617 W 7th Street, Suite 1103
Los Angeles, CA 90017
(213) 489-7443
altalosangeles@altaplanning.com

TECHNICAL MEMORANDUM

DRAFT

Re: Sunny Fields Spur Trail Study

To: City of Solvang Public Works Department

From: Alta Planning + Design

Date: May 22, 2018

PROJECT DESCRIPTION

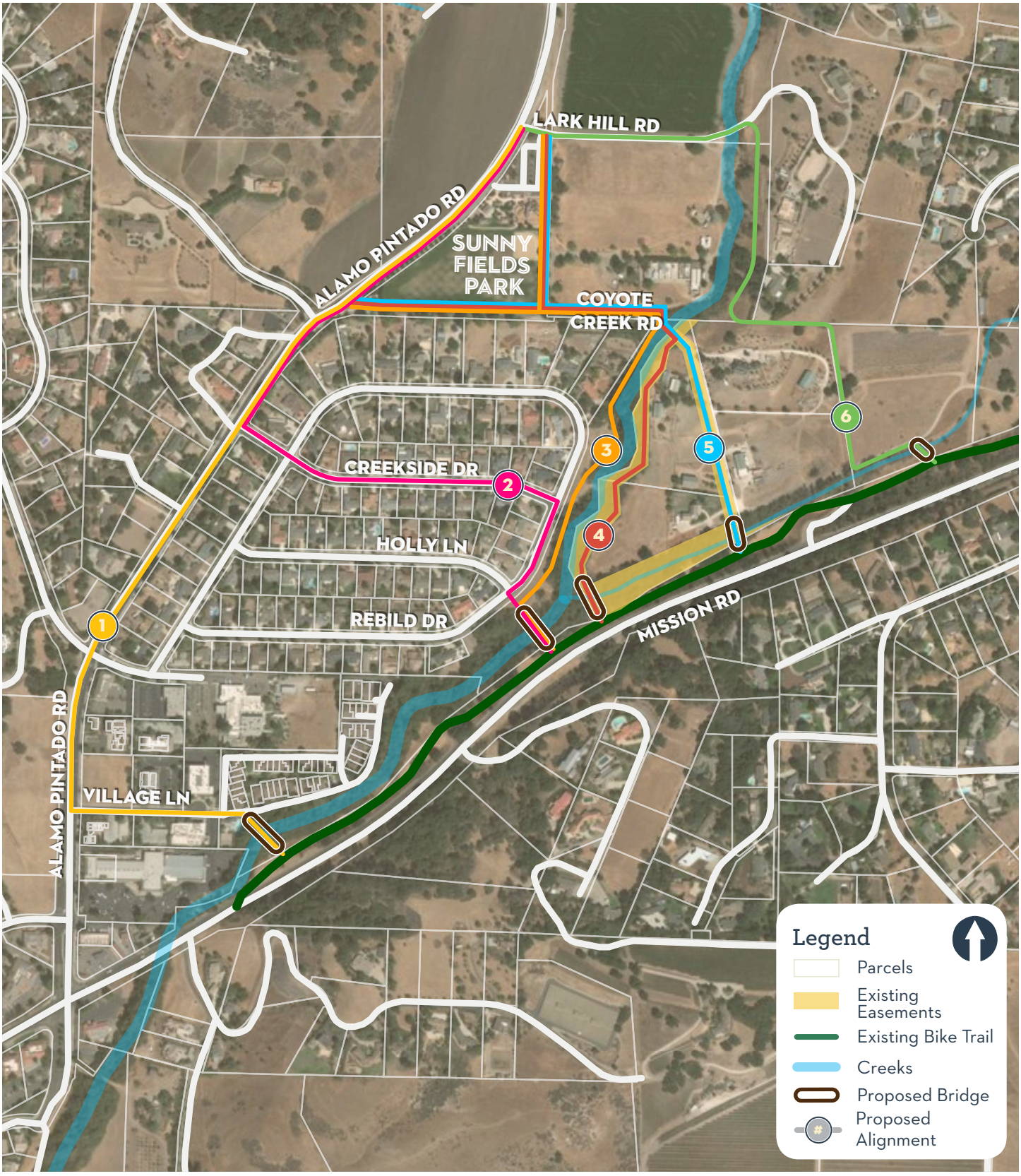
The City of Solvang, in partnership with the County of Santa Barbara Public Works Department, is developing an alignment study for a proposed Sunny Fields Spur Trail, to connect the existing Class I shared-use path along Highway 246 to Sunny Fields Park and existing bike lanes along Alamo Pintado Rd. Alta Planning + Design has been contracted to develop six alignment alternatives which will be evaluated based on criteria relating to feasibility, function, and desirability. The project seeks to continue the Class I shared-use path and to provide an off-street facility, where possible, to develop an alignment which is separated from vehicles and offers a safe and low stress route for bicyclists and pedestrians of all ages and abilities.

ALIGNMENT ALTERNATIVES

Six alternative alignments have been developed to bring users from the existing bike trail to Sunny Fields Park. Each alignment offers a distinct route and experience, some of which utilize on-street routes, and others which are primarily off-street shared-use facilities. In the pages that follow, these alignments are mapped and described in detail, and cross-sections have been provided to help visualize the proposed facility. Preliminary cost estimates have been provided for each alternative, and each has been evaluated, as mentioned above, according to the criteria of feasibility, function, and desirability. A series of photos have also been provided to illustrate the types of facilities being proposed.

