

Attachment B**TDA Article 3 Project Application Form**

1. Agency	City of Antioch		
2. Primary Contact	Frank B. Appiah, Traffic Engineer Consultant		
3. Mailing Address	200 H Street, Antioch, CA 94531		
4. Email Address	fappiah@interwestgrp.com	5. Phone Number	916-584-5193
6. Secondary Contact (in the event primary is not available)	Scott Buenting, City of Antioch Public Works Director		
7. Mailing address (if different) N/A <input checked="" type="checkbox"/>			
8. Email Address	sbuening@antiochca.gov	9. Phone Number	925-799-6129
10. Send allocation instructions to (if different from above):			
11. Project Title	Safe Routes to School Improvements		
12. Amount requested	\$100,000	13. Fiscal Year of Claim	2026-2027

14. Description of Overall Project:

The Safe Route to School Program identified two of the twenty-five schools in the Antioch School district to receive improvements through this grant. After completing a school safety assessment with all 25 schools at the end of the school year ending 2025, the city prioritized the schools based on a combination of need, effectiveness of proposed benefits, and frequency of public requests. Black Diamond Middle School and Carmen Dragon Elementary were both at the top of the prioritization list and the two schools we would like to implement the improvements first.

Antioch staff prepared SR2S Safety Assessment memos to share with each of the 25 schools and superintendent. The memos were well received and supported by the schools, school district and the student guardians. All are eager to get the improvements implemented. Improvements include but not limited to striping, signage, enhanced crosswalks, rapid flashing beacons, and various traffic calming measures.

15. Project Scope Proposed for Funding: (Project level environmental, preliminary planning, and ROW are ineligible uses of TDA funds.)

The grant will be used for Construction. Antioch will also fund an in-kind match of \$15,000 towards its consultant and maintenance staff for installation, construction management and inspection, coordination with the schools and school district, and traffic control services. Additionally, thermoplastic striping equipment will be needed and purchased with City funds at approximately \$15,000.

16. **Project Location:** A map of the project location is attached or a link to an online map of the project location is provided below:

Please find the project locations of Black Diamond Middle School and Carmen Dragon Elementary on the attached plans.

Project Relation to Regional Policies (for information only)

17. Is the project in an [Equity Priority Community](#)?

Yes ☒ No ☐

18. Is this project in a [Priority Development Area](#) or a [Transit-Oriented Community](#)?

Yes ☒ No ☐

19. Project Budget and Schedule

Project Phase	TDA 3	Other Funds	Total Cost	Estimated Completion (month/year)
Bike/Ped Plan				
ENV				
PA&ED				
PS&E				
ROW				
CON	\$100,000	\$30,000 (in-kind)	\$130,000	Dec 2027
Total Cost	\$100,000	\$30,000 (in-kind)	\$130,000	Dec 2027

Project Eligibility

A. Has the project been reviewed by the Bicycle and Pedestrian Advisory Committee?

Yes ☐ No ☐ To be reviewed by County BPAC

If "YES," identify the date and provide a copy or link to the agenda.

If "NO," provide an explanation).

B. Has the project been approved by the claimant's governing body?

Yes ☐ No ☒

If "NO," provide expected date: 01-06-26

C. Has this project previously received TDA Article 3 funding?

Yes ☐ No ☒

(If "YES," provide an explanation on a separate page)

D. For "bikeways," does the project meet Caltrans minimum safety design criteria

Yes ☒ No ☐

pursuant to [Chapter 1000 of the California Highway Design Manual](#)?

E. 1. Is the project categorically exempt from CEQA, pursuant to CCR Section 15301(c), Existing Facility? Yes ☒ No ☐

2. If "NO" above, is the project is exempt from CEQA for another reason?

Yes ☐ No ☐

Cite the basis for the exemption. _____

N/A ☒

If the project is not exempt, please check "NO," and provide environmental documentation, as appropriate.

F. Estimated Completion Date of project (month and year): December 2024

G. Have provisions been made by the claimant to maintain the project or facility, or has

Yes ☒ No ☐

the claimant arranged for such maintenance by another agency? (If an agency other than the Claimant is to maintain the facility, please identify below and provide the agreement.

