



MEMORANDUM

To: Erin Venard
City of Naperville

From: Emma Albers, P.E., PTOE
Taylor Eschbach, P.E.
Kimley-Horn and Associates, Inc.

Date: March 17, 2023

Subject: Trip Generation Estimates for Proposed Audrey Senior Living
Naperville, IL

Kimley-Horn was retained by Ryan Companies to prepare trip generation projections for the development of a convalescent home at 2939 Audrey Avenue in Naperville, Illinois. The subject site is located on the north side of Audrey Avenue, west of Beebe Drive. A copy of the site plan is provided as **Attachment A**.

DEVELOPMENT CHARACTERISTICS

The proposed convalescent home will consist of 170 units, including 79 independent living units, 63 assisted living units, and 28 memory care units united in a single building with shared staff and amenities. As a convalescent home, residents of the facility will generally be part of the older senior cohort (age 85+).

Residents will transition in place as their care needs evolve. The facility will also welcome residents directly into assisted living or memory care units.

The development plan includes 140 parking spaces. Detailed information regarding the anticipated parking supply and demand is outlined in a separate memo. Access to the proposed site would be provided via two driveways to Audrey Avenue: one full-access driveway in the southeast corner of the site and one full-access driveway near the middle of the site frontage.

TRIP GENERATION

The Institute of Transportation Engineers (ITE) [Trip Generation Manual](#), 11th Edition is a compilation of traffic count data collected at sites throughout the United States for a range of land uses based on building floor area, unit count, and other relevant variables. For this proposed senior living community development, trip generation data is referenced for ITE Land Use Code (LUC) 255 (Continuing Care Retirement Community) as such communities are comprised of a combination of senior residential types providing a graduating level of care.

Based on the ITE data and the proposed development plan with 170 total dwelling units, **Table 1** summarizes the projected trips on a typical weekday and during the weekday morning and evening peak hours. For purposes of this review, the site-generated trips projected during the peak hours were rounded to the nearest multiple of five and daily trips were rounded to the nearest multiple of ten.

Table 1. Site-Generated Traffic Projections

Land Use	Size	Weekday					
		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Convalescent Home	170 Units	30	15	45	30	45	75

¹ Projections are based on data published in ITE's *Trip Generation Manual, 11th Edition* for LUC 255 - Continuing Care Retirement Community

As shown in Table 2, developments similar to the proposed plan are generally low traffic generators. Residents typically own fewer vehicles than a typical multifamily residential development. Furthermore, on-site amenities and shuttle/town car services for resident errands and appointments reduce site-generated traffic. Additionally, the majority of traffic generated by the proposed site is expected to occur outside of normal commuter peak hours, thereby limiting the impact to the adjacent roadway network.

TRAFFIC REVIEW

Traffic generated by the proposed development is expected to use Audrey Avenue and Fort Hill Drive to access nearby major arterials such as IL 59 and 75th Street. The proposed development is projected to generate 45 and 75 total trips (entering or exiting) during the weekday morning and evening peak hours, respectively. For context, on average, this represents a vehicle either entering or exiting the site once every 1 minute 20 seconds during the AM peak hour and once every 48 seconds during the PM peak hour. This rate of traffic generation is limited and not expected to noticeably impact traffic conditions at surrounding intersections.

SUMMARY

Based on Kimley-Horn's review of the site plan, existing roadway network, operational characteristics of the proposed development, and the estimated trip generation, the proposed development is not expected to materially impact traffic conditions on the surrounding roadway network.

Please do not hesitate to contact us with any questions related to the information in this memorandum.

Drawing name: C:\USL\168018020_Plan_Separ Units_Notebook\C2.0 - SITE DIMENSION PLAN.dwg CLO, Mar 17, 2022 9:17am by Taylor Breen/etd
 This document, together with the contract and other documents mentioned herein, is intended only for the specific project and site for which it was prepared. It is not to be used for any other project or site without the written authorization and signature of the engineer and architect. It is not to be used for any other project or site without the written authorization and signature of the engineer and architect.