City of Solvang
SUNNY FIELDS SPUR TRAIL STUDY

ALIGNMENTS OVERVIEW MAP



ALIGNMENTS EVALUATION OVERVIEW

- Most effectively addresses evaluation criteria
- Addresses evaluation criteria
- Least effectively addresses evaluation criteria

ALIGNMENTS EVALUATION CRITERIA

FEASIBILITY

Lower Cost
Alignments with lower construction costs are preferable and will be more feasible to build.

Limited Easement Acquisition
Alignments with fewer new easements to acquire are preferable and more feasible to build.

Low Environmental Impact
Alignments with a lower environmental impact are preferable and more feasible to build.

FUNCTION

High Connectivity
Alignments which more directly connect the existing shared-use path with Sunny Fields Park are preferable and more effectively address the goals of this project.

Vehicular Separation
Alignments which provide separation between path users and vehicles are more preferable and more effectively address the goals of this project.

Access
Alignments which provide access to the proposed path from the most points and for the most people are preferable and more effectively address the goals of this project.

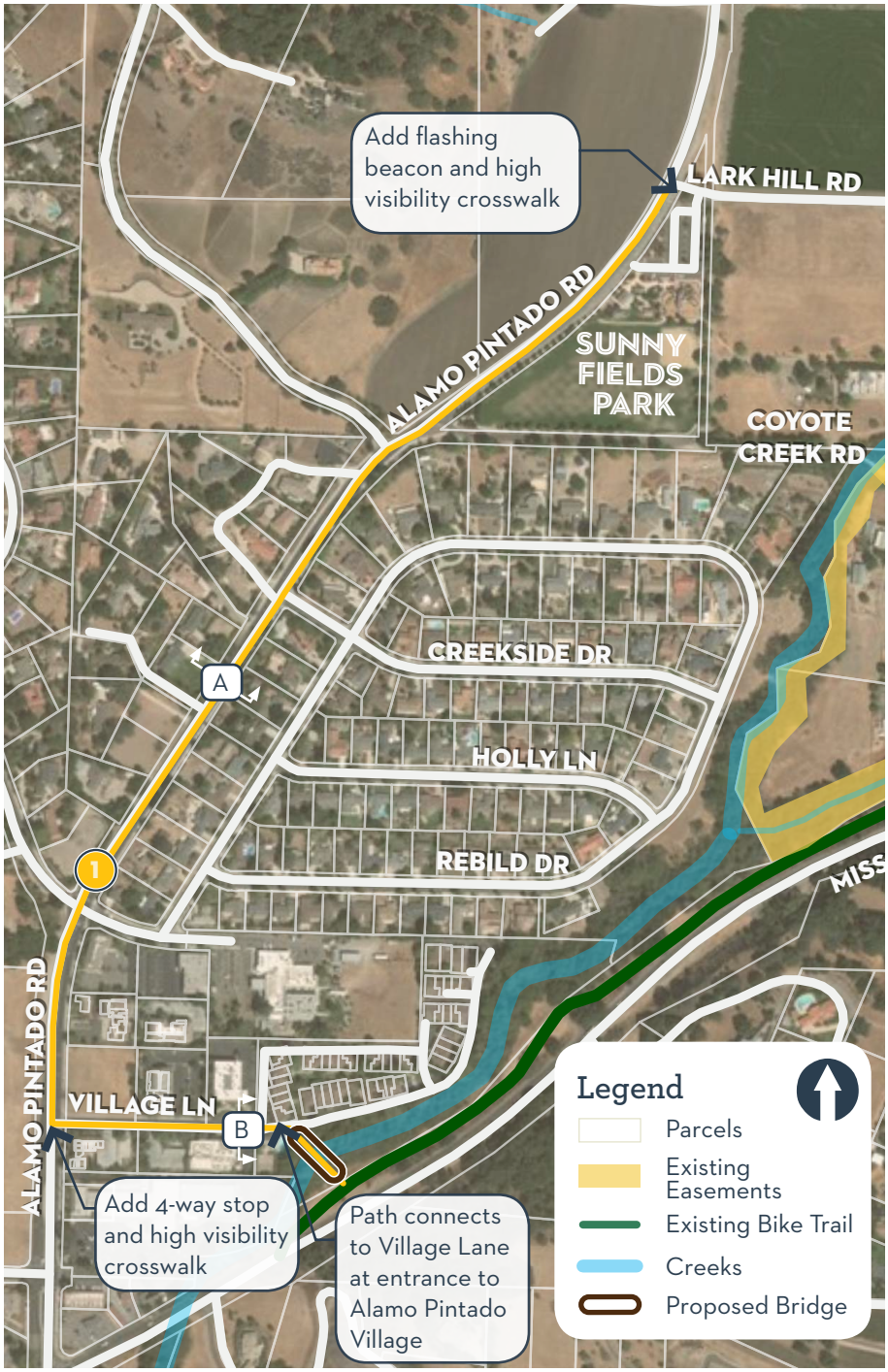
DESIRABILITY

User Experience
Alignments which provide an enjoyable user experience are more desirable and more effectively address the goals of this project.

Compatible with Adjacent Land Uses
Alignments which are compatible with adjacent land uses will create the least amount of conflicts and be more desirable.

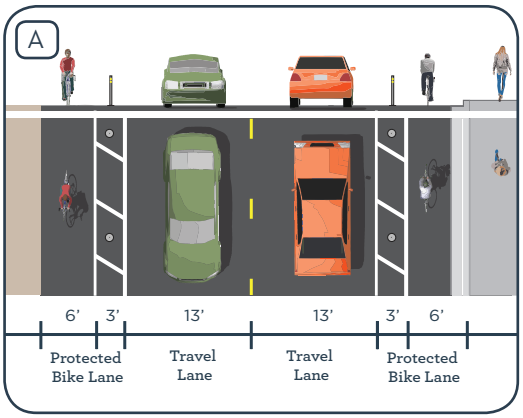
Safe
Alignments which provide a safe route between Sunny Fields Park and the existing shared-use path are more desirable and more effectively address the goals of this project.

