Prior to the release of the Special Use Permit site plan, the applicant shall provide a revised drawing with the following changes:
  - a. Application of additional architectural treatment to the main entry to achieve visual prominence.
  - b. Revision of the access drive on E 23<sup>rd</sup> Street, if necessary, based on KDOT's review of the additional Traffic Information.
  - c. Addition of the following note, "Special Events on the property require approval of a Special Event Permit."
  - d. Addition of recording information (Book and Page Number) for the dedicated shared access easement.
  - e. Addition of the following note: "The future building addition is shown for information purposes. A site plan will be submitted for approval prior to the construction of this addition."

Reason for Request:

"In the CS zoning, 'Manufacturing and Production, Limited' is only allowed by special use. CS zoning was required for the facility to have a tap room/bar."

#### **KEY POINTS**

- The property was recently rezoned from the IG (General Industrial) District to CS to accommodate the proposed tap room/bar in addition to the microbrewery. The microbrewery would have been permitted by right in the IG District, with site plan approval; however, it requires approval of a Special Use Permit in the CS District.
- The subject property is not platted. Platting is required and a Preliminary Plat has been submitted in conjunction with the Special Use Permit application.

#### **ASSOCIATED CASES**

- Z-16-00154; Rezoning of the subject property from IG to CS. Approved by the City Commission on July 12, 2016 with the adoption of Ordinance No. 9262.
- PP-16-00261; Preliminary Plat for Johnston Addition, a one-lot subdivision. The plat was submitted concurrently with the Special Use Permit application and is also on the August Planning Commission agenda.

#### OTHER ACTION REQUIRED

- City Commission approval of Special Use Permit and adoption of related ordinance.
- Publication of Special Use Permit ordinance.
- Planning Commission approval of Preliminary Plat.
- Submittal and administrative approval of a Final Plat.
- City Commission approval of easements or right-of-way being dedicated on the Final Plat.
- Building permits obtained from Development Services Division prior to commencement of development activity.

#### PLANS AND STUDIES REQURIED

- *Downstream Sanitary Sewer Analysis* Fixture count analysis provided as the Downstream Sanitary Sewer Analysis was accepted by the City Utilities Engineer.
- *Drainage Study* The drainage study dated 6-21-2016 met the specified requirements and was approved.
- Traffic Study A 7-step Traffic Impact Study was provided and accepted by the City Engineer. KDOT requested additional traffic information, which was provided on August 10, 2016. The review of the additional information is not complete; however, KDOT indicated the purpose of the review was to insure the design of the access drive on E 23<sup>rd</sup> Street was appropriate.

#### **ATTACHMENT**

- 1. Site Plan
- 2. Traffic Impact Studies

#### **PUBLIC COMMENT**

No public comment was received prior to the printing of this staff report.

# GENERAL INFORMATION Current Zoning and Land Use:

CS (Commercial Strip) District; vacant lumberyard, proposed use: microbrewery with tap room/bar and incidental retail sales and food truck permanently on the premises (*Manufacturing and Production, Limited; Bar or Lounge; General Retail Sales, and Fast Order Food*)

# Surrounding Zoning and Land Use:

#### To the north:

IG (General Industrial) District; Light Wholesale Storage and Distribution and General Industrial

#### To the west:

IG (General Industrial) District; Construction Sales and Services and Manufacturing and Production, Limited

#### To the east:

CS (Commercial Strip) District; Car Wash, Light Equipment Repair

To the south: IG (General Industrial) and CS (Commercial Strip) south of K-10; *Veterinarian, Light Equipment Repair* (Figure 1)



**Figure 1a.** Zoning in the area, subject property outlined.



Figure 1b. Land use/development in the area.

#### **SUMMARY OF SPECIAL USE**

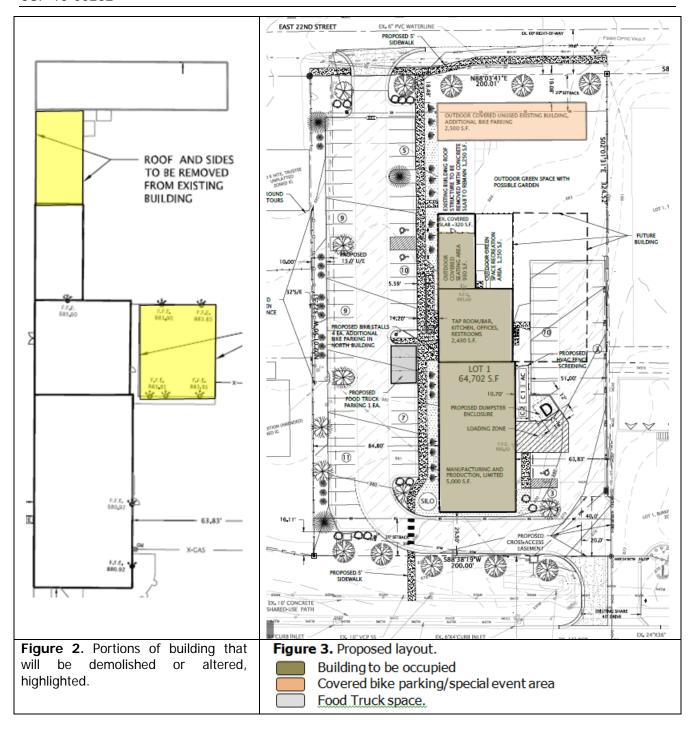
The applicant proposes to renovate the former lumber yard on the site to house a microbrewery and taproom with the sale of beer for on-site consumption. Taprooms where product can be sampled before being purchased is typically considered an accessory use to a microbrewery. A taproom which includes the sale of alcohol for on-site consumption is classified as a *Bar* use and requires the appropriate zoning. Retail sales of branded merchandise is also being proposed; this would be classified as *General Retail Sales* but would be considered an accessory use to the bar. A small kitchen will be provided in the taproom, for appetizers and other items. Most of the food sales for the facility will be provided by a Food Truck. The site plan shows a dedicated parking area for the Food Truck on the west side of the building.

The small kitchen and the appetizers, or typical bar food, is considered an accessory use to a bar while the food truck is classified as *Fast Order Food*. The *Fast Order food* and *Bar/Lounge* uses are allowed in the CS District with site plan approval. The micro-brewery, classified in the Development Code as *Manufacturing and Production*, *Limited*, requires approval of a Special Use Permit in the CS Zoning District.

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SITE SUMMARY	SITE SUMMARY Existing Proposed		Change
Land Use:	Vacant	Manufacturing and Production, Limited; Bar/Lounge; General Retail Sales;	Change in use
Land Area:	64,702 sq ft	64,702 sq ft	
Building Area:	14,780 sq ft	11,390 sq ft	-3,390 sq ft
Pavement Area:	47,452 sq ft	33,687 sq ft	-13,765 sq ft
Impervious Area:	62,232 sq ft (96.2%)	45,077 sq ft (69.7%)	-17,155 sq ft
Pervious Area:	2,470 sq ft	19,625 sq ft	+17,155 sq ft

The facility will continue to use the shared drive on E 23<sup>rd</sup> Street/K10 Highway and will add a second access on E 22<sup>nd</sup> Street to the north. Parking areas will be constructed on the west and east side of the building. The portion of the building at the loading area, 2,140 sq ft, will be demolished and a portion of the covered, open-sided metal building that was the lumber storage area will be removed. (Figure 2) The existing sign pole and fencing will also be removed and the existing overhead electric lines from the building to the line along the west property line will be placed underground.

A future building is shown on the plans to illustrate the future plans for the property; however, the addition is not being approved with this plan. Additional review and approval is required before building permits would be issued for this improvement. The plan should note that the future building addition will require site plan approval.



The open-sided storage building to the north of the tap-room will be used for outdoor seating. Windows will be added to the west side of this portion of the building. A green wall, with plantings, will be added north of the seating area. A grass recreation area east of the outdoor seating area will be used for activities such as bocce ball, bean bag toss, etc. The open-sided building along the north side of the property will be retained and used for additional bike parking that may be associated with bicycle oriented events on the site. This may also be a location of outdoor music and other activities associated with Special Events. These events would require approval of a Special Event Permit. (Figure 3) This should be noted on the plan.

A Special Use Permit is intended to insure compatibility with adjacent residential uses. Section 20-1306(a), of the Development Code provides the following information on the review procedures for a Special Use:

"The process entails a public review and evaluation of the use's operating characteristic and site development features and is intended to ensure that proposed Special Uses will not have a significant adverse impact on surrounding uses or on the community at large."

The Development Code defines the *Manufacturing and Production, Limited* use as "Establishments generally employing fewer than 20 persons, do not involve outside storage of materials, do not require Federal air quality discharge permits, are compatible with nearby residential uses because there are few or no offensive external effects, and are primarily engaged in one of the following: ...

(3) Manufacturing, processing, or packaging of small-scale food production operations with limited on-site retail sales. Typical uses include caterers, bakeries, bottling and beverage manufacturing operations." (Section 20-1739)

A *Manufacturing and Production, Limited* use is typically considered to be compatible with nearby residential use because there are few or no offensive external effects. The Special Use Permit review process allows the use to be reviewed and conditioned to insure there are few or no offensive external effects that would impact land uses in the area.

#### **SITE PLAN REVIEW**

Review and Decision-Making Criteria (20-1306(i), Development Code)

# 1. WHETHER THE PROPOSED USE COMPLIES WITH ALL APPLICABLE PROVISIONS OF THIS DEVELOPMENT CODE

Applicant's Response:

"The request does comply with the applicable development code. Manufacturing and Production, Limited is allowed in the CS district as a special use."

The proposed use, a microbrewery, is classified in the Development Code as a *Manufacturing and Production, Limited* use. Standards that apply to this development include density and dimensional requirements in Article 6, parking in Article 9, landscaping in Article 10 and general development standards in Article 11. The following is a review of the change being proposed with this project for compliance with the Development Code.

#### DENSITY AND DIMENSIONAL STANDARDS

The property is not currently platted. Platting is required by Code prior to issuance of building permits. A preliminary plat was submitted concurrently with the SUP application and will also be considered by the Planning Commission at their August meeting.

CS District Density and Dimensional Standards				
STANDARD	REQUIRED	PROVIDED		
Minimum Lot Area	5,000 sq ft	64,702 sq ft		
Minimum Lot Width	100 ft	200 ft		
Maximum Impervious Lot Coverage	80%	69.7%		

Setbacks		
Front	25 ft	29.5 ft
Side	0 ft	84.8 ft (west) / 63.83 ft (east)
Rear(double frontage)	25 ft	19.08 ft*

\*The Douglas County Appraiser's records indicate that the lumber storage shed was built in 1975. At that time, the property was zoned M-2 (General Industrial). This District required a 25 ft setback when the property abuts a street right-of-way and is across the street from a non-residential district. The structure was in compliance with the setback when it was constructed, but with the additional right-of-way being dedicated with the platting of the property it now encroaches into the required setback.

A deed described the property a certain distance from the 22<sup>nd</sup> Street right-of-way; however, the right-of-way was assumed and hadn't been formally dedicated. The additional right-of-way is being dedicated with the plat for this property. Section 20-1503 of the Development Code contains provisions for nonconforming structures, but notes that a building which encroaches into the setback due to the acquisition of right-of-way is not a nonconforming structure. The building is allowed to remain in this location and is not considered a nonconforming structure. This should be noted on the plan.

#### PARKING SUMMARY

Use	Requirement	Required	Provided
Manufacturing and Production, Limited	1 parking space per 1,000 sq ft of building area and 1 space per vehicle used in the business.	5000 sq ft building and 3 vehicles: 8 spaces	
Bar/Lounge	1 parking space for 3 people based on maximum occupancy and 1 space for each employee on largest shift	162 occupants and 5 employees: 59 spaces	
General Retail Sales	Ancillary use with the bar, no additional parking required	Ancillary to bar use: 0 spaces	
Fast Order Food (Food Truck)	No additional parking unless additional customer service area provided	No additional customer service area provided:  0 spaces	67 spaces, (plus 1 space reserved for the
TOTAL		67 spaces	Food Truck)
ADA parking	3 spaces (1 van accessible) for lots with 51 to 75 spaces	3 spaces, 1 van accessible	3 spaces, 1 van accessible
Bicycle parking	5 or 1 per 10 auto spaces	8 spaces	8 spaces

LANDSCAPING / BUFFERYARD

Street trees are required at the rate of 1 tree per 40 ft of street frontage. Each street frontage is 200 ft; therefore, 5 street trees are required on E 22<sup>nd</sup> and on E 23<sup>rd</sup> Street each. The plan provides the required number of street trees.

