MEMORANDUM

Date: May 8, 2023

To: Ana Alfaro, ZS Development Corp.

From: Kay Hsu, PE, TE, K2 Traffic Engineering, Inc.

Re: Site Access Memo for Walteria Townhomes
East of Hawthorne Blvd and North of Rolling Hills Rd, Torrance

PROJECT DEVELOPMENT

The project site, APN# 7547-004-049, is currently a vacant lot located east of Hawthorne Boulevard and north of Rolling Hills Road in the City of Torrance. The proposed development plans to construct a mixed-use building that consists of 20 townhome units and 1,608 square feet of office space. The proposed site plan is provided in **Exhibit 1**.

STOPPING SIGHT DISTANCE

Site access is provided by the proposed right-in-right-out driveway on Hawthorne Boulevard. The posted speed limit is 45 mph in the project vicinity. Stopping sight distances for the corresponding roadway design speed per Chapter 200 of the Caltrans Highway Design Manual are shown in **Table 1**.

Table 1. Stopping Sight Distance Standards

Design Speed (MPH)	20	25	30	35	40	**45**	50	55	60	65
Stopping Sight Distance (ft)	125	150	200	250	300	**360**	430	500	580	660

For the design speed of 45 mph, the required stopping sight distance is 360 feet. However, with a downhill slope of 4% for northbound Hawthorne Boulevard, the stopping sight distance is increased by 20% from 360 feet to 432 feet. As illustrated in **Exhibit 2**, the adjusted stopping

sight distance has been adequately provided at the proposed driveway for northbound traffic. Sight distance is NOT required for southbound traffic since left-turn movements are prohibited and obstructed by the presence of a raised median island.

