MEMO

This memorandum provides expected trip generation for the Summit 470 Logistics Center, Lot 1, development. The development project is a proposed 465,000 square foot warehouse located west of Douglas Street between I-470 and Victoria Drive in Lee's Summit, Missouri. Additional information regarding planned road improvements associated with the site and expected site circulation are also presented in this memorandum. The general location of the project is illustrated in **Figure 1**.

Figure 1: Project Location

Three access points are proposed to service the site. Two access points are proposed on the east side of the site intersecting a proposed public road. The proposed public roadway intersects Victoria Drive. The third access is located on the west side of the site intersecting with Main Street. An existing rail line is located along the south side of the project site. The proposed site plan is provided with this memorandum.

Trip Generation

The Institute of Transportation Engineers (ITE) *Trip Generation Manual (11th Edition)* was referenced to determine trip generation for the proposed land use. The land use that best represents the proposed use is *Warehousing* (Land Use 150). **Table 1** illustrates the expected trip generation for the proposed land use for daily, AM peak hour, and PM peak hour periods. Detailed trip generation information is provided with this memorandum.

Table 1: Daily and Peak Hour Trip Generation

Land Use	Intensity	ITE Code	Average Weekday	A.M. Peak Hour			P.M. Peak Hour		
				Total	In	Out	Total	In	Out
Warehousing	465,000 SF	150	773	79	61	18	82	23	59

Referencing **Table 1**, the proposed site is expected to generate approximately 773 trips during a typical weekday, 79 AM peak hour trips and 82 PM peak hour trips. Referencing the ITE *Trip Generation Manual (11th Edition)*, the number of truck trips to the site was determined. Considering the total trips presented in **Table 1**, it is expected that the site will generate approximately 279 daily truck trips, 10 truck trips in the AM peak hour and 14 truck trips in the PM peak hour.