The property is adjacent to CS District on the east and IG properties to the north, west, and south-across W 23<sup>rd</sup> Street/K10 Highway. A Type 1 Bufferyard is required between developments in the CS and IG Districts. (Figure 4)

The structure and use of the property is very similar to that on the surrounding properties. The property is separated from the property to the south by E 23<sup>rd</sup> Street/ K10 Highway right-of-way which is approximately 140 ft wide in this location. The bufferyard requirement along W 23<sup>rd</sup> Street/K10 Highway is administratively waived, due to the separation provided by the right-of-way. The property is separated from the property to the north by E 22<sup>nd</sup> Street right-of-way, 60 ft wide. Given the separation and the similar building types on each property, the bufferyard requirement is administratively waived on the north property line.



**Figure 4.** Type I Bufferyard (marked in yellow).

A bufferyard is required along west property line, Figure 5. Per Code, a 10 ft wide Type 1 Bufferyard requires 4 trees and 10 shrubs per 100 linear feet. The west property line is 322.51 ft in length, which would require 12 trees and 33 shrubs. A 10 ft wide bufferyard with a 6 ft tall wooden privacy fence in the open area between the buildings is proposed (Figure 5).

The unfenced area contains the sides of the adjacent buildings and parking areas. Given the mixed use nature of the subject property (Commercial and Industrial) and the fact that the buffer areas beyond the fence would be buffering adjacent parking areas; the 6 ft tall privacy fence and the planting of 4 bufferyard trees has been approved to meet the bufferyard requirement as Alternative Compliance. The and Alternative Compliance approved for the bufferyards should be noted on the plan.



**Figure 5.** View to the west. Location of proposed privacy fence -shown in red.

#### PARKING LOT LANDSCAPING

The perimeter and interior parking lot landscaping shown on the plan is compliant with Code requirements.

#### SITE COVERAGE.

The CS District permits a maximum of 80% of the site to be covered with impervious materials. Approximately 70% of the site will be covered with impervious materials. The proposed plan reduces the amount of impervious surface on the site by more than 25%.

#### LIGHTING

The lighting proposed with this project consists of three single head LED fixtures on 22 ft poles on 3 ft foundations and fourteen 42-watt lights mounted on the building near the entrances and along the building face. The lighting levels at the property line are compliant with the lighting standards in the Development Code. The parking lot lighting will be LED lights with full cut-off fixtures. In keeping with the industrial nature of the property, industrial style lighting is proposed for the building (Figure 6). The lighting utilizes a 32-watt fluorescent lamp. This emits 2,200 lumens of light, which is less the equivalent of a 150 watt incandescent bulb, 2,600 lumens; therefore, full cut-off fixtures are not required.



**Figure 6.** Building mounted lighting fixture.

#### **ACCESS**

The project will utilize the shared access drive on E 23<sup>rd</sup> Street/K10 Highway and will add a secondary access on E 22<sup>nd</sup> Street. The second access will provide an option for traffic entering and leaving the site and will provide a secondary access for emergency vehicles.

#### COMMERCIAL AND INDUSTRIAL DESIGN STANDARDS

The proposed project contains a mix of industrial and commercial uses which would require compliance with the Commercial and Industrial Design Standards in the *Community Design Manual*. However, as these uses are located within the same structure the Commercial Design Standards will be applied based on the commercial zoning of the property. The standards are intended to be applied on a case by case basis. Flexibility will be allowed with this project based on the mix of commercial and industrial uses and the reuse of an existing industrial building.

Part Three of the Commercial Design Standards pertains to infill and redevelopment projects. The following is a review of the standards provided in Part Three (Pages 2-39 through 2-51, *Community Design Manual*) Building elevations are provided in Attachment A. Standards are underlined and planning discussion follows in italics.

- <u>Stormwater and Site Drainage developed as an attractive amenity</u>. Adequate stormwater management and drainage is being provided; however, due to the existing development of the site, room is not available to develop the detention area as an attractive amenity.
- Streetscape and Neighborhood Transitions:
  - --Fencing along a property line should be decorative using materials and accents which are compatible with the building design. A short span of fencing is proposed for screening along the west property line. It will be a 6 ft tall wooden fence. While not decorative, this is compatible with the design of the building.
  - --<u>Pedestrian connections into the site shall be clearly defined and continuous</u>. A walkway connects the facility with adjacent walkways on E 22<sup>nd</sup> and E 23<sup>rd</sup> Streets. Markings identify the crossing across the access drive near E 23<sup>rd</sup> Street.
- Vehicular Access and Parking Areas.
   Access easements ensure that adjacent parcels have adequate access in the event that ownership changes.
   An access easement for the shared access on E 23<sup>rd</sup> Street/K10

Highway is being dedicated with the plat for the property. The recording information should be included on the plan.

Accessible parking spaces shall be located adjacent to walkways and at building entryways to minimize pedestrian-vehicle conflicts. All ADA spaces are adjacent to walkways so it is not necessary to cross drive aisles to access the building. Two ADA spaces are provided near the ramp to the tap room/bar. Another ADA space is proposed on the southeast corner of the microdistillery near the entry, for employee use.

#### Pedestrian Access and Amenities

All internal pedestrian walkways of the commercial development shall be a minimum of 6 ft wide. The shape of the property and configuration of the existing development provide site constraints; therefore, 5 ft wide walkways are acceptable.

Pedestrian walkways should be provided along the full length of any building and along any façade abutting public parking areas. These walkways shall be separated from the building to provide an area for foundation plantings. A walkway is provided along the west side of the building with an area for foundation plantings, where the ADA ramp is not necessary. The east side is an area for overflow and employee parking. There is an entrance into the building directly from the parking lot on the east but a walkway is not provided along the back façade of the building. Given the small size of this parking lot and the fact that it will be used primarily for employees and company vehicles, the walkway is not required.

#### • Outdoor storage, Sales and Service Areas.

The dumpster is oriented to the northeast, out of view of the adjacent property and the right-of-way. The mechanical equipment will be screened on all visible sides with a fence.

#### <u>Landscaping</u>

One-third of the plantings (excluding street trees and interior parking lot trees) shall be evergreen species. Evergreen or year-round plantings make up a large portion of the shrub plantings.

#### Facades and Exterior Walls and Roofline.

As this project is reusing an existing industrial building, it is not possible to meet all the standards regarding the building façade and roofline. A variety of materials are used for the building exterior. Windows are provided for the taproom/bar and the outdoor seating area; however, windows are not included in the industrial portion of the building used for the microbrewery. A green wall, a wall covered with plantings, to the north of the outdoor seating area provides additional variety. The principal entry should be a prominent feature on the façade. Additional architectural measures or features should be added to the plan to increase the prominence of the entry to the taproom. With this condition, the proposed changes to the building comply with the standards to the degree that the mix of uses and the reuse of the building would permit.

**Staff Finding** – This use, as conditioned, complies with the applicable provisions of the Development Code.

3. WHETHER THE PROPOSED USE IS COMPATIBLE WITH ADJACENT USES IN TERMS OF SCALE, SITE DESIGN, AND OPERATING CHARACTERISTICS, INCLUDING HOURS OF

## OPERATION, TRAFFIC GENERATION, LIGHTING, NOISE, ODOR, DUST AND OTHER EXTERNAL IMPACTS

Applicant's Response:

"Yes, the adjacent properties are zoned IG or CS and are compatible with the proposed use."

The proposed use will utilize an existing structure that was built in the 1970s. The structure originally housed a lumber store with an open-sided storage shed. The structure has an industrial design and character, and the intent of the applicant is to maintain this character. The property is located along a principal arterial, E 23<sup>rd</sup> Street/K10 Highway; is adjacent to commercial zoning to the east and is surrounded on other sides by industrial zoning. The microbrewery is an industrial use that will be similar in nature and operational characteristics to other uses in the area. The Bar/taproom may have later hours that the other uses in the area, but as there are no nearby residences and the other uses would be closed at that time. Outdoor activity area is proposed, but it is located between the outdoor seating area and the back of the commercial property to the east.

**Staff Finding** – The proposed project contains both industrial and commercial uses that will be located in a pre-existing industrial style building. The proposed uses are compatible with the adjacent commercial and industrial land uses.

# 3. WHETHER THE PROPOSED USE WILL CAUSE SUBSTANTIAL DIMINUTION IN VALUE OF OTHER PROPERTY IN THE NEIGHBORHOOD IN WHICH IT IS TO BE LOCATED

Applicant's Response:

"No, a remodeled building with a vibrant business would increase the value of other property as opposed to the vacant dilapidated building that exists."

The lumberyard property has been vacant for several years. Development projects have been proposed for this site, but the additional process and cost of platting; in addition to site planning the use and possibly rezoning have deterred the applicants. This project will reuse the vacant lumber building and maintain/enhance the character of the area. The site improvements should have no negative effect, and would more likely have a positive effect, on the value of other property in the area.

**Staff Finding** – The reuse and rehabilitation of the existing structure on this property in addition to the landscaping and other site improvements should enhance the character of this area. This project is not expected to have any negative impact, and may have a positive impact, on property values in the area.

4. WHETHER PUBLIC SAFETY, TRANSPORTATION AND UTLITY FACILITIES AND SERVICES WILL BE AVAILABLE TO SERVE THE SUBJECT PROPERTY WHILE MAINTAINING SUFFICIENT LEVELS OF SERVICE FOR EXISTING DEVELOPMENT

**Staff Finding** – As this is an infill redevelopment project, safety, transportation and utility facilities are currently available to serve the subject property. However, as E 22<sup>nd</sup> Street is not currently constructed with curb and gutter, the property owner may be asked to participate in future improvements if the street is improved by a benefit district in the future.

## 5. WHETHER ADEQUATE ASSURANCES OF CONTINUING MAINTENANCE HAVE BEEN PROVIDED

**Staff Finding** – The site plan will function as the enforcement document to assure that the maintenance and use of the property is consistent with the approval.

# 6. WHETHER THE USE WILL CAUSE SIGNIFICANT ADVERSE IMPACTS ON THE NATURAL ENVIRONMENT

Applicant's Response: '

"No, the proposed use is generally indoor and being food grade production will be quite sanitary."

The proposed use should have no adverse impact on the natural environment. The facility will reuse and rehabilitate a vacant building.

**Staff Finding –** The proposed use should have no adverse impact on the natural environment.

# 7. WHETHER IT IS APPROPRIATE TO PLACE A TIME LIMIT ON THE PERIOD OF TIME THE PROPOSED USE IS TO BE ALLOWED BY SPECIAL USE PEMRIT AND, IF SO, WHAT THAT TIME PERIOD SHOULD BE

Time limits are established on Special Use Permits to permit a periodic review to determine if the use remains compliant with the area. The microbrewery, being an industrial use, is very similar in nature to the other uses in the area. The use, as approved, should remain compatible with the area.

**Staff Finding** – The Special Use Permit is required for the limited industrial use due to the recent rezoning of the property. The proposed industrial use is very similar to other uses in the area. It would not be appropriate to place a time limit on the Special Use Permit.

#### CONCLUSION

Based on the findings in this report, and as conditioned, staff recommends approval of the proposed Special Use Permit.