H. Is a Complete Streets Checklist required for this project ?

Yes ☐ No ☒

If the amount requested is over \$250,000 or if the total project phase or construction phase is over \$250,000, a Complete Streets checklist is likely required. Please attach the Complete Streets checklist or record of review, as applicable. More information and the form may be found here:

<https://mtc.ca.gov/planning/transportation/complete-streets>

PS&E Cost Estimate

**Project: Safe Routes to School - Near Term Improvements
Black Diamond Elementary**

DATE: 12/2/2025

SIGNS

Item No.	Sign Type	Quantity	Unit	Unit Price	Extension
1	S1-1	8	Each	\$500	\$4,000
2	W16-7P(L)	0	Each	\$500	\$0
3	W16-7P(R)	8	Each	\$250	\$2,000
4	W16-6P(L)		Each	\$500	\$0
5	W16-6P(R)		Each	\$500	\$0
6	SW24-1		Each	\$500	\$0
7	SW24-3	0	Each	\$500	\$0
8	W11-2		Each	\$500	\$0
9	W16-9P		Each	\$500	\$0
10	R1-5(L)		Each	\$500	\$0
11	R1-5(R)		Each	\$500	\$0
12	"NOT A THROUGH STREET" Sign		Each	\$500	\$0
13	S4-5		Each	\$500	\$0
14	SR4-1(CA)		Each	\$500	\$0
15	S5-3		Each	\$500	\$0
16	R2-1		Each	\$500	\$0
17	New sign poles	0	Each	\$150	\$0
18	Sign removal		Each	\$250	\$0
Total					\$6,000

STRIPING

Item No.	Description	Quantity	Unit	Unit Price	Extension
1	Staggered Yellow Continental Crosswalks (Thermoplastic)	3,608	Sqft	\$8.52	\$30,740.16
2	Staggered White Continental Crosswalks (Thermoplastic)	1,707	Sqft	\$8.52	\$14,545.34
3	Staggered Yellow/White Continental Crosswalks (MM)		Sqft	\$10.00	\$0.00
4	"SLOW SCHOOL XING" Text Pavement Marking	0	Each	\$673.08	\$0.00
5	"STOP" Text Pavement Marking	0	Each	\$187.44	\$0.00
6	White Thermoplastic Limit Line, 1' Width	0	LF	\$8.52	\$0.00
7	White Yield Line "Teeth" Markings per Caltrans Std. Plan A24G	0	Each	\$12.78	\$0.00
8	Striping Removal	59	Sqft	\$4.50	\$265.50
Total					\$45,551

OTHER INSTALLATION

Item No.	Description	Quantity	Unit	Unit Price	Extension
1	RRFB		Each	\$16,000	\$0.00
2	A.D.A.-compliant Curb Ramp		Lump Sum		\$0.00

Signs & Striping Costs	\$51,551
Other Costs	\$0
Total Cost	\$51,551
+10% Contingency	\$5,155
TOTAL (rounded up to \$100):	\$56,800

PS&E Cost Estimate

**Project: Safe Routes to School - Near Term Improvements
Carmen Dragon Elementary**

DATE: 12/2/2025

SIGNS

Item No.	Sign Type	Quantity	Unit	Unit Price	Extension
1	S1-1	4	Each	\$500	\$2,000
2	W16-7P(L)	0	Each	\$500	\$0
3	W16-7P(R)	4	Each	\$500	\$2,000
4	W16-6P(L)		Each	\$500	\$0
5	W16-6P(R)		Each	\$500	\$0
6	SW24-1		Each	\$500	\$0
7	SW24-3	2	Each	\$500	\$1,000
8	W11-2		Each	\$500	\$0
9	W16-9P		Each	\$500	\$0
10	R1-5(L)		Each	\$500	\$0
11	R1-5(R)		Each	\$500	\$0
12	"NOT A THROUGH STREET" Sign		Each	\$500	\$0
13	S4-5		Each	\$500	\$0
14	SR4-1(CA)		Each	\$500	\$0
15	S5-3	2	Each	\$500	\$1,000
16	R2-1		Each	\$500	\$0
17	New sign poles	5	Each	\$100	\$500
18	Sign removal		Each	\$250	\$0
Total					\$6,500

