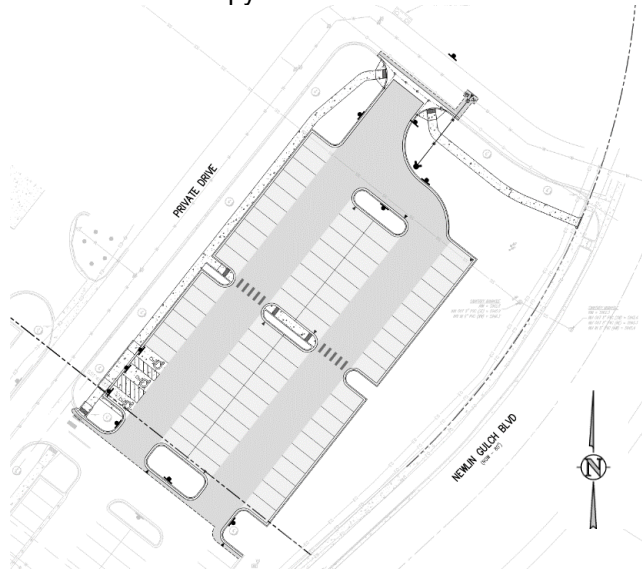


# E. PARKING LOT EXPANSION TRAFFIC MEMO

|            |                                                                                                                                                                                              |                                                                                                   |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| To:        | Lutheran High School<br>ATTN: Dan Gehrke<br>11249 Newlin Gulch Blvd<br>Parker, CO 80134<br><br>JVA Incorporated<br>ATTN: Chad Cantrell<br>1675 Larimer Street, Suite 550<br>Denver, CO 80202 | <br>03/16/2023 |
| From:      | Olsson<br>1880 Fall River Drive, Suite 200<br>Loveland, CO 80538                                                                                                                             |                                                                                                   |
| Subject:   | East Parking Lot Expansion – Queueing Memorandum                                                                                                                                             |                                                                                                   |
| Date:      | March 16, 2023                                                                                                                                                                               |                                                                                                   |
| Project #: | A21-04403                                                                                                                                                                                    |                                                                                                   |
| Enclosed:  | Site Plan – Lutheran High School East Parking Lot Expansion (1/13/23)                                                                                                                        |                                                                                                   |

On January 19<sup>th</sup>, 2023, on behalf of the project owner, both JVA Incorporated and Olsson met with Michael Walton, The Town of Parker to discuss traffic-related comments regarding the subject project. The project involves the latest site development at Lutheran High School, an expansion of the eastern parking lot found located adjacent to Newlin Gulch Boulevard. The lot is also surrounded by a one-way internal roadway, Private Drive that is used most notably for pick-up and drop-off site circulation and that also accesses Newlin Gulch Boulevard. The proposed site plan provided by JVA Incorporated is shown in Figure 1 for reference and a full scaled copy is enclosed.



**Figure 1: Proposed Site Plan**

The current enrollment at Lutheran High School is 920 students as of January 2023, within 1% of the enrollment assumed in the trip generation estimated in the approved April 2022 Lutheran High School Traffic Impact Study (April 2022 TIS). The April 2022 TIS provided analysis of the expected operational and safety performance of the site with respect to enrollment of the school at an estimated 910 students.

Per section 4.2.2.2 *Spacing* of the current November 2020 Town of Parker Roadway Construction Standards (Town Standards), the location of the proposed parking lot access, approximately 120 feet from Newlin Gulch Boulevard meets the minimum driveway spacing (100 feet flowline to flowline for commercial driveways along non-residential locals, per Table 4-3 of the Town Standards). Additionally, The Standards state a non-residential local street such as this proposed parking lot drive is required to have 200 feet of stopping sight distance.

The proposed driveway location is not expected to negatively influence the safety or operations of the site during student pick-up and drop-off periods and the following considerations are provided to support this assertion:

**Safety:** No impacts to safety are expected at any of the internal driveways, with respect to vehicle, bicycle, and pedestrian traffic, for the following reasons.