### **DEVELOPMENT SUMMARY**

IMPERVIOUS SURFACE SUMMARY				
Existing Summary	AREA (SQ. FT.)	Summary After Project Completion	AREA (SQ. FT.)	
Existing Building	14,780	Proposed Buildings	11,390	
Existing Pavement	47,452	Proposed Pavement	33,687	
Existing Impervious	62,232	Proposed Impervious	45,077	
Existing Pervious	2,470	Proposed Pervious	19,625	
Property Area	64,702		64,702	
BUILDING COVERAGE 22.8% IMPERVIOUS LOT COVERAGE 96.2%		BUILDING COVER IMPERVIOUS LOT CO		

PARK	ING SUMMARY	
PARKING REQUIREMENT	# OF UNITS	PARKING REQUIRED
BAR OR LOUNGE 1 PER 3 PERSONS MAXIMUM OCC. PLUS 1 PER EMPLOYEE	162 OCC. 5 EMPLOYEES	59 SPACES
MANUFACTURING AND PRODUCTION, LIMITED 1 PER 1000 SF PLUS 1 PER VEHICLE USED	5,000 S.F. 3 VEHICLES	8 SPACES
PERMANENT FOOD TRUCK	1 VEHICLE	1 SPACE
PARKING PROVIDED		
TOTAL PARKING SPACES	67	
STANDARD SPACES	64	
ADA HANDICAP SPACES	3 (1 VAN)	
FOOD TRUCK 18'x30'	1	

LANDSCAPING SCHEDULE			
SYMBOL	QUANT.	NAME	SIZE & COND
	0	EX. CONIFEROUS/DECIDUOUS TREES	
THE PARTY OF THE P	9	STREET TREES - 1 PER 40' OF FRONTAGE LARGE CANOPY - LACEBARK ELM, SHUMARD OAK, SUMMERSHADE NORWAY MAPLE, GREENSPIRE LINDEN, OR APPROVED EQUAL (2 SPECIES MIN.)	2.5" CAL - B&B
	1	MEDIUM CANOPY - SHANTUNG MAPLE, GOLDENRAINTREE, CHICKAPIN OAK OR APPROVED EQUAL	
	2+1*	PERIMETER LANDSCAPING REQUIREMENT  1 TREE PER 25' OF PARKING LOT PLUS CONTIN. ROW OF EVERGREEN SHRUBS * DENOTES COUNTED AS STREET TREES	2.5" CAL - B&B
	1+1	LACEBARK ELM, SHUMARD OAK OR SUMMERSHADE NORWAY MAPLE, + BOSNIAN PINE OR WHITE SPRUCE	2.5" CAL - B&B 5 GAL - CONT.
A MILE AND	12	DWARF BURNING BUSH, MAGIC CARPET SPIREA OR APPROVED EQUAL	2 GAL.
		INTERIOR LANDSCAPING REQUIREMENT PARKING LOTS - 40 S.F. PER STALL, 1 SHADE TREE & 3 SHRUBS PER 10 STALLS (67 STALLS - 2680 S.F./7 TREES/21 SHRUBS) AREAS PROVIDED AT END ISLANDS, CENTER ISLANDS; PLANTERS AND BETWEEN FENCE AND PARKING EXCEED 3,450 S.F.	
	5+2	LACEBARK ELM, SHUMARD OAK, SUMMERSHADE NORWAY MAPLE, GREENSPIRE LINDEN + BOSNIAN PINE, LIMBER PINE, WHITE SPRUCE OR APPROVED EQUAL	2.5" CAL - B&B
	21	DWARF BURNING BUSH, MAGIC CARPET SPIREA, KNOCK-OUT ROSES, BLUE HOLLY OR APPROVED EQUAL	2 GAL.
	16	LANDSCAPE AREAS + LOW MAINTENANCE GRASSES - BLUESTEM, PAMPAS GRASS, MAIDEN GRASS, INDIAN GRASS, WITH A MATURE SPREAD OF LESS THAN 3' OR APPROVED EQUAL- MULCH, RIVER GRAVEL OR OTHER GROUND TREATMENT	1 GAL.
		ALL UNPAVED AREAS SHALL BE PLANTED WITH TURF GRASSES	
	BU	FFERYARD LANDSCAPING REQ.	

CS TO IG ZONING - TYPE 1 - 10' TO >25'

ALTERNATE COMPLIANCE - THE PROPERTY WAS REZONED FOR THIS HAS BEEN ESTABLISHED, NO ADDITIONAL BUFFERING IS PROPOSED

	PAVING SCHEDULE				
SYMBOL (SHADED FOR CLARITY)	NAME				
	4" CONCRETE PAVING FOR SIDEWALKS				
	5.5" ASPHALT PAVING				
	7" ASPHALT PAVING				
Δ Δ Δ	6" CONCRETE PAVING				
	8" CONCRETE PAVING CITY SPEC. FOR APPROACHES				

### LEGAL DESCRIPTION

LOT 1, JOHNSTON ADDITION, LOCATED IN THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 13 SOUTH, RANGE 20 EAST OF THE SIXTH PRINCIPAL MERIDIAN, IN THE CITY OF LAWRENCE, DOUGLAS COUNTY, KANSAS.

### GENERAL NOTES

Lawrence Brothers, LLC 879 N 200 Road

Baldwin City, Kansas 66006 **Contract Purchaser:** Johnston Investments Company, LLC

10745 S. Oakcrest Lane Olathe, Kansas 66061 Land Planner/Engineer: Grob Engineering Services, LLC

3210 Mesa Way, Suite A Lawrence, Kansas 66049 All Points Surveying, LP Surveyor:

P.O. Box 4444

- Lawrence, Kansas 66045 1. Aerial and topographic information obtained from aerial survey performed by Sanborn Mapping for the City of Lawrence and Douglas County 1995, 2006 and 2013. Specific topographic and boundary information for property & directly adjacent obtained from field survey provided by All Points Surveying LP, June, 2016.
- 2. Typical Soil Type: Pc - Pawnee Clay Loam
- Vacant Lumber Yard 3. Existing Land Use: Manufacturing and Production, Limited; Bar or Lounge; and Fast Order Food (Microbrewery/Tap Room; Food Truck) 4. Proposed Land Use:
- CS Commercial Strip 5. Current Zoning: 6. No part of the property is located within a SPECIAL FLOOD HAZARD AREA (SFHA) SUBJECT TO INUNDATION BY THE 1% CHANCE FLOOD per FEMA
- Flood Insurance Rate Map (FIRM) Panel 178 of 460, Map # 20045C0178E, Map Revised September 2, 2015.
- 7. Proposed utility locations, elevations, and sizes are preliminary and will be finalized during final design of improvements.
- 8. New telephone, cable television and electrical lines (except high voltage lines) must be located underground. The developer is responsible for the cost of relocation of existing utilities, if necessary to serve the subdivision. 9. Soils investigations shall be performed before primary structures are erected on lots with slopes greater than 3:1, or non-engineered fill greater
- than 12 inches. A soils engineer licensed by the State of Kansas, shall perform investigations, and a report of the investigation shall be submitted to the City of Lawrence Codes Enforcement Division. Other lots may be required to be investigated where excavation reveals indications of unsuitable conditions.
- 10. No new public right-of-way or streets will be created as part of this subdivision. No improvements are proposed for 22nd or 23rd Streets. Sidewalks exists along 23rd Street. Sidewalks will be constructed along 22nd Street in accordance with Public Improvement Standards Section 20-811(c). This subdivision will connect to the City of Lawrence public water source. This subdivision will connect to City of Lawrence public sanitary sewer system. The above mentioned public improvements will be financed and completed by the Subdivision Developer.
- 11. With the dedication of additional right-of-way for E. 22nd Street, the existing building encroaches into the required setback; however the
- structure is not considered a nonconforming structure per Section 20-1503(a) of the Development Code. 12. City of Lawrence will not be responsible for pavement damage due to refuse collection.

along the open area to serve as the buffer. Four bufferyard trees will be planted along the bufferyard area.

- 13. This plan has been designed to comply with the provisions of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) for Buildings and Facilities, Appendix A to 28CFR part 36.
- 14. Exterior ground-mounted or building-mounted equipment including, but not limited to, mechanical equipment, utility boxes and meters, shall be fully screened from view of adjacent properties and from street rights-of-way (as measured 6 ft above ground level). Screening shall be in the
- form of landscape planting or an architectural treatment compatible with the architecture of the principal building. 15. All Traffic Control signs placed on private property open to the general public shall comply with the 'Manual on Uniform Traffic Control Devices' and 'Standard Highway Signs' as published by the Federal Highway Administration, with respect to size, shape, color, retro-reflectivity, and position: Per Ordinance No. 7542.
- 16. Turf areas to be seeded unless noted otherwise. 17. Bufferyard requirements on the north and south property lines were waived based on the separation provided by the intervening right-of-way and the similar land uses. Alternative compliance was approved for the bufferyard along the west side to allow the use of a 6 ft tall privacy fence

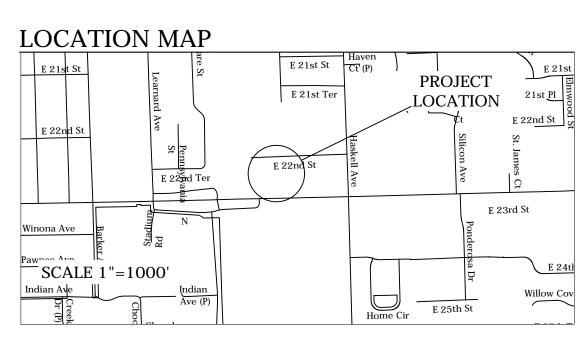
### PROJECT BENCH MARK:

1. DOUGLAS COUNTY PUBLIC WORKS CHARN DG41

NORTHING 233,503.53 EASTING 2,100,788.90

ELEVATION = 862.21 FT.2. CHISELED SQUARE IN THE NW CORNER OF CONCRETE STORMWATER

INLET IN THE WEST OF ENTRANCE TO PROPERTY ON 23RD STREET, ELEVATION = 877.79.



OHW OHW OVERHEAD WIRE OHE OHE OHE OVERHEAD ELECTRICAL OHE OHE OHE OF STORM MANHOLE F.F.E. FINISH FLOOR ELEVATION ROW RIGHT-OF-WAY C/L CENTERLINE O/F DRAINAGE EASEMENT O/F DRAINAGE EASEM		LEGEND					
NOTE: "X" IN UTILITY DENOTES EXISTING FEATURE	OHE ————————————————————————————————————	- OHE	OVERHEAD ELECTRICAL UNDERGROUND TELEPHONE GAS WATERLINE SANITARY SEWER LINE SANITARY SEWER SERVICE STORMWATER LINE BUILDING SETBACK LINE SECTION LINE PAVEMENT/SURFACING PROPERTY LINE EASEMENT RIGHT-OF-WAY ACCESS RESTRICTED	SEV GA OWW WW FH OWW OWW OWW OWW OWW OWW OWW OW	STORM MANHOLE STORM DRAIN GUY ANCHOR UTILITY POLE WATER METER WATER VALVE FIRE HYDRANT TRAFFIC SIGNAL STR. GAS VALVE GAS METER LIGHT POLE SIGN	F.F.E. ROW C/L D/E U/E (P) (M) (C)	FINISH FLOOR ELEVATION RIGHT-OF-WAY CENTERLINE DRAINAGE EASEMENT UTILITY EASEMENT PLATTED MEASURED CALCULATED PROPERTY CORNER

THIS DOCUMENT IS FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION



SPECIAL USE PERMIT SITE PLAN for MICROBREWERY AND TAP ROOM

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FOR RO  $\simeq$ SPECIAL USE P MICROBREWE