STRIPING

Item No.	Description	Quantity	Unit	Unit Price	Extension
1	Staggered Yellow Continental Crosswalks (Thermoplastic)	2,112	Sqft	\$8.52	\$17,994.24
2	Staggered White Continental Crosswalks (Thermoplastic)	986	Sqft	\$8.52	\$8,397.31
3	Staggered Yellow/White Continental Crosswalks (MM)		Sqft	\$10.00	\$0.00
4	"SLOW SCHOOL XING" Text Pavement Marking	2	Each	\$673.08	\$1,346.16
5	"STOP" Text Pavement Marking	0	Each	\$187.44	\$0.00
6	White Thermoplastic Limit Line, 1' Width	0	LF	\$8.52	\$0.00
7	White Yield Line "Teeth" Markings per Caltrans Std. Plan A24G	0	Each	\$12.78	\$0.00
8	Striping Removal	204	Sqft	\$4.50	\$918.00
Total					\$28,656

OTHER INSTALLATION

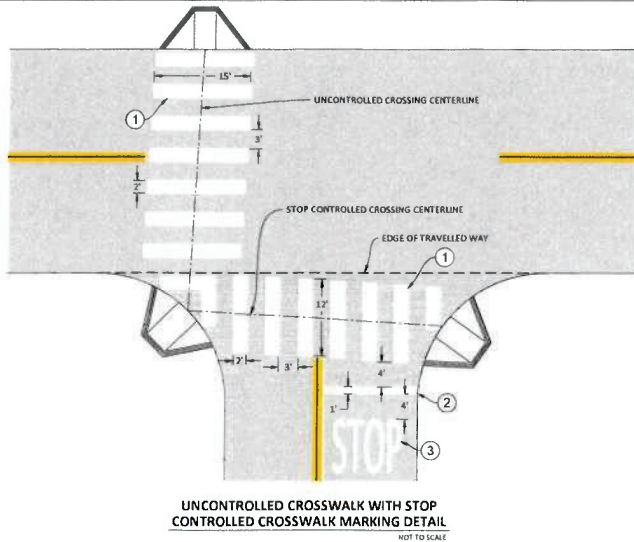
Item No.	Description	Quantity	Unit	Unit Price	Extension
1	RRFB		Each	\$16,000	\$0.00
2	A.D.A.-compliant Curb Ramp		Lump Sum		\$0.00

Signs & Striping Costs	\$35,156
Other Costs	\$0
Total Cost	\$35,156
+10% Contingency	\$3,516
TOTAL (rounded up to \$100):	\$38,700

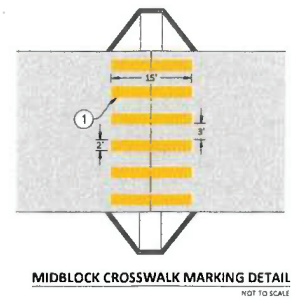
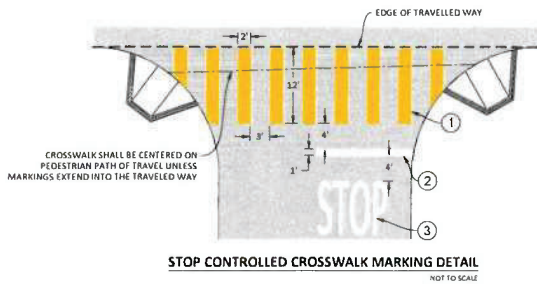
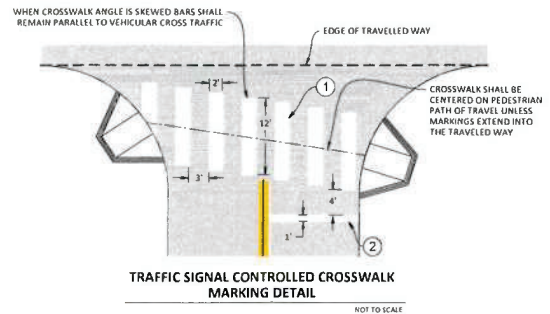