- **Minimal Points of Conflict** - The one-way flow of the Private Drive will result in fewer potential points of conflict at each driveway, reducing their safety and operational impacts.
- **Adequate Sight Lines** - The required 200 feet of stopping distance at the parking lot access is provided and is expected to be adequate for vehicles, bikes, and pedestrians moving through and around the proposed access. Present trees and vegetation along the Private Drive do not appear to limit sight distance, and they should be continually maintained to ensure compliance.
- **Low Operating Speed** – The operating speed of the Private Drive is observed to be slower during times of pickup and drop-off during the most congested periods.
- **Low Pedestrians and Bicycle Volumes** – Pedestrian and bicycle traffic at the proposed driveway crossing is expected to be low such that no further improvements are expected to be warranted or needed to maintain safe operations for all modes of transportation. Volumes at this driveway are expected to be low for three reasons. The current volumes are measured to be low at this location, the demand for pickup and drop-off at Newlin Gulch is expected to decrease as discussed in the April 2022 TIS due to the new proposed circulation plan, and lastly, as a private school Lutheran High School induces less pedestrian/bicycle traffic.

**Operations:** The site circulation plan included in the April 2022 TIS includes specific recommendations that are aimed at reducing traffic volumes and points of conflict between motorists and pedestrians along the Private Drive, minimizing congestion that could affect the proposed driveway.