> **DESIGNED BY** JDG

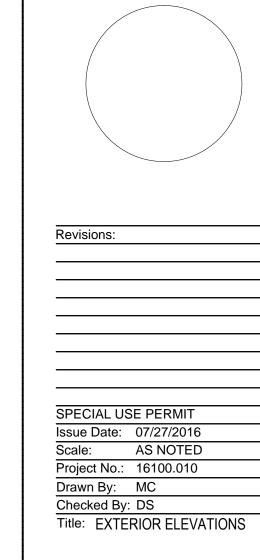
CHECKED BY

**ISSUE DATE** JUNE 20, 2016

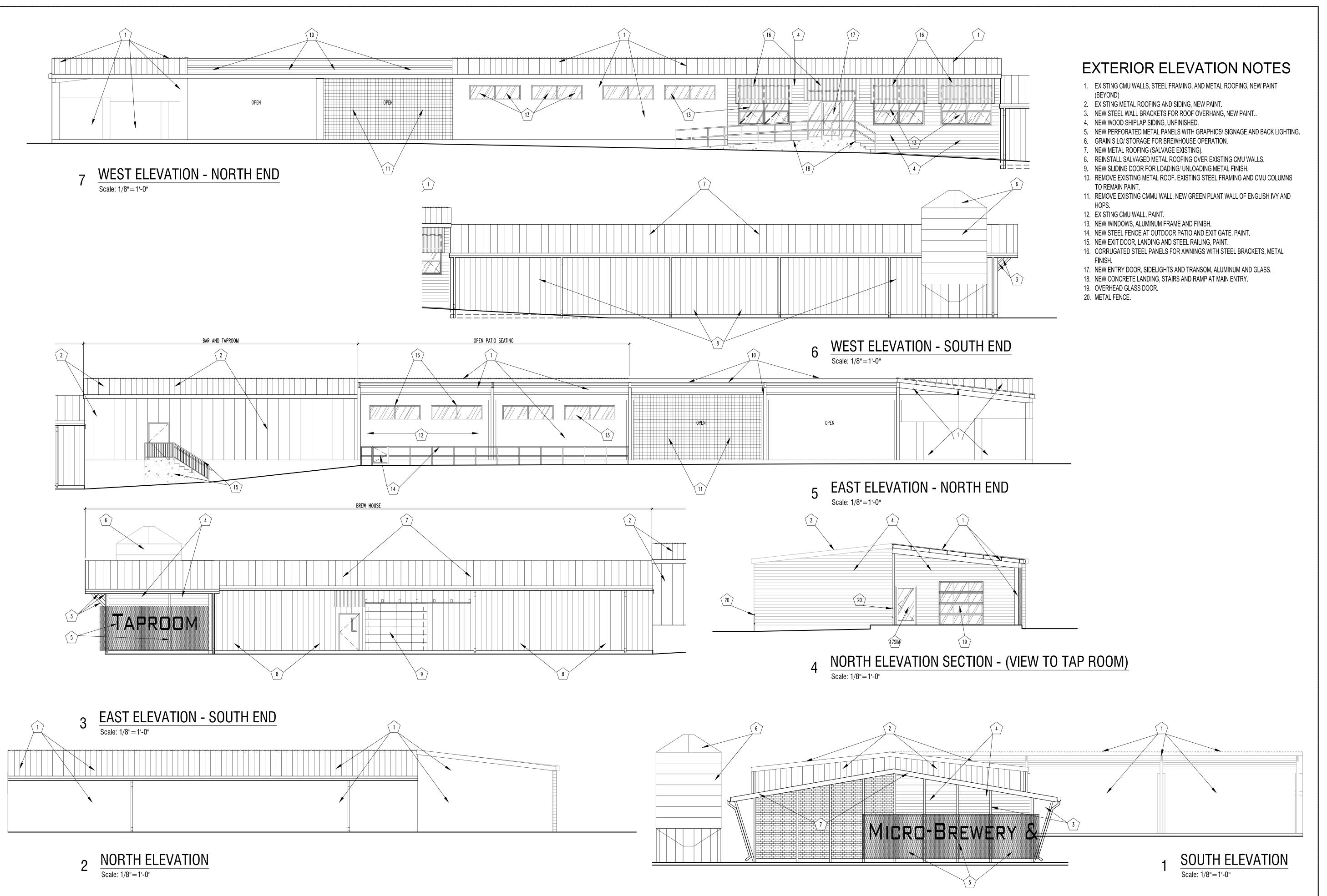
REVISIONS JULY 29, 2016 AUGUST 12, 2016

**SHEET** 











# Traffic Impact Data

for

# Microbrewery and Tap Room

706 E. 23<sup>rd</sup> Street Lawrence, Kansas

Prepared for Grob Engineering Services, LLC

Prepared By



<u>Serving Communities Through Excellence</u> Kansas - Missouri - Michigan - California



Mehrdad Givechi, P.E., P.T.O.E.

**June 2016** 

According to City Ordinance #7650, collection of Traffic Impact Data (TID) is required for all non-residential new developments or redevelopments and all residential developments of eleven (11) or more lots or dwelling units. The following information is compiled to fulfill the requirements of this ordinance for the proposed *Microbrewery and Tap Room* redevelopment located at 706 E. 23<sup>rd</sup> Street in Lawrence, Kansas (See Location Map in the Appendix).

1. The site is currently occupied by an abandoned building with access at one point onto E. 23<sup>rd</sup> Street. This access point is a shared driveway also providing access to the two adjoining businesses to the east (i.e. *Solar Concepts Window Tilting* and *Wash Me Carwash*).

Under the proposed redevelopment plan, as shown on the Site Plan in the Appendix, the building will be remodeled and the site will be reconfigured to provide for

- A restaurant / tap room with a total floor area of approximately 3,680 sq. ft.
   (kitchen = 1,080 sq. ft.; indoor seating = 1,350 sq. ft.; and outdoor patio = 1,250 sq. ft.);
- A microbrewery (manufacturing and production) area of approximately 5,000
   sq. ft.; and
- A new parking lot on the west side of the site with a new access drive onto E.
   22<sup>nd</sup> Street, while still maintaining the existing shared driveway on E. 23<sup>rd</sup> Street. Delivery trucks enter the site from E. 23<sup>rd</sup> Street and exit the site onto E. 22<sup>nd</sup> Street.
- 2. The existing zoning for this site is General Industrial (IG). The proposed zoning will be CS (Commercial Strip). According to the Horizon 2020 (Map 3-2), the designated land use for this site is "Office Research and/or Industrial/Warehouse/Distribution".
- 3. The street network surrounding the site consists of:
  - E. 23<sup>rd</sup> Street, running east/west along south side of the site, designated as "Principal Arterial" on *City's T2040 Thoroughfare Map*.

- Haskell Avenue, running north/south approximately 660 ft. east of the site, designated as "Minor Arterial" north of E. 23<sup>rd</sup> Street and as "Principal Arterial" south of E. 23<sup>rd</sup> Street on <u>City's T2040 Thoroughfare Map</u>.
- E. 22<sup>nd</sup> Street, running east/west along north side of the site, designated as "Local Street" on *City's T2040 Thoroughfare Map*.
- 4. Under the existing conditions, the site is served by a shared access drive onto E. 23<sup>rd</sup> Street that also serves the two adjoining businesses to the east (i.e. *Solar Concepts Window Tilting* and *Wash Me Carwash*). The proposed redevelopment plan calls for no change to this access, but adds a new access drive onto E. 22<sup>nd</sup> Street on the northwest corner of the site as shown on the Site Plan.

#### 5. In the vicinity of this redevelopment:

- E. 23<sup>rd</sup> Street is a four-lane divided roadway with a Two-Way Left-Turn Lane (TWLTL) and posted speed limit of 35 mph. On-street parking is prohibited on both sides.
- Haskell Avenue is a two-way two-lane roadway with posted speed limit of 30 mph north of E. 23<sup>rd</sup> Street and 35 mph south of E. 23<sup>rd</sup> Street. On-street parking is prohibited on both sides.
- E. 22<sup>nd</sup> Street is a two-way, two-lane, dead-end local street with no posted speed limit (Statutory speed limit = 30 mph).
- The intersection of E. 23<sup>rd</sup> Street and Haskell Avenue is a fully-actuated signalized intersection with camera detection and "protected/permissive" left-turn phasing for north/south approaches and "protected only" left-turn phasing for east/west approaches.
  - East/west approach, each has two through lanes with a dedicated leftturn lane and no dedicated right-turn lane. There is a near-side bus stop for both westbound and eastbound movements on E. 23<sup>rd</sup> Street.
  - North/south approach, each has one through lane, one dedicated leftturn lane and one dedicated right-turn lane.
- The intersection of Haskell Avenue and E. 22<sup>nd</sup> Street is a "T" intersection controlled by stop sign on E. 22<sup>nd</sup> Street. Each approach has a single lane.

- 6. As mentioned earlier, under the proposed redevelopment plan, the existing curb cut on E. 23<sup>rd</sup> Street remains unchanged at its current location. Moreover, a new access drive is proposed on the northwest corner of the site providing access to the proposed parking lot along the west side of the site. Field observations indicate that sight distance is not restricted at either of the two driveways.
- 7. The trip generation of a proposed land development project is typically estimated using trip generation rates suggested by the latest edition of the <u>Institute of Transportation Engineers, Trip Generation Manual</u> (Currently, the 9<sup>th</sup> Edition). For this analysis, ITE Land Use Codes that are most similar to the proposed uses were examined and the scenario that generated most trip numbers was selected.
  - For the Tap Room/Bar area (3,680 sq. ft.), ITE Codes 925 (Drinking Place) and 932 (High-Turnover Sit-Down Restaurant) with "gross floor area" as independent variable were examined.
  - For the Microbrewery area with 5,000 sq. ft., ITE Codes 110 (General Light Industrial) and 140 (Manufacturing) with "gross floor area" as independent variable were examined.

The results, as summarized in the Appendix, indicate that total number of trips likely to be generated by the proposed redevelopment will be below the threshold of 100 trip-ends during the critical peak period of a typical weekday as follows:

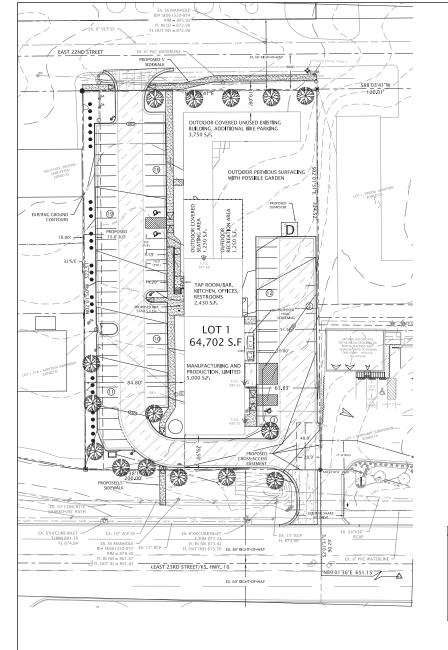
- On average, 5 trip-ends (4 inbound and 1 outbound) during the morning peak-hour of <u>adjacent street network</u>;
- On average, 54 trip-ends (30 inbound and 24 outbound) during the afternoon peak-hour of <u>generator</u>, and
- On average, 47 trip-ends (29 inbound and 18 outbound) during the afternoon peak-hour of <u>adjacent street network</u>; and
- On average, 73 trip-ends (38 inbound and 35 outbound) during the afternoon peak-hour of *generator*.

### **APPENDIX**

- Location Map
- Site Plan
- Results of Trip Generation Analysis, Using the ITE Trip Generation Manual, 9<sup>th</sup> Edition



Figure 1 Location Map



SCALE: 1" = 25'

#### **DEVELOPMENT SUMMARY**

IME	IMPERVIOUS SURFACE SUMMARY				
Existing Summary	AREA (SQ. FT.)	Summary After Project Completion	AREA (SQ. FT.)		
Existing Building	14,780	Proposed Buildings	12,640		
Existing Pavement	47,452	Proposed Pavement	32,437		
Existing Impervious	62,232	Proposed Impervious	45,077		
Existing Pervious	2,470	Proposed Pervious	19,625		
Property Area	64,702		64,702		
BUILDING COVERAGE 22.8% IMPERVIOUS LOT COVERAGE 96.2%		BUILDING COVER IMPERVIOUS LOT CO			

PARKING SUMMARY					
PARKING REQUIREMENT	# OF UNITS	PARKING REQUIRED			
BAR OR LOUNGE 1 PER 3 PERSONS MAXIMUM OCC. PLUS 1 PER EMPLOYEE	184 OCC. 5 EMPLOYEES	66 SPACES			
MANUFACTURING AND PRODUCTION, LIMITED 1 PER 1000 SF PLUS 1 PER VEHICLE USED	5,000 S.F. 3 VEHICLES	8 SPACES			
PARKING PROVIDED					
TOTAL PARKING SPACES	74				
STANDARD SPACES	71				
ADA HANDICAP SPACES	3				

	LANDSCAPING SCHEDULE					
SYMBOL	QUANT.	NAME	SIZE & COND			
0	0	EXISTING DECIDUOUS TREES	_			
*	0	EXISTING CONIFEROUS TREES	_			
₩	15	PROPOSED SITE AND STREET TREES	2-1/2"			
*	26	DWARF BURNING BUSH, MAGIC CARPET SPIREA, KNOCK-OUT ROSES, BLUE HOLLY, OR APPROVED EQUAL	2 GAL			
		ALL UNPAVED AREAS SHALL BE PLANTED WITH TURF GRASSES				

PAVING SCHEDULE  STATES, STATES AND STATES A								
	NAME							
	4" CONCRETE PAVING FOR SIDEWALKS							
	5.5" ASPHALT PAVING							
33/3//3/	7" ASPHALT PAVING							
	6" CONCRETE PAVING							
	8" CONCRETE PAVING CITY SPEC. FOR APPROACHES							

#### LOCATION MAP



LEGEND										
PA	ATERNAD LILETTICAS,  ADDRESSOUND TELEPHONE OF  ATTRILINE  MITTARY SEWER LIVE  MITTARY SEWER SEWICE  COMMATTER LIVE  LEPPOS STREACY, LIVE  CETION LIVE  SEMENT SUBSECTION  SEMENT SUBSECTION  SEMENT SUBSECTION  LEPPOS STREACY  SEMENT SUBSECTION  LEPPOS STREACY  LEPOS STREACY  LEPPOS STREACY  LEPPOS STREA	STORM MARHOLE STORM DRAIN CUT ANCHOR OF CUT ANCHOR WATER METER WATER METER TRAFFIC SIZAML STR. CAS WALVE LIGHT POLE SIZON LIECTRIC BOX	R/B ROW C/L D/E U/E (P) (M) (C)	BACK OF CURRANACK OF CURR RIGHT-OF-WAY CONTIBLINE DIABAGE EACHMIT UTLITY EASEMINT FLATTED NEASIRED CALCULATED PROPERTY CONNER CAR STACKING SYMBOLS						

LEGAL DESCRIPTION

LOT 1, JOHNSTON ADDITION, LOCATED IN THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 13 SOUTH, RANGE 20 EAST OF THE SIXTH PRINCIPAL MERIDIAN, IN THE CITY OF LAWRENCE, DOUGLAS

#### GENERAL NOTES

Lawrence Brothers, LLC 879 N 200 Road Bajdwin City, Kansas 66006 Johnsson Investments Company, LLC Olathe, Kansas 66001 Grob Engineering Services, LLC 3210 Mesia Way, Suite A Lawrence, Kansas 66049 All Politis Surveying, LP Lawrence, Kansas 66045 Land Planner/Engineer:

- P. D. De ever Characteristics of the Control of the Control of the Control of Control of

#### PROJECT BENCH MARK:

DOUGLAS COUNTY PRIETIC WORKS CHARN DG41
NORTHING 233,503.53
AGTIME 230,503.53
AGTIME 230,003.53
CHISCALD SQUARE BY THE BWY CORNER OF CONCRETE STORAMMATER
MILET BY THE WEST OF ENTRANCE TO PROPERTY ON 23RD STREET,
ELEVATION — 877.79.