INDEX MAP

EXHIBIT ONLY -
NOT FOR CONSTRUCTION



- DETAIL CONSTRUCTION NOTES** (THIS SHEET ONLY)
- 1 FURNISH AND INSTALL THERMOPLASTIC, CONTINENTAL CROSSWALK (COLOR PER PLAN).
 - 2 REMOVE ANY CONFLICTING LIMIT LINES, FURNISH AND INSTALL NEW THERMOPLASTIC, WHITE, 12" WIDE LIMIT LINE.
 - 3 REMOVE ANY CONFLICTING "STOP" LEGENDS, FURNISH AND INSTALL NEW THERMOPLASTIC, WHITE "STOP" LEGEND PER 2018 CALTRANS STANDARD PLAN A24D.



CONTINENTAL CROSSWALK MARKING DETAILS

EXHIBIT ONLY -
NOT FOR CONSTRUCTION



CONSTRUCTION NOTES (THIS SHEET ONLY)

- ① FURNISH AND INSTALL OR REFRESH YELLOW PAVEMENT MARKING AS SHOWN.
- ② FURNISH AND INSTALL YELLOW CROSSWALK PER DETAILS ON SHEET 2.
- ③ FURNISH AND INSTALL S1-1 & W16-7P(L) ON POST.
- ④ FURNISH AND INSTALL S1-1 & W16-7P(R) ON POST.
- ⑤ FURNISH AND INSTALL SW24-1(CA) ON POST.
- ⑥ FURNISH AND INSTALL SW24-3(CA) ON POST.
- ⑦ FURNISH AND INSTALL WHITE CROSSWALK PER DETAILS ON SHEET 2.

SIGN LEGEND



LEGEND

- SCHOOL BOUNDARY
- ▼ SIGN ON POST
- ⑤ SIGNALIZED INTERSECTION

NOTE:
ANY CONFLICTING SIGNS OR MARKINGS SHALL BE REMOVED PRIOR TO INSTALLING NEW SIGNS OR MARKINGS. ANY REMOVED SIGNS SHALL BE SALVAGED AND RETURNED TO THE CITY.



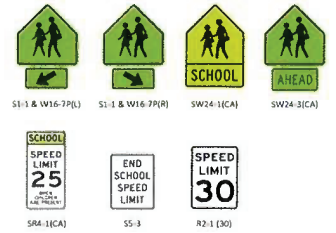
**EXHIBIT ONLY -
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CONSTRUCTION NOTES (THIS SHEET ONLY)

- ① FURNISH AND INSTALL OR REFRESH YELLOW PAVEMENT MARKING AS SHOWN.
- ② FURNISH AND INSTALL YELLOW CROSSWALK PER DETAILS ON SHEET 2.
- ③ FURNISH AND INSTALL S1-1 & W16-7P(L) ON POST.
- ④ FURNISH AND INSTALL S1-1 & W16-7P(R) ON POST.
- ⑤ FURNISH AND INSTALL SW24-1(CA) ON POST.
- ⑥ FURNISH AND INSTALL SW24-3(CA) ON POST.
- ⑦ FURNISH AND INSTALL WHITE CROSSWALK PER DETAILS ON SHEET 2.
- ⑧ FURNISH AND INSTALL SR4-1(CA) ON POST.
- ⑨ FURNISH AND INSTALL S5-3 ON POST.
- ⑩ FURNISH AND INSTALL R2-1 (30) ON POST.

SIGN LEGEND



LEGEND



NOTE:
ANY CONFLICTING SIGNS OR MARKINGS SHALL BE REMOVED PRIOR TO INSTALLING NEW SIGNS OR MARKINGS. ANY REMOVED SIGNS SHALL BE SALVAGED AND RETURNED TO THE CITY.