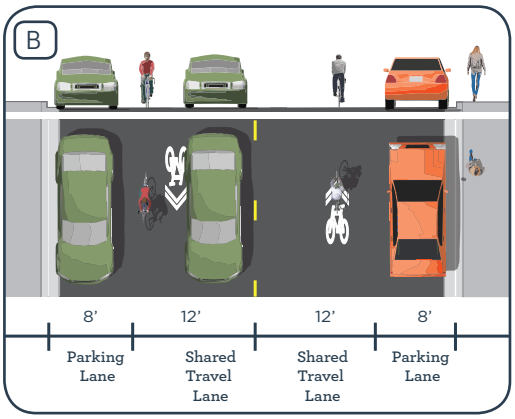
Alignment 1



ALIGNMENT DESCRIPTION

Alignment 1 requires a new bridge to cross Alamo Pintado Creek near the western end of the existing shared-use path. After crossing the creek the alignment lands in the Alamo Pintado Village community before connecting to Village Ln. Along these roads a Class III bike route would be created with sharrows painted on the pavement. At Village Ln and Alamo Pintado Rd, a 3-way stop would be added, allowing crossing of Alamo Pintado for southbound cyclists. On Alamo Pintado, from Village Ln to Lark Hill Rd a Class IV protected bike lane would be installed. At Lark Hill Rd a new high visibility crosswalk would be installed with a flashing beacon to improve the visibility of cyclists crossing from the park to the southbound bike lane.





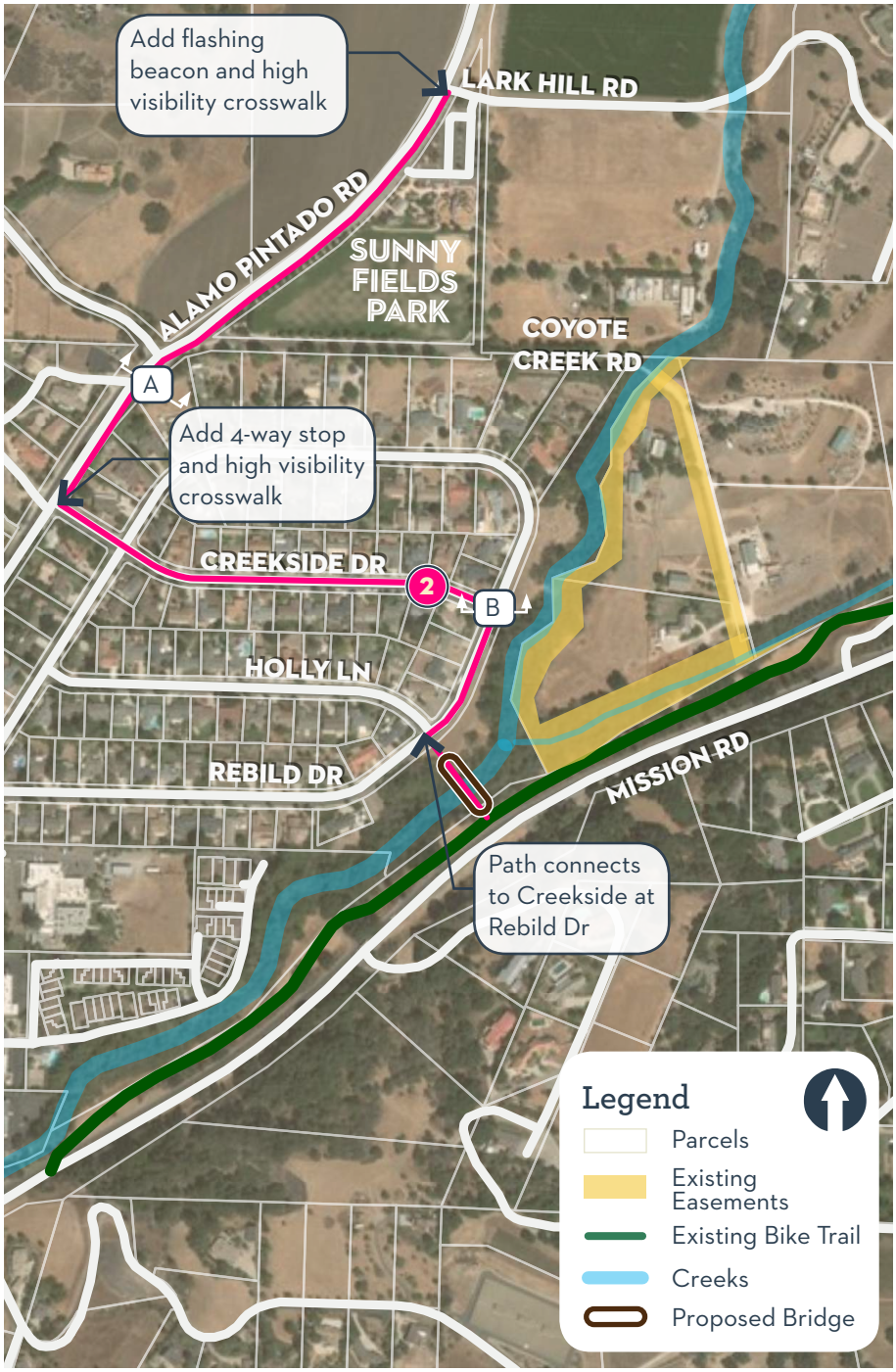
EVALUATION

Feasibility			Function			Desirability		
Lower Cost	Limited Easement Acquisition	Low Env. Impact	High Connectivity	Vehicular Separation	Access	User Experience	Compatible with Adjacent Land Uses	Safe
	●				●			