THIS DOCUMENT IS FOR PLANNING PURPOSES ONLY - NOT FOR CONSTRUCTION



SPECIAL USE PERMIT SITE PLAN for **MICROBREWERY AND TAP ROOM** 



GROB ENGINEERING SERVICES, LLC SEG

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SPECIAL USE PERMIT SITE PLAN FOR MICROBREWERY AND TAP ROOM 706 E. 23RD STREET LAWRENCE, KANSAS

DESIGNED BY IDG

CHECKED BY IDG

ISSUE DATE JUNE 20, 2016

REVISIONS

SHEET

1

#### Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of RESTAURANTHT 1 (932) High-Turnover (Sit-Down) Restaurant

Project: Microbrewery and Tap Room

Phase: Restaurant

Open Date: 6/18/2016 Description: 706 E. 23rd Street, Lawrence, KS Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	468	0	127.15	73.51	246	41.77	7	50	50	False		
Weekday AM Peak Hour of Generator	49	0	13.33	3	54.09	9.44	7	53	47	False		
Weekday AM Peak Hour of Adjacent Street Traffic	40	0	10.81	2.32	25.6	6.59	6	55	45	False		
Weekday PM Peak Hour of Generator	68	0	18.49	5.6	69.2	13.32	5	54	46	False		
Weekday PM Peak Hour of Adjacent Street Traffic	36	0	9.85	0.92	62	8.54	6	60	40	False		
Saturday Average Daily Trips	583	0	158.37	144.6	172.71		5	50	50	False		
Saturday Peak Hour of Generator	52	0	14.07	4.44	50.4	12.19	4	53	47	False		
Sunday Average Daily Trips	485	0	131.84	119.38	143.8		5	50	50	False		
Sunday Peak Hour of Generator	68	0	18.46	9.79	43.2	13.74	4	55	45	False		

#### Detailed Land Use Data For 5 Gross Floor Area 1000 SF of MANUFACTURING 1 (140) Manufacturing

Project: Microbrewery and Tap Room

Phase: Manufacturing

Open Date: 6/18/2016 Description: 706 E. 23rd Street, Lawrence, KS Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By <u>Trips</u>	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	19	0	3.82	0.5	52.05	3.07	349	50	50	False	T = 3.88(X) - 20.70	0.87
Weekday AM Peak Hour of Generator	4	0	0.79	0.1	8.75	1.02	363	68	32	False	T = 0.83(X) - 14.26	0.81
Weekday AM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.1	8.75	1.04	293	78	22	False	T = 0.83(X) - 29.52	0.67
Weekday PM Peak Hour of Generator	4	0	0.75	0.09	7.85	0.98	370	52	48	False	T = 0.76(X) - 5.15	0.83
Weekday PM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.07	7.85	1.01	318	36	64	False	T = 0.78(X) - 15.97	0.75
Saturday Average Daily Trips	7	0	1.49	0.88	6.42		483	50	50	False		
Saturday Peak Hour of Generator	1	0	0.28	0.2	0.94		483	50	50	False		
Sunday Average Daily Trips	3	0	0.62	0.07	5.09		483	50	50	False		
Sunday Peak Hour of Generator	0	0	0.09	0.01	0.75		483	50	50	False		

# Detailed Land Use Data For 5 Gross Floor Area 1000 SF of GINDUSTRIAL 1 ( 110 ) General Light Industrial

Project: Microbrewery and Tap Room

Phase: General Light Industry

Description: 706 E. 23rd Street, Lawrence, KS

Open Date: 6/18/2016 Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By <u>Trips</u>	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	35	0	6.97	1.58	16.88	4.24	203	50	50	False	T = 7.47(X) - 101.92	0.81
Weekday AM Peak Hour of Generator	5	0	1.01	0.27	4	1.1	358	90	10	False	T = 1.18(X) - 60.80	0.92
Weekday AM Peak Hour of Adjacent Street Traffic	5	0	0.92	0.17	4	1.07	336	88	12	False	T = 1.18(X) - 89.28	0.92
Weekday PM Peak Hour of Generator	5	0	1.08	0.36	4.5	1.18	364	14	86	False	T = 1.42(X) - 125.20	0.89
Weekday PM Peak Hour of Adjacent Street Traffic	5	0	0.97	0.08	4.5	1.16	345	12	88	False	T = 1.43(X) - 157.36	0.88
Saturday Average Daily Trips	7	0	1.32	0.69	5.78	1.48	351	50	50	False	T = 0.85(X) + 163.06	0.6
Saturday Peak Hour of Generator	1	0	0.14	0.08	0.94	0.41	410	47	53	False		
Sunday Average Daily Trips	3	0	0.68	0.28	5	1.14	486	50	50	False		
Sunday Peak Hour of Generator	1	0	0.1	0.05	0.69	0.33	486	48	52	False		

# Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of BAR 1 ( 925 ) Drinking Place

Project: Microbrewery and Tap Room

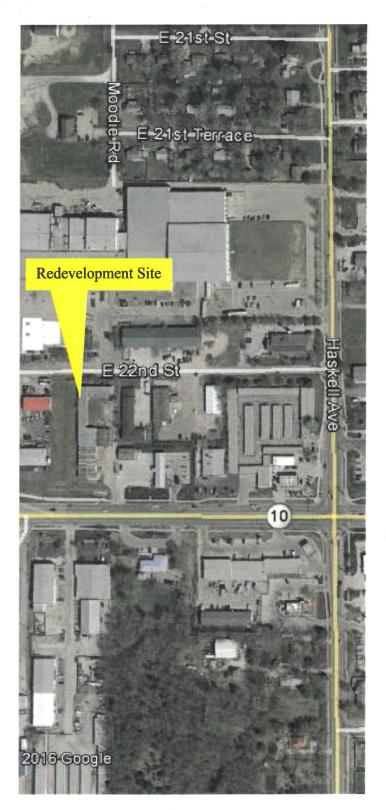
Phase: Drinking Place

Description: 706 E. 23rd Street, Lawrence, KS

Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use <u>Eq.</u>	Equation	R2
Weekday PM Peak Hour of Generator	57	0	15.49	3.73	29.98	8.63	3	68	32	False		
Weekday PM Peak Hour of Adjacent Street Traffic	42	0	11.34	3.73	29.98	8.04	4	66	34	False		

Open Date: 6/18/2016



# Basic Traffic Impact Study

for

### Microbrewery and Tap Room

706 E. 23<sup>rd</sup> Street Lawrence, Kansas

Prepared for Grob Engineering Services, LLC

Prepared By



Serving Communities Through Excellence

Kapsas - Missouri - Michigan - California



Mehrdad Givechi, P.E., P.T.O.E.

August 2016

#### Background

Per the requirements of City of Lawrence Ordinance #7650, a Traffic Impact Data (TID) report was prepared for the proposed *Microbrewery and Tap Room* redevelopment on 6/20/16. Because one of the proposed access drives to the redevelopment site is on the State Highway K-10 (E. 23<sup>rd</sup> Street), KDOT staff has requested that a Basic Traffic Impact Study (BTIS) be conducted to assess the impact on the subject access drive. This document is prepared as an addendum to the TID to fulfill KDOT's Access Management Policy requirements for this redevelopment.

#### Proposed Development Plan

- <u>Location Description</u> The proposed *Microbrewery and Tap Room* redevelopment is located at 706 E. 23<sup>rd</sup> Street, Lawrence, Kansas, in Douglas County, KDOT District 1, Area 2 (See Location Map, Figure 1 of Appendix I);
- <u>Land Use</u> The site is currently occupied by abandoned buildings. Under the proposed redevelopment plan, as shown on the Site Plan (Figure 2 of Appendix I), the site will be reconfigured to provide for
  - A restaurant / tap room with a total floor area of approximately 3,680 sq. ft.
     (kitchen = 1,080 sq. ft.; indoor seating = 1,350 sq. ft.; and outdoor patio = 1,250 sq. ft.);
  - A microbrewery (manufacturing and production) area of approximately 5,000 sq. ft.; and
  - A new parking lot on the west side of the site with a new access drive onto
     E. 22<sup>nd</sup> Street, while still maintaining the existing shared driveway on E.
     23<sup>rd</sup> Street.
- Zoning The site is currently zoned as IG (General Industrial). The proposed zoning will be CS (Commercial Strip). According to the City's Horizon 2020 (Map 3-2), the designated land use for this site is "Office Research and/or Industrial/Warehouse/Distribution".
- <u>Access (Existing and Proposed)</u> The site is currently served by a shared driveway on E. 23<sup>rd</sup> Street that also provides access to the two adjoining businesses to the east – namely, Solar Concepts Window Tilting and Wash Me

Carwash. This driveway serves as <u>ingress only</u> for the carwash and as <u>ingress/egress</u> for the other business. The <u>egress</u> for the carwash is located approximately 165 ft. (CL to CL) to the east of the project access.

Access to the proposed redevelopment site, as illustrated on the Site Plan (Figure 2 of Appendix I), will be provided at two locations:

- The existing access on E. 23<sup>rd</sup> Street will remain in place as a shared driveway. This access is approximately 655 ft. (CL to CL) west of Haskell Avenue.
- A new full-access drive on the northwest corner of the site on E. 22<sup>nd</sup>
   Street, near the west property line, approximately 810 ft. (CL to CL) west of Haskell Avenue.

#### Highway and Area Street Characteristics

In the vicinity of the project site

- KDOT Approved Functional Classification E. 23<sup>rd</sup> Street is designated as "Other Principal Arterials"
- National Highway System E. 23<sup>rd</sup> Street is on the National Highway System
- KDOT Access Route Classification E. 23<sup>rd</sup> Street is classified as "Class B" highway because it is on the National Highway System.
- KDOT Access Control Classification E. 23<sup>rd</sup> Street is designated as "Full Access Control".
- <u>Posted Speed Limit</u> E. 23<sup>rd</sup> Street is a 45 mph facility. (Note: In the previously submitted TID report, the posted speed limit was inadvertently listed as 35 mph. The 35 mph zone starts ¼ mile west of the project site.)
- <u>On-Street Parking</u> Parking prohibited on both sides of E. 23<sup>rd</sup> Street.
- <u>Type of Area</u> This site is located within the city limits of Lawrence, Kansas in a developed area.
- Roadway Characteristics E. 23<sup>rd</sup> Street is a 4-lane divided roadway with a Two-Way Left-Turn Lane (TWLTL) that runs east/west along the south side of the

- project site and has a 64 ft. wide asphalt pavement (EOP to EOP) with curb/gutter sections.
- <u>Existing Transportation System Plan</u> This site is not located in a planned corridor.
- <u>E. 22<sup>nd</sup> Street</u> A 2-lane, dead-end roadway that runs east/west along the north side of the project site and has a 22 ft. wide asphalt pavement (EOP to EOP) with open drainage ditches on both sides. Speed limit is not posted (statutory speed limit is 30 mph)
- <u>Haskell Avenue</u> A 2-lane roadway that runs north/south approximately 660 ft.
  east of the project site, and has a 27 ft. wide asphalt pavement (EOP to EOP)
  with curb/gutter sections. The posted speed limit is 30 mph and 35 mph north
  and south of E. 23<sup>rd</sup> Street, respectively, with on-street parking prohibited on both
  sides.
- <u>The intersection of E. 23<sup>rd</sup> Street and Haskell Avenue</u> A fully-actuated signalized intersection with camera detection and "protected/permissive" left-turn phasing for north/south approaches and "protected only" left-turn phasing for east/west approaches.
  - East/west approach, each has two through lanes, a dedicated left-turn lane with storage length of approximately 145 ft. (part of the TWLTL), and no dedicated right-turn lane. There is a near-side bus stop for both westbound and eastbound movements on E. 23<sup>rd</sup> Street.
  - North approach has one through lane, one dedicated left-turn lane with storage length of approximately 170 ft., and one dedicated right-turn lane with storage length of approximately160 ft.
  - South approach has one through lane, one dedicated left-turn lane and one dedicated right-turn lane, each with storage length of approximately 95 ft.
- <u>The intersection of Haskell Avenue and E. 22<sup>nd</sup> Street</u> A "T" intersection controlled by stop sign on E. 22<sup>nd</sup> Street. Each approach has a single lane.