**EXHIBIT ONLY -
NOT FOR CONSTRUCTION**



Date: May 25, 2025

To: Phyllis James, Black Diamond Middle School Principal
Pamela Seto, Black Diamond Middle School Vice Principal

CC: Stephanie Anello, Antioch Unified School District Superintendent
Scott Buenting, City of Antioch Acting Public Works Director

From: Mitchell Loving, City of Antioch Junior Engineer
Charmine Solla, City of Antioch Consultant Traffic Engineer
Ethan Angold, City of Antioch Consultant Transportation Engineer

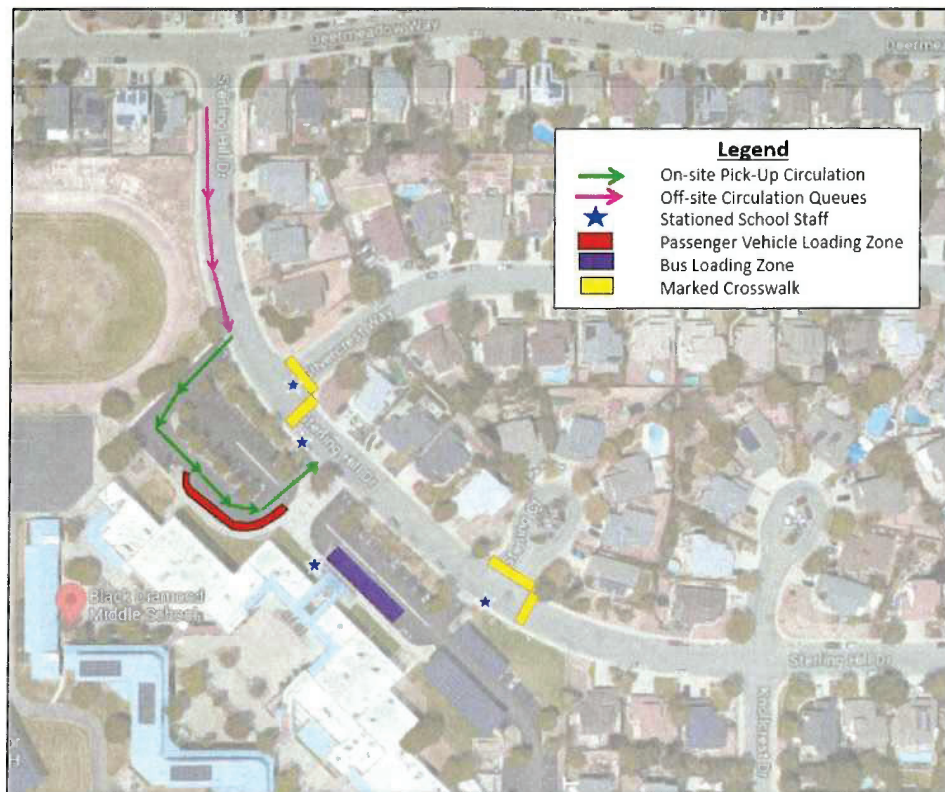
Subject: Safe Routes to School

This memo documents observations and input about traffic patterns during the afternoon school pickup time at Black Diamond Middle School. This onsite meeting occurred on Tuesday, May 16, 2023, and included Site Safety Lead Lulu. If you have any questions or concerns with the information herein, please reach out to Charmine Solla (csolla@antiochca.gov).

Observations

- Overall site layout and circulation is shown on the next page.
- Dismissal occurs at 2:55 PM.
- Students were occasionally observed crossing outside of the crosswalk, to their parent's parked vehicle.
- Parked vehicles obstructed the parking lot entrance as the bus was trying to enter.
- A driver was observed making a U-turn in the Silvercrest Way intersection.
- Approximately 50 students were observed to walk north from the school site toward Deermeadow Way.
- Some drivers utilize Sterling Court and Knollcrest Court cul-de-sacs instead of making a U-turn on Sterling Hill Drive. Some vehicle loading and queuing also occurs at these locations.
- Observed driver stopping in the travel lane on Sterling Hill Drive to load.
- Observed a vehicle using a residential driveway to load, blocking the pathway of the sidewalk.
- The crosswalk on Sterling Hills Drive at Sterling Court was infrequently used by pedestrians.
- The pick-up queue did not spill back onto the Sterling Hill Drive travel lane. When the queue backed up to the parking lot entrance, drivers would wait in the on-street parking north of the parking lot entrance and enter the queue when space in the parking lot was available.