CONSTRUCTION COST ESTIMATE: $1,425,000 + 1 easement

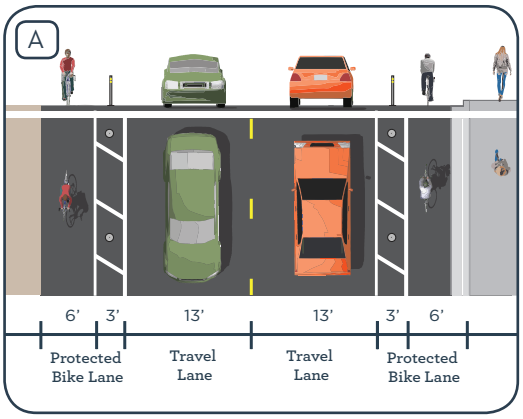
DESIGN/CEQA: $500,000

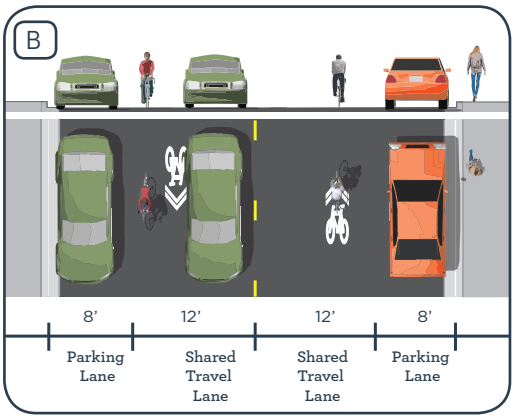
Alignment 2



ALIGNMENT DESCRIPTION

Alignment 2 requires a new bridge to cross Alamo Pintado Creek and lands in the Creekside residential community at Rebild Dr. A Class III bike route would begin at Rebild Dr and Holly Ln, and continue north to Creekside Dr, which it would follow to Alamo Pintado Rd. Along Alamo Pintado Rd a Class IV protected bike lane would replace the existing Class II bike lane between Lark Hill Rd and Creekside Dr. At the intersection of Creekside and Alamo Pintado roads a 4-way stop would be added to allow crossing for south-bound cyclists. At Lark Hill Rd a flashing beacon and high visibility crosswalk would be added to allow crossing to and from Sunny Fields Park.