#### Existing Traffic Condition plus Site Generated Traffic

- <u>Existing Traffic Volumes</u> The most recent turning movement counts for the intersection of E. 23<sup>rd</sup> Street and Haskell Avenue (obtained from city records dated February 18, 2016) indicate that the peak characteristics of traffic in the study area are as follows (See Appendix II and Figures 3 and 4 of Appendix I for details)
  - On a typical weekday, the morning peak occurs between 7:15 and 8:15 resulting in the following:
    - E. 23<sup>rd</sup> Street (K-10) carrying peak-hour volumes of approximately 2,280 vph (west of Haskell Avenue) with directional distribution of approximately 54% 46% (westbound eastbound); and 2,350 vph (east of Haskell Avenue) with directional distribution of approximately 46% 54% (westbound eastbound).
    - Haskell Avenue carrying peak-hour volumes of approximately 910 vph (north of E. 23<sup>rd</sup> Street) with directional distribution of approximately 50% 50% (northbound southbound); and 990 vph (south of E. 23<sup>rd</sup> Street) with directional distribution of approximately 70% 30% (northbound southbound).
  - On a typical weekday, the afternoon peak occurs between 4:45 and 5:45 resulting in the following:
    - E. 23<sup>rd</sup> Street (K-10) carrying peak-hour volumes of approximately 2,520 vph (west of Haskell Avenue) with directional distribution of approximately 54% 46% (westbound eastbound); and 2,670 vph (east of Haskell Avenue) with directional distribution of approximately 51% 49% (westbound eastbound).
    - Haskell Avenue carrying peak-hour volumes of approximately 1,090 vph (north of E. 23<sup>rd</sup> Street) with directional distribution of approximately 40% 60% (northbound southbound); and 1,130 vph (south of E. 23<sup>rd</sup> Street) with directional distribution of approximately 45% 55% (northbound southbound).

- The intersection of E. 23<sup>rd</sup> Street (K-10) and Haskell Avenue carries approximately 3,260 vph and 3,700 vph during the morning and afternoon peak-hours, respectively.
- o Driveway volume counts were also conducted at the existing shared driveway on E. 23<sup>rd</sup> Street (project access drive) during the peak-hours of a typical weekday from 7:00 to 9:00 and 4:00 to 6:00 on 8/4/2016. Results, as summarized in Appendix II and shown in Figures 3 and 4 of Appendix I, indicate that driveway volumes during the critical peak-period (afternoon peak-hour of a typical weekday) are 16 vph (13 inbound and 3 outbound).
- <u>ITE Trip Generation (9<sup>th</sup> Edition)</u> For this analysis, ITE Land Use Codes that are most similar to the proposed uses were examined and the scenario that generated most trip numbers was selected.
  - For the Tap Room/Bar area (3,680 sq. ft.), ITE Codes 925 (Drinking Place) and 932 (High-Turnover Sit-Down Restaurant) with "gross floor area" as independent variable were examined.
  - For the Microbrewery area with 5,000 sq. ft., ITE Codes 110 (General Light Industrial) and 140 (Manufacturing) with "gross floor area" as independent variable were examined.

The results, as summarized in Appendix III, indicate that, <u>under the worst case</u> <u>scenario</u>, total number of <u>unadjusted trips (combined "new" and "pass-by")</u> likely to be generated by the proposed redevelopment, on a typical weekday, will be:

- On average, 5 trip-ends (4 inbound and 1 outbound) during the morning peak-hour of <u>adjacent street network</u>;
- On average, 54 trip-ends (30 inbound and 24 outbound) during the morning peak-hour of <u>generator</u>, and
- On average, 47 trip-ends (29 inbound and 18 outbound) during the afternoon peak-hour of <u>adjacent street network</u>; and
- o On average, 73 trip-ends (38 inbound and 35 outbound) during the afternoon peak-hour of *generator*.
- o On average, 503 trip-ends during a 24-hour period.

These trip generation numbers represent total vehicles entering and exiting the site at its proposed driveways. Because the proposed redevelopment is a retail-oriented development, it attracts a portion of its trips from the traffic passing the site on the way from origin to an ultimate destination. These retail trips are called "pass-by" trips and do not add new traffic to the adjacent street network. The remaining trips are "new" trips added to the adjacent street network. For the purpose of this report <u>zero</u> pass-by trips are assumed.

• <u>Trip Distribution/Assignment</u> – It is assumed that distribution of the site-generated traffic, at its two access points, will be proportionate to the volumes on E. 23<sup>rd</sup> Street and Haskell Avenue – 70% using the driveway on E. 23<sup>rd</sup> Street and 30% using the driveway on E. 22<sup>nd</sup> Street. It is further assumed that directional distribution of the site-generated traffic at its driveway location on E. 23<sup>rd</sup> Street will follow the existing directional distribution patterns on E. 23<sup>rd</sup> Street – 54% to/from east and 46% to/from west.

Using these distribution patterns and the ITE's suggested ingress/egress distribution factors, the site generated traffic at its proposed driveway locations will be as follows:

- Afternoon peak-hour of the generator
  - 14 vph westbound right-turn (inbound off of E. 23<sup>rd</sup> Street)
  - 12 vph eastbound left-turn (inbound off of E. 23<sup>rd</sup> Street)
  - 12 vph westbound left-turn (inbound off of E. 22<sup>nd</sup> Street)
  - 13 vph southbound left-turn (outbound onto E. 23<sup>rd</sup> Street)
  - 11 vph southbound right-turn (outbound onto E. 23<sup>rd</sup> Street)
  - 11 vph northbound right-turn (outbound onto E. 22<sup>nd</sup> Street)
- Afternoon peak-hour of adjacent street network
  - 11 vph westbound right-turn (inbound off of E. 23<sup>rd</sup> Street)
  - 9 vph eastbound left-turn (inbound off of E. 23<sup>rd</sup> Street)
  - 9 vph westbound left-turn (inbound off of E. 22<sup>nd</sup> Street)
  - 7 vph southbound left-turn (outbound onto E. 23<sup>rd</sup> Street)
  - 6 vph southbound right-turn (outbound onto E. 23<sup>rd</sup> Street)
  - 5 vph northbound right-turn (outbound onto E. 22<sup>nd</sup> Street)

- o 24-Hour period
  - 352 vpd using driveway on E. 23<sup>rd</sup> Street
  - 151 vpd using driveway on E. 22<sup>nd</sup> Street
- <u>Design Vehicle</u> The design vehicle is a passenger car. There will be occasional delivery truck (WB-40), which will enter the site from E. 23<sup>rd</sup> Street and exit onto E. 22<sup>nd</sup> Street. The swept paths for the delivery truck are illustrated in Figures 5 and 6 of Appendix I.

#### **Proposed Site Access Characteristics**

- <u>Access Type</u> Using the estimated driveway volumes (existing + project), the access on E. 23<sup>rd</sup> Street will be of KDOT's Type 5 because it will likely carry less than 50 vph and between 50 and 499 vpd.
- <u>Shared Access</u> The proposed access drive on E. 23<sup>rd</sup> Street is a shared access.
- <u>Access Width and Radii</u> The existing access on E. 23<sup>rd</sup> Street is 38 ft. wide with no curb/gutter section on the west side and a curb section on the east side. Under the proposed redevelopment plan, a new curb/gutter section will be constructed along the west side of the driveway with 20 ft. radius. The width of the new driveway will be 36 ft. The eastern portion of the driveway is on the adjacent property under a separate ownership.
- <u>Access Surfacing</u> The western portion of the existing driveway on E. 23<sup>rd</sup> Street
  is currently constructed with asphalt. The remaining portion is concrete. Under
  the proposed redevelopment plan, the asphalt portion will be replaced with 8-inch
  thick concrete in compliance with the policy.
- <u>Drainage Method and Material</u> Access on E. 23<sup>rd</sup> Street will be designed to drain from the right-of-way line to the street, thence to the existing curb inlet downstream.
- Adjacent Access Spacing The first upstream access (on the same side of E. 23<sup>rd</sup> Street) is the <u>egress only</u> for the carwash and is located approximately 165 ft. (CL to CL) from the project access. The first downstream access (on the same

side) is Learnard Avenue located ¼ mile from the project access. The recommended access spacing per KDOT AMP (Table 4-6) is 450 ft.

The nearest driveway on the opposite side of E. 23<sup>rd</sup> Street is located to the east of the project access with a slight offset of approximately 20 ft. with no conflicting left-turn movement. The recommended access offset distance per KDOT AMP (Table 4-9) is 275 ft.

- The new access drive on E. 22<sup>nd</sup> Street will be 21 ft. wide with curb/gutter sections, concrete apron, and 15 ft. radius on the west side and 25 ft. radius on the east side.
- Intersection Influence Area The nearest intersections (with public streets) are
   Haskell Avenue (signalized) approximately 655 ft. to the east; and Learnard
   Avenue approximately ¼ mile to the west. No overlap between upstream and
   downstream influence areas of these two intersections is anticipated.
- <u>Sight Distance</u> The project access drive on E. 23<sup>rd</sup> Street is near the low point of a vertical curve with approach downgrade of approximately 3%. The required stopping sight distance per KDOT AMP (Table 4-12) is 378 ft. Field measurements indicate that the available stopping sight distance is greater than 1,000 ft.

The required intersection sight distance per KDOT AMP (Table 4-14) for a passenger car is 530 ft. (for left-turn out) and 430 ft. (for right-turn out). Field measurements indicate that the available intersection sight distance is greater than 1,000 ft. both upstream and downstream of the project access.

<u>Auxiliary Lane</u> – Currently there is a two-way left-turn lane on E. 23<sup>rd</sup> Street. A
dedicated westbound right-turn lane on E. 23<sup>rd</sup> Street at the project access point
is not warranted

Critical peak-hour = Afternoon peak-hour of adjacent street network

Advance volume (westbound on E. 23<sup>rd</sup> Street) = 1347 vph

Posted speed limit = 45 mph

Westbound right-turn volume (existing + project) = 6+11 = 17 vph < 18 vph (per KDOT AMP, Table 4-26)

#### Recommendations

The recommended access spacing for an Access Route Class B in a developed area with 45 mph speed limit is 450 ft. (on the same side) and 275 ft. (on the opposite side). The spacing of the project access drive does not meet these KDOT AMP requirements. Given the fact that the project access drive on E. 23<sup>rd</sup> Street is a shared driveway with eastern half owned by another entity and other constraints, relocation of the project access drive is not feasible.

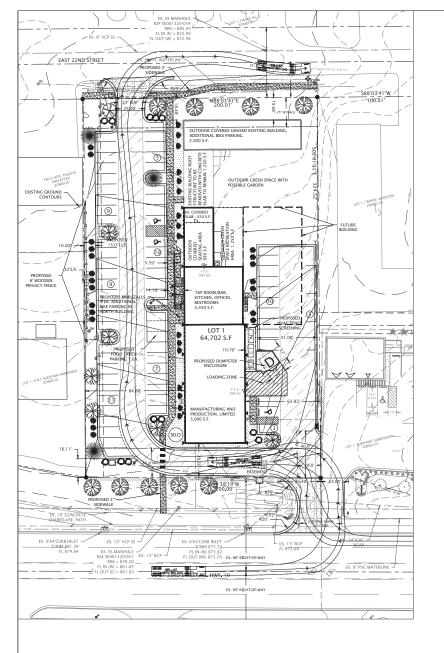
As part of the proposed redevelopment plan, however, this project driveway on E. 23<sup>rd</sup> Street will be improved to have a 36 ft. wide throat with curb/gutter sections (on the east side that is under ownership of the project applicant), 20 ft. radius and 8" thick concrete that replaces the existing asphalt.