Overall site layout and circulation

School Staff Comments and Input

- There are currently no posted stop signs on-site. On-site signs and parking lot entrance gates are anticipated to be installed.
- Staff frequently observe speeding on Sterling Hill Drive.
- School could benefit from installation of rectangular rapid flashing beacon (RRFB).
- Frequently notice U-turns at intersection of Sterling Hill Drive and Silvercrest Way.
- Drivers lack attention and mobile phone usage is an issue. Collisions have occurred in the past as a result.
- Visibility around the curves near the school make speeding more hazardous.
- Pedestrians mainly cross within marked crosswalks.
- During pick-up, the parking lot exit is right out only, resulting in vehicles making U-turns further down Sterling Hill Drive.
- Residents directly across from the school formerly complained about driveways being blocked, but the issue has since been resolved due to school staff facilitation.
- No City crossing guards present.
- Overall, updates to the pick-up procedure and traffic facilitation have improved traffic operations.





CONSTRUCTION NOTES (THIS SHEET ONLY)

- ① FURNISH AND INSTALL OR REFRESH YELLOW PAVEMENT MARKING AS SHOWN.
- ② FURNISH AND INSTALL YELLOW CROSSWALK PER DETAILS ON SHEET 2.
- ③ FURNISH AND INSTALL S1-1 & W16-7P(L) ON POST.
- ④ FURNISH AND INSTALL S1-1 & W16-7P(R) ON POST.
- ⑤ FURNISH AND INSTALL SW24-1(CA) ON POST.
- ⑥ FURNISH AND INSTALL SW24-3(CA) ON POST.
- ⑦ FURNISH AND INSTALL WHITE CROSSWALK PER DETAILS ON SHEET 2.

SIGN LEGEND



LEGEND

- SCHOOL BOUNDARY
- ▼ PROPOSED SIGN ON POST
- ▽ EXISTING SIGN ON POST
- EXISTING PAVEMENT MARKING
- (B) SIGNALIZED INTERSECTION

NOTE: ANY CONFLICTING SIGNS OR MARKINGS SHALL BE REMOVED PRIOR TO INSTALLING NEW SIGNS OR MARKINGS. ANY REMOVED SIGNS SHALL BE SALVAGED AND RETURNED TO THE CITY.

**EXHIBIT ONLY -
 NOT FOR CONSTRUCTION**



SHEET 21 OF 25



- A school site safety staff member facilitates traffic and pedestrian crossing at the intersection of Sterling Hill Drive and Silvercrest Way.
- Staff sets up cones in designated layouts shown below for morning and afternoon peak times respectively.



Proposed Improvements to School Zone

Proposed improvements are presented in the figure on page 5, and include the following:

- Upgraded high-visibility crosswalks, with advance limit lines.
- Updated signage per the California Manual on Uniform Traffic Control Devices (CAMUTCD).

City Traffic Engineering Staff Improvement Options

This section lists optional improvements identified by City traffic engineering staff to City-maintained roads that are not immediately proposed for implementation but noted for future consideration.

Improvement Options to City-maintained Roads:

- Upgrade crosswalk signage at the intersection of Sterling Hill Drive and Silvercrest Way with RRFBs.
- Provide a City crossing guard at the intersection of Sterling Hill Drive and Silvercrest Way.
- After trial of proposed and above listed improvement options, consider installing 25 MPH speed limit signage on Sterling Hill Drive.

Improvement Options to On-site Traffic Layout:

- None noted.