NO.	DATE	REVISIONS
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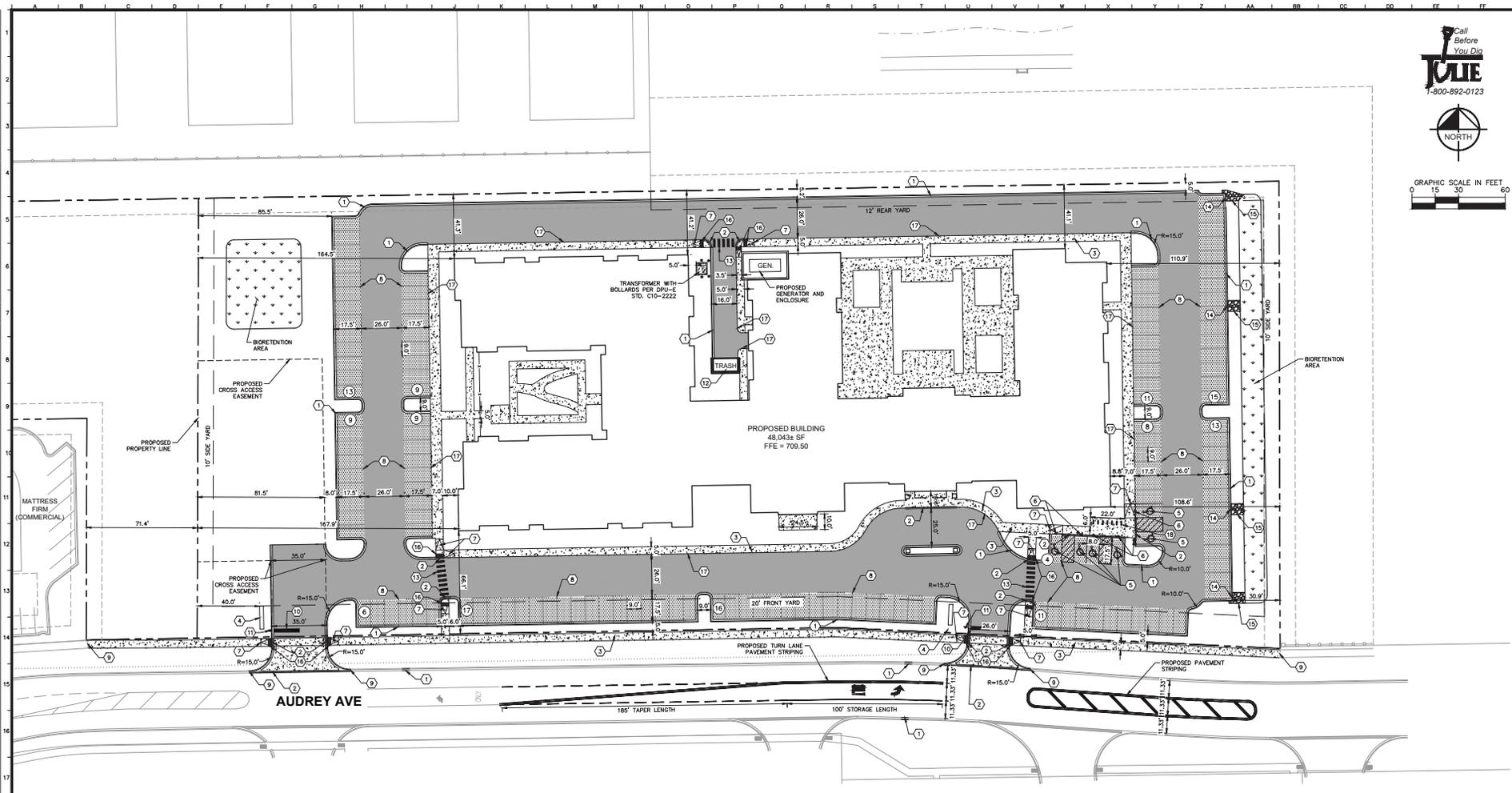
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ORIGINAL ISSUE:
 11/04/2022
 KHA PROJECT NO.
 168018020

SHEET NUMBER
C2.0



GENERAL NOTES

- ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
- RADI ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3'-FEET, PHYSICAL.
- REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS.
- ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

ZONING SUMMARY

EXISTING ZONING: B-2 COMMUNITY SHOPPING CENTER DISTRICT
 PROPOSED ZONING: O3 OFFICE, COMMERCIAL AND INSTITUTIONAL DISTRICT
 EXISTING USE: VACANT LAND
 PROPOSED USE: CONDITIONAL USE - CONVALESCENT HOME
 PROPOSED LOT AREA: 4.56 AC
 REQUIRED FAR: 1.5 MAX.
 PROPOSED FAR: 1.0
 PROPOSED SETBACKS:
 FRONT: 66.1 FEET MIN.
 SIDE: 10.6 FEET MIN.
 REAR: 41.1 FEET MIN.
 *WHERE ADJACENT TO R3A PLD

PROPOSED UNIT COUNT

INDEPENDENT LIVING:	79 UNITS
44 - 1 BED UNITS	
15 - 2 BED UNITS	
ASSISTED LIVING:	63 UNITS
54 - 1 BED UNITS	
5 - 2 BED UNITS	
MEMORY CARE:	28 UNITS
28 - 1 BED UNITS	
2 - 2 BED UNITS	
170 TOTAL UNITS PROPOSED	
216 TOTAL BEDS PROPOSED	

PARKING SUMMARY

PARKING SPACES REQUIRED (PER CITY REQUIREMENTS)	= 140 SPACES
1 SPACE PER INDEPENDENT LIVING BED (114 BEDS)	
0.25 SPACES PER ASSISTED LIVING BED (72 BEDS)	
0.25 SPACES PER MEMORY CARE BED (30 BEDS)	
STANDARD PARKING SPACES PROVIDED	= 134 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	= 5 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	= 6 SPACES
TOTAL PARKING SPACES PROVIDED	= 140 SPACES
BICYCLE PARKING REQUIRED (10% OF VEHICLE PARKING REQUIREMENTS)	= 14 SPACES
BICYCLE PARKING PROVIDED	= 14 SPACES

PAVING AND CURB LEGEND

	STANDARD DUTY ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CONCRETE CURB AND GUTTER
	CONCRETE DEPRESSED CURB AND GUTTER
	BIORETENTION AREA
	RIP RAP
	HEAVY DUTY CONCRETE

KEY NOTES

- 86.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
- DEPRESSED CURB AND GUTTER
- CONCRETE SIDEWALK, TYP. (SEE DETAILS)
- MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
- ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
- ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8 & R7-101, SEE DETAILS)
- WIDE RAMP (SEE DETAILS)
- 4" WIDE PAINTED SOLID LINE, TYP.
- CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
- 24" WIDE STOP BAR, TYP. (SEE DETAILS)
- STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
- TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
- CROSSWALK STRIPING
- CURB CUT
- RIP RAP
- ADA DETECTABLE WARNING STRIP
- INTEGRAL CURB AND SIDEWALK
- BIKE RACK