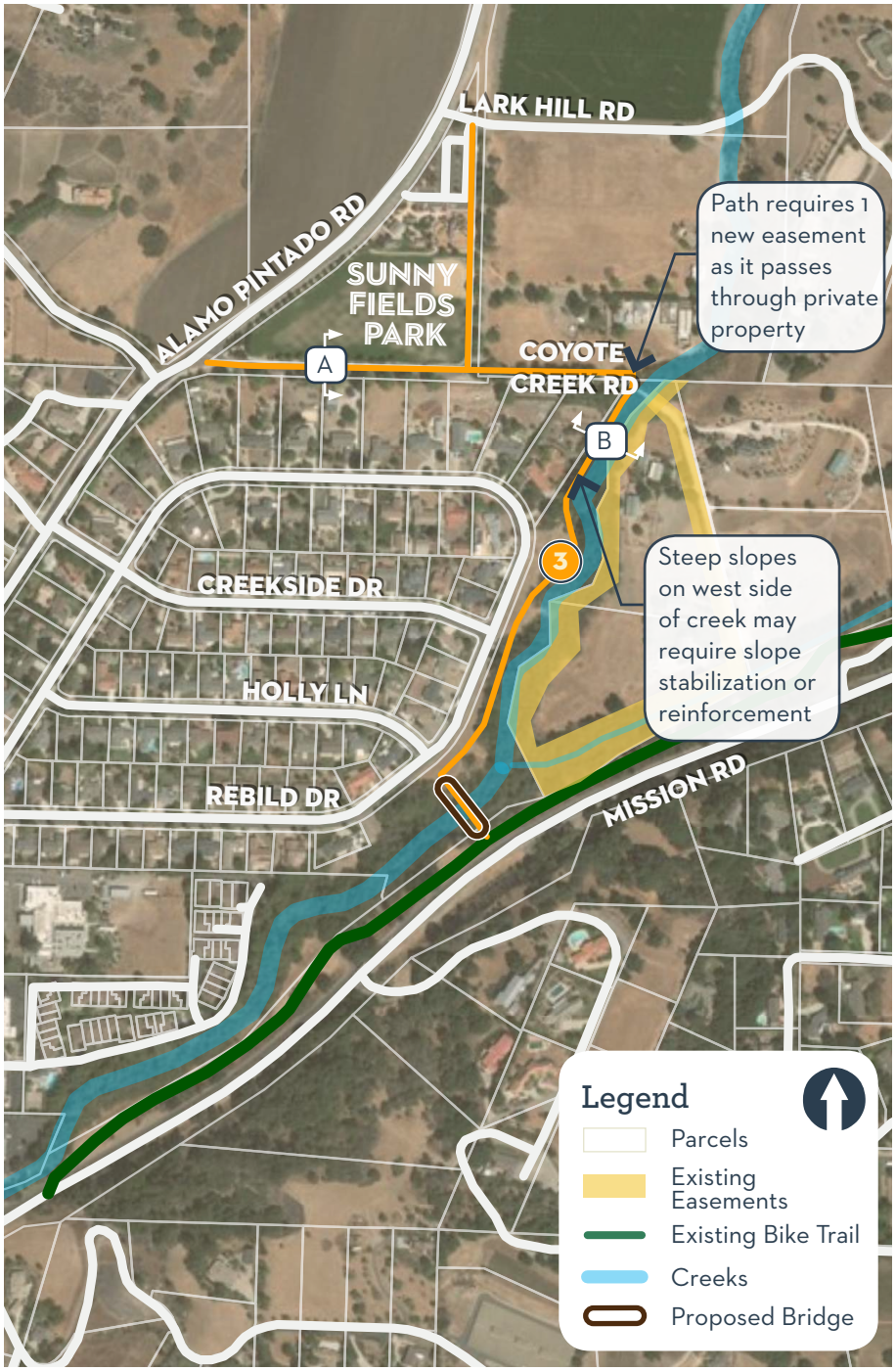
EVALUATION

Feasibility			Function			Desirability		
Lower Cost	Limited Easement Acquisition	Low Env. Impact	High Connectivity	Vehicular Separation	Access	User Experience	Compatible with Adjacent Land Uses	Safe
	●				●			

CONSTRUCTION COST ESTIMATE: $1,400,000

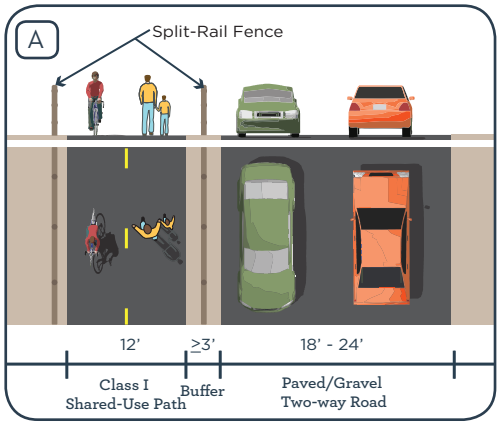
DESIGN/CEQA: $500,000

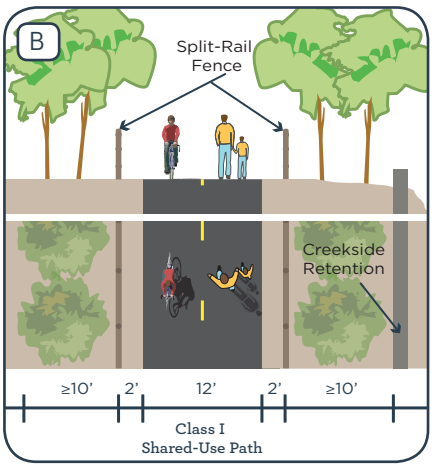
Alignment 3



ALIGNMENT DESCRIPTION

Alignment 3 requires a new bridge to cross Alamo Pintado Creek towards the Creekside residential community. East of Rebild Dr the alignment turns north on public land. A Class I shared-use path would continue on the west side of Alamo Pintado Creek to Coyote Creek Rd. The northern-most portion of this section may require slope stabilization and reinforcement between the creek and the shared-use path. Split-rail fence would border the shared-use path to provide safety from the edge of the creek and to create an additional buffer for neighboring properties. At Coyote Creek Rd the alignment would run parallel to the road on the north side in a new easement, before reaching the park where two new shared-use paths would border the eastern and southern perimeters of Sunny Fields Park.





EVALUATION

Feasibility			Function			Desirability		
Lower Cost	Limited Easement Acquisition	Low Env. Impact	High Connectivity	Vehicular Separation	Access	User Experience	Compatible with Adjacent Land Uses	Safe
			●	●		●		●

CONSTRUCTION COST ESTIMATE: $3,050,000 + 1 easement

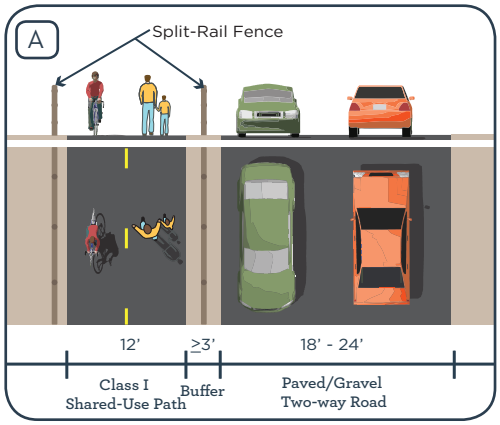
DESIGN/CEQA: $600,000

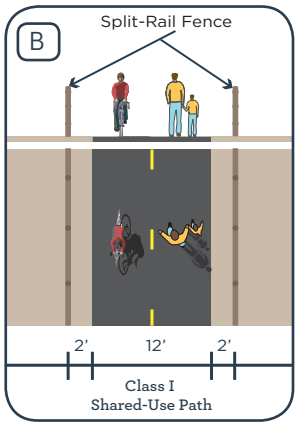
Alignment 4



ALIGNMENT DESCRIPTION

Alignment 4 requires a new bridge to cross a small creek to the east of Alamo Pintado Creek, landing on the eastern bank of Alamo Pintado Creek. A Class I shared-use path would run along that eastern bank, in an existing flood control easement, north to Coyote Creek Rd. Split-rail fence would border the shared-use path to provide safety from the edge of the creek and to create an additional buffer for neighboring properties. At Coyote Creek Rd the alignment would enter the roadway and cross Alamo Pintado Creek on the existing vehicular bridge. After crossing the bridge the alignment would run parallel to the road on the north side in a new easement, before reaching the park where two new shared-use paths would border the eastern and southern perimeters of Sunny Fields Park.