ANTIOCH CALIFORNIA

Date: May 2, 2025

To: Mark Hemauer, Carmen Dragon Elementary School Principal
Annabel Carvalho, Carmen Dragon Elementary School Vice Principal

CC: Stephanie Anello, Antioch Unified School District Superintendent
Scott Buenting, City of Antioch Acting Public Works Director

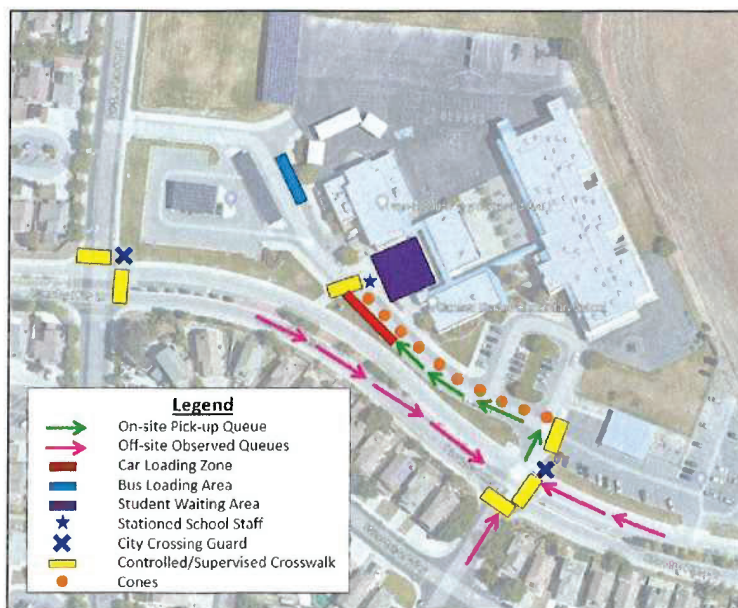
From: Mitchell Loving, City of Antioch Junior Engineer
Charmine Solla, City of Antioch Consultant Traffic Engineer
Ethan Angold, City of Antioch Consultant Transportation Engineer

Subject: Safe Routes to School

This memo documents observations and input about traffic patterns during the afternoon school pickup time at Carmen Dragon Elementary School. This onsite meeting occurred on Tuesday, April 11, 2023, from 2 PM to 3 PM, and included Principal Mark Hemauer. If you have any questions or concerns with the information herein, please reach out to Charmine Solla (csolla@antiochca.gov).

Observations

- Overall site layout and circulation is shown in the image below:



- Queue on Country Hills Drive began around 2:10 PM and cleared up around 2:35 PM. Students are dismissed at 2:30 PM.
- Country Hills Drive has bike lanes on both sides and on-street parking/stopping is prohibited.
- Pedestrian ramp at Country Hills Drive and Timberbrook Way does not line up with marked crosswalk.
- Some parents parked in the parking lots to pick up their children.
- Some parents park along Vista Grande Drive to pick up their children.
- Multiple vehicles parked on-site near the school exit onto Vista Grande Drive to what for students to load.
- Red curb is not obeyed off-site or on-site. Parked cars along red curb cause visibility issues.
- An Ice Cream truck was observed parked near the exit onto Vista Grande Drive and was blocking visibility.

School Staff Comments and Input

- Speeding along Country Hills Drive is a concern.
- Students and parents are aware that pickup along Country Hills Drive is prohibited.
- Students have haven't been picked up by 2:45 PM are brought back inside.
- Collisions have occurred.

Proposed Improvements to School Zone

Proposed improvements are presented in the figure on page 4, and include the following:

- Upgraded high-visibility crosswalks, with "SLOW SCHOOL XING" legend pavement markings in advance.
- Updated signage per the California Manual on Uniform Traffic Control Devices (CAMUTCD).