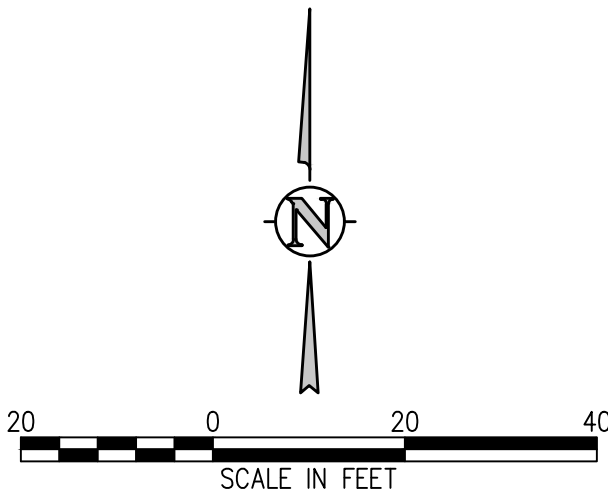
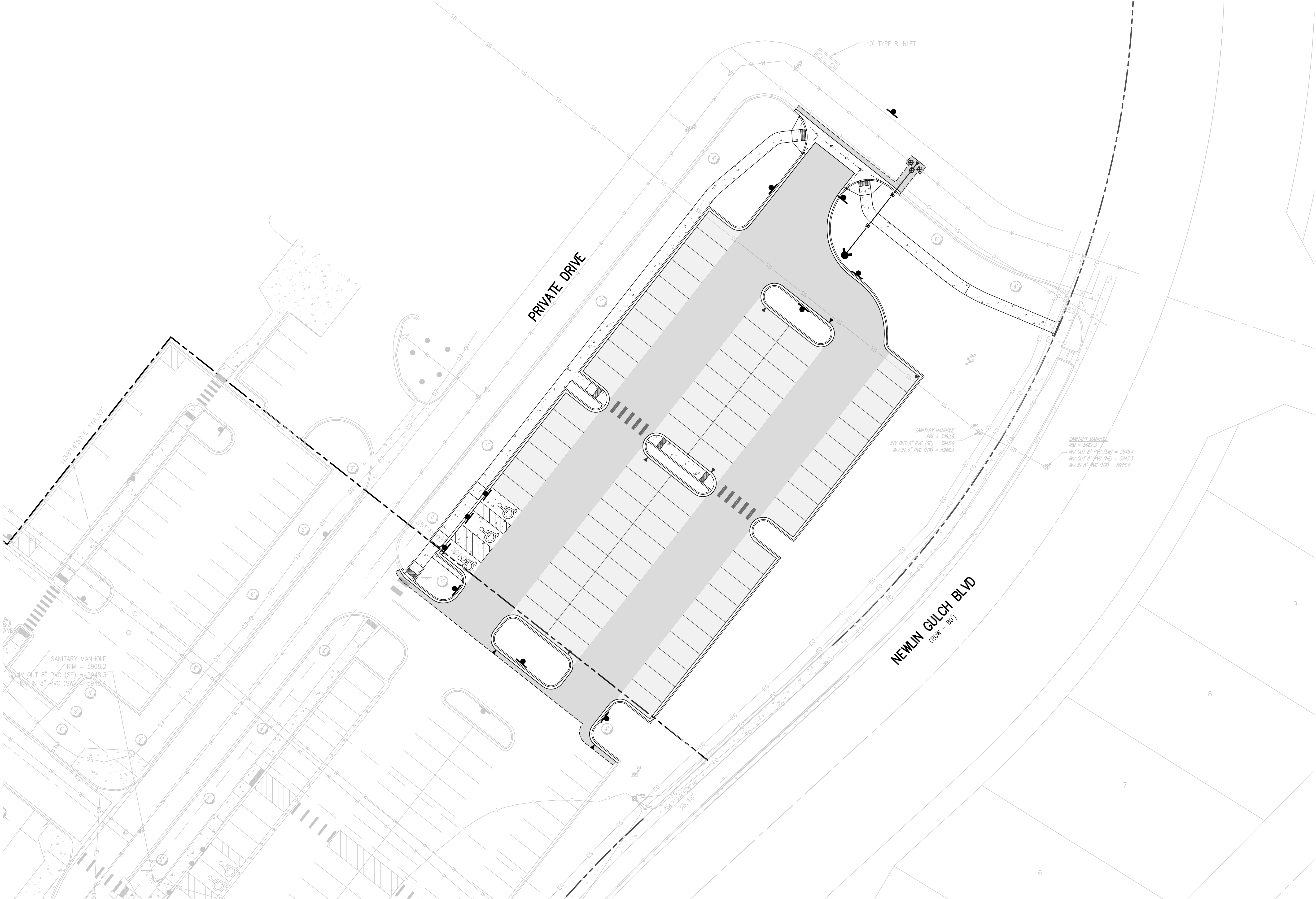
- **Points of Conflict** - The one-way flow and reduced number of points of conflict at each driveway and particularly at the proposed driveway (including vehicles, bicycles, and pedestrians) also serves to reduce the congestion along the internal one-way roadway.
- **Congestion** - In the event that significant congestion along the Private Drive does occur (for example, during periods of student pick-up and drop-off), the proposed driveway location (approximately 120 feet from Newlin Gulch Boulevard) is expected to provide adequate storage for up to five westbound vehicles, which is expected to be sufficient for queueing. The driveway itself will serve to provide an alternative path for those on the Private Drive facing congestion, further relieving the potential for queues to extend to Newlin Gulch Boulevard. The driveway's location and site circulation also suggest the volume of NB Left Turns from the driveway will be low, so points of conflict are expected to be very few, and often non-existent at the driveway.

Based on the April 2022 TIS, and for the reasons stated above, we find the proposed improvements to be in general conformance with the Town's standards. This assumes that the recommendations of the April 2022 TIS are implemented, and in advance of or concurrently with the subject improvements, and that enrollment does not increase significantly.

# LUTHERAN HIGH SCHOOL - EAST PARKING LOT EXPANSION

## NEW HORIZONS

PART OF THE SOUTHWEST 1/4 OF SECTION 20, TOWNSHIP 6 SOUTH,  
RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, TOWN OF PARKER,  
COUNTY OF DOUGLAS, STATE OF COLORADO



SITE PLAN  
AMENDMENT  
PAGE 3 OF 8 PAGES  
PROJECT #: 2220  
ISSUED: 01/13/2023

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