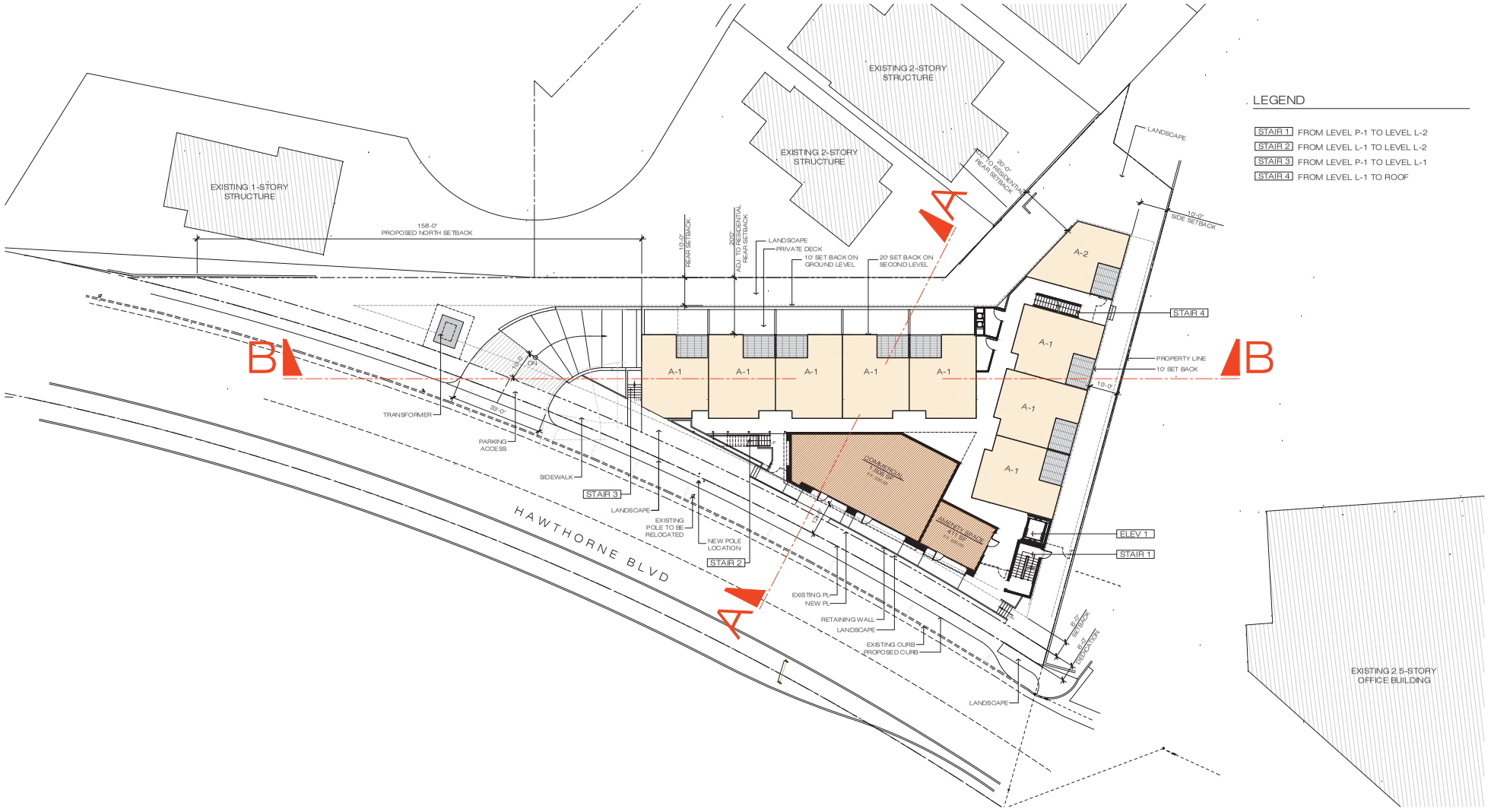
PEDESTRIAN VISIBILITY

To ensure visibility of pedestrian by the motorists approaching the project driveway, a minimum of 10 feet pedestrian visibility is recommended. As shown in **Exhibit 3**, pedestrian visibility is adequately provided for the proposed driveway without visual obstructions. STOP sign and pavement markings (including STOP legends and the limit line) are recommended nonetheless for the proposed driveway to enhance pedestrian safety.

Prepared By:

K2 Traffic Engineering, Inc.

Jende Kay Hsu, T.E.
California License TR2285



LEGEND

STAIR 1 FROM LEVEL P-1 TO LEVEL L-2
STAIR 2 FROM LEVEL L-1 TO LEVEL L-2
STAIR 3 FROM LEVEL P-1 TO LEVEL L-1
STAIR 4 FROM LEVEL L-1 TO ROOF