# **APPENDIX I**

Figures



Figure 1 Location Map



#### **DEVELOPMENT SUMMARY**

IMF	ERVIOUS SUR	FACE SUMMARY				
Existing Summary	AREA (SQ. FT.)	Summary After Project Completion	AREA (SQ. FT.)			
Existing Building	14,780	Proposed Buildings	11,390			
Existing Pavement	47,452	Proposed Pavement	33,687			
Existing Impervious	62,232	Proposed Impervious	45,077			
Existing Pervious	2,470	Proposed Pervious	19,625			
Property Area	64,702		64,702			
BUILDING COVER		BUILDING COVERAGE 17.6% IMPERVIOUS LOT COVERAGE 69.7%				

PARK	NG SUMMARY	
PARKING REQUIREMENT	# OF UNITS	PARKING REQUIRED
BAR OR LOUNGE 1 PER 3 PERSONS MAXIMUM OCC. PLUS 1 PER EMPLOYEE	162 OCC. 5 EMPLOYEES	59 SPACES
MANUFACTURING AND PRODUCTION, LIMITED 1 PER 1000 SF PLUS 1 PER VEHICLE USED	5,000 S.F. 3 VEHICLES	8 SPACES
PERMANENT FOOD TRUCK	1 VEHICLE	1 SPACE
PARKING PROVIDED		
TOTAL PARKING SPACES	67	
STANDARD SPACES	64	
ADA HANDICAP SPACES	3 (1 VAN)	
FOOD TRUCK 18'x30'	1	

		LANDSCAPING SCHEDULE	
SYMBOL	QUANT.	NAME	SIZE & COND
	0	EX. CONIFEROUS/DECIDUOUS TREES	
	9	STREET TREES - 1 PER 40' OF FRONTAGE LARGE CANOPY - LACEBARK ELM, SHUMARD OAK, SUMMERSHADE NORWAY MAPLE, GREENSPIRE LINDEN, OR APPROVED EQUAL (2 SPECIES MIN.)	2.5" CAL - B&B
8	1	MEDIUM CANOPY - SHANTUNG MAPLE, GOLDENRAINTREE, CHICKAPIN OAK OR APPROVED EQUAL	
	4+1*	PERIMETER LANDSCAPING REQUIREMENT  1 TREE PER 25' OF PARKING LOT PLUS CONTIN. ROW OF EVERGREEN SHRUBS DENOTES COUNTED AS STREET TREES	2.5" CAL - B&B
**	1+1	LACEBARK ELM, SHUMARD OAK OR SUMMERSHADE NORWAY MAPLE, + BOSNIAN PINE OR WHITE SPRUCE	2.5" CAL - B&B 5 GAL - CONT.
0	12	DWARF BURNING BUSH, MAGIC CARPET SPIREA OR APPROVED EQUAL	2 GAL.
		INTERIOR LANDSCAPING REQUIREMENT PARKING LOTS - 40 S.F. PER STALL, 1 SHADE TREE & 3 SHRUBS PER 10 STALL, 1 (67 STALLS - 2680 S.F./7 TREES/21 SHRUBS) AREAS PROVIDED AT END ISLANDS, CENTER ISLANDS; PLANTERS AND BETWEEN FENCE AND PARKING EXCEED 3,450 S.F.	
**	5+2	LACEBARK ELM, SHUMARD OAK, SUMMERSHADE NORWAY MAPLE, GREENSPIRE LINDEN + BOSNIAN PINE, LIMBER PINE, WHITE SPRUCE OR APPROVED EQUAL	2.5" CAL - B&B
* *	21 + 16	DWARF BURNING BUSH, MACIC CARPET SPIREA, KNOCK-OUT ROSES, BLUE HOLLY OR APPROVED EQUIAL - LOW MAINTENANCE GRASSES - BLUESTEM, PAMPAS GRASS, MAIDEN GRASS, INDIAN GRASS, WITH A MATURE SPREAD OF LESS THAN 3' OR APPROVED EQUIAL	2 GAL.
		LANDSCAPE AREAS - MULCH, RIVER GRAVEL OR OTHER GROUND TREATMENT ALL UNPAVED AREAS SHALL BE PLANTED	
		WITH TURF GRASSES	
	BU	FFERYARD LANDSCAPING REQ.	

CS TO IG ZONING - TYPE 1 - 10' TO >25' NATE COMPLIANCE - THE PROPERTY WAS REZONED FOR THIS ENT FROM IG TO CS TO ALLOW FOR SPECIFIC USES. THIS PROPERTY REDVELOPMENT FROM IC TO CS TO ALLOW FOR SPECIFIC USES. THIS PROPERTY HAS SIMILAR CHARACTERISTICS TO THE ADJACENT IG ZONDE PROPERTIES. THE WEST PROPERTY LINE HAS BEEN LANDSCARPD WITH 4 TREES, 14 SHRUES, AND LE, 07 6 FOOT WOODEN PRIVACY FENCE IN ADDITIONAT TO THE EXSTING CHARLINK FENCE TO ACT AS A BUFFERVARD. AS THE INTENT OF A BUFFERVARD HAS BEEN ESTABLISHED, NO ADDITIONAL BUFFERING SPROYDOWN.

	PAVING SCHEDULE
SYMBOL (SHADED FOR CLARITY)	NAME
The second second second	4" CONCRETE PAVING FOR SIDEWALKS
	5.5" ASPHALT PAVING
(3////3)	7" ASPHALT PAVING
1 (4 8 2 2 5 7	6" CONCRETE PAVING
	8" CONCRETE PAVING CITY SPEC. FOR APPROACHES

LEGAL DESCRIPTION
LOT 1, JOINSTON ADDITION, LOCATED IN THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 13 SOUTH, RANCE 20 EAST OF THE SXTH PRINCIPAL MERIDIAN, IN

#### GENERAL NOTES

10745 S. Oakcrest Lane

Olathe, Kansas 66061

- Liverence, Kansas 60609
  All Points Surveying, LP
  Laverence, Kansas 606015
  Laverence, Lavere

#### PROJECT BENCH MARK:

ELEVATION = 862.21 FT

CHISELED SQUARE IN THE NW CORNER OF CONCRETE STORMWATER INLET IN THE WEST OF ENTRANCE TO PROPERTY ON 23RD STREET, ELEVATION = 877.79.



	L	EG	END	
SSSS STNSTN	UNDERCROUND TELEPHONE CAS WATERLINE SANITARY SEWER LINE SANITARY SEWER SERVICE STORMWATER LINE BUILDING STERCK LINE SECTION LINE PAVEMENT/SURFACNIC EASTENCTE EASTENCT EASTENCT EASTE EASTENCT EASTENCT EASTENCT EASTENCT EASTENCT EASTENCT EASTENCT E	ತಾತ್ರಿಕ್ಕಿತಿಂದಿಗೆ ಎಂದಿಕೆ ಪ್ರಕ	SANITARY SEWER MANHOLE STORM MANHOLE STORM MANHOLE STORM DEAN CUY ANCHOR UITUITY POLE WATER MATER WATER VALVE FREE HYDEAANT TRAFFICE SOONAL STR. GAS VALVE SIGN LICHT FOLE SIGN ELECTRIC BOX CABLE TY BOX CABLE TY BOX CABLE TY BOX	BACK OF CURB/BACK OF CURB RIGHT OF WAY CENTRELINE DIABANGE FASHENT UTILITY EASEMENT PLATTID MEASURID ACACCULATED PROPERTY CORNER

THIS DOCUMENT IS FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION



SPECIAL USE PERMIT SITE PLAN for **MICROBREWERY AND TAP ROOM** 

RVICES, LLC  $\cong Z \stackrel{\Pi}{=}$ SEC

FOR ROOM E PLAN F TAP | EET SPECIAL USE PERMIT SITE PLAI MICROBREWERY AND TAI 706 E. 23RD STREET LAWRENCE, KANSAS

> DESIGNED BY JDG

CHECKED BY JDG

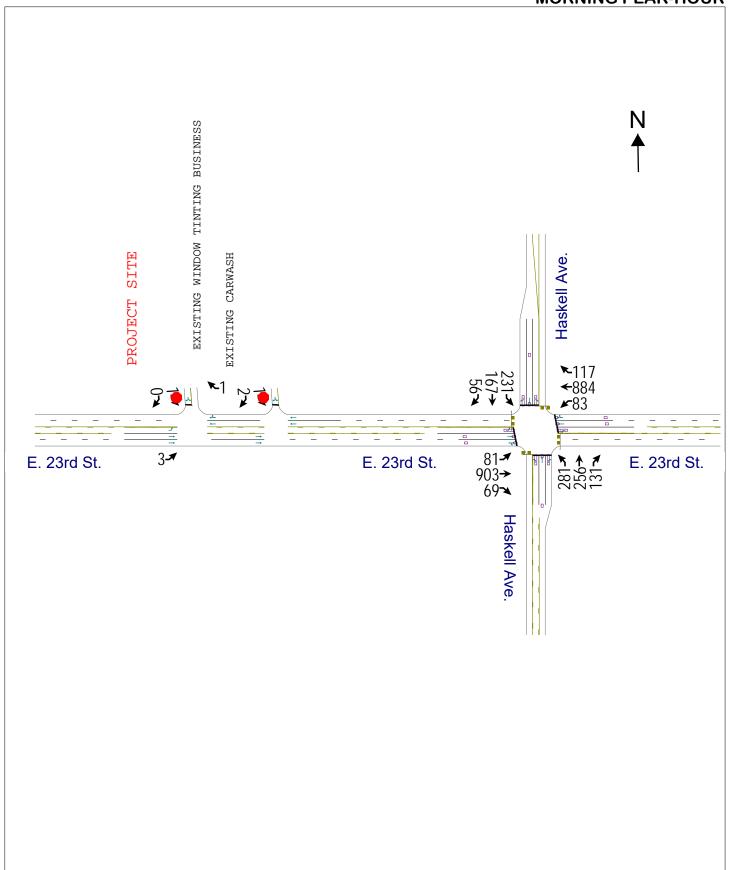
ISSUE DATE JUNE 20, 2016

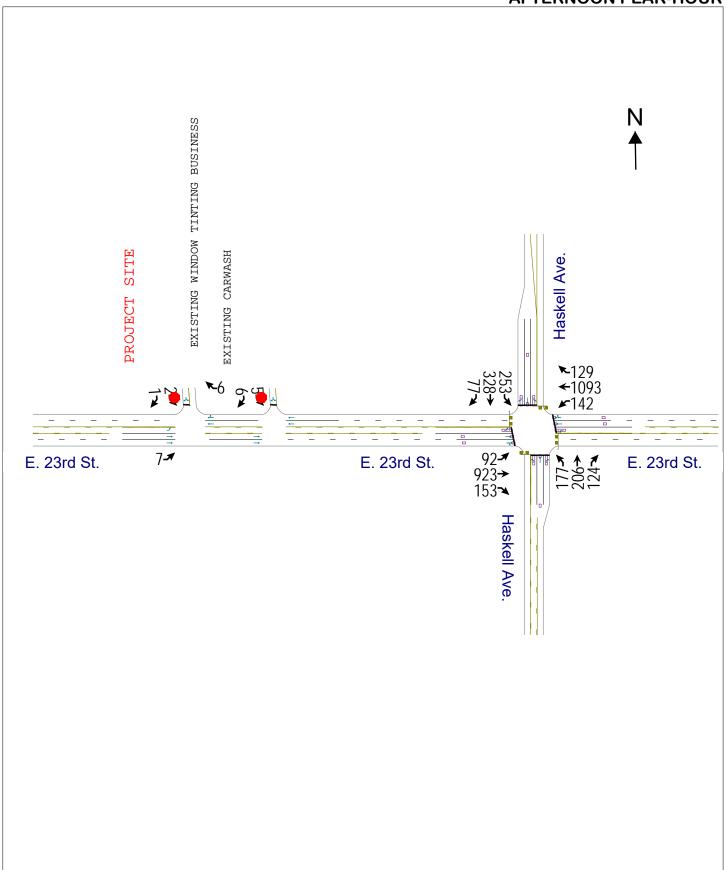
REVISIONS JULY 29, 2016 AUGUST 8, 2016

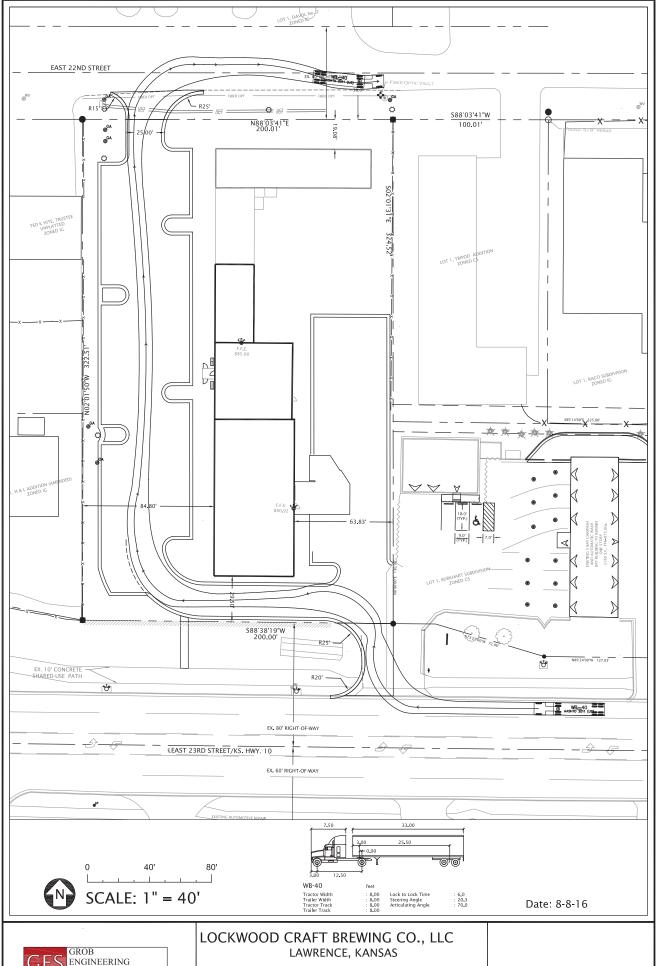
SHEET

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SCALE: 1" = 25'