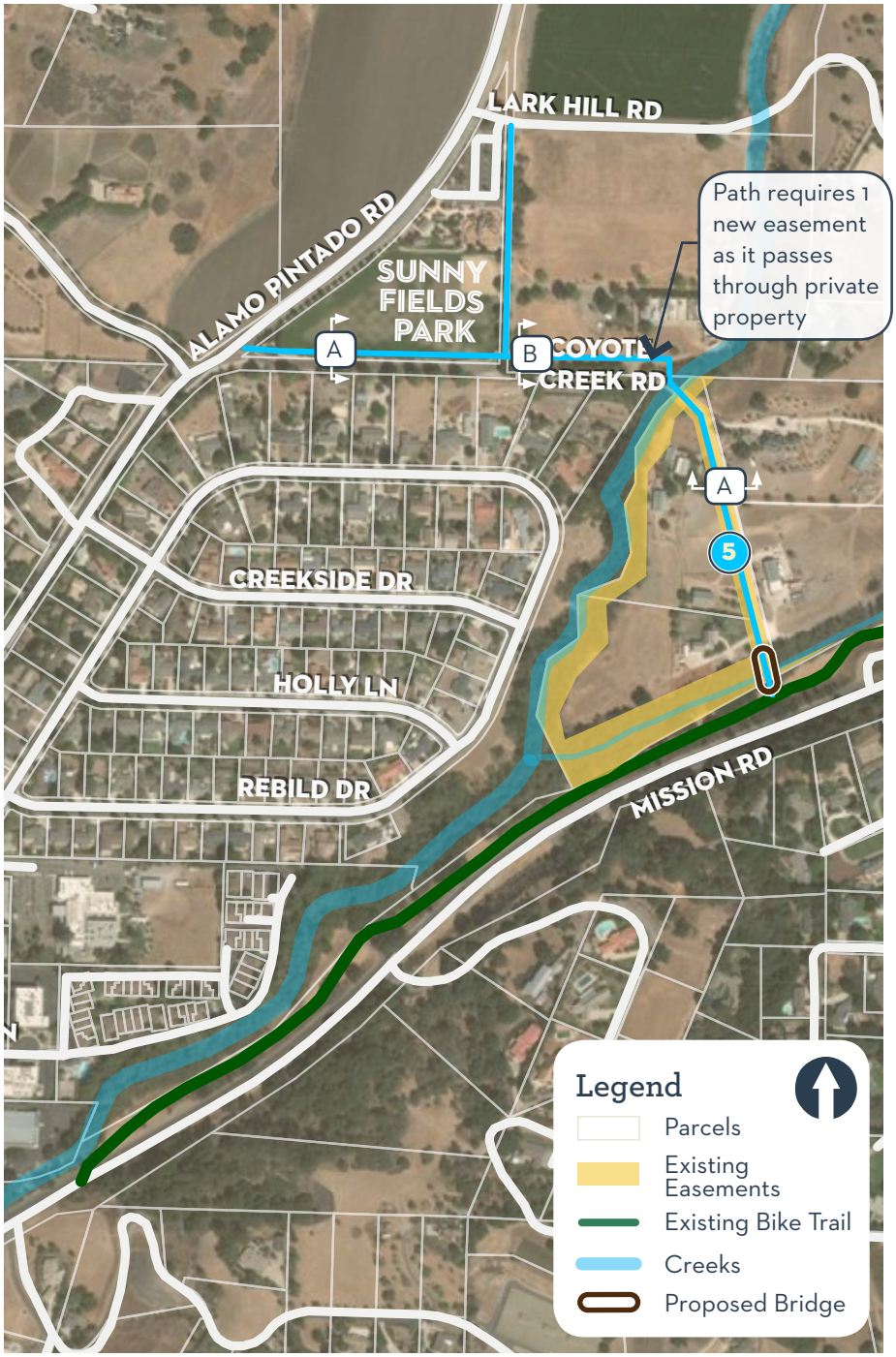
EVALUATION

Feasibility			Function			Desirability		
Lower Cost	Limited Easement Acquisition	Low Env. Impact	High Connectivity	Vehicular Separation	Access	User Experience	Compatible with Adjacent Land Uses	Safe
			●	●		●		●