Planned Roadway Improvements and Review of Unimproved Road Policy

The City of Lee's Summit has adopted an *Unimproved Road Policy* (Resolution 16-22) to provide guidance for development activity impacting roadways. Main Street in the vicinity of the project site is currently a partially improved roadway. South of the development site Main Street has been improved, or is planned to be improved, to meet roadway design standards. North of the development site Main Street has a roadway width of 22 feet. Within the vicinity of the project area the roadway type transitions from improved to unimproved.
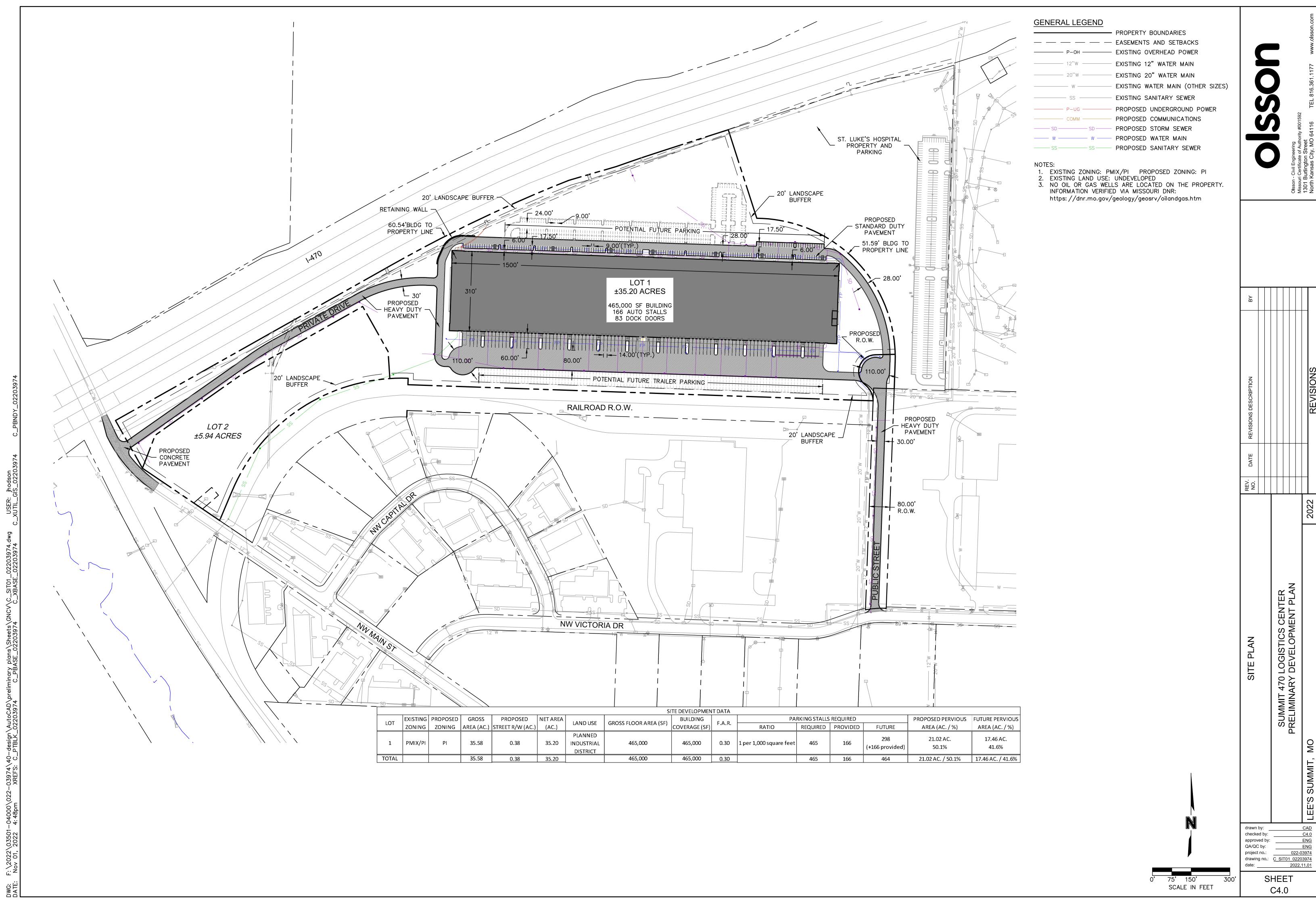
Per the City of Lee's Summit's *Comprehensive Plan Map* (dated December 2021), Main Street is classified as a commercial/industrial collector. LS Section 5200 (July 2020) requires a roadway of this classification to have two to three 12-foot lanes, a minimum curve radius of 510 feet, and curb and gutter. Following the unimproved road policy, improvements are proposed to an approximately 300 linear foot segment of Main Street within the project site property limits. These improvements include improving the centerline radius and increasing the roadway width to 36 feet with curb and gutter. This will improve Main Street to meet industrial/collector roadway standards along the project site boundary.

Site Circulation

All truck traffic will be directed to utilize Victoria Drive/Douglas Street for access to the site. Trucks will be directed to not utilize Main Street north of the project site. Passenger vehicle access to the site is expected to be provided via the northmost east drive accessing Victoria Drive, and via the proposed drive accessing Main Street.

We hope that we have provided adequate information for your request. If you have additional questions, please contact us at 913.381.1170.

ATTACHMENTS

GENERAL LEGEND

————————	PROPERTY BOUNDARIES
— — — — —	EASEMENTS AND SETBACKS
P~OH	EXISTING OVERHEAD POWER
12"W	EXISTING 12" WATER MAIN
20"W	EXISTING 20" WATER MAIN
W	EXISTING WATER MAIN (OTHER SIZES)
SS	EXISTING SANITARY SEWER
P~UG	PROPOSED UNDERGROUND POWER
COMM	PROPOSED COMMUNICATIONS
SD——SD	PROPOSED STORM SEWER
W——W	PROPOSED WATER MAIN
SS——SS	PROPOSED SANITARY SEWER

NOTES:
1. EXISTING ZONING: PMIX/PI   PROPOSED ZONING: PI
2. EXISTING LAND USE: UNDEVELOPED
3. NO OIL OR GAS WELLS ARE LOCATED ON THE PROPERTY.
   INFORMATION VERIFIED VIA MISSOURI DNR:
   https://dnr.mo.gov/geology/geosrv/oilandgas.htm

ST. LUKE'S HOSPITAL
PROPERTY AND
PARKING

20' LANDSCAPE BUFFER

20' LANDSCAPE BUFFER

RETAINING WALL

60.54' BLDG TO PROPERTY LINE

PROPOSED STANDARD DUTY PAVEMENT

51.59' BLDG TO PROPERTY LINE

POTENTIAL FUTURE PARKING

24.00' 9.00'

17.50'

28.00'

17.50'

6.00'

9.00'(TYP.)