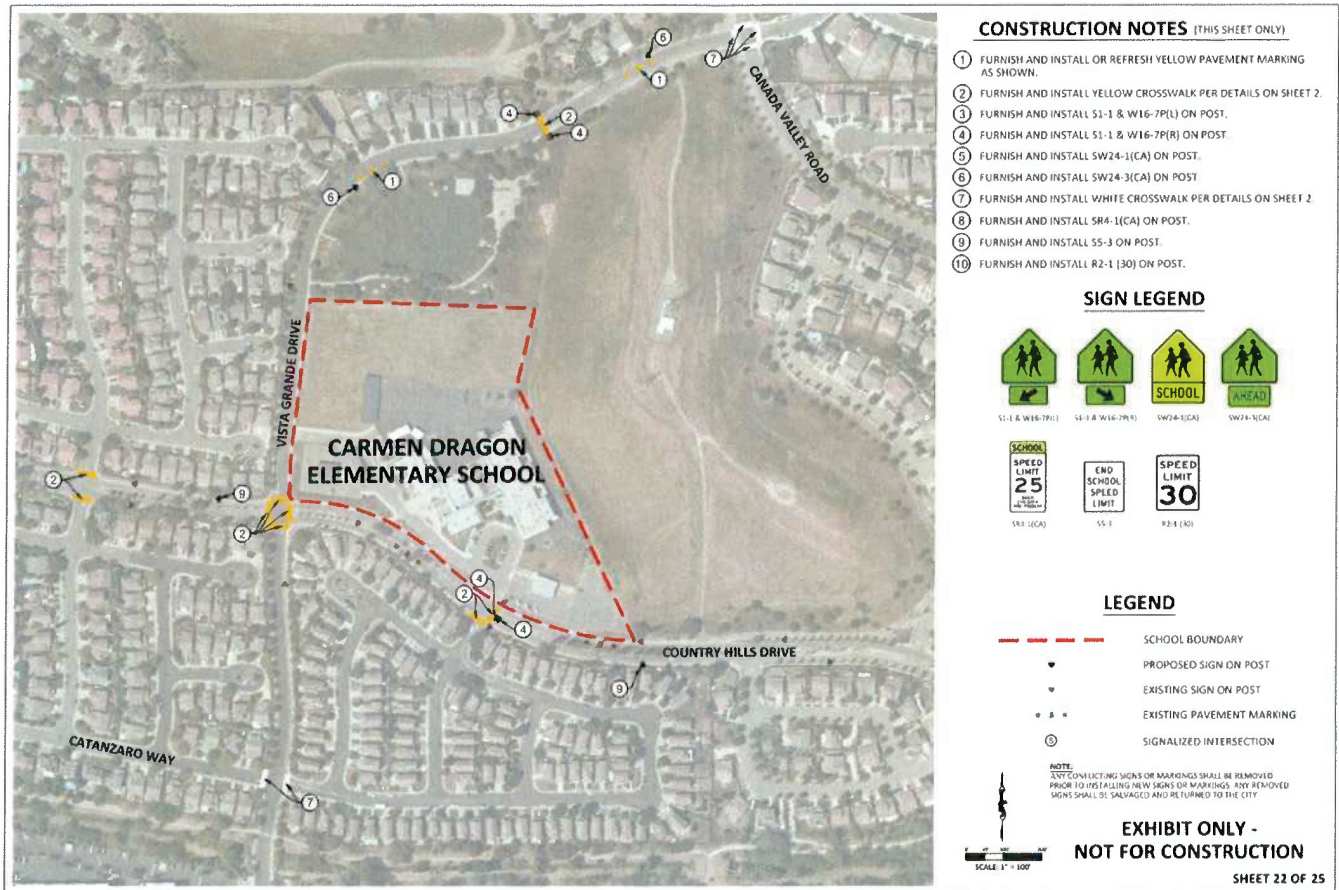
City Traffic Engineering Staff Improvement Options

This section lists optional improvements identified by City traffic engineering staff to City-maintained roads that are not immediately proposed for implementation but noted for future consideration. Additionally, improvement options for the on-site traffic layout are listed in this section.

Improvement Options to City-maintained Roads:

- Implement additional countermeasures to deter cars from using red curb zones to park and pick up their children. Possible countermeasures could be:
 - Additional "NO STOPPING ANYTIME" signage
 - Physical barriers such as flexible delineators
- Traffic calming measures along Country Hills Drive and Vista Grande Drive.





- Rectifying the misalignment of pedestrian ramp and marked crosswalk at the intersection of Country Hills Drive and Timberbrook Way.

Improvement Options to On-site Pick-up Traffic Layout:

- Replace faded signage.
- Add more painted arrows to the pavement that reinforce the one-way circulation.