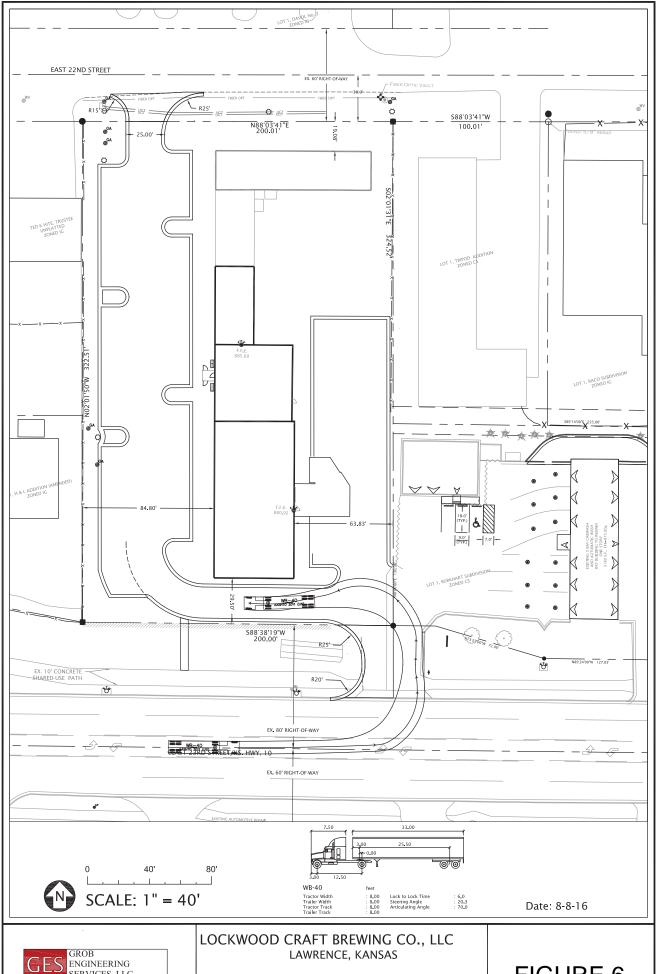






TRUCK MANEUVERING DIAGRAM 1

FIGURE 5





TRUCK MANEUVERING DIAGRAM 2

FIGURE 6

# **APPENDIX II**

Summary of Traffic Counts

### **PEAK AM Count**

Si	gnal	Count AM	Begin	Peak	S	outh Boun	ıd	V	Vest Boun	d	N	Iorth Boun	ıd	E	d	
Loc	ation	Date	Peak	Volume	Right	Right Thru Left			ight Thru Left		Right	Thru Left		Right	Thru	Left
STREET1	STREET2			TOTAL	SBRT	SBTHRU	SBLT	WBRT	WBTHRU	WBLT	NBRT	<b>NBTHRU</b>	NBLT	EBRT	<b>EBTHRU</b>	EBLT
23 rd St.	Haskell Rd.	18-Feb-16	7:15	3259	56	167	231	117	884	83	131	256	281	69	903	81

### **PEAK PM Count**

	Sig	gnal	Count PM	Begin	Peak	South Bound			V	Vest Boun	d	N	Iorth Boun	d	East Bound		
	Loc	ation	Date	Peak	Volume	Right	Right Thru Left			Right Thru Left		Right	t Thru Left		Right	Right Thru L	
SI	TREET1	STREET2			TOTAL	SBRT	<b>SBTHRU</b>	SBLT	WBRT	WBTHRU	WBLT	NBRT	<b>NBTHRU</b>	NBLT	EBRT	<b>EBTHRU</b>	EBLT
2	3 rd St.	Haskell Rd.	18-Feb-16	16:45	3697	77	328	253	129	1093	142	124	206	177	153	923	92

Source: City Public Works Department, Traffic Division

# **Summary of Vehicular Turning Movement Counts**

Project Access Afternoon Peak-Hours Sunny, Hot File Name: 706 E. 23rd Brewery-epm

Site Code : 1

Start Date: 8/4/2016

Page No : 1

**Groups Printed- Unshifted** 

			ject Acc					23rd Str	eet	po : ::::tou						E. 23rd Street					
		F	rom Nor	th			F	rom Eas	st			F	rom Sou	th			F	rom Wes	st		
Start Time	R-out	Thru	L-out	Peds	App. Total	R-in	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	L-in	Peds	App. Total	Int. Total
04:00 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2	4
04:15 PM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	4	0	4	7
04:30 PM	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	4
04:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	2	0	3	6	0	0	0	6	0	0	0	0	0	0	0	7	0	7	16
1					1																
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
05:30 PM	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0	0	0	2	0	2	5
05:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	3
Total	1	0	1	0	2	4	0	0	0	4	0	0	0	0	0	0	0	7	0	7	13
Grand Total	2	0	3	0	5	10	0	0	0	10	0	0	0	0	0	0	0	14	0	14	29
Apprch %	40	0	60	0		100	0	0	0		0	0	0	0		0	0	100	0		
Total %	6.9	0	10.3	0	17.2	34.5	0	0	0	34.5	0	0	0	0	0	0	0	48.3	0	48.3	

# **Summary of Vehicular Turning Movement Counts**

Project Access Afternoon Peak-Hours Sunny, Hot File Name: 706 E. 23rd Brewery-epm

Site Code : 1

Start Date: 8/4/2016

Page No : 2

		Pr	oject Ac	cess			E.	23rd Str	eet							Е	. 23rd St	reet		
	From North					From East					From South					From West				
Start Time	R-out	Thru	L-out	Peds	App. Total	R-in	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds App. T	al Right	Thru	L-in	Peds	App. Total	Int. Total

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM					04:00 PN	1				04:00 PI	M				04:00 PN	Л			
+0 mins.	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	4	0	4
+30 mins.	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	2	0	3	6	0	0	0	6	0	0	0	0	0	0	0	7	0	7
% App. Total	33.3	0	66.7	0		100	0	0	0		0	0	0	0		0	0	100	0	
PHF	.250	.000	.500	.000	.375	.500	.000	.000	.000	.500	.000	.000	.000	.000	.000	.000	.000	.438	.000	.438

# **APPENDIX III**

Results of Trip Generation Analysis
Using
ITE Trip Generation Manual, 9<sup>th</sup> Edition

## Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of RESTAURANTHT 1 (932) High-Turnover (Sit-Down) Restaurant

Project: Microbrewery and Tap Room

Phase: Restaurant

Open Date: 6/18/2016 Description: 706 E. 23rd Street, Lawrence, KS Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	468	0	127.15	73.51	246	41.77	7	50	50	False		
Weekday AM Peak Hour of Generator	49	0	13.33	3	54.09	9.44	7	53	47	False		
Weekday AM Peak Hour of Adjacent Street Traffic	40	0	10.81	2.32	25.6	6.59	6	55	45	False		
Weekday PM Peak Hour of Generator	68	0	18.49	5.6	69.2	13.32	5	54	46	False		
Weekday PM Peak Hour of Adjacent Street Traffic	36	0	9.85	0.92	62	8.54	6	60	40	False		
Saturday Average Daily Trips	583	0	158.37	144.6	172.71		5	50	50	False		
Saturday Peak Hour of Generator	52	0	14.07	4.44	50.4	12.19	4	53	47	False		
Sunday Average Daily Trips	485	0	131.84	119.38	143.8		5	50	50	False		
Sunday Peak Hour of Generator	68	0	18.46	9.79	43.2	13.74	4	55	45	False		

## Detailed Land Use Data For 5 Gross Floor Area 1000 SF of MANUFACTURING 1 (140) Manufacturing

Project: Microbrewery and Tap Room

Phase: Manufacturing

Open Date: 6/18/2016 Description: 706 E. 23rd Street, Lawrence, KS Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	19	0	3.82	0.5	52.05	3.07	349	50	50	False	T = 3.88(X) - 20.70	0.87
Weekday AM Peak Hour of Generator	4	0	0.79	0.1	8.75	1.02	363	68	32	False	T = 0.83(X) - 14.26	0.81
Weekday AM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.1	8.75	1.04	293	78	22	False	T = 0.83(X) - 29.52	0.67
Weekday PM Peak Hour of Generator	4	0	0.75	0.09	7.85	0.98	370	52	48	False	T = 0.76(X) - 5.15	0.83
Weekday PM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.07	7.85	1.01	318	36	64	False	T = 0.78(X) - 15.97	0.75
Saturday Average Daily Trips	7	0	1.49	0.88	6.42		483	50	50	False		
Saturday Peak Hour of Generator	1	0	0.28	0.2	0.94		483	50	50	False		
Sunday Average Daily Trips	3	0	0.62	0.07	5.09		483	50	50	False		
Sunday Peak Hour of Generator	0	0	0.09	0.01	0.75		483	50	50	False		

# Detailed Land Use Data For 5 Gross Floor Area 1000 SF of GINDUSTRIAL 1 ( 110 ) General Light Industrial

Project: Microbrewery and Tap Room

Phase: General Light Industry

Description: 706 E. 23rd Street, Lawrence, KS

Open Date: 6/18/2016 Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By <u>Trips</u>	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	35	0	6.97	1.58	16.88	4.24	203	50	50	False	T = 7.47(X) - 101.92	0.81
Weekday AM Peak Hour of Generator	5	0	1.01	0.27	4	1.1	358	90	10	False	T = 1.18(X) - 60.80	0.92
Weekday AM Peak Hour of Adjacent Street Traffic	5	0	0.92	0.17	4	1.07	336	88	12	False	T = 1.18(X) - 89.28	0.92
Weekday PM Peak Hour of Generator	5	0	1.08	0.36	4.5	1.18	364	14	86	False	T = 1.42(X) - 125.20	0.89
Weekday PM Peak Hour of Adjacent Street Traffic	5	0	0.97	0.08	4.5	1.16	345	12	88	False	T = 1.43(X) - 157.36	0.88
Saturday Average Daily Trips	7	0	1.32	0.69	5.78	1.48	351	50	50	False	T = 0.85(X) + 163.06	0.6
Saturday Peak Hour of Generator	1	0	0.14	0.08	0.94	0.41	410	47	53	False		
Sunday Average Daily Trips	3	0	0.68	0.28	5	1.14	486	50	50	False		
Sunday Peak Hour of Generator	1	0	0.1	0.05	0.69	0.33	486	48	52	False		

## Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of BAR 1 (925) Drinking Place

Project: Microbrewery and Tap Room

Phase: Drinking Place

Open Date: 6/18/2016 Description: 706 E. 23rd Street, Lawrence, KS Analysis Date: 6/18/2016

Day / Period	Total Trips	Pass-By <u>Trips</u>	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday PM Peak Hour of Generator	57	0	15.49	3.73	29.98	8.63	3	68	32	False		
Weekday PM Peak Hour of Adjacent Street Traffic	42	0	11.34	3.73	29.98	8.04	4	66	34	False		



SUP-16-00262: Special Use Permit for Manufacturing and Production, Limited Use to Accommodate a Microbrewery Located at 706 E 23rd Street