6.00'

1500'

310'

LOT 1
±35.20 ACRES

465,000 SF BUILDING
166 AUTO STALLS
83 DOCK DOORS

28.00'

PROPOSED R.O.W.

30'
PROPOSED HEAVY DUTY PAVEMENT

PRIVATE DRIVE

I-470

20' LANDSCAPE BUFFER

110.00'

60.00'

80.00'

14.00'(TYP.)

110.00'

POTENTIAL FUTURE TRAILER PARKING

LOT 2
±5.94 ACRES

PROPOSED CONCRETE PAVEMENT

RAILROAD R.O.W.

20' LANDSCAPE BUFFER

PROPOSED HEAVY DUTY PAVEMENT

30.00'

80.00' R.O.W.

NW CAPITAL DR

PUBLIC STREET

NW MAIN ST

NW VICTORIA DR

SITE DEVELOPMENT DATA

LOT	EXISTING ZONING	PROPOSED ZONING	GROSS AREA (AC.)	PROPOSED STREET R/W (AC.)	NET AREA (AC.)	LAND USE	GROSS FLOOR AREA (SF)	BUILDING COVERAGE (SF)	F.A.R.	PARKING STALLS REQUIRED				PROPOSED PERVIOUS AREA (AC. / %)	FUTURE PERVIOUS AREA (AC. / %)
										RATIO	REQUIRED	PROVIDED	FUTURE		
1	PMIX/PI	PI	35.58	0.38	35.20	PLANNED INDUSTRIAL DISTRICT	465,000	465,000	0.30	1 per 1,000 square feet	465	166	298 (+166 provided)	21.02 AC. 50.1%	17.46 AC. 41.6%
TOTAL			35.58	0.38	35.20		465,000	465,000	0.30		465	166	464	21.02 AC. / 50.1%	17.46 AC. / 41.6%

SITE PLAN

SUMMIT 470 LOGISTICS CENTER
PRELIMINARY DEVELOPMENT PLAN

LEE'S SUMMIT, MO

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

2022

SHEET
C4.0

N

0' 75' 150' 300'
SCALE IN FEET

Daily Trip Generation

ITE Code/Page	Land Use	Size		Trip Gen. Avg. Rate/Eq.	Daily Trips	Trip Distribution Enter	Exit	Daily Trips Enter	Exit	Trucks (from ITE)
150	Warehousing	465,000	SF	Equation	773	50%	50%	387	386	279
Total					**773**			**387**	**386**	

AM Peak Hour Trip Generation (Peak Hour of Adjacent Street)

ITE Code/Page	Land Use	Size		Trip Gen. Avg. Rate/Eq.	AM Peak Hour Trips	Trip Distribution Enter	Exit	AM Peak Hour Trips Enter	Exit	Trip Gen. Avg. Rate/Eq.	AM Peak Hour Trips	Trip Distribution Enter	Exit	AM Peak Hour Trips Enter	Exit
150	Warehousing	465,000	SF	Equation	79	77%	23%	61	18	Avg Rate	10	52%	48%	5	5
Total					**79**			**61**	**18**						

PM Peak Hour Trip Generation (Peak Hour of Adjacent Street)

ITE Code/Page	Land Use	Size		Trip Gen. Avg. Rate/Eq.	PM Peak Hour Trips	Trip Distribution Enter	Exit	PM Peak Hour Trips Enter	Exit	Trip Gen. Avg. Rate/Eq.	PM Peak Hour Trips	Trip Distribution Enter	Exit	PM Peak Hour Trips Enter	Exit
150	Warehousing	465,000	SF	Equation	82	28%	72%	23	59	Avg Rate	14	52%	48%	7	7
Total					**82**			**23**	**59**						