CONSTRUCTION COST ESTIMATE: $1,350,000 + 3 easements

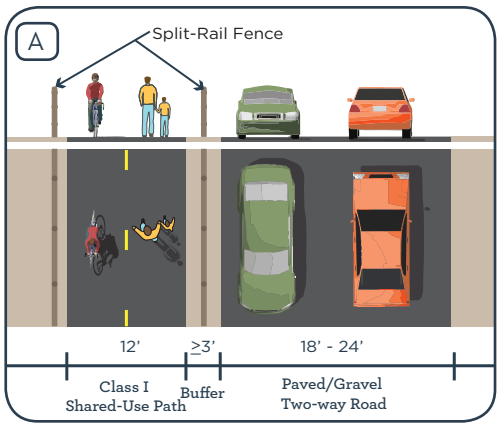
DESIGN/CEQA: $500,000

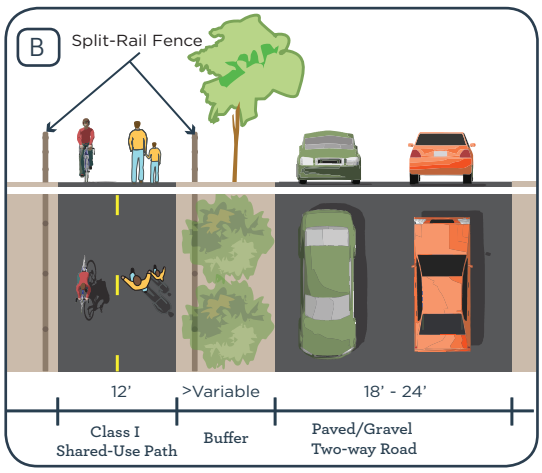
Alignment 5



ALIGNMENT DESCRIPTION

Alignment 5 requires a new bridge to cross a small creek to the east of Alamo Pintado Creek, landing on an unpaved portion of Coyote Creek Rd. A Class I shared-use path would run along the west side of that road in an existing trail easement, north to Coyote Creek Rd. Split-rail fence would border the shared-use path to provide safety from the edge of the road and to create an additional buffer for neighboring properties. At Coyote Creek Rd the alignment would enter the roadway and cross Alamo Pintado Creek on the existing vehicular bridge. After crossing the bridge the alignment would run parallel to the road on the north side in a new easement, before reaching the park where two new shared-use paths would border the eastern and southern perimeters of Sunny Fields Park.





EVALUATION

Feasibility			Function			Desirability		
Lower Cost	Limited Easement Acquisition	Low Env. Impact	High Connectivity	Vehicular Separation	Access	User Experience	Compatible with Adjacent Land Uses	Safe
●			●	●		●	●	●

CONSTRUCTION COST ESTIMATE: $1,100,000 + 1 easement

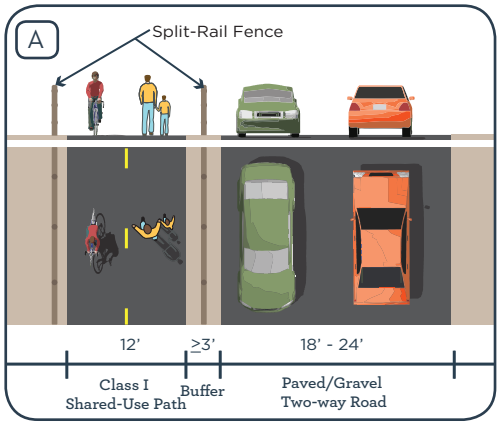
DESIGN/CEQA: $500,000

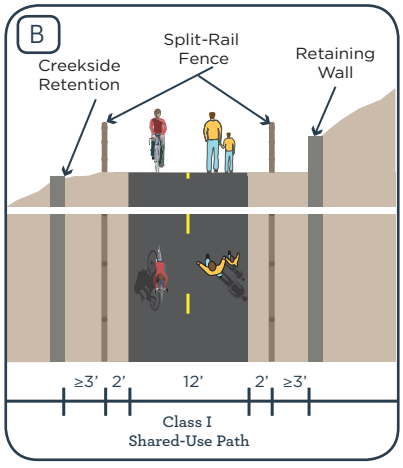
Alignment 6



ALIGNMENT DESCRIPTION

Alignment 6 requires a small new bridge to cross a small creek to the east of Alamo Pintado Creek, landing on an unpaved portion of Coyote Creek Rd. A Class I shared-use path would run westward along the north side of that road in a new easement, before turning north between two properties in a new easement. Split-rail fence would border the shared-use path to provide a buffer for neighboring properties. The alignment jogs westward then north along the eastern side of Alamo Pintado Creek. The steep slope on the eastern bank would require some slope reinforcement and stabilization. After crossing a new bike/ped bridge the alignment would run parallel to the road on the north side in a new easement, before reaching the park.





EVALUATION

Feasibility			Function			Desirability		
Lower Cost	Limited Easement Acquisition	Low Env. Impact	High Connectivity	Vehicular Separation	Access	User Experience	Compatible with Adjacent Land Uses	Safe
			●	●		●		●

CONSTRUCTION COST ESTIMATE: $4,650,000 + 4 easements

DESIGN/CEQA: $700,000

Conclusion

(TO BE COMPLETED AFTER WORKSHOP)

Recommendations

(TO BE COMPLETED AFTER WORKSHOP)

Appendix A: Cost Estimates

ALIGNMENT 1

Item	Unit	Quantity	Unit Price	Total Price
Class I Shared-Use Path	LF		$ 90.00	$ -
Class I Shared-Use Path with Split Rail Fence	LF		$ 140.00	$ -
Embankment Reinforcement/Retention	SF		$ 300.00	$ -
Bike/Ped Bridge	LF	200	$ 5,000.00	$ 1,000,000.00
Class III Striping and Signing	LF	740	$ 3.00	$ 2,220.00
Class IV Striping and Signing	LF	3,600	$ 21.00	$ 75,600.00
Curb Cut	EA	1	$ 2,000.00	$ 2,000.00
Stop Controlled Intersection	EA	1	$ 20,000.00	$ 20,000.00
Flashing beacon and High vis crosswalk	EA	1	$ 40,000.00	$ 40,000.00
			Subtotal	$ 1,139,820.00
			25% Contingency	$ 284,955.00
			Total	**$ 1,424,775.00**