WALTERIA

CITY OF TORRANCE - CALIFORNIA

N

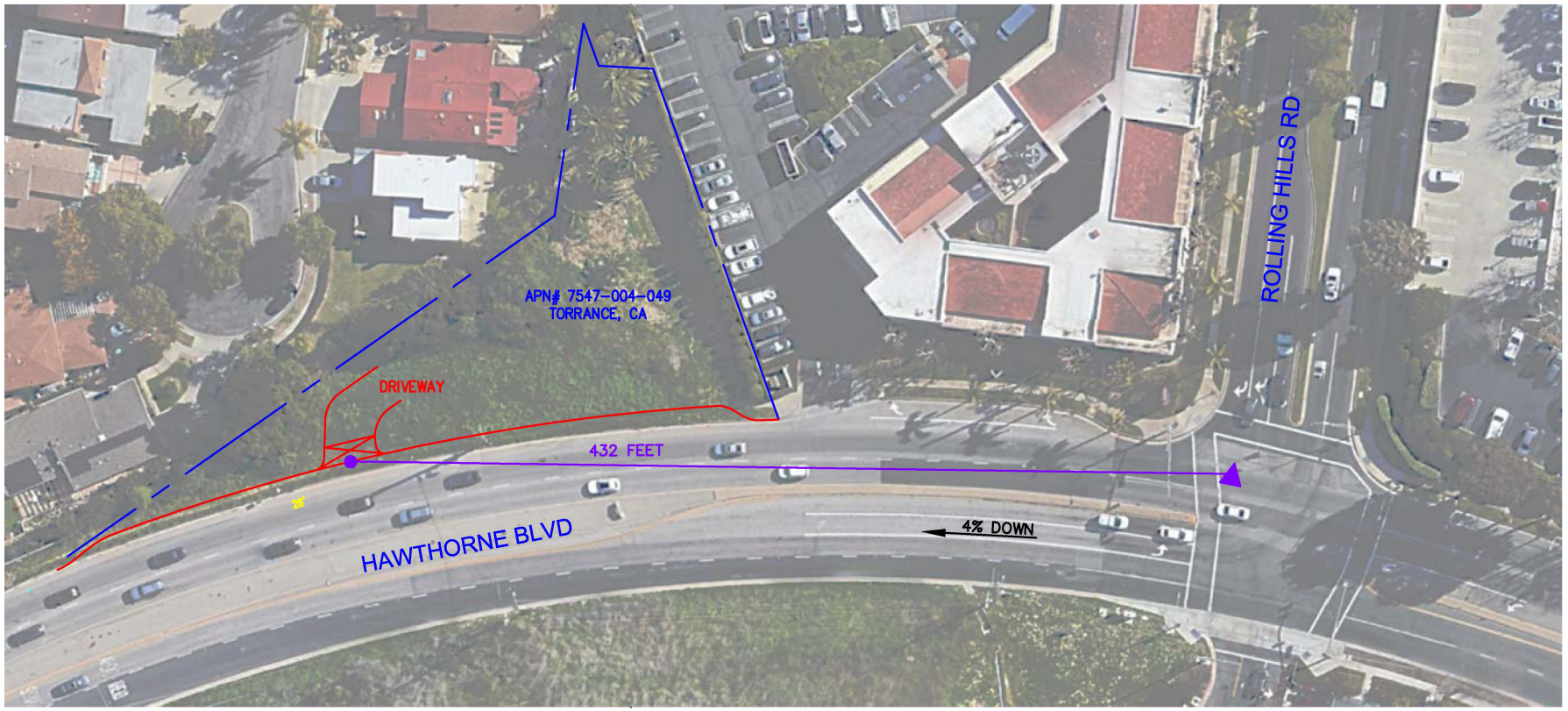
scale: 1/16" = 1'-0"
0 16 32 48 64

SITE PLAN
LEVEL L-1

No. MU210521 (C0018)
Date.02.06.2023 01-02

BSB DESIGN

EXHIBIT 1. SITE PLAN



SIGHT DISTANCE AT THE PROPOSED DRIVEWAYS
EAST OF HAWTHORNE BLVD & NORTH OF ROLLING HILLS RD, TORRANCE

HAWTHORNE BLVD

POSTED SPEED LIMIT: **45** MPH
STOPPING SIGHT DISTANCE= **360** FEET
SOURCE: HIGHWAY DESIGN MANUAL 2020; INDEX 405.1(2)(c)

NORTHBOUND DOWNHILL: 4% SLOPE
ADJUSTED STOPPING SIGHT DISTANCE= **432** FEET (20% INCREASE FROM 360 FEET)
SOURCE: HIGHWAY DESIGN MANUAL 2020; INDEX 201.3