ALIGNMENT 2

Item	Unit	Quantity	Unit Price	Total Price
Class I Shared-Use Path	LF		$ 90.00	$ -
Class I Shared-Use Path with Split Rail Fence	LF	85	$ 140.00	$ 11,900.00
Embankment Reinforcement/Retention	SF		$ 300.00	$ -
Bike/Ped Bridge	LF	199	$ 5,000.00	$ 995,000.00
Class III Striping and Signing	LF	1,876	$ 3.00	$ 5,628.00
Class IV Striping and Signing	LF	1,792	$ 21.00	$ 37,632.00
Curb Cut	EA	1	$ 2,000.00	$ 2,000.00
Stop Controlled Intersection	EA	1	$ 20,000.00	$ 20,000.00
Flashing beacon and High vis crosswalk	EA	1	$ 40,000.00	$ 40,000.00
			Subtotal	$ 1,112,160.00
			25% Continge	$ 278,040.00
			Total	**$ 1,390,200.00**

ALIGNMENT 3

Item	Unit	Quantity	Unit Price	Total Price
Class I Shared-Use Path	LF		$ 90.00	$ -
Class I Shared-Use Path with Split Rail Fence	LF	2,481	$ 140.00	$ 347,340.00
Embankment Reinforcement/Retention	SF	3,650	$ 300.00	$ 1,095,000.00
Bike/Ped Bridge	LF	199	$ 5,000.00	$ 995,000.00
Class III Striping and Signing	LF		$ 3.00	$ -
Class IV Striping and Signing	LF		$ 21.00	$ -
Curb Cut	EA		$ 2,000.00	$ -
			Subtotal	$ 2,437,340.00
			25% Contingency	$ 609,335.00
			Total	**$ 3,046,675.00**

Appendix A: Cost Estimates

ALIGNMENT 4

Item	Unit	Quantity	Unit Price	Total Price
Class I Shared-Use Path	LF		$ 90.00	
Class I Shared-Use Path with Split Rail Fence	LF	3,229	$ 140.00	$ 452,060.00
Embankment Reinforcement/Retention	SF		$ 300.00	$ -
Bike/Ped Bridge	LF	126	$ 5,000.00	$ 630,000.00
Class III Striping and Signing	LF	111	$ 3.00	$ 333.00
Class IV Striping and Signing	LF		$ 21.00	$ -
Curb Cut	EA		$ 2,000.00	$ -
			Subtotal	$ 1,082,393.00
			25% Contingency	$ 270,598.25
			Total	**$ 1,352,991.25**

ALIGNMENT 5

Item	Unit	Quantity	Unit Price	Total Price
Class I Shared-Use Path	LF	65	$ 90.00	$ 5,850.00
Class I Shared-Use Path with Split Rail Fence	LF	2,853	$ 140.00	$ 399,420.00
Embankment Reinforcement/Retention	SF		$ 300.00	$ -
Bike/Ped Bridge	LF	94	$ 5,000.00	$ 470,000.00
Class III Striping and Signing	LF	111	$ 3.00	$ 333.00
Class IV Striping and Signing	LF		$ 21.00	$ -
Curb Cut	EA		$ 2,000.00	$ -
			Subtotal	$ 875,603.00
			25% Contingency	$ 218,900.75
			Total	**$ 1,094,503.75**

ALIGNMENT 6

Item	Unit	Quantity	Unit Price	Total Price
Class I Shared-Use Path	LF	55	$ 90.00	$ 4,950.00
Class I Shared-Use Path with Split Rail Fence	LF	2,978	$ 140.00	$ 416,920.00
Embankment Reinforcement/Retention	SF	8,750	$ 300.00	$ 2,625,000.00
Bike/Ped Bridge	LF	35	$ 5,000.00	$ 175,000.00
Bike/Ped Bridge	LF	100	$ 5,000.00	$ 500,000.00
Class III Striping and Signing	LF	132	$ 3.00	$ 396.00
Class IV Striping and Signing	LF		$ 21.00	$ -
Curb Cut	EA		$ 2,000.00	$ -
			Subtotal	$ 3,717,316.00
			25% Contingency	$ 929,329.00
			Total	**$ 4,646,645.00**

Appendix B: Bike Facility Precedent Images



Buffered bike lane with flexible posts



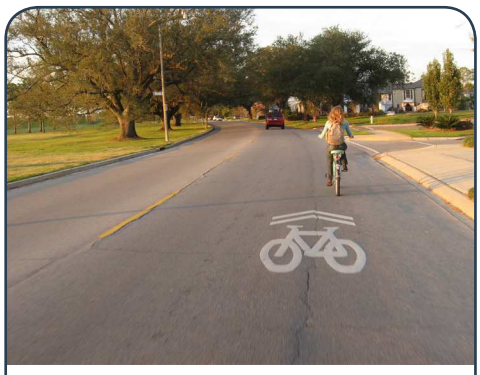
Buffered bike lane with flexible posts



Buffered bike lane with flexible posts



Bike route with sharrows



Neighborhood bike route with sharrows



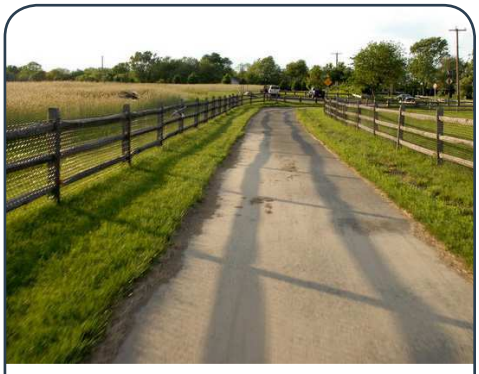
Bike route with sharrows and signage



Shared-use path with split-rail fence



Striped shared-use path w/ split-rail



Shared-use path with wide buffer



Shared-use path w/ split-rail along road



Shared-use path with fence along river



Shared-use path by creek through trees