NOT TO SCALE

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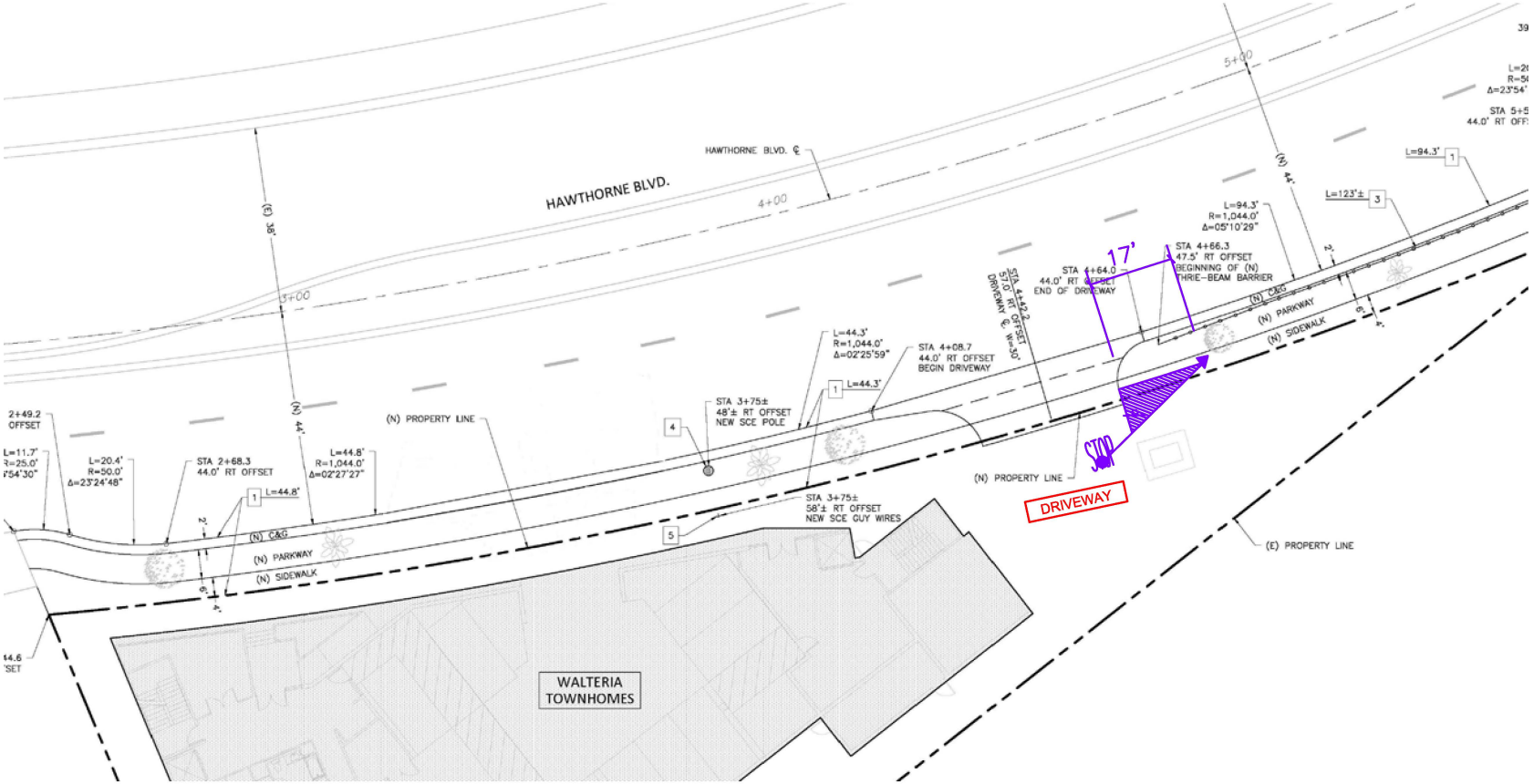
EXHIBIT 2. STOPPING SIGHT DISTANCE



LEGEND

- PEDESTRIAN VISIBILITY ZONE
- DRIVER'S EYES 3.5 FEET ABOVE PAVEMENT SURFACE
- AN OBJECT 0.5 FEET HIGH ON THE ROAD

PEDESTRIAN VISIBILITY

WALTERIA TOWNHOMES

PREFERRED PEDESTRIAN VISIBILITY DISTANCE = **10** FEET

PROJECT DRIVEWAY
PEDESTRIAN VISIBILITY = 17 FEET (> 10 FEET, OK)

NOT TO SCALE

EXHIBIT 3. PEDESTRIAN VISIBILITY

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